RESTRAINT SYSTEM

SECTION

FROM DIAGNOSTIC PROCEDURE 2)48

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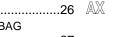
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Precautions

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

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The Supplemental Restraint System such as "AIR BAG" and "SEAT BELT PRE-TENSIONER" used along with a 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 B15 is as follows:

of MA

- 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), front seat belt pre-tensioners, a diagnosis sensor unit, warning lamp, wiring harness and spiral cable.

• For a side collision

- de of front
- The Supplemental Restraint System consists of front side air bag module (located in the outer side of front seat), front (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).

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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 should be performed by an authorized NISSAN dealer.

- Improper maintenance, including incorrect removal and installation of the SRS, can lead to personal injury caused by unintentional activation of the system.
- Do not use electrical test equipment on any circuit related to the SRS unless instructed to in this Service Manual. Spiral cable and wiring harnesses covered with yellow insulation tape either just before the harness connectors or for the complete harness are related to the SRS.

PRECAUTION FOR SEAT BELT SERVICE

CAUTION:

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

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 After replacing or reinstalling front seat belt pre-tensioner assembly, or reconnecting front seat belt pre-tensioner connector, check the system function. Refer to "Checking Seat Belt Pre-tensioner Operation by Using "SEAT BELT" Warning Lamp — User Mode", RS-42 for details.

- Do not use disassembled 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.

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

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After A Collision

WARNING:

Inspect all seat belt assemblies including retractors and attaching hardware after any collision.

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



Replace any seat belt assembly if:

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 The seat belt was in use at the time of a collision (except for minor collisions and the belts, retractors and buckles show no damage and continue to operate properly).

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- 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.

SEAT BELTS

Precautions i	(Cont'd)

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

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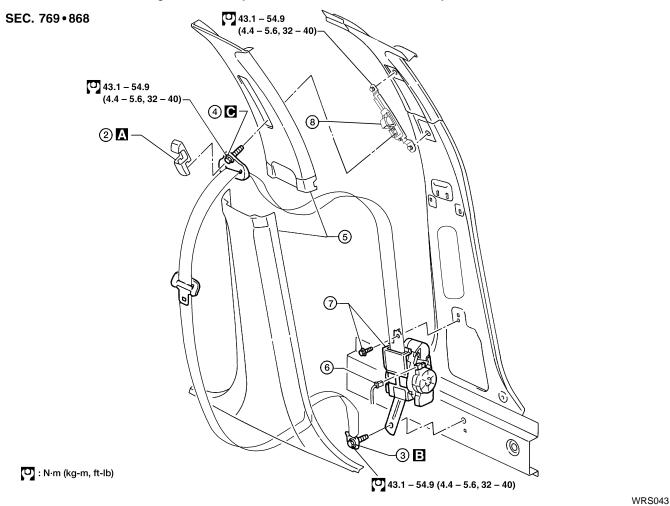
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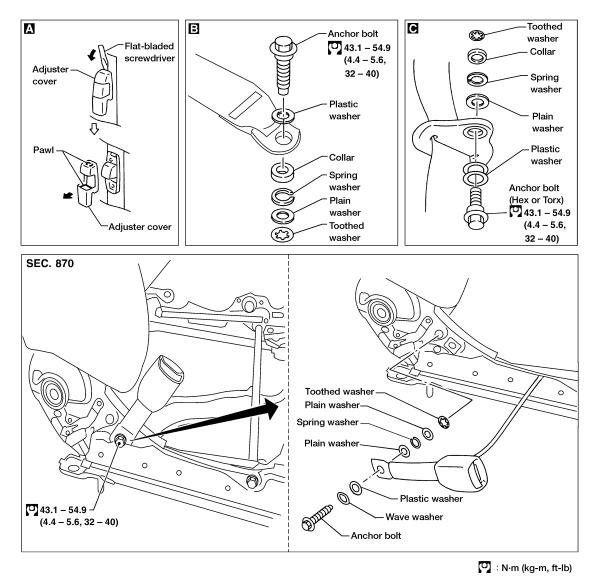
Front Seat Belt

REMOVAL AND INSTALLATION

- 1. Slide the seat all the way forward and tilt the seat back toward the front.
- 2. Remove adjuster cover.
- 3. Remove floor anchor bolt.
- 4. Remove shoulder anchor bolt.
- 5. Remove center pillar upper and lower garnish. Refer to BT-25, "SIDE AND FLOOR TRIM" for details.
- 6. Disconnect front seat belt pre-tensioner connector.
- 7. Remove the screw securing front seat belt pre-tensioner retractor, then remove seat belt and seat belt pre-tensioner retractor.
- 8. Remove bolts securing seat belt adjuster, then remove seat belt adjuster.



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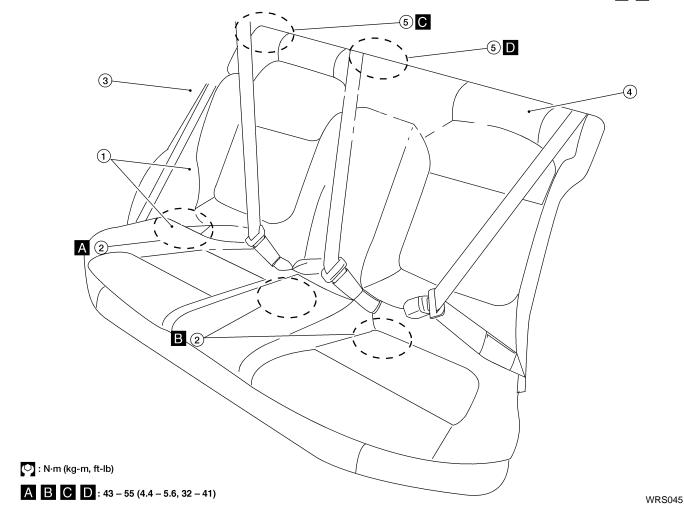
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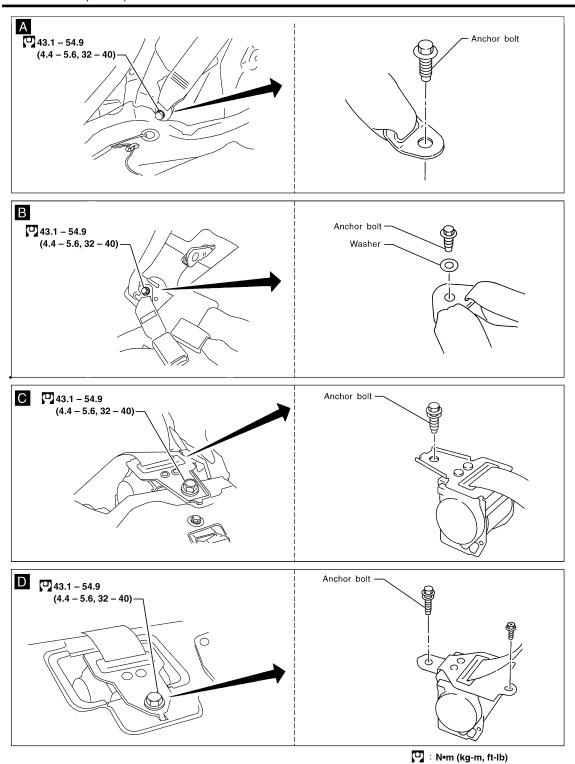
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Rear Seat Belt

REMOVAL AND INSTALLATION

- 1. Remove rear seat. Refer to BT-39, "REAR SEAT" for details.
- 2. Remove outer and floor anchor bolt. A B
- 3. Remove rear side garnish. Refer to **BT-25**, "SIDE AND FLOOR TRIM" for details.
- 4. Remove rear parcel shelf finisher. Refer to BT-25, "SIDE AND FLOOR TRIM" for details.
- 5. Remove bolts securing rear seat belt retractor, then remove seat belt and seat belt retractor.





Seat Belt Inspection

AFTER A COLLISION

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

Replace any seat belt assembly if:

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The seat belt was in use at the time of a collision (except for minor collisions if 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 quide, etc.)

The seat belt attaching point was damaged in an accident. Inspect the seat belt attaching area for damage or distortion and repair as necessary before installing a new seat belt assembly.

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Anchor bolts are deformed or worn out.

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

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PRELIMINARY CHECKS

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

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

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

If the seat belt warning lamp is blinking, conduct self-diagnosis using CONSULT-II, and seat belt warning lamp. Refer to "Checking Seat Belt Pre-tensioner Operation by Using "SEAT BELT" Warning Lamp — User Mode", RS-41.

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

3. 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 quide. Ensure height adjuster operates properly and holds securely.

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4. Check retractor operation:

a. Fully extend the seat belt webbing and check for twists, tears or other damage. Allow the seat belt to retract. Ensure that belt returns smoothly and completely into the retractor. If the seat belt does not return smoothly, wipe the inside of the loops with a clean paper cloth etc. because dirt built

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up in the loops of the upper anchors can cause the seat belts to retract slowly. Fasten the seat belt. Pull firmly on belt and buckle to ensure belt remains latched. Unfasten seat belt. Ensure belt releases freely and buckle button returns to original position.

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

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SEAT BELT RETRACTOR ON-VEHICLE CHECK

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

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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

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

ALR Function Stationary Check

NIRS0005S0303

- 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 of 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

WARNING:

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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.

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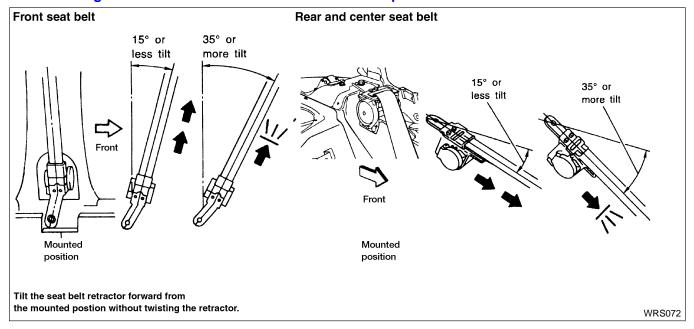
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SEAT BELT RETRACTOR OFF-VEHICLE CHECK

- 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.



If NG, replace the retractor assembly.

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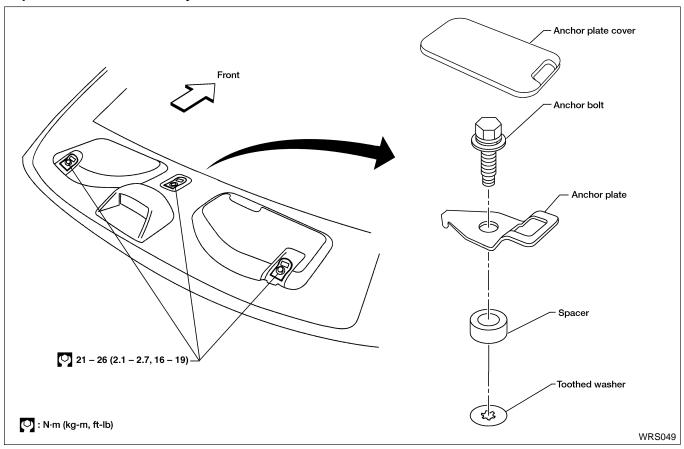
Tether Anchor Plate

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REMOVAL AND INSTALLATION

CAUTION:

Replace anchor bolts if they are deformed or worn out.



- 1. Remove tether anchor plate cover. Refer to BT-25, "SIDE AND FLOOR TRIM" for details.
- 2. Remove tether anchor plate.

NOTE:

• To install, reverse the removal procedure sequence.

Precautions

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

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The Supplemental Restraint System such as "AIR BAG" and "SEAT BELT PRE-TENSIONER" used along with a 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 B15 is as follows:

. f M≜

- 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), front seat belt pre-tensioners, a diagnosis sensor unit, warning lamp, wiring harness and spiral cable.

For a side collision

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The Supplemental Restraint System consists of side air bag module (located in the outer side of front seat), front (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 should be performed by an authorized NISSAN dealer.

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

• Do not use electrical test equipment on any circuit related to the SRS unless instructed to in this Service Manual. Spiral cable and wiring harnesses covered with yellow insulation tape either just before the harness connectors or for the complete harness are related to the SRS.

PRECAUTIONS FOR SRS "AIR BAG" AND "SEAT BELT PRE-TENSIONER" SERVICE

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Do not use electrical test equipment to check SRS circuits unless instructed to in this Service Manual.
Before servicing the SRS, turn ignition switch "OFF", disconnect both battery cables and wait at least 3

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For approximately 3 minutes after the cables are removed, it is still possible for the air bag and seat belt pre-tensioner to deploy. Therefore, do not work on any SRS connectors or wires until at least 3 minutes have passed.

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 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.

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 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.

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 Handle air bag module carefully. Always place driver and front passenger air bag modules with the pad side facing upward and front side air bag module (built-in type) standing with the stud bolt side facing down.

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• Conduct self-diagnosis to check entire SRS for proper function after replacing any components.

