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 turn steering wheel and column after removal of steering gear.
- Handle air bag module carefully. Always place driver and front passenger air bag modules with the pad side facing upward and seat mounted front side air bag module standing with the stud bolt side facing down.
- Conduct self-diagnosis to check entire SRS for proper function after replacing any components.
- After air bag inflates, the front instrument panel assembly should be replaced if damaged.
- Always replace instrument panel pad following front passenger air bag deployment.

Occupant Classification System Precaution

Replace occupant classification system control unit and passenger front seat cushion as an assembly. Refer to <u>SE-101, "FRONT SEAT"</u>.

SRS

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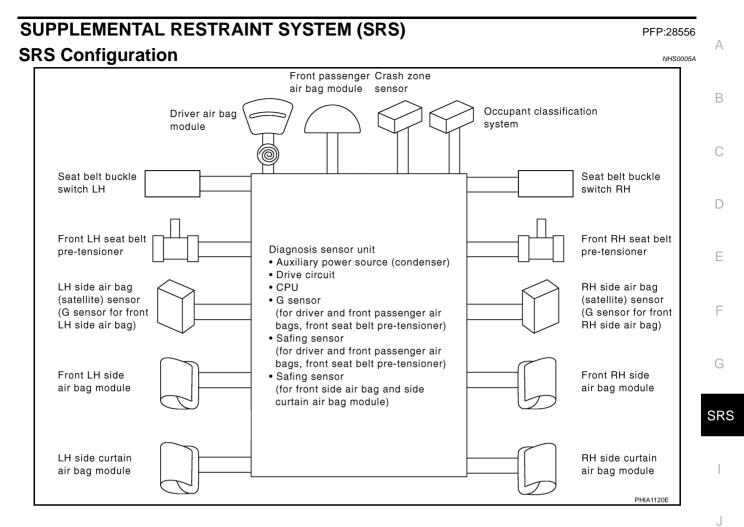
PREPARATION

PREPARATION Commercial Service Tools

PFP:00002

commercial Service Tool	S		NHS00059
Tool name		Description	
Tamper resistant TORX bit	S-NT/57	Size: T30	

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

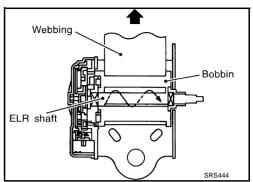
The seat belt pre-tensioner system with load limiter is installed for both the driver's seat and the front passenger's seat. It operates simultaneously with the SRS air bag system in the event of a frontal collision with an impact exceeding a specified level.

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.

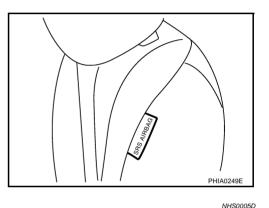
When passengers in a vehicle are thrown forward in a collision and the restraining force of the seat belt exceeds a specified level, the load limiter permits the specified extension of the seat belt by the twisting of the ELR shaft, and a relaxation of the chest-area seat belt web tension while maintaining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

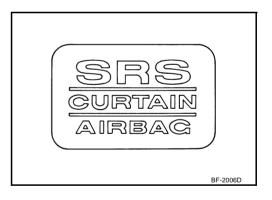


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Side Curtain Air Bag

The side curtain air bags have the labels as shown.



NHS0005B

Revision: 2006 July

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).

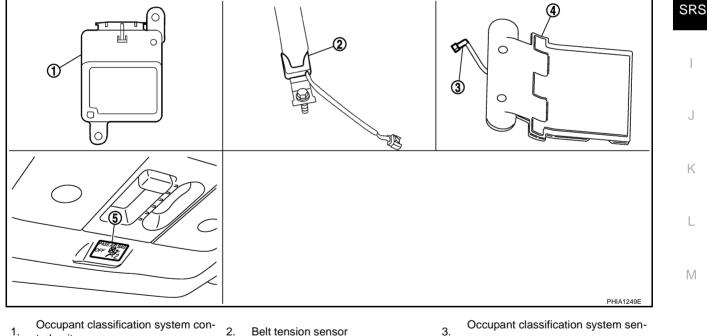
Passenger Air Bag Status Condition

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)

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SRS-7

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Passenger Seatbelt Warning System 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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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	

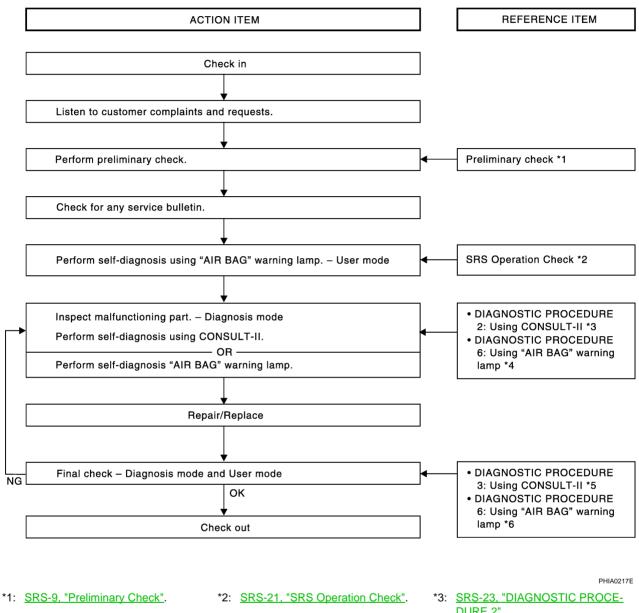
HOW TO PERFORM TROUBLE DIAGNOSIS FOR QUICK AND ACCURATE REPAIR

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

WORK FLOW



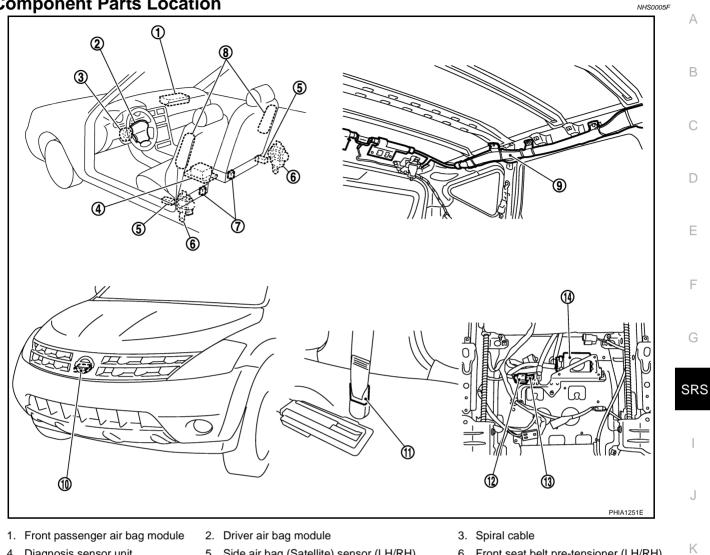
*4: SRS-36, "DIAGNOSTIC PROCE-DURE 6".

*5: SRS-28, "DIAGNOSTIC PROCE-DURE 3".

DURE 2".

*6: SRS-36, "DIAGNOSTIC PROCE-<u>DURE 6"</u>.

