SUPPLEMENTAL RESTRAINT SYSTEM (SRS) C

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PRECAUTIONS

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Precautions 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 and SB section 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 SRS section.
- 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 for SRS "AIR BAG" and "SEAT BELT PRE-TENSIONER" Service

- 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 pre-tensioner to deploy. Therefore, do not work on any SRS connectors or wires until at least 3 minutes have 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 installation and replace as required.
- The spiral cable must be aligned with the neutral position since its rotations are limited. Do not attempt to turn steering wheel or 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.

Precautions for Battery Service

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.

Occupant Classification System Precaution

Replace occupant classification system control unit and passenger front seat cushion as an assembly. Refer to <u>SE-134, "FRONT SEAT"</u>.

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SRS

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NHS0001F

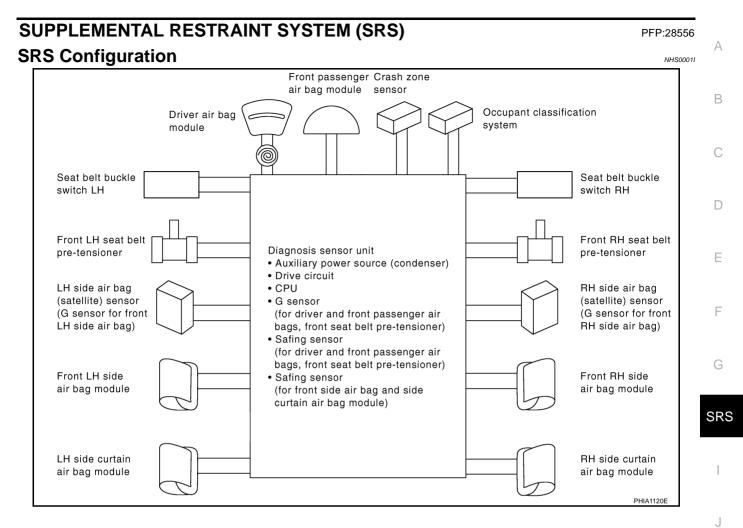
PREPARATION

PREPARATION Commercial Service Tools

PFP:00002

commercial Service Tools		NHS0001H
Tool name	Description	
Tamper resistant TORX bit	S-NI757	

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		_	×

Front Seat Belt Pre-tensioner With Load Limiter

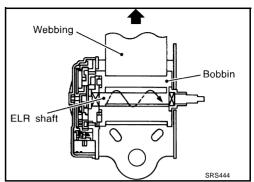
The seat belt pre-tensioner system with load limiter is installed for both the driver's seat and the front passenger's seat. It operates simultaneously with the SRS air bag system in the event of a frontal collision with an impact exceeding a specified level.

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.

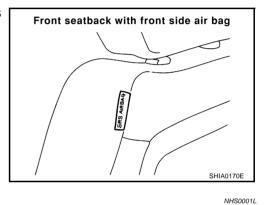
Front Side Air Bag

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



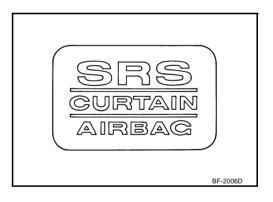
NHS0001K

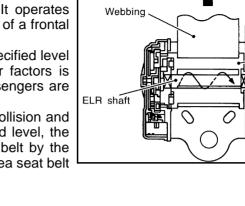
NHS0001J



Side Curtain Air Bag

The side curtain air bags have the labels as shown.





Revision: 2006 August

Occupant Classification System (OCS)

А 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 В (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 C front air bag completely.

NOTE:

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

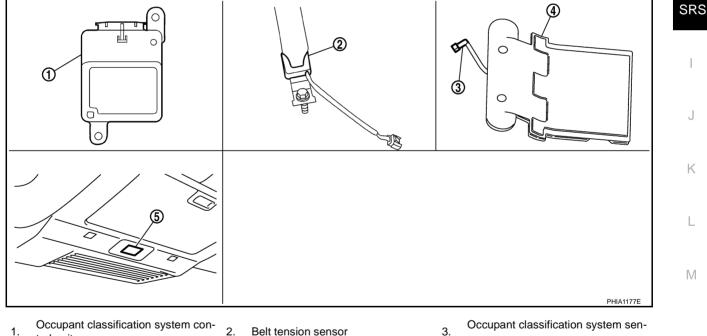
Passenger Air Bag Status Condition

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

NOTE:

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

Component Parts of Occupant Classification System



trol unit

4.

Bladder

- Belt tension sensor
- Front passenger air bag OFF indica-5. tor (Cutoff telltaile)

sor

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NHS0006H

NHSOOOGI

SRS-7

Passenger Seatbelt Warning SystemIt

SYSTEM DESCRIPTION This system warns when passenger seatbelt is not fasten.

This system is composed of the following items.

- Seatbelt warning lamp.
- Seatbelt buckle switch (passenger side).
- Air bag diagnosis sensor unit.
- Occupant classification system.

Seatbelt warning lamp is used for both driver seatbelt warning and passenger seatbelt warning. Seatbelt warning lamp turns ON when all conditions below are met.

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

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TROUBLE DIAGNOSIS

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SRS

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Trouble Diagnosis Introduction

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-diagnostic results can be read by using "AIR BAG" warning lamp and/or CONSULT-II.

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-II are as follows:

	User mode	Diagnosis mode	Display type	F
"AIR BAG" warning lamp	Х	Х	ON-OFF operation	-
CONSULT-II	_	Х	Monitoring	

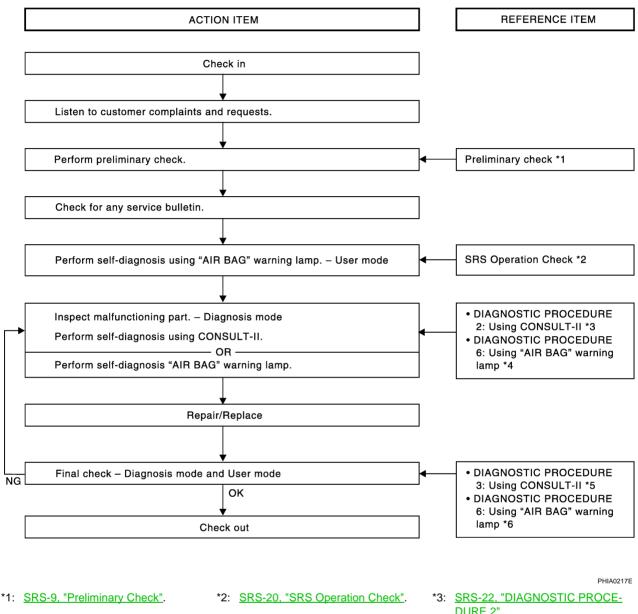
HOW TO PERFORM TROUBLE DIAGNOSIS FOR QUICK AND ACCURATE REPAIR

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	
Make sure the following parts are in good order.	
 Battery (Refer to <u>SC-4, "How to Handle Battery"</u>.) 	K
 Fuse (Refer to <u>SRS-13, "Wiring Diagram — SRS —</u>".) 	
System component-to-harness connections.	L

WORK FLOW



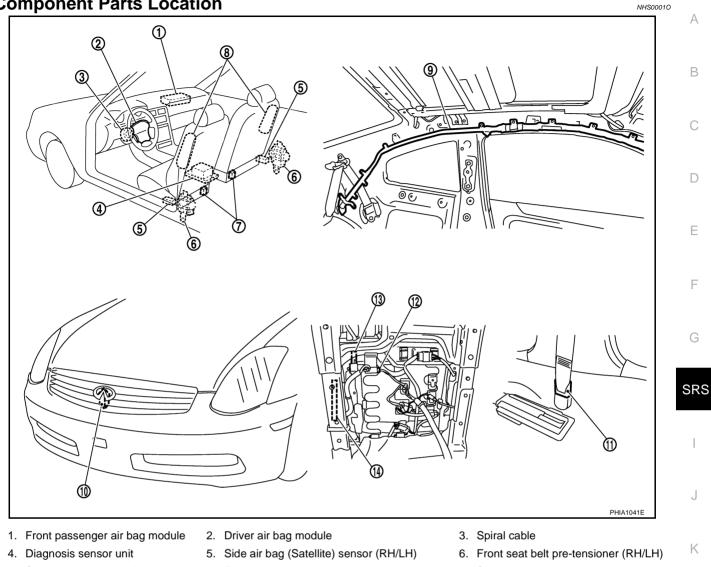
*4: SRS-35, "DIAGNOSTIC PROCE-DURE 6".

*5 SRS-27, "DIAGNOSTIC PROCE-DURE 3".

DURE 2".

*6 SRS-35, "DIAGNOSTIC PROCE-DURE 6".

Component Parts Location



- 7. Seat belt buckle switchs
- 10. Crash zone sensor
- Occupant classification system 13. sensor *
- 8. Front side air bag modules
- 11. Belt tension sensor
- 14. Occupant classification system control unit *
- 9. Side curtain air bag module
- 12. Belt tension sensor connector *
- Μ

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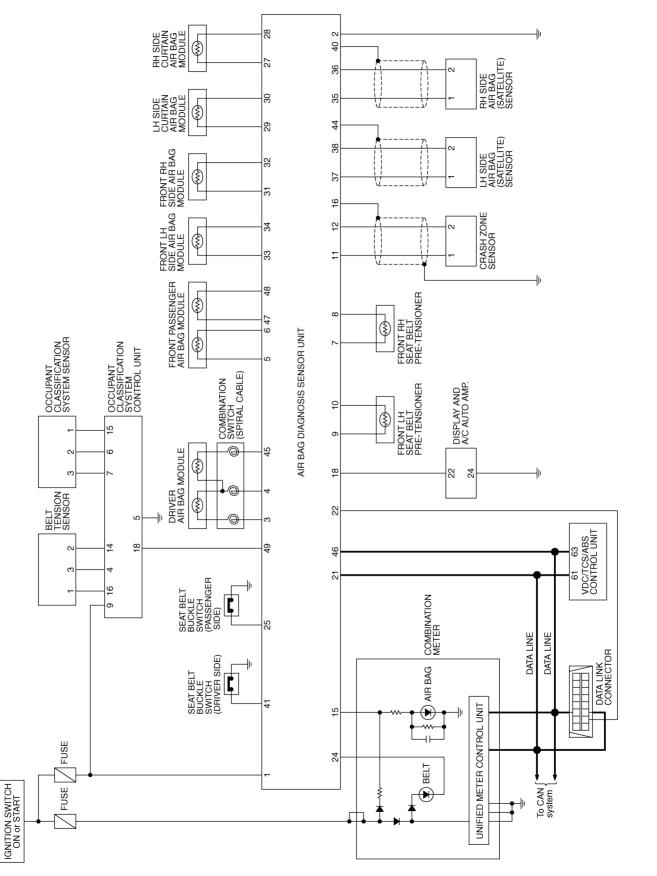
*: 12, 13, 14 \rightarrow The bottom of front passenger seat

