

RESTRAINT SYSTEM

SECTION RS

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Precautions

SUPPLEMENTAL RESTRAINT SYSTEM (SRS) “AIR BAG” AND “SEAT BELT PRE-TENSIONER”

NARS0001

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), side curtain air bag module (located in the headlining side of front and rear 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.
- Do not use electrical test equipment on any circuit related to the SRS unless instructed to in this Service Manual. SRS wiring harnesses can be identified by yellow and/or orange harness connector (and by yellow harness protector or yellow insulation tape before the harness connectors).

PRECAUTION FOR SEAT BELT SERVICE

NARS0002

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-31) for details.
- 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.

After A Collision

NARS0002S01

WARNING:

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

Replace any seat belt assembly (including anchor bolts) if:

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

SEAT BELTS

Precautions (Cont'd)

which the air bags are deployed.

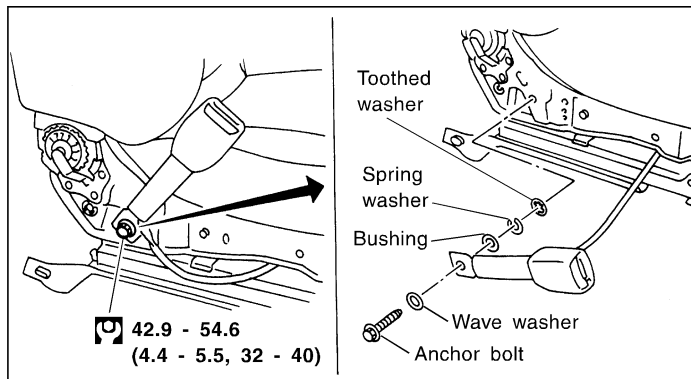
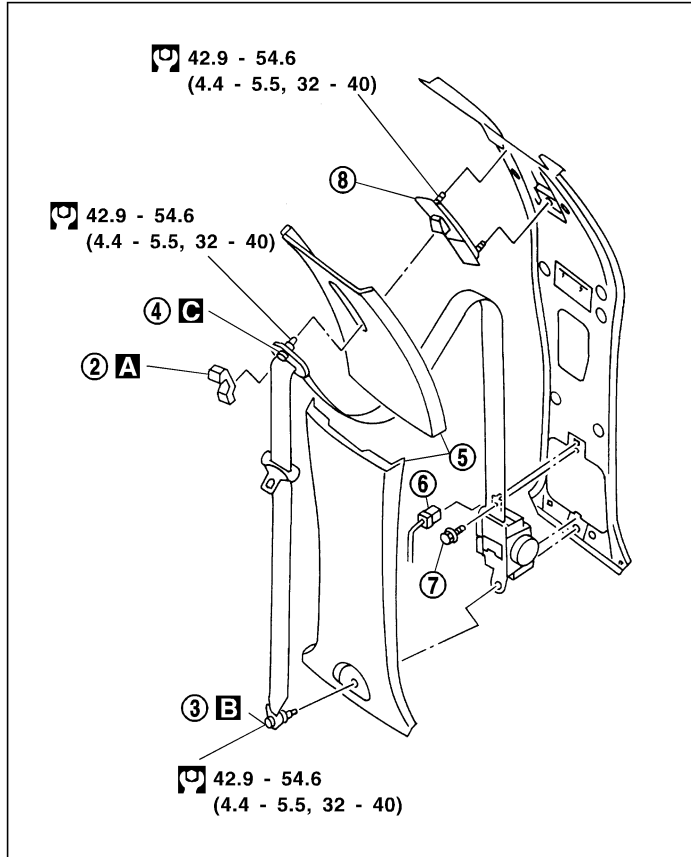
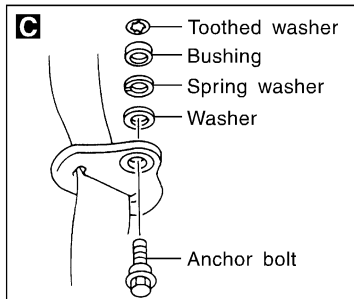
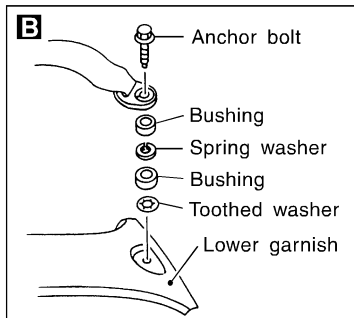
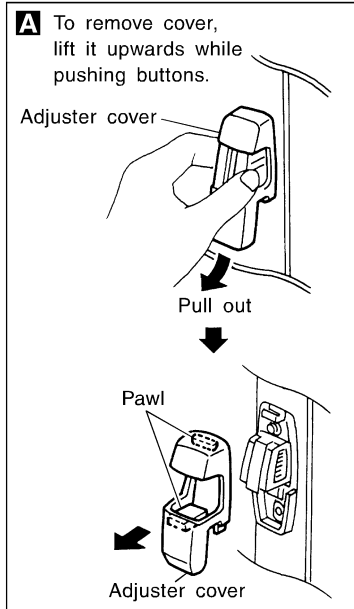
Front Seat Belt

REMOVAL AND INSTALLATION

=NARS0003

1. Slide the seat all the way forward and tilt the seatback toward the front.
2. Remove adjuster cover. **A**
3. Remove floor anchor bolt. **B**
4. Remove shoulder anchor bolt. **C**
5. Remove center pillar upper and lower garnish. Refer to BT-31, "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.

SEC. 769•868•870



: N•m (kg-m, ft-lb)

SRS873-A

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SEAT BELTS

Rear Seat Belt

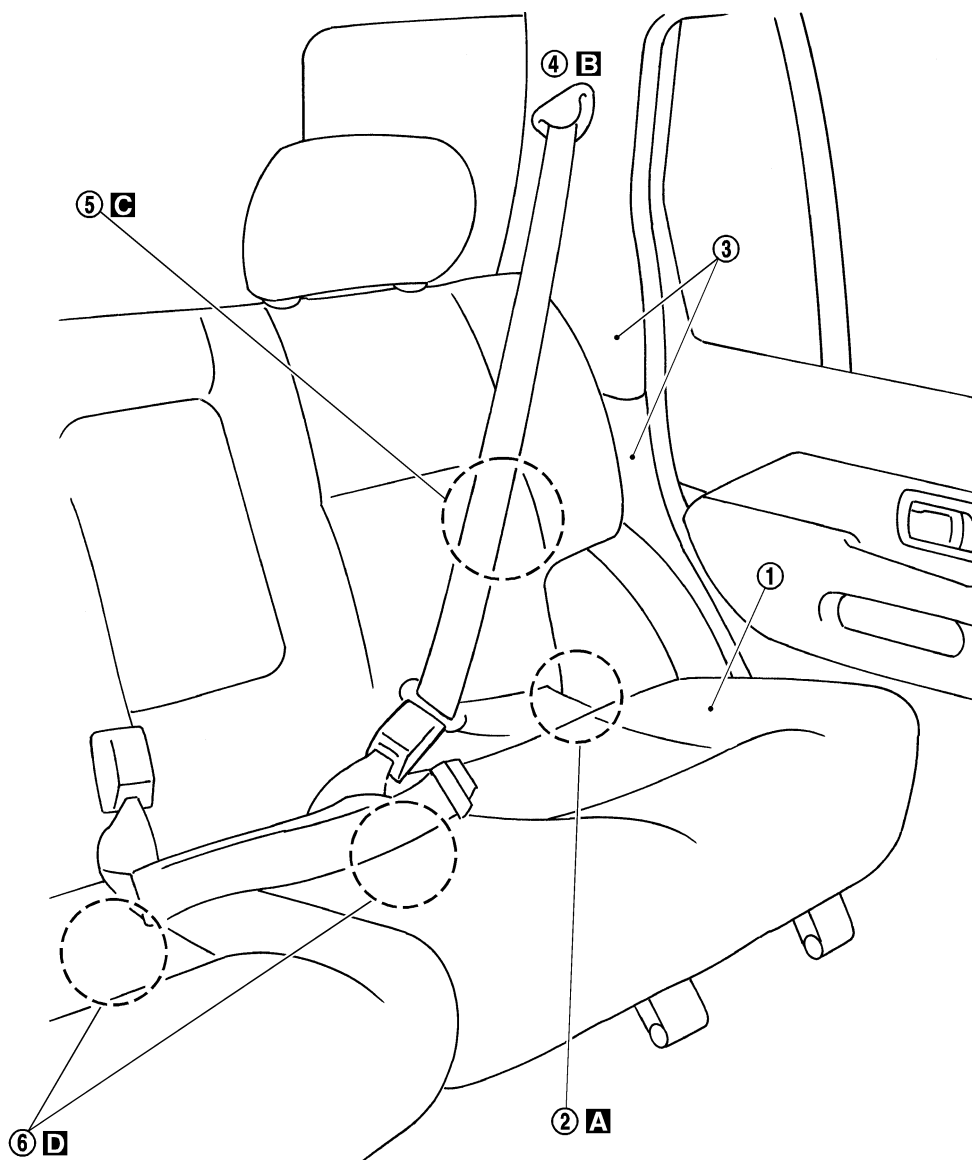
Rear Seat Belt

REMOVAL AND INSTALLATION


=NARS0004

1. Raise up rear seat cushion.
2. Remove outer anchor bolt. **A**
3. Remove rear side upper and lower garnish. Refer to BT-31, "SIDE AND FLOOR TRIM" for details.
4. Remove anchor through-bolt. **B**
5. Remove anchor bolt and bolt securing rear seat belt retractor, then remove seat belt and seat belt retractor. **C**
6. Remove each anchor bolt. **D**

SEC. 869



Anchor bolt

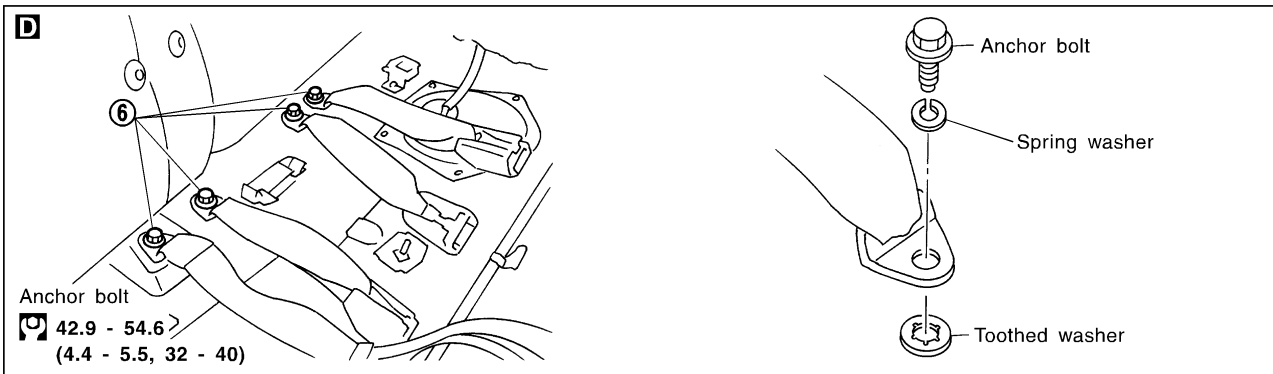
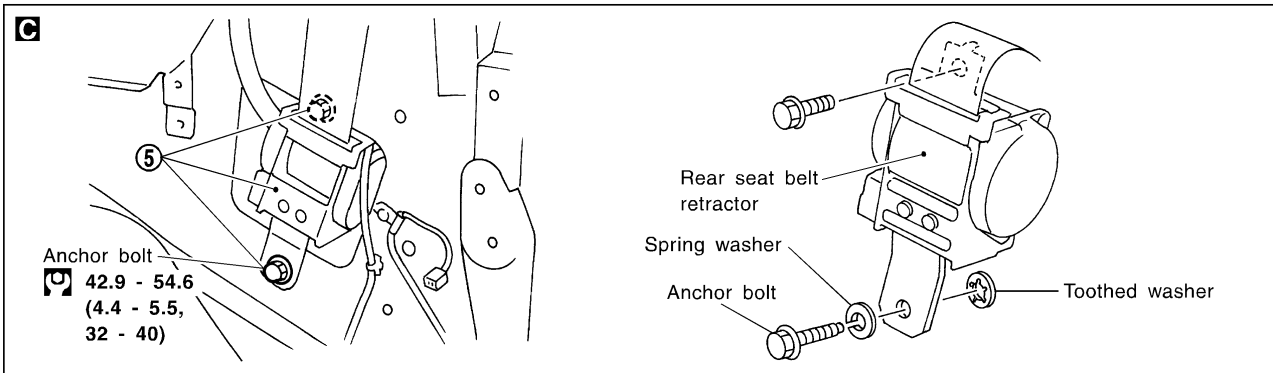
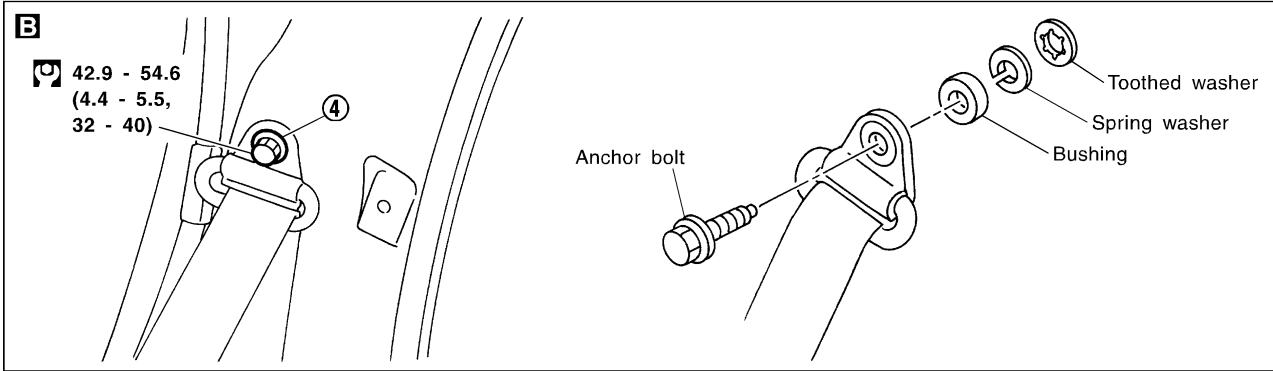
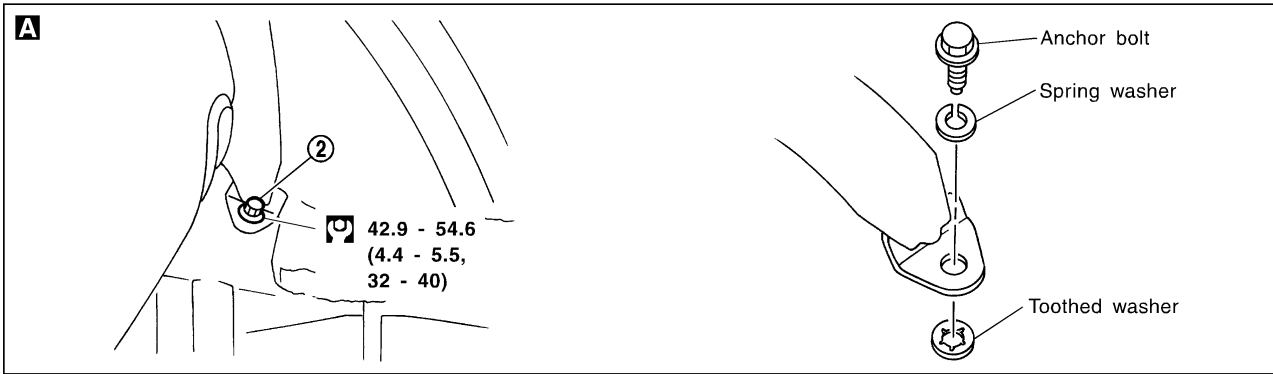
 42.9 - 54.6 N·m (4.4 - 5.5 kg-m, 32 - 40 ft-lb)

SRS654-A

SEAT BELTS

Rear Seat Belt (Cont'd)

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: N·m (kg-m, ft-lb)

SRS781-C

SEAT BELTS

Seat Belt Inspection

=NARS0029

NARS0029S01

AFTER A COLLISION

WARNING:

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

Replace any seat belt assembly (including anchor bolts) if:

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

PRELIMINARY CHECKS

NARS0029S02

1. Check the seat belt warning lamp/chime for proper operation as follows:
 - a. Switch ignition ON. The seat belt warning lamp should illuminate. Also, the seat belt warning chime should sound for about seven seconds.
 - b. Fasten driver's seat belt. The seat belt warning lamp should go out and the chime (if sounding) should stop.
2. 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-31.
3. Check that the seat belt retractor, seat belt anchor and buckle bolts are securely attached.
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.
5. Check retractor operation:
 - a. Fully extend the seat belt webbing and check for twists, tears or other damage.
 - b. Allow the seat belt to retract. Ensure that belt returns smoothly and completely into the retractor. If the seat belt does not return smoothly, the cause may be an accumulation of dust or dirt. Use the "SEAT BELT TAPE SET" and perform the following steps. Inspect the front seat belt through-anchor.
 - i. Pull the seat belt out to a length of 500 mm (19.69 in) or more.
 - ii. Use a clip or other device to fix the seat belt at the center pillar belt opening.
 - iii. Pass a thin wire through the through-anchor belt opening. Hold both ends of the wire and pull taut while moving it up and down several times along the belt opening surface to move matter stuck there.
 - iv. Any dirt that cannot be removed with the wire can be removed by cleaning the opening with a clean cloth.
 - v. Apply tape at the point where the belt contacts the through-anchor belt opening.

NOTE:

Apply the tape so that there is no looseness or wrinkling.

- vi. Remove the clip fixing the seat belt and check that the belt returns smoothly.
 - c. Fasten the seat belt. Pull firmly on belt and buckle to ensure belt remains latched. Unfasten seat belt. Ensure belt releases freely and buckle button returns to original position.
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)

NARS0029S0301

NOTE:

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

1. 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.
3. Grasp the seat belt and try to pull out the retractor. The belt must lock and not extend any further. If NG, replace the retractor assembly.
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

1. 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.