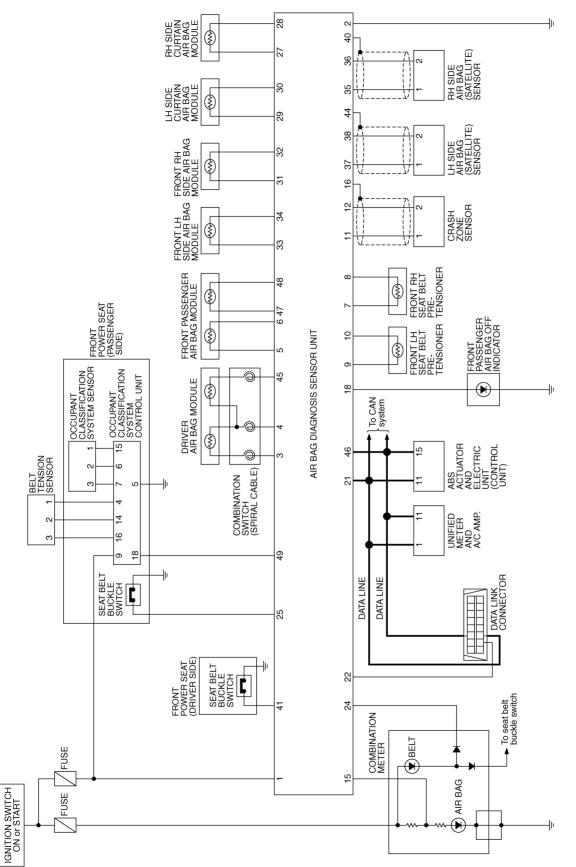
Component Parts Location



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

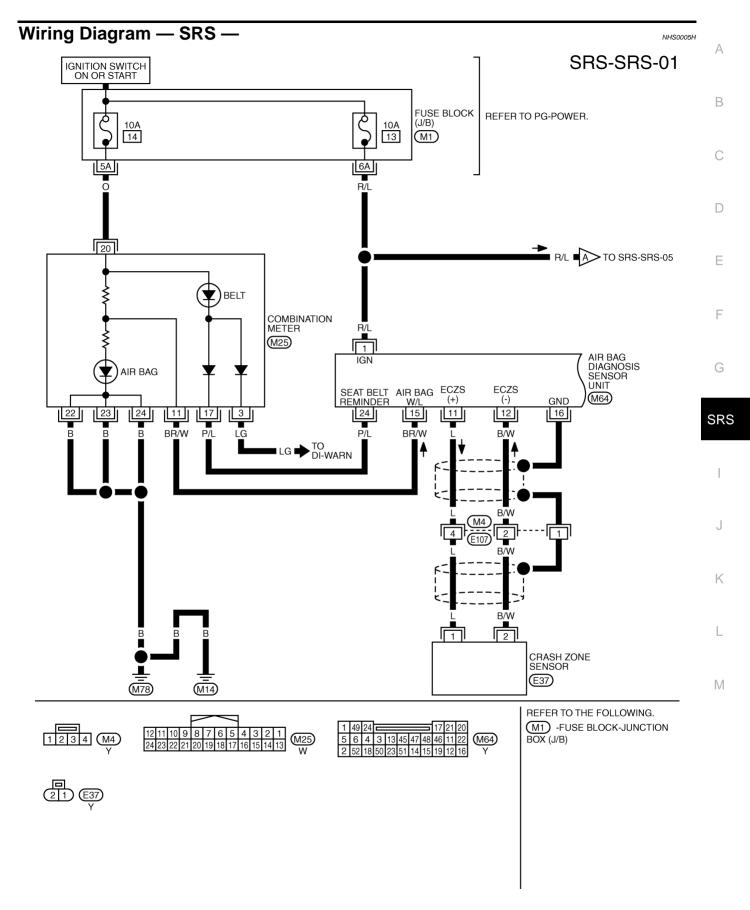
L

Schematic

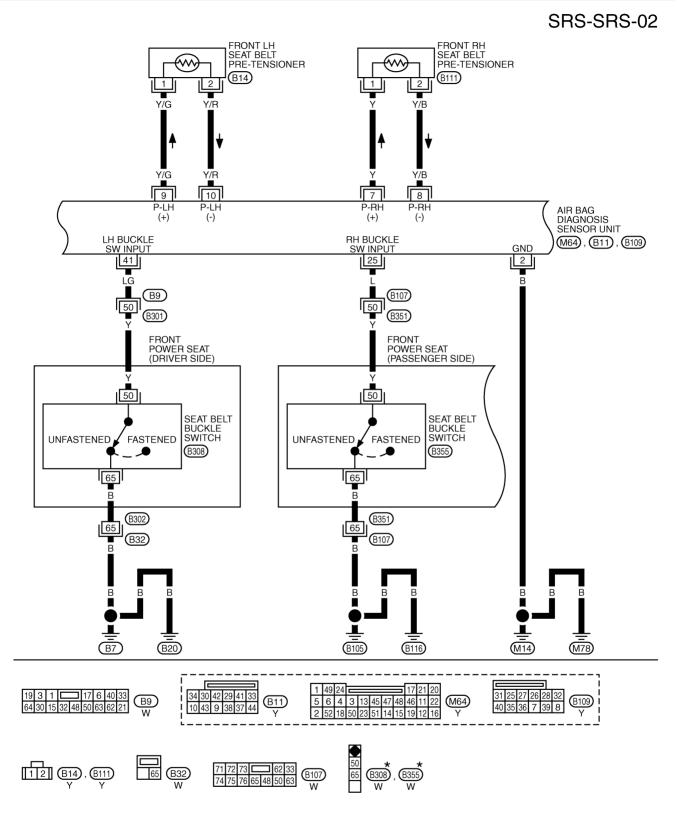


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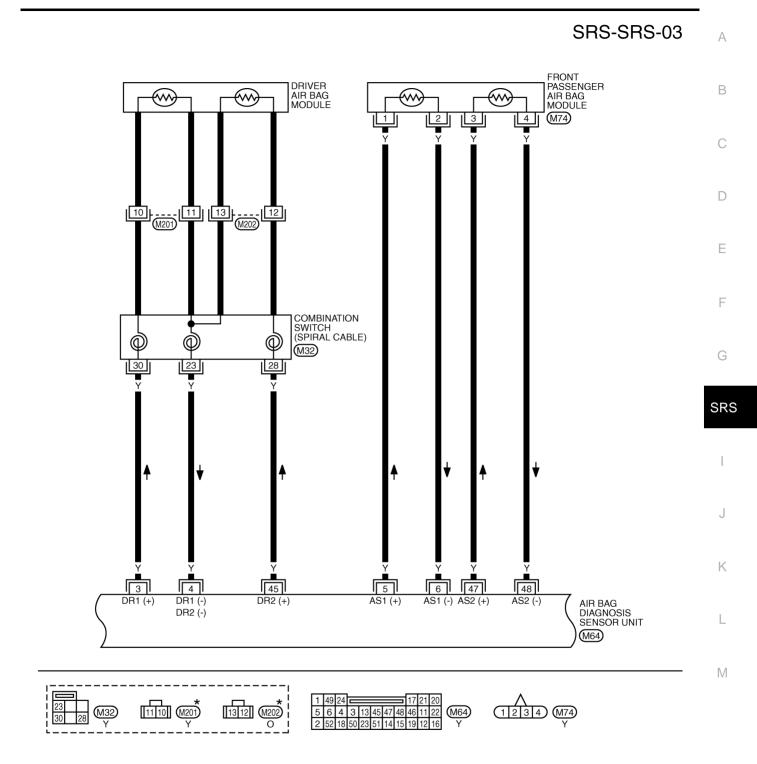


