

RESTRAINT SYSTEM

SECTION RS

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Precautions

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

NGRS0001

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

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. SRS wiring harness can be identified by yellow and/or orange harness connectors.

PRECAUTIONS FOR SEAT BELT SERVICE

NGRS0002

CAUTION:

- Before removing the seat belt pre-tensioner assembly, turn the ignition switch OFF, disconnect both battery cables and wait at least 3 minutes.
- After replacing or reinstalling seat belt pre-tensioner assembly, or reconnecting seat belt pre-tensioner assembly connector, ensure entire SRS operates properly. Refer to “SRS Operation Check”, RS-37.
- Do not disassemble buckle or seat belt assembly.
- Do not reuse seat belt anchor bolts after removal. Replace with new ones.
- Replace anchor bolts if they are deformed or worn out.
- Never oil tongue and buckle.
- If any component of seat belt assembly is questionable, do not repair. Replace the whole seat belt assembly.
- If webbing is cut, frayed, or damaged, replace seat belt assembly.
- When replacing seat belt assembly, use a genuine NISSAN seat belt assembly.

After A Collision

NGRS0002S01

WARNING:

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

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

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

SEAT BELTS

Front Seat Belt

Front Seat Belt

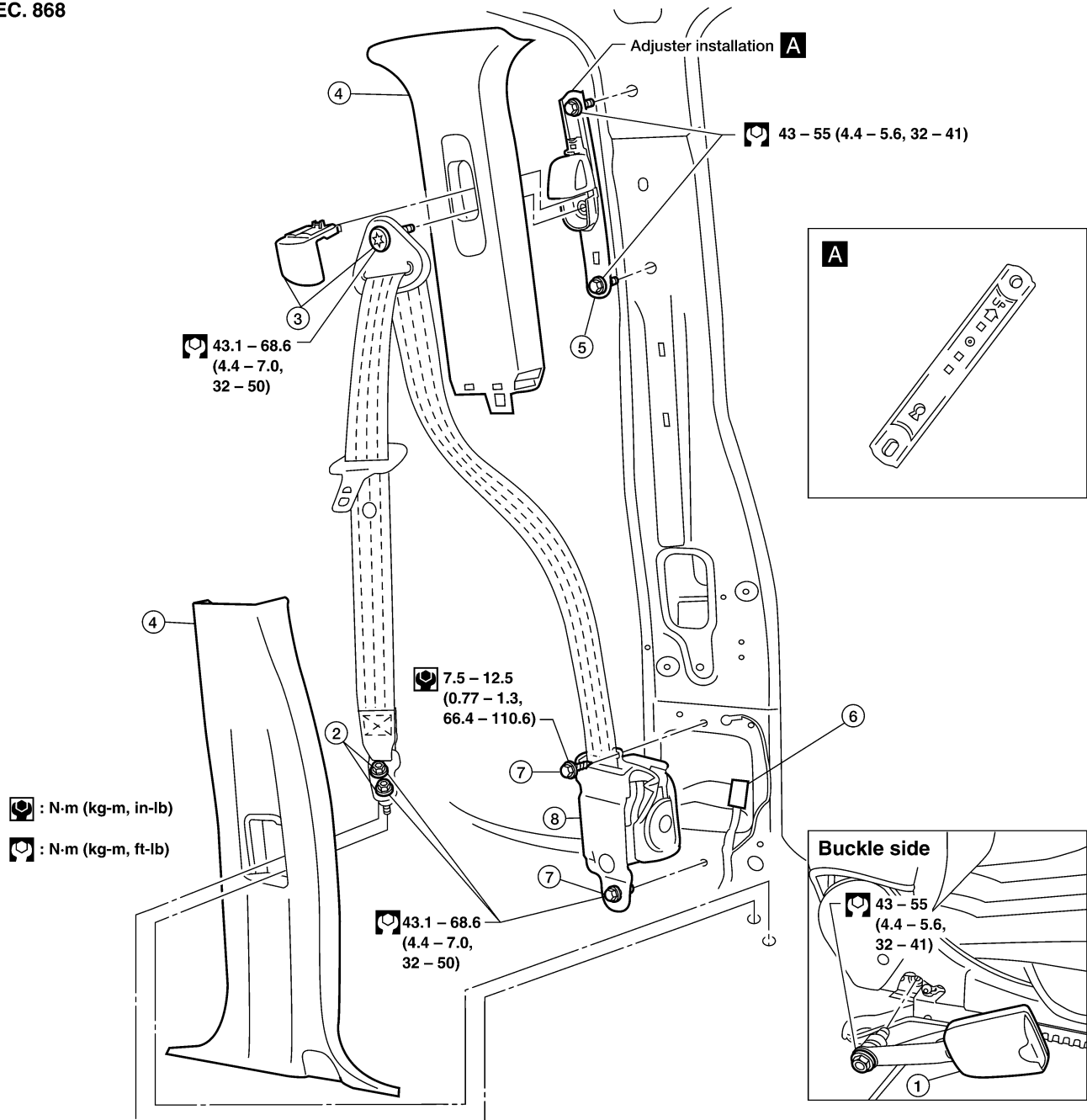
REMOVAL AND INSTALLATION

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Slide the seat all the way forward and tilt the seatback toward the front.

1. Remove buckle. For driver and passenger side, disconnect seat belt switch connector.
2. Remove floor anchor bolts.
3. Remove adjuster cover and upper guide loop anchor bolt.
4. Remove center pillar lower and upper garnishes. Refer to **BT-24**, "SIDE AND FLOOR TRIM".
5. Remove two adjuster bolts and adjuster assembly.
6. Disconnect seat belt pre-tensioner connector.
7. Remove retractor anchor bolt and screw.
8. Remove retractor.

SEC. 868



WRS251

Rear Seat Belt

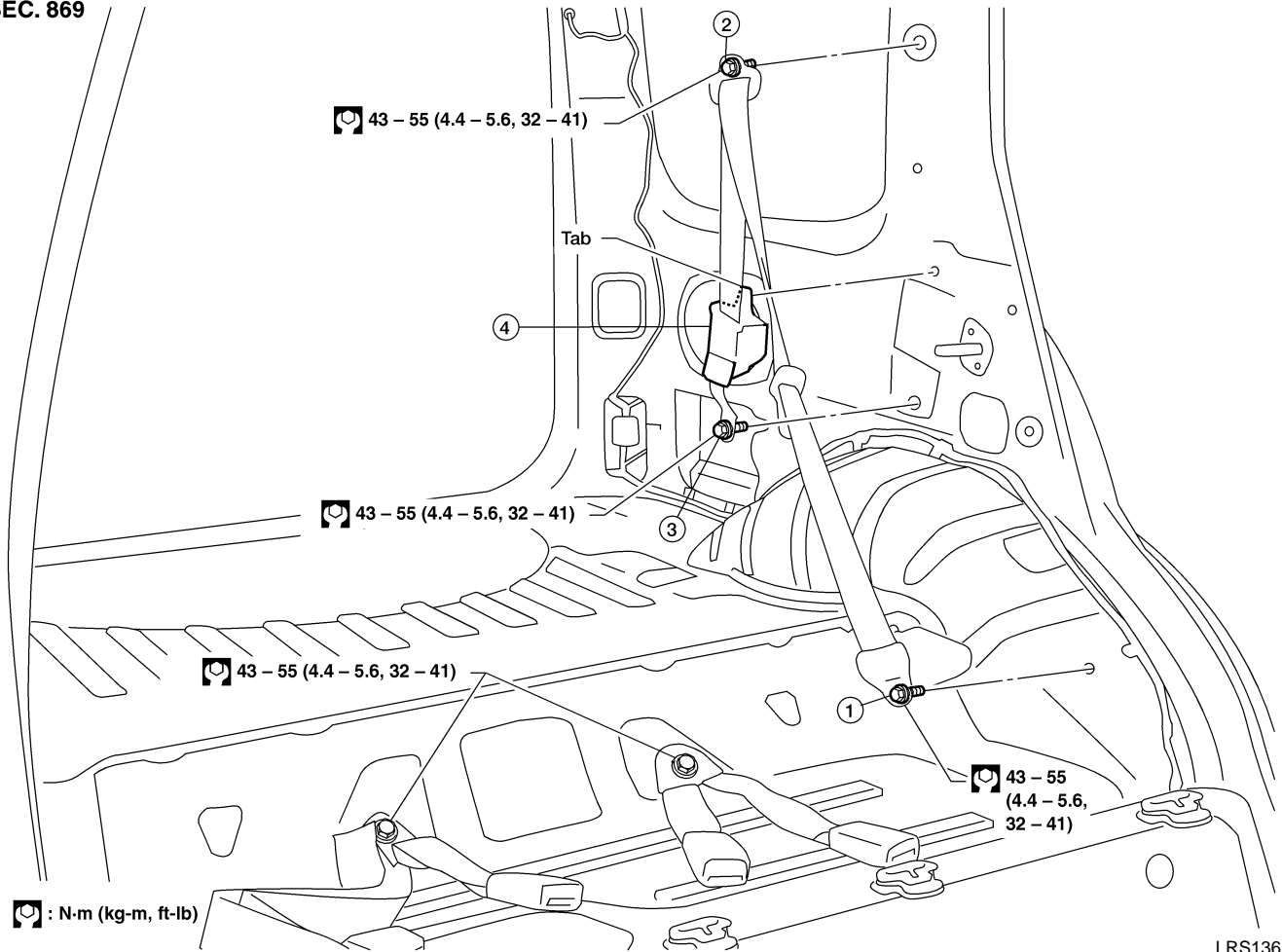
REMOVAL AND INSTALLATION

Remove rear seat. Refer to **BT-38**, "REAR SEAT".

1. Remove lower seat belt anchor bolt.
2. Remove shoulder anchor bolt.
3. Remove retractor bolt.
4. Remove retractor.

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SEAT BELTS

Seat Belt Inspection

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AFTER A COLLISION

WARNING:

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

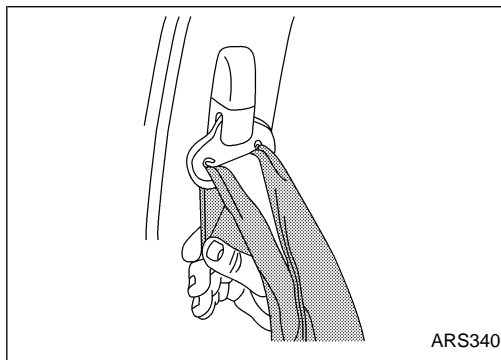
Replace any seat belt assembly (including anchor bolts) if:

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

PRELIMINARY CHECKS

NGRS0029S02

1. Check the "SEAT BELT" warning lamp for proper operation as follows:
 - a. Switch ignition ON. With driver seat belt unfastened, the "SEAT BELT" warning lamp should illuminate. Also, the "SEAT BELT" warning chime should sound for about seven seconds.
 - b. Fasten driver's seat belt. The "SEAT BELT" warning lamp should go out.
2. If the "AIR BAG" warning lamp is blinking, conduct self-diagnosis using "AIR BAG" warning lamp or CONSULT-II. Refer to "SRS Operation Check", RS-37.
3. Check that the seat belt retractor, seat belt anchor and buckle bolts are securely attached.
4. Check the shoulder seat belt guide and shoulder belt height adjuster for front seats. Ensure guide swivels freely and that belt lays flat and does not bind in guide. Ensure height adjuster operates properly and holds securely.
5. Check retractor operation:
 - a. Fully extend the seat belt webbing and check for twists, tears or other damage.
 - b. Allow the seat belt to retract. Ensure that belt returns smoothly and completely into the retractor. If the seat belt does not return smoothly, wipe the inside of the loops with a clean paper cloth etc. Dirt built up in the loops of the upper anchors can cause the seat belts to retract slowly.



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

SEAT BELTS

Seat Belt Inspection (Cont'd)

SEAT BELT RETRACTOR ON-VEHICLE CHECK

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

=NGRS0029S03

NGRS0029S0301

NOTE:

All seat belt retractors are of the Emergency Locking (ELR) type. In an emergency (sudden stop) the retractor will lock and prevent the belt from extending any further. All outboard 3-point type seat belt retractors except the driver's seat belt also have an Automatic Locking (ALR) mode. The ALR mode (also called child restraint mode) is used when installing child seats in outboard seating positions. 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

NGRS0029S0302

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

ALR Function Stationary Check

NGRS0029S0304

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 (ALR) mode.
3. Grasp the seat belt and try to pull out of 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 (all outboard seating positions)

NGRS0029S0303

WARNING:

Perform the following test in a safe, open area clear of other vehicles and obstructions (for example, a large, empty parking lot). Road surface must be paved and dry. DO NOT perform the following test on wet roads, gravel roads, public streets or 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 extend. If the seat belt retractor assembly does not lock, perform the retractor off-vehicle check.

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SEAT BELTS

Seat Belt Inspection (Cont'd)

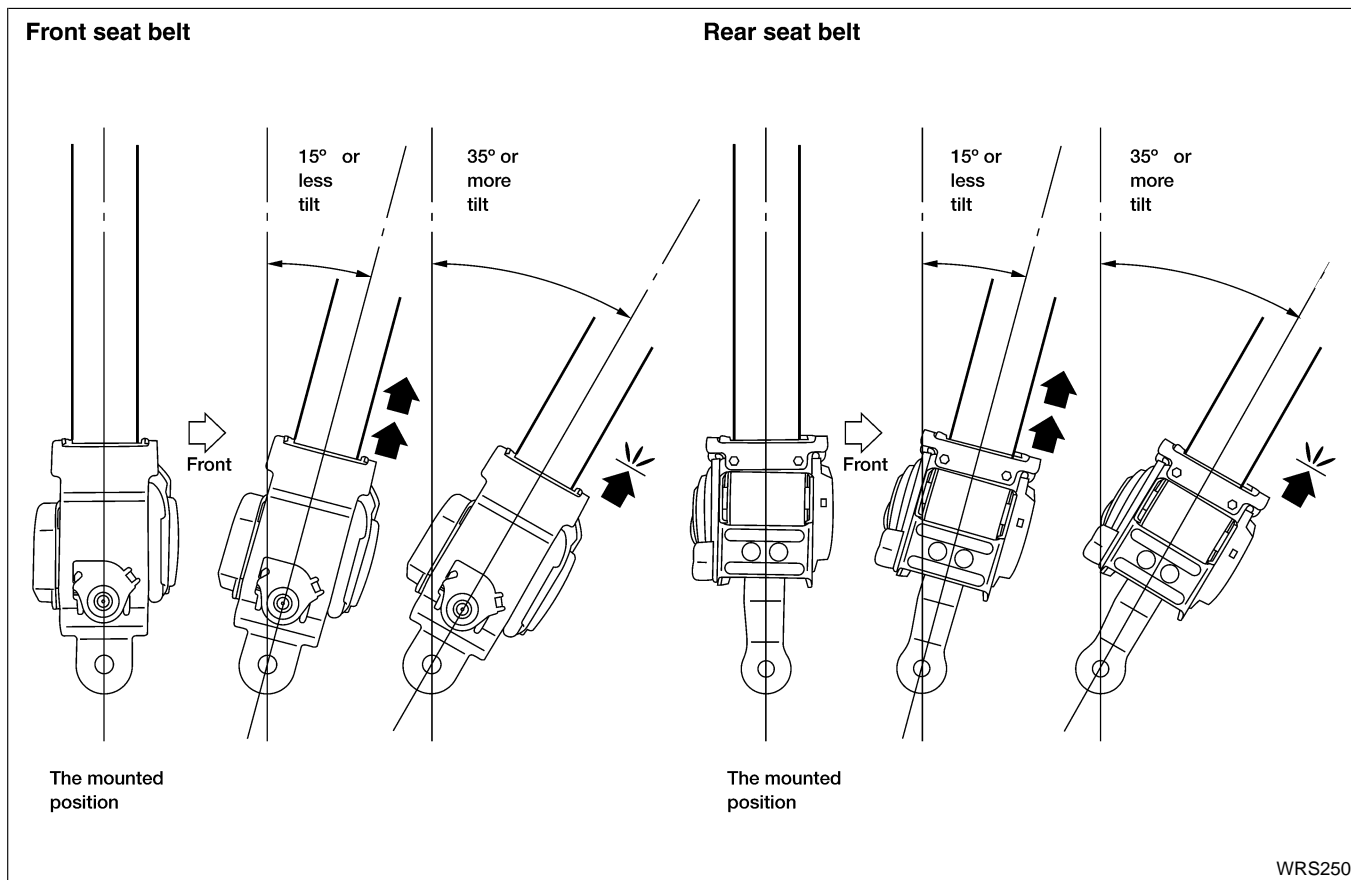
SEAT BELT RETRACTOR OFF-VEHICLE CHECK

=NGRS0029S04

1. Remove the seat belt retractor assembly.
2. Slowly pull out belt while tilting the retractor assembly forward from the mounted position 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.



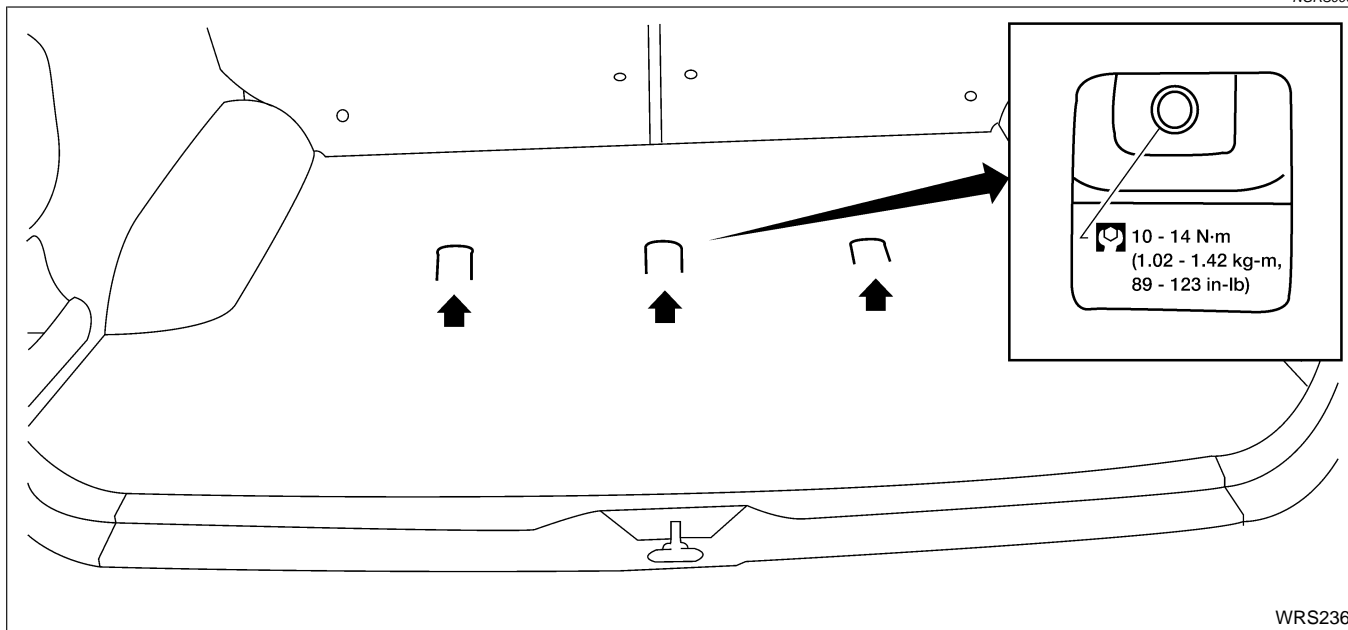
If NG, replace the retractor assembly.

