

RESTRAINT SYSTEM

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Precautions

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

NERS0001

The Supplemental Restraint System “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 in a frontal collision. The Supplemental Restraint System consists of air bag modules (located in the center of the steering wheel and in the instrument panel on the passenger side), seat belt pre-tensioners, a diagnosis sensor unit, a crash zone sensor (4WD model), warning lamp, wiring harness and spiral cable.

The vehicle (except crew cab model) is equipped with a passenger air bag deactivation switch. Because no rear seat exists where a rear-facing child restraint can be placed, the switch is designed to turn off the passenger air bag so that a rear-facing child restraint can be used in the front passenger seat. The switch is located in the center of the instrument panel, near the ashtray. When the switch is turned to the ON position, the passenger air bag is enabled and could inflate in a frontal collision. When the switch is turned to the OFF position, the passenger air bag is disabled and will not inflate in a frontal collision. A passenger air bag OFF indicator on the instrument panel lights up when the passenger air bag is switched OFF. The driver air bag always remains enabled and is not affected by the passenger air bag deactivation switch.

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 harnesses are covered with yellow insulation either just before the harness connectors or on the complete harness, for easy identification.
- The vehicle (except crew cab model) is equipped with a passenger air bag deactivation switch which can be operated by the customer. When the passenger air bag is switched OFF, the passenger air bag is disabled and will not inflate in a frontal collision. When the passenger air bag is switched ON, the passenger air bag is enabled and could inflate in a frontal collision. After SRS maintenance or repair, make sure the passenger air bag deactivation switch is in the same position (ON or OFF) as when the vehicle arrived for service.

PRECAUTIONS FOR SEAT BELT SERVICE

NERS0002

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”, “TROUBLE DIAGNOSIS — Supplemental Restraint System (SRS)”, RS-47.
- Do not disassemble buckle or seat belt assembly.
- Do not reuse seat belt anchor bolts after removal. Replace with new ones.
- Never oil tongue and buckle.
- If any component (including anchor bolts) 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

NERS0044

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 if:

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SEAT BELTS

Precautions (Cont'd)

- 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.

SEAT BELTS

Front Seat Belt

Front Seat Belt

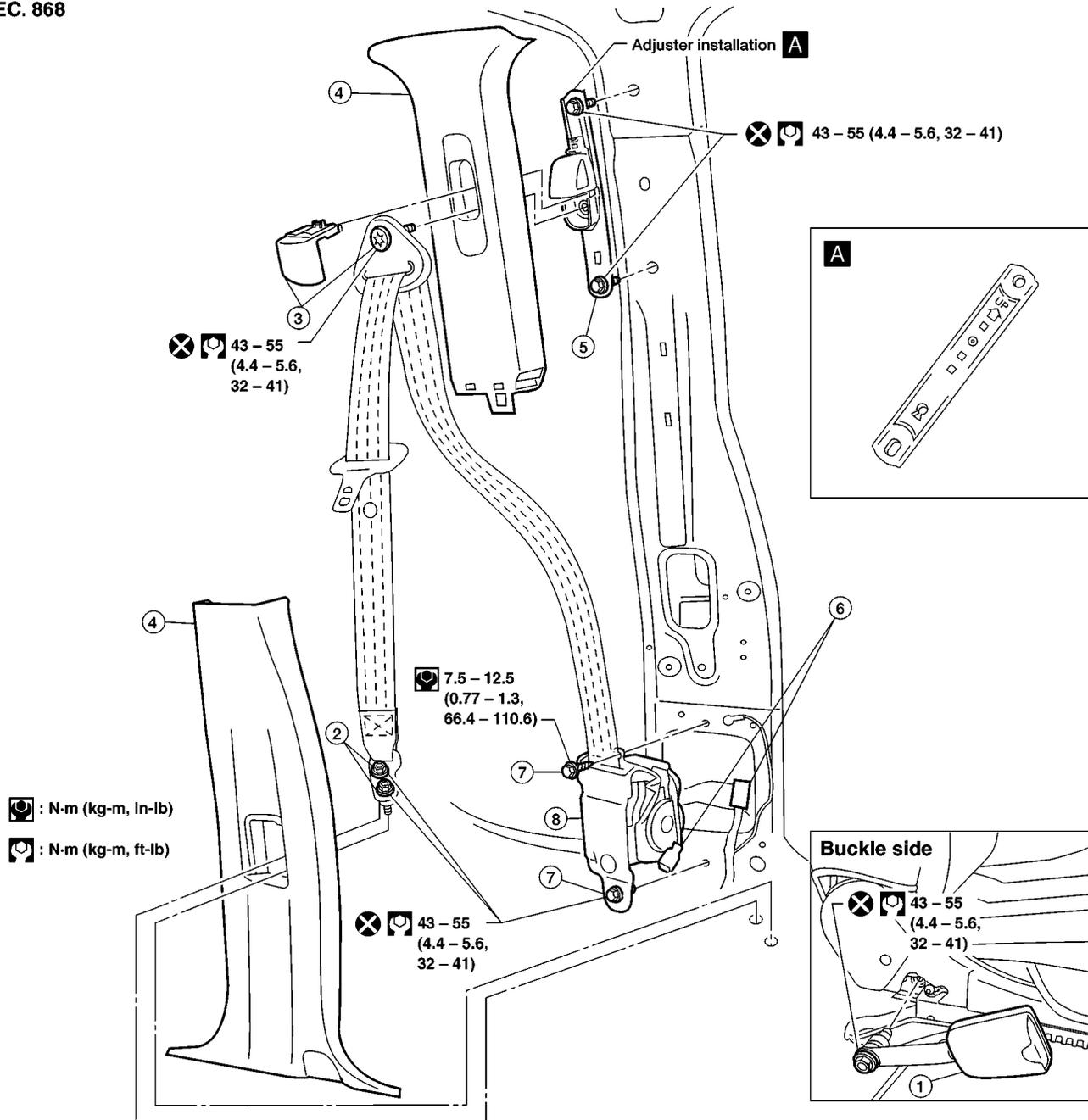
REMOVAL AND INSTALLATION

Bucket Seats

Remove front seat. Refer to "Front Seat", BT-42.

1. Remove buckle. For driver 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 "SIDE AND FLOOR TRIM", BT-25.
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



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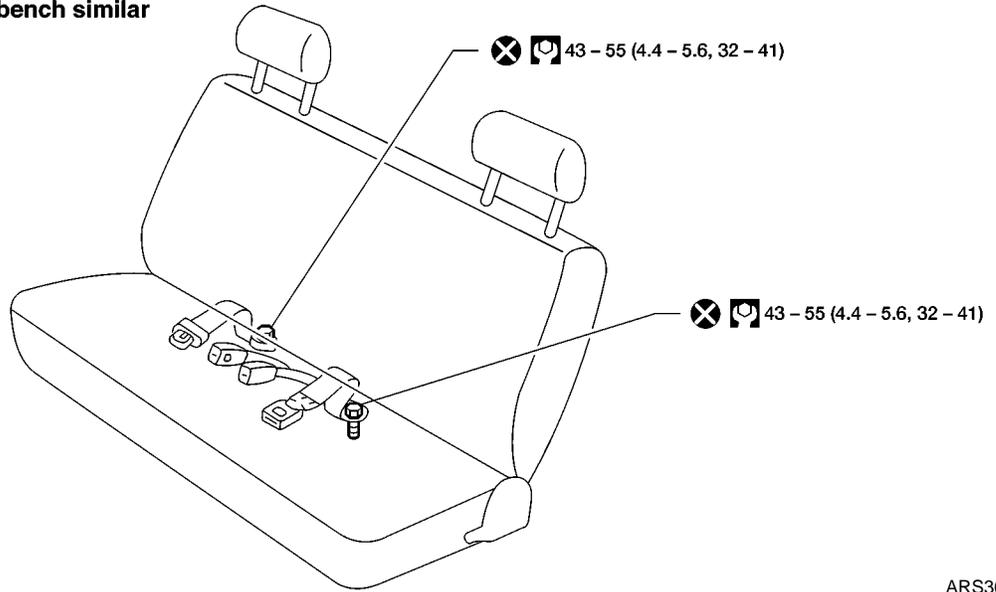
SEAT BELTS

Front Seat Belt (Cont'd)

Front Center Seat Belt (Bench and Split Bench Seats)

=NERS0003S02

Bench seat shown, split bench similar



 : N·m (kg·m, ft·lb)

ARS363

SEAT BELTS

Rear Seat Belt

Rear Seat Belt

REMOVAL AND INSTALLATION

King Cab Models

1. Remove underseat storage.
2. Remove buckle.
3. Remove seat belt anchor bolt.

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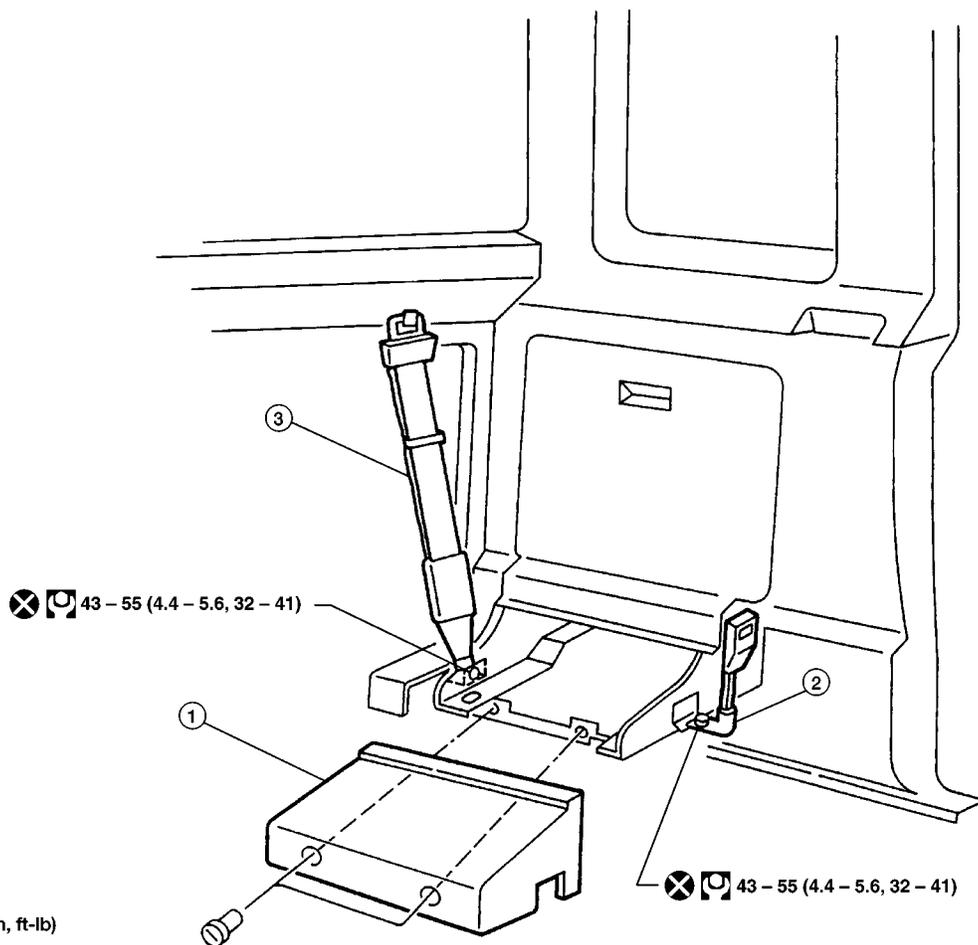
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: N·m (kg-m, ft-lb)