THWM0276E



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

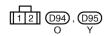
THWB0053E



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

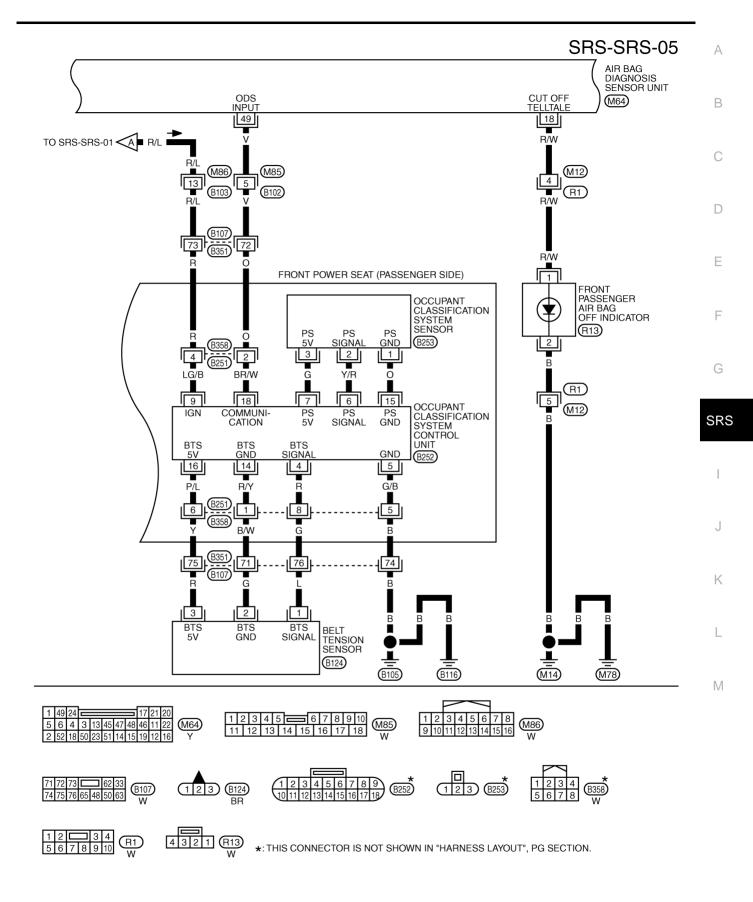
THWB0026E

LH SIDE CURTAIN AIR BAG MODULE RH SIDE CURTAIN AIR BAG MODULE FRONT LH SIDE AIR BAG MODULE FRONT RH SIDE AIR BAG MODULE 2 (m) (B10) (B108) 2 **D**94 2 D95 1 2 1 2 Y/R Y/B Y/G Y/R Y/B Y/G Y/G Y/B Y/F (D92 3 2 ¥ 1 (B26) Y/R Y/G Y/B (B18) 2 B118 Y/B Y/R Y/G Y/B Y/R Y/G 33 32 29 34 30 28 27 31 C-LH (-) C-RH (+) S-LH (-) S-RH (+) C-RH (-) S-LH (+) S-RH (-) C-LH (+) AIR BAG DIAGNOSIS SENSOR UNIT SATELLITE SATELLITE LH (-) LH (+) SATELLITE SATELLITE RH (-) RH (+) **B11** , **B109** GND GND 38 37 44 36 35 40 BR G R BR R G 2 2 RH SIDE AIR BAG (SATELLITE) SENSOR LH SIDE AIR BAG (SATELLITE) SENSOR (B13) (B110) **E** (21) (B13), (B110) 1234 D92 1 2 34 30 42 29 41 33 31 25 27 26 28 32 B10, B18, B108 <u>B11</u> (B109) 40 35 36 7 39 8 10 43 9 38 37 44 Υ



THWB0054E

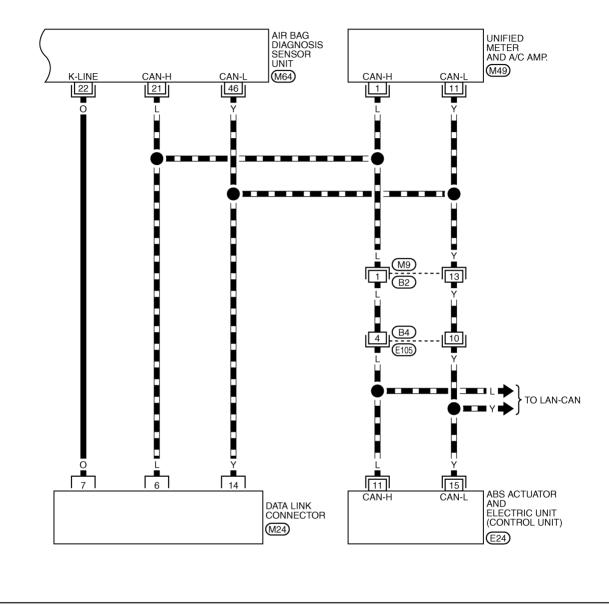
SRS-SRS-04

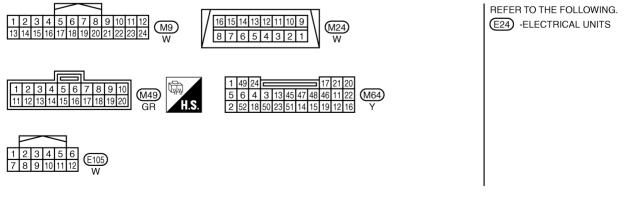


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SRS-SRS-06

: DATA LINE





THWM0278E

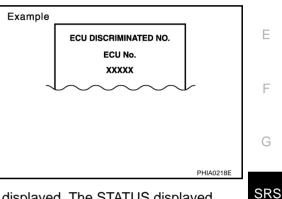
CONSULT-II Function DIAGNOSIS MODE FOR CONSULT-II

"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 B repairs.

- "SELF-DIAG [PAST]"
 Diagnosis results previously stored in the memory are displayed on the CONSULT-II screen. The stored cresults 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-54</u>, <u>"ECU DISCRIMINATED NO."</u>.



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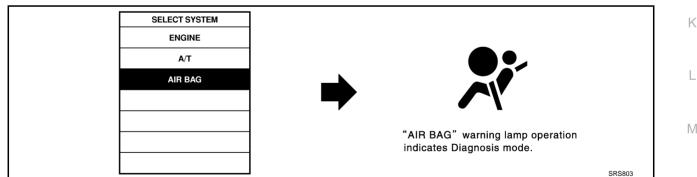
• PASSENGER AIR BAG

The STATUS (readiness) of the front passenger air bag module is displayed. The STATUS displayed (ON/OFF) depends on the signals supplied to the occupant classification system control module and air bag diagnosis sensor unit. Refer to <u>SRS-7</u>, "Occupant Classification System (OCS)" for more information.

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

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

SRS804

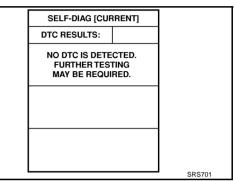
HOW TO ERASE SELF-DIAGNOSTIC RESULTS

- "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)

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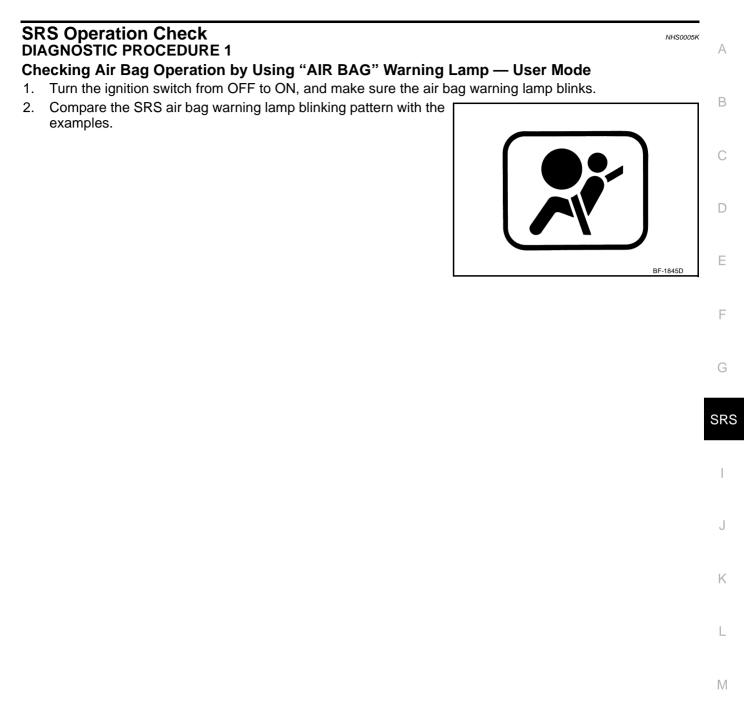
- The reading of these results is accomplished "User mode" and "Diagnosis mode".
- After a malfunction is repaired, turn ignition switch ON. Diagnosis mode returns to the User mode. At that time, the self-diagnostic result is cleared.

