# SRS AIRBAG CONTROL SYSTEM

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# CONTENTS

BASIC INSPECTION5
DIAGNOSIS AND REPAIR WORK FLOW 5 Work Flow
SYSTEM DESCRIPTION8
SRS AIR BAG SYSTEM8System Diagram8System Description8Component Parts Location10Component Description10
OCCUPANT CLASSIFICATION SYSTEM12
System Diagram12System Description12Component Parts Location12Component Description13
PASSENGER SEAT BELT WARNING SYS-
TEM14System Diagram14System Description14Component Parts Location15Component Description15
DIAGNOSIS SYSTEM (AIRBAG)17
Diagnosis Description17 Air Bag Warning Lamp Diagnosis17 CONSULT Function21
DTC/CIRCUIT DIAGNOSIS23
B1001, B1002, B1003, B1004, B1005 DIAG-         NOSIS SENSOR UNIT       23         Description       23         DTC Logic       23         Diagnosis Procedure       23

B1006, B1007, B1008,	B1009, B1010 DIAG-
<b>NOSIS SENSOR UNIT</b>	25
Description	25

DTC Logic25 Diagnosis Procedure25	F
B1011, B1012, B1013, B1014, B1015 DIAG- NOSIS SENSOR UNIT27 Description	G
DTC Logic27 Diagnosis Procedure27	SRO
B1017, B1020, B1021 OCCUPANT SENS C/U	
29	
Description	
DTC Logic29 Diagnosis Procedure	
C C	J
B1018 OCCUPANT SENS31	
Description	K
Diagnosis Procedure	I.
B1022 OCCUPANT SENS C/U	
Description	L
DTC Logic	
Diagnosis Procedure	
B1023 PASS A/B INDCTR CKT35	M
Description	
DTC Logic35	Ν
Diagnosis Procedure35	I N
B1026, B1027, B1028, B1029, B1030, B1031	
DIAGNOSIS SENSOR UNIT	0
Description	
DTC Logic	
Diagnosis Procedure	Ρ
B1033, B1034 CRASH ZONE SEN	
Description	
DTC Logic	

B1035, B1036 CRASH ZONE SEN ......41

Description	
DTC Logic	41
Diagnosis Procedure	41
B1042, B1043, B1044, B1045, B1046, B1047	
DIAGNOSIS SENSOR UNIT	
Description	
DTC Logic Diagnosis Procedure	
	43
B1049, B1054 DRIVER AIRBAG MODULE	
Description	
DTC Logic Diagnosis Procedure	
-	
B1050, B1055 DRIVER AIRBAG MODULE	
Description DTC Logic	
Diagnosis Procedure	
<b>C</b>	
B1051, B1056 DRIVER AIRBAG MODULE	
Description DTC Logic	
Diagnosis Procedure	
	<b>E</b> 4
B1052, B1057 DRIVER AIRBAG MODULE Description	
DTC Logic	
Diagnosis Procedure	
B1058, B1059, B1060, B1061, B1062, B1063	
DIAGNOSIS SENSOR UNIT	53
Description	
DTC Logic	
Diagnosis Procedure	53
B1065, B1070 ASSIST A/B MODULE	55
Description	
DTC Logic	55
Diagnosis Procedure	55
B1066, B1071 ASSIST A/B MODULE	57
Description	
DTC Logic	
Diagnosis Procedure	
B1067, B1072 ASSIST A/B MODULE	
Description	
DTC Logic Diagnosis Procedure	
B1068, B1073 ASSIST A/B MODULE	
Description	
DTC Logic Diagnosis Procedure	
	2.
B1074, B1075, B1076, B1077, B1078, B1079 DIAGNOSIS SENSOR UNIT	~~
DIAGNOSIS SENSOR UNIT Description	
DTC Logic	
Diagnosis Procedure	

B1081 PRE-TEN FRONT RH Description DTC Logic Diagnosis Procedure	65 65
B1082 PRE-TEN FRONT RH Description DTC Logic Diagnosis Procedure	67 67
B1083 PRE-TEN FRONT RH Description DTC Logic Diagnosis Procedure	
B1084 PRE-TEN FRONT RH Description DTC Logic Diagnosis Procedure	71 71
B1086 PRE-TEN FRONT LH Description DTC Logic Diagnosis Procedure	73 73
B1087 PRE-TEN FRONT LH Description DTC Logic Diagnosis Procedure	75 75
B1088 PRE-TEN FRONT LH Description DTC Logic Diagnosis Procedure	77 77
B1089 PRE-TEN FRONT LH Description DTC Logic Diagnosis Procedure	79 79
B1090, B1091, B1092, B1093, B10 DIAGNOSIS SENSOR UNIT Description DTC Logic Diagnosis Procedure	
B1106, B1107, B1108, B1109, B1 DIAGNOSIS SENSOR UNIT Description DTC Logic Diagnosis Procedure	<b>83</b> 
B1113, B1114 SATELLITE SENS Description DTC Logic Diagnosis Procedure	85 85
B1115, B1116 SATELLITE SENS Description DTC Logic Diagnosis Procedure	

B1118, B1119 SATELLITE SENS LH	89
Description	
DTC Logic	
Diagnosis Procedure	89
B1120, B1121 SATELLITE SENS LH	01
Description	
DTC Logic	
Diagnosis Procedure	
5	
B1122, B1123, B1124, B1125, B1126, B1127	
DIAGNOSIS SENSOR UNIT	
Description	
DTC Logic	
Diagnosis Procedure	93
B1129 SIDE MODULE RH	95
Description	
DTC Logic	
Diagnosis Procedure	
B1130 SIDE MODULE RH	
Description	
DTC Logic	
Diagnosis Procedure	97
B1131 SIDE MODULE RH	99
Description	99
DTC Logic	99
Diagnosis Procedure	99
B1132 SIDE MODULE RH	101
Description	
DTC Logic	
Diagnosis Procedure	
B1134 SIDE MODULE LH	
Description	
DTC Logic	103
Diagnosis Procedure	103
B1135 SIDE MODULE LH	105
Description	
DTC Logic	
Diagnosis Procedure	105
B1136 SIDE MODULE LH	407
Description DTC Logic	
Diagnosis Procedure	
5	
B1137 SIDE MODULE LH	109
Description	
DTC Logic	
Diagnosis Procedure	109
B1138, B1139, B1140, B1141, B1142, B1143	
DIAGNOSIS SENSOR UNIT	111
Description	
DTC Logic	
Diagnosis Procedure	111

B1145 CURTAIN MODULE RH113Description113DTC Logic113Diagnosis Procedure113	A
<b>B1146 CURTAIN MODULE RH115</b> Description	В
Diagnosis Procedure115	С
B1147 CURTAIN MODULE RH	D
B1148 CURTAIN MODULE RH	E
B1150 CURTAIN MODULE LH121Description121DTC Logic121Diagnosis Procedure121	G
B1151 CURTAIN MODULE LH123Description123DTC Logic123Diagnosis Procedure123	SRC
B1152 CURTAIN MODULE LH	J
B1153 CURTAIN MODULE LH	K
B1154, B1155, B1156, B1157, B1158, B1159 DIAGNOSIS SENSOR UNIT	L
Description	Μ
B1170, B1171, B1172, B1173, B1174, B1175         DIAGNOSIS SENSOR UNIT         Description         131         DTC Logic         131         Diagnosis Procedure         131	N
B1186, B1187, B1188, B1189, B1190, B1191         DIAGNOSIS SENSOR UNIT         Discription         133         DTC Logic         133         Diagnosis Procedure	Ρ
B1202, B1203, B1204, B1205, B1206, B1207 DIAGNOSIS SENSOR UNIT	

DTC Logic135 Diagnosis Procedure135	
B1209 FRONTAL COLLISION DETECTION . 137 Description	
B1210 SIDE COLLISION DETECTION	
B1218, B1219, B1220, B1221, B1222, B1223         DIAGNOSIS SENSOR UNIT       141         Description       141         DTC Logic       141         Diagnosis Procedure       141	
B1234, B1235, B1236, B1237, B1238, B1239         DIAGNOSIS SENSOR UNIT         Description         143         DTC Logic         143         Diagnosis Procedure	
B1250, B1251, B1252, B1253, B1254, B1255         DIAGNOSIS SENSOR UNIT         Description         145         DTC Logic         145         Diagnosis Procedure	
B1266, B1267, B1268, B1269 DIAGNOSIS           SENSOR UNIT         147           Description         147           DTC Logic         147           Diagnosis Procedure         147	
B1282, B1283, B1284, B1285 DIAGNOSIS         SENSOR UNIT       149         Description       149         DTC Logic       149         Diagnosis Procedure       149	
B1336, B1337 SATELLITE SENSOR RH 151 Description	
B1338, B1340, B1341, B1342 SATELLITE SENSOR RH	
B1339 SATELLITE SENSOR RH	
B1343, B1344 SATELLITE SENSOR LH 156 Description	

DTC Logic	156
Diagnosis Procedure	156

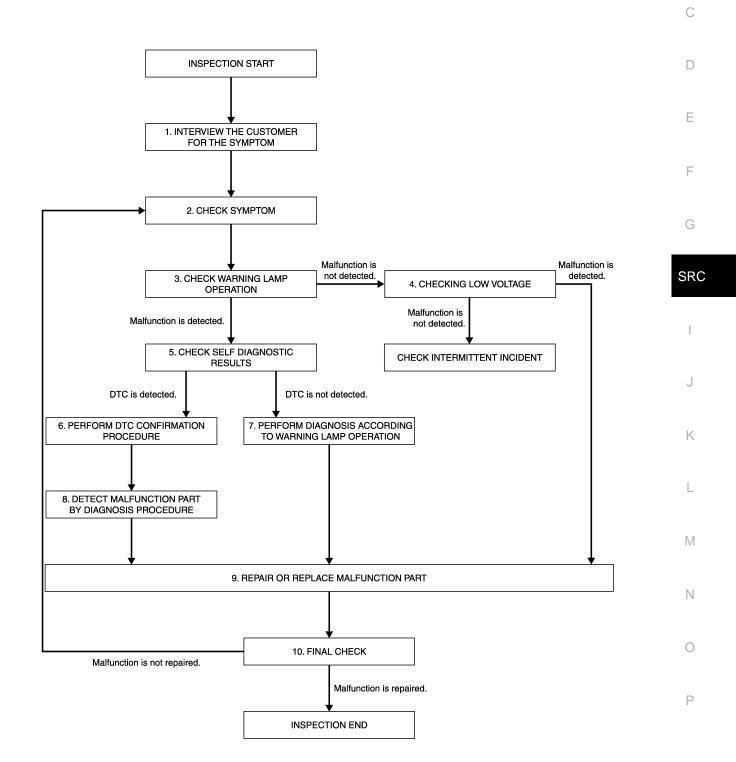
B1345, B1347, B1348, B1349 SATELLITE SENSOR LH
Description
Diagnosis Procedure 158
B1346 SATELLITE SENSOR LH
DTC Logic
B1350, B1351 SATELLITE SENSOR
Description
B1378, B1379, B1380, B1381 DIAGNOSIS SENSOR UNIT163
Description
DTC Logic
Diagnosis Procedure 163
ECU DIAGNOSIS INFORMATION165
DIAGNOSIS SENSOR UNIT165
DTC Index165
Wiring Diagram - SRS AIR BAG CONTROL SYS-
TEM - (Without front door satellite sensor)
Wiring Diagram - SRS AIR BAG CONTROL SYS- TEM - (With front door satellite sensor)
SYMPTOM DIAGNOSIS174
SRS AIR BAG WARNING LAMP DOES NOT TURN OFF174
Diagnosis Procedure
SRS AIR BAG WARNING LAMP DOES NOT TURN ON175
Diagnosis Procedure 175
SRS AIR BAG WARNING LAMP BLINKS176 Diagnosis Procedure
PASSENGER SEAT BELT WARNING SYS-
TEM177
Diagnosis Procedure 177
PRECAUTION178
PRECAUTIONS178
Precaution for Supplemental Restraint System
(SRS) "AIR BAG" and "SEAT BELT PRE-TEN-
SIONER" 178 Service
Precaution for Battery Service
Occupant Classification System

< 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-17, "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 out or write down)
- 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-17, "Air Bag Warning Lamp Diag-nosis"</u>.
- 2. Perform Diagnosis Procedure for the air bag warning lamp operation. Refer to <u>SRC-17, "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.	
<u>Is the malfunction repaired?</u> YES >> INSPECTION END	С
NO >> GO TO 2.	
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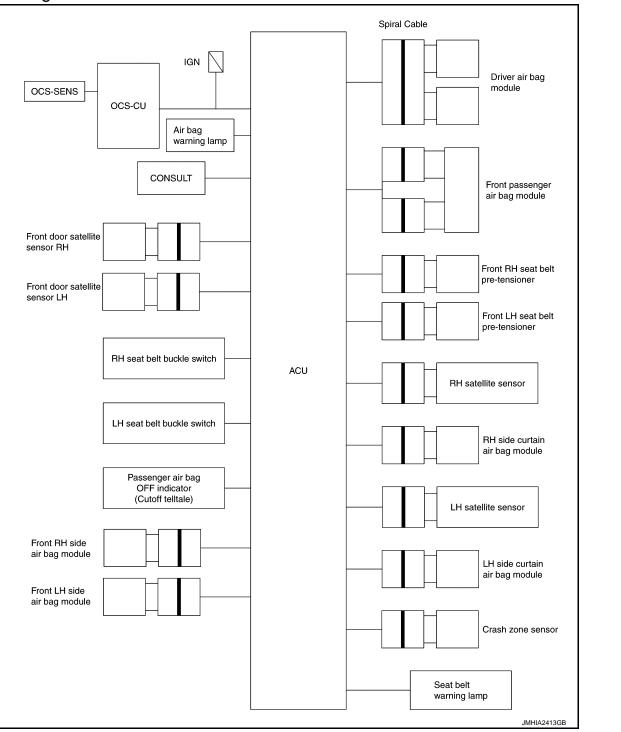
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# < SYSTEM DESCRIPTION >

# 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. Air bag diagnosis sensor unit supplies power supply to air bag module and pre-tensioner seat belt when deceleration that is more than the specified limit is detected by G sensor in air bag diagnosis sensor unit,

# SRS AIR BAG SYSTEM

#### < SYSTEM DESCRIPTION >

crash zone sensor, or satellite sensor, or when pressure that is more than the specified limit is detected by front door satellite sensor.

- Detects electrical malfunction in SRS Air Bag System and Seat Belt Pre-tensioner System, records malfunction code, and blinking air bag warning lamp.
- 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 C 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	, F
SRS configuration	Frontal collision	Left side collision	Right side collision	
Driver air bag module	×	—	—	G
Front passenger air bag module	×	—	—	G
Front LH seat belt pre-tensioner	×	—	—	
Front RH seat belt pre-tensioner	×	_	_	SR
Front LH side air bag module	—	×	—	
Front RH side air bag module	—	—	×	
LH side curtain air bag module	—	×	—	
RH side curtain air bag module	_	—	×	

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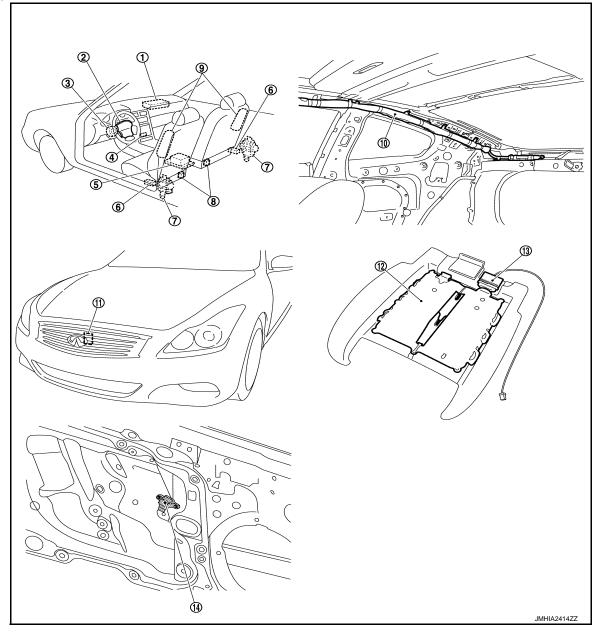
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# SRS AIR BAG SYSTEM

# < SYSTEM DESCRIPTION >

# **Component Parts Location**

INFOID:000000008164232



- 1. Front passenger air bag module
- 4. Passenger air bag off indicator (Cut-off telltale)
- 7. Front seat belt pre-tensioner (LH/ RH)
- 10. Curtain air bag module
- 13. OCS control unit

- 2. Driver air bag module
- 5. Diagnosis sensor unit (ACU)
- 8. Seat belt buckle switch (LH/RH)
- 11. Crash zone sensor
- 14. Front door satellite sensor (LH/RH)
- 3. Spiral cable
- 6. Satellite sensor (LH/RH)
- 9. Front side air bag module (LH/RH)
- 12. OCS seat sensor mat

INFOID:000000008164233

**Component Description** 

SRC-10

# SRS AIR BAG SYSTEM

# < SYSTEM DESCRIPTION >

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.
Front door 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.

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# **OCCUPANT CLASSIFICATION SYSTEM**

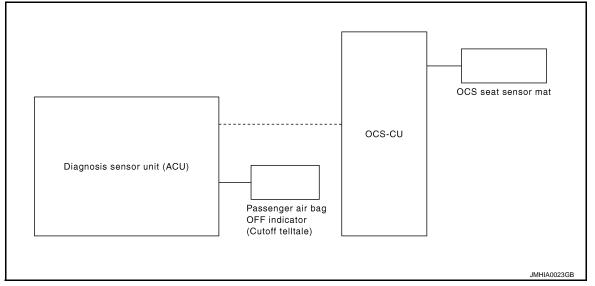
# < SYSTEM DESCRIPTION >

# 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

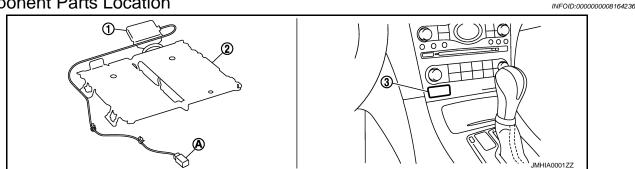
- 1. Suppress the deployment of front passenger air bag when front passenger seat is empty, or when occupied by child and child-seat. Turns ON front passenger air bag OFF indicator when front passenger seat is occupied by child-seat and child.
- 2. Indicates malfunction portion with blinking times of 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)
Empty	Suppress	OFF	OFF	OFF
Child/ child-seat	Suppress	ON	OFF	ON
Adult	Enable to deploy	OFF	OFF	ON
Malfunction	Suppress	ON	Blinking	OFF

# **Component Parts Location**



# **OCCUPANT CLASSIFICATION SYSTEM**

2. OCS seat sensor mat

# < SYSTEM DESCRIPTION >

1. OCS control unit

A. OCS harness connector

# **Component Description**

INFOID:000000008164237

Passenger air bag OFF indicator (cutoff telltale)

3.

