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# < SERVICE INFORMATION >

# SERVICE INFORMATION DTC INDEX

B1001-B1015

INFOID:000000005348418

DTC	Items (CONSULT screen terms)	Reference
B1001		
B1002		
B1003		
B1004		
B1005		
B1006		
B1007		
B1008	CONTROL UNIT	SRS-23, "Trouble Diagnosis with CONSULT-III"
B1009		
B1010		
B1011		
B1012		
B1013		
B1014		
B1015		

# B1017-B1031

INFOID:000000005348419

DTC	Items (CONSULT screen terms)	Reference
B1017	OCCUPANT SENSOR C/U	
B1018	OCCUPANT SENS	
B1019	BELT TENSION SENS	
B1020	OCCUPANT SENSOR C/U	
B1021	OCCUPANT SENSOR C/U	
B1022	OCCUPANT SENS C/U	
B1023	PASS A/B INDCTR CKT	SRS-23, "Trouble Diagnosis with CONSULT-III"
B1026		
B1027		
B1028	CONTROL UNIT	
B1029		
B1030		
B1031		

# < SERVICE INFORMATION >

# B1033-B1047

INFOID:000000005348420

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Reference	Items (CONSULT screen terms)	DTC
		B1033
		B1034
	CRASH ZONE SENSOR	B1035
	CRASH ZONE SENSOR	B1036
		B1038
SRS-23, "Trouble Diagnosis with CONSULT-III"		B1040
SR3-23, Trouble Diagnosis with CONSULT-III		B1042
		B1043
		B1044
	CONTROL UNIT	B1045
		B1046
		B1047

B1049-B1063

INFOID:000000005348421

DTC	Items (CONSULT screen terms)	Reference
B1049		
B1050		
B1051		
B1052	DRIVER AIR BAG MODULE	
B1054	DRIVER AIR BAG MODULE	SRS-23, "Trouble Diagnosis with CONSULT-III"
B1055		
B1056		
B1057		
B1058		
B1059		
B1060	CONTROL UNIT	
B1061		
B1062		
B1063		

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# < SERVICE INFORMATION >

# B1065-B1079

INFOID:000000005348422

DTC	Items (CONSULT screen terms)	Reference
B1065		SRS-23, "Trouble Diagnosis with CONSULT-III"
B1066		
B1067		
B1068		
B1070	ASSIST A/B MODULE	
B1071		
B1072		
B1073		
B1074		
B1075		
B1076	CONTROL UNIT	
B1077		
B1078		
B1079		

# B1081-B1111

INFOID:000000005348423

DTC	Items (CONSULT screen terms)	Reference
B1081	- PRE-TEN FRONT RH	SRS-23, "Trouble Diagnosis with CONSULT-III"
B1082		
B1083		
B1084		
B1086	PRE-TEN FRONT LH	
B1087		
B1088		
B1089		
B1106		
B1107		
B1108		
B1109		
B1110		
B1111		

# < SERVICE INFORMATION >

# B1113-B1127

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SRS

DTC	Items (CONSULT screen terms)	Reference
B1113		
B1114		
B1115	SATELLITE SENS RH	
B1116		
B1118		
B1119	SATELLITE SENS LH	SRS-23, "Trouble Diagnosis with CONSULT-III"
B1120	SATELLITE SENS LH	
B1121		
B1122		
B1123		
B1124	CONTROL UNIT	
B1125		
B1126		
B1127		

01120	

DTC	Items (CONSULT screen terms)	Reference	
B1129			1
B1130	SIDE MODULE RH		
B1131			
B1132			J
B1134			
B1135	SIDE MODULE LH		Κ
B1136		SBS 22 "Trauble Diagnosis with CONSULT III"	
B1137	SRS-23, "Trouble Diagnosis with CONSULT-III"		
B1138			L
B1139			
B1140			в. Л
B1141	CONTROL UNIT		M
B1142			
B1143			Ν
B1145-B1210		INFOID:000000005348426	

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#### < SERVICE INFORMATION >

DTC	Items (CONSULT screen terms)	Reference
B1145		
B1146	CURTAIN MODULE RH	
B1147		
B1148		
B1150		
B1151	CURTAIN MODULE LH	
B1152		
B1153	-	SRS-23, "Trouble Diagnosis with CONSULT-III"
B1202		SINS-23, Houble Diagnosis with CONSOLT-III
B1203		
B1204	CONTROL UNIT	
B1205		
B1206		
B1207		
B1209	FRONTAL COLLISION	
B1210	SIDE COLLISIONJ	

# PRECAUTIONS

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

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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 "SUPPLEMENTAL RESTRAINT SYS-TEM" and "SEAT BELTS" of this Service Manual.

#### WARNING:

- To avoid rendering the SRS inoperative, which could increase the risk of personal injury or death in the event of a collision which 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 the "SUPPLEMENTAL RESTRAINT SYSTEM".
- Do not 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:

- When working near the Air Bag Diagnosis Sensor Unit or other Air Bag System sensors with the ignition ON or engine running, DO NOT 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.

Precaution for SRS "AIR BAG" and "SEAT BELT PRE-TENSIONER" Service

INFOID:000000005348428

- 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 L passed.

- 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 installa-Μ tion and replace as required.
- The spiral cable must be aligned with the neutral position since its rotations are limited. Do not turn steering wheel and column after removal of steering gear.
- Ν Handle air bag module carefully. Always place driver and front passenger air bag modules with the pad side facing upward and seat mounted front side air bag module standing with the stud bolt side facing down.
- Conduct self-diagnosis to check entire SRS for proper function after replacing any components.
- After air bag inflates, the front instrument panel assembly should be replaced if damaged.
- Always replace instrument panel pad following front passenger air bag deployment.

Occupant Classification System Precaution

Replace occupant classification system control unit and passenger front seat cushion as an assembly. Refer to SE-145, "Passenger's Seat Component".

Revision: 2009 June

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# < SERVICE INFORMATION >

# PREPARATION

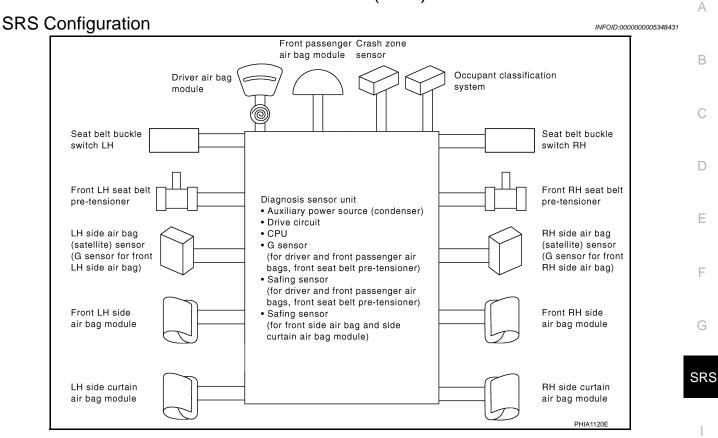
# **Commercial Service Tool**

INFOID:000000005348430

	Tool name	Description
Tamper resistant TORX bit	S-NT757	Removal tool of driver air bag module

#### < SERVICE INFORMATION >

# SUPPLEMENTAL RESTRAINT SYSTEM (SRS)



The air bag deploys if the diagnosis sensor unit activates while the ignition switch is in the ON or START position.

The collision modes for which supplemental restraint systems are activated are different among the SRS systems. For example, the driver air bag module and front passenger air bag module are activated in a frontal collision but not in a side collision.

SRS configurations which are activated for some collision modes are as follows;

SRS configuration	Frontal collision	Left side collision	Right side collision
Driver air bag module	×	_	—
Front passenger air bag module	×	_	_
Front LH seat belt pre-tensioner	×	_	_
Front RH seat belt pre-tensioner	×	_	—
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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#### < SERVICE INFORMATION >

#### Front Seat Belt Pre-tensioner with Load Limiter

The seat belt pre-tensioner system with load limiter is installed for both the driver's seat and the front passenger's seat. It operates simultaneously with the SRS air bag system in the event of a frontal collision with an impact exceeding a specified level.

When the frontal collision with an impact exceeding a specified level occurs, seat belt slack resulting from clothing or other factors is immediately taken up by the pre-tensioner. Vehicle passengers are securely restrained.

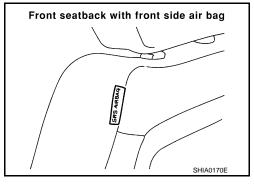
When passengers in a vehicle are thrown forward in a collision and the restraining force of the seat belt exceeds a specified level, the load limiter permits the specified extension of the seat belt by the twisting of the ELR shaft, and a relaxation of the chest-area seat belt web tension while maintaining force.

## Front Side Air Bag

Side Curtain Air Bag

Front side air bag is built-in type.

The front seatback with built-in type side air bag have the labels as shown.



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# Occupant Classification System (OCS)

The side curtain air bags have the labels as shown.

The occupant classification system identifies different size occupants, out of position occupants, and detects if child seat is present in the front passenger seat. The occupant classification system receives inputs from the occupant classification sensor (located inside the passenger seat cushion assembly) and belt tension sensor (part of the passenger front seat belt assembly and located at the belt anchor location). Depending on classification of passenger, the occupant classification system sends a signal to the diagnosis sensor unit. The diagnosis sensor unit uses this signal to determine full, partial, or non deployment of passenger front air bag in the event of a collision. Depending on the signal received, the diagnosis sensor unit can disable the passenger front air bag completely.

#### NOTE:

In case of customer concern, CONSULT-III can be used to confirm the passenger air bag status (readiness).

ELR shaft

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SRS444

INFOID:000000005348433

Revision: 2009 June

#### < SERVICE INFORMATION >

# Passenger Air Bag Status Condition

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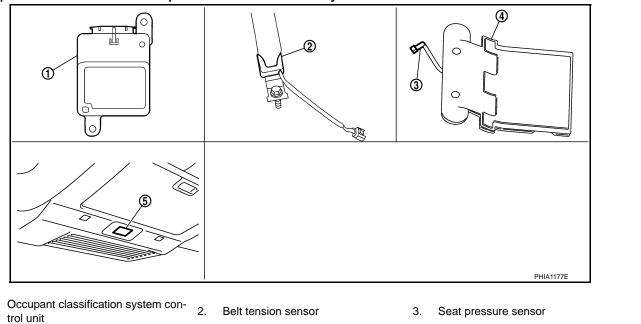
Front Passenger Seat (Condition)	PASS AIR BAG OFF Indicator (Status)	Passenger Air Bag Status (Readiness)	CONSULT-III Display	В
Seat occupied	OFF	Active (enabled)	ON	
seat occupiedNOTE	ON	Deactivated (disabled)	OFF	-
Seat empty	OFF	Deactivated (disabled)	OFF	С

#### NOTE:

Passenger does not meet Ocuupant Classification System specifications for passenger air bag activation.