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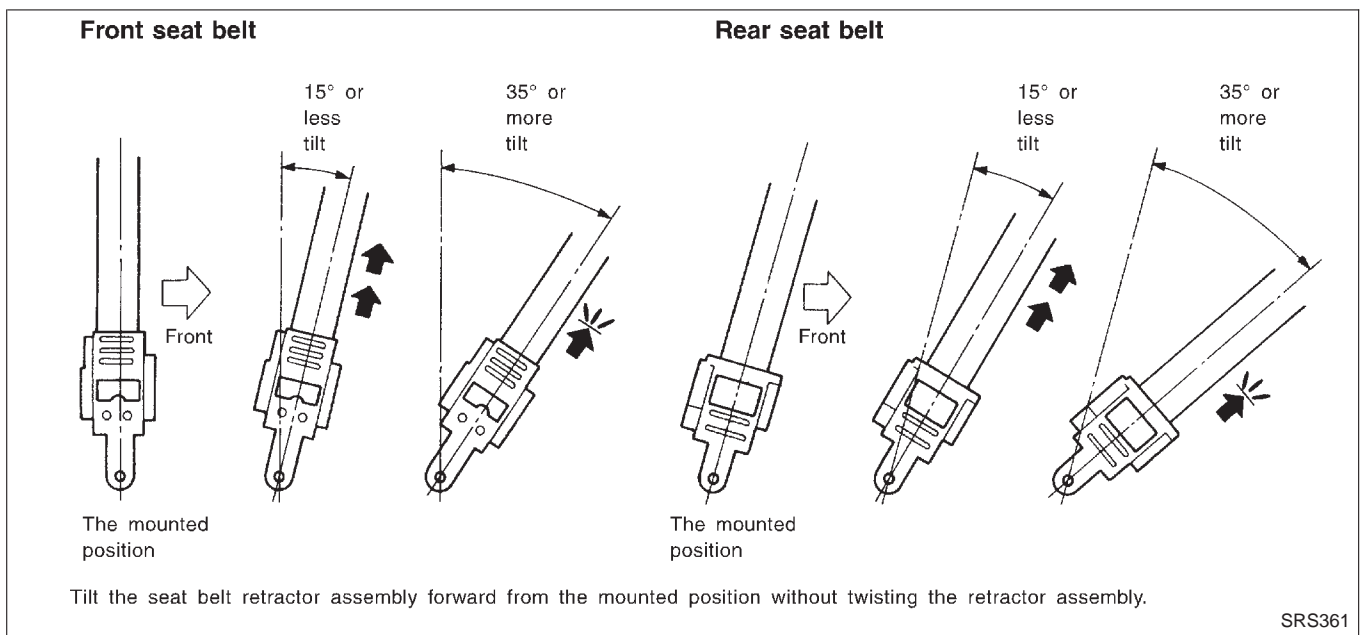
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EL

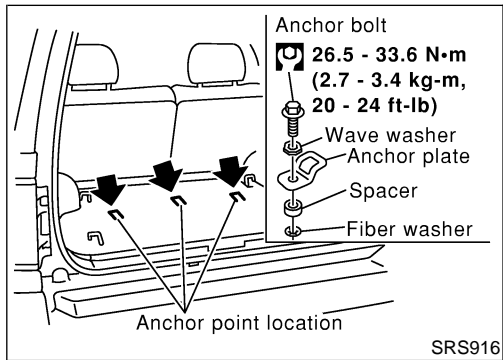
IDX

SEAT BELTS

Seat Belt Inspection (Cont'd)



If NG, replace the retractor assembly.



Tether Anchor Plate REMOVAL AND INSTALLATION

NARS0050

CAUTION:
Replace anchor bolt if they are deformed or worn out.

Precautions

SUPPLEMENTAL RESTRAINT SYSTEM (SRS) “AIR BAG” AND “SEAT BELT PRE-TENSIONER”

NARS0005

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), side curtain air bag module (located in the headlining side of front and rear 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.
- Do not use electrical test equipment on any circuit related to the SRS unless instructed to in this Service Manual. SRS wiring harnesses can be identified by yellow and/or orange harness connector (and by yellow harness protector or yellow insulation tape before the harness connectors).

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 or activate. 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 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-11, “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”

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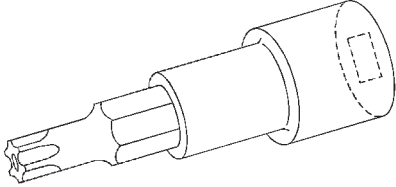
SUPPLEMENTAL RESTRAINT SYSTEM (SRS)

Preparation

Preparation

COMMERCIAL SERVICE TOOL

NARS0051

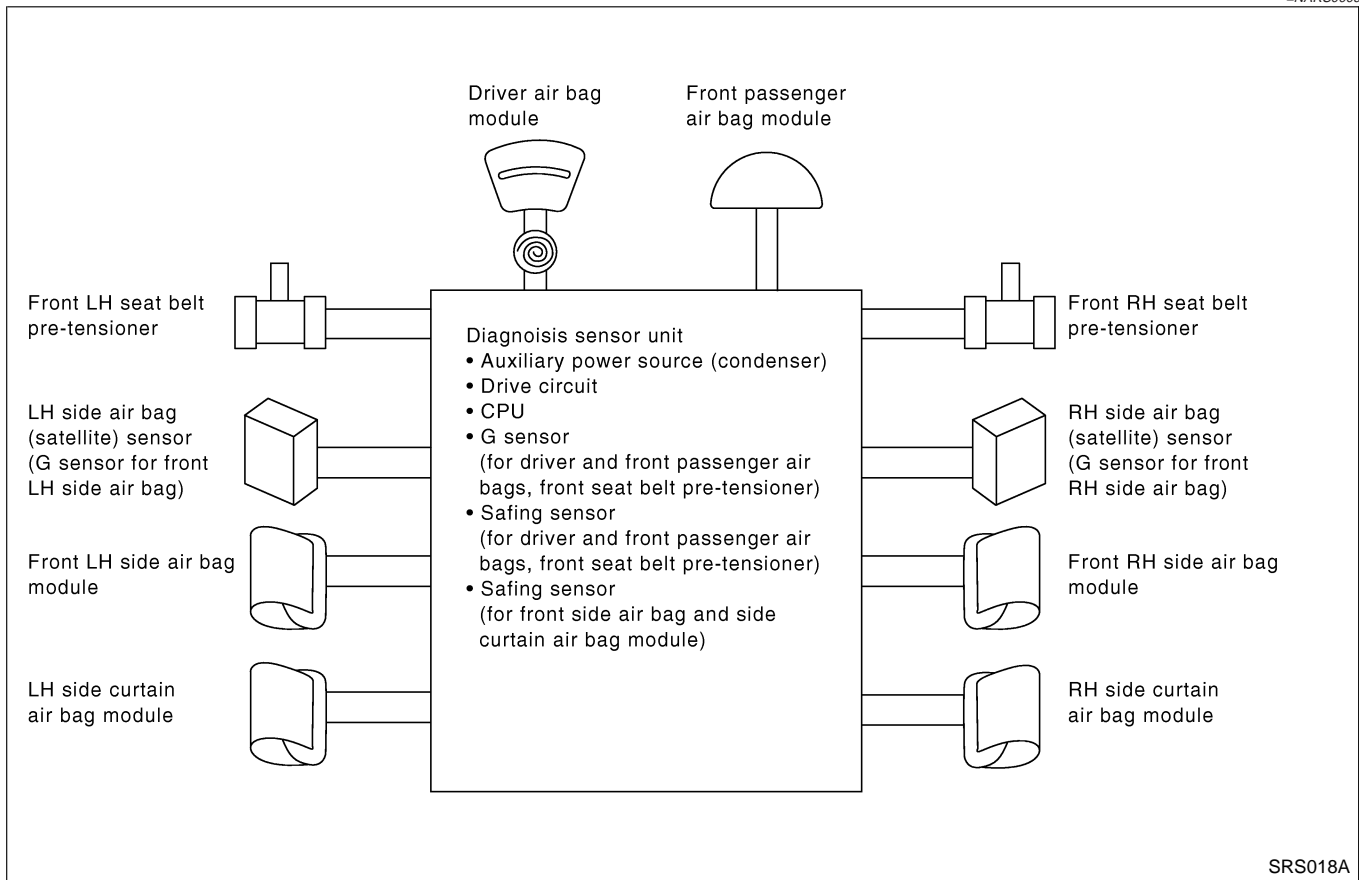
Tool name	Description
Tamper resistant torx socket	<p data-bbox="951 289 1049 317">Size: T30</p>  <p data-bbox="415 579 475 600">NT757</p>

SUPPLEMENTAL RESTRAINT SYSTEM (SRS)

Description

Description

=NARS0009



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

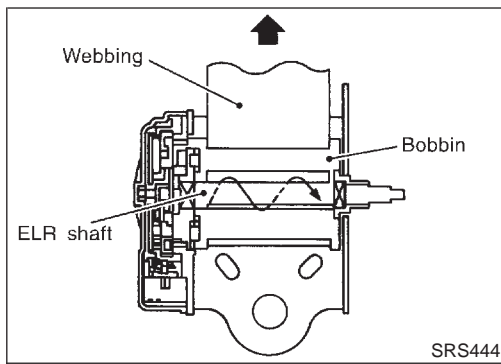
The collision modes for which supplemental restraint systems are activated are different among the SRS systems. For example, the driver air bag module and passenger air bag module are activated in a frontal collision but not in a side collision.

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	X	—	—
Passenger air bag module	X	—	—
Front LH seat belt pre-tensioner	X	—	—
Front RH seat belt pre-tensioner	X	—	—
Front LH side air bag module (LH)	—	X	—
Front RH side air bag module (RH)	—	—	X
LH side curtain air bag module	—	X	—
RH side curtain air bag module	—	—	X

SUPPLEMENTAL RESTRAINT SYSTEM (SRS)

Seat Belt Pre-tensioner with Load Limiter



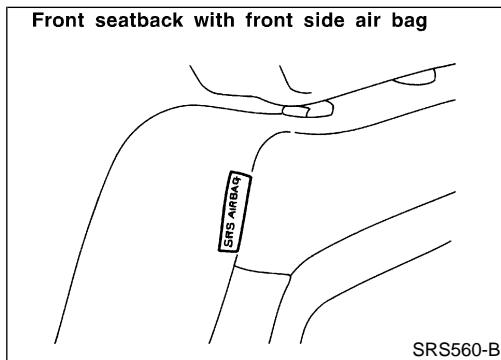
Seat Belt Pre-tensioner with Load Limiter

NARS0032

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

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

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

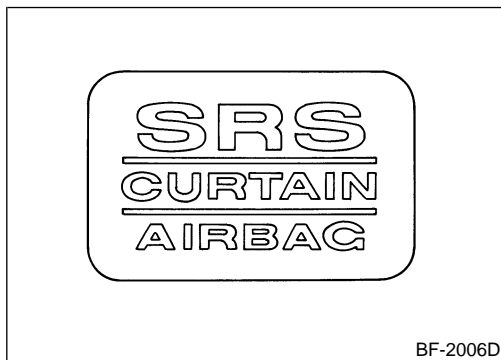


Side Air Bag

NARS0033

Front side air bag is built-in type.

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



Side Curtain Air Bag

NARS0053

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

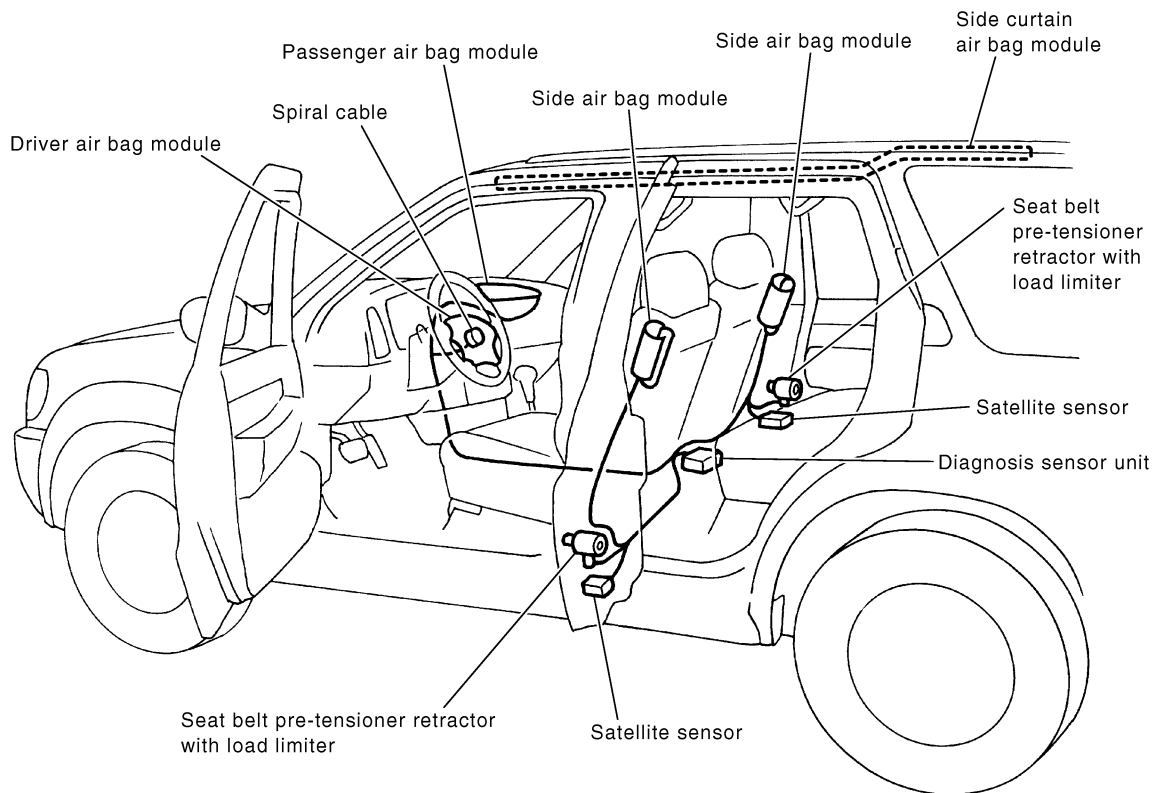
SUPPLEMENTAL RESTRAINT SYSTEM (SRS)

SRS Component Parts Location

SRS Component Parts Location

NARS0010

SEC. 240•251•253•484•680•868•870



SRS019A

Diagnosis Sensor Unit REMOVAL AND INSTALLATION

NARS0012

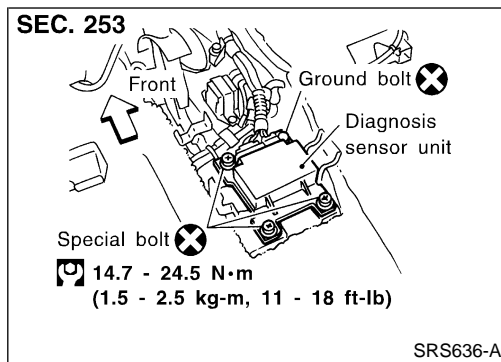
CAUTION:

- Before servicing SRS, turn the ignition switch off, disconnect both battery cables and wait for at least 3 minutes.
- Do not use old bolts after removal; replace with new ones.
- Check diagnosis sensor unit for proper installation.
- Check diagnosis sensor unit to ensure it is free of deformities, dents, cracks or rust. If they show any visible signs of damage, replace them with new ones.
- Check diagnosis sensor unit brackets to ensure they are free of deformities or rust.
- Replace diagnosis sensor unit if it has been dropped or sustained an impact.
- After replacement of diagnosis sensor unit, perform self-diagnosis for SRS. Refer to "SRS Operation Check" for details (RS-31).

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SUPPLEMENTAL RESTRAINT SYSTEM (SRS)

Diagnosis Sensor Unit (Cont'd)



1. Disconnect connectors for driver and passenger air bag modules and seat belt pre-tensioner.
2. Remove console box. Refer to BT-24, "INSTRUMENT PANEL ASSEMBLY".
3. Disconnect diagnosis sensor unit connector.
4. Remove ground bolt and diagnostic sensor unit fixing bolts. Use TAMPER RESISTANT TORX (Size T50) to remove special bolts. Then remove the diagnosis sensor unit.

NOTE:

- To install, reverse the removal procedure sequence.

Seat Belt Pre-tensioner

REMOVAL AND INSTALLATION

NARS0034

CAUTION:

- Before servicing SRS, turn the ignition switch off, disconnect both battery cables and wait at least 3 minutes.
- Check seat belt pre-tensioner with load limiter for proper installation.
- After replacement of seat belt pre-tensioner, check SRS function and perform self-diagnosis for SRS. Refer to "SRS Operation Check" for details. (RS-31)
- 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).

For removal of seat belt pre-tensioner, refer to "Front Seat Belt" for details. (RS-5)

NOTE:

- To install, reverse the removal procedure sequence.

Satellite Sensor

REMOVAL AND INSTALLATION

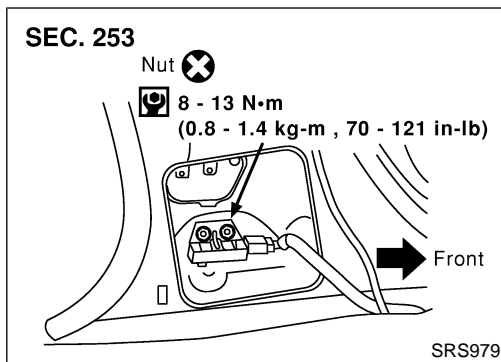
NARS0035

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-31)
- Do not attempt to disassemble satellite sensor.
- Replace satellite sensor if it has been dropped or sustained an impact.

SUPPLEMENTAL RESTRAINT SYSTEM (SRS)

Satellite Sensor (Cont'd)



1. Remove seat belt pre-tensioner. Refer to "Front Seat Belt" for details. (RS-5)
2. Disconnect satellite sensor connector.
3. Remove satellite sensor fixing nuts. Then remove the satellite sensor.

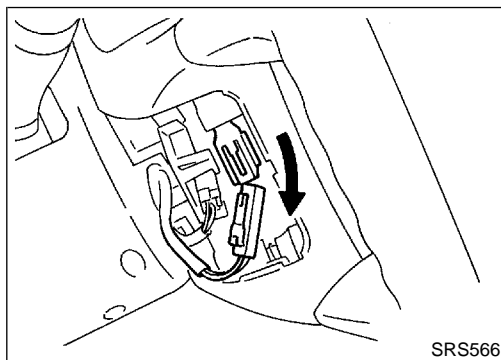
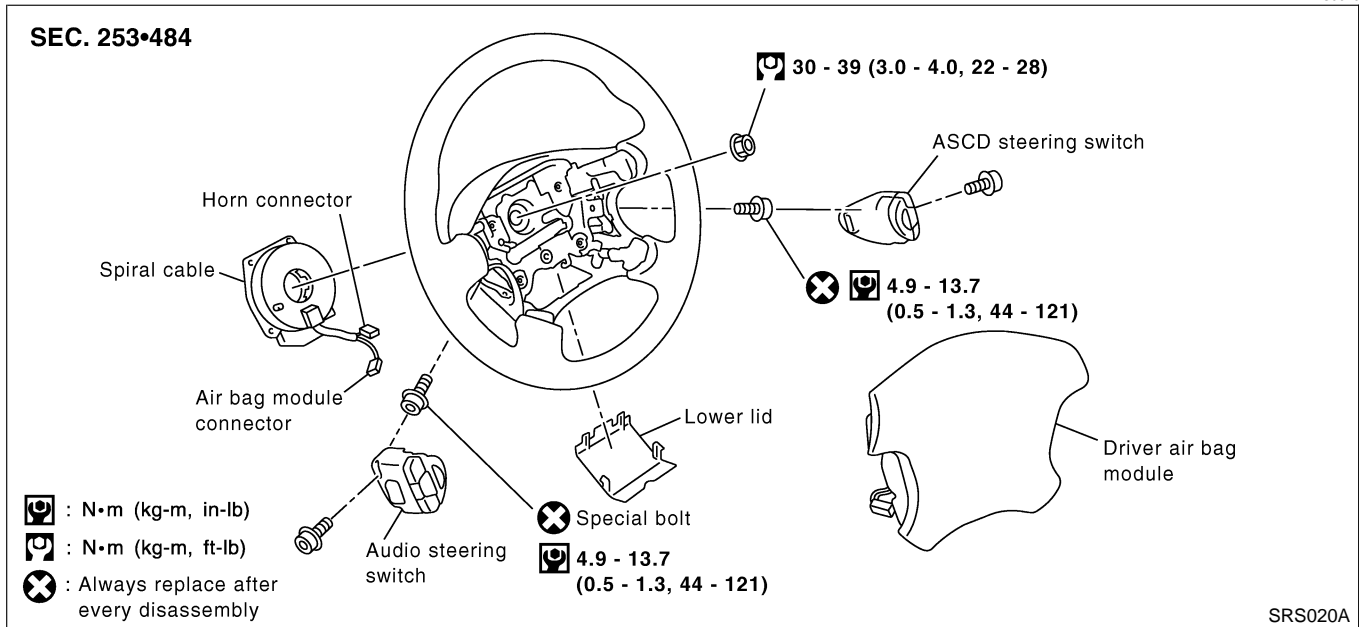
NOTE:

- To install, reverse the removal procedure sequence.