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

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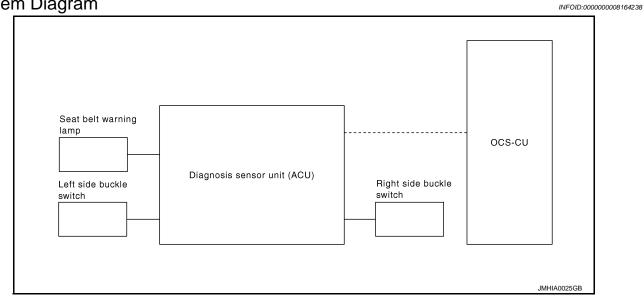
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# PASSENGER SEAT BELT WARNING SYSTEM

#### < SYSTEM DESCRIPTION >

# PASSENGER SEAT BELT WARNING SYSTEM

# System Diagram



# System Description

INFOID:000000008164239

- Turns ON seat belt warning lamp, when the Occupant Classification System judges adult or child in the front 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.

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

# PASSENGER SEAT BELT WARNING SYSTEM

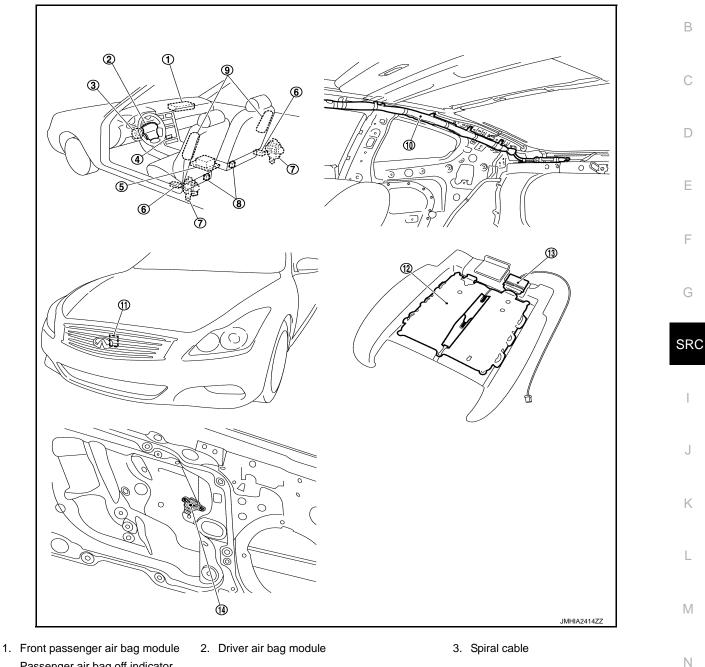
# < SYSTEM DESCRIPTION >

# **Component Parts Location**

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SRS AIR BAG



- 4. Passenger air bag off indicator (Cut-off telltale)
- 7. Front seat belt pre-tensioner (LH/ RH)
- 10. Curtain air bag module
- 13. OCS control unit

# **Component Description**

- 5. Diagnosis sensor unit (ACU)
- 8. Seat belt buckle switch (LH/RH)
- 11. Crash zone sensor
- 14. Front door satellite sensor (LH/RH)
- 6. Satellite sensor (LH/RH)
- 9. Front side air bag module (LH/RH)
- 12. OCS seat sensor mat

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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

# PASSENGER SEAT BELT WARNING SYSTEM

# < SYSTEM DESCRIPTION >

Component parts	Outline of function
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 PG-3, "How to Handle Battery"). Fuse (Refer to PG-30, "Fuse"). System component-to-harness connections. Air Bag Warning Lamp Diagnosis NFOID:000000008164243

#### 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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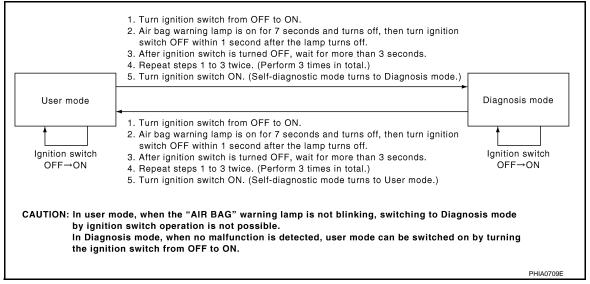
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#### < SYSTEM DESCRIPTION >

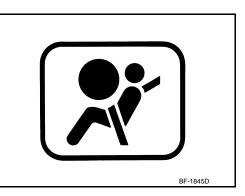
# HOW TO CHANGE SELF-DIAGNOSIS MODE WITHOUT CONSULT

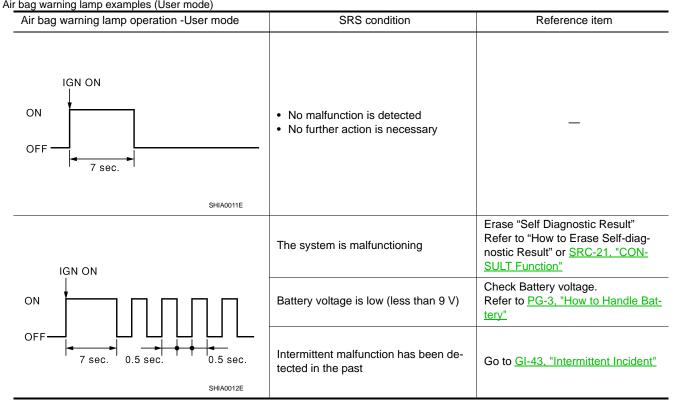


# DIAGNOSTIC PROCEDURE (USER MODE)

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 examples (User mode)

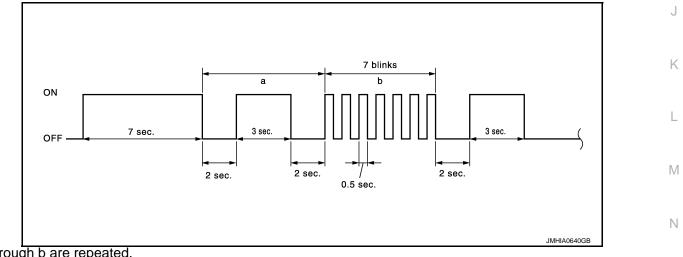
# < SYSTEM DESCRIPTION >

Air bag warning lamp operation -User mode	SRS condition	Reference item
	<ul><li>Air bag is deployed</li><li>Seat belt pre-tensioner is deployed</li></ul>	Go to <u>SRC-137, "Diagnosis Proce-</u> <u>dure"</u> or <u>SRC-139, "Diagnosis Pro-</u> <u>cedure"</u>
OFF SHIA0013E	<ul> <li>Air bag diagnosis sensor unit is mal- functioning</li> <li>Air bag power supply circuit is mal- functioning</li> <li>Air bag warning lamp circuit is mal- functioning</li> </ul>	Go to <u>SRC-174, "Diagnosis Proce-</u> dure"
IGN ON	<ul> <li>Air bag diagnosis sensor unit is mal- functioning</li> <li>Air bag warning lamp circuit is mal- functioning</li> </ul>	Go to <u>SRC-175, "Diagnosis Proce-</u> <u>dure"</u>
SHIA0014E		

# 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- sec-2. ond 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.

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

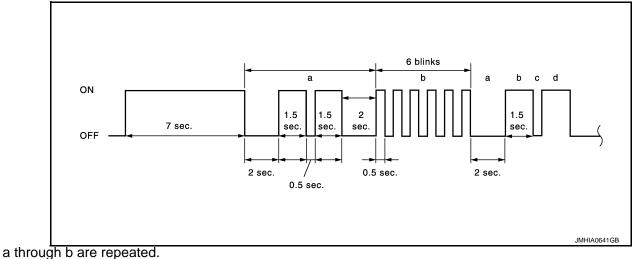
#### NUMBER OF 0.5-SECOND BLINKS AFTER A 3-SECOND BLINK INDICATES MALFUNCTIONING ITEMS

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-65, "DTC Logic"         • SRC-67, "DTC Logic"         • SRC-69, "DTC Logic"         • SRC-71, "DTC Logic"

# < SYSTEM DESCRIPTION >

Number of 0.5-second blinks	Malfunctioning items	Blinking pattern
2	Driver air bag module	Refer to the following items <ul> <li><u>SRC-45</u>, "DTC Logic"</li> <li><u>SRC-47</u>, "DTC Logic"</li> <li><u>SRC-49</u>, "DTC Logic"</li> <li><u>SRC-51</u>, "DTC Logic"</li> </ul>
3	Front LH seat belt pre-tensioner	Refer to the following items         SRC-73, "DTC Logic"         SRC-75, "DTC Logic"         SRC-77, "DTC Logic"         SRC-79, "DTC Logic"
5	Occupant Classification System control unit	Refer to the following items         • SRC-29, "DTC Logic"         • SRC-31, "DTC Logic"         • SRC-33, "DTC Logic"
6	Crash zone sensor	Refer to the following items• SRC-39, "DTC Logic"• SRC-41, "DTC Logic"
7	Air bag diagnosis sensor unit	Refer to the following items         SRC-23, "DTC Logic"         SRC-25, "DTC Logic"         SRC-37, "DTC Logic"         SRC-37, "DTC Logic"         SRC-33, "DTC Logic"         SRC-63, "DTC Logic"         SRC-83, "DTC Logic"         SRC-83, "DTC Logic"         SRC-93, "DTC Logic"         SRC-93, "DTC Logic"         SRC-93, "DTC Logic"         SRC-93, "DTC Logic"         SRC-111, "DTC Logic"         SRC-135, "DTC Logic"
8	Front passenger air bag module	Refer to the following items• SRC-55, "DTC Logic"• SRC-57, "DTC Logic"• SRC-59, "DTC Logic"• SRC-61, "DTC Logic"
11	Front passenger air bag OFF indicator	Refer to <u>SRC-35, "DTC Logic"</u> .

#### AN EXAMPLE OF TWO 1.5-SECOND BLINKS FOLLOWED BY A 0.5-SECOND BLINK 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

# < SYSTEM DESCRIPTION >

Number of 0.5-second blinks	Malfunctioning items	Blinking pattern
1	Front RH side air bag module	Refer to the following items• SRC-95, "DTC Logic"• SRC-97, "DTC Logic"• SRC-99, "DTC Logic"• SRC-101, "DTC Logic"
2	Front LH side air bag module	Refer to the following items• SRC-103, "DTC Logic"• SRC-105, "DTC Logic"• SRC-107, "DTC Logic"• SRC-109, "DTC Logic"
3	RH satellite sensor	Refer to the following items         • SRC-85, "DTC Logic"         • SRC-87, "DTC Logic"
4	LH satellite sensor	Refer to the following items• SRC-89. "DTC Logic"• SRC-91. "DTC Logic"
5	RH side curtain air bag module	Refer to the following items• SRC-113, "DTC Logic"• SRC-115, "DTC Logic"• SRC-117, "DTC Logic"• SRC-119, "DTC Logic"
6	LH side curtain air bag module	Refer to the following items• SRC-121, "DTC Logic"• SRC-123, "DTC Logic"• SRC-125, "DTC Logic"• SRC-127, "DTC Logic"
9	RH front door satellite sensor	Refer to the following items• SRC-151, "DTC Logic"• SRC-153, "DTC Logic"• SRC-155, "DTC Logic"
10	LH front door satellite sensor	Refer to the following items• SRC-156, "DTC Logic"• SRC-158, "DTC Logic"• SRC-160, "DTC Logic"

# 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.

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-165. "DTC Index"</u>.</li> <li>"No DTC" is displayed when repair is completed by part replacement or other operations.</li> <li>"SELF-DIAG RESULT [MEMORY]" is displayed until "Erase" is performed. 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.

#### < SYSTEM DESCRIPTION >

Diagnosis mode	Description	
SELF-DIAG RESULT [CAN]	CAN diagnosis result is displayed.	
Cause of Warning Lamp	It displays the cause of warning lamp illumination that is not recorded in memory.	

# CAUSE OF WARNING LAMP

The SRS air bag warning lamp blinks when the ignition voltage is a voltage value (9V or less) at which the SRS air bag cannot operate normally. After blinking, if the ignition voltage returns to normal, SRS air bag warning lamp turns OFF.DTC memory is not performed while the abnormal ignition voltage is detected. The mode cannot be switched to trouble diagnosis mode when the ignition switch is operated."No DTC" is displayed when checking "Self-diagnosis result" using CONSULT.

#### NOTE:

 SRS air bag warning may blink when the condition is out of detection area\* of the satellite sensor in door. The system is normal if SRS air bag warning lamp turns OFF after the condition returns within detection area of the satellite sensor in door.

• \*: Pressure inside of door is excessively low and air bag system cannot be operated normally (example: altitude is approximately 4,000 m or more).

Display item	Display content	Actions by worker
IGN VOLT COND	<ul> <li>The ignition voltage recognized by air bag system (air bag control unit and occupant detection system control unit) is displayed or a message stating that condition is out of detection range of satellite sensor in door is displayed.</li> <li>OK: Normal</li> <li>LOW: The ignition voltage is low, high, or out of detection range of satellite sensor in door</li> </ul>	Perform the check at an altitude of 4,000 m or less. • Check battery voltage if the ignition voltage
IGN VOLT TIME	Total number of times is displayed, summing up the num- ber of times ignition voltage error is detected and the num- ber of times that out of detection range of satellite sensor in door is detected. (Detection record is erased and counter returns to "0" by "ERASE MEMORY" in "Self-diagnosis results" using CON- SULT.)	<ul> <li>status is displayed as "LOW".</li> <li>Check battery voltage if the ignition voltage status is "OK" and the number of times detected is 1 or more. This is because an ignition voltage error may be detected in the past.</li> <li>NOTE:</li> <li>If battery voltage is normal, the cause may be</li> </ul>
LOW V RECORED	Number of times ignition switch ON is displayed after igni- tion voltage error or out of detection range of satellite sen- sor in door is detected. (Detection record is erased and counter returns to "0" by "ERASE MEMORY" in "Self-diagnosis results" using CON- SULT.)	that out of detection range of satellite sensor in door is detected.

# 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

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# DTC DETECTION LOGIC

DTC	CONSULT display description	DTC detecting condition	Possible cause
B1001 B1002 B1003 B1004 B1005	CONTROL UNIT	Air bag diagnosis sensor unit is malfunc- tioning 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>

# DTC CONFIRMATION PROCEDURE

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

$(\square)$	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-17, "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, "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.

INFOID:000000008164247

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

< 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-24, "Exploded View"</u>. Perform DTC confirmation procedure. Refer to <u>SRC-23, "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

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# DTC DETECTION LOGIC

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DTC	CONSULT display description	DTC detecting condition	Possible cause	0
B1006 B1007 B1008 B1009 B1010	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>	SRC

# DTC CONFIRMATION PROCEDURE

#### 1.CHECK SELF-DIAG RESULT (P) With CONSULT 1. Turn ignition switch ON. 2. Perform "AIR BAG" Self Diagnostic Result. Κ 🕅 Without CONSULT Turn ignition switch ON. Check the air bag warning lamp status. Refer to <u>SRC-17, "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? M YES >> Refer to SRC-25, "Diagnosis Procedure". NO >> INSPECTION END Diagnosis Procedure INFOID:000000008164250 Ν 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 P Check the harness connector.

Is the inspection result normal?

NO >> Replace harness connectors.

# 2. CHECK WIRING HARNESS

Check the wiring harness externals.

# B1006, B1007, B1008, B1009, B1010 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

- 1. Replace air bag diagnosis sensor unit. Refer to <u>SR-24, "Exploded View"</u>
- 2. Perform DTC confirmation procedure. Refer to <u>SRC-25, "DTC Logic"</u>
- Is DTC detected?

YES >> GO TO 1.

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

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# DTC DETECTION LOGIC

 DTC	CONSULT display description	DTC detecting condition	Possible cause	G
B1011 B1012 B1013 B1014 B1015	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>	SRC

# DTC CONFIRMATION PROCEDURE

1.CHECK SELF-DIAG RESULT	J
<ul> <li>With CONSULT</li> <li>1. Turn ignition switch ON.</li> <li>2. Perform "AIR BAG" Self Diagnostic Result.</li> <li>Without CONSULT</li> </ul>	К
<ol> <li>Turn ignition switch ON.</li> <li>Check the air bag warning lamp status. Refer to <u>SRC-17. "Air Bag Warning Lamp Diagnosis"</u>.</li> <li>NOTE:</li> </ol>	L
<ul> <li>SRS does not enter diagnosis mode if no malfunction is detected in user mode.</li> <li><u>Is malfunctioning part detected?</u></li> <li>YES &gt;&gt; Refer to <u>SRC-27, "Diagnosis Procedure"</u>.</li> <li>NO &gt;&gt; INSPECTION END</li> </ul>	M
Diagnosis Procedure	Ν
<ul> <li>WARNING:</li> <li>Before servicing, turn ignition switch OFF, disconnect battery negative terminal and wait at least 3 minutes. (To discharge backup capacitor.)</li> <li>Never use unspecified tester or other measuring device.</li> <li>CHECK HARNESS CONNECTOR</li> </ul>	O
Check the harness connector.	

Is the inspection result normal?

NO >> Replace harness connectors.

# 2. CHECK WIRING HARNESS

Check the wiring harness externals.

# B1011, B1012, B1013, B1014, B1015 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

- 1. Replace air bag diagnosis sensor unit. Refer to <u>SR-24. "Exploded View"</u>
- 2. Perform DTC confirmation procedure. Refer to <u>SRC-27, "DTC Logic"</u>
- Is DTC detected?

YES >> GO TO 1.

NO >> INSPECTION END

# B1017, B1020, B1021 OCCUPANT SENS C/U

#### < DTC/CIRCUIT DIAGNOSIS >

# B1017, B1020, B1021 OCCUPANT SENS C/U

# 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

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:000000008164255

# DTC DETECTION LOGIC

DTC	CONSULT display description	DTC detecting condition	Possible cause
B1017 B1020 B1021	OCCUPANT SENS C/U [UNIT FAIL]	Malfunction occurs in Occupant Classi- fication 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 CONFI	RMATION PROCEDURE		
.CHECK S	ELF-DIAG RESULT		
	tion switch ON. 'AIR BAG" Self Diagnostic F	Result CONSULT.	
Check th OTE:		us. Refer to <u>SRC-17, "Air Bag War</u>	
<u>s malfunctior</u> YES >> F	ning part detected? Refer to <u>SRC-29, "Diagnosis</u> NSPECTION END	malfunction is detected in user m Procedure".	ode.
Diagnosis	Procedure		INFOID:0000000816423
minutes. (1	vicing, turn ignition switc ſo discharge backup capa unspecified tester or othe	citor.)	tive terminal and wait at least 3
IAGNOSTI	C PROCEDURE		
.снеск н	ARNESS CONNECTOR		
Check the co	nnection of harness connec	tor.	
s the inspect	ion result normal?		

>> GO TO 2.

>> Replace harness connectors.

YES

NO

# 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-24, "Exploded View"</u>. Perform DTC confirmation procedure. Refer to <u>SRC-29, "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-163</u>, "Exploded View".

2. Perform DTC confirmation procedure. Refer to SRC-29, "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:000000008164258

# DTC DETECTION LOGIC

DTC	CONSULT display description	DTC detecting condition	Possible cause
	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>

# DTC CONFIRMATION PROCEDURE

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

#### (P) With CONSULT

- 1. Turn ignition switch ON.
- 2. Perform "AIR BAG" Self Diagnostic Result CONSULT.
- 🕅 Without CONSULT
- 1. Turn ignition switch ON.

 Check the air bag warning lamp status. Refer to <u>SRC-17, "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-31, "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.