SEAT BELTS

Top Tether Strap Child Restraint

Top Tether Strap Child Restraint REMOVAL AND INSTALLATION

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SUPPLEMENTAL RESTRAINT SYSTEM (SRS)

Precautions

Precautions

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

NGRS0005

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

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. SRS wiring harness can be identified by yellow and/or orange harness connectors.

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

NGRS0006

- Do not use a circuit tester to check SRS circuits unless instructed to in this Service Manual.
- Before servicing the SRS, turn ignition switch OFF, disconnect both battery cables and wait at least 3 minutes.
For approximately 3 minutes after the cables are removed, it is still possible for the air bags and seat belt pre-tensioners to deploy. Therefore, do not work on any SRS connectors or wires until at least 3 minutes have passed.
- Air bag diagnosis sensor unit must always be installed with forward mark “←” pointing toward the front of the vehicle for proper operation. Also check air bag diagnosis sensor unit for deformities, dents, cracks and rust before installation and replace as required.
- The spiral cable must be aligned in the neutral position since its rotations are limited. Do not rotate steering column while steering gear is removed to avoid damaging spiral cable.
- Handle air bag module carefully. Always place it with air bag lid surface facing upward.
- Conduct Self-diagnosis to check entire SRS for proper function after replacing any components. Refer to “SRS Operation Check”, RS-37.
- After air bag inflates, the instrument panel assembly should be replaced if damaged.

SUPPLEMENTAL RESTRAINT SYSTEM (SRS)

Precautions (Cont'd)

AFTER A COLLISION

-NGRS0067

WARNING:

Inspect all seat belt assemblies including retractors, buckles 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 assemblies which are equipped with pre-tensioners should be replaced even if the seat belts are not in use during a frontal collision in which the air bags are deployed.

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

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

WIRING DIAGRAMS AND TROUBLE DIAGNOSIS

NGRS0007

When you read wiring diagrams, refer to the following:

- Refer to **GI-10**, "HOW TO READ WIRING DIAGRAMS".
- Refer to **EL-10**, "POWER SUPPLY ROUTING" for power distribution circuit.

When you perform trouble diagnosis, refer to the following:

- Refer to **GI-33**, "How to Follow Test Groups in Trouble Diagnoses".
- Refer to **GI-22**, "HOW TO PERFORM EFFICIENT DIAGNOSIS FOR AN ELECTRICAL INCIDENT".

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SUPPLEMENTAL RESTRAINT SYSTEM (SRS)

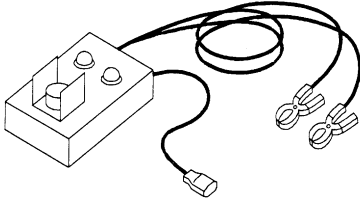
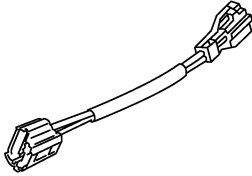
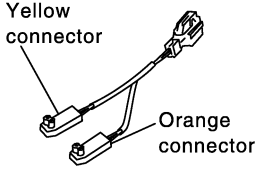
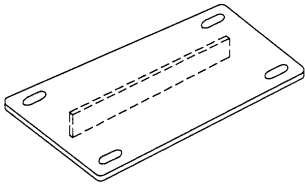
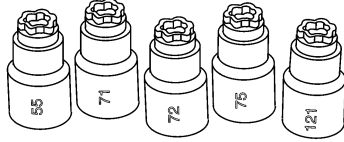
Preparation

Preparation

SPECIAL SERVICE TOOLS

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

Tool number (Kent-Moore No.) Tool name	Description
KV991072S0 (J38381-KIT) Air bag deployment kit KV99106400 (J38381) Deployment tool	 <p>Disposing of air bag module and seat belt pre-tensioner</p> <p>NT357</p>
(J38381-65) Deployment tool adapter for passenger air bag module	 <p>WRS287</p>
(J38381-80) Deployment tool adapter for driver air bag module and seat belt pre-tensioner	 <p>Yellow connector</p> <p>Orange connector</p> <p>WRS288</p>
KV99105300 (J41246) Air bag module bracket	 <p>Anchoring air bag module</p> <p>NT354</p>
(J-44615) Air bag master key set	 <p>Removing and installing accessory air bag locking bolts.</p> <p>LRS210</p>

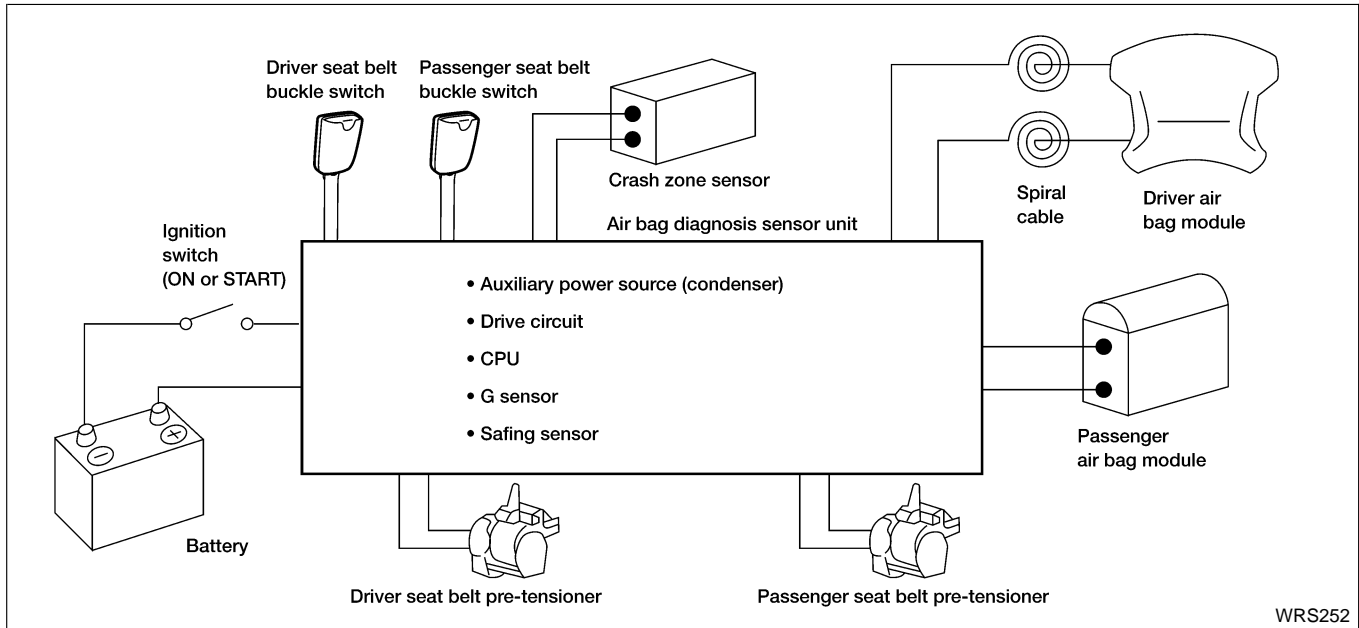
*: Special tool or commercial equivalent

SUPPLEMENTAL RESTRAINT SYSTEM (SRS)

Description

Description

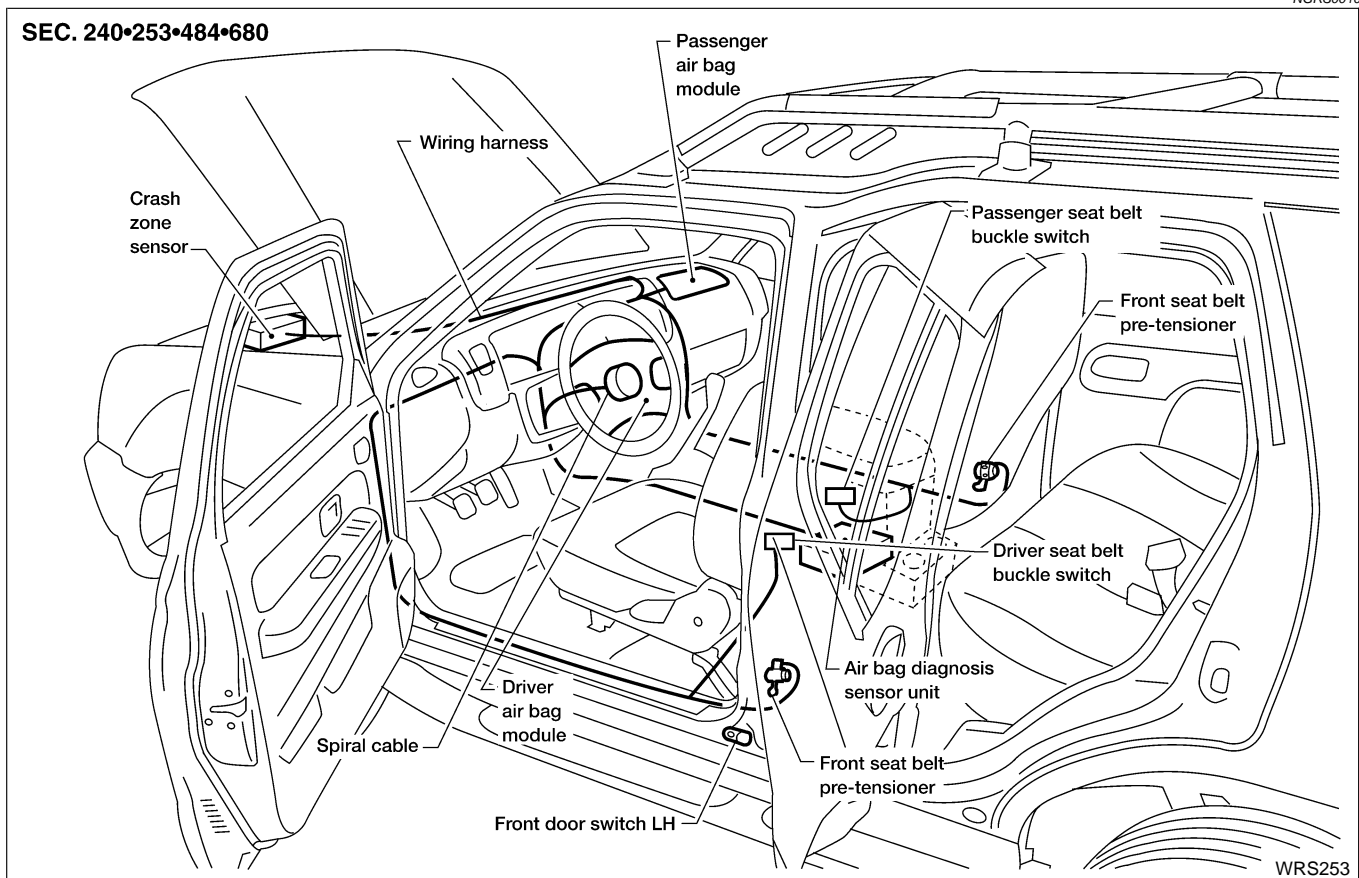
NGRS0009



The air bags and seat belt pre-tensioners deploy if the air bag diagnosis sensor unit activates while the ignition switch is in the ON or START position. The air bag diagnosis sensor unit will deploy the air bags and seat belt pre-tensioners if the G sensor activates simultaneously with the safing sensor while the ignition switch is ON.

SRS Component Parts Location

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SUPPLEMENTAL RESTRAINT SYSTEM (SRS)

SRS Component Parts Location (Cont'd)

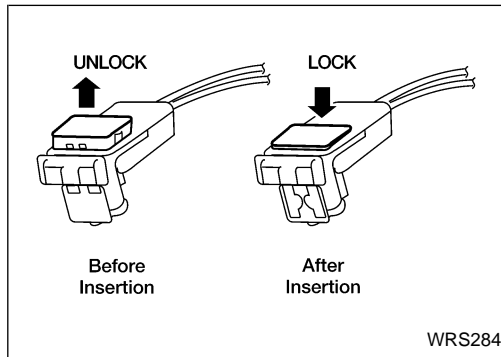
DIRECT-CONNECT SRS COMPONENT CONNECTORS

NGRS0010S01

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

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

Always pull up to release black locking tab prior to removing connector from SRS component. Always push down to lock black locking tab after installing connector to SRS component.

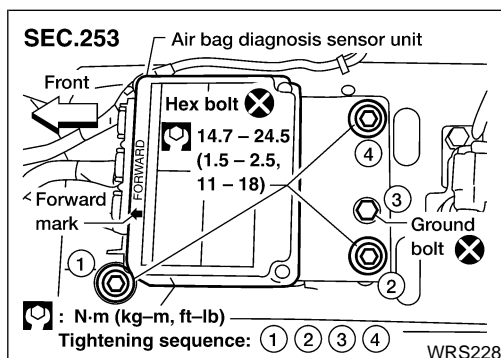


Diagnosis Sensor Unit REMOVAL AND INSTALLATION

NGRS0012

CAUTION:

- 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 reuse bolts after removal; replace with new ones.
- Check air bag diagnosis sensor unit for proper installation.
- Check air bag diagnosis sensor unit to ensure it is free of deformities, dents, cracks and rust. If there are any visible signs of damage, replace it with a new one.
- Check air bag diagnosis sensor unit brackets to ensure they are free of deformities or rust.
- Replace air bag diagnosis sensor unit if it has been dropped or has sustained an impact.



1. Disconnect driver and passenger air bag module connectors and seat belt pre-tensioner connectors.
2. Remove console box. Refer to "INSTRUMENT PANEL ASSEMBLY", **BT-20**.
3. Disconnect air bag diagnosis sensor unit connector.
4. Remove ground bolt and also remove hex head bolts from air bag diagnosis sensor unit. Then remove the air bag diagnosis sensor unit.

NOTE:

- To install, reverse the removal procedure and tighten new bolts in the sequence indicated in the illustration.

SUPPLEMENTAL RESTRAINT SYSTEM (SRS)

Diagnosis Sensor Unit (Cont'd)

- After replacement, perform self-diagnosis for SRS. Refer to "SRS Operation Check", RS-37.

CAUTION:

Air bag diagnosis sensor unit must always be installed with forward mark "←" pointing toward the front of the vehicle for proper operation. Also check air bag diagnosis sensor unit for deformities, dents, cracks and rust before installation and replace as required.

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Crash Zone Sensor

REMOVAL AND INSTALLATION

NGRS0066

CAUTION:

- Before servicing SRS, turn the ignition switch off, disconnect both battery cables and wait at least 3 minutes.
- Check crash zone sensor for proper installation.
- Check crash zone 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 crash zone sensor, check SRS function and perform self-diagnosis for SRS. Refer to "SRS Operation Check" for details. (RS-37)
- Do not attempt to disassemble crash zone sensor.
- Replace crash zone sensor if it has been dropped or sustained an impact.

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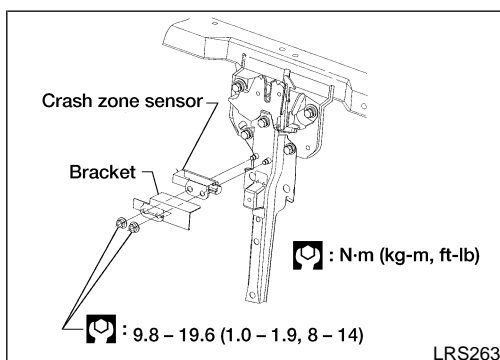
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1. Disconnect crash zone sensor.
2. Remove nuts from crash zone sensor and bracket. Then remove bracket and crash zone sensor from radiator support.

NOTE:

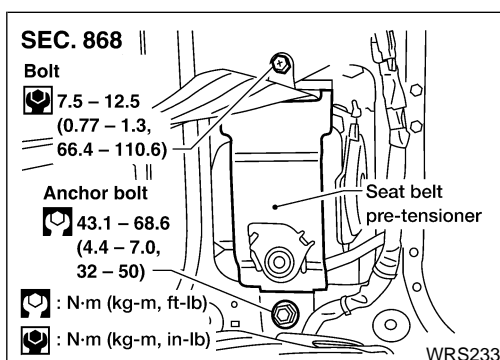
- To install, reverse the removal procedure sequence.

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Seat Belt Pre-tensioner

REMOVAL AND INSTALLATION

NGRS0040

CAUTION:

- Before servicing SRS, turn the ignition switch off, disconnect both battery cables and wait at least 3 minutes.
- Check seat belt pre-tensioner for proper installation.
- After replacement of seat belt pre-tensioner, check SRS function and perform self-diagnosis for SRS. Refer to "SRS Operation Check", RS-37.
- Do not attempt to disassemble air bag diagnosis sensor unit or seat belt pre-tensioner.

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SUPPLEMENTAL RESTRAINT SYSTEM (SRS)

Seat Belt Pre-tensioner (Cont'd)

- Replace seat belt pre-tensioner if it has been dropped or sustained an impact.
- Do not expose seat belt pre-tensioner to temperatures exceeding 80°C (176°F).

