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-90, "FRONT SEAT"</u>. SRS

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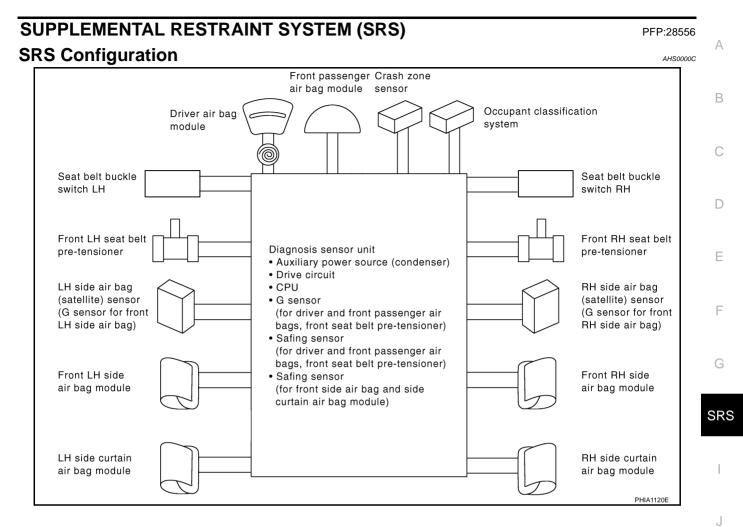
PREPARATION

PREPARATION Commercial Service Tools

PFP:00002

commercial Service Tool	S		AHS0001B
Tool name		Description	
Tamper resistant TORX bit	S-NT757	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.

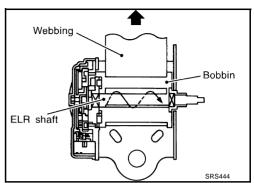
When the frontal collision with an impact exceeding a specified level occurs, seat belt slack resulting from clothing or other factors is immediately taken up by the pre-tensioner. Vehicle passengers are securely restrained.

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

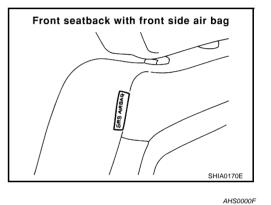
Front side air bag is built-in type. The front seatback with built-in type s

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



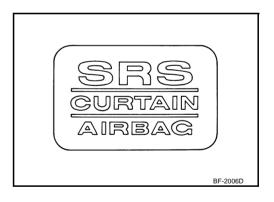
AHS0000E

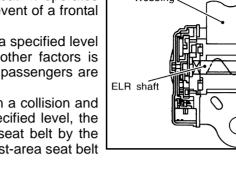
AHS0000D



Side Curtain Air Bag

The side curtain air bags have the labels as shown.





Occupant Classification System

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

NOTE:

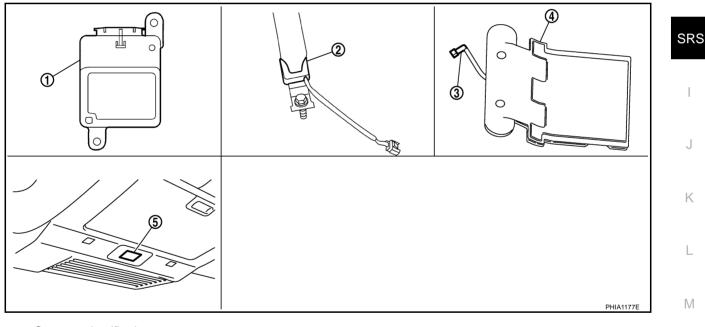
In case of customer concern, CONSULT-II can be used to confirm the passenger air bag status (readiness).

Passenger Air Bag Status Conditions

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 occupied NOTE	ON	Deactivated (disabled)	OFF	F
Seat empty	OFF	Deactivated (disabled)	OFF	

NOTE:

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



- 1. Occupant classification system control unit 2. E
 - Belt tension sensor
- 3. Seat pressure sensor

4. Bladder

5. Front passenger air bag OFF indicator AHS000RW

AHS000VT

PFP:00004

AHS0000G

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-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 DIAGNOSIS FOR QUICK AND ACCURATE REPAIR

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

Information from Customer

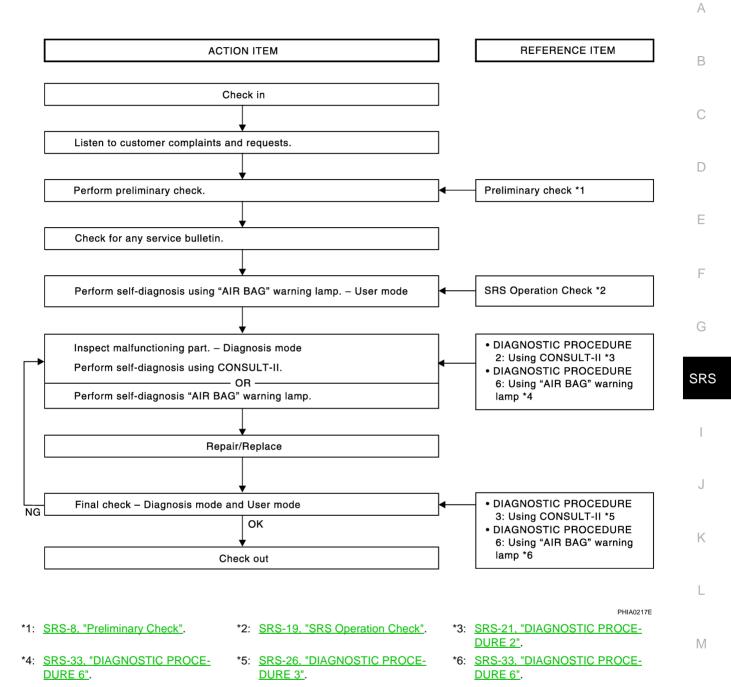
WHAT..... Vehicle model WHEN..... Date, Frequencies WHERE..... Road conditions HOW..... Operating conditions, Symptoms

Preliminary Check

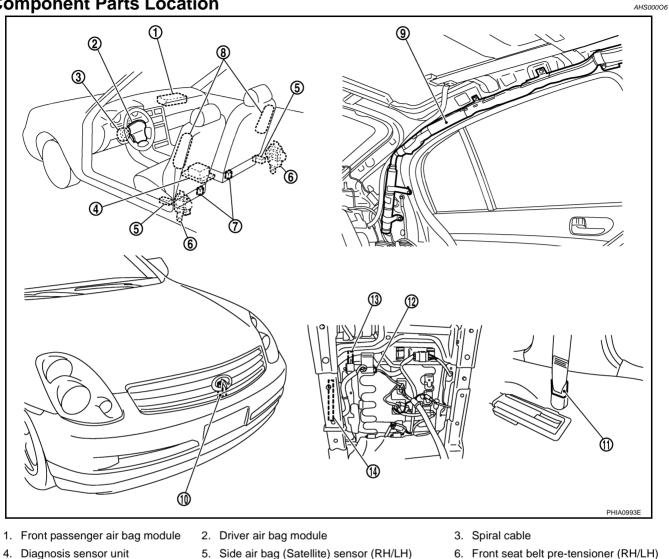
Make sure the following parts are in good order.