Component Parts of Occupant Classification Syste	em
--	----

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4. Bladder

1.

5. Front passenger air bag OFF indicator (Cut-off telltaile)

# Passenger Seatbelt Warning System

SYSTEM DESCRIPTION This system warns when passenger seatbelt is not fasten.	L
<ul><li>This system is composed of the following items.</li><li>Seatbelt warning lamp.</li><li>Seatbelt buckle switch (passenger side).</li></ul>	Μ
<ul> <li>Air bag diagnosis sensor unit.</li> <li>Occupant classification system.</li> <li>Seatbelt warning lamp is used for both driver seatbelt warning and passenger seatbelt warning.</li> <li>Seatbelt warning lamp turns ON when all conditions below are met.</li> </ul>	Ν
<ul> <li>Driver seatbelt is fastened.</li> <li>Occupant is on passenger seat.</li> <li>Passenger seatbelt is not fasten.</li> </ul>	0
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< SERVICE INFORMATION >

# **TROUBLE DIAGNOSIS**

#### Trouble Diagnosis Introduction

INFOID:000000005348439

#### **CAUTION:**

- · Do not 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.
- Do not 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-III.

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-III are as follows:

	User mode	Diagnosis mode	Display type
Air bag warning lamp	Х	Х	ON/OFF operation
CONSULT-III	_	Х	Monitoring

HOW TO PERFORM TROUBLE DIAGNOSIS FOR QUICK AND ACCURATE REPAIR

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

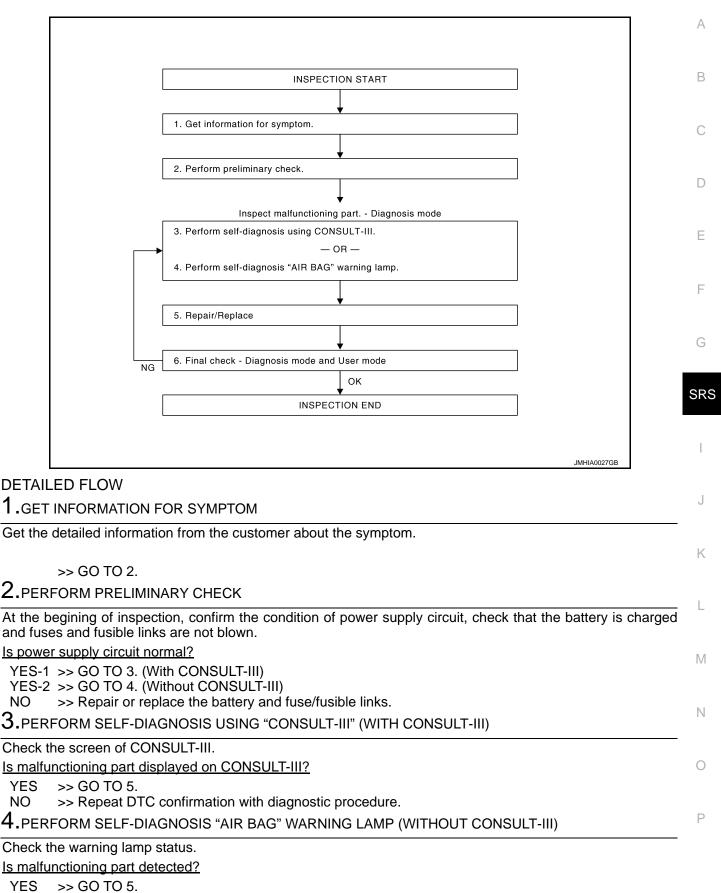
Information from Customer WHAT..... Vehicle model WHEN..... Date, Frequencies WHERE..... Road conditions HOW..... Operating conditions, Symptoms

**Preliminary Check** 

- Check that the following parts are in good order.
- Battery (Refer to <u>SC-4, "How to Handle Battery"</u>.)
  Fuse (Refer to <u>SRS-16, "Wiring Diagram SRS -"</u>.)
- System component-to-harness connections

WORK FLOW

< SERVICE INFORMATION >



NO >> Repeat DTC confirmation with diagnostic procedure.

**5.**REPAIR OR REPLACE

< SERVICE INFORMATION >

Repair or replace the malfunctioning part.

After the malfunctioning is repaired, erase the self-diagnostic result. Refer to SRS-20, "CONSULT-III Function".

>> GO TO 6.

#### 6. FINAL CHECK DIAGNOSIS MODE AND USER MODE

Check the screen of CONSULT-III and/or Air bag warning lamp status.

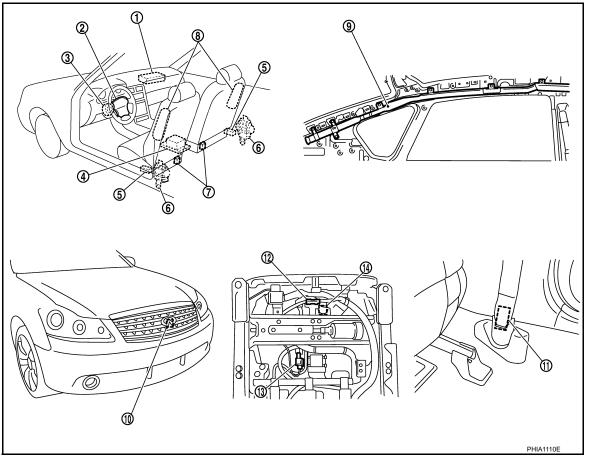
Are the malfunctions corrected?

#### YES >> INSPECTION END.

NO-1 >> GO TO 3. (With CONSULT-III)

NO-2 >> GO TO 4. (Without CONSULT-III)

#### **Component Parts Location**

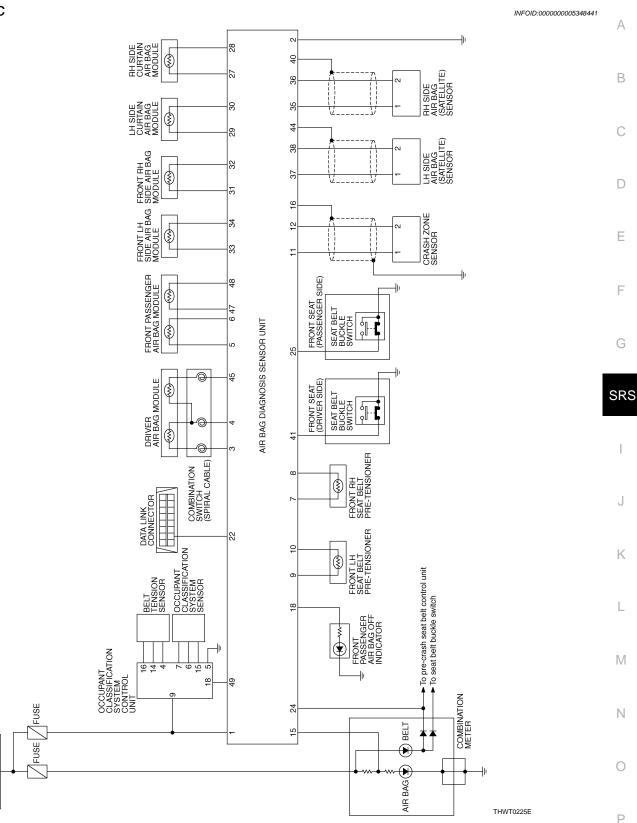


- 1. Front passenger air bag module
- 4. Diagnosis sensor unit
- 7. Seat belt buckle switch (RH/LH)
- 10. Crash zone sensor
- 13. Seat pressure sensor \*
- \*: The bottom of front passenger seat
- 2. Driver air bag module
- 5. Side air bag (Satellite) sensor (RH/LH)
- 8. Front side air bag module (RH/LH)
- 11. Belt tension sensor
- 14. Occupant classification system control unit \*
- 3. Spiral cable
- 6. Front seat belt pre-tensioner (RH/LH)
- 9. Side curtain air bag module
- 12. Belt tension sensor connector \*

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#### < SERVICE INFORMATION >

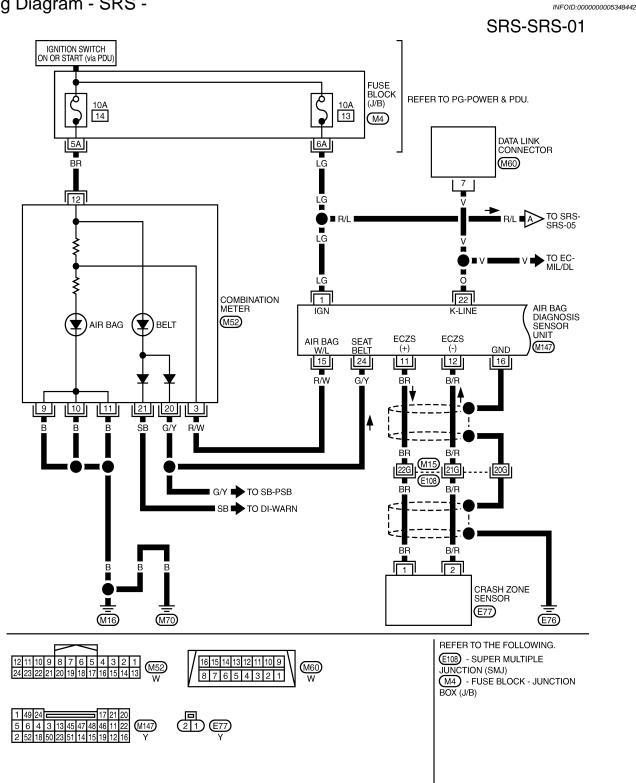
Schematic



IGNITION SWITCH ON or START (via PDU)