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

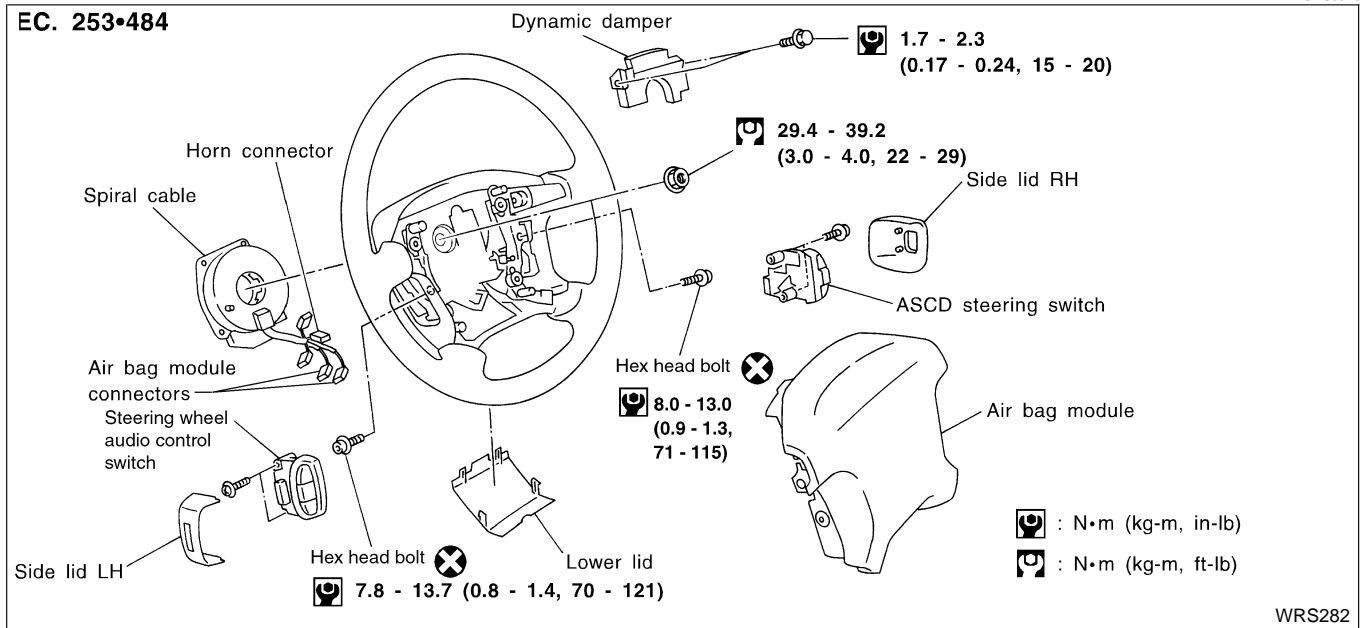
NOTE:

- To install, reverse removal procedure.

Driver Air Bag Module and Spiral Cable

REMOVAL AND INSTALLATION

NGRS0013



REMOVAL

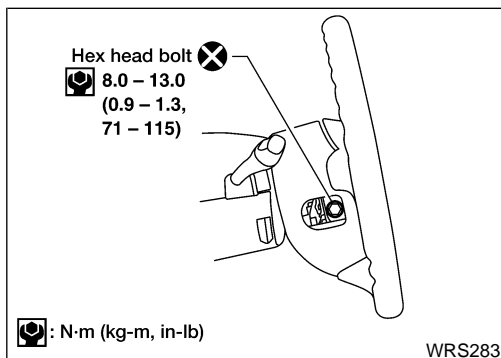
NGRS0014

CAUTION:

- Before servicing SRS, turn the ignition switch OFF, disconnect both battery cables and wait at least 3 minutes.
- Always work from the side of an air bag module.

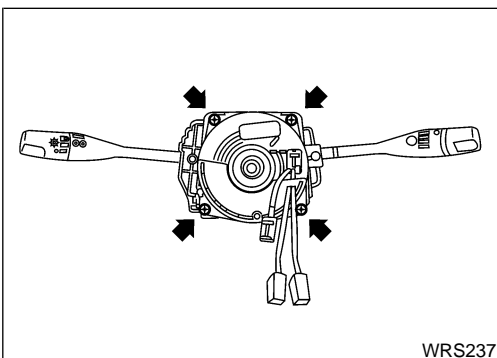
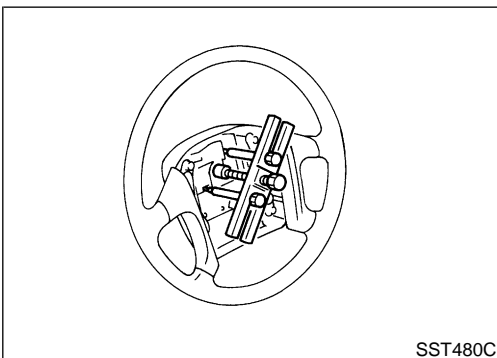
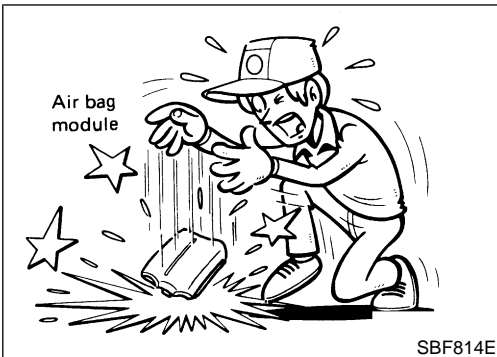
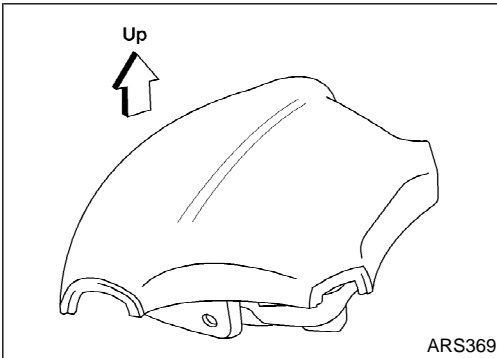
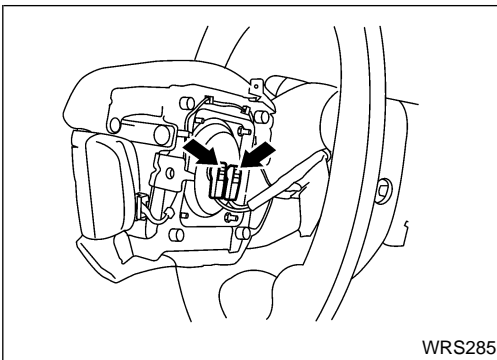
1. Remove side lids and/or switch covers and switches.

2. Remove right and left special hex head bolts.



SUPPLEMENTAL RESTRAINT SYSTEM (SRS)

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



3. Disconnect the air bag harness connectors, and remove the air bag module.
 - For removal/installation of the direct-connect SRS connectors, refer to RS-14, "DIRECT-CONNECT SRS COMPONENT CONNECTORS"

CAUTION:

- Always place air bag module with air bag lid surface facing upward.
- Do not attempt to disassemble air bag module.
- 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 drop or impact air bag module. If any portion is deformed or cracked, replace the module.
- Do not expose the air bag module to temperatures exceeding 90°C (194°F).
- Do not allow oil, grease or water to come in contact with the air bag module.

4. Set steering wheel in the neutral position.
5. Disconnect spiral cable connector from steering wheel sub-harness and remove nut.
6. Remove dynamic damper, then using steering wheel puller, remove steering wheel. Be careful not to over-tighten puller bolt on steering wheel.

CAUTION:

- Do not tap or bump the steering wheel.
7. Remove steering column covers, instrument panel lower LH and knee protector.
 8. Disconnect spiral cable connector from air bag harness.
 9. Remove the four spiral cable retaining screws. Remove the spiral cable.

CAUTION:

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

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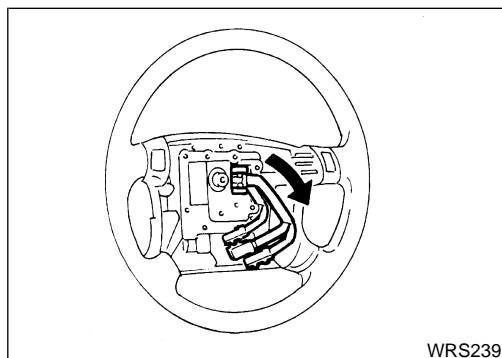
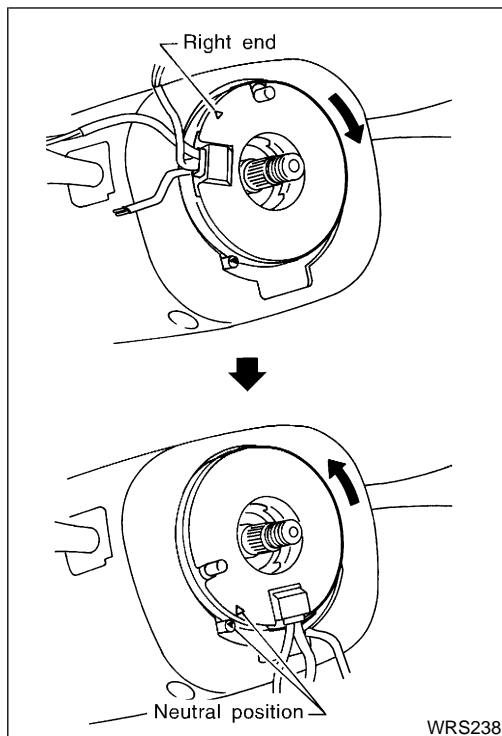
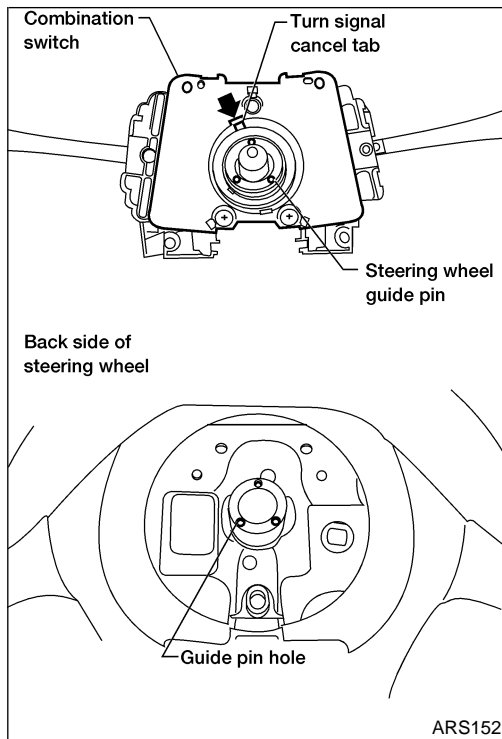
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SUPPLEMENTAL RESTRAINT SYSTEM (SRS)

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



INSTALLATION

NGRS0015

1. Set the front wheels in the straight-ahead position.
2. Align the turn signal cancel tab with the notch of the combination switch as shown.


3. Rotate the spiral cable fully clockwise until tight.
4. Rotate the spiral cable counterclockwise approximately 2.25 turns and align white pin with arrow on housing.

- When the spiral cable is centered, white pin is aligned with arrow on housing and yellow wheel shows in window.

CAUTION:

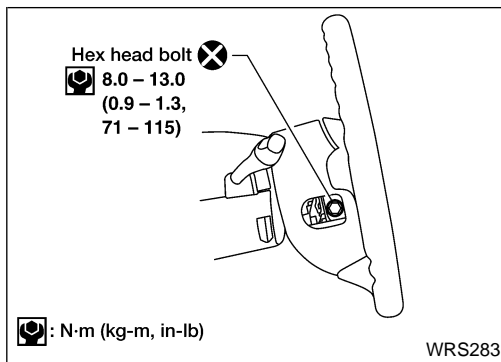
- The spiral cable may snap during steering operation if the spiral cable is installed in an improper position.
 - Also, with the steering linkage disconnected, the cable may snap by turning the steering wheel beyond the limited number of turns. The spiral cable can be turned counterclockwise approximately 2.25 turns. Always perform SRS self-diagnosis after installing the air bag module. Refer to "SRS Operation Check", RS-37.
5. Connect spiral cable to air bag harness and tighten screws. Install steering column covers.

6. Install steering wheel, setting spiral cable pin guide, and pull spiral cable connectors through.
7. Install dynamic damper.
8. Tighten steering wheel nut.

 : 29 - 39 N·m (3.0 - 4.0 kg·m, 22 - 29 ft·lb)

SUPPLEMENTAL RESTRAINT SYSTEM (SRS)

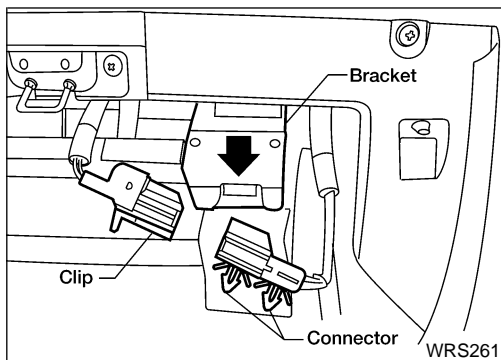
Driver Air Bag Module and Spiral Cable (Cont'd)



9. Position driver air bag module and install two new hex head bolts.
10. Connect driver air bag module connector.
 - For removal/installation of the direct-connect SRS connectors, refer to RS-14, "DIRECT-CONNECT SRS COMPONENT CONNECTORS".
11. Install all lids and steering switches.
12. Connect both battery cables.
13. Conduct self-diagnosis to ensure entire SRS operates properly. (Use CONSULT-II or "AIR BAG" warning lamp check.) Turn the steering wheel fully to the right and left to check that the spiral cable is set in the neutral position.
14. If "AIR BAG" warning lamp blinks (in User mode), it shows the spiral cable may be snapped due to its improper position. Perform self-diagnosis again. (Use CONSULT-II or "AIR BAG" warning lamp check.) If a malfunction is detected, replace the spiral cable with a new one.

NOTE:

- After replacement, perform self-diagnosis for SRS. Refer to "SRS Operation Check", RS-37.



Front Passenger Air Bag Module

REMOVAL

NGRS0016

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 an air bag module.
1. Open glove box assembly.
 2. Reach up and bend down deformable connector mounting bracket assembly.
 3. Remove passenger air bag module connector clip from bracket.
 4. Disconnect passenger air bag module connector from air bag harness connector.
 5. Remove glove box and instrument panel lower passenger side. Refer to "INSTRUMENT PANEL ASSEMBLY", BT-20.

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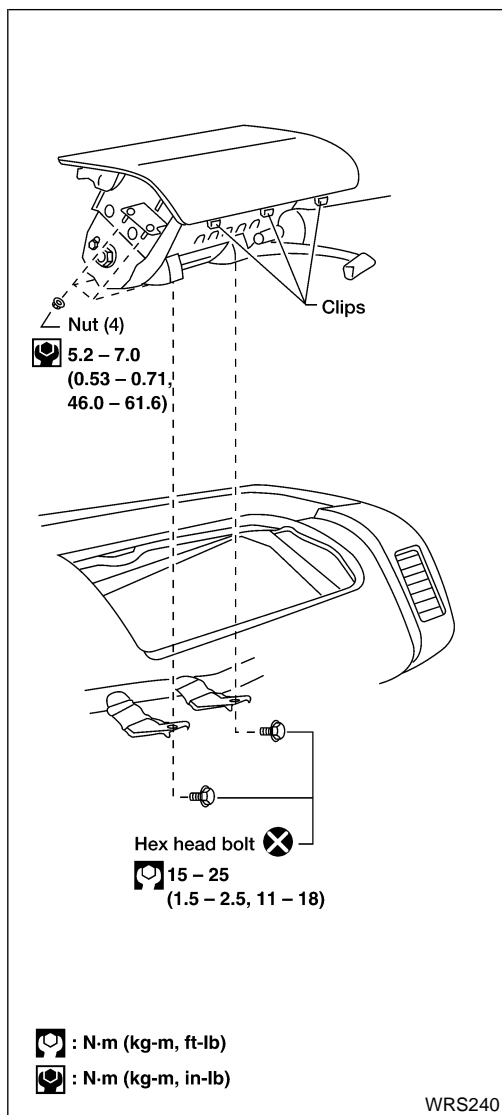
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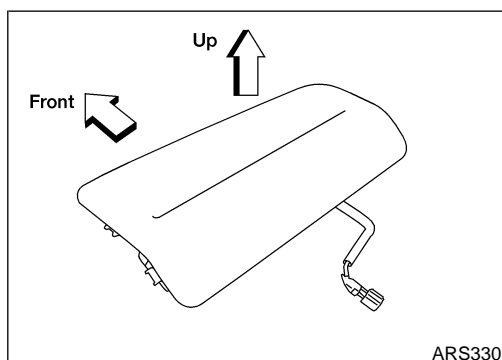
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SUPPLEMENTAL RESTRAINT SYSTEM (SRS)

Front Passenger Air Bag Module (Cont'd)

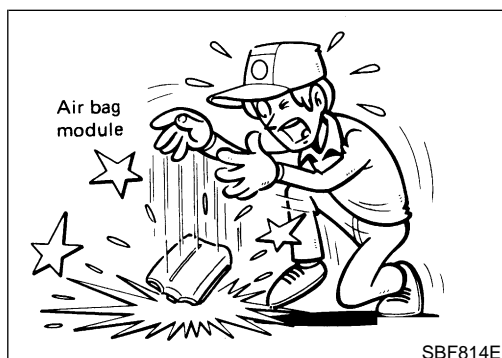


6. Remove two hex head bolts.
 7. Remove four mounting nuts.
 8. Remove passenger air bag module by releasing the clips from the top of the instrument panel.
- **The air bag module is heavy and should be supported using both hands during removal.**



CAUTION:

- Always place air bag module with pad side facing upward.
- Do not attempt to disassemble air bag module.
- The special bolts are coated with a 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.



- Do not drop or impact air bag module. If any portion is deformed or cracked, replace the module.
- 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 instrument panel assembly should be replaced if damaged.

