SUPPLEMENTAL RESTRAINT SYSTEM (SRS)

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PRECAUTIONS

PRECAUTIONS PFP:00001

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

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The Supplemental Restraint System such as "AIR BAG" and "SEAT BELT PRE-TENSIONER", used along with a front seat belt, helps to reduce the risk or severity of injury to the driver and front passenger for certain types of collision. 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

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- 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 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.

PREPARATION

PREPARATION Special service tool EHS00002

The actual shapes of Kent-Moore tools may differ from those of special service tools illustrated here.

Tool number (Kent-Moore No.) Tool name		Description
 (J-44615) Air bag lock master key set		Removing and installing air bag locking bolts
	LRS210	

Commercial Service Tool

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Tool name		Description
Tamper resistant torx socket		Size: T30
	S-NT757	

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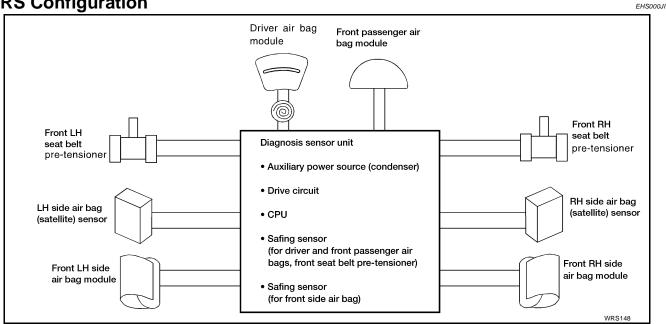
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SRS CONFIGURATION

SRS CONFIGURATION

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SRS Configuration



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

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	Х	_	_
Front passenger air bag module	Х	_	_
Front LH seat belt pre-tensioner	Х	_	_
Front RH seat belt pre-tensioner	X	_	_
Front LH side air bag module	_	X	_
Front RH side air bag module	_	_	X

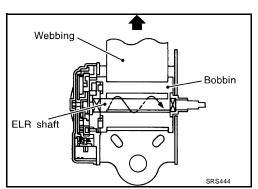
SRS CONFIGURATION

Seat Belt Pre-tensioner with Load Limiter

The front 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.

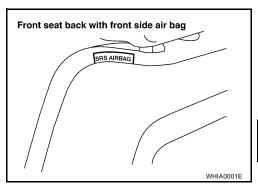
When passengers in a vehicle are thrown forward in a collision and the restraining force of the seat belt exceeds a specified level, the load limiter permits the specified extension of the seat belt by the twisting of the ELR shaft, and a relaxation of the chest-area seat belt web tension while maintaining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



Side Air Bag

Front side air bag is built-in type.

The front seat backs with built-in type side air bag have the label shown in figure at right.



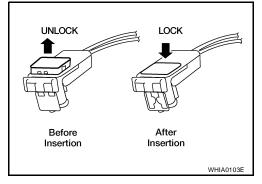
Direct-connect SRS Component Connectors

The following SRS components use direct-connect style harness connectors.

- Driver air bag module
- Front LH seat belt pre-tensioner
- Front RH seat belt pre-tensioner

Always pull up to release black locking tab prior to removing connector from SRS component.

Always push down to lock black locking tab after installing connector to SRS component. When locked, the black locking tab is level with the connector housing.



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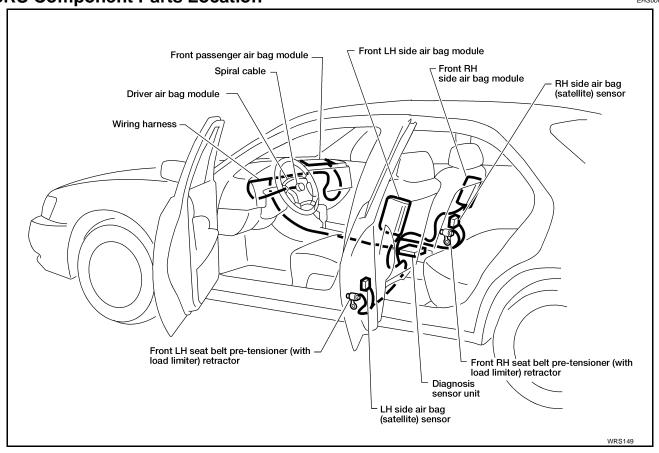
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Revision: December 2006 SRS-5 2006 Sentra

SRS CONFIGURATION

SRS Component Parts Location

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TROUBLE DIAGNOSIS

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Trouble Diagnoses Introduction

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CAUTION:

- 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 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 reading of these results is accomplished using one of two modes — "User mode" and "Diagnosis mode".

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	X	X	ON-OFF operation
CONSULT-II	_	X	Monitoring

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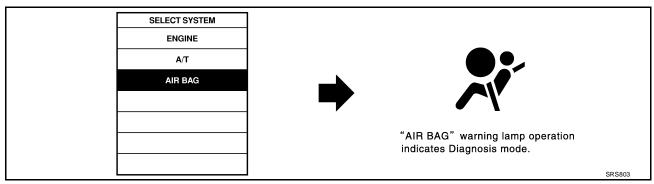
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(A) HOW TO CHANGE SELF-DIAGNOSIS MODE WITH CONSULT-II

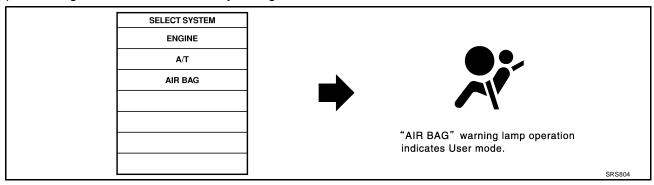
From User Mode to Diagnosis Mode

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



From Diagnosis Mode to User Mode

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



NOW TO CHANGE SELF-DIAGNOSIS MODE WITHOUT CONSULT-II

From User Mode to Diagnosis Mode

Diagnosis mode activates only when a malfunction is detected, by turning ignition switch as follows:

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

SRS will enter Diagnosis mode, if a malfunction is detected.

From Diagnosis Mode to User Mode

After a malfunction is repaired, turn ignition switch "OFF" for at least one second, then back "ON". Diagnosis mode is returned to User mode.

If switching Diagnosis mode to User mode is required while malfunction is being detected, turn ignition switch as follows:

- 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 steps 1 to 3 three times.
- 5. Turn ignition switch "ON".

HOW TO ERASE SELF-DIAGNOSIS RESULTS

With CONSULT-II

"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]".

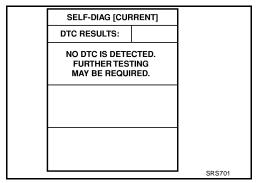
"SELF-DIAG [PAST]"

Return to the "SELF-DIAG [CURRENT]" CONSULT-II screen by pushing "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.



⋈ Without CONSULT-II

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

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CONSULT-II Function (AIR BAG)

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CONSULT-II can display each diagnostic item using the diagnostic test modes shown following.

	· · · · · · · · · · · · · · · · · · ·	
AIR BAG diagnostic mode	Description	
SELF-DIAG [CURRENT]	A current Self-diagnosis result (also indicated by the mode) is displayed on the CONSULT-II screen in reaing repairs.	5 ,
SELF-DIAG [PAST]	Diagnosis results previously stored in the memory are displayed on the CONSULT-II screen. The stored results will remain 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. For NISSAN MODEL B15, the diagnosis sensor unit discriminated numbers assigned are A616 (for models with side air bags) and A615 (for models without side air bags).	ECU DISCRIMINATED NO. ECU No. XXXX PRINT BACK LIGHT COPY ARS366

How to Perform Trouble Diagnoses for Quick and Accurate Repair A good understanding of the malfunction conditions can make troubleshooting faster and more accurate.

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, "BATTERY"</u> .]
- Fuse
- System component-to-harness connections

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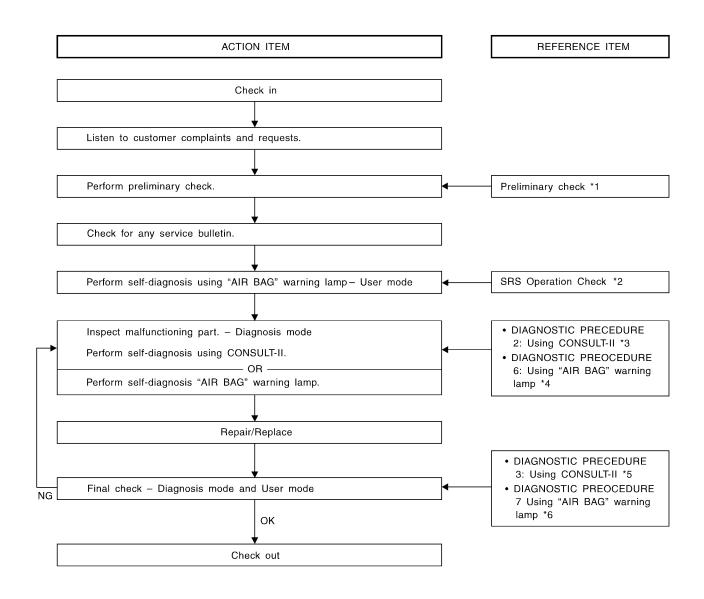
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WORK FLOW

NOTE:

Seat belt pre-tensioner malfunction is indicated by "AIR BAG" warning lamp.