< SERVICE INFORMATION >

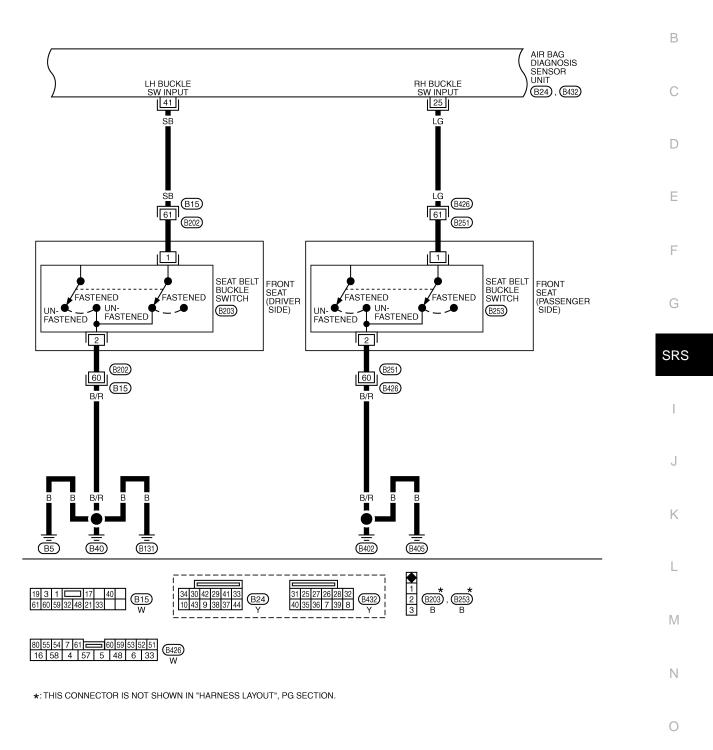
Wiring Diagram - SRS -



THWT0315E

SRS-SRS-02

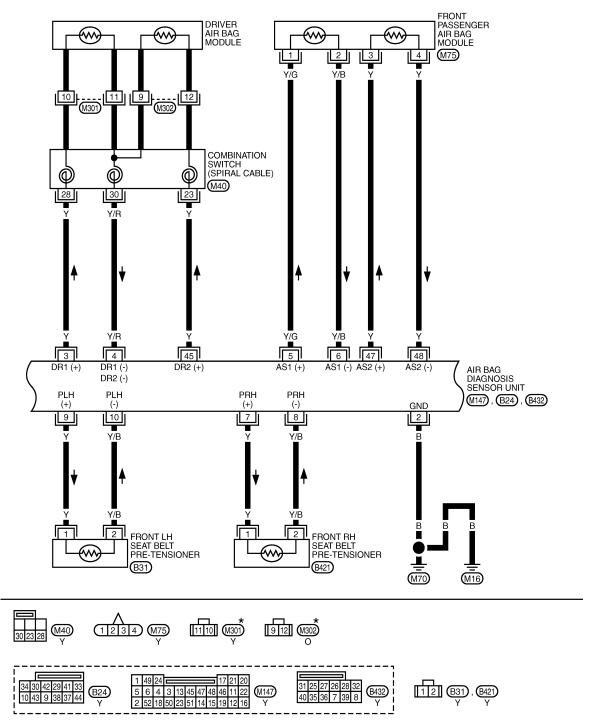
А



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#### < SERVICE INFORMATION >

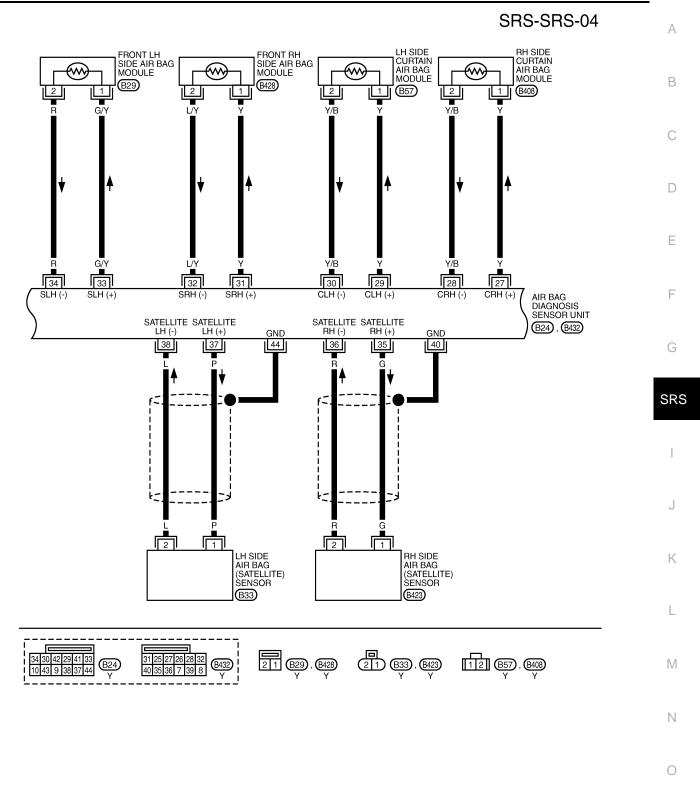
#### SRS-SRS-03



\*: THIS CONNECTOR IS NOT SHOWN IN "HARNESS LAYOUT", PG SECTION.

THWT0318E

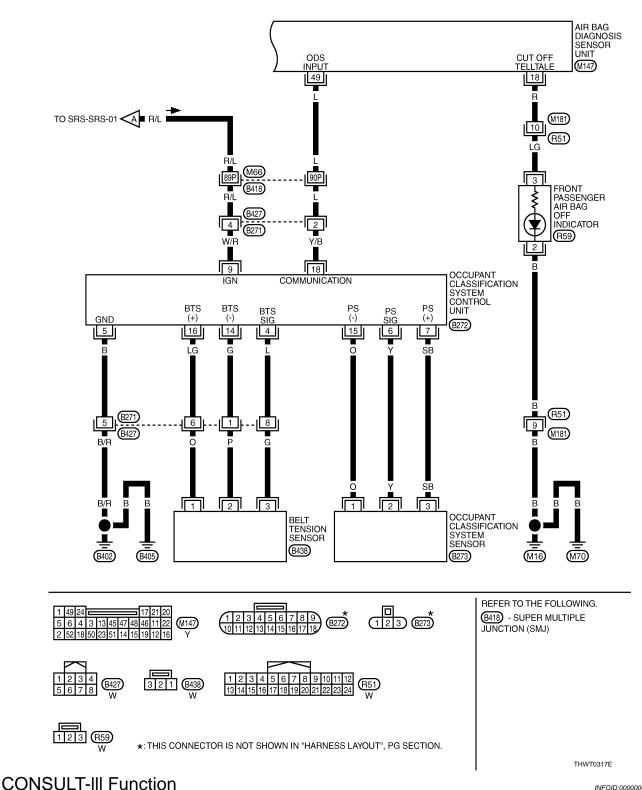
#### < SERVICE INFORMATION >



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SRS-SRS-05



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# DIAGNOSIS MODE FOR CONSULT-III

"SELF-DIAG [CURRENT]"

A current self-diagnostic results (also indicated by the number of warning lamp flashes in the Diagnosis mode) is displayed on the CONSULT-III screen in real time. This refers to a malfunctioning part requiring repairs.

• "SELF-DIAG [PAST]"

#### SRS-20

< SERVICE INF	ORMATION >	
stored results • "TROUBLE DI		A
on the CONSU • "ECU DISCRII		an be displayed B
	usis sensor unit ECU discriminated number (identification number) is displayed unit has individual ECU discriminated number (identification number) based	
B HOW TO C	HANGE SELF-DIAGNOSIS MODE WITH CONSULT-III	
	to Diagnosis Mode AIR BAG" on the "SELECT SYSTEM" screen, User mode automatically chang	D ges to Diagnosis
To return to Use	Aode to User Mode er mode from Diagnosis mode, touch "BACK" key of CONSULT-III until "SEI agnosis mode automatically changes to User mode.	ELECT SYSTEM"
	SE SELF-DIAGNOSTIC RESULTS	F
After the malfu • "SELF-DIAG [	diagnostic result is displayed on the CONSULT-III screen in real time. Inction is repaired completely, no malfunction is detected on "SELF-DIAG [CU PAST]"	-
	'SELF-DIAG [CURRENT]" CONSULT-III screen by touching "BACK" key of C DIAG [CURRENT]" in SELECT DIAG MODE. Touch "ERASE" in "SELF-DIA	
If the memory malfunction by • "TROUBLE DI	of the malfunction in "SELF-DIAG [PAST]" is not erased, the User mode she the operation of the warning lamp even if the malfunction is repaired complet AG RECORD" f "TROUBLE DIAG RECORD" cannot be erased.	
-	is Function (Without CONSULT-III)	INFOID:000000005348444
• After a malfun	these results is accomplished "User mode" and "Diagnosis mode". ction is repaired, turn ignition switch ON. Diagnosis mode returns to the Use liagnostic result is cleared.	er mode. At that $\kappa$
HOW TO CHA	NGE SELF-DIAGNOSTIC MODE WITHOUT CONSULT-III	
	<ol> <li>Turn ignition switch from OFF to ON.</li> <li>Air bag warning lamp is on for 7 seconds and turns off, then turn ignition switch OFF within 1 second after the lamp turns off.</li> <li>After ignition switch is turned OFF, wait for more than 3 seconds.</li> <li>Repeat steps 1 to 3 twice. (Perform 3 times in total.)</li> <li>Turn ignition switch ON. (Self-diagnostic mode turns to Diagnosis mode.)</li> </ol>	М
Use	r mode	node
	1. Turn ignition switch from OFF to ON.     2. Air bag warning lamp is on for 7 seconds and turns off, then turn ignition	
	switch OFF within 1 second after the lamp turns off.          on switch       3. After ignition switch is turned OFF, wait for more than 3 seconds.       Ignition sw         F→ON       4. Repeat steps 1 to 3 twice. (Perform 3 times in total.)       OFF→O         5. Turn ignition switch ON. (Self-diagnostic mode turns to User mode.)       OFF→O	

#### HOW TO ERASE SELF-DIAGNOSTIC RESULTS

After a malfunction is repaired, turn the ignition switch OFF for at least one second, then back ON. Diagnosis mode returns to the User mode. At that time, the self-diagnostic results are cleared.

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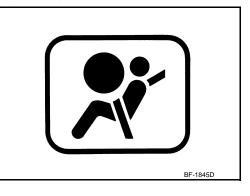
#### < SERVICE INFORMATION >

# SRS Operation Check (USER MODE)

#### DIAGNOSTIC PROCEDURE

Checking Air Bag Operation by Using "AIR BAG" Warning Lamp-User Mode

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



#### Warning lamp examples

"AIR BAG" warning lamp operation-User mode-	SRS condition	Reference item
OFF	<ul> <li>No malfunction is detected.</li> <li>No further action is necessary.</li> </ul>	_
SHIA0011E		
IGN ON ON OFF 7 sec. 0.5 sec. OFF	<ul> <li>The system is malfunctioning and needs to be repaired as indicated.</li> </ul>	Go to <u>SRS-27, "Trouble Diagnosis</u> without CONSULT-III".