SUPPLEMENTAL RESTRAINT SYSTEM (SRS)

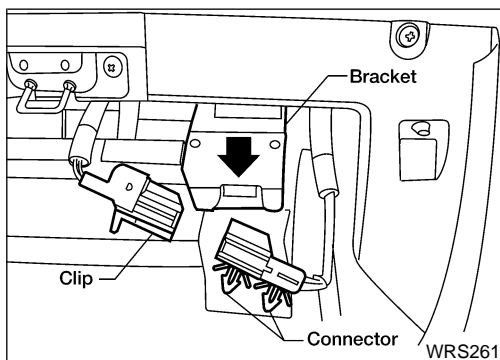
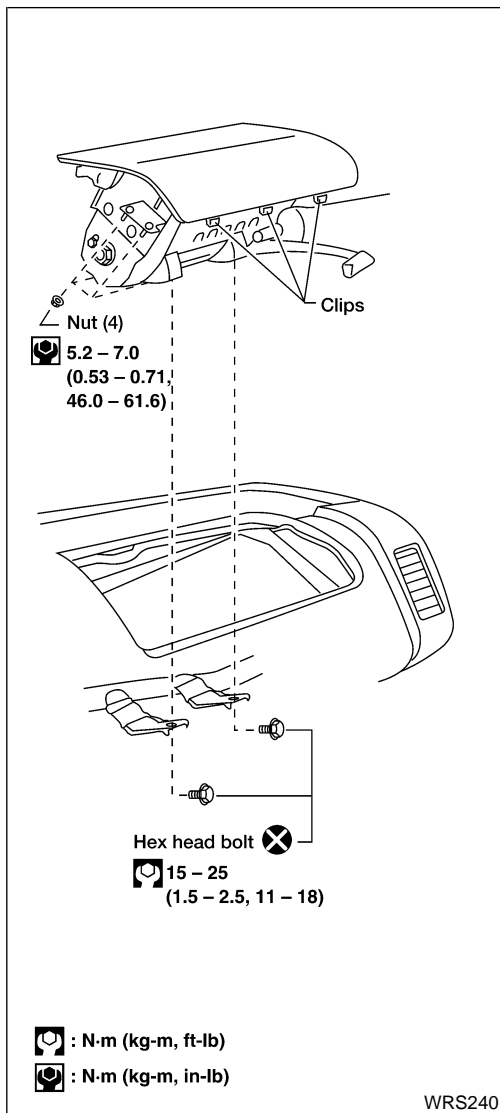
Front Passenger Air Bag Module (Cont'd)

NGRS0017

INSTALLATION

CAUTION:

- Always work from the side of an air bag module.
1. Install passenger air bag module in instrument panel.
 - 1) Insert front edge of passenger air bag module first to ease installation.
 - Ensure harness is not caught between passenger air bag module and support bracket.
 - 2) Install four mounting nuts.
 - 3) Install two new hex head bolts.
 2. Install instrument panel lower passenger side and glove box.



3. Connect passenger air bag module connector to air bag harness connector.
4. Attach passenger air bag module connector clip to lid.
5. Close lid and glove box.
6. Connect both battery cables.
7. Conduct self-diagnosis to ensure entire SRS operates properly. (Use CONSULT-II or "AIR BAG" warning lamp check.)

NOTE:

- After replacement, perform self-diagnosis for SRS. Refer to "SRS Operation Check", RS-37.

Disposal of Air Bag Module and Seat Belt Pre-tensioner

NGRS0018

- Before disposing of air bag modules and seat belt pre-tensioners, or vehicles equipped with such systems, deploy the systems. If such systems have already been deployed due to an accident, dispose of as indicated in "DISPOSING OF AIR BAG MODULE AND SEAT BELT PRE-TENSIONER", RS-27.
- When deploying air bag module or seat belt pre-tensioner, always use the Special Service Tool; Deployment tool KV99106400 (Kent-Moore No. J38381).
- When deploying air bag module or seat belt pre-tensioner,

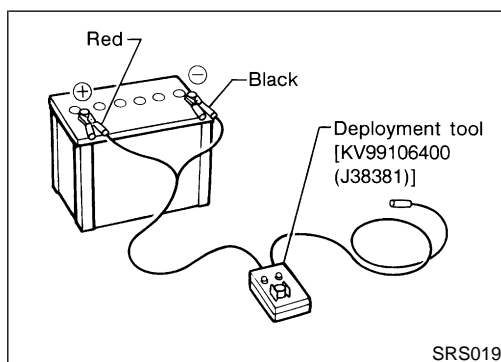
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SUPPLEMENTAL RESTRAINT SYSTEM (SRS)

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

stand at least 5 m (16 ft) away from the deployment component.

- When deploying air bag module or 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 as it irritates the throat and can cause choking.
- Only activate one air bag module or seat belt pre-tensioner at a time.
- Due to heat, leave air bag module unattended for more than 30 minutes after deployment. Leave seat belt pre-tensioner unattended for more than 10 minutes after deployment.
- Be sure to wear gloves when handling a deployed air bag module or seat belt pre-tensioner.
- Never apply water to a deployed air bag module or 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 or 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 or seat belt pre-tensioner un-deployed.



CHECKING DEPLOYMENT TOOL

Connecting to Battery

NGRS0018S01

NGRS0018S0101

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.

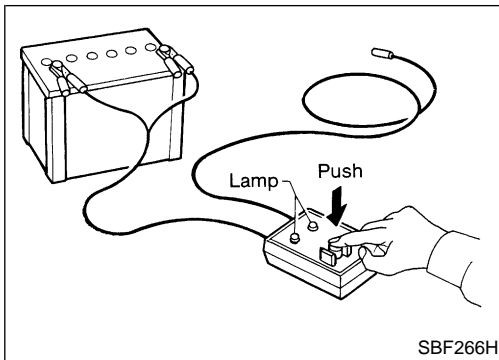
- Wait 3 minutes after the vehicle battery is disconnected before proceeding.
- Connect red clip of deployment tool [SST: KV99106400 (J38381)] to battery positive terminal and black clip to negative terminal.

CAUTION:

Make sure the polarity is correct. The right side lamp on the deployment tool [SST: KV99106400 (J38381)], marked "DEPLOYMENT TOOL POWER", should glow with a green light. If the right side lamp glows red, reverse the connections to the battery.

SUPPLEMENTAL RESTRAINT SYSTEM (SRS)

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



Deployment Tool Check

NGRS0018S0102

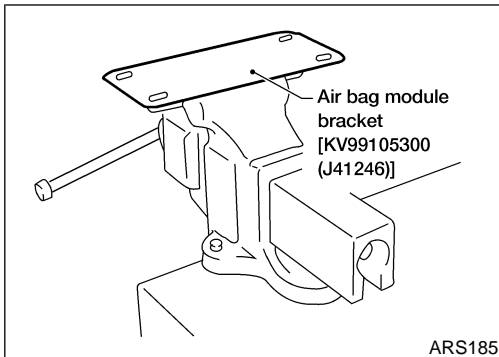
Press the deployment tool [SST: KV99106400 (J38381)] switch to the ON position. The left side lamp on the deployment tool [SST: KV99106400 (J38381)], marked "AIR BAG CONNECTOR VOLTAGE", should illuminate. If it does not illuminate, replace the tool.

Air Bag Deployment Tool Lamp Illumination Chart (Battery connected)

NGRS0018S0103

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.

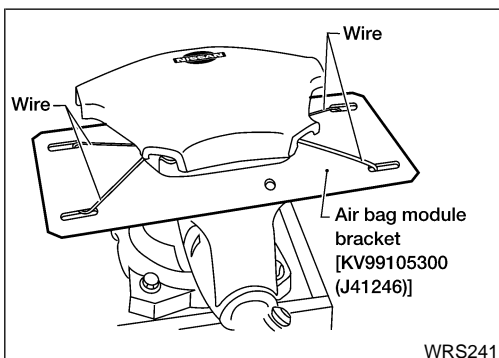


DEPLOYMENT PROCEDURES FOR AIR BAG MODULE (OUTSIDE OF VEHICLE)

NGRS0018S02

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

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



Deployment of Driver Air Bag Module (Outside of vehicle)

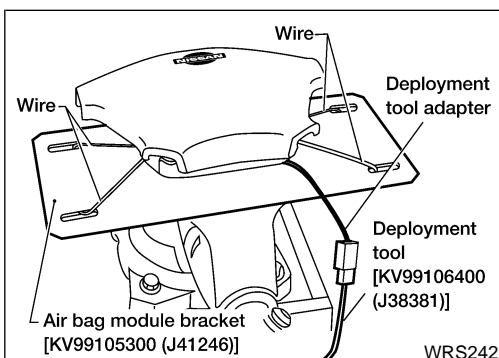
NGRS0018S0201

- Using wire, secure driver air bag module to air bag module bracket [SST: KV99105300 (J41246)] at two places.

CAUTION:

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

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



- Firmly secure air bag module bracket [SST: KV99105300 (J41246)] with driver air bag module attached, in a vise.
- Connect deployment tool adapter (J38381-80) to deployment tool [SST: KV99106400 (J38381)] connector and to driver air bag module connector.
- Connect red clip of deployment tool [SST: KV99106400 (J38381)] to battery positive terminal and black clip to negative terminal.
- The right side lamp on the deployment tool [SST: KV99106400 (J38381)], marked "DEPLOYMENT TOOL POWER", should glow green, not red.
- Press the button on the deployment tool [SST: KV99106400 (J38381)]. The left side lamp on the deployment tool [SST: KV99106400 (J38381)].

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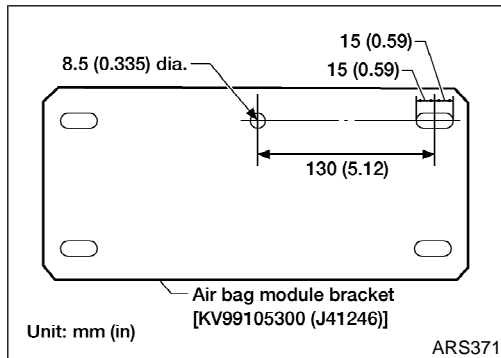
SUPPLEMENTAL RESTRAINT SYSTEM (SRS)

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

KV99106400 (J38381)], marked "AIR BAG CONNECTOR VOLTAGE", will illuminate and the air bag module will deploy.

CAUTION:

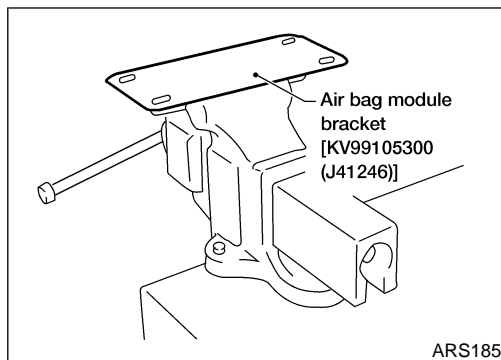
When deploying the air bag module, stand at least 5 m (16 ft) away from the air bag module.



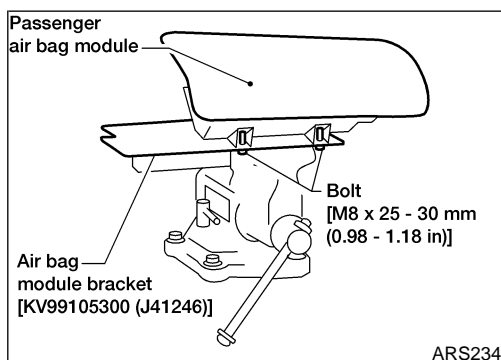
Deployment of Passenger Air Bag Module (Outside of vehicle)

NGRS0018S0202

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



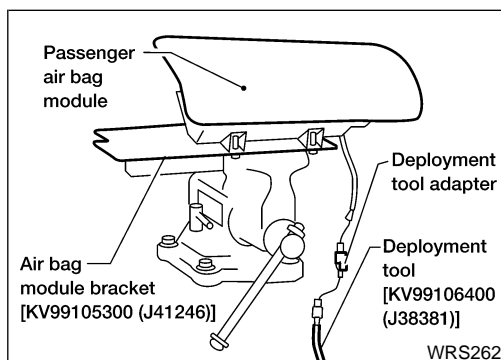
2. Firmly secure air bag module bracket [SST: KV99105300 (J41246)] in a vise.



3. Match the two holes in air bag module bracket [SST: KV99105300 (J41246)] (held in vise) and passenger air bag module and fix them with two bolts [M8 x 25 - 30 mm (0.98 - 1.18 in)].

CAUTION:

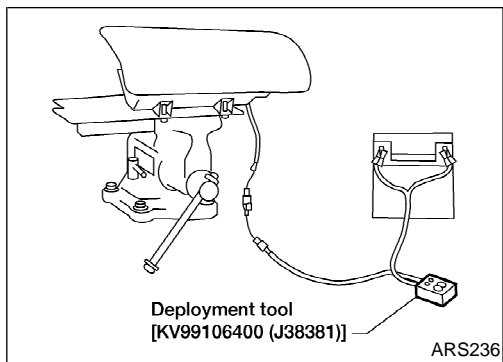
If a gap exists between passenger air bag module and air bag module bracket, use a piece of wood inserted in the gap to stabilize the air bag module.



4. Connect deployment tool adapter (J38381-65) to deployment tool [SST: KV99106400 (J38381)] connector and passenger air bag module connector.

SUPPLEMENTAL RESTRAINT SYSTEM (SRS)

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



5. Connect red clip of deployment tool [SST: KV99106400 (J38381)] to battery positive terminal and black clip to negative terminal.
6. The right side lamp on the deployment tool [SST: KV99106400 (J38381)], marked "DEPLOYMENT TOOL POWER", should glow green, not red.
7. Press the button on the deployment tool [SST: KV99106400 (J38381)]. The left side lamp on the deployment tool [SST: KV99106400 (J38381)], marked "AIR BAG CONNECTOR VOLTAGE", will illuminate and the air bag module will deploy.

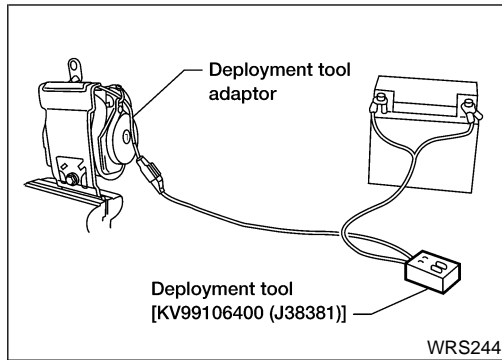
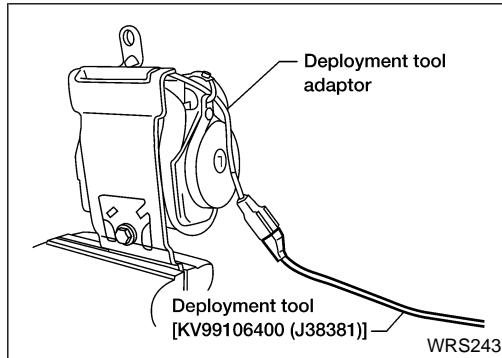
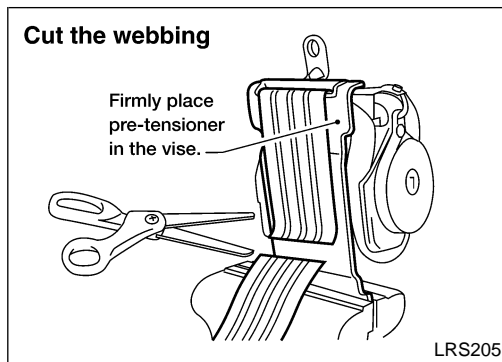
CAUTION:

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

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SUPPLEMENTAL RESTRAINT SYSTEM (SRS)

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



Deployment of Seat Belt Pre-tensioner (Outside of vehicle)

=NGRS0018S0203

1. Firmly anchor seat belt pre-tensioner in a vise, then cut webbing off.
2. Connect deployment tool adapter (J38381–80) connector to seat belt pre-tensioner connector.
 - Use deployment tool adapter [SST: KV99109000 (J44230)] for pre-tensioner that have a built in harness lead.
3. Connect red clip of deployment tool [SST: KV99106400 (J38381)] to battery positive terminal and black clip to negative terminal.
4. The right side lamp on the deployment tool [SST: KV99106400 (J38381)], marked “DEPLOYMENT TOOL POWER”, should glow green, not red.
5. Press the button on the deployment tool [SST: KV99106400 (J38381)]. The left side lamp on the deployment tool [SST: KV99106400 (J38381)], marked “AIR BAG CONNECTOR VOLTAGE”, will illuminate and the seat belt pre-tensioner will deploy.

CAUTION:

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

SUPPLEMENTAL RESTRAINT SYSTEM (SRS)

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

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

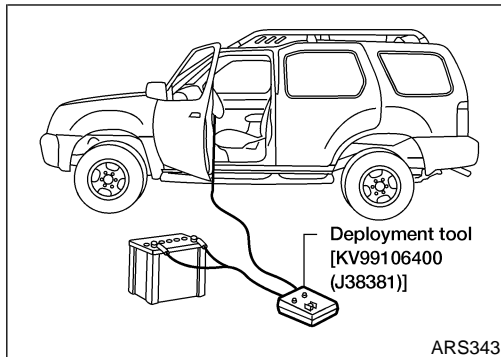
=NGRS0018S03

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

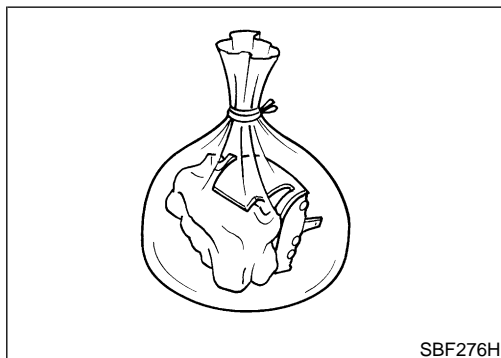
CAUTION:

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

1. Disconnect both battery cables and wait 3 minutes.
2. Disconnect air bag module connector or seat belt pre-tensioner connector.
3. Connect deployment tool [SST: KV99106400 (SST: J38381)] to air bag module or seat belt pre-tensioner.
For passenger air bag module, use deployment tool adapter (J38381-65), or for pre-tensioner, use deployment tool adapter (J38381-80), or for driver air bag module, use deployment tool adapter (J38381-80) to attach to the deployment tool [SST: KV99106400 (J38381)] connector.



4. Connect red clip of deployment tool [SST: KV99106400 (J38381)] to battery positive terminal and black clip to negative terminal.
5. The right side lamp on the deployment tool [SST: KV99106400 (J38381)], marked "DEPLOYMENT TOOL POWER", should glow green, not red.
6. Press the button on the deployment tool [SST: KV99106400 (J38381)]. The left side lamp on the deployment tool [SST: KV99106400 (J38381)], marked "AIR BAG CONNECTOR VOLTAGE", will illuminate and the air bag module or seat belt pre-tensioner will deploy.