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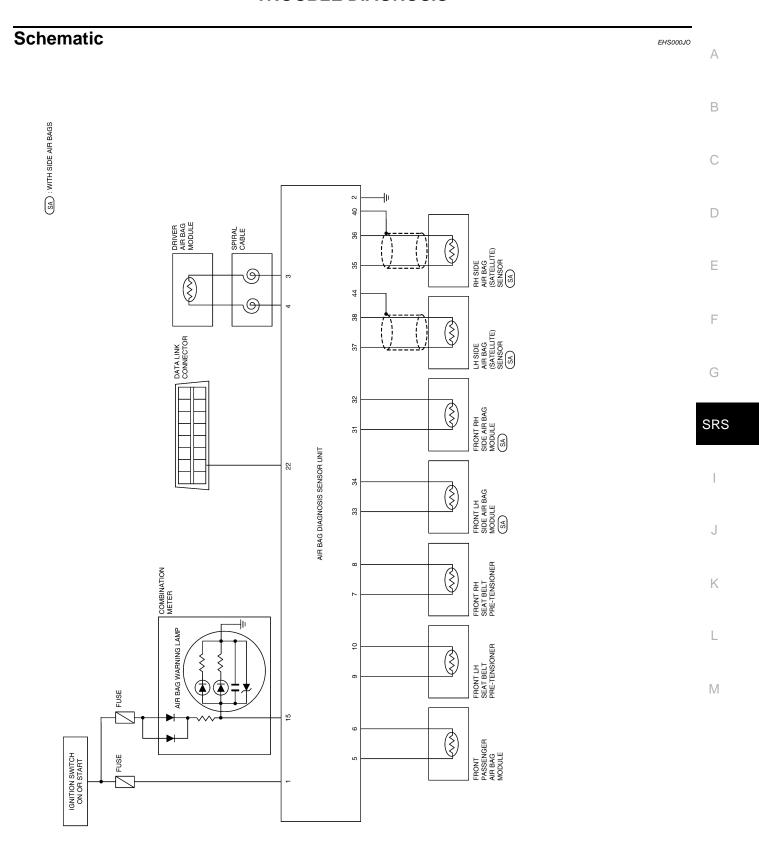
*1: <u>SRS-11</u>
*4: <u>SRS-28</u>

*2: <u>SRS-17</u>

*5: <u>SRS-21</u>

*3: <u>SRS-17</u>

*6: SRS-33

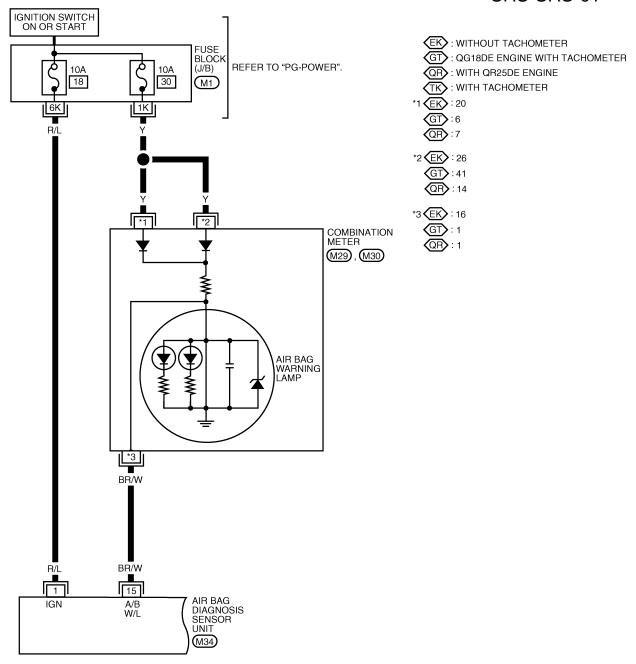


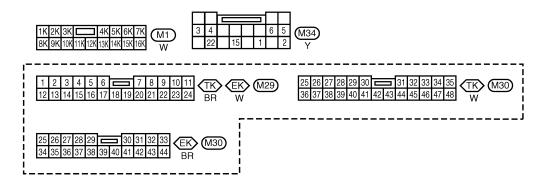
WHWA0045E

Wiring Diagram — SRS —

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SRS-SRS-01

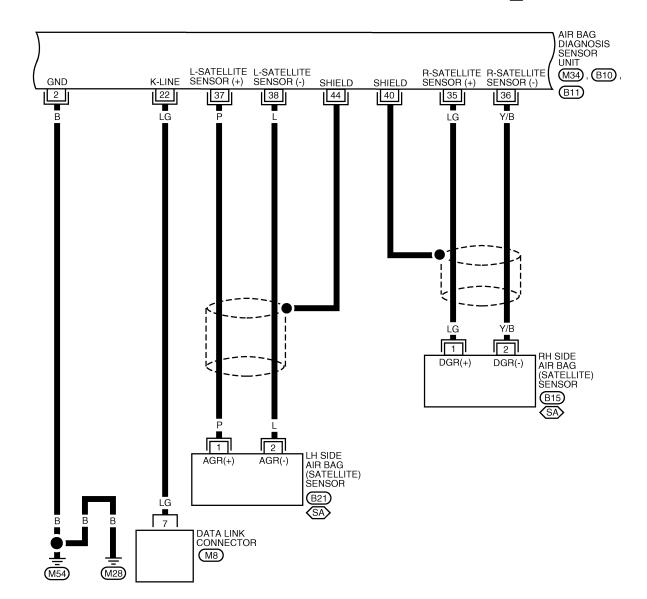


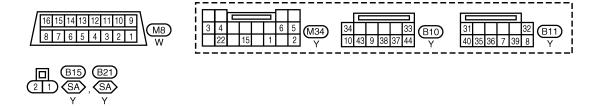


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SA: WITH SIDE AIR BAGS





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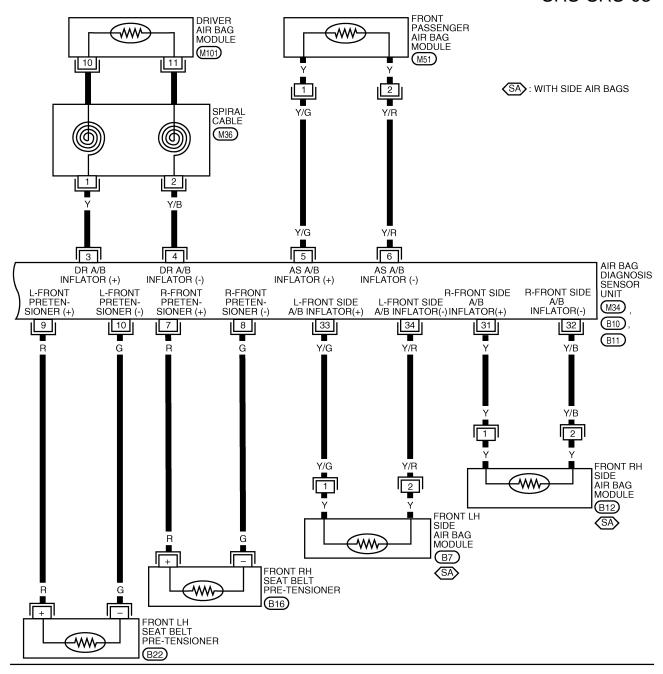
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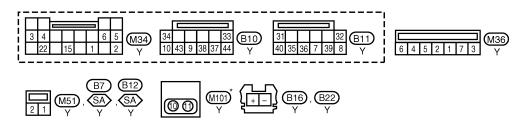
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^{*} THIS CONNECTOR IS NOT SHOWN IN "HARNESS LAYOUT " OF PG SECTION.

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SRS Operation Check DIAGNOSTIC PROCEDURE 1

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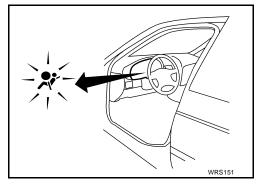
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Checking Air Bag Operation by Using "AIR BAG" Warning Lamp — User Mode

- 1. After turning ignition switch from "OFF" to "ON", "AIR BAG" warning lamp operates.
- 2. Compare "AIR BAG" warning lamp operation to the chart below.



"AIR BAG" warning lamp operation — User mode —	SRS condition	Reference item	
OFF 7 sec.	No malfunction is detected. No further action is necessary.	_	F
MRS095A			SR
OFF 0.5 sec. 0.5 sec.	The system is malfunctioning and needs to be repaired as indicated.	Go to SRS-17, "DIAG- NOSTIC PROCEDURE 2" or SRS-28, "DIAGNOSTIC PROCEDURE 6" .	
MRS096A			J
IGN ON	Air bag is deployed. Front seat belt pre-tensioner is deployed.	Go to SRS-46, "COLLI- SION DIAGNOSIS" .	K
OFF MRS097A	Air bag fuse, diagnosis sensor unit or harness is malfunctioning and needs to be repaired.	Go to SRS-35, "DIAG- NOSTIC PROCEDURE 9"	L
IGN ON	One of the following has occurred and needs to be repaired.	Go to SRS-36, "DIAG- NOSTIC PROCEDURE 10" .	M
ON OFF	 Meter fuse is blown. "AIR BAG" warning lamp circuit has open or short. 		
MRS098A	 Diagnosis sensor unit is malfunctioning. 		