Driver Air Bag Module and Spiral Cable

REMOVAL AND INSTALLATION

NARS0013



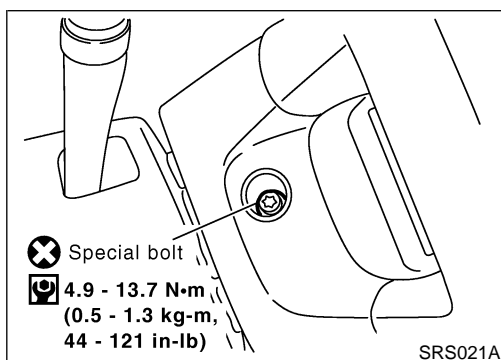
REMOVAL

NARS0014

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.

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

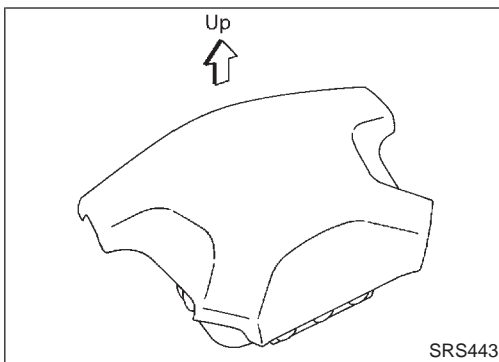


2. Remove audio and ASCD steering switches. Using the TAMPER RESISTANT TORX (Size T30), remove left and right special bolts.
3. Remove air bag module, and then disconnect horn connector.

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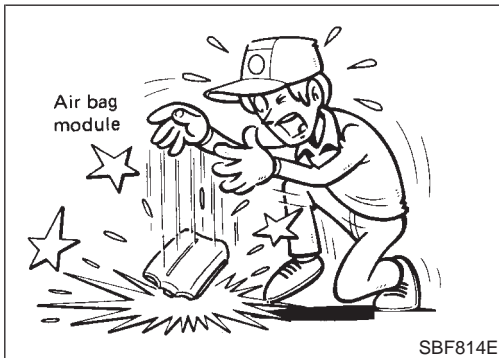
SUPPLEMENTAL RESTRAINT SYSTEM (SRS)

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

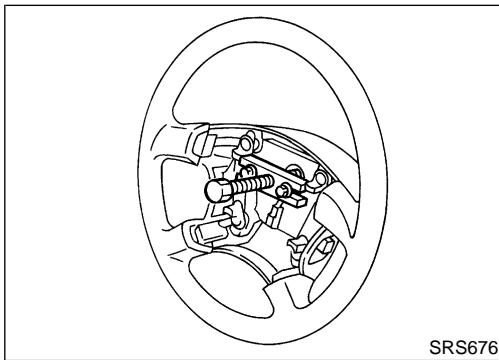


CAUTION:

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



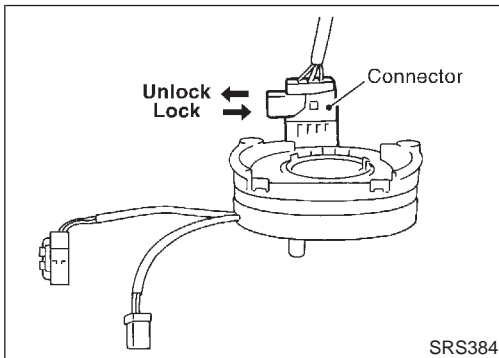
- Replace air bag module if it has been dropped or sustained an impact.
- Do not expose the air bag module to temperatures exceeding 90°C (194°F).
- Do not allow oil, grease or water to come in contact with the air bag module.



4. Set steering wheel in the neutral position.
5. Remove nuts.
6. Using steering wheel puller, remove steering wheel. Be careful not to over-tighten puller bolt on steering wheel.

CAUTION:

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



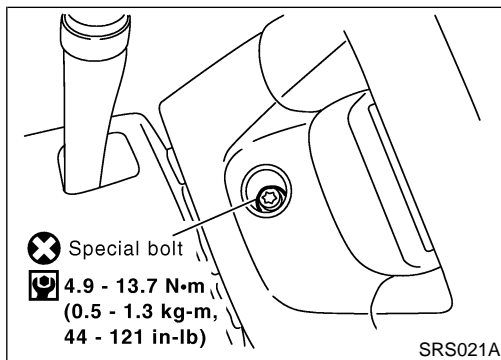
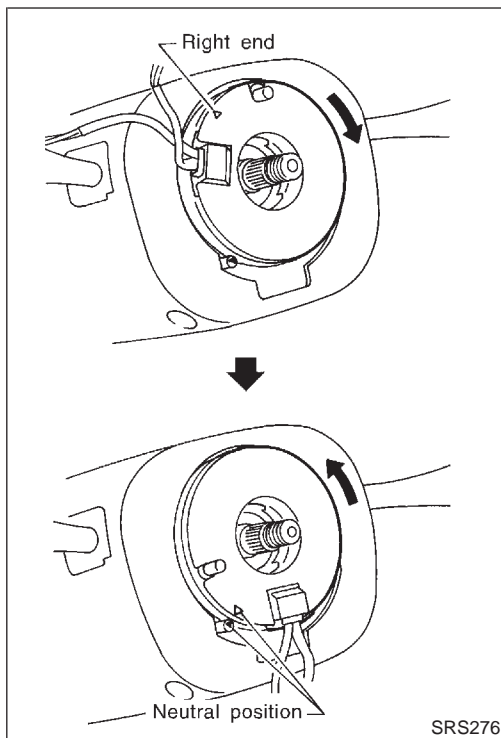
8. Unlock the spiral cable connector. Then disconnect connectors and remove the four screws. The spiral cable can then be removed.

CAUTION:

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

SUPPLEMENTAL RESTRAINT SYSTEM (SRS)

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



INSTALLATION

NARS0015

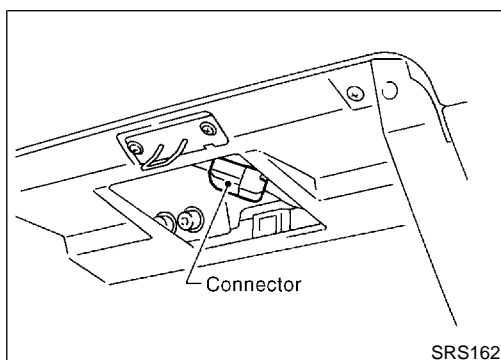
1. Set the front wheels in the straight-ahead position.
2. Make sure that the spiral cable is in the neutral position. The neutral position is detected by turning left about 2.5 revolutions from the right end position. Align the two marks (X).

CAUTION:

- The spiral cable may snap due to steering operation if the cable is installed in an improper position.
 - Also, with the steering linkage disconnected, the cable may snap by turning the steering wheel beyond the limited number of turns. The spiral cable can be turned to the left about 2.5 turns from the right end position.
3. Connect spiral cable connector and tighten with screws. Install steering column cover.
 4. Install steering wheel, aligning with spiral cable pin guides, and pull spiral cable through.
 5. Connect horn connector and steering switch connector engage spiral cable with pawls in steering wheel. Move air bag module connector away from steering wheel lower lid opening.
 6. Tighten nut.

: 30 - 39 N·m (3.0 - 4.0 kg-m, 22 - 28 ft-lb)

7. Position air bag module and tighten with new special bolts.
8. Connect air bag module connector.
9. Conduct self-diagnosis to ensure entire SRS operates properly. (Use CONSULT-II or warning lamp check.) Before performing self-diagnosis, connect both battery cables.
10. 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.
11. Perform self-diagnosis again to check that no malfunction is detected.



Front Passenger Air Bag Module

REMOVAL

NARS0016

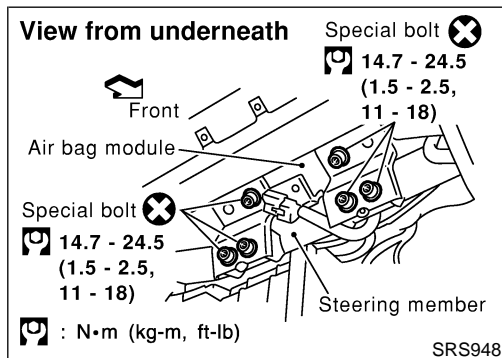
- ### CAUTION:
- Before servicing SRS, turn the ignition switch OFF, disconnect both battery cables and wait for at least 3 minutes.
 - Always work from the side of or under air bag module.
1. Remove glove box assembly. Refer to BT-24, "INSTRUMENT PANEL ASSEMBLY" for details.
 2. Disconnect front passenger air bag module connector from air bag harness connector.

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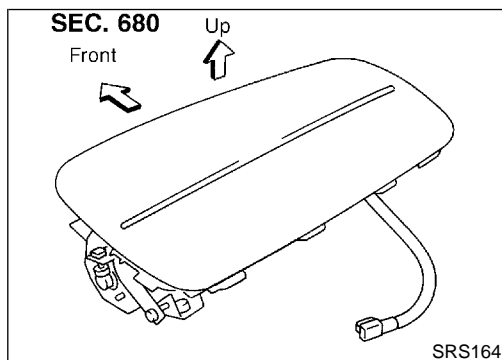
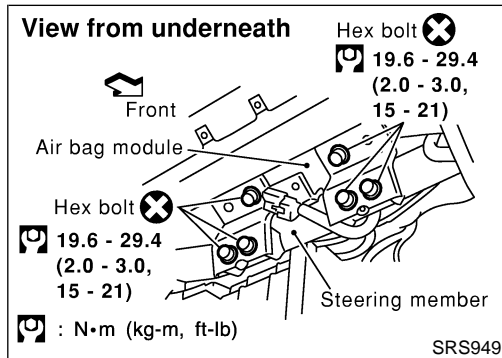
SUPPLEMENTAL RESTRAINT SYSTEM (SRS)

Front Passenger Air Bag Module (Cont'd)

3. Remove instrument lower panel on passenger side. Refer to BT-24, "INSTRUMENT PANEL ASSEMBLY" for details.

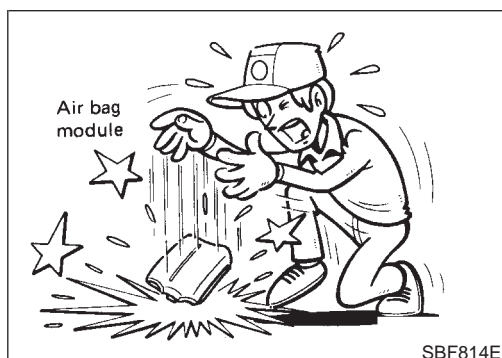


4. Remove front passenger fixing bolts. Use the TAMPER RESISTANT TORX (SIZE T50) to remove special bolts from front passenger air bag module.
5. Take out the air bag module from the instrument panel.
 - The air bag module is heavy and should be supported using both hands during removal.



CAUTION:

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

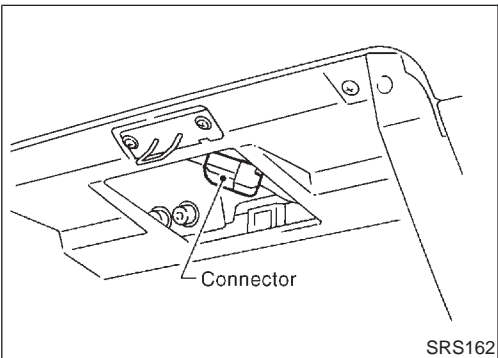
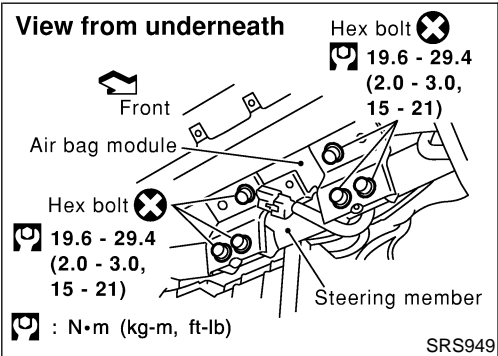
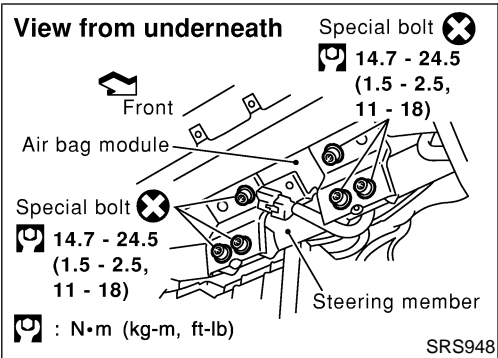


- Replace air bag module if it has been dropped or sustained an impact.
- Do not expose the air bag module to temperatures exceeding 90°C (194°F).
- Do not allow oil, grease or water to come in contact with the air bag module.
- After air bag inflates, the front instrument panel assembly should be replaced if damaged.

SUPPLEMENTAL RESTRAINT SYSTEM (SRS)

Front Passenger Air Bag Module (Cont'd)

NARS0017



INSTALLATION

CAUTION:

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

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

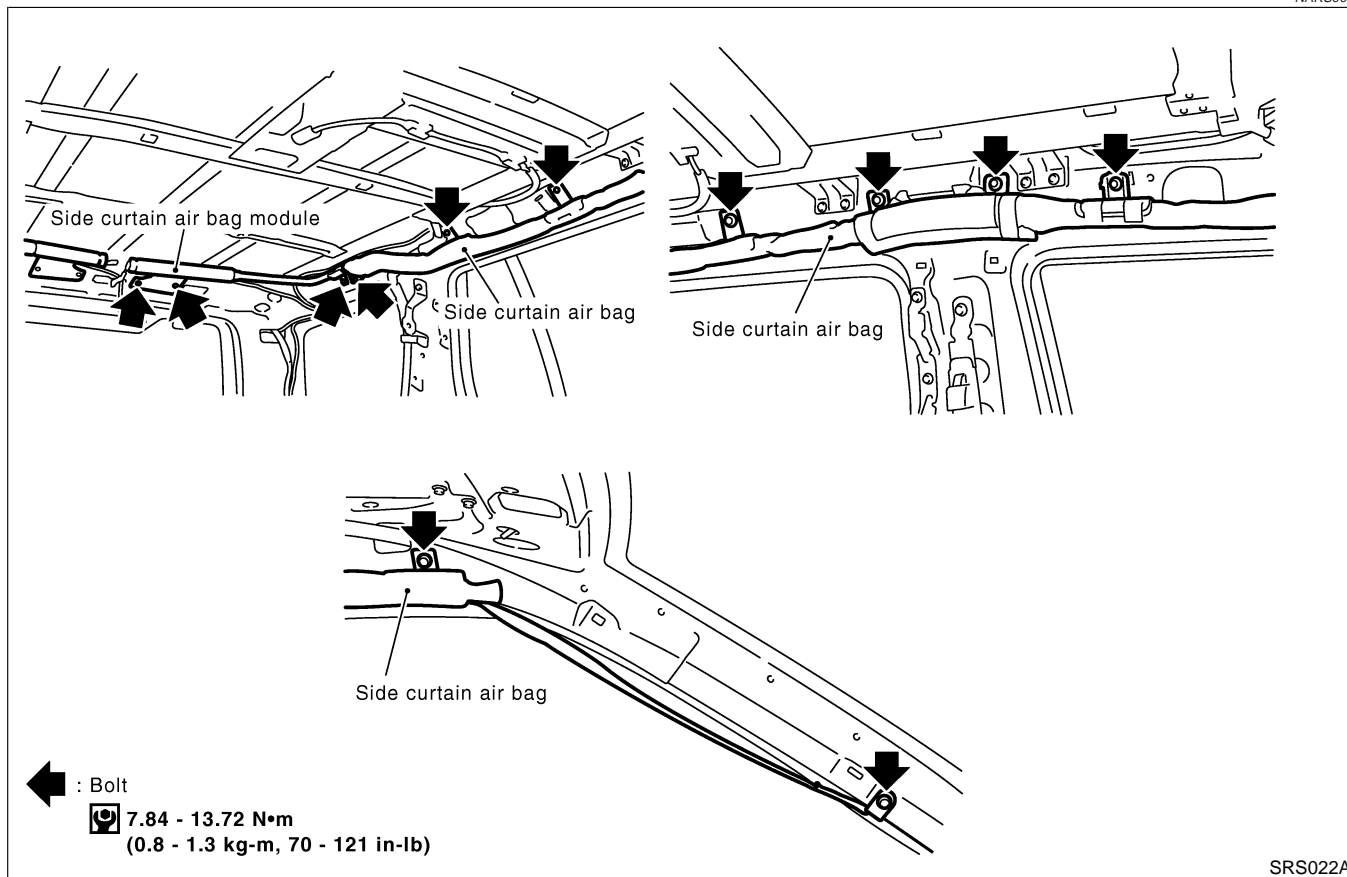
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SUPPLEMENTAL RESTRAINT SYSTEM (SRS)

Side Curtain Air Bag Module

Side Curtain Air Bag Module REMOVAL AND INSTALLATION

NARS0052

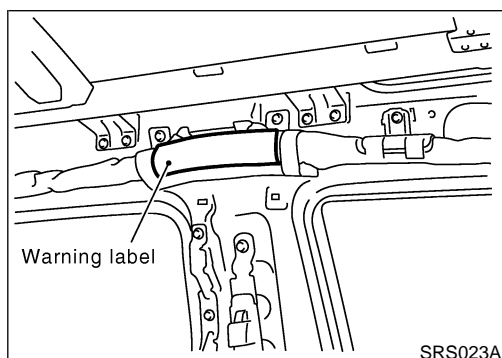


Removal

NARS0052S01

CAUTION:

- Before servicing SRS, turn the ignition switch OFF, disconnect both battery cables and wait at least 3 minutes.
 - Always work from the side of the side curtain air bag module.
1. Remove headliner. Refer to BT-36, "ROOF TRIM" for details.
 2. Disconnect side curtain air bag connector.
 3. Remove side curtain air bag module fixing bolts, and remove the side curtain air bag module.

