

## **RESTRAINT SYSTEM**

SECTION

RS

MA EM

GI

EC

FE

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EXIT

## Precautions

Precautions	
SUPPLEMENTAL RESTRAINT SYSTEM (SRS) "AIR BAG" AND "SEAT BELT PRE-TENSIONER"	G]
The Supplemental Restraint System such as "AIR BAG" and "SEAT BELT PRE-TENSIONER" used along with a seat belt, helps to reduce the risk or severity of injury to the driver and front passenger for certain types of collision. The SRS composition which is available to INFINITI QX4 is as follows:	
<ul> <li>For a frontal collision         The Supplemental Restraint System consists of driver air bag module (located in the center of the steer- ing wheel), front passenger air bag module (located on the instrument panel on passenger side), seat belt pre-tensioners, a diagnosis sensor unit, warning lamp, wiring harness and spiral cable.     </li> </ul>	
<ul> <li>For a side collision         The Supplemental Restraint System consists of side air bag module (located in the outer side of front seat), satellite sensor, diagnosis sensor unit (one of components of air bags for a frontal collision), wiring harness, warning lamp (one of components of air bags for a frontal collision).     </li> </ul>	
<ul> <li>WARNING:</li> <li>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 INFINITI dealer.</li> </ul>	
<ul> <li>Improper maintenance, including incorrect removal and installation of the SRS, can lead to per- sonal injury caused by unintentional activation of the system.</li> </ul>	AT
<ul> <li>Do not use electrical test equipment on any circuit related to the SRS unless instructed to in this Service Manual. Spiral cable and wiring harnesses covered with yellow insulation tape either just before the harness connectors or for the complete harness are related to the SRS.</li> </ul>	
PRECAUTION FOR SEAT BELT SERVICE	PD
<ul> <li>CAUTION:</li> <li>Before removing the seat belt pre-tensioner assembly, turn the ignition switch off, disconnect both battery cables and wait at least 3 minutes.</li> </ul>	AX
<ul> <li>Do not use electrical test equipment for seat belt pre-tensioner connector.</li> <li>After replacing or reinstalling seat belt pre-tensioner assembly, or reconnecting seat belt pre-tensioner connector, check the system function. Refer to "Checking Seat Belt Pre-tensioner Operation by Using "SEAT BELT" Warning Lamp — User Mode", "SRS Operation Check" (RS-40) for details.</li> </ul>	50
Do not use disassemble buckle or seat belt assembly.	BR
Replace anchor bolts if they are deformed or worn out.	<u>85</u>
<ul> <li>Never oil tongue and buckle.</li> <li>If any component of seat belt assembly is questionable, do not repair. Replace the whole seat belt assembly.</li> </ul>	ST
<ul> <li>If webbing is cut, frayed, or damaged, replace seat belt assembly.</li> <li>When replacing seat belt assembly, use a genuine seat belt assembly.</li> </ul>	RS
After A Collision	BT
WARNING: Inspect all seat belt assemblies including retractors and attaching hardware after any collision. NISSAN recommends that all seat belt assemblies in use during a collision be replaced unless the collision was minor and the belts show no damage and continue to operate properly. Failure to do so	
could result in serious personal injury in an accident. Seat belt assemblies not in use during a colli- sion should also be replaced if either damage or improper operation is noted. Seat belt pre-tensioner should be replaced even if the seat belts are not in use during a frontal collision in which the air bags	SC
are deployed. Replace any seat belt assembly if:	EL
<ul> <li>The seat belt assembly in.</li> <li>The seat belt was in use at the time of a collision (except for minor collisions and the belts, retractors and buckles show no damage and continue to operate properly).</li> </ul>	IDX

- The seat belt was damaged in an accident. (i.e. torn webbing, bent retractor or guide, etc.)
- The seat belt attaching point was damaged in an accident. Inspect the seat belt attaching area for damage or distortion and repair as necessary before installing a new seat belt assembly.
- Anchor bolts are deformed or worn out.



• The seat belt pre-tensioner should be replaced even if the seat belts are not in use during the collision in which the air bags are deployed.



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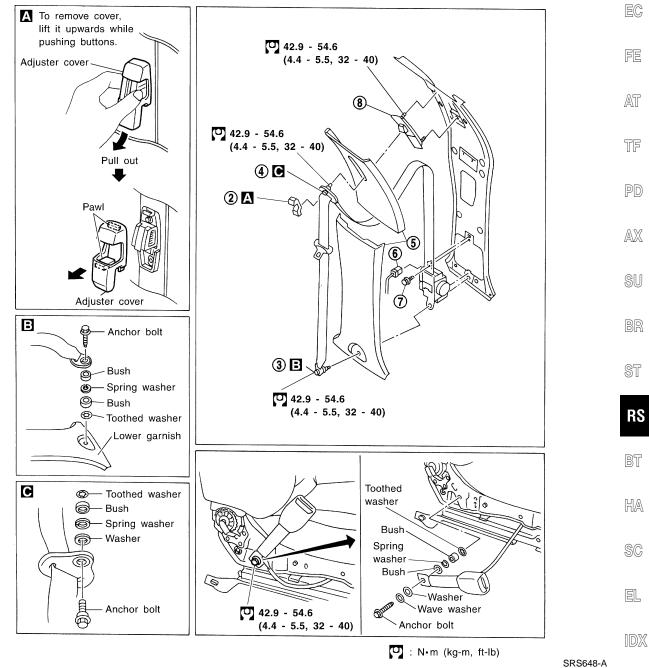
## **Front Seat Belt**

#### **REMOVAL AND INSTALLATION**

1.	Slide the seat all the way forward and tilt the seatback toward the front.	GII
2.	Remove adjuster cover.	
3.	Remove floor anchor bolt.	MA
4.	Remove shoulder anchor bolt.	
5.	Remove center pillar upper and lower garnish. Refer to BT-24, "SIDE AND FLOOR TRIM" for details.	EM
6	Disconnect cost bolt are tensioner connector	LEIM

- 6. Disconnect seat belt pre-tensioner connector.
- 7. Remove the bolt securing seat belt retractor, then remove seat belt and seat belt retractor.
- 8. Remove bolts securing seat belt adjuster, then remove seat belt adjuster.

#### SEC. 769•868•870

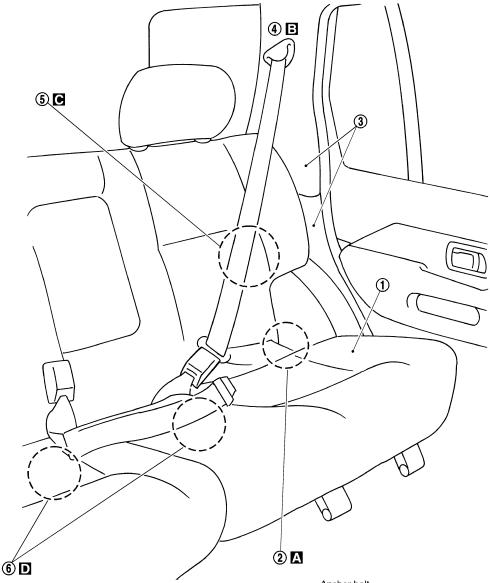


## **Rear Seat Belt**

#### **REMOVAL AND INSTALLATION**

- 1. Raise up rear seat cushion.
- 2. Remove outer anchor bolt.
- 3. Remove rear side upper and lower garnish. Refer to BT-24, "SIDE AND FLOOR TRIM" for details.
- 4. Remove anchor through-bolt.
- 5. Remove anchor bolt and bolt securing rear seat belt retractor, then remove seat belt and seat belt retractor.
- 6. Remove each anchor bolt. D

#### SEC. 869

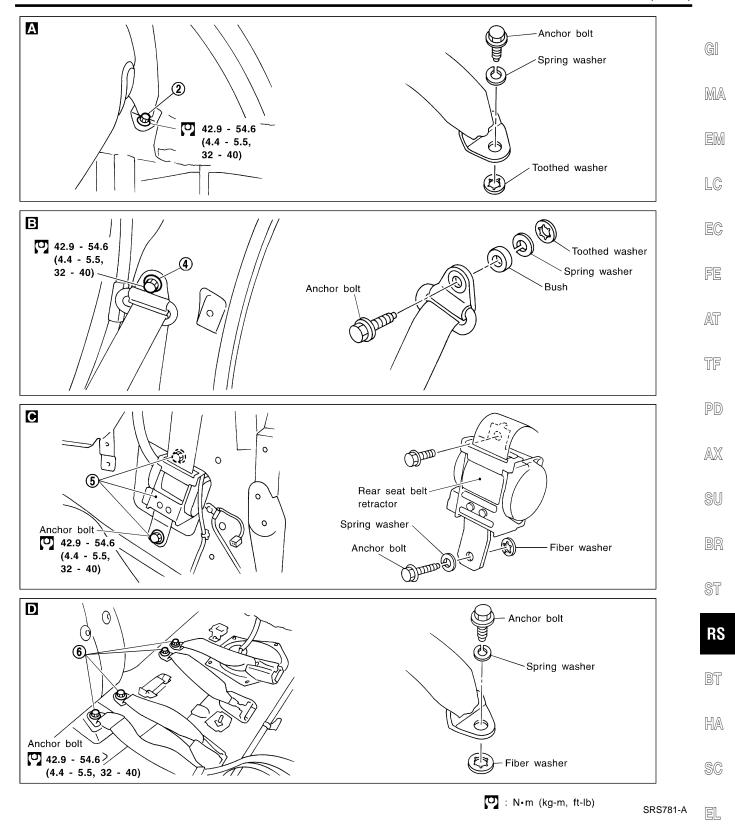


Anchor bolt 42.9 - 54.6 N·m (4.4 - 5.5 kg-m, 32 - 40 ft-lb)

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NBRS0029S02

#### **Seat Belt Inspection**

#### AFTER A COLLISION

#### WARNING:

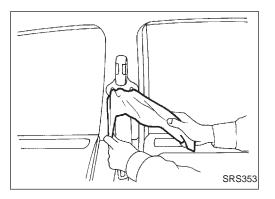
Inspect all seat belt assemblies including retractors and attaching hardware after any collision. NISSAN recommends that all seat belt assemblies in use during a collision be replaced unless the collision was minor and the belts show no damage and continue to operate properly. Failure to do so could result in serious personal injury in an accident. Seat belt assemblies not in use during a collision should also be replaced if either damage or improper operation is noted. Seat belt pre-tensioner should be replaced even if the seat belts are not in use during a frontal collision in which the air bags are deployed.

#### Replace any seat belt assembly if:

- The seat belt was in use at the time of a collision (except for minor collisions and the belts, retractors and buckles show no damage and continue to operate properly).
- The seat belt was damaged in an accident. (i.e. torn webbing, bent retractor or guide, etc.)
- The seat belt attaching point was damaged in an accident. Inspect the seat belt attaching area for damage or distortion and repair as necessary before installing a new seat belt assembly.
- Anchor bolts are deformed or worn out.
- The seat belt pre-tensioner should be replaced even if the seat belts are not in use during the collision in which the air bags are deployed.

#### PRELIMINARY CHECKS

- 1. Check the seat belt warning lamp/chime for proper operation as follows:
- a. Switch ignition ON. The seat belt warning lamp should illuminate. Also, the seat belt warning chime should sound for about seven seconds.
- b. Fasten driver's seat belt. The seat belt warning lamp should go out and the chime (if sounding) should stop.
- c. If the seat belt warning lamp is blinking, conduct self-diagnosis using CONSULT, and seat belt warning lamp. Refer to "Checking Seat Belt Pre-tensioner Operation by Using "SEAT BELT" Warning Lamp User Mode", "SRS Operation Check", RS-40.
- 2. Check that the seat belt retractor, seat belt anchor and buckle bolts are securely attached.
- Check the shoulder seat belt guide and shoulder belt height adjuster for front seats. Ensure guide swivels freely and that belt lays flat and does not bind in guide. Ensure height adjuster operates properly and holds securely.
- 4. Check retractor operation:
- a. Fully extend the seat belt webbing and check for twists, tears or other damage.
- b. Allow the seat belt to retract. Ensure that belt returns smoothly and completely into the retractor. If the seat belt does not returns smoothly, wipe the inside of the loops with a clean paper cloth etc. because dirt built up in the loops of the upper anchors can cause the seat belts to retractor slowly.



- c. Fasten the seat belt. Pull firmly on belt and buckle to ensure belt remains latched. Unfasten seat belt. Ensure belt releases freely and buckle button returns to original position.
- 5. For center (non-retractable) seat belts, check that the seat belt are accessible. Check seat belt webbing for twists, tears or other damage. Fasten the seat belt. Pull firmly on belt and buckle to ensure belt remains latched. Unfasten seat belts. Ensure belt releases freely and buckle button returns to original position.
- 6. Repeat steps above as necessary to check the other seat belts.

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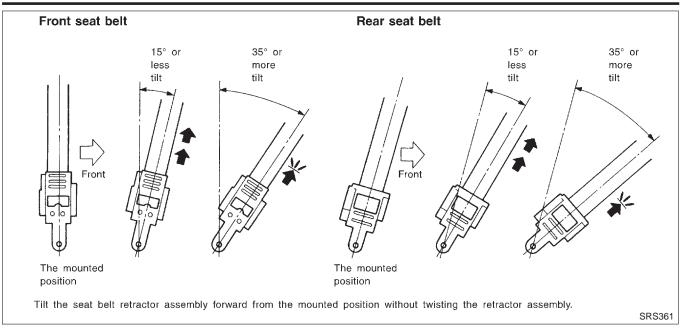
## 

SEAT BELT RETRACTOR ON-VEHICLE CHECK	
Emergency Locking Retractors (ELR) and Automatic Locking Retractors (ALR)	GI
All seat belt retractors are of the Emergency Locking Retractors (ELR) type. In an emergency (sudden stop) the retractor will lock and prevent the belt from extending any further. All 3-point type seat belt retractors except the driver's seat belt also have an Automatic Locking Retractors (ALR) mode. The ALR mode (also called child restraint mode) is used when installing child seats. The ALR mode is activated when the seat belt is fully	MA
avtanded When the helt is then retreated partially, the ALP made automatically looks the east helt in a one	EM
Check the seat belt retractors using the following test(s) to determine if a retractor assembly is operating properly.	LC
ELR Function Stationary Check	RA
Grasp the shoulder belt and pull forward quickly. The retractor should lock and prevent the belt from extend- ing further.	EC
ALR Function Stationary Check	FE
1. Pull out entire length of seat belt from retractor until a click is heard.	
	AT
3. Grasp the seat belt and try to pull out the retractor. The belt must lock and not extend any further. If NG, replace the retractor assembly.	TF
<ol><li>Allow the entire length of the belt to retract to cancel the automatic locking mode.</li></ol>	
ELR Function Moving Check	PD
on wet or gravel roads or on public streets and highways. This could result in an accident and seri-	AX
ous personal injury. The driver and passenger must be prepared to brace themselves in the event the retractor does not lock.	SU
1. Fasten driver's seat belt. Buckle a passenger into the seat for the belt that is to be tested.	00
2 Dressed to the designated asfa area	
3. Drive the vehicle at approximately 16 km/h (10 MPH). Notify any passengers of a pending sudden stop and the driver and passenger must be prepared to brace themselves in the event the retractor does not	BR
	ST
During stop, seat belts should lock and not be extended. If the seat belt retractor assembly does not lock, perform the retractor off-vehicle check.	RS
SEAT BELT RETRACTOR OFF-VEHICLE CHECK	110
1. Remove the seat belt retractor assembly.	
the retractor assembly as shown in the illustration.	BT
15 degrees or less tilt: Belt can be pulled out.	HA
35 degrees or more tilt: Belt locks and cannot be pulled out.	0.0247
	SC
	EL

**RS-9** 

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#### Seat Belt Inspection (Cont'd)



If NG, replace the retractor assembly.