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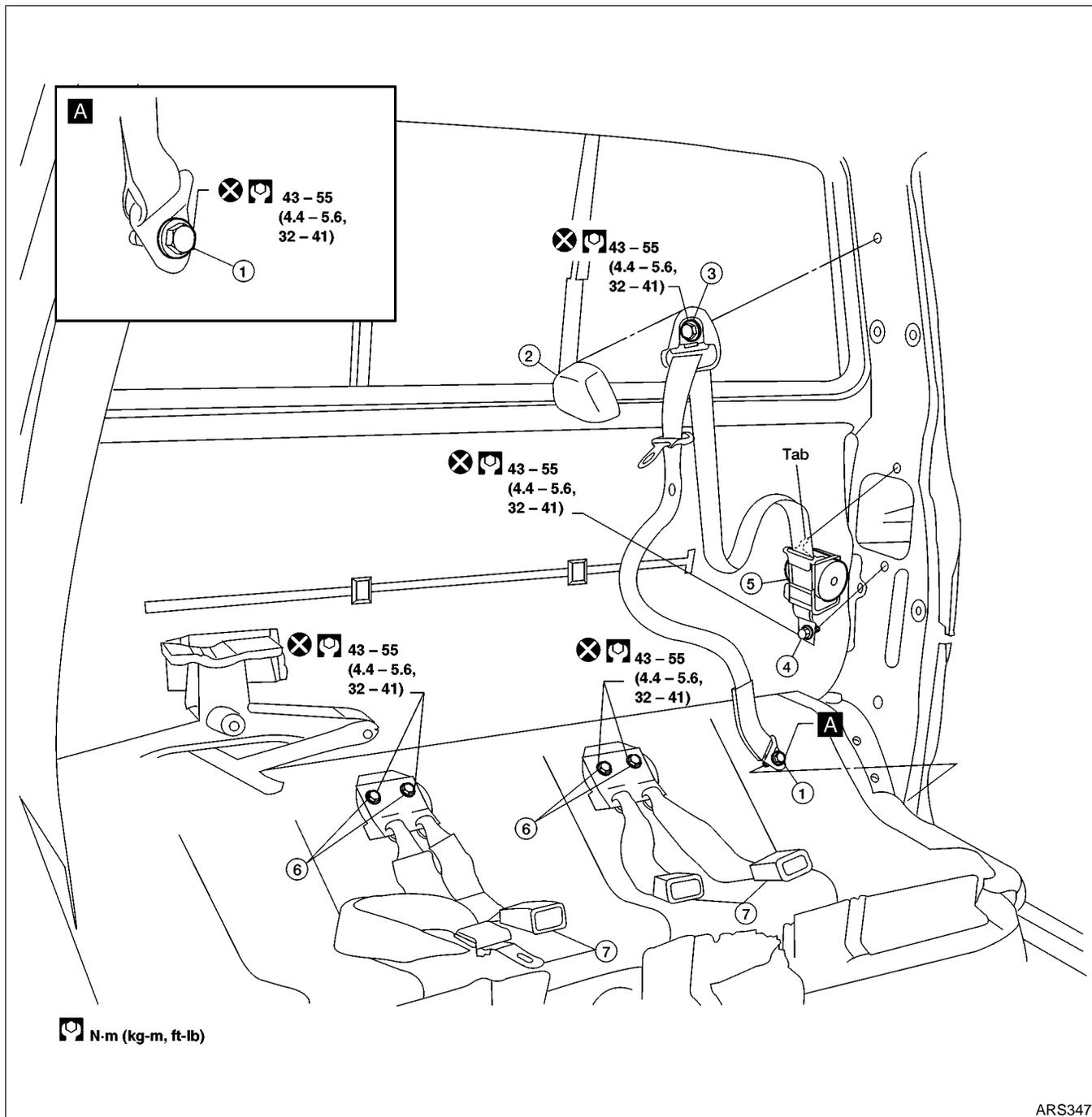
SEAT BELTS

Rear Seat Belt (Cont'd)

=NERS0004S02

Crew Cab Models

1. Remove lower seat belt anchor bolt.
2. Remove shoulder anchor cover.
3. Remove shoulder anchor bolt.
4. Remove retractor bolt.
5. Remove retractor.
6. Remove anchor bolts.
7. Remove seat belt assembly.



ARS347

Seat Belt Inspection

=NERS0029

NERS0029S01

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.

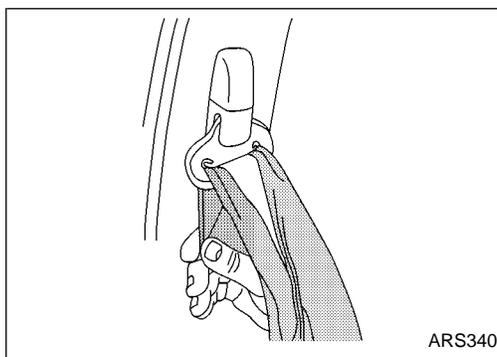
Replace any seat belt assembly if:

- 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.

PRELIMINARY CHECKS

NERS0029S02

1. Check the "SEAT BELT" warning lamp/chime for proper operation as follows:
 - a. Turn ignition switch ON. The "SEAT BELT" warning lamp should illuminate. Also, the "SEAT BELT" warning chime should sound for about seven seconds.
 - b. Fasten driver's seat belt. The "SEAT BELT" warning lamp should go out and the chime (if sounding) should stop.
 - c. If the "SEAT BELT" warning lamp is blinking, conduct self-diagnosis using "SEAT BELT" warning lamp or CONSULT-II. Refer to "Checking seat belt pre-tensioner operation by using "SEAT BELT" warning lamp — User mode", "SRS Operation Check", RS-48.
2. Check that the seat belt retractor, seat belt anchor and buckle bolts are securely attached.
3. Check the shoulder seat belt guide and shoulder belt height adjuster for front seats. Ensure guide swivels freely and that belt lays flat and does not bind in guide. Ensure height adjuster operates properly and holds securely.
4. Check retractor operation:
 - a. Fully extend the seat belt webbing and check for twists, tears or other damage.
 - b. Allow the seat belt to retract. Ensure that belt returns smoothly and completely into the retractor. If the seat belt does not 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.
5. 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.
6. 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)

-NERS0029S03

NERS0029S0301

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

NERS0029S0302

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

ALR Function Stationary Check

NERS0029S0304

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)

NERS0029S0303

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.

SEAT BELTS

Seat Belt Inspection (Cont'd)

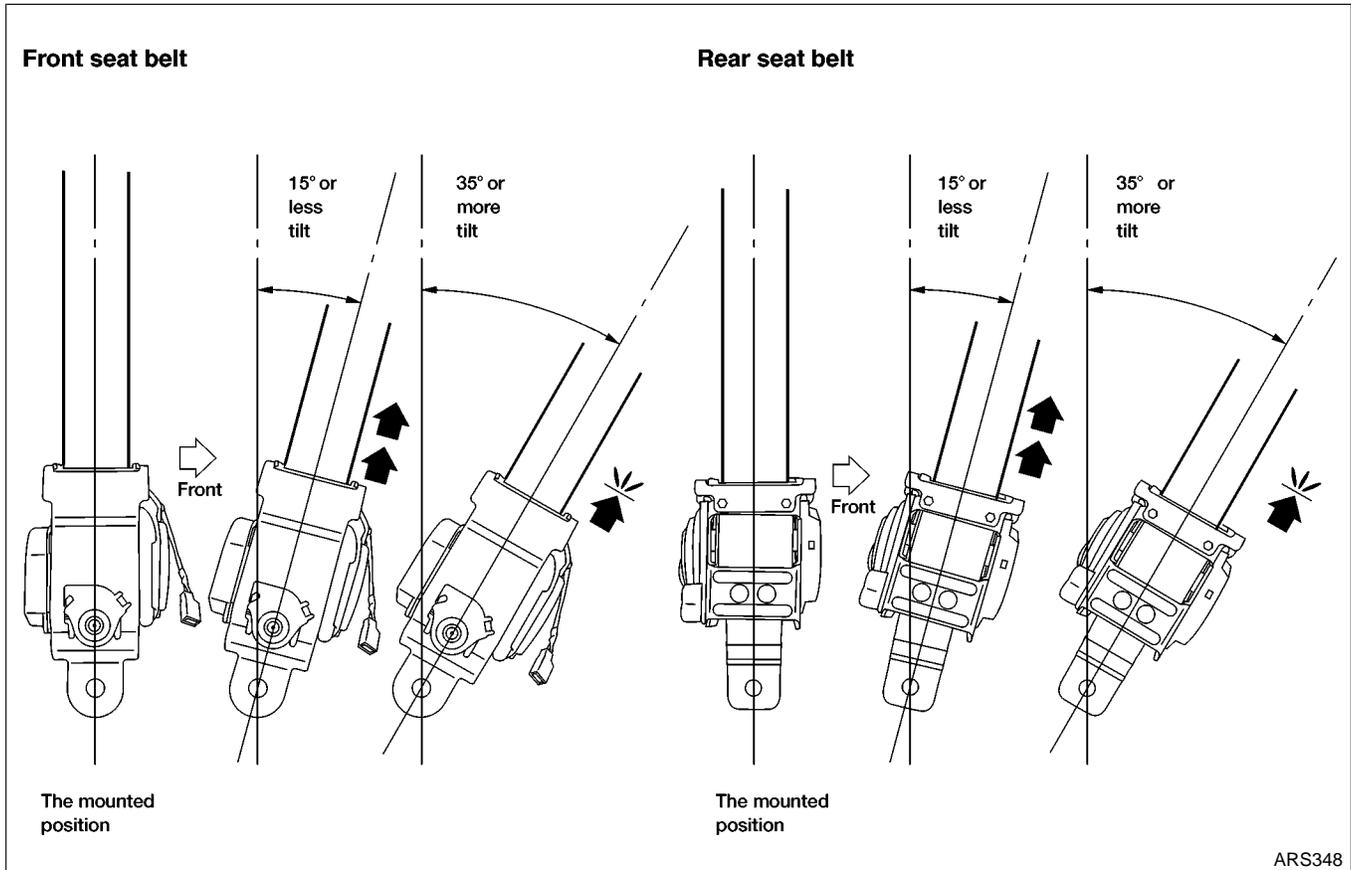
SEAT BELT RETRACTOR OFF-VEHICLE CHECK

-NERS0029S04

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.

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SUPPLEMENTAL RESTRAINT SYSTEM (SRS)

Precautions

Precautions

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

NERS0005

The Supplemental Restraint System “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 in a frontal collision. The Supplemental Restraint System consists of air bag modules (located in the center of the steering wheel and in the instrument panel on the passenger side), seat belt pre-tensioners, a diagnosis sensor unit, a crash zone sensor (4WD model), warning lamp, wiring harness and spiral cable.

The vehicle (except crew cab model) is equipped with a passenger air bag deactivation switch. Because no rear seat exists where a rear-facing child restraint can be placed, the switch is designed to turn off the passenger air bag so that a rear-facing child restraint can be used in the front passenger seat. The switch is located in the center of the instrument panel, near the ashtray. When the switch is turned to the ON position, the passenger air bag is enabled and could inflate in a frontal collision. When the switch is turned to the OFF position, the passenger air bag is disabled and will not inflate in a frontal collision. A passenger air bag OFF indicator on the instrument panel lights up when the passenger air bag is switched OFF. The driver air bag always remains enabled and is not affected by the passenger air bag deactivation switch.

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 harnesses are covered with yellow insulation either just before the harness connectors or on the complete harness, for easy identification.
- The vehicle (except crew cab model) is equipped with a passenger air bag deactivation switch which can be operated by the customer. When the passenger air bag is switched OFF, the passenger air bag is disabled and will not inflate in a frontal collision. When the passenger air bag is switched ON, the passenger air bag is enabled and could inflate in a frontal collision. After SRS maintenance or repair, make sure the passenger air bag deactivation switch is in the same position (ON or OFF) as when the vehicle arrived for service.

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

NERS0006

- 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 and crash zone sensor (4WD models) must always be installed with forward mark “←” pointing toward the front of the vehicle for proper operation. Also check air bag diagnosis sensor unit and crash zone sensor (4WD models) 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 the pad side facing upward.
- Conduct Self-diagnosis to check entire SRS for proper function after replacing any components. Refer to “SRS Operation Check”, “TROUBLE DIAGNOSES — Supplemental Restraint System (SRS)”, RS-47.
- After air bag inflates, the instrument panel assembly should be replaced if damaged.