INFOID:000000008164259

# 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-24, "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 AND SENSOR

1. Replace seat cushion frame. Refer to <u>SR-24, "Exploded View"</u>.

2. Perform DTC confirmation procedure. Refer to SRC-31, "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	CONSULT display descrip- tion	DTC detecting condition	Possible cause	SF
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>	I
TC CONF	IRMATION PROCEDU	JRE		L.
.CHECK	SELF-DIAG RESULT			
2. Perform	nition switch ON. h "AIR BAG" Self Diagnos	tic Result CONSULT.		k
	nition switch ON.	status. Refer to <u>SRC-17, "Air Bag</u>	Warning Lamp Diagnosis".	L
RS does not see a second se Second second se	oning part detected? Refer to <u>SRC-33, "Diagn</u>	if no malfunction is detected in use osis Procedure".	er mode.	N
-	INSPECTION END			Ν
Jagnosis	Trocedure		INFOID:00000008164262	
				C
Before se minutes.	(To discharge backup c	apacitor.)	negative terminal and wait at least 3	F
Before se minutes. ( Never use	(To discharge backup c		negative terminal and wait at least 3	
minutes. ( Never use DIAGNOST	(To discharge backup ca e unspecified tester or o	apacitor.) other measuring device.	negative terminal and wait at least 3	
Before se minutes. ( Never use DIAGNOST	(To discharge backup ca e unspecified tester or o FIC PROCEDURE	apacitor.) other measuring device.	negative terminal and wait at least 3	

# B1022 OCCUPANT SENS C/U

< DTC/CIRCUIT DIAGNOSIS >

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.

 $\mathbf{3}$ .Replace air bag diagnosis sensor unit

1. Replace air bag diagnosis sensor unit. Refer to <u>SR-24, "Exploded View"</u>.

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

Is DTC detected?

YES >> GO TO 4.

NO >> INSPECTION END

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

1. Replace seat cushion frame. Refer to <u>SE-163, "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

# 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.

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# DTC DETECTION LOGIC

DTC CONSULT display tion	crip-DTC detecting condition	Possible cause
B1023 PASS A/B INDCTF	T 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 sensor unit</li> </ul>

# DTC CONFIRMATION PROCEDURE

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

#### (P) With CONSULT

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

 Check the air bag warning lamp status. Refer to <u>SRC-17, "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.

#### DIAGNOSTIC PROCEDURE

# **1.**CHECK HARNESS CONNECTOR

# Check the connection of harness connector.

#### Is the inspection result normal?

NO >> Replace harness connectors.

INFOID:00000008164265

# 2. CHECK WIRING HARNESS

Check the wiring harness externals.

Is the inspection result normal?

YES >> GO TO 3.

NO >> Replace wiring harness.

**3.**CHECK PASSENGER AIR BAG OFF INDICATOR

Replace front passenger air bag OFF indicator. Refer to <u>IP-12, "A/T MODELS : Exploded View"</u> (A/T models) or <u>IP-23, "M/T MODELS : Exploded View"</u> (M/T models).

2. Perform DTC confirmation procedure. Refer to <u>SRC-35, "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-24, "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

# 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 DETECTION LOGIC

	Γ display de- iption D	DTC detecting condition	Possible cause
B1026 CONTRO B1027 B1028 B1029 B1030 B1031		liagnosis sensor unit is mal- ng 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 specifi- cation</li> </ul>

#### 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.

 Check the air bag warning lamp status. Refer to <u>SRC-17, "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-37, "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

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

< DTC/CIRCUIT DIAGNOSIS >

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

1. Replace air bag diagnosis sensor unit. Refer to <u>SR-24, "Exploded View"</u>.

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

Is DTC detected?

YES >> GO TO 1.

# 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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INFOID:000000008164269

#### DTC DETECTION LOGIC

DTC	CONSULT display description	DTC detecting condition	Possible cause	(
B1033 B1034	CRASH ZONE SEN [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>	SI

#### 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.
- Check the air bag warning lamp status. Refer to <u>SRC-17, "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-39. "Diagnosis Procedure"</u>. NO >> INSPECTION END

### Diagnosis Procedure

INFOID:000000008164271

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?

# B1033, B1034 CRASH ZONE SEN

< DTC/CIRCUIT DIAGNOSIS >

YES >> GO TO 3.

NO >> Replace wiring harness.

**3.**REPLACE CRASH ZONE SENSOR

1. Replace crash zone sensor. Refer to <u>SR-21, "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-24, "Exploded View"</u>.

2. Perform DTC confirmation procedure. Refer to SRC-39, "DTC Logic".

#### 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

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INFOID:00000008164272

#### DTC DETECTION LOGIC

DTC	CONSULT display description	DTC detecting condition	Possible cause	G
B1035	CRASH ZONE SEN [COMM FAIL]	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></ul>	SRO
B1036	CRASH ZONE SEN [UNMATCH]		Malfunction in air bag diagnosis sensor unit	ORC

#### DTC CONFIRMATION PROCEDURE

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

With CONSULT

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

Without CONSULT

- 1. Turn ignition switch ON.
- Check the air bag warning lamp status. Refer to <u>SRC-17, "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?

Revision: 2012 July

# B1035, B1036 CRASH ZONE SEN

< DTC/CIRCUIT DIAGNOSIS >

YES >> GO TO 3.

NO >> Replace wiring harness.

**3.**REPLACE CRASH ZONE SENSOR

1. Replace crash zone sensor. Refer to <u>SR-21, "Exploded View"</u>.

2. Perform DTC confirmation procedure. Refer to <u>SRC-41. "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-24, "Exploded View"</u>.

2. Perform DTC confirmation procedure. Refer to SRC-41, "DTC Logic".

#### 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

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#### DTC DETECTION LOGIC

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DTC	CONSULT display description	DTC detecting condition	Possible cause	0
B1042 B1043 B1044 B1045 B1046 B1047	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>	SRC

#### 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.

 Check the air bag warning lamp status. Refer to <u>SRC-17, "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-43, "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

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

< DTC/CIRCUIT DIAGNOSIS >

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

1. Replace air bag diagnosis sensor unit. Refer to <u>SR-24, "Exploded View"</u>.

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

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 DETECTION LOGIC

DTC	CONSULT display description	DTC detecting condition	Possible cause
B1049	DRIVER AIRBAG MODULE	Driver air bag module circuit is open	<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>
B1054	[OPEN]	(including the spiral cable)	

#### DTC CONFIRMATION PROCEDURE

**1.**CHECK SELF-DIAG RESULT

(I) 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 SRC-17, "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-45, "Diagnosis Procedure"</u>.

# NO >> INSPECTION END

Diagnosis Procedure

#### WARNING:

(P) With CONSULT

- 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 connector.

2.check wiring harness

Check the wiring harness externals.

# B1049, B1054 DRIVER AIRBAG MODULE

< DTC/CIRCUIT DIAGNOSIS >

Is the inspection result normal?

YES >> GO TO 3.

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 con-2. nector.
- Check continuity between driver air bag module harness connector and combination switch (spiral cable) 3. harness connector.

Driver air	bag module	Combination switch (spiral cable)		Continuity	
Connector	Terminal	Connector	Terminal	Continuity	
M302	10		28		
101302	11	M35	30	Existed	
M301	12		29	Existed	
NISU I	9		30	•	

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

Driver side a	Driver side air bag module		Continuity
Connector	Terminal	Continuity	
M302	10	Ground	
101302	11		Not existed
M301	12		NOT EXISTED
INISO I	9		

Is the inspection result normal?

YES >> GO TO 4.

NO >> Replace combination switch (spiral cable). Refer to SR-14, "Exploded View".

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

Replace air bag diagnosis sensor unit. Refer to <u>SR-24, "Exploded View"</u> Perform DTC confirmation procedure. Refer to <u>SRC-45, "DTC Logic"</u>. 1.

2.

Is DTC detected?

YES >> GO TO 5.

NO >> INSPECTION END

 ${f 5.}$ REPLACE DRIVER AIR BAG MODULE

1. Replace driver air bag module. Refer to SR-11, "Exploded View"

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

#### Is DTC detected?

YES >> GO TO 1.

#### 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

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#### DTC DETECTION LOGIC

DTC	CONSULT display description	DTC detecting condition	Possible cause
B1050 B1055	DRIVER AIRBAG MODULE [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

(I) With CONSULT

1. Turn ignition switch ON.

2. Perform "AIR BAG" Self Diagnostic Result.

**(R)** Without CONSULT

1. Turn ignition switch ON.

2. Check the air bag warning lamp status. Refer to SRC-17, "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-47, "Diagnosis Procedure"</u>. NO >> INSPECTION END

#### Diagnosis Procedure

#### INFOID:000000008164283

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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?

YES >> GO TO 2.

NO >> Replace harness connector.

2. CHECK WIRING HARNESS

Check the wiring harness externals.

# B1050, B1055 DRIVER AIRBAG MODULE

< DTC/CIRCUIT DIAGNOSIS >

Is the inspection result normal?

YES >> GO TO 3.

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 con-2. nector.
- Check continuity between driver air bag module harness connector and combination switch (spiral cable) 3. harness connector.

Driver air l	bag module	Combination switch (spiral cable)		Continuity	
Connector	Terminal	Connector	Terminal	Continuity	
M302	10		28		
101302	11	- M35 -	30	Existed	
M301	12		29	EXISTED	
IVISU I	9		30	•	

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

Driver side a	Driver side air bag module		Continuity
Connector	Terminal	Continuity	
M302	10	Ground	
101302	11		Not existed
M301	12		NOT EXISTED
INISO I	9		

Is the inspection result normal?

YES >> GO TO 4.

NO >> Replace combination switch (spiral cable). Refer to SR-14, "Exploded View".

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

Replace air bag diagnosis sensor unit. Refer to <u>SR-24, "Exploded View"</u>. Perform DTC confirmation procedure. Refer to <u>SRC-47, "DTC Logic"</u>. 1.

2.

Is DTC detected?

YES >> GO TO 5.

NO >> INSPECTION END

 ${f 5.}$ REPLACE DRIVER AIR BAG MODULE

1. Replace driver air bag module. Refer to SR-11, "Exploded View"

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

#### Is DTC detected?

YES >> GO TO 1.

### 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 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

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 DETECTION LOGIC

DTC	CONSULT display description	DTC detecting condition	Possible cause	G
B1051 B1056	DRIVER AIRBAG MODULE [GND-SHORT]	Driver air bag module circuit is shorted to ground (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>	SRC

#### DTC CONFIRMATION PROCEDURE

1.CHECK SELF-DIAG RESULT

(I) With CONSULT

1. Turn ignition switch ON.

2. Perform "AIR BAG" Self Diagnostic Result.

**(R)** Without CONSULT

1. Turn ignition switch ON.

2. Check the air bag warning lamp status. Refer to SRC-17, "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-49. "Diagnosis Procedure"</u>. NO >> INSPECTION END

#### Diagnosis Procedure

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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?

YES >> GO TO 2.

NO >> Replace harness connector.

2. CHECK WIRING HARNESS

Check the wiring harness externals.

# B1051, B1056 DRIVER AIRBAG MODULE

< DTC/CIRCUIT DIAGNOSIS >

Is the inspection result normal?

YES >> GO TO 3.

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 b	bag module	Combination switch (spiral cable)		
Connector	Terminal	harness connector	Terminal	Continuity
M302	10		28	
101302	11	M25	30	Existed
M301	12	M35 –	29	EXISTED
101301	9		30	-

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

Driver side	air bag module		Continuity
Connector	Connector Terminal		Continuity
M302	10	Ground	
101302	11		Not existed
M301	12		NOT EXISTED
101301	9	1	

#### Is the inspection result normal?

YES >> GO TO 4.

NO >> Replace combination switch (spiral cable). Refer to <u>SR-24, "Exploded View"</u>.

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

- 1. Replace air bag diagnosis sensor unit. Refer to <u>SR-24, "Exploded View"</u>.
- 2. Perform DTC confirmation procedure. Refer to SRC-49, "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-11, "Exploded View"</u>.
- 2. Perform DTC confirmation procedure. Refer to <u>SRC-49, "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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INFOID:000000008164287

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#### DTC DETECTION LOGIC

DTC	CONSULT display description	DTC detecting condition	Possible cause	G
B1052 B1057	DRIVER AIRBAG MODULE [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>	SRC

#### DTC CONFIRMATION PROCEDURE

1.CHECK SELF-DIAG RESULT

(I) 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 SRC-17, "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-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?

YES >> GO TO 2.

NO >> Replace harness connector.

2. CHECK WIRING HARNESS

Check the wiring harness externals.

# B1052, B1057 DRIVER AIRBAG MODULE

< DTC/CIRCUIT DIAGNOSIS >

Is the inspection result normal?

YES >> GO TO 3.

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 con-2. nector.
- Check continuity between driver air bag module harness connector and combination switch (spiral cable) 3. harness connector.

Driver air bag module		Combination switch (spiral cable)		Continuity
Connector	Terminal	Connector	Terminal	Continuity
M302	10		28	
101302	11	M35	30	Existed
M301	12	WISS N	29	Existed
NISU I	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		
101302	11		Not existed	
M301	12		NOT EXISTED	
INISO I	9			

Is the inspection result normal?

YES >> GO TO 4.

NO >> Replace combination switch (spiral cable). Refer to SR-14, "Exploded View".

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

Replace air bag diagnosis sensor unit. Refer to <u>SR-24, "Exploded View"</u>. Perform DTC confirmation procedure. Refer to <u>SRC-51, "DTC Logic"</u>. 1.

2.

Is DTC detected?

YES >> GO TO 5.

NO >> INSPECTION END

 ${f 5.}$ REPLACE DRIVER AIR BAG MODULE

1. Replace driver air bag module. Refer to SR-11, "Exploded View".

Perform DTC confirmation procedure. Refer to SRC-51, "DTC Logic". 2.

#### Is DTC detected?

YES >> GO TO 1.

>> INSPECTION END NO

# 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:000000008164291

INFOID:000000008164290

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#### DTC DETECTION LOGIC

DTC CONSULT display description	DTC detecting condition	Possible cause
31058 CONTROL UNIT 31059 31060 31061 31062 31063	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>

#### 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.

 Check the air bag warning lamp status. Refer to <u>SRC-17, "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-53</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

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

< DTC/CIRCUIT DIAGNOSIS >

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

1. Replace air bag diagnosis sensor unit. Refer to <u>SR-24, "Exploded View"</u>.

2. Perform DTC confirmation procedure. Refer to <u>SRC-53. "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

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INFOID:000000008164293

INFOID:000000008164294

#### DTC DETECTION LOGIC

DTC	CONSULT display de- scription	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>	

#### DTC CONFIRMATION PROCEDURE

**1.**CHECK SELF-DIAG RESULT With CONSULT 1. Turn ignition switch ON. 2. Perform "AIR BAG" Self Diagnostic Result. Κ 🕅 Without CONSULT Turn ignition switch ON. 1 Check the air bag warning lamp status. Refer to SRC-17, "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? M YES >> Refer to SRC-55. "Diagnosis Procedure". NO >> INSPECTION END Diagnosis Procedure INFOID:000000008164295 Ν 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 P Check the harness connector. Is the inspection result normal?

NO >> Replace harness connector.

2. CHECK WIRING HARNESS

Check the wiring harness externals.

# B1065, B1070 ASSIST A/B MODULE

< DTC/CIRCUIT DIAGNOSIS >

Is the inspection result normal?

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-24, "Exploded View"</u>.

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

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-17, "Exploded View"</u>

2. Perform DTC confirmation procedure. Refer to <u>SRC-55. "DTC Logic"</u>.

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

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INFOID:000000008164296

#### DTC DETECTION LOGIC

DTC	CONSULT display de- scription	DTC detecting condition	Possible cause	G
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 sensor unit</li> </ul>	SR

#### 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 Turn ignition switch ON. 1 Check the air bag warning lamp status. Refer to SRC-17, "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-57, "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.

## B1066, B1071 ASSIST A/B MODULE

< DTC/CIRCUIT DIAGNOSIS >

Is the inspection result normal?

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-24, "Exploded View"</u>.

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

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-17, "Exploded View"</u>.

2. Perform DTC confirmation procedure. Refer to <u>SRC-57. "DTC Logic"</u>.

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:000000008164300

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INFOID:000000008164299

#### DTC DETECTION LOGIC

-	DTC	CONSULT display de- scription	DTC detecting condition	Possible cause	G
_	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 sensor unit</li> </ul>	SRC

#### 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.	
<ol> <li>Check the air bag warning lamp status. Refer to <u>SRC-17, "Air Bag Warning Lamp Diagnosis"</u>.</li> <li>NOTE:</li> </ol>	
SRS does not enter diagnosis mode if no malfunction is detected in user mode.	
Is malfunctioning part detected?	
YES >> Refer to <u>SRC-59, "Diagnosis Procedure"</u> . NO >> INSPECTION END	
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.) <ul> <li>Never use unspecified tester or other measuring device.</li> </ul>	
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.

# 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-24, "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-17, "Exploded View"</u>
- Perform DTC confirmation procedure. Refer to SRC-59, "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

#### DTC DETECTION LOGIC

•	DTC	CONSULT display de- scription	DTC detecting condition	Possible cause	G
-	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 sensor unit</li> </ul>	SRC

#### DTC CONFIRMATION PROCEDURE

1.CHECK SELF-DIAG RESULT

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-17, "Air Bag Warning Lamp Diagnosis". NOTE: SRS does not enter diagnosis mode if no malfunction is detected in user mode. Is malfunctioning part detected? L YES >> Refer to SRC-61, "Diagnosis Procedure". NO >> INSPECTION END M Diagnosis Procedure INFOID:000000008164304 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.

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# 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-24, "Exploded View"</u>. Perform DTC confirmation procedure. Refer to <u>SRC-61, "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-17, "Exploded View"</u>

Perform DTC confirmation procedure. Refer to SRC-61, "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:000000008164306

INFOID:000000008164305

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#### DTC DETECTION LOGIC

DTC	CONSULT display description	DTC detecting condition	Possible cause
B1074 ( B1075 B1076 B1077 B1078 B1079	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>

#### DTC CONFIRMATION PROCEDURE

<b>1.</b> CHECK SELF-DIAG	RESULT
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#### (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-17, "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-63</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

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

< DTC/CIRCUIT DIAGNOSIS >

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

1. Replace air bag diagnosis sensor unit. Refer to <u>SR-24, "Exploded View"</u>.

2. Perform DTC confirmation procedure. Refer to <u>SRC-63. "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 B 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

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INFOID:000000008164308

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#### DTC DETECTION LOGIC

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DTC	CONSULT display de- scription	DTC detecting condition	Possible cause	0
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 pre-tensioner</li> <li>Malfunction in air bag diagnosis sensor unit</li> </ul>	SRC

#### DTC CONFIRMATION PROCEDURE

1.CHECK SELF-DIAG RESULT

() With CONSULT

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

Check the air bag warning lamp status. Refer to <u>SRC-17, "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-65, "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.

NO >> Replace wiring harness.

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

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

2. 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

1. Replace air bag diagnosis sensor unit. Refer to <u>SR-24, "Exploded View"</u>.

2. Perform DTC confirmation procedure. Refer to <u>SRC-65. "DTC Logic"</u>.

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 B 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

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INFOID:000000008164311

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#### DTC DETECTION LOGIC

DTC	CONSULT display de- scription	DTC detecting condition	Possible cause	G
B1082	PRE-TEN FRONT RH [VB-SHORT]	Front RH seat belt pre-tensioner circuit is shorted to some power supply circuit	0	SRC

#### 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** 

Turn ignition switch ON.