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

WORK FLOW



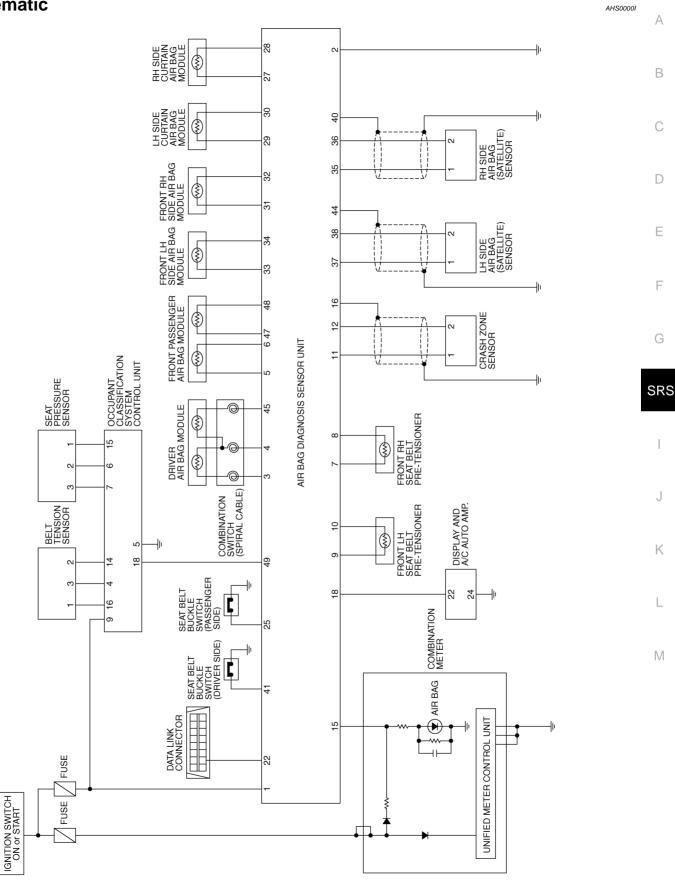
Component Parts Location



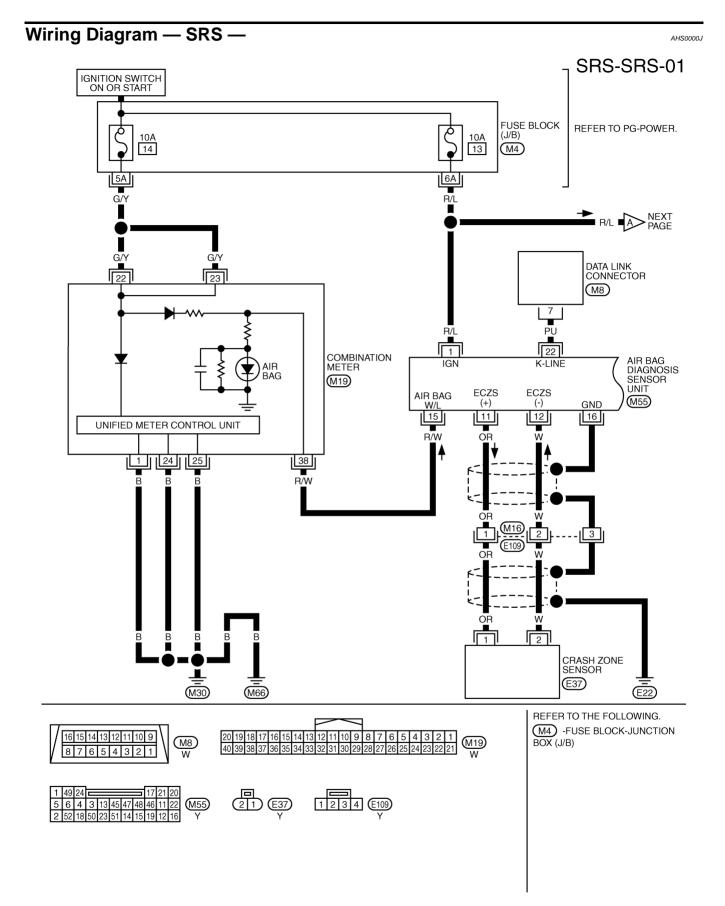
- 7. Seat belt buckle switch (RH/LH)
- 10. Crash zone sensor
- 13. Seat pressure sensor *
- 5. Side air bag (Satellite) sensor (RH/LH)
- 8. Front side air bag module
- 11. Belt tension sensor
- 14. Occupant classification system control unit *
- 6. Front seat belt pre-tensioner (RH/LH)
- 9. Side curtain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