# < SERVICE INFORMATION >

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>SRS-47, "For Frontal Collision"</u> .
	<ul> <li>Diagnosis sensor unit is malfunction- ing.</li> <li>Air bag power supply circuit is mal- functioning.</li> <li>SRS air bag warning lamp circuit is malfunctioning.</li> </ul>	Go to <u>SRS-31, "Trouble Diagnosis:</u> <u>"AIR BAG" Warning Lamp Does Not</u> <u>Turn OFF"</u> .
SHIA0013E		
IGN ON	Diagnosis sensor unit is malfunction-	
ON	<ul> <li>Air bag warning lamp circuit is mal- functioning.</li> </ul>	Go to <u>SRS-31, "Trouble Diagnosis:</u> <u>"AIR BAG" Warning Lamp Does Not</u> <u>Turn ON"</u> .

# Trouble Diagnosis with CONSULT-III

#### DIAGNOSTIC PROCEDURE

Diagnositic modeDescriptionSELF-DIAG RESULTThe self-diagnosis result is displayed. SELF-DIAG [CURRENT], [PAST], RECORRD.ECU DISCRIMINATED No.The parts number of diagnosis sensor unit is displayed.

#### DTC No. Index ("SELF-DIAG [CURRENT]" "SELF-DIAG [PAST]" or TROUBLE DIAG RECORD )

Diagnostic item		Explanation	Repair order "Recheck SRS at each replacement"	L
NO DTC IS DETECTED.	When malfunction is in-	Low battery voltage (Less than 9V)	_	
	dicated by the "AIR BAG" warning lamp in User mode.	<ul> <li>Self-diagnostic results "SELF-DIAG [PAST]" (previously stored in the memory) might not be erased after re- pair.</li> <li>Intermittent malfunction has been de- tected in the past.</li> </ul>	Go to <u>SRS-20, "CONSULT-III Func-</u> tion".	M
	No malfunction is detected.		_	
CONTROL UNIT [B1001-B1015]	Diagnosis sensor unit is malfunctioning.		Replace diagnosis sensor unit.	0
OCCUPANT SENS C/U [UNIT FAIL] [B1017] [B1020] [B1021]	Trouble occurs in Occupant Classification System-CU.		Replace passenger side seat cushion assembly.	Ρ
OCCUPANT SENS [UNIT FAIL] [B1018]	Trouble occurs in Occ	cupant Classification System-SENS.	Replace passenger side seat cushion assembly.	

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#### < SERVICE INFORMATION >

Diagnostic item	Explanation	Repair order "Recheck SRS at each replacement"
BELT TENSION SENS [UNIT FAIL] [B1019]	<ul> <li>Belt tension sensor circuit between belt tension sensor and oc- cupant classification system control unit, or diagnosis sensor unit is malfunctioning.</li> </ul>	<ol> <li>Visually check the wiring harness connection.</li> <li>Replace the harness if it has visible damage.</li> <li>Replace front seat belt (passenger side) assembly.</li> <li>Replace front passenger seat cushion/occupant classification system control unit assembly.</li> </ol>
OCCUPANT SENS C/U [COMM FAIL] [B1022]	<ul> <li>Trouble occurs in Occupant Classification System-CU, circuit of Occupant Classification System-CU—Diagnosis Sensor Unit or Diagnosis Sensor Unit.</li> </ul>	<ol> <li>Visually check the wiring harness connection.</li> <li>Replace the harness if it has visible damage.</li> <li>Replace passenger side seat cushion assembly.</li> <li>Replace the diagnosis sensor unit.</li> </ol>
PASS A/B INDCTR CKT [B1023]	Cutoff telltale circuit is open or shorted to grand or the circuits are shorted each other.	<ol> <li>Visually check the wiring harness connection.</li> <li>Replace the harness if it has visible damage.</li> <li>Replace cutoff telltale.</li> <li>Replace the diagnosis sensor unit.</li> </ol>
CONTROL UNIT [B1026-B1031]	Diagnosis sensor unit is malfunctioning.	Replace diagnosis sensor unit.
CRASH ZONE SEN [UNIT FAIL] [B1033] [B1034] CRASH ZONE SEN [COMM FAIL] [B1035] CRASH ZONE SEN [UNMATCH] [B1036] [OPEN/UPR-VB-	Crash zone sensor	<ol> <li>Visually check the wiring harness connection.</li> <li>Replace the harness if it has visible damage.</li> <li>Replace the crash zone sensor.</li> <li>Replace the diagnosis sensor unit.</li> </ol>
SHORT] [B1038] [SHORT/UPR-GND- SHORT]		
[B1040] CONTROL UNIT [B1042-B1047]	Diagnosis sensor unit is malfunctioning.	Replace diagnosis sensor unit.

#### < SERVICE INFORMATION >

Diagnostic item	Explanation	Repair order "Recheck SRS at each replacement"
DRIVER AIRBAG MOD- ULE [OPEN] [B1049] [B1054]	• Driver air bag module circuit is open (including the spiral cable).	<ol> <li>Visually check the wiring harness connection.</li> <li>Replace the harness if it has visi- ble damage.</li> </ol>
DRIVER AIRBAG MOD- ULE [VB-SHORT] [B1050] [B1055]	• Driver air bag module circuit is shorted to a power supply circuit (including the spiral cable).	<ol> <li>Replace driver air bag module.</li> <li>Replace the spiral cable.</li> <li>Replace the diagnosis sensor unit.</li> </ol>
DRIVER AIRBAG MOD- JLE GND-SHORT] B1051] [B1056]	• Driver air bag module circuit is shorted to ground (including the spiral cable).	•
DRIVER AIRBAG MOD- JLE SHORT] B1052] [B1057]	Driver air bag module circuit is shorted between lines.	
CONTROL UNIT B1058-B1063]	Diagnosis sensor unit is malfunctioning.	Replace diagnosis sensor unit.
ASSIST A/B MODULE VB-SHORT] B1065] [B1070]	<ul> <li>Front passenger air bag module circuit is shorted to a power supply circuit.</li> </ul>	<ol> <li>Visually check the wiring harness connection.</li> <li>Replace the harness if it has visi-</li> </ol>
ASSIST A/B MODULE OPEN] B1066] [B1071]	Front passenger air bag module circuit is open.	<ul> <li>ble damage.</li> <li>3. Replace front passenger air bag module.</li> <li>4. Replace the diagnosis sensor</li> </ul>
ASSIST A/B MODULE GND-SHORT] B1067] [B1072]	Front passenger air bag module circuit is shorted to ground.	unit.
ASSIST A/B MODULE SHORT] B1068] [B1073]	• Front passenger air bag module circuit is shorted between lines.	-
CONTROL UNIT B1074-B1079]	Diagnosis sensor unit is malfunctioning.	Replace diagnosis sensor unit.
PRE-TEN FRONT RH OPEN] B1081]	Front RH pre-tensioner circuit is shorted to a power supply cir- cuit.	<ol> <li>Visually check the wiring harness connections.</li> <li>Replace the harness if it has visi-</li> </ol>
PRE-TEN FRONT RH VB-SHORT] B1082]	• Front RH pre-tensioner is shorted to a power supply circuit.	ble damage. 3. Replace front RH seat belt. 4. Replace the diagnosis sensor unit.
PRE-TEN FRONT RH GND-SHORT] B1083]	Front RH pre-tensioner circuit is shorted to ground.	
PRE-TEN FRONT RH SHORT] B1084]	Front RH pre-tensioner circuit is shorted between lines.	÷

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#### < SERVICE INFORMATION >

Diagnostic item	Explanation	Repair order "Recheck SRS at each replacement"
PRE-TEN FRONT LH [OPEN] [B1086]	Front LH pre-tensioner circuit is open.	<ol> <li>Visually check the wiring harness connections.</li> <li>Replace the harness if it has visi-</li> </ol>
PRE-TEN FRONT LH [VB-SHORT] [B1087]	Front LH pre-tensioner circuit is shorted to a power supply cir- cuit.	<ul> <li>ble damage.</li> <li>3. Replace front LH seat belt.</li> <li>4. Replace the diagnosis sensor unit.</li> </ul>
PRE-TEN FRONT LH [GND-SHORT] [B1088]	Front LH pre-tensioner circuit is shorted to ground.	
PRE-TEN FRONT LH [SHORT] [B1089]	Front LH pre-tensioner circuit is shorted between lines.	
CONTROL UNIT [B1106-B1111]	Diagnosis sensor unit is malfunctioning.	Replace diagnosis sensor unit.
SATELLITE SENS RH [UNIT FAIL] [B1113] [B1114] SATELLITE SENS RH [COMM FAIL] [B1115] SATELLITE SENS RH [UNMATCH] [B1116]	RH side air bag (Satellite) sensor	<ol> <li>Visually check the wiring harness connection.</li> <li>Replace the harness if it has visible damage.</li> <li>Replace the RH side air bag (Satellite) sensor.</li> <li>Replace the diagnosis sensor unit.</li> </ol>
SATELLITE SENS LH [UNIT FAIL] [B1118] [B1119] SATELLITE SENS LH [COMM FAIL] [B1120] SATELLITE SENS LH [UNMATCH] [B1121]	LH side air bag (Satellite) sensor	<ol> <li>Visually check the wiring harness connection.</li> <li>Replace the harness if it has visible damage.</li> <li>Replace the LH side air bag (Satellite) sensor.</li> <li>Replace the diagnosis sensor unit.</li> </ol>
CONTROL UNIT [B1122-B1127]	Diagnosis sensor unit is malfunctioning.	Replace diagnosis sensor unit.
SIDE MODULE RH [OPEN] [B1129]	Front RH side air bag module circuit is open.	<ol> <li>Visually check the wiring harness connection.</li> <li>Replace the harness if it has visi-</li> </ol>
SIDE MODULE RH [VB-SHORT] [B1130]	Front RH side air bag module circuit is shorted to some power supply circuit.	<ul> <li>ble damage.</li> <li>3. Replace front RH setback assembly (front RH side air bag module).</li> </ul>
SIDE MODULE RH [GND-SHORT] [B1131]	Front RH side air bag module circuit is shorted to ground.	<ol> <li>4. Replace the diagnosis sensor unit.</li> </ol>
SIDE MODULE RH [SHORT] [B1132]	Front RH side air bag module circuit is shorted between lines.	