Precautions

#### **Precautions**

#### 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 seat belt, helps to reduce the risk or severity of injury to the driver and front passenger for certain types of MA collision. The SRS composition which is available to INFINITI QX4 is as follows: For a frontal collision The Supplemental Restraint System consists of driver air bag module (located in the center of the steer-EM ing wheel), front passenger air bag module (located on the instrument panel on passenger side), seat belt pre-tensioners, a diagnosis sensor unit, warning lamp, wiring harness and spiral cable. LC For a side collision • The Supplemental Restraint System consists of side air bag module (located in the outer side of front seat), satellite sensor, diagnosis sensor unit (one of components of air bags for a frontal collision), wiring harness, EC warning lamp (one of components of air bags for a frontal collision). 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 INFINITI dealer. Improper maintenance, including incorrect removal and installation of the SRS, can lead to per-AT sonal injury caused by unintentional activation of the system. Do not use electrical test equipment on any circuit related to the SRS unless instructed to in this Service Manual. Spiral cable and wiring harnesses covered with yellow insulation tape either just before the harness connectors or for the complete harness are related to the SRS. PRECAUTIONS FOR SRS "AIR BAG" AND "SEAT BELT PRE-TENSIONER" SERVICE NBRS0006 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 • AX 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. ST Handle air bag module carefully. Always place driver and passenger air bag modules with the pad side facing upward and side air bag module (built-in type) with the stud bolt side facing down. RS 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. WIRING DIAGRAMS AND TROUBLE DIAGNOSIS NBRS0007 When you read wiring diagrams, refer to the following: GI-11, "HOW TO READ WIRING DIAGRAMS" HA EL-9, "POWER SUPPLY ROUTING" for power distribution circuit When you perform trouble diagnosis, refer to the following: GI-34, "HOW TO FOLLOW TEST GROUPS IN TROUBLE DIAGNOSIS" SC GI-23, "HOW TO PERFORM EFFICIENT DIAGNOSIS FOR AN ELECTRICAL INCIDENT" EL

[D]X

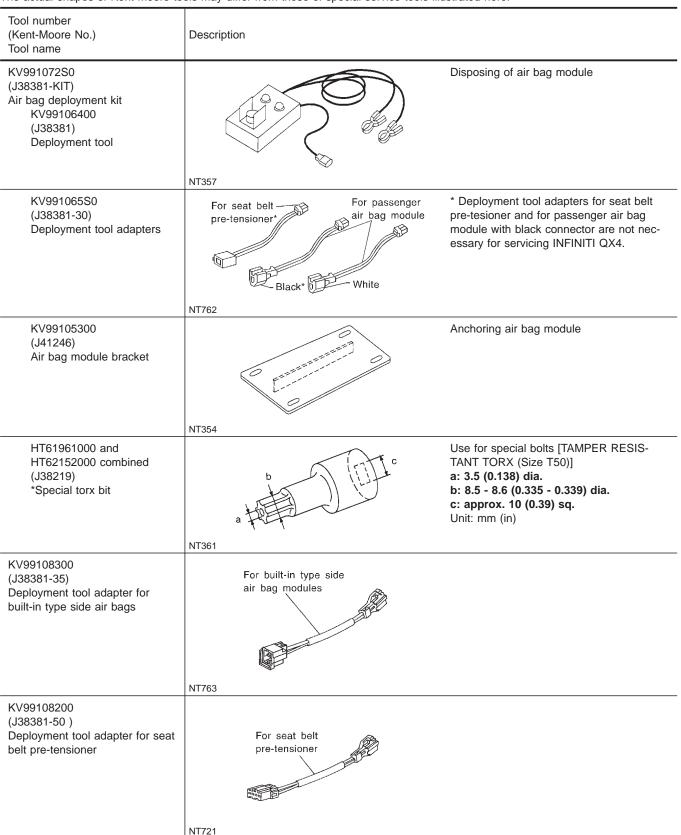
Preparation

#### **Preparation**

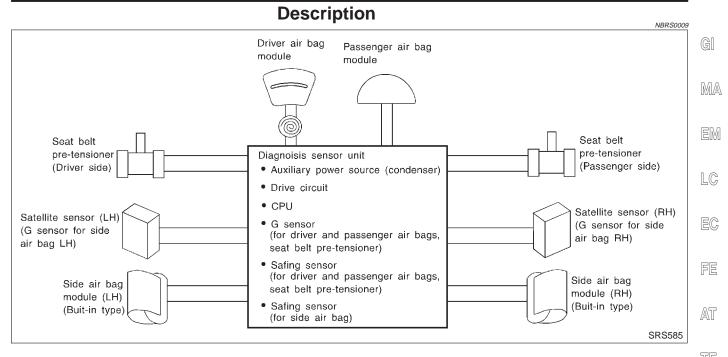
#### SPECIAL SERVICE TOOLS

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

=NBRS0008



\*: Special tool or commercial equivalent



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 passenger air bag module are activated in a frontal collision but not in a side collision.

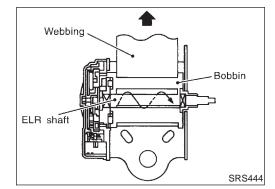
SRS configurations which are activated for some collision modes are as follows;

				<i>I</i> AVA
SRS configuration	Frontal collision	Left side collision	Right side collision	-
Driver air bag module	0	—	—	SU
Passenger air bag module	0	—	—	
Seat belt pre-tensioner (Driver side)	0	—	—	BR
Seat belt pre-tensioner (Passenger side)	0	—	—	_
Side air bag module (LH)	-	0	—	ST
Side air bag module (RH)	_	_	0	

AX

BI

HA



## Seat Belt Pre-tensioner with Load Limiter

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

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

When passengers in a vehicle are thrown forward in a collision and the restraining force of the seat belt exceeds a specified level, the

SC EL



Description

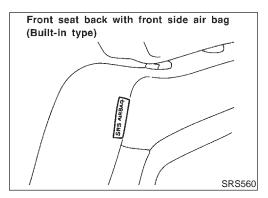


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## SUPPLEMENTAL RESTRAINT SYSTEM (SRS)

Seat Belt Pre-tensioner with Load Limiter (Cont'd)

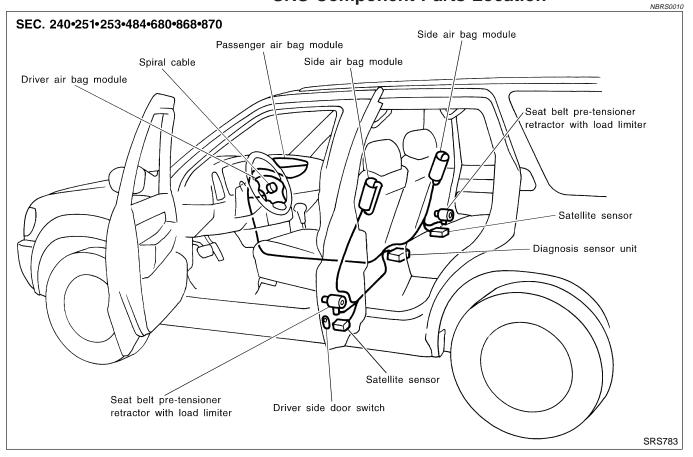
load limiter permits the specified extension of the seat belt by the twisting of the ELR shaft, and a relaxation of the chest-area seat belt web tension while maintaining force.



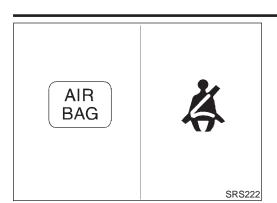
## Built-in Type Side Air Bag

Front side air bag is built-in type. The front seat backs with built-in type side air bag have the labels shown in figures at left.

## **SRS Component Parts Location**



Maintenance Items



## Maintenance Items

CAUTION:

- Do not use electrical test equipment to check SRS circuit. 1. Check operation of "AIR BAG" and "SEAT BELT" warning
- lamps.
   After turning ignition key to "ON" position, both warning lamps illuminate. The "AIR BAG" warning lamp will go off after about 7 seconds if no malfunction is detected. The "SEAT BELT" warning lamp will also go off after about 7 seconds after seat belt has been fastened and no malfunction is detected. (When seat belt has not been fastened, the warning lamp continues to illuminate until seat belt is fastened.) If any of the following warning lamp conditions occur, immediately check the air bag or seat belt pre-tensioner system. Refer to RS-39 or RS-40 for details.
- The "AIR BAG" or "SEAT BELT" warning lamp does not illuminate when the ignition switch is turned "ON".
- The "AIR BAG" or "SEAT BELT" (with seat belt fastened) warning lamp does not go off about 7 seconds after the ignition switch is turned "ON".
- The "AIR BAG" or "SEAT BELT" (with seat belt fastened) warning lamp blinks after about 7 seconds after the ignition switch is turned "ON".
- 2. Visually check SRS components.
- 1) Diagnosis sensor unit
- Check diagnosis sensor unit and bracket for dents, cracks and deformities.
- Check connectors for damage, and terminals for deformities.
- 2) Air bag module and steering wheel
- Remove air bag module from steering wheel, instrument panel or seatback. Check harness cover and connectors for damage, terminals for deformities, and harness for binding.
- Install driver air bag module to steering wheel to check fit or BR alignment with the wheel.
- Check steering wheel for excessive free play.
- Install passenger air bag module to instrument panel to check fit or alignment with the instrument panel.
- Install side air bag module to seatback to check fit and alignment with the seat.
- 3) Spiral cable
- Check spiral cable for dents, cracks, or deformities.
- Check connectors and protective tape for damage.
- Check steering wheel for noise, binding or heavy operation.
- 4) Main harness, air bag harness, body harness, side air bag module sub-harness
- Check connectors for poor connections, damage, and terminals for deformities.
- Check harnesses for binding, chafing or cut.
- 5) Seat belt pre-tensioner
- Check harness cover and connectors for damage, terminals for deformities, and harness for binding.
- Check belts for damage and anchors for loose mounting.
- Check retractor for smooth operation.
- Perform self-diagnosis for seat belt pre-tensioner using seat belt warning lamp or CONSULT. Refer to "SRS Operation Check" for details. (RS-40)

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Maintenance Items (Cont'd)



- 6) Satellite sensor
- Check satellite sensor (including bracket portion) for dents, cracks or deformities.
- Check connectors for damage, and terminals for deformities.

#### CAUTION:

Replace previously used special bolts and ground bolt with new ones.

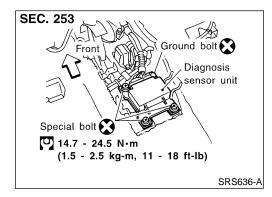
## Diagnosis Sensor Unit

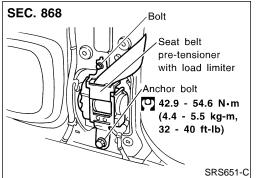
#### **REMOVAL AND INSTALLATION**

#### **CAUTION:**

NBRS0012

- Before servicing SRS, turn the ignition switch off, disconnect both battery cables and wait for at least 3 minutes.
- The special bolts are coated with bonding agent while the other bolt is for ground. 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 selfdiagnosis for SRS. Refer to "SRS Operation Check" for details (RS-39).





- 1. Disconnect connectors for driver and passenger air bag modules and seat belt pre-tensioner.
- 2. Remove console box. Refer to BT-20, "INSTRUMENT PANEL ASSEMBLY".
- 3. Disconnect diagnosis sensor unit connector.
- Remove ground bolt and also remove special bolts using the TAMPER RESISTANT TORX (Size T50), from diagnosis sensor unit.

Then remove the diagnosis sensor unit.

NOTE:

• To install, reverse the removal procedure sequence.

### Seat Belt Pre-tensioner REMOVAL AND INSTALLATION

NBRS0034

- CAUTION:
   Before servicing SRS, turn the ignition switch off, disconnect both battery cables and wait at least 3 minutes.
- Check seat belt pre-tensioner with load limiter for proper installation.
- After replacement of seat belt pre-tensioner, check SRS function and perform self-diagnosis for SRS. Refer to "Checking Seat Belt Pre-tensioner Operation by Using

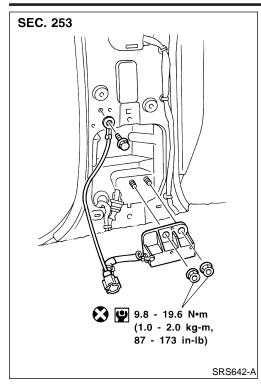


Seat Belt Pre-tensioner (Cont'd)

"Seat Belt" Waring Lamp — User Mode", "SRS Operation Check" for details. (RS-40)	
• Do not attempt to disassemble seat belt pre-tensioner with load limiter.	GI
<ul> <li>Replace seat belt pre-tensioner if it has been dropped or sustained an impact.</li> </ul>	MA
<ul> <li>Do not expose seat belt pre-tensioner to temperatures exceeding 80°C (176°F).</li> </ul>	EM
For removal of seat belt pre-tensioner, refer to "Front Seat Belt" for details. (RS-5)	
NOTE: • To install, reverse the removal procedure sequence.	LC
	EC
	FE
	AT
	TF
Satellite Sensor REMOVAL AND INSTALLATION	PD
<ul> <li>Before servicing SRS, turn the ignition switch off, disconnect both battery cables and wait at least 3 minutes.</li> <li>Do not use old bolts coated with bonding agent after</li> </ul>	AX
<ul> <li>Check satellite sensor for proper installation.</li> </ul>	SU
• Check 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.	BR
• After replacement of satellite sensor, check SRS function and perform self-diagnosis for SRS. Refer to "SRS Operation Check" for details. (RS-39)	ST
<ul> <li>Do not attempt to disassemble satellite sensor.</li> <li>Replace satellite sensor if it has been dropped or sus-</li> </ul>	RS
tained an impact.	BT
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Satellite Sensor (Cont'd)

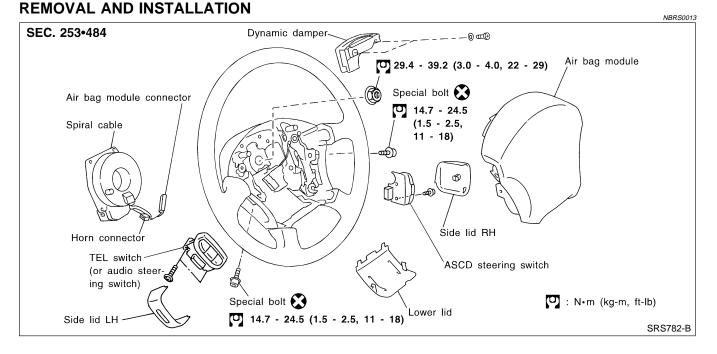


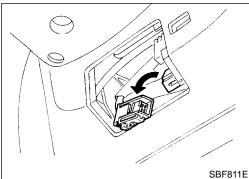
- 1. Remove seat belt pre-tensioner with load limiter. Refer to "Front Seat Belt" for details. (RS-5)
- 2. Disconnect satellite sensor connector.
- 3. Remove bolt and nuts from satellite sensor unit. Then remove the satellite sensor.

#### NOTE:

• To install, reverse the removal procedure sequence.

Driver Air Bag Module and Spiral Cable





## REMOVAL

#### **CAUTION:**

NBRS0014

- Before servicing SRS, turn the ignition switch off, disconnect both battery cables and wait at least 3 minutes.
- Always work from the side of air bag module.
- 1. Remove lower lid from steering wheel, and disconnect air bag module connector.

