SECTION SRS В SUPPLEMENTAL RESTRAINT SYSTEM (SRS) С

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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 place front side air bag module standing with stud bolt side setting bottom.
- 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.

Occupant Classification System Precaution

 Replace occupant classification system control unit and passenger front seat cushion as an assembly. Refer to <u>SE-182, "FRONT SEAT"</u>. SRS

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PREPARATION

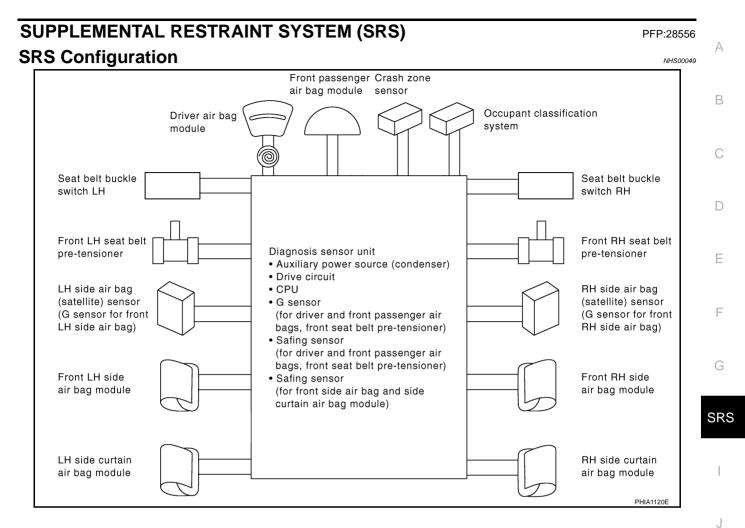
PREPARATION Commercial Service Tools

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Tool name		Description
Tamper resistant TORX bit	S-NT757	Size: T30/T50

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 to 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.

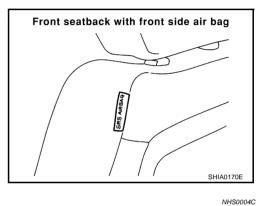
When the frontal collision with an impact exceeding a specified level occurs, seat belt slack resulting from clothing or other factors is immediately taken up by the pre-tensioner. Vehicle passengers are securely restrained.

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

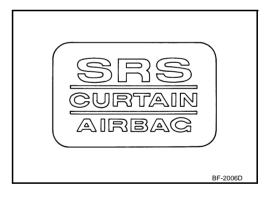
Front side air bag is built-in type.

The front seatbacks with built-in type side air bag have the labels shown in figure at right.



Side Curtain Air Bag

The side curtain air bag have the labels shown in figure at right.



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Revision: 2005 November

SUPPLEMENTAL RESTRAINT SYSTEM (SRS)

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).

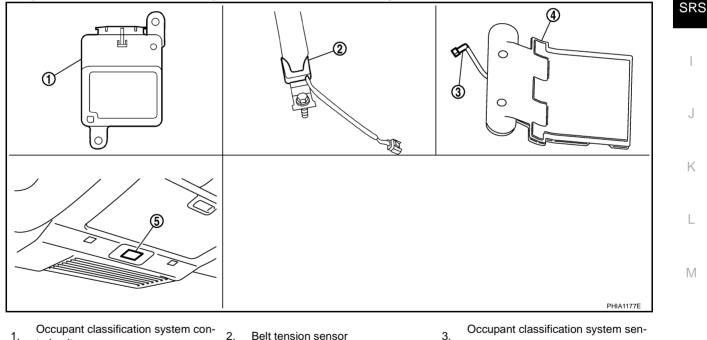
Passenger Air Bag Status Condition

Status	Passenger Air Bag	Cutoff Telltale Indicator	Air bag Warning Lamp	F
Empty	Suppress	OFF	OFF	
Child/ Child seat	Suppress	ON	OFF	_
Adult	Enable to deploy	OFF	OFF	F
Trouble	Suppress	ON	Blinking	_

NOTE:

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

Component Parts of Occupant Classification System



1. trol unit

Belt tension sensor

Occupant classification system sensor

4 Bladder

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

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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 attempt to repair, splice or modify the SRS wiring harness. If the harness is damaged, replace it with a new one.
- Keep ground portion clean.

DIAGNOSIS FUNCTION

The SRS self-diagnosis results can be read by using "AIR BAG" warning lamp and/or CONSULT-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
"AIR BAG" warning lamp	Х	Х	ON-OFF operation
CONSULT-II	_	Х	Monitoring

HOW TO PERFORM TROUBLE DIAGNOSES FOR QUICK AND ACCURATE REPAIR

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

Information from Customer

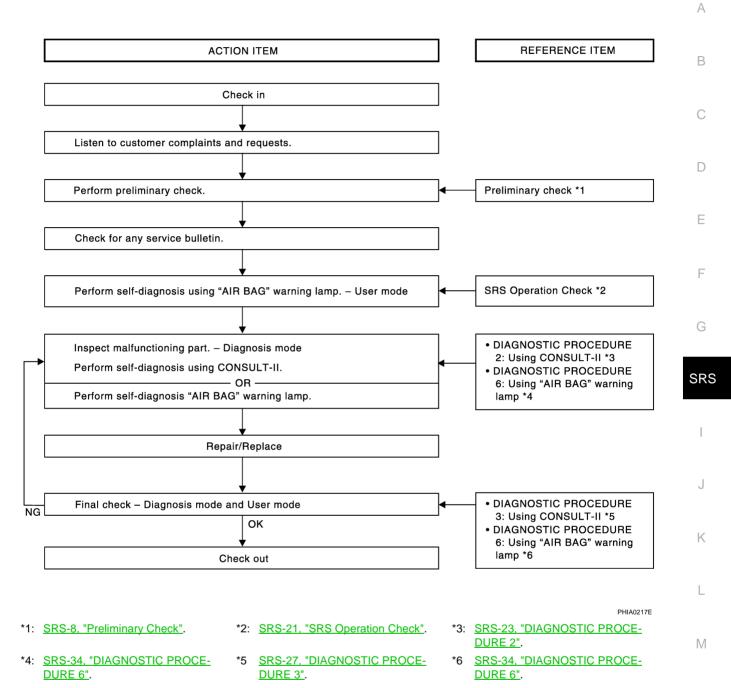
WHAT..... Vehicle model WHEN..... Date, Frequencies WHERE..... Road conditions HOW..... Operating conditions, Symptoms

Preliminary Check

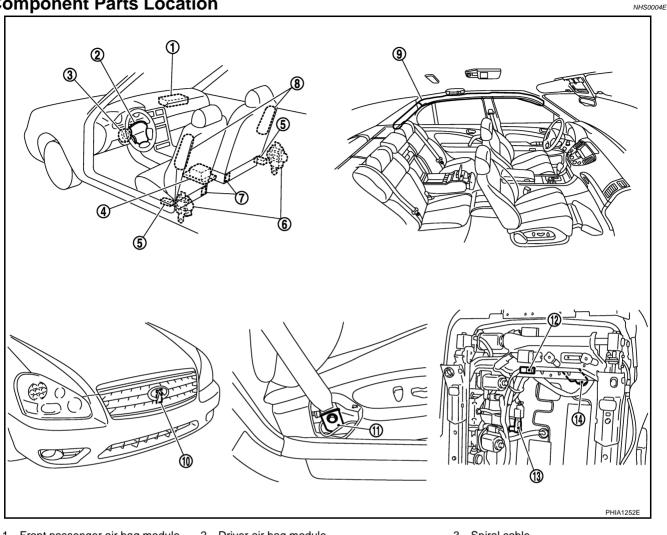
Check that the following parts are in good order.

- Battery (Refer to <u>SC-4, "How to Handle Battery"</u>.)
- Fuse (Refer to <u>SRS-12, "Wiring Diagram SRS —</u>".)
- System component-to-harness connections

