# **RESTRAINT SYSTEM**

# SECTION RS

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#### **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 collision. The SRS composition which is available to NISSAN MODEL R50 is as follows:

- For a frontal collision
  - The Supplemental Restraint System consists of driver air bag module (located in the center of the steering wheel), front passenger air bag module (located on the instrument panel on passenger side), seat belt LC pre-tensioners, a diagnosis sensor unit, warning lamp, wiring harness and spiral cable.

MA

- - 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).

#### **WARNING:**

To avoid rendering the SRS inoperative, which could increase the risk of personal injury or death in the event of a collision which would result in air bag inflation, all maintenance must be performed by an authorized NISSAN dealer.

Improper maintenance, including incorrect removal and installation of the SRS, can lead to personal injury caused by unintentional activation of the system.

MIT

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.

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#### PRECAUTION FOR SEAT BELT SERVICE

#### **CAUTION:**

- Before removing the seat belt pre-tensioner assembly, turn the ignition switch off, disconnect both battery cables and wait at least 3 minutes.
- Do not use electrical test equipment for seat belt pre-tensioner connector.

After replacing or reinstalling seat belt pre-tensioner assembly, or reconnecting seat belt pre-tensioner connector, check the system function. Refer to "SRS Operation Check" (RS-38) for details.

AX

- Do not use disassemble buckle or seat belt assembly.
- Replace anchor bolts if they are deformed or worn out.
- Never oil tongue and buckle.

- If any component of seat belt assembly is questionable, do not repair. Replace the whole seat belt assembly.

- If webbing is cut, frayed, or damaged, replace seat belt assembly.
- When replacing seat belt assembly, use a genuine seat belt assembly.

### NARS0002S01

### 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.

RS

Replace any seat belt assembly if:

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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).

SC

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.

EL

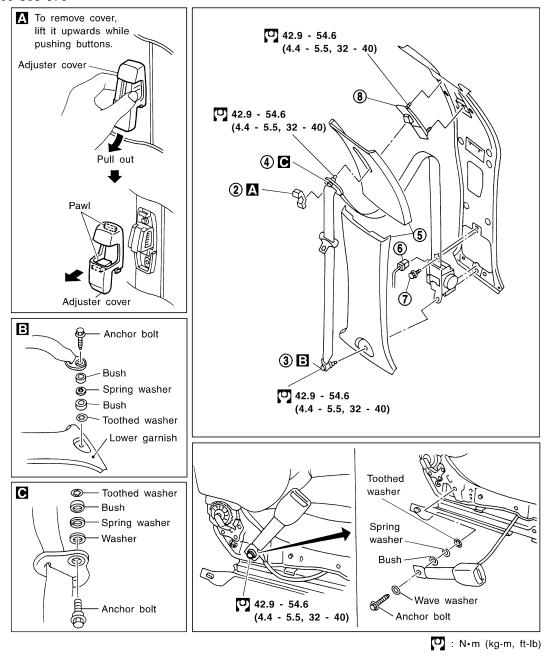
- Anchor bolts are deformed or worn out.
- The seat belt pre-tensioner should be replaced even if the seat belts are not in use during the collision in which the air bags are deployed.

#### **Front Seat Belt**

#### REMOVAL AND INSTALLATION

- 1. Slide the seat all the way forward and tilt the seatback toward the front.
- 2. Remove adjuster cover.
- 3. Remove floor anchor bolt.
- 4. Remove shoulder anchor bolt.
- 5. Remove center pillar upper and lower garnish. Refer to BT-29, "SIDE AND FLOOR TRIM" for details.
- 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.

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SRS873

=NARS0003

### **Rear Seat Belt**

#### **REMOVAL AND INSTALLATION**

=NARS0004

Raise up rear seat cushion.

2. Remove outer anchor bolt.

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- 3. Remove rear side upper and lower garnish. Refer to BT-29, "SIDE AND FLOOR TRIM" for details.

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4. Remove anchor through-bolt.

- 5. Remove anchor bolt and bolt securing rear seat belt retractor, then remove seat belt and seat belt retractor. C
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6. Remove each anchor bolt.

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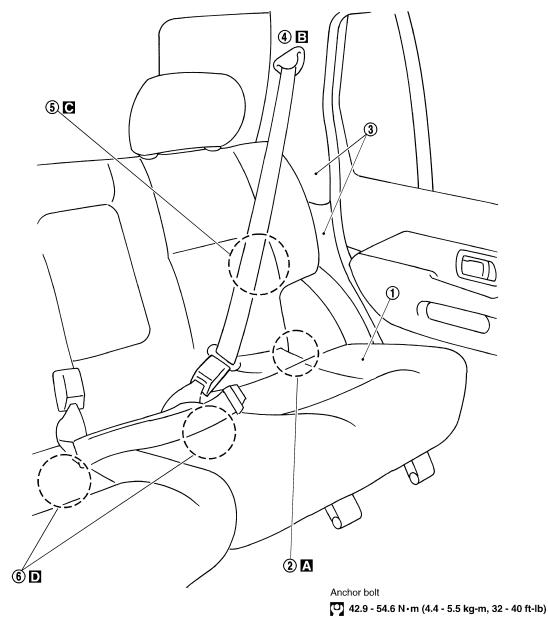
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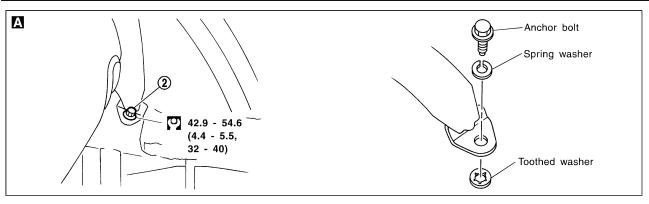
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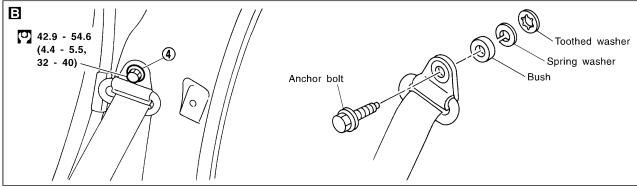
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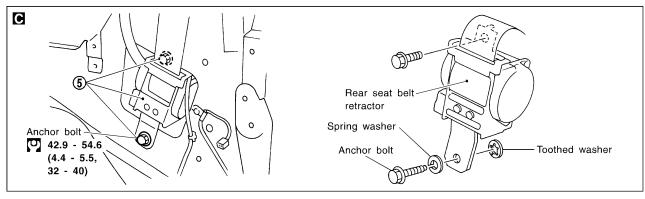


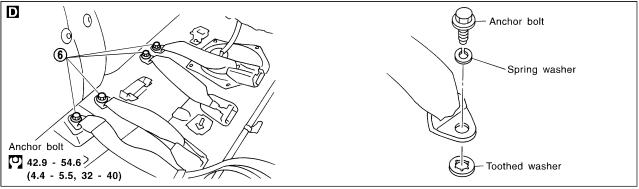
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: N·m (kg-m, ft-lb)

SRS781-B

#### Seat Belt Inspection

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### 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.

MA

LC

#### 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.

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Anchor bolts are deformed or worn out.

NARS0029S02

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.

MIT

#### PRELIMINARY CHECKS

Check the seat belt warning lamp/chime for proper operation as follows:

Switch ignition ON. The seat belt warning lamp should illuminate. Also, the seat belt warning chime should sound for about seven seconds.

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b. Fasten driver's seat belt. The seat belt warning lamp should go out and the chime (if sounding) should

If the air bag warning lamp is blinking, conduct self-diagnosis using CONSULT-II, and air bag warning lamp. Refer to "SRS Operation Check", RS-38.

Check that the seat belt retractor, seat belt anchor and buckle bolts are securely attached.

a. Fully extend the seat belt webbing and check for twists, tears or other damage.

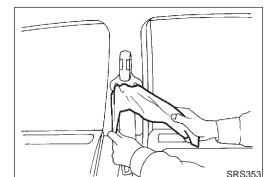
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4. Check the shoulder seat belt guide and shoulder belt height adjuster for front seats. Ensure guide swivels freely and that belt lays flat and does not bind in guide. Ensure height adjuster operates properly and holds securely.

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5. Check retractor operation:

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.



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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.

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6. 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.

7. Repeat steps above as necessary to check the other seat belts.

#### SEAT BELT RETRACTOR ON-VEHICLE CHECK

NARS0029S03

## Emergency Locking Retractors (ELR) and Automatic Locking Retractors (ALR) NOTE:

NARS0029S0301

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 extended. When the belt is then retracted partially, the ALR mode automatically locks the seat belt in a specific position so the belt cannot be extended any further. To cancel the ALR mode, allow the seat belt to fully wind back into the retractor.

Check the seat belt retractors using the following test(s) to determine if a retractor assembly is operating properly.

### **ELR Function Stationary Check**

NARS0029S0302

Grasp the shoulder belt and pull forward quickly. The retractor should lock and prevent the belt from extending further.

#### **ALR Function Stationary Check**

NARS0029S0304

- Pull out entire length of seat belt from retractor until a click is heard.
- 2. Retract the belt partially. A clicking noise should be heard as the belt retracts indicating that the retractor is in the Automatic Locking Retractors (ALR) mode.
- 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.
- 4. Allow the entire length of the belt to retract to cancel the automatic locking mode.

#### **ELR Function Moving Check**

NARS0029S0303

#### **WARNING:**

Perform the following test in a safe, open area clear of other vehicles and obstructions (for example, a large, empty parking lot). Road surface must be paved and dry. DO NOT perform the following test on wet or gravel roads or on public streets and highways. This could result in an accident and serious personal injury. The driver and passenger must be prepared to brace themselves in the event the retractor does not lock.

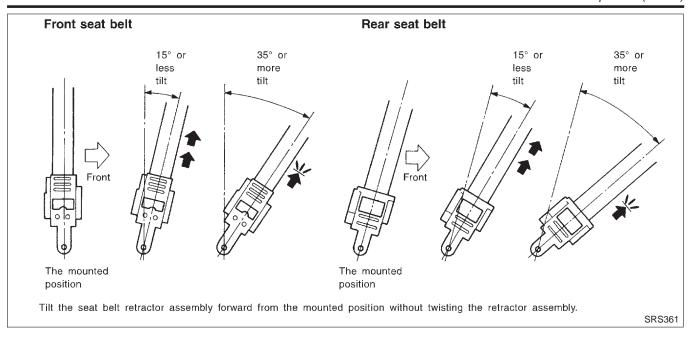
- 1. Fasten driver's seat belt. Buckle a passenger into the seat for the belt that is to be tested.
- 2. Proceed to the designated safe area.
- 3. Drive the vehicle at approximately 16 km/h (10 MPH). Notify any passengers of a pending sudden stop and the driver and passenger must be prepared to brace themselves in the event the retractor does not lock, apply brakes firmly and make a very hard stop.

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.

#### SEAT BELT RETRACTOR OFF-VEHICLE CHECK

NARS0029S04

- Remove the seat belt retractor assembly.
- 2. Slowly pull out belt while tilting the retractor assembly forward from the mounted position without twisting the retractor assembly as shown in the illustration.
  - 15 degrees or less tilt: Belt can be pulled out.
  - 35 degrees or more tilt: Belt locks and cannot be pulled out.



If NG, replace the retractor assembly.

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#### **Precautions**

# SUPPLEMENTAL RESTRAINT SYSTEM (SRS) "AIR BAG" AND "SEAT BELT PRE-TENSIONER"

warning lamp (one of components of air bags for a frontal collision).