Check the air bag warning lamp status. Refer to <u>SRC-17, "Air Bag Warning Lamp Diagnosis"</u>.

#### NOTE:

WARNING:

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

Is malfunctioning part detected?

YES >> Refer to <u>SRC-67, "Diagnosis Procedure"</u>. NO >> INSPECTION END

# Diagnosis Procedure

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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.

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

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

2. 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

1. Replace air bag diagnosis sensor unit. Refer to <u>SR-24, "Exploded View"</u>.

2. Perform DTC confirmation procedure. Refer to <u>SRC-67. "DTC Logic"</u>.

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 B 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

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INFOID:000000008164314

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#### DTC DETECTION LOGIC

DTC	CONSULT display de- scription	DTC detecting condition	Possible cause	G
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 sensor unit</li> </ul>	SRC

#### DTC CONFIRMATION PROCEDURE

#### 1.CHECK SELF-DIAG RESULT (P) With CONSULT 1. Turn ignition switch ON. 2. Perform "AIR BAG" Self Diagnostic Result. Κ Without CONSULT 1. Turn ignition switch ON. Check the air bag warning lamp status. Refer to <u>SRC-17, "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? M YES >> Refer to SRC-69, "Diagnosis Procedure". >> INSPECTION END NO Diagnosis Procedure INFOID:000000008164316 Ν 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 Ρ Check the harness connector.

Is the inspection result normal?

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.

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

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

2. 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

1. Replace air bag diagnosis sensor unit. Refer to <u>SR-24, "Exploded View"</u>.

2. Perform DTC confirmation procedure. Refer to <u>SRC-69, "DTC Logic"</u>.

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 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:000000008164318

INFOID:000000008164317

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#### DTC DETECTION LOGIC

DTC	CONSULT display de- scription	DTC detecting condition	Possible cause	G
B1084	PRE-TEN FRONT RH [SHORT]	Front RH seat belt pre-tensioner circuit are shorted to each other	<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 sensor unit</li> </ul>	SRC

#### DTC CONFIRMATION PROCEDURE

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

With CONSULT		
1. Turn ignition switch ON.		
<ol><li>Perform "AIR BAG" Self Diagnostic Result.</li></ol>		
🕱 Without CONSULT		
1. Turn ignition switch ON.	Κ	
2. Check the air bag warning lamp status. Refer to SRC-17, "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-71, "Diagnosis Procedure"</u> .		
NO >> INSPECTION END	М	
	IVI	
Diagnosis Procedure		
	Ν	
WARNING:	IN	
• 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.	0	
1.CHECK HARNESS CONNECTOR		
Check the harness connector.	P	
Is the inspection result normal?		
YES >> GO TO 2.		
NO >> Replace harness connector.		

**Z**.CHECK WIRING HARNESS

Check the wiring harness externals.

Is the inspection result 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-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-24, "Exploded View"</u>.
 Perform DTC confirmation procedure. Refer to <u>SRC-71, "DTC Logic"</u>.

#### Is DTC detected?

YES >> GO TO 1.

# **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 В 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:00000000816432

INFOID:000000008164320

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## DTC DETECTION LOGIC

DTC	CONSULT display de- scription	DTC detecting condition	Possible cause	9
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 pre-tensioner</li> <li>Malfunction in air bag diagnosis sensor unit</li> </ul>	SRC

## DTC CONFIRMATION PROCEDURE

## 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. Check the air bag warning lamp status. Refer to <u>SRC-17, "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 SRC-73, "Diagnosis Procedure". NO >> INSPECTION END Diagnosis Procedure INFOID:000000008164322 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?

# **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-73, "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-24, "Exploded View"</u>.
 Perform DTC confirmation procedure. Refer to <u>SRC-73, "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 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:000000008164324

INFOID:000000008164323

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## DTC DETECTION LOGIC

DTC	CONSULT display de- scription	DTC detecting condition	Possible cause	G
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 pre-tensioner</li> <li>Malfunction in air bag diagnosis sensor unit</li> </ul>	SRC

## DTC CONFIRMATION PROCEDURE

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

(P) With CONSULT	
1. Turn ignition switch ON.	J
2. Perform "AIR BAG" Self Diagnostic Result.	
Without CONSULT	
1. Turn ignition switch ON.	Κ
2. Check the air bag warning lamp status. Refer to <u>SRC-17, "Air Bag Warning Lamp Diagnosis"</u> .	
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-75, "Diagnosis Procedure"</u> .	
NO >> INSPECTION END	М
	1 V 1
Diagnosis Procedure	
	Ν
WARNING:	IN
• 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.	0
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?

# **B1087 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-75</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-24, "Exploded View"</u>.
 Perform DTC confirmation procedure. Refer to <u>SRC-75, "DTC Logic"</u>.

#### Is DTC detected?

YES >> GO TO 1.

# 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 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:000000008164327

INFOID:000000008164326

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## DTC DETECTION LOGIC

DTC	CONSULT display de- scription	DTC detecting condition	Possible cause	G
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 pre-tensioner</li> <li>Malfunction in air bag diagnosis sensor unit</li> </ul>	SRC

## DTC CONFIRMATION PROCEDURE

**1.**CHECK SELF-DIAG RESULT

(E) With CONSULT	
1. Turn ignition switch ON.	J
2. Perform "AIR BAG" Self Diagnostic Result.	
Without CONSULT	
1. Turn ignition switch ON.	Κ
2. Check the air bag warning lamp status. Refer to <u>SRC-17, "Air Bag Warning Lamp Diagnosis"</u> .	
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-77, "Diagnosis Procedure"</u> .	
NO >> INSPECTION END	M
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.	$\cap$
1. CHECK HARNESS CONNECTOR	0
I.CHECK HARNESS CONNECTOR	
Check the harness connector.	D
Is the inspection result normal?	Р
YES >> GO TO 2.	

NO >> Replace harness connector.

2. CHECK WIRING HARNESS

Check the wiring harness 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</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 SR-24, "Exploded View". 1.

2. Perform DTC confirmation procedure. Refer to SRC-77, "DTC Logic".

#### 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 B 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:000000008164330

INFOID:000000008164329

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## DTC DETECTION LOGIC

DTC	CONSULT display de- scription	DTC detecting condition	Possible cause	G
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 sensor unit</li> </ul>	SRC

## 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.
- Check the air bag warning lamp status. Refer to <u>SRC-17, "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

INFOID:000000008164331

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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?

YES >> GO TO 2.

NO >> Replace harness connector.

2. CHECK WIRING HARNESS

Check the wiring harness externals.

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

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-79, "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-24, "Exploded View"</u>.
 Perform DTC confirmation procedure. Refer to <u>SRC-79, "DTC Logic"</u>.

#### Is DTC detected?

YES >> GO TO 1.

# B1090, B1091, B1092, B1093, B1094, B1095 DIAGNOSIS SENSOR UNIT < DTC/CIRCUIT DIAGNOSIS >

# B1090, B1091, B1092, B1093, B1094, B1095 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:000000008782201

INFOID:000000008800046

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## DTC DETECTION LOGIC

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DTC	CONSULT display description	DTC detecting condition	Possible cause	0
B1090 B1091 B1092 B1093	CONTROL UNIT	Air bag diagnosis sensor unit is malfunctioning	Malfunction in air bag diagnosis sensor unit	SRC
B0194 B1095				Ι

## DTC CONFIRMATION PROCEDURE

<b>1.</b> CHECK SELF-DIAG	RESULT
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#### (P) With CONSULT

- 1. Turn ignition switch ON.
- 2. Perform "Self Diagnostic Result" mode of "AIR BAG" using CONSULT.
- 🕅 Without CONSULT
- 1. Turn ignition switch ON.

 Check the air bag warning lamp status. Refer to <u>SRC-17, "Air Bag Warning Lamp Diagnosis"</u>. NOTE:

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

#### Is malfunctioning part detected?

- YES >> Refer to <u>SRC-81, "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.**CHECK HARNESS CONNECTOR

Check the harness connector.

Is the inspection result normal?

YES >> GO TO 2.

- NO >> Replace harness connectors.
- 2.CHECK WIRING HARNESS

## B1090, B1091, B1092, B1093, B1094, B1095 DIAGNOSIS SENSOR UNIT

< DTC/CIRCUIT DIAGNOSIS >

Check the wiring harness externals.

Is the inspection result normal?

YES >> GO TO 3.

NO >> Replace wiring harness.

 $\mathbf{3}.\mathsf{REPLACE}$  air bag diagnosis sensor unit

1. Replace air bag diagnosis sensor unit. Refer to <u>SR-24, "Removal and Installation"</u>.

2. Perform DTC confirmation procedure. Refer to <u>SRC-81, "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:000000008164333

INFOID:000000008164332

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## DTC DETECTION LOGIC

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DTC	CONSULT display description	DTC detecting condition	Possible cause	0
B1106 B1107 B1108 B1109 B1110 B1111	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>	SRC

## 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.

 Check the air bag warning lamp status. Refer to <u>SRC-17, "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-83</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

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

< DTC/CIRCUIT DIAGNOSIS >

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

1. Replace air bag diagnosis sensor unit. Refer to <u>SR-24, "Exploded View"</u>.

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

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INFOID:000000008164335

## DTC DETECTION LOGIC

 DTC	CONSULT display de- scription	DTC detecting condition	Possible cause	G
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 sensor unit</li> </ul>	SRC

## DTC CONFIRMATION PROCEDURE

**1.**CHECK SELF-DIAG RESULT

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-17, "Air Bag Warning Lamp Diagnosis". NOTE: SRS does not enter diagnosis mode if no malfunction is detected in user mode. Is malfunctioning part detected? L YES >> Refer to SRC-85, "Diagnosis Procedure". NO >> INSPECTION END M Diagnosis Procedure INFOID:000000008164337 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.

# B1113, B1114 SATELLITE SENS RH

< DTC/CIRCUIT DIAGNOSIS >

NO >> Replace wiring harness.

**3.**REPLACE SATELLITE SENSOR

1. Replace RH satellite sensor. 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 4.

NO >> INSPECTION END

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

1. Replace air bag diagnosis sensor unit. Refer to <u>SR-24, "Exploded View"</u>.

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

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## DTC DETECTION LOGIC

DTC	CONSULT display de- scription	DTC detecting condition	Possible cause	G
B1115	SATELLITE SENS RH [COMM FAIL]	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></ul>	SR
B1116	SATELLITE SENS RH [UNMATCH]		Malfunction in air bag diagnosis sensor unit	OR

## DTC CONFIRMATION PROCEDURE

**1.**CHECK SELF-DIAG RESULT

(I) With CONSULT

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

Without CONSULT

- 1. Turn ignition switch ON.
- Check the air bag warning lamp status. Refer to <u>SRC-17, "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:

- 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 connector.

2. CHECK WIRING HARNESS

Check the wiring harness externals.

Is the inspection result normal?

# B1115, B1116 SATELLITE SENS RH

< DTC/CIRCUIT DIAGNOSIS >

YES >> GO TO 3.

NO >> Replace wiring harness.

**3.**REPLACE SATELLITE SENSOR

1. Replace RH satellite sensor. 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 4.

NO >> INSPECTION END

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

1. Replace air bag diagnosis sensor unit. Refer to <u>SR-24, "Exploded View"</u>.

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

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INFOID:00000008164341

## DTC DETECTION LOGIC

-	DTC	CONSULT display de- scription	DTC detecting condition	Possible cause	G
-	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 sensor unit</li> </ul>	SRC

## 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-17, "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</u>, "Diagnosis Procedure".

NO >> INSPECTION END

## Diagnosis Procedure

## WARNING:

- Before servicing, turn ignition switch OFF, disconnect battery negative terminal and wait at least 3 <sup>N</sup> 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.

## B1118, B1119 SATELLITE SENS LH

< DTC/CIRCUIT DIAGNOSIS >

NO >> Replace wiring harness.

**3.**REPLACE SATELLITE SENSOR

1. Replace LH satellite sensor. 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 4.

NO >> INSPECTION END

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

1. Replace air bag diagnosis sensor unit. Refer to <u>SR-24, "Exploded View"</u>.

2. Perform DTC confirmation procedure. Refer to <u>SRC-89, "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 В side collision.

## OPERATION

When air bag diagnosis sensor unit defines both signal voltage of the "G" sensor and the safing algorithm to С 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

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INFOID:000000008164344

## DTC DETECTION LOGIC

DTC	CONSULT display de- scription	DTC detecting condition	Possible cause	G
B1120	SATELLITE SENS LH [COMM FAIL]	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></ul>	SRO
B1121	SATELLITE SENS LH [UNMATCH]		<ul> <li>Malfunction in air bag diagnosis sensor unit</li> </ul>	ORC

## DTC CONFIRMATION PROCEDURE

## 1.CHECK SELF-DIAG RESULT

With CONSULT
1. Turn ignition switch ON.
<ol><li>Perform "AIR BAG" Self Diagnostic Result.</li></ol>
🛞 Without CONSULT
1. Turn ignition switch ON.
2. Check the air bag warning lamp status. Refer to SRC-17, "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-91, "Diagnosis Procedure"</u> .

>> INSPECTION END NO

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 connector.

2.CHECK WIRING HARNESS

Check the wiring harness externals. Is the inspection result normal?

Revision: 2012 July

# B1120, B1121 SATELLITE SENS LH

< DTC/CIRCUIT DIAGNOSIS >

YES >> GO TO 3.

NO >> Replace wiring harness.

**3.**REPLACE SATELLITE SENSOR

1. Replace LH satellite sensor. Refer to <u>SR-22, "Exploded View"</u>.

2. Perform DTC confirmation procedure. Refer to <u>SRC-91, "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-24, "Exploded View"</u>.

2. Perform DTC confirmation procedure. Refer to SRC-91, "DTC Logic".

#### 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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INFOID:000000008164347

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## DTC DETECTION LOGIC

DTC	CONSULT display description	DTC detecting condition	Possible cause	G
B1122 B1123 B1124 B1125 B1126 B1127	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>	SR

## DTC CONFIRMATION PROCEDURE

#### (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-17, "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-93, "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

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

< DTC/CIRCUIT DIAGNOSIS >

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

1. Replace air bag diagnosis sensor unit. Refer to <u>SR-24, "Exploded View"</u>.

2. Perform DTC confirmation procedure. Refer to <u>SRC-93. "DTC Logic"</u>.

Is DTC detected?

YES >> GO TO 1.

## 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 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

## DTC DETECTION LOGIC

_	DTC	CONSULT display description	DTC detecting condition	Possible cause	G
_	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>	SRC

## DTC CONFIRMATION PROCEDURE

1.CHECK SELF-DIAG RESULT

(P) With CONSULT	
1. Turn ignition switch ON.	
2. Perform "AIR BAG" Self Diagnostic Result.	J
Without CONSULT	
1. Turn ignition switch ON.	
<ol> <li>Check the air bag warning lamp status.</li> <li>SRC-17, "Air Bag Warning Lamp Diagnosis"</li> </ol>	Κ
NOTE:	
SRS does not enter diagnosis mode if no malfunction is detected in user mode.	
Is malfunctioning part detected?	L
YES >> Refer to <u>SRC-95, "Diagnosis Procedure"</u> .	
NO >> INSPECTION END	
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Diagnosis Procedure	IVI
WARNING:	Ν
<ul> <li>WARNING:</li> <li>Before servicing, turn ignition switch OFF, disconnect battery negative terminal and wait at least 3</li> </ul>	Ν
<ul> <li>WARNING:</li> <li>Before servicing, turn ignition switch OFF, disconnect battery negative terminal and wait at least 3 minutes. (To discharge backup capacitor.)</li> </ul>	Ν
<ul> <li>WARNING:</li> <li>Before servicing, turn ignition switch OFF, disconnect battery negative terminal and wait at least 3 minutes. (To discharge backup capacitor.)</li> <li>Never use unspecified tester or other measuring device.</li> </ul>	
<ul> <li>WARNING:</li> <li>Before servicing, turn ignition switch OFF, disconnect battery negative terminal and wait at least 3 minutes. (To discharge backup capacitor.)</li> </ul>	N
<ul> <li>WARNING:</li> <li>Before servicing, turn ignition switch OFF, disconnect battery negative terminal and wait at least 3 minutes. (To discharge backup capacitor.)</li> <li>Never use unspecified tester or other measuring device.</li> </ul>	
<ul> <li>WARNING:</li> <li>Before servicing, turn ignition switch OFF, disconnect battery negative terminal and wait at least 3 minutes. (To discharge backup capacitor.)</li> <li>Never use unspecified tester or other measuring device.</li> <li>1.CHECK HARNESS CONNECTOR</li> <li>Check the harness connector.</li> </ul>	0
<ul> <li>WARNING:</li> <li>Before servicing, turn ignition switch OFF, disconnect battery negative terminal and wait at least 3 minutes. (To discharge backup capacitor.)</li> <li>Never use unspecified tester or other measuring device.</li> <li>1.CHECK HARNESS CONNECTOR</li> <li>Check the harness connector.</li> <li>Is the inspection result normal?</li> </ul>	
<ul> <li>WARNING:</li> <li>Before servicing, turn ignition switch OFF, disconnect battery negative terminal and wait at least 3 minutes. (To discharge backup capacitor.)</li> <li>Never use unspecified tester or other measuring device.</li> <li>1.CHECK HARNESS CONNECTOR</li> <li>Check the harness connector.</li> <li>Is the inspection result normal?</li> <li>YES &gt;&gt; GO TO 2.</li> </ul>	0
<ul> <li>WARNING:</li> <li>Before servicing, turn ignition switch OFF, disconnect battery negative terminal and wait at least 3 minutes. (To discharge backup capacitor.)</li> <li>Never use unspecified tester or other measuring device.</li> <li>1.CHECK HARNESS CONNECTOR</li> <li>Check the harness connector.</li> <li>Is the inspection result normal?</li> <li>YES &gt;&gt; GO TO 2.</li> <li>NO &gt;&gt; Replace harness connector.</li> </ul>	0
<ul> <li>WARNING:</li> <li>Before servicing, turn ignition switch OFF, disconnect battery negative terminal and wait at least 3 minutes. (To discharge backup capacitor.)</li> <li>Never use unspecified tester or other measuring device.</li> <li>1.CHECK HARNESS CONNECTOR</li> <li>Check the harness connector.</li> <li>Is the inspection result normal?</li> <li>YES &gt;&gt; GO TO 2.</li> </ul>	0
<ul> <li>WARNING:</li> <li>Before servicing, turn ignition switch OFF, disconnect battery negative terminal and wait at least 3 minutes. (To discharge backup capacitor.)</li> <li>Never use unspecified tester or other measuring device.</li> <li>1.CHECK HARNESS CONNECTOR</li> <li>Check the harness connector.</li> <li>Is the inspection result normal?</li> <li>YES &gt;&gt; GO TO 2.</li> <li>NO &gt;&gt; Replace harness connector.</li> </ul>	0
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	0

YES >> GO TO 3.

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NO >> Replace wiring harness.

3. REPLACE air bag diagnosis sensor unit

- Replace air bag diagnosis sensor unit. Refer to <u>SR-24, "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-163, "Exploded View"</u>.
- 2. Perform DTC confirmation procedure. Refer to SRC-95, "DTC Logic".