2007 G35 Coupe

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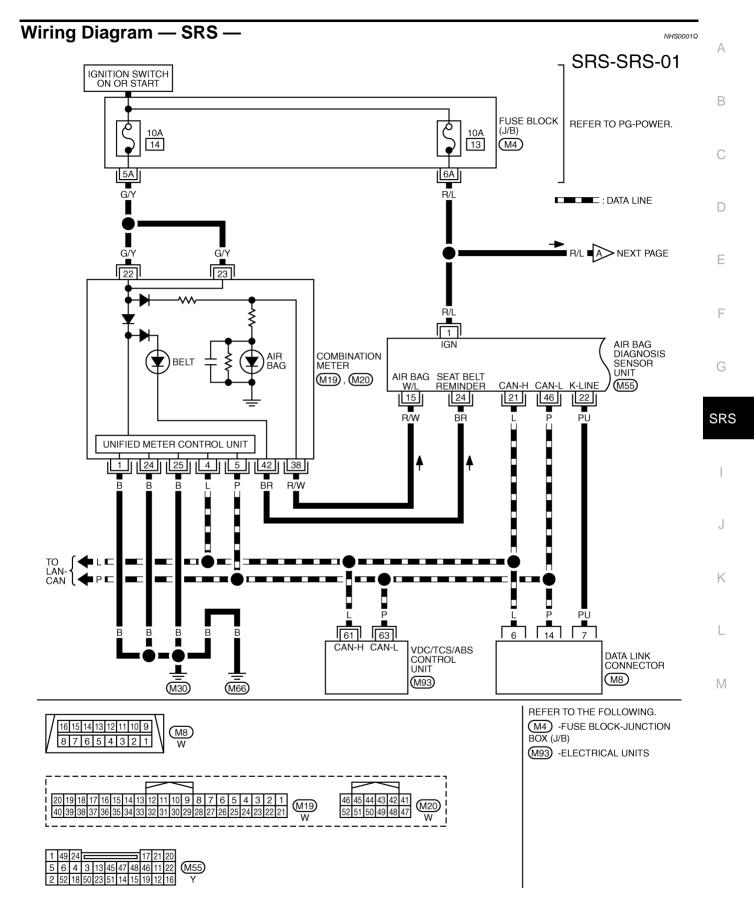
SRS-11

Schematic

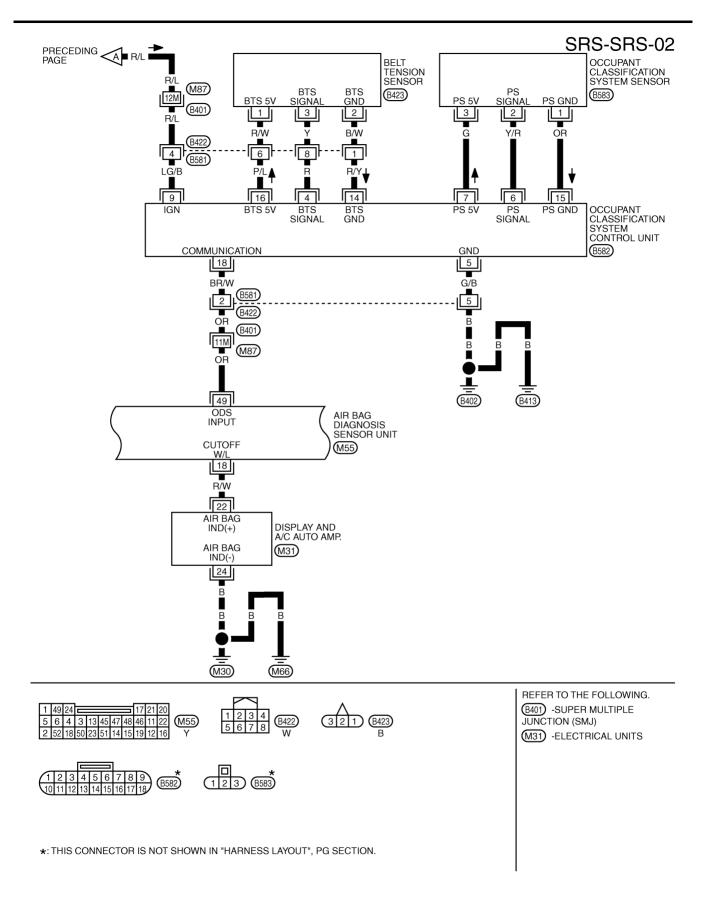


THWM0267E

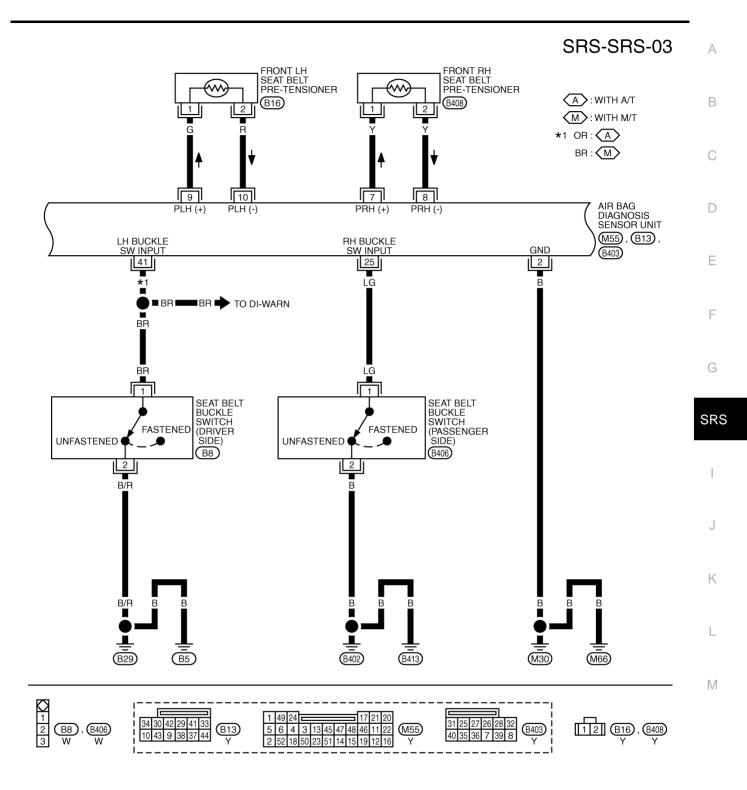
NHS0001P



THWM0268E



THWM0179E



THWM0269E

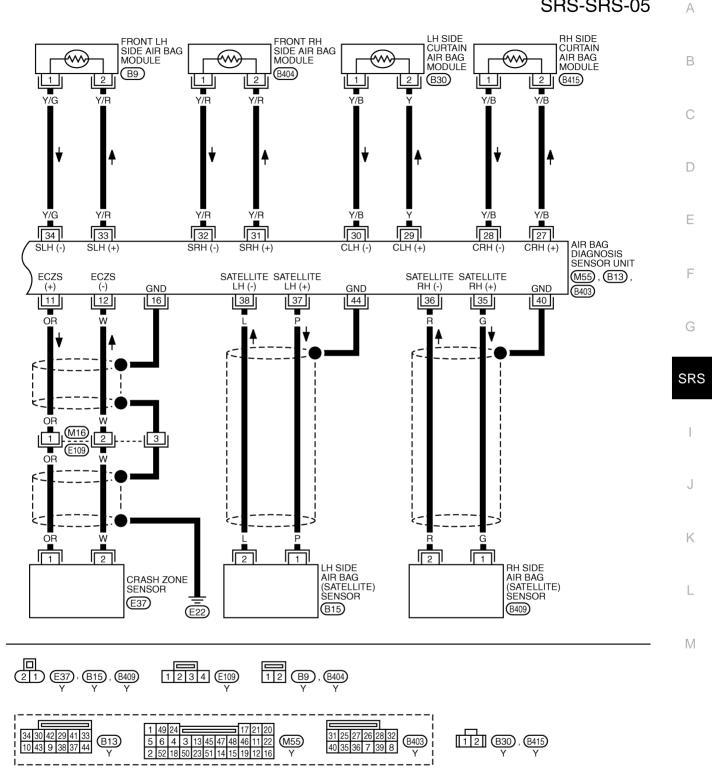
FRONT PASSENGER AIR BAG MODULE DRIVER AIR BAG MODULE ∞ 3 (M65) 4 2 1 13 ---- 12 M202 COMBINATION SWITCH (SPIRAL CABLE) \bigcirc \bigcirc \bigcirc (M24) 28 23 30 ╈ f 3 47 48 4 45 5 6 DR1 (-) DR2 (-) DR1 (+) DR2 (+) AS1 (+) AS1 (-) AS2 (+) AS2 (-) AIR BAG DIAGNOSIS SENSOR UNIT (M55) 1 49 24 **=** 5 6 4 3 1234 M65 v (M24) Y 13 12 (M202) OR (M55) Y 3 13 45 47 48 46 11 22 28 114 19 1 16

SRS-SRS-04

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

THWM0111E

SRS-SRS-05



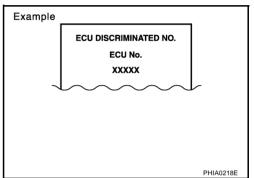
THWM0270E

CONSULT-II Function DIAGNOSIS MODE FOR CONSULT-II

- "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-II screen in real time. This refers to a malfunctioning part requiring repairs.
- "SELF-DIAG [PAST]" Diagnosis results previously stored in the memory are displayed on the CONSULT-II screen. The stored results are not erased until memory erasing is executed.
- "TROUBLE DIAG RECORD" With TROUBLE DIAG RECORD, diagnosis results previously erased by a reset operation can be displayed on the CONSULT-II screen.
- "ECU DISCRIMINATED NO."

The diagnosis sensor unit for each vehicle model is assigned with its own, individual classification number. This number will be displayed on the CONSULT-II screen, as shown. When replacing the diagnosis sensor unit, refer to the part number for the compatibility. After installation, replacement with a correct unit can be checked by confirming this classification number on the CONSULT-II screen.

After repair, make sure the discriminated number of diagnosis sensor unit installed to vehicle are same. Refer to <u>SRS-52</u>, <u>"ECU DISCRIMINATED NO."</u>.



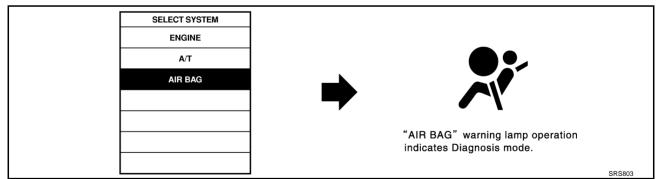
• PASSENGER AIR BAG

The STATUS (readiness) of the front passenger air bag module is displayed. The STATUS displayed (ON/ OFF) depend on the signals supplied to the occupant classification system control module and air bag diagnosis sensor unit. Refer to <u>SRS-53</u>, <u>"OCCUPANT CLASSIFICATION SYSTEM CONTROL UNIT"</u> for more infomation.