#### < SERVICE INFORMATION >

Diagnostic item	Explanation	Repair order "Recheck SRS at each replacement"
SIDE MODULE LH [OPEN] [B1134]	Front LH side air bag module circuit is open.	<ol> <li>Visually check the wiring harness connection.</li> <li>Replace the harness if it has visi-</li> </ol>
SIDE MODULE LH [VB-SHORT] [B1135]	Front LH side air bag module circuit is shorted to a power supply circuit.	<ul> <li>ble damage.</li> <li>3. Replace front LH setback assembly (front LH side air bag module).</li> <li>4. Replace the diagnosis sensor</li> </ul>
SIDE MODULE LH [GND-SHORT] [B1136]	<ul> <li>Front LH side air bag module circuit is shorted to ground.</li> </ul>	unit.
SIDE MODULE LH [SHORT] [B1137]	Front LH side air bag module circuit is shorted between lines.	
CONTROL UNIT B1138-B1143]	Diagnosis sensor unit is malfunctioning.	Replace diagnosis sensor unit.
CURTAIN MODULE RH [OPEN] [B1145]	RH side curtain air bag module circuit is open.	<ol> <li>Visually check the wiring harness connection.</li> <li>Replace the harness if it has visi-</li> </ol>
CURTAIN MODULE RH VB-SHORT] B1146]	RH side curtain air bag module circuit is shorted to a power sup- ply circuit.	<ul> <li>ble damage.</li> <li>3. Replace RH side curtain air bag module.</li> <li>4. Replace the diagnosis sensor</li> </ul>
CURTAIN MODULE RH GND-SHORT] B1147]	RH side curtain air bag module circuit is shorted to ground.	unit.
CURTAIN MODULE RH SHORT] B1148]	• RH side curtain air bag module circuit is shorted between lines.	
CURTAIN MODULE LH OPEN] B1150]	LH side curtain air bag module circuit is open.	<ol> <li>Visually check the wiring harness connection.</li> <li>Replace the harness if it has visi-</li> </ol>
CURTAIN MODULE LH [VB-SHORT] [B1151]	LH side curtain air bag module circuit is shorted to some power supply circuits.	<ul> <li>ble damage.</li> <li>3. Replace LH side curtain air bag module.</li> <li>4. Replace the diagnosis sensor</li> </ul>
CURTAIN MODULE LH [GND-SHORT] [B1152]	LH side curtain air bag module circuit is shorted to ground.	unit.
CURTAIN MODULE LH SHORT] B1153]	LH side curtain air bag module circuit is shorted between lines.	+
CONTROL UNIT [B1202-B1207]	Diagnosis sensor unit is malfunctioning.	Replace the diagnosis sensor unit.
FRONTAL COLLISION DETECTION [B1209]	Seat belt pre-tensioner and front air bag are deployed.	Go to SRS-47, "For Frontal Collision".
SIDE COLLISION DE- TECTION [B1210]	Side air bag and curtain air bag is deployed.	Go to <u>SRS-48, "For Side Collision"</u> .

#### NOTE:

Follow the procedures in numerical order when repairing malfunctioning parts. Confirm whether malfunction is eliminated using air bag warning lamp or CONSULT-III each time repair is finished. If malfunction is still observed, proceed to the next step. When malfunction is eliminated, further repair work is not required.

## Trouble Diagnosis without CONSULT-III

INFOID:000000005348447

#### DIAGNOSTIC PROCEDURE

#### < SERVICE INFORMATION >

Inspecting SRS Malfunctioning Parts by Using "AIR BAG" Warning Lamp — Diagnosis Mode **NOTE:** 

SRS will not enter Diagnosis mode if no malfunction is detected in User mode.

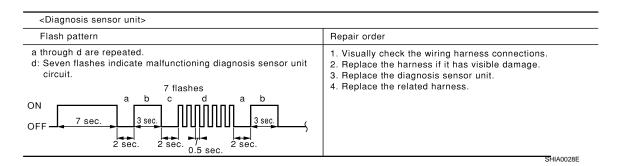
- 1. Turn ignition switch ON.
- 2. After "AIR BAG" warning lamp lights for 7 seconds, turn ignition switch OFF within 1 second.
- 3. Wait more than 3 seconds.
- 4. Repeat the steps 1 to 3 two times.
- 5. Turn ignition switch ON.

SRS is now in Diagnosis mode.

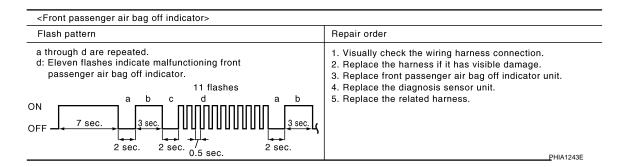
"AIR BAG" warning lamp operates in Diagnosis mode as follows:

#### WARNING LAMP FLASH CODE CHART

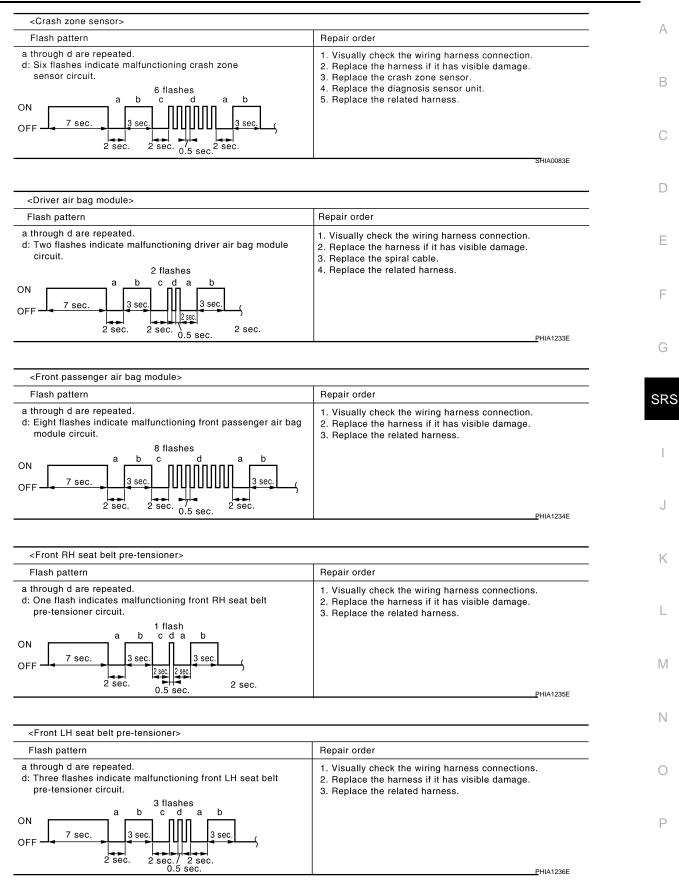
< Diagnosis results (previously stored in the memory) might not be erased after repair or intermittent malfunctions have been detected in the past.> Repair order Flash pattern a through b are repeated. 1. Erase memory. (Once key switch is turned from OFF to ON, TROUBLE DIAG RECORD will be erased.) IGN ON а ON 3 7 sec se OFF 2 sec. 2 sec PHIA0532E



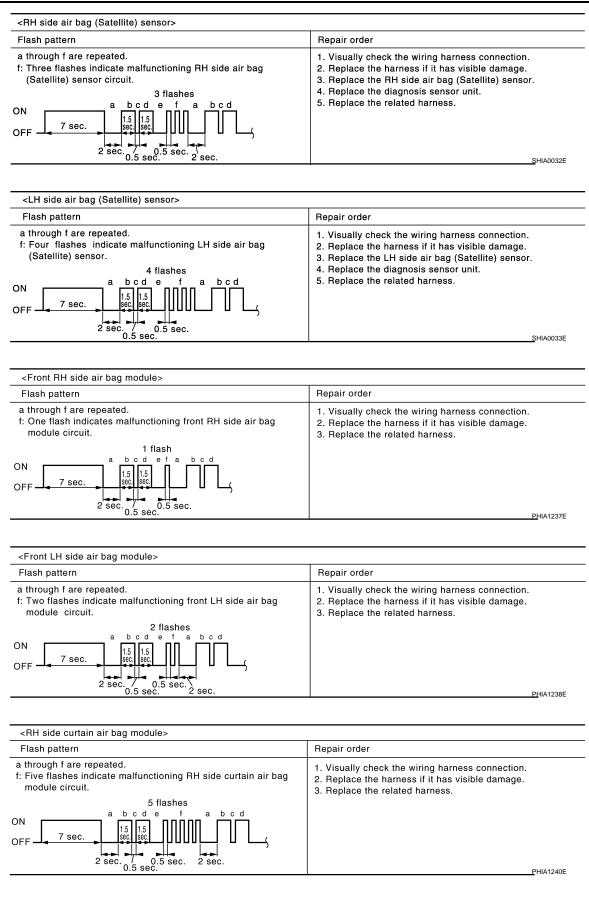
<occupant classification="" system=""></occupant>	
Flash pattern	Repair order
a through d are repeated. d: Five flashes indicate malfunctioning OCS control unit. ON OFF 7 sec. 2 sec. 2 sec.	<ol> <li>Visually check the wiring harness connection.</li> <li>Replace the harness if it has visible damage.</li> <li>Replace front passenger seat cushion and occupant classification system control unit as an assembly.</li> <li>Replace the diagnosis sensor unit.</li> </ol>
2 sec. 2 sec. 2 sec. 0.5 sec.	PHIA1242I



#### < SERVICE INFORMATION >



#### < SERVICE INFORMATION >



#### < SERVICE INFORMATION >

<lh air="" bag="" curtain="" module="" side=""></lh>		^	
Flash pattern	Repair order	А	
a through f are repeated. f: Six flashes indicate malfunctioning LH side curtain air bag module circuit. 6 flashes	<ol> <li>Visually check the wiring harness connection.</li> <li>Replace the harness if it has visible damage.</li> <li>Replace the related harness.</li> </ol>	В	
ON OFF $7$ sec. 2 sec. 7 sec. 2 sec. 3 s		С	
Trouble Diagnosis: "AIR BAG" Warning Lar	mp Does Not Turn OFF INFOID:00000000534844	<sup>18</sup> D	
DIAGNOSTIC PROCEDURE			
1.CHECK FRONT AIR BAG MODULE		E	
Check the deployment of front air bag module.		-	
Is air bag module deployed?		F	
YES >> Refer to <u>SRS-47, "For Frontal Collision"</u> or NO >> GO TO 2.	SRS-48, "For Side Collision".		
2.CHECK AIR BAG FUSE		G	
Check 10A fuse [No.13, located in fuse block (J/B)]. Refer to <u>PG-18, "Fuse"</u> .			
Is the inspection result normal?		SRS	
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 >> <b>INSPECTION END</b>		J	
4. CHECK DIAGNOSIS SENSOR UNIT		K	
Check the screen of CONSULT-III.		-	
Is the inspection result normal?		1	
YES >> GO TO 5. NO >> Replace diagnosis sensor unit.		L	
5.CHECK HARNESS CONNECTION			
Check harness connection between warning lamp and	diagnosis sensor unit	M	
Is the inspection result normal?			
YES >> Check the intermittent incident.		Ν	
NO >> Replace wiring harness connector.			
Trouble Diagnosis: "AIR BAG" Warning Lar	mp Does Not Turn ON	9	
DIAGNOSTIC PROCEDURE			
1.CHECK METER FUSE		Р	
Check the meter fuse. Refer to PG-18, "Fuse".			
Check 10A fuse [No.14. located in fuse block (J/B)] normal?			
YES >> GO TO 3. NO >> GO TO 2.			
2. CHECK "METER" FUSE AGAIN			

Replace 10A fuse [No.14, located in fuse block (J/B)] and turn ignition switch ON.