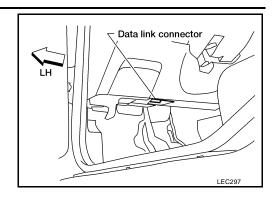
Trouble Diagnoses with CONSULT-II DIAGNOSTIC PROCEDURE 2

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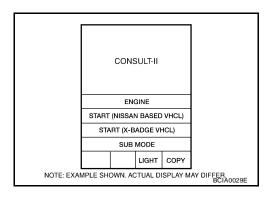
Inspecting SRS malfunctioning parts by using CONSULT-II — Diagnosis mode CAUTION:

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

- Turn ignition switch OFF.
- 2. Connect CONSULT-II to the data link connector.

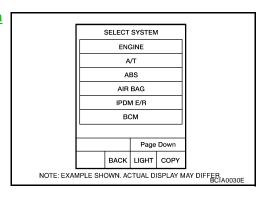


- 3. Turn ignition switch ON.
- 4. Touch "START (NISSAN BASED VHCL)".

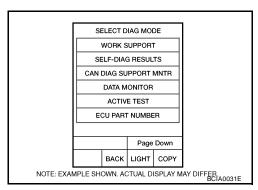


5. Touch "AIR BAG".

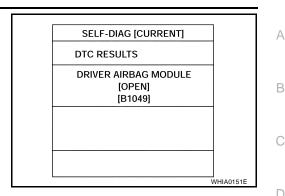
If "AIR BAG" is not indicated, refer to GI-38, "CONSULT-II Data Link Connector (DLC) Circuit".



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



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", refer to SRS-23, "DIAGNOSTIC PROCEDURE 4 (CONTINUED FROM DIAGNOSTIC PROCEDURE 2)", 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.
- 8. Touch "PRINT".
- 9. Compare diagnostic codes. Refer to <u>SRS-19</u>, "CONSULT-II <u>Diagnostic Code Chart ("SELF-DIAG [CURRENT]")"</u>.
- Touch "BACK" key of CONSULT-II until "SELECT SYSTEM" appears in order to return to User mode from Diagnosis mode.
- 11. Turn ignition switch "OFF", then turn off and disconnect CONSULT-II and disconnect both battery cables.
- 12. Repair the system as outlined by the "Repair order" in "CONSULT-II Diagnostic Code Chart", that corresponds to the self-diagnostic result.
- 13. After repairing the system, refer to <u>SRS-21, "DIAGNOSTIC PROCEDURE 3"</u> for final checking.

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 User mode	 Self-diagnostic result "SELF-DIAG [PAST]" (previously stored in the memory) might not be erased after repair. Intermittent malfunction has been detected in the past. 	Go to SRS-23, "DIAGNOSTIC PRO- CEDURE 4 (CONTINUED FROM DIAGNOSTIC PROCEDURE 2)".
		Low battery voltage (Less than 9V)	Go to <u>SRS-21</u> , " <u>DIAGNOSTIC PRO-CEDURE 3"</u> after charging battery.
	No malfunction is determined.	cted.	Go to <u>SRS-21, "DIAGNOSTIC PRO-CEDURE 3"</u> .

SELF-DIAG [CURRENT]
DTC RESULTS:

NO DTC IS DETECTED.
FURTHER TESTING
MAY BE REQUIRED.

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Diagnostic item	Explanation	Repair order
	·	Recheck SRS at each replacement.
DRIVER AIR BAG MODULE [OPEN]	Driver air bag module circuit is open. (including the spiral cable)	Visually check the wiring harness connection.
[B1049]		Replace the harness if it has visible damage.
DRIVER AIR BAG MODULE	 Driver air bag module circuit is shorted to some power supply circuit. (including the spiral cable) 	3. Replace the spiral cable.
[VB-SHORT]	circuit. (including the spiral cable)	4. Replace driver air bag module.5. Replace the diagnosis sensor unit.
[B1050]		6. Replace the related harness.
DRIVER AIR BAG MODULE [GND-SHORT] [B1051]	Driver air bag module circuit is shorted to ground. (including the spiral cable)	
DRIVER AIR BAG MODULE [SHORT] [B1052]	Driver air bag module circuits are shorted to each other.	
ASSIST A/B MODULE [OPEN] [B1065]	Front passenger air bag module circuit is open.	Visually check the wiring harness
ASSIST A/B MODULE	Front passenger air bag module circuit is shorted to some	connection.
[VB-SHORT] [B1066]	power supply circuit.	Replace the harness if it has visible damage.
ASSIST A/B MODULE [GND-SHORT]	Front passenger air bag module circuit is shorted to ground.	Replace front passenger air bag module.
[B1067]		4. Replace the diagnosis sensor unit.
ASSIST A/B MODULE [SHORT] [B1068]	 Front passenger air bag module circuits are shorted to each other. 	5. Replace the related harness.
SIDE MODULE LH [OPEN] [B1134]	Front LH side air bag module circuit is open.	Visually check the wiring harness connection. Replace the harness if it has visible
SIDE MODULE LH [VB-SHORT] [B1135]	Front LH side air bag module circuit is shorted to some power supply circuits.	damage. 3. Replace front LH seatback assembly.
SIDE MODULE LH [GND-SHORT] [B1136]	Front LH side air bag module circuit is shorted to ground.	4. Replace the diagnosis sensor unit. 5. Replace the related harness.
SIDE MODULE LH [SHORT] [B1137]	Front LH side air bag module circuits are shorted to each other.	
SIDE MODULE RH [OPEN] [B1129]	Front RH side air bag module circuit is open.	Visually check the wiring harness connection. Replace the harness if it has visible
SIDE MODULE RH [VB-SHORT] [B1130]	Front RH side air bag module circuit is shorted to some power supply circuits.	damage. 3. Replace front RH seatback assembly.
SIDE MODULE RH [GND-SHORT] [B1131]	Front RH side air bag module circuit is shorted to ground.	4. Replace the diagnosis sensor unit. 5. Replace the related harness.
SIDE MODULE RH [SHORT] [B1132]	Front RH side air bag module circuits are shorted to each other.	

Diagnostic item	Explanation	Repair order Recheck SRS at each replacement.
0.4751.175.0510.111	LH side air bag (satellite) sensor	Visually check the wiring harness connection.
SATELLITE SENS LH [UNIT FAIL] [B1118] or [B1119]		Replace the harness if it has visible damage.
SATELLITE SENS LH [COMM FAIL]		Replace the LH side air bag (satellite) sensor.
[B1120]		4. Replace the diagnosis sensor unit.
		5. Replace the related harness.
SATELLITE SENS RH	RH side air bag (satellite) sensor	Visually check the wiring harness connection.
[UNIT FAIL] [B1113] or [B1114]		Replace the harness if it has visible damage.
SATELLITE SENS RH [COMM FAIL]		Replace the RH side air bag (satellite) sensor.
[B1115]		4. Replace the diagnosis sensor unit.
		5. Replace the related harness.
PRE-TEN FRONT LH [OPEN]	The circuit for the front LH pre-tensioner is open to some power supply circuit.	Visually check the wiring harness connections.
[B1086]		2. Replace the harness if it has visible
PRE-TEN FRONT LH	The circuit for the front LH pre-tensioner is shorted to some power supply circuit.	damage.
[VB-SHORT] [B1087]	power supply circuit.	Replace the front LH seat belt. Replace the diagnosis sensor unit.
PRE-TEN FRONT LH	The circuit for the front LH pre-tensioner is shorted to ground.	5. Replace the related harness.
[GND-SHORT] [B1088]	, , , , , , , , , , , , , , , , , , ,	o. Noplass the related harmose.
PRE-TEN FRONT LH	The circuits for the front LH pre-tensioner are shorted to each	
[SHORT] [B1089]	other.	
PRE-TEN FRONT RH	The circuit for the front RH pre-tensioner is open to some power	Visually check the wiring harness
[OPEN]	supply circuit.	connections.
[B1081]		2. Replace the harness if it has visible
PRE-TEN FRONT RH	The circuit for the front RH pre-tensioner is shorted to some payor curely circuit.	damage.
[VB-SHORT] [B1082]	power supply circuit.	Replace the front RH seat belt. A Replace the diagnosis conserunit
PRE-TEN FRONT RH	The circuit for the front RH pre-tensioner is shorted to ground.	Replace the diagnosis sensor unit. Replace the related harness.
[GND-SHORT] [B1083]	ground.	o. rropiace the related harness.
PRE-TEN FRONT RH	The circuits for the front RH pre-tensioner are shorted to each	
[SHORT] [B1084]	other.	
	Diagnosis sensor unit is malfunctioning.	Visually check wiring harness con- nections.
CONTROL UNIT [B1XXX]		Replace the harness if it has visible damage.
		3. Replace diagnosis sensor unit.
		4. Replace the related harness.

Follow the procedures in numerical order when repairing malfunctioning parts. Confirm whether malfunction is eliminated using the 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.