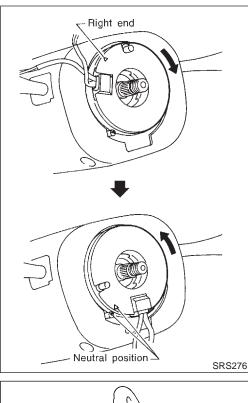
**RS-18** 

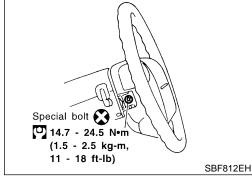


Driver Air Bag Module and Spiral Cable (Cont'd) 2. Remove side lids, ASCD steering switch and TEL switch (or Audio steering switch). Using the TAMPER RESISTANT TORX (Size T50), remove left and right special bolts. Air bag module can then be removed. MA Special bolt 🕅 LC SBF812E CAUTION: Up Always place air bag module with pad side facing upward. 4 EC 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 ones. FE Do not insert any foreign objects (screwdriver, etc.) into air bag module connector. AT SRS161 Replace air bag module if it has been dropped or sus-tained an impact. Do not expose the air bag module to temperatures exceed-Air bag ing 90°C (194°F). module AX Do not allow oil, grease or water to come in contact with the air bag module. SBF814E Set steering wheel in the neutral position. 3. Disconnect horn connector and remove nuts. 4. Remove dynamic damper. Then using steering wheel puller, 5. remove steering wheel. Be careful not to over-tighten puller RS bolt on steering wheel. CAUTION: Do not tap or bump the steering wheel. • Remove steering column cover. 6. HA SBF239F Unlock the spiral cable connector. Then disconnect connectors 7. SC and remove the four screws. The spiral cable can then be removed. Connector Unlock EL CAUTION: Lock Do not attempt to disassemble spiral cable. Do not apply lubricant to the spiral cable.

SRS384

Driver Air Bag Module and Spiral Cable (Cont'd)





### INSTALLATION

- 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 2.5 revolutions from the right end position. Align the two marks (X).

#### **CAUTION:**

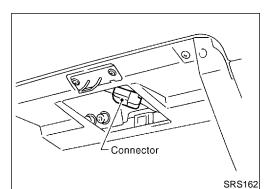
- The spiral cable may snap due to steering operation if the cable is installed in an improper position.
- Also, with the steering linkage disconnected, the cable may snap by turning the steering wheel beyond the limited number of turns. The spiral cable can be turned to the left about 2.5 turns from 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 air bag module connector away from steering wheel lower lid opening.
- 6. Tighten nut.

### 🖸 : 29.4 - 39.2 N·m (3.0 - 4.0 kg-m, 22 - 28 ft-lb)

- 7. Install dynamic damper.
- 8. Position air bag module and tighten with new special bolts.
- 9. Connect air bag module connector.
- 10. Install steering switches and lids.
- Conduct self-diagnosis to ensure entire SRS operates properly. (Use CONSULT or warning lamp check.) Before performing self-diagnosis, connect both battery cables.
- 12. 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 or warning lamp). If a malfunction is detected, replace the spiral cable with a new one.

13. Perform self-diagnosis again to check that no malfunction is detected.



## Front Passenger Air Bag Module REMOVAL

#### CAUTION:

- 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.
- 1. Remove glove box assembly. Refer to BT-20, "INSTRUMENT PANEL ASSEMBLY" for details.
- 2. Disconnect front passenger air bag module connector from air bag harness connector.

NBRS0015

NBRS0016



Front Passenger Air Bag Module (Cont'd)

3. Remove instrument lower panel on passenger side. Refer to BT-20, "INSTRUMENT PANEL ASSEMBLY" for details.



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- Remove special bolts using the TAMPER RESISTANT TORX 4. (Size T50) from front passenger air bag module.
- EC Remove instrument panel assembly. Refer to BT-20. "INSTRU-5. MENT PANEL ASSEMBLY" for details.
- Remove the bolts from left and right sides of front passenger 6. FE air bag module. Then remove the air bag module from the instrument panel assembly.
- The air bag module is heavy and should be supported using AT both hands during removal.
  - TF



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

  - ST

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NBRS0017

- tained an impact. Do not expose the air bag module to temperatures exceeding 90°C (194°F).
- RS Do not allow oil, grease or water to come in contact with the air bag module.

Replace air bag module if it has been dropped or sus-

BT After air bag inflates, the front instrument panel assembly should be replaced if damaged.

#### INSTALLATION CAUTION:

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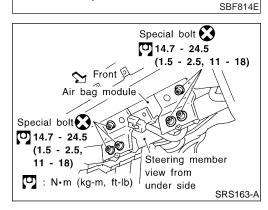
CAUTION:

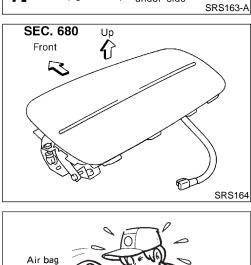
•

- Always work from the side of or under air bag module. SC
- 1. Install front passenger air bag module to instrument panel assembly.
- 2. Install instrument panel.
- Ensure harness is not caught between rear of air bag module . and steering member.
- 3. Install front passenger air bag module to steering member.

**RS-21** 

Air baq module





Special bolt

14.7 - 24.5

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view from

under side

Steering member

Sront 🖗

Air bag module

6

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Special bolt

14.7 - 24.5

(1.5 - 2.5,

🕐 : N•m (kg-m, ft-lb)

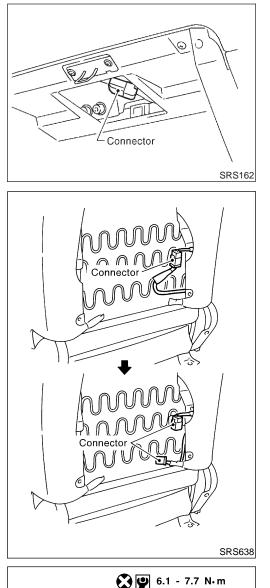
11 - 18)

(1.5 - 2.5, 11 - 18)

Front Passenger Air Bag Module (Cont'd)



NBRS0036



- 4. Install instrument lower panel on passenger side.
- Connect air bag module connector to air bag harness connector.
- 6. Install glove box assembly.
- 7. Connect both battery cables.
- 8. Conduct self-diagnosis to ensure entire SRS operates properly. (Use CONSULT or warning lamp check.)

## Side Air Bag Module

#### **CAUTION:**

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

- Always work from the rear of the air bag module.
- 1. Remove seatback board.
- When using a clip removal tool to remove the seatback board, take care not to damage the air bag harness.
- 2. Disconnect side air bag module connector.

- 3. Pull up the seatback trim.
- 4. Remove the nuts securing the inner cloth with seatback frame. Then pull up the inner cloth.
- SEC. 870 Torx nut 2.9 - 9.8 N·m (0.5 - 1.0 kg-m, 44 - 86 in-lb) Side air bag module Seatback finisher 0

Inner cloth

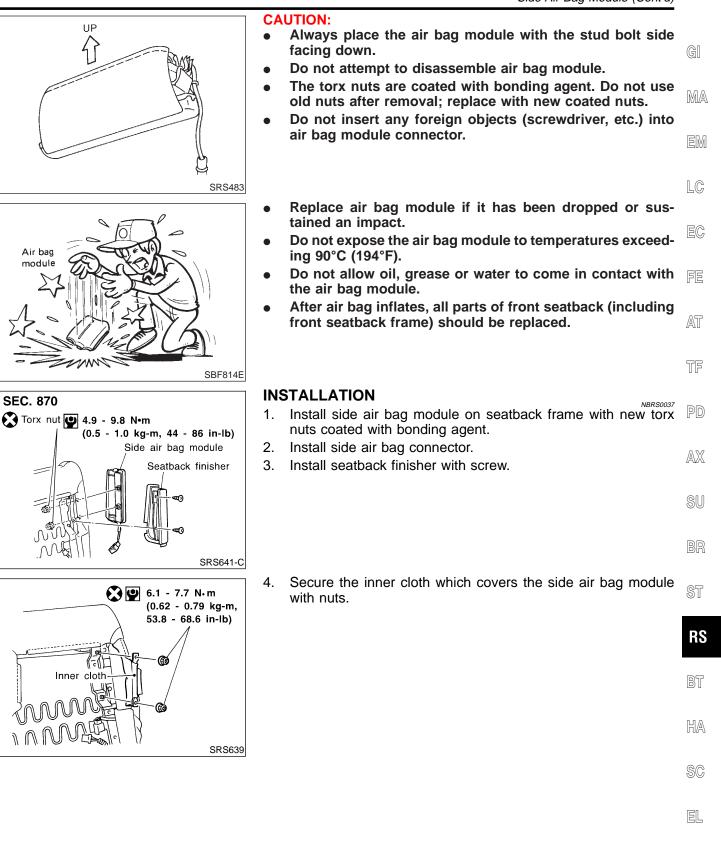
(0.62 - 0.79 kg-m,

53.8 - 68.6 in-lb)

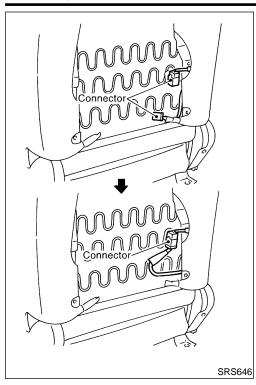
SRS641-C

- 5. Remove seatback finisher.
- 6. Remove the torx nuts coated with bonding agent from the side air bag module.
- 7. Remove side air bag connector. Side air bag module can then be removed.

IDX



Side Air Bag Module (Cont'd)



- 5. Connect side air bag module connector.
- 6. Install seatback board with new clips.
- 7. Connect both battery cables.
- 8. Go to "SRS Operation Check", RS-39 and perform self-diagnosis to ensure entire SRS operates properly. (Use CONSULT or air bag warning lamp.)

### Disposal of Air Bag Module and Seat Belt Pretensioner

- Before disposing of air bag module and seat belt pre-tensioner, or vehicles equipped with such systems, deploy the systems. If such systems have already been deployed due to an accident, dispose of them as indicated in "DISPOSING OF AIR BAG MODULE AND SEAT BELT PRE-TENSIONER" (RS-29).
- When deploying the air bag module and seat belt pretensioner, always use the Special Service Tool; Deployment tool KV99106400 (Kent-Moore No. J38381).
- When deploying the air bag module and seat belt pretensioner, stand at least 5 m (16 ft) away from the deployment component.
- When deploying air bag module and seat belt pre-tensioner, a fairly loud noise is made, followed by smoke being released. The smoke is not poisonous, however, be careful not to inhale smoke since it irritates the throat and can cause choking.
- Always activate one air bag module at a time.
- Due to heat, leave air bag module unattended for more than 30 minutes after deployment. Also leave seat belt pre-tensioner unattended for move than 10 minutes after deployment.
- Be sure to wear gloves when handling a deployed air bag module and seat belt pre-tensioner.
- Never apply water to the deployed air bag module and seat belt pre-tensioner.
- Wash your hands clean after finishing work.
- Place the vehicle outdoors with an open space of at least 6 m (20 ft) on all sides when deploying air bag module and seat belt pre-tensioner while mounted in vehicle.
- Use a voltmeter to make sure the vehicle battery is fully charged.
- Do not dispose of the air bag module and seat belt pre-tensioner un-deployed.





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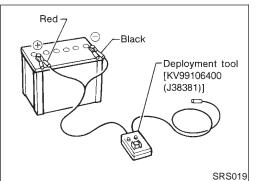
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NBRS0018S0101

## SUPPLEMENTAL RESTRAINT SYSTEM (SRS)

Disposal of Air Bag Module and Seat Belt Pre-tensioner (Cont'd,



## CHECKING DEPLOYMENT TOOL Connecting to Battery CAUTION: The battery must show voltage of 9.6V or more.

Remove the battery from the vehicle and place it on dry wood MA blocks approximately 5 m (16 ft) away from the vehicle.

- Wait 3 minutes after the vehicle battery is disconnected before proceeding.
- Connect red clip of deployment tool to battery positive terminal and black clip to negative terminal.

Make sure the polarity is correct. The right side lamp in the tool, marked "deployment tool power", should glow with a green light. If the right side lamp glows red, reverse the connections to the battery.

Lamp Push SBF266H

#### **Deployment Tool Check**

Press the deployment tool switch to the "ON" position. The left side lamp in the tool, marked "air bag connector voltage" should illuminate. If it does not illuminate, replace the tool.

#### Air Bag Deployment Tool Lamp Illumination Chart (Battery connected)

	-	NBRS0018S0103	SU
Switch operation	Left side lamp, green* "AIR BAG CONNECTOR VOLTAGE"	Right side lamp, green* "DEPLOYMENT TOOL POWER"	BR
OFF	OFF	ON	
ON	ON	ON	ST

\*: If this lamp glows red, the tool is connected to the battery incorrectly. Reverse the connections and make sure the lamp glows green.

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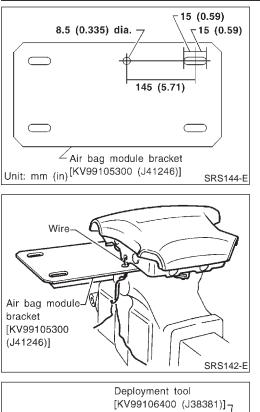
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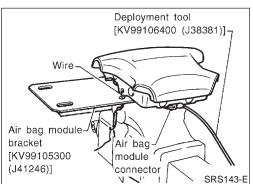
SC

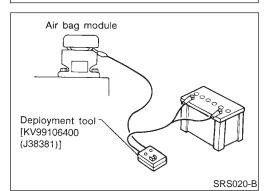
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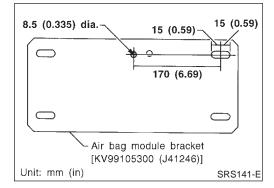
IDX

Disposal of Air Bag Module and Seat Belt Pre-tensioner (Cont'd)









#### DEPLOYMENT PROCEDURES FOR AIR BAG MODULE (OUTSIDE OF VEHICLE)

Unless the vehicle is being scrapped, deploying the air bag in the vehicle is not recommended. This may cause damage to the vehicle interior.

Anchor air bag module bracket [KV99105300 (J41246)] in a vise secured to a firm foundation during deployment.

## Deployment of Driver's Air Bag Module (Outside of vehicle)

- Make an 8.5 mm (0.335 in) diameter hole in air bag module bracket [SST: KV99105300 (J41246)] at the position shown in figure at left.
- 2. Using wire, secure air bag module to air bag module bracket [SST: KV99105300 (J41246)] at two places.

#### **CAUTION:**

#### Use wire of at least 1 mm (0.04 in) diameter.

- 3. Firmly secure air bag module bracket [SST: KV99105300 (J41246)] with air bag module attached, in a vise.
- 4. Connect deployment tool [SST: KV99106400 (J38381)] to air bag module connector.

- 5. Connect red clip of deployment tool to battery positive terminal and black clip to negative terminal.
- 6. The lamp on the right side of the tool, marked "deployment tool power", should glow green, not red.
- 7. Press the button on the deployment tool. The left side lamp on the tool, marked "air bag connector voltage", will illuminate and the air bag module will deploy.

#### CAUTION:

When deploying the air bag module, stand at least 5 m (16 ft) away from the air bag module.

## Deployment of Passenger Air Bag Module (Outside of vehicle)

 Make an 8.5 mm (0.335 in) diameter hole in air bag module bracket [SST: KV99105300 (J41246)] at the position shown in figure at left.





Disposal of Air Bag Module and Seat Belt Pre-tensioner (Cont'd)

 Firmly secure air bag module bracket [SST: KV99105300 (J41246)] in a vise.

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3. Match the two holes in air bag module bracket (held in vise) and passenger air bag module and fix them with two bolts [M8  $\times$  25 - 30 mm (0.98 - 1.18 in)].