DISPOSING OF AIR BAG MODULE AND SEAT BELT PRE-TENSIONER

NGRS0018S04

Deployed air bag modules and seat belt pre-tensioners are very hot. Before disposing of air bag modules and seat belt pre-tensioners, 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 or seat belt pre-tensioner.**
- **Be sure to wear gloves when handling a deployed air bag module or seat belt pre-tensioner.**
- **No poisonous gas is produced upon air bag module or seat belt pre-tensioner deployment. However, be careful not to inhale gas since it irritates the throat and can cause choking.**
- **Do not attempt to disassemble air bag module or seat belt pre-tensioner.**
- **Air bag module or seat belt pre-tensioner cannot be reused.**
- **Wash your hands clean after finishing work.**

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SUPPLEMENTAL RESTRAINT SYSTEM (SRS)

Trouble Diagnoses Introduction

=NGRS0055

CAUTION:

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

DIAGNOSIS FUNCTION

NGRS0055S01

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

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

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

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

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

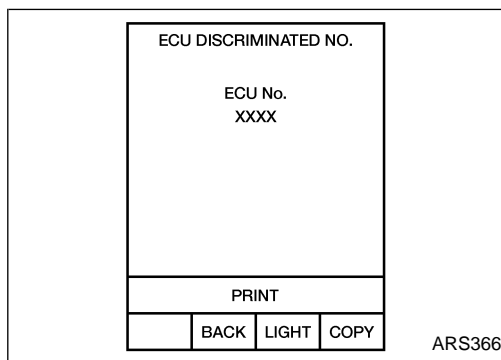
NOTE:

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

DIAGNOSIS MODE FOR CONSULT-II

NGRS0055S02

- “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. 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.



ECU Part No.	ECU Discriminated No.
28556 8Z800	F60E

SUPPLEMENTAL RESTRAINT SYSTEM (SRS)

Trouble Diagnoses Introduction (Cont'd)

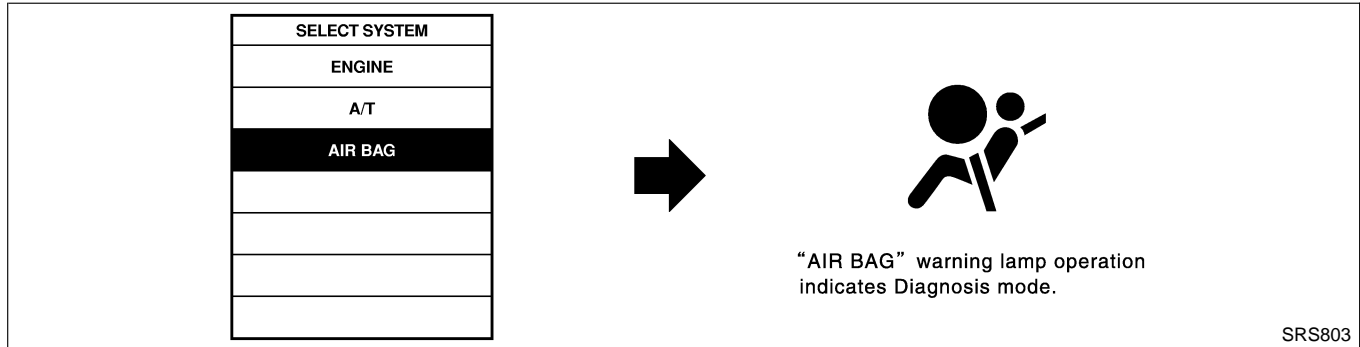
① HOW TO CHANGE SELF-DIAGNOSIS MODE WITH CONSULT-II

~NGRS0055S03

From User Mode to Diagnosis Mode

NGRS0055S0301

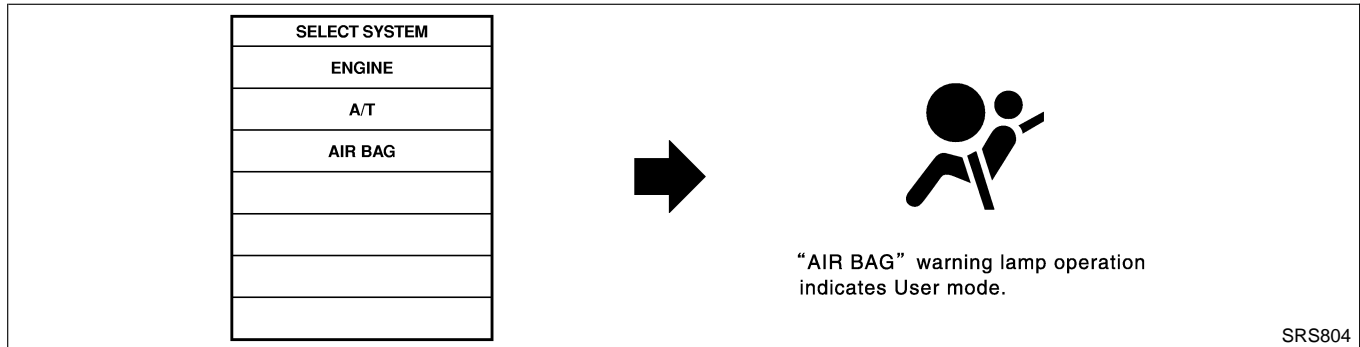
After selecting "AIR BAG" on the "SELECT SYSTEM" screen, User mode automatically changes to Diagnosis mode.



From Diagnosis Mode to User Mode

NGRS0055S0302

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



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

NGRS0055S04

From User Mode to Diagnosis Mode

NGRS0055S0401

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

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

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

From Diagnosis Mode to User Mode

NGRS0055S0402

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

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

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

HOW TO ERASE SELF-DIAGNOSIS RESULTS

NGRS0055S05

① With CONSULT-II

NGRS0055S0501

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

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SUPPLEMENTAL RESTRAINT SYSTEM (SRS)

Trouble Diagnoses Introduction (Cont'd)

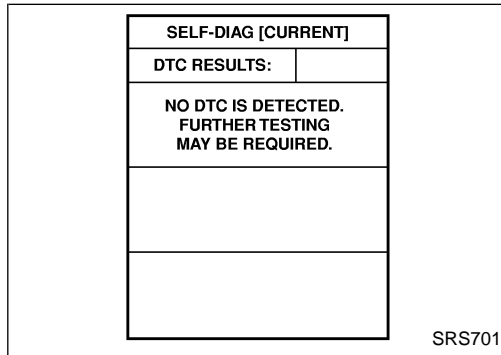
After the malfunction is repaired completely, no malfunction is detected on "SELF-DIAG [CURRENT]".

- "SELF-DIAG [PAST]"

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

NOTE:

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



- "TROUBLE DIAG RECORD"

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

⊗ **Without CONSULT-II**

After a malfunction is repaired, switch the ignition "OFF" for at least one second, then back "ON". NGRS0055S0502 Diagnosis mode returns to the User mode. At that time, the self-diagnostic result is cleared.

SUPPLEMENTAL RESTRAINT SYSTEM (SRS)

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.

INFORMATION FROM CUSTOMER

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

PRELIMINARY CHECK

Check that the following parts are in good order.

- Battery, refer to **SC-4**, "BATTERY".
- System component-to-harness connections.
- Check fuse.

=NGRS0056

NGRS0056S01

NGRS0056S02

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SUPPLEMENTAL RESTRAINT SYSTEM (SRS)

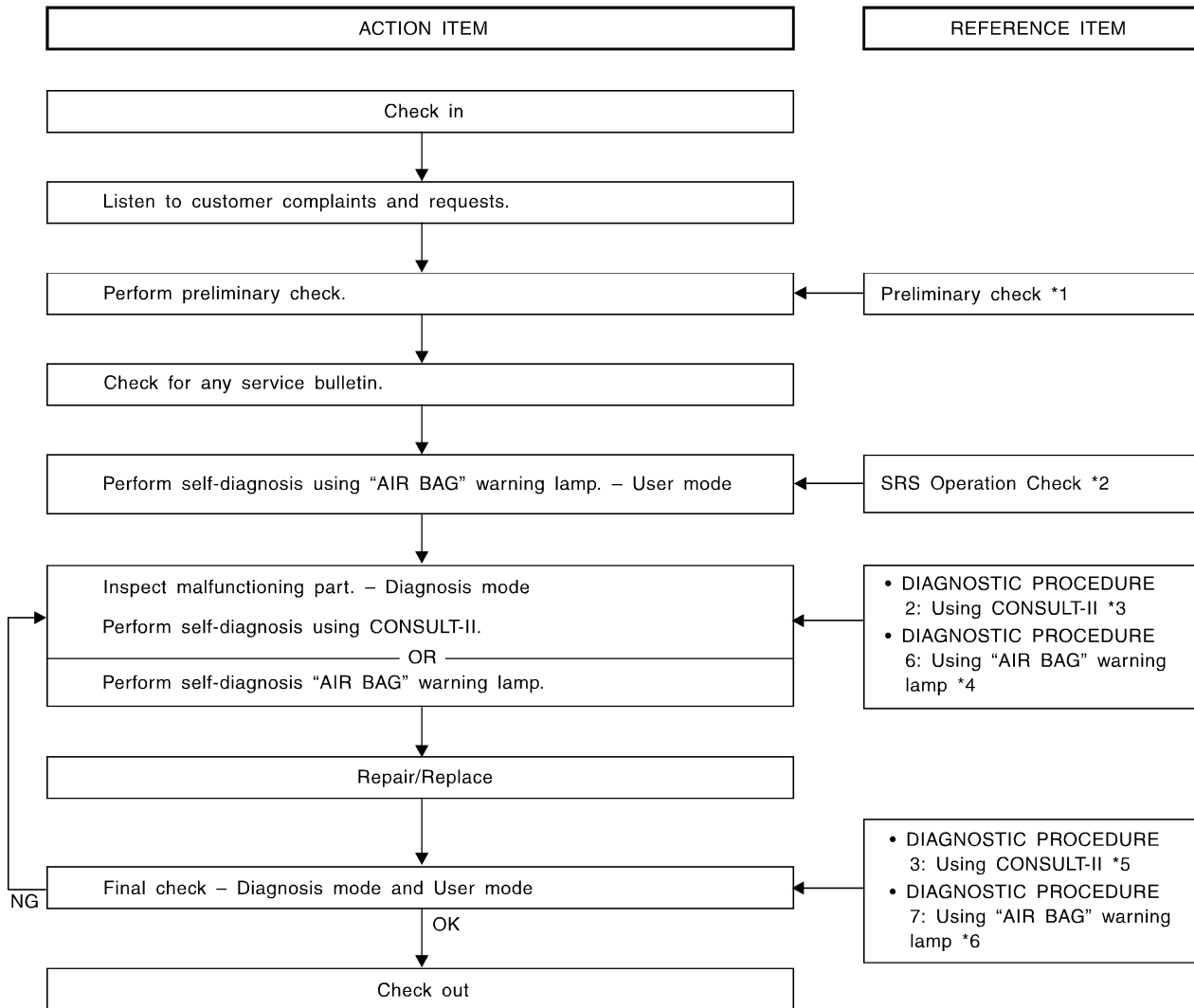
How to Perform Trouble Diagnoses for Quick and Accurate Repair (Cont'd)

WORK FLOW

=NGRS0056S03

NOTE:

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



SRS799

*1: RS-31
*2: RS-37

*3: RS-38
*4: RS-47

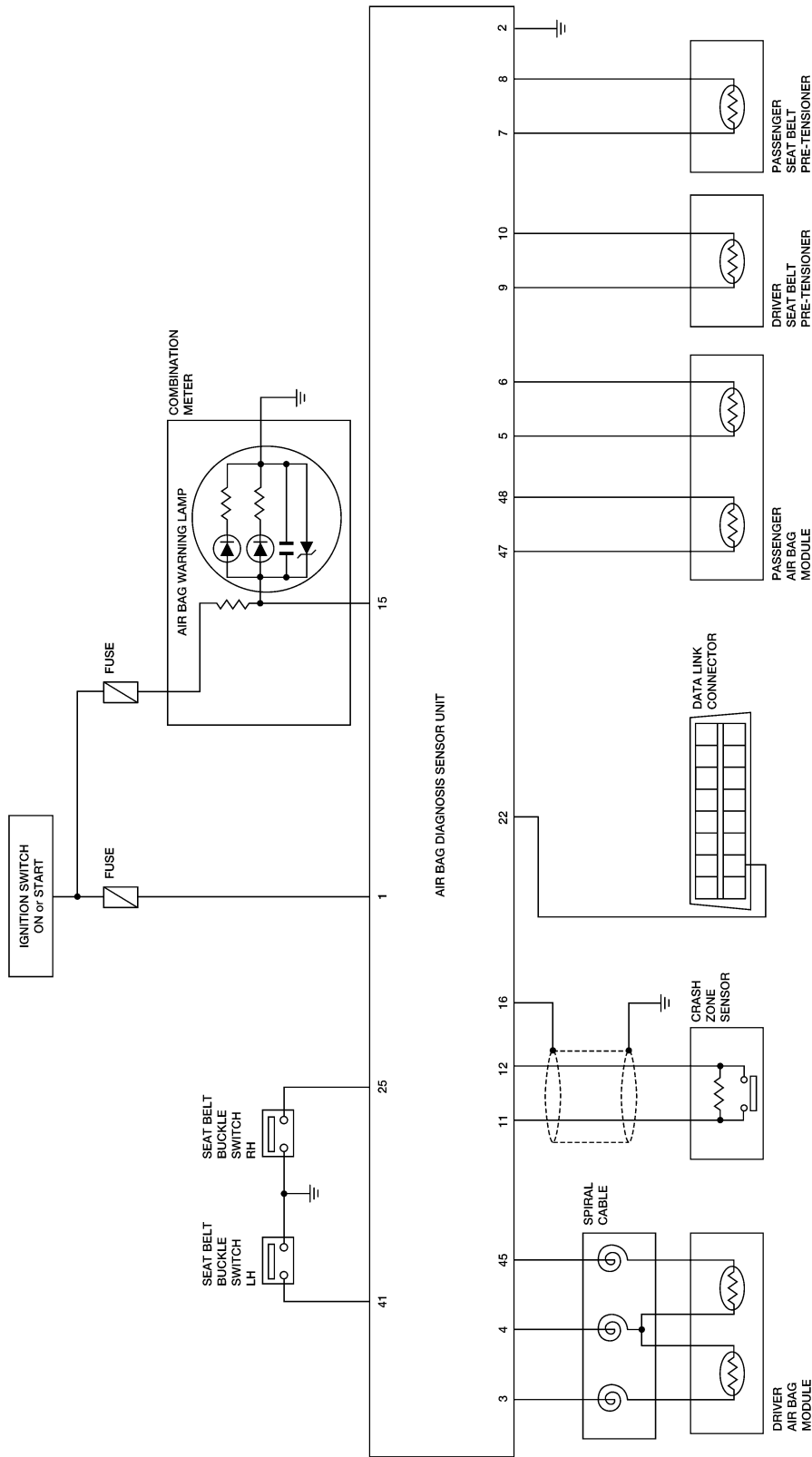
*5: RS-41
*6: RS-51

SUPPLEMENTAL RESTRAINT SYSTEM (SRS)

Schematic

NGRS0057

Schematic



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WRS224

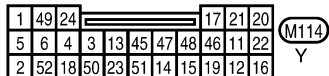
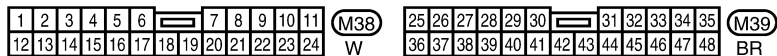
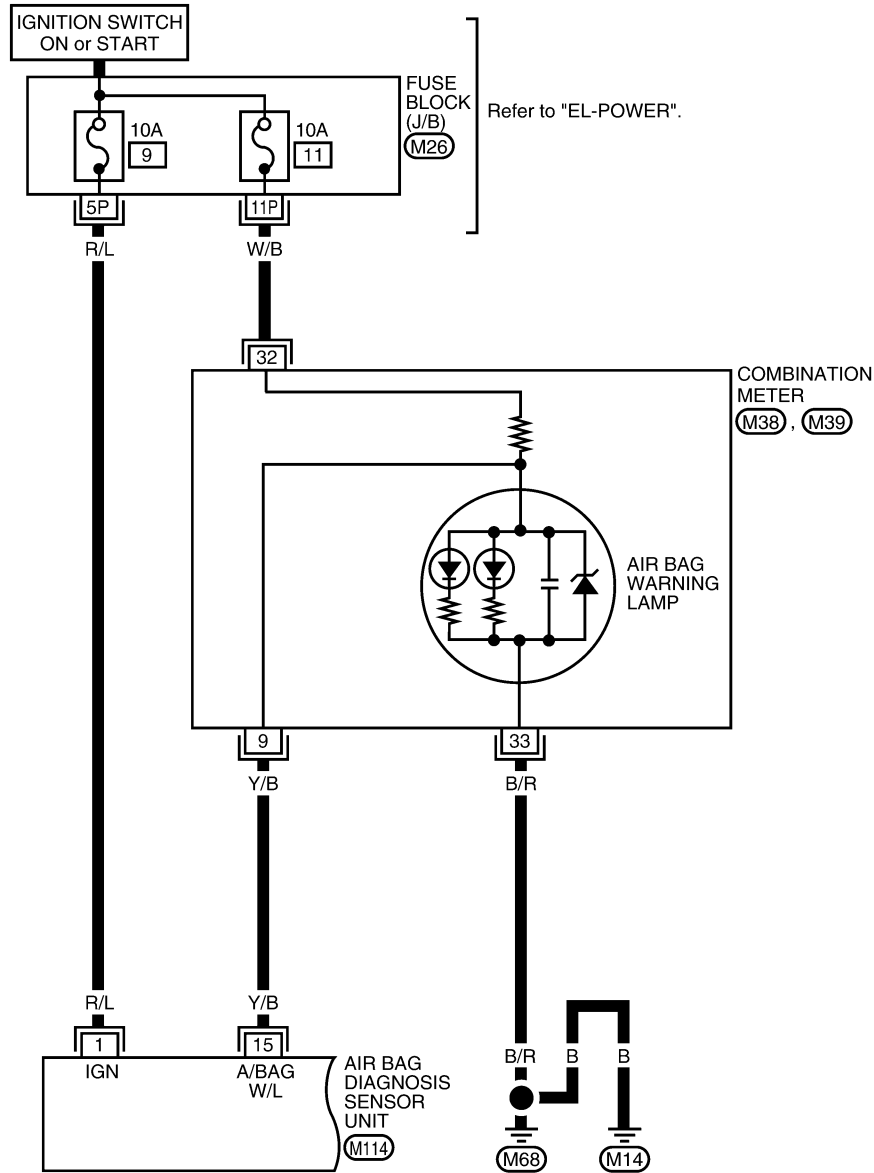
SUPPLEMENTAL RESTRAINT SYSTEM (SRS)