WORK FLOW

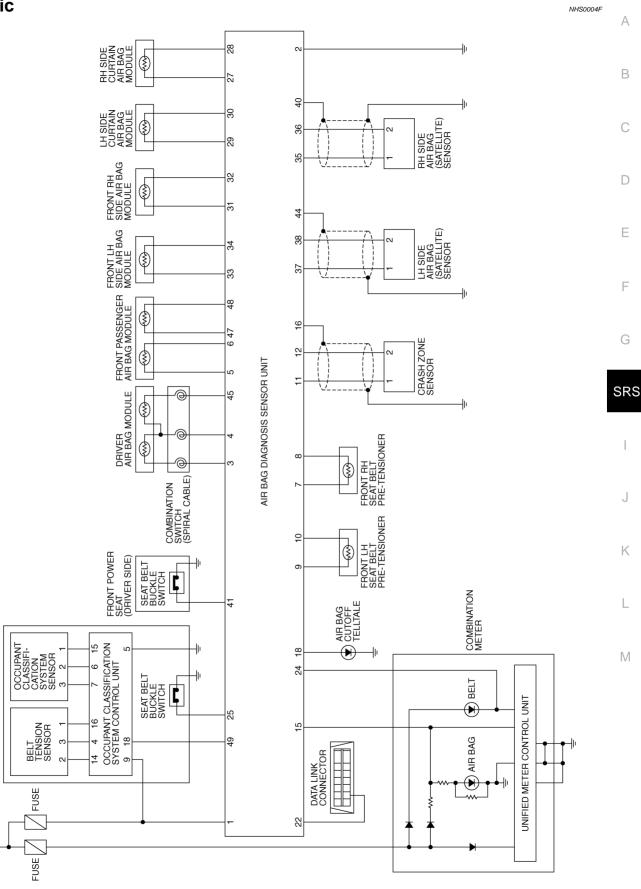


Component Parts Location



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

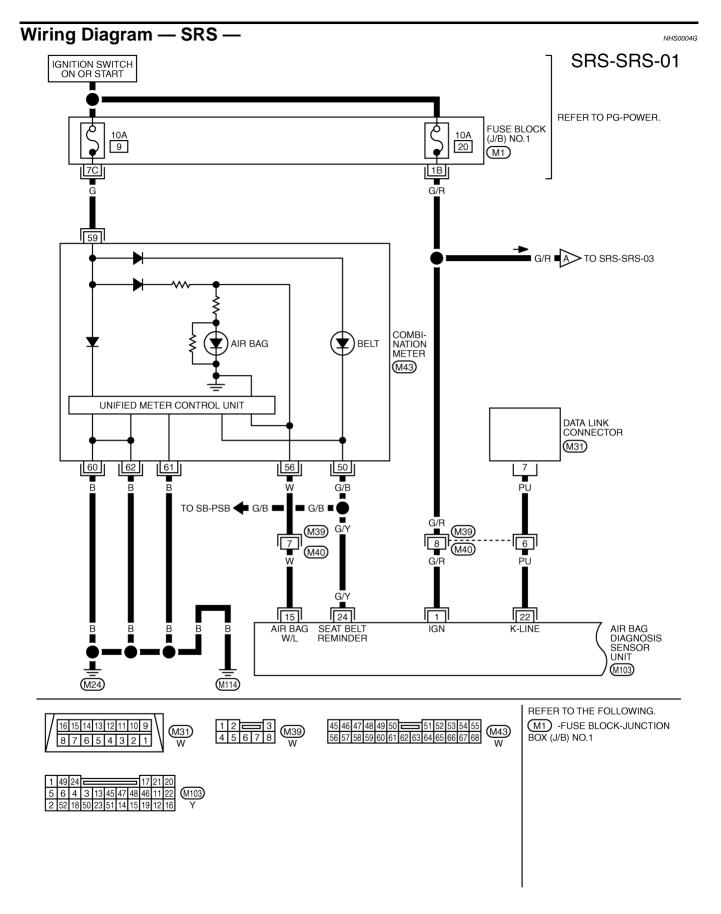
Schematic



THWM0195E

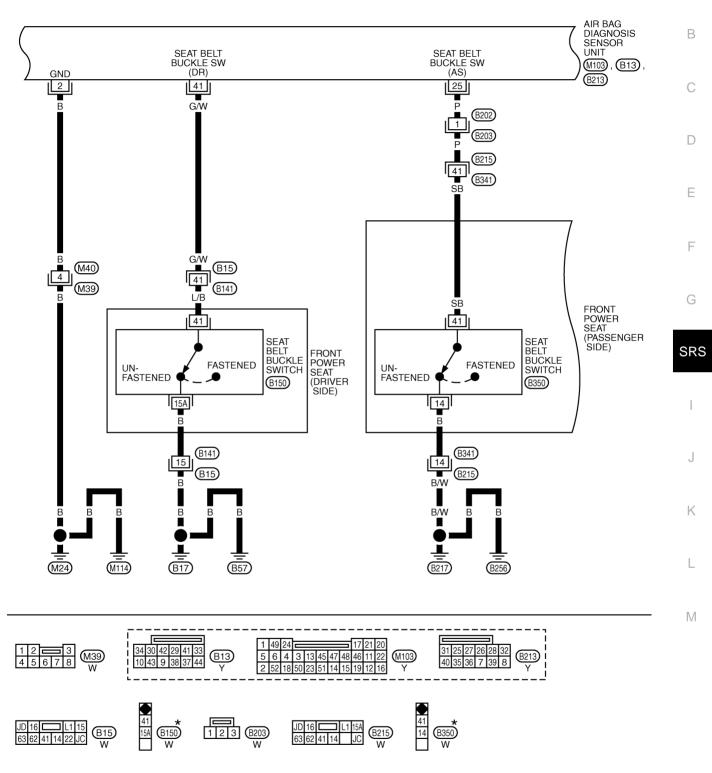
FRONT POWER SEAT (PASSENGER SIDE)

IGNITION SWITCH ON or START



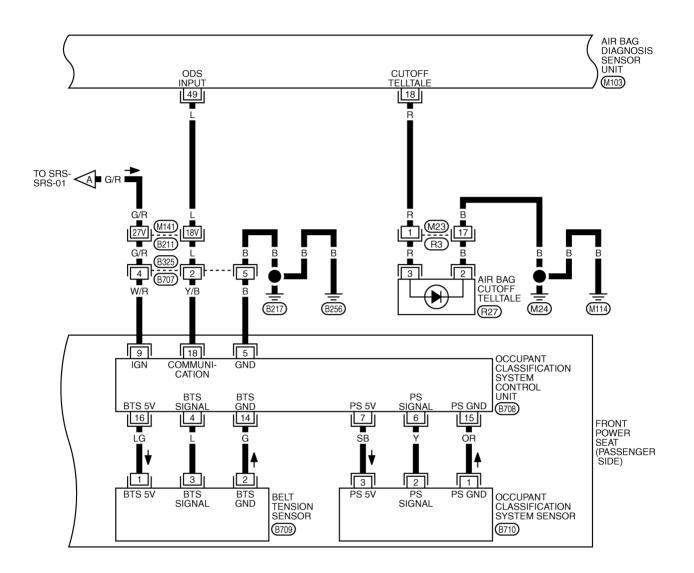
THWM0196E

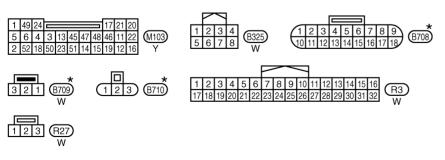
А



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

THWM0197E



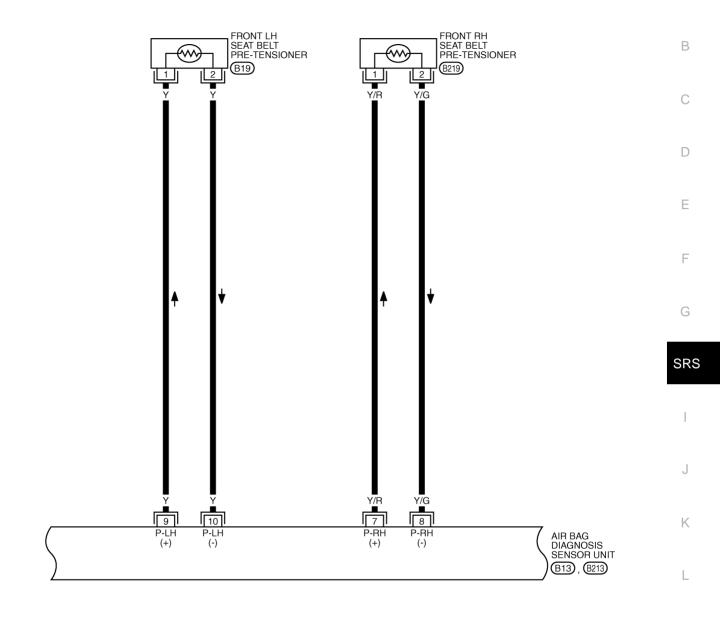


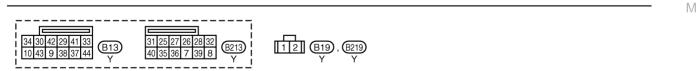
REFER TO THE FOLLOWING. B211) -SUPER MULTIPLE JUNCTION (SMJ)

 $\boldsymbol{\star}:$ THIS CONNECTOR IS NOT SHOWN IN "HARNESS LAYOUT", PG SECTION.