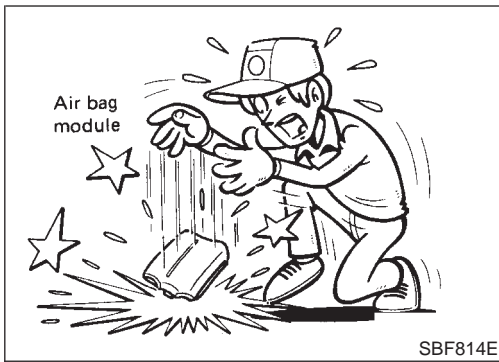


CAUTION:

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

SUPPLEMENTAL RESTRAINT SYSTEM (SRS)

Side Curtain Air Bag Module (Cont'd)



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

Trouble Diagnoses Introduction

NARS0040

CAUTION:

- Do not use electrical test equipment on any circuit related to the SRS unless instructed to in this Service Manual. SRS wiring harnesses can be identified by yellow harness connector (and with yellow harness protector or yellow insulation tape before the harness connectors).
- Do not attempt to repair, splice or modify the SRS wiring harness. If the harness is damaged, replace it with a new one.
- Keep ground portion clean.

DIAGNOSIS FUNCTION

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

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

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

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

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

NOTE:

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

DIAGNOSIS MODE FOR CONSULT-II

NARS0040S02

- “SELF-DIAG [CURRENT]”
A current self-diagnostic 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.
- “TROUBLE DIAG RECORD”
With TROUBLE DIAG RECORD, diagnosis results previously erased by a reset operation can be displayed on the CONSULT-II screen.
- “ECU DISCRIMINATED NO.”
The diagnosis sensor unit for each vehicle model is assigned with its own, individual classification number. This number will be displayed on the CONSULT-II screen, as shown 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.

For NISSAN MODEL R50, the diagnosis sensor unit classification numbers assigned is AA2F (Models with side air bag) and AA2E (Models without side air bag).

SUPPLEMENTAL RESTRAINT SYSTEM (SRS)

Trouble Diagnoses Introduction (Cont'd)

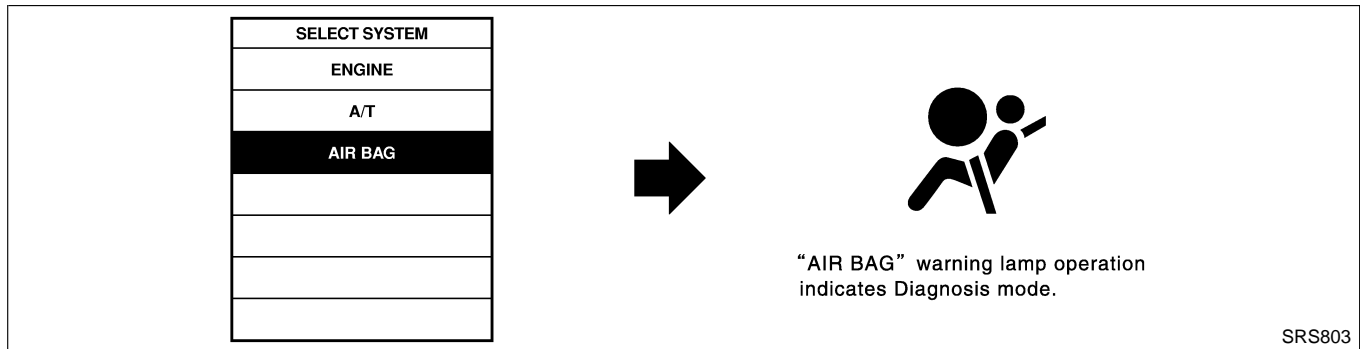
④ HOW TO CHANGE SELF-DIAGNOSIS MODE WITH CONSULT-II

=NARS0040S03

From User Mode to Diagnosis Mode

NARS0040S0301

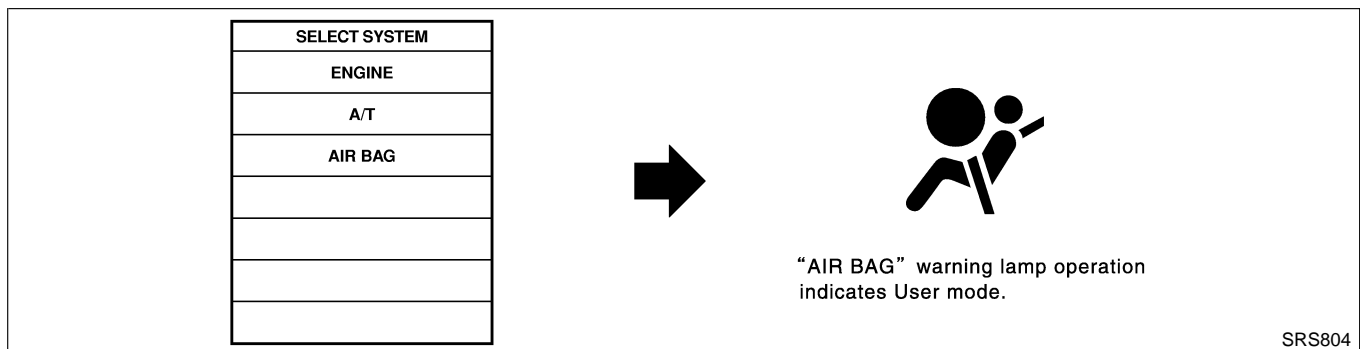
After selecting "AIR BAG" on the "SELECT SYSTEM" screen, User mode automatically changes to Diagnosis mode.



From Diagnosis Mode to User Mode

NARS0040S0302

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.



⊗ HOW TO CHANGE SELF-DIAGNOSIS MODE WITHOUT CONSULT-II

NARS0040S04

From User Mode to Diagnosis Mode

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.
- 3) Wait more than 3 seconds.
- 4) Repeat steps 1 to 3 twice (Perform 3 times in total).
- 5) Turn ignition switch "ON".

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

From Diagnosis Mode to User Mode

NARS0040S0402

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.
- 3) Wait more than 3 seconds.
- 4) Repeat steps 1 to 3 twice (Perform 3 times in total).
- 5) Turn ignition switch "ON".

HOW TO ERASE SELF-DIAGNOSIS RESULTS

NARS0040S05

④ With CONSULT-II

NARS0040S0501

- "SELF-DIAG [CURRENT]"
A current self-diagnostic result is displayed on the CONSULT-II screen in real time.

SUPPLEMENTAL RESTRAINT SYSTEM (SRS)

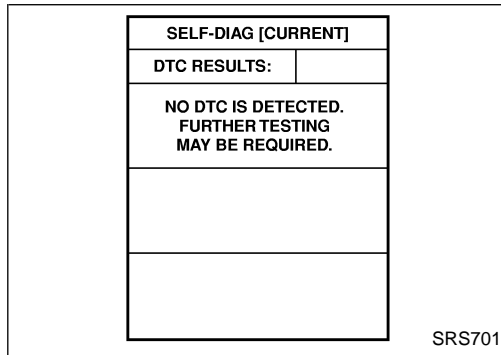
Trouble Diagnoses Introduction (Cont'd)

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.

NOTE:

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



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

⊗ Without CONSULT-II

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

How to Perform Trouble Diagnoses for Quick and Accurate Repair

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

INFORMATION FROM CUSTOMER

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

PRELIMINARY CHECK

Check that the following parts are in good order.

- Battery [Refer to SC-4, "BATTERY".]
- Fuse [Refer to EL-11, "Fuse", "POWER SUPPLY ROUTING".]
- System component-to-harness connections

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SUPPLEMENTAL RESTRAINT SYSTEM (SRS)

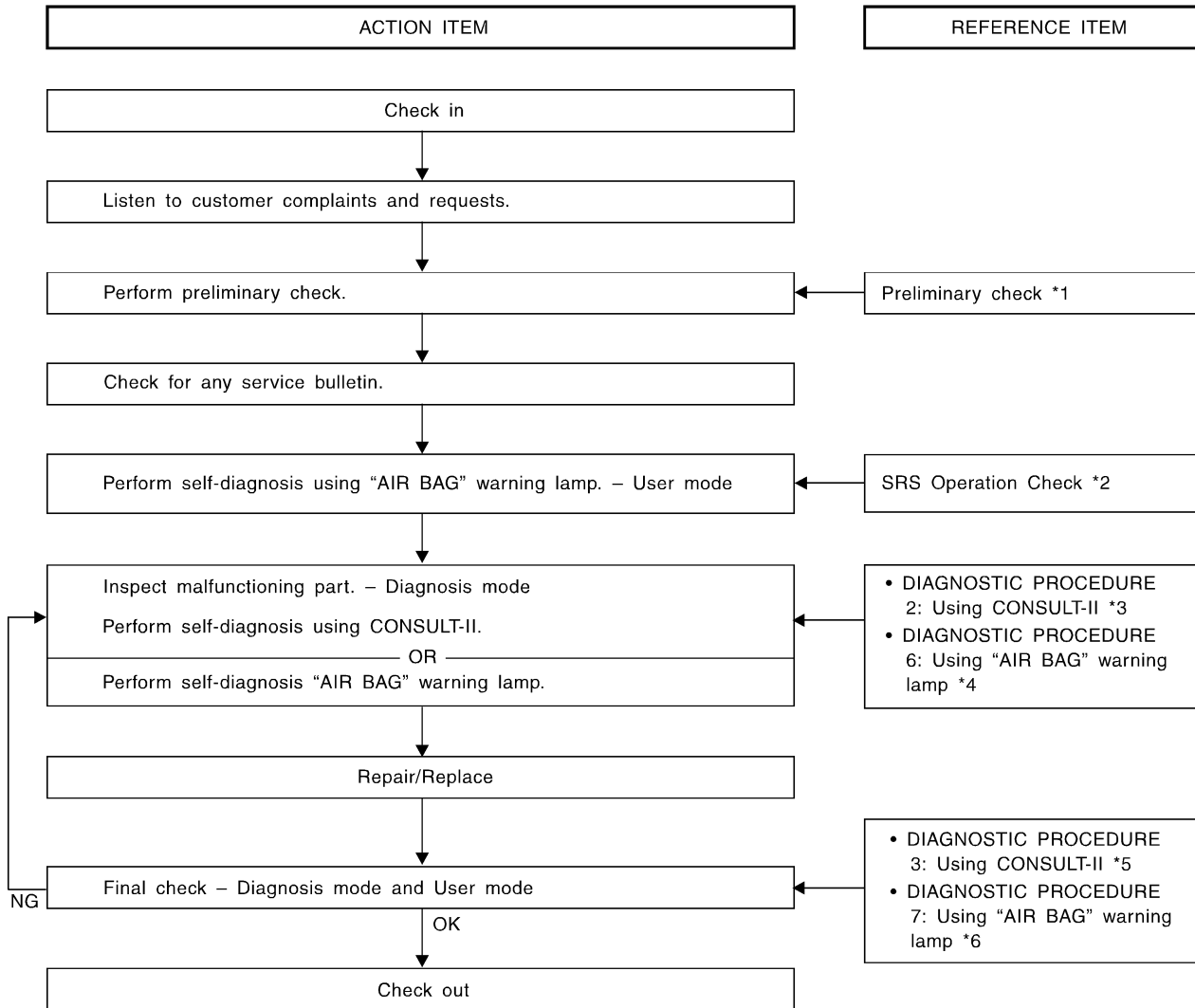
How to Perform Trouble Diagnoses for Quick and Accurate Repair (Cont'd)

WORK FLOW

=NARS0041S03

NOTE:

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



SRS799

*1: RS-25
*2: RS-31

*3: RS-32
*4: RS-42

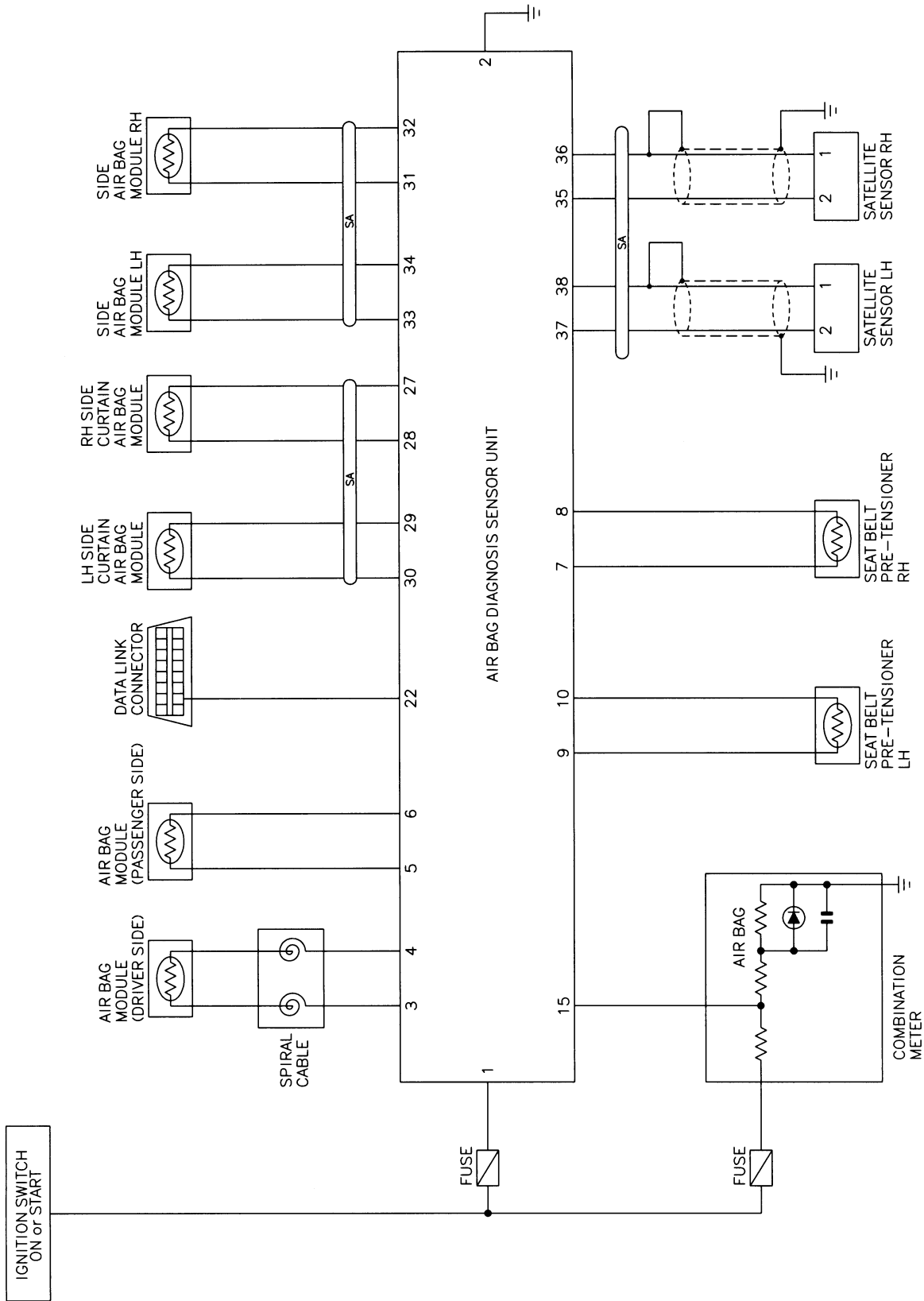
*5: RS-36
*6: RS-48

SUPPLEMENTAL RESTRAINT SYSTEM (SRS)

Schematic

NARS0042

Schematic



(SA) : With side air bag

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MRS451A

SUPPLEMENTAL RESTRAINT SYSTEM (SRS)

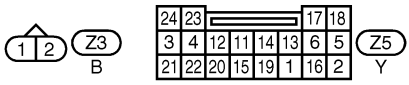
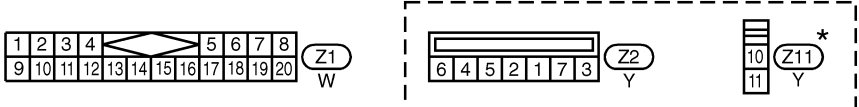
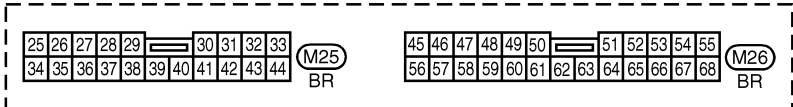
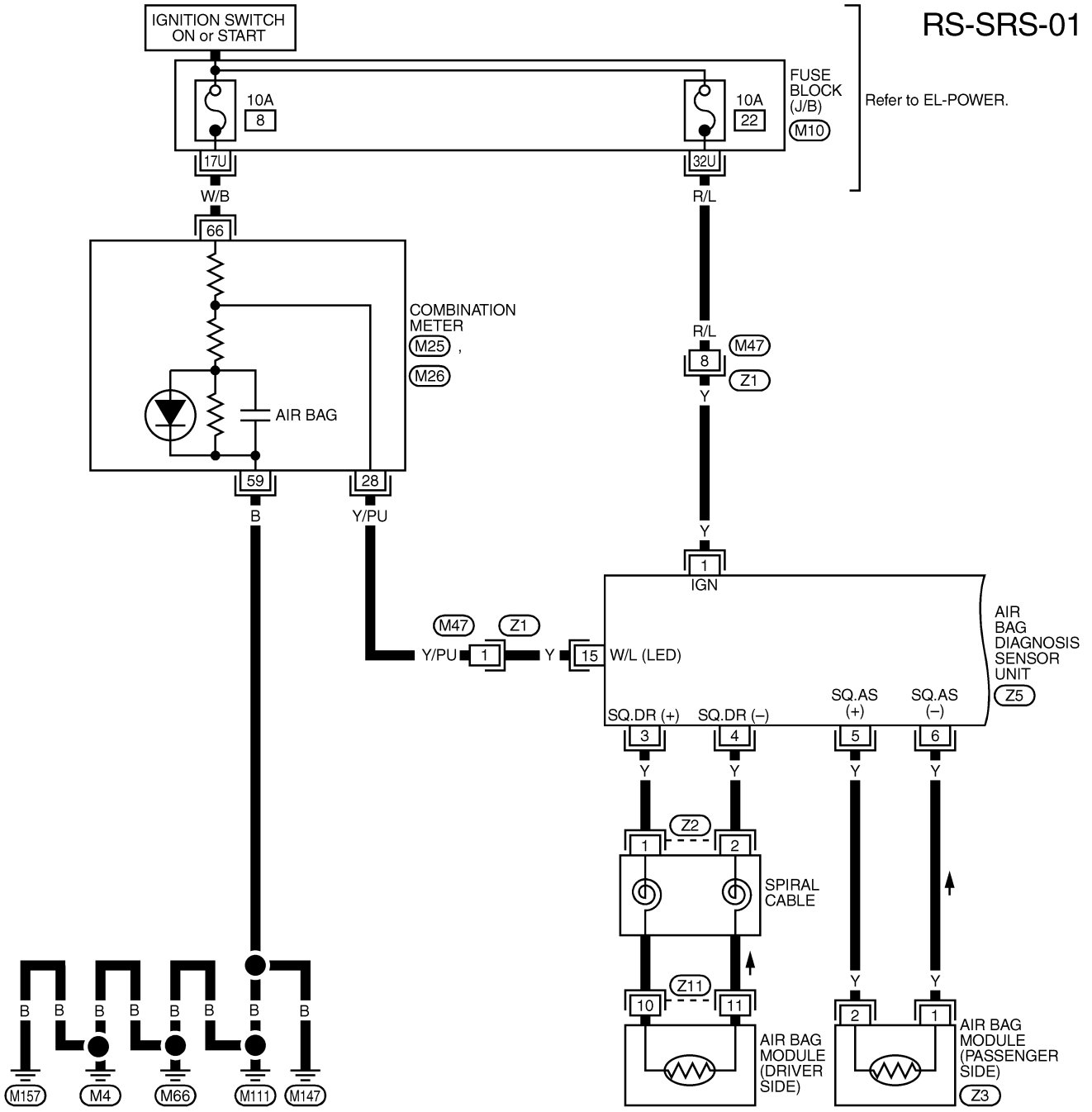
Wiring Diagram — SRS —

Wiring Diagram — SRS —

NARS0043

RS-SRS-01

Refer to EL-POWER.