Wiring Diagram — SRS —

Wiring Diagram — SRS —

NGRS0058

RS-SRS-01

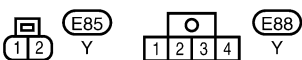
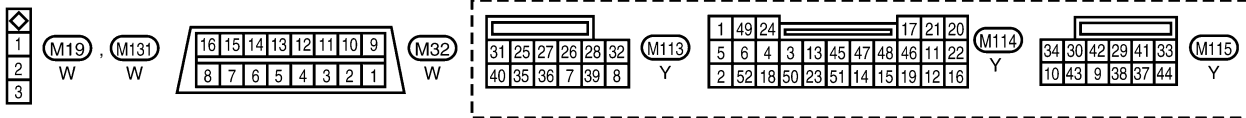
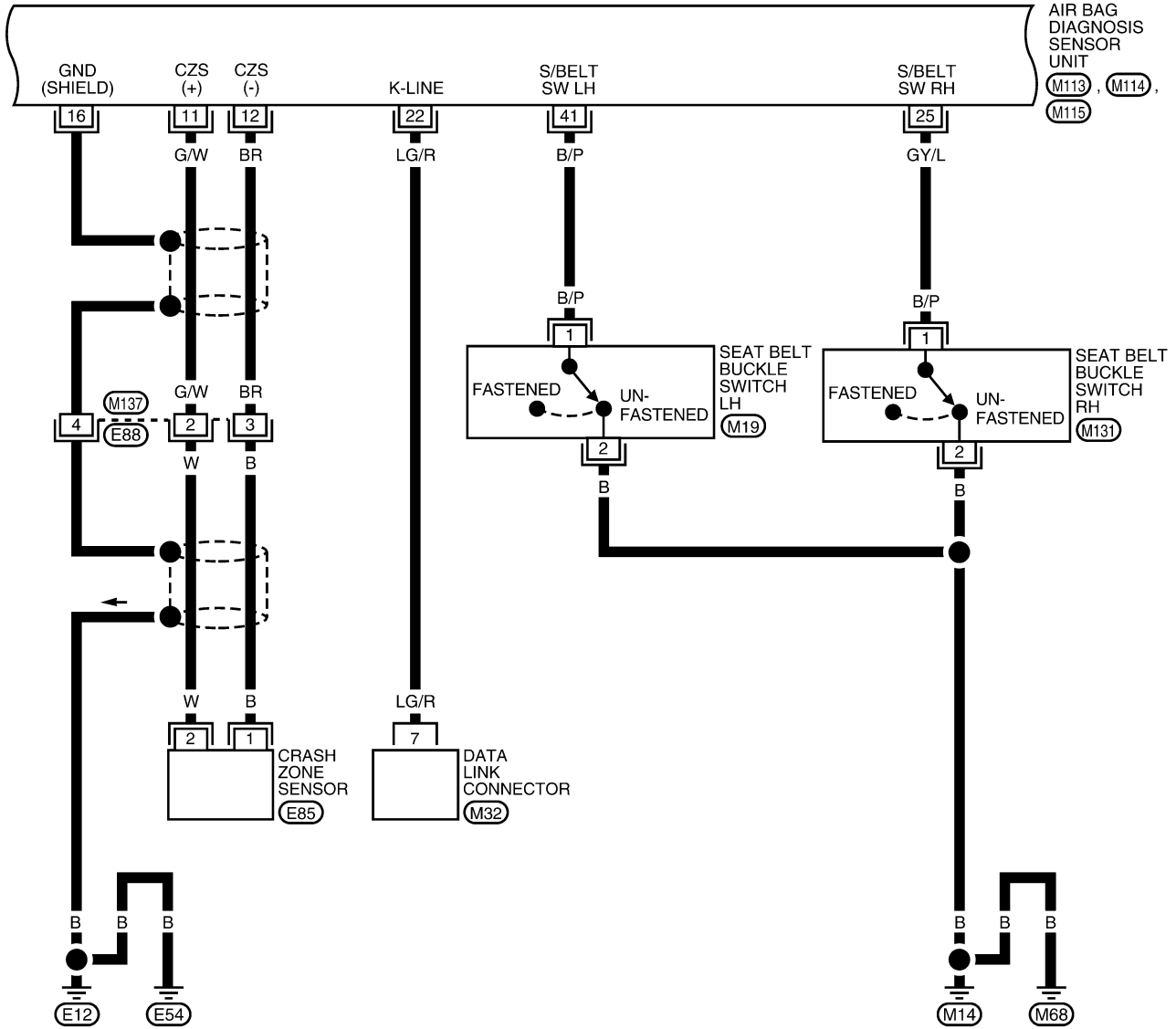


WRS225

SUPPLEMENTAL RESTRAINT SYSTEM (SRS)

Wiring Diagram — SRS — (Cont'd)

RS-SRS-02



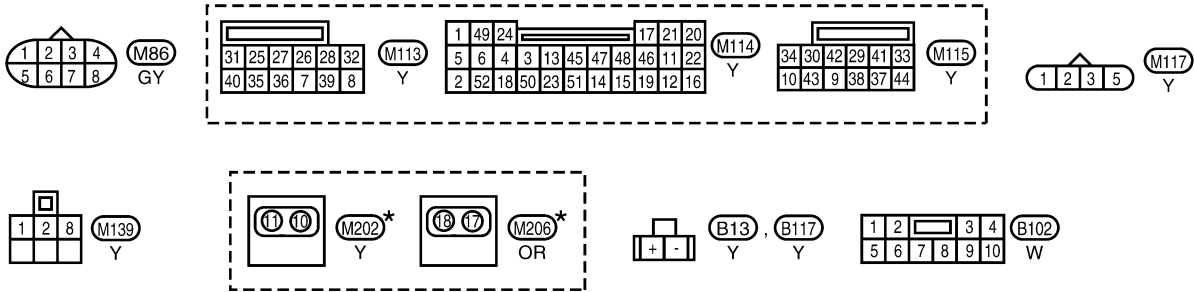
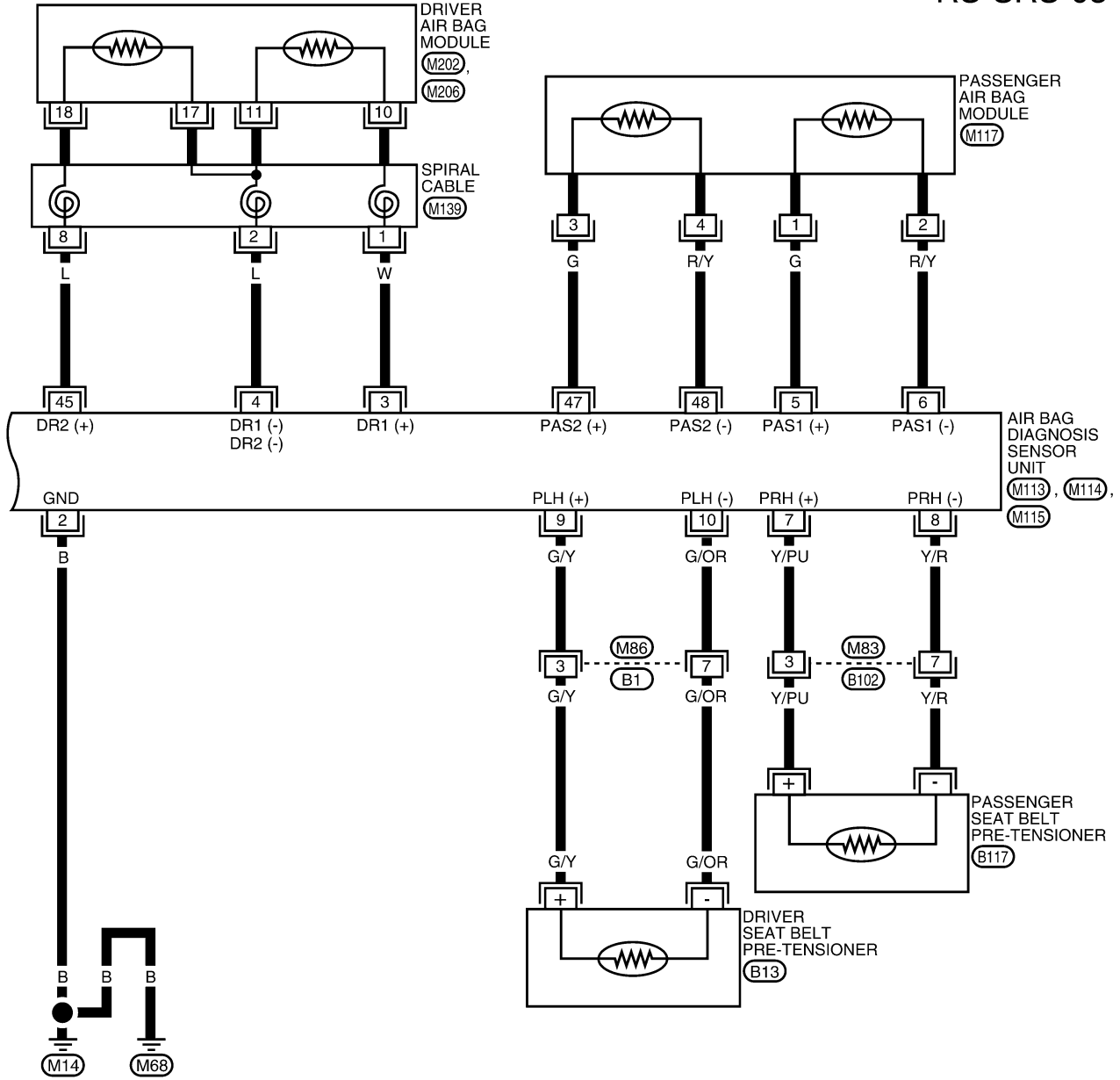
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WRS286

SUPPLEMENTAL RESTRAINT SYSTEM (SRS)

Wiring Diagram — SRS — (Cont'd)

RS-SRS-03

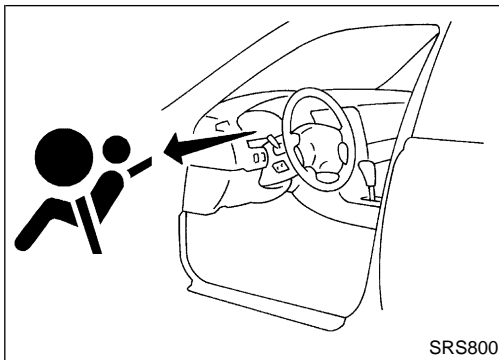


* : This connector is not shown in "HARNESS LAYOUT" of EL section.

WRS281

SUPPLEMENTAL RESTRAINT SYSTEM (SRS)

SRS Operation Check



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

NGRS0059

NGRS0059S01

NGRS0059S0101

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

“AIR BAG” warning lamp operation — User mode —	SRS condition	Reference item
<p>MRS095A</p>	No malfunction is detected. No further action is necessary.	—
<p>MRS096A</p>	The system is malfunctioning and needs to be repaired as indicated.	Go to “DIAGNOSTIC PROCEDURE 2”, RS-38 or “DIAGNOSTIC PROCEDURE 6” RS-47.
<p>MRS097A</p>	Air bag is deployed. Seat belt pre-tensioner is deployed.	Go to “Collision Diagnosis”, RS-57.
<p>MRS098A</p>	Air bag fuse, diagnosis sensor unit or harness is malfunctioning and needs to be repaired.	Go to “DIAGNOSTIC PROCEDURE 9”, RS-54.
<p>MRS098A</p>	One of the following has occurred and needs to be repaired. <ul style="list-style-type: none"> • Meter fuse is blown. • “AIR BAG” warning lamp circuit has open or short. • Diagnosis sensor unit is malfunctioning. 	Go to “DIAGNOSTIC PROCEDURE 10”, RS-56.

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SUPPLEMENTAL RESTRAINT SYSTEM (SRS)

 Trouble Diagnoses with CONSULT-II

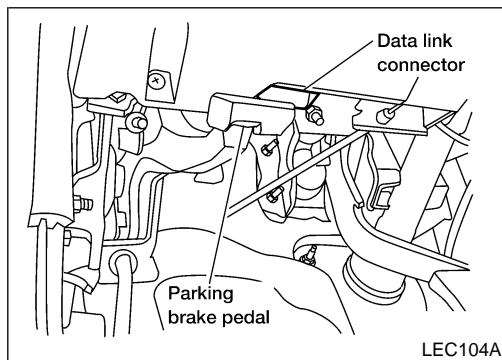
Trouble Diagnoses with CONSULT-II

=NGRS0060

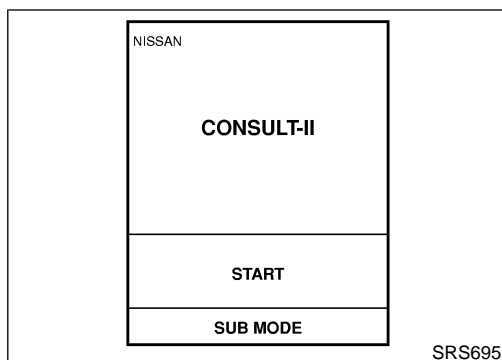
DIAGNOSTIC PROCEDURE 2

NGRS0060S01

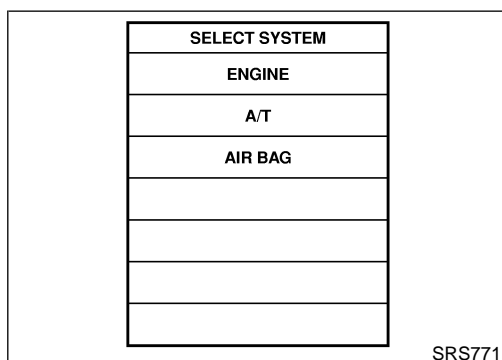
Inspecting SRS malfunctioning parts by using CONSULT-II —
Diagnosis mode



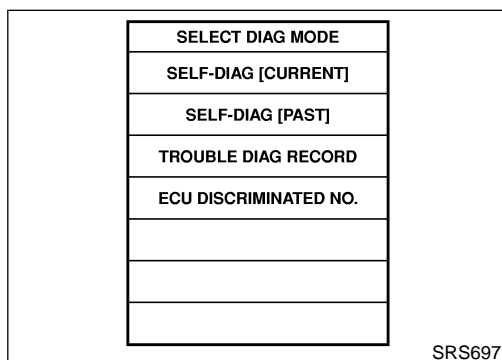
1. Turn ignition switch "OFF".
2. Connect "CONSULT-II" to data link connector.



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



5. Touch "AIR BAG".



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

SUPPLEMENTAL RESTRAINT SYSTEM (SRS)

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

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

WRS254

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

SRS701

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

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

If the battery voltage is less than 9V, charge the battery. Then go to "DIAGNOSTIC PROCEDURE 3", RS-41.

If the battery voltage is OK, refer to "DIAGNOSTIC PROCEDURE 4 (CONTINUE FROM DIAGNOSTIC PROCEDURE 2)", RS-44, to diagnose the following cases:

- Self-diagnostic result "SELF-DIAG [PAST]" (previously stored in the memory) might not be erased after repair.
- The SRS system malfunctions intermittently.

8. Touch "COPY".

9. Compare diagnostic codes to "CONSULT-II Diagnostic Code Chart". Refer to "CONSULT-II Diagnostic Code Chart ("SELF-DIAG [CURRENT]")", RS-39.

10. Touch "BACK" key of CONSULT-II until "SELECT SYSTEM" appears in order to return to User mode from Diagnosis mode.

11. Turn ignition switch "OFF", then turn off and disconnect CONSULT-II, and disconnect both battery cables.

12. Repair the system as outlined by the "Repair order" in "CONSULT-II Diagnostic Code Chart", that corresponds to the self-diagnostic result. For replacement procedure of component parts, refer to "REMOVAL AND INSTALLATION", RS-14.

13. After repairing the system, refer to "DIAGNOSTIC PROCEDURE 3", RS-41 for final checking.

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

NGRS0060S0101

Diagnostic item	Explanation	Repair order "Recheck SRS at each replacement."
NO DTC IS DETECTED.	When malfunction is indicated by the "AIR BAG" warning lamp in User mode	<ul style="list-style-type: none"> • Low battery voltage (Less than 9V) • Self-diagnostic result "SELF-DIAG [PAST]" (previously stored in the memory) might not be erased after repair. • Intermittent malfunction has been detected in the past.
	<ul style="list-style-type: none"> • No malfunction is detected. 	<ul style="list-style-type: none"> • Go to "DIAGNOSTIC PROCEDURE 3", RS-41 after charging battery. • Go to "DIAGNOSTIC PROCEDURE 4", RS-44. • Go to "DIAGNOSTIC PROCEDURE 3", RS-41.