AFTER A COLLISION

NERS0045

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

SUPPLEMENTAL RESTRAINT SYSTEM (SRS)

Precautions (Cont'd)

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 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

When you read wiring diagrams, refer to the following:

- "HOW TO READ WIRING DIAGRAMS", GI-11
- "POWER SUPPLY ROUTING" for power distribution circuit, EL-8

When you perform trouble diagnosis, refer to the following:

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

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SUPPLEMENTAL RESTRAINT SYSTEM (SRS)

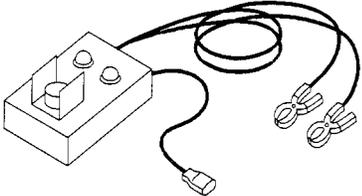
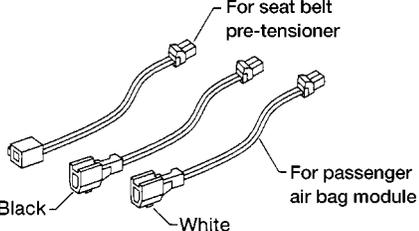
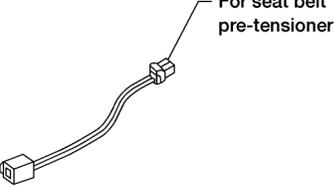
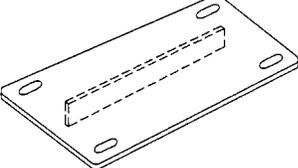
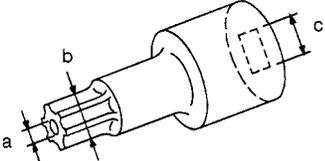
Preparation

Preparation

SPECIAL SERVICE TOOLS

=NERS0008

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>
KV991065S0 (J38381-30) Deployment tool adapters	 <p>For seat belt pre-tensioner</p> <p>Black</p> <p>White</p> <p>For passenger air bag module</p> <p>ARS269</p>
KV99109000 (J44230) Deployment tool adapter	 <p>For seat belt pre-tensioner</p> <p>ARS387</p>
KV99105300 (J41246) Air bag module bracket	 <p>Anchoring air bag module</p> <p>NT354</p>
HT61961000 and HT62152000 combined (J38219) *Special torx bit	 <p>Use for special bolts [TAMPER RESISTANT TORX (Size T50)]</p> <p>a: 3.5 (0.138) dia.</p> <p>b: 8.5 - 8.6 (0.335 - 0.339) dia.</p> <p>c: approx. 10 (0.39) sq.</p> <p>Unit: mm (in)</p> <p>NT361</p>

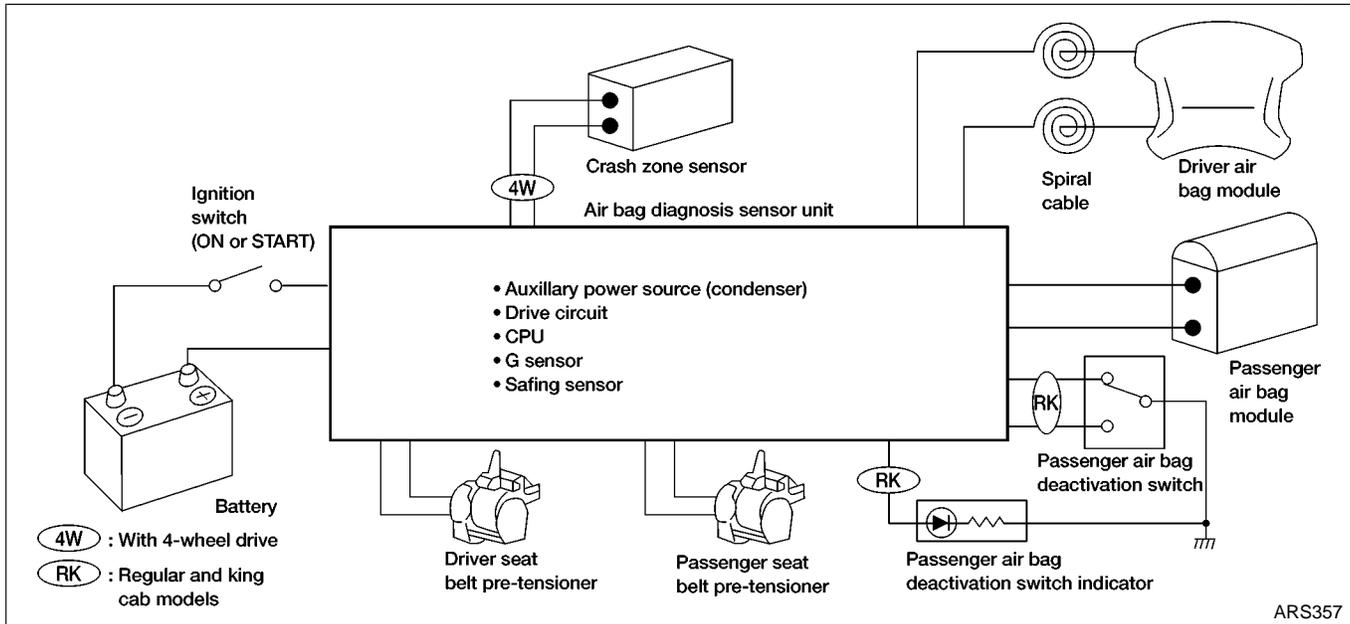
*: Special tool or commercial equivalent

SUPPLEMENTAL RESTRAINT SYSTEM (SRS)

Description

Description

NERS0009



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.

2WD MODELS

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.

4WD MODELS

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

Ignition	Crash zone sensor (4WD models only)	Diagnosis sensor unit		Driver air bag	Passenger air bag	Driver seat belt pre-tensioner	Passenger seat belt pre-tensioner
		G sensor	Safing sensor				
ON	—	ON	ON	Deploy			
ON	ON	—	ON	Deploy			
ON	ON	ON	ON	Deploy			

PASSENGER AIR BAG DEACTIVATION SWITCH

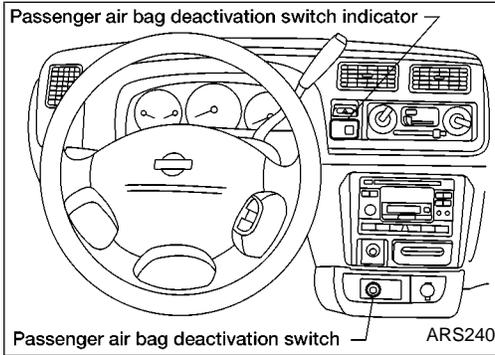
The vehicle is equipped with a passenger air bag deactivation switch which can be operated by the customer. When the switch is turned to the ON position, the passenger air bag is enabled and could inflate in a frontal collision. When the switch is turned to the OFF position, the passenger air bag is disabled and will not inflate in a frontal collision.

After turning the ignition switch ON, the passenger air bag deactivation switch indicator on the instrument panel illuminates for bulb check. The indicator will remain illuminated if the passenger air bag deactivation switch is in the OFF position. If the passenger air bag deactivation switch is in the ON position, the indicator will turn off after about 7 seconds.

After SRS maintenance or repair, make sure the passenger air bag deactivation switch is in the same position (ON or OFF) as when the vehicle arrived for service.

SUPPLEMENTAL RESTRAINT SYSTEM (SRS)

Description (Cont'd)



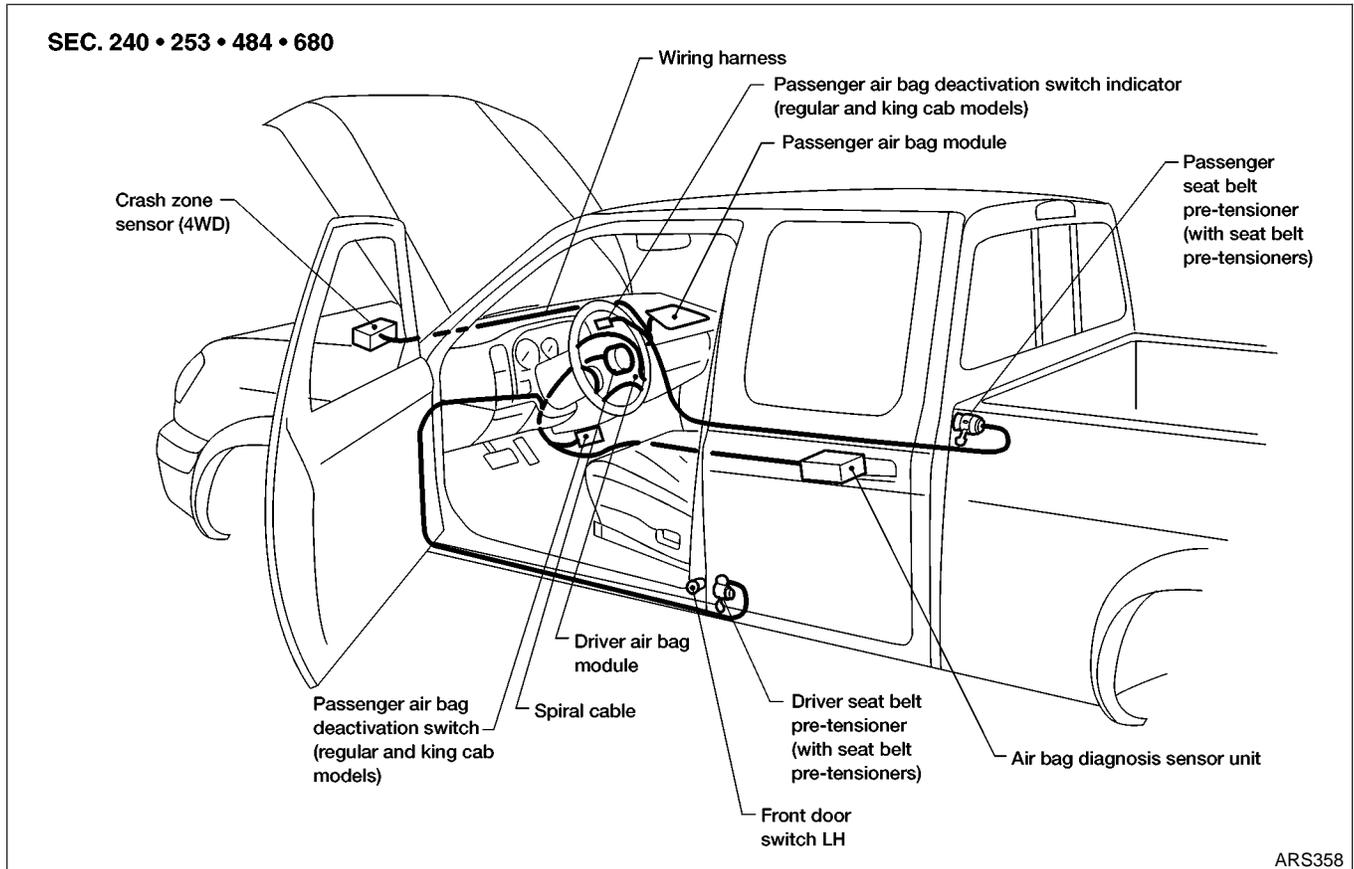
IGN OFF → ON

NERS0009S0301

Passenger air bag deactivation switch position	Passenger air bag deactivation switch indicator	Passenger air bag deployment
ON	Turns off within 7 seconds	Enabled
OFF	Remains illuminated	Disabled

SRS Component Parts Location

NERS0010



Maintenance Items

NERS0011

CAUTION:

Do not use electrical test equipment to check any SRS circuit.



1. Check "AIR BAG" and "SEAT BELT" warning lamp operation
After turning ignition switch ON, "AIR BAG" and "SEAT BELT" warning lamps illuminate. The "AIR BAG" warning lamp will turn off after about 7 seconds if no malfunction is detected. The "SEAT BELT" warning lamp will also go off after about 7 seconds if the seat belt has been fastened and no malfunction has been detected. (When the driver's seat belt has not been fastened, the "SEAT BELT" warning lamp remains illuminated until the seat belt is fastened.)

If any of the following "AIR BAG" or "SEAT BELT" warning lamp conditions occur, immediately check the air bag or seat belt pre-tensioner system. Refer to RS-47 for details.

- The "AIR BAG" or "SEAT BELT" warning lamp does not illuminate when the ignition switch is turned ON.
 - The "AIR BAG" or "SEAT BELT" (with seat belt fastened) warning lamp does not turn off about 7 seconds after the ignition switch is turned ON.
 - The "AIR BAG" or "SEAT BELT" (with seat belt fastened) warning lamp blinks after illuminating for about 7 seconds after the ignition switch is turned ON.
2. Visually check SRS components
 - 1) Crash zone sensor (4WD models)
 - Check crash zone sensor to ensure the forward mark "←" is pointing toward the front of the vehicle.
 - Check sensor body and sensor bracket for deformities and rust.
 - Check sensor case for dents, cracks, deformities and rust.
 - Check sensor harness for binding, connector for damage and terminals for deformities.
 - 2) Air bag diagnosis sensor unit
 - Check air bag diagnosis sensor unit and bracket for dents, cracks and deformities.
 - Check connectors for damage and terminals for deformities.
 - 3) Air bag modules, steering wheel and instrument panel
 - Remove driver air bag module from steering wheel. Check harness cover and connectors for damage, terminals for deformities and harness for binding.
 - Install driver air bag module to steering wheel to check fit or alignment with the wheel.
 - Check steering wheel for excessive free play.
 - Remove passenger air bag module. Check harness cover and connectors for damage, terminals for deformities and harness for binding. Check the bracket for deformities and rust.
 - Install passenger air bag module in instrument panel to check fit or alignment with the instrument panel.

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SUPPLEMENTAL RESTRAINT SYSTEM (SRS)

Maintenance Items (Cont'd)

- 4) Spiral cable
 - Check spiral cable for dents, cracks and deformities.
 - Check connectors and protective tape for damage.
 - Check steering wheel for noise, binding and heavy operation.
- 5) Seat belt pre-tensioner
 - Check harness cover and connectors for damage, terminals for deformities and harness for binding.
 - Check belts for damage and anchors for loose mounting.
 - Check retractor for smooth operation.
 - Perform Self-diagnosis for seat belt pre-tensioner using “SEAT BELT” warning lamp or CONSULT-II. Refer to “Checking seat belt pre-tensioner operation by using “SEAT BELT” warning lamp — User mode”, “SRS Operation Check”, RS-48.
- 6) Passenger air bag deactivation switch
 - Check passenger air bag deactivation switch for damage.
 - Check harness for binding, connector for damage and terminals for deformities.
- 7) Main harness and air bag harness
 - Check connectors for poor connections, damage, and terminals for deformities.
 - Check harnesses for binding, chafing and cuts.