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

WIRING DIAGRAMS AND TROUBLE DIAGNOSIS When you read wiring diagrams, refer to the following:

• **GI-11**, "HOW TO READ WIRING DIAGRAMS"

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EL-9, "POWER SUPPLY ROUTING" for power distribution circuit

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When you perform trouble diagnosis, refer to the following:

• GI-36, "HOW TO FOLLOW TEST GROUPS IN TROUBLE DIAGNOSES"

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GI-25. "HOW TO PERFORM EFFICIENT DIAGNOSIS FOR AN ELECTRICAL INCIDENT"

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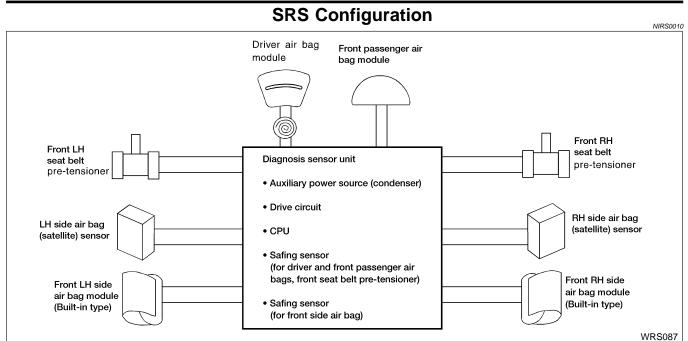
Preparation

SPECIAL SERVICE TOOLS

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

Tool number Description (Kent-Moore No.) Tool name KV991072S0 Disposing of air bag module (J38381-KIT) Air bag deployment kit KV99106400 (J38381)Deployment tool NT357 KV991065S0 * Deployment tool adapters for front seat For front passenger For front seat belt air bag module (J38381-30) pre-tensioner* belt pre-tensioner and for front passenger Deployment tool adapters air bag module with black connector are and driver air bag not necessary for servicing NISSAN module MODEL B15. ·Black* WRS085 KV99105300 Anchoring air bag module (J-41246-A) Air bag module bracket NT354 HT61961000 and Use for special bolts [TAMPER RESIS-HT62152000 combined TANT TORX (Size T30)] (J38219)a: 3.5 (0.138) dia. *Special torx bit b: 8.5 - 8.6 (0.335 - 0.339) dia. c: approx. 10 (0.39) sq. Unit: mm (in) WRS086 KV99108300 For front side air bag (J38381-35) modules and front Deployment tool adapter for front passenger air bag module side air bag modules and front passenger air bag module WRS115 KV99108200 (J38381-50) For front seat belt Deployment tool adapter for front pre-tensioner seat belt pre-tensioner WRS090

^{*:} Special tool or commercial equivalent



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

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

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

SRS configuration	Frontal collision	Left side collision	Right side collision
Driver air bag module	0	_	_
Front passenger air bag module	0	_	_
Front LH seat belt pre-tensioner	0	_	_
Front RH seat belt pre-tensioner	0	_	_
Front LH side air bag module	_	0	_
Front RH side air bag module	_		0

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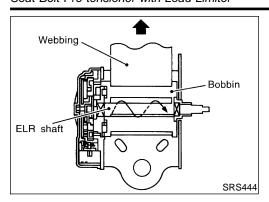
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Seat Belt Pre-tensioner with Load Limiter

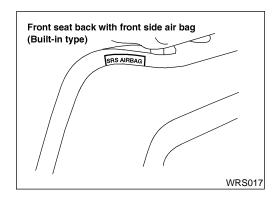


Seat Belt Pre-tensioner with Load Limiter

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

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

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



Built-in Type Side Air Bag

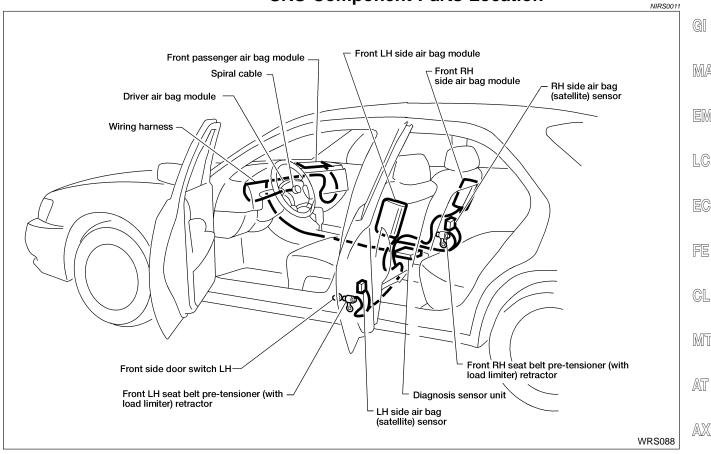
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Front side air bag is built-in type.

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

SRS Component Parts Location

SRS Component Parts Location





Maintenance Items

Do not use electrical test equipment to check SRS circuit.

Check operation of "AIR BAG" and "SEAT BELT" warning

After turning ignition key to "ON" position, both warning lamps illuminate. The "AIR BAG" warning lamp will go off after about 7 seconds if no malfunction is detected. The "SEAT BELT" warning lamp will also go off after about 7 seconds after seat belt has been fastened and no malfunction is detected. (When seat belt has not been fastened, the warning lamp continues to illuminate until seat belt is fastened.) If any of the following warning lamp conditions occur, immediately check the air bag or seat belt pre-tensioner system. Refer to "Checking Air Bag Operation by Using "AIR BAG" Warning Lamp — User Mode", RS-41 or "Checking Seat Belt Pre-tensioner Operation by Using "Seat Belt" Warning Lamp — User Mode", RS-42 for

- The "AIR BAG" or "SEAT BELT" warning lamp does not illuminate when the ignition switch is turned "ON".
- The "AIR BAG" or " SEAT BELT" (with seat belt fastened) warning lamp does not go off about 7 seconds after the ignition switch is turned "ON".

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- The "AIR BAG" or "SEAT BELT" (with seat belt fastened) warning lamp blinks after about 7 seconds after the ignition switch is turned "ON".
- 2. Visually check SRS components.
- 1) Diagnosis sensor unit
- Check diagnosis sensor unit and bracket for dents, cracks and deformities.
- Check connectors for damage, and terminals for deformities.
- 2) Air bag module and steering wheel
- Remove air bag module from steering wheel, instrument panel or seat back. Check harness cover and connectors for damage, terminals for deformities, and harness for binding.
- Install driver air bag module to steering wheel to check fit or alignment with the wheel.
- Check steering wheel for excessive free play.
- Install front passenger air bag module to instrument panel to check fit or alignment with the instrument panel.
- Install front side air bag module to seat back to check fit and alignment with the seat.
- Spiral cable
- Check spiral cable for dents, cracks, or deformities.
- Check connectors and protective tape for damage.
- Check steering wheel for noise, binding or heavy operation.
- 4) Main harness, body harness, side air bag module sub-harness
- Check connectors for poor connections, damage, and terminals for deformities.
- Check harnesses for binding, chafing or cut.
- Front seat belt pre-tensioner
- Check harness cover and connectors for damage, terminals for deformities, and harness for binding.
- Check belts for damage and anchors for loose mounting.
- Check retractor for smooth operation.
- Perform self-diagnosis for front seat belt pre-tensioner using seat belt warning lamp or CONSULT-II. Refer to "SRS Operation Check", RS-41 for details.
- 6) Side air bag (satellite) sensor
- Check side air bag satellite sensor for dents, cracks or deformities.
- Check connectors for damage, and terminals for deformities.

CAUTION:

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

Diagnosis Sensor Unit REMOVAL AND INSTALLATION

CAUTION:

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- Before servicing SRS, turn the ignition switch off, disconnect both battery cables and wait for at least 3 minutes.
- The special bolts are coated with bonding agent while the other bolt is for ground. Do not use old bolts after removal; replace with new ones.
- Check diagnosis sensor unit for proper installation.
- Check diagnosis sensor unit to ensure it is free of deformities, dents, cracks or rust. If they show any visible

Diagnosis Sensor Unit (Cont'd)

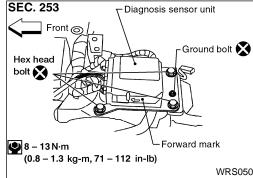
signs of damage, replace them with new ones.

- Check diagnosis sensor unit brackets to ensure they are free of deformities or rust.
- Replace diagnosis sensor unit if it has been dropped or sustained an impact.
- After replacement of diagnosis sensor unit, perform selfdiagnosis for SRS. Refer to "DIAGNOSTIC PROCEDURE 1", RS-41 for details.



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Disconnect driver, front passenger and front side air bag module connectors. Also, disconnect front seat belt pre-tensioner connector.



- Remove console box. Refer to BT-21, "INSTRUMENT PANEL ASSEMBLY".
- 3. Disconnect diagnosis sensor unit connector.
- Remove bolts from diagnosis sensor unit. Then remove the diagnosis sensor unit.

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NOTE:

To install, reverse the removal procedure sequence.

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Seat Belt Pre-tensioner REMOVAL AND INSTALLATION

AT NIRS0036

CAUTION:

- Before servicing SRS, turn the ignition switch off, disconnect both battery cables and wait at least 3 minutes.
 - Check front seat belt pre-tensioner with load limiter for proper installation.

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After replacement of front seat belt pre-tensioner, check SRS function and perform self-diagnosis for SRS. Refer to "Checking Seat Belt Pre-tensioner Operation by Using "Seat Belt" Warning Lamp — User Mode", RS-42 for details.



Do not attempt to disassemble front seat belt pre-tensioner with load limiter.



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

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

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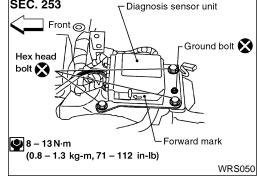
NOTE:

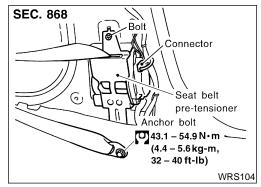
To install, reverse the removal procedure sequence.

Satellite Sensor **REMOVAL AND INSTALLATION**

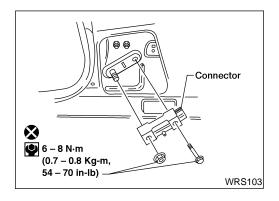
CAUTION:

- Before servicing SRS, turn the ignition switch off, disconnect both battery cables and wait at least 3 minutes.
- Do not use old nut or bolt coated with bonding agent after removal; replace with new ones.
 - Check side air bag (satellite) sensor for proper installa-
 - Check side air bag (satellite) sensor to ensure they are free of deformities, dents, cracks or rust. If it shows any





- visible signs of damage, replace it with new one.
- After replacement of side air bag (satellite) sensor, check SRS function and perform self-diagnosis. Refer to "SRS Operation Check", RS-41 for details.
- Do not attempt to disassemble side air bag (satellite) sensor.
- Replace side air bag (satellite) sensor if it has been dropped or sustained an impact.



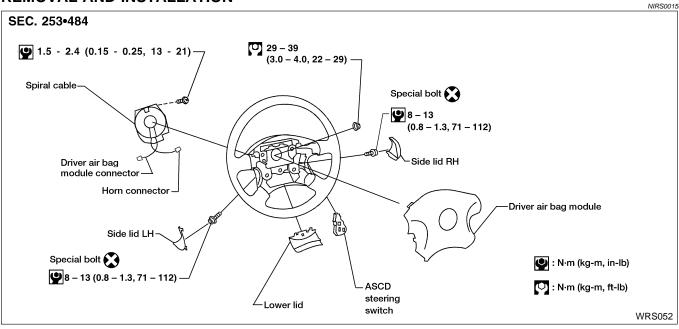
- 1. Remove front seat belt pre-tensioner. Refer to "Front Seat Belt", RS-5 for details.
- 2. Disconnect side air bag (satellite) sensor connector.
- Remove bolt and nuts from side air bag (satellite) sensor unit.
 Then remove the side air bag (satellite) sensor.

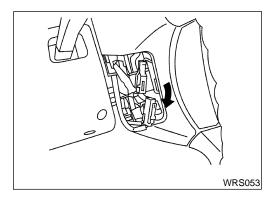
NOTE:

To install, reverse the removal procedure sequence.

Driver Air Bag Module and Spiral Cable

REMOVAL AND INSTALLATION





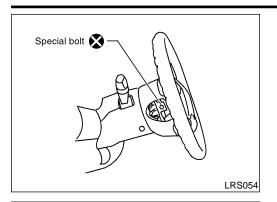
REMOVAL

CAUTION:

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

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

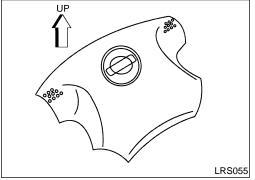


Remove side lids, ASCD steering switch. Using the TAMPER RESISTANT TORX (Size T30), remove left and right special bolts. Driver air bag module can then be removed.



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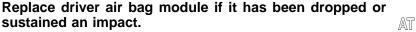
Air bag

module

CAUTION:

- Always place driver air bag module with pad side facing
- 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.





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







Disconnect horn connector and remove nuts.