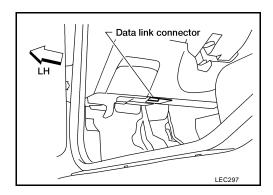
DIAGNOSTIC PROCEDURE 3

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

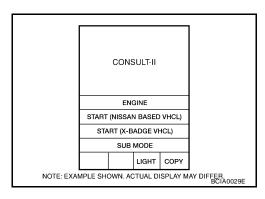
If CONSULT-II is used with no connection of CONSULT-II CONVERTER, malfunction might be detected in self-diagnosis depending on control unit which carry out CAN communication.

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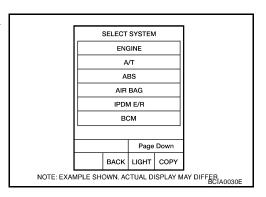
- 1. After repairing SRS, connect both battery cables.
- 2. Connect CONSULT-II to data link connector.
- 3. Turn ignition switch ON.



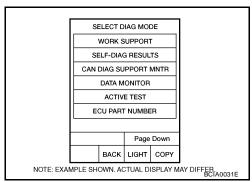
4. Touch "START (NISSAN BASED VHCL)".



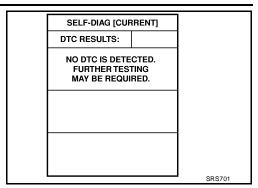
 Touch "AIR BAG".
 If "AIR BAG" is not indicated, refer to GI-38, "CONSULT-II Data Link Connector (DLC) Circuit".



Touch "SELF-DIAG [CURRENT]".



7. If no malfunction is detected on "SELF-DIAG [CURRENT]", repair of SRS is completed. Go to step 8. If any malfunction is detected on "SELF-DIAG [CURRENT]", the malfunctioning part is not repaired completely or another malfunctioning part is detected. Go to <u>SRS-17</u>, "<u>DIAGNOSTIC</u> PROCEDURE 2", and repair malfunctioning part completely.



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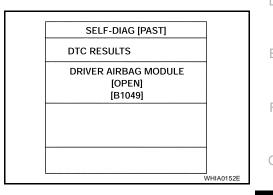
SRS

8. Touch "ERASE".

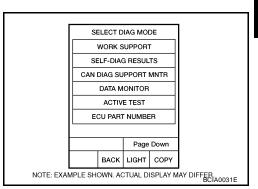
NOTE:

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

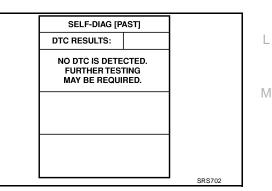
If the memory of the malfunction in "SELF-DIAG [PAST]" is not erased, the User mode shows the system malfunction by the operation of the warning lamp even if the malfunction is repaired completely.



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



- 10. Check that no malfunction is detected on "SELF-DIAG [PAST]".
- 11. Touch "BACK" key of CONSULT-II until "SELECT SYSTEM" appears in order to return to User mode from Diagnosis mode.
- 12. Turn ignition switch OFF then turn off and disconnect CON-SULT-II.
- 13. Go to SRS-17, "Checking Air Bag Operation by Using "AIR BAG" Warning Lamp User Mode".



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 SRS-24, "DIAGNOSTIC PROCEDURE 5".

No >> Self-diagnostic result "SELF-DIAG [PAST]" (previously stored in the memory) might not be erased after repair. Go to SRS-21, "DIAGNOSTIC PROCEDURE 3".

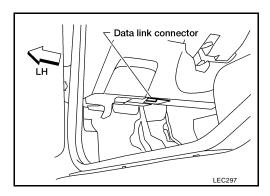
DIAGNOSTIC PROCEDURE 5

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

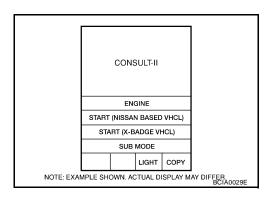
CAUTION:

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

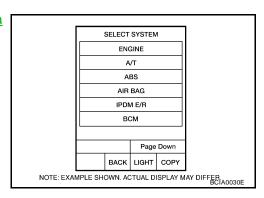
- 1. Turn ignition switch OFF.
- 2. Connect CONSULT-II to data link connector.



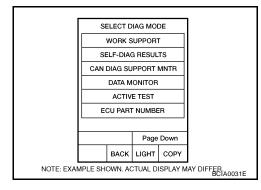
- 3. Turn ignition switch ON.
- 4. Touch "START (NISSAN BASED VHCL)".



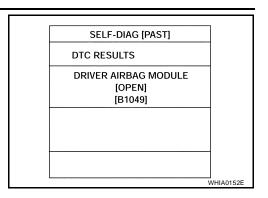
 Touch "AIR BAG".
 If "AIR BAG" is not indicated, refer to GI-38, "CONSULT-II Data Link Connector (DLC) Circuit".



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



If diagnostic codes are displayed on "SELF-DIAG [PAST]", go to step 10.

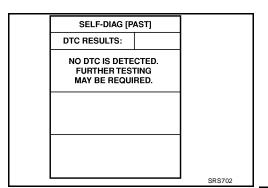


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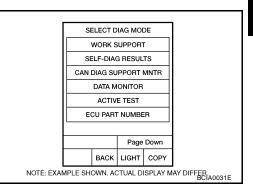
If no malfunction is detected on "SELF-DIAG [PAST]", touch "BACK" and go back to "SELECT DIAG MODE".



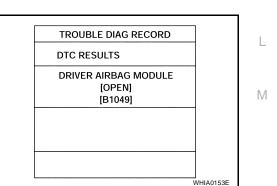
8. Touch "TROUBLE DIAG RECORD".

NOTE:

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



- 9. Diagnostic code is displayed on "TROUBLE DIAG RECORD".
- 10. Touch "PRINT".
- 11. Compare diagnostic codes to <u>SRS-26</u>, "Intermittent Malfunction <u>Diagnostic Code Chart ("SELF-DIAG [PAST]" or "TROUBLE DIAG RECORD")"</u>.
- 12. Touch "BACK" key of CONSULT-II until "SELECT SYSTEM" appears.
- 13. Turn ignition switch OFF, then turn off and disconnect CON-SULT-II, and both battery cables.
- 14. 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.
- 15. Go to SRS-21, "DIAGNOSTIC PROCEDURE 3", for final checking.



Intermittent Malfunction Diagnostic Code Chart ("SELF-DIAG [PAST]" or "TROUBLE DIAG RECORD")

Diagnostic item	Explanation	Repair order
NO DTC IS DETECTED.	No malfunction is detected.	Go to <u>SRS-21</u> , " <u>DIAGNOSTIC PROCE-DURE 3"</u> .
DRIVER AIR BAG MODULE [OPEN] [B1049]	Driver air bag module circuit is open. (including the spiral cable)	Visually check the wiring harness connection. Replace the harness if it has visible damage.
DRIVER AIR BAG MODULE [VB-SHORT] [B1050]	Driver air bag module circuit is shorted to some power supply circuit. (including the spiral cable)	If the harness check is OK, replace the spiral cable, diagnosis sensor unit and driver air bag module.
DRIVER AIR BAG MODULE [GND-SHORT] [B1051]	Driver air bag module circuit is shorted to ground. (including the spiral cable)	
DRIVER AIR BAG MODULE [SHORT] [B1052]	Driver air bag module circuits are shorted to each other.	
ASSIST A/B MODULE [OPEN] [B1065]	Front passenger air bag module circuit is open.	Visually check the wiring harness connection. Replace the harness if it has visible
ASSIST A/B MODULE [VB-SHORT] [B1066]	 Front passenger air bag module circuit is shorted to some power supply circuit. 	damage. 3. If the harness check is OK, replace the diagnosis sensor unit and front passen-
ASSIST A/B MODULE [GND-SHORT] [B1067]	 Front passenger air bag module circuit is shorted to ground. 	ger air bag module.
ASSIST A/B MODULE [SHORT] [B1068]	 Front passenger air bag module circuits are shorted to each other. 	
SIDE MODULE LH [OPEN] [B1134]	Front LH side air bag module circuit is open.	Visually check the wiring harness connection. Replace the harness if it has visible
SIDE MODULE LH [VB-SHORT] [B1135]	 Front LH side air bag module circuit is shorted to some power supply circuits. 	damage. 3. If the harness check is OK, replace the diagnosis sensor unit and front LH seat-
SIDE MODULE LH [GND-SHORT] [B1136]	Front LH side air bag module circuit is shorted to ground.	back assembly.
SIDE MODULE LH [SHORT] [B1137]	Front LH side air bag module circuits are shorted to each other.	
SIDE MODULE RH [OPEN] [B1129]	Front RH side air bag module circuit is open.	Nisually check the wiring harness connection. Replace the harness if it has visible
SIDE MODULE RH [VB-SHORT] [B1130]	 Front RH side air bag module circuit is shorted to some power supply circuits. 	damage. 3. If the harness check is OK, replace the diagnosis sensor unit and front RH seat-
SIDE MODULE RH [GND-SHORT] [B1131]	Front RH side air bag module circuit is shorted to ground.	back assembly.
SIDE MODULE RH [SHORT] [B1132]	 Front RH side air bag module circuits are shorted to each other. 	