SUPPLEMENTAL RESTRAINT SYSTEM (SRS)

 Trouble Diagnoses with CONSULT-II (Cont'd)

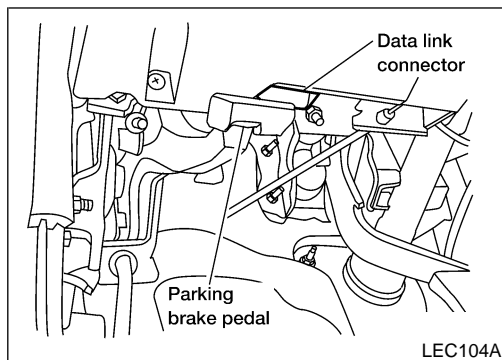
Diagnostic item	Explanation	Repair order "Recheck SRS at each replacement."
DRIVER AIRBAG MODULE [OPEN]	<ul style="list-style-type: none"> ● Driver air bag module circuit is open. (including the spiral cable) 	<ol style="list-style-type: none"> 1. Visually check the wiring harness connection. 2. Replace the harness if it has visible damage. 3. Replace driver air bag module. (Before disposal of it, it must be deployed.) 4. Replace the spiral cable. 5. Replace the air bag diagnosis sensor unit. 6. Replace the related harness.
DRIVER AIRBAG MODULE [VB-SHORT]	<ul style="list-style-type: none"> ● Driver air bag module circuit is shorted to some power supply circuit. (including the spiral cable) 	<ol style="list-style-type: none"> 1. Visually check the wiring harness connection. 2. Replace the harness if it has visible damage.
DRIVER AIRBAG MODULE [GND-SHORT]	<ul style="list-style-type: none"> ● Driver air bag module circuit is shorted to ground. (including the spiral cable) 	<ol style="list-style-type: none"> 3. Replace the spiral cable. 4. Replace driver air bag module. (Before disposal of it, it must be deployed.)
DRIVER AIRBAG MODULE [SHORT]	<ul style="list-style-type: none"> ● Driver air bag module circuits are shorted to each other. 	<ol style="list-style-type: none"> 5. Replace the air bag diagnosis sensor unit. 6. Replace the related harness.
ASSIST A/B MODULE [VB-SHORT]	<ul style="list-style-type: none"> ● Passenger air bag module circuit is shorted to some power supply circuit. 	<ol style="list-style-type: none"> 1. Visually check the wiring harness connection.
ASSIST A/B MODULE [OPEN]	<ul style="list-style-type: none"> ● Passenger air bag module circuit is open. 	<ol style="list-style-type: none"> 2. Replace the harness if it has visible damage. 3. Replace passenger air bag module. (Before disposal of it, it must be deployed.)
ASSIST A/B MODULE [GND-SHORT]	<ul style="list-style-type: none"> ● Passenger air bag module circuit is shorted to ground. 	<ol style="list-style-type: none"> 4. Replace the air bag diagnosis sensor unit.
ASSIST A/B MODULE [SHORT]	<ul style="list-style-type: none"> ● Passenger air bag module circuits are shorted to each other. 	<ol style="list-style-type: none"> 5. Replace the related harness.
PRE-TEN FRONT LH [OPEN]	<ul style="list-style-type: none"> ● The circuit for driver seat belt pre-tensioner is open. 	<ol style="list-style-type: none"> 1. Visually check the wiring harness connections. 2. Replace the harness if it has visible damage.
PRE-TEN FRONT LH [VB-SHORT]	<ul style="list-style-type: none"> ● The circuit for driver seat belt pre-tensioner is shorted to some power supply circuit. 	<ol style="list-style-type: none"> 3. Replace driver seat belt. (Before disposing, it must be deactivated.)
PRE-TEN FRONT LH [GND-SHORT]	<ul style="list-style-type: none"> ● The circuit for driver seat belt pre-tensioner is shorted to ground. 	<ol style="list-style-type: none"> 4. Replace the air bag diagnosis sensor unit. 5. Replace the related harness.
PRE-TEN FRONT RH [OPEN]	<ul style="list-style-type: none"> ● The circuit for passenger seat belt pre-tensioner is open. 	<ol style="list-style-type: none"> 1. Visually check the wiring harness connections. 2. Replace the harness if it has visible damage.
PRE-TEN FRONT RH [VB-SHORT]	<ul style="list-style-type: none"> ● The circuit for passenger seat belt pre-tensioner is shorted to some power supply circuit. 	<ol style="list-style-type: none"> 3. Replace passenger seat belt. (Before disposing, it must be deactivated.)
PRE-TEN FRONT RH [GND-SHORT]	<ul style="list-style-type: none"> ● The circuit for passenger seat belt pre-tensioner is shorted to ground. 	<ol style="list-style-type: none"> 4. Replace the air bag diagnosis sensor unit. 5. Replace the related harness.

SUPPLEMENTAL RESTRAINT SYSTEM (SRS)

Trouble Diagnoses with CONSULT-II (Cont'd)

Diagnostic item	Explanation	Repair order "Recheck SRS at each replacement."
CRASH ZONE SEN [UNIT FAIL] CRASH ZONE SEN [COMM FAIL]	<ul style="list-style-type: none"> Crash zone sensor 	<ol style="list-style-type: none"> Visually check the wiring harness connection. Replace the harness if it has visible damage. Replace the crash zone sensor. Replace the diagnosis sensor unit. Replace the related harness.
CONTROL UNIT	<ul style="list-style-type: none"> Air bag diagnosis sensor unit is malfunctioning. 	<ol style="list-style-type: none"> Visually check the wiring harness connection. Replace the air bag diagnosis sensor unit.

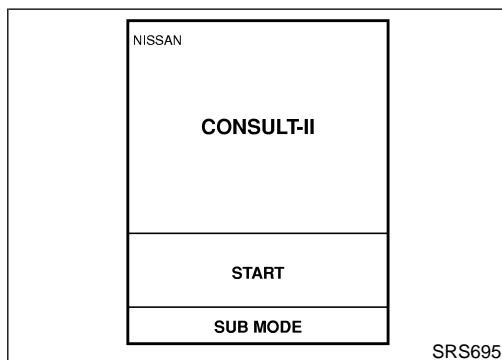
* Follow the procedures in numerical order when repairing malfunctioning parts. Confirm whether malfunction is eliminated using the air bag warning lamp or CONSULT-II each time repair is finished. If malfunction is still observed, proceed to the next step. When malfunction is eliminated, further repair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



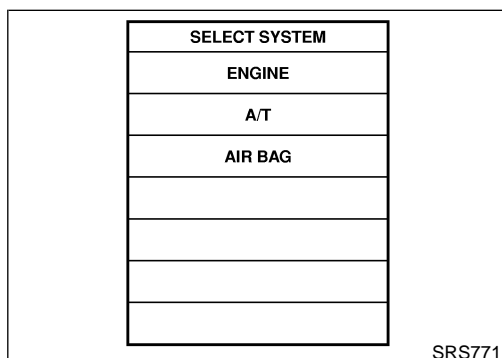
DIAGNOSTIC PROCEDURE 3

Final checking after repairing SRS by using CONSULT-II — ^{NGRS0060S02} Diagnosis mode

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



- Touch "START".



- Touch "AIR BAG".

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SUPPLEMENTAL RESTRAINT SYSTEM (SRS)

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

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

SRS697

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

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

SRS701

7. If no malfunction is detected on "SELF-DIAG [CURRENT]", repair of SRS is completed. Go to step 8.
If any malfunction is displayed on "SELF-DIAG [CURRENT]", the malfunctioning part is not repaired completely or another malfunctioning part is detected. Go to "DIAGNOSTIC PROCEDURE 2", RS-38, and repair malfunctioning part completely.

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

WRS255

8. Touch "ERASE".

NOTE:

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

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

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

SRS697

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

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

SRS702

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

SUPPLEMENTAL RESTRAINT SYSTEM (SRS)

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

11. Touch "BACK" key of CONSULT-II until "SELECT SYSTEM" appears in order to return to User mode from Diagnosis mode.
12. Turn ignition switch "OFF", then turn off and disconnect CONSULT-II.
13. Go to "SRS Operation Check", RS-37 to check SRS operation by using "AIR BAG" warning lamp with User mode.

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SUPPLEMENTAL RESTRAINT SYSTEM (SRS)

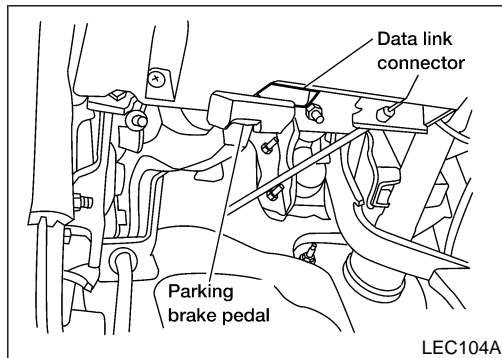
Trouble Diagnoses with CONSULT-II (Cont'd)

DIAGNOSTIC PROCEDURE 4 (CONTINUED FROM DIAGNOSTIC PROCEDURE 2)

=NGRS0060S03

Inspecting SRS malfunctioning record

1	CONSIDER POSSIBILITY OF NOT ERASING SELF-DIAGNOSTIC RESULT AFTER REPAIRING	
Is it the first time for maintenance of SRS?		
Yes or No		
Yes	▶	Go to "DIAGNOSTIC PROCEDURE 5", RS-44.
No	▶	Self-diagnostic result "SELF-DIAG [PAST]" (previously stored in the memory) might not be erased after repair. Go to "DIAGNOSTIC PROCEDURE 3", RS-41.



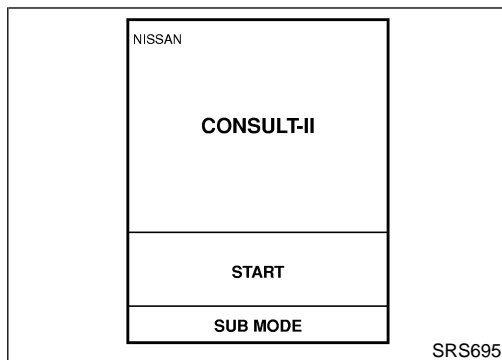
LEC104A

DIAGNOSTIC PROCEDURE 5

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

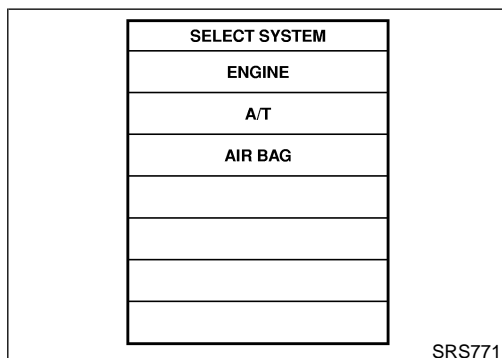
NGRS0060S04

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



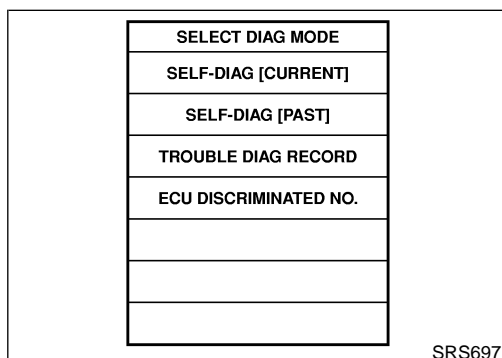
SRS695

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



SRS771

5. Touch "AIR BAG".



SRS697

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

SUPPLEMENTAL RESTRAINT SYSTEM (SRS)

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

SELF-DIAG [PAST]	
DTC RESULTS:	
DRIVER AIR BAG MODULE [(OPEN)]	

WRS256

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

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

SRS702

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

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

SRS697

- Touch "TROUBLE DIAG RECORD".

NOTE:

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

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

WRS257

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

- Touch "COPY".
- Compare diagnostic codes to "Intermittent Malfunction Diagnostic Code Chart". Refer to "Intermittent Malfunction Diagnostic Code Chart ("SELF-DIAG [PAST]" or "TROUBLE DIAG RECORD")", RS-46.
- Touch "BACK" key of CONSULT-II until "SELECT SYSTEM" appears.
- Turn ignition switch "OFF", then turn off and disconnect CONSULT-II, and disconnect both battery cables.
- Repair the system as outlined by the "Repair order" in "Intermittent Malfunction Diagnostic Code Chart", that corresponds

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SUPPLEMENTAL RESTRAINT SYSTEM (SRS)

 Trouble Diagnoses with CONSULT-II (Cont'd)

to the self-diagnostic result. For replacement procedure of component parts, refer to "REMOVAL AND INSTALLATION", RS-14.

15. Go to "DIAGNOSTIC PROCEDURE 3", RS-41, for final checking.

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

NGRS0060S0401

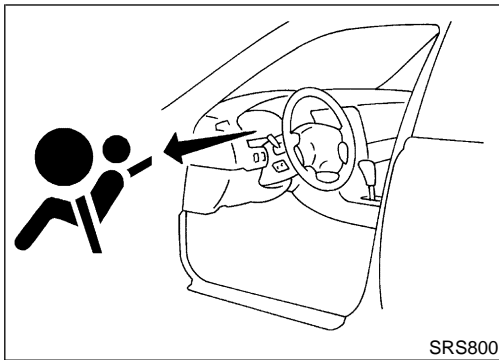
Diagnostic item	Explanation		Repair order
NO DTC IS DETECTED.	When malfunction is indicated by the "AIR BAG" warning lamp in User mode	<ul style="list-style-type: none"> Low battery voltage (Less than 9V) 	<ul style="list-style-type: none"> Go to "DIAGNOSTIC PROCEDURE 3", RS-41 after charging battery.
	<ul style="list-style-type: none"> No malfunction is detected. 		<ul style="list-style-type: none"> Go to "DIAGNOSTIC PROCEDURE 3", RS-41.
DRIVER AIRBAG MODULE [OPEN]	<ul style="list-style-type: none"> Driver air bag module circuit is open. (including the spiral cable) 		<ol style="list-style-type: none"> Visually check the wiring harness connection. Replace the harness if it has visible damage. If the harness check result is OK, replace driver air bag module (Before disposal of it, it must be deployed.), air bag diagnosis sensor unit and spiral cable.
DRIVER AIRBAG MODULE [VB-SHORT]	<ul style="list-style-type: none"> Driver air bag module circuit is shorted to some power supply circuit. (including the spiral cable) 		
DRIVER AIRBAG MODULE [GND-SHORT]	<ul style="list-style-type: none"> Driver air bag module circuit is shorted to ground. (including the spiral cable) 		
DRIVER AIRBAG MODULE [SHORT]	<ul style="list-style-type: none"> Driver air bag module circuits are shorted to each other. 		
ASSIST A/B MODULE [VB-SHORT]	<ul style="list-style-type: none"> Passenger air bag module circuit is shorted to some power supply circuit. 		<ol style="list-style-type: none"> Visually check the wiring harness connection. Replace the harness if it has visible damage. If the harness check result is OK, replace passenger air bag module (Before disposal of it, it must be deployed.), and air bag diagnosis sensor unit.
ASSIST A/B MODULE [OPEN]	<ul style="list-style-type: none"> Passenger air bag module circuit is open. 		
ASSIST A/B MODULE [GND-SHORT]	<ul style="list-style-type: none"> Passenger air bag module circuit is shorted to ground. 		
ASSIST A/B MODULE [SHORT]	<ul style="list-style-type: none"> Passenger air bag module circuits are shorted to each other. 		
PRE-TEN FRONT LH [OPEN]	<ul style="list-style-type: none"> The circuit for driver seat belt pre-tensioner is open. 		<ol style="list-style-type: none"> Visually check the wiring harness connections. Replace the harness if it has visible damage. If the harness check is OK, replace the air bag diagnosis sensor unit and driver seat belt. (Before disposing the driver seat belt pre-tensioner, it must be deployed.)
PRE-TEN FRONT LH [VB-SHORT]	<ul style="list-style-type: none"> The circuit for driver seat belt pre-tensioner is shorted to some power supply circuit. 		
PRE-TEN FRONT LH [GND-SHORT]	<ul style="list-style-type: none"> The circuit for driver pre-tensioner is shorted to ground. 		
PRE-TEN FRONT RH [OPEN]	<ul style="list-style-type: none"> The circuit for passenger seat belt pre-tensioner is open. 		<ol style="list-style-type: none"> Visually check the wiring harness connections. Replace the harness if it has visible damage. If the harness check is OK, replace the air bag diagnosis sensor unit and passenger seat belt. (Before disposing the passenger seat belt pre-tensioner, it must be deployed.)
PRE-TEN FRONT RH [VB-SHORT]	<ul style="list-style-type: none"> The circuit for passenger seat belt pre-tensioner is open or shorted to some power supply circuit. 		
PRE-TEN FRONT RH [GND-SHORT]	<ul style="list-style-type: none"> The circuit for passenger pre-tensioner is shorted to ground. 		

SUPPLEMENTAL RESTRAINT SYSTEM (SRS)

 Trouble Diagnoses with CONSULT-II (Cont'd)

Diagnostic item	Explanation	Repair order
CRASH ZONE SEN [UNIT FAIL] CRASH ZONE SEN [COMM FAIL]	<ul style="list-style-type: none"> Crash zone sensor 	<ol style="list-style-type: none"> 1. Visually check the wiring harness connection. 2. Replace the harness if it has visible damage. 3. If the harness check is OK, replace the diagnosis sensor unit and crash zone sensor.
CONTROL UNIT	<ul style="list-style-type: none"> Air bag diagnosis sensor unit is malfunctioning. 	<ol style="list-style-type: none"> 1. Visually check the wiring harness connection. 2. Replace the harness if it has visible damage. 3. If the harness check is OK, replace the air bag diagnosis sensor unit.

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



Trouble Diagnoses without CONSULT-II

DIAGNOSTIC PROCEDURE 6

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

NOTE:

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

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

NOTE:

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

If the battery voltage is less than 9V, charge the battery. Then refer to "DIAGNOSTIC PROCEDURE 7", RS-51.

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

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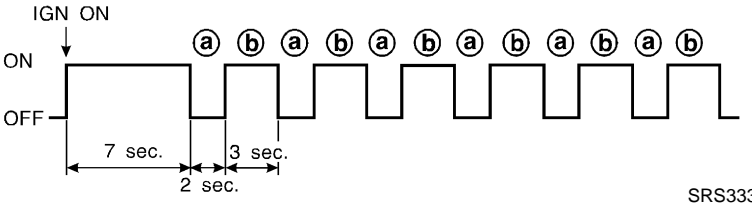
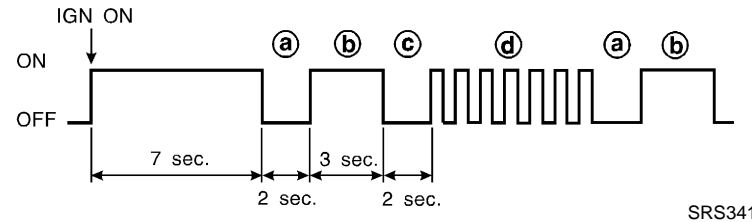
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SUPPLEMENTAL RESTRAINT SYSTEM (SRS)

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

No.	"AIR BAG" warning lamp flash pattern — Diagnosis mode —		SRS condition
1	 <p style="text-align: right;">SRS333</p>	<p>a through b are repeated.</p>	<ul style="list-style-type: none"> • Diagnosis results (previously stored in the memory) might not be erased after repair. • Intermittent malfunction has been detected in the past. <p>Go to "DIAGNOSTIC PROCEDURE 8", RS-53.</p>
2	 <p style="text-align: right;">SRS341</p>	<p>a through d are repeated. b — Driver and passenger air bag and seat belt pre-tensioner marker (For identifying driver air bag, passenger air bag and/or seat belt pre-tensioners malfunctioning) d — Indicates malfunctioning part. The number of flash varies with malfunctioning part (0.5 sec. ON and 0.5 sec. OFF is counted as one flash.)</p>	<p>The system is malfunctioning and needs to be repaired.</p>

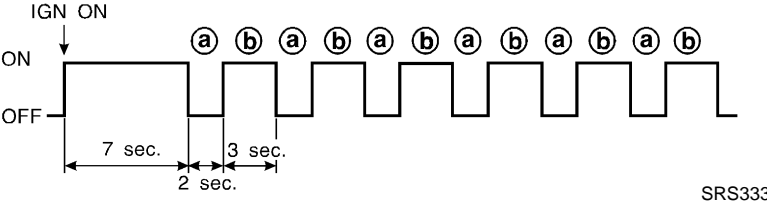
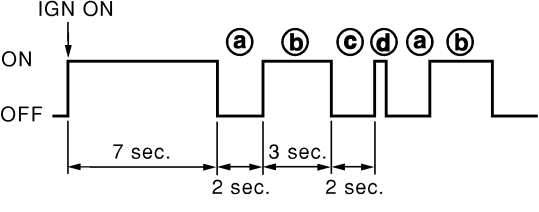
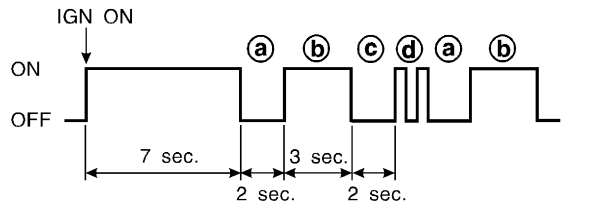
7. Malfunctioning part is indicated by the number of flashes (part **d**). Compare the number of flashes to "Air Bag Warning Lamp Flash Code Chart". Refer to "Air Bag Warning Lamp Flash Code Chart (Diagnosis mode)", RS-49, and locate malfunctioning part.
8. Turn ignition switch "OFF", and disconnect both battery cables.
9. 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 "REMOVAL AND INSTALLATION", RS-14.
10. After repairing the system, refer to "DIAGNOSTIC PROCEDURE 7", RS-51.