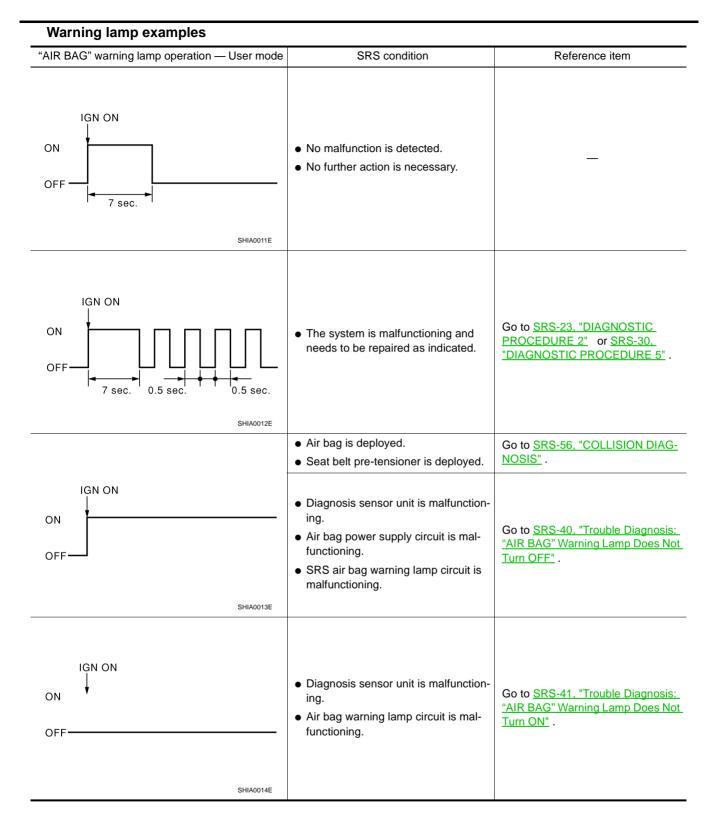
HOW TO CHANGE SELF-DIAGNOSIS MODE WITHOUT CONSULT-LL

	 Turn ignition switch from OFF to 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.) Turn ignition switch ON. (Self-diagnostic mode turns to Diagnosis mode.) [
User mode	5. Turn ignition switch ON. (Sen-diagnostic mode turns to Diagnosis mode.)	Diagnosis mode
Ignition switch OFF→ON	 Turn ignition switch from OFF to 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.) Turn ignition switch ON. (Self-diagnostic mode turns to User mode.) 	Ignition switch OFF→ON
by igniti In Diagn	node, when the "AIR BAG" warning lamp is not blinking, switching to Diagno on switch operation is not possible. osis mode, when no malfunction is detected, user mode can be switched on ion switch from OFF to ON.	
		PHIA0709E

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 result is cleared.





Trouble Diagnosis with CONSULT-II DIAGNOSTIC PROCEDURE 2

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

CAUTION:

2.

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]".

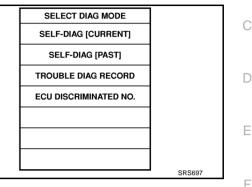
Diagnostic code is displayed on "SELF-DIAG [CURRENT]".

- 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 9V, charge or replace the battery. Then go to <u>SRS-28, "DIAGNOS-TIC PROCEDURE 3"</u>. If the battery voltage is OK, go to <u>SRS-30, "DIAGNOSTIC PROCEDURE 4 (CONTINUED FROM 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"
DETECTED. ii E U	When malfunction is indicated by the "AIR BAG" warning lamp in User mode.	• Low battery voltage (Less than 9V)	 Go to <u>SRS-28</u>, "<u>DIAGNOSTIC PRO-</u> <u>CEDURE 3</u>" after charging the bat- tery.
		 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-30, "DIAGNOSTIC PRO-CEDURE 4 (CONTINUED FROM</u>DIAGNOSTIC PROCEDURE 2)". Go to <u>SRS-30, "DIAGNOSTIC PROCEDURE 5"</u>.
	No malfunction is determined	ected.	_

[SELF-DIAG [CUF	RENT]		J
	DTC RESULTS:			
	NO DTC IS DETE FURTHER TES MAY BE REQUI	TING		K
				L
			SRS701	M



SELF-DIAG [CURRENT] DTC RESULTS: DRIVER AIR BAG MODULE [OPEN] SHIA0203E

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SRS

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

Diagnostic item	Explanation	Repair order "Recheck SRS at each replacement"
SIDE MODULE RH [OPEN]	• Front RH side air bag module circuit is open.	1. Visually check the wiring harness connection.
[B1129] 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 setback
SIDE MODULE RH [GND-SHORT]	• Front RH side air bag module circuit is shorted to ground.	assembly (front RH side air bag module).4. Replace the diagnosis sensor unit.
[B1131]		5. Replace the related harness.
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]		3. Replace the LH side air bag (Satel- lite) sensor.
SATELLITE SENS LH [UNMATCH]		4. Replace the diagnosis sensor unit.
[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 [UNMATH]		4. Replace the diagnosis sensor unit.
[B1116]		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	• Front LH pre-tensioner circuit is shorted to a power supply cir-	connections.
[VB-SHORT] [B1087]	cuit.	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.	 Replace the front LH seat belt. 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 circuit.	2. 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.

Diographia itarr	Evaluation	Repair order
Diagnostic item	Explanation	"Recheck SRS at each replacement"
CURTAIN MODULE LH [OPEN] [B1150]	 LH side curtain air bag module circuit is open. 	1. Visually check the wiring harness
CURTAIN MODULE LH [VB-SHORT] [B1151]	• LH side curtain air bag module circuit is shorted to some power supply circuits.	connection. 2. 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.	 Replace the LH side curtain air bag module. 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] [B1145]	• RH side curtain air bag module circuit is open.	1. Visually check the wiring harness
CURTAIN MODULE RH [VB-SHORT] [B1146]	• RH side curtain air bag module circuit is shorted to a power supply circuit.	connection. 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. Replace the RH side curtain air bag module.
CURTAIN MODULE RH [SHORT] [B1148]	• RH side curtain air bag module circuit is shorted between lines.	 Replace the diagnosis sensor unit. Replace the related harness.
CONTROL UNIT [B1001-B1015] [B1026-B1031] [B1042-B1047] [B1058-B1063] [B1074-B1079] [B1106-B1111] [B1122-B1127] [B1138-B1143] [B1202-B1207]	 Diagnosis sensor unit is malfunctioning. 	 Visually check the wiring harness connection. 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.	 Visually check the wiring harness connection. Replace the harness if it has visible damage. Replace cutoff telltale. Replace the diagnosis sensor unit.
OCCUPANT SENS C/U [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 Senser Unit, or Diagnosis Sensor Unit.	 Visually check the wiring harness connection. Replace the harness if it has visible damage. Replace passenger side seat cush- ion assembly. 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.	
		3. 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-56, "For Frontal Colli-</u> <u>sion"</u> .	[
SIDE COLLISION DETECTION [B1210]	• Side and curtain air bag is deployed.	Go to <u>SRS-58, "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.

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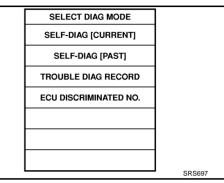
DIAGNOSTIC PROCEDURE 3

Final inspection after repairing SRS by using CONSULT-II — Diagnosis mode Refer to <u>GI-37</u>, "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]".



 SELF-DIAG [CURRENT]

 DTC RESULTS:

 NO DTC IS DETECTED.

 FURTHER TESTING

 MAY BE REQUIRED.

repair of SRS is completed. Go to step 3.

3. Touch "ERASE".

NOTE:

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

2. If no malfunction is detected on "SELF-DIAG [CURRENT]",

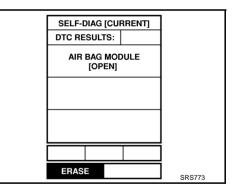
If any malfunction is detected on "SELF-DIAG [CURRENT]". the

malfunctioning part is not repaired completely or another mal-

functioning part is detected. Go to SRS-23, "DIAGNOSTIC

PROCEDURE 2", and repair malfunctioning part completely.

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.



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

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

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-21</u>, "Checking Air Bag Operation by Using "AIR BAG" Warning Lamp — User Mode".