CAUTION:

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

Diagnosis Sensor Unit

REMOVAL AND INSTALLATION

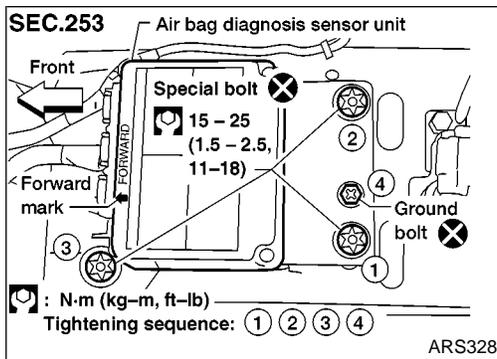
NERS0012

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.
- After replacement, perform self-diagnosis for SRS. Refer to “SRS Operation Check”, “TROUBLE DIAGNOSES — Supplemental Restraint System (SRS)”, RS-47

SUPPLEMENTAL RESTRAINT SYSTEM (SRS)

Diagnosis Sensor Unit (Cont'd)



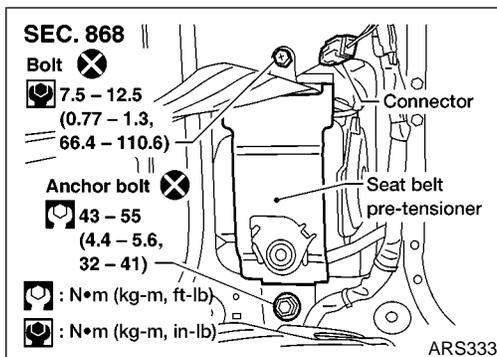
1. Disconnect driver and passenger air bag module connectors and seat belt pre-tensioner connectors.
2. Remove console box. Refer to "INSTRUMENT PANEL ASSEMBLY", BT-21.
3. Disconnect air bag diagnosis sensor unit connector.
4. Remove ground bolt and also remove special bolts using the TAMPER RESISTANT TORX (Size T50), 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.

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.



Seat Belt Pre-tensioner REMOVAL AND INSTALLATION

NERS0040

CAUTION:

- Before servicing SRS, turn the ignition switch off, disconnect both battery cables and wait at least 3 minutes.
- Do not use old bolts and nuts after removal; replace with new ones.
- 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 "Checking seat belt pre-tensioner operation by using "SEAT BELT" warning lamp — User mode", "SRS Operation Check", RS-48
- Do not attempt to disassemble air bag diagnosis sensor unit or seat belt pre-tensioner.
- Replace air bag diagnosis sensor unit or 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", "SEAT BELTS", RS-5.

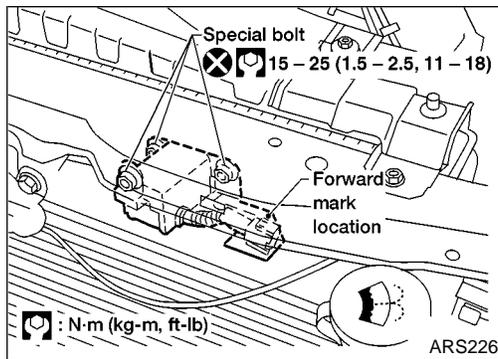
NOTE:

To install, reverse removal procedure.

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SUPPLEMENTAL RESTRAINT SYSTEM (SRS)

Crash Zone Sensor



Crash Zone Sensor REMOVAL AND INSTALLATION

NERS0041

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. Do not reuse bolts after removal; replace with new ones.
 - Check crash zone sensor for proper installation.
 - Check crash zone sensor 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.
 - After replacement, perform self-diagnosis for SRS. Refer to "SRS Operation Check", "TROUBLE DIAGNOSES — Supplemental Restraint System (SRS)", RS-47
 - Check crash zone sensor brackets to ensure they are free of deformities or rust.
- 1) Disconnect driver and passenger air bag module connectors.
 - 2) Remove front grille.
 - 3) Disconnect crash zone sensor connector.
 - 4) Using TAMPER RESISTANT TORX (Size T50), remove special bolts. Then remove the crash zone sensor.

NOTE:

To install, reverse the removal procedure.

CAUTION:

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

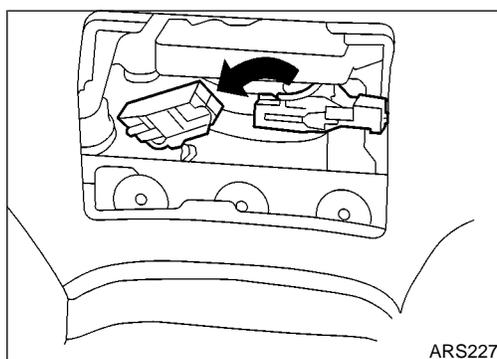
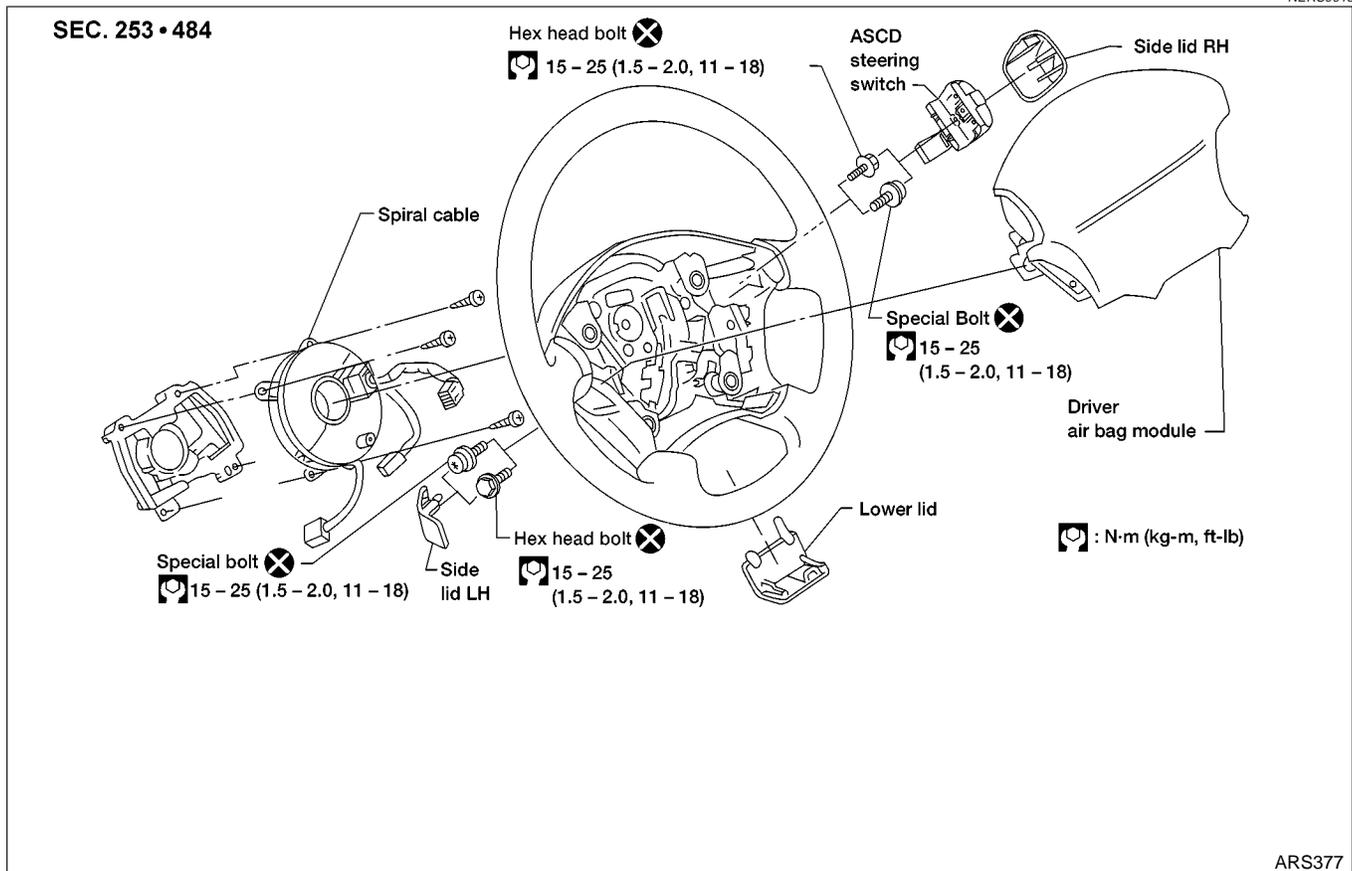
SUPPLEMENTAL RESTRAINT SYSTEM (SRS)

Driver Air Bag Module and Spiral Cable

Driver Air Bag Module and Spiral Cable

REMOVAL AND INSTALLATION

NERS0013



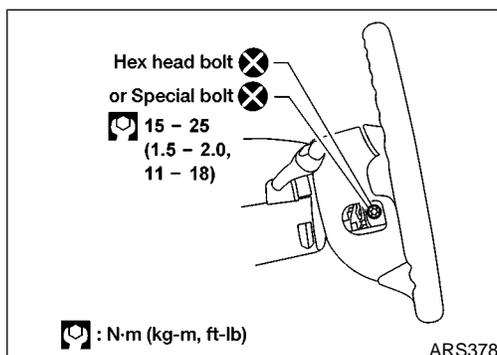
REMOVAL

NERS0014

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

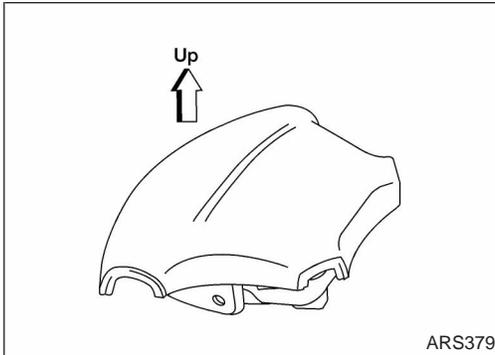


2. Remove side lids. Remove the hex head bolts or use the TAMPER RESISTANT TORX (Size T50) if necessary, to remove left and right special bolts.

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SUPPLEMENTAL RESTRAINT SYSTEM (SRS)

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

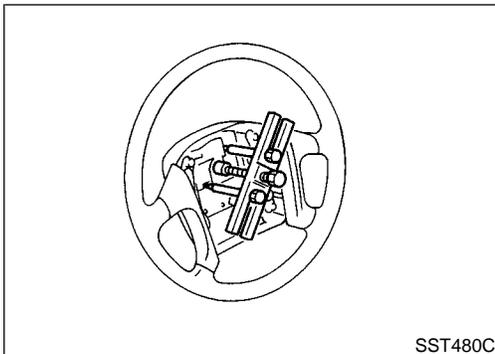


CAUTION:

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



- 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.



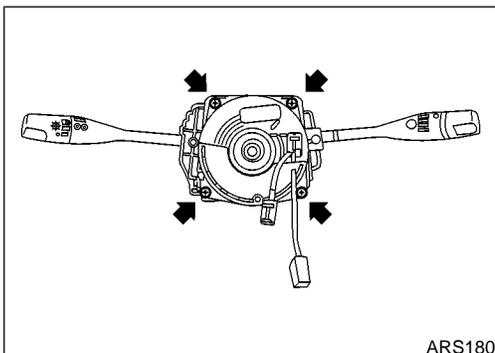
3. Set steering wheel in the neutral position.
4. Disconnect spiral cable connector from steering wheel sub-harness and remove nut.
5. Using steering wheel puller, remove steering wheel. Be careful not to over-tighten puller bolt on steering wheel.