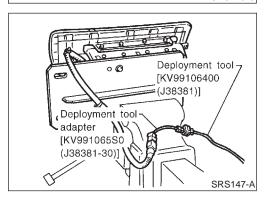
#### **CAUTION:**

If a gap exists between passenger air bag module and air bag module bracket, use a piece of wood inserted in the gap to stabilize the air bag module.

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Air bag module

[KV99105300 (J41246)]-

bracket

Air bag module

SRS145-C

SRS146-C

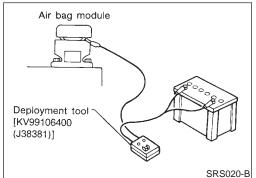
bracket [KV99105300 (J41246)]

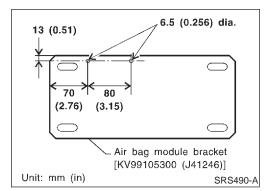
Passenger air bag module

Bolt 1

≈[M8 × 25 - 30 mm

(0.98 - 1.18 in)]





- Connect deployment tool adapter [SST: KV991065S0 (J38381-30)] to deployment tool [SST: KV99106400 (J38381)] connector and air bag module connector.
- 5. Connect red clip of deployment tool to battery positive terminal and black clip to negative terminal.
- 6. The lamp on the right side of the tool, marked "deployment tool power", should glow green, not red.
- 7. Press the button on the deployment tool. The left side lamp on the tool, marked "air bag connector voltage", will illuminate and the air bag module will deploy.

#### **CAUTION:**

- When deploying the air bag module, do not stand on the deploying side.
- Stand at least 5 m (16 ft) away from the air bag module.

#### Deployment of Side Air Bag Module (Built-in type) (Outside of vehicle)

 Make 6.5 mm (0.256 in) diameter holes in air bag module bracket [SST: KV99105300 (J41246)] at the position shown in figure at left.

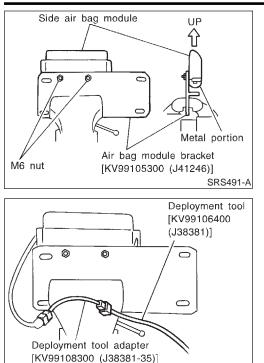
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Disposal of Air Bag Module and Seat Belt Pre-tensioner (Cont'd)

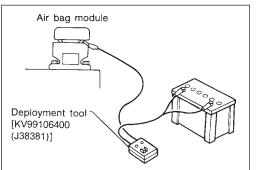


- 2. Firmly secure air bag module bracket [SST: KV99105300 (J41246)] in a vise.
- 3. Insert the stud bolts of side air bag module (built-in type) into the two holes in air bag module bracket (held in vise) and fix them with two M6 nuts.

#### **CAUTION:**

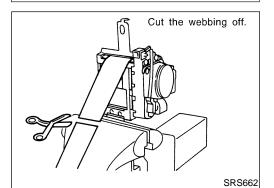
Side air bag module should be secured to air bag module bracket [SST: KV99105300 (J41246)] in a vise with metal portion facing down.

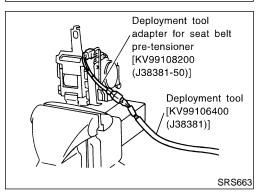
4. Connect deployment tool adapter [SST: KV99108300 (J38381-35)] to deployment tool [SST: KV99106400 (J38381)] connector and connector on air bag module.



SRS020-B

SRS492-A





- 5. Connect red clip of deployment tool to battery positive terminal and black clip to negative terminal.
- 6. The lamp on the right side of the tool, marked "deployment tool power", should glow green, not red.
- 7. Press the button on the deployment tool. The left side lamp on the tool, marked "air bag connector voltage", will illuminate and the air bag module will deploy.

#### **CAUTION:**

When deploying the air bag module, stand at least 5 m (16 ft) away from the air bag module.

#### DEPLOYMENT PROCEDURES FOR SEAT BELT PRE-TENSIONER (OUTSIDE OF VEHICLE)

1. Firmly grip pre-tensioner in a vise and cut the webbing off.

 Connect deployment tool adapter [SST: KV99108200 (J38381-50)] to deployment tool [SST: KV99106400 (J38381)] connector and seat belt pre-tensioner connector.



Deployment tool [KV99106400 (J38381)] Disposal of Air Bag Module and Seat Belt Pre-tensioner (Cont'd)

- 3. Connect red clip of deployment tool to battery positive terminal and black clip to negative terminal.
- 4. The lamp on the right side of the tool, marked "deployment tool G power", should glow green, not red.
- Press the button on the deployment tool. The left side lamp on the tool, marked "seat belt pre-tensioner connector voltage", MA will illuminate and the seat belt pre-tensioner will deploy.

#### **CAUTION:**

When deploying the seat belt pre-tensioner, stand at least 5 m (16 ft) away from the seat belt pre-tensioner.

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#### DEPLOYMENT OF AIR BAG MODULE AND SEAT BELT PRE-TENSIONER WHILE MOUNTED IN VEHICLE

When disposing of a vehicle, deploy air bag module and seat belt pre-tensioners while they are mounted in vehicle.

#### CAUTION:

## When deploying air bag module or seat belt pre-tensioner, ensure vehicle is empty.

- 1. Disconnect both the vehicle battery cables and wait 3 minutes.
- 2. Disconnect air bag module and seat belt pre-tensioner connector.
- 3. Connect deployment tool [SST: KV99106400 (J38381)] to air bag module or seat belt pre-tensioner. For front passenger air bag module, attach deployment tool adapter [SST: KV991065S0 (J38381-30)] to the tool connector. For side air bag module (built-in type), attach deployment tool adapter [SST: KV99108300 (J38381-35)]. For seat belt pre-tensioner, attach deployment tool adapter [SST: KV99108200 (J38381-50)] to the tool connector.

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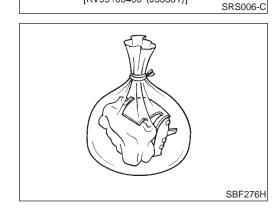
- 4. Connect red clip of deployment tool to battery positive terminal and black clip to negative terminal.
- 5. The lamp on the right side of the tool, marked "deployment tool power", should glow green, not red.
- 6. Press the button on the deployment tool. The left side lamp on the tool, marked "air bag connector voltage", will illuminate and the air bag module will deploy.

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Deployment tool / [KV99106400 (J38381)]

#### DISPOSING OF AIR BAG MODULE AND SEAT BELT PRE-TENSIONER

Deployed air bag module and seat belt pre-tensioner are very hot. Before disposing of air bag module, and seat belt pre-tensioner wait at least 30 minutes, and 10 minutes, respectively. Seal them in a plastic bag before disposal.

#### **CAUTION:**

- Never apply water to a deployed air bag module and seat belt pre-tensioner.
- Be sure to wear gloves when handling a deployed air bag module and seat belt pre-tensioner.

**RS-29** 



Disposal of Air Bag Module and Seat Belt Pre-tensioner (Cont'd)

- No poisonous gas is produced upon air bag module deployment. However, be careful not to inhale gas since it irritates throat and can cause choking.
- Do not attempt to disassemble air bag module and seat belt pre-tensioner.
- Air bag module and seat belt pre-tensioner cannot be reused.
- Wash your hands clean after finishing work.

Trouble Diagnoses Introduction

#### **Trouble Diagnoses Introduction**

#### **CAUTION:**

- Do not use electrical test equipment on any circuit related to the SRS unless instructed to in this Service Manual. SRS wiring harnesses are covered with yellow insulation tape either just before the harness connectors or for the complete harness, for easy identification.
- MA 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, "SEAT BELT" warning lamp LC and/or CONSULT. 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 EC malfunction through the operation of the "AIR BAG" warning lamp and/or "SEAT BELT" warning lamp. The Diagnosis mode allows the technician to locate and inspect the malfunctioning part.

The mode applications for the "AIR BAG" warning lamp, "SEAT BELT" warning lamp and CONSULT are as FE follows:

	User mode	Diagnosis mode	Display type	. AT
"AIR BAG" warning lamp	Х	X	ON-OFF operation	
"SEAT BELT" warning lamp	Х	—	ON-OFF operation	TF
CONSULT	_	X	Monitoring	

#### DIAGNOSIS MODE FOR CONSULT

- NBRS0030502 "SELF-DIAG [CURRENT]" A current Self-diagnosis result (also indicated by the number of warning lamp flashes in the Diagnosis mode) is displayed on the CONSULT 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 screen. The stored results are not erased until memory erasing is executed.

- **"TROUBLE DIAG RECORD"** With TROUBLE DIAG RECORD, diagnosis results previously erased by a reset operation can be displayed on the CONSULT screen. ST
- "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 screen, as shown below. When replacing the diag-RS nosis 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 screen.

ECU DISC	RIMINATED NO.	
ECU	No.	
	A531	
		SRS784

For INFINITI QX4, the diagnosis sensor unit classification number assigned is A531.



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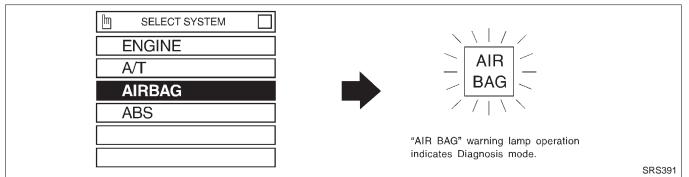
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Trouble Diagnoses Introduction (Cont'd)

#### B HOW TO CHANGE SELF-DIAGNOSIS MODE WITH CONSULT

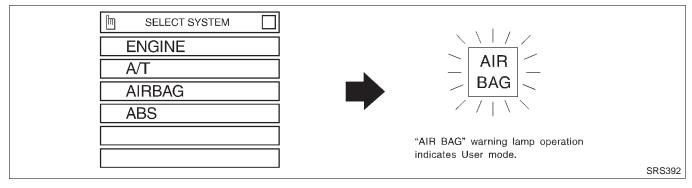
#### From User Mode to Diagnosis Mode

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 until "SELECT SYSTEM" appears, Diagnosis mode automatically changes to User mode.



NBRS0030S03

Trouble Diagnoses Introduction (Cont'd)

#### **B** HOW TO CHANGE SELF-DIAGNOSIS MODE WITHOUT CONSULT

#### From User Mode to Diagnosis Mode

Diagnosis mode activates only when a malfunction is detected, by pressing the driver's door switch at least 5 times within 7 seconds after turning the ignition "ON". SRS will not enter Diagnosis mode, if no malfunction is detected.

### From Diagnosis Mode to User Mode

After a malfunction is repaired, switch the ignition "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, switch the ignition "OFF", then back "ON" and press the driver's door switch at least 5 times within 7 seconds.

#### HOW TO ERASE SELF-DIAGNOSIS RESULTS

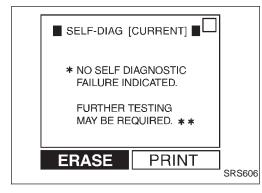
#### **With CONSULT**

 "SELF-DIAG [CURRENT]"
 A current Self-diagnosis result is displayed on the CONSULT 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 screen by pushing "BACK" key of CONSULT 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.

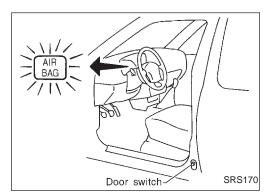


• "TROUBLE DIAG RECORD"

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

#### **Without CONSULT**

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 malfunction code is cleared.





MA

LC

PD

RS

HA

SC

EL

=NBRS0030S05

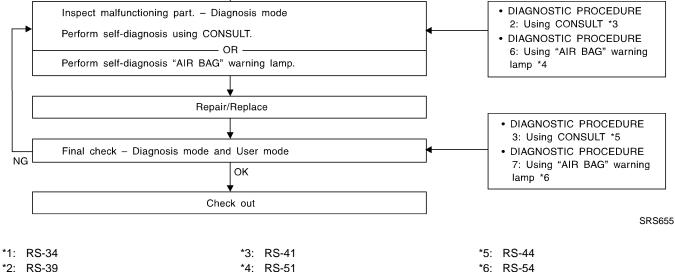
NBRS0030S04

How to Perform Trouble Diagnoses for Quick and Accurate Repair

#### How to Perform Trouble Diagnoses for Quick and Accurate Repair NBRS0031

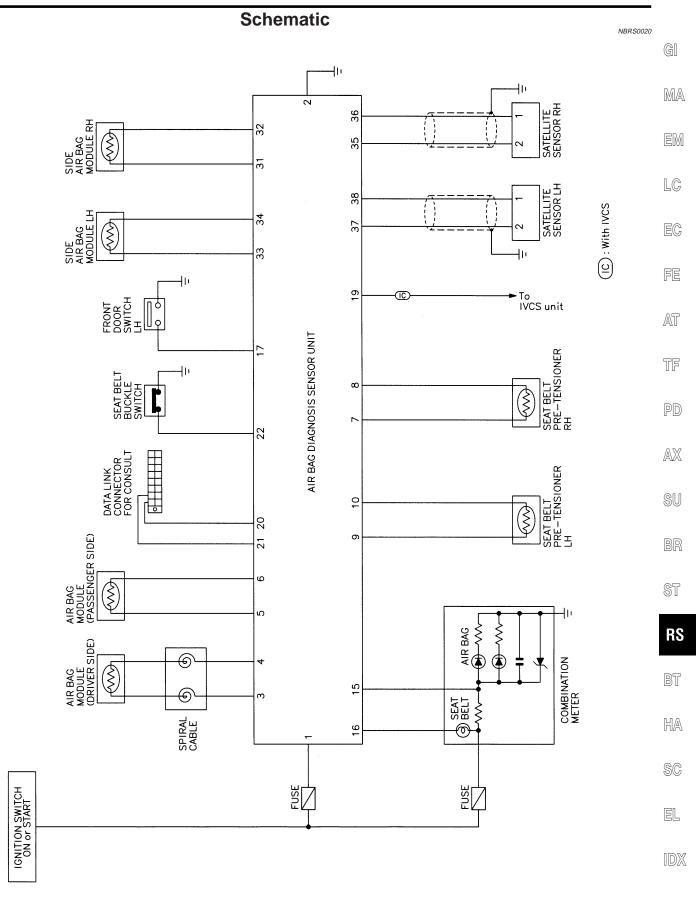
A good understanding of the malfunction conditions can make troubleshooting faster and more accurate. In general, each customer feels differently about a problem. It is important to fully understand the symptoms or conditions for a customer complaint.