NARSONA

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 NISSAN MODEL R50 is as follows:

- For a frontal collision
  - The Supplemental Restraint System consists of driver air bag module (located in the center of the steering 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.
- 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:**

- To avoid rendering the SRS inoperative, which could increase the risk of personal injury or death in the event of a collision which would result in air bag inflation, all maintenance must be performed by an authorized NISSAN dealer.
- Improper maintenance, including incorrect removal and installation of the SRS, can lead to personal 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

NARS0006

- Do not use electrical test equipment to check SRS circuits unless instructed to in this Service Manual.
- Before servicing the SRS, turn ignition switch "OFF", disconnect both battery cables and wait at least 3 minutes.
  - For approximately 3 minutes after the cables are removed, it is still possible for the air bag and seat belt pre-tensioner to deploy. Therefore, do not work on any SRS connectors or wires until at least 3 minutes have passed.
- Diagnosis sensor unit must always be installed with their arrow marks "←" pointing towards the front of the vehicle for proper operation. Also check diagnosis sensor unit for cracks, deformities or rust before installation and replace as required.
- The spiral cable must be aligned with the neutral position since its rotations are limited. Do not attempt to turn steering wheel or column after removal of steering gear.
- Handle air bag module carefully. Always place driver and passenger air bag modules with the pad side facing upward and side air bag module (built-in type) standing with the stud bolt side setting bottom.
- Conduct self-diagnosis to check entire SRS for proper function after replacing any components.
- After air bag inflates, the front instrument panel assembly should be replaced if damaged.

#### WIRING DIAGRAMS AND TROUBLE DIAGNOSIS

NARS0007

- When you read wiring diagrams, refer to the following:

   GI-11, "HOW TO READ WIRING DIAGRAMS"
- EL-9, "POWER SUPPLY ROUTING" for power distribution circuit

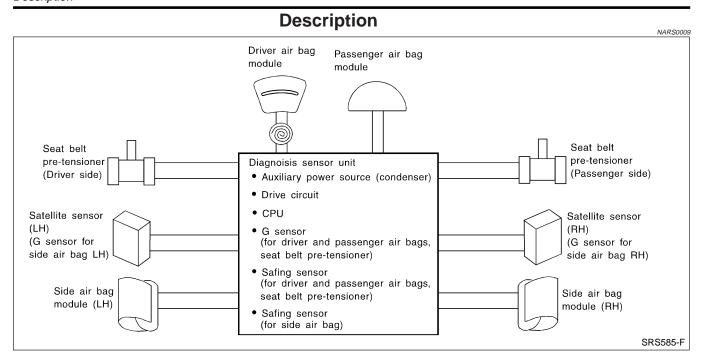
When you perform trouble diagnosis, refer to the following:

- GI-35, "HOW TO FOLLOW TEST GROUPS IN TROUBLE DIAGNOSES"
- GI-24, "HOW TO PERFORM EFFICIENT DIAGNOSIS FOR AN ELECTRICAL INCIDENT"

Preparation

#### **Preparation** GI SPECIAL SERVICE TOOLS =NARS0008 The actual shapes of Kent-Moore tools may differ from those of special service tools illustrated here. MA Tool number (Kent-Moore No.) Description EM Tool name KV99106400 Disposing of air bag module (J38381) LC Deployment tool EC NT357 FE KV991065S0 \* Deployment tool adapters for seat belt For passenger For seat belt (J38381-30) air bag module pre-tesioner and for passenger air bag pre-tensioner Deployment tool adapters module with black connector are not nec-CL essary for servicing NISSAN MODEL R50. MT White NT762 AT KV99105300 Anchoring air bag module (J41246) Air bag module bracket TF PD NT354 HT61961000 and Use for special bolts [TAMPER RESIS-AX TANT TORX (Size T50)] HT62152000 combined a: 3.5 (0.138) dia. (J38219)\*Special torx bit b: 8.5 - 8.6 (0.335 - 0.339) dia. SU c: approx. 10 (0.39) sq. Unit: mm (in) BR NT361 KV99109000 For built-in side air bag modules (J44230)ST Deployment tool adapter for built-in side air bags RS NT827 KV99108200 (J38381-50) Deployment tool adapter for seat For seat belt HA pre-tensioner belt pre-tensioner SC EL NT721

<sup>\*:</sup> Special tool or commercial equivalent

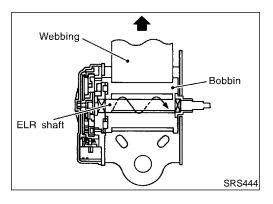


The air bag deploys if the diagnosis sensor unit activates while the ignition switch is in the "ON" or "START" position.

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;

SRS configuration	Frontal collision	Left side collision	Right side collision
Driver air bag module	0	_	_
Passenger air bag module	0	_	_
Seat belt pre-tensioner (Driver side)	0	_	_
Seat belt pre-tensioner (Passenger side)	0	_	_
Side air bag module (LH)	_	0	_
Side air bag module (RH)	_	_	0



### 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

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

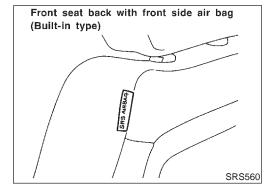
load limiter permits the specified extension of the seat belt by the twisting of the ELR shaft, and a relaxation of the chest-area seat belt web tension while maintaining force.



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### **Built-in Type Side Air Bag**

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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.

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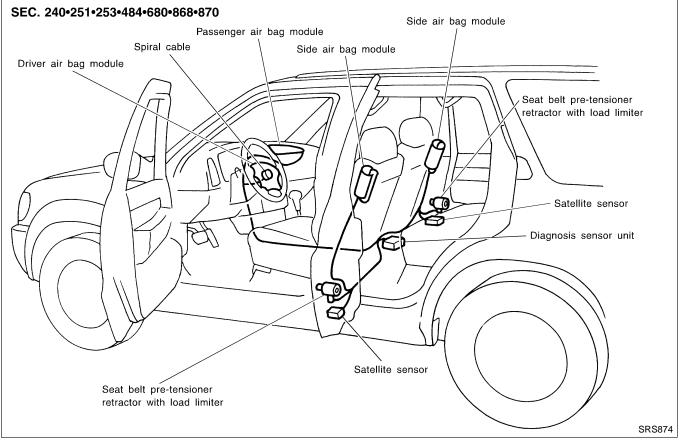
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### **SRS Component Parts Location**

NARS0010



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#### Maintenance Items

#### **CAUTION:**

Do not use electrical test equipment to check SRS circuit.

NARS0011

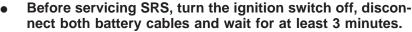
- Check operation of "AIR BAG" warning lamp.
   After turning ignition key to "ON" position, air bag warning lamp illuminates. The "AIR BAG" warning lamp will go off after about 7 seconds if no malfunction is detected. If any of the following warning lamp conditions occur, immediately check the air bag or seat belt pre-tensioner system. Refer to RS-38 for details.
- The "AIR BAG" warning lamp does not illuminate when the ignition switch is turned "ON".
- The "AIR BAG" warning lamp does not go off about 7 seconds after the ignition switch is turned "ON".
- The "AIR BAG" 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 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.
- 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.
- 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 air bag warning lamp or CONSULT-II. Refer to "SRS Operation Check" for details. (RS-38)
- 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:**



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.

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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.

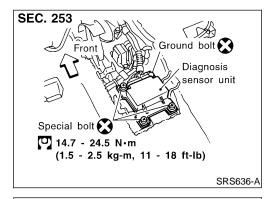
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Check diagnosis sensor unit brackets to ensure they are free of deformities or rust.

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-38).

MIT



Bolt

Seat belt

Anchor bolt

pre-tensioner

with load limiter

42.9 - 54.6 N·m

(4.4 - 5.5 kg-m,

SRS651-C

32 - 40 ft-lb)

**SEC. 868** 

Disconnect connectors for driver and passenger air bag modules and seat belt pre-tensioner.

Remove console box. Refer to BT-22, "INSTRUMENT PANEL TF ASSEMBLY".

Disconnect diagnosis sensor unit connector.

Remove ground bolt and also remove special bolts using the TAMPER RESISTANT TORX (Size T50), from diagnosis sen-

AX

Then remove the diagnosis sensor unit.

NOTE:

To install, reverse the removal procedure sequence.

SU

### Seat Belt Pre-tensioner REMOVAL AND INSTALLATION

**CAUTION:** 

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

ST

Check seat belt pre-tensioner with load limiter for proper installation.

RS

After replacement of seat belt pre-tensioner, check SRS

function and perform self-diagnosis for SRS. Refer to "SRS Operation Check" for details. (RS-38) Do not attempt to disassemble seat belt pre-tensioner with

load limiter. Replace seat belt pre-tensioner if it has been dropped or sustained an impact.

Do not expose seat belt pre-tensioner to temperatures exceeding 80°C (176°F).

SC

For removal of seat belt pre-tensioner, refer to "Front Seat Belt" for details. (RS-4)

To install, reverse the removal procedure sequence.

NOTE:

**RS-15** 

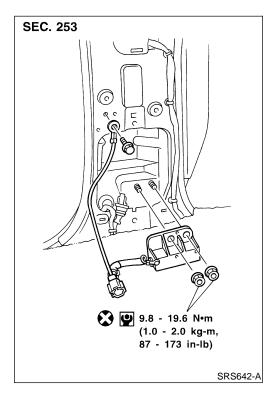
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# Satellite Sensor REMOVAL AND INSTALLATION

NARS0035

#### **CAUTION:**

- Before servicing SRS, turn the ignition switch off, disconnect both battery cables and wait at least 3 minutes.
- Do not use old bolts coated with bonding agent after removal; replace with new ones.
- Check satellite sensor for proper installation.
- 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.
- After replacement of satellite sensor, check SRS function and perform self-diagnosis for SRS. Refer to "SRS Operation Check" for details. (RS-38)
- Do not attempt to disassemble satellite sensor.
- Replace satellite sensor if it has been dropped or sustained an impact.



- 1. Remove seat belt pre-tensioner with load limiter. Refer to "Front Seat Belt" for details. (RS-4)
- 2. Disconnect satellite sensor connector.
- Remove bolt and nuts from satellite sensor unit. Then remove the satellite sensor.

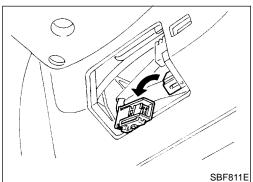
#### NOTE:

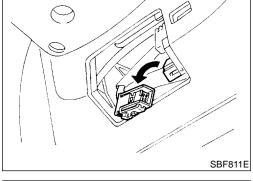
To install, reverse the removal procedure sequence.

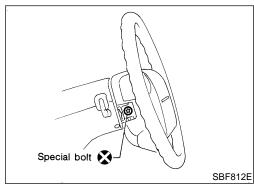
### **Driver Air Bag Module and Spiral Cable**

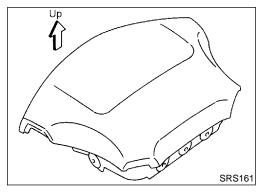
#### REMOVAL AND INSTALLATION

SEC. 253•484 Dynamic damper Air bag module O 29.4 - 39.2 (3.0 - 4.0, 22 - 29) Special bolt Air bag module connector 14.7 - 24.5 (1.5 - 2.5,Spiral cable 11 - 18) Śide lid RH Horn connectór Audio steering switch ASCD steering switch Special bolt : N•m (kg-m, ft-lb) Lower lid (I) 14.7 - 24.5 (1.5 - 2.5, 11 - 18) Side lid LH SRS782-C









#### REMOVAL

#### **CAUTION:**

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

Always work from the side of air bag module.

Remove lower lid from steering wheel, and disconnect air bag module connector.

Remove side lids, ASCD steering switch and audio steering switch. Using the TAMPER RESISTANT TORX (Size T50), remove left and right special bolts. Air bag module can then be removed.

#### **CAUTION:**

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

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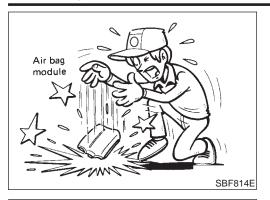
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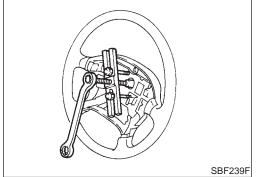
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Driver Air Bag Module and Spiral Cable (Cont'd)



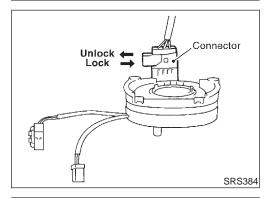
- Replace air bag module if it has been dropped or sustained an impact.
- Do not expose the air bag module to temperatures exceeding 90°C (194°F).
- Do not allow oil, grease or water to come in contact with the air bag module.