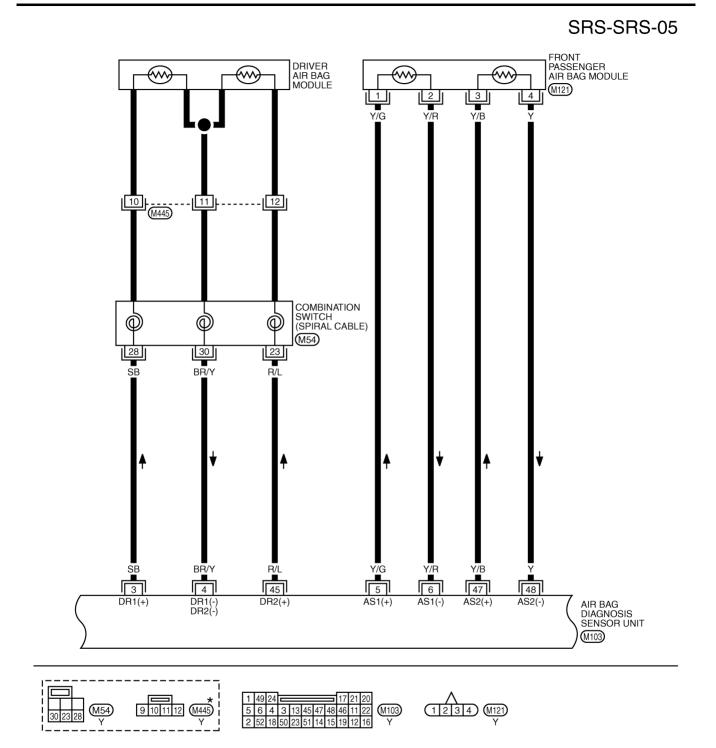
THWM0198E

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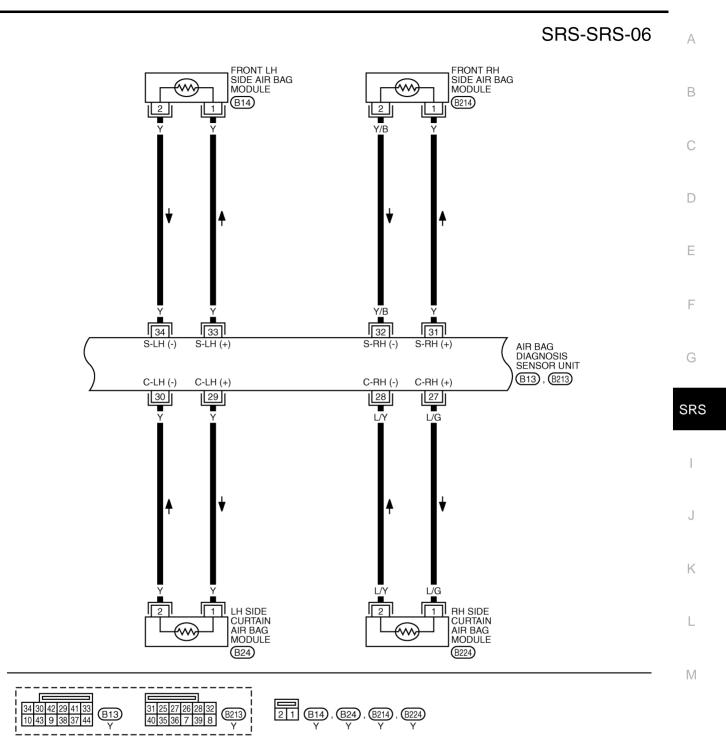


THWM0199E

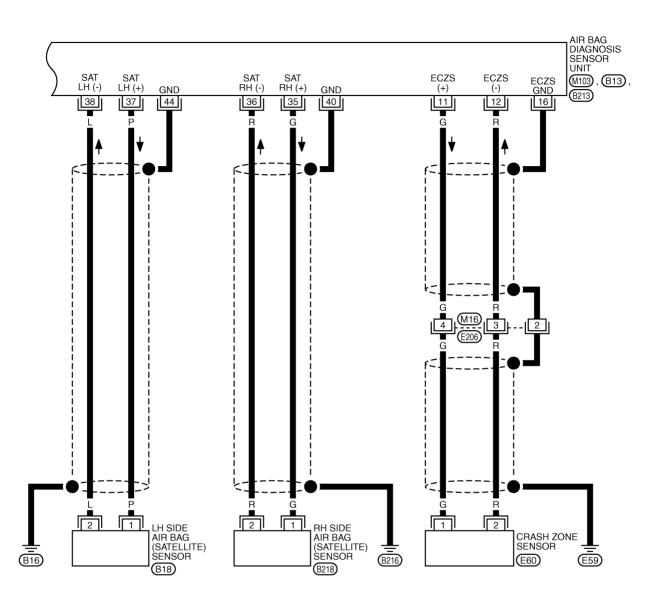


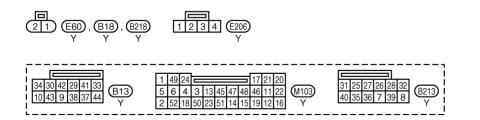
*: THIS CONNECTOR IS NOT SHOWN IN "HARNESS LAYOUT", PG SECTION.

THWM0200E



THWM0201E





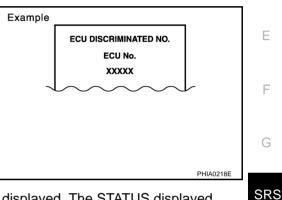
THWM0202E

CONSULT-II Function DIAGNOSIS MODE FOR CONSULT-II

- "SELF-DIAG [CURRENT]"
 A current Self-diagnosis result (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-50</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>, <u>"Occupant Classification System (OCS)"</u> 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, then diagnosis mode automatically changes to User mode.

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

SRS-19

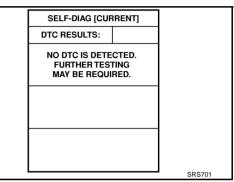
HOW TO ERASE SELF-DIAGNOSIS RESULTS

- "SELF-DIAG [CURRENT]"
 A current Self-diagnosis 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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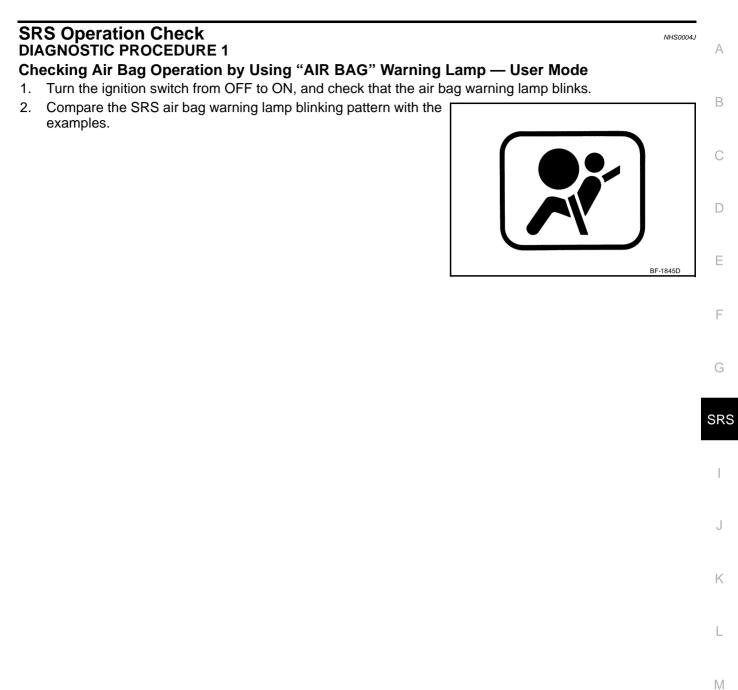
- The reading of these results is accomplished "User mode" and "Diagnosis mode".
- After a malfunction is repaired, turn ignition switch ON. Diagnosis mode returns to the User mode. At that time, the self-diagnostic result is cleared.

HOW TO CHANGE SELF-DIAGNOSIS MODE WITHOUT CONSULT-II

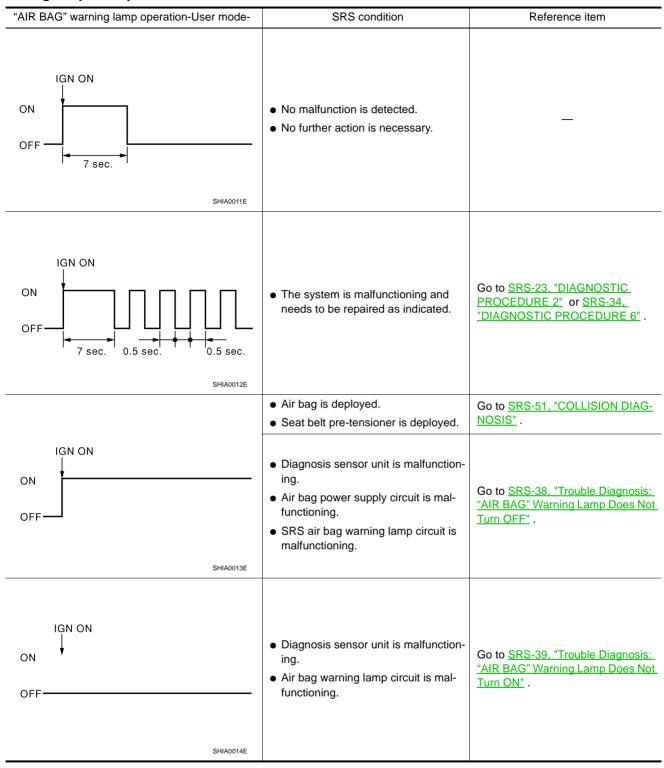
	 Turn ignition switch from OFF to ON. Air bag warning lamp is on for 7 seconds and turns off, then turn ignition switch OFF within 1 second after the lamp turns off. After ignition switch is turned OFF, wait for more than 3 seconds. Repeat steps 1 to 3 twice. (Perform 3 times in total.) Turn ignition switch ON. (Self-diagnostic mode turns to Diagnosis mode.) 	
User mode 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.) 	Diagnosis mode Ignition switch OFF→ON
by ignitic In Diagno	node, when the "AIR BAG" warning lamp is not blinking, switching to Diagnon 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.	

HOW TO ERASE SELF-DIAGNOSIS 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.



Warning lamp examples



Trouble Diagnosis with CONSULT-II DIAGNOSTIC PROCEDURE 2

Refer to GI-36, "CONSULT-II Start Procedure" .