(B) HOW TO CHANGE SELF-DIAGNOSIS MODE WITH CONSULT-II

From User Mode to Diagnosis Mode

After selecting "AIR BAG" on the "SELECT SYSTEM" screen, User mode automatically changes to Diagnosis mode.



From Diagnosis Mode to User Mode

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To return to User mode from Diagnosis mode, touch "BACK" key of CONSULT-II until "SELECT SYSTEM" appears, then diagnosis mode automatically changes to User mode.

SELECT SYSTEM ENGINE A/T AIR BAG	•	"AIR BAG" warning lamp operation indicates User mode.	
			SRS804

2007 G35 Coupe

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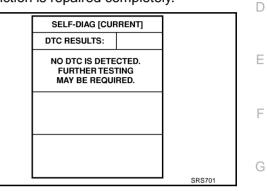
HOW TO ERASE SELF-DIAGNOSTIC RESULTS

- "SELF-DIAG [CURRENT]"
 A current self-diagnostic result is displayed on the CONSULT-II screen in real time.
 After the malfunction is repaired completely, no malfunction is detected on "SELF-DIAG [CURRENT]".
- "SELF-DIAG [PAST]" Return to the "SELF-DIAG [CURRENT]" CONSULT-II screen by touching "BACK" key of CONSULT-II and select "SELF-DIAG [CURRENT]" in SELECT DIAG MODE. Touch "ERASE" in "SELF-DIAG [CURRENT]" mode.

NOTE:

If the memory of the malfunction in "SELF-DIAG [PAST]" is not erased, the User mode shows the system malfunction by the operation of the warning lamp even if the malfunction is repaired completely.

 "TROUBLE DIAG RECORD" The memory of "TROUBLE DIAG RECORD" cannot be erased.



Self-Diagnosis Function (Without CONSULT-II)

- The reading of these results is accomplished "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-diagnostic result is cleared.

HOW TO CHANGE SELF-DIAGNOSIS MODE WITHOUT CONSULT-II

User mode		 3. After ignition switch is turned OFF, wait for more than 3 seconds. 4. Repeat steps 1 to 3 twice. (Perform 3 times in total.) 5. Turn ignition switch ON. (Self-diagnostic mode turns to Diagnosis mode.) 	
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.	User mode	► ►	Diagnosis mode
OFF→ON3. After ignition switch is turned OFF, wait for indire than 3 seconds.OFF→ON4. Repeat steps 1 to 3 twice. (Perform 3 times in total.)OFF→ON5. Turn ignition switch ON. (Self-diagnostic mode turns to User mode.)	Ignition switch OFF→ON	 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. After ignition switch is turned OFF, wait for more than 3 seconds. Repeat steps 1 to 3 twice. (Perform 3 times in total.) 	Ignition switch OFF→ON

HOW TO ERASE SELF-DIAGNOSIS RESULTS

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

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SRS Operation Check DIAGNOSTIC PROCEDURE 1

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
IGN ON DFF 7 sec.	 No malfunction is detected. No further action is necessary. 	
$OFF \xrightarrow{IGN ON}_{OFF} \xrightarrow{0.5 sec.} 0.5 sec.$	 The system is malfunctioning and needs to be repaired as indicated. 	Go to <u>SRS-22, "DIAGNOSTIC</u> <u>PROCEDURE 2"</u> or <u>SRS-29,</u> "DIAGNOSTIC PROCEDURE 5" .
	Air bag is deployed.Seat belt pre-tensioner is deployed.	Refer to <u>SRS-54, "COLLISION</u> <u>DIAGNOSIS"</u> .
ON OFF SHIA0013E	 Diagnosis sensor unit is malfunction- ing. Air bag power supply circuit is mal- functioning. SRS air bag warning lamp circuit is malfunctioning. 	Refer to <u>SRS-39, "Trouble Diagno-</u> sis: "AIR BAG" Warning Lamp Does <u>Not Turn OFF"</u> .
IGN ON ON OFF	 Diagnosis sensor unit is malfunction- ing. Air bag warning lamp circuit is mal- functioning. 	Refer to <u>SRS-40, "Trouble Diagno-</u> sis: "AIR BAG" Warning Lamp Does <u>Not Turn ON"</u> .
SHIA0014E		

Trouble Diagnosis with CONSULT-II DIAGNOSTIC PROCEDURE 2

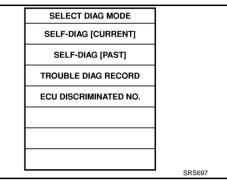
NHS0001U

Refer to GI-37, "CONSULT-II Start Procedure" .

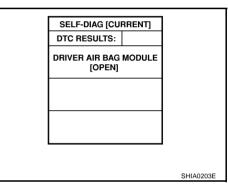
CAUTION:

If CONSULT-II is used with no connection of CONSULT-II CONVERTER, malfunctions might be detected in self-diagnosis depending on control unit which carry out CAN communication.

1. Touch "SELF-DIAG [CURRENT]".



2. Diagnostic code is displayed on "SELF-DIAG [CURRENT]".



3.	If no malfunction is detected on "SELF-DIAG [CURRENT]" even
	though malfunction is detected in "SRS Operation Check",
	check the battery voltage. If the battery voltage is less than 9 V,
	charge or replace the battery. Then go to SRS-27, "DIAGNOS-
	TIC PROCEDURE 3". If the battery voltage is OK, go to <u>SRS-</u>
	29, "DIAGNOSTIC PROCEDURE 4 (CONTINUED FROM
	<u>DIAGNOSTIC PROCEDURE 2)</u> " to diagnose the following
	cases:

- Self-diagnostic result "SELF-DIAG [PAST]" (previously stored in the memory) might not be erased after repair.
- The SRS system malfunctions intermittently.

DTC No. Index ("SELF-DIAG [CURRENT]")

Diagnostic item		Explanation	Repair order "Recheck SRS at each replacement"
NO DTC IS DETECTED.	When malfunction is indicated by the "AIR BAG" warning lamp in	• Low battery voltage (Less than 9V)	 Go to <u>SRS-27</u>, "<u>DIAGNOSTIC PRO-</u> <u>CEDURE 3</u>" after charging the bat- tery.
	User mode.	 Self-diagnostic result "SELF-DIAG [PAST]" (previously stored in the memory) might not be erased after repair. Intermittent malfunction has been detected in the past. 	 Go to <u>SRS-29</u>, "DIAGNOSTIC PRO- <u>CEDURE 4 (CONTINUED FROM</u> <u>DIAGNOSTIC PROCEDURE 2)"</u>. Go to <u>SRS-29</u>, "DIAGNOSTIC PRO- <u>CEDURE 5"</u>.
	No malfunction is determined	ected.	_

SELF-DIAG [CURRENT]	
DTC RESULTS:	
NO DTC IS DETECTED. FURTHER TESTING MAY BE REQUIRED.	-
	000704
	SRS701

Diagnostic item	Explanation	Repair order "Recheck SRS at each replacement"	
DRIVER AIR BAG MODULE [OPEN]	Driver air bag module circuit is open (including the spiral cable).	 Visually check the wiring harness connection. Replace the harness if it has visible 	I
[B1054]		damage.	
DRIVER AIR BAG MODULE	• Driver air bag module circuit is shorted to a power supply circuit (including the spiral cable).	3. Replace the driver air bag module.	
[VB-SHORT]		4. Replace the spiral cable.	(
[B1055]		5. Replace the diagnosis sensor unit.	
DRIVER AIR BAG MODULE [GND-SHORT] [B1056]	 Driver air bag module circuit is shorted to ground (including the spiral cable). 	6. Replace the related harness.	I
DRIVER AIR BAG MODULE [SHORT] [B1057]	Driver air bag module circuit is shorted between lines.		I
ASSIST A/B MODULE [OPEN] [B1070]	• Front passenger air bag module circuit is open.	1. Visually check the wiring harness connection.	
ASSIST A/B MODULE	Front passenger air bag module circuit is shorted to a power	2. Replace the harness if it has visible damage.	(
[VB-SHORT] [B1071]	supply circuit.	3. Replace the front passenger air bag module.	
ASSIST A/B MODULE	• Front passenger air bag module circuit is shorted to ground.	4. Replace the diagnosis sensor unit.	S
[GND-SHORT] [B1072]		5. Replace the related harness.	
ASSIST A/B MODULE [SHORT] [B1073]	Front passenger air bag module circuit is shorted between lines.		
CRASH ZONE SEN [UNIT FAIL]	Crash zone sensor	1. Visually check the wiring harness connection.	,
[B1033] [B1034]		2. Replace the harness if it has visible damage.	
CRASH ZONE SEN [COMM FAIL]		3. Replace the crash zone sensor.	
[B1035]		4. Replace the diagnosis sensor unit.	
CRASH ZONE SEN [UNMATCH]		5. Replace the related harness.	
[B1036]			
SIDE MODULE LH [OPEN]	• Front LH side air bag module circuit is open.	1. Visually check the wiring harness connection.	
[B1134]		2. Replace the harness if it has visible	
SIDE MODULE LH	• Front LH side air bag module circuit is shorted to a power sup-	damage.	
[VB-SHORT] [B1135]	ply circuit.	3. Replace the front LH seatback	
SIDE MODULE LH	 Front LH side air bag module circuit is shorted to ground. 	assembly (front LH side air bag module).	
[GND-SHORT] [B1136]		4. Replace the diagnosis sensor unit.	
SIDE MODULE LH [SHORT] [B1137]	Front LH side air bag module circuit is shorted between lines.	5. Replace the related harness.	