- 3. Set steering wheel in the neutral position.
- 4. Disconnect horn connector and remove nuts.
- 5. Remove dynamic damper. Then using steering wheel puller, remove steering wheel. Be careful not to over-tighten puller bolt on steering wheel.



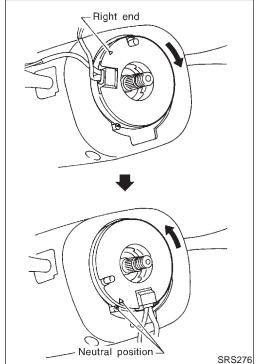
- Do not tap or bump the steering wheel.
- 6. Remove steering column cover.



 Unlock the spiral cable connector. Then disconnect connectors and remove the four screws. The spiral cable can then be removed.

#### **CAUTION:**

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



#### **INSTALLATION**

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- 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).

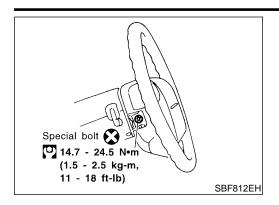
#### CAUTION

- 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.
- 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.

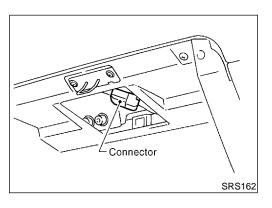
(3.0 - 4.0 kg-m, 22 - 28 ft-lb)

Install dynamic damper.

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



- 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-II 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-II or warning lamp). If a malfunction is detected, replace the spiral cable with a new one.
- Perform self-diagnosis again to check that no malfunction is detected.



# Front Passenger Air Bag Module REMOVAL

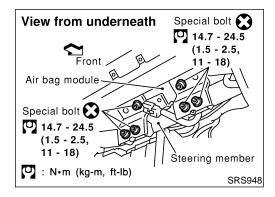
**CAUTION:** 

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.

- Remove glove box assembly. Refer to BT-22, "INSTRUMENT PANEL ASSEMBLY" for details.
- Disconnect front passenger air bag module connector from air bag harness connector.
- Remove instrument lower panel on passenger side. Refer to BT-22. "INSTRUMENT PANEL ASSEMBLY" for details.

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- Remove hex bolts or special bolts using the TAMPER RESISTANT TORX (Size T50) from front passenger air bag module.
- Remove instrument panel assembly. Refer to BT-22, "INSTRU-MENT PANEL ASSEMBLY" for details.
- Remove the bolts from left and right sides of front passenger 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 both hands during removal.

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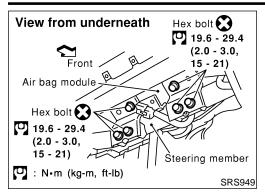
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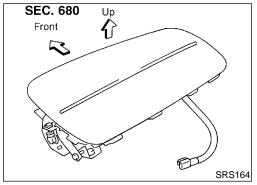
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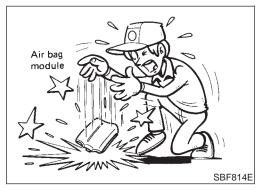
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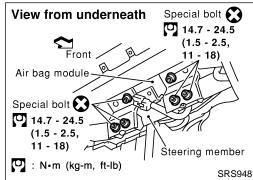
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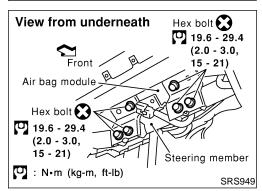
Front Passenger Air Bag Module (Cont'd)











#### **CAUTION:**

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

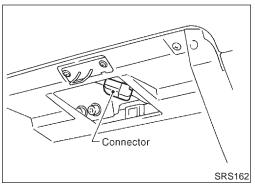
### **INSTALLATION**

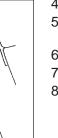
**CAUTION:** 

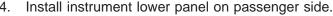
NARS0017

- Always work from the side of or under air bag module.
- 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.

Front Passenger Air Bag Module (Cont'd)







5. Connect air bag module connector to air bag harness connec-

6. Install glove box assembly.

7. Connect both battery cables.

Conduct self-diagnosis to ensure entire SRS operates properly. (Use CONSULT-II or warning lamp check.)

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NARS0036 CAUTION: Before servicing SRS, turn the ignition switch OFF, dis-

connect 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.

Disconnect side air bag module connector by sliding tab.

Pull up the seatback trim.

Remove the nuts securing the inner cloth with seatback frame. Then pull up the inner cloth.

Remove seatback trim. Refer to BT-43, "FRONT SEAT" for details.

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SU Remove the torx nuts coated with bonding agent from the side

air bag module. Remove side air bag connector. Side air bag module can then be removed.

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Always place the air bag module stading with the stud bolt side setting bottom.

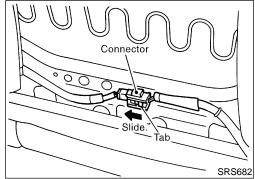
Do not attempt to disassemble air bag module.

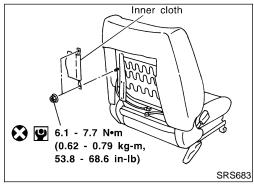
The torx nuts are coated with bonding agent. Do not use old nuts after removal; replace with new coated nuts.

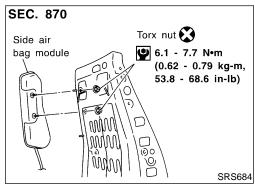
Do not insert any foreign objects (screwdriver, etc.) into air bag module connector.

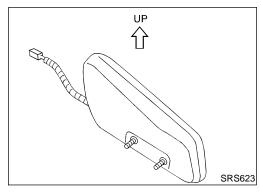
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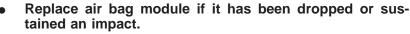




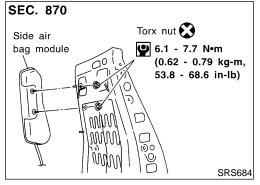


Side Air Bag Module (Cont'd)





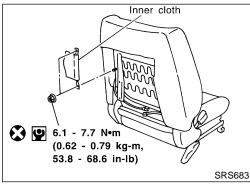
- Do not expose the air bag module to temperatures exceeding 90°C (194°F).
- Do not allow oil, grease or water to come in contact with the air bag module.
- After air bag inflates, all parts of front seatback (including front seatback frame) should be replaced.



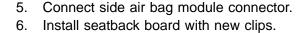
#### INSTALLATION

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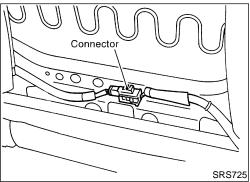
- 1. Install side air bag module on seatback frame with new torx nuts coated with bonding agent.
- Install side air bag connector.
- 3. Install seatback trim. Refer to BT-43, "FRONT SEAT" for details.



4. Secure the inner cloth which covers the side air bag module with nuts.



- 7. Connect both battery cables.
- 8. Go to "SRS Operation Check", RS-38 and perform self-diagnosis to ensure entire SRS operates properly. (Use CONSULT-II or air bag warning lamp.)

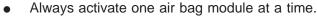


# Disposal of Air Bag Module and Seat Belt Pretensioner

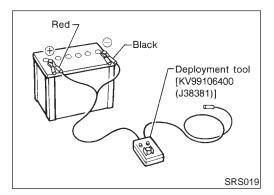
- Before disposing of air bag module and seat belt pre-tensioner, or vehicles equipped with such systems, deploy the systems.
   If such systems have already been deployed due to an accident, dispose of them as indicated in "DISPOSING OF AIR BAG MODULE AND SEAT BELT PRE-TENSIONER" (RS-28).
- When deploying the air bag module and seat belt pretensioner, always use the Special Service Tool; Deployment tool KV99106400 (Kent-Moore No. J38381).

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

- 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.



- 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.



### 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 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.





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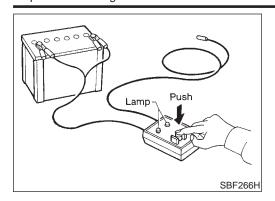
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Disposal of Air Bag Module and Seat Belt Pre-tensioner (Cont'd)



#### **Deployment Tool Check**

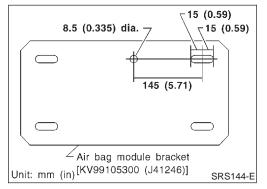
Press the deployment tool switch to the "ON" position. The left side lamp in the tool, marked "air bag connector voltage" should illuminate. If it does not illuminate, replace the tool.

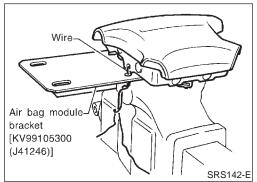
# Air Bag Deployment Tool Lamp Illumination Chart (Battery connected)

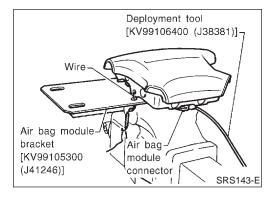
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Switch operation	Left side lamp, green* "AIR BAG CONNECTOR VOLTAGE"	Right side lamp, green* "DEPLOYMENT TOOL POWER"
OFF	OFF	ON
ON	ON	ON

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







# 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)

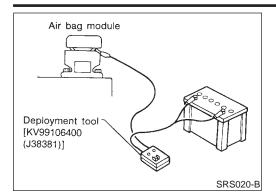
- Make an 8.5 mm (0.335 in) diameter hole in air bag module bracket [SST: KV99105300 (J41246)] at the position shown in figure at left.
- 2. Using wire, secure air bag module to air bag module bracket [SST: KV99105300 (J41246)] at two places.

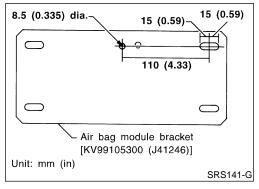
#### CAUTION

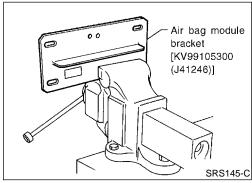
#### Use wire of at least 1 mm (0.04 in) diameter.

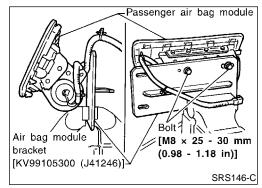
- 3. Firmly secure air bag module bracket [SST: KV99105300 (J41246)] with air bag module attached, in a vise.
- Connect deployment tool [SST: KV99106400 (J38381)] to air bag module connector.

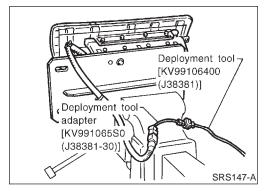
Disposal of Air Bag Module and Seat Belt Pre-tensioner (Cont'd)











Connect red clip of deployment tool to battery positive terminal and black clip to negative terminal.

The lamp on the right side of the tool, marked "deployment tool power", should glow green, not red.

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)

1. 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.

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

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.

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.

The lamp on the right side of the tool, marked "deployment tool power", should glow green, not red.

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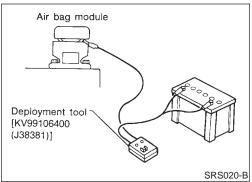
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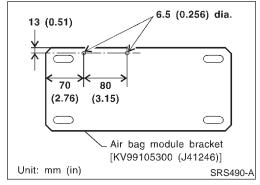
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Disposal of Air Bag Module and Seat Belt Pre-tensioner (Cont'd)

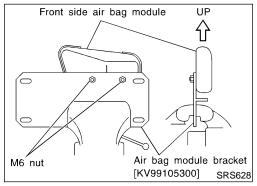


- When deploying the air bag module, do not stand on the deploying side.
- Stand at least 5 m (16 ft) away from the air bag module.



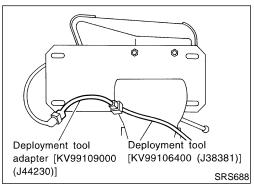
### Deployment of Side Air Bag Module (Built-in type) (Outside of vehicle)

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.

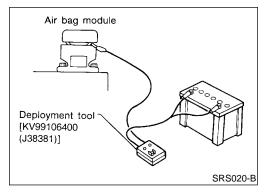


- Firmly secure air bag module bracket [SST: KV99105300 (J41246)] in a vise.
- 3. Insert the stud bolts of side air bag module (built-in type) into the two holes in air bag module bracket (held in vise) and fix them with two M6 nuts.