#### < SERVICE INFORMATION >

Does the meter fuse blow again?

YES >> Repair or replace the related harness.

#### NO >> INSPECTION END

# ${f 3.}$ CHECK HARNESS CONNECTION BETWEEN DIAGNOSIS SENSOR UNIT AND COMBINATION METER

Disconnect diagnosis sensor unit connector and turn ignition switch ON.

Does air bag warning lamp turn ON?

YES >> Replace diagnosis sensor unit.

NO >> Replace combination meter assembly.

#### Trouble Diagnosis: Passenger Seat belt Warning System

INFOID:000000005348450

## **1.**HECK THE SYSTEM 1

Check seat belt warning lamp function.

Seat belt warning lamp turns ON in the following conditions.

- Driver seat belt is fastened.
- Occupant is on passenger seat.
- Passenger seat belt is not fasten.

Is the inspection result normal?

- YES >> GO TO 2.
- NO >> Check the followings.
  - Harness between air bag diagnosis sensor unit and combination meter.
  - Seat belt buckle switch (passenger side) circuit.
  - Seat belt buckle switch (passenger side).

If these are OK, replace air bag diagnosis sensor unit.

# 2.CHECK THE SYSTEM 2

Check seat belt warning lamp function.

Seat belt warning lamp turns OFF in the following conditions.

- Driver seat belt is fastened.
- Occupant is on passenger seat.
- Passenger seat belt is fastened.

#### Is the inspection result normal?

- YES >> System is OK.
- NO >> Check the followings.
  - Sea tbelt buckle switch (passenger side) circuit.
  - Seat belt buckle switch (passenger side).
  - If these are OK, replace air bag diagnosis sensor unit.

## DRIVER AIR BAG MODULE

#### < SERVICE INFORMATION >

# DRIVER AIR BAG MODULE

# Removal and Installation

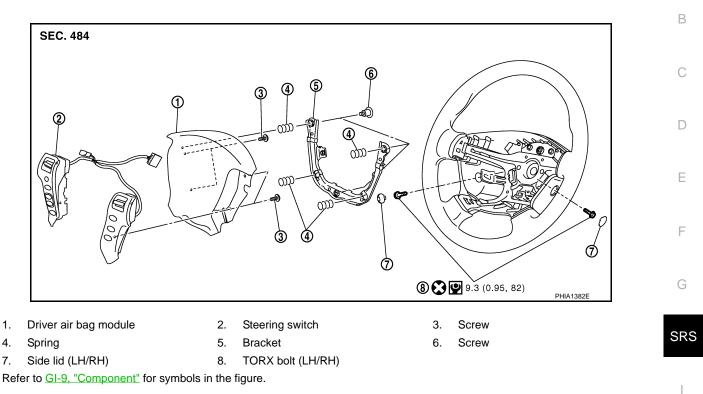
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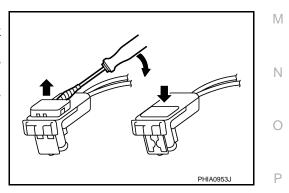


#### WARNING:

- Before servicing, turn ignition switch OFF, disconnect battery negative terminal and wait 3 minutes or more.
- Always work from the side of air bag module. Never work from the front of it.
- Never use air tools or electric tools for servicing.

#### REMOVAL

- 1. Remove the side lids (LH/RH).
- 2. Remove the TORX bolt (LH/RH) from the steering wheel lower side using TORX bit.
- 3. Pull out the driver air bag module.
- 4. Disconnect the driver air bag harness connector. CAUTION:
  - For installing/removing driver air bag harness connector, insert thin screwdriver wrapped in tape into notch, lift lock and remove connector.
  - Install connector with lock raised, and push lock into connector.
  - After installing the connector, check that the lock is pushed securely into it.



5. Remove the screws then remove the steering switch.

#### **CAUTION:**

• Always place the driver air bag module with pad side facing upward.

# DRIVER AIR BAG MODULE

#### < SERVICE INFORMATION >

# Never impact the driver air bag module.

 Replace the driver air bag module if it has been dropped or sustained an impact.



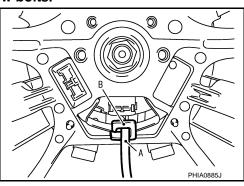
- Never insert any foreign objects (screwdriver, etc.) into driver air bag module.
- Never disassemble the driver air bag module.
- Never expose the driver air bag module to temperatures exceeding 90°C (194 °F).
- Never allow oil, grease, detergent, or water to come in contact with the driver air bag module.

#### INSTALLATION

Install in the reverse order of removal.

#### **CAUTION:**

- Never use the old TORX bolts after removal, replace with the new bolts.
- Fix the air bag module harness (shown as A in the figure) to the harness fixing hook (shown as B in the figure).



- Never damage the harness while installing.
- Tighten the TORX bolts after completely adjusting the centers of fixing holes on the driver air bag module side and the steering wheel side. If the holes are misaligned, the bolt threads are damaged and the module is not installed securely.
- If malfunction is detected by the air bag warning lamp, after repair or replacement of the malfunctioning parts, reset the memory using self-diagnosis or CONSULT–III. Refer to <u>SRS-20, "CONSULT-III</u> <u>Function"</u>.
- After the work is completed, check that no system malfunction is detected by air bag warning lamp.

# < SERVICE INFORMATION >

# SPIRAL CABLE

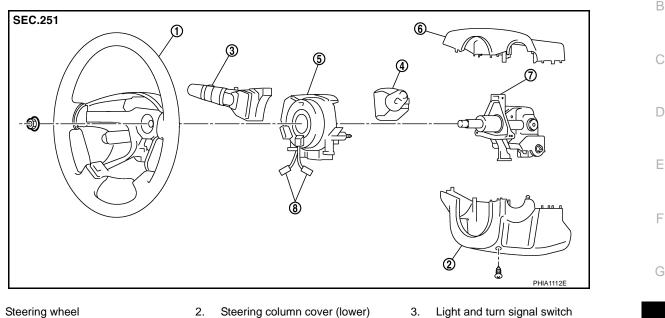
# **Removal and Installation**

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Steering wheel 1.

- Steering column cover (lower)
- 3. 6. Steering column cover (upper)

4. Wiper washer switch

Steering column assembly

5. Spiral cable Driver air bag harness connectors

WARNING:

7.

- Before servicing, turn ignition switch OFF, disconnect battery negative terminal and wait 3 minutes or more.
- Never use the air tools or electric tools for servicing.

#### REMOVAL

1. Remove the air bag module. Refer to SRS-33, "Removal and Installation".

8.

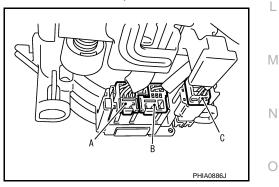
- Remove the steering wheel. Refer to PS-10, "Removal and Installation". 2.
- 3. Remove the steering column cover (upper/lower).
- Remove the wiper washer switch, then remove light and turn signal switch from the spiral cable.
- 5. Disconnect the horn switch connector (shown as A in the figure).
- 6. Disconnect the spiral cable connector (shown as B in the figure).
- 7. Loosen the spiral cable fixing screws.
- Shift the spiral cable forward a bit while pushing the pawl located 8. above the spiral cable.
- Disconnect the steering wheel switch connector (shown as C in 9. the figure).

NOTE:

Disconnect the spiral cable connector after disconnecting the horn switch connector.

10. Remove the spiral cable.

### CAUTION:



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## **SPIRAL CABLE**

#### < SERVICE INFORMATION >

- Never impact the spiral cable.
- Replace the spiral cable if it has been dropped or sustained an impact.



- Never disassemble the spiral cable.
- Never apply lubricant to the spiral cable.
- Never arrow oil, grease, detergent, or water to come in contact with the spiral cable.

#### INSTALLATION

Install in the reverse order of removal.

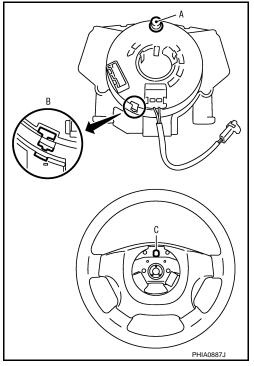
#### **CAUTION:**

- The spiral cable may snap by steering operation if the cable is installed in an improper position.
- The neutral position is set as follows.

Turn quietly the spiral cable clockwise to the end position. Then turn it counterclockwise (about 2 and half turns) and stop turning at the point on which the stopper insertion holes are in the same position.

The service part is installed in the neutral position by the stopper and can be set without adjusting after the stopper is removed.

- Never turn the spiral cable rashly and also beyond the limit number of turns. (These will cause cable snap.)
- Adjust the spiral cable locating pin (showed as A in the figure) to the steering wheel locating pin hole (showed as C in the figure).
- Secure the air bag harness with the harness fixing hook.



- If malfunction is detected by the air bag warning lamp, after repair or replacement of the malfunctioning parts, reset the memory using self-diagnosis or CONSULT-III. Refer to <u>SRS-20, "CONSULT-III</u> <u>Function"</u>.
- After the work is completed, check that no system malfunction is detected by air bag warning lamp.

# FRONT PASSENGER AIR BAG MODULE

### < SERVICE INFORMATION >

# FRONT PASSENGER AIR BAG MODULE

## Removal and Installation

#### WARNING:

- Before servicing, turn ignition switch OFF, disconnect battery negative terminal and wait 3 minutes or more.
- Always work from the side of air bag module. Never work from the front of it.
- Never use the air tools or electric tools for servicing.