* This connector is not shown in "HARNESS LAYOUT", EL section.

REFER TO THE FOLLOWING.

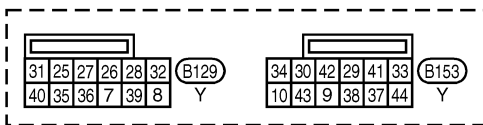
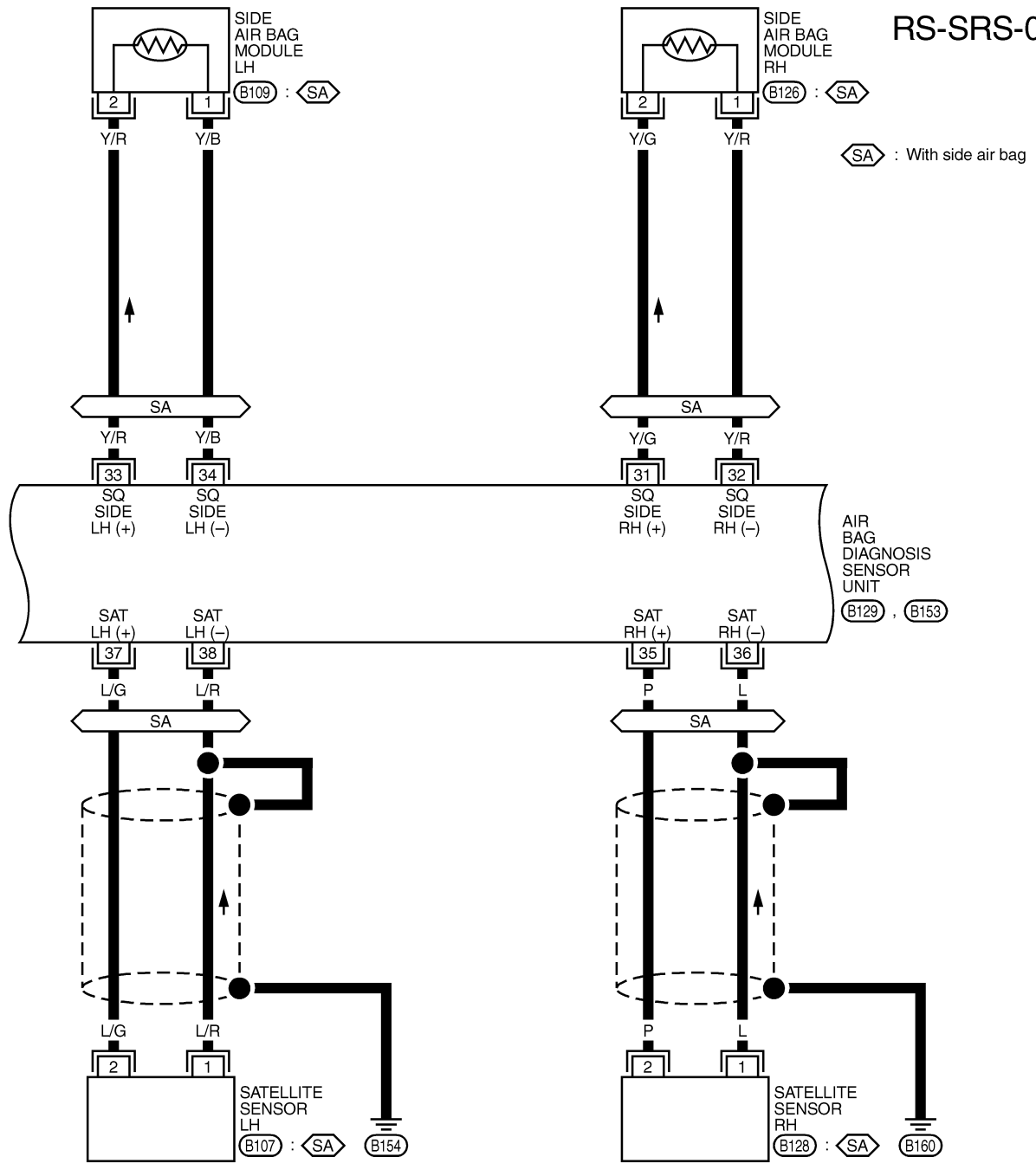
(M10) - FUSE BLOCK -
JUNCTION BOX (J/B)

MRS452A

SUPPLEMENTAL RESTRAINT SYSTEM (SRS)

Wiring Diagram — SRS — (Cont'd)

RS-SRS-02

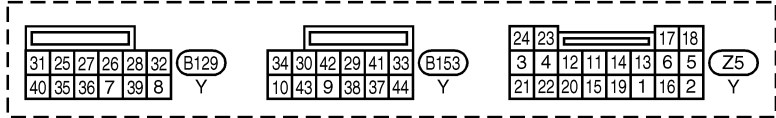
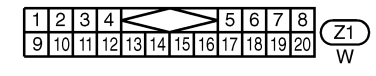
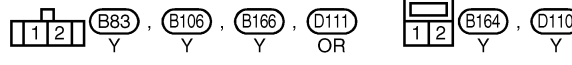
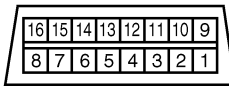
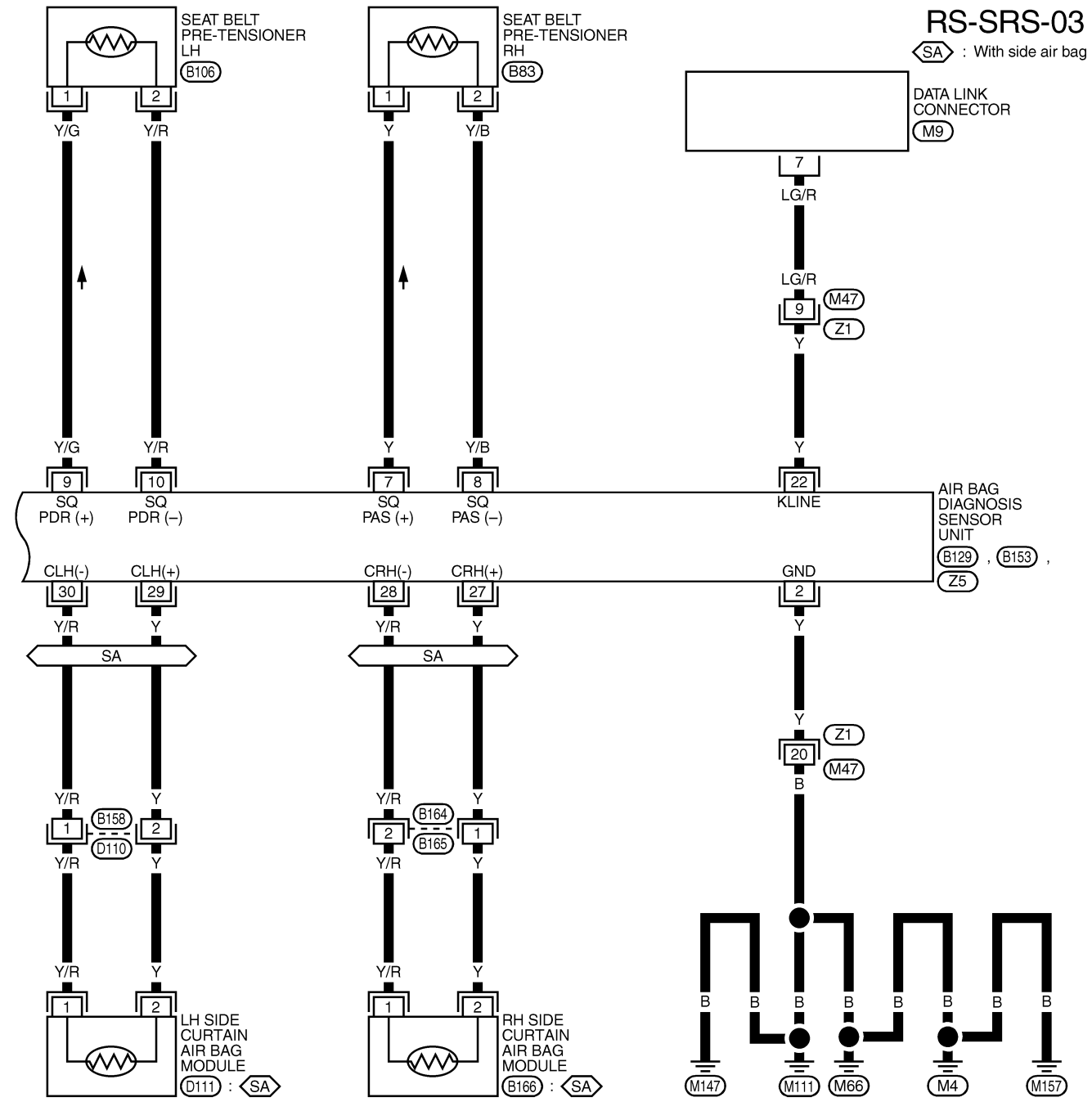


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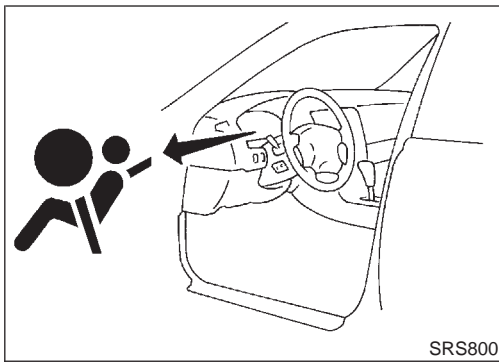
MRS453A

SUPPLEMENTAL RESTRAINT SYSTEM (SRS)

Wiring Diagram — SRS — (Cont'd)



MRS454A



SRS Operation Check DIAGNOSTIC PROCEDURE 1 Checking Air Bag Operation by Using "AIR BAG" Warning Lamp — User Mode

NARS0044

NARS0044S01

NARS0044S0101

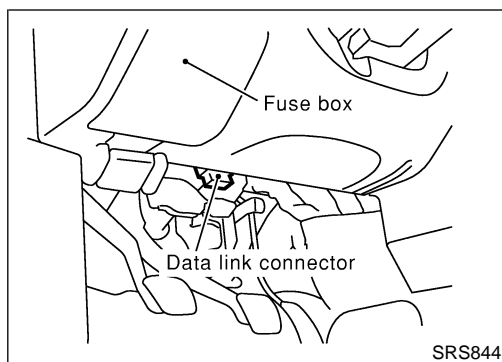
1. After turning ignition switch from "OFF" to "ON", "AIR BAG" warning lamp operates.
2. Compare "AIR BAG" warning lamp operation to the chart below.

"AIR BAG" warning lamp operation — User mode —	SRS condition	Reference item
<p>MRS095A</p>	No malfunction is detected. No further action is necessary.	—
<p>MRS096A</p>	The system is malfunctioning and needs to be repaired as indicated.	Go to DIAGNOSTIC PROCEDURE 2 or 6 (RS-32 or RS-42).
<p>MRS097A</p>	Air bag is deployed. Seat belt pre-tensioner is activated.	Go to COLLISION DIAGNOSIS (RS-53).
<p>MRS098A</p>	Air bag fuse, diagnosis sensor unit or harness is malfunctioning and needs to be repaired.	Go to DIAGNOSTIC PROCEDURE 9 (RS-50).
<p>MRS098A</p>	One of the following has occurred and needs to be repaired. <ul style="list-style-type: none"> • Meter fuse is blown. • "AIR BAG" warning lamp circuit has open or short. • Diagnosis sensor unit is malfunctioning. 	Go to DIAGNOSTIC PROCEDURE 10 (RS-52).

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SUPPLEMENTAL RESTRAINT SYSTEM (SRS)

Trouble Diagnoses with CONSULT-II



Trouble Diagnoses with CONSULT-II

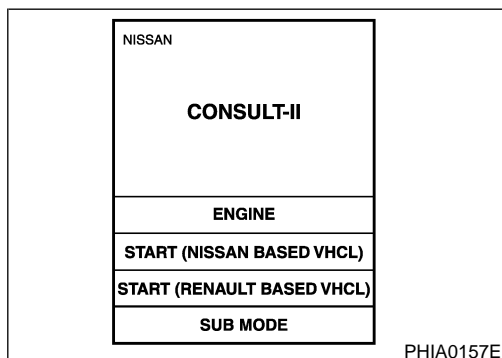
=NARS0045

DIAGNOSTIC PROCEDURE 2

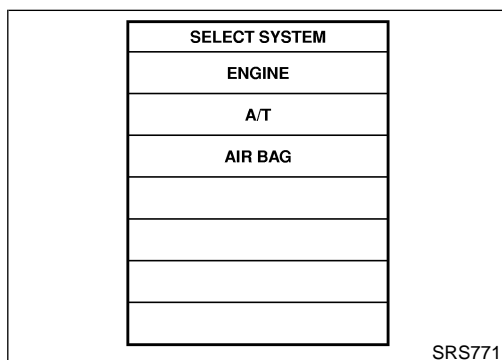
NARS0045S01

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

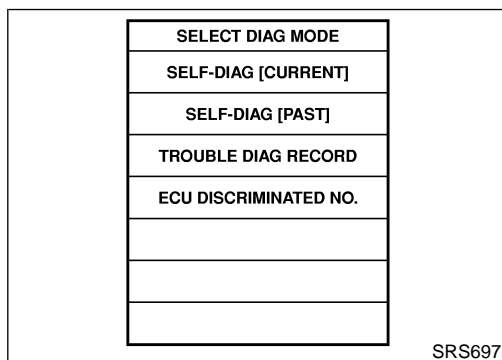
1. Turn ignition switch "OFF".
2. Connect CONSULT-II to data link connector.



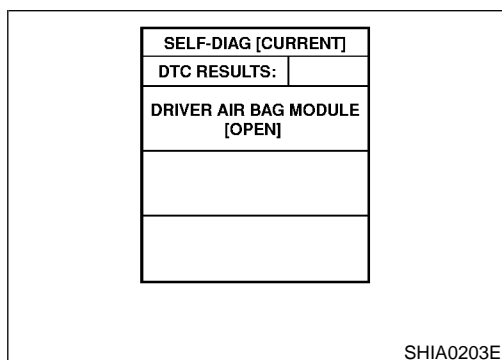
3. Turn ignition switch "ON".
4. Touch "START (NISSAN BASED VHCL)".



5. Touch "AIR BAG".




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



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

SUPPLEMENTAL RESTRAINT SYSTEM (SRS)

 Trouble Diagnoses with CONSULT-II (Cont'd)

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

SRS701

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-36.

If the battery voltage is OK, go to DIAGNOSTIC PROCEDURE 4, page RS-37, to diagnose the following cases:

- Self-diagnostic results “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-33.

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 “CONSULT-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-36 for final checking.

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

NARS0045S0101

Diagnostic item	Explanation	Repair order “Recheck SRS at each replacement.”
NO DTC IS DETECTED.	When malfunction is indicated by the “AIR BAG” warning lamp in User mode	<ul style="list-style-type: none"> ● Low battery voltage (Less than 9V) ● Self-diagnostic results “SELF-DIAG [PAST]” (previously stored in the memory) might not be erased after repair. ● Intermittent malfunction has been detected in the past.
	<ul style="list-style-type: none"> ● No malfunction is detected. 	<ul style="list-style-type: none"> ● Go to DIAGNOSTIC PROCEDURE 3 (RS-36) after charging battery. ● Go to DIAGNOSTIC PROCEDURE 4 (RS-37).
DRIVER AIRBAG MODULE [OPEN]	<ul style="list-style-type: none"> ● Driver air bag module circuit is open. (including the spiral cable) 	<ol style="list-style-type: none"> 1. Visually check the wiring harness connection. 2. Replace the harness if it has visible damage. 3. Replace driver air bag module. 4. Replace the spiral cable. 5. Replace the diagnosis sensor unit. 6. Replace the related harness.