Diagnostic item	Explanation	Repair order	
SATELLITE SENS LH	LH side air bag (satellite) sensor	Visually check the wiring harness connection.	
[UNIT FAIL] [B1118] or [B1119] SATELLITE SENS LH		Replace the harness if it has visible damage.	
[COMM FAIL] [B1120]		If the harness check is OK, replace the diagnosis sensor unit and LH side air bag (satellite) sensor.	
SATELLITE SENS RH	RH side air bag (satellite) sensor	Visually check the wiring harness connection.	
[UNIT FAIL] [B1113] or [B1114] SATELLITE SENS RH		Replace the harness if it has visible damage.	
[COMM FAIL] [B1115]		If the harness check is OK, replace the diagnosis sensor unit and RH side air bag (satellite) sensor.	
PRE-TEN FRONT LH [OPEN]	The circuit for front LH pre-tensioner is open to some power supply circuit.	Visually check the wiring harness connection.	
[B1086] PRE-TEN FRONT LH	The circuit for front LH pre-tensioner is shorted to some	Replace the harness if it has visible damage.	
[VB-SHORT] [B1087]	power supply circuit.	If the harness check is OK, replace the diagnosis sensor unit and front LH sea	
PRE-TEN FRONT LH [GND-SHORT] [B1088]	The circuit for front LH pre-tensioner is shorted to ground.	belt.	
PRE-TEN FRONT LH [SHORT] [B1089]	The circuits for the front LH pre-tensioner are shorted to each other.		
PRE-TEN FRONT RH [OPEN]	The circuit for front RH pre-tensioner is open to some power supply circuit.	Visually check the wiring harness connection.	
[B1081] PRE-TEN FRONT RH	The circuit for front RH pre-tensioner is shorted to some	Replace the harness if it has visible damage.	
[VB-SHORT] [B1082]	power supply circuit.	If the harness check is OK, replace the diagnosis sensor unit and front RH seat	
PRE-TEN FRONT RH [GND-SHORT] [B1083]	The circuit for front RH pre-tensioner is shorted to ground.	belt.	
PRE-TEN FRONT RH [SHORT] [B1084]	The circuits for the front RH pre-tensioner are shorted to each other.		
	Diagnosis sensor unit is malfunctioning.	Visually check the wiring harness connection.	
CONTROL UNIT [B1XXX]		Replace the harness if it has visible damage.	
		If the harness check is OK, replace the diagnosis sensor unit.	

Follow the procedures in numerical order when repairing malfunctioning parts, then make the final system check.

▼ Trouble Diagnoses 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.

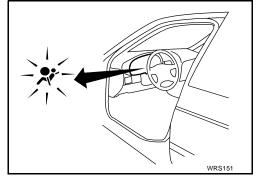
- 1. Turn ignition switch "ON".
- 2. After "AIR BAG" warning lamp lights for 7 seconds, turn ignition switch "OFF" within 1 second.
- 3. Wait more than 3 seconds.
- 4. Repeat steps 1 to 3 three times.
- Turn ignition switch "ON". SRS is now in Diagnosis mode.
- 6. "AIR BAG" warning lamp operates in Diagnosis mode as follows:



If SRS does not enter Diagnosis mode even though malfunction is detected in User mode, check the battery voltage.

If the battery voltage is less than 9V, charge the battery. Then go to SRS-33, "DIAGNOSTIC PROCEDURE 7"

If the battery voltage is OK, replace the diagnosis sensor unit.

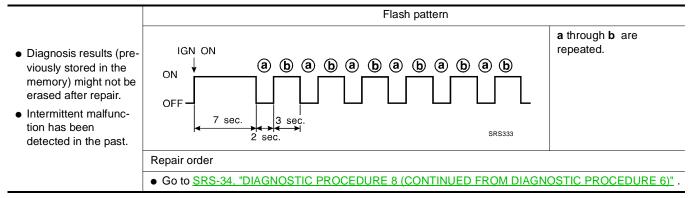


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No.	"AIR BAG" warning lamp flash pattern — Diagnosis	3" warning lamp flash pattern — Diagnosis mode —	
1	ON (a) (b) (b) (a) (b) (b) (b) (b) (b) (b) (b) (b) (b) (b	a through b are repeated.	Diagnosis results (previously stored in the memory) might not be erased after repair. Intermittent malfunction has been detected in the past. Go to SRS-34, "DIAGNOSTIC PROCEDURE 8 (CONTINUED FROM DIAGNOSTIC PROCEDURE 6)".

- 7. Malfunctioning part is indicated by the number of flashes (part **d** or **f**). Compare the number of flashes to SRS-29, "Air Bag Warning Lamp Flash Code Chart (Diagnosis mode)", and locate malfunctioning part.
- 8. Turn ignition switch "OFF", and disconnect both battery cables.
- Repair the system as outlined by the "Repair order" in "Warning Lamp Flash Code Chart" that corresponds to the flash code. For replacement procedure of component parts, refer to the Removal and Installation procedure for the appropriate component.
- 10. After repairing the system, refer to SRS-33, "DIAGNOSTIC PROCEDURE 7".

Air Bag Warning Lamp Flash Code Chart (Diagnosis mode)



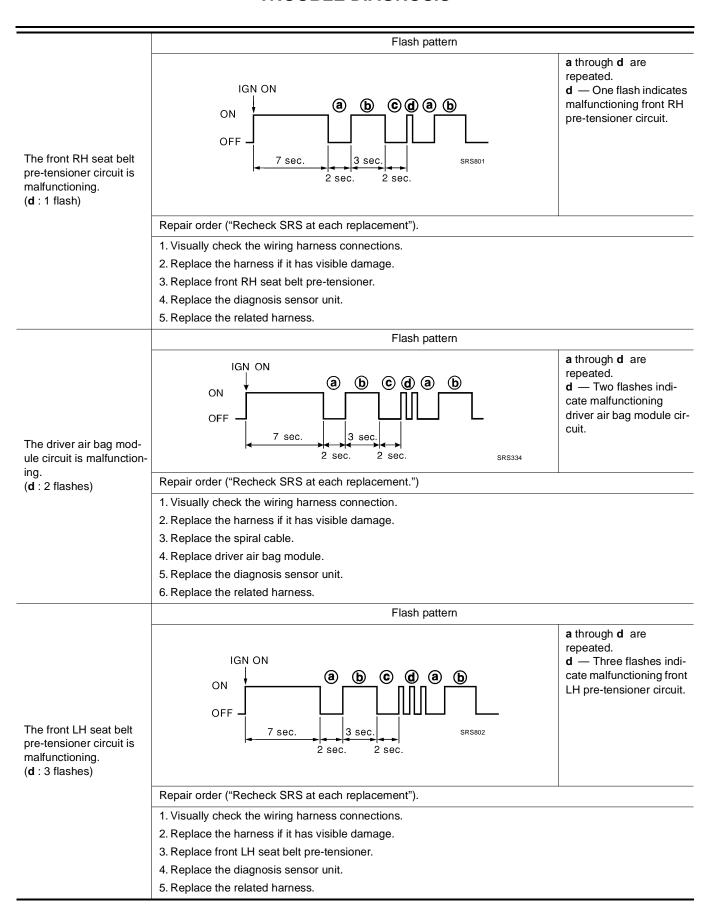
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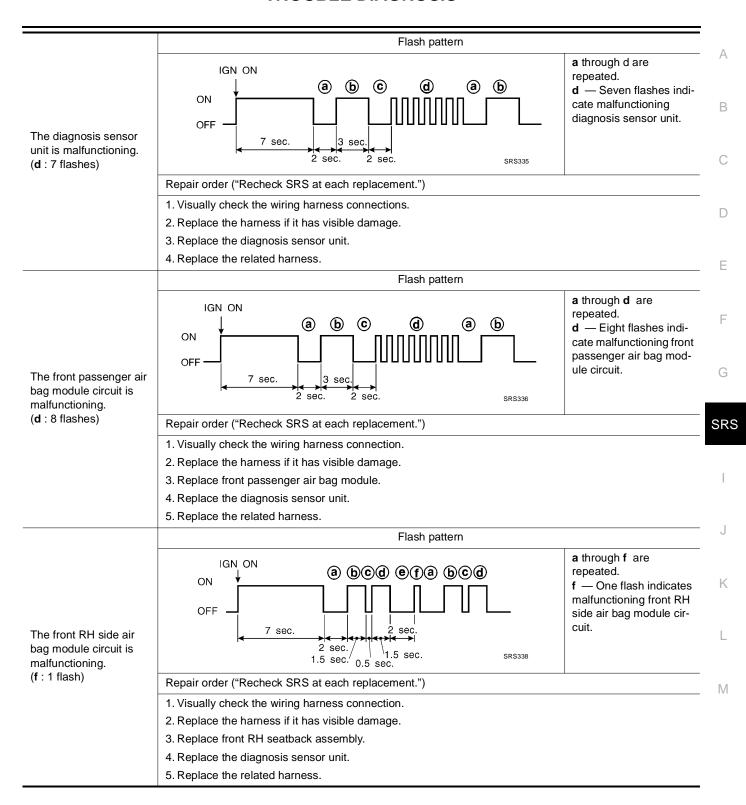
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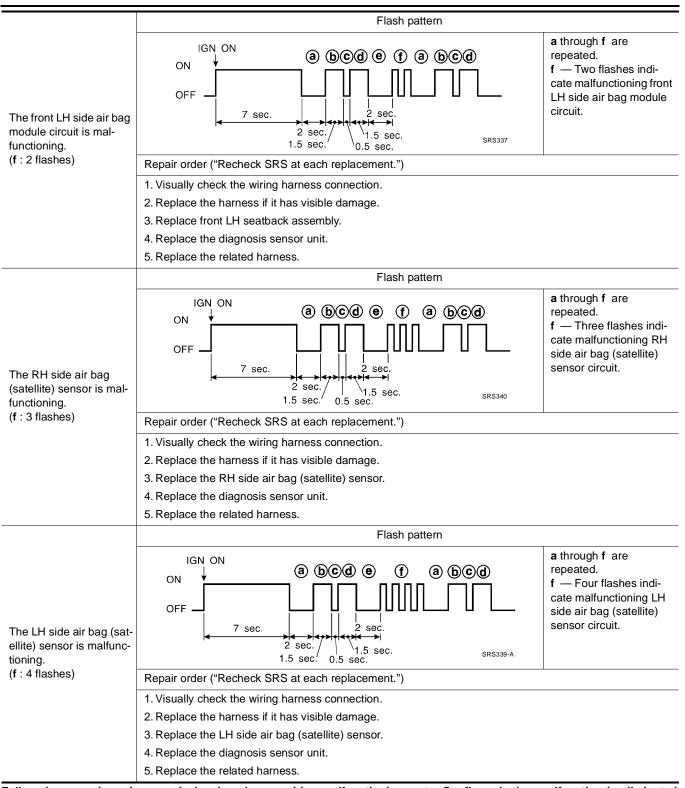
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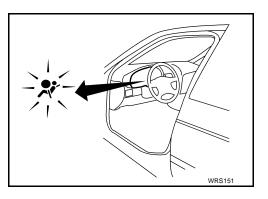