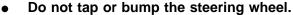


Using steering wheel puller, remove steering wheel. Be careful not to over-tighten puller bolt on steering wheel.



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Remove steering column cover.

sustained an impact.



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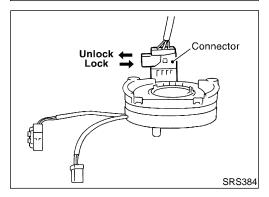
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Unlock the spiral cable connector. Then disconnect connectors and remove the four screws. The spiral cable can then be removed.

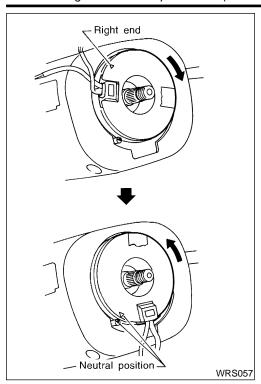
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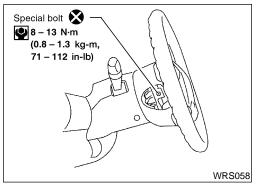


- Do not attempt to disassemble spiral cable.
- Do not apply lubricant to the spiral cable.



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





INSTALLATION

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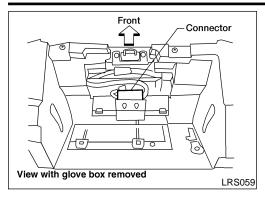
- 1. Set the front wheels in the straight-ahead position.
- 2. Make sure that the spiral cable is in the neutral position. The neutral position is detected by turning left about 3.5 revolutions from the right end position. Align the two marks (X).

CAUTION

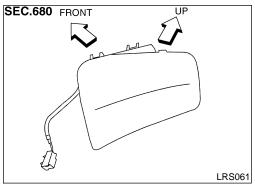
- The spiral cable may snap due to steering operation if the cable is installed in an improper position.
- Also, with the steering linkage disconnected, the cable may snap by turning the steering wheel beyond the limited number of turns. To set spiral cable to neutral position turn to the left approximately 3.5 turns from the right end position.
- 3. Connect spiral cable connector and tighten with screws. Install steering column cover.
- 4. Install steering wheel, aligning with spiral cable pin guides, and pull spiral cable through.
- Connect horn connector and engage spiral cable with pawls in steering wheel. Move driver air bag module connector away from steering wheel lower lid opening.
- 6. Tighten nut.

- 7. Position driver air bag module, press firmly and tighten with new special bolts.
- 8. Connect driver air bag module connector.
- Install ASCD steering switch and all lids.
- Connect both battery cables, then conduct self-diagnosis to ensure entire SRS operates properly. (Use CONSULT-II or warning lamp check.)
- 11. Turn steering wheel to the left end and then to the right end fully to make sure that spiral cable is set in the neutral position.
 - If air bag warning lamp blinks or stays ON (at the user mode), it shows the spiral cable may be snapped due to its improper position. Perform self-diagnosis again (use CONSULT-II or warning lamp). Refer to "SRS Operation Check", RS-41. If a malfunction is detected, replace the spiral cable with a new one.
- Perform self-diagnosis again to check that no malfunction is detected. Go to "SRS Operation Check", RS-41 and perform self-diagnosis to ensure entire SRS operates properly. (Use CONSULT-II or warning lamp check.)

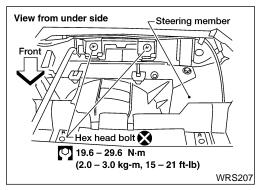
Front Passenger Air Bag Module



View from under side Steering member Front Hex head bolt 19.6 – 29.6 N·m (2.0 – 3.0 kg·m, 15 – 21 ft-lb) WRS207







Front Passenger Air Bag Module REMOVAL

CAUTION:

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

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

1. Open the glove box lid.

2. Disconnect front passenger air bag module connector from air bag harness connector.

3. Remove glove box assembly. Refer to **BT-21**, "INSTRUMENT PANEL ASSEMBLY" for details.

 Remove the nuts and hex bolts from front passenger air bag module.

Take out the front passenger air bag module from the instrument panel.

 The front passenger air bag module is heavy and should be supported using both hands during removal.

CAUTION:

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

INSTALLATION

CAUTION:

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

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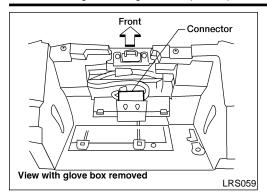
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Front Passenger Air Bag Module (Cont'd)



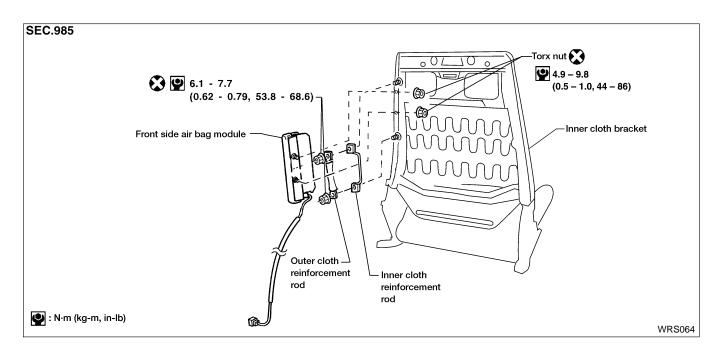
- Connect front passenger air bag module connector to air bag harness connector.
- 4. Close the glove box lid.
- Connect both battery cables.
- Go to "SRS Operation Check", RS-41 and perform self-diagnosis to ensure entire SRS operates properly. (Use CONSULT-II or warning lamp check.)

Side Air Bag Module REMOVAL

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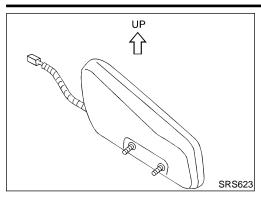
CAUTION:

- Before servicing SRS, turn the ignition switch off, disconnect both battery cables and wait at least 3 minutes.
- Always work from the rear of air bag module.
- 1. Open seat back zipper to access module.



- 2. Pull up the seat back trim.
- 3. Remove the nuts securing the outer and inner reinforcement rods which secure the outer and inner reinforcement cloth.
- Remove the Torx nuts coated with bonding agent from front side air bag module.
- Remove harness clips. Front side air bag module can then be removed.

Side Air Bag Module (Cont'd)





CAUTION:

- Always place front side air bag module with the stud bolt side facing down.
- Do not attempt to disassemble air bag module.
- The Torx nuts are coated with bonding agent. Do not use old nuts after removal; replace with new coated nuts.
- Do not insert any foreign objects (screwdriver, etc.) into air bag module connector.
- 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 seat should be replaced if damaged.

INSTALLATION

- 1. Install front side air bag module on front seat with new Torx nuts coated with bonding agent.
- Secure the front side air bag module harness with new harness clips.
- 3. Secure nuts for the outer and inner cloth which covers the side air bag module.
- 4. Close the seat back zipper.
- Ensure harness is not caught between seat back board and seat back.
- Connect both battery cables.
- Go to "SRS Operation Check", RS-41 and perform self-diagnosis to ensure entire SRS operates properly. (Use CONSULT-II or air bag warning lamp.)

Disposal of Air Bag Module and Seat Belt Pretensioner

- Before disposing of air bag module and seat belt pre-tensioner, on vehicles equipped with such systems, deploy the systems.
 If such systems have already been deployed due to an accident, dispose of them as indicated in "DISPOSING OF AIR BAG MODULE AND SEAT BELT PRE-TENSIONER", RS-30.
- When deploying the air bag module and seat belt pretensioner, always use the Special Service Tool; Deployment tool KV99106400 (Kent-Moore No. J38381).
- When deploying the air bag module and seat belt pretensioner, stand at least 5 m (16 ft) away from the deployment component.
- When deploying air bag module and seat belt pre-tensioner, a fairly loud noise is made, followed by smoke being released.
 The smoke is not poisonous, however, be careful not to inhale smoke since it irritates the throat and can cause choking.
- Always activate one air bag module at a time.
- Due to heat, leave air bag module unattended for more than 30 minutes after deployment. Also leave seat belt pre-tensioner unattended for more than 10 minutes after deployment.
- Be sure to wear gloves when handling a deployed air bag

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

module and seat belt pre-tensioner.

- Never apply water to the deployed air bag module and seat belt pre-tensioner.
- Wash your hands clean after finishing work.
- Place the vehicle outdoors with an open space of at least 6 m (20 ft) on all sides when deploying air bag module and seat belt pre-tensioner while mounted in vehicle.
- Use a voltmeter to make sure the vehicle battery is fully charged.
- Do not dispose of the air bag module and seat belt pre-tensioner un-deployed.



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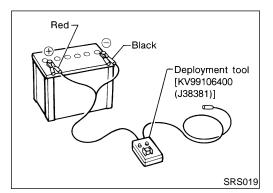
CAUTION:

The battery must show voltage of 9.6V or more.

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

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

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



Lamp Push SBF266H

Deployment Tool Check

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

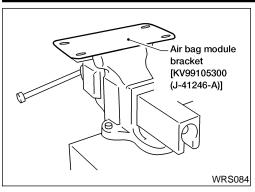
Air Bag Deployment Tool Lamp Illumination Chart (Battery connected)

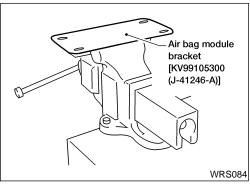
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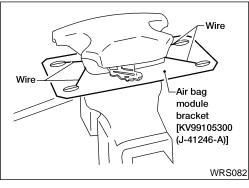
		NIK3002230103
Switch operation	Left side lamp, green* "AIR BAG CONNECTOR VOLTAGE"	Right side lamp, green* "DEPLOYMENT TOOL POWER"
OFF	OFF	ON
ON	ON	ON

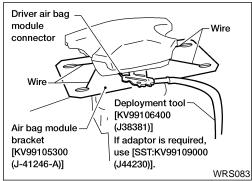
^{*:} If this lamp glows red, the tool is connected to the battery incorrectly. Reverse the connections and make sure the lamp glows green.

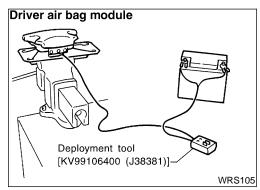
Disposal of Air Bag Module and Seat Belt Pre-tensioner (Cont'd)

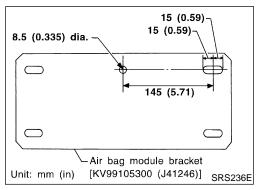












DEPLOYMENT PROCEDURES FOR AIR BAG MODULE (OUTSIDE OF VEHICLE)

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

Anchor air bag module bracket [KV99105300 (J-41246-A)] in a vise secured to a firm foundation during deployment.

Deployment of Driver Air Bag Module (Outside of vehicle)

1. Using wire, secure driver air bag module to air bag module bracket [SST: KV99105300 (J-41246-A)] at two places.

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

Firmly secure air bag module bracket [SST: KV99105300 (J-41246-A)] with air bag module attached, in a vise.

Connect deployment tool [SST: KV99106400 (J38381)] to driver air bag module connector. If adapter is required, use SST: KV99109000 (J44230).

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

CAUTION:

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

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

Make an 8.5 mm (0.335 in) diameter hole in air bag module bracket [SST: KV99105300 (J-41246-A)] at the position shown in figure at left.

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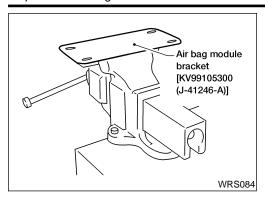
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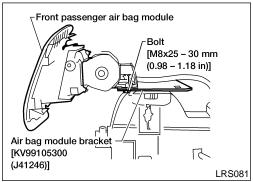
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Disposal of Air Bag Module and Seat Belt Pre-tensioner (Cont'd)



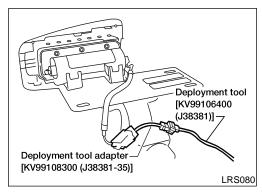
2. Firmly secure air bag module bracket [SST: KV99105300 (J-41246-A)] in a vise.



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

CAUTION:

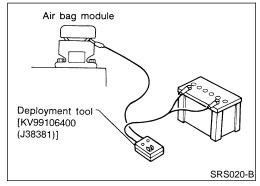
If a gap exists between front passenger air bag module and air bag module bracket, use a piece of wood inserted in the gap to stabilize the front passenger air bag module.



- 4. Connect deployment tool adapter [SST: KV99108300 (J38381-35)] to deployment tool [SST: KV99106400 (J38381)] connector and front passenger air bag module connector.
- 5. Connect red clip of deployment tool to battery positive terminal and black clip to negative terminal.
- 6. The lamp on the right side of the tool, marked "deployment tool power", should glow green, not red.
- 7. Press the button on the deployment tool. The left side lamp on the tool, marked "air bag connector voltage", will illuminate and the front passenger air bag module will deploy.