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

- 2. Diagnostic code is displayed on "SELF-DIAG [CURRENT]".
- G
 SRS
 SHIA0203E
 G
 SRS
 SHIA0203E

SELECT DIAG MODE

SELF-DIAG [CURRENT] SELF-DIAG [PAST] TROUBLE DIAG RECORD

> SELF-DIAG [CURRENT] DTC RESULTS:

DRIVER AIR BAG MODULE [OPEN] NHS0004K

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- 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 <u>SRS-27</u>, "<u>DIAGNOS-TIC PROCEDURE 3</u>". If the battery voltage is OK, go to <u>SRS-29</u>, "<u>DIAGNOSTIC PROCEDURE 4</u> (<u>CONTINUED FROM</u> <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.

SRS701

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CONSULT-II Diagnostic Code Chart ("SELF-DIAG [CURRENT]")

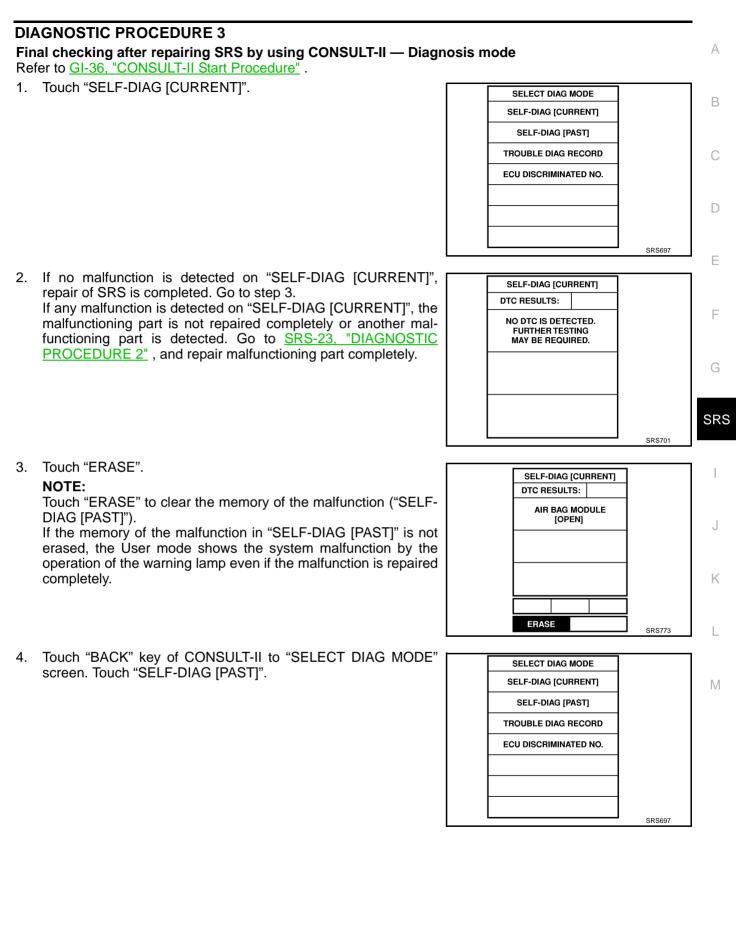
Diagnostic item		Explanation	Repair order "Recheck SRS at each replacement"
NO DTC IS DETECTED.	When malfunction is indicated by the "AIR BAG" warning lamp in	• Low battery voltage (Less than 9V)	 Go to <u>SRS-23</u>, "<u>DIAGNOSTIC PRO-</u> <u>CEDURE 2</u>" after charging the bat- tery.
	User mode.	 Self-diagnostic result "SELF-DIAG [PAST]" (previously stored in the memory) might not be erased after 	Go to <u>SRS-29</u> , "DIAGNOSTIC PRO- CEDURE 4 (CONTINUED FROM DIAGNOSTIC PROCEDURE 2)"
		repair.Intermittent malfunction has been detected in the past.	Go to <u>SRS-29, "DIAGNOSTIC PRO-</u> <u>CEDURE 5"</u> .
	No malfunction is determined	ected.	_
DRIVER AIRBAG 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
DRIVER AIRBAG MODULE [VB-SHORT]	• Driver air bag module (including the spiral ca	circuit is shorted to a power supply circuit able).	damage.3. Replace driver air bag module.4. Replace the spiral cable.
DRIVER AIRBAG MODULE [GND-SHORT]	Driver air bag module spiral cable).	circuit is shorted to ground (including the	 5. Replace the diagnosis sensor unit. 6. Replace the related harness.
DRIVER AIRBAG MODULE [SHORT]	Driver air bag module	circuit is shorted between lines.	
ASSIST A/B MODULE [OPEN]	Front passenger air ba	ag module circuit is open.	1. Visually check the wiring harness connection.
ASSIST A/B MODULE [VB-SHORT]	 Front passenger air bassenger. 	ag module circuit is shorted to a power-	2. Replace the harness if it has visible damage.
ASSIST A/B MODULE [GND-SHORT]	• Front passenger air ba	ag module circuit is shorted to ground.	 Replace front passenger air bag module.
ASSIST A/B MODULE [SHORT]	• Front passenger air bag module circuit is shorted between lines.		 4. Replace the diagnosis sensor unit. 5. Replace the related harness.
CRASH ZONE SEN [UNIT FAIL]	Crash zone sensor		1. Visually check the wiring harness connection.
CRASH ZONE SEN [COMM FAIL]			2. Replace the harness if it has visible damage.
			3. Replace the crash zone sensor.
			4. Replace the diagnosis sensor unit.
SIDE MODULE LH [OPEN]	• Front LH side air bag	module circuit is open.	 5. Replace the related harness. 1. Visually check the wiring harness connection.
SIDE MODULE LH [VB-SHORT]	 Front LH side air bag ply circuit. 	module circuit is shorted to a power sup-	2. Replace the harness if it has visible damage.
SIDE MODULE LH [GND-SHORT]	• Front LH side air bag	module circuit is shorted to ground.	3. Replace front LH setback assembly (Front LH side air bag module).
SIDE MODULE LH [SHORT]	• Front LH side air bag	module circuit is shorted between lines.	 Replace the diagnosis sensor unit. Replace the related harness.

Diagnostic item	Explanation	Repair order "Recheck SRS at each replacement"	А
SIDE MODULE RH [OPEN]	Front RH side air bag module circuit is open.	1. Visually check the wiring harness connection.	
SIDE MODULE RH [VB-SHORT]	 Front RH side air bag module circuit is shorted to a power sup- ply circuit. 	2. Replace the harness if it has visible damage.	В
SIDE MODULE RH [GND-SHORT]	Front RH side air bag module circuit is shorted to ground.	3. Replace front RH setback assembly (Front RH side air bag module).	С
SIDE MODULE RH [SHORT]	• Front RH side air bag module circuit is shorted between lines.	4. Replace the diagnosis sensor unit. 5. Replace the related harness.	
SATELLITE SENS LH	LH side air bag (Satellite) sensor	1. Visually check the wiring harness connection.	D
SATELLITE SENS LH [COMM FAIL]		2. Replace the harness if it has visible damage.	Е
		3. Replace the LH side air bag (Satel- lite) sensor.	
		4. Replace the diagnosis sensor unit.	F
		5. Replace the related harness.	
SATELLITE SENS RH [UNIT FAIL]	RH side air bag (Satellite) sensor	1. Visually check the wiring harness connection.	G
SATELLITE SENS RH [COMM FAIL]		2. Replace the harness if it has visible damage.	
		3. Replace the RH side air bag (Satel- lite) sensor.	SRS
		4. Replace the diagnosis sensor unit.	
		5. Replace the related harness.	
PRE-TEN FRONT LH [OPEN]	• Front LH pre-tensioner circuit is open.	1. Visually check the wiring harness connections.	
PRE-TEN FRONT LH [VB-SHORT]	• Front LH pre-tensioner circuit is shorted to a power supply circuit.	2. Replace the harness if it has visible damage.	J
PRE-TEN FRONT LH	• Front LH pre-tensioner circuit is shorted to ground.	3. Replace front LH seat belt.	
[GND-SHORT]		4. Replace the diagnosis sensor unit.	Κ
PRE-TEN FRONT LH [SHORT]	• Front LH pre-tensioner circuit is shorted between lines.	5. Replace the related harness.	
PRE-TEN FRONT RH [OPEN]	Front RH pre-tensioner circuit is open.	1. Visually check the wiring harness	L
PRE-TEN FRONT RH [VB-SHORT]	• Front RH pre-tensioner circuit is shorted to a power supply cir- cuit.	2. Replace the harness if it has visible damage.	M
PRE-TEN FRONT RH [GND-SHORT]	• Front RH pre-tensioner circuit is shorted to ground.	3. Replace front RH seat belt.	IVI
PRE-TEN FRONT RH [SHORT]	• Front RH pre-tensioner circuit is shorted between lines.	4. Replace the diagnosis sensor unit. 5. Replace the related harness.	
CURTAIN MODULE LH	LH side curtain air bag module circuit is open.	1. Visually check the wiring harness connection.	
CURTAIN MODULE LH [VB-SHORT]	 LH 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 LH [GND-SHORT]	LH side curtain air bag module circuit is shorted to ground.	3. Replace LH side curtain air bag module.	
CURTAIN MODULE LH [SHORT]	• LH side curtain air bag module circuit is shorted between lines.	4. Replace the diagnosis sensor unit. 5. Replace the related harness.	