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DIAGNOSTIC PROCEDURE 4 (CONTINUED FROM DIAGNOSTIC PROCEDURE 2) Inspecting SRS malfunctioning record

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

Is it the first time for maintenance of SRS?

YES or NO

YES >> Go to <u>SRS-23, "DIAGNOSTIC PROCEDURE 2"</u>.

NO >> Self-diagnostic result "SELF-DIAG [PAST]" (previously stored in the memory) might not be erased after repair. Go to <u>SRS-28, "DIAGNOSTIC PROCEDURE 3"</u>.

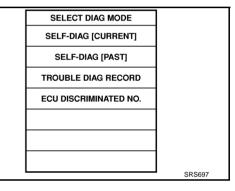
DIAGNOSTIC PROCEDURE 5

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

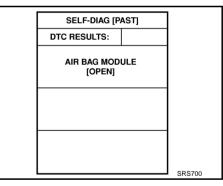
CAUTION:

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

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

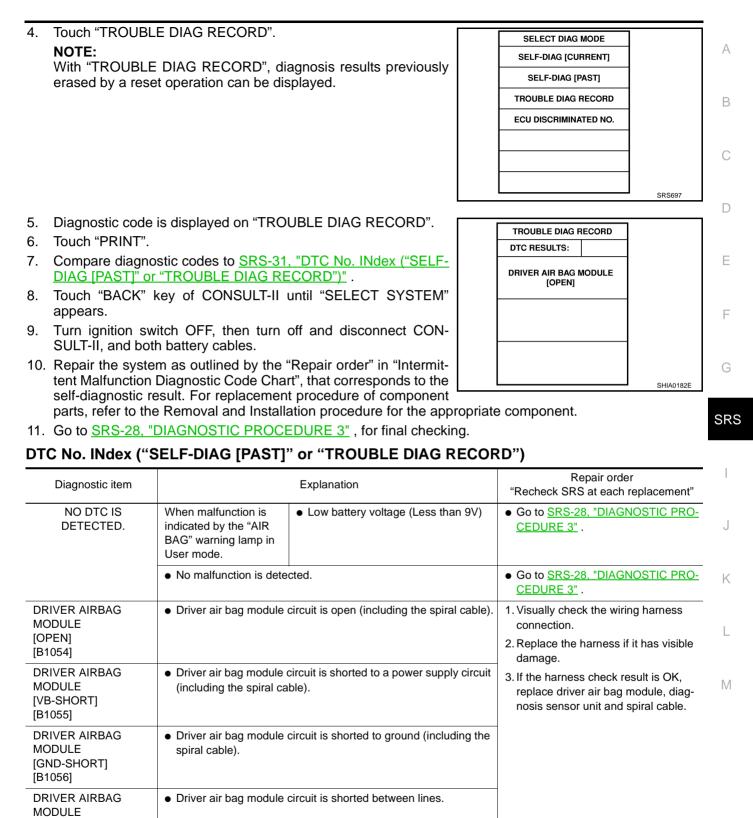


2. If diagnostic codes are displayed on "SELF-DIAG [PAST]", go to step 6.



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

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



[SHORT] [B1057]

Diagnostic item	Explanation	Repair order "Recheck SRS at each replacement"
ASSIST A/B MODULE [OPEN] [B1070]	 Front passenger air bag module circuit is open. 	 Visually check the wiring harness connection. Replace the harness if it has visible
ASSIST A/B MODULE [VB-SHORT] [B1071]	• Front passenger air bag module circuit is shorted to a power supply circuit.	 Replace the namess in thas visible damage. If the harness check result is OK, replace the diagnosis sensor unit
ASSIST A/B MODULE [GND-SHORT] [B1072]	• Front passenger air bag module circuit is shorted to ground.	and front passenger air bag module.
ASSIST A/B MODULE [SHORT] [B1073]	• Front passenger air bag module circuit is shorted between lines.	
CRASH ZONE SEN [UNIT FAIL] [B1033] [B1034] CRASH ZONE SEN [COMM FAIL] [B1035] CRASH ZONE SEN [UNMATCH] [B1036]	Crash zone sensor	 Visually check the wiring harness connection. Replace the harness if it has visible damage. If the harness check result is OK, replace crash zone sensor and diag- nosis sensor unit.
SIDE MODULE LH [OPEN] [B1134]	• Front LH side air bag module circuit is open.	 Visually check the wiring harness connection. 2 Peplace the harness if it has visible
SIDE MODULE LH [VB-SHORT] [B1135]	• Front LH side air bag module circuit is shorted to a power supply circuit.	 2. Replace the harness if it has visible damage. 3. If the harness check result is OK, replace the diagnosis sensor unit and LH side air bag module.
SIDE MODULE LH [GND-SHORT] [B1136]	• Front LH side air bag module circuit is shorted to ground.	
SIDE MODULE LH [SHORT] [B1137]	• Front LH side air bag module circuit is shorted between lines.	
SIDE MODULE RH [OPEN] [B1129]	 Front RH side air bag module circuit is open. 	 Visually check the wiring harness connection. Replace the harness if it has visible
SIDE MODULE RH [VB-SHORT] [B1130]	• Front RH side air bag module circuit is shorted to a power supply circuit.	damage. 3. If the harness check result is OK, replace the diagnosis sensor unit
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] [B1118] [B1119] SATELLITE SENS LH [COMM FAIL] [B1120] SATELLITE SENS LH [UNMATCH] [B1121]	• LH side air bag (Satellite) sensor	 Visually check the wiring harness connection. Replace the harness if it has visible damage. If the harness check result is OK, replace the diagnosis sensor unit and LH side air bag (Satellite) sen- sor.

Diagnostic item	Explanation	Repair order "Recheck SRS at each replacement"	A
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.	E
[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.		
PRE-TEN FRONT LH [VB-SHORT] [B1087]	• Front LH pre-tensioner circuit is shorted to a power supply circuit.	 Visually check the wiring harness connections. Replace the harness if it has visible 	E
PRE-TEN FRONT LH [GND-SHORT] [B1088]	• Front LH pre-tensioner circuit is shorted to ground.	 damage. 3. If the harness check result is OK, replace the diagnosis sensor unit and front LH seat belt. 	F
PRE-TEN FRONT LH [SHORT] [B1089]	• Front LH pre-tensioner circuit is shorted between lines.	- and front LH seat belt.	(
PRE-TEN FRONT RH [OPEN] [B1081]	• Front RH pre-tensioner circuit is open.		S
PRE-TEN FRONT RH [VB-SHORT] [B1082]	• Front RH pre-tensioner circuit is shorted to a power supply circuit.	 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 	
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.	and front RH seat belt.	
CURTAIN MODULE LH [OPEN] [B1150]	• LH side curtain air bag module circuit is open.		
CURTAIN MODULE LH [VB-SHORT] [B1151]	• LH side curtain air bag module circuit is shorted to a power supply circuits.	 Visually check the wiring harness connection. Replace the harness if it has visible damage. If the harness check result is OK, replace the diagnosis sensor unit and LH side curtain air bag module. 	ſ
CURTAIN MODULE LH [GND-SHORT] [B1152]	• LH side curtain air bag module circuit is shorted to ground.		
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] [B1146]	• RH 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
CURTAIN MODULE RH [GND-SHORT] [B1147]	• RH side curtain air bag module circuit is shorted to ground.	 damage. 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.	
CONTROL UNIT [B1001-B1015] [B1026-B1031] [B1042-B1047] [B1058-B1063] [B1074-B1079] [B1106-B1111] [B1122-B1127] [B1138-B1143] [B1202-B1207]	 Diagnosis sensor unit is malfunctioning. 	 Visually check the wiring harness connection. 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. 	 Visually check the wiring harness connection. Replace the harness if it has visible damage. Replace cutoff telltale. Replace the diagnosis sensor unit.
OCCUPANT SENS C/U [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 Senser Unit, or Diagnosis Sensor Unit.	 Visually check the wiring harness connection. Replace the harness if it has visible damage. Replace passenger side seat cush- ion assembly. Replace the diagnosis sensor unit.
OCCUPANT SENS [UNIT FAIL] [B1018]	Trouble occurs in Occupant Classification System-SENS.	 Replace passenger side seat cush- ion assembly.
BELT TENSION SENS [UNIT FAIL] [B1019]	Trouble occurs in Belt Tension sensor (BTS), circuit of BTS— Occupant Classification System-CU, or Occupant Classification System-CU.	 Visually check the wiring harness connection. Replace the harness if it has visible damage. Replace passenger side seat belt assembly.
		4. Replace the diagnosis sensor unit.