	Evelse - the	Repair order
Diagnostic item	Explanation	"Recheck SRS at each replacement"
SIDE MODULE RH [OPEN] [B1129]	• Front RH side air bag module circuit is open.	1. Visually check the wiring harness connection.
SIDE MODULE RH [VB-SHORT] [B1130]	• Front RH side air bag module circuit is shorted to a power supply circuit.	 2. Replace the harness if it has visible damage. 3. Replace the front RH seatback assembly (front RH side air bag
SIDE MODULE RH [GND-SHORT] [B1131]	• Front RH side air bag module circuit is shorted to ground.	module). 4. Replace the diagnosis sensor unit.
SIDE MODULE RH [SHORT] [B1132]	Front RH side air bag module circuit is shorted between lines.	5. Replace the related harness.
SATELLITE SENS LH [UNIT FAIL] [B1118]	LH side air bag (Satellite) sensor	 Visually check the wiring harness connection. Replace the harness if it has visible
[B1119] SATELLITE SENS LH [COMM FAIL]		damage. 3. Replace the LH side air bag (Satel-
[B1120] SATELLITE SENS LH		lite) sensor. 4. Replace the diagnosis sensor unit.
[UNMATCH] [B1121]		5. Replace the related harness.
SATELLITE SENS RH [UNIT FAIL]	RH side air bag (Satellite) sensor	1. Visually check the wiring harness connection.
[B1113] [B1114] SATELLITE SENS RH		2. Replace the harness if it has visible damage.
[COMM FAIL] [B1115]		3. Replace the RH side air bag (Satel- lite) sensor.
SATELLITE SENS RH [UNMATCH] [B1116]		 4. Replace the diagnosis sensor unit. 5. Replace the related harness.
PRE-TEN FRONT LH [OPEN] [B1086]	• Front LH pre-tensioner circuit is open.	1. Visually check the wiring harness
PRE-TEN FRONT LH [VB-SHORT] [B1087]	• Front LH pre-tensioner circuit is shorted to a power supply circuit.	2. Replace the harness if it has visible damage.
PRE-TEN FRONT LH [GND-SHORT] [B1088]	• Front LH pre-tensioner circuit is shorted to ground.	 3. Replace the front LH seat belt. 4. Replace the diagnosis sensor unit.
PRE-TEN FRONT LH [SHORT] [B1089]	• Front LH pre-tensioner circuit is shorted between lines.	5. Replace the related harness.
PRE-TEN FRONT RH [OPEN] [B1081]	• Front RH pre-tensioner circuit is open.	1. Visually check the wiring harness
PRE-TEN FRONT RH [VB-SHORT] [B1082]	• Front RH pre-tensioner circuit is shorted to a power supply cir- cuit.	 Visually check the wining harness connections. Replace the harness if it has visible damage.
PRE-TEN FRONT RH [GND-SHORT] [B1083]	• Front RH pre-tensioner circuit is shorted to ground.	 Replace the front RH seat belt. Replace the diagnosis sensor unit.
PRE-TEN FRONT RH [SHORT] [B1084]	• Front RH pre-tensioner circuit is shorted between lines.	5. Replace the related harness.

Diagnostic item	Explanation	Repair order "Recheck SRS at each replacement"
CURTAIN MODULE LH [OPEN]	• LH side curtain air bag module circuit is open.	
[B1150]		1. Visually check the wiring harness connection.
CURTAIN MODULE LH [VB-SHORT] [B1151]	• LH side curtain air bag module circuit is shorted to a power supply circuit.	 Replace the harness if it has visible damage.
CURTAIN MODULE LH [GND-SHORT]	• LH side curtain air bag module circuit is shorted to ground.	3. Replace the LH side curtain air bag module.
[B1152]		4. Replace the diagnosis sensor unit.
CURTAIN MODULE LH [SHORT] [B1153]	• LH side curtain air bag module circuit is shorted between lines.	5. Replace the related harness.
CURTAIN MODULE RH [OPEN]	• RH side curtain air bag module circuit is open.	
		1. Visually check the wiring harness connection.
CURTAIN MODULE RH [VB-SHORT] [B1146]	 RH side curtain air bag module circuit is shorted to a power sup- ply circuit. 	2. Replace the harness if it has visible damage.
CURTAIN MODULE RH [GND-SHORT]	• RH side curtain air bag module circuit is shorted to ground.	3. Replace the RH side curtain air bag module.
[B1147]		4. Replace the diagnosis sensor unit.
CURTAIN MODULE RH [SHORT] [B1148]	• RH side curtain air bag module circuit is shorted between lines.	5. Replace the related harness.
CONTROL UNIT [B1001-B1015]	Diagnosis sensor unit is malfunctioning.	1. Visually check the wiring harness connection.
[B1026-B1031] [B1042-B1047] [B1058-B1063] [B1074-B1079] [B1106-B1111] [B1122-B1127] [B1138-B1143] [B1202-B1207]		2. Replace the diagnosis sensor unit.
PASS A/B INDCTR CKT	• Cutoff telltale circuit is open or shorted to grand or the circuits are shorted each other.	1. Visually check the wiring harness connection.
[B1023]		2. Replace the harness if it has visible damage.
		3. Replace cutoff telltale.
		4. Replace the diagnosis sensor unit.
OCCUPANT SENS C/U [UNIT FAIL] [1017] []1020] [B1021]	 Trouble occurs in Occupant Classification System-CU. 	 Replace passenger side seat cush- ion assembly.
OCCUPANT SENS C/U [COMM FAIL]	 Trouble occurs in Occupant Classification System-CU, circuit of Occupant Classification System-CU—Diagnosis Sensor Unit or 	1. Visually check the wiring harness connection.
[B1022]	Diagnosis Sensor Unit.	2. Replace the harness if it has visible damage.
		3. Replace passenger side seat cush- ion assembly.
		4. Replace the diagnosis sensor unit.
OCCUPANT SENS [UNIT FAIL] [B1018]	 Trouble occurs in Occupant Classification System-SENS. 	Replace passenger side seat cush- ion assembly.

Diagnostic item	Explanation	Repair order "Recheck SRS at each replacement"
BELT TENSION SENS [UNIT FAIL]	 Trouble occurs in belt tension sensor (BTS), circuit of BTS— Occupant Classification System-CU, or Occupant Classification 	1. Visually check the wiring harness connection.
[B1019]	System-CU.	2. Replace the harness if it has visible damage.
		 Replace passenger side seat belt assembly.
		4. Replace the diagnosis sensor unit.
FRONTAL COLLISION DETECTION [B1209]	 Seat belt pre-tensioner and front air bag are deployed. 	• Go to <u>SRS-54, "For Frontal Collision"</u> .
SIDE COLLISION DETECTION [B1210]	 Side and curtain air bag is deployed. 	• Go to <u>SRS-56, "For Side Collision"</u> .

NOTE:

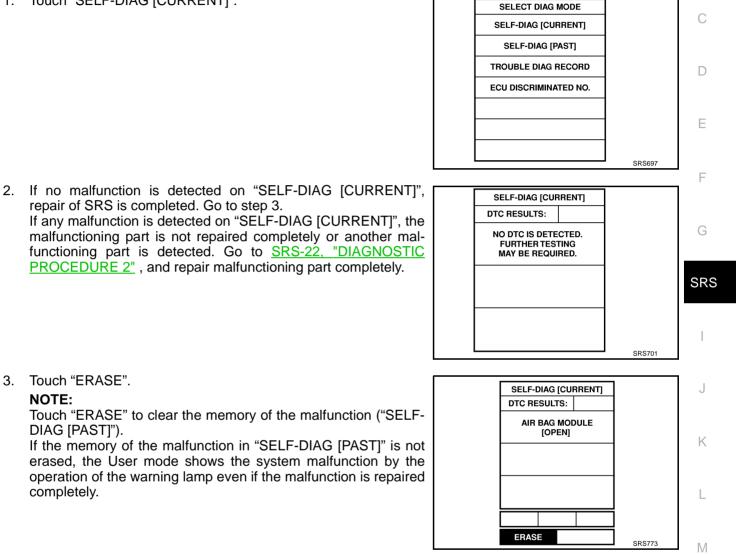
Follow the procedures in numerical order when repairing malfunctioning parts. Confirm whether malfunction is eliminated using air bag warning lamp or CONSULT-II each time repair is finished. If malfunction is still observed, proceed to the next step. When malfunction is eliminated, further repair work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

Final inspection after repairing SRS by using CONSULT-II — Diagnosis mode Refer to GI-37, "CONSULT-II Start Procedure"

CAUTION:

If CONSULT-II is used with no connection of CONSULT-II CONVERTER, malfunctions might be В detected in self-diagnosis depending on control unit which carry out CAN communication.

1. Touch "SELF-DIAG [CURRENT]".



3 Touch "ERASE".

NOTE:

Touch "ERASE" to clear the memory of the malfunction ("SELF-DIAG [PAST]").

If the memory of the malfunction in "SELF-DIAG [PAST]" is not erased, the User mode shows the system malfunction by the operation of the warning lamp even if the malfunction is repaired completely.

Touch "BACK" key of CONSULT-II to "SELECT DIAG MODE" 4. screen. Touch "SELF-DIAG [PAST]".

SELECT DIAG MODE	
SELF-DIAG [CURRENT]	
SELF-DIAG [PAST]	
TROUBLE DIAG RECORD	
ECU DISCRIMINATED NO.	
	SRS697

А

- 5. Make sure no malfunction is detected on "SELF-DIAG [PAST]".
- 6. Touch "BACK" key of CONSULT-II until "SELECT SYSTEM" appears in order to return to User mode from Diagnosis mode.
- 7. Turn ignition switch OFF then turn off and disconnect CON-SULT-II. Go to <u>SRS-20</u>, "Checking Air Bag Operation by Using <u>"AIR BAG" Warning Lamp — User Mode"</u>

SELF-DIAG [P/	AST]	
DTC RESULTS:		
NO DTC IS DETE FURTHER TEST MAY BE REQUI	ING	
		SRS702

DIAGNOSTIC PROCEDURE 4 (CONTIN	NUED	FROM D	DIAGN	OST	IC F	PRO	CEDU	RE 2))
Inspecting SRS malfunctioning record									
1									

1. CONSIDER POSSIBILITY OF NOT ERASING SELF-DIAGNOSTIC RESULTS AFTER REPAIRING

Is it the first time for maintenance of SRS?
--

YES or NO

YES >> Go to <u>SRS-22</u>, "DIAGNOSTIC PROCEDURE 2".

NO >> Self-diagnostic result "SELF-DIAG [PAST]" (previously stored in the memory) might not be erased C after repair. Go to <u>SRS-27, "DIAGNOSTIC PROCEDURE 3"</u>.

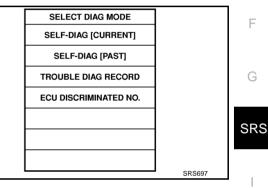
DIAGNOSTIC PROCEDURE 5

Inspecting SRS intermittent malfunction by using CONSULT-II — Diagnosis mode Refer to GI-37, "CONSULT-II Start Procedure".

CAUTION:

If CONSULT-II is used with no connection of CONSULT-II CONVERTER, malfunctions might be detected in self-diagnosis depending on control unit which carry out CAN communication.

1. Touch "SELF-DIAG [PAST]".



А

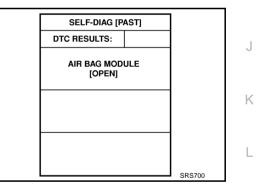
В

D

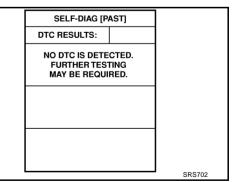
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2. If diagnostic codes are displayed on "SELF-DIAG [PAST]", go to step 6.

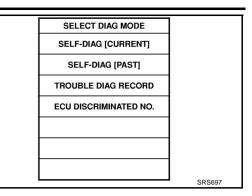


3. If no malfunction is detected on "SELF-DIAG [PAST]", touch "BACK" and go back to "SELECT DIAG MODE".



4. Touch "TROUBLE DIAG RECORD". NOTE:

With "TROUBLE DIAG RECORD", diagnosis results previously erased by a reset operation can be displayed.