CAUTION:

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

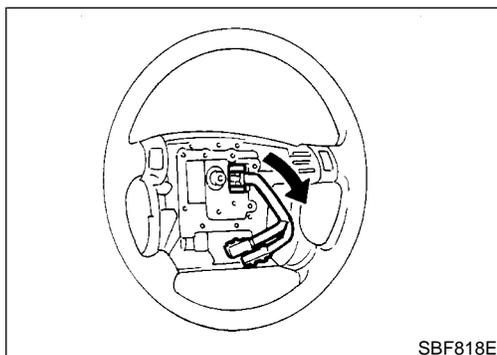
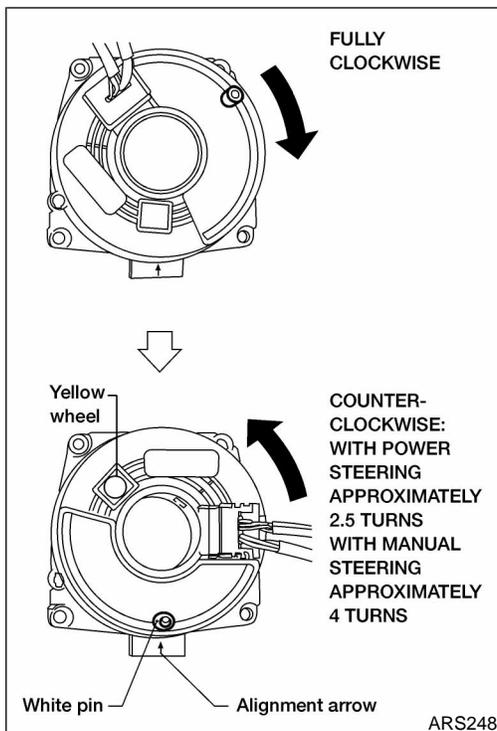
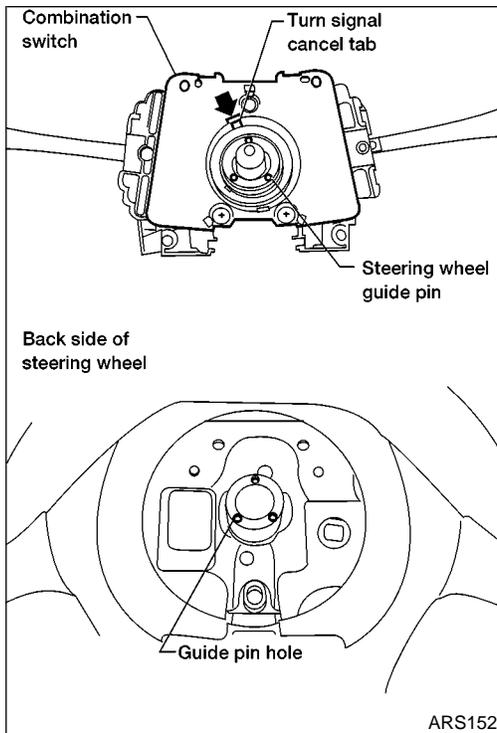
CAUTION:

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



SUPPLEMENTAL RESTRAINT SYSTEM (SRS)

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



INSTALLATION

NERS0015

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 as specified below and align white pin with arrow on housing.

Specified turns for spiral cable:

Applied model	Specified turns from neutral position
With power steering	Approx. 2.5
Without power steering	Approx. 4

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

CAUTION:

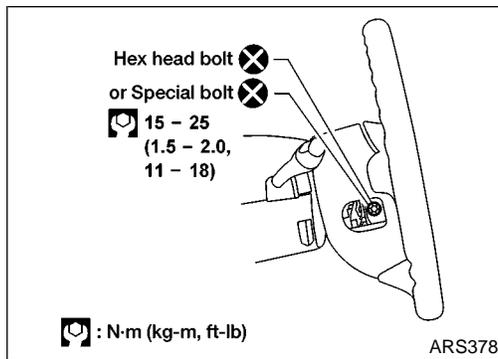
- The spiral cable may snap during steering operation if the spiral cable is installed in an improper position.
- Also, with the steering linkage disconnected, the cable may snap by turning the steering wheel beyond the specified number of turns. Always perform SRS Self-diagnosis after installing the air bag module.

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. Tighten steering wheel nut.
⚙️ : 29 - 39 N-m (3.0 - 4.0 kg-m, 22 - 29 ft-lb)
8. Connect spiral cable connector to steering wheel sub-harness.

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SUPPLEMENTAL RESTRAINT SYSTEM (SRS)

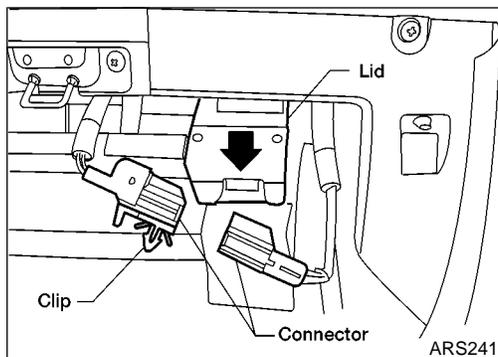
Driver Air Bag Module and Spiral Cable (Cont'd)



9. Position driver air bag module and install two new hex head or two new special bolts [use TAMPER RESISTANT TORX (Size T50) if required].
10. Connect driver air bag module connector.
11. Install all lids.
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", "TROUBLE DIAGNOSIS — Supplemental Restraint System (SRS)", RS-47.



Front Passenger Air Bag Module

REMOVAL

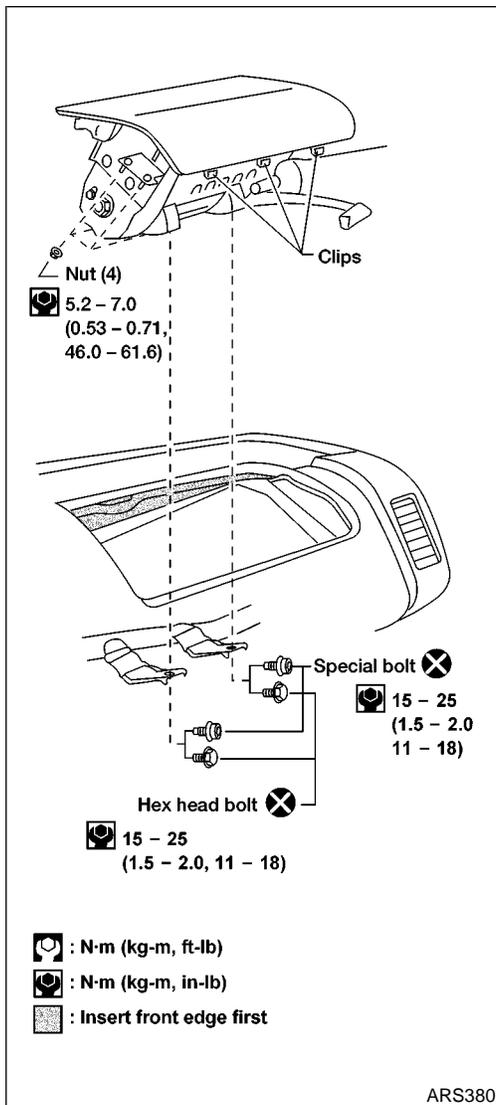
NERS0016

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. Open lid of instrument panel lower passenger side, inside glove box.
 3. Remove passenger air bag module connector clip from lid.
 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-21.

SUPPLEMENTAL RESTRAINT SYSTEM (SRS)

Front Passenger Air Bag Module (Cont'd)



6. Remove the hex head bolts or use TAMPER RESISTANT TORX (Size T50) if required to remove the two special 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.**

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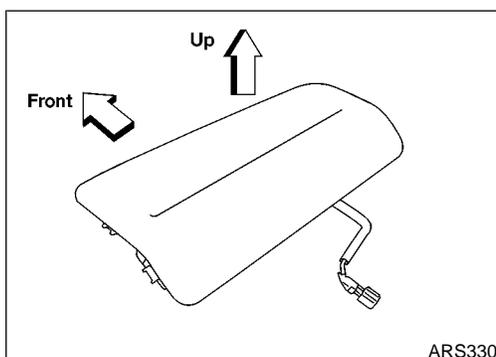
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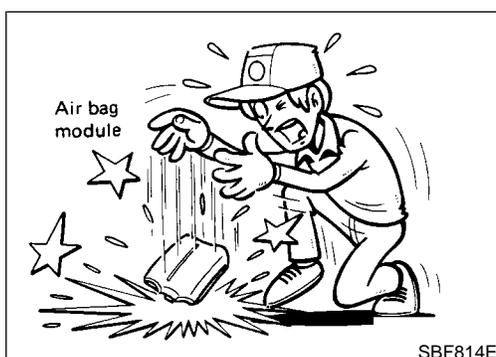
CAUTION:

- 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.

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- 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.

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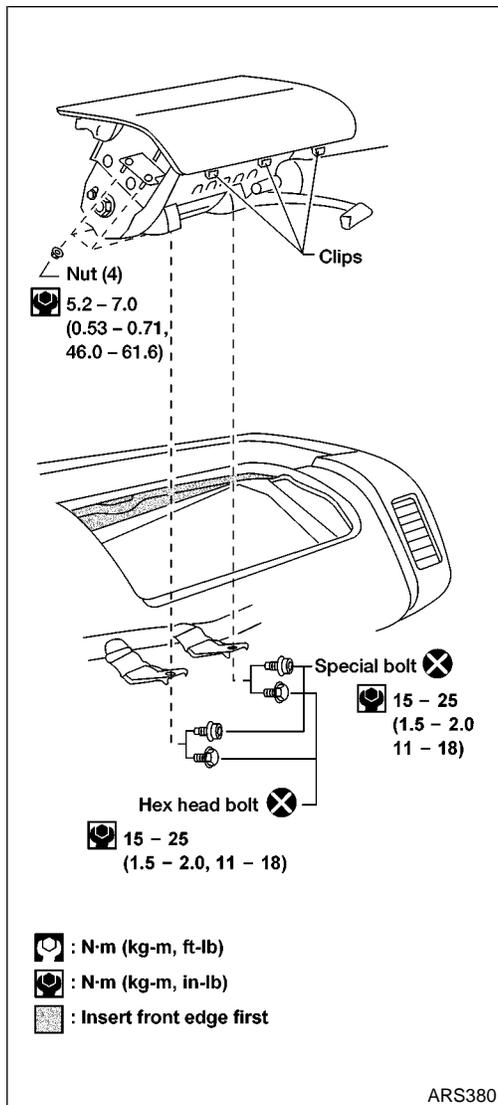
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SUPPLEMENTAL RESTRAINT SYSTEM (SRS)

Front Passenger Air Bag Module (Cont'd)

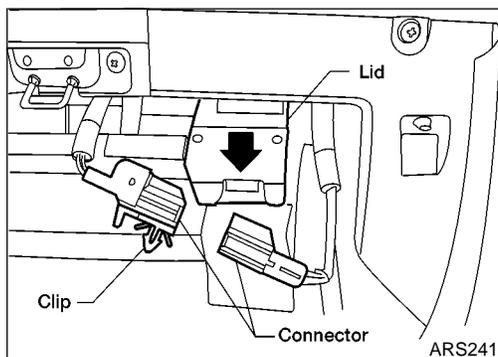
NERS0017



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 or two new special bolts using [TAMPER RESISTANT TORX (Size T50) if required].
 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.)

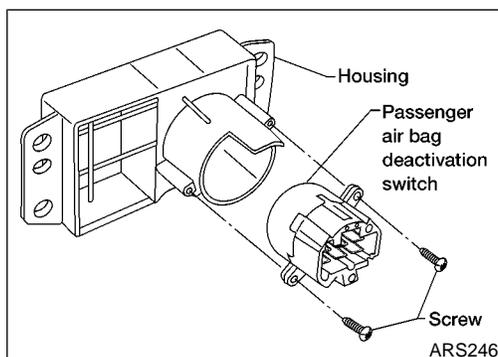
NOTE:

- After replacement, perform Self-diagnosis for SRS. Refer to “SRS Operation Check”, “TROUBLE DIAGNOSIS — Supplemental Restraint System (SRS)”, RS-47.

Passenger Air Bag Deactivation Switch REMOVAL

NERS0046

- Before servicing SRS, turn the ignition switch OFF, disconnect both battery cables and wait for at least 3 minutes.
1. Detach instrument stay cover lower center from instrument panel. Refer to “Removal and Installation”, “INSTRUMENT PANEL ASSEMBLY”, BT-21.
 2. Disconnect passenger air bag deactivation switch harness connector and cigarette lighter harness connector.
 3. Remove instrument stay cover lower center.



SUPPLEMENTAL RESTRAINT SYSTEM (SRS)

Passenger Air Bag Deactivation Switch (Cont'd)

4. Remove two screws and remove passenger air bag deactivation switch.

INSTALLATION

NERS0047

CAUTION:

Passenger air bag deactivation switch is keyed for proper installation. Improper positioning of the switch will result in damage to the switch.

NOTE:

- Be sure that the passenger air bag deactivation switch and lock cylinder are in the same position as during removal for proper engagement.
- To install, reverse removal procedure.
- After replacement, perform Self-diagnosis for SRS. Refer to "SRS Operation Check", RS-47.

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Passenger Air Bag Deactivation Switch Lock Cylinder

REMOVAL

NERS0048

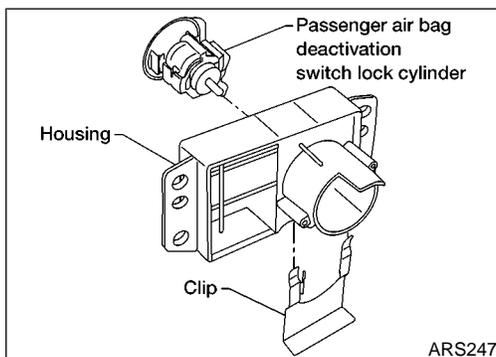
- Before servicing SRS, turn ignition switch OFF, disconnect both battery cables and wait for at least 3 minutes.

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1. Detach instrument stay cover lower center from instrument panel. Refer to "Removal and Installation", "INSTRUMENT PANEL ASSEMBLY", BT-21.
2. Disconnect passenger air bag deactivation switch harness connector and cigarette lighter harness connector.
3. Remove instrument stay cover lower center.
4. Remove four screws and housing from instrument stay cover lower center.
5. Remove clip from bottom of housing.
6. Remove passenger air bag deactivation switch lock cylinder from front of housing.