Follow the procedures in numerical order when repairing malfunctioning parts. Confirm whether malfunction is eliminated using the air bag warning lamp or CONSULT-II each time repair is finished. If malfunction is still observed, proceed to the next step. When malfunction is eliminated, further repair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

DIAGNOSTIC PROCEDURE 7

Final checking after repairing SRS by using "AIR BAG" warning lamp — Diagnosis mode and User mode

- 1. After repairing SRS, connect both battery cables.
- 2. Open driver's door.
- Turn ignition switch "ON".
- "AIR BAG" warning lamp operates in Diagnosis mode as fol-



N o.	"AIR BAG" warning lamp flash pattern — Diagnosis mode —		SRS condition	Е
1	OFF 7 sec. 2 sec. SRS333	a through b are repeated.	No malfunction is detected or repair is completed. No further action is necessary.	F
2	ON (a) (b) (c) (d) (a) (b) (c) (d) (a) (b) (c) (d) (a) (d) (d) (d) (d) (d) (d) (d) (d) (d) (d	a through d are repeated. b — Driver and front passenger air bag marker (For identifying driver air bag, front passenger air bag and/or seat belt pre-tensioner malfunctioning) d — Indicates malfunctioning part. The number of flashes varies with malfunctioning part (0.5 sec. ON and 0.5 sec. OFF is counted as one flash.)	The system is malfunction-ing and needs to be repaired.	SRS I J
3	OFF 7 sec. 2 sec. 2 sec. 1.5 sec. 0.5 sec. SRS342A	a through f are repeated. b, c, d — Front side air bag marker (For identifying front side air bag malfunctioning) f — Indicates malfunctioning part. The number of flashes varies with malfunctioning part (0.5 sec. ON and 0.5 sec. OFF is counted as one flash.)		L

NOTE:

When diagnosis sensor unit is replaced with new one, "AIR BAG" warning lamp will operate in User mode. Checking "AIR BAG" warning lamp operation in Diagnosis mode is not required. Go to step 6.

- 5. If "AIR BAG" warning lamp operates as shown in No. 1 in chart above, turn ignition switch "OFF" to reset from Diagnosis mode to User mode and to erase the memory of the malfunction. Then go to step 6. If "AIR BAG" warning lamp operates as shown in No. 2 or No. 3 in chart above, the malfunctioning part is not repaired completely, or another malfunctioning part is detected. Go to SRS-28, "DIAGNOSTIC PRO-CEDURE 6", and repair malfunctioning part completely.
- Turn ignition switch "ON". "AIR BAG" warning lamp operates in User mode. Compare "AIR BAG" warning lamp operation to the chart below.

NOTE:

If switching Diagnosis mode to User mode is required while malfunction is being detected, turn ignition switch as follows:

- 7. Turn ignition switch "ON".
- After "AIR BAG" warning lamp lights for 7 seconds, turn ignition switch "OFF".

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- 9. Wait more than 3 seconds.
- 10. Repeat steps 1 to 3 three times.
- 11. Turn ignition switch "ON".

SRS is now in User mode.

"AIR BAG" warning lamp operation — User mode —	SRS condition	Reference item
OFF 7 sec.	No malfunction is detected. No further action is necessary.	_
OFF 0.5 sec. 0.5 sec.	The system is malfunctioning and needs to be repaired as indicated.	Go to SRS-28, "DIAG- NOSTIC PROCEDURE 6"
IGN ON	Air bag is deployed.	Go to SRS-46, "COLLI- SION DIAGNOSIS".
OFF OFF	Air bag fuse, diagnosis sensor unit or harness is malfunctioning and needs to be repaired.	Go to <u>SRS-35</u> , "DIAG- NOSTIC PROCEDURE 9"
MRS097A		
IGN ON	One of the following has occurred and needs to be repaired.	Go to SRS-36, "DIAG- NOSTIC PROCEDURE 10" .
ON OFF	Meter fuse is blown. "AIR BAG" warning lamp circuit has open or short.	
MRS098A	Diagnosis sensor unit is malfunctioning.	

DIAGNOSTIC PROCEDURE 8 (CONTINUED FROM DIAGNOSTIC PROCEDURE 6) 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-24, "DIAGNOSTIC PROCEDURE 5"</u> . (Further inspection cannot be performed without CONSULT-II.)

No >> Diagnosis results (previously stored in the memory) might not be erased after repair. Go to <u>SRS-33</u>, "DIAGNOSTIC PROCEDURE 7".

Trouble Diagnoses: "AIR BAG" Warning Lamp Does Not Turn Off DIAGNOSTIC PROCEDURE 9

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1. SEE THE DEPLOYMENT OF AIR BAG MODULE

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Is air bag module deployed?

Yes or No

Yes >> Refer to <u>SRS-46</u>, "<u>COLLISION DIAGNOSIS</u>".

No >> GO TO 2.

2. CHECK AIR BAG FUSE

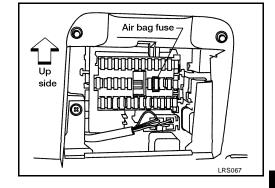
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Check 10A fuse 18 [located in the fuse block (J/B)].

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.

Is "AIR BAG" fuse blown again?

Yes >> Repair main harness and/or replace related harness.

No >> Inspection End.

4. CHECK DIAGNOSIS SENSOR UNIT

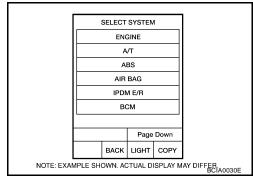
Connect CONSULT-II and touch "START". Is "AIR BAG" displayed on CONSULT-II?

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. Refer to SRS-37, "Removal and Installation".



5. CHECK HARNESS CONNECTION

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

OK >> Replace diagnosis sensor unit. Refer to <u>SRS-37</u>, "Removal and Installation".

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 Diagnoses: "AIR BAG" Warning Lamp Does Not Turn On DIAGNOSTIC PROCEDURE 10

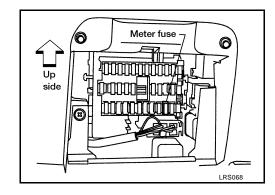
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1. CHECK "METER" FUSE

Check 10A fuse 30 [located in the fuse block (J/B)].

OK or NG

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



2. CHECK "METER" FUSE AGAIN

Replace "METER" fuse and turn ignition switch ON.

Is "METER" fuse blown again?

Yes >> Repair main harness.

No >> Inspection End.

3. CHECK HARNESS CONNECTION BETWEEN DIAGNOSIS SENSOR UNIT AND "AIR BAG" WARNING LAMP

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. Refer to <u>SRS-37</u>, "Removal and Installation".

No >> Check the ground circuit of "AIR BAG" warning lamp.

DIAGNOSIS SENSOR UNIT

DIAGNOSIS SENSOR UNIT

PFP:28556

Removal and Installation REMOVAL

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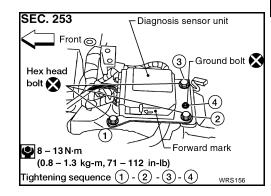
CAUTION:

- Before servicing SRS, turn the ignition switch off, disconnect both battery cables and wait for at least 3 minutes.
- Do not use old bolts after removal; replace with new ones.
- Check diagnosis sensor unit for proper installation.
- Check diagnosis sensor unit to ensure it is free of deformities, dents, cracks or rust. If they show any visible signs of damage, replace them with new ones.
- Check diagnosis sensor unit brackets to ensure they are free of deformities or rust.
- Replace diagnosis sensor unit if it has been dropped or sustained an impact.
- After replacement of diagnosis sensor unit, perform self-diagnosis for SRS. Refer to <u>SRS-17, "SRS</u> <u>Operation Check"</u> for details.
- Disconnect driver, front passenger and front side air bag module connectors. Also, disconnect front seat belt pre-tensioner connectors.
- 2. Remove console box. Refer to IP-10, "INSTRUMENT PANEL ASSEMBLY" .
- 3. Disconnect diagnosis sensor unit connector.
- 4. Remove bolts from diagnosis sensor unit. Then remove the diagnosis sensor unit.