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



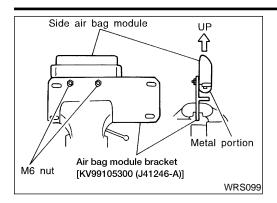
Air bag module bracket [KV99105300 (J41246-A)]

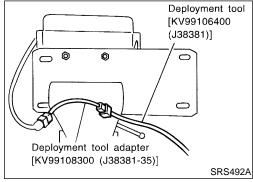
WRS098

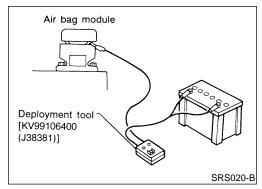
Unit: mm (in)

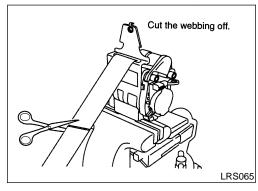
Deployment of Front Side Air Bag Module (Built-in type) (Outside of vehicle) 1. Make 6.5 mm (0.256 in) diameter holes in air bag module bracket [SST: KV99105300 (J-41246-A)] at the position shown in figure at left.

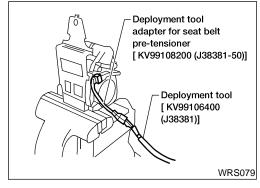
Disposal of Air Bag Module and Seat Belt Pre-tensioner (Cont'd)





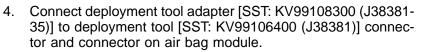






- Firmly secure air bag module bracket [SST: KV99105300 (J-41246-A)] in a vise.
- Insert the stud bolts of front side air bag module (built-in type) into the two holes in air bag module bracket (held in vise) and fix them with two M6 nuts.

Front side air bag module should be secured to air bag module bracket [SST: KV99105300 (J-41246-A)] in a vise with metal portion facing down.



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

CAUTION:

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

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

Firmly grip front seat belt pre-tensioner in a vise and cut the webbing off.

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

Press the button on the deployment tool. The left side lamp on

the front side air bag module will deploy.

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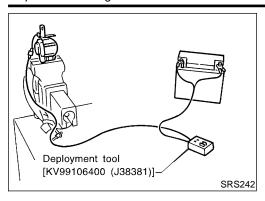
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Disposal of Air Bag Module and Seat Belt Pre-tensioner (Cont'd)



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

CAUTION:

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

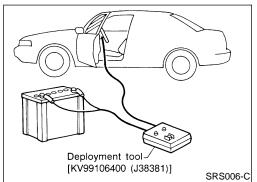
DEPLOYMENT OF AIR BAG MODULE AND SEAT BELT PRE-TENSIONER WHILE MOUNTED IN VEHICLE

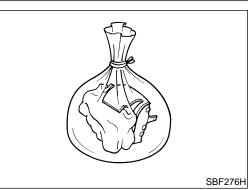
When disposing of a vehicle, deploy air bag module and seat belt pre-tensioners while they are mounted in vehicle.

CAUTION:

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

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





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

CAUTION:

Activate only one air bag module or seat belt pre-tensioner at a time.

DISPOSING OF AIR BAG MODULE AND SEAT BELT PRE-TENSIONER

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

CAUTION:

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

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

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

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EL

Trouble Diagnoses Introduction

CAUTION:

- Do not use electrical test equipment on any circuit related to the SRS unless instructed to in this Service Manual. SRS wiring harnesses (except "SEAT BELT PRE-TENSIONER" connector) are covered with yellow insulation either just before the harness connectors or for the complete harness, for easy identification.
- 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

NIRS0023S01

=NIRS0023

The SRS self-diagnosis results can be read by using "AIR BAG" warning lamp, "SEAT BELT" 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 and/or "SEAT BELT" warning lamp.

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

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

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

DIAGNOSIS MODE FOR CONSULT-II

NIRS0023S02

"SELF-DIAG [CURRENT]"

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

"SELF-DIAG [PAST]"

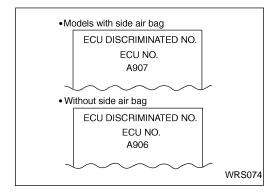
Diagnosis results previously stored in the memory are displayed on the CONSULT-II screen. The stored results are not erased until memory erasing is executed.

"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 B15, the diagnosis sensor unit discriminated number assigned is A907 (models with side air bags) or A906 (models without side air bags).

Trouble Diagnoses Introduction (Cont'd)

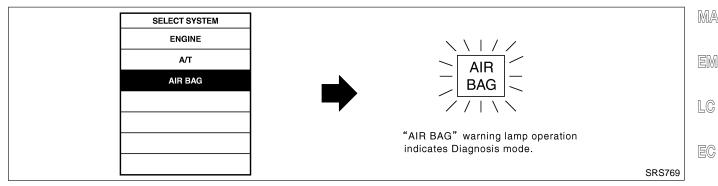
(P) HOW TO CHANGE SELF-DIAGNOSIS MODE WITH CONSULT-II

From User Mode to Diagnosis Mode

=NIRS0023S03

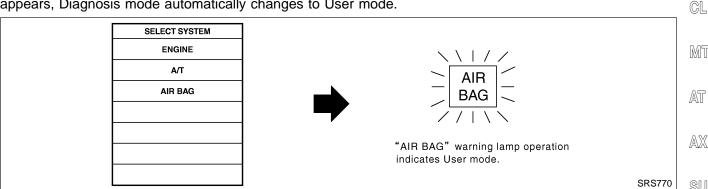
NIRS0023S0301

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



From Diagnosis Mode to User Mode

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

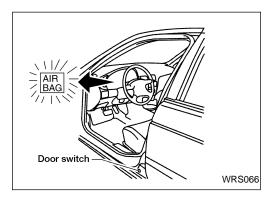


NOW TO CHANGE SELF-DIAGNOSIS MODE WITHOUT CONSULT-II

From User Mode to Diagnosis Mode

NIRS0023S04

Diagnosis mode is activated by pressing the front door switch LH at least 5 times within 7 seconds after turning the ignition switch ON. If no malfunction is detected, SRS will not enter Diagnosis mode.



From Diagnosis Mode to User Mode

To return to User mode while a malfunction is being detected, turn ignition switch OFF, then back ON and press the front door switch LH at least 5 times within 7 seconds.

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

HOW TO ERASE SELF-DIAGNOSIS RESULTS

(I) With CONSULT-II

"SELF-DIAG [CURRENT]"

NIRS0023S05

NIRS0023S0501

RS-33

FE

BT

HA

<u>a</u>a

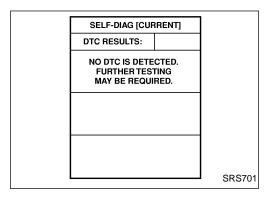
Trouble Diagnoses Introduction (Cont'd)

A current Self-diagnosis result is displayed on the CONSULT-II screen in real time. After the malfunction is repaired completely, no malfunction is detected on "SELF-DIAG [CURRENT]".

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

NOTE:

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



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

⊗ Without CONSULT-II

NIRS0023S0502

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

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.

MA

GI

INFORMATION FROM CUSTOMER

WHAT Vehicle model WHEN Date, Frequencies WHERE Road conditions

HOW Operating conditions, Symptoms

NIRS0024S01

LC

PRELIMINARY CHECK

Check that the following parts are in good order.

- Battery [Refer to **SC-3**, "BATTERY".]
- Fuse [Refer to *EL-19*, "Inspection".]
- System component-to-harness connections

NIRS0024S02

FE

GL

MT

AT

AX

BR

ST

BT

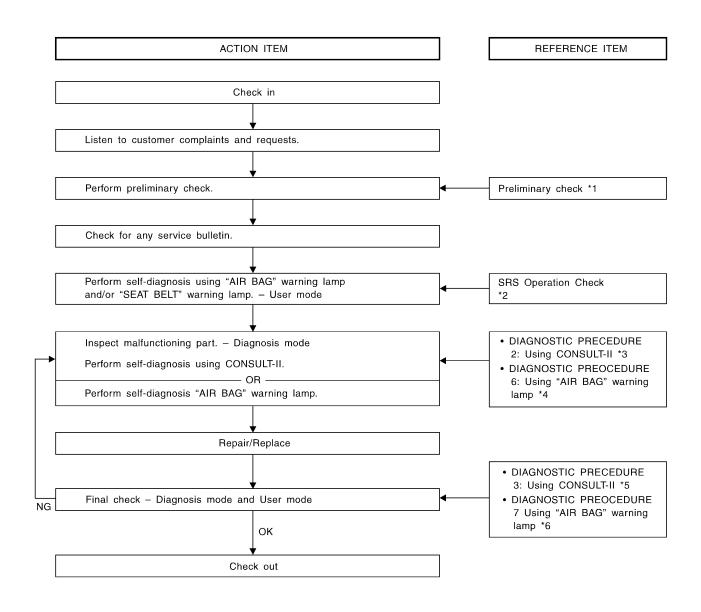
HA

SC

EL

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

WORK FLOW



WRS075

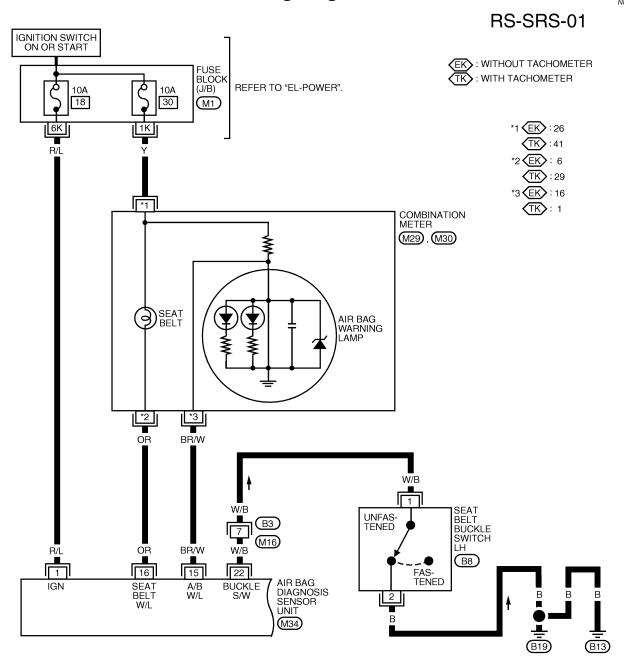
*1: RS-35 *2: RS-41 *3: RS-43 *4: RS-52 *5: RS-46 *6: RS-55

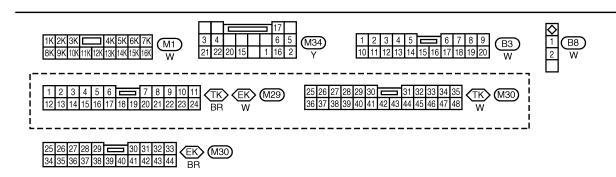
RS-36

Schematic NIRS0025 GI MA (SA): WITH SIDE AIR BAGS (3) RH SIDE AIR BAG - (SATELLITE) SENSOR EM LC (\$) LH SIDE AIR BAG (SATELLITE) SENSOR EC -{s} 32 FE (\$) FRONT RH SIDE AIR BAG MODULE GL -(§) 34 (\$) FRONT LH SIDE AIR BAG MODULE MT -(s) 33 AT AIR BAG WARNING LAMP FRONT RH SEAT BELT PRE-TENSIONER (\$) $\mathbb{A}\mathbb{X}$ 15 SEAT BELT SU FUSE FRONT LH SEAT BELT PRE-TENSIONER 9 (M) 16 (\$) AIR BAG DIAGNOSIS SENSOR UNIT BR ST (3) FRONT PASSENGER AIR BAG MODULE IGNITION SWITCH ON OR START FUSE RS BT DATA LINK CONNECTOR 22 SEAT BELT BUCKLE SWITCH LH 21 HA 20 SC FRONT DOOR SWITCH LH 6 (\$) EL SPIRAL CABLE DRIVER AIR BAG MODULE