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INSTALLATION

NERS0049

NOTE:

- Be sure that the passenger air bag deactivation switch and lock cylinder are in the same position as during removal for proper engagement.
- To install, reverse removal procedure.
- After replacement, perform Self-diagnosis for SRS. Refer to "SRS Operation Check", RS-47.

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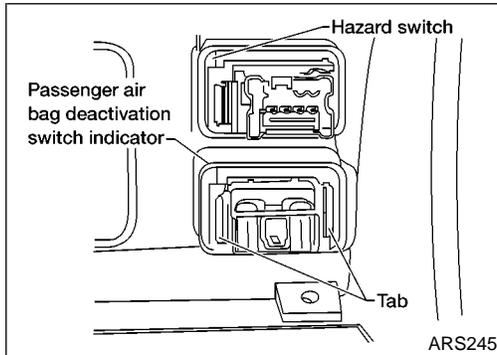
SUPPLEMENTAL RESTRAINT SYSTEM (SRS)

Passenger Air Bag Deactivation Switch Indicator

Passenger Air Bag Deactivation Switch Indicator

REMOVAL

- Before servicing SRS, turn ignition switch OFF, disconnect both battery cables and wait for at least 3 minutes. NERS0050



1. Remove meter cover. Refer to "Removal and Installation", "INSTRUMENT PANEL ASSEMBLY", BT-21.
2. Release passenger air bag deactivation switch indicator tabs from back side of meter cover.
3. Remove passenger air bag deactivation switch indicator from front side of meter cover.

INSTALLATION

NOTE:

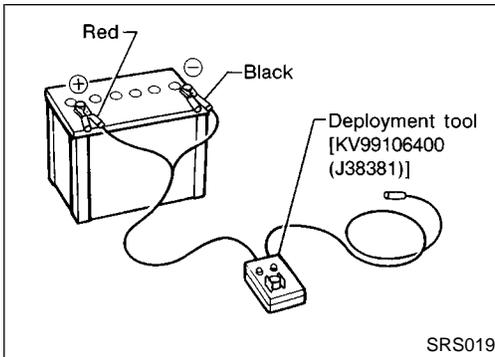
- To install, reverse removal procedure. NERS0051
- After replacement, perform Self-diagnosis for SRS. Refer to "SRS Operation Check", RS-47.

Disposal of Air Bag Module and Seat Belt Pre-tensioner

- 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-33. NERS0018
- 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, 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.

SUPPLEMENTAL RESTRAINT SYSTEM (SRS)

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



CHECKING DEPLOYMENT TOOL

NERS0018S01

Connecting to Battery

NERS0018S0101

CAUTION:

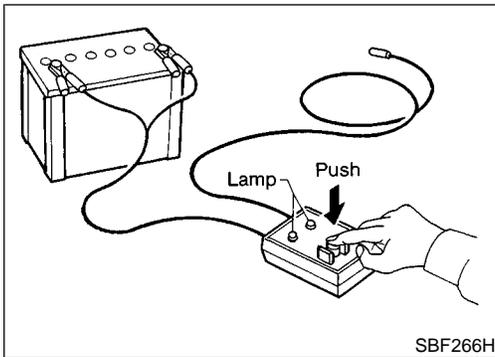
The battery must show voltage of 9.6V or more.

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.

NOTE:

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.



Deployment Tool Check

NERS0018S0102

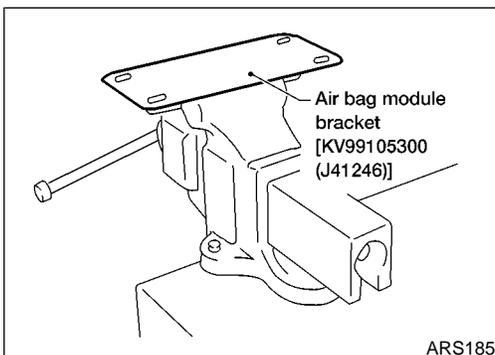
Press the deployment tool [SST: KV99106400 (J38381)] switch to the ON position. The left side lamp on the deployment tool [SST: KV99106400 (J38381)], marked "AIR BAG CONNECTOR VOLTAGE", should illuminate. If it does not illuminate, replace the tool.

Air Bag Deployment Tool Lamp Illumination Chart (Battery connected)

NERS0018S0103

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)

NERS0018S02

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.

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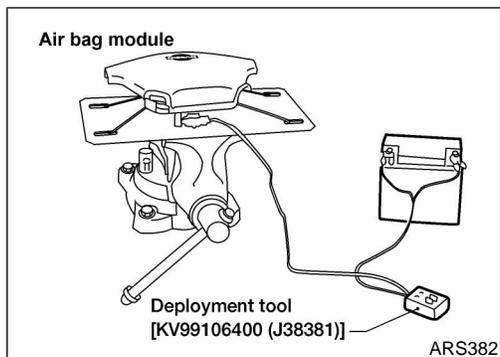
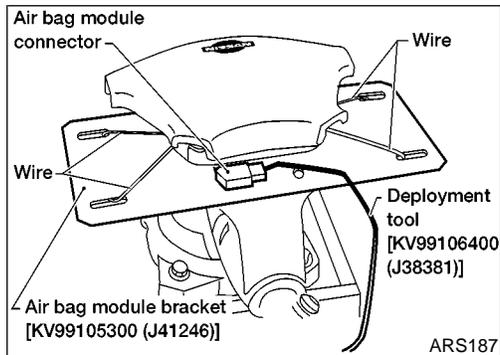
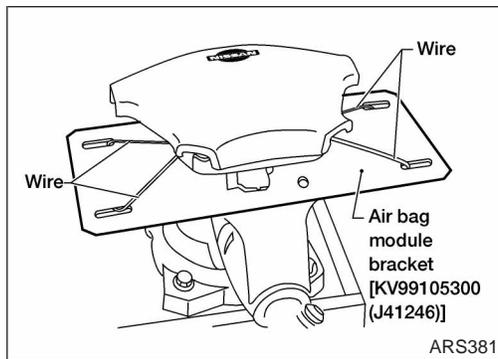
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SUPPLEMENTAL RESTRAINT SYSTEM (SRS)

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



Deployment of Driver Air Bag Module (Outside of vehicle)

NERS0018S0201

1. 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.

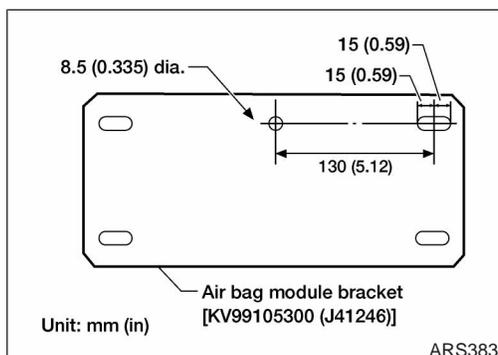
Use wire of at least 1 mm (0.04 in) diameter.

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

CAUTION:

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



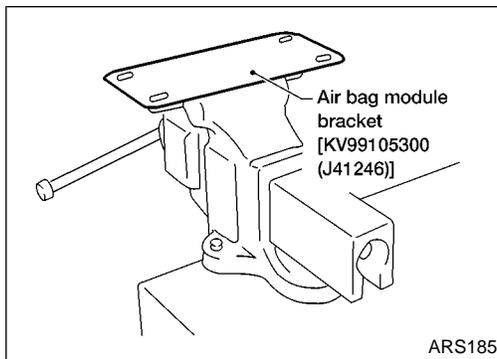
Deployment of Passenger Air Bag Module (Outside of vehicle)

NERS0018S0202

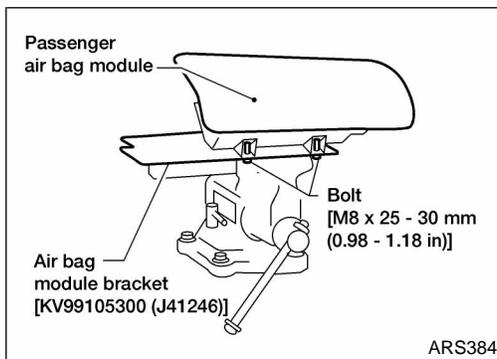
1. Make an 8.5 mm (0.335 in) diameter hole in air bag module bracket [SST: KV99105300 (J41246)] at the position shown in figure at left.

SUPPLEMENTAL RESTRAINT SYSTEM (SRS)

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

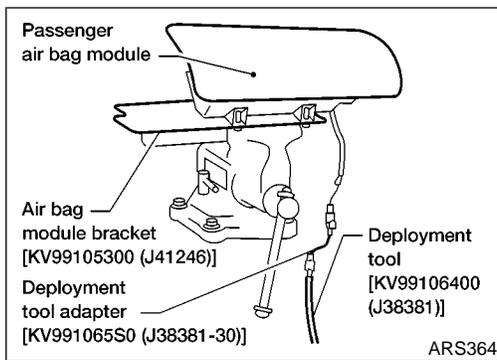


2. Firmly secure air bag module bracket [SST: KV99105300 (J41246)] in a vise.

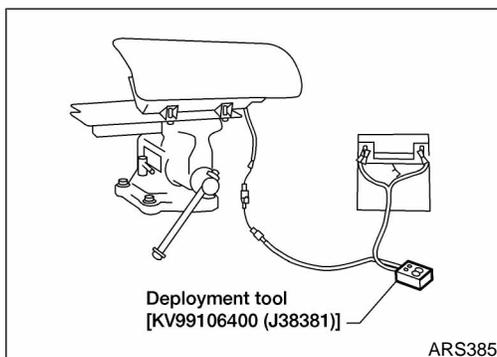


3. Match the two holes in air bag module bracket [SST: KV99105300 (J41246)] (held in vise) and passenger air bag module and fix them with two bolts [M8 x 25 - 30 mm (0.98 - 1.18 in)].

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 [SST: KV991065S0 (J38381-30)] to deployment tool [SST: KV99106400 (J38381)] connector and passenger air bag module connector.



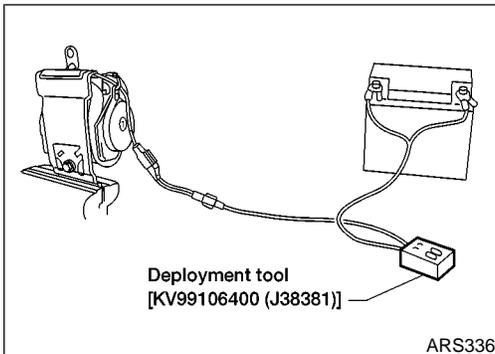
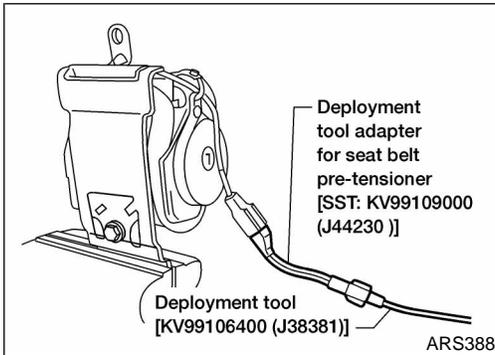
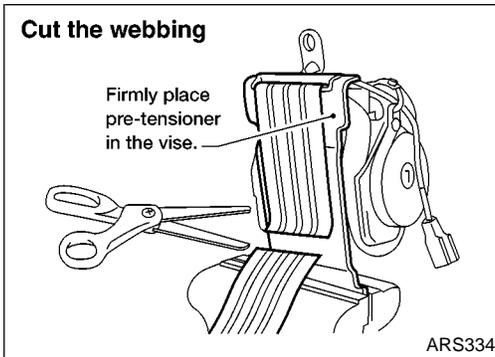
5. Connect red clip of deployment tool [SST: KV99106400 (J38381)] to battery positive terminal and black clip to negative terminal.
6. The right side lamp on the deployment tool [SST: KV99106400 (J38381)], marked "DEPLOYMENT TOOL POWER", should glow green, not red.
7. Press the button on the deployment 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)

NERS0018S0203

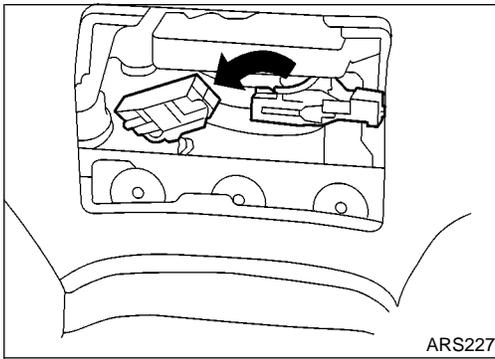
1. Firmly anchor seat belt pre-tensioner in a vise, then cut webbing off.
2. Connect deployment tool adapter [SST: KV99106400 (J38381-30)] to deployment tool [SST: KV99106400 (J38381)] connector and seat belt pre-tensioner [SST: KV99109000 (J44230)].
3. Connect red clip of deployment tool [SST: KV99106400 (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

=NERS0018S03

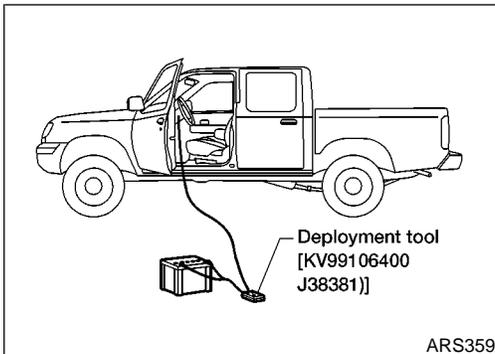
When disposing of a vehicle, deploy air bag modules and seat belt pre-tensioners while they are mounted in vehicle.