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-56, "For Frontal Collision"</u> .	
SIDE COLLISION DETECTION [B1210]	• Side and curtain air bag is deployed.	• Go to <u>SRS-58, "For Side Collision"</u> .	

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Trouble Diagnosis without CONSULT-II DIAGNOSTIC PROCEDURE 6

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

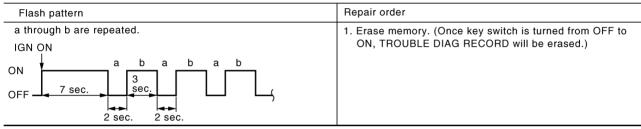
- 1. Turn ignition switch ON.
- 2. After "AIR BAG" warning lamp lights for 7 seconds, turn ignition switch OFF within 1 second.
- 3. Wait more than 3 seconds.
- 4. Repeat the steps 1 to 3 twice. (Perform three times in all.)
- 5. Turn ignition switch ON.

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.>

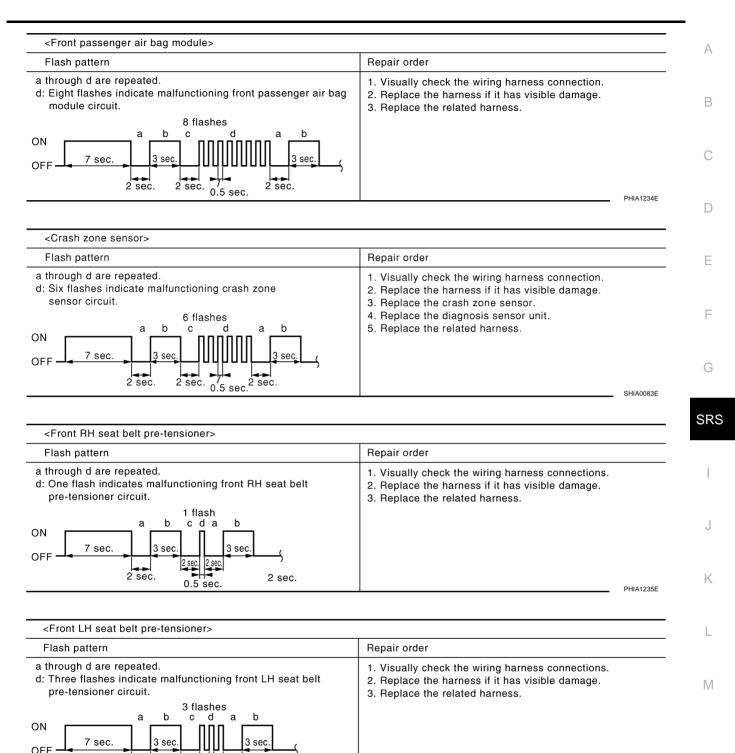


PHIA0532E

NHS0005M

<driver air="" bag="" module=""></driver>	
Flash pattern	Repair order
a through d are repeated. d: Two flashes indicate malfunctioning driver air bag module circuit.	 Visually check the wiring harness connection. Replace the harness if it has visible damage. Replace the spiral cable.
2 flashes	4. Replace the related harness.
ON OFF 7 sec. 2 sec. 2 sec. 2 sec. 2 sec. 2 sec.	
0.5 sec.	PHIA1233E

<diagnosis sensor="" unit=""></diagnosis>	
Flash pattern	Repair order
a through d are repeated. d: Seven flashes indicate malfunctioning diagnosis sensor unit circuit. ON OFF 7 sec. 2 sec. 2 sec. 0.5 sec. 7 flashes 2 sec. 0.5 sec.	 Visually check the wiring harness connections. Replace the harness if it has visible damage. Replace the diagnosis sensor unit. Replace the related harness.

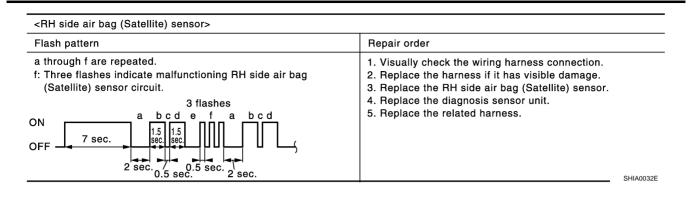


2 sec./ 2 s 0.<u>5 sec</u>.

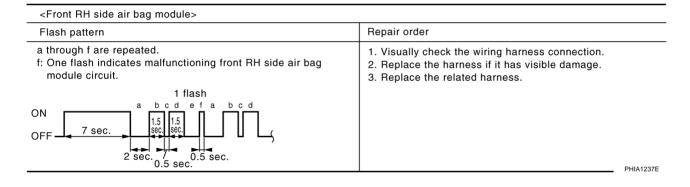
2 sec.

2 sec.

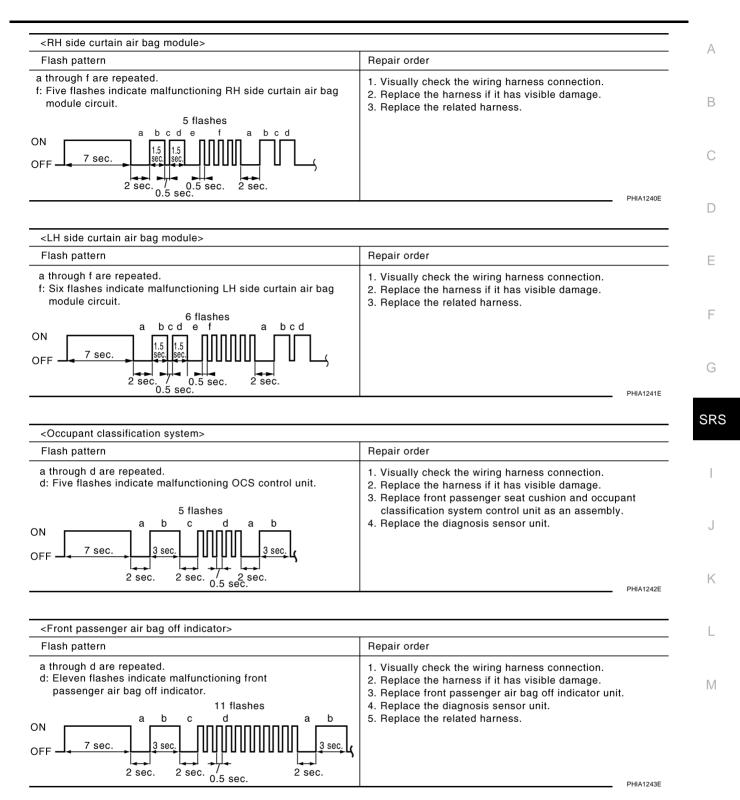
PHIA1236E



<LH side air bag (Satellite) sensor> Flash pattern Repair order a through f are repeated. 1. Visually check the wiring harness connection. f: Four flashes indicate malfunctioning LH side air bag 2. Replace the harness if it has visible damage. (Satellite) sensor. 3. Replace the LH side air bag (Satellite) sensor. 4. Replace the diagnosis sensor unit. 4 flashes bcd e а bcd 5. Replace the related harness. а f ON .5 7 sec. OFF 2 sec 0.5 sec. 0.5 sec SHIA0033E



<front air="" bag="" lh="" module="" side=""></front>		
Flash pattern	Repair order	
a through f are repeated. f: Two flashes indicate malfunctioning front LH side air bag module circuit. 2 flashes ON OFF 7 sec. 7 sec. 7 sec.	 Visually check the wiring harness connection. Replace the harness if it has visible damage. Replace the related harness. 	
2 sec. / 0.5 sec. 0.5 sec. 2 sec.		PHIA1238E



Trouble Diagnosis: "AIR BAG" Warning Lamp Does Not Turn OFF DIAGNOSTIC PROCEDURE 7

1. CHECK THE DEPLOYMENT OF AIR BAG MODULE

Is air bag module deployed?