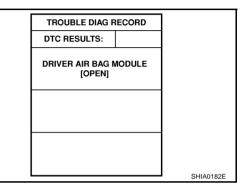
- 5. Diagnostic code is displayed on "TROUBLE DIAG RECORD".
- 6. Touch "PRINT".
- 7. Compare diagnostic codes to <u>SRS-30, "DTC No. Index ("SELF-DIAG [PAST]" or "TROUBLE DIAG RECORD")"</u>.
- 8. Touch "BACK" key of CONSULT-II until "SELECT SYSTEM" appears.
- 9. Turn ignition switch OFF, then turn off and disconnect CON-SULT-II, and both battery cables.
- 10. Repair the system as outlined by the "Repair order" in "Intermittent Malfunction Diagnostic Code Chart", that corresponds to the self-diagnostic result. For replacement procedure of component

parts, refer to the Removal and Installation procedure for the appropriate component.

11. Go to <u>SRS-27, "DIAGNOSTIC PROCEDURE 3"</u>, for final inspection.

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

Diagnostic item		Explanation	Repair order "Recheck SRS at each replacement"
NO DTC IS DETECTED.	When malfunction is indicated by the "AIR BAG" warning lamp in User mode.	 Low battery voltage (Less than 9V) 	Go to <u>SRS-27, "DIAGNOSTIC PRO-</u> <u>CEDURE 3"</u> .
	 No malfunction is determined 	cted.	Go to <u>SRS-27, "DIAGNOSTIC PRO-</u> <u>CEDURE 3"</u> .
DRIVER AIR BAG MODULE	Driver air bag module	circuit is open (including the spiral cable).	1. Visually check the wiring harness connection.
[OPEN] [B1054]			2. Replace the harness if it has visible damage.
DRIVER AIR BAG MODULE [VB-SHORT] [B1055]	 Driver air bag module (including the spiral cat 	circuit is shorted to a power supply circuit ble).	 If the harness check result is OK, replace driver air bag module diag- nosis sensor unit and spiral cable.
DRIVER AIR BAG MODULE [GND-SHORT] [B1056]	 Driver air bag module spiral cable). 	circuit is shorted to ground (including the	
DRIVER AIR BAG MODULE [SHORT] [B1057]	Driver air bag module	circuit is shorted between lines.	



Diagnostic item	Explanation	Repair order	_
-	'	"Recheck SRS at each replacement"	А
ASSIST A/B MODULE [OPEN] [B1070]	 Front passenger air bag module circuit is open. 	1. Visually check the wiring harness connection.	D
ASSIST A/B MODULE [VB-SHORT]	Front passenger air bag module circuit is shorted to a power supply circuit	2. Replace the harness if it has visible damage.	В
[81071]	supply circuit.	3. If the harness check result is OK, replace the diagnosis sensor unit	С
ASSIST A/B MODULE [GND-SHORT] [B1072]	 Front passenger air bag module circuit is shorted to ground. 	and front passenger air bag module.	D
ASSIST A/B MODULE [SHORT] [B1073]	• Front passenger air bag module circuit is shorted between lines.		D
CRASH ZONE SEN [UNIT FAIL]	Crash zone sensor	1. Visually check the wiring harness connection.	E
[B1033] [B1034] CRASH ZONE SEN		2. Replace the harness if it has visible damage.	F
[COMM FAIL] [B1035]		3. If the harness check result is OK, replace crash zone sensor and diag-	
CRASH ZONE SEN [UNMATCH] [B1036]		nosis sensor unit.	G
SIDE MODULE LH [OPEN] [B1134]	 Front LH side air bag module circuit is open. 	1. Visually check the wiring harness connection.	SRS
SIDE MODULE LH	 Front LH side air bag module circuit is shorted to a power sup- 	2. Replace the harness if it has visible damage.	
[VB-SHORT] [B1135]	ply circuit.	3. If the harness check result is OK, replace the diagnosis sensor unit	
SIDE MODULE LH [GND-SHORT] [B1136]	• Front LH side air bag module circuit is shorted to ground.	and LH side air bag module.	J
SIDE MODULE LH [SHORT] [B1137]	• Front LH side air bag module circuit is shorted between lines.		K
SIDE MODULE RH [OPEN]	• Front RH side air bag module circuit is open.	1. Visually check the wiring harness connection.	
[B1129] SIDE MODULE RH	 Front RH side air bag module circuit is shorted to a power sup- 	2. Replace the harness if it has visible damage.	L
[VB-SHORT] [B1130]	ply circuit.	3. If the harness check result is OK, replace the diagnosis sensor unit	Μ
SIDE MODULE RH [GND-SHORT] [B1131]	• Front RH side air bag module circuit is shorted to ground.	and RH side air bag module.	
SIDE MODULE RH [SHORT] [B1132]	• Front RH side air bag module circuit is shorted between lines.		
SATELLITE SENS LH [UNIT FAIL]	LH side air bag (Satellite) sensor	1. Visually check the wiring harness connection.	
[B1118] [B1119] SATELLITE SENS LH		2. Replace the harness if it has visible damage.	
[COMM FAIL] [B1120] SATELLITE SENS LH [UNMATCH]		 If the harness check result is OK, replace the diagnosis sensor unit and LH side air bag (Satellite) sen- sor. 	
[B1121]			

Diagnostic item	Explanation	Repair order "Recheck SRS at each replacement"	
SATELLITE SENS RH [UNIT FAIL] [B1113] [B1114] SATELLITE SENS RH	• RH side air bag (Satellite) sensor	 Visually check the wiring harness connection. Replace the harness if it has visible damage. 	
[COMM FAIL] [B1115] SATELLITE SENS RH [UNMATCH] [B1116]		3. If the harness check result is OK, replace the diagnosis sensor unit and RH side air bag (Satellite) sen- sor.	
PRE-TEN FRONT LH [OPEN] [B1086]	 Front LH pre-tensioner circuit is open. 	1 Visually check the wiring harness	
PRE-TEN FRONT LH [VB-SHORT] [B1087]	 Front LH pre-tensioner circuit is shorted to a power supply cir- cuit. 	 Visually check the wiring harness connections. Replace the harness if it has visible damage. If the harness check result is OK, replace the diagnosis sensor unit and front LH seat belt. 	
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. 		
PRE-TEN FRONT RH [OPEN] [B1081]	• Front RH pre-tensioner circuit is open.	1 Visually check the wiring barness	
PRE-TEN FRONT RH [VB-SHORT] [B1082]	 Front RH pre-tensioner circuit is shorted to a power supply cir- cuit. 	 Visually check the wiring harness connections. Replace the harness if it has visible 	
PRE-TEN FRONT RH [GND-SHORT] [B1083]	• Front RH pre-tensioner circuit is shorted to ground.	 damage. 3. If the harness check result is OK, replace the diagnosis sensor unit and front RH seat belt. 	
PRE-TEN FRONT RH [SHORT] [B1084]	• Front RH pre-tensioner circuit is shorted between lines.		
CURTAIN MODULE LH [OPEN] [B1150]	• LH side curtain air bag module circuit is open.	1 Visually check the wiring barpess	
CURTAIN MODULE LH [VB-SHORT] [B1151]	• LH side curtain air bag module circuit is shorted to a power supply circuit.	 Visually check the wiring harness connection. Replace the harness if it has visible damage. 	
CURTAIN MODULE LH [GND-SHORT] [B1152]	• LH side curtain air bag module circuit is shorted to ground.	 3. If the harness check result is OK, replace the diagnosis sensor unit and LH side curtain air bag module. 	
CURTAIN MODULE LH [SHORT] [B1153]	• LH side curtain air bag module circuit is shorted between lines.		

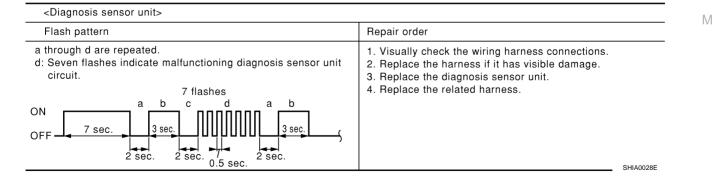
Diagnostic item	Explanation	Repair order "Recheck SRS at each replacement"
CURTAIN MODULE RH [OPEN] [B1145]	• RH side curtain air bag module circuit is open.	
CURTAIN MODULE RH [VB-SHORT]	RH side curtain air bag module circuit is shorted to a power sup-	1. Visually check the wiring harness connection.
B1146]	ply circuit.	2. Replace the harness if it has visible damage.
CURTAIN MODULE RH GND-SHORT] B1147]	 RH side curtain air bag module circuit is shorted to ground. 	3. If the harness check result is OK, replace the diagnosis sensor unit and RH side curtain air bag module.
CURTAIN MODULE RH SHORT] B1148]	• RH side curtain air bag module circuit is shorted between lines.	and KH side curtain an bag module.
CONTROL UNIT B1001-B1015]	 Diagnosis sensor unit is malfunctioning. 	1. Visually check the wiring harness connection.
B1026-B1031] B1042-B1047] B1058-B1063] B1074-B1079] B1106-B1111] B1122-B1127] B1138-B1143] B1202-B1207]		2. Replace the diagnosis sensor unit.
PASS A/B INDCTR CKT [B1023]	• Cutoff telltale circuit is open or shorted to grand or the circuits are shorted each other.	1. Visually check the wiring harness connection.
		2. Replace the harness if it has visible damage.
		3. Replace cutoff telltale.
DCCUPANT SENS C/U	• Trauble ecoure in Occupant Classification System Cl.	4. Replace the diagnosis sensor unit.
UNIT FAIL] B1017] B1020] B1021]	 Trouble occurs in Occupant Classification System-CU. 	 Replace passenger side seat cush- ion assembly.
OCCUPANT SENS C/U [COMM FAIL] [B1022]	 Trouble occurs in Occupant Classification System-CU, circuit of Occupant Classification System-CU—Diagnosis Sensor Unit, or Diagnosis Sensor Unit. 	1. Visually check the wiring harness connection.
		2. Replace the harness if it has visible damage.
		3. Replace passenger side seat cush- ion assembly.
		4. Replace diagnosis sensor unit.
DCCUPANT SENS UNIT FAIL] B1018]	 Trouble occurs in Occupant Classification System-SENS. 	 Replace passenger side seat cush- ion assembly.
BELT TENSION SENS UNIT FAIL]	• Trouble occurs in belt tension sensor (BTS), circuit of BTS— Occupant Classification System-CU, or Occupant Classification	1. Visually check the wiring harness connection.
[B1019]	System-CU.	2. Replace the harness if it has visible damage.
		 Replace passenger side seat belt assembly.
		 Replace passenger side seat cush- ion assembly.

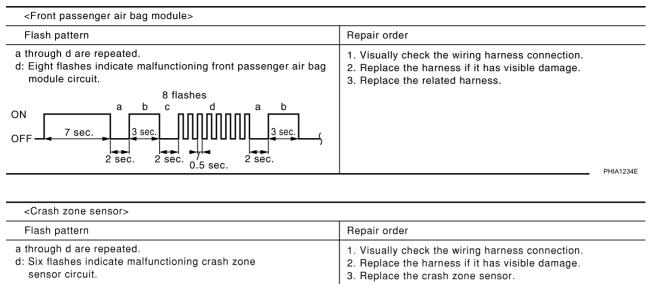
Diagnostic item	Explanation	Repair order "Recheck SRS at each replacement"
FRONTAL COLLISION DETECTION [B1209]	 Seat belt pre-tensioner and front air bag are deployed. 	 Go to <u>SRS-54</u>, "For Frontal Colli- sion".
SIDE COLLISION DETECTION [B1210]	• Side and curtain air bag is deployed.	• Go to <u>SRS-56, "For Side Collision"</u> .