CAUTION:

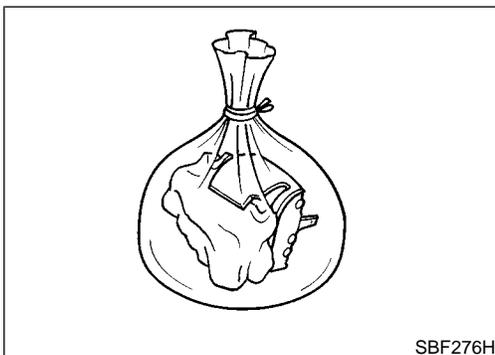
When deploying air bag module or seat belt pre-tensioner, ensure vehicle is empty.

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.

For passenger air bag module or seat belt pre-tensioner, use deployment tool adapter [SST: KV991065S0 (J38381-30)] to attach passenger air bag module or [SST: KV99109000 (J44230)] to attach seat belt pre-tensioner to 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

NERS0018S04

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. 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

Trouble Diagnoses Introduction

=NERS0030

CAUTION:

- Do not use electrical test equipment on any circuit related to the SRS unless instructed to in this Service Manual. SRS wiring harnesses are covered with yellow insulation either just before the harness connectors or on the complete harness, for easy identification.
- Do not attempt to repair, splice or modify the SRS wiring harness. If the harness is damaged, replace it with a new one.
- Keep ground portion clean.

DIAGNOSIS FUNCTION

NERS0030S01

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

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

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

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

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

SUPPLEMENTAL RESTRAINT SYSTEM (SRS)

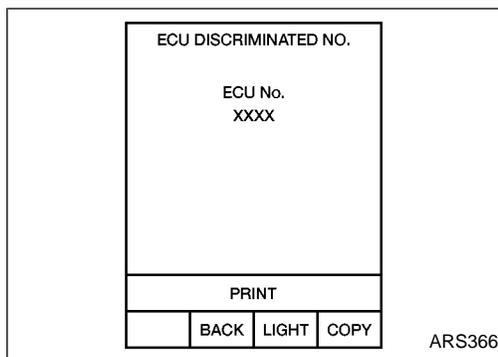
Trouble Diagnoses Introduction (Cont'd)

-NERS0030S02

DIAGNOSIS MODE FOR CONSULT-II

- "SELF-DIAG [CURRENT]"
A current Self-diagnosis result (also indicated by the number of warning lamp flashes in the Diagnosis mode) is displayed on the CONSULT-II screen in real time. This refers to a malfunctioning part requiring repairs.
- "SELF-DIAG [PAST]"
Diagnosis results previously stored in the memory are displayed on the CONSULT-II screen. The stored results are not cleared 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 air bag diagnosis sensor unit for each vehicle model is assigned with its own individual classification number. This number will be displayed on the CONSULT-II screen, as shown below. When replacing the air bag diagnosis sensor unit, refer to the part number for compatibility. After installation, replacement with a correct unit can be checked by confirming this classification number on the CONSULT-II screen.

For NISSAN MODEL D22, the air bag diagnosis sensor unit classification numbers assigned are as follows:



Model	ECU Discriminated No.
KA24DE Models Regular cab (2WD) King cab (2WD)	A6F7
VG33E Models Regular cab (2WD) King cab (2WD)	FD
Regular cab (4WD) King cab (4WD)	A6F8
Crew cab (2WD)	A6FE
Crew cab (4WD)	A6F6

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SUPPLEMENTAL RESTRAINT SYSTEM (SRS)

Trouble Diagnoses Introduction (Cont'd)

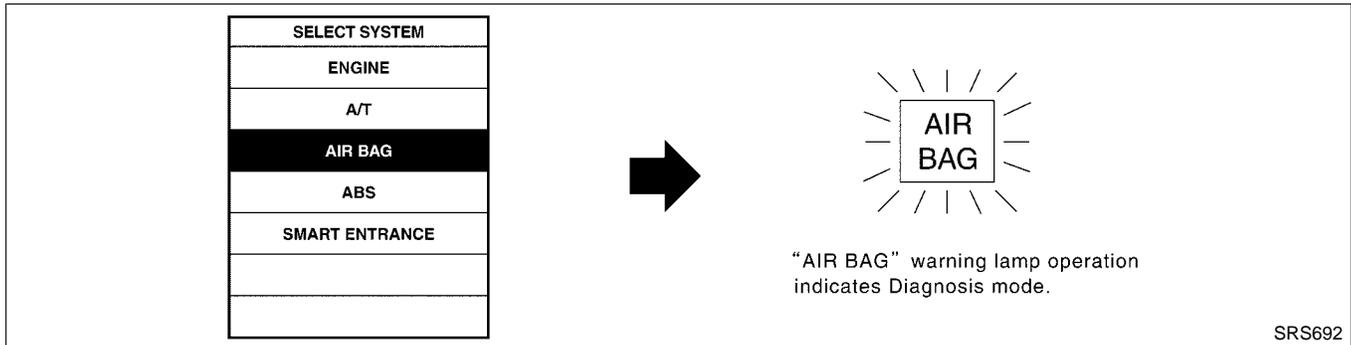
HOW TO CHANGE SELF-DIAGNOSIS MODE WITH CONSULT-II

=NERS0030S03

From User Mode to Diagnosis Mode

NERS0030S0301

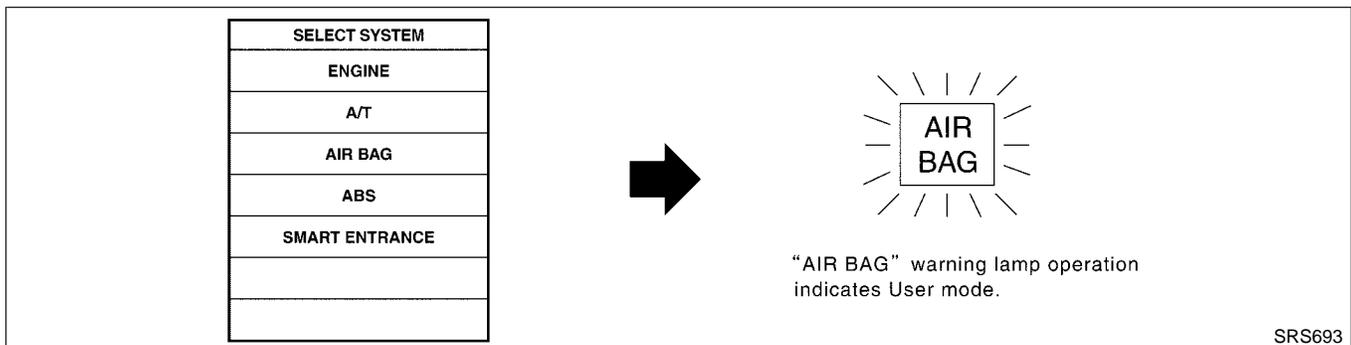
Touch "AIRBAG" on the "SELECT SYSTEM" screen. User mode automatically changes to Diagnosis mode.



From Diagnosis Mode to User Mode

NERS0030S0303

Touch "BACK" key of CONSULT-II until "SELECT SYSTEM" appears. Diagnosis mode automatically changes to User mode.



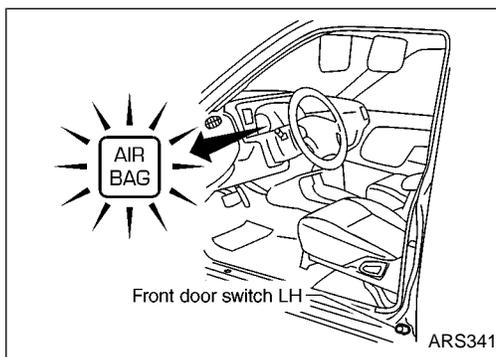
HOW TO CHANGE SELF-DIAGNOSIS MODE WITHOUT CONSULT-II

NERS0030S05

From User Mode to Diagnosis Mode

NERS0030S0501

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



From Diagnosis Mode to User Mode

NERS0030S0502

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

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

SUPPLEMENTAL RESTRAINT SYSTEM (SRS)

Trouble Diagnoses Introduction (Cont'd)

HOW TO ERASE SELF-DIAGNOSIS RESULTS

-NERS0030S04

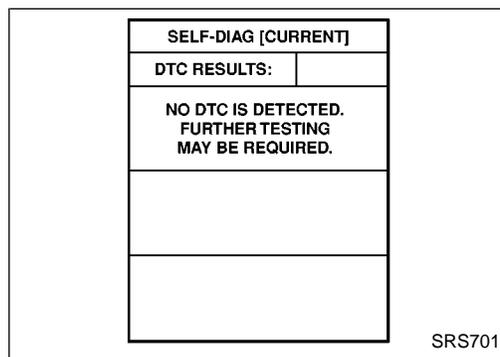
Ⓟ With CONSULT-II

NERS0030S0401

- "SELF-DIAG [CURRENT]"
A current Self-diagnosis result is displayed on the CONSULT-II screen in real time. After the malfunction is repaired completely, no malfunction is detected on "SELF-DIAG [CURRENT]".
- "SELF-DIAG [PAST]"
Return to the "SELF-DIAG [CURRENT]" CONSULT-II screen by pushing "BACK" key of CONSULT-II and select "SELF-DIAG [CURRENT]" in "SELECT DIAG MODE". Touch "ERASE" in "SELF-DIAG [CURRENT]" mode.

NOTE:

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



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

ⓧ Without CONSULT-II

NERS0030S0402

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

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SUPPLEMENTAL RESTRAINT SYSTEM (SRS)

How to Perform Trouble Diagnoses for Quick and Accurate Repair

How to Perform Trouble Diagnoses for Quick and Accurate Repair

=NERS0031

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

NERS0031S01

WHAT Vehicle model

WHEN Date, Frequencies

WHERE Road conditions

HOW Operating conditions, Symptoms

PRELIMINARY CHECK

NERS0031S02

Check that the following parts are in good order.

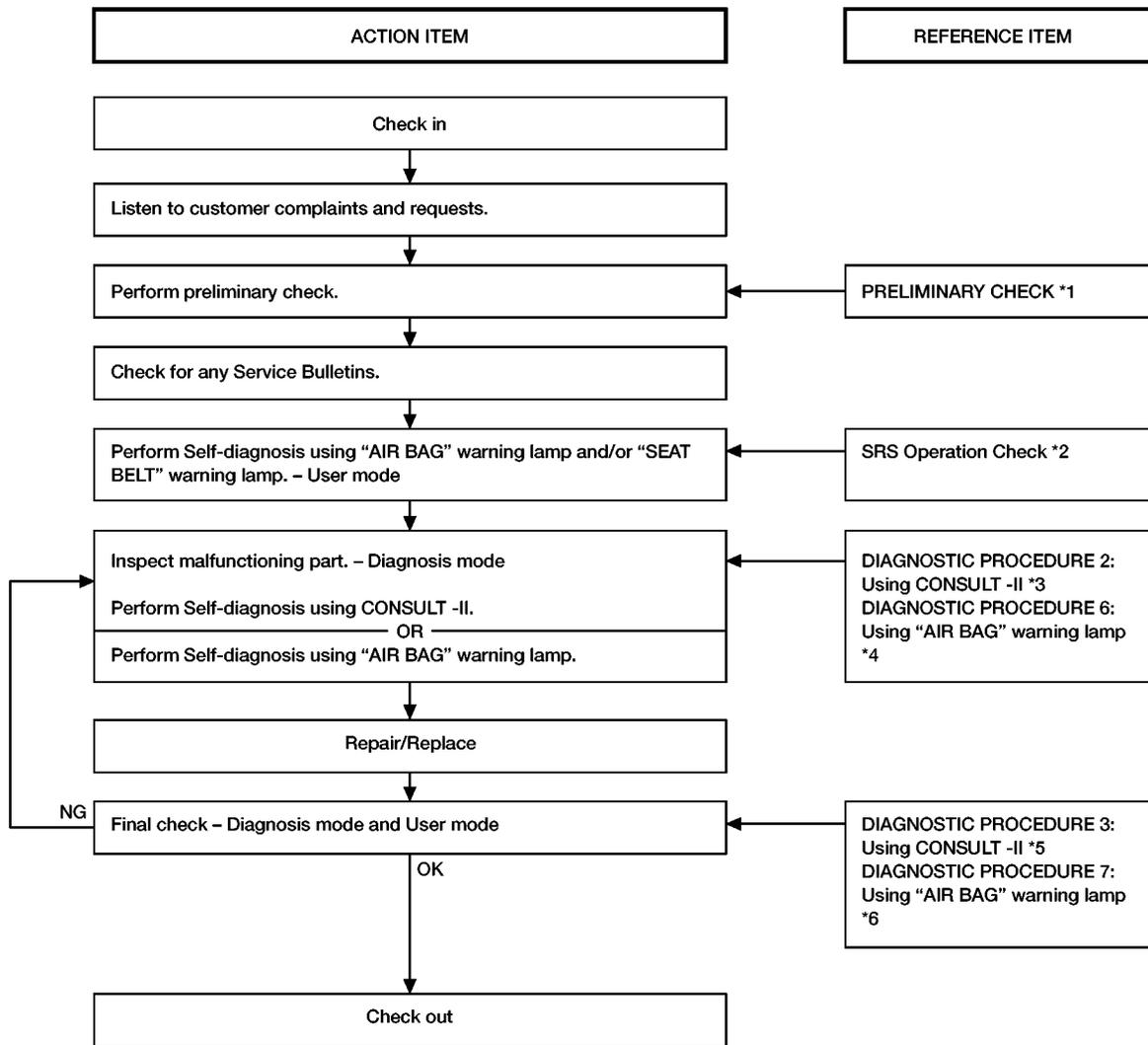
- Battery [Refer to "BATTERY", SC-3.]
- Fuse [Refer to "POWER SUPPLY ROUTING", EL-15.]
- System component-to-harness connections