SUPPLEMENTAL RESTRAINT SYSTEM (SRS)

 Trouble Diagnoses with CONSULT-II (Cont'd)

Diagnostic item	Explanation	Repair order "Recheck SRS at each replacement."
DRIVER AIRBAG MODULE [VB-SHORT]	<ul style="list-style-type: none"> ● Driver air bag module circuit is shorted to a power supply circuit. (including the spiral cable) 	<ol style="list-style-type: none"> 1. Visually check the wiring harness connection. 2. Replace the harness if it has visible damage. 3. Replace the spiral cable. 4. Replace driver air bag module. 5. Replace the diagnosis sensor unit. 6. Replace the related harness.
DRIVER AIRBAG MODULE [GND-SHORT]	<ul style="list-style-type: none"> ● Driver air bag module circuit is shorted to ground. (including the spiral cable) 	
DRIVER AIRBAG MODULE [SHORT]	<ul style="list-style-type: none"> ● Driver air bag module circuit is shorted between lines. 	
ASSIST A/B MODULE [VB-SHORT]	<ul style="list-style-type: none"> ● Front passenger air bag module circuit is shorted to some power supply circuit. 	<ol style="list-style-type: none"> 1. Visually check the wiring harness connection. 2. Replace the harness if it has visible damage. 3. Replace front passenger air bag module. 4. Replace the diagnosis sensor unit. 5. Replace the related harness.
ASSIST A/B MODULE [OPEN]	<ul style="list-style-type: none"> ● Front passenger air bag module circuit is open. 	
ASSIST A/B MODULE [GND-SHORT]	<ul style="list-style-type: none"> ● Front passenger air bag module circuit is shorted to ground. 	
ASSIST A/B MODULE [SHORT]	<ul style="list-style-type: none"> ● Front passenger air bag module circuit is shorted between lines. 	
SIDE MODULE LH [OPEN]	<ul style="list-style-type: none"> ● Front LH side air bag module circuit is open. 	<ol style="list-style-type: none"> 1. Visually check the wiring harness connection. 2. Replace the harness if it has visible damage. 3. Replace the front LH side air bag module. 4. Replace the diagnosis sensor unit. 5. Replace the related harness.
SIDE MODULE LH [VB-SHORT]	<ul style="list-style-type: none"> ● Front LH side air bag module circuit is shorted to a power supply circuit. 	
SIDE MODULE LH [GND-SHORT]	<ul style="list-style-type: none"> ● Front LH side air bag module circuit is shorted to ground. 	
SIDE MODULE LH [SHORT]	<ul style="list-style-type: none"> ● Front LH side air bag module circuit is shorted between lines. 	
SIDE MODULE RH [OPEN]	<ul style="list-style-type: none"> ● Front RH side air bag module circuit is open. 	<ol style="list-style-type: none"> 1. Visually check the wiring harness connection. 2. Replace the harness if it has visible damage. 3. Replace the front RH side air bag module. 4. Replace the diagnosis sensor unit. 5. Replace the related harness.
SIDE MODULE RH [VB-SHORT]	<ul style="list-style-type: none"> ● Front RH side air bag module circuit is shorted to a power supply circuit. 	
SIDE MODULE RH [GND-SHORT]	<ul style="list-style-type: none"> ● Front RH side air bag module circuit is shorted to ground. 	
SIDE MODULE RH [SHORT]	<ul style="list-style-type: none"> ● Front RH side air bag module circuit is shorted between lines. 	
SATELLITE SENS LH [UNIT FAIL] SATELLITE SENS LH [COMM FAIL]	<ul style="list-style-type: none"> ● LH side air bag (Satellite) sensor 	<ol style="list-style-type: none"> 1. Visually check the wiring harness connection. 2. Replace the harness if it has visible damage. 3. Replace the LH side air bag (satellite) sensor. 4. Replace the diagnosis sensor unit. 5. Replace the related harness.
SATELLITE SENS RH [UNIT FAIL] SATELLITE SENS RH [COMM FAIL]	<ul style="list-style-type: none"> ● RH side air bag (Satellite) sensor 	<ol style="list-style-type: none"> 1. Visually check the wiring harness connection. 2. Replace the harness if it has visible damage. 3. Replace the RH side air bag (satellite) sensor. 4. Replace the diagnosis sensor unit. 5. Replace the related harness.

SUPPLEMENTAL RESTRAINT SYSTEM (SRS)

 Trouble Diagnoses with CONSULT-II (Cont'd)

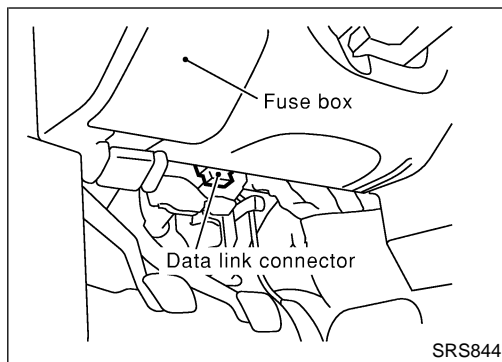
Diagnostic item	Explanation	Repair order "Recheck SRS at each replacement."	
PRE-TEN FRONT LH [OPEN]	● Front LH seat belt pre-tensioner circuit is open.	<ol style="list-style-type: none"> 1. Visually check the wiring harness connections. 2. Replace the harness if it has visible damage. 3. Replace front LH seat belt. 4. Replace the diagnosis sensor unit. 5. Replace the related harness. 	GI
PRE-TEN FRONT LH [VB-SHORT]	● Front LH seat belt pre-tensioner circuit is shorted to a power supply circuit.		MA
PRE-TEN FRONT LH [GND-SHORT]	● Front LH seat belt pre-tensioner circuit is shorted to ground.		EM
PRE-TEN FRONT LH [SHORT]	● Front LH pre-tensioner circuit is shorted between lines.		LC
PRE-TEN FRONT RH [OPEN]	● Front RH seat belt pre-tensioner circuit is open.	<ol style="list-style-type: none"> 1. Visually check the wiring harness connections. 2. Replace the harness if it has visible damage. 3. Replace front RH seat belt. 4. Replace the diagnosis sensor unit. 5. Replace the related harness. 	EC
PRE-TEN FRONT RH [VB-SHORT]	● Front RH seat belt pre-tensioner circuit is shorted to a power supply circuit.		FE
PRE-TEN FRONT RH [GND-SHORT]	● Front RH seat belt pre-tensioner circuit is shorted to ground.		CL
PRE-TEN FRONT RH [SHORT]	● Front RH pre-tensioner circuit is shorted between lines.		MT
CURTAIN MODULE LH [OPEN]	● LH side curtain air bag module circuit is open.	<ol style="list-style-type: none"> 1. Visually check the wiring harness connection. 2. Replace the harness if it has visible damage. 3. Replace LH side curtain air bag module. 4. Replace the diagnosis sensor unit. 5. Replace the related harness. 	AT
CURTAIN MODULE LH [VB-SHORT]	● LH side curtain air bag module circuit is shorted to a power supply circuit.		TF
CURTAIN MODULE LH [GND-SHORT]	● LH side curtain air bag module circuit is shorted to ground.		PD
CURTAIN MODULE LH [SHORT]	● LH side curtain air bag module circuit is shorted between lines.		AX
CURTAIN MODULE RH [OPEN]	● RH side curtain air bag module circuit is open.	<ol style="list-style-type: none"> 1. Visually check the wiring harness connection. 2. Replace the harness if it has visible damage. 3. Replace RH side curtain air bag module. 4. Replace the diagnosis sensor unit. 5. Replace the related harness. 	SU
CURTAIN MODULE RH [VB-SHORT]	● RH side curtain air bag module circuit is shorted to a power supply circuit.		BR
CURTAIN MODULE RH [SHORT]	● RH side curtain air bag module circuit is shorted between lines.		ST
CURTAIN MODULE RH [GND-SHORT]	● RH side curtain air bag module circuit is shorted to ground.		RS
CONTROL UNIT	● Diagnosis sensor unit is malfunctioning.	<ol style="list-style-type: none"> 1. Visually check the wiring harness connection. 2. Replace the diagnosis sensor unit. 	BT

* 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.

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SUPPLEMENTAL RESTRAINT SYSTEM (SRS)

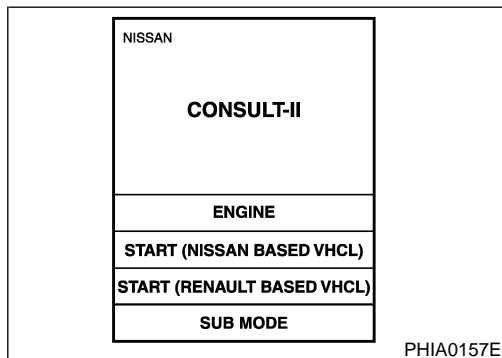
Trouble Diagnoses with CONSULT-II (Cont'd)



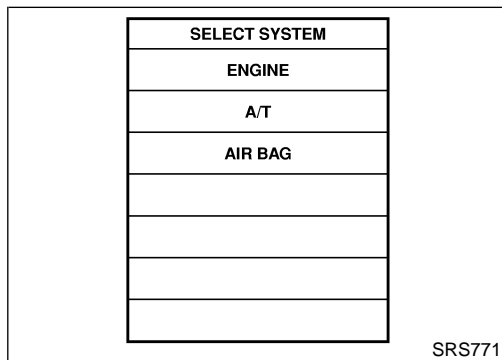
DIAGNOSTIC PROCEDURE 3

Final checking after repairing SRS by using CONSULT-II —
NARS0045S02
Diagnosis mode

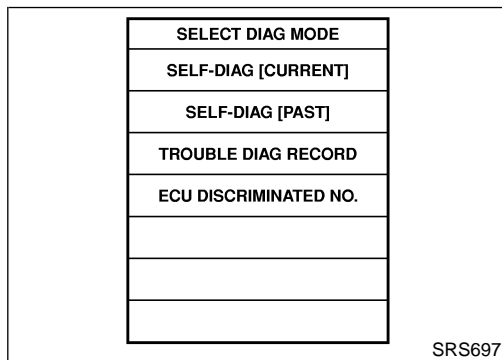
1. After repairing SRS, connect both battery cables.
2. Connect CONSULT-II to Data link connector.
3. Turn ignition switch from "OFF" to "ON".



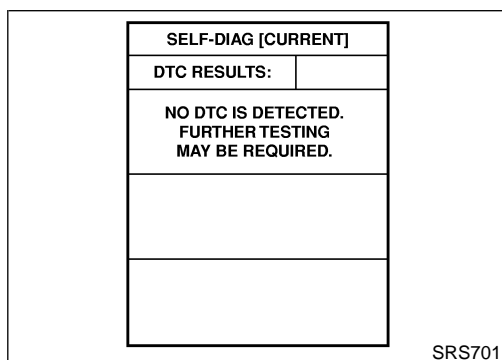
4. Touch "START (NISSAN BASED VHCL)".



5. Touch "AIR BAG".



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



7. If no malfunction is detected on "SELF-DIAG [CURRENT]", repair of SRS is completed. Go to step 8.
 If any malfunction is displayed on "SELF-DIAG [CURRENT]", the malfunctioning part is not repaired completely or another malfunctioning part is detected. Go to DIAGNOSTIC PROCEDURE 2, page RS-32, and repair malfunctioning part completely.

SUPPLEMENTAL RESTRAINT SYSTEM (SRS)

 Trouble Diagnoses with CONSULT-II (Cont'd)

SELF-DIAG [CURRENT]	
DTC RESULTS:	
DRIVER AIR BAG MODULE [OPEN]	
ERASE	

SHIA0180E

8. Touch "ERASE".

NOTE:

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

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

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

SRS697

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

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

SRS702

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 CONSULT-II.

13. Go to "SRS Operation Check", page RS-31 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

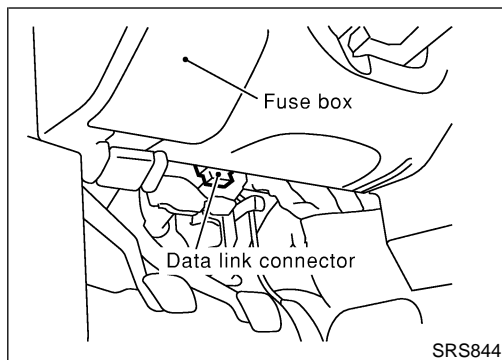
NARS0045S03

1	CONSIDER POSSIBILITY OF NOT ERASING SELF-DIAGNOSTIC RESULTS AFTER REPAIRING	
Is it the first time for maintenance of SRS?		
Yes or No		
Yes	▶	Go to DIAGNOSTIC PROCEDURE 5 (RS-38).
No	▶	Self-diagnostic results "SELF-DIAG [PAST]" (previously stored in the memory) might not be erased after repair. Go to DIAGNOSTIC PROCEDURE 3, step 8 (RS-36).

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SUPPLEMENTAL RESTRAINT SYSTEM (SRS)

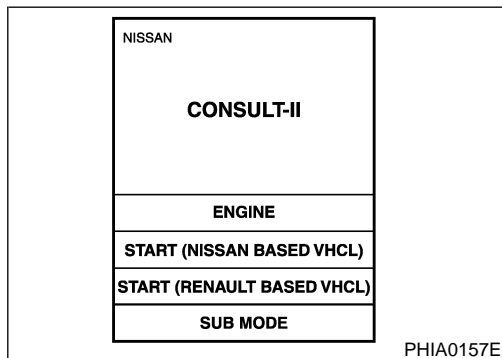
Trouble Diagnoses with CONSULT-II (Cont'd)



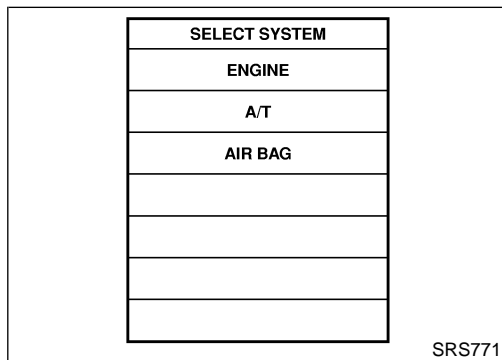
DIAGNOSTIC PROCEDURE 5

Inspecting SRS intermittent malfunction by using CONSULT-II NARS0045S04
 — Diagnosis mode

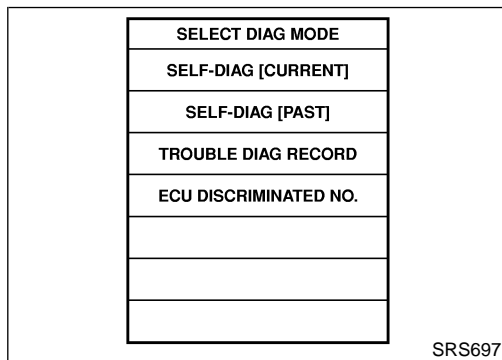
1. Turn ignition switch "OFF".
2. Connect CONSULT-II to data link connector.



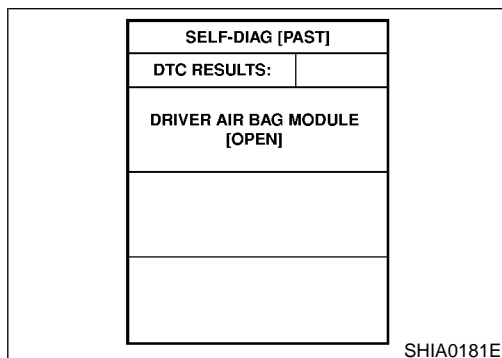
3. Turn ignition switch "ON".
4. Touch "START (NISSAN BASED VHCL)".



5. Touch "AIR BAG".




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



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

SUPPLEMENTAL RESTRAINT SYSTEM (SRS)

 Trouble Diagnoses with CONSULT-II (Cont'd)

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

SRS702

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

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

SRS697

8. Touch “TROUBLE DIAG RECORD”.

NOTE:

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

TROUBLE DIAG RECORD	
DTC RESULTS:	
DRIVER AIR BAG MODULE [OPEN]	

SHIA0182E

9. Diagnostic code is displayed on “TROUBLE DIAG RECORD”.

10. Touch “PRINT”.

11. Compare diagnostic codes to “Intermittent Malfunction Diagnostic Code Chart”, page RS-40.

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-36, for final checking.

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SUPPLEMENTAL RESTRAINT SYSTEM (SRS)

 Trouble Diagnoses with CONSULT-II (Cont'd)

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

NARS0045S0401

Diagnostic item	Explanation		Repair order
NO DTC IS DETECTED.	When malfunction is indicated by the “AIR BAG” warning lamp in User mode	<ul style="list-style-type: none"> Low battery voltage (Less than 9V) 	<ul style="list-style-type: none"> Go to DIAGNOSTIC PROCEDURE 3 (RS-36) after charging battery.
	<ul style="list-style-type: none"> No malfunction is detected. 		<ul style="list-style-type: none"> Go to DIAGNOSTIC PROCEDURE 3 (RS-36).
DRIVER AIRBAG MODULE [OPEN]	<ul style="list-style-type: none"> Driver air bag module circuit is open. (including the spiral cable) 		<ol style="list-style-type: none"> Visually check the wiring harness connection. Replace the harness if it has visible damage. If the harness check result is OK, replace driver air bag module diagnosis sensor unit and spiral cable.
DRIVER AIRBAG MODULE [VB-SHORT]	<ul style="list-style-type: none"> Driver air bag module circuit is shorted to a power supply circuit. (including the spiral cable) 		
DRIVER AIRBAG MODULE [GND-SHORT]	<ul style="list-style-type: none"> Driver air bag module circuit is shorted to ground. (including the spiral cable) 		
DRIVER AIRBAG MODULE [SHORT]	<ul style="list-style-type: none"> Driver air bag module circuit is shorted between lines. 		
ASSIST A/B MODULE [VB-SHORT]	<ul style="list-style-type: none"> Front passenger air bag module circuit is shorted to a power supply circuit. 		<ol style="list-style-type: none"> Visually check the wiring harness connection. Replace the harness if it has visible damage. If the harness check result is OK, replace front passenger air bag module and diagnosis sensor unit.
ASSIST A/B MODULE [OPEN]	<ul style="list-style-type: none"> Front passenger air bag module circuit is open. 		
ASSIST A/B MODULE [GND-SHORT]	<ul style="list-style-type: none"> Front passenger air bag module circuit is shorted to ground. 		
ASSIST A/B MODULE [SHORT]	<ul style="list-style-type: none"> Front passenger air bag module circuit is shorted between lines. 		
SIDE MODULE LH [OPEN]	<ul style="list-style-type: none"> Front LH side air bag module circuit is open. 		<ol style="list-style-type: none"> Visually check the wiring harness connection. Replace the harness if it has visible damage. If the harness check is OK, replace the diagnosis sensor unit and front LH side air bag module.
SIDE MODULE LH [VB-SHORT]	<ul style="list-style-type: none"> Front LH side air bag module circuit is shorted to a power supply circuit. 		
SIDE MODULE LH [GND-SHORT]	<ul style="list-style-type: none"> Front LH side air bag module circuit is shorted to ground. 		
SIDE MODULE LH [SHORT]	<ul style="list-style-type: none"> Front LH side air bag module circuit is shorted between lines. 		
SIDE MODULE RH [OPEN]	<ul style="list-style-type: none"> Front RH side air bag module circuit is open. 		<ol style="list-style-type: none"> Visually check the wiring harness connection. Replace the harness if it has visible damage. If the harness check is OK, replace the diagnosis sensor unit and front RH side air bag module.
SIDE MODULE RH [VB-SHORT]	<ul style="list-style-type: none"> Front RH side air bag module circuit is shorted to a power supply circuit. 		
SIDE MODULE RH [GND-SHORT]	<ul style="list-style-type: none"> Front RH side air bag module circuit is shorted to ground. 		
SIDE MODULE RH [SHORT]	<ul style="list-style-type: none"> Front RH side air bag module circuit is shorted between lines. 		
SATELLITE SENS LH [UNIT FAIL] SATELLITE SENS LH [COMM FAIL]	<ul style="list-style-type: none"> LH side air bag (Satellite) sensor 		<ol style="list-style-type: none"> Visually check the wiring harness connection. Replace the harness if it has visible damage. If the harness check is OK, replace the diagnosis sensor unit and LH side air bag (Satellite) sensor.