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

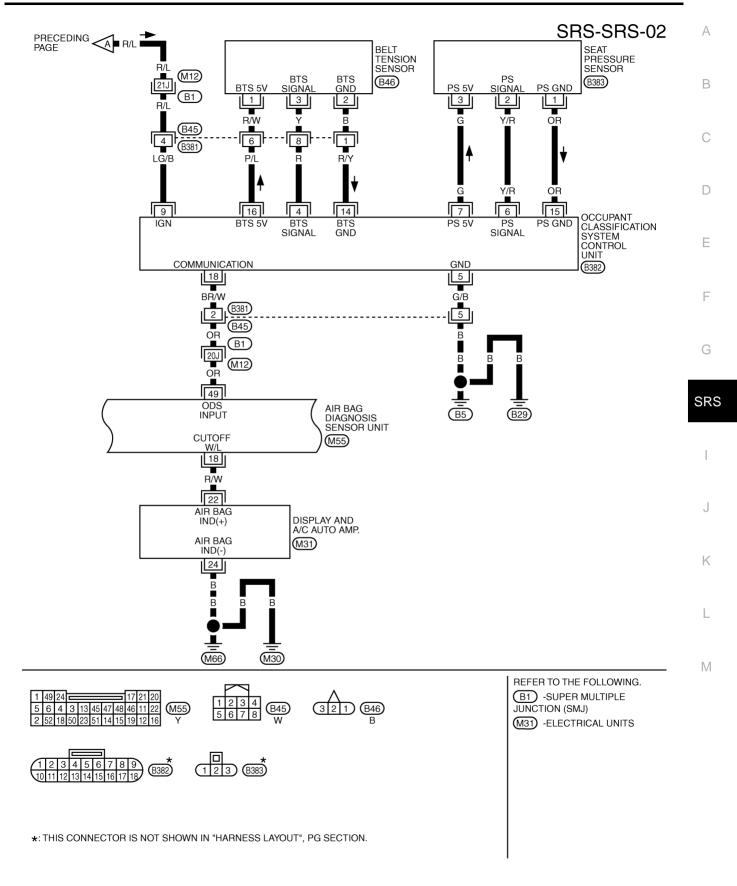
Schematic



THWM0101E

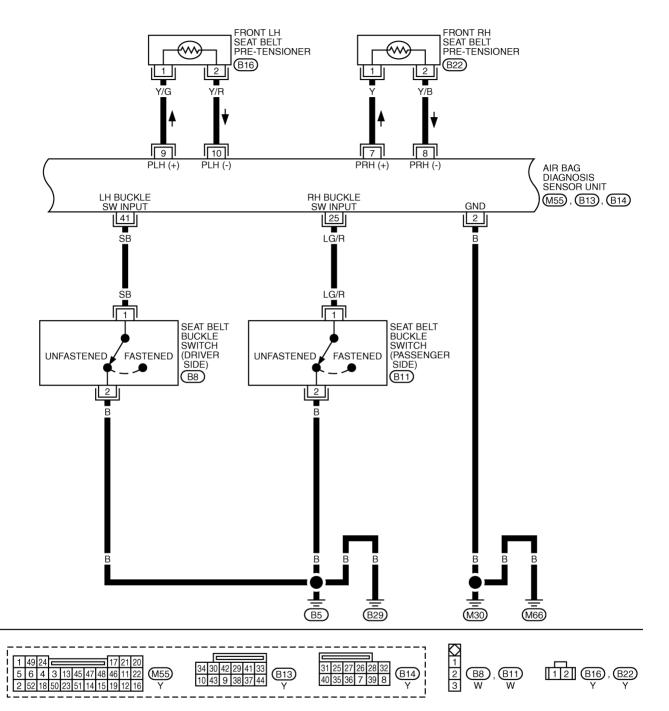


THWM0102E

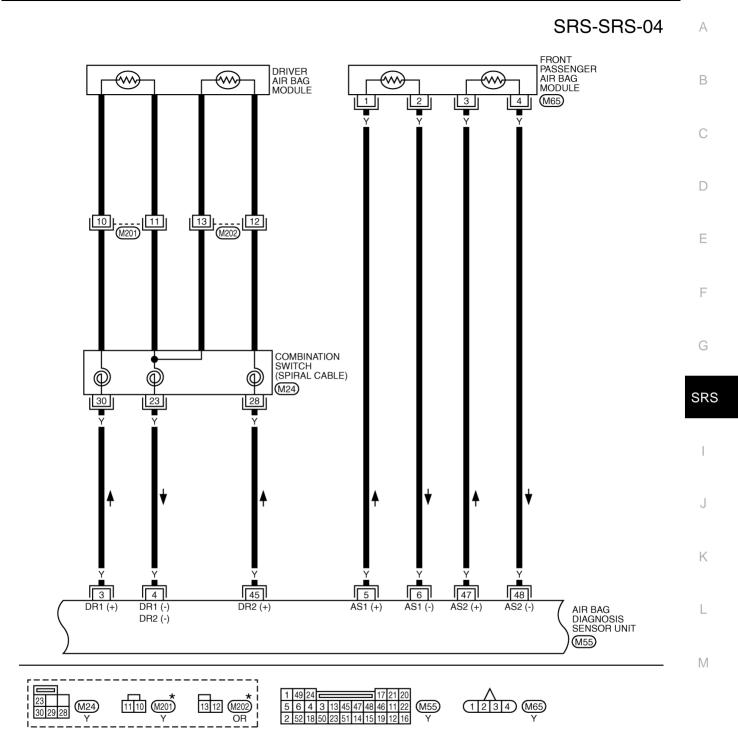


THWM0103E

SRS-SRS-03



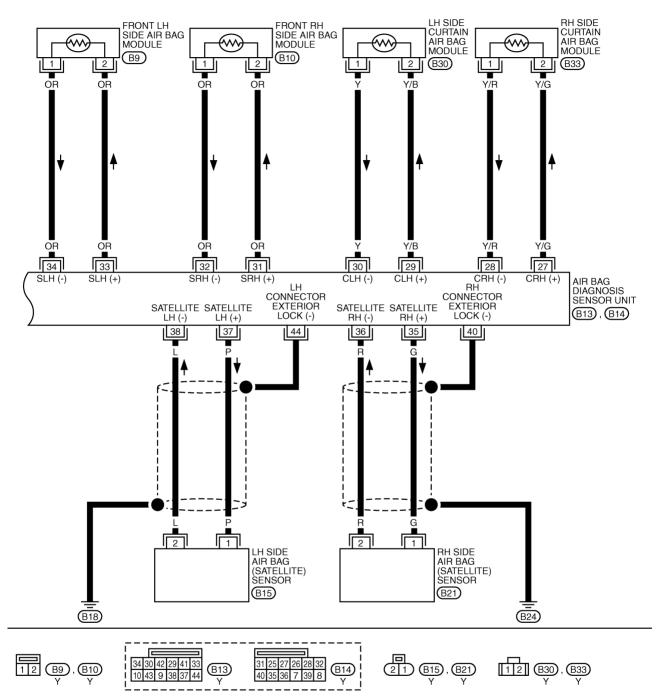
THWM0134E



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

THWM0105E

SRS-SRS-05



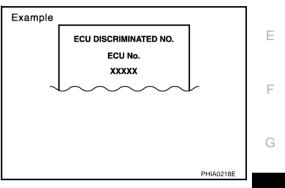
THWM0106E

CONSULT-II Function DIAGNOSIS MODE FOR CONSULT-II

- "SELF-DIAG [CURRENT]"
 A current self-diagnosis results (also indicated by the number of warning lamp flashes in the Diagnosis mode) is displayed on the CONSULT-II screen in real time. This refers to a malfunctioning part requiring repairs.
- "SELF-DIAG [PAST]"
 Diagnosis results previously stored in the memory are displayed on the CONSULT-II screen. The stored 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-49</u>, <u>"ECU DISCRIMINATED NO."</u>.



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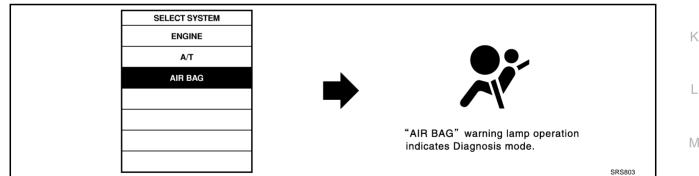
• PASSENGER AIR BAG

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" 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.

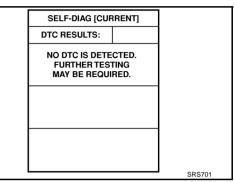
HOW TO ERASE SELF-DIAGNOSTIC RESULTS

- "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)

AHS0000L

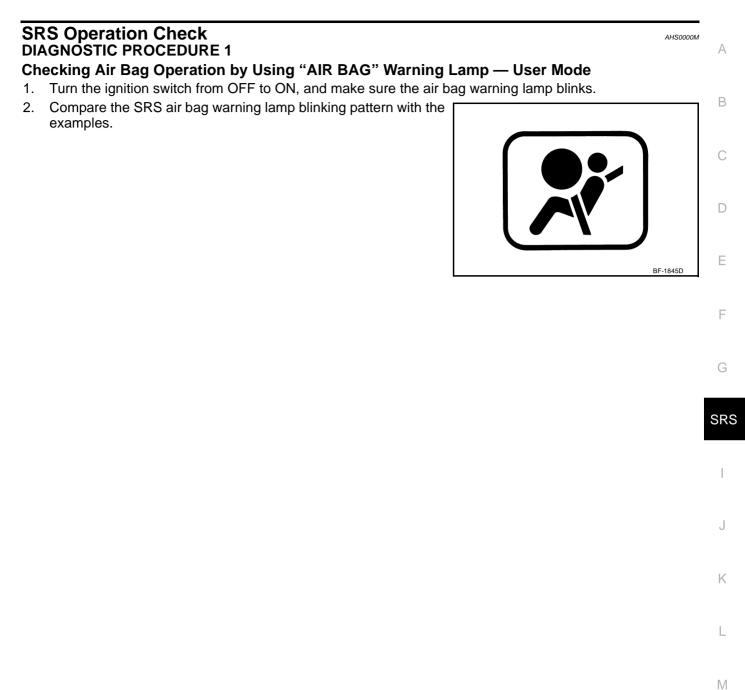
- The reading of these results is accomplished "User mode" and "Diagnosis mode".
- After a malfunction is repaired, turn ignition switch ON. Diagnosis mode returns to the User mode. At that time, the self-diagnosis result is cleared.

HOW TO CHANGE SELF-DIAGNOSIS MODE WITHOUT CONSULT-II

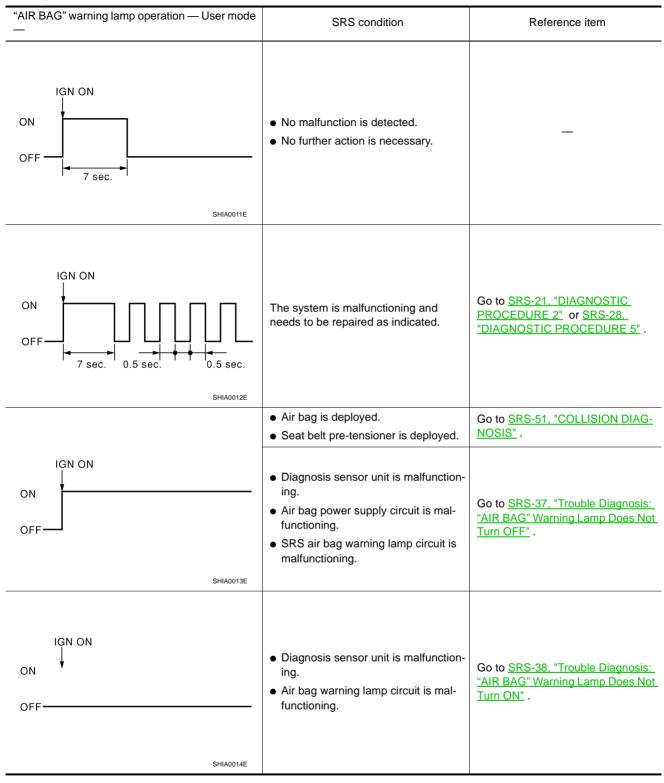
	 Turn ignition switch from OFF to ON. Air bag warning lamp is on for 7 seconds and turns off, then turn ignition switch OFF within 1 second after the lamp turns off. After ignition switch is turned OFF, wait for more than 3 seconds. Repeat steps 1 to 3 twice. (Perform 3 times in total.) Turn ignition switch ON. (Self-diagnostic mode turns to Diagnosis mode.) 	
User mode		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.) 	lgnition switch OFF→ON
by ignition In Diagne	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