YES or NO

YES >> Refer to <u>SRS-56, "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 PG-3, "POWER SUPPLY ROUTING CIRCUIT".

OK or NG

OK >> GO TO 4. NG >> GO TO 3.

3. CHECK AIR BAG FUSE AGAIN

Replace "AIR BAG" fuse and turn ignition switch ON.

Does the "AIR BAG" fuse blow again?

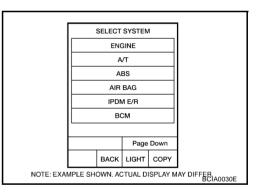
- YES >> Repair or replace main harness.
- NO >> INSPECTION END

4. CHECK DIAGNOSIS SENSOR UNIT

Connect CONSULT-II and touch "START". Is "AIR BAG" displayed on CONSULT-II?

YES or NO

- YES >> GO TO 5.
- NO >> Visually check the wiring harness connection of diagnosis sensor unit. If the harness connection check result is OK, replace diagnosis sensor unit.



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.

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?	1
YES >> Repair or replace the related harness. NO >> INSPECTION END	L
3. CHECK HARNESS CONNECTION BETWEEN DIAGNOSIS SENSOR UNIT AND COMBINATION METER $% \left({{\left({{{\left({{{\left({{{}} \right)}} \right)}} \right)}} \right)} \right)$	I
Disconnect diagnosis sensor unit connector and turn ignition switch ON. Does "AIR BAG" warning lamp turn on?	(
YES or NOYES >> Replace diagnosis sensor unit.NO >> Replace combination meter assembly.	SI
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Trouble Diagnosis: Passenger Seatbelt Warning System

1. CHECK THE SYSTEM 1

Check seatbelt warning lamp function.

Seatbelt warning lamp turns ON in the following conditions.

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

OK or NG

OK >> GO TO 2.

- NG >> Check the followings.
 - Harness between air bag diagnosis sensor unit and combination meter.
 - Seatbelt buckle switch (passenger side) circuit.
 - Seatbelt buckle switch (passenger side). If these are OK, replace air bag diagnosis sensor unit.

2. CHECK THE SYSTEM 2

Check seatbelt warning lamp function.

Seatbelt warning lamp turns OFF in the following conditions.

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

OK or NG

- OK >> System is OK.
- NG >> Check the followings.
 - Seatbelt buckle switch (passenger side) circuit.
 - Seatbelt buckle switch (passenger side).
 If these are OK, replace air bag diagnosis sensor unit.

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DRIVER AIR BAG MODULE

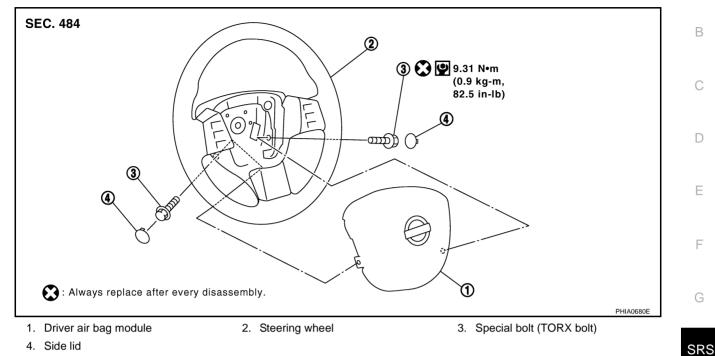
DRIVER AIR BAG MODULE



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PFP:K8510

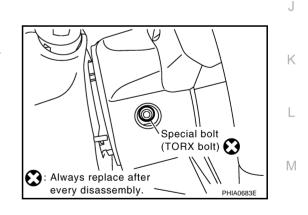
Removal and Installation



REMOVAL

CAUTION:

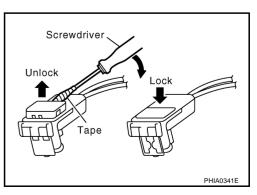
- Before servicing SRS, turn the ignition switch off, disconnect both battery cables and wait at least 3 minutes.
- Always work from the side of driver air bag module.
- Do not use air tools or electric tools for servicing.
- 1. Remove the side lids.
- 2. Remove the left and right side special bolts (TORX bolts T30).



- 3. Lift up the driver air bag module.
- 4. Disconnect the air bag harness connectors, and remove the driver air bag module.

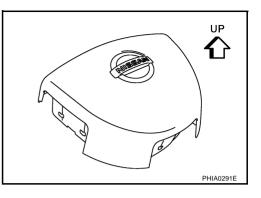
NOTE:

- 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.



CAUTION:

- Always work from the side of driver air bag module.
- 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.
- Do not expose the driver air bag module to temperatures exceeding 90°C (194°F).
- 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.



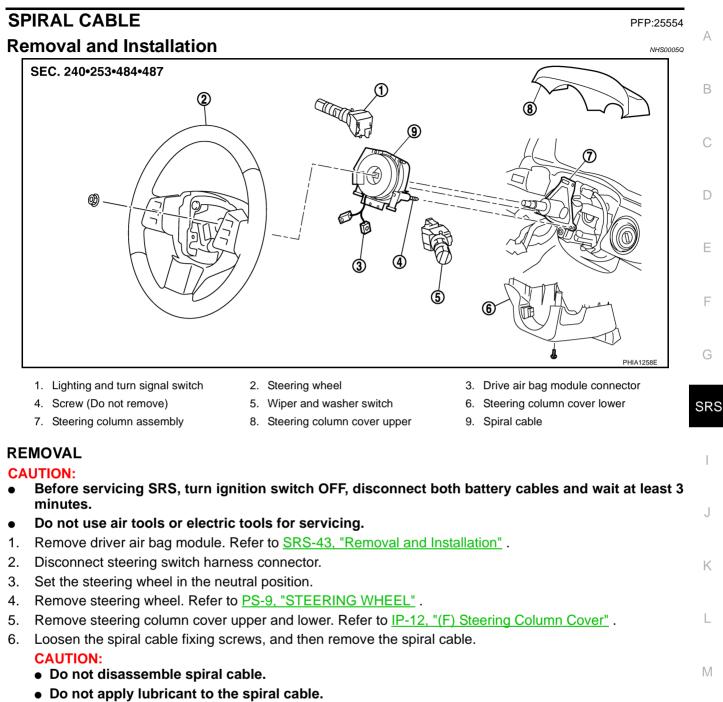


INSTALLATION

Install in the reverse order of removal.

- For installing the air bag module, tighten the special bolts (TORX bolts).
- After the work is completed, perform self-diagnosis to check that no malfunction is detected. Refer to <u>SRS-21, "SRS Operation Check"</u>.

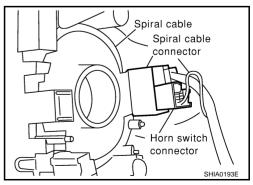
SPIRAL CABLE



7. Disconnect the horn switch connector, and then spiral cable connector.

CAUTION:

- Do not tap or bump the steering wheel.
- Also, with the steering linkage disconnected the cable may snap by turning the steering wheel beyond the limited number of turns.

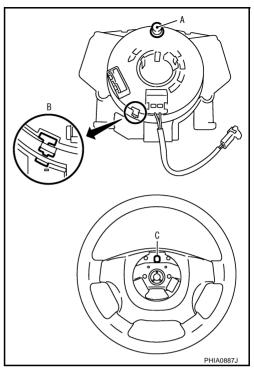


INSTALLATION

Install in the reverse order of removal.