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: KV99109000 (J44230)] to deployment tool [SST: KV99106400 (J38381)] connector and connector on air bag module.

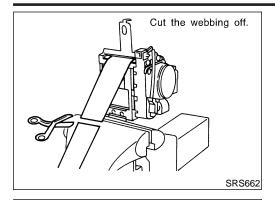


- Connect red clip of deployment tool to battery positive terminal and black clip to negative terminal.
- The lamp on the right side of the tool, marked "deployment tool power", should glow green, not red.
- Press the button on the deployment tool. The left side lamp on the tool, marked "air bag connector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

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



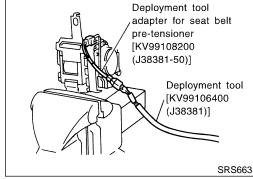
# DEPLOYMENT PROCEDURES FOR SEAT BELT PRETENSIONER (OUTSIDE OF VEHICLE)

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

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

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Connect red clip of deployment tool to battery positive terminal and black clip to negative terminal.

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The lamp on the right side of the tool, marked "deployment tool power", should glow green, not red.
Press the button on the deployment tool. The left side lamp on

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the tool, marked "seat belt pre-tensioner connector voltage", will illuminate and the seat belt pre-tensioner will deploy.

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#### **CAUTION:**

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

SU

# 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.

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#### **CAUTION:**

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

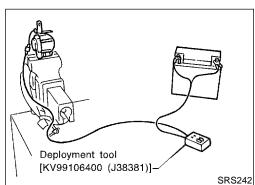
- 1. Disconnect both the vehicle battery cables and wait 3 minutes.
- Disconnect air bag module and seat belt pre-tensioner connector.

Connect deployment tool [SST: KV99106400 (J38381)] to air bag module or seat belt pre-tensioner.

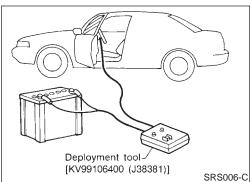
For front passenger air bag module, attach deployment tool adapter [SST: KV991065S0 (J38381-30)] to the tool connector. For side air bag module (built-in type), attach deployment tool adapter [SST: KV99109000 (J44230)]. For seat belt pretensioner, attach deployment tool adapter [SST: KV99108200 (J38381-50)] to the tool connector.

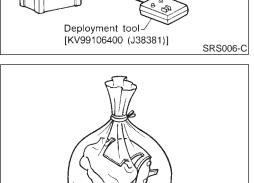
SC

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





- 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.

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

NARS0018S04

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:**

SBF276H

- 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.
- 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. 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.

MA

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=NARS0040

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

LC

The SRS self-diagnosis results can be read by using "AIR BAG" warning lamp and/or CONSULT-II. The reading of these results is accomplished using one of two modes — "User mode" and "Diagnosis mode".

FE

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The User mode is exclusively prepared for the customer (driver). This mode warns the driver of a system malfunction through the operation of the "AIR BAG" warning lamp.

The Diagnosis mode allows the technician to locate and inspect the malfunctioning part.

The mode applications for the "AIR BAG" warning lamp and CONSULT-II are as follows:

GL

	User mode	Diagnosis mode	Display type
"AIR BAG" warning lamp	X	X	ON-OFF operation
CONSULT-II	-	X	Monitoring

#### NOTE:

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

AT

#### DIAGNOSIS MODE FOR CONSULT-II

"SELF-DIAG [CURRENT]"

A current Self-diagnosis result (also indicated by the number of warning lamp flashes in the Diagnosis mode) is displayed on the CONSULT-II screen in real time. This refers to a malfunctioning part requiring repairs.

"SELF-DIAG [PAST]"

Diagnosis results previously stored in the memory are displayed on the CONSULT-II screen. The stored results are not erased until memory erasing is executed.

AX

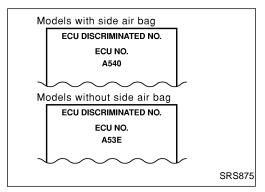
"TROUBLE DIAG RECORD"

With TROUBLE DIAG RECORD, diagnosis results previously erased by a reset operation can be displayed on the CONSULT-II screen.

SU

"ECU DISCRIMINATED NO."

The diagnosis sensor unit for each vehicle model is assigned with its own, individual classification number. This number will be displayed on the CONSULT-II screen, as shown below. When replacing the diagnosis sensor unit, refer to the part number for the compatibility. After installation, replacement with a correct unit can be checked by confirming this classification number on the CONSULT-II screen.



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For NISSAN MODEL R50, the diagnosis sensor unit classification numbers assigned is A540 (Models with side air bag) and A53E (Models without side air bag).

EL

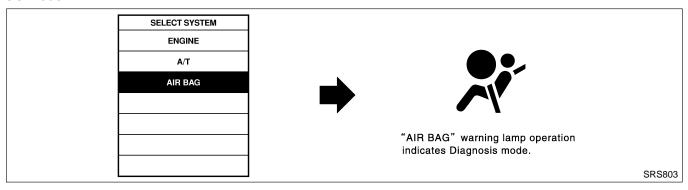
Trouble Diagnoses Introduction (Cont'd)

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

#### From User Mode to Diagnosis Mode

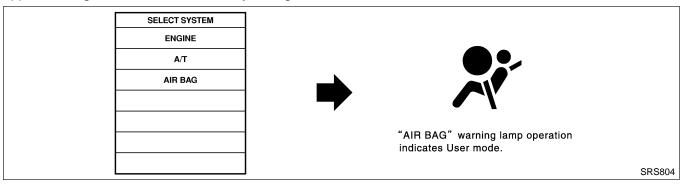
=NARS0040S03

ARS0040S0301 After selecting "AIR BAG" on the "SELECT SYSTEM" screen, User mode automatically changes to Diagnosis mode.



#### From Diagnosis Mode to User Mode

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



### N HOW TO CHANGE SELF-DIAGNOSIS MODE WITHOUT CONSULT-II From User Mode to Diagnosis Mode

NARS0040S04 NARS0040S0401

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

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

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

#### HOW TO ERASE SELF-DIAGNOSIS RESULTS

### (P) With CONSULT-II

"SELF-DIAG [CURRENT]"

A current Self-diagnosis result is displayed on the CONSULT-II screen in real time.

NARS0040S05

NARS0040S0501

Trouble Diagnoses Introduction (Cont'd)

After the malfunction is repaired completely, no malfunction is detected on "SELF-DIAG [CURRENT]".

"SELF-DIAG [PAST]" Return to the "SELF-DIAG [CURRENT]" CONSULT-II screen by pushing "BACK" key of CONSULT-II and select "SELF-DIAG [CURRENT]" in SELECT DIAG MODE. Touch "ERASE" in "SELF-DIAG [CURRENT]" mode.

GI MA

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#### 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.

SELF-DIAG [CURRENT]

DTC RESULTS:

NO DTC IS DETECTED.
FURTHER TESTING
MAY BE REQUIRED.

SRS701

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

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#### **⋈** Without CONSULT-II

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

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How to Perform Trouble Diagnoses for Quick and Accurate Repair

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

=NARS004

NARS0041S01

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

#### INFORMATION FROM CUSTOMER

WHAT ..... Vehicle model

WHEN ..... Date, Frequencies

WHERE ..... Road conditions

HOW ..... Operating conditions, Symptoms

#### PRELIMINARY CHECK

NARS0041S02

Check that the following parts are in good order.

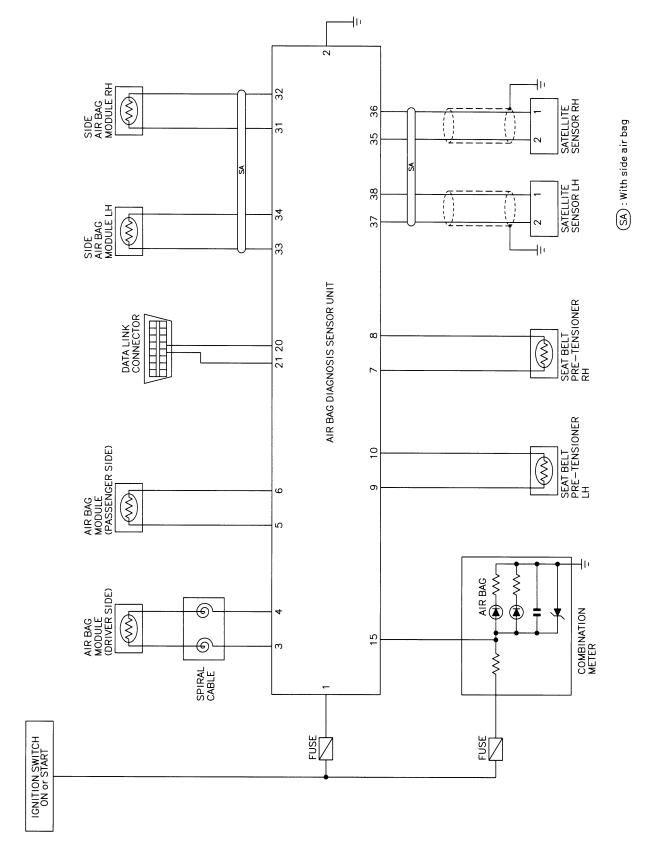
- Battery [Refer to SC-4, "BATTERY".]
- Fuse [Refer to EL-16, "Fuse", "POWER SUPPLY ROUTING".]
- System component-to-harness connections

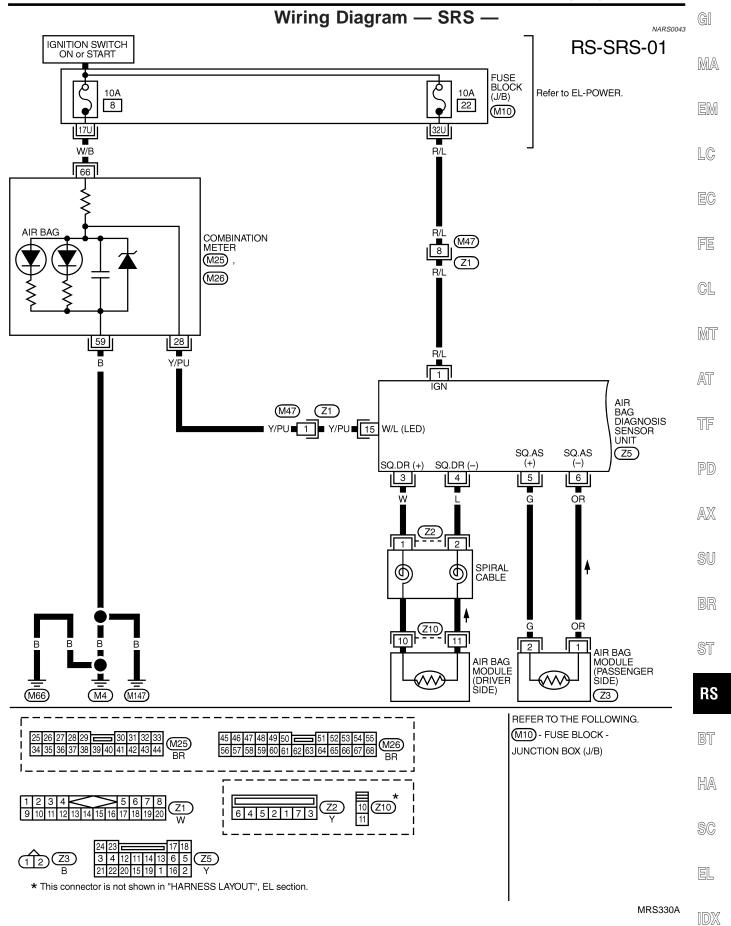
How to Perform Trouble Diagnoses for Quick and Accurate Repair (Cont'd)