SUPPLEMENTAL RESTRAINT SYSTEM (SRS)

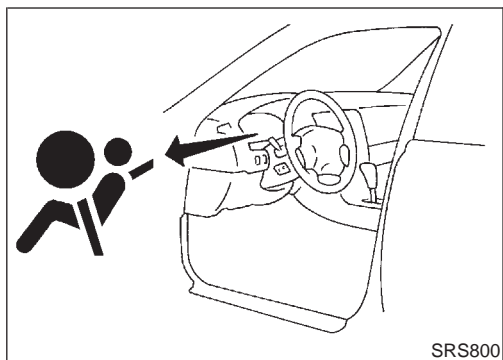
 Trouble Diagnoses with CONSULT-II (Cont'd)

Diagnostic item	Explanation	Repair order	
SATELLITE SENS RH [UNIT FAIL] SATELLITE SENS RH [COMM FAIL]	<ul style="list-style-type: none"> RH side air bag (Satellite) sensor 	<ol style="list-style-type: none"> Visually check the wiring harness connection. Replace the harness if it has visible damage. If the harness check is OK, replace the diagnosis sensor unit and RH side air bag (Satellite) sensor. 	GI MA EM
PRE-TEN FRONT LH [OPEN]	<ul style="list-style-type: none"> Front LH seat belt pre-tensioner circuit is open. 	<ol style="list-style-type: none"> Visually check the wiring harness connections. Replace the harness if it has visible damage. If the harness check is OK, replace the diagnosis sensor unit and front LH seat belt. 	LC
PRE-TEN FRONT LH [VB-SHORT]	<ul style="list-style-type: none"> Front LH seat belt pre-tensioner circuit is shorted to a power supply circuit. 		EC
PRE-TEN FRONT LH [GND-SHORT]	<ul style="list-style-type: none"> Front LH seat belt pre-tensioner circuit is shorted to ground. 		FE
PRE-TEN FRONT LH [SHORT]	<ul style="list-style-type: none"> Front LH pre-tensioner circuit is shorted to between lines. 		CL
PRE-TEN FRONT RH [OPEN/VB-SHORT]	<ul style="list-style-type: none"> Front RH seat belt pre-tensioner circuit is open. 	<ol style="list-style-type: none"> Visually check the wiring harness connections. Replace the harness if it has visible damage. If the harness check is OK, replace the diagnosis sensor unit and front RH seat belt. 	MT
PRE-TEN FRONT RH [VB-SHORT]	<ul style="list-style-type: none"> Front RH seat belt pre-tensioner circuit is shorted to a power supply circuit. 		AT
PRE-TEN FRONT RH [SHORT]	<ul style="list-style-type: none"> Front RH pre-tensioner circuit is shorted between lines. 		TF
PRE-TEN FRONT RH [GND-SHORT]	<ul style="list-style-type: none"> Front RH pre-tensioner circuit is shorted to ground. 		
CURTAIN MODULE LH [OPEN]	<ul style="list-style-type: none"> LH side curtain air bag module circuit is open. 	<ol style="list-style-type: none"> Visually check the wiring harness connection. Replace the harness if it has visible damage. If the harness check is OK, replace the diagnosis sensor unit and LH side curtain air bag module. 	PD
CURTAIN MODULE LH [VB-SHORT]	<ul style="list-style-type: none"> LH side curtain air bag module circuit is shorted to a power supply circuit. 		AX
CURTAIN MODULE LH [GND-SHORT]	<ul style="list-style-type: none"> LH side curtain air bag module circuit is shorted to ground. 		SU
CURTAIN MODULE LH [SHORT]	<ul style="list-style-type: none"> LH side curtain air bag module circuit is shorted between lines. 		
CURTAIN MODULE RH [OPEN]	<ul style="list-style-type: none"> RH side curtain air bag module circuit is open. 	<ol style="list-style-type: none"> Visually check the wiring harness connection. Replace the harness if it has visible damage. If the harness check is OK, replace the diagnosis sensor unit and RH side curtain air bag module. 	BR
CURTAIN MODULE RH [VB-SHORT]	<ul style="list-style-type: none"> RH side curtain air bag module circuit is shorted to a power supply circuit. 		ST
CURTAIN MODULE RH [SHORT]	<ul style="list-style-type: none"> RH side curtain air bag module circuit is shorted between lines. 		BT
CURTAIN MODULE RH [GND-SHORT]	<ul style="list-style-type: none"> RH side curtain air bag module circuit is shorted to ground. 		HA
CONTROL UNIT	<ul style="list-style-type: none"> Diagnosis sensor unit is malfunctioning. 	<ol style="list-style-type: none"> Visually check the wiring harness connection. Replace the harness if it has visible damage. If the harness check is OK, replace the diagnosis sensor unit. 	SC EL

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

SUPPLEMENTAL RESTRAINT SYSTEM (SRS)

⊗ Trouble Diagnoses without CONSULT-II



⊗ Trouble Diagnoses without CONSULT-II

NARS0046

DIAGNOSTIC PROCEDURE 6

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

NARS0046S01

NOTE:

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

1. Turn ignition switch "ON".
2. After "AIR BAG" warning lamp lights for 7 seconds, turn ignition switch "OFF" within 1 second.
3. Wait more than 3 seconds.
4. Repeat steps 1 to 3 twice (Perform 3 times in total).
5. Turn ignition switch "ON".
SRS is now in Diagnosis mode.
6. "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-48.

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

SUPPLEMENTAL RESTRAINT SYSTEM (SRS)

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

No.	"AIR BAG" warning lamp flash pattern — Diagnosis mode —	SRS condition
1	<p style="text-align: right;">SRS333</p>	<p>a through b are repeated.</p> <ul style="list-style-type: none"> • Diagnosis results (previously stored in the memory) might not be erased after repair. • Intermittent malfunction has been detected in the past. Go to DIAGNOSTIC PROCEDURE 8 (RS-49).
2	<p style="text-align: right;">SRS341</p>	<p>a through d are repeated.</p> <p>b — Driver and passenger air bag and seat belt pre-tensioner marker (For identifying driver air bag, passenger air bag and/or seat belt pre-tensioners malfunctioning)</p> <p>d — Indicates malfunctioning part. The number of flash varies with malfunctioning part (0.5 sec. ON and 0.5 sec. OFF is counted as one flash.)</p>
3	<p style="text-align: right;">SRS342-A</p>	<p>a through f are repeated.</p> <p>b, c, d — Side air bag marker (For identifying side air bag malfunctioning)</p> <p>f — Indicates malfunctioning part. The number of flash varies with malfunctioning part (0.5 sec. ON and 0.5 sec. OFF is counted as one flash.)</p>

- 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-44, and locate malfunctioning part.
- 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-48.

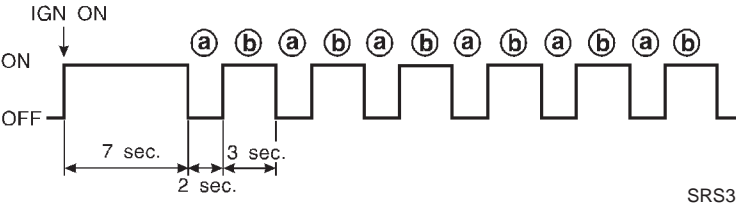
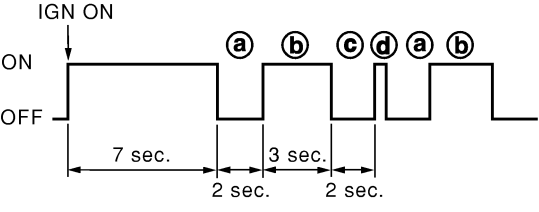
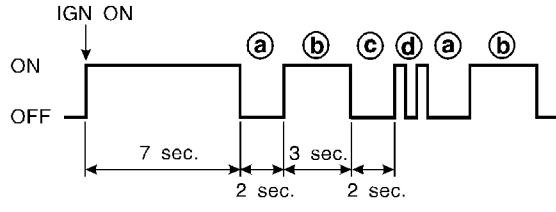
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SUPPLEMENTAL RESTRAINT SYSTEM (SRS)

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

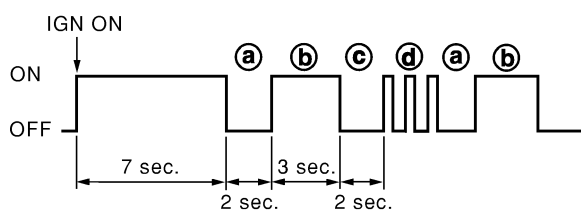
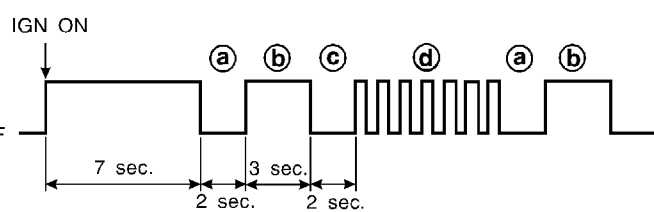
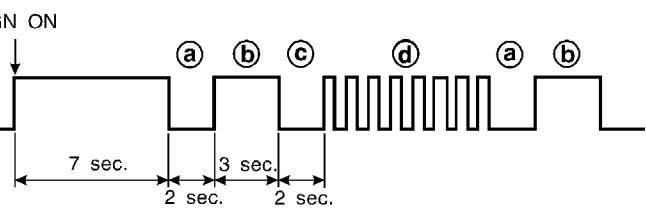
Air Bag Warning Lamp Flash Code Chart (Diagnosis mode)

NARS0046S0101

<ul style="list-style-type: none"> • Diagnosis results (previously stored in the memory) might not be erased after repair. • Intermittent malfunction has been detected in the past. 	<p style="text-align: center;">Flash pattern</p>  <p style="text-align: right;">SRS333</p> <p>a through b are repeated.</p> <p>Repair order</p> <ul style="list-style-type: none"> • Go to DIAGNOSTIC PROCEDURE 8 (RS-49).
<p>Front RH seat belt pre-tensioner circuit is malfunctioning. (d: 1 flash)</p>	<p style="text-align: center;">Flash pattern</p>  <p style="text-align: right;">SRS801</p> <p>a through d are repeated. d — One flash indicates malfunctioning front RH seat belt pre-tensioner circuit.</p> <p>Repair order ("Recheck SRS at each replacement").</p> <ol style="list-style-type: none"> 1. Visually check the wiring harness connections. 2. Replace the harness if it has visible damage. 3. Replace front RH seat belt pre-tensioner. 4. Replace the diagnosis sensor unit. 5. Replace the related harness.
<p>Driver air bag module circuit is malfunctioning. (d: 2 flashes)</p>	<p style="text-align: center;">Flash pattern</p>  <p style="text-align: right;">SRS334</p> <p>a through d are repeated. d — Two flashes indicate malfunctioning driver's air bag module circuit.</p> <p>Repair order ("Recheck SRS at each replacement.")</p> <ol style="list-style-type: none"> 1. Visually check the wiring harness connection. 2. Replace the harness if it has visible damage. 3. Replace the spiral cable. 4. Replace driver air bag module. 5. Replace the diagnosis sensor unit. 6. Replace the related harness.

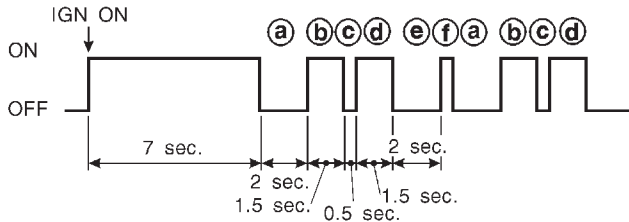
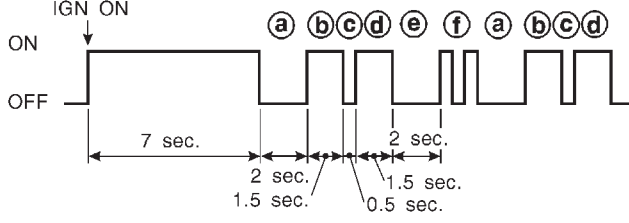
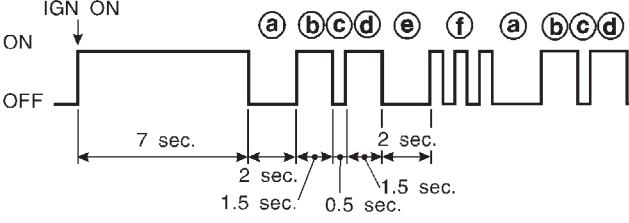
SUPPLEMENTAL RESTRAINT SYSTEM (SRS)

Trouble Diagnoses without CONSULT-II (Cont'd)

<p>Front LH seat belt pre-tensioner circuit is malfunctioning. (d: 3 flashes)</p>	<p style="text-align: center;">Flash pattern</p>  <p style="text-align: right;">SRS802</p>	<p>a through d are repeated. d — Three flashes indicate malfunctioning front LH seat belt pre-tensioner circuit.</p>
	<p>Repair order ("Recheck SRS at each replacement").</p>	
	<ol style="list-style-type: none"> 1. Visually check the wiring harness connections. 2. Replace the harness if it has visible damage. 3. Replace front LH seat belt pre-tensioner. 4. Replace the diagnosis sensor unit. 5. Replace the related harness. 	
<p>Diagnosis sensor unit is malfunctioning. (d: 7 flashes)</p>	<p style="text-align: center;">Flash pattern</p>  <p style="text-align: right;">SRS335</p>	<p>a through d are repeated. d — Seven flashes indicate malfunctioning diagnosis sensor unit.</p>
	<p>Repair order ("Recheck SRS at each replacement.")</p>	
	<ol style="list-style-type: none"> 1. Visually check the wiring harness connections. 2. Replace the harness if it has visible damage. 3. Replace the diagnosis sensor unit. 4. Replace the related harness. 	
<p>Front passenger air bag module circuit is malfunctioning. (d: 8 flashes)</p>	<p style="text-align: center;">Flash pattern</p>  <p style="text-align: right;">SRS336</p>	<p>a through d are repeated. d — Eight flashes indicate malfunctioning front passenger air bag module circuit.</p>
	<p>Repair order ("Recheck SRS at each replacement.")</p>	
	<ol style="list-style-type: none"> 1. Visually check the wiring harness connection. 2. Replace the harness if it has visible damage. 3. Replace front passenger air bag module. 4. Replace the diagnosis sensor unit. 5. Replace the related harness. 	

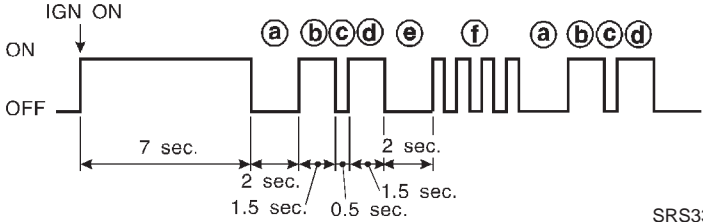
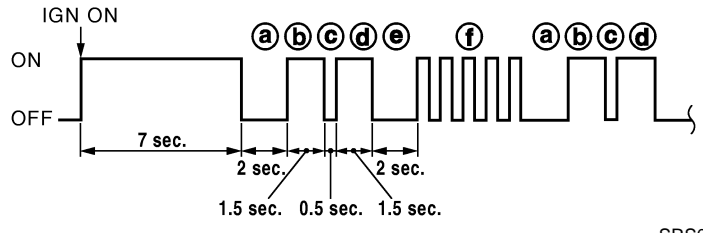
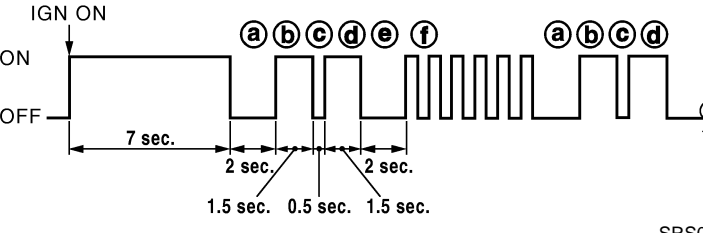
SUPPLEMENTAL RESTRAINT SYSTEM (SRS)

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

<p>Front RH side air bag module circuit is malfunctioning. (f: 1 flash)</p>	<p style="text-align: center;">Flash pattern</p>  <p style="text-align: right;">a through f are repeated. f — One flash indicates malfunctioning front RH side air bag module circuit.</p> <p style="text-align: right;">SRS338</p>
<p>Repair order ("Recheck SRS at each replacement.")</p>	
<ol style="list-style-type: none"> 1. Visually check the wiring harness connection. 2. Replace the harness if it has visible damage. 3. Replace front RH side air bag module. 4. Replace the diagnosis sensor unit. 5. Replace the related harness. 	
<p>Front LH side air bag module circuit is malfunctioning. (f: 2 flashes)</p>	<p style="text-align: center;">Flash pattern</p>  <p style="text-align: right;">a through f are repeated. f — Two flashes indicate malfunctioning front LH side air bag module circuit.</p> <p style="text-align: right;">SRS337</p>
<p>Repair order ("Recheck SRS at each replacement.")</p>	
<ol style="list-style-type: none"> 1. Visually check the wiring harness connection. 2. Replace the harness if it has visible damage. 3. Replace front LH side air bag module. 4. Replace the diagnosis sensor unit. 5. Replace the related harness. 	
<p>RH side air bag (Satellite) sensor is malfunctioning. (f: 3 flashes)</p>	<p style="text-align: center;">Flash pattern</p>  <p style="text-align: right;">a through f are repeated. f — Three flashes indicate malfunctioning RH side air bag (Satellite) sensor circuit.</p> <p style="text-align: right;">SRS340</p>
<p>Repair order ("Recheck SRS at each replacement.")</p>	
<ol style="list-style-type: none"> 1. Visually check the wiring harness connection. 2. Replace the harness if it has visible damage. 3. Replace the RH side air bag (Satellite) sensor. 4. Replace the diagnosis sensor unit. 5. Replace the related harness. 	

SUPPLEMENTAL RESTRAINT SYSTEM (SRS)

Trouble Diagnoses without CONSULT-II (Cont'd)

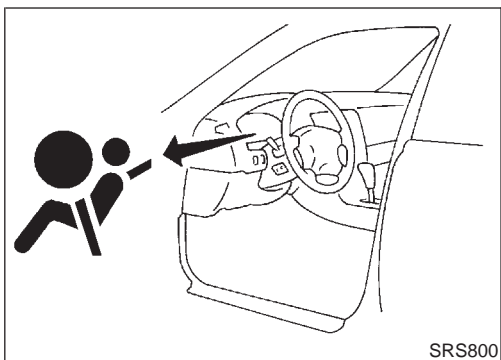
<p>LH side air bag (Satellite) sensor is malfunctioning. (f: 4 flashes)</p>	<p style="text-align: center;">Flash pattern</p>  <p>a through f are repeated. f — Four flashes indicate malfunctioning LH side air bag (Satellite) sensor circuit.</p> <p style="text-align: right;">SRS339-A</p>	<p>GI MA EM LC</p>	
<p>Repair order ("Recheck SRS at each replacement.")</p>			
<ol style="list-style-type: none"> 1. Visually check the wiring harness connection. 2. Replace the harness if it has visible damage. 3. Replace the LH side air bag (Satellite) sensor. 4. Replace the diagnosis sensor unit. 5. Replace the related harness. 			<p>EC FE</p>
<p>Side curtain air bag module (RH) circuit is malfunctioning. (f: 5 flashes)</p>	<p style="text-align: center;">Flash pattern</p>  <p>a through f are repeated. f — Five flashes indicate malfunctioning RH side curtain air bag module circuit.</p> <p style="text-align: right;">SRS024A</p>	<p>CL MT AT TF</p>	
<p>Repair order ("Recheck SRS at each replacement.")</p>			
<ol style="list-style-type: none"> 1. Visually check the wiring harness connection. 2. Replace the harness if it has visible damage. 3. Replace RH side curtain air bag module. 4. Replace the diagnosis sensor unit. 5. Replace the related harness. 			<p>PD AX</p>
<p>LH side curtain air bag module circuit is malfunctioning. (f: 6 flashes)</p>	<p style="text-align: center;">Flash pattern</p>  <p>a through f are repeated. f — Six flashes indicate malfunctioning LH side curtain air bag module circuit.</p> <p style="text-align: right;">SRS025A</p>	<p>SU BR ST RS</p>	
<p>Repair order ("Recheck SRS at each replacement.")</p>			
<ol style="list-style-type: none"> 1. Visually check the wiring harness connection. 2. Replace the harness if it has visible damage. 3. Replace LH side curtain air bag module. 4. Replace the diagnosis sensor unit. 5. Replace the related harness. 			<p>BT HA</p>

* 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.