CAUTION:

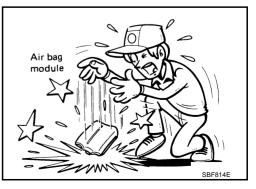
- The spiral cable may snap by steering operation if the cable is installed in an improper position.
- The neutral position is set as follows. Turn quietly the spiral cable clockwise to the end position. Then turn it counterclockwise (about 2 and half turns) and stop turning at the point on which the 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.
- 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 (showed as A inthe figure) to the steering wheel locating pin hole (showed as C in the figuer).
- Secure the air bag harness with the harness fixing hook.
- After the work is completed, perform self-diagnosis to make sure no malfunction is detected. Refer to <u>SRS-21, "SRS</u> <u>Operation Check"</u>.



FRONT PASSENGER AIR BAG MODULE

FRONT PASSENGER AIR BAG MODULE PFP:K8515 А **Removal and Installation** NHS0005R REMOVAL **CAUTION:** В Before servicing SRS, turn ignition switch OFF, disconnect both battery cables and wait at least 3 minutes. Always work from the side of or under front passenger air bag module. Do not use air tools or electric tools for servicing. 1. Remove instrument passenger lower panel and glove box assembly. Refer to IP-13, "(J) Instrument Passenger Lower Panel Assembly" Remove cluster lid C. Refer to IP-14, "(N) Cluster Lid C" . 2. Remove side ventilator assembly (RH). Refer to IP-13, "(H) Side Ventilator Assembly (LH/RH)". 3 Remove instrument side finisher (RH). Refer to IP-13, "(I) Instrument Side Finisher (LH/RH)" . 4. F 5 Disconnect passenger air bag connector. 6. Remove bolt, and then remove instrument passenger upper panel assembly. E Fixing bolt: 24.5 N·m (2.5 kg-m, 18 ft-lb) O SRS โก้ C : Always replace after every disassembly. PHIA0931E 7. Remove nuts, and then remove passenger air bag module. Fixing nuts: @6 N·m (0.6 kg-m, 53 in-lb) ন K PHIA0932E **CAUTION:** Always place front passenger air bag module with the air bag deployment side facing upward. Μ

- 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.

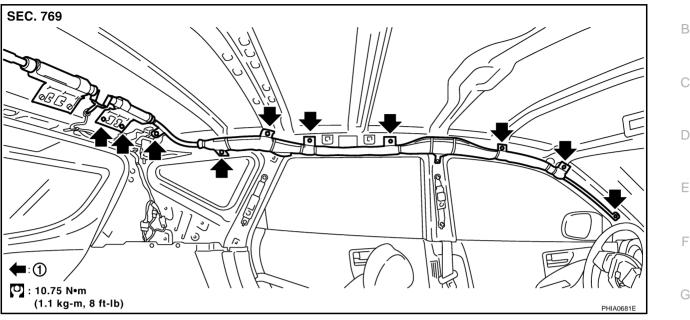
CAUTION:

- 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-21, "SRS Operation Check"</u>.

SIDE CURTAIN AIR BAG MODULE

SIDE CURTAIN AIR BAG MODULE

Removal and Installation



Bolt 1.

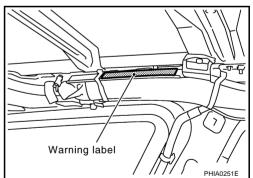
REMOVAL

CAUTION:

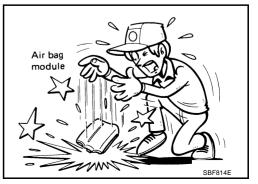
- Before servicing SRS, turn ignition switch OFF, disconnect both battery cables and wait at least 3 minutes.
- Do not use air tools or electric tools for servicing.
- 1. Remove headlining. Refer to EI-35, "Removal and Installation".
- 2. Disconnect side curtain air bag connector.
- 3. Remove side curtain air bag module fixing bolts.
- 4. 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:

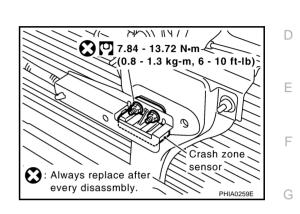
- Always place the side curtain air bag module with the warning label facing upward.
- After replacement of side curtain air bag module, perform self-diagnosis to make sure no malfunction is detected. Refer to <u>SRS-21, "SRS Operation Check"</u>.

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 front grille. Refer to EI-19, "FRONT GRILLE" .
- 2. Remove crash zone sensor connector.
- 3. Remove crash zone sensor fixing nuts.



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CAUTION:

	Replace crash zone sensor if it has been dropped or sustained an impact. Do not disassemble crash zone sensor.	SRS
INS	TALLATION	
Insta	all in the reverse order of removal.	
	JTION: Check crash zone sensor for proper installation.	
	After the work is complete, perform self-diagnosis to make sure no malfunction is detected. Refer to <u>SRS-21, "SRS Operation Check"</u> .	J
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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 SB-3, "Removal and Installation of Front Seat Belt" .
- 2. Remove side air bag (Satellite) sensor fixing nuts.
- 3. Remove the side air bag (Satellite) sensor connector.



SEC. 253

Side air bag

(Satellite) sensor

PHIA0260

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 no malfunction is detected. Refer to <u>SRS-21, "SRS Operation Check"</u>.

PFP:98830

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FRONT SEAT BELT PRE-TENSIONER

FRONT SEAT BELT PRE-TENSIONER	PFP:86884
Removal and Installation	NHS0005W
For removal and installation procedures, refer to <u>SB-3</u> , "Removal and Installation of Front Seat Belt"	

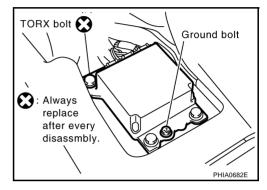
DIAGNOSIS SENSOR UNIT

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-18, "Removal and Installation" .
- 3. Disconnect diagnosis sensor unit connector.
- 4. Remove the bolts from the diagnosis sensor unit.

Hex bolts: 24.5 N·m (2.5 kg-m, 18 ft-lb) Ground bolt: 96.9 N·m (0.7 kg-m, 61 in-lb)



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 no malfunction is detected. Refer to <u>SRS-21, "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/AWD: Driver air bag module, passenger air bag module, side air bag module and side curtain air bag module, seat belt pre-tensioner	FAE8

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NHS0005X

OCCUPANT CLASSIFICATION SYSTEM CONTROL UNIT	3852
Removal and Installation	A 8000A8
The occupant classification system control unit, seat pressure sensor, and bladder are an integral part of front passenger seat cushion and are replaced as an assembly. Refer to <u>SE-101, "Removal and Installation</u>	the <u>n"</u> . B
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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-21, "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-21, "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-21, "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	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]

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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		, damage, and terminals for deformities.
nectors	2. Check harness for binding, chafing, cu	ts, or deformities.
	3. If no damage is found, reinstall the har	mess and connectors.
	4. If damaged—REPLACE damaged sec	tion of harness. Do not repair, splice or modify any SRS harness.
Instrument panel	1. Visually check instrument panel for da	mage.
	2. If no damage is found, reinstall the instrument 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 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).
- 3. Conduct self-diagnosis using CONSULT-II or "AIR BAG" warning lamp. Refer to <u>SRS-21, "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-21, "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 is activated	Front side air bag and side curtain air bag is NOT activated
(LH or RH) side cur- tain air bag module	Replace the side cur- tain air bag module. (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 side curtain air bag module. Check harness and connectors for damage, and terminals for deformities. If no damage is found, reinstall the side curtain air bag module with new bolts. If damaged—REPLACE the side curtain air bag module with new bolts. Air bag must be deployed before disposal.
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 damaged—REPLACE the front seatback assembly. Air bag must be deployed before disposal.
(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 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 side air bag (Satellite) sensor. Install the side air bag (Satellite) sensor to check fit. If no damage is found, reinstall the side sir bag (Satellite) sensor with new nuts. If damaged—REPLACE the 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.

NHS00060

COLLISION DIAGNOSIS

Part	Front side air bag and side curtain air bag is activated	Front side air bag and side curtain air bag is NOT activated
Seat belt pre-ten- sioner assembly		t can be extended smoothly. be extended smoothly,
Solie assembly		s of the center pillar inner.
		her has no damage, REPLACE the seat belt pre-tensioner assembly.
	2. Remove the seat be	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	ACE 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.
	back 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	1. Check the center inr	her 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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