**WORK FLOW** GI =NARS0041S03 NOTE: Seat belt pre-tensioner malfunction is indicated by "AIR BAG" warning lamp. MA EM ACTION ITEM REFERENCE ITEM Check in FE Listen to customer complaints and requests. GL Perform preliminary check. Preliminary check \*1 MT Check for any service bulletin. AT Perform self-diagnosis using "AIR BAG" warning lamp. - User mode SRS Operation Check \*2 TF • DIAGNOSTIC PROCEDURE Inspect malfunctioning part. - Diagnosis mode 2: Using CONSULT-II \*3 Perform self-diagnosis using CONSULT-II. • DIAGNOSTIC PROCEDURE 6: Using "AIR BAG" warning Perform self-diagnosis "AIR BAG" warning lamp. lamp \*4 AX Repair/Replace SU • DIAGNOSTIC PROCEDURE 3: Using CONSULT-II \*5 Final check - Diagnosis mode and User mode • DIAGNOSTIC PROCEDURE 7: Using "AIR BAG" warning OK lamp \*6 Check out BT SRS799 \*1: RS-32 \*3: RS-39 \*5: RS-42 HA \*2: RS-38 \*4: RS-48 \*6: RS-53 SC EL

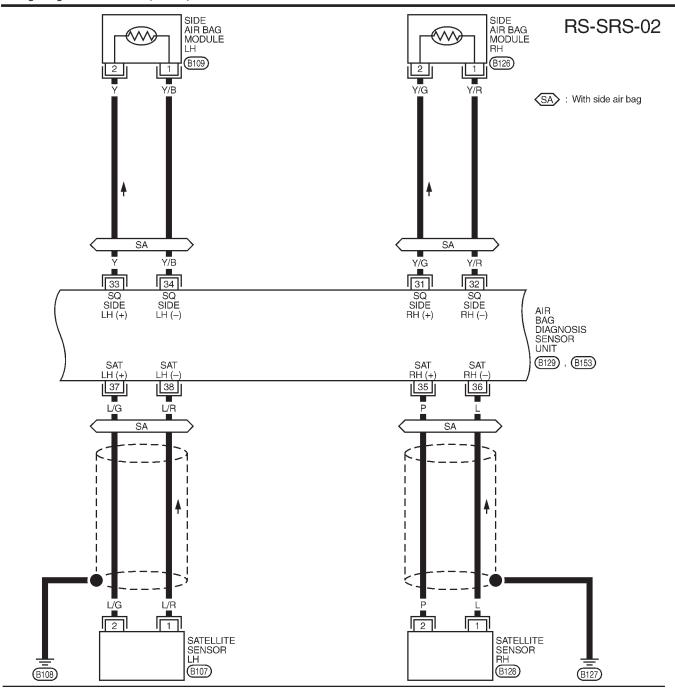
### **Schematic**

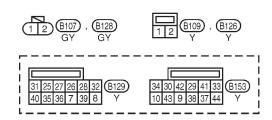
NARS0042





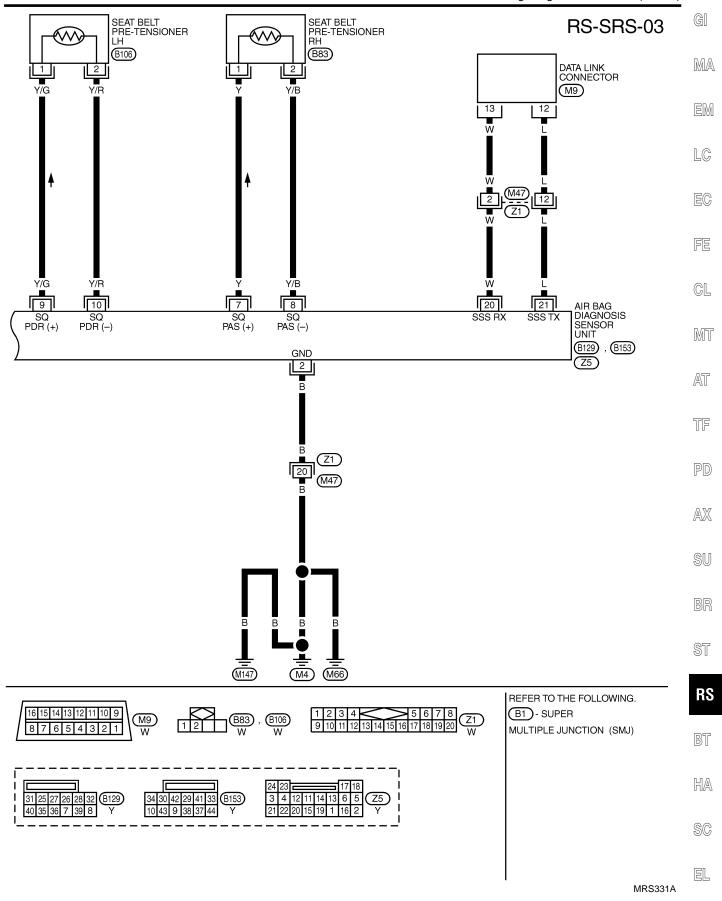
Wiring Diagram — SRS — (Cont'd)



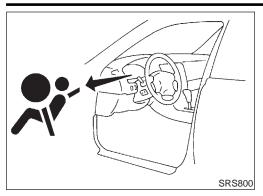


MRS359A

Wiring Diagram — SRS — (Cont'd)



SRS Operation Check



# **SRS Operation Check DIAGNOSTIC PROCEDURE 1**

NARS0044

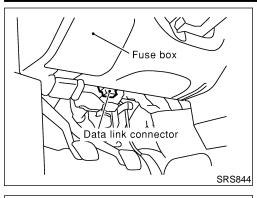
Checking Air Bag Operation by Using "AIR BAG"

Warning Lamp — User Mode

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

"AIR BAG" warning lamp operation — User mode —	SRS condition	Reference item
OFF 7 sec.  MRS095A	No malfunction is detected. No further action is necessary.	_
OFF 0.5 sec. 0.5 sec. MRS096A	The system is malfunctioning and needs to be repaired as indicated.	Go to DIAGNOSTIC PRO- CEDURE 2 or 6 (RS-39 or RS-48).
IGN ON	Air bag is deployed. Seat belt pre-tensioner is deployed.	Go to COLLISION DIAGNOSIS (RS-56).
OFF MRS097A	Air bag fuse, diagnosis sensor unit or harness is malfunctioning and needs to be repaired.	Go to DIAGNOSTIC PRO- CEDURE 9 RS-59).
IGN ON ON OFF  MRS098A	One of the following has occurred and needs to be repaired.  • Meter fuse is blown.  • "AIR BAG" warning lamp circuit has open or short.  • Diagnosis sensor unit is malfunctioning.	Go to DIAGNOSTIC PRO- CEDURE 10 (RS-58).

(P) Trouble Diagnoses with CONSULT-II



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

Turn ignition switch "OFF".

2. Connect CONSULT-II to data link connector.

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. Turn ignition switch "ON".

4. Touch "START".

EG FE

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MT

AT

Touch "AIR BAG".

TF

PD

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BR

Touch "SELF-DIAG [CURRENT]".

ST

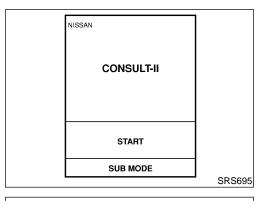
RS

BT

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

HA

SC



SELECT SYSTEM
ENGINE
A/T
AIR BAG
SRS771

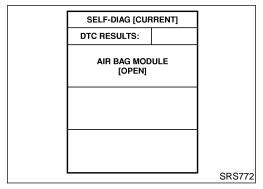
SELECT DIAG MODE

SELF-DIAG [CURRENT]

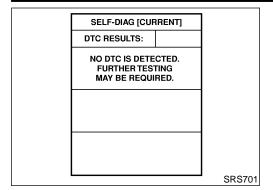
SELF-DIAG [PAST]

TROUBLE DIAG RECORD

ECU DISCRIMINATED NO.



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



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-42.

If the battery voltage is OK, go to DIAGNOSTIC PROCEDURE 4, page RS-44, 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-II Diagnostic Code Chart", page RS-40.
- 10. Touch "BACK" key of CONSULT-II until "SELECT SYSTEM" appears in order to return to User mode from Diagnosis mode.
- 11. Turn ignition switch "OFF", then turn off and disconnect CONSULT-II, and disconnect both battery cables.
- 12. Repair the system as outlined by the "Repair order" in "CON-SULT-II Diagnostic Code Chart", that corresponds to the self-diagnostic result. For replacement procedure of component parts, refer to RS-15.
- 13. After repairing the system, go to DIAGNOSTIC PROCEDURE 3, page RS-42 for final checking.

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

NARS0045S0101 Repair order "Recheck SRS at each replace-Diagnostic item Explanation ment." NO DTC IS When malfunction is Low battery voltage (Less than 9V) • Go to DIAGNOSTIC PROCEDURE 3 DETECTED. indicated by the "AIR (RS-42) after charging battery. BAG" warning lamp in Self-diagnostic result "SELF-DIAG Go to DIAGNOSTIC PROCEDURE 4 User mode [PAST]" (previously stored in the (RS-44). memory) might not be erased after repair. Intermittent malfunction has been detected in the past. No malfunction is detected. • Go to DIAGNOSTIC PROCEDURE 3 (RS-42). AIRBAG MODULE • Driver's air bag module circuit is open. (including the spiral 1. Visually check the wiring harness [OPEN] cable) connection. 2. Replace the harness if it has visible damage. 3. Replace driver's air bag module. (Before disposal of it, it must be deployed.) 4. Replace the spiral cable. 5. Replace the diagnosis sensor unit. 6. Replace the related harness.

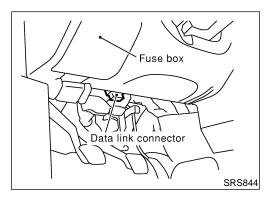
Trouble Diagnoses with CONSULT-II (Cont'd)

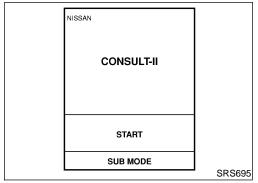
Diagnostic item	Explanation	Repair order "Recheck SRS at each replace- ment."
AIRBAG MODULE [VB-SHORT]	Driver's air bag module circuit is shorted to some power supply circuit. (including the spiral cable)	<ol> <li>Visually check the wiring harness connection.</li> <li>Replace the harness if it has visible</li> </ol>
AIRBAG MODULE [GND-SHORT]	Driver's air bag module circuit is shorted to ground. (including the spiral cable)	damage. 3. Replace the spiral cable. 4. Replace driver's air bag module. (Before disposal of it, it must be
AIRBAG MODULE [SHORT]	Driver's air bag module circuits are shorted to each other.	deployed.) 5. Replace the diagnosis sensor unit. 6. Replace the related harness.
ASSIST A/B MODULE [VB-SHORT]	Front passenger air bag module circuit is shorted to some power supply circuit.	Visually check the wiring harness connection.
ASSIST A/B MODULE [OPEN]	Front passenger air bag module circuit is open.	Replace the harness if it has visible damage.     Replace front passenger air bag
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.	Replace the related harness.
SIDE MODULE LH [OPEN]	Side air bag module (LH) circuit is open.	Visually check the wiring harness connection.
SIDE MODULE LH [VB-SHORT]	Side air bag module (LH) circuit is shorted to some power supply circuits.	<ul><li>2. Replace the harness if it has visible damage.</li><li>3. Replace side air bag module (LH).</li></ul>
SIDE MODULE LH [GND-SHORT]	Side air bag module (LH) circuit is shorted to ground.	(Before disposal, it must be deployed.) 4. Replace the diagnosis sensor unit.
SIDE MODULE LH [SHORT]	Side air bag module (LH) circuits are shorted to each other.	Replace the related harness.
SIDE MODULE RH [OPEN]	Side air bag module (RH) circuit is open.	Visually check the wiring harness connection.
SIDE MODULE RH [VB-SHORT]	Side air bag module (RH) circuit is shorted to some power supply circuits.	<ul><li>2. Replace the harness if it has visible damage.</li><li>3. Replace side air bag module (RH).</li></ul>
SIDE MODULE RH [GND-SHORT]	Side air bag module (RH) circuit is shorted to ground.	(Before disposal, it must be deployed.) 4. Replace the diagnosis sensor unit.
SIDE MODULE RH [SHORT]	Side air bag module (RH) circuits are shorted to each other.	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> </ol>
		<ol> <li>Replace the satellite sensor (LH).</li> <li>Replace the diagnosis sensor unit.</li> <li>Replace the related harness.</li> </ol>
SATELLITE SENS RH [UNIT FAIL] SATELLITE SENS RH [COMM FAIL]	Satellite sensor (RH)	<ol> <li>Visually check the wiring harness connection.</li> <li>Replace the harness if it has visible damage.</li> </ol>
		<ol> <li>Replace the satellite sensor (RH).</li> <li>Replace the diagnosis sensor unit.</li> <li>Replace the related harness.</li> </ol>

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

Diagnostic item	Explanation	Repair order "Recheck SRS at each replace- ment."
PRE-TEN FRONT LH [OPEN/VB-SHORT]	The circuit for front LH pre-tensioner is open or shorted to some power supply circuit.	Visually check the wiring harness connections.     Replace the harness if it has visible damage.
PRE-TEN FRONT LH [GND-SHORT]	The circuit for front LH pre-tensioner is shorted to ground.	<ul> <li>3. Replace front LH seat belt. (Before disposing, it must be deactivated.)</li> <li>4. Replace the diagnosis sensor unit.</li> <li>5. Replace the related harness.</li> </ul>
PRE-TEN FRONT RH [OPEN/VB-SHORT]	The circuit for front RH pre-tensioner is open or shorted to some power supply circuit.	<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]	The circuit for front RH pre-tensioner is shorted to ground.	(Before disposing, it must be deactivated.)  4. Replace the diagnosis sensor unit.  5. Replace the related harness.
CONTROL UNIT	Diagnosis sensor unit is malfunctioning.	Visually check the wiring harness connection.     Replace the diagnosis sensor unit.