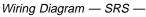
## INFORMATION FROM CUSTOMER NBRS0031S01 WHAT ..... Vehicle model WHEN ..... Date, Frequencies WHERE ..... Road conditions HOW ..... Operating conditions, Symptoms PRELIMINARY CHECK NBRS0031502 Check that the following parts are in good order. Battery [Refer to SC-3, "BATTERY".] Fuse [Refer to EL-16, "Fuse", "POWER SUPPLY ROUTING".] System component-to-harness connections WORK FLOW NBRS0031S03 ACTION ITEM **REFERENCE ITEM** Check in Listen to customer complaints and requests. Perform preliminary check. Preliminary check \*1 Check for any service bulletin. Perform self-diagnosis using "AIR BAG" warning lamp SRS Operation Check \*2 and/or "SEAT BELT" warning lamp. - User mode



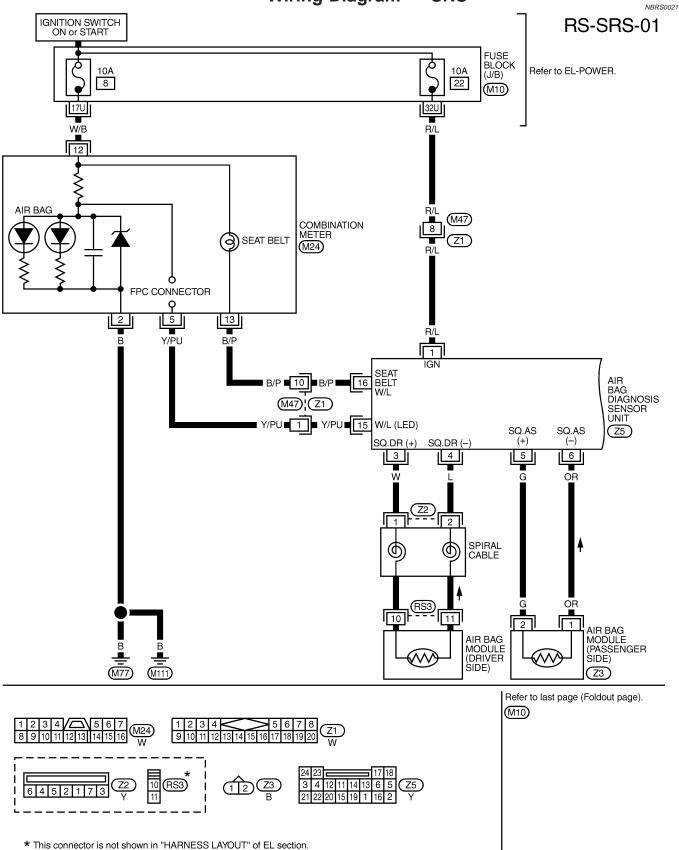


Schematic

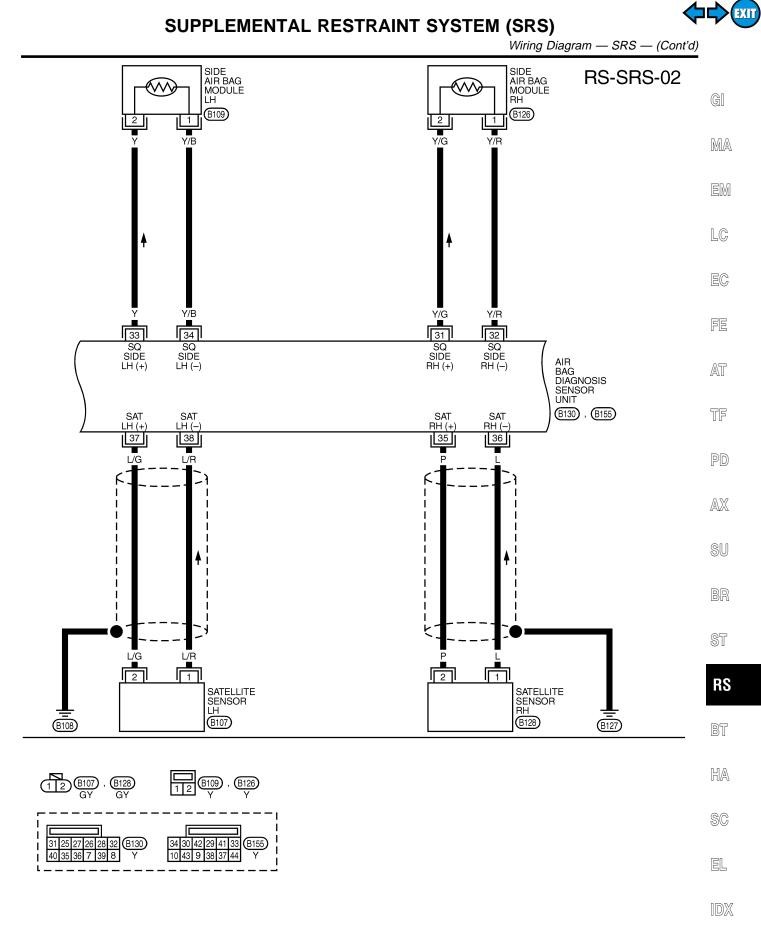




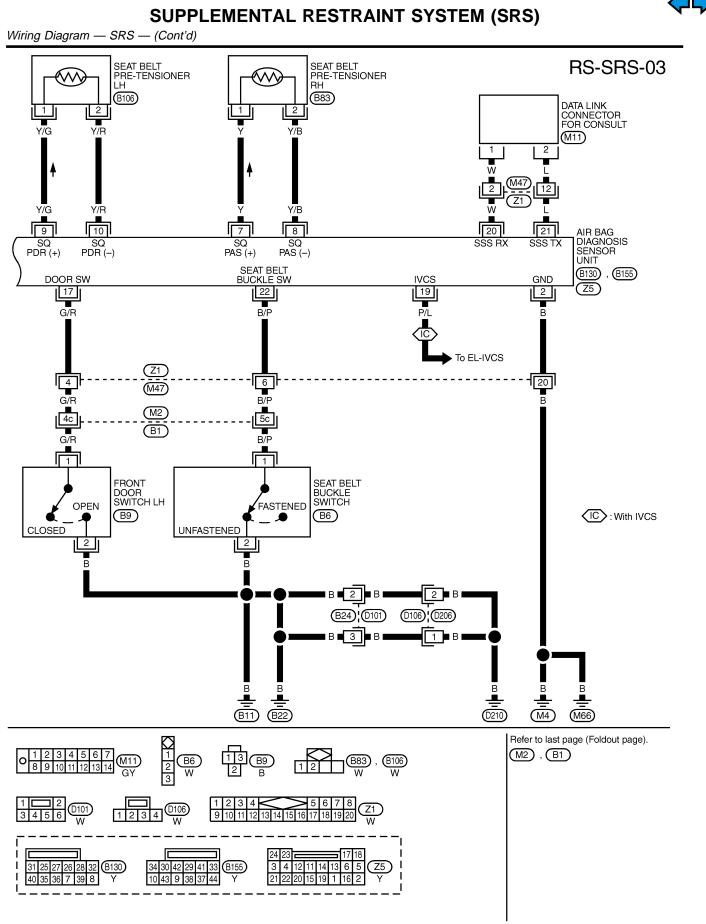
Wiring Diagram — SRS —



**₽XIT** 



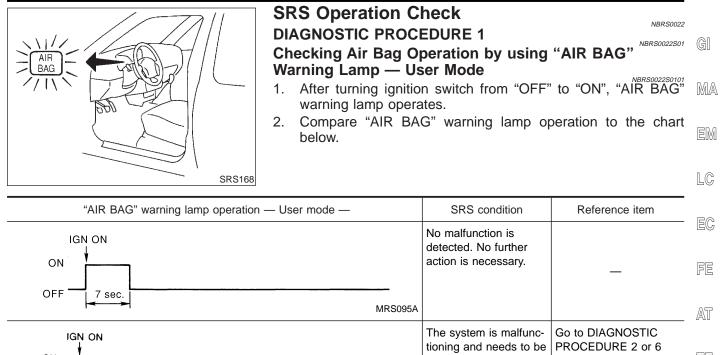
MRS282A

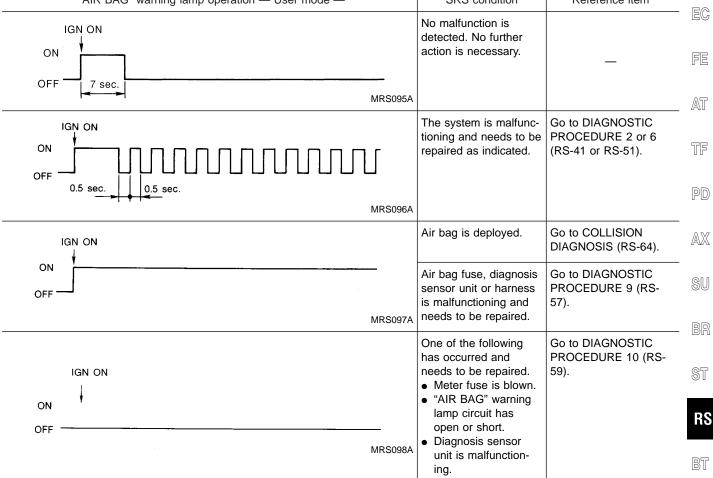


MRS283A

EXIT)







#### NOTE:

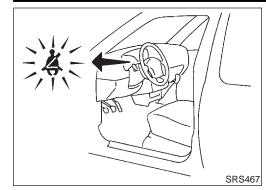
If "AIR BAG" warning lamp operates differently from the operations shown above, refer to "AIR BAG" warning lamp operation — Diagnosis mode —, DIAGNOSTIC PROCEDURE 6 (step 4), RS-51.

EL

IDX



SRS Operation Check (Cont'd)



### Checking Seat Belt Pre-tensioner Operation by Using "SEAT BELT" Warning Lamp — User Mode

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

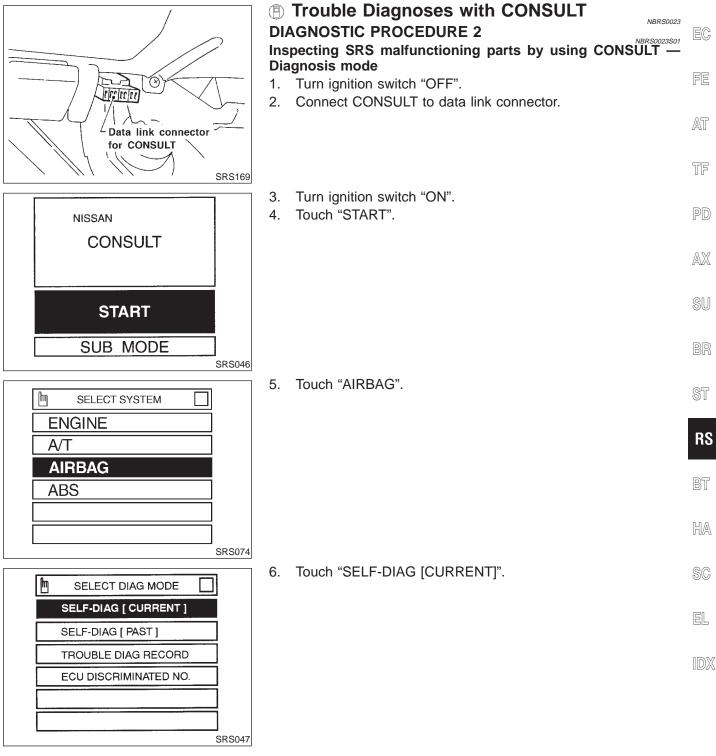
"SEAT BELT" warning lamp operation	SRS condition	Reference item
After driver's seat belt has been fastened.      IGN ON     OFF 7 sec.     MRS095A      When driver's seat belt has not been fastened.      IGN ON     Seat belt is fastened.      OFF	No malfunction is detected. No further action is neces- sary.	
SRS086		
<ul> <li>After driver's seat belt has been fastened.</li> <li>IGN ON OFF 0.5 sec.</li> <li>When driver's seat belt has not been fastened.</li> <li>When driver's seat belt has not been fastened.</li> <li>IGN ON OFF 0.5 sec.</li> <li>When driver's seat belt has not been fastened.</li> <li>Seat belt is fastened.</li> <li>OFF 7 sec.</li> <li>0.5 sec.</li> <li>SRS344</li> </ul>	<ul> <li>Seat belt pre-tensioner circuit is opened, or</li> <li>Seat belt pre-tensioner power supply or ground circuit is shorted.</li> </ul>	<ul> <li>If CONSULT is available, go to DIAGNOSTIC PROCEDURE 2 (RS- 41).</li> <li>If CONSULT is not available, repair the sys- tem as follows.*</li> <li>Visually check the wir- ing harness connec- tions.</li> <li>Replace driver's and front passenger seat belt assemblies. (Before disposing, they must be deactivated.)</li> <li>Replace diagnosis sen- sor unit.</li> <li>Replace body harness.</li> </ul>
• When driver's seat belt is fastened.	Seat belt pre-tensioner (and air bag) is deployed.	Go to COLLISION DIAG- NOSIS (RS-64).
ON OFF MRS097A	Seat belt buckle switch, harness, combination meter assembly, diagnosis sensor unit are malfunc- tioning and need to be repaired.	Go to DIAGNOSTIC PRO- CEDURE 12 (RS-61).



SRS Operation Check (Cont'd)

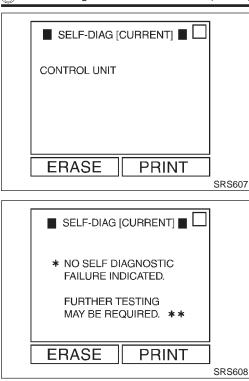
"SEAT BELT" warning lamp operation	SRS condition	Reference item	
	, 0	Go to DIAGNOSTIC PRO- CEDURE 13 (RS-63).	GI MA
OFF MRS098A			

\* Follow the procedures in numerical order when repairing malfunctioning parts. Confirm whether malfunction is eliminated using the seat belt warning lamp 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.





(P) Trouble Diagnoses with CONSULT (Cont'd)



7. Diagnostic codes are displayed on "SELF-DIAG [CURRENT]".

If no malfunction is detected on "SELF-DIAG [CURRENT]" even though malfunction is detected in "SRS Operation Check", check the battery voltage.

If the battery voltage is less than 9V, charge the battery. Then go to DIAGNOSTIC PROCEDURE 3, page RS-44.

If the battery voltage is OK, go to DIAGNOSTIC PROCEDURE 4, page RS-46, 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 to "CONSULT Diagnostic Code Chart", page RS-42.
- 10. Touch "BACK" key of CONSULT until SELECT SYSTEM appears in order to return to User mode from Diagnosis mode, then turn off CONSULT.
- 11. Turn ignition switch "OFF", then disconnect CONSULT and both battery cables.
- 12. Repair the system as outlined by the "Repair order" in "CON-SULT Diagnostic Code Chart", that corresponds to the self-diagnostic result. For replacement procedure of component parts, refer to RS-16.
- 13. After repairing the system, go to DIAGNOSTIC PROCEDURE 3, page RS-44 for final checking.

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

NBRS0023S0101

Diagnostic item		Explanation	Repair order "Recheck SRS at each replace- ment."
TIC FAILURE INDI- CATED. Indicated by the "AIR BAG" warning lamp in User mode	• Low battery voltage (Less than 9V)	Go to DIAGNOSTIC PROCEDURE     3 (RS-44) after charging battery.	
	<ul> <li>Self-diagnostic result "SELF-DIAG [PAST]" (previously stored in the memory) might not be erased after repair.</li> <li>Intermittent malfunction has been detected in the past.</li> </ul>	<ul> <li>Go to DIAGNOSTIC PROCEDURE 4 (RS-46).</li> </ul>	
	<ul> <li>No malfunction is determined</li> </ul>	ected.	• Go to DIAGNOSTIC PROCEDURE 3 (RS-44).