INSTALLATION

NOTE:

• To install, reverse the removal procedure sequence.



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FRONT SEAT BELT PRE-TENSIONER

FRONT SEAT BELT PRE-TENSIONER

PFP:86884

Removal and Installation

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For removal and installation of front seat belt pre-tensioners, refer to SB-3, "Removal and Installation" .

SIDE AIR BAG (SATELLITE) SENSOR

SIDE AIR BAG (SATELLITE) SENSOR

PFP:K8EH0

Removal and Installation **REMOVAL**

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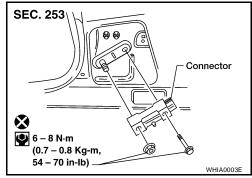
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CAUTION:

- Before servicing SRS, turn the ignition switch off, disconnect both battery cables and wait at least 3 minutes.
- Do not use old nut or bolt coated with bonding agent after removal; 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.
- 1. Remove front seat belt pre-tensioner. Refer to SB-3, "Removal and Installation".
- 2. Disconnect side air bag (satellite) sensor connector.
- 3. Remove bolt and nut from side air bag (satellite) sensor unit. Then remove the side air bag (satellite) sensor.



SRS

INSTALLATION

CAUTION:

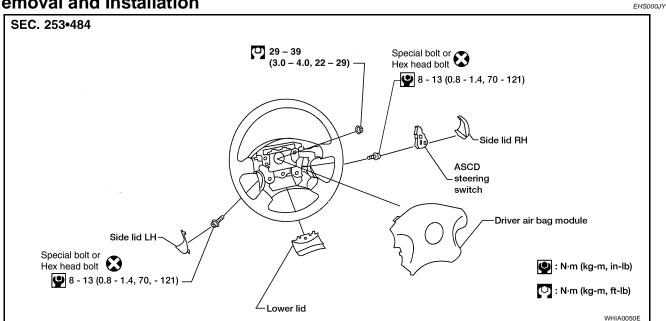
- Check side air bag (satellite) sensor for proper installation.
- After replacement of side air bag (satellite) sensor, check SRS function and perform self-diagnosis. Refer to SRS-17, "SRS Operation Check" for details.

To install, reverse the removal procedure sequence.

DRIVER AIR BAG MODULE

PFP:K8510

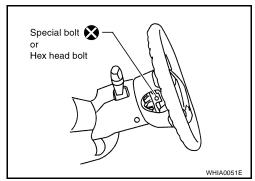
Removal and Installation



Removal EHS000JZ

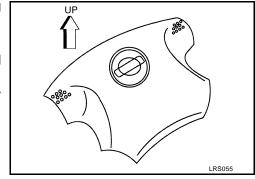
CAUTION:

- Do not attempt to repair or replace damaged direct-connect driver air bag module connectors. If a direct-connect harness connector is damaged, the harness must be replaced.
- 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.
- Remove side lids and ASCD steering switch (if equipped). Using the TAMPER RESISTANT TORX (Size T30) (if equipped), remove left and right special bolts or hex head bolts. Driver air bag module can then be removed.
- Disconnect the air bag harness connector and remove the air bag module.
 - For removal/installation of the direct-connect SRS connectors, refer to SRS-5, "Direct-connect SRS Component Connectors".



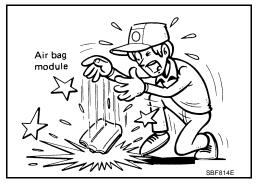
CAUTION:

- Always place driver air bag module with pad side facing
- Do not attempt to disassemble air bag module.
- The bolts are coated with bonding agent. Do not use old bolts after removal; replace with new ones.
- Do not insert any foreign objects (screwdriver, etc.) into air bag module connector.



DRIVER AIR BAG MODULE

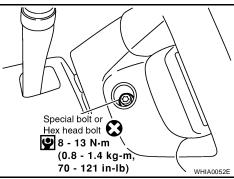
- Replace driver air bag module if it has been dropped or sustained an impact.
- Do not expose the driver air bag module to temperatures exceeding 90°C (194°F).
- Do not allow oil, grease or water to come in contact with the driver air bag module.



Installation EHS000K0

- 1. Connect driver air bag harness connector.
 - For removal/installation of the direct-connect SRS connectors, refer to SRS-5, "Direct-connect SRS Component Connectors".
- 2. Position driver air bag module, press firmly and tighten with new special bolts.
- 3. Install ASCD steering switch (if equipped) and all lids.
- 4. Connect both battery cables, then conduct self-diagnosis to ensure entire SRS operates properly. (Use CONSULT-II or warning lamp check.)
- 5. Turn steering wheel to the left end and then to the right end fully to make sure that spiral cable is set in the neutral position.

 If air bag warning lamp blinks or stays ON (at the user mode), it shows the spiral cable may be snapped due to its improper position. Perform self-diagnosis again (use CONSULT-II or warning lamp). Refer to SRS-17, "SRS Operation Check". If a malfunction is detected, replace the spiral cable with a new one.
- 6. Perform self-diagnosis again to check that no malfunction is detected. Go to SRS-17, "SRS Operation Check and perform self-diagnosis to ensure entire SRS operates properly. (Use CONSULT-II or warning lamp check.)



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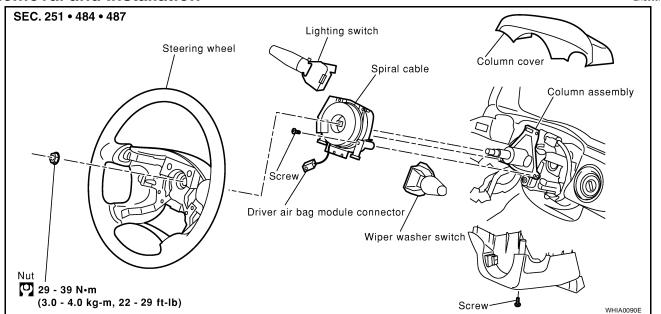
SRS

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SPIRAL CABLE PFP:25554

Removal and Installation

FHS000K1



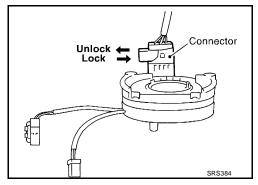
Removal

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 SRS-40, "Removal".
- 2. Set steering wheel in the neutral position.
- 3. Remove lower lid and disconnect horn connector. Remove steering wheel nut.
- 4. Remove the steering wheel. Refer to PS-11, "Removal and Installation".
- Remove steering column cover.
- Unlock the spiral cable connector. Then disconnect connectors and remove the four screws. The spiral cable can then be removed.

CAUTION:

- Do not attempt to disassemble spiral cable.
- Do not apply lubricant to the spiral cable.



SPIRAL CABLE

Installation EHS000K3

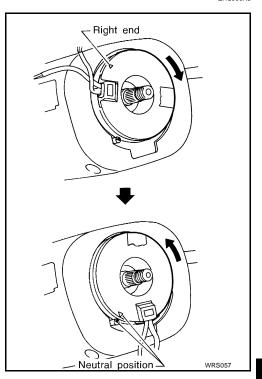
- 1. Set the front wheels in the straight-ahead position.
- 2. Make sure that the spiral cable is in the neutral position. The neutral position is detected by turning left about 3.5 revolutions from the right end position. Align the two marks ($^{\times}$).

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. To set spiral cable to neutral position turn to the left approximately 3.5 turns from the right end position.
- 3. Connect spiral cable connector and tighten with screws. Install steering column cover.
- 4. Install steering wheel, aligning with spiral cable pin guides, and pull spiral cable through.
- 5. Connect horn connector and engage spiral cable with pawls in steering wheel. Move driver air bag module connector away from steering wheel lower lid opening.
- Tighten nut.



- 7. Install driver air bag module. Refer to <a>SRS-41, "Installation".
- Connect both battery cables, then conduct self-diagnosis to ensure entire SRS operates properly. Refer to SRS-17, "SRS Operation Check".



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FRONT PASSENGER AIR BAG MODULE

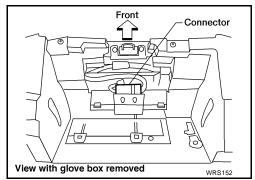
PFP:K8515

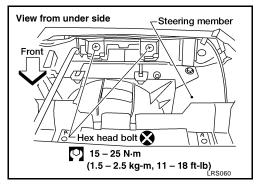
Removal and Installation REMOVAL

EHS000K4

CAUTION:

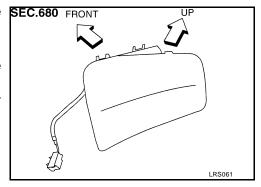
- Do not attempt to repair or replace damaged direct-connect front passenger air bag module connectors. If a direct-connect harness connector is damaged, the harness must be replaced.
- Before servicing SRS, turn the ignition switch off, disconnect both battery cables and wait for at least 3 minutes.
- Always work from the side of or under air bag module.
- Remove glove box assembly. Refer to <u>IP-10</u>, <u>"INSTRUMENT</u> PANEL ASSEMBLY" for details.
- Disconnect front passenger air bag module connector from air bag harness connector.
- Remove the nuts and hex bolts from front passenger air bag module.
- 4. Remove the front passenger air bag module from the instrument panel.
- The front passenger air bag module is heavy and should be supported using both hands during removal.