## Is DTC detected?

YES >> GO TO 1.

## 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

## DTC DETECTION LOGIC

DTC	CONSULT display description	DTC detecting condition	Possible cause	G
 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 sensor unit</li> </ul>	SRC

## DTC CONFIRMATION PROCEDURE

1.CHECK SELF-DIAG RESULT

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-17, "Air Bag Warning Lamp Diagnosis". NOTE: SRS does not enter diagnosis mode if no malfunction is detected in user mode. Is malfunctioning part detected? L YES >> Refer to SRC-97, "Diagnosis Procedure". NO >> INSPECTION END M Diagnosis Procedure INFOID:000000008164355 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.

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NO >> Replace wiring harness.

3. REPLACE air bag diagnosis sensor unit

- Replace air bag diagnosis sensor unit. Refer to <u>SR-24, "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-163, "Exploded View"</u>.
- 2. Perform DTC confirmation procedure. Refer to SRC-97, "DTC Logic".

## Is DTC detected?

YES >> GO TO 1.

## 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

## DTC DETECTION LOGIC

-	DTC	CONSULT display description	DTC detecting condition	Possible cause	G
_	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 sensor unit</li> </ul>	SRC

## 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. Check the air bag warning lamp status. Refer to SRC-17, "Air Bag Warning Lamp Diagnosis". Κ 2. NOTE: SRS does not enter diagnosis mode if no malfunction is detected in user mode. Is malfunctioning part detected? L YES >> Refer to SRC-99, "Diagnosis Procedure". NO >> INSPECTION END M Diagnosis Procedure INFOID:000000008164358 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.

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NO >> Replace wiring harness.

3. REPLACE air bag diagnosis sensor unit

- Replace air bag diagnosis sensor unit. Refer to <u>SR-24, "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 RH side air bag module. Refer to <u>SE-163, "Exploded View"</u>.
- 2. Perform DTC confirmation procedure. Refer to SRC-99, "DTC Logic".

#### Is DTC detected?

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

# 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 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

## DTC DETECTION LOGIC

 DTC	CONSULT display description	DTC detecting condition	Possible cause	G
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 sensor unit</li> </ul>	SRC

## 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-17, "Air Bag Warning Lamp Diagnosis". NOTE: SRS does not enter diagnosis mode if no malfunction is detected in user mode. Is malfunctioning part detected? L YES >> Refer to SRC-101, "Diagnosis Procedure". NO >> INSPECTION END M Diagnosis Procedure INFOID:000000008164361 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.

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NO >> Replace wiring harness.

3. REPLACE air bag diagnosis sensor unit

- Replace air bag diagnosis sensor unit. Refer to <u>SR-24, "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 RH side air bag module. Refer to <u>SE-163, "Exploded View"</u>.
- 2. Perform DTC confirmation procedure. Refer to SRC-101, "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

## DTC DETECTION LOGIC

-	DTC	CONSULT display description	DTC detecting condition	Possible cause	G
-	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>	SRC

## 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. Check the air bag warning lamp status. Refer to SRC-17, "Air Bag Warning Lamp Diagnosis". Κ 2. NOTE: SRS does not enter diagnosis mode if no malfunction is detected in user mode. Is malfunctioning part detected? L YES >> Refer to SRC-103, "Diagnosis Procedure". NO >> INSPECTION END M Diagnosis Procedure INFOID:000000008164364 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.

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NO >> Replace wiring harness.

3. REPLACE air bag diagnosis sensor unit

- Replace air bag diagnosis sensor unit. Refer to <u>SR-24, "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-163, "Exploded View"</u>.
- 2. Perform DTC confirmation procedure. Refer to SRC-103, "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	INF0ID:00000008164366
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## DTC DETECTION LOGIC

	DTC	CONSULT display description	DTC detecting condition	Possible cause	G
-	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 sensor unit</li> </ul>	SRC

## 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-17, "Air Bag Warning Lamp Diagnosis". NOTE: SRS does not enter diagnosis mode if no malfunction is detected in user mode. Is malfunctioning part detected? L YES >> Refer to SRC-105, "Diagnosis Procedure". NO >> INSPECTION END M Diagnosis Procedure INFOID:000000008164367 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.

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NO >> Replace wiring harness.

3. REPLACE air bag diagnosis sensor unit

- Replace air bag diagnosis sensor unit. Refer to <u>SR-24, "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-163, "Exploded View"</u>.
- 2. Perform DTC confirmation procedure. Refer to <u>SRC-105, "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

## DTC DETECTION LOGIC

-	DTC	CONSULT display description	DTC detecting condition	Possible cause	G
	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> <li>Malfunction in air bag diagnosis sensor unit</li> </ul>	SRC

## 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. Check the air bag warning lamp status. Refer to SRC-17, "Air Bag Warning Lamp Diagnosis". Κ 2. NOTE: SRS does not enter diagnosis mode if no malfunction is detected in user mode. Is malfunctioning part detected? L YES >> Refer to SRC-107, "Diagnosis Procedure". NO >> INSPECTION END M Diagnosis Procedure INFOID:000000008164370 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.

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NO >> Replace wiring harness.

3. REPLACE air bag diagnosis sensor unit

- Replace air bag diagnosis sensor unit. Refer to <u>SR-24, "Exploded View"</u>. Perform DTC confirmation procedure. Refer to <u>SRC-107, "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-163, "Exploded View"</u>.
- 2. Perform DTC confirmation procedure. Refer to <u>SRC-107, "DTC Logic"</u>.

## 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:00000008164372
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## DTC DETECTION LOGIC

-	DTC	CONSULT display description	DTC detecting condition	Possible cause	G
-	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 sensor unit</li> </ul>	SRC

## 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-17, "Air Bag Warning Lamp Diagnosis". NOTE: SRS does not enter diagnosis mode if no malfunction is detected in user mode. Is malfunctioning part detected? L YES >> Refer to SRC-109, "Diagnosis Procedure". NO >> INSPECTION END M Diagnosis Procedure INFOID:000000008164373 WARNING: Ν Before servicing, turn ignition switch OFF, disconnect battery negative terminal and wait at least 3 minutes. (To discharge backup capacitor.) Never use un specified 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.

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NO >> Replace wiring harness.

3. REPLACE air bag diagnosis sensor unit

- Replace air bag diagnosis sensor unit. Refer to <u>SR-24, "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 FRONT SIDE AIR BAG MODULE

- 1. Replace front LH side air bag module. Refer to <u>SE-163, "Exploded View"</u>.
- 2. Perform DTC confirmation procedure. Refer to SRC-109, "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:000000008164375

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## DTC DETECTION LOGIC

DTC	CONSULT display description	DTC detecting condition	Possible cause
B1138 B1139 B1140 B1141 B1142 B1143	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>

## 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.

 Check the air bag warning lamp status. Refer to <u>SRC-17, "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-111, "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

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

< DTC/CIRCUIT DIAGNOSIS >

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

1. Replace air bag diagnosis sensor unit. Refer to <u>SR-24, "Exploded View"</u>.

2. Perform DTC confirmation procedure. Refer to <u>SRC-111, "DTC Logic"</u>.

Is DTC detected?

YES >> GO TO 1.

# 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

## DTC DETECTION LOGIC

DTC	CONSULT display de- scription	DTC detecting condition	Possible cause	G
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>	SRC

## 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-17, "Air Bag Warning Lamp Diagnosis". NOTE: SRS does not enter diagnosis mode if no malfunction is detected in user mode. Is malfunctioning part detected? L YES >> Refer to SRC-113, "Diagnosis Procedure". NO >> INSPECTION END M Diagnosis Procedure INFOID:000000008164379 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.

Check the wiring harness externals. Is the inspection result normal?

YES >> GO TO 3.

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# **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-24, "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-19, "Exploded View"</u>
- 2. Perform DTC confirmation procedure. Refer to SRC-113, "DTC Logic".

#### Is DTC detected?

YES >> GO TO 1.

# 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
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## DTC DETECTION LOGIC

	DTC	CONSULT display de- scription	DTC detecting condition	Possible cause	G
-	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 sensor unit</li> </ul>	SRC

## 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-17, "Air Bag Warning Lamp Diagnosis". NOTE: SRS does not enter diagnosis mode if no malfunction is detected in user mode. Is malfunctioning part detected? L YES >> Refer to <u>SRC-115</u>, "Diagnosis Procedure". NO >> INSPECTION END M Diagnosis Procedure INFOID:000000008164382 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.

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# **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-24, "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-19, "Exploded View"</u>
- 2. Perform DTC confirmation procedure. Refer to SRC-115, "DTC Logic".

#### Is DTC detected?

YES >> GO TO 1.

# 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:00000008164384

## DTC DETECTION LOGIC

	DTC	CONSULT display de- scription	DTC detecting condition	Possible cause	G
-	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 bag module</li> <li>Malfunction in air bag diagnosis sensor unit</li> </ul>	SRC

## DTC CONFIRMATION PROCEDURE

1.CHECK SELF-DIAG RESULT

(P)With CONSULT	
1. Turn ignition switch ON.	
2. Perform "AIR BAG" Self Diagnostic Result.	J
Without CONSULT	
1. Turn ignition switch ON.	
2. Check the air bag warning lamp status. Refer to <u>SRC-17, "Air Bag Warning Lamp Diagnosis"</u> .	Κ
NOTE:	
SRS does not enter diagnosis mode if no malfunction is detected in user mode.	
Is malfunctioning part detected?	L
YES >> Refer to <u>SRC-117, "Diagnosis Procedure"</u> .	
NO >> INSPECTION END	
	M
Diagnosis Procedure	
WARNING:	Ν
• Before servicing, turn ignition switch OFF, disconnect battery negative terminal and wait at least 3	Ν
• Before servicing, turn ignition switch OFF, disconnect battery negative terminal and wait at least 3 minutes. (To discharge backup capacitor.)	Ν
<ul> <li>Before servicing, turn ignition switch OFF, disconnect battery negative terminal and wait at least 3 minutes. (To discharge backup capacitor.)</li> <li>Never use unspecified tester or other measuring device.</li> </ul>	N
• Before servicing, turn ignition switch OFF, disconnect battery negative terminal and wait at least 3 minutes. (To discharge backup capacitor.)	N
<ul> <li>Before servicing, turn ignition switch OFF, disconnect battery negative terminal and wait at least 3 minutes. (To discharge backup capacitor.)</li> <li>Never use unspecified tester or other measuring device.</li> </ul>	N
<ul> <li>Before servicing, turn ignition switch OFF, disconnect battery negative terminal and wait at least 3 minutes. (To discharge backup capacitor.)</li> <li>Never use unspecified tester or other measuring device.</li> <li>CHECK HARNESS CONNECTOR</li> <li>Check the harness connector.</li> </ul>	0
<ul> <li>Before servicing, turn ignition switch OFF, disconnect battery negative terminal and wait at least 3 minutes. (To discharge backup capacitor.)</li> <li>Never use unspecified tester or other measuring device.</li> <li>CHECK HARNESS CONNECTOR</li> </ul>	N O P
<ul> <li>Before servicing, turn ignition switch OFF, disconnect battery negative terminal and wait at least 3 minutes. (To discharge backup capacitor.)</li> <li>Never use unspecified tester or other measuring device.         <ol> <li>CHECK HARNESS CONNECTOR</li> <li>Check the harness connector.</li> <li>Is the inspection result normal?</li> <li>YES &gt;&gt; GO TO 2.</li> </ol> </li> </ul>	0
<ul> <li>Before servicing, turn ignition switch OFF, disconnect battery negative terminal and wait at least 3 minutes. (To discharge backup capacitor.)</li> <li>Never use unspecified tester or other measuring device.</li> <li>1.CHECK HARNESS CONNECTOR</li> <li>Check the harness connector.</li> <li>Is the inspection result normal?</li> <li>YES &gt;&gt; GO TO 2.</li> <li>NO &gt;&gt; Replace harness connector.</li> </ul>	0
<ul> <li>Before servicing, turn ignition switch OFF, disconnect battery negative terminal and wait at least 3 minutes. (To discharge backup capacitor.)</li> <li>Never use unspecified tester or other measuring device.         <ol> <li>CHECK HARNESS CONNECTOR</li> <li>Check the harness connector.</li> <li>Is the inspection result normal?</li> <li>YES &gt;&gt; GO TO 2.</li> </ol> </li> </ul>	0
<ul> <li>Before servicing, turn ignition switch OFF, disconnect battery negative terminal and wait at least 3 minutes. (To discharge backup capacitor.)</li> <li>Never use unspecified tester or other measuring device.</li> <li>1.CHECK HARNESS CONNECTOR</li> <li>Check the harness connector.</li> <li>Is the inspection result normal?</li> <li>YES &gt;&gt; GO TO 2.</li> <li>NO &gt;&gt; Replace harness connector.</li> </ul>	0
<ul> <li>Before servicing, turn ignition switch OFF, disconnect battery negative terminal and wait at least 3 minutes. (To discharge backup capacitor.)</li> <li>Never use unspecified tester or other measuring device.</li> <li>CHECK HARNESS CONNECTOR</li> <li>Check the harness connector.</li> <li>Is the inspection result normal?</li> <li>YES &gt;&gt; GO TO 2.</li> <li>NO &gt;&gt; Replace harness connector.</li> <li>CHECK WIRING HARNESS</li> </ul>	0

YES >> GO TO 3.

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# **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-24, "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 RH side curtain air bag module. Refer to <u>SR-19, "Exploded View"</u>

2. Perform DTC confirmation procedure. Refer to SRC-117, "DTC Logic".

#### Is DTC detected?

YES >> GO TO 1.

# 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

## DTC DETECTION LOGIC

-	DTC	CONSULT display de- scription	DTC detecting condition	Possible cause	G
	B1148	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 sensor unit</li> </ul>	SRC

## 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-17, "Air Bag Warning Lamp Diagnosis". NOTE: SRS does not enter diagnosis mode if no malfunction is detected in user mode. Is malfunctioning part detected? L YES >> Refer to SRC-119, "Diagnosis Procedure". NO >> INSPECTION END M Diagnosis Procedure INFOID:000000008164388 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.

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# **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-24, "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 RH side curtain air bag module. Refer to <u>SR-19, "Exploded View"</u>
- 2. Perform DTC confirmation procedure. Refer to SRC-119, "DTC Logic".

#### Is DTC detected?

YES >> GO TO 1.

# 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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## DTC DETECTION LOGIC

_	DTC	CONSULT display de- scription	DTC detecting condition	Possible cause	G
	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>	SRC

## 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-17, "Air Bag Warning Lamp Diagnosis". NOTE: SRS does not enter diagnosis mode if no malfunction is detected in user mode. Is malfunctioning part detected? L YES >> Refer to SRC-121, "Diagnosis Procedure". NO >> INSPECTION END M Diagnosis Procedure INFOID:000000008164391 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.

# **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-24, "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-19. "Exploded View"
- 2. Perform DTC confirmation procedure. Refer to SRC-121, "DTC Logic".

#### Is DTC detected?

YES >> GO TO 1.

# 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

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INFOID:00000008164392

## DTC DETECTION LOGIC

DTC	CONSULT display de- scription	DTC detecting condition	Possible cause	G
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 sensor unit</li> </ul>	SRC

## 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-17, "Air Bag Warning Lamp Diagnosis". NOTE: SRS does not enter diagnosis mode if no malfunction is detected in user mode. Is malfunctioning part detected? L YES >> Refer to SRC-123, "Diagnosis Procedure". NO >> INSPECTION END M Diagnosis Procedure INFOID:000000008164394 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.

# **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-24, "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-19. "Exploded View"
- 2. Perform DTC confirmation procedure. Refer to SRC-123, "DTC Logic".

#### Is DTC detected?

YES >> GO TO 1.

# 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

## DTC DETECTION LOGIC

	DTC	CONSULT display de- scription	DTC detecting condition	Possible cause	G
-	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> <li>Malfunction in air bag diagnosis sensor unit</li> </ul>	SRC

## 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-17, "Air Bag Warning Lamp Diagnosis". NOTE: SRS does not enter diagnosis mode if no malfunction is detected in user mode. Is malfunctioning part detected? L YES >> Refer to SRC-125, "Diagnosis Procedure". NO >> INSPECTION END M Diagnosis Procedure INFOID:000000008164397 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.

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INFOID:000000008164395

# **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-24, "Exploded View"</u>. Perform DTC confirmation procedure. Refer to <u>SRC-125, "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-19. "Exploded View"
- 2. Perform DTC confirmation procedure. Refer to SRC-125, "DTC Logic".

#### Is DTC detected?

YES >> GO TO 1.

# 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:000000008164399

INFOID:000000008164398

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## DTC DETECTION LOGIC

-	DTC	CONSULT display de- scription	DTC detecting condition	Possible cause	G
-	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 sensor unit</li> </ul>	SRC

## 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-17, "Air Bag Warning Lamp Diagnosis". NOTE: SRS does not enter diagnosis mode if no malfunction is detected in user mode. Is malfunctioning part detected? L YES >> Refer to SRC-127, "Diagnosis Procedure". NO >> INSPECTION END M Diagnosis Procedure INFOID:000000008164400 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.

# **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-24, "Exploded View"</u>. Perform DTC confirmation procedure. Refer to <u>SRC-127, "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-19. "Exploded View"
- 2. Perform DTC confirmation procedure. Refer to SRC-127, "DTC Logic".

#### Is DTC detected?

YES >> GO TO 1.

# B1154, B1155, B1156, B1157, B1158, B1159 DIAGNOSIS SENSOR UNIT < DTC/CIRCUIT DIAGNOSIS >

# B1154, B1155, B1156, B1157, B1158, B1159 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:000000008782203

INFOID:000000008800048

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## DTC DETECTION LOGIC

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DTC	CONSULT display de- scription	DTC detecting condition	Possible cause	0
B1154 B1155	CONTROL UNIT	Air bag diagnosis sensor unit is malfunctioning	Malfunction in air bag diagnosis sensor unit	SRC
B1156 B1157				
B1157 B1158				
B1159				I

## DTC CONFIRMATION PROCEDURE

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

- (P) With CONSULT
- 1. Turn ignition switch ON.
- 2. Perform "Self Diagnostic Result" mode of "AIR BAG" using CONSULT.
- **Without CONSULT**
- 1. Turn ignition switch ON.

 Check the air bag warning lamp status. Refer to <u>SRC-17, "Air Bag Warning Lamp Diagnosis"</u>. NOTE:

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

#### Is malfunctioning part detected?

- YES >> Refer to <u>SRC-129</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 or more. (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

# B1154, B1155, B1156, B1157, B1158, B1159 DIAGNOSIS SENSOR UNIT

< DTC/CIRCUIT DIAGNOSIS >

Check the wiring harness externals.

Is the inspection result normal?

YES >> GO TO 3.

NO >> Replace wiring harness.

 $\mathbf{3}.\mathsf{REPLACE}$  air bag diagnosis sensor unit

1. Replace air bag diagnosis sensor unit. Refer to <u>SR-24, "Removal and Installation"</u>.

2. Perform DTC confirmation procedure. Refer to <u>SRC-129, "DTC Logic"</u>.

Is DTC detected?

YES >> GO TO 1.