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SUPPLEMENTAL RESTRAINT SYSTEM (SRS)

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



DIAGNOSTIC PROCEDURE 7

Final checking after repairing SRS by using "AIR BAG" warning lamp — Diagnosis mode and User mode NARS0046S02

1. After repairing SRS connect both battery cables.
2. Turn ignition switch from "OFF" to "ON".
3. "AIR BAG" warning lamp operates in Diagnosis mode as follows:


No.	"AIR BAG" warning lamp flash pattern — Diagnosis mode —	SRS condition
1		<p>a through b are repeated.</p> <p>No malfunction is detected or repair is completed. No further action is necessary.</p>
2		<p>a through d are repeated.</p> <p>b — Driver and passenger air bag and seat belt pre-tensioner marker (For identifying driver air bag, passenger air bag and/or seat belt pre-tensioners malfunctioning)</p> <p>d — Indicates malfunctioning part. The number of flashes varies with malfunctioning part (0.5 sec. ON and 0.5 sec. OFF is counted as one flash.)</p> <p>The system is malfunctioning and needs to be repaired.</p>
3		<p>a through f are repeated.</p> <p>b, c, d — Side air bag marker (For identifying side air bag malfunctioning)</p> <p>f — Indicates malfunctioning part. The number of flashes varies with malfunctioning part (0.5 sec. ON and 0.5 sec. OFF is counted as one flash.)</p>

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.

4. 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-42, and repair malfunctioning part completely.
5. Turn ignition switch "ON". "AIR BAG" warning lamp operates in User mode. Compare "AIR BAG" warning lamp operation to the chart below.

SUPPLEMENTAL RESTRAINT SYSTEM (SRS)

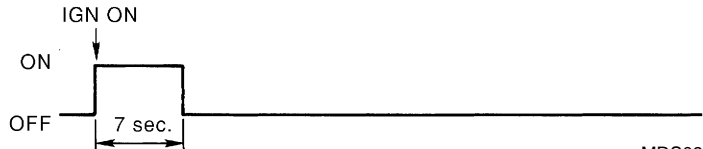
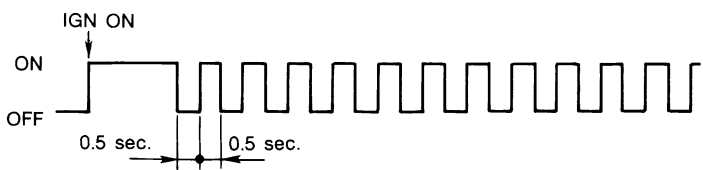
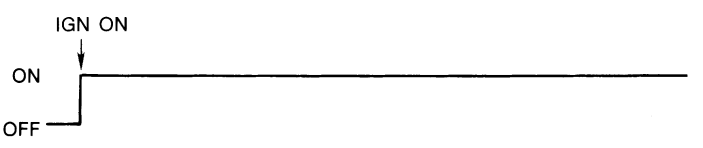


 Trouble Diagnoses without CONSULT-II (Cont'd)

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.
- 4) Repeat steps 1 to 3 twice (Perform 3 times in total).
- 5) Turn ignition switch "ON".

SRS is now in User mode.

"AIR BAG" warning lamp operation — User mode —	SRS condition	Reference item
 <p>MRS095A</p>	No malfunction is detected. No further action is necessary.	—
 <p>MRS096A</p>	The system is malfunctioning and needs to be repaired as indicated.	Go to DIAGNOSTIC PROCEDURE 6 (RS-42).
 <p>MRS097A</p>	Air bag is deployed. Seat belt pre-tensioner is activated.	Go to COLLISION DIAGNOSIS (RS-53).
 <p>MRS098A</p>	Air bag fuse, diagnosis sensor unit or harness is malfunctioning and needs to be repaired.	Go to DIAGNOSTIC PROCEDURE 9 (RS-50).
 <p>MRS098A</p>	One of the following has occurred and needs to be repaired. <ul style="list-style-type: none"> • Meter fuse is blown. • "AIR BAG" warning lamp circuit has open or short. • Diagnosis sensor unit is malfunctioning. 	Go to DIAGNOSTIC PROCEDURE 10 (RS-52).

DIAGNOSTIC PROCEDURE 8 (CONTINUED FROM DIAGNOSTIC PROCEDURE 6)

Inspecting SRS malfunctioning record

NARS0046S03

1	CONSIDER POSSIBILITY OF NOT ERASING SELF-DIAGNOSTIC RESULT AFTER REPAIRING	
Is it the first time for maintenance of SRS?		
Yes or No		
Yes	▶	Go to DIAGNOSTIC PROCEDURE 5 (RS-38). (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-48).

SUPPLEMENTAL RESTRAINT SYSTEM (SRS)

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

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

=NARS0047

DIAGNOSTIC PROCEDURE 9

NARS0047S01

1	SEE THE DEPLOYMENT OF AIR BAG MODULE	
Is air bag module deployed?		
Yes or No		
Yes	▶	Refer to COLLISION DIAGNOSIS (RS-53).
No	▶	GO TO 2.

2	CHECK AIR BAG FUSE	
Is SRS "Air Bag" fuse OK?		
SRS577		
OK or NG		
OK	▶	GO TO 4.
NG	▶	GO TO 3.

3	CHECK AIR BAG FUSE AGAIN	
Replace "AIR BAG" fuse and turn ignition switch ON.		
Is "AIR BAG" fuse blown again?		
Yes	▶	Repair main harness and/or replace air bag harness.
No	▶	INSPECTION END

SUPPLEMENTAL RESTRAINT SYSTEM (SRS)

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

4	CHECK DIAGNOSIS SENSOR UNIT									
<p>Ⓟ Connect CONSULT-II and touch "START".</p> <ul style="list-style-type: none"> ● Is "AIR BAG" displayed on CONSULT-II? 										
<table border="1" style="margin: auto;"> <tr><td style="text-align: center;">SELECT SYSTEM</td></tr> <tr><td style="text-align: center;">ENGINE</td></tr> <tr><td style="text-align: center;">A/T</td></tr> <tr><td style="text-align: center;">AIR BAG</td></tr> <tr><td style="text-align: center;"> </td></tr> <tr><td style="text-align: center;"> </td></tr> <tr><td style="text-align: center;"> </td></tr> <tr><td style="text-align: center;"> </td></tr> </table>			SELECT SYSTEM	ENGINE	A/T	AIR BAG				
SELECT SYSTEM										
ENGINE										
A/T										
AIR BAG										
SRS771										
Yes or No										
Yes	▶	GO TO 5.								
No	▶	Visually check the wiring harness connection of diagnosis sensor unit. If the harness connection check result is OK, replace diagnosis sensor unit.								

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

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SUPPLEMENTAL RESTRAINT SYSTEM (SRS)

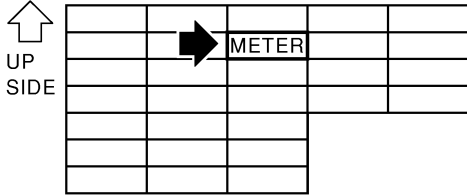
Trouble Diagnoses: "AIR BAG" Warning Lamp Does Not Turn On

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

=NARS0048

DIAGNOSTIC PROCEDURE 10

NARS0048S01

1	CHECK "METER" FUSE	
Is meter fuse OK?		
		
SRS852		
OK or NG		
OK	▶	GO TO 3.
NG	▶	GO TO 2.

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

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

Collision Diagnosis

=NARS0049

NARS0049S01

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-31). 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).
- 2) Conduct self-diagnosis using CONSULT-II or "AIR BAG" warning lamp. Refer to "SRS Operation Check" for details (RS-31). Ensure entire SRS operation properly.

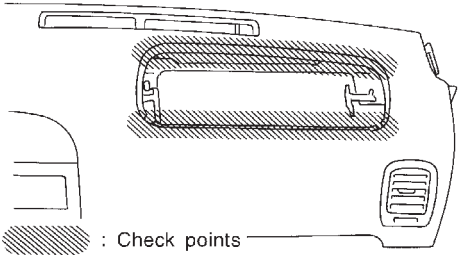
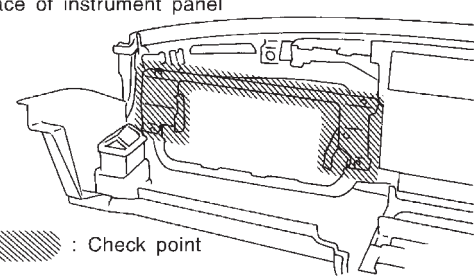
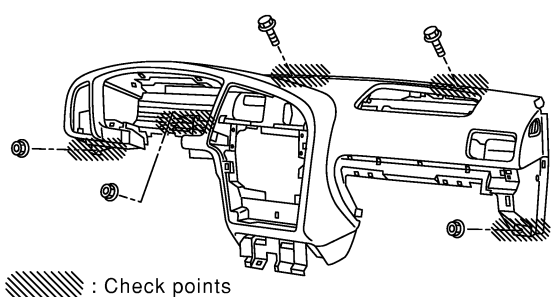
SRS Inspection (For frontal collision)

NARS0049S0101

Part	SRS is activated	SRS is NOT activated
Air bag module (driver and front passenger side)	REPLACE Install with new bolts.	<ol style="list-style-type: none"> 1. Remove air bag module. Check harness cover and connectors for damage, terminals for deformation, and harness for binding. 2. <ol style="list-style-type: none"> a. Install driver air bag module into the steering wheel to check fit and alignment with the wheel. b. Install front passenger air bag module into the instrument panel to check fit with the instrument panel. 3. No damage found, reinstall with new bolts. 4. If damaged—REPLACE. Install air bag modules with new bolts.
Seat belt pre-tensioner assembly	REPLACE Install seat belt pre-tensioner with new bolts.	<ol style="list-style-type: none"> 1. Remove seat belt pre-tensioners. Check harness cover and connectors for damage, terminals for deformation, and harness for binding. 2. Check belts for damage and anchors for loose mounting. 3. Check retractor for smooth operation. 4. If no damage is found, reinstall seat belt pre-tensioner assembly. 5. If damaged—REPLACE. Install the seat belt pre-tensioners with new bolts coated with bonding agent.
Diagnosis sensor unit	REPLACE Install with new bolts.	<ol style="list-style-type: none"> 1. Check case for dents, cracks or deformation. 2. Check connectors for damage, and terminals for deformation. 3. If no damage is found, reinstall with new bolts and ground bolt. 4. If damaged—REPLACE. Install diagnosis sensor unit with new bolts and ground bolt coated with bonding agent.
Steering wheel		<ol style="list-style-type: none"> 1. Visually check steering wheel for deformation. 2. Check harness (built into steering wheel) and connectors for damage, and terminals for deformation. 3. Install air bag module to check fit or alignment with steering wheel. 4. Check steering wheel for excessive free play. 5. If no damage is found, reinstall with bolts. 6. If damaged—REPLACE.
Spiral cable		<ol style="list-style-type: none"> 1. Visually check spiral cable and combination switch for damage. 2. Check connectors and protective tape for damage. 3. Check steering wheel for noise, binding or heavy operation. 4. If no damage is found, reinstall with bolts. 5. If damaged—REPLACE.
Harness and Connectors		<ol style="list-style-type: none"> 1. Check connectors for poor connection, damage, and terminals for deformation. 2. Check harness for binding, chafing, cuts, or deformation. 3. If no damage is found, reinstall the harness and connectors. 4. Damaged—REPLACE damaged section of harness. Do not attempt to repair, splice or modify any SRS harness.

SUPPLEMENTAL RESTRAINT SYSTEM (SRS)

Collision Diagnosis (Cont'd)

Part	SRS is activated	SRS is NOT activated
Instrument panel	<p>1. When passenger air bag inflates, check the following points for bending, deformation or cracks.</p> <ul style="list-style-type: none"> ● Opening portion for passenger air bag 	 <p>: Check points</p> <p>SRS366</p> <ul style="list-style-type: none"> ● Passenger air bag module brackets <p>Back face of instrument panel</p>  <p>: Check point</p> <p>SRS367</p> <ul style="list-style-type: none"> ● The portions securing the instrument panel  <p>: Check points</p> <p>SRS876</p> <p>2. If no damage is found, reinstall the instrument panel. 3. If damaged—REPLACE the instrument panel with bolts.</p>

SUPPLEMENTAL RESTRAINT SYSTEM (SRS)

Collision Diagnosis (Cont'd)

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FOR SIDE COLLISION

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

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

- 1) Replace the following component:
 - All parts of front seatback (including front seatback frame) with side air bag module (on the side on which side air bag is activated)
 - Side curtain air bag module (on the side on which side curtain air bag is activated)
 - Diagnosis sensor unit
 - Side air bag (Satellite) sensor (on the side on which side air bag is activated)
- 2) Check the SRS components and the related parts using the table shown below.
 - Replace any SRS components and the related parts showing visible signs of damage (dents, cracks, deformation).
- 3) Conduct self-diagnosis using CONSULT-II or “AIR BAG” warning lamp. Refer to “SRS Operation Check” for details (RS-31). Ensure entire SRS operation properly.

When SRS is not activated in the side collision:

- 1) Check the SRS components and the related parts using the table shown below.
 - Replace any SRS components and the related parts showing visible signs of damage (dents, cracks, deformation).
- 2) Conduct self-diagnosis using CONSULT-II or “AIR BAG” warning lamp. Refer to “SRS Operation Check” for details (RS-31). Ensure entire SRS operation properly.

SRS Inspection (For side collision)

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Part	Side air bag is activated	SRS is NOT activated
(LH or RH) side curtain air bag module	Replace the side curtain air bag module. (Repair the center pillar inner, etc. before installing new one if damaged.)	<ol style="list-style-type: none"> 1. Check for visible signs of damage (dents, tears, deformation) of the center pillar on the collision side. 2. If damaged—Remove the side curtain air bag module. 3. Check for visible signs of damaged (tears etc.) of the side curtain air bag module. 4. Check harness and connectors for damage, and terminals for deformation. 5. If no damaged is found, reinstall the side curtain air bag module with new bolts. 6. If damaged—REPLACE the side curtain air bag module with new bolts.
Front (LH or RH) side air bags module	REPLACE all parts of front seatback with deployed side air bag module.	<ol style="list-style-type: none"> 1. Check for visible signs of damage (dents, tears, deformation) of the seatback on the collision side. 2. If damaged—REPLACE the damaged seat parts with new bolts and remove the front (LH or RH) side air bag module. 3. Check for visible signs of damaged (tears etc.) of the front (LH or RH) side air bag module. 4. Check harness and connectors for damage, and terminals for deformation. 5. If no damaged is found, reinstall the front (LH or RH) side air bag module with new torx nuts coated with bonding agent. 6. If damaged—REPLACE the front (LH or RH) side air bag module with new torx nuts coated with bonding agent.
(LH or RH) side air bag (Satellite) sensor	REPLACE the satellite sensor on the collision side with new nuts coated with bonding agent. (Repair the center pillar inner, etc. before installing new one if damaged.)	<ol style="list-style-type: none"> 1. Remove the (LH or RH) side air bag (Satellite) sensor on the collision side. Check harness connectors for damage, terminals for deformation, and harness for binding. 2. Check for visible signs of damage (dents, cracks, deformation) of the LH or RH side air bag (Satellite) sensor. 3. Install the satellite sensor to check fit. 4. If no damage is found, reinstall the (LH or RH) side air bag (Satellite) sensor with new nuts coated with bonding agent. 5. If damaged—REPLACE the (LH or RH) side air bag (Satellite) sensor with new nuts coated with bonding agent.

SUPPLEMENTAL RESTRAINT SYSTEM (SRS)

Collision Diagnosis (Cont'd)

Part	Side air bag is activated	SRS is NOT activated
Diagnosis sensor unit	REPLACE the diagnosis sensor unit with the new bolts.	<ol style="list-style-type: none"> 1. Check case and bracket for dents, cracks or deformation. 2. Check connectors for damage, and terminals for deformation. 3. If no damage is found, reinstall the diagnosis sensor unit with new special bolts and ground bolt. 4. If damaged—REPLACE. Install the diagnosis sensor unit with new special bolts and ground bolt.
Seat belt pre-tensioner assembly	<ol style="list-style-type: none"> 1. Check if the seat belt can be extended smoothly. If the seat belt cannot be extended smoothly. <ul style="list-style-type: none"> – Check for deformation of the center pillar inner. – If the center pillar inner has no damage, REPLACE the seat belt pre-tensioner assembly. 2. Remove the seat belt pre-tensioner assembly on the collision side. Check harness cover and connectors for damage, terminals for deformation, and harness for binding. 3. Check for visible signs of damage (dents, cracks, deformation) of the seat belt pre-tensioner assembly. 4. If no damage is found, reinstall the seat belt pre-tensioner assembly. 5. If damaged—REPLACE the seat belt pre-tensioner assembly with new bolts coated with bonding agent. 	
Seat with side air bag	REPLACE all parts of front seatback (including front seatback frame)	<ol style="list-style-type: none"> 1. Visually check the seat on the collision side. 2. Remove the seat on the collision side and check the following for damage and deformation. <ul style="list-style-type: none"> ● Harness, connectors and terminals ● Frame and recliner (for front and rear seat), and also adjuster and slides (for front seat) 3. If no damage is found, reinstall the seat. 4. If damaged—REPLACE the damaged seat parts with new bolts.
Center pillar inner	<ol style="list-style-type: none"> 1. Check the center pillar inner on the collision side for damage (dents, cracks, deformation). 2. If damaged—REPAIR the center pillar inner. 	
Trim	<ol style="list-style-type: none"> 1. Check for visible signs of damage (dents, cracks, deformation) of the interior trim on the collision side. 2. If damaged—REPLACE the damaged trim parts. 	