Trouble Diagnosis without CONSULT-II DIAGNOSTIC PROCEDURE 6	NHS0001V	
Inspecting SRS Malfunctioning Parts by Using	"AIR BAG" Warning Lamp — Diagnosis Mode	
NOTE: SRS will not enter Diagnosis mode if no malfunction is of 1. Turn ignition switch ON.	detected in User mode.	
 After "AIR BAG" warning lamp lights for 7 seconds, Wait more than 3 seconds. 	turn ignition switch OFF within 1 second.	
 Repeat the steps 1 to 3 twice. (Perform three times Turn ignition switch ON. SRS is now in Diagnosis mode. "AIR BAG" warning lamp operates in Diagnosis mode a 		
WARNING LAMP FLASH CODE CHART		
<diagnosis (previously="" detected="" in="" memory)="" might="" not="" past.="" results="" stored="" the=""></diagnosis>	be erased after repair or intermittent malfunctions have been	
Flash pattern	Repair order	
a through b are repeated. IGN ON	1. Erase memory. (Once key switch is turned from OFF to ON, TROUBLE DIAG RECORD will be erased.)	
ON OFF 7 sec. 3 sec. 4 2 sec. 2 sec.		93

PHIA0532E

Flash pattern	Repair order	
a through d are repeated. d: Two flashes indicate malfunctioning driver air bag module circuit. 2 flashes	 Visually check the wiring harness connection. Replace the harness if it has visible damage. Replace the spiral cable. Replace the related harness. 	
$\begin{array}{c} a & b & c & d & a & b \\ \hline R & & & & & & & \\ FF & \hline \hline 7 & sec. & & & & & \\ \hline \hline 3 & sec. & & & & & \\ \hline \hline 1 & 2 & sec. & & \\ \hline \hline 2 & sec. & & & \\ \hline \end{array}$		
		PHIA1233E







ON 7 sec se 900 OFF 2 sec. 2 sec. 2 sec 0.5 sec

а b С

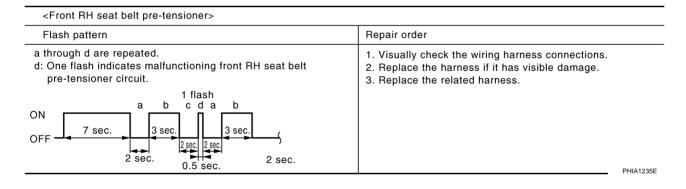
6 flashes

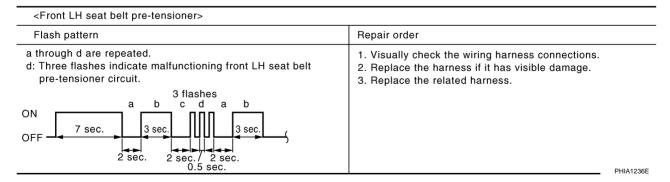
d

а

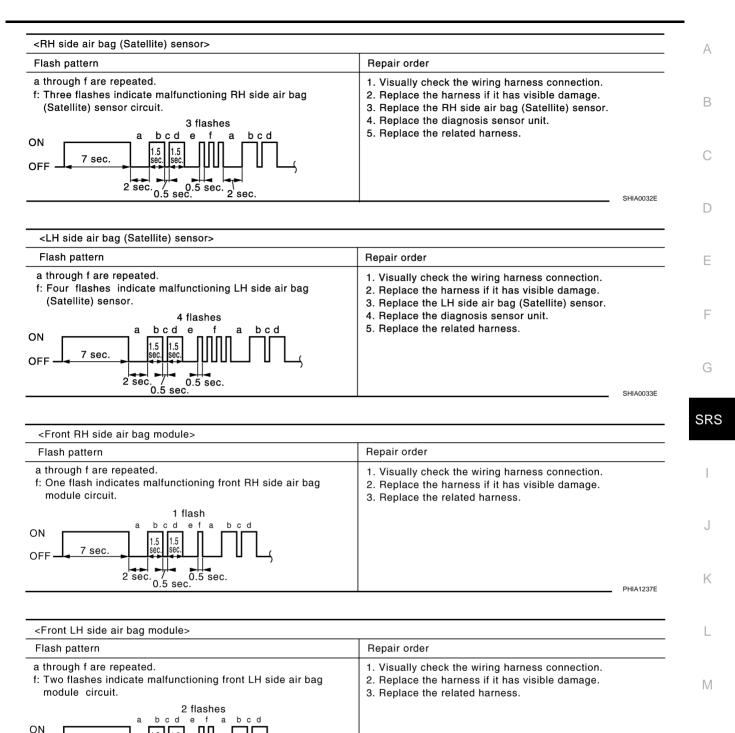
4. Replace the diagnosis sensor unit. 5. Replace the related harness.

SHIA0083E





TROUBLE DIAGNOSIS



7 sec.

OFF

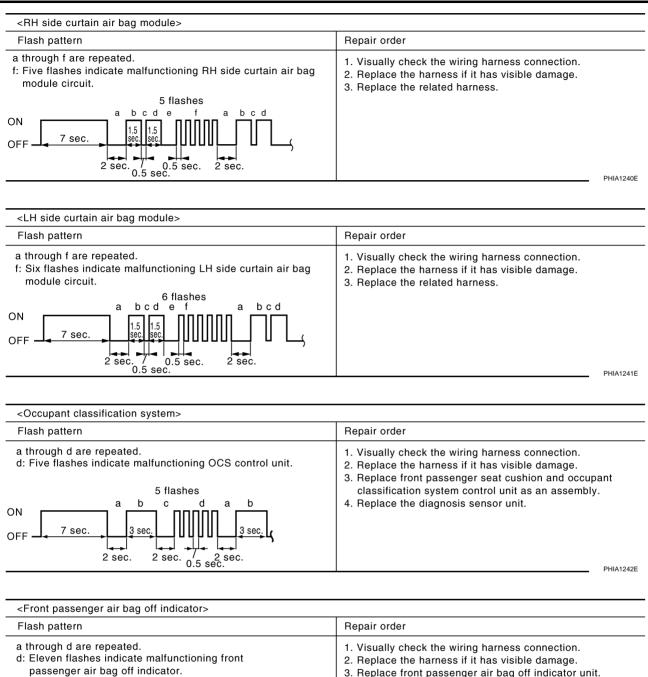
5

2 sec. 0.5 sec.

2 sec

PHIA1238E

TROUBLE DIAGNOSIS



3. Replace front passenger air bag off indicator unit.

- 4. Replace the diagnosis sensor unit.
- 5. Replace the related harness.

PHIA1243E

ON

OFF

7 sec

b

3 sec.

а

2 sec.

11 flashes

d

0.5 sec

b а

3 sec

2 sec

С

2 sec.

TROUBLE DIAGNOSIS

Trouble Diagnosis: "AIR BAG" Warning Lamp Does DIAGNOSTIC PROCEDURE 7	Not Turn OFF
1. CHECK THE DEPLOYMENT OF AIR BAG MODULE	
Is air bag module deployed? <u>YES or NO</u>	
YES >> Refer to <u>SRS-54, "COLLISION DIAGNOSIS"</u> . NO >> GO TO 2.	
2. CHECK THE AIR BAG FUSE	
Check 10A fuse [No.13, located in fuse block (J/B)]. Refer to <u>PG-3, "POWER SUPPLY ROUTING CIRCUIT"</u> .	
<u>OK or NG</u> OK >> GO TO 4. NG >> GO TO 3.	
3. CHECK AIR BAG FUSE AGAIN	
Replace "AIR BAG" fuse and turn ignition switch ON. <u>Does the "AIR BAG" fuse blow again?</u> YES >> Repair or replace main harness. NO >> INSPECTION END	
4. CHECK DIAGNOSIS SENSOR UNIT	
Connect CONSULT-II and touch "START". Is "AIR BAG" displayed on CONSULT-II? <u>YES or NO</u> YES >> GO TO 5. NO >> Visually check the wiring harness connection of diagno- sis sensor unit. If the harness connection check result is OK, replace diagnosis sensor unit.	SELECT SYSTEM ENGINE A/T ABS AIR BAG IPDM E/R BCM

5. CHECK HARNESS CONNECTION

Is harness connection between warning lamp and diagnosis sensor unit OK?

OK or NG

OK >> Replace diagnosis sensor unit.

NG >> Connect "AIR BAG" warning lamp and diagnosis sensor unit connector properly. If "AIR BAG" warning lamp still does not go off, replace harness.

 BACK
 LIGHT
 COPY

 NOTE: EXAMPLE SHOWN. ACTUAL DISPLAY MAY DIFFEB BCIA0030E
 BCIA0030E

L

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Trouble Diagnosis: "AIR BAG" Warning Lamp Does Not Turn ON DIAGNOSTIC PROCEDURE 8

1. CHECK METER FUSE

Check 10A fuse [No.14, located in fuse block (J/B)]. Refer to <u>PG-3, "POWER SUPPLY ROUTING CIRCUIT"</u>.

OK or NG

OK >> GO TO 3. NG >> GO TO 2.

2. CHECK METER FUSE AGAIN

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

Does the meter fuse blow again?

YES >> Repair or replace the related harness.

NO >> INSPECTION END

$\mathbf{3.}\ check$ 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 or NO

- YES >> Replace diagnosis sensor unit.
- NO >> Replace combination meter assembly.