# B1170, B1171, B1172, B1173, B1174, B1175 DIAGNOSIS SENSOR UNIT < DTC/CIRCUIT DIAGNOSIS >

# B1170, B1171, B1172, B1173, B1174, B1175 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:000000008782205

INFOID:000000008800049

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## DTC DETECTION LOGIC

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DTC	CONSULT display description	DTC detecting condition	Possible cause	0
B1170 B1171 B1172 B1173 B1174 B1175	CONTROL UNIT	Air bag diagnosis sensor unit is malfunctioning	Malfunction in air bag diagnosis sensor unit	SRC

## DTC CONFIRMATION PROCEDURE

<b>1.</b> CHECK SELF-DIAG RE	SULT
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#### (P) With CONSULT

- 1. Turn ignition switch ON.
- 2. Perform "Self Diagnostic Result" mode of "AIR BAG" using CONSULT.
- Without CONSULT
- 1. Turn ignition switch ON.

 Check the air bag warning lamp status. Refer to <u>SRC-17, "Air Bag Warning Lamp Diagnosis"</u>. NOTE:

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

#### Is malfunctioning part detected?

- YES >> Refer to <u>SRC-131, "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.**CHECK HARNESS CONNECTOR

Check the harness connector.

Is the inspection result normal?

YES >> GO TO 2.

NO >> Replace harness connectors.

2.CHECK WIRING HARNESS

# B1170, B1171, B1172, B1173, B1174, B1175 DIAGNOSIS SENSOR UNIT

< DTC/CIRCUIT DIAGNOSIS >

Check the wiring harness externals.

Is the inspection result normal?

YES >> GO TO 3.

NO >> Replace wiring harness.

 $\mathbf{3}.\mathsf{REPLACE}$  air bag diagnosis sensor unit

1. Replace air bag diagnosis sensor unit. Refer to <u>SR-24, "Removal and Installation"</u>.

2. Perform DTC confirmation procedure. Refer to <u>SRC-131, "DTC Logic"</u>.

Is DTC detected?

YES >> GO TO 1.

# B1186, B1187, B1188, B1189, B1190, B1191 DIAGNOSIS SENSOR UNIT < DTC/CIRCUIT DIAGNOSIS >

# B1186, B1187, B1188, B1189, B1190, B1191 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:000000008782207

INFOID:000000008800050

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## DTC DETECTION LOGIC

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DTC	CONSULT display description	DTC detecting condition	Possible cause	0
B1186 B1187 B1188 B1189 B1190 B1191	CONTROL UNIT	Air bag diagnosis sensor unit is malfunctioning	Malfunction in air bag diagnosis sensor unit	SRC

## DTC CONFIRMATION PROCEDURE

<b>1.</b> CHECK SELF-DIAG RE	SULT
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#### (P) With CONSULT

- 1. Turn ignition switch ON.
- 2. Perform "Self Diagnostic Result" mode of "AIR BAG" using CONSULT.
- Without CONSULT
- 1. Turn ignition switch ON.

2. Check the air bag warning lamp status. Refer to <u>SRC-17, "Air Bag Warning Lamp Diagnosis"</u>. **NOTE:** 

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

#### Is malfunctioning part detected?

- YES >> Refer to <u>SRC-133</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 or more. (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

# B1186, B1187, B1188, B1189, B1190, B1191 DIAGNOSIS SENSOR UNIT

< DTC/CIRCUIT DIAGNOSIS >

Check the wiring harness externals.

Is the inspection result normal?

YES >> GO TO 3.

NO >> Replace wiring harness.

 $\mathbf{3}.\mathsf{REPLACE}$  air bag diagnosis sensor unit

1. Replace air bag diagnosis sensor unit. Refer to <u>SR-24, "Removal and Installation"</u>.

2. Perform DTC confirmation procedure. Refer to <u>SRC-133, "DTC Logic"</u>.

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

INFOID:000000008164402

INFOID:000000008164401

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## DTC DETECTION LOGIC

DTC	CONSULT display description	DTC detecting condition	Possible cause
B1202 B1203 B1204 B1205 B1206 B1207	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>

## DTC CONFIRMATION PROCEDURE

#### ()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-17, "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-135</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

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

< DTC/CIRCUIT DIAGNOSIS >

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

1. Replace air bag diagnosis sensor unit. Refer to <u>SR-24, "Exploded View"</u>.

2. Perform DTC confirmation procedure. Refer to <u>SRC-135, "DTC Logic"</u>.

Is DTC detected?

YES >> GO TO 1.

## **B1209 FRONTAL COLLISION DETECTION**

## < DTC/CIRCUIT DIAGNOSIS >

# B1209 FRONTAL COLLISION DETECTION

#### А Description INFOID:000000008164404 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-11, "Exploded View" (Driver air bag module), SR-17, "Exploded View" (Front passenger air bag module), <u>SR-21, "Exploded View"</u>(Crash zone sensor), <u>SR-24, "Exploded View"</u> (Air bag diagnosis sensor unit), <u>SB-6. "SEAT BELT RETRACTOR : Exploded View"</u> (Front LH/RH seat belt pre-tensioner). DTC Logic INFOID:000000008164405

## DTC DETECTION LOGIC

DTC	CONSULT display description	DTC detecting condition	Possible cause	SRC
B1209	FRONTAL COLLISION DETECTION	Front seat belt pre-tensioner, front air bag is deployed	_	

## DTC CONFIRMATION PROCEDURE

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

#### (B)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-17, "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-137</u>, "Diagnosis Procedure". NO >> INSPECTION END
  - IO >> 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-5, "FOR FRONTAL COLLISION : When SRS is activated in a collision</u>" P sion" or <u>SR-6, "FOR FRONTAL COLLISION : When SRS is not activated in a collision</u>".

Is collision diagnosis complete?

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

Perform "AIR BAG" Self Diagnostic Result.

INFOID:000000008164406

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## **B1209 FRONTAL COLLISION DETECTION**

< DTC/CIRCUIT DIAGNOSIS >

Is the inspection result normal?

YES >> INSPECTION END

NO >> Perform diagnosis of applicable DTC. Refer to <u>SRC-165, "DTC Index"</u>.

## **B1210 SIDE COLLISION DETECTION**

# < DTC/CIRCUIT DIAGNOSIS > B1210 SIDE COLLISION DETECTION

#### А Description INFOID:00000008164407 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-163. "Exploded View" (Front LH/RH side air bag module), SR-19. "Exploded View" (Side curtain air bag module), SR-22, "Exploded View" (LH/RH satellite sensor). DTC Logic F INFOID:000000008164408 DTC DETECTION LOGIC DTC CONSULT display description DTC detecting condition Possible cause SIDE COLLISION B1210 Front side air bag, side curtain air bag is DETECTION deployed SRC

## 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.

#### Check the air bag warning lamp status. Refer to <u>SRC-17, "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-139</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 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-7, "FOR SIDE AND ROLLOVER COLLISION : When SRS is acti-</u> vated in a collision" or <u>SR-8, "FOR SIDE AND ROLLOVER COLLISION : When SRS is not activated in a colli-</u> sion".

Is collision diagnosis complete?

2.FINAL INSPECTION

Perform "AIR BAG" Self Diagnostic Result. <u>Is the inspection result normal?</u> INFOID:000000008164409

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# **B1210 SIDE COLLISION DETECTION**

< DTC/CIRCUIT DIAGNOSIS >

- YES >> INSPECTION END
- NO >> Perform diagnosis of applicable DTC. Refer to <u>SRC-165, "DTC Index"</u>.

# B1218, B1219, B1220, B1221, B1222, B1223 DIAGNOSIS SENSOR UNIT < DTC/CIRCUIT DIAGNOSIS >

# B1218, B1219, B1220, B1221, B1222, B1223 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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INFOID:000000008800051

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## DTC DETECTION LOGIC

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DTC	CONSULT display description	DTC detecting condition	Possible cause	0
B1218 B1219 B1220 B1221 B1222 B1223	CONTROL UNIT	Air bag diagnosis sensor unit is malfunctioning	Malfunction in air bag diagnosis sensor unit	SRC

## DTC CONFIRMATION PROCEDURE

<b>1.</b> CHECK SELF-DIAG RE	SULT
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#### (P) With CONSULT

- 1. Turn ignition switch ON.
- 2. Perform "Self Diagnostic Result" mode of "AIR BAG" using CONSULT.
- 🕅 Without CONSULT
- 1. Turn ignition switch ON.

2. Check the air bag warning lamp status. Refer to <u>SRC-17, "Air Bag Warning Lamp Diagnosis"</u>. **NOTE:** 

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

#### Is malfunctioning part detected?

- YES >> Refer to <u>SRC-141, "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.**CHECK HARNESS CONNECTOR

Check the harness connector.

Is the inspection result normal?

YES >> GO TO 2.

NO >> Replace harness connectors.

2.CHECK WIRING HARNESS

# B1218, B1219, B1220, B1221, B1222, B1223 DIAGNOSIS SENSOR UNIT

< DTC/CIRCUIT DIAGNOSIS >

Check the wiring harness externals.

Is the inspection result normal?

YES >> GO TO 3.

NO >> Replace wiring harness.

 $\mathbf{3}.\mathsf{REPLACE}$  air bag diagnosis sensor unit

1. Replace air bag diagnosis sensor unit. Refer to <u>SR-24, "Removal and Installation"</u>.

2. Perform DTC confirmation procedure. Refer to <u>SRC-141, "DTC Logic"</u>.

Is DTC detected?

YES >> GO TO 1.

# B1234, B1235, B1236, B1237, B1238, B1239 DIAGNOSIS SENSOR UNIT < DTC/CIRCUIT DIAGNOSIS >

# B1234, B1235, B1236, B1237, B1238, B1239 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:000000008782211

INFOID:000000008800052

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## DTC DETECTION LOGIC

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DTC	CONSULT display description	DTC detecting condition	Possible cause	0
B1234 B1235 B1236 B1237 B1238 B1239	CONTROL UNIT	Air bag diagnosis sensor unit is malfunctioning	Malfunction in air bag diagnosis sensor unit	SRC

## DTC CONFIRMATION PROCEDURE

## (I) With CONSULT

- 1. Turn ignition switch ON.
- 2. Perform "Self Diagnostic Result" mode of "AIR BAG" using CONSULT.
- Without CONSULT
- 1. Turn ignition switch ON.

 Check the air bag warning lamp status. Refer to <u>SRC-17, "Air Bag Warning Lamp Diagnosis"</u>. NOTE:

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

## Is malfunctioning part detected?

- YES >> Refer to <u>SRC-143, "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.**CHECK HARNESS CONNECTOR

Check the harness connector.

Is the inspection result normal?

YES >> GO TO 2.

NO >> Replace harness connectors.

2.CHECK WIRING HARNESS

## B1234, B1235, B1236, B1237, B1238, B1239 DIAGNOSIS SENSOR UNIT

< DTC/CIRCUIT DIAGNOSIS >

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

1. Replace air bag diagnosis sensor unit. Refer to <u>SR-24, "Removal and Installation"</u>.

2. Perform DTC confirmation procedure. Refer to <u>SRC-143, "DTC Logic"</u>.

Is DTC detected?

YES >> GO TO 1.

# B1250, B1251, B1252, B1253, B1254, B1255 DIAGNOSIS SENSOR UNIT < DTC/CIRCUIT DIAGNOSIS >

## B1250, B1251, B1252, B1253, B1254, B1255 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:000000008782213

INFOID:000000008800053

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## DTC DETECTION LOGIC

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DTC	CONSULT display de- scription	DTC detecting condition	Possible cause	0
B1250 B1251 B1252 B1253 B1254 B1255	CONTROL UNIT	Air bag diagnosis sensor unit is malfunctioning	Malfunction in air bag diagnosis sensor unit	SRC

## DTC CONFIRMATION PROCEDURE

<b>1.</b> CHECK SELF-DIAG RE	SULT
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#### (P) With CONSULT

- 1. Turn ignition switch ON.
- 2. Perform "Self Diagnostic Result" mode of "AIR BAG" using CONSULT.
- 🕅 Without CONSULT
- 1. Turn ignition switch ON.

 Check the air bag warning lamp status. Refer to <u>SRC-17, "Air Bag Warning Lamp Diagnosis"</u>. NOTE:

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

#### Is malfunctioning part detected?

- YES >> Refer to <u>SRC-145</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 or more. (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

## B1250, B1251, B1252, B1253, B1254, B1255 DIAGNOSIS SENSOR UNIT

< DTC/CIRCUIT DIAGNOSIS >

Check the wiring harness externals.

Is the inspection result normal?

YES >> GO TO 3.

NO >> Replace wiring harness.

 $\mathbf{3}.\mathsf{REPLACE}$  air bag diagnosis sensor unit

1. Replace air bag diagnosis sensor unit. Refer to <u>SR-24, "Removal and Installation"</u>.

2. Perform DTC confirmation procedure. Refer to <u>SRC-145, "DTC Logic"</u>.

Is DTC detected?

YES >> GO TO 1.

NO >> INSPECTION END

## B1266, B1267, B1268, B1269 DIAGNOSIS SENSOR UNIT

#### < DTC/CIRCUIT DIAGNOSIS >

## B1266, B1267, B1268, B1269 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:000000008782215

INFOID:000000008800054

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## DTC DETECTION LOGIC

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DTC	CONSULT display de- scription	DTC detecting condition	Possible cause	0
B1266 B1267 B1268 B1269	CONTROL UNIT	Air bag diagnosis sensor unit is malfunctioning	Malfunction in air bag diagnosis sensor unit	SRC

#### DTC CONFIRMATION PROCEDURE

1.CHECK SELF-DIAG RESULT

(P) With CONSULT

- 1. Turn ignition switch ON.
- 2. Perform "Self Diagnostic Result" mode of "AIR BAG" using CONSULT.
- **Without CONSULT**
- Turn ignition switch ON.

2. Check the air bag warning lamp status. Refer to SRC-17. "Air Bag Warning Lamp Diagnosis".

#### NOTE:

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

Is malfunctioning part detected?

YES	>> Refer to <u>SRC-147, "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.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.

## B1266, B1267, B1268, B1269 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

- 1. Replace air bag diagnosis sensor unit. Refer to <u>SR-24, "Removal and Installation"</u>.
- 2. Perform DTC confirmation procedure. Refer to SRC-147, "DTC Logic".
- Is DTC detected?

YES >> GO TO 1.

NO >> INSPECTION END

## B1282, B1283, B1284, B1285 DIAGNOSIS SENSOR UNIT

#### < DTC/CIRCUIT DIAGNOSIS >

## B1282, B1283, B1284, B1285 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 DETECTION LOGIC

				G
DTC	CONSULT display description	DTC detecting condition	Possible cause	0
B1282 B1283 B1284 B1285	CONTROL UNIT	Air bag diagnosis sensor unit is malfunctioning	Malfunction in air bag diagnosis sensor unit	SRC

## DTC CONFIRMATION PROCEDURE

1.CHECK SELF-DIAG RESULT

(P) With CONSULT

- 1. Turn ignition switch ON.
- 2. Perform "Self Diagnostic Result" mode of "AIR BAG" using CONSULT.
- **Without CONSULT**
- Turn ignition switch ON.

2. Check the air bag warning lamp status. Refer to SRC-17. "Air Bag Warning Lamp Diagnosis".

#### NOTE:

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

Is malfunctioning part detected?

YES	>> Refer to <u>SRC-149, "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.CHECK HARNESS CONNECTOR

I.CHECK HARNESS CONNECTO

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.

## B1282, B1283, B1284, B1285 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

- 1. Replace air bag diagnosis sensor unit. Refer to <u>SR-24, "Removal and Installation"</u>.
- 2. Perform DTC confirmation procedure. Refer to SRC-149, "DTC Logic".
- Is DTC detected?

YES >> GO TO 1.

NO >> INSPECTION END

## B1336, B1337 SATELLITE SENSOR RH

#### < DTC/CIRCUIT DIAGNOSIS >

## B1336, B1337 SATELLITE SENSOR RH

## Description

Front door satellite sensor outputs voltage signal of pressure inside the front door.

#### **OPERATION**

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

#### STRUCTURE

Integrated pressure sensor monitors the pressure inside the front door with output terminals for signal voltage.

#### INSTALLATION

Front door satellite sensor is installed inside the front door.

## DTC Logic

#### DTC DETECTION LOGIC

DTC	CONSULT display description	DTC detecting condition	Possible cause	
B1336 B1337	FR-RH DOOR SATEL SENS [SENSOR MALFUNCTION]	Front door satellite sensor RH is mal- functioning	<ul> <li>Harness or connectors</li> <li>Malfunction in front door satellite sensor RH</li> <li>Malfunction in air bag diagnosis sensor unit</li> </ul>	(

#### DTC CONFIRMATION PROCEDURE

# 1.CHECK SELF-DIAG RESULT

<ul> <li>With CONSULT</li> <li>Turn ignition switch ON.</li> </ul>	I
<ol> <li>Perform "Self Diagnostic Result" mode of "AIR BAG" using CONSULT.</li> </ol>	
(R) Without CONSULT	
1. Turn ignition switch ON.	J
2. Check the air bag warning lamp status. Refer to <u>SRC-17, "Air Bag Warning Lamp Diagnosis"</u> .	
NOTE:	
SRS does not enter the diagnosis mode if no malfunction is detected in the user mode.	k
Is malfunctioning part detected?	
YES >> Refer to <u>SRC-151</u> , "Diagnosis Procedure".	
NO >> INSPECTION END	L
Diagnasis Procedure	
Diagnosis Procedure	000008782220
WARNING:	N
• Before servicing, turn ignition switch OFF, disconnect battery negative terminal, and wait at	least 3
minutes or more. (To discharge backup capacitor.)	
<ul> <li>Never use unspecified tester or other measuring device.</li> </ul>	Ν
1. CHECK HARNESS CONNECTOR	
Check the harness connector.	C
Is the inspection result normal?	
YES >> GO TO 2.	
NO >> Replace harness connector.	F
2. CHECK WIRING HARNESS	
Check the wiring harness externals.	
Is the inspection result normal?	
YES >> GO TO 3.	

>> Replace wiring harness.

NO

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INFOID:000000008800058

< DTC/CIRCUIT DIAGNOSIS >

## **3.**REPLACE FRONT DOOR SATELLITE SENSOR

- Replace front door satellite sensor RH. Refer to <u>SR-22, "Removal and Installation"</u>. Perform DTC confirmation procedure. Refer to <u>SRC-151, "DTC Logic"</u>. 1.
- 2.

#### Is DTC detected?

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

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

- Replace air bag diagnosis sensor unit. Refer to SR-24. "Removal and Installation". 1.
- 2. Perform DTC confirmation procedure. Refer to <u>SRC-151, "DTC Logic"</u>.
- Is DTC detected?
- YES >> GO TO 1.
- NO >> INSPECTION END

## B1338, B1340, B1341, B1342 SATELLITE SENSOR RH

#### < DTC/CIRCUIT DIAGNOSIS >

## B1338, B1340, B1341, B1342 SATELLITE SENSOR RH

## Description

Front door satellite sensor outputs voltage signal of pressure inside the front door.

#### OPERATION

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

#### STRUCTURE

Integrated pressure sensor monitors the pressure inside the front door with output terminals for signal voltage.

#### INSTALLATION

Front door satellite sensor is installed inside the front door.