Diagnostic item	Explanation	Repair order "Recheck SRS at each replacement"
CURTAIN MODULE RH [OPEN]	• RH side curtain air bag module circuit is open.	Visually check the wiring harness connection.
CURTAIN MODULE RH [VB-SHORT]	 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 RH side curtain air bag module.
CURTAIN MODULE RH [SHORT]	• RH side curtain air bag module circuit is shorted between lines.	 Replace the diagnosis sensor unit. Replace the related harness.
CONTROL UNIT	Diagnosis sensor unit is malfunctioning.	1. Visually check the wiring harness connection.
		2. Replace the harness if it has visible damage.
		3. 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.
		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]	• Trouble occurs in Occupant Classification System-CU.	Replace passenger side seat cush- ion assembly.
OCCUPANT SENS [UNIT FAIL]	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.
	System-CU.	2. Replace the harness if it has visible damage.
		 Replace passenger side seat belt assembly.
		4. Replace the diagnosis sensor unit.
OCCUPANT SENS C/U [COMM FAIL]	• Trouble occurs in Occupant Classification System-CU, circuit of Occupant Classification System-CU—Diagnosis Senser Unit, or	1. Visually check the wiring harness connection.
	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.
FRONTAL COLLISION- DETECTION	 Seat belt pre-tensioner and front air bag are deployed. 	• Go to <u>SRS-51, "For Frontal Collision"</u> .
SIDE COLLISION DETECTION	 Side and curtain air bag is deployed. 	• Go to <u>SRS-53, "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.



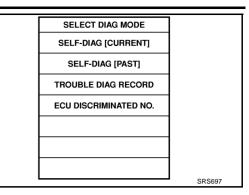
- 5. Check that no malfunction is detected on "SELF-DIAG [PAST]".
- 6. Touch "BACK" key of CONSULT-II until "SELECT SYSTEM" appears in order to return to User mode from Diagnosis mode.
- 7. Turn ignition switch OFF then turn off and disconnect CON-SULT-II. Go to <u>SRS-21</u>, "Checking Air Bag Operation by Using <u>"AIR BAG" Warning Lamp — User Mode</u>".

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

Έ	the first time for maintenance of SRS? <u>S or NO</u> S >> Go to <u>SRS-23, "DIAGNOSTIC PROCEDURE 2"</u> . >> Self-diagnostic result "SELF-DIAG [PAST]" (previously storafter repair. Go to <u>SRS-27, "DIAGNOSTIC PROCEDURE</u>)	
)/	GNOSTIC PROCEDURE 5	
	pecting SRS intermittent malfunction by using CONSULT-II — er to GI-36, "CONSULT-II Start Procedure".	– Diagnosis mode
	Touch "SELF-DIAG [PAST]".	SELECT DIAG MODE
		SELF-DIAG [CURRENT]
		SELF-DIAG [PAST]
		ECU DISCRIMINATED NO.
	If diagnostic codes are displayed on "SELF-DIAG [PAST]", go to	
	step 6.	SELF-DIAG [PAST]
		AIR BAG MODULE [OPEN]
		SRS700
	If no malfunction is detected on "SELF-DIAG [PAST]", touch	SELF-DIAG [PAST]
	"BACK" and go back to "SELECT DIAG MODE".	DTC RESULTS:
		NO DTC IS DETECTED. FURTHER TESTING MAY BE REQUIRED.
		585702

4. Touch "TROUBLE DIAG RECORD". NOTE: With "TROUBLE DIAC RECORD" dia

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



5. Diagnostic code is displayed on "TROUBLE DIAG RECORD".

TROUBLE DIAG RECORD		
DTC RESULTS:		
DRIVER AIR BAG N [OPEN]	IODULE	
		SHIA0182E

- 6. Touch "PRINT".
- 7. Compare diagnostic codes to <u>SRS-31</u>, "CONSULT-II Diagnostic Code Chart ("SELF-DIAG [PAST]" or <u>"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 CONSULT-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. Go to <u>SRS-27, "DIAGNOSTIC PRO-CEDURE 3"</u>, for final checking.

CONSULT-II Diagnostic Code Chart ("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 dete	cted.	Go to <u>SRS-27</u> , "DIAGNOSTIC PRO- CEDURE 3".
DRIVER AIRBAG 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
DRIVER AIRBAG MODULE VB-SHORT]	Driver air bag module (including the spiral ca	circuit is shorted to a power supply circuit able).	damage. 3. If the harness check result is OK, replace driver air bag module. diag-
DRIVER AIRBAG MODULE [GND-SHORT]	Driver air bag module spiral cable).	circuit is shorted to ground (including the	nosis sensor unit and spiral cable.
DRIVER AIRBAG MODULE SHORT]	Driver air bag module	circuit is shorted between lines.	
ASSIST A/B MODULE OPEN]	 Front passenger air bag 	ag module circuit is open.	1. Visually check the wiring harness connection.
ASSIST A/B MODULE VB-SHORT]	 Front passenger air ba supply circuit. 	ag module circuit is shorted to a power	2. Replace the harness if it has visible damage.
ASSIST A/B MODULE [GND-SHORT]	 Front passenger air bag 	ag module circuit is shorted to ground.	3. If the harness check result is OK, replace the diagnosis sensor unit
ASSIST A/B MODULE [SHORT]	 Front passenger air ba 	ag module circuit is shorted between lines.	and front passenger air bag module.
CRASH ZONE SEN UNIT FAIL]	Crash zone sensor		1. Visually check the wiring harness connection.
CRASH ZONE SEN [COMM FAIL]			 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]	 Front LH side air bag 	module circuit is open.	1. Visually check the wiring harness connection.
SIDE MODULE LH [VB-SHORT]	 Front LH side air bag ply circuit. 	module circuit is shorted to a power sup-	2. Replace the harness if it has visible damage.
SIDE MODULE LH GND-SHORT]	• Front LH side air bag	module circuit is shorted to ground.	3. If the harness check result is OK, replace the diagnosis sensor unit
SIDE MODULE LH SHORT]	• Front LH side air bag	module circuit is shorted between lines.	and front LH side air bag module.
SIDE MODULE RH OPEN]	• Front RH side air bag	module circuit is open.	1. Visually check the wiring harness connection.
SIDE MODULE RH VB-SHORT]	• Front RH side air bag ply circuit.	module circuit is shorted to a power sup-	2. Replace the harness if it has visible damage.
SIDE MODULE RH [GND-SHORT]	• Front RH side air bag	module circuit is shorted to ground.	3. If the harness check result is OK, replace the diagnosis sensor unit
SIDE MODULE RH [SHORT]	• Front RH side air bag	module circuit is shorted between lines.	and front RH side air bag module.

Diagnostic item	Explanation	Repair order "Recheck SRS at each replacement"	
SATELLITE SENS LH [UNIT FAIL]	LH side air bag (Satellite) sensor	1. Visually check the wiring harness connection.	
SATELLITE SENS LH [COMM FAIL]		2. 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. 	
SATELLITE SENS RH [UNIT FAIL]	• RH side air bag (Satellite) sensor	1. Visually check the wiring harness connection.	
SATELLITE SENS RH [COMM FAIL]		2. Replace the harness if it has visible damage.	
		 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]	• Front LH pre-tensioner circuit is open.	1. Visually check the wiring harness	
PRE-TEN FRONT LH [VB-SHORT]	• Front LH pre-tensioner circuit is shorted to a power supply circuit.	connections. 2. Replace the harness if it has visible	
PRE-TEN FRONT LH [GND-SHORT]	• Front LH pre-tensioner circuit is shorted to ground.	damage. 3. If the harness check result is OK,	
PRE-TEN FRONT LH [SHORT]	• Front LH pre-tensioner circuit is shorted between lines.	replace the diagnosis sensor unit and front LH seat belt.	
PRE-TEN FRONT RH [OPEN]	• Front RH pre-tensioner circuit is open.	1. Visually check the wiring harness connections.	
PRE-TEN FRONT RH [VB-SHORT]	• Front RH pre-tensioner circuit is shorted to a power supply cir- cuit.	2. Replace the harness if it has visible damage.	
PRE-TEN FRONT RH [GND-SHORT]	• Front RH pre-tensioner circuit is shorted to ground.	3. If the harness check result is OK, replace the diagnosis sensor unit	
PRE-TEN FRONT RH [SHORT]	• Front RH pre-tensioner circuit is shorted between limes.	and front RH seat belt.	
CURTAIN MODULE LH [OPEN]	• LH side curtain air bag module circuit is open.	1. Visually check the wiring harness	
CURTAIN MODULE LH [VB-SHORT]	• LH side curtain air bag module circuit is shorted to a power supply circuit.	connection. 2. Replace the harness if it has visible	
CURTAIN MODULE LH [GND-SHORT]	• LH side curtain air bag module circuit is shorted to ground.	damage. 3. If the harness check result is OK, replace the diagnosis sensor unit	
CURTAIN MODULE LH [SHORT]	• LH side curtain air bag module circuit is shorted between lines.	and LH side curtain air bag module.	
CURTAIN MODULE RH [OPEN]	• RH side curtain air bag module circuit is open.	1. Visually check the wiring harness	
CURTAIN MODULE RH [VB-SHORT]	• RH side curtain air bag module circuit is shorted to a power supply circuit.	connection. 2. Replace the harness if it has visible	
CURTAIN MODULE RH [GND-SHORT]	• 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	
CURTAIN MODULE RH [SHORT]	• RH side curtain air bag module circuit is shorted between lines.	and RH side curtain air bag module.	
CONTROL UNIT	• Diagnosis sensor unit is malfunctioning.	1. Visually check the wiring harness connection.	
		 Replace the harness if it has bisible damage. Replace the diagnostic concernant. 	
		3. Replace the diagnosis sensor unit.	