Wiring Diagram — SRS —

NIRS0026





WRS038

RS-SRS-02

GI

MA

LC

EC

GL

MT

AT

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

SU

BR

ST

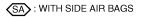
RS

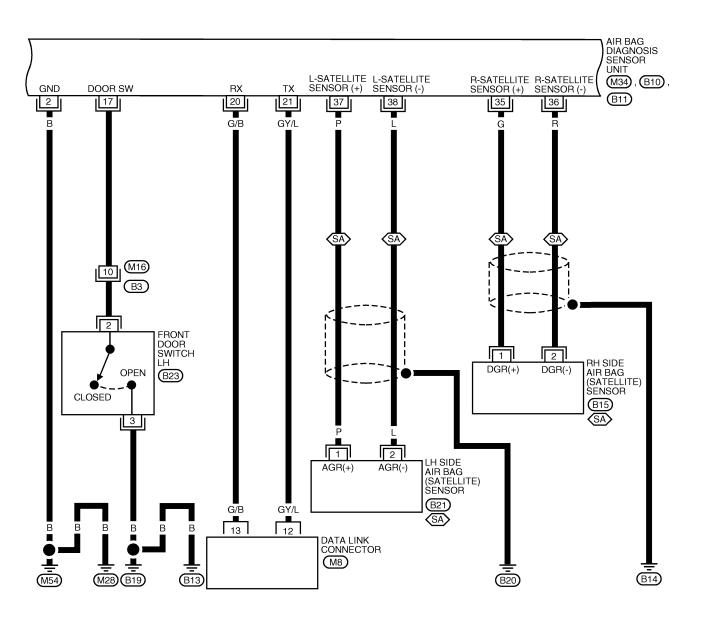
BT

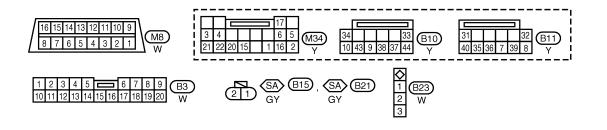
HA

SC

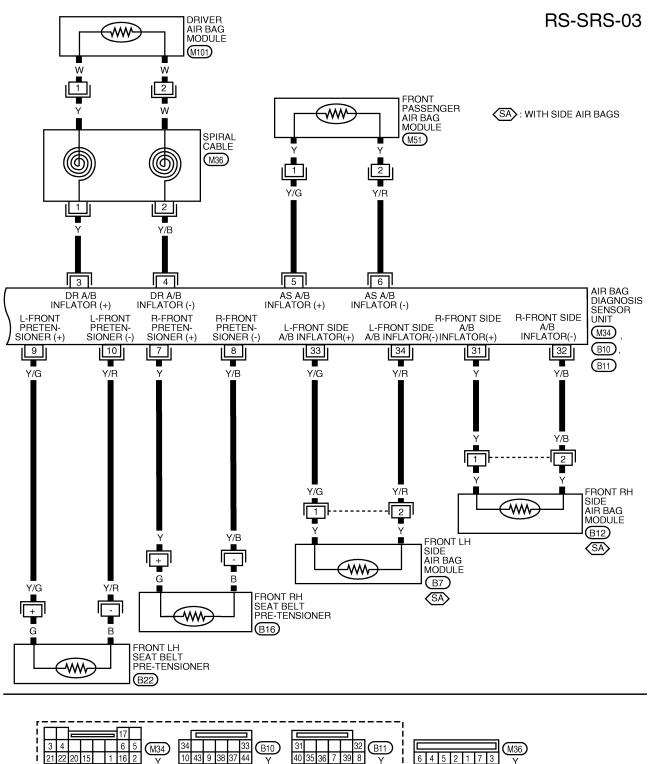
EL

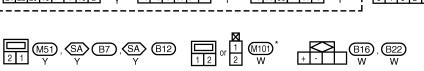






WRS039

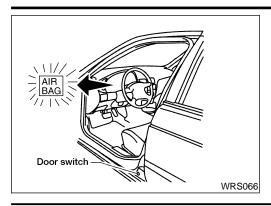




^{*} THIS CONNECTOR IS NOT SHOWN IN "HARNESS LAYOUT " OF EL SECTION.

WRS040

SRS Operation Check



SRS Operation Check DIAGNOSTIC PROCEDURE 1

NIRS0027

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

MA

1. After turning ignition switch from "OFF" to "ON", "AIR BAG" warning lamp operates.

Compare "AIR BAG" warning lamp operation to the chart below.

LC

"AIR BAG" warning lamp operation — User mode —	SRS condition	Reference item	P 6
OFF 7 sec.	No malfunction is detected. No further action is necessary.	_	FE
MRS095A			CL
OFF OFF	The system is malfunctioning and needs to be repaired as indicated.	Go to "DIAGNOSTIC PRO- CEDURE 2" or 6, RS-43 or RS-52.	M5
0.5 sec. 0.5 sec. MRS096A			AT
IGN ON	Air bag is deployed.	Go to "Collision Diagnosis", RS-65.	A)
ON OFF MRS097A	Air bag fuse, diagnosis sensor unit or harness is malfunctioning and needs to be repaired.	Go to "DIAGNOSTIC PRO- CEDURE 9", RS-58.	SI
IGN ON	One of the following has occurred and needs to be repaired.	Go to "DIAGNOSTIC PRO- CEDURE 10", RS-60.	BF
ON OFF	Meter fuse is blown."AIR BAG" warning lamp circuit has open or short.		ST
MRS098A	 Diagnosis sensor unit is malfunctioning. 		RS

NOTE:

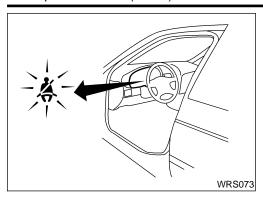
If "AIR BAG" warning lamp operates differently from the operations shown above, refer to "DIAGNOSTIC PROCEDURE 6", RS-52.

HA

SC

EL

SRS Operation Check (Cont'd)



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

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

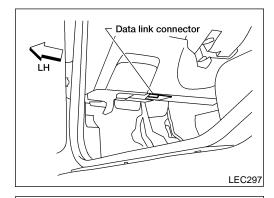
"SEAT BELT" warning lamp operation	SRS condition	Reference item
After driver's seat belt has been fastened. ON OFF 7 sec. MRS095A When driver's seat belt has not been fastened. ON ON Seat belt is fastened. SRS086	No malfunction is detected. No further action is necessary.	_
After driver's seat belt has been fastened. IGN ON OFF 0.5 sec. 0.5 sec. MRS096A When driver's seat belt has not been fastened. IGN ON OFF 7 sec. 0.5 sec. 0.5 sec. SRS344	Front seat belt pre-tensioner circuit is opened, or Front seat belt pre-tensioner power supply or ground circuit is shorted.	 If CONSULT-II is available, go to "DIAGNOSTIC PROCEDURE 2", RS-43. If CONSULT-II is not available, repair the system as follows.* Visually check the wiring harness connections. Replace driver's and front passenger seat belt assemblies. (Before disposing, they must be deactivated.) Replace diagnosis sensor unit. Replace the related harness.
When driver's seat belt is fastened. IGN ON J	Front seat belt pre-tensioner (and air bag) is deployed.	Go to "COLLISION DIAGNOSIS", RS-65.
ON OFF MRS097A	Seat belt buckle switch, harness, combination meter assembly, diagnosis sensor unit are malfunctioning and need to be repaired.	Go to "DIAGNOSTIC PRO- CEDURE 12", RS-62.

SRS Operation Check (Cont'd)

"SEAT BELT" warning lamp operation	SRS condition	Reference item	
IGN ON		Go to "DIAGNOSTIC PRO- CEDURE 13", RS-64.	© N
MRS098/			

^{*} Follow the procedures in numerical order when repairing malfunctioning parts. Confirm whether malfunction is eliminated using the seat belt warning lamp each time repair is finished. If malfunction is still observed, proceed to the next step. When malfunction is eliminated, further repair work is not required.





Trouble Diagnoses with CONSULT-II DIAGNOSTIC PROCEDURE 2

NIRS0028

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

1. Turn ignition switch "OFF".

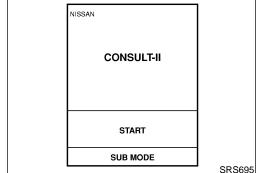
FE

1. Turn ignition switch Of L.

CL

2. Connect "CONSULT-II" to Data link connector.

MT



Turn ignition switch "ON".

4. Touch "START".

AT

AX

SI

5. Touch "AIR BAG".

SELECT SYSTEM
ENGINE
A/T
AIR BAG
SRS771

Touch "SELF-DIAG [CURRENT]".

HA

BT

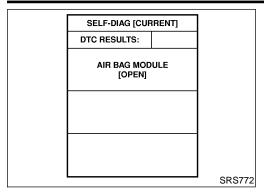
SC

EL

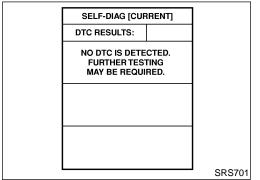
MX

1		
	SELECT DIAG MODE	
	SELF-DIAG [CURRENT]	
	SELF-DIAG [PAST]	
	TROUBLE DIAG RECORD	
	ECU DISCRIMINATED NO.	
		SRS697

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



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



If no malfunction is detected on "SELF-DIAG [CURRENT]" even though malfunction is detected in "SRS Operation Check", refer to "DIAGNOSTIC PROCEDURE 4", RS-48, to diagnose the following cases:

- Self-diagnostic result "SELF-DIAG [PAST]" (previously stored in the memory) might not be erased after repair.
- The SRS system malfunctions intermittently.
- 8. Touch "PRINT".
- 9. Compare diagnostic codes. Refer to "CONSULT-II Diagnostic Code Chart ("SELF-DIAG [CURRENT]")", RS-44.
- 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 CON-SULT-II and disconnect both battery cables.
- Repair the system as outlined by the "Repair order" in "CON-SULT-II Diagnostic Code Chart", that corresponds to the selfdiagnostic result. For replacement procedure of component parts, refer to RS-18.
- 13. After repairing the system, refer to "DIAGNOSTIC PROCE-DURE 3", RS-46 for final checking.

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

NIRS0028S0101

Diagnostic item		Explanation	Repair order Recheck SRS at each replacement.
NO DTC IS DETECTED.	When malfunction is indicated by the "AIR BAG" warning lamp in User mode	 Self-diagnostic result "SELF-DIAG [PAST]" (previously stored in the memory) might not be erased after repair. Intermittent malfunction has been detected in the past. 	Go to "DIAGNOSTIC PROCEDURE 4", RS-48.
	No malfunction is det	ected.	Go to "DIAGNOSTIC PROCEDURE 3", RS-46.

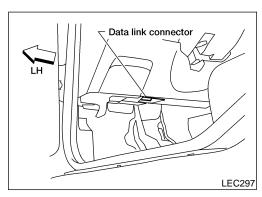
Trouble Diagnoses with CONSULT-II (Cont'd)

		Repair order
Diagnostic item	Explanation	Recheck SRS at each replacement.
AIR BAG MODULE [OPEN]	 Driver air bag module circuit is open. (including the spiral cable) 	Visually check the wiring harness connection. Replace the harness if it has visible
AIR BAG MODULE [VB-SHORT]	 Driver air bag module circuit is shorted to some power supply circuit. (including the spiral cable) 	damage. 3. Replace the spiral cable.
AIR BAG MODULE [GND-SHORT]	 Driver air bag module circuit is shorted to ground. (including the spiral cable) 	Replace driver air bag module. (Before disposal of it, it must be deployed.)
AIR BAG MODULE [SHORT]	Driver air bag module circuits are shorted to each other.	5. Replace the diagnosis sensor unit.6. Replace the related harness.
ASSIST A/B MODULE [VB-SHORT]	 Front passenger air bag module circuit is shorted to some power supply circuit. 	Visually check the wiring harness connection.
ASSIST A/B MODULE [OPEN]	Front passenger air bag module circuit is open.	 Replace the harness if it has visible damage. Replace front passenger air bag
ASSIST A/B MODULE [GND-SHORT]	Front passenger air bag module circuit is shorted to ground.	module. (Before disposal of it, it must be deployed.)
ASSIST A/B MODULE [SHORT]	Front passenger air bag module circuits are shorted to each other.	4. Replace the diagnosis sensor unit. 5. Replace the related harness.
SIDE MODULE LH [OPEN]	Front LH side air bag module circuit is open.	Visually check the wiring harness connection.
SIDE MODULE LH [VB-SHORT]	 Front LH side air bag module circuit is shorted to some power supply circuits. 	 Replace the harness if it has visible damage. Replace Front LH side air bag mod-
SIDE MODULE LH [GND-SHORT]	Front LH side air bag module circuit is shorted to ground.	ule. (Before disposal, it must be deployed.)
SIDE MODULE LH [SHORT]	Front LH side air bag module circuits are shorted to each other.	4. Replace the diagnosis sensor unit. 5. Replace the related harness.
SIDE MODULE RH [OPEN]	Front RH side air bag module circuit is open.	Visually check the wiring harness connection.
SIDE MODULE RH [VB-SHORT]	 Front RH side air bag module circuit is shorted to some power supply circuits. 	 Replace the harness if it has visible damage. Replace front RH side air bag mod-
SIDE MODULE RH [GND-SHORT]	Front RH side air bag module circuit is shorted to ground.	ule. (Before disposal, it must be
SIDE MODULE RH [SHORT]	Front RH side air bag module circuits are shorted to each other.	deployed.) 4. Replace the diagnosis sensor unit. 5. Replace the related harness.
SATELLITE SENS LH [UNIT FAIL] SATELLITE SENS LH [COMM FAIL]	LH side air bag (satellite) sensor	Visually check the wiring harness connection. Replace the harness if it has visible damage.
[COMM 17 NE]		 Replace the LH side air bag (satellite) sensor. Replace the diagnosis sensor unit. Replace the related harness.
SATELLITE SENS RH [UNIT FAIL]	RH side air bag (satellite) sensor	Visually check the wiring harness connection.
SATELLITE SENS RH [COMM FAIL]		Replace the harness if it has visible damage.
		 Replace the RH side air bag (satellite) sensor. Replace the diagnosis sensor unit. Replace the related harness.