## DTC Logic

#### DTC DETECTION LOGIC

	DTC	CONSULT display description	DTC detecting condition	Possible cause	
_	B1338 B1340 B1341 B1342	FR-RH DOOR SATEL SENS [COMM MALFUNCTION]	Front door satellite sensor RH is mal- functioning	<ul> <li>Harness or connectors</li> <li>Malfunction in front door satellite sensor RH</li> <li>Malfunction in air bag diagnosis sensor unit</li> </ul>	G

## DTC CONFIRMATION PROCEDURE

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

With CONSULT 1. Turn ignition switch ON. Perform "Self Diagnostic Result" mode of "AIR BAG" using CONSULT. 2. **Without CONSULT** 1. Turn ignition switch ON. 2. Check the air bag warning lamp status. Refer to <u>SRC-17, "Air Bag Warning Lamp Diagnosis"</u>. Κ NOTE: SRS does not enter the diagnosis mode if no malfunction is detected in the user mode. Is malfunctioning part detected? L YES >> Refer to <u>SRC-153</u>, "Diagnosis Procedure". NO >> INSPECTION END Diagnosis Procedure INFOID:00000008782222 M WARNING: • Before servicing, turn ignition switch OFF, disconnect battery negative terminal, and wait at least 3 Ν minutes or more. (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. Ρ 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.

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INFOID:000000008836709

## B1338, B1340, B1341, B1342 SATELLITE SENSOR RH

< DTC/CIRCUIT DIAGNOSIS >

**3.**REPLACE FRONT DOOR SATELLITE SENSOR

Replace front door satellite sensor RH. Refer to <u>SR-22, "Removal and Installation"</u>.
 Perform DTC confirmation procedure. Refer to <u>SRC-153, "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-24, "Removal and Installation"</u>.

2. Perform DTC confirmation procedure. Refer to <u>SRC-153. "DTC Logic"</u>.

Is DTC detected?

YES >> GO TO 1.

NO >> INSPECTION END

## **B1339 SATELLITE SENSOR RH**

#### < DTC/CIRCUIT DIAGNOSIS >

## **B1339 SATELLITE SENSOR RH**

## Description

Front door satellite sensor outputs voltage signal of pressure inside the front door.

#### OPERATION

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

#### STRUCTURE

Integrated pressure sensor monitors the pressure inside the front door with output terminals for signal voltage.

#### INSTALLATION

Front door satellite sensor is installed inside the front door.

## DTC Logic

#### DTC DETECTION LOGIC

DTC (	CONSULT display description	DTC detecting condition	Possible cause	
B1339	FR-RH DOOR SATEL SENS [MIS-INSTALLATION]	Front door satellite sensor RH is out of the specified specification	Diagnosis sensor unit or front door satellite sen- sor RH is different from the part specified	G

#### DTC CONFIRMATION PROCEDURE

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

$\square$	With CONSULT	
	The second second the second s	i.

- Turn ignition switch ON.
   Perform "Self Diagnostic Result" mode of "AIR BAG" using CONSULT.
- Without CONSULT
- 1. Turn ignition switch ON.
- Check the air bag warning lamp status. Refer to <u>SRC-17, "Air Bag Warning Lamp Diagnosis"</u>. NOTE:

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

Is malfunctioning part detected?

YES >> Refer to <u>SRC-155, "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.REPLACE FRONT DOOR SATELLITE SENSOR

1. Replace front door satellite sensor RH. Refer to SR-22, "Removal and Installation".

Perform DTC confirmation procedure. Refer to <u>SRC-155, "DTC Logic"</u>.

#### Is DTC detected?

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

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

1. Replace air bag diagnosis sensor unit. Refer to SR-24, "Removal and Installation".

2. Perform DTC confirmation procedure. Refer to SRC-155, "DTC Logic".

#### Is DTC detected?

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

## SRC-155

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## B1343, B1344 SATELLITE SENSOR LH

#### < DTC/CIRCUIT DIAGNOSIS >

## B1343, B1344 SATELLITE SENSOR LH

## Description

INFOID:000000008836711

Front door satellite sensor outputs voltage signal of pressure inside the front door.

#### OPERATION

When air bag diagnosis sensor unit defines both signal voltage of "G" sensor and pressure 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 pressure sensor monitors the pressure inside the front door with output terminals for signal voltage.

#### INSTALLATION

Front door satellite sensor is installed inside the front door.

## DTC Logic

INFOID:000000008782225

## DTC DETECTION LOGIC

DTC	CONSULT display description	DTC detecting condition	Possible cause
B1343 B1344	FR-LH DOOR SATEL SENS [SENSOR MALFUNCTION]	Front door satellite sensor LH is malfunctioning	<ul> <li>Harness or connectors</li> <li>Malfunction in front door satellite sensor LH</li> <li>Malfunction in air bag diagnosis sensor unit</li> </ul>

## DTC CONFIRMATION PROCEDURE

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

(I) With CONSULT

- Turn ignition switch ON.
- 2. Perform "Self Diagnostic Result" mode of "AIR BAG" using CONSULT.
- X Without CONSULT
- Turn ignition switch ON.
- Check the air bag warning lamp status. Refer to <u>SRC-17, "Air Bag Warning Lamp Diagnosis"</u>. NOTE:
- SRS does not enter the diagnosis mode if no malfunction is detected in the user mode.

#### Is malfunctioning part detected?

- YES >> Refer to <u>SRC-156</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 or more. (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.

## B1343, B1344 SATELLITE SENSOR LH

## < DTC/CIRCUIT DIAGNOSIS >

<b>3.</b> REPLACE FRONT DOOR SATELLITE SENSOR	А
<ol> <li>Replace front door satellite sensor LH. Refer to <u>SR-22, "Removal and Installation"</u>.</li> <li>Perform DTC confirmation procedure. Refer to <u>SRC-156, "DTC Logic"</u></li> </ol>	
Is DTC detected? YES >> GO TO 4.	В
NO >> INSPECTION END 4.REPLACE AIR BAG DIAGNOSIS SENSOR UNIT	С
<ol> <li>Replace air bag diagnosis sensor unit. Refer to <u>SR-24, "Removal and Installation"</u>.</li> <li>Perform DTC confirmation procedure. Refer to <u>SRC-156, "DTC Logic"</u>.</li> <li><u>Is DTC detected?</u></li> </ol>	D
YES >> GO TO 1. NO >> INSPECTION END	E
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## B1345, B1347, B1348, B1349 SATELLITE SENSOR LH

< DTC/CIRCUIT DIAGNOSIS >

## B1345, B1347, B1348, B1349 SATELLITE SENSOR LH

## Description

INFOID:000000008836712

Front door satellite sensor outputs voltage signal of pressure inside the front door.

#### OPERATION

When air bag diagnosis sensor unit defines both signal voltage of "G" sensor and pressure 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 pressure sensor monitors the pressure inside the front door with output terminals for signal voltage.

#### INSTALLATION

Front door satellite sensor is installed inside the front door.

## DTC Logic

INFOID:000000008782227

## DTC DETECTION LOGIC

DTC	CONSULT display description	DTC detecting condition	Possible cause
B1345 B1347 B1348 B1349	FR-LH DOOR SATEL SENS [COMM MALFUNCTION]	Front door satellite sensor LH is malfunctioning	<ul> <li>Harness or connectors</li> <li>Malfunction in front door satellite sensor LH</li> <li>Malfunction in air bag diagnosis sensor unit</li> </ul>

## DTC CONFIRMATION PROCEDURE

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

(P) With CONSULT

- 1. Turn ignition switch ON.
- 2. Perform "Self Diagnostic Result" mode of "AIR BAG" using CONSULT.
- **(R)** Without CONSULT
- Turn ignition switch ON.
- 2. Check the air bag warning lamp status. Refer to SRC-17. "Air Bag Warning Lamp Diagnosis".

#### NOTE:

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

Is malfunctioning part detected?

YES >> Refer to <u>SRC-158</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 or more. (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.

## B1345, B1347, B1348, B1349 SATELLITE SENSOR LH

< DTC/CIRCUIT DIAGNOSIS >

<b>3.</b> REPLACE SATELLITE SENSOR	А
<ol> <li>Replace front door satellite sensor LH. Refer to <u>SR-22, "Removal and Installation"</u>.</li> <li>Perform DTC confirmation procedure. Refer to <u>SRC-158, "DTC Logic"</u>.</li> </ol>	
Is DTC detected?	В
YES >> GO TO 4. NO >> INSPECTION END	
4.REPLACE AIR BAG DIAGNOSIS SENSOR UNIT	С
<ol> <li>Replace air bag diagnosis sensor unit. Refer to <u>SR-24, "Removal and Installation"</u>.</li> <li>Perform DTC confirmation procedure. Refer to <u>SRC-158, "DTC Logic"</u>.</li> <li><u>Is DTC detected?</u></li> </ol>	D
YES >> GO TO 1. NO >> INSPECTION END	E
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## **B1346 SATELLITE SENSOR LH**

#### < DTC/CIRCUIT DIAGNOSIS >

## **B1346 SATELLITE SENSOR LH**

## Description

INFOID:000000008836713

Front door satellite sensor outputs voltage signal of pressure inside the front door.

#### OPERATION

When air bag diagnosis sensor unit defines both signal voltage of "G" sensor and pressure 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 pressure sensor monitors the pressure inside the front door with output terminals for signal voltage.

#### INSTALLATION

Front door satellite sensor is installed inside the front door.

## DTC Logic

INFOID:000000008782229

## DTC DETECTION LOGIC

DTC	CONSULT display description	DTC detecting condition	Possible cause
B1346	FR-LH DOOR SATEL SENS [MIS-INSTALLATION]	Front door satellite sensor LH is out of the specified specification	Diagnosis sensor unit or front door satellite sensor LH is different from the part specified

## DTC CONFIRMATION PROCEDURE

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

(I) With CONSULT

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

#### **Without CONSULT**

1. Turn ignition switch ON.

2. Check the air bag warning lamp status. Refer to <u>SRC-17, "Air Bag Warning Lamp Diagnosis"</u>. **NOTE:** 

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

Is malfunctioning part detected?

YES >> Refer to <u>SRC-160, "Diagnosis Procedure"</u>.

NO >> INSPECTION END

## Diagnosis Procedure

INFOID:000000008782230

#### 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.REPLACE FRONT DOOR SATELLITE SENSOR

- 1. Replace front door satellite sensor LH. Refer to <u>SR-22, "Removal and Installation"</u>.
- 2. Perform DTC confirmation procedure. Refer to <u>SRC-160, "DTC Logic"</u>.

#### Is DTC detected?

YES >> GO TO 2.

NO >> INSPECTION END

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

1. Replace air bag diagnosis sensor unit. Refer to <u>SR-24, "Removal and Installation"</u>.

2. Perform DTC confirmation procedure. Refer to <u>SRC-160, "DTC Logic"</u>.

Is DTC detected?

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

## SRC-160

## B1350, B1351 SATELLITE SENSOR

#### < DTC/CIRCUIT DIAGNOSIS >

## B1350, B1351 SATELLITE SENSOR

## Description

Front door satellite sensor outputs voltage signal of pressure inside the front door.

#### OPERATION

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

#### STRUCTURE

Integrated pressure sensor monitors the pressure inside the front door with output terminals for signal voltage.

#### INSTALLATION

Front door satellite sensor is installed inside the front door.

## DTC Logic

#### DTC DETECTION LOGIC

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_	DTC	CONSULT display description	DTC detecting condition	Possible cause	
_	B1350 B1351	FR DOOR SATEL SENS	Front door satellite sensor is malfunction- ing or out of the specified specification	<ul> <li>Malfunction in front door satellite sensor LH/RH</li> <li>Malfunction in air bag diagnosis sensor</li> </ul>	G
-				unit	SRC

#### DTC CONFIRMATION PROCEDURE

## 1.CHECK SELF-DIAG RESULT

<ul> <li>With CONSULT</li> <li>Turn ignition switch ON.</li> </ul>	
2. Perform "Self Diagnostic Result" mode of "AIR BAG" using CONSULT.	
R Without CONSULT	
1. Turn ignition switch ON.	
<ol><li>Check the air bag warning lamp status. Refer to <u>SRC-17, "Air Bag Warning Lamp Diagnosis"</u>.</li></ol>	
NOTE:	
SRS does not enter the diagnosis mode if no malfunction is detected in the user mode.	
Is malfunctioning part detected?	
YES >> Refer to <u>SRC-161, "Diagnosis Procedure"</u> .	
NO >> INSPECTION END	
Diagnosis Procedure	
WARNING:	
<ul> <li>Before servicing, turn ignition switch OFF, disconnect battery negative terminal, and wait at least 3 minutes or more. (To discharge backup capacitor.)</li> </ul>	
• Before servicing, turn ignition switch OFF, disconnect battery negative terminal, and wait at least 3	
<ul> <li>Before servicing, turn ignition switch OFF, disconnect battery negative terminal, and wait at least 3 minutes or more. (To discharge backup capacitor.)</li> <li>Never use unspecified tester or other measuring device.</li> </ul>	
<ul> <li>Before servicing, turn ignition switch OFF, disconnect battery negative terminal, and wait at least 3 minutes or more. (To discharge backup capacitor.)</li> <li>Never use unspecified tester or other measuring device.</li> <li>REPLACE BOTH OF FRONT DOOR SATELLITE SENSORS</li> </ul>	(
<ul> <li>Before servicing, turn ignition switch OFF, disconnect battery negative terminal, and wait at least 3 minutes or more. (To discharge backup capacitor.)</li> <li>Never use unspecified tester or other measuring device.</li> <li>1. REPLACE BOTH OF FRONT DOOR SATELLITE SENSORS</li> <li>1. Replace both of front door satellite sensors. Refer to <u>SR-22, "Removal and Installation"</u>.</li> </ul>	(
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<ul> <li>Before servicing, turn ignition switch OFF, disconnect battery negative terminal, and wait at least 3 minutes or more. (To discharge backup capacitor.)</li> <li>Never use unspecified tester or other measuring device.</li> <li>1. REPLACE BOTH OF FRONT DOOR SATELLITE SENSORS</li> <li>1. Replace both of front door satellite sensors. Refer to <u>SR-22</u>, "<u>Removal and Installation</u>".</li> <li>2. Perform DTC confirmation procedure. Refer to <u>SRC-161</u>, "<u>DTC Logic</u>".</li> <li><u>Is DTC detected?</u></li> <li>YES &gt;&gt; GO TO 2.</li> </ul>	(

Perform DTC confirmation procedure. Refer to <u>SRC-161, "DTC</u> Logic".

Is DTC detected?

## SRC-161

## B1350, B1351 SATELLITE SENSOR

< DTC/CIRCUIT DIAGNOSIS >

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

## B1378, B1379, B1380, B1381 DIAGNOSIS SENSOR UNIT

#### < DTC/CIRCUIT DIAGNOSIS >

## B1378, B1379, B1380, B1381 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 DETECTION LOGIC

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DTC	CONSULT display description	DTC detecting condition	Possible cause	0
B1378 B1379 B1380 B1381	CONTROL UNIT	Air bag diagnosis sensor unit is malfunctioning	Malfunction in air bag diagnosis sensor unit	SRC

## DTC CONFIRMATION PROCEDURE

1.CHECK SELF-DIAG RESULT

(P) With CONSULT

- 1. Turn ignition switch ON.
- 2. Perform "Self Diagnostic Result" mode of "AIR BAG" using CONSULT.
- **Without CONSULT**
- Turn ignition switch ON.

2. Check the air bag warning lamp status. Refer to SRC-17. "Air Bag Warning Lamp Diagnosis".

#### NOTE:

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

Is malfunctioning part detected?

YES	>> Refer to <u>SRC-163, "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.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.

## B1378, B1379, B1380, B1381 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

- 1. Replace air bag diagnosis sensor unit. Refer to <u>SR-22, "Removal and Installation"</u>.
- 2. Perform DTC confirmation procedure. Refer to SRC-163, "DTC Logic".

#### Is DTC detected?

YES >> GO TO 1.

NO >> INSPECTION END

# ECU DIAGNOSIS INFORMATION DIAGNOSIS SENSOR UNIT

DTC Index

А

Diagnostic item		Explanation	Reference page
NO DTC IS DETECTED	When malfunction is indicated by the "AIR BAG" warning lamp in User mode	Low battery voltage (Less than 9 V) Self-diagnosis result "SELF-DIAG RESULT [PAST]" (previously stored in the memory) might not be erased after repair	SRC-176, "Diagnosis Procedure". SRC-17, "Air Bag Warning Lamp Di- agnosis", SRC-21, "CONSULT Function".
		Intermittent malfunction has been de- tected in the past	GI-43, "Intermittent Incident".
	No malfunction is dete	cted	_
CONTROL UNIT [B1001-B1015]	Air bag diagnosis sens specified specification	or unit is malfunctioning or out of the	<u>SRC-23, "DTC Logic"</u> . <u>SRC-25, "DTC Logic"</u> . <u>SRC-27, "DTC Logic"</u> .
OCCUPANT SENS C/U [UNIT FAIL] [B1017] [B1020] [B1021]	Malfunction occurs in C unit	Dccupant Classification System control	SRC-29, "DTC Logic".
OCCUPANT SENS [UNIT FAIL] [B1018]	Malfunction occurs in (	Occupant Classification System sensor	SRC-31, "DTC Logic".
OCCUPANT SENS C/U [COMM FAIL] [B1022]	Malfunction occurs in Occupant Classification System control unit, air bag diagnosis sensor unit, or circuit between Occu- pant Classification System control unit and air bag diagnosis sensor unit		SRC-33, "DTC Logic".
PASS A/B INDCTR CKT [B1023]	Front passenger air bag OFF indicator circuit is open or short- ed to ground, or the circuits are shorted each other		SRC-35, "DTC Logic".
CONTROL UNIT [B1026-B1031]	Air bag diagnosis sensor unit is malfunctioning or out of the specified specification		SRC-37, "DTC Logic".
CRASH ZONE SEN [UNIT FAIL] [B1033] [B1034]	Crash zone sensor is malfunctioning		SRC-39, "DTC Logic".
CRASH ZONE SEN [COMM FAIL] [B1035] [UNMATCH] [B1036]	Crash zone sensor is malfunctioning or out of the specified specification		SRC-41, "DTC Logic".
CONTROL UNIT [B1042-B1047]	Air bag diagnosis sensor unit is malfunctioning or out of the specified specification		SRC-43, "DTC Logic".
DRIVER AIRBAG MODULE [OPEN] [B1049] [B1054]	Driver air bag module circuit is open (including the spiral cable)		SRC-45, "DTC Logic".
DRIVER AIRBAG MODULE [VB-SHORT] [B1050] [B1055]	Driver air bag module o circuit (including the sp	circuit is shorted to some power supply biral cable)	SRC-47. "DTC Logic".
DRIVER AIRBAG MODULE [GND-SHORT] [B1051] [B1056]	Driver air bag module circuit is shorted to ground (including the spiral cable)		SRC-49, "DTC Logic".