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





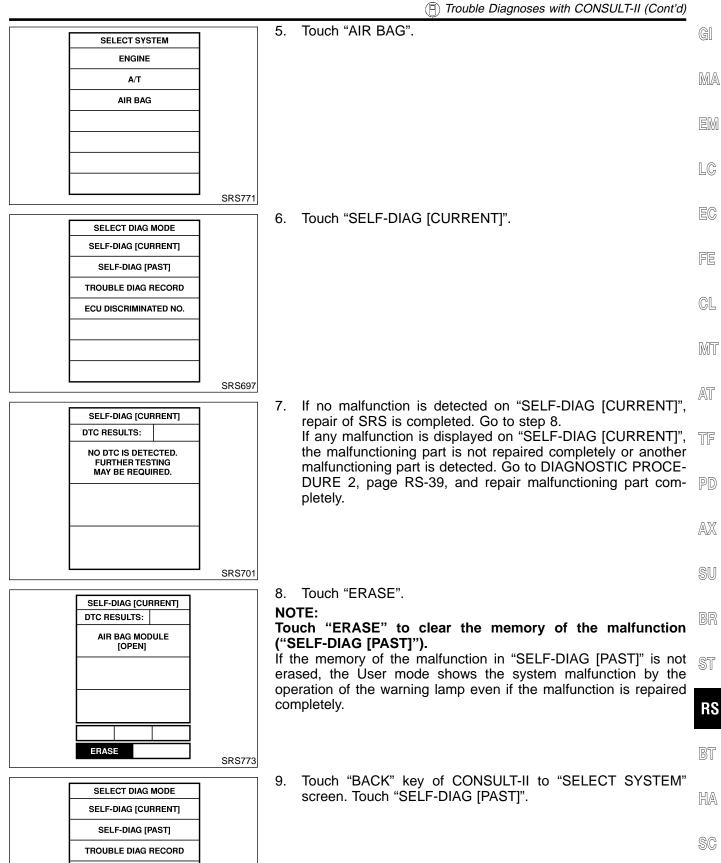
#### **DIAGNOSTIC PROCEDURE 3**

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

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

4. Touch "START".

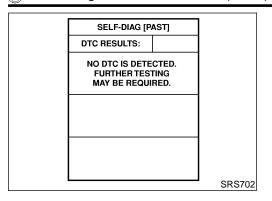
EL



SRS697

ECU DISCRIMINATED NO.

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



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

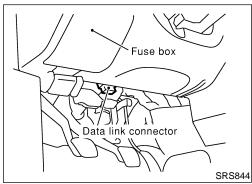
- 11. Touch "BACK" key of CONSULT-II until "SELECT SYSTEM" appears in order to return to User mode from Diagnosis mode.
- 12. Turn ignition switch "OFF", then turn off and disconnect CON-SULT-II.
- 13. Go to "SRS Operation Check", page RS-38 to check SRS operation by using "AIR BAG" warning lamp with User mode.

# DIAGNOSTIC PROCEDURE 4 (CONTINUED FROM DIAGNOSTIC PROCEDURE 2)

Inspecting SRS malfunctioning record

NARS0045S03

1	CONSIDER POSSIBILITY OF NOT ERASING SELF-DIAGNOSTIC RESULT AFTER REPAIRING			
Is it the first time for maintenance of SRS?				
	Yes or No			
Yes	<b>•</b>	Go to DIAGNOSTIC PROCEDURE 5 (RS-44).		
No	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-42).			



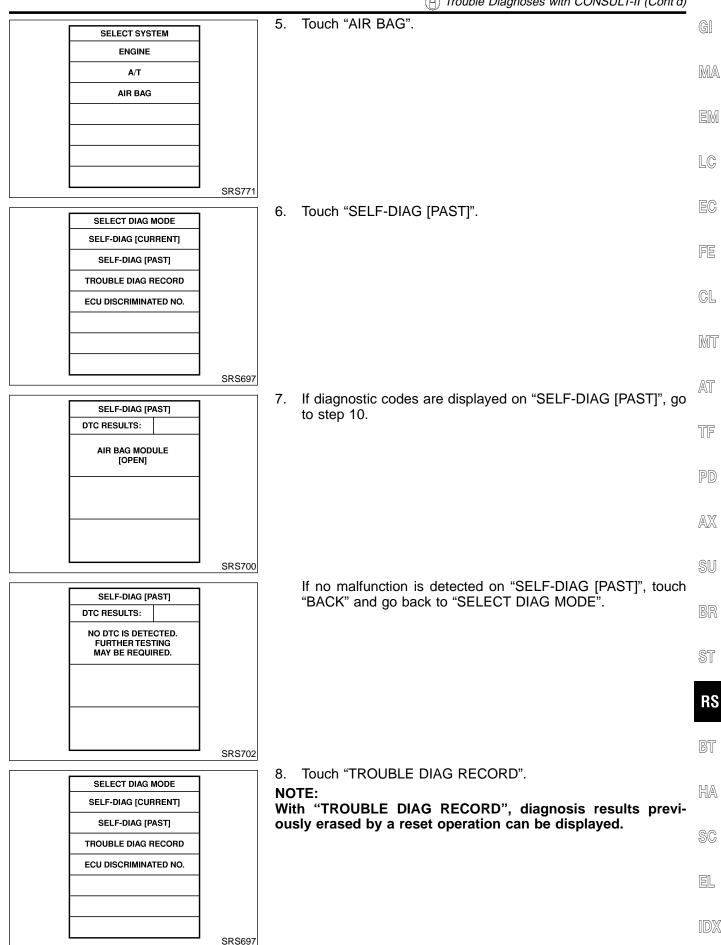
# CONSULT-II START SUB MODE SRS695

#### **DIAGNOSTIC PROCEDURE 5**

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

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

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



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

TROUBLE DIAG RECORD		
DTC RESULTS:		
AIR BAG MOD [OPEN]	ULE	
		SRS704

Diagnostic code is displayed on "TROUBLE DIAG RECORD".

- 10. Touch "PRINT".
- 11. Compare diagnostic codes to "Intermittent Malfunction Diagnostic Code Chart", page RS-46.
- 12. Touch "BACK" key of CONSULT-II until "SELECT SYSTEM" appears.
- 13. Turn ignition switch "OFF", then turn off and disconnect CONSULT-II, and disconnect 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-15.
- 15. Go to DIAGNOSTIC PROCEDURE 3, page RS-42, for final checking.

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

NARS0045S0401

		• •	NARS0045S0401	
Diagnostic item		Explanation	Repair order	
NO DTC IS DETECTED.	When malfunction is indicated by the "AIR BAG" warning lamp in User mode	Low battery voltage (Less than 9V)	Go to DIAGNOSTIC PROCEDURE     3 (RS-42) after charging battery.	
	No malfunction is determined.	ected.	Go to DIAGNOSTIC PROCEDURE 3 (RS-42).	
AIRBAG MODULE [OPEN]	Driver's air bag modu cable)	le circuit is open. (including the spiral	Visually check the wiring harness connection.	
AIRBAG MODULE [VB-SHORT]	Driver's air bag modu ply circuit. (including t	le circuit is shorted to some power sup- he spiral cable)	<ul><li>2. Replace the harness if it has visible damage.</li><li>3. If the harness check result is OK,</li></ul>	
AIRBAG MODULE [GND-SHORT]	Driver's air bag modu the spiral cable)	le circuit is shorted to ground. (including	replace driver's air bag module (Before disposal of it, it must be deployed.), diagnosis sensor unit	
AIRBAG MODULE [SHORT]	Driver's air bag modu	le circuits are shorted to each other.	and spiral cable.	
ASSIST A/B MODULE [VB-SHORT]	power supply circuit. connection.			
ASSIST A/B MODULE [OPEN]	Front passenger air bar	ag module circuit is open.	<ol> <li>Replace the harness if it has visible damage.</li> <li>If the harness check result is OK, replace front air bag module (Before disposal of it, it must be deployed.), and diagnosis sensor unit.</li> </ol>	
ASSIST A/B MODULE [GND-SHORT]	Front passenger air b	ag module circuit is shorted to ground.		
ASSIST A/B MODULE [SHORT]	Front passenger air be other.	ag module circuits are shorted to each		

Trouble Diagnoses with CONSULT-II (Cont'd)

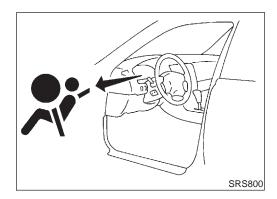
Diagnostic item	Explanation	Repair order
SIDE MODULE LH [OPEN]	Side air bag module (LH) circuit is open.	Visually check the wiring harness connection.
SIDE MODULE LH [VB-SHORT]	Side air bag module (LH) circuit is shorted to some power supply circuits.	<ul><li>2. Replace the harness if it has visible damage.</li><li>3. If the harness check is OK, replace</li></ul>
SIDE MODULE LH [GND-SHORT]	Side air bag module (LH) circuit is shorted to ground.	the diagnosis sensor unit and side air bag module (LH). (Before disposing the side air bag module
SIDE MODULE LH [SHORT]	Side air bag module (LH) circuits are shorted to each other.	(LH), it must be deployed.)
SIDE MODULE RH [OPEN]	Side air bag module (RH) circuit is open.	Visually check the wiring harness connection.
SIDE MODULE RH [VB-SHORT]	Side air bag module (RH) circuit is shorted to some power supply circuits.	<ul><li>2. Replace the harness if it has visible damage.</li><li>3. If the harness check is OK, replace</li></ul>
SIDE MODULE RH [GND-SHORT]	Side air bag module (RH) circuit is shorted to ground.	the diagnosis sensor unit and side air bag module (RH). (Before disposing the side air bag module
SIDE MODULE RH [SHORT]	Side air bag module (RH) circuits are shorted to each other.	(RH), it must be deployed.)
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>If the harness check is OK, replace the diagnosis sensor unit and satellite sensor (LH).</li> </ol>
SATELLITE SENS RH [UNIT FAIL] SATELLITE SENS RH [COMM FAIL]	Satellite sensor (RH)	<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 satellite sensor (RH).</li> </ol>
PRE-TEN FRONT LH [OPEN/VB-SHORT]	The circuit for front LH pre-tensioner is open or shorted to some power supply circuit.	<ol> <li>Visually check the wiring harness connections.</li> <li>Replace the harness if it has visible damage.</li> <li>If the harness check is OK, replace</li> </ol>
PRE-TEN FRONT LH [GND-SHORT]	The circuit for front LH pre-tensioner is shorted to ground.	the diagnosis sensor unit and front LH seat belt. (Before disposing the front LH seat belt pre-tensioner, it must be deployed.)
PRE-TEN FRONT RH [OPEN/VB-SHORT]	The circuit for front RH pre-tensioner is open or shorted to some power supply circuit.	<ol> <li>Visually check the wiring harness connections.</li> <li>Replace the harness if it has visible damage.</li> <li>If the harness check is OK, replace</li> </ol>
PRE-TEN FRONT RH [GND-SHORT]	The circuit for front RH pre-tensioner is shorted to ground.	the diagnosis sensor unit and front RH seat belt.  (Before disposing the front RH seat belt pre-tensioner, it must be deployed.)