Diagnostic item	Explanation	Repair order "Recheck SRS at each replacement"
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.
		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]	Trouble occurs in Occupant Classification System-CU.	 Replace passenger side seat cush- ion assembly.
OCCUPANT SENS [UNIT FAIL]	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 System-CU. 	1. Visually check the wiring harness connection.
		2. Replace the harness if it has visible damage.
		3. Replace passenger side seat belt assembly.
		4. Replace the diagnosis sensor unit.
OCCUPANT SENS C/U [COMM FAIL]	 Trouble occurs in Occupant Classification System-CU, circuit of Occupant Classification System-CU—Diagnosis Senser 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 the diagnosis sensor unit.
FRONTAL COLLISION- DETECTION	 Seat belt pre-tensioner and front air bag are deployed. 	• Go to <u>SRS-51, "For Frontal Colli-</u> sion".
SIDE COLLISION DETECTION	 Side and curtain air bag is deployed. 	• Go to <u>SRS-53, "For Side Collision"</u> .

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Trouble Diagnosis without CONSULT-II DIAGNOSTIC PROCEDURE 6

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

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

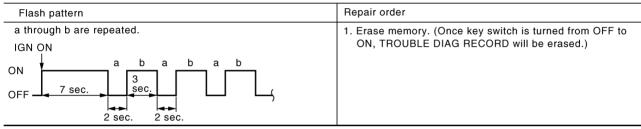
- 1. Turn ignition switch ON.
- 2. After "AIR BAG" warning lamp lights for 7 seconds, turn ignition switch OFF within 1 second.
- 3. Wait more than 3 seconds.
- 4. Repeat the steps 1 to 3 two times.
- 5. Turn ignition switch ON.

SRS is now in Diagnosis mode.

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

WARNING LAMP FLASH CODE CHART

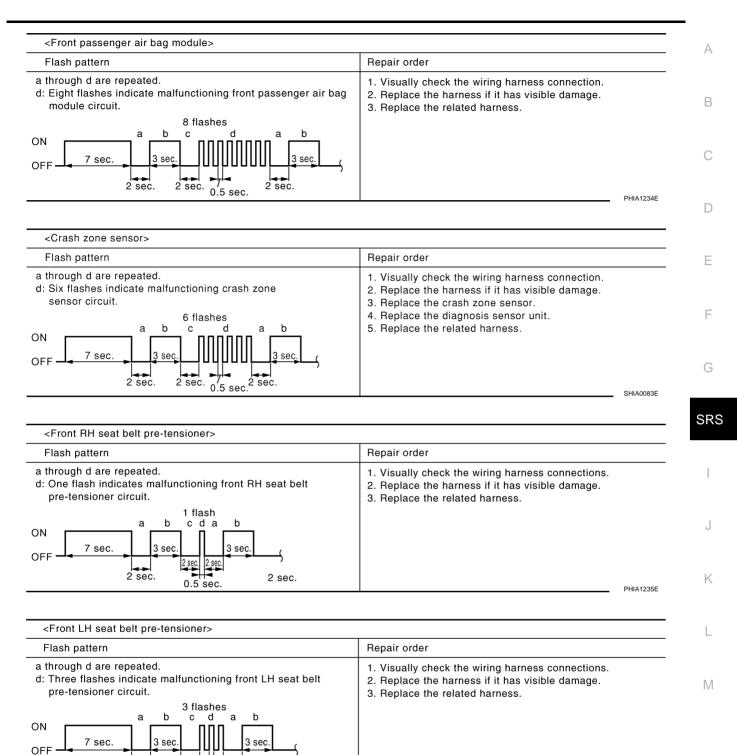
<Diagnosis results (previously stored in the memory) might not be erased after repair or intermittent malfunctions have been detected in the past.>



PHIA0532E

<driver air="" bag="" module=""></driver>		
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. 	
ON OFF 7 sec. 2 sec. 2 sec. 0.5 sec. 2 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.	 Visually check the wiring harness connections. Replace the harness if it has visible damage. Replace the diagnosis sensor unit. Replace the related harness.

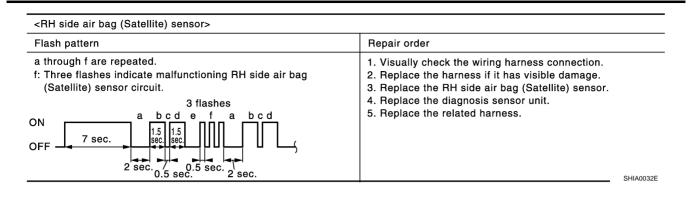


2 sec./ 2 s 0.<u>5 sec</u>.

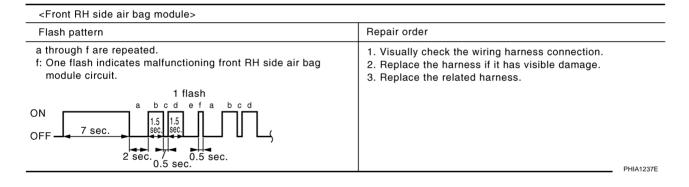
2 sec.

2 sec.

PHIA1236E

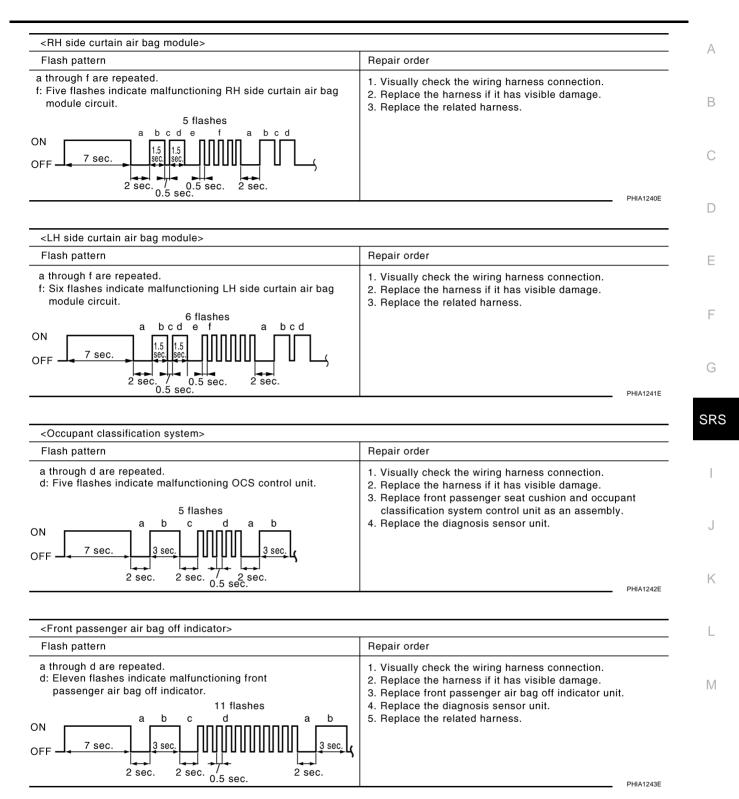


<LH side air bag (Satellite) sensor> Flash pattern Repair order a through f are repeated. 1. Visually check the wiring harness connection. f: Four flashes indicate malfunctioning LH side air bag 2. Replace the harness if it has visible damage. (Satellite) sensor. 3. Replace the LH side air bag (Satellite) 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. 2 flashes 2 flashes 0 0, 5 sec. 0,5 sec.	 Visually check the wiring harness connection. Replace the harness if it has visible damage. Replace the related harness. 	
0.5 sec. 2 sec.		PHIA1238E

TROUBLE DIAGNOSIS



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-51, "COLLISION DIAGNOSIS"</u>.

NO >> GO TO 2.

2. CHECK THE AIR BAG FUSE

Check 10A fuse [No.20, located in fuse block (J/B)]. Refer to PG-2, "POWER SUPPLY ROUTING".

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?

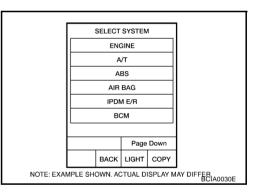
- YES >> Repair or replace main harness.
- NO >> INSPECTION END

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.



NHS0004M

Trouble Diagnosis: "AIR BAG" Warning Lamp Does Not Turn ON DIAGNOSTIC PROCEDURE 8	NHS0004N				
1. CHECK "METER" FUSE					
Check 10A fuse [No.9, located in fuse block (J/B)]. Refer to <u>PG-2, "POWER SUPPLY ROUTING"</u> . <u>OK or NG</u> OK >> GO TO 3. NG >> GO TO 2.					
2. CHECK "METER" FUSE AGAIN					
Replace 10A fuse [No.9, 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 3. CHECK HARNESS CONNECTION BETWEEN DIAGNOSIS SENSOR UNIT AND COMB METER	INATION				
Disconnect diagnosis sensor unit connector and turn ignition switch ON. Does "AIR BAG" warning lamp turn ON? <u>YES or NO</u> YES >> Replace diagnosis sensor unit. NO >> Replace combination meter assembly.					