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

Diagnostic item	Explanation	Repair order Recheck SRS at each replacement.	
PRE-TEN FRONT LH [OPEN/VB-SHORT]	The circuit for the front LH pre-tensioner is open or shorted to some power supply circuit.	connections. 2. Replace the harness if it has visible damage.	
PRE-TEN FRONT LH [GND-SHORT]	The circuit for the front LH pre-tensioner is shorted to ground.	 Replace the front LH seat belt. (Before disposing, it must be deactivated.) Replace the diagnosis sensor unit. Replace the related harness. 	
PRE-TEN FRONT RH [OPEN/VB-SHORT]	The circuit for the front RH pre-tensioner is open or shorted to some power supply circuit.	 Visually check the wiring harness connections. Replace the harness if it has visible damage. Replace the front RH seat belt. (Before disposing, it must be deactivated.) Replace the diagnosis sensor unit. Replace the related harness. 	
PRE-TEN FRONT RH [GND-SHORT]	The circuit for the front RH pre-tensioner is shorted to ground.		
CONTROL UNIT	Low battery voltage (Less than 9V)	Go to "DIAGNOSTIC PROCEDURE 3", RS-46 after charging battery.	
	Diagnosis sensor unit is malfunctioning.	 Visually check wiring harness connections. Replace the harness if it has visible damage. Replace diagnosis sensor unit. Replace the related harness. 	

Follow the procedures in numerical order when repairing malfunctioning parts. Confirm whether malfunction is eliminated using the air bag or seat belt 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.



CONSULT-II START SUB MODE SRS695

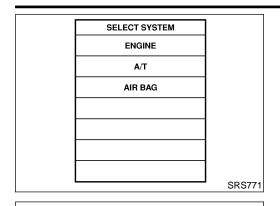
DIAGNOSTIC PROCEDURE 3

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

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

4. Touch "START".

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



SELECT DIAG MODE SELF-DIAG [CURRENT] SELF-DIAG [PAST] TROUBLE DIAG RECORD ECU DISCRIMINATED NO. Touch "AIR BAG".

GI

MA

Touch "SELF-DIAG [CURRENT]".

MT

AT

SELF-DIAG [CURRENT] DTC RESULTS: NO DTC IS DETECTED. FURTHER TESTING MAY BE REQUIRED. SRS701 If no malfunction is detected on "SELF-DIAG [CURRENT]", repair of SRS is completed. Go to step 8.

(When the malfunction was only in seat belt pre-tensioner system, go to step 11.)

If any malfunction is detected on "SELF-DIAG [CURRENT]", the malfunctioning part is not repaired completely or another malfunctioning part is detected. Go to "DIAGNOSTIC PROCE-DURE 2", RS-43, and repair malfunctioning part completely.

Touch "ERASE".

ST

NOTE:

SRS697

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

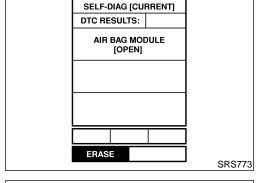
If the memory of the malfunction in "SELF-DIAG [PAST]" is not erased, the User mode shows the system malfunction by the operation of the warning lamp even if the malfunction is repaired completely.

RS

BT

HA

EL



SELECT DIAG MODE SELF-DIAG [CURRENT] SELF-DIAG [PAST] TROUBLE DIAG RECORD ECU DISCRIMINATED NO. SRS697 Touch "BACK" key of CONSULT-II to "SELECT DIAG MODE" screen. Touch "SELF-DIAG [PAST]".

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

SELF-DIAG [PAST]		
DTC RESULTS:		
NO DTC IS DETE FURTHER TES' MAY BE REQUI	ΓING	
		SRS702

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

NOTE:

Past malfunction for seat belt pre-tensioner system will not be displayed on "SELF-DIAG [PAST]".

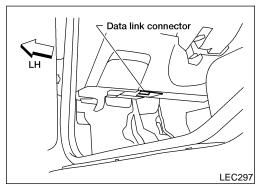
- 11. Touch "BACK" key of CONSULT-II until "SELECT SYSTEM" appears in order to return to User mode from Diagnosis mode.
- 12. Turn ignition switch "OFF" then turn off and disconnect CON-SULT-II.
- 13. Go to "Checking SRS Operation by Using "AIR BAG" Warning Lamp with User Mode", RS-41.

DIAGNOSTIC PROCEDURE 4 (CONTINUED FROM DIAGNOSTIC PROCEDURE 2)

Inspecting SRS malfunctioning record

NIRS0028S03

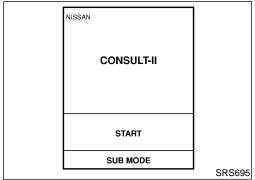
1	CONSIDER POSSIBILIT	Y OF NOT ERASING SELF-DIAGNOSTIC RESULT AFTER REPAIRING	
Is it th	Is it the first time for maintenance of SRS?		
	Yes or No		
Yes	>	Go to "DIAGNOSTIC PROCEDURE 5", RS-48.	
No	•	Self-diagnostic result "SELF-DIAG [PAST]" (previously stored in the memory) might not be erased after repair. Go to "DIAGNOSTIC PROCEDURE 3", RS-46.	



DIAGNOSTIC PROCEDURE 5

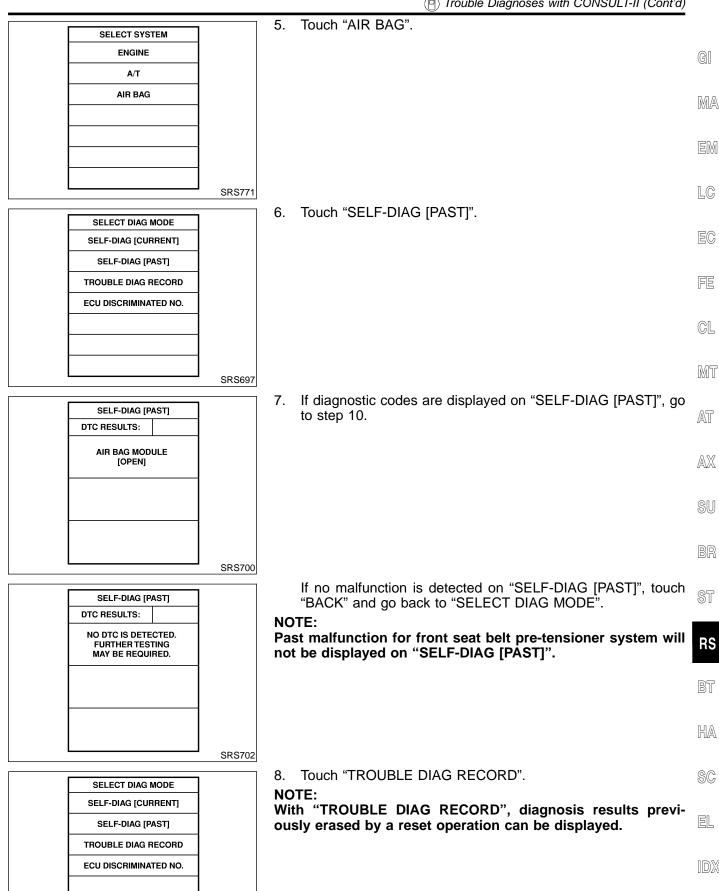
Inspecting SRS intermittent malfunction by using CONSULT-II — Diagnosis mode

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



- 3. Turn ignition switch "ON".
- 4. Touch "START".

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



SRS697

Trouble Diagnoses with CONSULT-II (Cont'd)

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

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

- 10. Touch "PRINT".
- 11. Compare diagnostic codes to "Intermittent Malfunction Diagnostic Code Chart ("SELF-DIAG [PAST]" or "TROUBLE DIAG RECORD")", RS-50.
- 12. Touch "BACK" key of CONSULT-II until "SELECT SYSTEM" appears.
- 13. Turn ignition switch "OFF", then turn off and disconnect CONSULT-II, and both battery cables.
- 14. Repair the system as outlined by the "Repair order" in "Intermittent Malfunction Diagnostic Code Chart", that corresponds to the self-diagnostic result. For replacement procedure of component parts, refer to "REMOVAL AND INSTALLATION", RS-18.
- 15. Refer to "DIAGNOSTIC PROCEDURE 3", RS-46, for final checking.

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

	<u> </u>	NIRS0028S0401
Diagnostic item	Explanation	Repair order
NO DTC IS DETECTED.	No malfunction is detected.	Go to "DIAGNOSTIC PROCEDURE 3", RS-46.
AIR BAG MODULE [OPEN]	Driver air bag module circuit is open. (including the spiral cable)	Visually check the wiring harness connection.
AIR BAG MODULE [VB-SHORT]	Driver air bag module circuit is shorted to some power supply circuit. (including the spiral cable)	2. Replace the harness if it has visible damage.3. If the harness check is OK, replace the
AIR BAG MODULE [GND-SHORT]	Driver air bag module circuit is shorted to ground. (including the spiral cable)	spiral cable, diagnosis sensor unit and driver air bag module. (Before disposing the driver air bag module, it must be
AIR BAG MODULE [SHORT]	Driver air bag module circuits are shorted to each other.	deployed.)
ASSIST A/B MODULE [VB-SHORT]	Front passenger air bag module circuit is shorted to some power supply circuit.	Visually check the wiring harness connection.
ASSIST A/B MODULE [OPEN]	Front passenger air bag module circuit is open.	2. Replace the harness if it has visible damage.3. If the harness check is OK, replace the
ASSIST A/B MODULE [GND-SHORT]	Front passenger air bag module circuit is shorted to ground.	diagnosis sensor unit and front passen- ger air bag module. (Before disposing the front passenger air bag module, it
ASSIST A/B MODULE [SHORT]	Front passenger air bag module circuits are shorted to each other.	must be deployed.)

Trouble Diagnoses with CONSULT-II (Cont'd)

Diagnostic item	Explanation	Repair order
SIDE MODULE LH [OPEN]	Front LH side air bag module circuit is open.	Visually check the wiring harness connection. Peoples the harness if it has visible.
SIDE MODULE LH [VB-SHORT]	Front LH side air bag module circuit is shorted to some power supply circuits.	2. Replace the harness if it has visible damage.3. If the harness check is OK, replace the
SIDE MODULE LH [GND-SHORT]	Front LH side air bag module circuit is shorted to ground.	diagnosis sensor unit and front LH side air bag module. (Before disposing the front LH side air bag module, it must be
SIDE MODULE LH [SHORT]	Front LH side air bag module circuits are shorted to each other.	_
SIDE MODULE RH [OPEN]	Front RH side air bag module circuit is open.	Visually check the wiring harness connection. Replace the harness if it has visible.
SIDE MODULE RH [VB-SHORT]	Front RH side air bag module circuit is shorted to some power supply circuits.	2. Replace the harness if it has visible damage.3. If the harness check is OK, replace the
SIDE MODULE RH [GND-SHORT]	Front RH side air bag module circuit is shorted to ground.	diagnosis sensor unit and front RH side air bag module. (Before disposing the front RH side air bag module, it must be
SIDE MODULE RH [SHORT]	Front RH side air bag module circuits are shorted to each other.	
SATELLITE SENS LH [UNIT FAIL] SATELLITE SENS LH [COMM FAIL]	LH side air bag (satellite) sensor	 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.
SATELLITE SENS RH [UNIT FAIL] SATELLITE SENS RH [COMM FAIL]	RH side air bag (satellite) sensor	 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.
CONTROL UNIT	Diagnosis sensor unit is malfunctioning.	 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.

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

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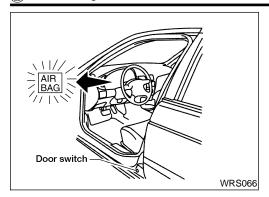
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🕅 Trouble Diagnoses without CONSULT-II



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

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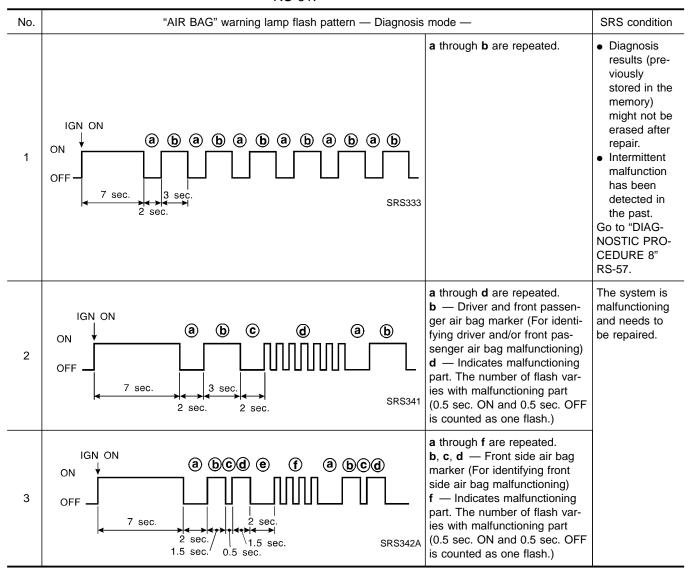
Inspecting SRS malfunctioning parts by using "AIR BAG" warning lamp — Diagnosis mode

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

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

NOTE:

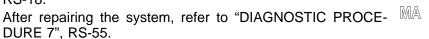
If SRS does not enter Diagnosis mode even though malfunction is detected in User mode, go to "DIAGNOSTIC PROCEDURE 11", RS-61.