# < ECU DIAGNOSIS INFORMATION >

Diagnostic item	Explanation	Reference page
DRIVER AIRBAG MODULE [SHORT] [B1052] [B1057]	Driver air bag module circuits are shorted to each other (in- cluding spiral cable)	SRC-51, "DTC Logic".
CONTROL UNIT [B1058-B1063]	Air bag diagnosis sensor unit is malfunctioning or out of the specified specification	SRC-53, "DTC Logic".
ASSIST A/B MODULE [OPEN] [B1065] [B1070]	Front passenger air bag module circuit is open	SRC-55, "DTC Logic".
ASSIST A/B MODULE [VB-SHORT] [B1066] [B1071]	Front passenger air bag module circuit is shorted to some power supply circuit	SRC-57, "DTC Logic".
ASSIST A/B MODULE [GND-SHORT] [B1067] [B1072]	Front passenger air bag module circuit is shorted to ground	SRC-59, "DTC Logic".
ASSIST A/B MODULE [SHORT] [B1068] [B1073]	Front passenger air bag module circuits are shorted to each other	SRC-61, "DTC Logic".
CONTROL UNIT [B1074-B1079]	Air bag diagnosis sensor unit is malfunctioning or out of the specified specification	SRC-63, "DTC Logic".
PRE-TEN FRONT RH [OPEN] [B1081]	Front RH seat belt pre-tensioner circuit is open	SRC-65, "DTC Logic".
PRE-TEN FRONT RH [VB-SHORT] [B1082]	Front RH seat belt pre-tensioner circuit is shorted to some power supply circuit	SRC-67, "DTC Logic".
PRE-TEN FRONT RH [GND-SHORT] [B1083]	Front RH seat belt pre-tensioner circuit is shorted to ground	SRC-69, "DTC Logic".
PRE-TEN FRONT RH [SHORT] [B1084]	Front RH seat belt pre-tensioner circuits are shorted to each other	SRC-71, "DTC Logic".
PRE-TEN FRONT LH [OPEN] [B1086]	Front LH seat belt pre-tensioner circuit is open	SRC-73, "DTC Logic".
PRE-TEN FRONT LH [VB-SHORT] [B1087]	Front LH seat belt pre-tensioner circuit is shorted to some power supply circuit	SRC-75, "DTC Logic".
PRE-TEN FRONT LH [GND-SHORT] [B1088]	Front LH seat belt pre-tensioner circuit is shorted to ground	SRC-77, "DTC Logic".
PRE-TEN FRONT LH [SHORT] [B1089]	Front LH seat belt pre-tensioner circuits are shorted to each other	SRC-79, "DTC Logic".
CONTROL UNIT [B1090-B1095]	Air bag diagnosis sensor unit is malfunctioning or out of the specified specification	SRC-81, "DTC Logic".
CONTROL UNIT [B1106-B1111]	Air bag diagnosis sensor unit is malfunctioning or out of the specified specification	SRC-83, "DTC Logic".
SATELLITE SENS RH [UNIT FAIL] [B1113] [B1114]	RH satellite sensor is malfunctioning	SRC-85, "DTC Logic".

# < ECU DIAGNOSIS INFORMATION >

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-87, "DTC Logic".
SATELLITE SENS LH [UNIT FAIL] [B1118] [B1119]	LH satellite sensor is malfunctioning	SRC-89, "DTC Logic".
SATELLITE SENS LH [COMM FAIL] [B1120] [UNMATCH] [B1121]	LH satellite sensor is malfunctioning or out of the specified specification	SRC-91, "DTC Logic".
CONTROL UNIT [B1122-B1127]	Air bag diagnosis sensor unit is malfunctioning or out of the specified specification	SRC-93, "DTC Logic".
SIDE MODULE RH [OPEN] [B1129]	Front RH side air bag module circuit is open	SRC-95, "DTC Logic".
SIDE MODULE RH [VB-SHORT] [B1130]	Front RH side air bag module circuit is shorted to some power supply circuit	SRC-97, "DTC Logic".
SIDE MODULE RH [GND-SHORT] [B1131]	Front RH side air bag module circuit is shorted to ground	SRC-99, "DTC Logic".
SIDE MODULE RH [SHORT] [B1132]	Front RH side air bag module circuits are shorted to each other	SRC-101, "DTC Logic".
SIDE MODULE LH [OPEN] [B1134]	Front LH side air bag module circuit is open	SRC-103, "DTC Logic".
SIDE MODULE LH [VB-SHORT] [B1135]	Front LH side air bag module circuit is shorted to some power supply circuit	SRC-105, "DTC Logic".
SIDE MODULE LH [GND-SHORT] [B1136]	Front LH side air bag module circuit is shorted to ground	SRC-107, "DTC Logic".
SIDE MODULE LH [SHORT] [B1137]	Front LH side air bag module circuits are shorted to each other	SRC-109, "DTC Logic".
CONTROL UNIT [B1138-B1143]	Air bag diagnosis sensor unit is malfunctioning or out of the specified specification	SRC-111, "DTC Logic".
CURTAIN MODULE RH [OPEN] [B1145]	RH side curtain air bag module circuit is open	SRC-113, "DTC Logic".
CURTAIN MODULE RH [VB-SHORT] [B1146]	RH side curtain air bag module circuit is shorted to some power supply circuit	SRC-115, "DTC Logic".
CURTAIN MODULE RH [GND-SHORT] [B1147]	RH side curtain air bag module circuit is shorted to ground	SRC-117, "DTC Logic".
CURTAIN MODULE RH [SHORT] [B1148]	RH side curtain air bag module circuits are shorted to each other	SRC-119, "DTC Logic".

#### < ECU DIAGNOSIS INFORMATION >

Diagnostic item	Explanation	Reference page
CURTAIN MODULE LH [OPEN] [B1150]	LH side curtain air bag module circuit is open	SRC-121, "DTC Logic".
CURTAIN MODULE LH [VB-SHORT] [B1151]	LH side curtain air bag module circuit is shorted to some pow- er supply circuits	SRC-123, "DTC Logic".
CURTAIN MODULE LH [GND-SHORT] [B1152]	LH side curtain air bag module circuit is shorted to ground	SRC-125, "DTC Logic".
CURTAIN MODULE LH [SHORT] [B1153]	LH side curtain air bag module circuits are shorted to each other	SRC-127, "DTC Logic".
CONTROL UNIT [B1154-B1159]	Air bag diagnosis sensor unit is malfunctioning or out of the specified specification	SRC-129, "DTC Logic".
CONTROL UNIT [B1170-B1175]	Air bag diagnosis sensor unit is malfunctioning or out of the specified specification	SRC-131, "DTC Logic".
CONTROL UNIT [B1186-B1191]	Air bag diagnosis sensor unit is malfunctioning or out of the specified specification	SRC-133, "DTC Logic".
CONTROL UNIT [B1202-B1207]	Air bag diagnosis sensor unit is malfunctioning or out of the specified specification	SRC-135, "DTC Logic".
FRONTAL COLLISION DETECTION [B1209]	Front seat belt pre-tensioner and front air bag is deployed	SRC-137, "DTC Logic".
SIDE COLLISION DETECTION [B1210]	Front side air bag and side curtain air bag are deployed	SRC-139, "DTC Logic".
CONTROL UNIT [B1218-B1223]	Air bag diagnosis sensor unit is malfunctioning or out of the specified specification	SRC-141, "DTC Logic".
CONTROL UNIT [B1234-B1239]	Air bag diagnosis sensor unit is malfunctioning or out of the specified specification	SRC-143, "DTC Logic".
CONTROL UNIT [B1250-B1255]	Air bag diagnosis sensor unit is malfunctioning or out of the specified specification	SRC-145, "DTC Logic".
CONTROL UNIT [B1266-B1269]	Air bag diagnosis sensor unit is malfunctioning or out of the specified specification	SRC-147, "DTC Logic".
CONTROL UNIT [B1282-B1285]	Air bag diagnosis sensor unit is malfunctioning or out of the specified specification	SRC-149, "DTC Logic".
FR-RH DOOR SATEL SENS [SENSOR MALFUNCTION] [B1336] [B1337]	Front door satellite sensor RH is malfunctioning	SRC-151, "DTC Logic".
FR-RH DOOR SATEL SENS [COMM MALFUNCTION] [B1338] [B1340-B1342]	Front door satellite sensor RH is malfunctioning	SRC-153, "DTC Logic".

#### < ECU DIAGNOSIS INFORMATION >

Diagnostic item	Explanation	Reference page
FR-RH DOOR SATEL SENS [MIS-INSTLLATION] [B1339]	Front door satellite sensor RH is out of the specified specifica- tion	SRC-155, "DTC Logic".
FR-LH DOOR SATEL SENS [SENSOR MALFUNCTION] [B1343] [B1344]	Front door satellite sensor LH is malfunctioning	SRC-156, "DTC Logic".
FR-LH DOOR SATEL SENS [COMM MALFUNCTION] [B1345] [B1347-B1349]	Front door satellite sensor LH is malfunctioning	SRC-158, "DTC Logic".
FR-LH DOOR SATEL SENS [MIS-INSTLLATION] [B1346]	Front door satellite sensor LH is out of the specified specifica- tion	SRC-160, "DTC Logic".
FR DOOR SATEL SENS [B1350] [B1351]	Front door satellite sensor is malfunctioning or out of the spec- ified specification	SRC-161, "DTC Logic".
CONTROL UNIT [B1378-B1381]	Air bag diagnosis sensor unit is malfunctioning or out of the specified specification	SRC-163, "DTC Logic".

Wiring Diagram - SRS AIR BAG CONTROL SYSTEM - (Without front door satellite

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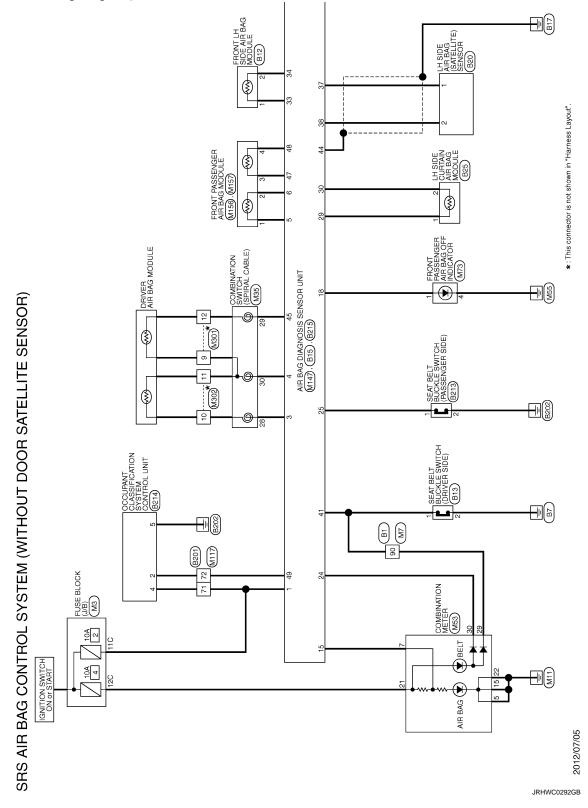
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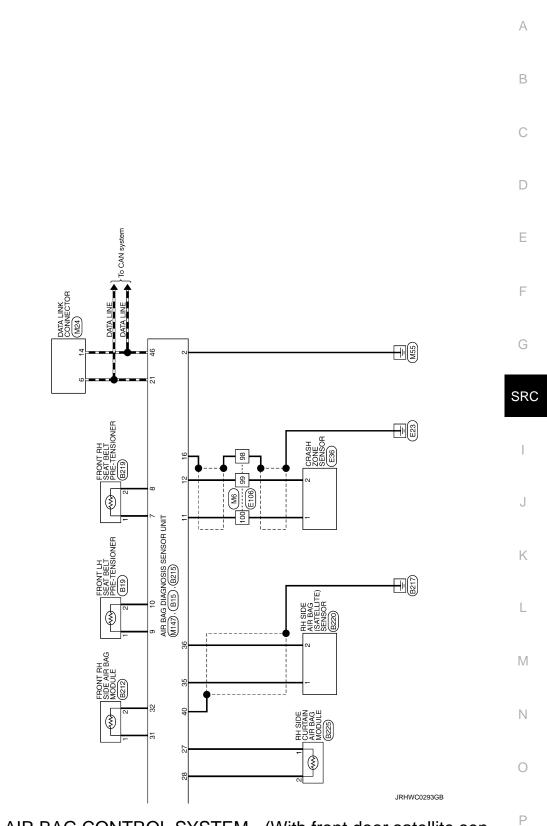
## sensor)

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



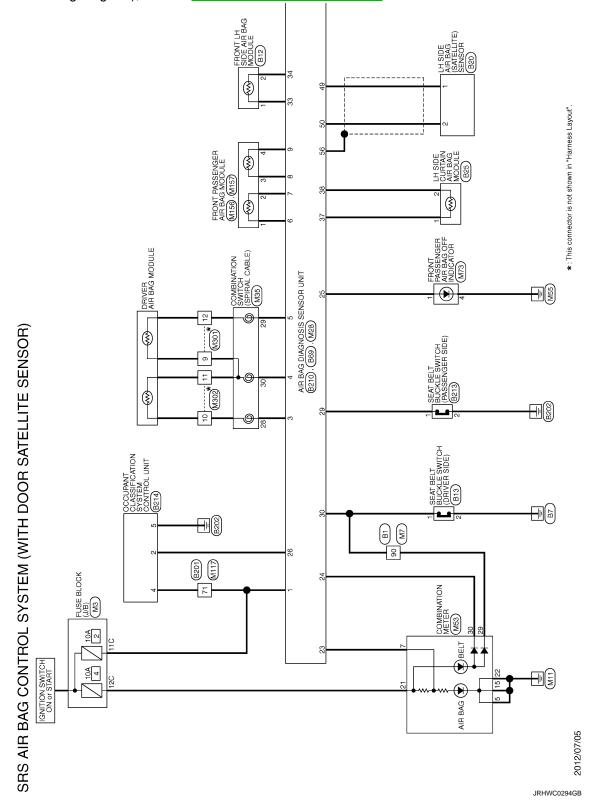
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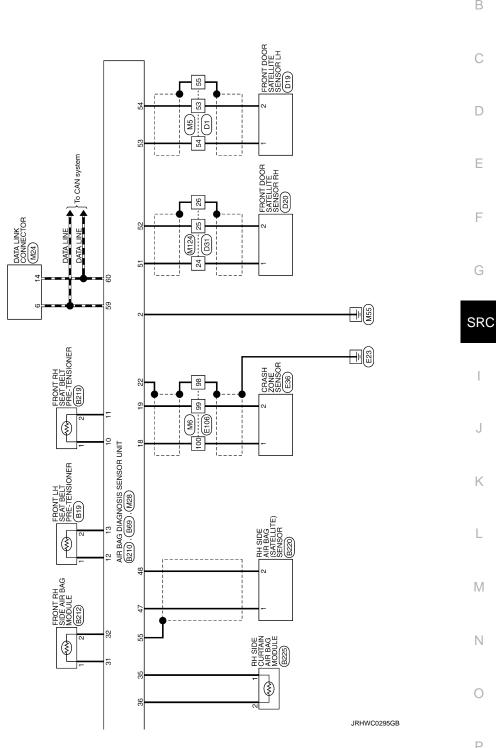
Wiring Diagram - SRS AIR BAG CONTROL SYSTEM - (With front door satellite sen-

< ECU DIAGNOSIS INFORMATION >

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



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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

**Diagnosis Procedure** 

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**1.**CHECK FRONT AIR BAG MODULE

Check the deployment of front air bag module.

Is air bag module deployed?

YES >> Refer to <u>SR-11</u> or <u>SR-17, "Exploded View"</u>.

NO >> GO TO 2.

**2.**CHECK AIR BAG FUSE

Check the air bag fuse. Refer to PG-109, "Fuse and Fusible Link Arrangement".

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

Replace air bag fuse and turn ignition switch ON.

Did the air bag fuse blow again?

YES >> Repair or replace main harness.

NO >> INSPECTION END

**4.**CHECK DIAGNOSIS SENSOR UNIT

Check the screen of CONSULT.

Is the inspection result normal?

YES >> GO TO 5.

NO >> Replace diagnosis sensor unit (ACU). Refer to <u>SR-24, "Exploded View"</u>.

**5.**CHECK HARNESS CONNECTION

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>.

NO >> Replace wiring harness connector.

SRS AIR BAG WARNING LAMP DOES NOT TURN ON < SYMPTOM DIAGNOSIS >	
SRS AIR BAG WARNING LAMP DOES NOT TURN ON	А
Diagnosis Procedure	A
"SRS AIR BAG" Warning Lamp Does Not Turn ON	В
1.CHECK METER FUSE	
Check the meter fuse. Refer to <u>PG-109, "Fuse and Fusible Link Arrangement"</u> . Is 10A fuse [No.4, located in fuse block (J/B)] normal?	С
YES >> GO TO 3. NO >> GO TO 2. <b>2.</b> CHECK METER FUSE AGAIN	D
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.	Е
NO >> INSPECTION END 3.CHECK HARNESS CONNECTION	F
<ol> <li>Check harness connection between diagnosis sensor unit and combination meter.</li> <li>Disconnect diagnosis sensor unit connector and turn ignition switch ON.</li> <li><u>Did air bag warning lamp turn ON?</u></li> <li>YES &gt;&gt; Replace diagnosis sensor unit (ACU). Refer to <u>SR-24, "Exploded View"</u>.</li> <li>NO &gt;&gt; Replace combination meter assembly. Refer to <u>MWI-112, "Removal and Installation"</u>.</li> </ol>	G SRC

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< SYMPTOM DIAGNOSIS >

## SRS AIR BAG WARNING LAMP BLINKS

Diagnosis Procedure

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**1.**CHECK BATTERY

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

Is the inspection result normal?

YES >> GO TO 2.

NO >> Repair or replace malfunctioning parts.

 $2. {\tt Replace occupant classification system control unit}$ 

1. Replace occupant classification system control unit. Refer to <u>SR-27, "Removal and Installation"</u>.

2. Check air bag warning lamp operation.

Is the inspection result normal?

YES >> INSPECTION END

NO >> GO TO 3.

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

1. Replace air bag diagnosis sensor unit. Refer to <u>SR-24, "Removal and Installation"</u>.

2. Check air bag warning lamp operation.

Is the inspection result normal?

YES >> INSPECTION END

NO >> GO TO 1.

## **PASSENGER SEAT BELT WARNING SYSTEM**

< SYMPTOM DIAGNOSIS >

# PASSENGER SEAT BELT WARNING SYSTEM

		Δ
Diagnosis Procedure		5
<b>1.</b> CHECK THE SYSTEM 1		В
<ul> <li>Check the seat belt warning lamp function.</li> <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> <li>Passenger seat belt is not fasten.</li> </ul>		С
Is the inspection result normal?		D
<ul> <li>YES &gt;&gt; GO TO 2.</li> <li>NO &gt;&gt; Check the followings.</li> <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>		E
2.CHECK THE SYSTEM 2		F
<ul> <li>Check the seat belt warning lamp function.</li> <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>		G
Is the inspection result normal?		SRC
<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>		I
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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.

## Precaution for Battery Service

INFOID:000000008164418

Before disconnecting the battery, lower both the driver and passenger windows. This will prevent any interference between the window edge and the vehicle when the door is opened/closed. During normal operation, the window slightly raises and lowers automatically to prevent any window to vehicle interference. The automatic window function will not work with the battery disconnected.

## SRC-178

## PRECAUTIONS

< PRECAUTION >	
Occupant Classification System	INFOID:000000008164419
<ul> <li>Replace occupant classification system control unit and passenger front seat cushio Refer to <u>SE-166. "Removal and Installation"</u>.</li> </ul>	n as an assembly.

Ρ