(E) Trouble Diagnoses with CONSULT (Cont'd)

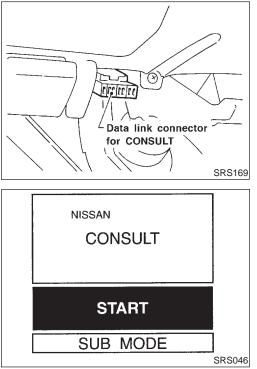
Diagnostic item	Explanation	Repair order "Recheck SRS at each replace- ment."
AIRBAG MODULE [OPEN]	• Driver's air bag module circuit is open. (including the spiral cable)	<ol> <li>Visually check the wiring harness connection.</li> <li>Replace the harness if it has visible damage.</li> <li>Replace driver's air bag module. (Before disposal of it, it must be deployed.)</li> </ol>
		<ol> <li>4. Replace the spiral cable.</li> <li>5. Replace the diagnosis sensor unit.</li> <li>6. Replace the related harness.</li> </ol>
AIRBAG MODULE [VB-SHORT]	• Driver's air bag module circuit is shorted to some power sup- ply circuit. (including the spiral cable)	<ol> <li>Visually check the wiring harness connection.</li> <li>Replace the harness if it has visible</li> </ol>
AIRBAG MODULE [GND-SHORT]	• Driver's air bag module circuit is shorted to ground. (including the spiral cable)	<ul> <li>damage.</li> <li>3. Replace the spiral cable.</li> <li>4. Replace driver's air bag module.</li> <li>(Before disposal of it, it must be</li> </ul>
AIRBAG MODULE [SHORT]	• Driver's air bag module circuits are shorted to each other.	<ul><li>deployed.)</li><li>5. Replace the diagnosis sensor unit.</li><li>6. Replace the related harness.</li></ul>
ASSIST A/B MODULE [VB-SHORT]	• Front passenger air bag module circuit is shorted to some power supply circuit.	1. Visually check the wiring harness connection.
ASSIST A/B MODULE [OPEN]	• Front passenger air bag module circuit is open.	<ol> <li>Replace the harness if it has visible damage.</li> <li>Replace front passenger air bag</li> </ol>
ASSIST A/B MODULE [GND-SHORT]	• Front passenger air bag module circuit is shorted to ground.	module. (Before disposal of it, it must be deployed.) 4. Replace the diagnosis sensor unit.
ASSIST A/B MODULE [SHORT]	• Front passenger air bag module circuits are shorted to each other.	5. Replace the related harness.
SIDE MODULE LH [OPEN]	• Side air bag module (LH) circuit is open.	1. Visually check the wiring harness connection.
SIDE MODULE LH [VB-SHORT]	• Side air bag module (LH) circuit is shorted to some power supply circuits.	<ol> <li>Replace the harness if it has visible damage.</li> <li>Replace side air bag module (LH).</li> </ol>
SIDE MODULE LH [GND-SHORT]	• Side air bag module (LH) circuit is shorted to ground.	<ul><li>(Before disposal, it must be deployed.)</li><li>4. Replace the diagnosis sensor unit.</li></ul>
SIDE MODULE LH [SHORT]	• Side air bag module (LH) circuits are shorted to each other.	5. Replace the related harness.
SIDE MODULE RH [OPEN]	• Side air bag module (RH) circuit is open.	1. Visually check the wiring harness connection.
SIDE MODULE RH [VB-SHORT]	• Side air bag module (RH) circuit is shorted to some power supply circuits.	<ol> <li>Replace the harness if it has visible damage.</li> <li>Replace side air bag module (RH).</li> </ol>
SIDE MODULE RH [GND-SHORT]	• Side air bag module (RH) circuit is shorted to ground.	<ul><li>(Before disposal, it must be deployed.)</li><li>4. Replace the diagnosis sensor unit.</li></ul>
SIDE MODULE RH [SHORT]	• Side air bag module (RH) circuits are shorted to each other.	5. Replace the related harness.
SATELLITE SENS LH [UNIT FAIL] SATELLITE SENS LH [COMM FAIL]	• Satellite sensor (LH)	<ol> <li>Visually check the wiring harness connection.</li> <li>Replace the harness if it has visible damage.</li> <li>Replace the satellite sensor (LH).</li> <li>Replace the diagnosis sensor unit.</li> <li>Replace the related harness.</li> </ol>



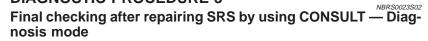
(E) Trouble Diagnoses with CONSULT (Cont'd)

Diagnostic item	Explanation	Repair order "Recheck SRS at each replace- ment."
SATELLITE SENS RH [UNIT FAIL] SATELLITE SENS RH [COMM FAIL]	<ul> <li>Satellite sensor (RH)</li> </ul>	<ol> <li>Visually check the wiring harness connection.</li> <li>Replace the harness if it has visible damage.</li> <li>Replace the satellite sensor (RH).</li> <li>Replace the diagnosis sensor unit.</li> <li>Replace the related harness.</li> </ol>
PRE-TEN FRONT LH [OPEN/VB-SHORT]	<ul> <li>The circuit for front LH pre-tensioner is open or shorted to some power supply circuit.</li> </ul>	<ol> <li>Visually check the wiring harness connections.</li> <li>Replace the harness if it has visible damage.</li> <li>Replace front LH seat belt.</li> </ol>
PRE-TEN FRONT LH [GND-SHORT]	<ul> <li>The circuit for front LH pre-tensioner is shorted to ground.</li> </ul>	<ol> <li>Keplace from Err sear ben. (Before disposing, it must be deac- tivated.)</li> <li>Replace the diagnosis sensor unit.</li> <li>Replace the related harness.</li> </ol>
PRE-TEN FRONT RH [OPEN/VB-SHORT]	<ul> <li>The circuit for front RH pre-tensioner is open or shorted to some power supply circuit.</li> </ul>	<ol> <li>Visually check the wiring harness connections.</li> <li>Replace the harness if it has visible damage.</li> <li>Replace front RH seat belt.</li> </ol>
PRE-TEN FRONT RH [GND-SHORT]	<ul> <li>The circuit for front RH pre-tensioner is shorted to ground.</li> </ul>	<ol> <li>Keplace from KH sear ben. (Before disposing, it must be deac- tivated.)</li> <li>Replace the diagnosis sensor unit.</li> <li>Replace the related harness.</li> </ol>
CONTROL UNIT	<ul> <li>Diagnosis sensor unit is malfunctioning.</li> </ul>	<ol> <li>Visually check the wiring harness connection.</li> <li>Replace the diagnosis sensor unit.</li> </ol>

\* Follow the procedures in numerical order when repairing malfunctioning parts. Confirm whether malfunction is eliminated using the air bag warning lamp or CONSULT 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**

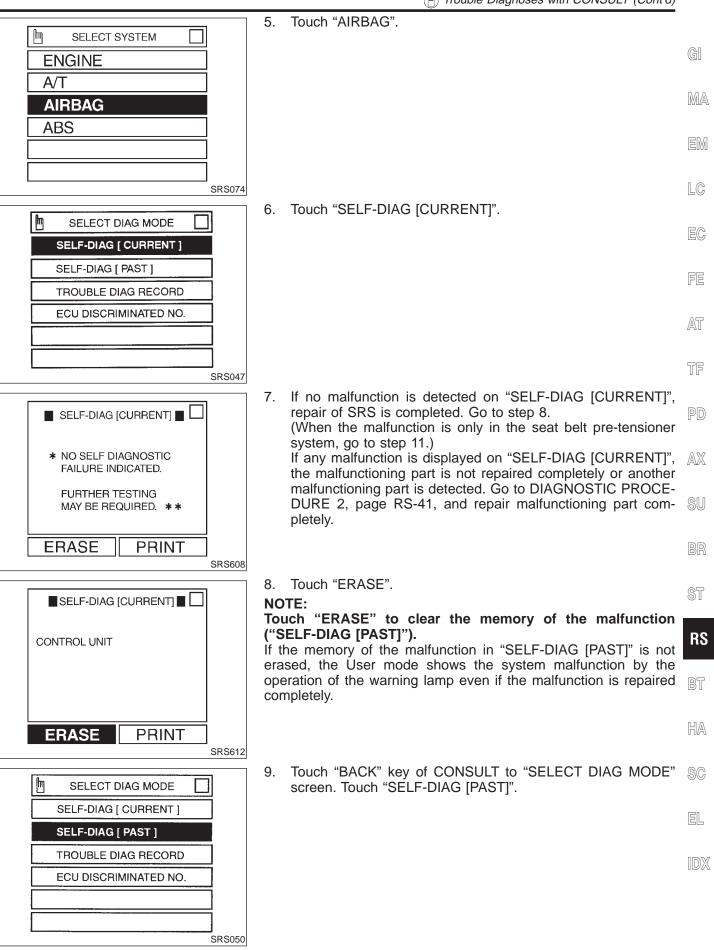


- 1. After repairing SRS, connect both battery cables.
- 2. Connect CONSULT to data link connector.
- 3. Turn ignition switch from "OFF" to "ON".

4. Touch "START".

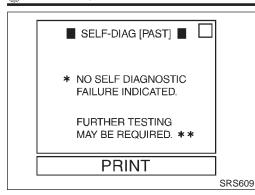


() Trouble Diagnoses with CONSULT (Cont'd)





(P) Trouble Diagnoses with CONSULT (Cont'd)



10. Check that no malfunction is detected on "SELF-DIAG [PAST]".

NOTE:

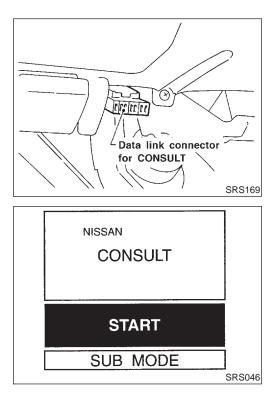
Past malfunctions of the seat belt pre-tensioner system will not be displayed on "SELF-DIAG [PAST]".

- 11. Touch "BACK" key of CONSULT until "SELECT SYSTEM" appears in order to return to User mode from Diagnosis mode, turn off CONSULT, then disconnect CONSULT.
- 12. Turn ignition switch "OFF".
- 13. Go to "SRS Operation Check", page RS-39 to check SRS operation by using "AIR BAG" warning lamp with User mode.

# DIAGNOSTIC PROCEDURE 4 (CONTINUED FROM DIAGNOSTIC PROCEDURE 2)

NBRS0023S03

1	CONSIDER POSSIBILI	TY OF NOT ERASING SELF-DIAGNOSTIC RESULT AFTER REPAIRING	
Is it th	Is it the first time for maintenance of SRS?		
		Yes or No	
Yes		Go to DIAGNOSTIC PROCEDURE 5 (RS-46).	
No		Self-diagnostic result "SELF-DIAG [PAST]" (previously stored in the memory) might not be erased after repair. Go to DIAGNOSTIC PROCEDURE 3, step 8 (RS-44).	



### **DIAGNOSTIC PROCEDURE 5**

# Inspecting SRS intermittent malfunction by using CONSULT — Diagnosis mode

- 1. Turn ignition switch "OFF".
- 2. Connect CONSULT to data link connector.
- 3. Turn ignition switch "ON".
- 4. Touch "START".



(P) Trouble Diagnoses with CONSULT (Cont'd)

5. Touch "AIRBAG". իղ SELECT SYSTEM **ENGINE** A/T MA AIRBAG ABS LC; SRS074 Touch "SELF-DIAG [PAST]". 6. h SELECT DIAG MODE EC SELF-DIAG [ CURRENT ] SELF-DIAG [ PAST ] TROUBLE DIAG RECORD ECU DISCRIMINATED NO. AT TF SRS050 If diagnostic codes are displayed on "SELF-DIAG [PAST]", go 7. to step 10. SELF-DIAG [PAST] AX CONTROL UNIT PRINT SRS610 If no malfunction is detected on "SELF-DIAG [PAST]", touch ST "BACK" and go back to "SELECT DIAG MODE". SELF-DIAG [PAST] NOTE: Past malfunctions of the seat belt pre-tensioner system will RS \* NO SELF DIAGNOSTIC not be displayed on "SELF-DIAG [PAST]". FAILURE INDICATED. FURTHER TESTING MAY BE REQUIRED. \*\* HA PRINT SRS609 Touch "TROUBLE DIAG RECORD". 8. SC ĥŋ SELECT DIAG MODE NOTE: With "TROUBLE DIAG RECORD", diagnosis results previ-SELF-DIAG [ CURRENT ] EL ously erased by a reset operation can be displayed. SELF-DIAG [ PAST ] **TROUBLE DIAG RECORD** IDX ECU DISCRIMINATED NO. SRS055



(P) Trouble Diagnoses with CONSULT (Cont'd)

■ TROUBLE DIAG RECORD	
ASSIST A/B MODULE [OPEN]	
PRINT	
	SRS611

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

- 10. Touch "PRINT".
- 11. Compare diagnostic codes to "Intermittent Malfunction Diagnostic Code Chart", page RS-49.
- 12. Touch "BACK" key of CONSULT until "SELECT SYSTEM" appears, then turn off CONSULT.
- 13. Turn ignition switch "OFF", then disconnect CONSULT 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 RS-16.
- 15. Go to DIAGNOSTIC PROCEDURE 3, page RS-44, for final checking.



(E) Trouble Diagnoses with CONSULT (Cont'd)

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

Diagnostic item	Explanation		Repair order		
NO SELF DIAGNOS- TIC FAILURE INDI- CATED.	When malfunction is indicated by the "AIR BAG" warning lamp in User mode	ge (Less than 9V)	<ul> <li>Go to DIAGNOSTIC PROCEDURE</li> <li>3 (RS-44) after charging battery.</li> </ul>		
	<ul> <li>No malfunction is detected.</li> </ul>		• Go to DIAGNOSTIC PROCEDURE 3 (RS-44).		
AIRBAG MODULE [OPEN]	<ul> <li>Driver's air bag module circuit is open. (incl cable)</li> </ul>		. Visually check the wiring harness connection.		
AIRBAG MODULE [VB-SHORT]	<ul> <li>Driver's air bag module circuit is shorted to ply circuit. (including the spiral cable)</li> </ul>	some power sup-	<ol> <li>Replace the harness if it has visible damage.</li> <li>If the harness check result is OK,</li> </ol>		
AIRBAG MODULE [GND-SHORT]	<ul> <li>Driver's air bag module circuit is shorted to the spiral cable)</li> </ul>	ground. (including	replace driver's air bag module (Before disposal of it, it must be deployed.), diagnosis sensor unit		
AIRBAG MODULE [SHORT]	<ul> <li>Driver's air bag module circuits are shorted</li> </ul>	to each other.	and spiral cable.		
ASSIST A/B MODULE [VB-SHORT]	<ul> <li>Front passenger air bag module circuit is sl power supply circuit.</li> </ul>		1. Visually check the wiring harness connection.		
ASSIST A/B MODULE [OPEN]	Front passenger air bag module circuit is o	pen.	<ol> <li>Replace the harness if it has visible damage.</li> <li>If the harness check result is OK,</li> </ol>		
ASSIST A/B MODULE [GND-SHORT]	<ul> <li>Front passenger air bag module circuit is sl</li> </ul>	horted to ground.	replace front air bag module (Before disposal of it, it must be deployed.), and diagnosis sensor		
ASSIST A/B MODULE [SHORT]	<ul> <li>Front passenger air bag module circuits are other.</li> </ul>	e shorted to each	unit.		
SIDE MODULE LH [OPEN]	• Side air bag module (LH) circuit is open.		1. Visually check the wiring harness connection.		
SIDE MODULE LH [VB-SHORT]	• Side air bag module (LH) circuit is shorted supply circuits.	to some power	<ol> <li>Replace the harness if it has visible damage.</li> <li>If the harness check is OK, replace</li> </ol>		
SIDE MODULE LH [GND-SHORT]	• Side air bag module (LH) circuit is shorted		the diagnosis sensor unit and side air bag module (LH). (Before dis- posing the side air bag module		
SIDE MODULE LH [SHORT]	Side air bag module (LH) circuits are shorte	ed to each other.	(LH), it must be deployed.)		
SIDE MODULE RH [OPEN]	• Side air bag module (RH) circuit is open.		1. Visually check the wiring harness connection.		
SIDE MODULE RH [VB-SHORT]	<ul> <li>Side air bag module (RH) circuit is shorted supply circuits.</li> </ul>	to some power	<ol> <li>Replace the harness if it has visible damage.</li> <li>If the harness check is OK, replace</li> </ol>		
SIDE MODULE RH [GND-SHORT]	• Side air bag module (RH) circuit is shorted		the diagnosis sensor unit and side air bag module (RH). (Before dis- posing the side air bag module		
SIDE MODULE RH [SHORT]	Side air bag module (RH) circuits are short	ed to each other.	(RH), it must be deployed.)		
SATELLITE SENS LH [UNIT FAIL] SATELLITE SENS LH [COMM FAIL]	<ul> <li>Satellite sensor (LH)</li> </ul>		<ol> <li>Visually check the wiring harness connection.</li> <li>Replace the harness if it has visible damage.</li> </ol>		
			<ol> <li>If the harness check is OK, replace the diagnosis sensor unit and satel- lite sensor (LH).</li> </ol>		