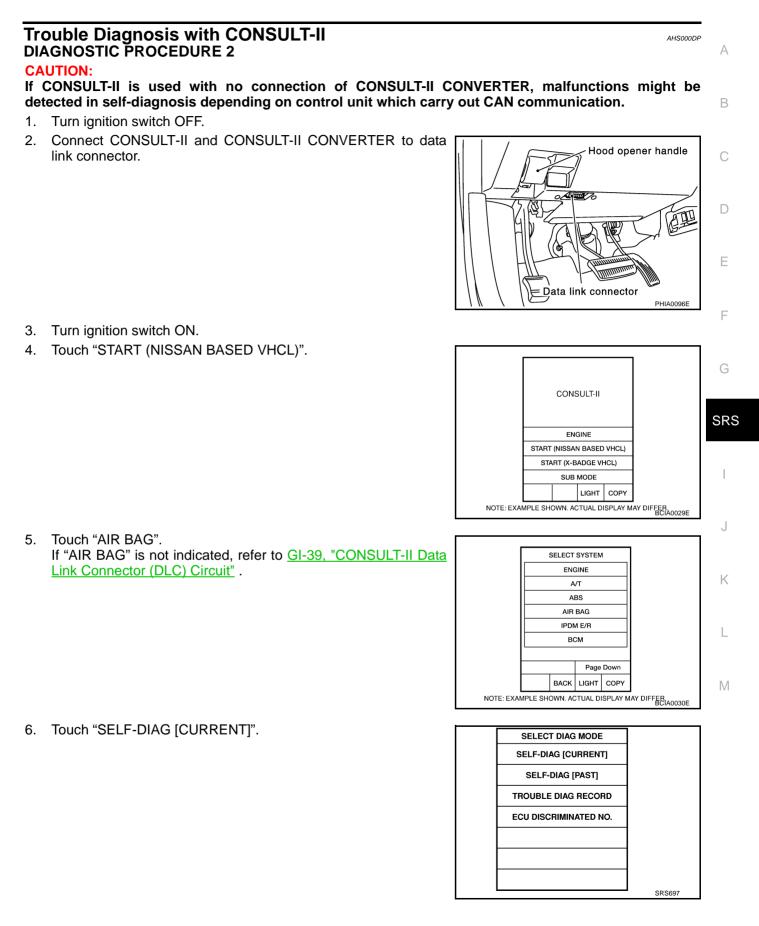
HOW TO ERASE SELF-DIAGNOSTIC RESULTS

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-diagnosis result is cleared.

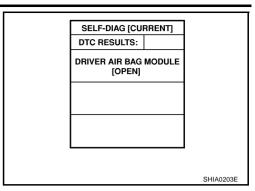


Warning lamp examples





7. 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 9 V, charge or replace the battery. Then go to <u>SRS-26</u>, "<u>DIAGNOSTIC PROCE-DURE 3</u>". If the battery voltage is OK, go to <u>SRS-28</u>, "<u>DIAGNOSTIC PROCEDURE 4</u> (<u>CONTINUED FROM DIAGNOSTIC PROCEDURE</u> <u>2</u>)" to diagnose the following cases:

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

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 9 V)	 Go to <u>SRS-26, "DIAGNOSTIC PRO-</u> <u>CEDURE 3"</u> after charging the bat- tery.
	User mode.	 Self-diagnosis 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-28</u>, "DIAGNOSTIC PRO- <u>CEDURE 4</u> (CONTINUED FROM <u>DIAGNOSTIC PROCEDURE 2)</u>". Go to <u>SRS-28</u>, "DIAGNOSTIC PRO- <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 the 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 bag 	ag module circuit is open.	1. Visually check the wiring harness connection.
ASSIST A/B MODULE [VB-SHORT]	 Front passenger air bas 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 ba	ag module circuit is shorted to ground.	3. Replace the front passenger air bag module.
ASSIST A/B MODULE [SHORT]	 Front passenger air ba 	ag module circuit is shorted between lines.	 Replace the diagnosis sensor unit. Replace the related harness.

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

Diagnostic item	Explanation	Repair order "Recheck SRS at each replacement"	/
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.	6
		3. Replace the crash zone sensor.	
		4. Replace the diagnosis sensor unit.	(
		5. Replace the related harness.	
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 module circuit is shorted to a power supply circuit.	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 the front LH setback assembly (front LH side air bag module).	I
	• Front LH side air bag module circuit is shorted between lines.	4. Replace the diagnosis sensor unit.	
[SHORT]		5. Replace the related harness.	
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 supply circuit.	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. Replace the front RH setback assembly (front RH side air bag	S
SIDE MODULE RH	• Front RH side air bag module circuit is shorted between lines.	- module).	
[SHORT]		4. Replace the diagnosis sensor unit.	
		5. Replace the related harness.	_
SATELLITE SENS LH [UNIT FAIL]	LH side air bag (Satellite) sensor	 Visually check the wiring harness connection. 	
SATELLITE SENS LH		2. Replace the harness if it has visible	
[COMM FAIL]		damage.	
		3. Replace the LH side air bag (Satel- lite) sensor.	
		4. Replace the diagnosis sensor unit.	
		5. Replace the related harness.	
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.	I
		3. Replace the RH side air bag (Satel- lite) sensor.	
		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.	
PRE-TEN FRONT LH [GND-SHORT]	• Front LH pre-tensioner circuit is shorted to ground.	3. Replace the front LH seat belt.	
PRE-TEN FRONT LH [SHORT]	• Front LH pre-tensioner 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"
PRE-TEN FRONT RH [OPEN]	 Front RH pre-tensioner circuit is shorted to a power supply cir- cuit. 	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.	 Replace the harness if it has visible damage.
PRE-TEN FRONT RH [GND-SHORT]	• Front RH pre-tensioner circuit is shorted to ground.	3. Replace the front RH seat belt.
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 [OPEN]	• 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 some power supply circuits.	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 the LH side curtain air bag module.
CURTAIN MODULE LH [SHORT]	• LH side curtain air bag module circuit is shorted between lines.	 Replace the diagnosis sensor unit. Replace the related harness.
CURTAIN MODULE RH	• RH side curtain air bag module circuit is open.	1. 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	RH side curtain air bag module circuit is shorted to ground.	3. Replace the 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 diagnosis sensor unit.
OCCUPANT SENS C/U [UNIT FAIL]	Occupant classification system control unit is malfunctioning.	 Replace front passenger seat cush- ion/occupant classification system control unit assembly.
OCCUPANT SENS C/U [COMM FAIL]	 Communication between the occupant classification system control unit and air bag diagnosis sensor unit is interrupted, or 	1. Visually check the wiring harness connection.
	occupant classification system control unit is malfunctioning.	2. Replace the harness if it has visible damage.
		 Replace front passenger seat cush- ion/occupant classification system control unit assembly.
		4. Replace the diagnosis sensor unit.
		5. Replace the related harness.
OCCUPANT SENS [UNIT FAIL]	 Occupant classification sensor is malfunctioning. 	 Replace front passenger seat cush- ion/occupant classification system control unit assembly.
BELT TENSION SENS [UNIT FAIL]	Belt tension sensor circuit between belt tension sensor and occupant classification system control unit, or diagnosis sensor	1. Visually check the wiring harness connection.
	unit is malfunctioning.	2. Replace the harness if it has visible damage.
		3. Replace front seat belt (passenger side) assembly.
		 Replace front passenger seat cush- ion/occupant classification system control unit assembly.

Diagnostic item	Explanation	Repair order "Recheck SRS at each replacement"
PASS A/B INDCTR CKT	• Front passenger air bag off indicator or related circuit is mal- functioning.	1. Visually check the wiring harness connection.
		2. Replace the harness if it has visible damage.
		3. Replace front passenger air bag off indicator (display and A/C auto amp.).
		4. Replace the diagnosis sensor unit.
		5. Replace the related harness.
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 G required.

SRS

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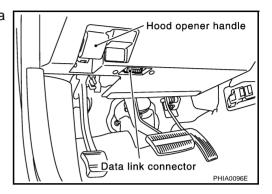
DIAGNOSTIC PROCEDURE 3

Final inspection after repairing SRS by using CONSULT-II — Diagnosis mode

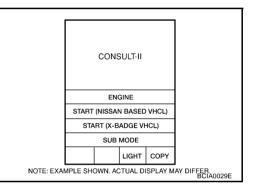
CAUTION:

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.

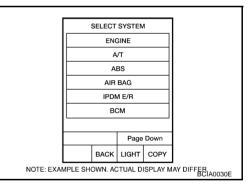
- 1. After repairing SRS, connect both battery cables.
- 2. Connect CONSULT-II and CONSULT-II CONVERTER to data link connector.



- 3. Turn ignition switch ON.
- 4. Touch "START (NISSAN BASED VHCL)".