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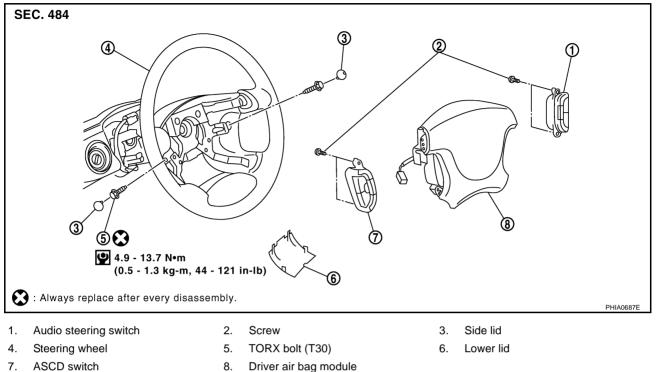
DRIVER AIR BAG MODULE

DRIVER AIR BAG MODULE

PFP:K8510

NHS00040

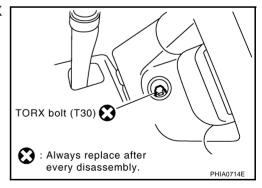
Removal and Installation



REMOVAL

CAUTION:

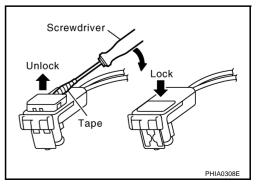
- Before servicing SRS, turn the ignition switch off, disconnect both battery cables and wait at least 3 minutes.
- Always work from the side of driver air bag module.
- 1. Remove the side lids.
- 2. Using Tamper resistant TORX bit (TH30), remove the TORX bolts (T30) at right and left.



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

CAUTION:

- 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.

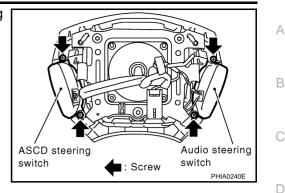


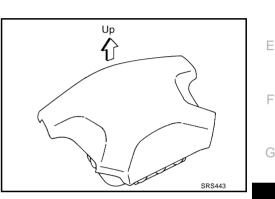
DRIVER AIR BAG MODULE

5. Remove the ASCD and audio steering switch from the air bag module.



- 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 attempt to 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.



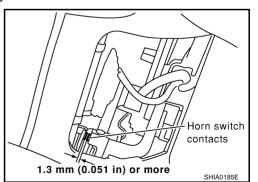




INSTALLATION

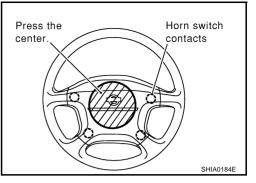
Install in the reverse order of removal paying attention to the following.

 After installing the air bag module, check that the contact clearance of the horn switch is in the specified range in the right.

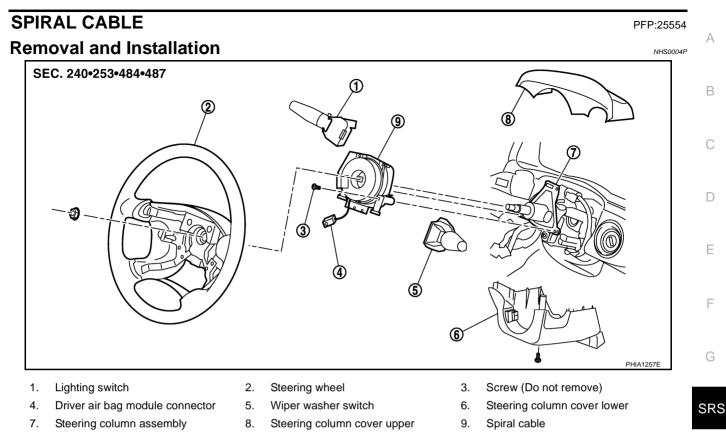


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- For installing the air bag module, tighten the special bolts with the center of the horn pad pressed to make the contacts (RH/LH) ON.
- After the work is completed, perform self-diagnosis to check that no malfunction is detected. Refer to <u>SRS-21, "SRS Operation</u> <u>Check"</u>.



SPIRAL CABLE

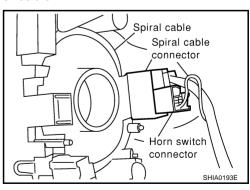


REMOVAL

CAUTION:

Before servicing SRS, turn the ignition switch off, disconnect both battery cables and wait at least 3 minutes.

- 1. Remove driver air bag module. Refer to <u>SRS-40, "Removal and Installation"</u>.
- 2. Set the steering wheel in the neutral position.
- 3. Remove steering wheel. Refer to PS-8, "STEERING WHEEL" .
- 4. Remove column cover. Refer to IP-12, "(A) Steering Column Cover" .
- 5. Remove the spiral cable fixing screws, and while pushing the upper plastic tab, remove the spiral cable.
- CAUTION: • Do not attempt to disassemble spiral cable.
 - Do not apply lubricant to the spiral cable.
- 6. Remove the wiper washer switch and lighting switch from the spiral cable.
- 7. Disconnect the horn switch connector, and then the spiral cable connector.



INSTALLATION

Install in the reverse order of removal.

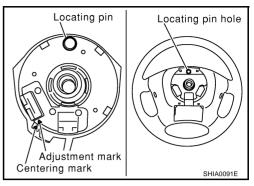
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CAUTION:

- The spiral cable may snap due to steering operation if the cable is installed in an improper position.
- Also, with the steering linkage disconnectedly cable may snap by turning the steering wheel beyond the limited number of turns. The spiral cable can be turned to the left about 2.5 turns from the right end position.
- After the work is completed, perform self-diagnosis to check that no malfunction is detected. Refer to <u>SRS-21</u>, <u>"SRS Operation Check"</u>.



FRONT PASSENGER AIR BAG MODULE

Removal and Installation REMOVAL

CAUTION:

Before servicing SRS, turn the ignition switch off, disconnect both battery cables and wait at least 3 minutes.

> SEC. 680 Special bolt

14.7 - 24.5 N•m

11 - 18 ft-lb)

Front passenger

- Always work from the side of or under front passenger air bag module.
- Remove the instrument lower cover, and disconnect the passenger air bag harness connector. 1.
- Remove the glove box. Refer to IP-10, "INSTRUMENT PANEL ASSEMBLY" . 2.
- Remove the audio unit. Refer to AV-52, "Removal and Installation of Audio Unit" . 3.
- Remove the hex bolts. 4

Pull the passenger air bag module toward the rear of the vehicle, 5. while being careful not to impact it. Pull it from between the instrument panel and the steering wheel member downward to remove.

CAUTION:

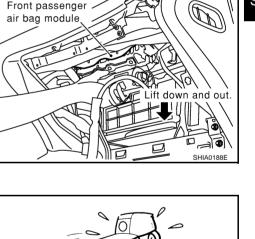
- Always place front passenger air bag module with caution label side facing upward.
- Do not insert any foreign objects (screwdriver, etc.) into front passenger air bag module.
- Do not attempt to disassemble front passenger air bagmodule.
- Do not use old bolts after removal; replace with new bolts.
- 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 check that no malfunction is detected. Refer to SRS-21, "SRS Operation Check" .



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(1.5 - 2.5 kg-m, air bag module

: Always replace after

every disassembly.

Front passenger

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SRS-45

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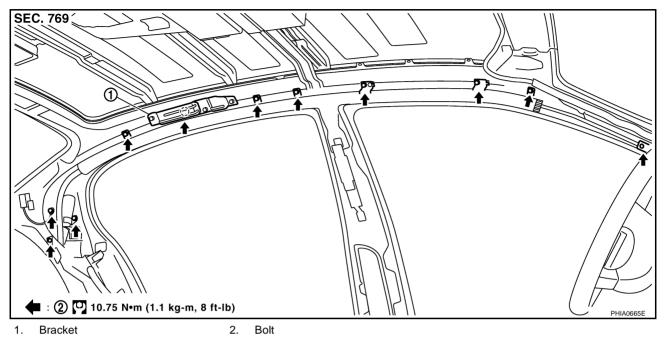
SIDE CURTAIN AIR BAG MODULE

SIDE CURTAIN AIR BAG MODULE

PFP:985P0

Removal and Installation

NHS0004R



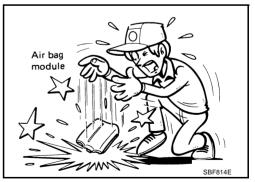
REMOVAL

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 the side curtain air bag module.
- 1. Remove rear pillar finisher. Refer to EI-43, "Removal and Installation".
- 2. Disconnect the side curtain air bag module connector.
- 3. Remove headlining. Refer to EI-58, "Removal and Installation" .
- 4. 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 caution label facing upward.
- Do not attempt to 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.



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

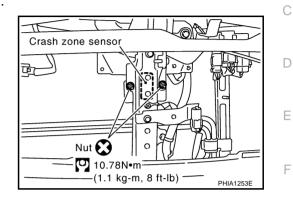
CRASH ZONE SENSOR

Removal and Installation REMOVAL

CAUTION:

Before servicing SRS, turn the ignition switch off, disconnect both battery cables and wait at least 3 minutes.