#### (P) Trouble Diagnoses with CONSULT-II (Cont'd)

Diagnostic item	Explanation	Repair order
CONTROL UNIT	Diagnosis sensor unit is malfunctioning.	<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>

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



# **⊗** Trouble Diagnoses without CONSULT-II DIAGNOSTIC PROCEDURE 6

NARS004

Inspecting SRS malfunctioning parts by using "AIR BAG" warning lamp — Diagnosis mode

#### NOTF:

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

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

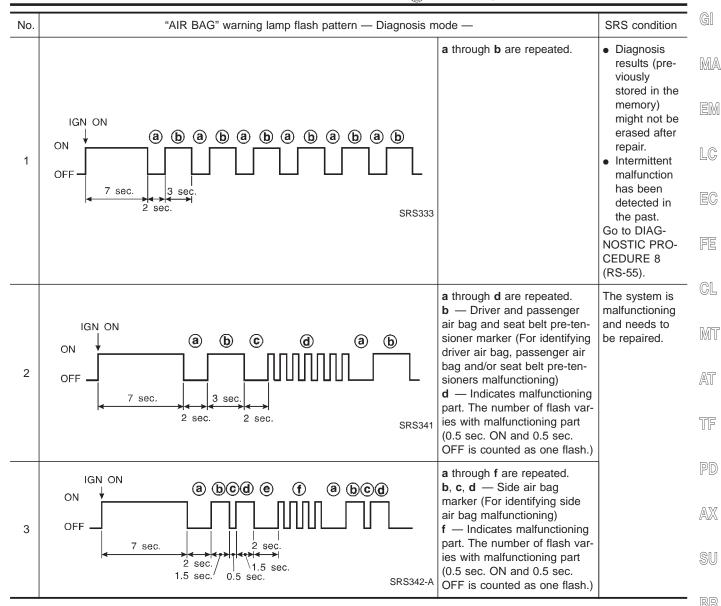
#### NOTE:

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

If the battery voltage is less than 9V, charge the battery. Then go to DIAGNOSTIC PROCEDURE 7, page RS-53.

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

Trouble Diagnoses without CONSULT-II (Cont'd)



- Malfunctioning part is indicated by the number of flashes (part d or f). Compare the number of flashes to "Air Bag Warning Lamp Flash Code Chart", page RS-50, and locate malfunctioning part.
- 8. Turn ignition switch "OFF", and disconnect both battery cables.
- Repair the system as outlined by the "Repair order" in "Warning Lamp Flash Code Chart" that corresponds to the flash code. For replacement procedure of component parts, refer to RS-15.
- After repairing the system, go to DIAGNOSTIC PROCEDURE 7, page RS-53.

ST







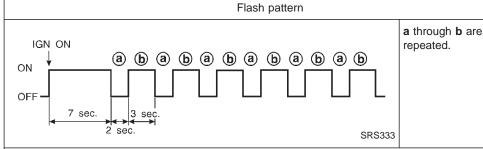




🕅 Trouble Diagnoses without CONSULT-II (Cont'd)



- · Diagnosis results (previously stored in the memory) might not be erased after repair.
- Intermittent malfunction has been detected in the past.



#### Repair order

Go to DIAGNOSTIC PROCEDURE 8 (RS-55).

#### **IGN ON (b) © d a b (a)** ON OFF 7 sec. 3 sec 2 sec. 2 sec SRS801

a through d are repeated.

d — One flash indicates malfunctioning front RH pre-tensioner circuit.

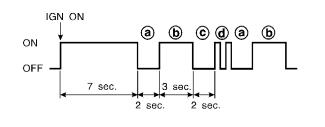
The front RH seat belt pre-tensioner circuit is malfunctioning. (d: 1 flash)

Repair order ("Recheck SRS at each replacement.")

- 1. Visually check the wiring harness connections.
- 2. Replace the harness if it has visible damage.
- 3. Replace front RH seat belt pre-tensioner. (Before disposing, it must be deactivated.)
- 4. Replace the diagnosis sensor unit.
- 5. Replace the related harness.

#### Flash pattern

Flash pattern



a through d are repeated.

SRS334

d - Two flashes indicate malfunctioning driver's air bag module circuit.

ule circuit is malfunction-

(d: 2 flashes)

ing.

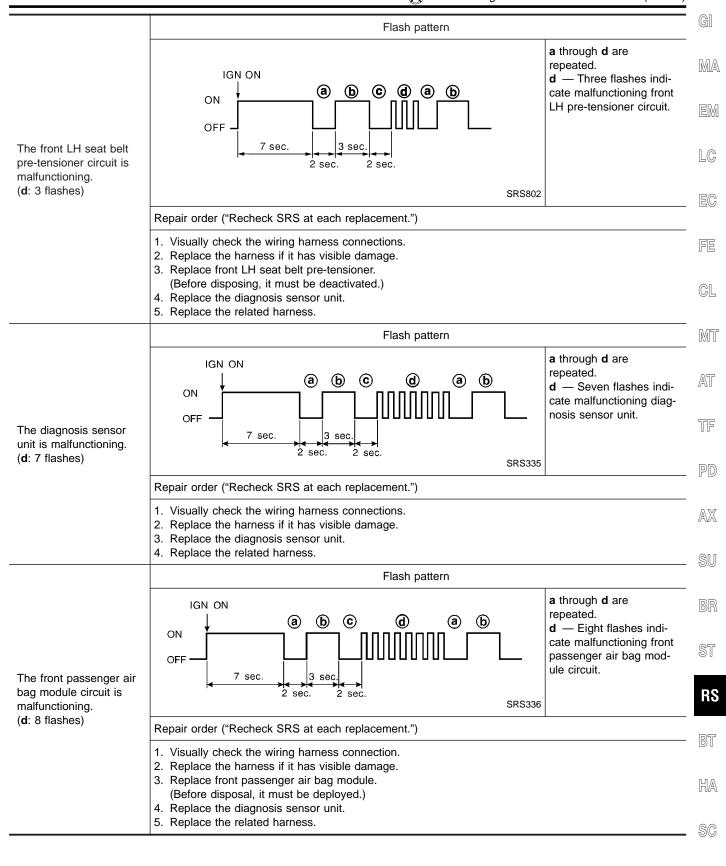
The driver's air bag mod-

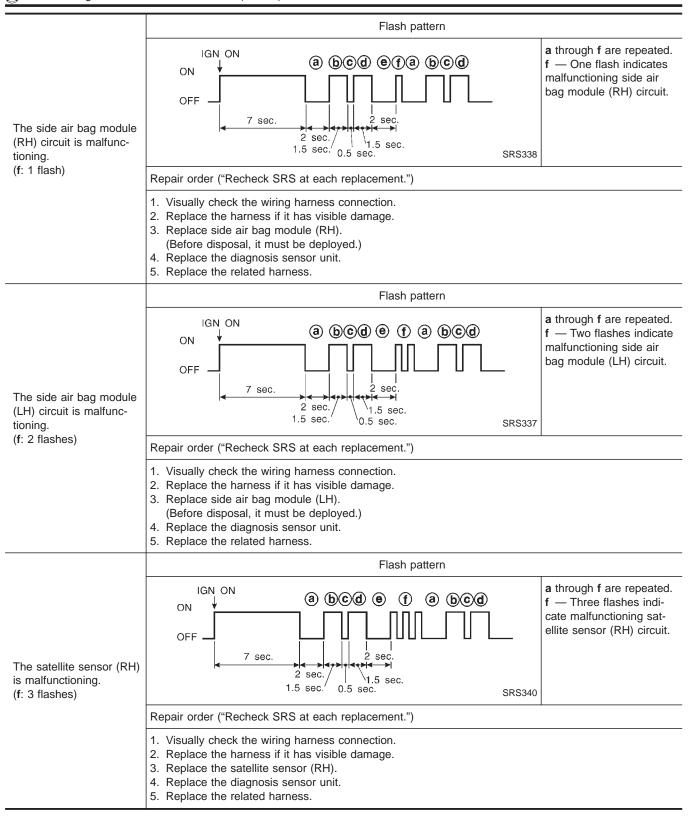
Repair order ("Recheck SRS at each replacement.")

- 1. Visually check the wiring harness connection.
- 2. Replace the harness if it has visible damage.
- 3. Replace the spiral cable.
- 4. Replace driver's air bag module. (Before disposal, it must be deployed.)
- 5. Replace the diagnosis sensor unit.
- 6. Replace the related harness.

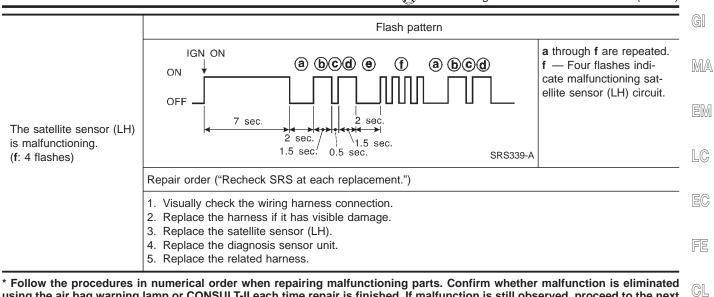
Trouble Diagnoses without CONSULT-II (Cont'd)

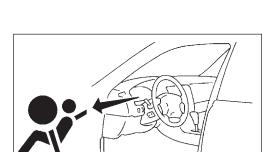
EL





Trouble Diagnoses without CONSULT-II (Cont'd)





step. When malfunction is eliminated, further repair work is not required.

SRS800

#### **DIAGNOSTIC PROCEDURE 7**

TF

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

PD

MIT

AT

- After repairing SRS connect both battery cables.
- Open driver's door.

using the air bag warning lamp or CONSULT-II each time repair is finished. If malfunction is still observed, proceed to the next

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

 $\mathbb{A}\mathbb{X}$ 

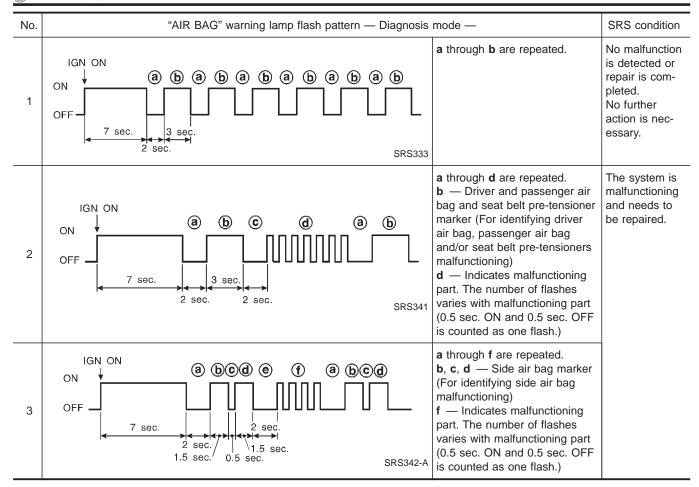
SU

RS

HA

SC

EL



#### NOTE:

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

- 5. If "AIR BAG" warning lamp operates as shown in No. 1 in chart above, turn ignition switch "OFF" to reset from Diagnosis mode to User mode and to erase the memory of the malfunction. Then go to step 6.
  - If "AIR BAG" warning lamp operates as shown in No. 2 or No. 3 in chart above, the malfunctioning part is not repaired completely, or another malfunctioning part is detected. Go to DIAGNOSTIC PROCEDURE 6, page RS-48, 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, by turning ignition switch as follows:

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

SRS is now in User mode.