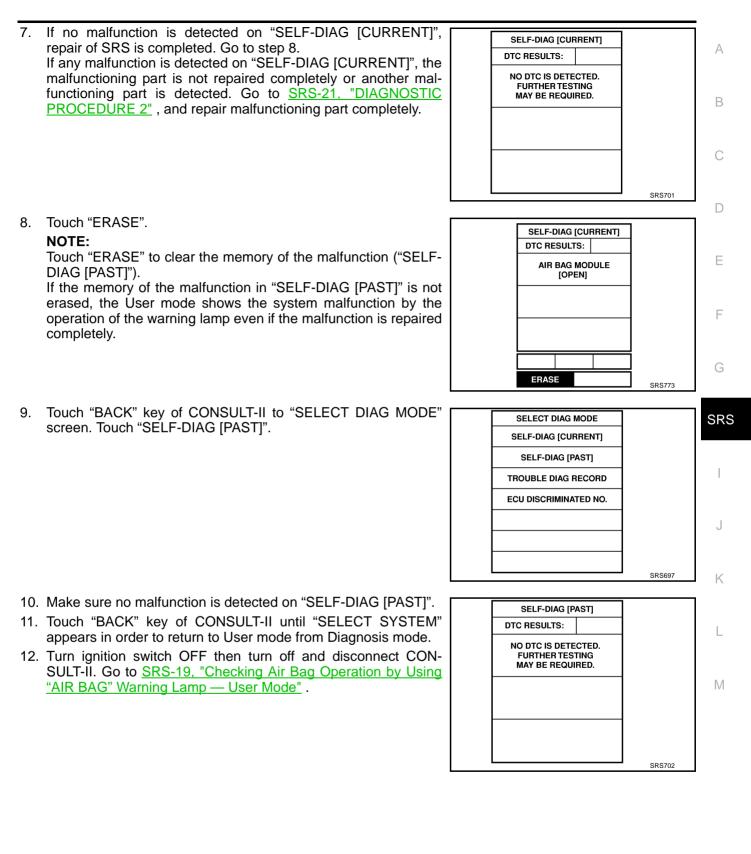


5. Touch "AIR BAG". If "AIR BAG" is not indicated, refer to <u>GI-39, "CONSULT-II Data</u> <u>Link Connector (DLC) Circuit"</u>.



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

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



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-21, "DIAGNOSTIC PROCEDURE 2"</u>.

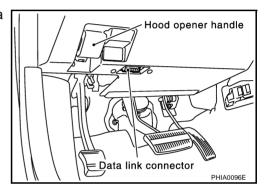
NO >> Self-diagnostic result "SELF-DIAG [PAST]" (previously stored in the memory) might not be erased after repair. Go to <u>SRS-26, "DIAGNOSTIC PROCEDURE 3"</u>.

DIAGNOSTIC PROCEDURE 5

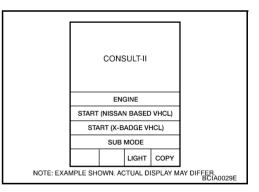
Inspecting SRS intermittent malfunction by using CONSULT-II — Diagnosis mode CAUTION:

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. Turn ignition switch OFF.
- Connect CONSULT-II and CONSULT-II CONVERTER to data link connector.



- 3. Turn ignition switch ON.
- 4. Touch "START (NISSAN BASED VHCL)".



5. Touch "AIR BAG".

If "AIR BAG" is not indicated, refer to <u>GI-39, "CONSULT-II Data</u> <u>Link Connector (DLC) Circuit"</u>.

	5	SELECT SYSTEM				
		ENGINE				
	A/T					
	ABS					
		AIR BAG				
	IPDM E/R					
	ВСМ					
	Page Down					
	BACK LIGHT COPY					
NOTE: EXAM	NOTE: EXAMPLE SHOWN. ACTUAL DISPLAY MAY DIFFER			-		

6.	Touch "SELF-DIAG [PAST]".		
0.		SELECT DIAG MODE	А
		SELF-DIAG [CURRENT]	\cap
		SELF-DIAG [PAST]	
		TROUBLE DIAG RECORD	В
		ECU DISCRIMINATED NO.	
			С
			0
		SRS697	
		2/2031	D
7.	If diagnostic codes are displayed on "SELF-DIAG [PAST]", go to		
	step 10.	SELF-DIAG [PAST] DTC RESULTS:	
			Е
		AIR BAG MODULE [OPEN]	
			F
			G
		SRS700	
	If no malfunction is detected on "SELF-DIAG [PAST]", touch "BACK" and go back to "SELECT DIAG MODE".	SELF-DIAG [PAST]	SRS
	BACK and go back to SELECT DIAG MODE .	DTC RESULTS:	
		NO DTC IS DETECTED.	
		FURTHER TESTING MAY BE REQUIRED.	I
			J
			К
		SRS702	r X
8.	Touch "TROUBLE DIAG RECORD".	SELECT DIAG MODE	
	NOTE:	SELF-DIAG [CURRENT]	L
	With "TROUBLE DIAG RECORD", diagnosis results previously		
	erased by a reset operation can be displayed.	SELF-DIAG [PAST]	
		TROUBLE DIAG RECORD	Μ
		ECU DISCRIMINATED NO.	
		SRS697	
9.	Diagnostic code is displayed on "TROUBLE DIAG RECORD".		
	Touch "PRINT".	TROUBLE DIAG RECORD	
		DTC RESULTS:	
	Compare diagnostic codes to <u>SRS-30</u> , "CONSULT-II Diagnostic <u>Code Chart ("SELF-DIAG [PAST]</u> " or "TROUBLE DIAG <u>RECORD"</u> ".	DRIVER AIR BAG MODULE [OPEN]	
12.	Touch "BACK" key of CONSULT-II until "SELECT SYSTEM" appears.		
12	Turn ignition switch OFF, then turn off and disconnect CON-		
13.	SULT-II, and both battery cables.		
		SHIA0182E	

- 14. Repair the system as outlined by the "Repair order" in "Intermittent Malfunction Diagnostic Code Chart", that corresponds to the self-diagnosis result. For replacement procedure of component parts, refer to the Removal and Installation procedure for the appropriate component.
- 15. Go to <u>SRS-26, "DIAGNOSTIC PROCEDURE 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-26, "DIAGNOSTIC PRO-</u> <u>CEDURE 3"</u> .
	No malfunction is dete	cted.	• Go to <u>SRS-26, "DIAGNOSTIC PRO-</u> <u>CEDURE 3"</u> .
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 ble).	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 module circuit is open.		1. Visually check the wiring harness connection.
ASSIST A/B MODULE [VB-SHORT]	 Front passenger air bag module circuit is shorted to a power supply circuit. 		2. Replace the harness if it has visible damage.
ASSIST A/B MODULE [GND-SHORT]	 Front passenger air ba 	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 	g 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]			2. 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 module circuit is shorted to a power supply circuit.		2. Replace the harness if it has visible damage.
SIDE MODULE LH [GND-SHORT]	• Front LH side air bag r	nodule 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 r	nodule circuit is shorted between lines.	and LH side air bag module.

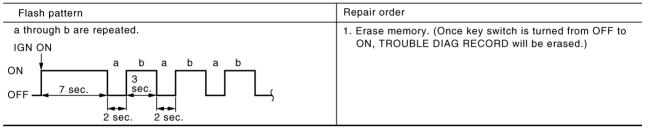
Diagnostic item	Explanation	Repair order "Recheck SRS at each replacement"
SIDE MODULE RH [OPEN]	• Front RH side air bag module circuit is open.	1. Visually check the wiring harness connection.
SIDE MODULE RH [VB-SHORT]	• Front RH side air bag module circuit is shorted to a power supply circuit.	2. Replace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

		Repair order
Diagnostic item	Explanation	"Recheck SRS at each replacement"
CURTAIN MODULE RH [OPEN]	• RH side curtain air bag module circuit is open.	1. Visually check the wiring harness connection.
CURTAIN MODULE RH [VB-SHORT]	• RH side curtain air bag module circuit is shorted to a power supply circuit.	 Replace the harness if it has visible damage.
CURTAIN MODULE RH [GND-SHORT]	• RH side curtain air bag module circuit is shorted to ground.	 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.
		2. Replace the diagnosis sensor unit.
OCCUPANT SENS C/U [UNIT FAIL]	 Occupant classification system control unit is malfunctioning. 	 Replace front passenger seat cush- ion/occupant classification system control unit assembly.
OCCUPANT SENS C/U [COMM FAIL]	 Communication between the occupant classification system control unit and air bag diagnosis sensor unit is interrupted, 	1. Visually check the wiring harness connection.
	diagnosis sensor unit is malfunction, or occupant classification system control unit is malfunctioning.	2. Replace the harness if it has visible damage.
		 Replace front passenger seat cush- ion/occupant classification system control unit assembly.
		4. Replace the diagnosis sensor unit.
		5. Replace the related harness.
OCCUPANT SENS [UNIT FAIL]	 Occupant classification sensor is malfunctioning. 	 Replace front passenger seat cush- ion/occupant classification system control unit assembly.
BELT TENSION SENS [UNIT FAIL]	 Belt tension sensor circuit between belt tension sensor and occupant classification system control unit, or diagnosis sensor 	1. Visually check the wiring harness connection.
	unit is malfunctioning.	2. Replace the harness if it has visible damage.
		 Replace front seat belt (passenger side) assembly.
		 Replace front passenger seat cush- ion/occupant classification system control unit assembly.
PASS A/B INDCTR CKT	• Front passenger air bag off indicator or related circuit is mal- functioning.	1. Visually check the wiring harness connection.
		2. Replace the harness if it has visible damage.
		 Replace front passenger air bag off indicator (display and A/C auto amp.).
		4. Replace the diagnosis sensor unit.
		5. Replace the related harness.
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> .