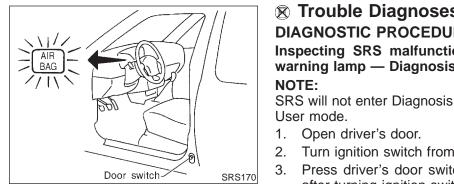
() Trouble Diagnoses with CONSULT (Cont'd)

Diagnostic item	Explanation	Repair order
SATELLITE SENS RH [UNIT FAIL] SATELLITE SENS RH [COMM FAIL]	<ul> <li>Satellite sensor (RH)</li> </ul>	<ol> <li>Visually check the wiring harness connection.</li> <li>Replace the harness if it has visible damage.</li> <li>If the harness check is OK, replace the diagnosis sensor unit and satel- lite sensor (RH).</li> </ol>
CONTROL UNIT	<ul> <li>Diagnosis sensor unit is malfunctioning.</li> </ul>	<ol> <li>Visually check the wiring harness connection.</li> <li>Replace the harness if it has visible damage.</li> <li>If the harness check is OK, replace the diagnosis sensor unit.</li> </ol>

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



R Trouble Diagnoses without CONSUL

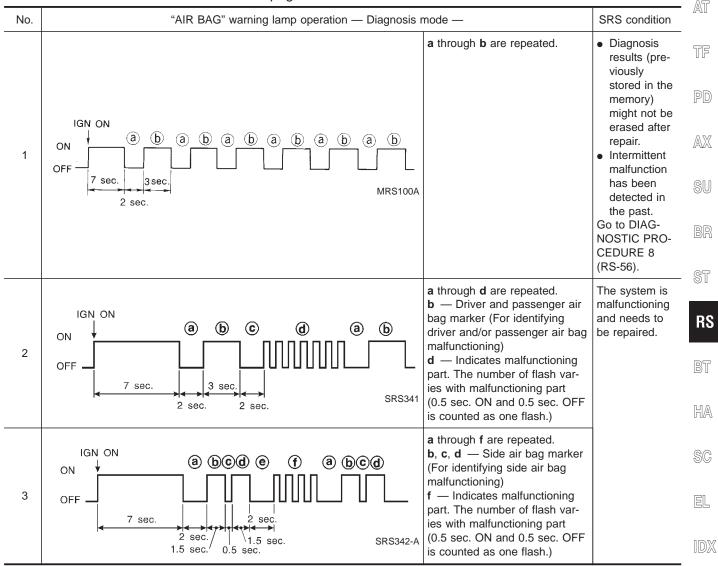


### Trouble Diagnoses without CONSULT =NBRS0024 **DIAGNOSTIC PROCEDURE 6** Inspecting SRS malfunctioning parts by using "AIR BAG" warning lamp — Diagnosis mode MA SRS will not enter Diagnosis mode if no malfunction is detected in

- Turn ignition switch from "OFF" to "ON".
- Press driver's door switch at least 5 times within 7 seconds LC after turning ignition switch "ON". SRS is now in Diagnosis mode.
- 4 "AIR BAG" warning lamp operates in Diagnosis mode as fol-EC lows:

#### NOTE:

FE If SRS does not enter Diagnosis mode even though malfunction is detected in User mode, go to DIAGNOSTIC PROCEDURE 11, page RS-60.



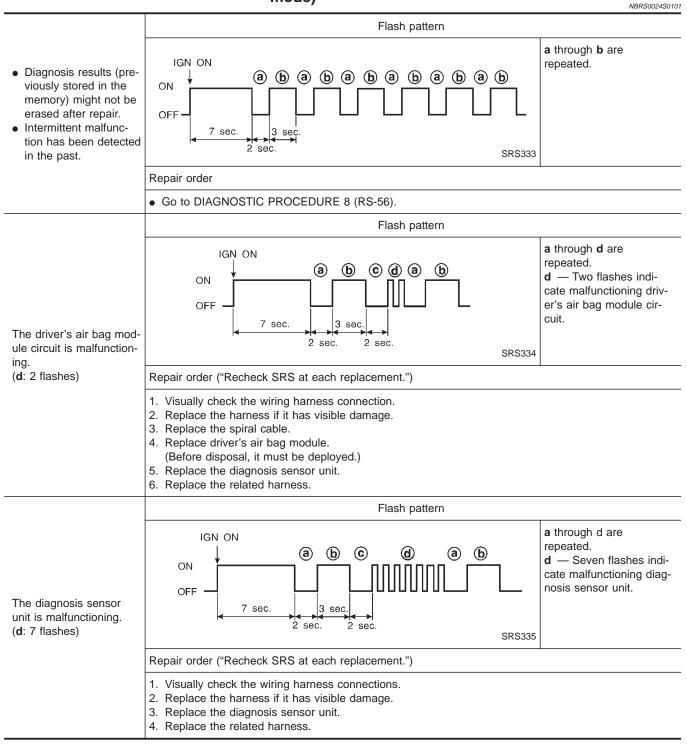
Malfunctioning part is indicated by the number of flashes (part 5. d or f). Compare the number of flashes to "Air Bag Warning Lamp Flash Code Chart", page RS-52, and locate malfunctioning part.

**RS-51** 



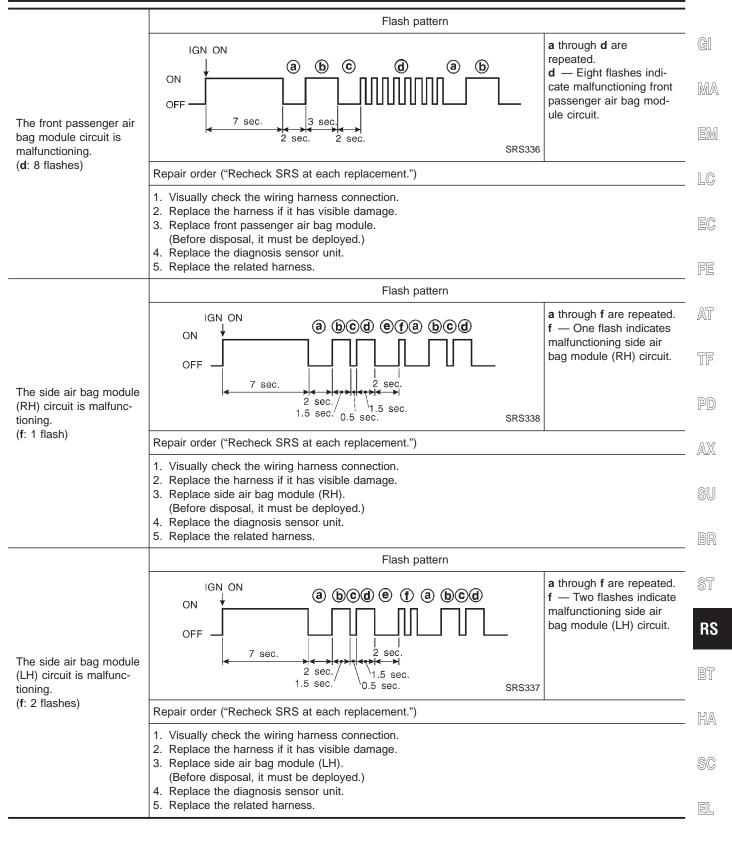
- Trouble Diagnoses without CONSULT (Cont'd)
  - 6. Turn ignition switch "OFF", and disconnect both battery cables.
  - 7. Repair the system as outlined by the "Repair order" in "Air Bag Warning Lamp Flash Code Chart" that corresponds to the flash code. For replacement procedure of component parts, refer to RS-16.
  - 8. After repairing the system, go to DIAGNOSTIC PROCEDURE 7, page RS-54.

# Air Bag Warning Lamp Flash Code Chart (Diagnosis mode)



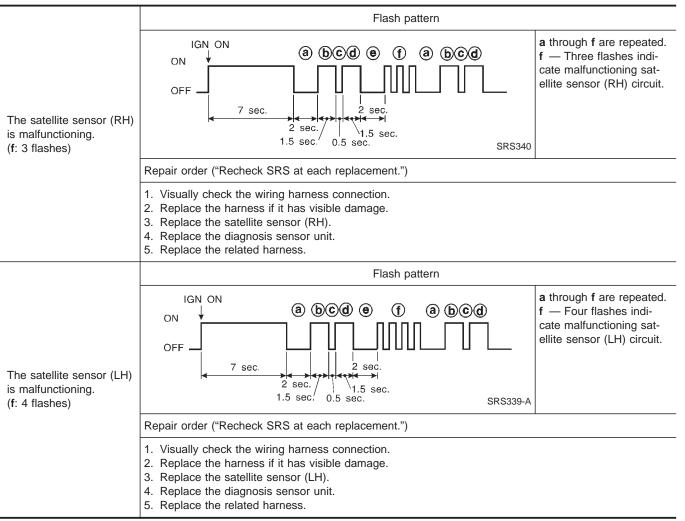


(Interpretending Continuing Conti

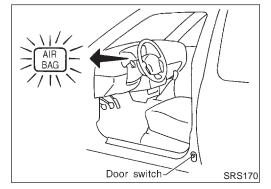


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Trouble Diagnoses without CONSULT (Cont'd)



\* Follow the procedures in numerical order when repairing malfunctioning parts. Confirm whether malfunction is eliminated using the air bag warning lamp or CONSULT 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.



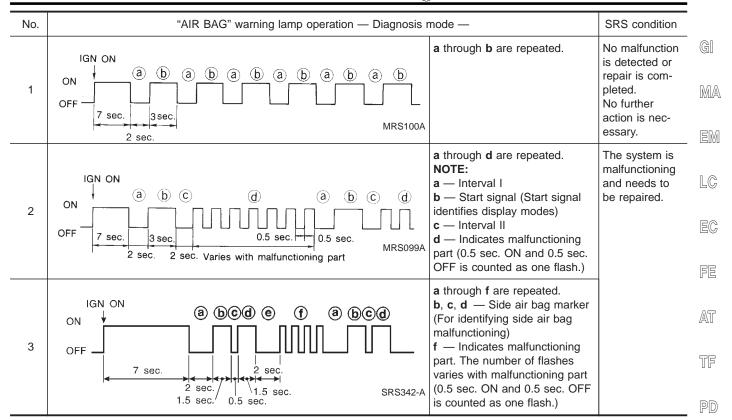
#### **DIAGNOSTIC PROCEDURE 7**

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.
- 3. Turn ignition switch from "OFF" to "ON".
- "AIR BAG" warning lamp operates in Diagnosis mode as follows:



Trouble Diagnoses without CONSULT (Cont'a



#### 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.

If "AIR BAG" warning lamp operates as shown in No. 2 or No. 3 in chart above, the malfunctioning part is not repaired ST completely, or another malfunctioning part is detected. Go to DIAGNOSTIC PROCEDURE 6, page RS-51, and repair malfunctioning part completely.

6. 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 from "OFF" to "ON". Then press driver's door switch at least 5 times within 7 seconds after turning ignition switch "ON". SRS is now in User mode.

"AIR BAG" w	varning lamp operation — User mode —	SRS condition	Reference item	00
		No malfunction is detected. No further action is neces- sary.	_	el Idx
	MRS095A			



Trouble Diagnoses without CONSULT (Cont'd)

"AIR BAG" warning lam	p operation — User mode —	SRS condition	Reference item
ON IGN ON OFF 0.5 sec.		The system is malfunction- ing and needs to be repaired as indicated.	Go to DIAGNOSTIC PRO- CEDURE 6 (RS-51).
IGN ON		Air bag is deployed.	Go to COLLISION DIAG- NOSIS (RS-64).
	MRS097A	Air bag fuse, diagnosis sensor unit or harness is malfunctioning and needs to be repaired.	Go to DIAGNOSTIC PRO- CEDURE 9 (RS-57).
IGN ON	MRS098A	<ul> <li>One of the following has occurred and needs to be repaired.</li> <li>Meter fuse is blown.</li> <li>"AIR BAG" warning lamp circuit has open or short.</li> <li>Diagnosis sensor unit is malfunctioning.</li> </ul>	Go to DIAGNOSTIC PRO- CEDURE 10 (RS-59).
	DIAGNOSTIC PR	ROCEDURE 8 (CON ROCEDURE 6) nalfunctioning record	<b>FINUED FROM</b>
1 CONSIDER POSSIBILI	TY OF NOT ERASING SELF-DIAG	NOSTIC RESULT AFTER	R REPAIRING
Is it the first time for maintenance	e of SRS?		
	Yes or No		
Yes	Go to DIAGNOSTIC PROCEDURE without CONSULT.)	5 (RS-46). (Further inspect	ion cannot be performed
No	Diagnosis results (previously stored to DIAGNOSTIC PROCEDURE 7, s		e erased after repair. Go



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

	Trouble Diagnoses: "AIR BAG" Warning Lamp Does Not Turn Off DIAGNOSTIC PROCEDURE 9	GI
1 SE	E THE DEPLOYMENT OF AIR BAG MODULE	M
ls air bag	nodule deployed?	UVU
	Yes or No	E
Yes	Refer to COLLISION DIAGNOSIS (RS-64).	
No	► GO TO 2.	] L(
2 CH	ECK "AIR BAG" FUSE	
Is SRS "A	Bag" fuse OK?	E(
	UP     Image: Single for the second sec	F A T P
ОК	► GO TO 4.	A
NG	GO TO 3.	
		'S
3 CH	ECK "AIR BAG" FUSE AGAIN	
Replace "/	IR BAG" fuse and turn ignition switch ON.	B
	Is "AIR BAG" fuse blown again?	
Yes	Repair main harness and/or replace air bag harness.	S
No	► INSPECTION END	
		ĺ

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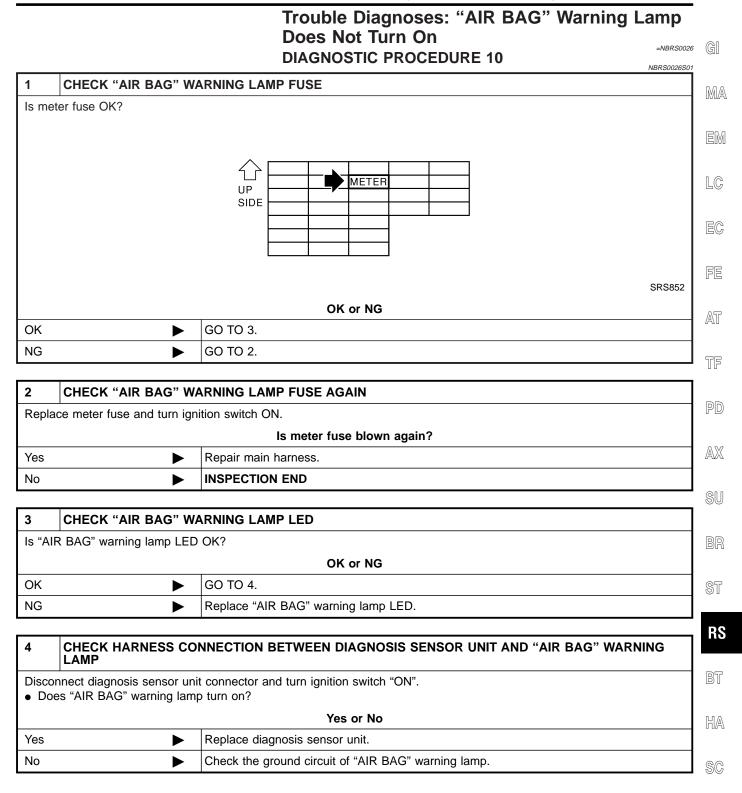
Trouble Diagnoses: "AIR BAG" Warning Lamp Does Not Turn Off (Cont'd)

4	CHECK DIAGNOSIS SE	NSOR UNIT
Wi     Conne	th CONSULT ct CONSULT and touch "S AIRBAG" displayed on COI	TART".
		SRS180 Yes or No
Yes		GO TO 5.
No	►	Visually check the wiring harness connection of diagnosis sensor unit. If the harness connection check result is OK, replace diagnosis sensor unit.