SUPPLEMENTAL RESTRAINT SYSTEM (SRS)

Trouble Diagnoses without CONSULT-II (Cont'd)

Air Bag Warning Lamp Flash Code Chart (Diagnosis mode)

NGRS0061S0101

<ul style="list-style-type: none"> • Diagnosis results (previously stored in the memory) might not be erased after repair. • Intermittent malfunction has been detected in the past. 	<p style="text-align: center;">Flash pattern</p>  <p style="text-align: right;">a through b are repeated.</p> <p style="text-align: right;">SRS333</p> <p>Repair order</p> <ul style="list-style-type: none"> • Go to "DIAGNOSTIC PROCEDURE 8 (CONTINUED FROM DIAGNOSTIC PROCEDURE 6)"RS-53. 	<p>GI</p> <p>MA</p> <p>EM</p> <p>LC</p>
<p>The passenger seat belt pre-tensioner circuit is malfunctioning. (d: 1 flash)</p>	<p style="text-align: center;">Flash pattern</p>  <p style="text-align: right;">a through d are repeated. d — One flash indicates malfunctioning passenger pre-tensioner circuit.</p> <p style="text-align: right;">SRS801</p> <p>Repair order (Recheck SRS at each replacement. Refer to "SRS Operation Check", RS-37.)</p> <ol style="list-style-type: none"> 1. Visually check the wiring harness connections. 2. Replace the harness if it has visible damage. 3. Replace passenger seat belt pre-tensioner. (Before disposing, it must be deactivated.) 4. Replace the air bag diagnosis sensor unit. 5. Replace the related harness. 	<p>FE</p> <p>CL</p> <p>MT</p> <p>AT</p> <p>TF</p> <p>PD</p> <p>AX</p>
<p>The driver air bag module circuit is malfunctioning. (d: 2 flashes)</p>	<p style="text-align: center;">Flash pattern</p>  <p style="text-align: right;">a through d are repeated. d — Two flashes indicate malfunctioning driver air bag module circuit.</p> <p style="text-align: right;">SRS334</p> <p>Repair order (Recheck SRS at each replacement. Refer to "SRS Operation Check", RS-37.)</p> <ol style="list-style-type: none"> 1. Visually check the wiring harness connection. 2. Replace the harness if it has visible damage. 3. Replace the spiral cable. 4. Replace driver air bag module. (Before disposal, it must be deployed.) 5. Replace the air bag diagnosis sensor unit. 6. Replace the related harness. 	<p>SU</p> <p>BR</p> <p>ST</p> <p style="background-color: black; color: white; padding: 2px;">RS</p> <p>BT</p> <p>HA</p> <p>SC</p> <p>EL</p> <p>IDX</p>

SUPPLEMENTAL RESTRAINT SYSTEM (SRS)

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

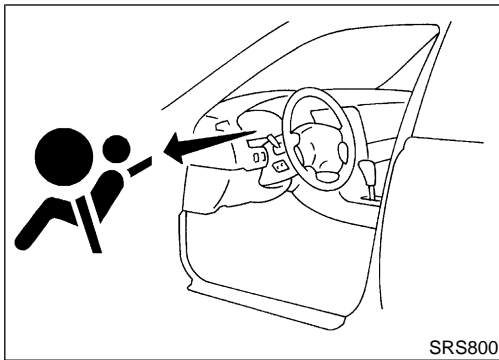
<p>The driver seat belt pre-tensioner circuit is malfunctioning. (d: 3 flashes)</p>	<p style="text-align: center;">Flash pattern</p> <p style="text-align: right;">SRS802</p> <p>a through d are repeated. d — Three flashes indicate malfunctioning driver pre-tensioner circuit.</p>
<p>Repair order (Recheck SRS at each replacement. Refer to "SRS Operation Check", RS-37.)</p>	
<ol style="list-style-type: none"> 1. Visually check the wiring harness connections. 2. Replace the harness if it has visible damage. 3. Replace driver seat belt pre-tensioner. (Before disposing, it must be deactivated.) 4. Replace the air bag diagnosis sensor unit. 5. Replace the related harness. 	
<p>The crash zone sensor circuit is malfunctioning. (d: 6 flashes)</p>	<p style="text-align: center;">Flash pattern</p> <p style="text-align: right;">SRS911</p> <p>a through d are repeated. d — Six flashes indicate malfunctioning crash zone sensor circuit.</p>
<p>Repair order ("Recheck SRS at each replacement").</p>	
<ol style="list-style-type: none"> 1. Visually check the wiring harness connections. 2. Replace the harness if it has visible damage. 3. Replace crash zone sensor. 4. Replace the diagnosis sensor unit. 5. Replace the related harness. 	
<p>The air bag diagnosis sensor unit is malfunctioning. (d: 7 flashes)</p>	<p style="text-align: center;">Flash pattern</p> <p style="text-align: right;">SRS335</p> <p>a through d are repeated. d — Seven flashes indicate malfunctioning air bag diagnosis sensor unit.</p>
<p>Repair order (Recheck SRS at each replacement. Refer to "SRS Operation Check", RS-37.)</p>	
<ol style="list-style-type: none"> 1. Visually check the wiring harness connections. 2. Replace the harness if it has visible damage. 3. Replace the air bag diagnosis sensor unit. 4. Replace the related harness. 	

SUPPLEMENTAL RESTRAINT SYSTEM (SRS)

Trouble Diagnoses without CONSULT-II (Cont'd)

<p>The passenger air bag module circuit is malfunctioning. (d: 8 flashes)</p>	Flash pattern	
		<p>a through d are repeated. d — Eight flashes indicate malfunctioning passenger air bag module circuit.</p>
	<p>Repair order (Recheck SRS at each replacement. Refer to "SRS Operation Check", RS-37.)</p> <ol style="list-style-type: none"> 1. Visually check the wiring harness connection. 2. Replace the harness if it has visible damage. 3. Replace passenger air bag module. (Before disposal, it must be deployed.) 4. Replace the air bag diagnosis sensor unit. 5. Replace the related harness. 	

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



DIAGNOSTIC PROCEDURE 7

Final checking after repairing SRS by using "AIR BAG" warning lamp — Diagnosis mode and User mode NGRS0061S02

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

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

SUPPLEMENTAL RESTRAINT SYSTEM (SRS)

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

NOTE:

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

4. If "AIR BAG" warning lamp operates as shown in No. 1 in chart above, turn ignition switch "OFF" to reset from Diagnosis mode to User mode and to erase the memory of the malfunction. Then go to step 6.

If "AIR BAG" warning lamp operates as shown in No. 2 or No. 3 in chart above, the malfunctioning part is not repaired completely, or another malfunctioning part is detected. Refer to "DIAGNOSTIC PROCEDURE 6", RS-47, and repair malfunctioning part completely.

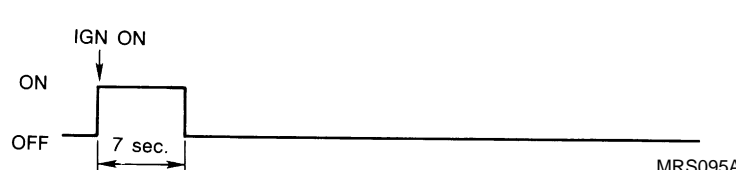
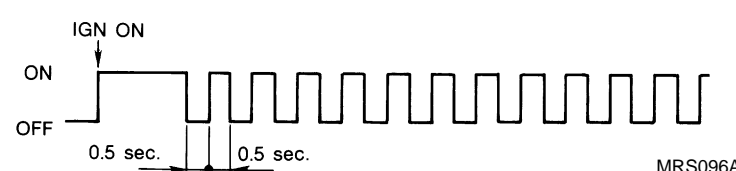
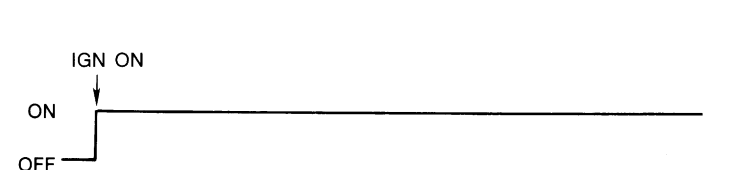
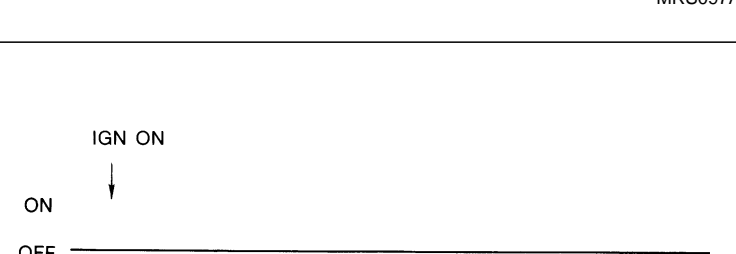

5. Turn ignition switch "ON". "AIR BAG" warning lamp operates in User mode. Compare "AIR BAG" warning lamp operation to the chart below.

NOTE:

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

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

SRS is now in User mode.

"AIR BAG" warning lamp operation — User mode —	SRS condition	Reference item
 <p>MRS095A</p>	No malfunction is detected. No further action is necessary.	—
 <p>MRS096A</p>	The system is malfunctioning and needs to be repaired as indicated.	Go to "DIAGNOSTIC PROCEDURE 6", RS-47.
 <p>MRS097A</p>	Air bag is deployed. Seat belt pre-tensioner is deployed.	Go to "COLLISION DIAGNOSIS", RS-57.
 <p>MRS098A</p>	Air bag fuse, air bag diagnosis sensor unit or harness is malfunctioning and needs to be repaired.	Go to "DIAGNOSTIC PROCEDURE 9", RS-54.
 <p>MRS098A</p>	One of the following has occurred and needs to be repaired. <ul style="list-style-type: none"> ● Meter fuse is blown. ● "AIR BAG" warning lamp circuit has open or short. ● Air bag diagnosis sensor unit is malfunctioning. 	Go to "DIAGNOSTIC PROCEDURE 10", RS-56.

SUPPLEMENTAL RESTRAINT SYSTEM (SRS)

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

DIAGNOSTIC PROCEDURE 8 (CONTINUED FROM DIAGNOSTIC PROCEDURE 6)

Inspecting SRS malfunctioning record

NGRS0061S03

1	CONSIDER POSSIBILITY OF NOT ERASING SELF-DIAGNOSTIC RESULT AFTER REPAIRING	
Is it the first time for maintenance of SRS?		
Yes or No		
Yes	▶	Go to "DIAGNOSTIC PROCEDURE 5", RS-44. (Further inspection cannot be performed without CONSULT-II.)
No	▶	Diagnosis results (previously stored in the memory) might not be erased after repair. Go to "DIAGNOSTIC PROCEDURE 7", RS-51.

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SUPPLEMENTAL RESTRAINT SYSTEM (SRS)

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

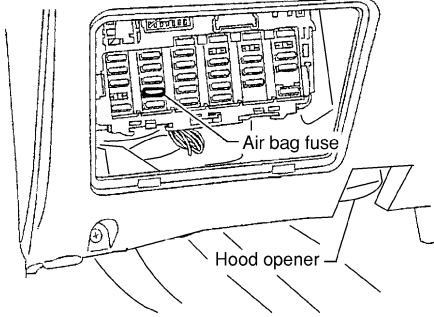
Trouble Diagnoses: "AIR BAG" Warning Lamp Does Not Turn Off

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DIAGNOSTIC PROCEDURE 9

1	SEE THE DEPLOYMENT OF AIR BAG MODULE	
Is air bag module deployed?		
Yes or No		
Yes	▶	Refer to "COLLISION DIAGNOSIS", RS-57.
No	▶	GO TO 2.

2	CHECK AIR BAG FUSE	
Is SRS "AIR BAG" fuse OK?		
 <p style="text-align: center;">Air bag fuse</p> <p style="text-align: center;">Hood opener</p>		
OK or NG		
OK	▶	GO TO 4.
NG	▶	GO TO 3.

WRS264

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

SUPPLEMENTAL RESTRAINT SYSTEM (SRS)

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

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

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

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SUPPLEMENTAL RESTRAINT SYSTEM (SRS)

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

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

=NGRS0063

DIAGNOSTIC PROCEDURE 10

NGRS0063S01

1	CHECK "METER" FUSE
Refer to "Wiring Diagram — SRS —", RS-34 Is meter fuse OK?	
OK or NG	
OK	▶ GO TO 3.
NG	▶ GO TO 2.

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

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

Collision Diagnosis

=NGRS0064

To repair the SRS, perform the following steps.

When SRS is activated in a collision:

- 1) Replace the air bag diagnosis sensor unit.
- 2) Remove the air bag modules and seat belt pre-tensioner assemblies.
- 3) Check the SRS components using the table shown below:
 - Replace any SRS components showing visible signs of damage (dents, cracks and deformation).
- 4) Install new air bag modules and seat belt pre-tensioner assemblies.
- 5) Conduct self-diagnosis using CONSULT-II or "AIR BAG" warning lamp. Refer to "SRS Operation Check", RS-37. Ensure entire SRS operates properly.

When SRS is not activated in a collision:

- 1) Check the SRS components using the table shown below:
 - Replace any SRS components showing visible signs of damage (dents, cracks and deformation).
- 2) Conduct self-diagnosis using CONSULT-II or "AIR BAG" warning lamp. Refer to "SRS Operation Check", RS-37. Ensure entire SRS operates properly.

SRS INSPECTION (FOR FRONTAL COLLISION)

NGRS0064S01

Part	SRS is activated	SRS is NOT activated
Air bag module (driver and passenger side)	REPLACE Install with new special 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. a. Install driver air bag module into the steering wheel to check fit and alignment with the wheel. b. Install 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.
Seat belt pre-tensioner assembly	REPLACE Install seat belt pre-tensioner with new bolts.	1. Remove 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 seat belt pre-tensioner assembly. 5. If damaged—REPLACE. Install the seat belt pre-tensioners with new bolts coated with bonding agent. Seat belt pre-tensioners must be deployed before discarding.
Crash zone sensor	REPLACE the crash zone sensor and bracket with new nuts and bolts coated with bonding agent.	1. Remove the crash zone sensor. Check harness connectors for damage, terminals for deformities, and harness for binding. 2. Check for visible signs of damage (dents, cracks, deformation) of the crash zone sensor and bracket. 3. Install the crash zone sensor to check fit. 4. If no damage is found, reinstall the crash zone sensor with new nuts coated with bonding agent. 5. If damaged—REPLACE the crash zone sensor and bracket with new nuts and bolts coated with bonding agent.
Air bag diagnosis sensor unit	REPLACE Install with new bolts coated with bonding agent.	1. Check case for dents, cracks or deformities. 2. Check connectors for damage, and terminals for deformities. 3. If no damage is found, reinstall with new special bolts and ground bolt coated with bonding agent. 4. If damaged—REPLACE. Install diagnosis sensor unit with new special bolts and ground bolt coated with bonding agent.
Steering wheel	1. Visually check steering wheel for deformities. 2. Check harness and connectors for damage, and terminals for deformities. 3. Install air bag module to check fit or alignment with steering wheel. 4. Check steering wheel for excessive free play. 5. If no damage is found, reinstall with new bolts. 6. If damaged—REPLACE.	

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SUPPLEMENTAL RESTRAINT SYSTEM (SRS)

Collision Diagnosis (Cont'd)

Part	SRS is activated	SRS is NOT activated
Spiral cable	<ol style="list-style-type: none"> 1. Visually check spiral cable and combination switch for damage. 2. Check connectors and protective tape for damage. 3. Check steering wheel for noise, binding or heavy operation. 4. If no damage is found, reinstall with new bolts. 5. If damaged—REPLACE. 	
Harness and Connectors	<ol style="list-style-type: none"> 1. Check connectors for poor connection, damage, and terminals for deformities. 2. Check harness for binding, chafing, cuts, or deformities. 3. If no damage is found, reinstall the harness and connectors. 4. Damaged—REPLACE damaged harness. Do not attempt to repair, splice or modify any SRS harness. 	
Instrument panel	<ol style="list-style-type: none"> 1. When passenger air bag inflates, check the following points for bending, deformities or cracks. <ul style="list-style-type: none"> ● Opening portion for passenger air bag <div data-bbox="706 567 1161 850"> </div> ● Passenger air bag module brackets <div data-bbox="706 945 1161 1207"> </div> ● The portions securing the instrument panel <div data-bbox="592 1302 1274 1648"> </div> 2. If no damage is found, reinstall the instrument panel. 3. If damaged—REPLACE the instrument panel with new bolts. 	

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