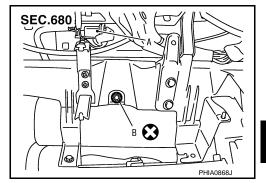
#### REMOVAL

1. Remove the instrument panel assembly. Refer to <u>IP-12, "INSTRUMENT PANEL : Removal and Installa-</u> D <u>tion"</u>.

#### NOTE:

The figure shows installed condition of the front passenger air bag module. (Under view of the module installed without glove box cover.)

- (A) : Passenger air bag module connector
- (B) : Passenger air bag module fixing bolt



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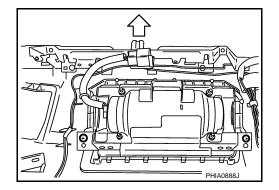
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- 2. Remove the front passenger air bag module fixing screws.
- 3. Remove the air bag from the rear side hook.
  - ⟨□ : Vehicle front



4. Remove the front passenger air bag module from the instrument panel pad assemblies.

#### CAUTION:

- Always place the front passenger air bag module with pad side facing upward.
- Never impact the front passenger air bag module.
- Replace the front passenger air bag module if it has been dropped or sustained an impact.
- A CONTRACTOR OF CONTRACTOR OF
- Never insert any foreign objects (screwdriver, etc.) into passenger air bag module.
- Never disassemble the passenger air bag module.
- Never expose the passenger air bag module to temperatures exceeding 90°C (194 °F).
- Never allow oil, grease, detergent, or water to come in contact with the passenger air bag module.

## **SRS-37**

INSTALLATION

Install in the reverse order of removal.

**CAUTION:** 

• Never use the old fixing bolts after removal, replace with the new bolts.

• Fixing bolt : 24.5 N·m (2.5 kg–m, 18.1 ft–lb)

- Never damage the harness while installing.
- If malfunction is detected by the air bag warning lamp, after repair or replacement of the malfunctioning parts, reset the memory using self-diagnosis or CONSULT-III. Refer to <u>SRS-20, "CONSULT-III</u> <u>Function"</u>.
- After the work is completed, check that no system malfunction is detected by air bag warning lamp.

# SIDE CURTAIN AIR BAG MODULE

# Removal and Installation

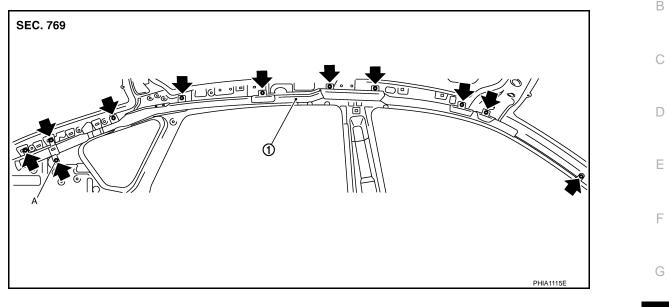
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1. Side curtain air bag module A Ground bolt

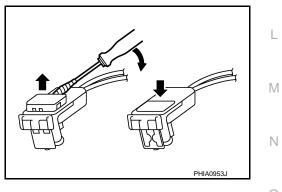
🛑 : Bolt

#### WARNING:

- Before servicing, turn ignition switch OFF, disconnect battery negative terminal and wait 3 minutes or more.
- Never use air tools or electric tools for servicing.

#### REMOVAL

- 1. Remove the curtain air bag module.
  - Remove the headlining. Refer to EI-62. "Removal and Installation".
  - Remove the side curtain air bag module connector. CAUTION:
    - For installing / removing side curtain air bag harness connector, insert thin screwdriver wrapped in tape into notch, lift lock and remove connector.
    - Install connector with lock raised, and push lock into connector.
    - After installing the connector, make sure that the lock is pushed securely into it.



• Remove the curtain air bag module fixing bolts, and then remove the ground bolt.

Fixing bolt : 10.8 N·m (1.1 kg–m, 8 ft–lb)

**Ground bolt** : 10.8 N·m (1.1 kg–m, 8 ft–lb)

#### **CAUTION:**

• Leave the curtain air bag module with air bag deployment side facing upward.

# SIDE CURTAIN AIR BAG MODULE

#### < SERVICE INFORMATION >

- Never impact the side curtain air bag module.
- Replace the side curtain air bag module if it has been dropped or sustained an impact.



- Never insert any foreign objects (screwdriver, etc.) into side curtain air bag module.
- Never disassemble side curtain air bag module.
- Never expose the side curtain air bag module to temperatures exceeding 90 °C (194 °F).
- Never allow oil, grease, detergent, or water to come in contact with the side curtain air bag module.

#### INSTALLATION

Install in the reverse order of removal.

#### **CAUTION:**

- Never damage the harness while installing.
- If malfunction is detected by the air bag warning lamp, after repair or replacement of the malfunctioning parts, reset the memory using self-diagnosis or CONSULT-III. Refer to <u>SRS-20, "CONSULT-III</u> <u>Function"</u>.
- After the work is completed, check that no system malfunction is detected by air bag warning lamp.

# **CRASH ZONE SENSOR**

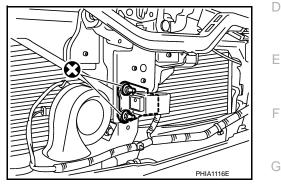
# Removal and Installation

#### WARNING:

- Before servicing, turn ignition switch OFF, disconnect battery negative terminal and wait 3 minutes or more.
- Never use the air tools or electric tools for servicing.

#### REMOVAL

- 1. Remove the front grille. Refer to EI-27, "Component Parts Location".
- 2. Remove the crash zone sensor fixing nuts.



- 3. Disconnect the crash zone sensor harness connector.
- 4. Remove the crash zone sensor.

#### **CAUTION:**

- Never impact the crash zone sensor.
- Replace the crash zone sensor if it has been dropped or sustained an impact.

 Replace the crash zone sensor of deployed SRS driver air bag and deployed SRS front passenger air bag.

#### INSTALLATION

Install in the reverse order of removal.

#### CAUTION:

• Never use the old fixing nuts after removal, replace with the new nuts.

#### Fixing nut : 10.8 N·m (1.1 kg–m, 8 ft–lb)

- Never damage the harness while installing.
- If malfunction is detected by the air bag warning lamp, after repair or replacement of the malfunctioning parts, reset the memory using self-diagnosis or CONSULT-III. Refer to <u>SRS-20, "CONSULT-III</u> <u>Function"</u>.
- After the work is completed, check that no system malfunction is detected by air bag warning lamp.

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# SIDE AIR BAG (SATELLITE) SENSOR

# Removal and Installation

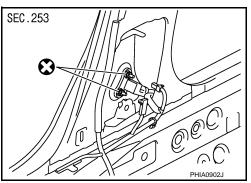
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#### WARNING:

- Before servicing, turn ignition switch OFF, disconnect battery negative terminal and wait 3 minutes or more.
- Never use the air tools or electric tools for servicing.

#### REMOVAL

- 1. Remove front seat belt retractor. Refer to SB-27. "Removal and Installation of Front Seat Belt".
- 2. Remove side air bag (Satellite) sensor fixing nuts.
- 3. Disconnect the side air bag (Satellite) sensor harness connector.



4. Remove the side air bag (Satellite) sensor.

#### **CAUTION:**

- Never impact the side air bag (satellite) sensor.
- Replace the side air bag (satellite) sensor if it has been dropped or sustained an impact.



• Replace the side air bag (satellite) sensor of deployed SRS front side air bag and deployed SRS side curtain air bag.

#### INSTALLATION

Install in the reverse order of removal.

#### **CAUTION:**

• Never use the old fixing nuts after removal, replace with the new nuts.

#### □ Fixing nut : 10.8 N·m (1.1 kg–m, 8 ft–lb)

- Never damage the harness while installing.
- If malfunction is detected by the air bag warning lamp, after repair or replacement of the malfunctioning parts, reset the memory using self-diagnosis or CONSULT-III. Refer to <u>SRS-20, "CONSULT-III</u> <u>Function"</u>.
- After the work is completed, check that no system malfunction is detected by air bag warning lamp.

#### ELT DDE TENSIONED -

<pre></pre>	
FRONT SEAT BELT PRE-TENSIONER	
Removal and Installation	457
For removal and installation procedures, refer to SB-27, "Removal and Installation of Front Seat Belt".	В
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# DIAGNOSIS SENSOR UNIT

# Removal and Installation

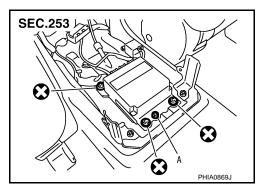
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#### WARNING:

- Before servicing, turn ignition switch OFF, disconnect battery negative terminal and wait 3 minutes or more.
- Before disconnecting the air bag sensor unit harness connector, be sure to disconnect the each harness connector of the air bag module and pre-tensioner seat belt to prevent air bag deployment by static electricity and pre-tensioner seat belt operation.
- Never use the air tools or electric tools for servicing.
- When replacing the air bag diagnosis sensor unit, always check with the parts department for the latest parts information. Installing an incorrect air bag diagnosis sensor unit may or may not cause the air bag warning lamp to illuminate and may cause incorrect deployment of the supplemental air bags and seat belt pre-tensioners in a collision resulting in serious personal injury or death.

#### REMOVAL

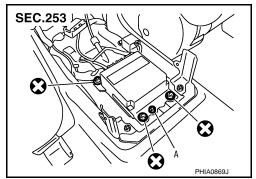
- 1. Always check the air bag diagnosis sensor unit ECU discriminated number (identification number) using CONSULT-III.
- 2. Disconnect the each connectors of all air bag modules and pre-tensioner seat belts.
- 3. Remove the center console assembly. Refer to IP-12, "INSTRUMENT PANEL : Removal and Installation".
- 4. Disconnect the diagnosis sensor unit harness connectors.
- 5. Remove the diagnosis sensor unit fixing bolts.



6. Remove the diagnosis sensor unit.

#### CAUTION:

- Never impact the diagnosis sensor unit.
- Replace the diagnosis sensor unit if it has been dropped or sustained an impact.



 Replace the diagnosis sensor unit of deployed SRS air bag and deployed SRS front seat belt pre-tensioner.

#### INSTALLATION

Install air bag diagnosis sensor unit in the reverse order of removal.

#### CAUTION:

• Never use the old fixing bolts after removal, replace with the new bolts.