5	CHECK HARNESS CONNECTION				
Is harr	Is harness connection between warning lamp and diagnosis sensor unit OK?				
	OK or NG				
OK		Replace diagnosis sensor unit.			
NG		Connect "AIR BAG" warning lamp and diagnosis sensor unit connector properly. If "AIR BAG" warning lamp still does not go off, replace harness.			



Trouble Diagnoses: "AIR BAG" Warning Lamp Does Not Turn On



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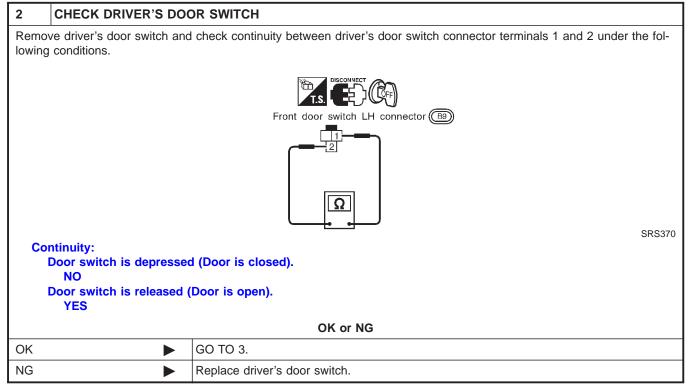
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Trouble Diagnoses: SRS Does Not Enter Diagnosis Mode Using Door Switch

### Trouble Diagnoses: SRS Does Not Enter Diagnosis Mode Using Door Switch DIAGNOSTIC PROCEDURE 11

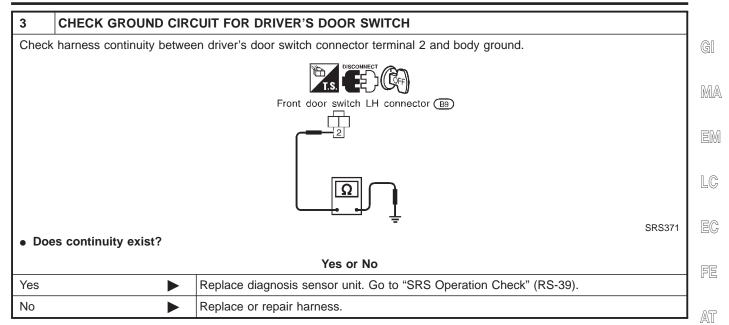
=NBRS0027

			NBRS0027S01		
1	CHECK BATTERY VOL	TAGE			
Disconnect both battery cables and check battery voltage using circuit tester.					
BAT					
● ls b	attery voltage more thar	9V2	SRS058		
	anory renage more mar				
		Yes or No			
Yes	•	GO TO 2.			
No		Charge battery.			





Trouble Diagnoses: SRS Does Not Enter Diagnosis Mode Using Door Switch (Cont'd)



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NBRS0038

### Trouble Diagnoses: "SEAT BELT" Warning Lamp Does Not Turn Off DIAGNOSTIC PROCEDURE 12

			NBRS0038S01	
1	SEE THE DEPLOYMEN	IT OF SEAT BELT PRE-TENSIONER		
Is seat	t belt pre-tensioner (and dr	iver's and front passenger's air bags) deployed?		SU
	Yes or No			
Yes	•	Refer to COLLISION DIAGNOSIS (RS-64).		
No		GO TO 2.		BR

2	CHECK THE STATUS OF SEAT BELT				
Is drive	Is driver's seat belt fastened?				
	Yes or No				
Yes		GO TO 3.			
No	No Check "SEAT BELT" warning lamp operation after the seat belt is fastened.				

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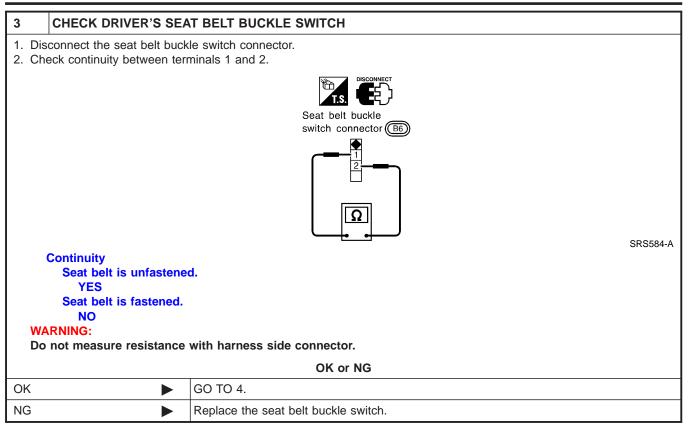
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### SUPPLEMENTAL RESTRAINT SYSTEM (SRS)

Trouble Diagnoses: "SEAT BELT" Warning Lamp Does Not Turn Off (Cont'd)



4	REPLACE DIAGNOSIS UNIT				
2. Rep 3. Fas 4. Tur	<ol> <li>Visually check the wiring harness connection.</li> <li>Replace the diagnosis unit.</li> <li>Fasten the seat belt.</li> <li>Turn ignition switch to ON position. Does the "SEAT BELT" warning lamp illuminate for about 7 seconds and then turn off?</li> </ol>				
	Yes or No				
Yes	Yes System is OK.				
No		GO TO 5.			

5	REPLACE METER ASS	EMBLY			
2. Fas 3. Tur	<ol> <li>Replace combination meter assembly.</li> <li>Fasten the seat belt.</li> <li>Turn ignition switch to ON position. Does the "SEAT BELT" warning lamp illuminate for about 7 seconds and then turn off?</li> </ol>				
	Yes or No				
Yes	Yes System is OK.				
No	No   Replace the main harness and air bag harness.				



Trouble Diagnoses: "SEAT BELT" Warning Lamp Does Not Turn On

		Trouble Diagnoses: "SEAT BELT" Warning Lamp Does Not Turn On DIAGNOSTIC PROCEDURE 13	Gili	
1	CHECK WARNING LAN	IP FUSE	MA	
Is met	er fuse OK?	UP SIDE	EM	
			EC FE	
		SRS852 OK or NG		
ОК	•	GO TO 3.	AT	
NG	►	GO TO 2.	TF	
2	CHECK WARNING LAN			
	ce meter fuse and turn ign		PD	
		Is meter fuse blown again?		
Yes	►	Repair main harness.	AX	
No	•	INSPECTION END		
3	CHECK WARNING LAN		SU	
	ning lamp bulb OK?		BR	
	5	OK or NG		
ОК	►	GO TO 4.	ST	
NG	•	Replace warning lamp bulb.		
4	REPLACE DIAGNOSIS	UNIT	RS	
1. Vis 2. Rej 3. Fas 4. Tur	<ol> <li>Visually check the wiring harness connection.</li> <li>Replace the diagnosis unit.</li> <li>Fasten the seat belt.</li> <li>Turn ignition switch to ON position. Does the "SEAT BELT" warning lamp illuminate for about 7 seconds and then turn off?</li> </ol>			
		Yes or No		
Yes	•	System is OK.	SC	
No		GO TO 5.	EL	

IDX

Trouble Diagnoses: "SEAT BELT" Warning Lamp Does Not Turn On (Cont'd)

5	5 REPLACE METER ASSEMBLY					
2. Fas 3. Tur	<ol> <li>Replace combination meter assembly.</li> <li>Fasten the seat belt.</li> <li>Turn ignition switch to ON position. Does the "SEAT BELT" warning lamp illuminate for about 7 seconds and then turn off?</li> </ol>					
		Yes or No				
Yes	Yes System is OK.					
No	No   Replace the main harness and air bag harness.					

### **Collision Diagnosis**

NBRS0028

NBRS0028S01

NBRS0028S0101

### FOR FRONTAL COLLISION

### To repair the SRS, perform the following steps.

#### When SRS is activated in a collision:

- 1) Replace the diagnosis sensor unit.
- 2) Remove the air bag modules.
- 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.
- 5) Conduct self-diagnosis using CONSULT or "AIR BAG" and "SEAT BELT" warning lamp. Refer to "SRS Operation Check" for details (RS-39). 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 or "AIR BAG" and "SEAT BELT" warning lamp. Refer to "SRS Operation Check" for details (RS-39). Ensure entire SRS operates properly.

### SRS Inspection (For frontal collision)

Part	SRS is activated	SRS is NOT activated
Air bag module (driver and passenger side)	REPLACE Install with new bolts.	<ol> <li>Remove air bag module. Check harness cover and connectors for damage, terminals for deformities, and harness for binding.</li> <li>a. Install driver air bag module into the steering wheel to check fit and alignment with the wheel.</li> <li>b. Install passenger air bag module into the instrument panel to check fit with the instrument panel.</li> <li>No damage found, reinstall with new bolts.</li> <li>If damaged—REPLACE. Air bag must be deployed before discarding.</li> </ol>
Seat belt pre-ten- sioner assembly	REPLACE Install seat belt pre- tensioner with new bolts.	<ol> <li>Remove seat belt pre-tensioners. Check harness cover and connectors for damage, terminals for deformities, and harness for binding.</li> <li>Check belts for damage and anchors for loose mounting.</li> <li>Check retractor for smooth operation.</li> <li>If no damage is found, reinstall the seat belt pre-tensioner assembly.</li> <li>If damaged—REPLACE. Install a new seat belt pre-tensioner assembly (includ- ing anchor bolts). Seat belt pre-tensioners must be deployed before discarding.</li> </ol>
Diagnosis sensor unit	REPLACE Install with new bolts.	<ol> <li>Check case for dents, cracks or deformities.</li> <li>Check connectors for damage, and terminals for deformities.</li> <li>If no damage is found, reinstall with new special bolts and ground bolt.</li> <li>If damaged—REPLACE. Install diagnosis sensor unit with new special bolts and ground bolt.</li> </ol>



Collision Diagnosis (Cont'd)

Part	SRS is activated	SRS is NOT activated		
Steering wheel	<ol> <li>Check harness (built</li> <li>Install air bag modul</li> </ol>	ng wheel for deformities. t into steering wheel) and connectors for damage, and terminals for d e to check fit or alignment with steering wheel. el for excessive free play.	eformities.	R
	6. If damaged—REPLA			
Spiral cable	<ol> <li>Check connectors at</li> <li>Check steering whee</li> <li>If no damage is four</li> </ol>			
Harness and Connec-	5. If damaged—REPLA	r poor connection, damage, and terminals for deformities.		
ors	<ol> <li>Check harness for b</li> <li>If no damage is four</li> </ol>	inding, chafing, cuts, or deformities. Id, reinstall the harness and connectors. E damaged section of harness. Do not attempt to repair, splice or mo	odify any SRS	
	harness.			
nstrument panel	<ol> <li>When passenger air</li> <li>Opening portion for p</li> </ol>	bag inflates, check the following points for bending, deformities or cra bassenger air bag	acks.	Æ
				1
		Check points	SRS366	ŀ
	Passenger air bag m	odule brackets	313300	
		Back face of instrument panel		۳ س
				60
		: Check point		
	<ul> <li>The portions securing</li> </ul>	g the instrument panel	SRS367	
		₽ P		
				Ľ
			$\tilde{\mathbf{A}}$	9
		Check points     Scheck points     AcE the instrument panel with bolts.	SRS653	
				[

#### Collision Diagnosis (Cont'd)

### FOR SIDE COLLISION

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 component:
- All parts of front seatback (including front seatback frame) with side air bag module (on the side on which side air bag is activated)
- Diagnosis sensor unit
- Satellite sensor (on the side on which side air bag is activated)
- 2) 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).
- Conduct self-diagnosis using CONSULT, and "AIR BAG" and "SEAT BELT" warning lamp. Refer to "SRS Operation Check" for details (RS-39). 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.
- Replace any SRS components and the related parts showing visible signs of damage (dents, cracks, deformation).
- 2) Conduct self-diagnosis using CONSULT, and "AIR BAG" and "SEAT BELT" warning lamp. Refer to "SRS Operation Check" for details (RS-39). Ensure entire SRS operates properly.

#### SRS Inspection (For side collision)

Side air bag is acti-Part SRS is NOT activated vated REPLACE all parts of Built-in type side air 1. Check for visible signs of damage (dents, tears, deformation) of the seatback bags module (LH or front seatback with on the collision side. RH) deployed side air bag 2. If damaged—REPLACE the damaged seat parts with new bolts and remove module. the side air bag module. 3. Check for visible signs of damaged (tesrs etc.) of the side air bag module. 4. Check harness and connectors for damage, and terminals for deformities. 5. If no damaged is found, reinstall the side air bag module with new torx nuts coated with bonding agent. 6. If damaged-REPLACE the side air bag module with new torx nuts coated with bonding agent. Air bag must be deployed before disposing of it. **REPLACE** the satel-Satellite sensor (LH 1. Remove the satellite sensor on the collision side. Check harness connectors or RH) lite sensor on the colfor damage, terminals for deformities, and harness for binding. 2. Check for visible signs of damage (dents, cracks, deformation) of the satellite lision side with new nuts coated with sensor. 3. Install the satellite sensor to check fit. bonding agent. (Repair the center 4. If no damage is found, reinstall the satellite sensor with new nuts coated with pillar inner, etc. before bonding agent. installing new one if 5. If damaged-REPLACE the satellite sensor with new nuts coated with bonding damaged.) agent. **REPLACE** the diag-1. Check case and bracket for dents, cracks or deformities. Diagnosis sensor unit nosis sensor unit with 2. Check connectors for damage, and terminals for deformities. the new bolts. 3. If no damage is found, reinstall the diagnosis sensor unit with new special bolts and ground bolt. 4. If damaged—REPLACE. Install the diagnosis sensor unit with new special bolts and ground bolt. 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. If no damage is found, reinstall the seat belt pre-tensioner assembly. 5. If damaged—REPLACE the seat belt pre-tensioner assembly (including anchor bolts). The seat belt pre-tensioner assembly must be deployed before disposing of it.

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# SUPPLEMENTAL RESTRAINT SYSTEM (SRS)

Collision Diagnosis (Cont'd)

Part	Side air bag is activated	SRS is NOT activated	G]
Seat with built-in side air bag	REPLACE all parts of front seatback (includ- ing front seatback frame)	<ol> <li>Visually check the seat on the collision side.</li> <li>Remove the seat on the collision side and check the following for damage and deformities.</li> <li>Harness, connectors and terminals</li> <li>Frame and recliner (for front and rear seat), and also adjuster and slides (for front seat)</li> <li>If no damage is found, reinstall the seat.</li> <li>If damaged—REPLACE the damaged seat parts with new bolts.</li> </ol>	MA
Center pillar inner		lar inner on the collision side for damage (dents, cracks, deformation). R the center pillar inner.	LC
Trim		ns of damage (dents, cracks, deformation) of the interior trim on the collision side. ACE the damaged trim parts.	EC

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NOTES