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", RS-53, and locate malfunctioning part.

Trouble Diagnoses without CONSULT-II (Cont'd)

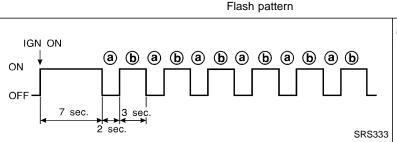
- 6. Turn ignition switch "OFF", and disconnect both battery cables.
- 7. Repair the system as outlined by the "Repair order" in "Warning Lamp Flash Code Chart" that corresponds to the flash code. For replacement procedure of component parts, refer to RS-18.



Air Bag Warning Lamp Flash Code Chart (Diagnosis mode)

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



a through b are repeated.

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Repair order

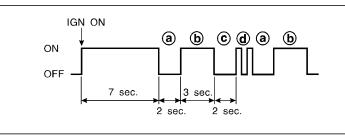
• Go to DIAGNOSTIC PROCEDURE 8 (RS-57).

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Flash pattern



a through d are repeated.

SRS334

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

The driver air bag module circuit is malfunctioning.

(d: 2 flashes)

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

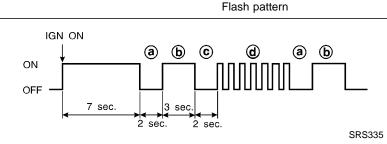
- 1. Visually check the wiring harness connection. 2. Replace the harness if it has visible damage.
- 3. Replace the spiral cable.
- 4. Replace driver air bag module. (Before disposal, it must be deployed.)
- 5. Replace the diagnosis sensor unit.
- 6. Replace the related harness.

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The diagnosis sensor unit is malfunctioning. (d: 7 flashes)



a through d are repeated.

d - Seven flashes indicate malfunctioning diagnosis sensor unit.

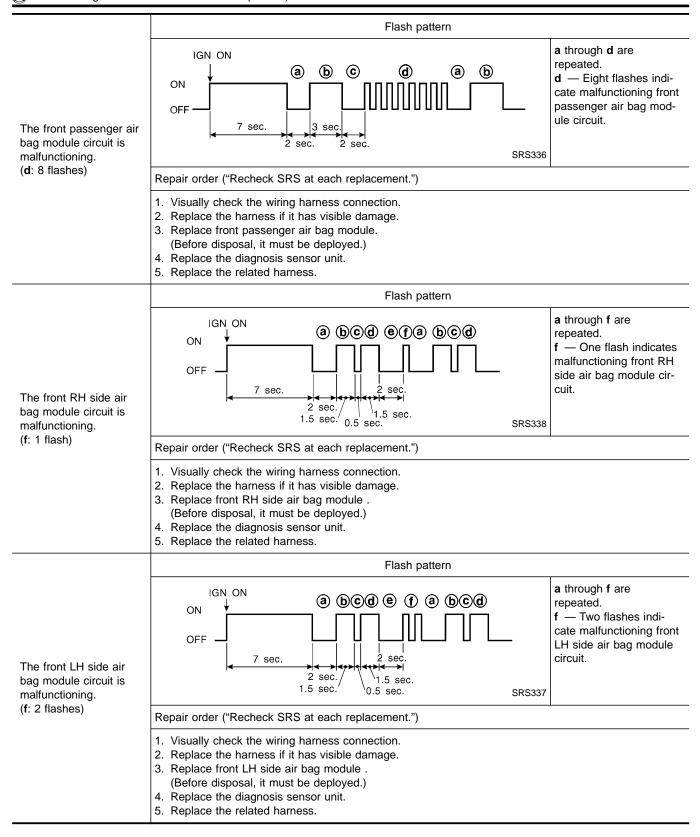
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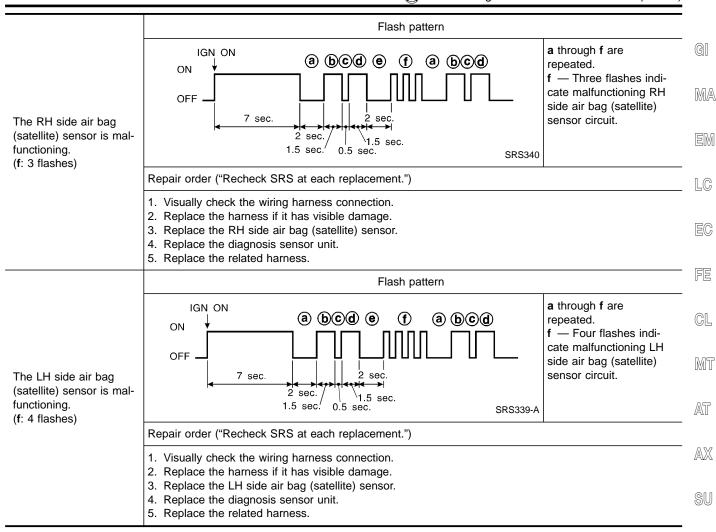
Repair order ("Recheck SRS at each replacement.")

- 1. Visually check the wiring harness connections.
- 2. Replace the harness if it has visible damage.
- 3. Replace the diagnosis sensor unit.
- 4. Replace the related harness.

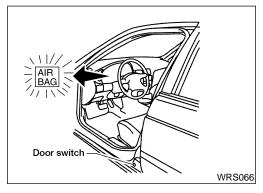
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Trouble Diagnoses without CONSULT-II (Cont'd)



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



DIAGNOSTIC PROCEDURE 7

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

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

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No.	"AIR BAG" warning lamp flash pattern — Diagnosis n	mode —	SRS condition
1	IGN ON ON ON OFF 7 sec. 2 sec. SRS333	a through b are repeated.	No malfunction is detected or repair is com- pleted. No further action is nec- essary.
2	ON B C B B C B B C B C B C B C B C B C B	a through d are repeated. b — Driver and front passenger air bag marker (For identifying driver and/or front passenger air bag malfunctioning) d — Indicates malfunctioning part. The number of flashes varies with malfunctioning part (0.5 sec. ON and 0.5 sec. OFF is counted as one flash.)	The system is malfunctioning and needs to be repaired.
3	ON ON ON ON ON ON ON ON ON OFF 7 sec. 2 sec. 2 sec. 1.5 sec. 0.5 sec. 1.5 sec.	a through f are repeated. b, c, d — Front side air bag marker (For identifying front side air bag malfunctioning) f — Indicates malfunctioning part. The number of flashes varies with malfunctioning part (0.5 sec. ON and 0.5 sec. OFF is counted as one flash.)	

NOTE:

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

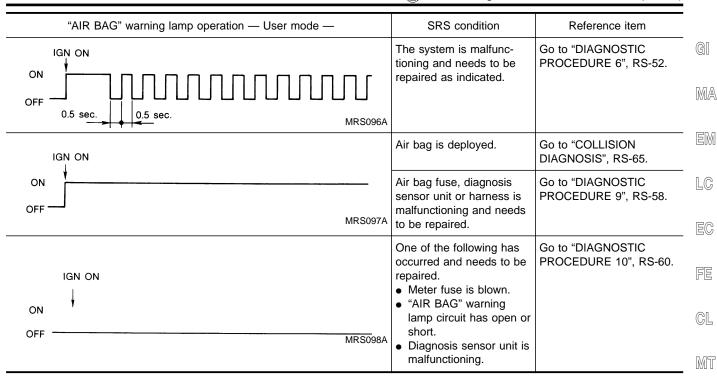
- 5. If "AIR BAG" warning lamp operates as shown in No. 1 in chart above, turn ignition switch "OFF" to reset from Diagnosis mode to User mode and to erase the memory of the malfunction. Then go to step 6.
 - If "AIR BAG" warning lamp operates as shown in No. 2 or No. 3 in chart above, the malfunctioning part is not repaired completely, or another malfunctioning part is detected. Go to "DIAGNOSTIC PROCEDURE 6", RS-52, and repair malfunctioning part completely.
- 6. Turn ignition switch "ON". "AIR BAG" warning lamp operates in User mode. Compare "AIR BAG" warning lamp operation to the chart below.

NOTE:

If switching Diagnosis mode to User mode is required while malfunction is being detected, turn ignition switch from "OFF" to "ON". Then press driver's door switch at least 5 times within 7 seconds after turning ignition switch "ON". SRS is now in User mode.

"AIR BAG" wa	rning lamp operation — User mode —	SRS condition	Reference item
IGN ON		No malfunction is detected. No further action is necessary.	_
OFF 7 sec.	MRS095A		

Trouble Diagnoses without CONSULT-II (Cont'd)



DIAGNOSTIC PROCEDURE 8 (CONTINUED FROM DIAGNOSTIC PROCEDURE 6)

Inspecting SRS malfunctioning record

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1	CONSIDER POSSIBILITY OF NOT ERASING SELF-DIAGNOSTIC RESULT AFTER REPAIRING			
Is it th	Is it the first time for maintenance of SRS?			
	Yes or No			
Yes	>	Go to "DIAGNOSTIC PROCEDURE 5", RS-48. (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", RS-55.		

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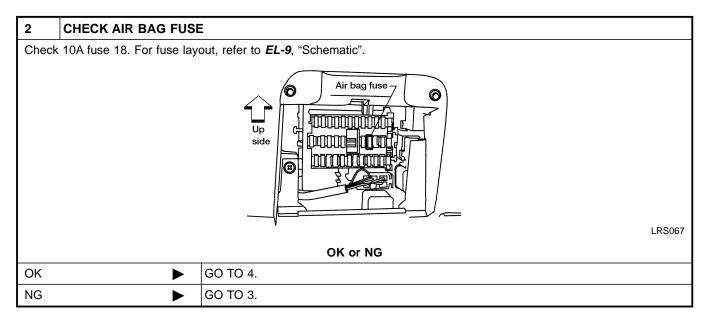
Trouble Diagnoses: "AIR BAG" Warning Lamp Does Not Turn Off

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

DIAGNOSTIC PROCEDURE 9

=NIRS0030 NIRS0030S01

1	SEE THE DEPLOYMENT OF AIR BAG MODULE			
Is air	Is air bag module deployed?			
	Yes or No			
Yes	Yes Refer to "Collision Diagnosis", RS-65.			
No	•	GO TO 2.		



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

Connect CONSULT-II and touch "START". Is "AIR BAG" displayed on CONSULT-II? SELECT SYSTEM ENGINE A/T AIR BAG	
ENGINE A/T	
A/T	
AIR BAG	
	SRS771
Yes or No	
Yes	
No Visually check the wiring harness connection of diagnosis sensor unit. If the same of the selection of the sensor unit is OV, and leave the sensor unit is over the sensor unit.	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 pr BAG" warning lamp still does not go off, replace harness.	roperly. If "AIR
	•

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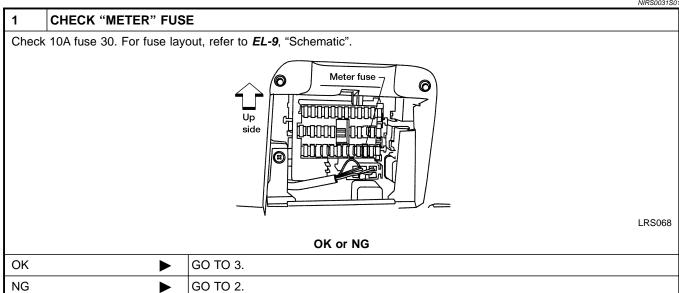
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Trouble Diagnoses: "AIR BAG" Warning Lamp Does Not Turn On

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

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

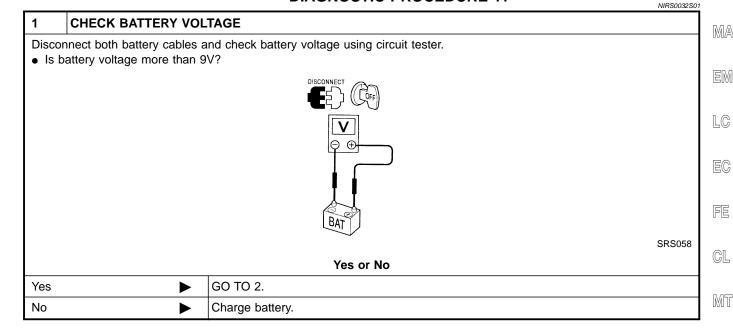
3	CHECK "AIR BAG" WARNING LAMP LED			
Is "AIR	Is "AIR BAG" warning lamp LED OK?			
	OK or NG			
OK	OK ▶ GO TO 4.			
NG	>	Replace "AIR BAG" warning lamp LED.		