Trouble Diagnosis without CONSULT-II DIAGNOSTIC PROCEDURE 6 Inspecting SRS Malfunctioning Parts by Using "AIR BAG" Warning Lamp — Diagnosis Mode	А
NOTE:	
SRS will not enter Diagnosis mode if no malfunction is detected in User mode.	В
1. Turn ignition switch ON.	
2. After "AIR BAG" warning lamp lights for 7 seconds, turn ignition switch OFF within 1 second.	C
3. Wait more than 3 seconds.	0
4. Repeat the steps 1 to 3 twice. (Perform three times in all.)	
5. Turn ignition switch ON.	D
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.>



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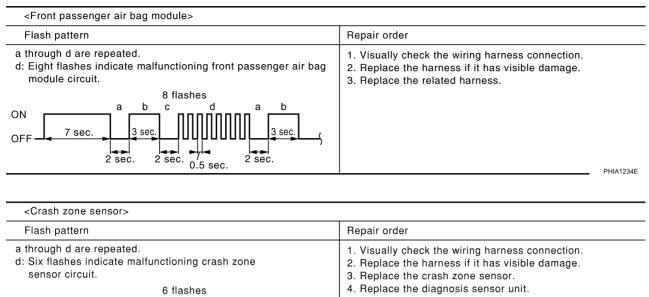
G

SRS

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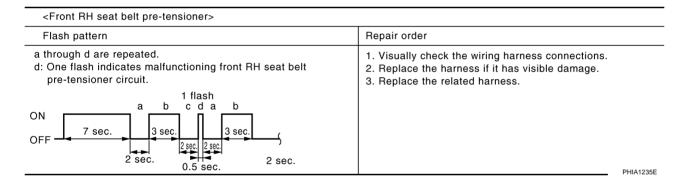
Flash pattern	Repair order	
a through d are repeated. d: Two flashes indicate malfunctioning driver air bag module circuit. 2 flashes	 Visually check the wiring harness connection. Replace the harness if it has visible damage. Replace the spiral cable. Replace the related harness. 	
ON <u>7 sec.</u> <u>3 sec.</u>		
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.



- - 5. Replace the related harness.

SHIA0083E



<front belt="" lh="" pre-tensioner="" seat=""></front>	
Flash pattern	Repair order
a through d are repeated. d: Three flashes indicate malfunctioning front LH seat belt pre-tensioner circuit. ON OFF 7 sec. 2 sec. 2 sec. 2 sec. 2 sec. 2 sec. 2 sec.	 Visually check the wiring harness connections. Replace the harness if it has visible damage. Replace the related harness.
0.5 sec.	PHIA1236E

а b С

2 sec.

sei

2 sec.

7 sec

ON

OFF

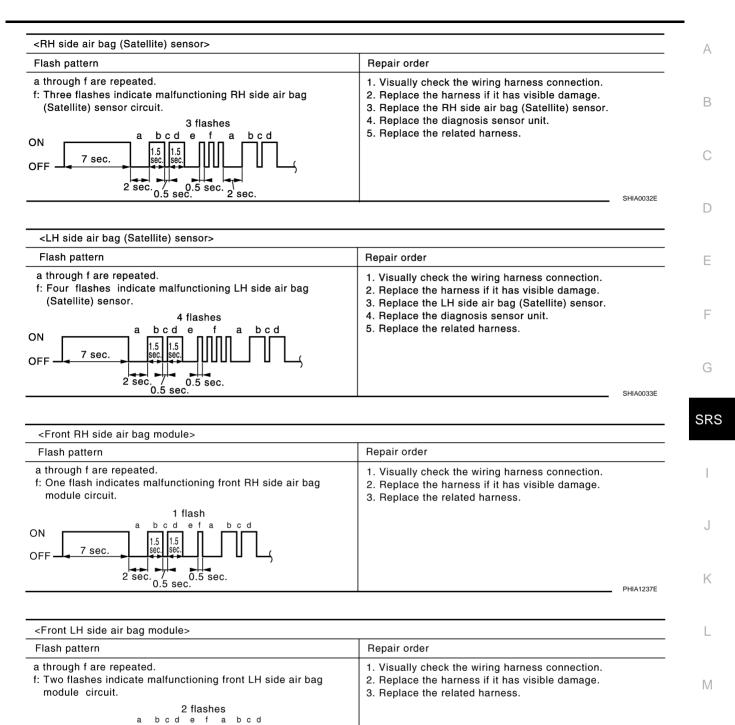
d

0.5 sec.

а b

2 sec

900



ON

OFF

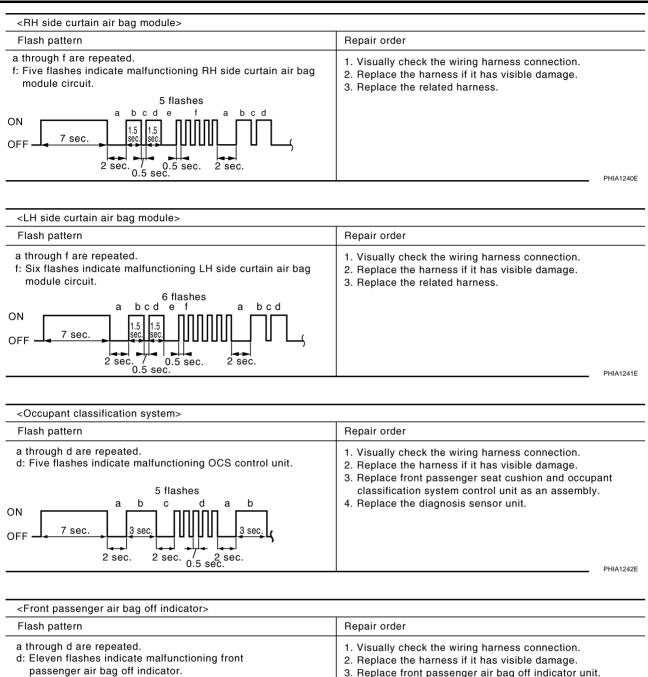
7 sec.

5

2 sec. 0.5 sec.

2 sec

PHIA1238E



3. Replace front passenger air bag off indicator unit.

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

PHIA1243E

ON

OFF

7 sec

b

3 sec.

а

2 sec.

11 flashes

d

0.5 sec

b а

3 sec

2 sec

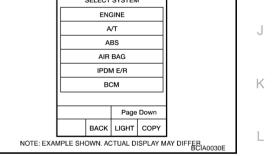
С

2 sec.

TROUBLE DIAGNOSIS

	_
Trouble Diagnosis: "AIR BAG" Warning Lamp Does Not Turn OFF AHSOOD DIAGNOSTIC PROCEDURE 7	dr A
1. CHECK THE DEPLOYMENT OF AIR BAG MODULE	
Is air bag module deployed?	В
<u>YES or NO</u> YES >> Refer to <u>SRS-51, "COLLISION DIAGNOSIS"</u> . NO >> GO TO 2.	С
2. CHECK THE AIR BAG FUSE	
Check 10A fuse [No.13, located in fuse block (J/B)]. Refer to <u>PG-3, "POWER SUPPLY ROUTING CIRCUIT"</u> .	D
<u>OK or NG</u> OK >> GO TO 4.	E
NG >> GO TO 3.	
3. CHECK AIR BAG FUSE AGAIN	F
Replace "AIR BAG" fuse and turn ignition switch ON. <u>Does the "AIR BAG" fuse blow again?</u> YES >> Repair or replace main harness. NO >> INSPECTION END	G
4. CHECK DIAGNOSIS SENSOR UNIT	SRS
Connect CONSULT-II and touch "START". Is "AIR BAG" displayed on CONSULT-II? <u>YES or NO</u>	_]
YES >> GO TO 5.	J

sis 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.