- 1. Remove front grille. Refer to EI-21, "Removal and Installation" .
- 2. Remove crash zone sensor connector.
- 3. Remove crash zone sensor fixing nuts.



CAUTION:

- Replace crash zone sensor if it has been dropped or sustained an impact.
- Do not attempt to 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 check that no malfunction is detected. Refer to <u>SRS-21, "SRS Operation Check"</u>.

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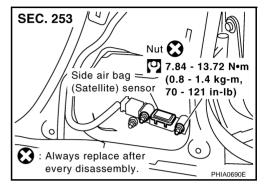
SIDE AIR BAG (SATELLITE) SENSOR

Removal and Installation REMOVAL

CAUTION:

Before servicing SRS, turn the ignition switch off, disconnect both battery cables and wait at least 3 minutes.

- 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.



CAUTION:

- Do not use old bolts, replace with new ones.
- Check side air bag (Satellite) sensor to ensure they are free of deformities, dents, cracks or rust. If it shows any visible signs of damage, replace it with new one.
- Do not attempt to disassemble side air bag (Satellite) sensor.
- Replace side air bag (Satellite) sensor if it has been dropped or sustained an impact.
- When the front side air bag or side curtain air bag deploys, always replace it with a new one.

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

PFP:98830

NHS0004T

FRONT SEAT BELT PRE-TENSIONER

FRONT SEAT BELT PRE-TENSIONER	PFP:86884
Removal and Installation	NHS0004U
To removal and installation procedures, refer to <u>SB-3, "Removal and Installation of Front Seat Belt"</u>	
	S

DIAGNOSIS SENSOR UNIT

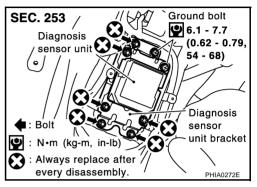
Removal and Installation REMOVAL

CAUTION:

Before servicing SRS, turn the ignition switch off, disconnect both battery cables and wait at least 3 minutes.

- 1. Disconnect each harness connector for the air bag module and seat belt pre-tensioner.
- 2. Remove center console. Refer to IP-10, "Removal and Installation".
- 3. Disconnect diagnosis sensor unit connector.
- 4. Remove the TORX bolts (T50).

TORX bolts (T50): 14.7 - 24.5 N.m (1.5 - 2.5 kg-m, 11 - 18 ft-lb)



CAUTION:

- Do not use old bolts. Replace with new ones.
- Check diagnosis sensor unit brackets to ensure it is free of deformities, dents, cracks or rust. If it shows any visible signs of damage, replace it 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 check that no malfunction is detected. Refer to <u>SRS-21, "SRS Operation Check"</u>.

ECU DISCRIMINATED NO.

After replacing air bag sensor unit, confirm control unit discriminated number.

Specification	ECU DISCRIMINATED No.
Model with driver and passenger air bags, seat belt pre-tensioner, side air bags and curtain air bags	FAC1H

PFP:28556

NHS0004V

	DIAGNOSIS				
For Frontal		PFP:00015	А		
		NHS0004W			
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:					
•	e diagnosis sensor unit.				
	e air bag modules (except the front side sensor assembly, bracket and seat belt	e air bag modules and side curtain air bag modules), pre-tensioner assemblies.	С		
	Check the SRS components using the table below:				
 Replace an 	y SRS components showing visible sign	s of damage (dents, cracks and deformation).	_		
	air bag modules (except the front side air r assembly, bracket and seat belt pre-ter	r bag modules and side curtain air bag modules) crash nsioner assemblies.	D		
	If-diagnosis using CONSULT-II or "AIR E details. Ensure entire SRS operates pro	BAG" warning lamp. Refer to <u>SRS-21, "SRS Operation</u> perly.	E		
When SRS is n	ot activated in a collision:				
1. Check the S	SRS components using the table below:				
 Replace an 	y SRS components showing visible sign	s of damage (dents, cracks and deformation).	F		
	If-diagnosis using CONSULT-II or "AIR E details. Ensure entire SRS operates pro	BAG" warning lamp. Refer to <u>SRS-21, "SRS Operation</u> perly.			
When only one	front air bag module is activated in a	collision:	G		
1. Replace the	e following components:				
 Diagnosis s 	ensor unit		SR		
 Crash zone 	sensor				
 Activated fr 	ont air bag and seat belt pre-tensioner.				
		elow. (Refer to "SRS is NOT activated".)			
•		s of damage (dents, cracks and deformation).			
	elf-diagnosis using CONSULT-II or "AIR E details. Ensure entire SRS operates pro	BAG" warning lamp. Refer to <u>SRS-21, "SRS Operation</u> perly.	J		
are belted or ur		on the crash severity and whether the front occupants performance of the system. Perform self-diagnosis to	K		
SRS INSPECT	TION (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]	L		
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]	M		
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- tensioner assem- blies	If the driver or passenger Seat belt pre- tensioner 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	If none of the SRS components have been activated: [same text as in current manual]			

REPLACE the Diagnosis sensor unit.

Install with new fasteners.

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.			
nectors	2. Check harness for binding, chafing, cuts, or deformities.			
	3. If no damage is found, reinstall the harness and connectors.			
	4. If damaged—REPLACE damaged section of harness. Do not repair, splice or modify any SRS harness.			
Instrument panel	1. Visually check instrument panel for damage.			
	2. If no damage is found, reinstall the instrument panel.			
	3. If damaged—REPLACE the instrument panel with bolts.			

	or Side Collision NH50004X	
1.	Replace the following components:	
-	All parts of front seatback (including front seat back 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.	
WI	HEN 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).	
2.	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.	
SR	S 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	S
	REPLACE the side curtain air bag mod-	 Check for visible signs of damage (dents, tears, deformation) of the center pillar on the collision side. If damaged— Remove LH or RH side curtain air bag module. Check for visible sizes of demaged (tears at) of LH or RH side curtain air bag. 	-
H or RH side curtain	ule. (Repair the center pil-	 Check for visible signs of damaged (tears etc.) of LH or RH side curtain air bag module. 	
	lar inner, etc. before installing new one if	4. Check harness and connectors for damage, and terminals for deformities.	
	damaged.)	If no damage is found, reinstall LH or RH side curtain air bag module with new bolts.	
		6. If damaged—REPLACE 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	1. Check for visible signs of damage (dents, tears, deformation) of the seatback on the collision side.	-
	deployed front side air bag module.	If damaged—REPLACE the damaged seat parts with new bolts and remove the front side air bag module.	
		3. Check for visible signs of damaged (tears etc.) of the front side air bag module.	
		4. Check harness and connectors for damage, and terminals for deformities.	
		5. If no damaged is found, reinstall the front side air bag module with new torx nuts coated with bonding agent.	
		6. If damaged—REPLACE the front seatback assembly.	
Front LH or RH side air bag (Satellite) sen- sor	REPLACE front LH or RH side air bag (Sat- ellite) sensor on the	 Remove the front LH or RH side air bag (Satellite) sensor on the collision side. Check harness connectors for damage, terminals for deformities, and harness for binding. 	-
	collision side with new nuts. (Repair the center pil- lar inner, etc. before	Check for visible signs of damage (dents, cracks, deformation) of front LH or RH side air bag (Satellite) sensor.	
		3. Install front LH or RH side air bag (Satellite) sensor to check fit.	
	installing new one if damaged.)	If no damage is found, reinstall front LH or RH side sir bag (Satellite) sensor with new nuts.	
		 If damaged—REPLACE front LH or RH side air bag (Satellite) sensor with new nuts. 	

Part	Front side air bag and side curtain air bag is activated	Front side air bag and side curtain air bag is NOT activated	
Diagnosis sensor unit	REPLACE the diag- nosis sensor unit with the new bolts.	1. Check case and bracket for dents, cracks or deformities.	
		2. Check connectors for damage, and terminals for deformities.	
		3. If no damage is found, reinstall the diagnosis sensor unit with new bolts and ground bolt.	
		4. If damaged—REPLACE the diagnosis sensor unit with new bolts and ground bolt.	
Seat belt pre- tensioner assembly	1. Check if the seat belt can be extended smoothly. If the seat belt cannot 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.	
	2. Remove the seat belt pre-tensioner assembly on the collision side. Check harness cover and connectors for damage, terminals for deformities, and harness for binding.		
	3. Check for visible signs of damage (dents, cracks, deformation) of the seat belt pre-tensioner assembly.		
	4. Check seat belt adjuster for damage.		
	5. If no damage is found, reinstall the seat belt pre-tensioner assembly.		
	6. If damaged—REPLACE the seat belt pre-tensioner assembly with new bolts.		
Seat with front side	REPLACE all parts of front seatback (including front seat- back frame)	1. Visually check the seat on the collision side.	
air bag		Remove the seat on the collision side and check the following for damage and deformities.	
		 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	r 1. Check the center inner pillar on the collision side for damage (dents, cracks, deformation).		
	2. If damaged—REPAIR the center inner pillar.		
Trim/headlining	dlining 1. Check for visible signs of damage (dents, cracks, deformation) of the interior trim on the collision side.		
	2. If damaged—REPLACE the damaged trim parts.		