Trouble Diagnosis: Passenger Seatbelt Warning System 1. CHECK THE SYSTEM 1	<i>NHS0006К</i>
Check seatbelt warning lamp function.	
Seatbelt warning lamp turns ON in the following conditions.	В
 Driver seatbelt is fastened. Occupant is on passenger seat. Passenger seatbelt is not fasten. 	С
OK or NG	D
 OK >> GO TO 2. NG >> Check the followings. Harness between air bag diagnosis sensor unit and combination meter. Seatbelt buckle switch (passenger side) circuit. 	E
 Seatbelt buckle switch (passenger side). If these are OK, replace air bag diagnosis sensor unit. 	F
2. CHECK THE SYSTEM 2	G
Check seatbelt warning lamp function.	
Seatbelt warning lamp turns OFF in the following conditions.	SR
 Driver seatbelt is fastened. Occupant is on passenger seat. Passenger seatbelt is fastened. 	I
OK or NG OK >> System is OK.	J
 NG >> Check the followings. Seatbelt buckle switch (passenger side) circuit. Seatbelt buckle switch (passenger side). 	K
If these are OK, replace air bag diagnosis sensor unit.	L
	M

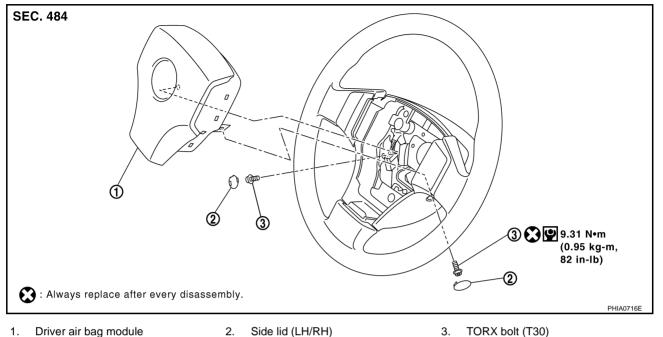
DRIVER AIR BAG MODULE

DRIVER AIR BAG MODULE

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NHS0001Y

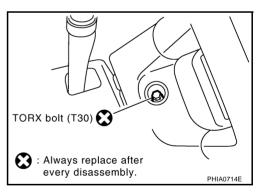
Removal and Installation



REMOVAL

CAUTION:

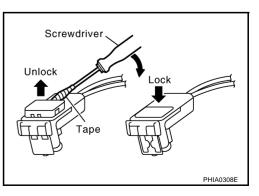
- Before servicing SRS, turn ignition switch OFF, disconnect both battery cables and wait at least 3 minutes.
- Always work from the side of driver air bag module.
- Do not use air tools or electric tools for servicing.
- 1. Remove the side lids (LH/RH).
- Using Tamper resistant TORX bit (T30), remove the TORX bolts (T30) at right and left.



- 3. Disconnect the steering wheel switch sub-harness connector.
- 4. Disconnect the air bag harness connector, and remove the driver air bag module.

NOTE:

- For installing / removing driver air bag module 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.



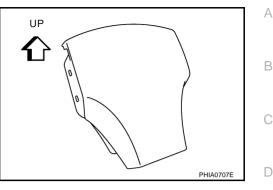
DRIVER AIR BAG MODULE

CAUTION:

- Always place driver air bag module with pad side facing upward.
- Do not insert any foreign objects (screwdriver, etc.) into driver air bag module.
- Do not disassemble driver air bag module.
- Do not use old bolts after removal; replace with new bolts.



- Replace driver air bag module if it has been dropped or sustained an impact.
- Do not allow oil, grease or water to come in contact with the front passenger air bag module.



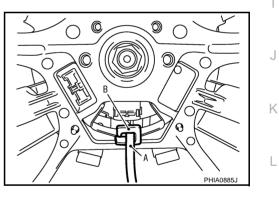


INSTALLATION

Install in the reverse order of removal.

CAUTION:

- Fix the air bag module harness (shown as A in the figure) to the harness fixing hook (shown as B in the figure).
- Be careful not to damage the harness while installing.
- For installing the air bag module, tighten the TORX bolts (T30).
- Tighten the special bolts after exactly adjusting the centers of fixing holes on the 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.
- After the work is completed, perform self-diagnosis to make sure no malfunction is detected. Refer to <u>SRS-20, "SRS</u> <u>Operation Check"</u>.



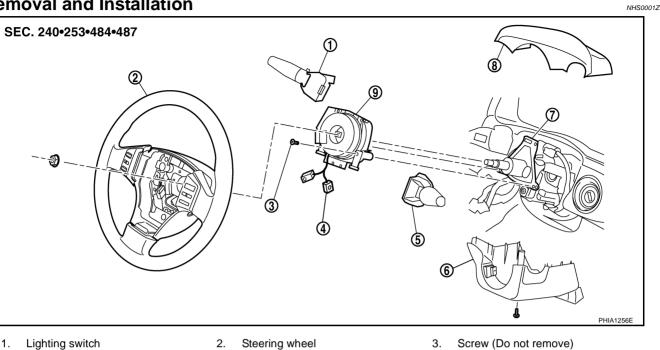
M

SPIRAL CABLE

SPIRAL CABLE

PFP:25554

Removal and Installation



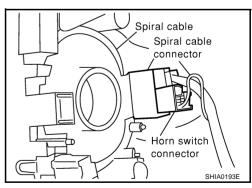
- Driver air bag module connector 4.
- 5. Wiper washer switch
- Steering column assembly 8. Steering column cover (upper)
- 6. Steering column cover (lower)
- Spiral cable 9.

REMOVAL

CAUTION:

7.

- Before servicing SRS, turn ignition switch OFF, disconnect both battery cables and wait at least 3 minutes.
- Do not use air tools or electric tools for servicing. .
- Remove driver air bag module. Refer to SRS-42, "Removal and Installation". 1.
- Set the steering wheel in the neutral position. 2.
- Remove steering wheel. Refer to PS-11, "Removal and Installation" . 3.
- 4. Remove the column covers. Refer to IP-13, "(K) Steering Column Covers" .
- 5. Loosen the spiral cable fixing screws, then remove the spiral cable.
- 6. Disconnect the horn switch connector, and then the spiral cable connector.



- 7. Remove the wiper washer switch and lighting switch from the spiral cable. CAUTION:
 - The spiral cable may snap due to steering operation if the cable is installed in an improper position.
 - Do not disassemble spiral cable.
 - Do not apply lubricant to the spiral cable.
 - Do not arrow oil, grease, detergent or water to come in contact with the spiral cable.

SRS-44

 Do not make an impact to the spiral cable by dropping etc. Replace the spiral cable if it has been dropped or sustained an impact.

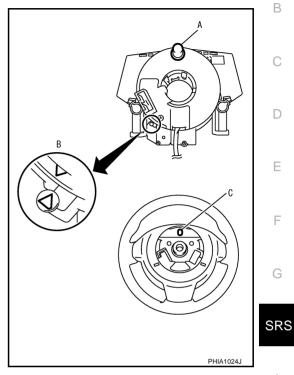
INSTALLATION

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 harf 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.

- Do not turn the spiral cable rashly and also beyond the limit number of turns. (These will cause cable snap.)
- Adjust the spiral cable locating pin hole (shown as A in the figure) to the steering wheel locating pin hole (shown as C in the figure).
- Secure the air bag harness with the harness fixing hook.
- After the work is completed, perform self-diagnosis to make sure that no malfunction is detected. Refer to SRS-20, "SRS **Operation Check**".



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FRONT PASSENGER AIR BAG MODULE

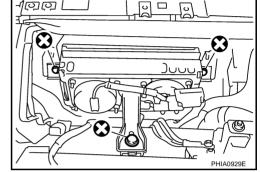
Removal and Installation REMOVAL

CAUTION:

- Before servicing SRS, turn ignition switch OFF, disconnect both battery cables and wait at least 3 minutes.
- Always work from the side of front passenger air bag module.
- Do not use air tools or electric tools for servicing.
- 1. Remove instrument panel & pad. Refer to IP-10, "INSTRUMENT PANEL ASSEMBLY" .
- 2. Remove hex bolt, then remove front passenger air bag module.

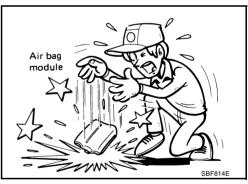
Hex bolt (M8) Fixing bolt (M6)

: ♥24.5 N·m (2.5 kg-m, 18 ft-lb) : ●6 N·m (0.6 kg-m, 53 in-lb)



CAUTION:

- Always place front passenger air bag module with deployment side facing upward.
- Do not insert any foreign objects (screwdriver, etc.) into front passenger air bag module.
- Do not disassemble front passenger air bag module.
- Do not use old bolts after removal; replace with new bolts.
- Replace front passenger air bag module if it has been dropped or sustained an impact.
- Do not expose the front passenger air bag module to temperatures exceeding 90°C (194°F).
- Do not allow oil, grease or water to come in contact with the front passenger air bag module.
- After front passenger air bag module inflates, the instrument panel assembly should be replaced.



INSTALLATION

Install in the reverse order of removal.

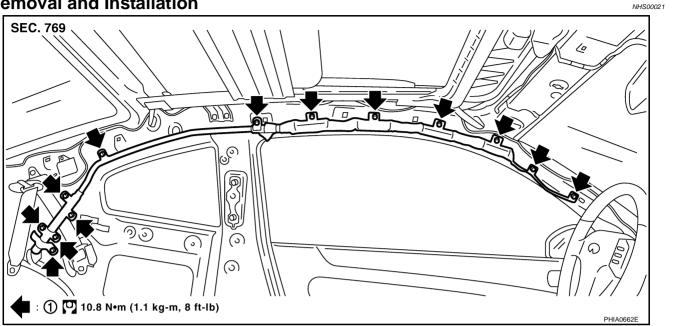
CAUTION:

- Always work from the side of or under front passenger air bag module.
- After the work is completed, perform self-diagnosis to make sure no malfunction is detected. Refer to <u>SRS-20, "SRS Operation Check"</u>.

SIDE CURTAIN AIR BAG MODULE

SIDE CURTAIN AIR BAG MODULE

Removal and Installation



1. Bolt

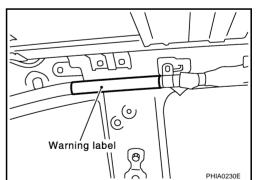
REMOVAL

CAUTION:

- Before servicing SRS, turn ignition switch OFF, disconnect both battery cables and wait at least 3 minutes.
- Do not use air tools or electric tools for servicing.
- 1. Remove headlining. Refer to EI-36, "Removal and Installation" .
- 2. Disconnect side curtain air bag connector.
- 3. Remove side curtain air bag module fixing bolts, and remove the side curtain air bag module.

CAUTION:

- Always place the side curtain air bag module with the warning label facing upward.
- Do not disassemble side curtain air bag module.
- Do not insert any foreign objects (screwdriver, etc.) into air bag module connector.



- Replace side curtain air bag module if it has been dropped or sustained an impact.
- Do not expose the air bag module to temperatures exceeding 90°C (194°F).
- Do not allow oil, grease or water to come in contact with the side curtain air bag module.



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INSTALLATION

Install in the reverse order of removal.

CAUTION:

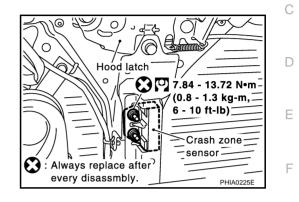
- Always work from the side of the side curtain air bag module.
- After replacement of side curtain air bag module, perform self-diagnosis to make sure that no malfunction is detected. Refer to <u>SRS-20, "SRS Operation Check"</u>.

CRASH ZONE SENSOR

Removal and Installation REMOVAL

CAUTION:

- Before servicing SRS, turn ignition switch OFF, disconnect both battery cables and wait at least 3 minutes.
- Do not use air tools or electric tools for servicing.
- 1. Remove crash zone sensor connector.
- 2. Remove crash zone sensor fixing nuts.



CAUTION:

Replace crash zone sensor if it has been dropped or sustained an impact.
Do not disassemble crash zone sensor.
INSTALLATION
Install in the reverse order of removal.
CAUTION:

Check crash zone sensor for proper installation.
After the work is complete, perform self-diagnosis to make sure that no malfunction is detected. Refer to <u>SRS-20, "SRS Operation Check"</u>.