Trouble Diagnoses without CONSULT-II (Cont'd)

"AIR BAG" warning lamp operation — User mod	de —	SRS condition	Reference item
IGN ON  The second seco	MRS095A	No malfunction is detected. No further action is necessary.	_
IGN ON  TO THE TOTAL CONTROL OF THE TOTAL CONTROL O	WW.	The system is malfunctioning and needs to be repaired as indicated.	Go to DIAGNOSTIC PRO- CEDURE 6 (RS-48).
IGN ON	MRS096A	Air bag is deployed. Seat belt pre-tensioner is	Go to COLLISION DIAG- NOSIS (RS-59).
N T	MRS097A	deployed.  Air bag fuse, diagnosis sensor unit or harness is malfunctioning and needs to be repaired.	Go to DIAGNOSTIC PRO- CEDURE 9 (RS-56).
IGN ON		One of the following has occurred and needs to be repaired.  • Meter fuse is blown.  • "AIR BAG" warning lamp circuit has open or	Go to DIAGNOSTIC PRO- CEDURE 10 (RS-58).
=F	MRS098A	short.	

# DIAGNOSTIC PROCEDURE 8 (CONTINUED FROM DIAGNOSTIC PROCEDURE 6)

Inspecting SRS malfunctioning record

	1 0				
1	CONSIDER POSSIBILITY OF NOT ERASING SELF-DIAGNOSTIC RESULT AFTER REPAIRING				
Is it the first time for maintenance of SRS?					
	Yes or No				
Yes	<b>&gt;</b>	Go to DIAGNOSTIC PROCEDURE 5 (RS-44). (Further inspection cannot be performed without CONSULT-II.)			
No		Diagnosis results (previously stored in the memory) might not be erased after repair. Go to DIAGNOSTIC PROCEDURE 7, step 5 (RS-53).			

RS

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BR

ST

NARS0046S03

BT

HA

SC

EL

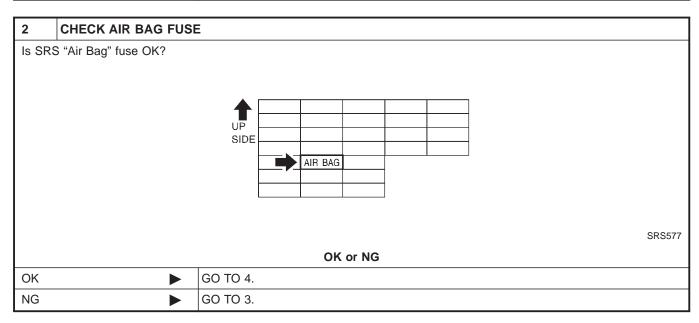
Trouble Diagnoses: "AIR BAG" Warning Lamp Does Not Turn Off

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

#### **DIAGNOSTIC PROCEDURE 9**

=NARS0047

1	SEE THE DEPLOYMENT OF AIR BAG MODULE		
Is air I	Is air bag module deployed?		
	Yes or No		
Yes	<b>•</b>	Refer to COLLISION DIAGNOSIS (RS-59).	
No	<b>•</b>	GO TO 2.	



3	CHECK AIR BAG FUSE AGAIN		
Replac	Replace "AIR BAG" fuse and turn ignition switch ON.		
	Is "AIR BAG" fuse blown again?		
Yes	<b>&gt;</b>	Repair main harness and/or replace air bag harness.	
No	•	INSPECTION END	

SRS771  S*AIR BAG* displayed on CONSULT-II?  SELECT SYSTEM ENGINE A/T AIR BAG  SRS771  Yes or No  SS SO Visually check the wiring harness connection of diagnosis sensor unit. If the harness connection check result is OK, replace diagnosis sensor unit.  CHECK HARNESS CONNECTION  Tharness connection between warning lamp and diagnosis sensor unit OK? OK or NG  K Replace diagnosis sensor unit.  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 Off (Cont'd	_
Is "AIR BAG" displayed on CONSULT-II?    SELECT SYSTEM   ENGINE     AT	CHEC	K DIAGNOSIS S	ENSOR UNIT	
The service of the following part of the fol				
Yes or No  S				
Yes or No  S				
Yes or No  S				
Yes or No  Ses				
Solution   Go To 5.  Visually check the wiring harness connection of diagnosis sensor unit. If the harness connection check result is OK, replace diagnosis sensor unit.  CHECK HARNESS CONNECTION  harness connection between warning lamp and diagnosis sensor unit OK?  OK or NG  K   Replace diagnosis sensor unit.  Connect "AIR BAG" warning lamp and diagnosis sensor unit connector properly. If "AIR BAG" warning lamp still does not go off, replace harness.				
Visually check the wiring harness connection of diagnosis sensor unit. If the harness connection check result is OK, replace diagnosis sensor unit.  CHECK HARNESS CONNECTION  harness connection between warning lamp and diagnosis sensor unit OK?  OK or NG  K  Replace diagnosis sensor unit.  Connect "AIR BAG" warning lamp and diagnosis sensor unit connector properly. If "AIR BAG" warning lamp still does not go off, replace harness.				+
harness connection between warning lamp and diagnosis sensor unit OK?  OK or NG  K  Replace diagnosis sensor unit.  Connect "AIR BAG" warning lamp and diagnosis sensor unit connector properly. If "AIR BAG" warning lamp still does not go off, replace harness.	o	<b>&gt;</b>	Visually check the wiring harness connection of diagnosis sensor unit. If the harness	
OK or NG  K ▶ Replace diagnosis sensor unit.  G ▶ Connect "AIR BAG" warning lamp and diagnosis sensor unit connector properly. If "AIR BAG" warning lamp still does not go off, replace harness.	CHEC	K HARNESS CO	NNECTION	]
Replace diagnosis sensor unit.  Connect "AIR BAG" warning lamp and diagnosis sensor unit connector properly. If "AIR BAG" warning lamp still does not go off, replace harness.	harness cor	nnection between		
Connect "AIR BAG" warning lamp and diagnosis sensor unit connector properly. If "AIR BAG" warning lamp still does not go off, replace harness.	V.		T	+
BAG" warning lamp still does not go off, replace harness.	G			┨
				╛
				ı

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

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

#### **DIAGNOSTIC PROCEDURE 10**

=NARS0048

1	CHECK "METER" FUSE							NARS0048S01
Is m	eter fuse OK?	UP SIDE	•	METER				
			ок	or NG				SRS852
ОК	<b>▶</b> G	O TO 3.						
NG	<b>▶</b> G	O TO 2.						

2	CHECK "METER" FUSE AGAIN					
Repla	Replace meter fuse and turn ignition switch ON.					
	Is meter fuse blown again?					
Yes	Yes Repair main harness.					
No	<b></b>	INSPECTION END				

3	CHECK "AIR BAG" WARNING LAMP LED				
Is "AIF	Is "AIR BAG" warning lamp LED OK?				
	OK or NG				
OK	OK • GO TO 4.				
NG	NG Replace "AIR BAG" warning lamp LED.				

4	CHECK HARNESS CONNECTION BETWEEN DIAGNOSIS SENSOR UNIT AND "AIR BAG" WARNING LAMP					
	Disconnect diagnosis sensor unit connector and turn ignition switch "ON".  • Does "AIR BAG" warning lamp turn on?					
	Yes or No					
Yes	Yes Replace diagnosis sensor unit.					
No	No Check the ground circuit of "AIR BAG" warning lamp.					

Collision Diagnosis

#### **Collision Diagnosis**

=NARS0049

NARS0049S01

MA

EM

LC

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FE

GL

#### FOR FRONTAL COLLISION

To repair the SRS, perform the following steps.

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

- 1) Replace the diagnosis sensor unit.
- 2) Remove the air bag modules (except the side air bag module) and seat belt pre-tensioner assemblies.
- 3) Check the SRS components using the table shown below:
- Replace any SRS components showing visible signs of damage (dents, cracks and deformation).
- 4) Install new air bag modules (except the side air bag module) and seat belt pre-tensioner assemblies.
- 5) Conduct self-diagnosis using CONSULT-II or "AIR BAG" warning lamp. Refer to "SRS Operation Check" for details (RS-38). Ensure entire SRS operation 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).
- Conduct self-diagnosis using CONSULT-II or "AIR BAG" warning lamp. Refer to "SRS Operation Check" for details (RS-38). Ensure entire SRS operation properly.

#### SRS Inspection (For frontal collision)

NARS0049S0101

Part	SRS is activated	SRS is NOT activated	$\mathbb{N}$
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> </ol>	A
		If damaged—REPLACE. Install air bag modules with new bolts with bonding agent. Air bag must be deployed before discarding.	
Seat belt pre-ten- sioner assembly	REPLACE Install seat belt pre- tensioner with new	Remove seat belt pre-tensioners.     Check harness cover and connectors for damage, terminals for deformities, and harness for binding.	Æ
	bolts.	<ol> <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 seat belt pre-tensioner assembly.</li> <li>If damaged—REPLACE. Install the seat belt pre-tensioners with new bolts coated with bonding agent. Seat belt pre-tensioners must be deployed before discarding.</li> </ol>	
Diagnosis sensor unit	REPLACE Install with new bolts coated with bonding agent.	<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 coated with bonding agent.</li> <li>If damaged—REPLACE. Install diagnosis sensor unit with new special bolts and ground bolt coated with bonding agent.</li> </ol>	
Steering wheel	Visually check steering wheel for deformities.     Check harness (built into steering wheel) and connectors for damage, and terminals for deformities.     Install air bag module to check fit or alignment with steering wheel.     Check steering wheel for excessive free play.     If no damage is found, reinstall with bolts.		
Spiral cable	If damaged—REPLA     Visually check spira	ACE.  I cable and combination switch for damage.	9
			C

Collision Diagnosis (Cont'd)

Part	SRS is activated	SRS is NOT activated	
Harness and Connectors	Check harness for b     If no damage is four	or poor connection, damage, and terminals for deformities.  binding, chafing, cuts, or deformities.  nd, reinstall the harness and connectors.  CE damaged section of harness. Do not attempt to repair, splice or modify any	SRS
Instrument panel	When passenger air     Opening portion for particle.	bag inflates, check the following points for bending, deformities or cracks. bassenger air bag	
			RS366
	Passenger air bag m	nodule brackets  Back face of instrument panel	
		: Check point	RS367
	The portions securin		(330)
		© Check points	
		nd, reinstall the instrument panel.  ACE the instrument panel with bolts.	RS87

#### Collision Diagnosis (Cont'd) FOR SIDE COLLISION =NARS0049S02 To repair the SRS for a side collision, perform the following steps. When the side air bag is activated in the side collision: MA 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) LC 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-II or "AIR BAG" warning lamp, Refer to "SRS Operation Check" for details (RS-38). Ensure entire SRS operation properly. When SRS is not activated in the side collision: 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, GL deformation). 2) Conduct self-diagnosis using CONSULT-II or "AIR BAG" warning lamp. Refer to "SRS Operation Check" for details (RS-38). Ensure entire SRS operation properly. MIT SRS Inspection (For side collision) Side air bag is acti-AT Part SRS is NOT activated vated REPLACE all parts of Built-in side air bags 1. Check for visible signs of damage (dents, tears, deformation) of the seatback module (LH or RH) front seatback with on the collision side. deployed side air bag 2. If damaged—REPLACE the damaged seat parts with new bolts and remove the side air bag module. 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. AX 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 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. RS 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. HA 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. SC 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 connec-

3. Check for visible signs of damage (dents, cracks, deformation) of the seat belt pre-tensioner assembly.

If damaged—REPLACE the seat belt pre-tensioner assembly with new bolts coated with bonding agent. The seat belt pre-tensioner assembly must be deployed before disposing of it. EL

tors for damage, terminals for deformities, and harness for binding.

4. If no damage is found, reinstall the seat belt pre-tensioner assembly.

Collision Diagnosis (Cont'd)

Part	Side air bag is activated	SRS is NOT activated	
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>	
		llar inner on the collision side for damage (dents, cracks, deformation). IR the center pillar inner.	
Trim	1. Check for visible signs of damage (dents, cracks, deformation) of the interior trim on the collisi 2. If damaged—REPLACE the damaged trim parts.		