- Hex bolts : 24.5 N·m (2.5 kg–m, 18 ft–lb)
- **Ground bolt** : 6.9 N·m (0.7kg–m, 61 in–lb)
- Never damage the harness while installing.
- If malfunction is detected by the air bag warning lamp, after repair or replacement of the malfunctioning parts, reset the memory using self-diagnosis or CONSULT-III. Refer to <u>SRS-20, "CONSULT-III</u> <u>Function"</u>.
- After the work is completed, check that no system malfunction is detected by air bag warning lamp.
- After replacing the air bag diagnosis sensor unit, confirm using CONSULT-III that the ECU discriminated number (identification number) of the new replacement air bag sensor unit matches the ECU discriminated number (identification number) of the replaced (old) air bag diagnosis sensor unit.
   NOTE:

If the ECU discriminated number of the new replacement air bag diagnosis sensor unit differs from the ECU discriminated number of the replaced air bag diagnosis sensor unit, reconfirm the parts information and verify that the correct air bag diagnosis sensor unit was installed.

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# **OCCUPANT CLASSIFICATION SYSTEM CONTROL UNIT**

#### < SERVICE INFORMATION >

# OCCUPANT CLASSIFICATION SYSTEM CONTROL UNIT

# Removal and Installation

INFOID:000000005348459

The occupant classification system control unit, seat pressure sensor, and bladder are an integral part of the front passenger seat cushion and are replaced as an assembly. Refer to <u>SE-145</u>, "Passenger's Seat Component".

# **COLLISION DIAGNOSIS**

# < SERVICE INFORMATION >

COLLISION D	IAGNOSIS		А	
For Frontal Colli	ision	INFOID:00000005348460	A	
To repair the SRS, perform the following steps. When SRS (except the front side air bag and side curtain air bag modules) is activated in a collision: 1. Replace the diagnosis sensor unit.				
2. Remove the air crash zone sense	bag modules (except the front side air sor assembly, bracket and seat belt pre-	bag modules and side curtain air bag modules), tensioner assemblies.	С	
<ol> <li>Check the SRS components using the table below:</li> <li>Replace any SRS components showing visible signs of damage (dents, cracks and deformation).</li> <li>Install new air bag modules (except the front side air bag modules and side curtain air bag modules) crash zone sensor assembly, bracket and seat belt pre-tensioner assemblies.</li> </ol>				
5. Conduct self-dia Check (USER M		warning lamp. Refer to SRS-22, "SRS Operation	E	
<ol> <li>Check the SRS</li> <li>Replace any SR</li> </ol>	components using the table below: S components showing visible signs of	damage (dents, cracks and deformation). warning lamp. Refer to <u>SRS-22, "SRS Operation</u>	F	
Check (USER M When only one from	<u>MODE)</u> for details. Ensure entire SRS o <b>nt air bag module is activated in a co</b> l owing components:	perates properly.	Г	
<ul> <li>Diagnosis senso</li> <li>Crash zone sen</li> </ul>	or unit		G	
<ol> <li>Check the other</li> <li>Replace any SR</li> <li>Conduct self-dia <u>Check (USER M</u></li> <li>Only one front air ba are belted or unbelte</li> </ol>	agnosis using CONSULT-III or air bag v <u>1ODE)"</u> for details. Ensure entire SRS o ag may inflate a crash, depending on th	damage (dents, cracks and deformation). warning lamp. Refer to <u>SRS-22, "SRS Operation</u>	SR	
SRS INSPECTION	I (FOR FRONTAL COLLISION)		J	
Part	SRS is activated	SRS is NOT activated	K	
Driver air bag module	If the Driver air bag has deployed: REPLACE. Install with new fasteners.	If the Driver air bag has NOT been activated: [same text as in current manual]		
Passenger front air bag module	If the Passenger front air bag has deployed: REPLACE. Install with new fasteners.	If the Passenger front air bag has NOT been activated: [same text as in current manual]	L	
Crash zone sensor	If any of the front air bags or seat belt pre- tensioners have been activated: REPLACE the crash zone sensor and bracket with new fasteners.	If the front air bags or seat belt pre-tensioners have NOT been activated: [same text as in current manual]	M	
Seat belt pre-tensioner	If the driver or passenger Seat belt pre-tension- er has been activated: REPLACE the seat belt pre-tensioner assemblies with new fasteners.	If the pre-tensioners have NOT been activated: [same text as in current manual]	0	
	If any of the SRS components have been	If pape of the SPS companyons have been activated:		

activated:

REPLACE the Diagnosis sensor unit.

If the Driver air bag has deployed:

Install with new fasteners.

REPLACE the spiral cable.

Diagnosis sensor unit

Steering wheel

Spiral cable

[same text as in current manual]

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If none of the SRS components have been activated:

[same text as in current manual]

[same text as in current manual]

If the Driver air bag has not deployed:

# **COLLISION DIAGNOSIS**

#### < SERVICE INFORMATION >

Part	SRS is activated	SRS is NOT activated		
Harness and connec- tors	<ol> <li>Check connectors for poor connection, damage, and terminals for deformities.</li> <li>Check harness for binding, chafing, cuts, or deformities.</li> <li>If no damage is found, reinstall the harness and connectors.</li> <li>If damaged – REPLACE damaged section of harness. Do not repair, splice or modify any SRS harnes</li> </ol>			
Instrument panel	<ol> <li>Visually check instrument panel for damage.</li> <li>If no damage is found, reinstall the instrument panel.</li> <li>If damaged – REPLACE the instrument panel with bolts.</li> </ol>			

# For Side Collision

INFOID:000000005348461

# WHEN THE SIDE AIR BAG IS ACTIVATED IN THE SIDE COLLISION:

- 1. Replace the following components:
- All parts of front seatback (including front seatback frame) with front side air bag module (on the side on which front side air bag is activated)
- Curtain air bag module (on the side on which side curtain air bag is activated)
- Diagnosis sensor unit
- Satellite sensor (on the side on which side air bag and side curtain air bag is activated)
- 2. Check the SRS components and the related parts using the following table.
- Replace any SRS components and the related parts showing visible signs of damage (dents, cracks, deformation).
- Conduct self-diagnosis using CONSULT-III or air bag warning lamp. Refer to <u>SRS-22, "SRS Operation</u> <u>Check (USER MODE)"</u>. Ensure entire SRS operates properly.

#### WHEN SRS IS NOT ACTIVATED IN THE SIDE COLLISION:

- 1. Check the SRS components and the related parts using the following table.
- Replace any SRS components and the related parts showing visible signs of damage (dents, cracks, deformation).
- Conduct self-diagnosis using CONSULT-III or air bag warning lamp. Refer to <u>SRS-22, "SRS Operation</u> <u>Check (USER MODE)"</u>. Ensure entire SRS operates properly.

#### SRS INSPECTION (FOR SIDE COLLISION)

Part	Front side air bag and side curtain air bag is activated	Front side air bag and side curtain air bag is NOT activated
LH or RH side curtain air bag module	REPLACE the side curtain air bag mod- ule. (Repair the center pil- lar inner, etc. before installing new one if damaged.)	<ol> <li>Check for visible signs of damage (dents, tears, deformation) of the center pillar on the collision side.</li> <li>If damaged – Remove the LH or RH side curtain air bag module.</li> <li>Check for visible signs of damaged (tears etc.) of the LH or RH side curtain air bag module.</li> <li>Check harness and connectors for damage, and terminals for deformities.</li> <li>If no damage is found, reinstall the LH or RH side curtain air bag module with new bolts.</li> <li>If damaged – REPLACE the LH or RH side curtain air bag module with new bolts.</li> </ol>
Front LH or RH side air bag module	REPLACE all parts of seatback with de- ployed front side air bag module.	<ol> <li>Check for visible signs of damage (dents, tears, deformation) of the seatback on the collision side.</li> <li>Check harness and connectors for damage, and terminals for deformities.</li> <li>If damaged – REPLACE the front seatback assembly.</li> </ol>
LH or RH side air bag (Satellite) sensor	REPLACE the side air bag (Satellite) sensor on the collision side with new nuts. (Repair the center pil- lar inner, etc. before installing new one if damaged.)	<ol> <li>Remove the LH or RH side air bag (Satellite) sensor on the collision side. Check harness connectors for damage, terminals for deformities, and harness for bind- ing.</li> <li>Check for visible signs of damage (dents, cracks, deformation) of the LH or RH side air bag (Satellite) sensor.</li> <li>Install the LH or RH side air bag (Satellite) sensor to check fit.</li> <li>If no damage is found, reinstall the LH or RH side sir bag (Satellite) sensor with new nuts.</li> <li>If damaged – REPLACE the LH or RH side air bag (Satellite) sensor with new nuts.</li> </ol>

# **COLLISION DIAGNOSIS**

## < SERVICE INFORMATION >

Part	Front side air bag and side curtain air bag is activated	Front side air bag and side curtain air bag is NOT activated	А
Diagnosis sensor unit	REPLACE the diag- nosis sensor unit with the new bolts.	<ol> <li>Check case and bracket for dents, cracks or deformities.</li> <li>Check connectors for damage, and terminals for deformities.</li> <li>If no damage is found, reinstall the diagnosis sensor unit with new bolts and ground bolt.</li> <li>If damaged – REPLACE the diagnosis sensor unit with new bolts and ground bolt.</li> </ol>	B
Seat belt pre-tension- er assembly	<ol> <li>Check if the seat belt can be extended smoothly. If the seat belt cannot be extended smoothly,</li> <li>Check for deformities of the center pillar inner.</li> <li>If the center pillar inner has no damage, REPLACE the seat belt pre-tensioner assembly.</li> <li>Remove the seat belt pre-tensioner assembly on the collision side. Check harness cover and connectors for damage, terminals for deformities, and harness for binding.</li> <li>Check for visible signs of damage (dents, cracks, deformation) of the seat belt pre-tensioner assembly.</li> <li>Check seat belt adjuster for damage.</li> <li>If no damage is found, reinstall the seat belt pre-tensioner assembly.</li> <li>If damaged – REPLACE the seat belt pre-tensioner assembly with new bolts.</li> </ol>		D
Seat with front side air bag	REPLACE all parts of front seatback (includ- ing front seatback frame)	<ol> <li>Visually check the seat on the collision side.</li> <li>Remove the seat on the collision side and check the following for damage and deformities.</li> <li>Harness, connectors and terminals</li> <li>Frame and recliner (for front and rear seat), and also adjuster and slides (for front seat)</li> <li>If no damage is found, reinstall the seat.</li> <li>If damaged – REPLACE the damaged seat parts using new bolts.</li> </ol>	F G SR
Center inner pillar	<ol> <li>Check the center inner pillar on the collision side for damage (dents, cracks, deformation).</li> <li>If damaged – REPAIR the center inner pillar.</li> </ol>		
Trim/headlining		igns of damage (dents, cracks, deformation) of the interior trim on the collision side. LACE the damaged trim parts.	I

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