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

1. CHECK METER FUSE

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

OK or NG

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

2. CHECK METER FUSE AGAIN

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

Does the meter fuse blow again?

YES >> Repair or replace the related harness.

NO >> INSPECTION END

$\mathbf{3.}\ check$ harness connection between diagnosis sensor unit and combination meter

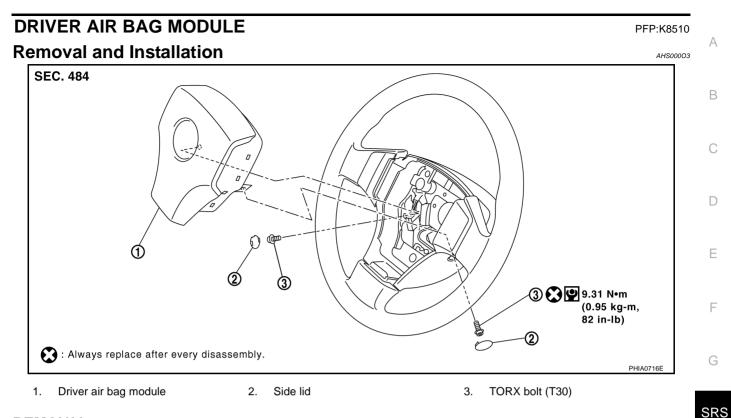
Disconnect diagnosis sensor unit connector and turn ignition switch ON.

• Does "AIR BAG" warning lamp turn ON?

YES or NO

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

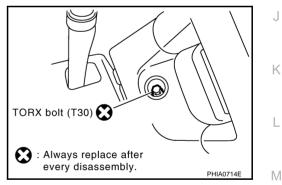
DRIVER AIR BAG MODULE



REMOVAL

CAUTION:

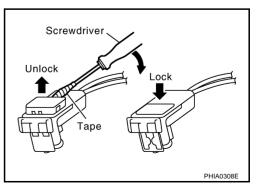
- Before servicing SRS, turn ignition switch OFF, disconnect both battery cables and wait at least 3 minutes.
- Always work from the side of driver air bag module.
- 1. Remove the side lids (LH/RH).
- 2. Using Tamper resistant TORX bit (T30), remove the TORX bolts (T30) at right and left.



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

CAUTION:

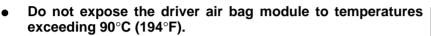
- For installing / removing driver air bag module connector, insert thin screwdriver wrapped in tape into notch, lift lock and remove connector.
- Install connector with lock raised, and push lock into connector.



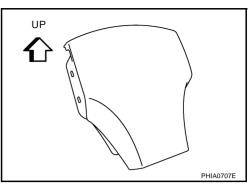
DRIVER AIR BAG MODULE

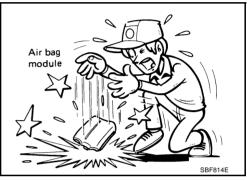
CAUTION:

- 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.



- 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.



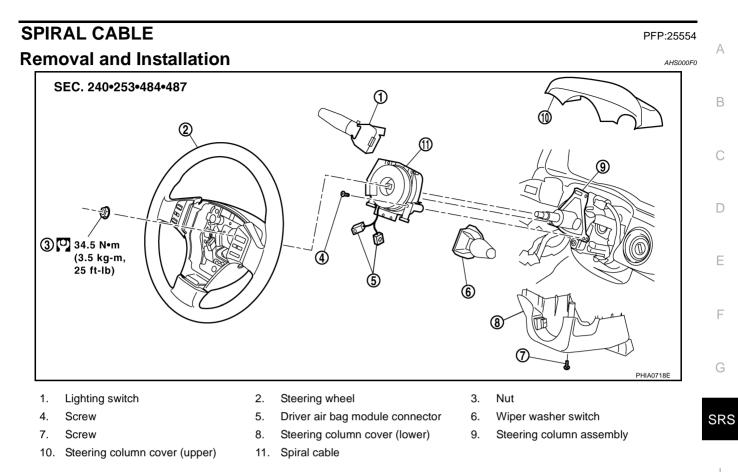


INSTALLATION

Install in the reverse order of removal.

- For installing the air bag module, tighten the TORX bolts (T30).
- After the work is completed, perform self-diagnosis to make sure no malfunction is detected. Refer to <u>SRS-19, "SRS Operation Check"</u>.

SPIRAL CABLE



REMOVAL

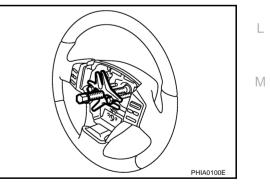
CAUTION:

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

- 1. Remove driver air bag module. Refer to <u>SRS-39, "Removal and Installation"</u>.
- 2. Set the steering wheel in the neutral position.
- 3. Remove steering wheel nut.
- 4. Remove steering wheel with steering wheel puller [SST: ST27180001].

CAUTION:

Be careful not to over-tighten puller on steering wheel.



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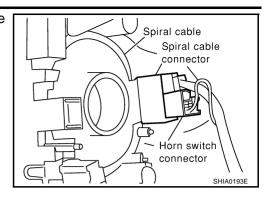
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- 5. Remove steering column cover upper and lower. Refer to IP-12, "REMOVAL" .
- 6. Loosen the spiral cable fixing screws, and then remove the spiral cable. **CAUTION:**
 - Do not disassemble spiral cable.
 - Do not apply lubricant to the spiral cable.

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

CAUTION:

Do not tap or bump the steering wheel.



8. Remove the wiper washer switch and lighting switch from the spiral cable. **CAUTION:**

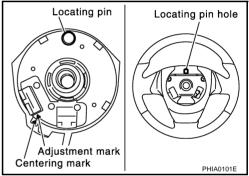
The spiral cable may snap due to steering operation if the cable is installed in an improper position.

INSTALLATION

Install in the reverse order of removal.

CAUTION:

- The spiral cable may snap due to steering operation if the cable is installed in an improper position.
- Also, with the steering linkage disconnected the cable may snap by turning the steering wheel beyond the limited number of turns. The spiral cable can be turned counterclockwise about 2.5 turns from the right end position.
- After the work is completed, perform self-diagnosis to make sure that no malfunction is detected. Refer to <u>SRS-19, "SRS</u> <u>Operation Check"</u>.



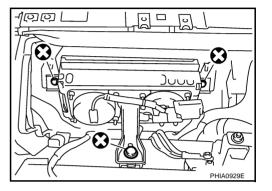
FRONT PASSENGER AIR BAG MODULE

FRONT PASSENGER AIR BAG MODULE

Removal and Installation REMOVAL

CAUTION:

- Before servicing SRS, turn ignition switch OFF, disconnect both battery cables and wait at least 3 minutes.
- Always work from the side of front passenger air bag module.
- 1. Remove instrument panel & pad. Refer to IP-10, "INSTRUMENT PANEL ASSEMBLY" .
- 2. Remove bolt, then remove front passenger air bag module.
 - Bolt (M8) : 24.5 N·m (2.5 kg-m, 18 ft-lb)
 - Bolt (M6)
- : 🖤 6 N·m (0.6 kg-m, 53 in-lb)



CAUTION:

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



INSTALLATION

Install in the reverse order of removal.

CAUTION:

- Always work from the side of or under front passenger air bag module.
- After the work is completed, perform self-diagnosis to make sure no malfunction is detected. Refer to <u>SRS-19, "SRS Operation Check"</u>.

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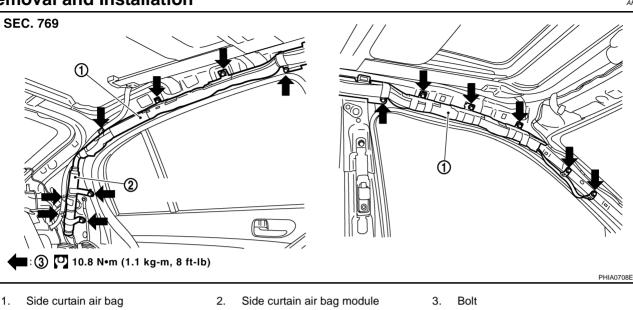
SIDE CURTAIN AIR BAG MODULE

SIDE CURTAIN AIR BAG MODULE

PFP:985P0

Removal and Installation





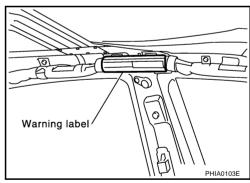
REMOVAL

CAUTION:

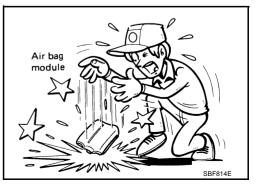
- Before servicing SRS, turn ignition switch OFF, disconnect both battery cables and wait at least 3 minutes.
- Always work from the side of the side curtain air bag module.
- 1. Remove headlining. Refer to EI-45, "HEADLINING" .
- 2. Disconnect side curtain air bag connector.
- 3. Remove side curtain air bag module fixing bolts, and remove the side curtain air bag module.