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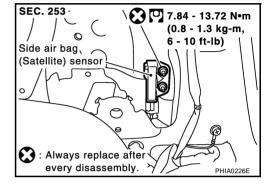
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SIDE AIR BAG (SATELLITE) SENSOR

Removal and Installation REMOVAL

CAUTION:

- Before servicing SRS, turn ignition switch OFF, disconnect both battery cables and wait at least 3 minutes.
- Do not use air tools or electric tools for servicing.
- 1. Remove seat belt pre-tensioner. Refer to EI-31, "BODY SIDE TRIM" and <u>SB-4, "Removal and Installation</u> of Front Seat Belt".
- 2. Remove side air bag (Satellite) sensor fixing nuts.
- 3. Remove the side air bag (Satellite) sensor connector.



CAUTION:

- Do not use old nuts; replace with new ones.
- Check side air bag (Satellite) sensor to ensure it is free of deformities, dents, cracks or rust. If it shows any visible signs of damage, replace it with new one.
- Do not disassemble side air bag (Satellite) sensor.
- Replace side air bag (Satellite) sensor if it has been dropped or sustained an impact.

INSTALLATION

Install in the reverse order of removal.

CAUTION:

- Check side air bag (Satellite) sensor for proper installation.
- After replacement of side air bag (Satellite) sensor, perform self-diagnosis to make sure that no malfunction is detected. Refer to <u>SRS-20, "SRS Operation Check"</u>.

PFP:98830

FRONT SEAT BELT PRE-TENSIONER

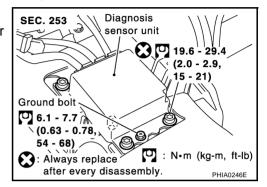
FRONT SEAT BELT PRE-TENSIONER	PFP:86884	~
Removal and Installation	NH\$00024	A
For removal and installation procedures, refer to SB-4, "Removal and Installation of Front Seat Belt"		
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DIAGNOSIS SENSOR UNIT

Removal and Installation REMOVAL

CAUTION:

- Before servicing SRS, turn ignition switch OFF, disconnect both battery cables and wait at least 3 minutes.
- Do not use air tools or electric tools for servicing.
- 1. Disconnect each harness connector for the air bag module and seat belt pre-tensioner.
- 2. Remove center console. Refer to IP-15, "(Y) Center Console Assembly" .
- 3. Disconnect diagnosis sensor unit connector.
- Remove hex bolts and ground bolt from the diagnosis sensor unit.



CAUTION:

- Do not use old bolts. Replace with new ones.
- Check diagnosis sensor unit bracket to ensure it is free of deformities, dents, cracks or rust. If it shows any visible signs of damage, replace with new one.
- Replace diagnosis sensor unit if it has been dropped or sustained an impact.

INSTALLATION

Install in the reverse order of removal.

CAUTION:

- Check the diagnosis sensor unit for proper installation.
- After replacement of diagnosis sensor unit, perform self-diagnosis to make sure that no malfunction is detected. Refer to <u>SRS-20, "SRS Operation Check"</u>.

ECU DISCRIMINATED NO.

After replacing the diagnosis sensor unit, confirm that the diagnosis sensor unit identification is correct for the vehicle as equipped.

Specification	ECU DISCRIMINATED No.	
2WD Models with driver and passenger air bags, seat belt pre-tensioner, side air bags and curtain air bags	FADFH	

OCCUPANT CLASSIFICATION SYSTEM CONTROL UNIT

OCCUPANT CLASSIFICATION SYSTEM CONTROL UNIT PFP:98852	
Removal and Installation	А
The occupant classification control unit, occupant classification sensor, and bladder are an integral part of the front passenger seat cushion and are replaced as an assembly. Refer to <u>SE-134, "FRONT SEAT"</u> .	В
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COLLISION DIAGNOSIS

COLLISION DIAGNOSIS

For Frontal Collision

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 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.
- 3. Check the SRS components using the table below:
- Replace any SRS components showing visible signs of damage (dents, cracks and deformation).
- 4. 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.
- 5. Conduct self-diagnosis using CONSULT-II or "AIR BAG" warning lamp. Refer to <u>SRS-20, "SRS Operation</u> <u>Check"</u> for details. Ensure entire SRS operates properly.

When SRS is not activated in a collision:

- 1. Check the SRS components using the table below:
- Replace any SRS components showing visible signs of damage (dents, cracks and deformation).
- Conduct self-diagnosis using CONSULT-II or "AIR BAG" warning lamp. Refer to <u>SRS-20, "SRS Operation</u> <u>Check"</u> for details. Ensure entire SRS operates properly.

When only one front air bag module is activated in a collision:

- 1. Replace the following components:
- Diagnosis sensor unit
- Crash zone sensor
- Activated front air bag and seat belt pre-tensioner.
- 2. Check the other SRS components using the table below. (Refer to "SRS is NOT activated".)
- Replace any SRS components showing visible signs of damage (dents, cracks and deformation).
- 3. Conduct self-diagnosis using CONSULT-II or "AIR BAG" warning lamp. Refer to <u>SRS-20, "SRS Operation</u> <u>Check"</u> for details. Ensure entire SRS operates properly.

Only one front air bag may inflate a crash, depending on the crash severity and whether the front occupants are belted or unbelted. This does not indicate improper performance of the system. Perform self-diagnosis to make sure the entire SRS operates properly.

SRS INSPECTION (FOR FRONTAL COLLISION)

Part	rt SRS is activated SRS is NOT activated	
Driver airbag module	If the Driver airbag has deployed: REPLACE. Install with new fasteners.	If the Driver air bag has NOT been activated: [same text as in current manual]
Passenger front airbag module	If the Passenger front airbag has deployed: REPLACE. Install with new fasteners.	If the Passenger front air bag has NOT been activated: [same text as in current manual]
Crash zone sensor	If any of the front airbags or seat belt pre- tensionsers have been activated: REPLACE the crash zone sensor and bracket with new fasteners.	If the front airbags or seat belt pre-tensionsers have NOT been activated: [same text as in current manual]
Seat belt pre-ten- sioner assemblies	If the driver or passenger Seat belt pre-ten- sioner 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]
Diagnosis sensor unit	If any of the SRS components have been activated: REPLACE the Diagnosis sensor unit. Install with new fasteners.	If none of the SRS components have been activated: [same text as in current manual]

COLLISION DIAGNOSIS

Part	SRS is activated	SRS is NOT activated
Steering wheel	[same text as in current manual]	
Spiral cable	If the Driver airbag has deployed:	If the Driver airbag has not deployed:
	REPLACE the spiral cable.	[same text as in current manual]
Harness and con- 1. Check connectors for poor connection, damage, and terminals for deformities.		damage, and terminals for deformities.
nectors	2. Check harness for binding, chafing, cuts, or deformities.	
	3. If no damage is found, reinstall the har	ness and connectors.
	4. If damaged—REPLACE damaged sect	ion of harness. Do not repair, splice or modify any SRS harness.
Instrument panel	1. Visually check instrument panel for dar	nage.
	2. If no damage is found, reinstall the inst	rument panel.
	3. If damaged—REPLACE the instrument	t panel with bolts.

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For Side Collision 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 are 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).
- 3. Conduct self-diagnosis using CONSULT-II or "AIR BAG" warning lamp. Refer to <u>SRS-20, "SRS Operation</u> <u>Check"</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-II or "AIR BAG" warning lamp. Refer to <u>SRS-20, "SRS Operation</u> <u>Check"</u>. Ensure entire SRS operates properly.

SRS INSPECTION (FOR SIDE COLLISION)

Part	Front side air bag and side curtain air bag are activated	Front side air bag and side curtain air bag are 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.)	 Check for visible signs of damage (dents, tears, deformation) of the center pillar on the collision side. If damaged—Remove the side curtain air bag module. Check for visible signs of damaged (tears etc.) of the LH or RH side curtain air bag module. Check harness and connectors for damage, and terminals for deformities. If no damage is found, reinstall the LH or RH side curtain air bag module with new bolts. If damaged—REPLACE the LH or RH side curtain air bag module with new bolts.
Front LH or RH side air bag module	REPLACE all parts of seatback with deployed front side air bag module.	 Check for visible signs of damage (dents, tears, deformation) of the seatback on the collision side. Check harness and connectors for damage, and terminals for deformities. If no damage is found, reinstall the front seatback assembly. If damaged—REPLACE the front seatback assembly.
LH or RH side air bag (Satellite) sensor	REPLACE the side air bag (Satellite) sen- sor on the collision side with new nuts. (Repair the center pil- lar inner, etc. before installing new one if damaged.)	 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 binding. Check for visible signs of damage (dents, cracks, deformation) of the LH or RH side air bag (Satellite) sensor. Install the LH or RH side air bag (Satellite) sensor to check fit. If no damage is found, reinstall the LH or RH side sir bag (Satellite) sensor with new nuts. If damaged—REPLACE the LH or RH side air bag (Satellite) sensor with new nuts.
Diagnosis sensor unit	REPLACE the diag- nosis sensor unit with the new bolts.	 Check case and bracket for dents, cracks or deformities. Check connectors for damage, and terminals for deformities. If no damage is found, reinstall the diagnosis sensor unit with new bolts and ground bolt. If damaged—REPLACE the diagnosis sensor unit with new bolts and ground bolt.

COLLISION DIAGNOSIS

Part	Front side air bag and side curtain air bag are activated	Front side air bag and side curtain air bag are NOT activated
Seat belt pre-ten- sioner assembly		t can be extended smoothly. of be extended smoothly,
	- Check for deformitie	s of the center pillar inner.
	- If the center pillar inr	ner has no damage, REPLACE the seat belt pre-tensioner assembly.
		It pre-tensioner assembly on the collision side. Check harness cover and connectors Is for deformities, and harness for binding.
	3. Check for visible sign	ns of damage (dents, cracks, deformation) of the seat belt pre-tensioner assembly.
	4. Check seat belt adju	ster for damage.
	5. If no damage is foun	d, reinstall the seat belt pre-tensioner assembly.
	6. If damaged—REPLA	CE the seat belt pre-tensioner assembly with new bolts.
Seat with front side	REPLACE all parts of	1. Visually check the seat on the collision side.
air bag	front seatback (including front seat- back frame)	Remove the seat on the collision side and check the following for damage and deformities.
	Dack frame)	 Harness, connectors and terminals
		 Frame and recliner (for front and rear seat), and also adjuster and slides (for front seat)
		3. If no damage is found, reinstall the seat.
		4. If damaged—REPLACE the damaged seat parts using new bolts.
Center inner pillar	llar 1. Check the center inner pillar on the collision side for damage (dents, cracks, deformation).	
	2. If damaged—REPAI	R the center inner pillar.
Trim/headlining	1. Check for visible sign	ns of damage (dents, cracks, deformation) of the interior trim on the collision side.
	2. If damaged—REPLA	ACE the damaged trim parts.

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