CAUTION:

- Always place front passenger air bag module with pad side facing upward.
- Do not attempt to disassemble air bag module.
- The special bolts are coated with bonding agent. Do not use old bolts after removal; replace with new coated bolts.
- Do not insert any foreign objects (screwdriver, etc.) into air bag module connector.



- Replace 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 front passenger air bag module.
- After air bag inflates, the front instrument panel assembly should be replaced if damaged.

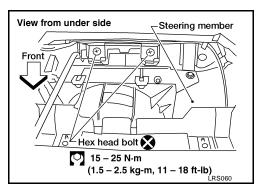


FRONT PASSENGER AIR BAG MODULE

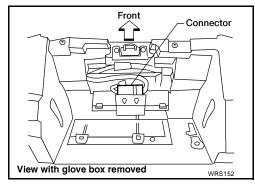
INSTALLATION

CAUTION:

- Always work from the side of or under air bag module.
- 1. Install front passenger air bag module on steering member.
 - Ensure harness is not caught between rear of air bag module and steering member.
- 2. Install glove box assembly. (Glove box lid is open.)



- 3. Connect front passenger air bag module connector to air bag harness connector.
- 4. Close the glove box lid.
- 5. Connect both battery cables.
- Go to <u>SRS-17</u>, "<u>SRS Operation Check"</u> and perform self-diagnosis to ensure entire SRS operates properly. (Use CONSULT-II or warning lamp check.)



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COLLISION DIAGNOSIS

COLLISION DIAGNOSIS FOR FRONTAL COLLISION

PFP:00015

FHS000K7

To repair the SRS, perform the following steps.

When SRS (except the side air bag) is activated in a collision:

- 1. Replace the diagnosis sensor unit and (LH and RH) side airbag sensors.
- Remove the air bag modules (except the side air bag modules) and front seat belt pre-tensioner assemblies.
- 3. Check the SRS components using the table shown below:
- Replace any SRS components showing visible signs of damage (dents, cracks and deformation).
- 4. Install new air bag modules (except the side air bag modules), spiral cable and front seat belt pre-tensioner assemblies.
- 5. Conduct self-diagnosis using CONSULT-II or "AIR BAG" warning lamp. Refer to <u>SRS-17</u>, "<u>SRS Operation Check"</u> for details. Ensure entire SRS operates properly.

When SRS is not activated in a collision:

- 1. Check the SRS components using the table shown below:
- Replace any SRS components showing visible signs of damage (dents, cracks and deformation).
- 2. Conduct self-diagnosis using CONSULT-II or "AIR BAG" warning lamp. Refer to <u>SRS-17</u>, "<u>SRS Operation Check</u>" for details. Ensure entire SRS operates properly.

SRS INSPECTION (FOR FRONTAL COLLISION)

Part	SRS is activated	SRS is NOT activated	
Air bag module (driver and front pas- senger side)	REPLACE Install with new bolts.	1. Remove air bag module. Check terminals for deformities, and harness for binding.	
		2. Install air bag modules.	
		 Install driver air bag module into the steering wheel to check fit and alignment with the wheel. 	
		 Install front passenger air bag module into the instrument panel to check fit with the instrument panel. 	
		3. If no damage is found, reinstall with new bolts.	
		4. If damaged—REPLACE. Install air bag modules with new bolts.	
Front seat belt pretensioner assembly	REPLACE Install front seat belt pre-tensioner with new bolts.	Remove front seat belt pre-tensioners. Check terminals for deformities, and harness for binding.	
		2. Check belts for damage and anchors for loose mounting.	
		3. Check retractor for smooth operation.	
		4. If no damage is found, reinstall the front seat belt pre-tensioner assembly.	
		If damaged—REPLACE. Install the front seat belt pre-tensioners with new bolts coated with bonding agent.	
Diagnosis sensor unit	REPLACE (LH and RH) side air bag (satellite) sensor Diagnosis sensor unit	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 with new bolts and ground bolt coated with bonding agent.	
		4. If damaged—REPLACE. Install with new bolts and ground bolt.	
Steering wheel	1. Visually check steering wheel for deformities.		
	2. Check harness (built into steering wheel) and connectors for damage, and terminals for deformities.		
	3. Install driver air bag module to check fit or alignment with steering wheel.		
	4. Check steering wheel for excessive free play.		
	5. If no damage is found, reinstall with new bolts.		
	6. If damaged—REPLACE.		
Spiral cable	Visually check spiral cable and combination switch for damage.		
	2. Check connectors and protective tape for damage.		
	3. Check steering wheel for noise, binding or heavy operation.		
	4. If no damage is found, reinstall with new bolts.		
	5. If damaged—REPLACE.		

COLLISION DIAGNOSIS

Part	SRS is activated SRS is NOT activated		
Harness and connectors	1. Check connectors for poor connection, damage, and terminals for deformities.		
	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 harness. Do not attempt to repair, splice or modify any SRS harness.		
Instrument panel	When front passenger air bag inflates, check the following points for bending, deformities or cracks. Opening portion for front passenger air bag		
	Check points LRS069 - Front passenger air bag module brackets		
	- Front passenger all bag module brackets		
	- The portions securing the instrument panel		
	•'		
	©: Check points LRS071		
	2. If no damage is found, reinstall the instrument panel.		
	3. If damaged—REPLACE the instrument panel with new bolts and nuts.		

FOR SIDE COLLISION

EHS000K8

To repair the SRS for a side collision, perform the following steps.

When the side air bag is activated in the side collision:

- 1. Replace the following components:
- Front seatback assembly (on the side on which side air bag is activated)
- Diagnosis sensor unit
- (LH and RH) side air bag (satellite) sensors
- Check the SRS components and the related parts using the table shown below.
- Replace any SRS components and the related parts showing visible signs of damage (dents, cracks, deformation).

COLLISION DIAGNOSIS

3. Conduct self-diagnosis using CONSULT-II and "AIR BAG" warning lamp. Refer to <u>SRS-17, "SRS Operation Check"</u> for details. Ensure entire SRS operates properly.

When SRS is not activated in the side collision:

- 1. Check the SRS components and the related parts using the table shown below.
- If the front seatback assembly is damaged, the front seatback assembly must be replaced.
- 2. Conduct self-diagnosis using CONSULT-II and "AIR BAG" warning lamp. Refer to <u>SRS-17, "SRS Operation Check"</u> for details. Ensure entire SRS operates properly.

SRS INSPECTION (FOR SIDE COLLISION)

Part	Side air bag is acti- vated	SRS is NOT activated	
Front (LH or RH) side air bag module	REPLACE front seat- back assembly.	Check for visible signs of damage (dents, tears, deformation) of the seat back on the collision side.	
		2. Check harness and connectors for damage, and terminals for deformities.	
		3. If damaged—REPLACE the front seatback assembly.	
(LH or RH) side air bag (satellite) sensor	REPLACE (LH and RH) side air bag (satellite sensor and diagnosis sensor	Remove the side air bag (satellite) sensor on the collision side. Check harness connectors for damage, terminals for deformities, and harness for binding.	
		2. Check for visible signs of damage (dents, cracks, deformation) of the satellite sensor.	
	unit. (Repair the center pil-	3. Install the side air bag (satellite) sensor to check fit.	
	lar inner, etc. before installing new one if damaged.)	4. If no damage is found, reinstall the side air bag (satellite) sensor with new nut and bolt coated with bonding agent.	
		5. If damaged—REPLACE the (LH and RH) side air bag (satellite sensor and diagnosis sensor unit with new nut and bolt coated with bonding agent.	
Diagnosis sensor unit	REPLACE (LH and RH) side air bag (satellite sensor and diagnosis sensor unit with new bolts.	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 with new bolts and ground bolt coated with bonding agent.	
		If damaged—REPLACE. Install (LH and RH) side air bag (satellite sensor and diagnosis sensor unit with new bolts and ground bolt coated with bonding agent.	
Front seat belt pre- tensioner assembly	Check if the seat belt can be extended smoothly. 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 front seat belt pre-tensioner assembly.		
	2. Remove the front 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 front seat belt pre-tensioner assembly.		
	4. If no damage is found, reinstall the front seat belt pre-tensioner assembly.		
	5. If damaged—REPLACE the front seat belt pre-tensioner assembly with new bolts coated with bonding agent.		
Seat (with side air	REPLACE front seat- back assembly.	1. Visually check the seat on the collision side.	
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 with new bolts. If the front seat-back assembly is damaged, the front seatback assembly must be replaced.	
Center pillar inner	1. Check the center pillar inner on the collision side for damage (dents, cracks, deformation).		
	2. If damaged—REPAIR the center pillar inner.		
Trim	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.		