CAUTION:

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



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



INSTALLATION

Install in the reverse order of removal.

CAUTION:

- Always work from the side of the side curtain air bag module.
- After replacement of side curtain air bag module, perform self-diagnosis to make sure no malfunction is detected. Refer to <u>SRS-19, "SRS Operation Check"</u>.

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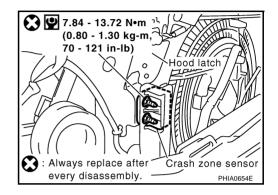
CRASH ZONE SENSOR

Removal and Installation REMOVAL

CAUTION:

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

- 1. Remove front grille. Refer to EI-20, "FRONT GRILLE" .
- 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 disassemble crash zone sensor.

INSTALLATION

Install in the reverse order of removal.

CAUTION:

- Check crash zone sensor for proper installation.
- After the work is complete, perform self-diagnosis to make sure no malfunction is detected. Refer to <u>SRS-19, "SRS Operation Check"</u>.

PFP:98531

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SIDE AIR BAG (SATELLITE) SENSOR

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.

- Remove seat belt pre-tensioner. Refer to SB-3, "Removal and Installation of Front Seat Belt" . 1.
- 2. Remove side air bag (Satellite) sensor fixing nuts.
- 3. Remove the side air bag (Satellite) sensor connector.

💽 🌄 7.84 - 13.72 N•m 🤇 (0.8 - 1.3 kg-m, Always replace after 70 - 121 in-lb) every disassembly. PHIA0245E

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.

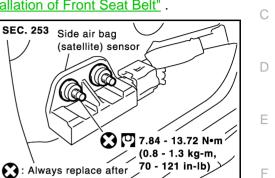
INSTALLATION

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 SRS-19, "SRS Operation Check" .

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FRONT SEAT BELT PRE-TENSIONER

FRONT SEAT BELT PRE-TENSIONER

Removal and Installation

For removal and installation procedures, refer to <u>SB-3</u>, "Removal and Installation of Front Seat Belt" .

PFP:86884

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DIAGNOSIS SENSOR UNIT

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.

- Disconnect each harness connector for the air bag module and seat belt pre-tensioner. 1.
- 2. Remove center console. Refer to IP-11, "Removal and Installation" .
- 3. Disconnect diagnosis sensor unit connector.
- Remove special hex bolts from the diagnosis sensor unit. 4.

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.

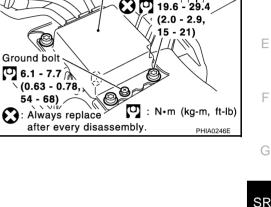
CAUTION:

- 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 SRS-19, "SRS Operation Check" .

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.	0
2WD	Models with driver and passenger air bags, seat belt pre-tensioner, side air bags and curtain air bags	FA87	K
AWD	Models with driver and passenger air bags, seat belt pre-tensioner, side air bags and curtain air bags	FA89	



Diagnosis

sensor unit

SEC. 253

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OCCUPANT CLASSIFICATION SYSTEM CONTROL UNIT

Removal and Installation

The occupant classification system control unit, seat pressure sensor, and bladder are an integral part of the front passenger seat cushion and are replaced as an assembly. Refer to <u>SE-90, "FRONT SEAT"</u>.

PFP:98852

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COLLISION	DIAGNOSIS	PFP:00015		
For Frontal Collision				
To repair the SR	S, perform the following steps.	rtain air bag modules) is activated in a collision:		
1. Replace the				
	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 S	Check the SRS components using the table below:			
- Replace any	SRS components showing visible sign	s of damage (dents, cracks and deformation).		
zone sensor	assembly, bracket and seat belt pre-ter			
Check for a	details. Ensure entire SRS operates pro	BAG" warning lamp. Refer to <u>SRS-19, "SRS Operation</u> perly.		
When SRS is no	ot activated in a collision:			
1. Check the S	RS components using the table below:			
		s of damage (dents, cracks and deformation).		
Check for o	details. Ensure entire SRS operates pro			
When only one	front air bag module is activated in a	collision:		
1. Replace the	following components:			
 Diagnosis se 	ensor unit			
- Crash zone	Crash zone sensor			
 Activated from 	ont air bag and seat belt pre-tensioner.			
2. Check the o	ther SRS components using the table b	elow (Refer to "SRS is NOT activated").		
 Replace any 	SRS components showing visible signation	s of damage (dents, cracks and deformation).		
	f-diagnosis using CONSULT-II or "AIR E details. Ensure entire SRS operates pro	BAG" warning lamp. Refer to <u>SRS-19, "SRS Operation</u> perly.		
are belted or unl		on the crash severity and whether the front occupants performance of the system. Perform self-diagnosis to		
SRS INSPECT	ION (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:	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: REPLACE the spiral cable.	If the Driver airbag has not deployed: [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			
Instrument panel	1. Visually check instrument panel for damage.		
	 If no damage is found, reinstall the instrument panel. If damaged—REPLACE the instrument panel with bolts. 		

-	Pr Side Collision HEN 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-19, "SRS Operation</u> <u>Check"</u> . Ensure entire SRS operates properly.
Wł	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-19, "SRS Operation</u> <u>Check"</u> . Ensure entire SRS operates properly.
SR	S INSPECTION (FOR SIDE COLLISION)
	Front side air hag and

Part	Front side air bag and side curtain air bag is activated	Front side air bag and side curtain air bag is NOT activated
LH or RH side curtain air bag module	REPLACE the side curtain air bag mod- ule. (Repair the center pil- lar inner, etc. before installing new one if damaged.)	1. Check for visible signs of damage (dents, tears, deformation) of the center pillar on the collision side.
		2. If damaged— Remove the LH or RH side curtain air bag module.
		3. Check for visible signs of damaged (tears etc.) of the LH or RH side curtain air bag module.
		4. Check harness and connectors for damage, and terminals for deformities.
		5. If no damage is found, reinstall the LH or RH side curtain air bag module with new bolts.
		6. If damaged—REPLACE the LH or RH side curtain air bag module with new bolts.
Front LH or RH side air bag module	REPLACE all parts of seatback with	1. Check for visible signs of damage (dents, tears, deformation) of the seatback on the collision side.
	deployed front side	2. Check harness and connectors for damage, and terminals for deformities.
	air bag module.	3. If damaged—REPLACE the front seatback assembly.
LH or RH side air bag (Satellite) sensor	bag 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.)	1. Remove the LH or RH side air bag (Satellite) sensor on the collision side. Check harness connectors for damage, terminals for deformities, and harness for binding.
		Check for visible signs of damage (dents, cracks, deformation) of the LH or RH side air bag (Satellite) sensor.
		3. Install the LH or RH side air bag (Satellite) sensor to check fit.
		 If no damage is found, reinstall the LH or RH side sir bag (Satellite) sensor with new nuts.
		5. If damaged—REPLACE the LH or RH side air bag (Satellite) sensor with new nuts.
Diagnosis sensor unit	REPLACE the diag-	1. Check case and bracket for dents, cracks or deformities.
	nosis sensor unit with the new bolts.	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.

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-	1. Check if the seat belt can be extended smoothly.		
sioner assembly	If the seat belt cannot be extended smoothly,		
	 Check for deformities of the center pillar inner. 		
	- If the center pillar inner 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.	
	Dack frame)	 Harness, connectors and terminals 	
		 Frame and recliner (for front and rear seat), and also adjuster and slides (for front seat) 	
		3. If no damage is found, reinstall the seat.	
		4. If damaged—REPLACE the damaged seat parts using new bolts.	
Center inner pillar 1. Check the center inner pillar on the collision side for damage (dents, cracks, deformation).		her pillar on the collision side for damage (dents, cracks, deformation).	
	2. If damaged—REPAIR the center inner pillar.		
Trim/headlining	1. Check for visible sig	ns of damage (dents, cracks, deformation) of the interior trim on the collision side.	
	2. If damaged—REPLA	ACE the damaged trim parts.	