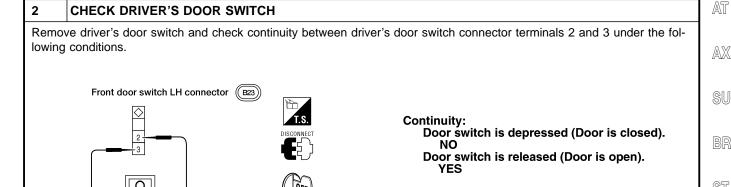
4	CHECK HARNESS COL	NNECTION BETWEEN DIAGNOSIS SENSOR UNIT AND "AIR BAG" WARNING		
Disconnect diagnosis sensor unit connector and turn ignition switch "ON". • Does "AIR BAG" warning lamp turn on?				
	Yes or No			
		Yes or No		
Yes	•	Yes or No Replace diagnosis sensor unit.		

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

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

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OK or NG

OK

B

GO TO 3.

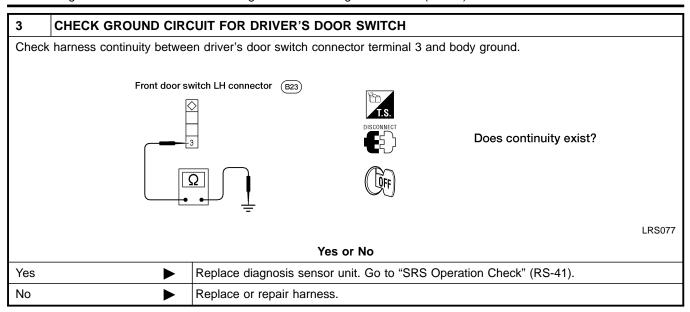
Replace driver's door switch.

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



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

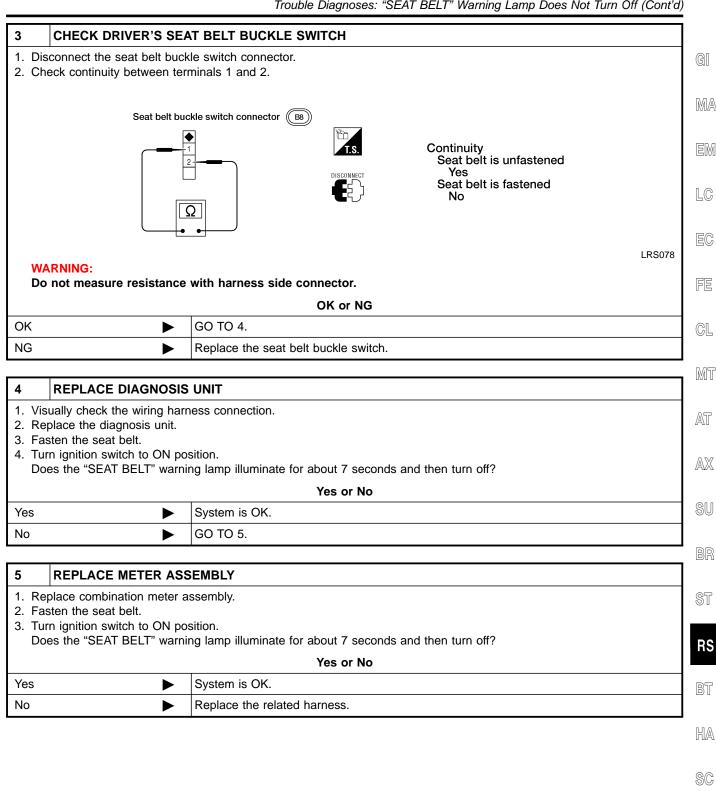
NIRS0037

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1	SEE THE DEPLOYMENT OF SEAT BELT PRE-TENSIONER				
Is fron	Is front seat belt pre-tensioner (and driver and front passenger air bag modules) deployed?				
	Yes or No				
Yes	Yes Refer to "Collision Diagnosis", RS-65.				
No	>	GO TO 2.			

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

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

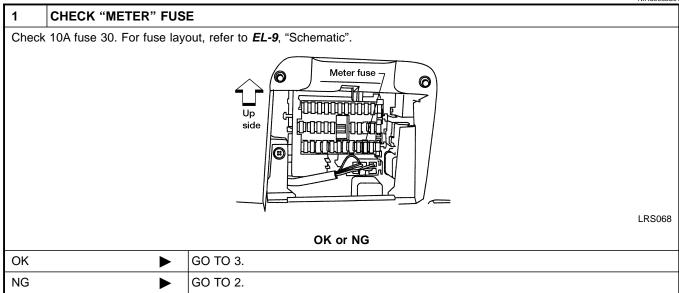


Trouble Diagnoses: "SEAT BELT" Warning Lamp Does Not Turn On

Trouble Diagnoses: "SEAT BELT" Warning Lamp Does Not Turn On DIAGNOSTIC PROCEDURE 13

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NIRS0038S01



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

3	CHECK WARNING LAMP BULB			
Is war	Is warning lamp bulb OK?			
	OK or NG			
OK	OK ▶ GO TO 4.			
NG	NG Replace warning lamp bulb.			

4 REPLACE DIAGNOSIS UNIT 1. Visually check the wiring harness connection. 2. Replace the diagnosis unit. 3. Fasten the seat belt. 4. Turn ignition switch to ON position. Does the "SEAT BELT" warning lamp illuminate for about 7 seconds and then turn off? Yes or No Yes System is OK. No ▶ GO TO 5.

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

5	REPLACE METER AS	SEMBLY		
Replace combination meter assembly. Fasten the seat belt.				
3. Tur	rn ignition switch to ON po	sition. ng lamp illuminate for about 7 seconds and then turn off?		
	Yes or No			
Yes	>	System is OK.		
No	•	Replace the related harness.	1	

Collision Diagnosis

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 front seat belt pre-tensioner assemblies.
- 3) Check the SRS components using the table shown below:
- Replace any SRS components showing visible signs of damage (dents, cracks and deformation).
- 4) Install new air bag modules (except the side air bag module) and front seat belt pre-tensioner assemblies.
- 5) Conduct self-diagnosis using CONSULT-II or "AIR BAG" and "SEAT BELT" warning lamp. Refer to "SRS Operation Check", RS-41 for details. Ensure entire SRS operates properly.

When SRS is not activated in a collision:

- 1) Check the SRS components using the table shown below:
- Replace any SRS components showing visible signs of damage (dents, cracks and deformation).
- 2) Conduct self-diagnosis using CONSULT-II or "AIR BAG" and "SEAT BELT" warning lamp. Refer to "SRS Operation Check", RS-41 for details. Ensure entire SRS operates properly.

SRS Inspection (For frontal collision)

`		NIRS0033S0101
Part	SRS is activated	SRS is NOT activated
Air bag module (driver and front passenger side)	REPLACE Install with new spe- cial bolts coated with bonding agent.	1. Remove air bag module. Check harness cover and connectors for damage, terminals for deformities, and harness for binding. 2. Install air bag modules. 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 coated with bonding agent. 4. If damaged—REPLACE. Install air bag modules with new special bolts coated with bonding agent. Air bag must be deployed before discarding.
Front seat belt pre- tensioner assembly	REPLACE Install front seat belt pre-tensioner with new bolts.	1. Remove front seat belt pre-tensioners. Check harness cover and connectors for damage, terminals for deformities, and harness for binding. 2. Check belts for damage and anchors for loose mounting. 3. Check retractor for smooth operation. 4. If no damage is found, reinstall the front seat belt pre-tensioner assembly. 5. If damaged—REPLACE. Install the front seat belt pre-tensioners with new bolts coated with bonding agent. Front seat belt pre-tensioners must be deployed before discarding.
Diagnosis sensor unit	REPLACE Install with new bolts coated with bonding agent.	Check case for dents, cracks or deformities. Check connectors for damage, and terminals for deformities. If no damage is found, reinstall with new special bolts and ground bolt coated with bonding agent. If damaged—REPLACE. Install diagnosis sensor unit with new special bolts and ground bolt coated with bonding agent.

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Collision Diagnosis (Cont'd)

Part	SRS is activated	SRS is NOT activated		
Steering wheel	 Visually check steering wheel for deformities. Check harness (built into steering wheel) and connectors for damage, and terminals for deformities. Install driver air bag module to check fit or alignment with steering wheel. Check steering wheel for excessive free play. If no damage is found, reinstall with bolts. If damaged—REPLACE. 			
Spiral cable	 Visually check spiral cable and combination switch for damage. Check connectors and protective tape for damage. Check steering wheel for noise, binding or heavy operation. If no damage is found, reinstall with bolts. If damaged—REPLACE. 			
Harness and Connectors	 Check connectors for poor connection, damage, and terminals for deformities. Check harness for binding, chafing, cuts, or deformities. If no damage is found, reinstall the harness and connectors. Damaged—REPLACE damaged section of harness. Do not attempt to repair, splice or modify an harness. 			
Instrument panel	When front passeng Opening portion for f	er air bag inflates, check the following points for bending, deforont passenger air bag	rmities or cracks.	
			LRS0	
	Front passenger air t	pag module brackets	LNOC	
	The continue convice	©: Check points	LRS0	
	The portions securing	g the instrument panel		
		@:Check points id, reinstall the instrument panel. ICE the instrument panel with bolts.	LRSO	

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 components:
- All parts of seat back (including seat back frame) with side air bag module (on the side on which side 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, and "AIR BAG" and "SEAT BELT" warning lamp. Refer to "SRS Operation Check" (RS-41) for details. Ensure entire SRS operates properly.

When SRS is not activated in the side collision:

- 1) Check the SRS components and the related parts using the table shown below.
- Replace any SRS components and the related parts showing visible signs of damage (dents, cracks, deformation).
- 2) Conduct self-diagnosis using CONSULT-II, and "AIR BAG" and "SEAT BELT" warning lamp. Refer to "SRS Operation Check" (RS-41) for details. Ensure entire SRS operates properly.

SRS Inspection (For side collision)

Part	Side air bag is acti- vated	SRS is NOT activated
Front (LH or RH) side air bags module	REPLACE all parts of seat back with	Check for visible signs of damage (dents, tears, deformation) of the seat back on the collision side.
	deployed front side air bag module.	 If damaged—REPLACE the damaged seat parts with new bolts and remove the front side air bag module. Check for visible signs of damaged (tears etc.) of the front side air bag mod-
		trieck for visible signs of damaged (lears etc.) of the front side all bag module.Check harness and connectors for damage, and terminals for deformities.If no damaged is found, reinstall the front side air bag module with new torx
		nuts coated with bonding agent. 6. If damaged—REPLACE the front side air bag module with new torx nuts coated with bonding agent. Air bag must be deployed before disposing of it.
(LH or RH) Side air bag (satellite) sensor	REPLACE the side air bag (satellite) sensor on the collision side	 Remove the side air bag (satellite) sensor on the collision side. Check harness connectors for damage, terminals for deformities, and harness for binding. Check for visible signs of damage (dents, cracks, deformation) of the satellite
	with new nut and bolt coated with bonding agent. (Repair the center	sensor.3. Install the side air bag (satellite) sensor to check fit.4. If no damage is found, reinstall the side air bag (satellite) sensor with new nuts coated with bonding agent.
	pillar inner, etc. before installing new one if damaged.)	 If damaged—REPLACE the side air bag (satellite) sensor with new nut and bolt coated with bonding agent.
Diagnosis sensor unit	REPLACE the diagnosis sensor unit with	Check case and bracket for dents, cracks or deformities. Check connectors for damage, and terminals for deformities.
	the new bolts.	3. If no damage is found, reinstall the diagnosis sensor unit with new special bolts and ground bolt.4. If damaged—REPLACE. Install the diagnosis sensor unit with new special bolts and ground bolt.

RS-67

Collision Diagnosis (Cont'd)

Part	Side air bag is activated	SRS is NOT activated	
Front seat belt pre- tensioner assembly	 Check if the seat belt can be extended smoothly. If the seat belt cannot be extended smoothly. Check for deformities of the center pillar inner. If the center pillar inner has no damage, REPLACE the front seat belt pre-tensioner assembly. Remove the front seat belt pre-tensioner assembly on the collision side. Check harness cover and connectors for damage, terminals for deformities, and harness for binding. Check for visible signs of damage (dents, cracks, deformation) of the front seat belt pre-tensioner assembly. If no damage is found, reinstall the front seat belt pre-tensioner assembly with new bolts coated with bonding agent. The front seat belt pre-tensioner assembly must be deployed before disposing of it. 		
Seat	REPLACE all parts of seat back (including seat back frame)	 Visually check the seat on the collision side. Remove the seat on the collision side and check the following for damage and deformities. Harness, connectors and terminals Frame and recliner (for front and rear seat), and also adjuster and slides (for front seat) If no damage is found, reinstall the seat. If damaged—REPLACE the damaged seat parts with new bolts. 	
Center pillar inner	Check the center pillar inner on the collision side for damage (dents, cracks, deformation). If damaged—REPAIR the center pillar inner.		
Trim	Check for visible signs of damage (dents, cracks, deformation) of the interior trim on the collision s If damaged—REPLACE the damaged trim parts.		