SUPPLEMENTAL RESTRAINT SYSTEM (SRS)

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

WORK FLOW

NERS0031S03



*1: RS-38
*2: RS-47

*3: RS-50
*4: RS-60

*5: RS-54
*6: RS-63

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SUPPLEMENTAL RESTRAINT SYSTEM (SRS)

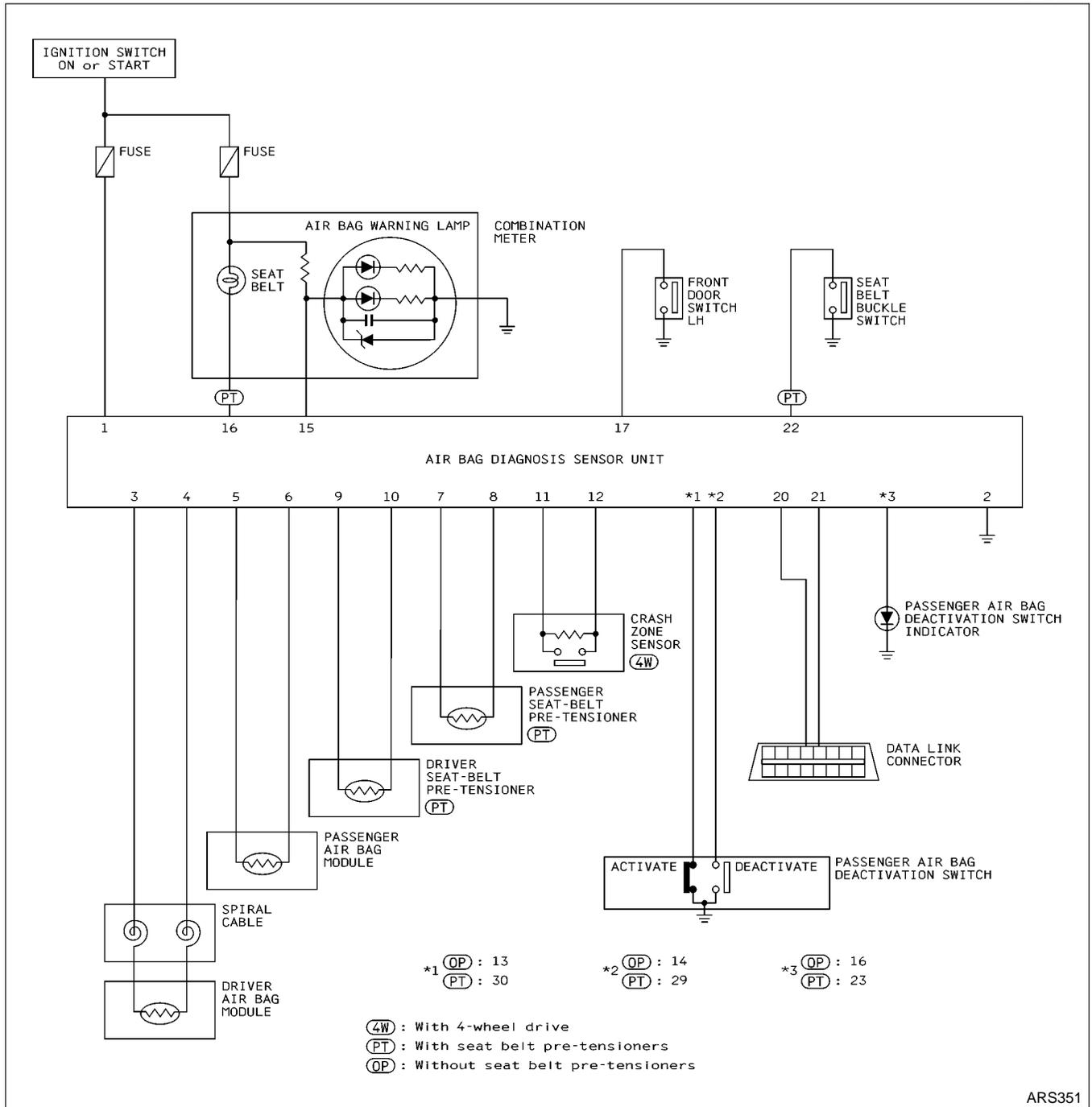
Circuit Diagram

Circuit Diagram

NERS0020

REGULAR AND KING CAB MODELS

NERS0020S01



SUPPLEMENTAL RESTRAINT SYSTEM (SRS)

Wiring Diagram — SRS —

Wiring Diagram — SRS —

REGULAR AND KING CAB MODELS

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NER50021S01

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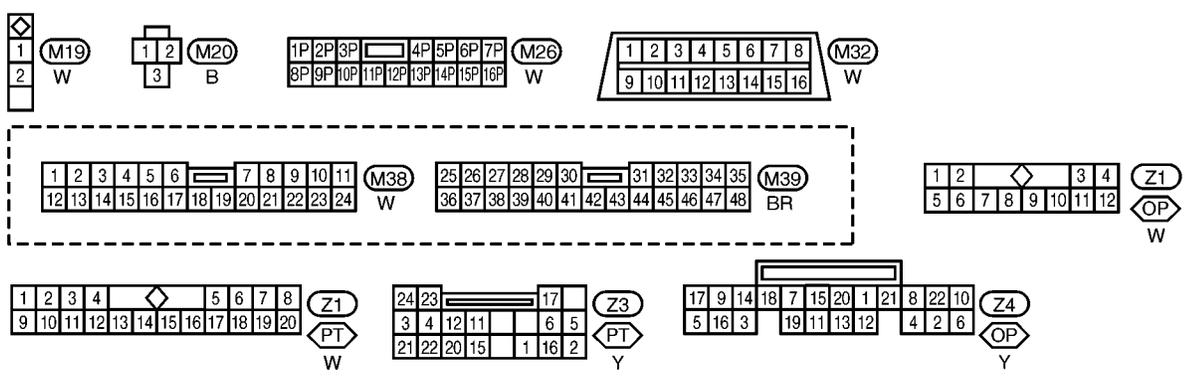
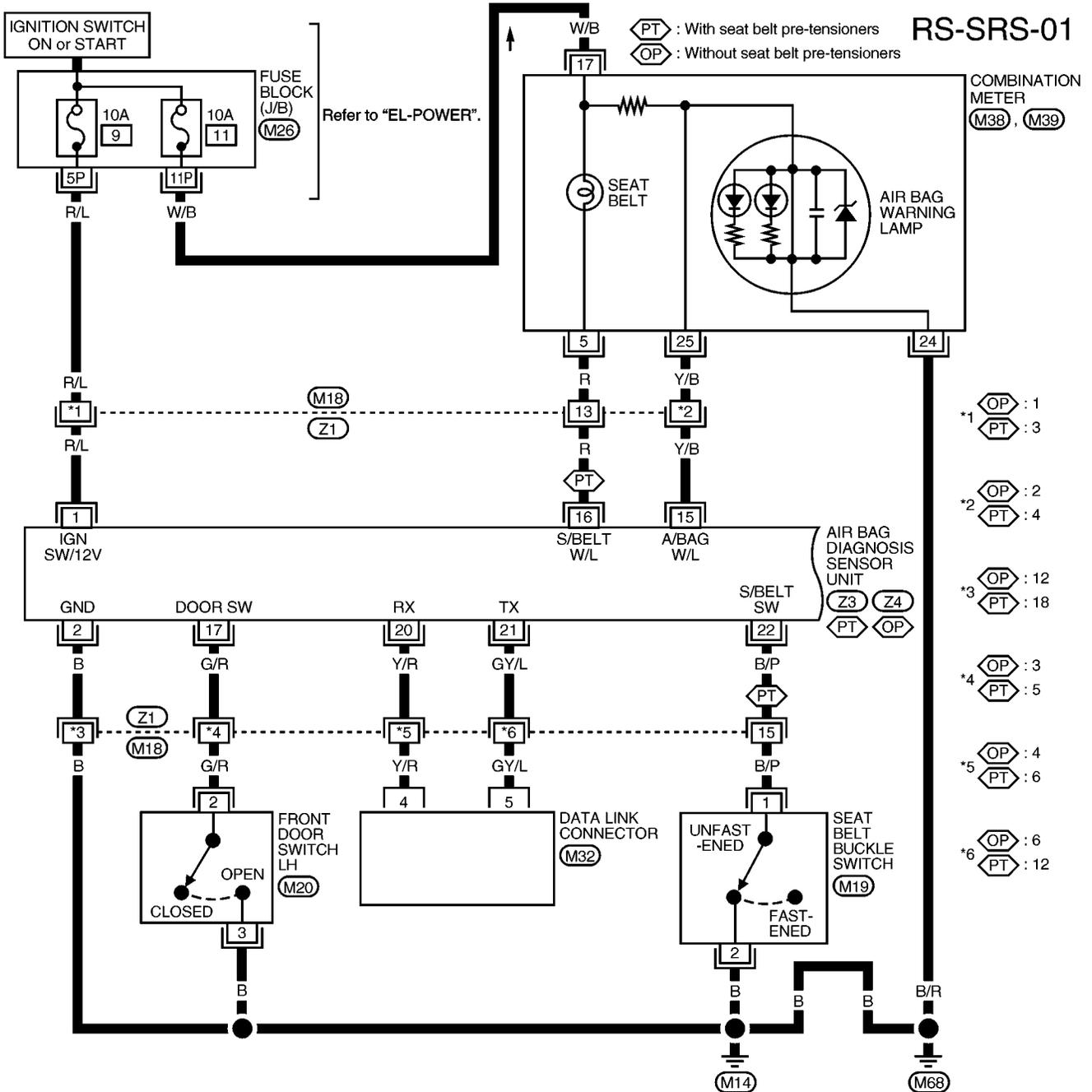
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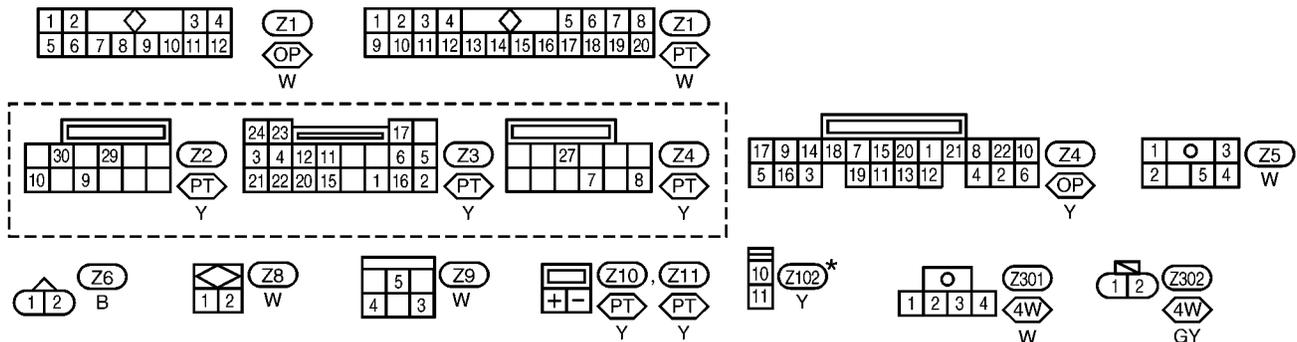
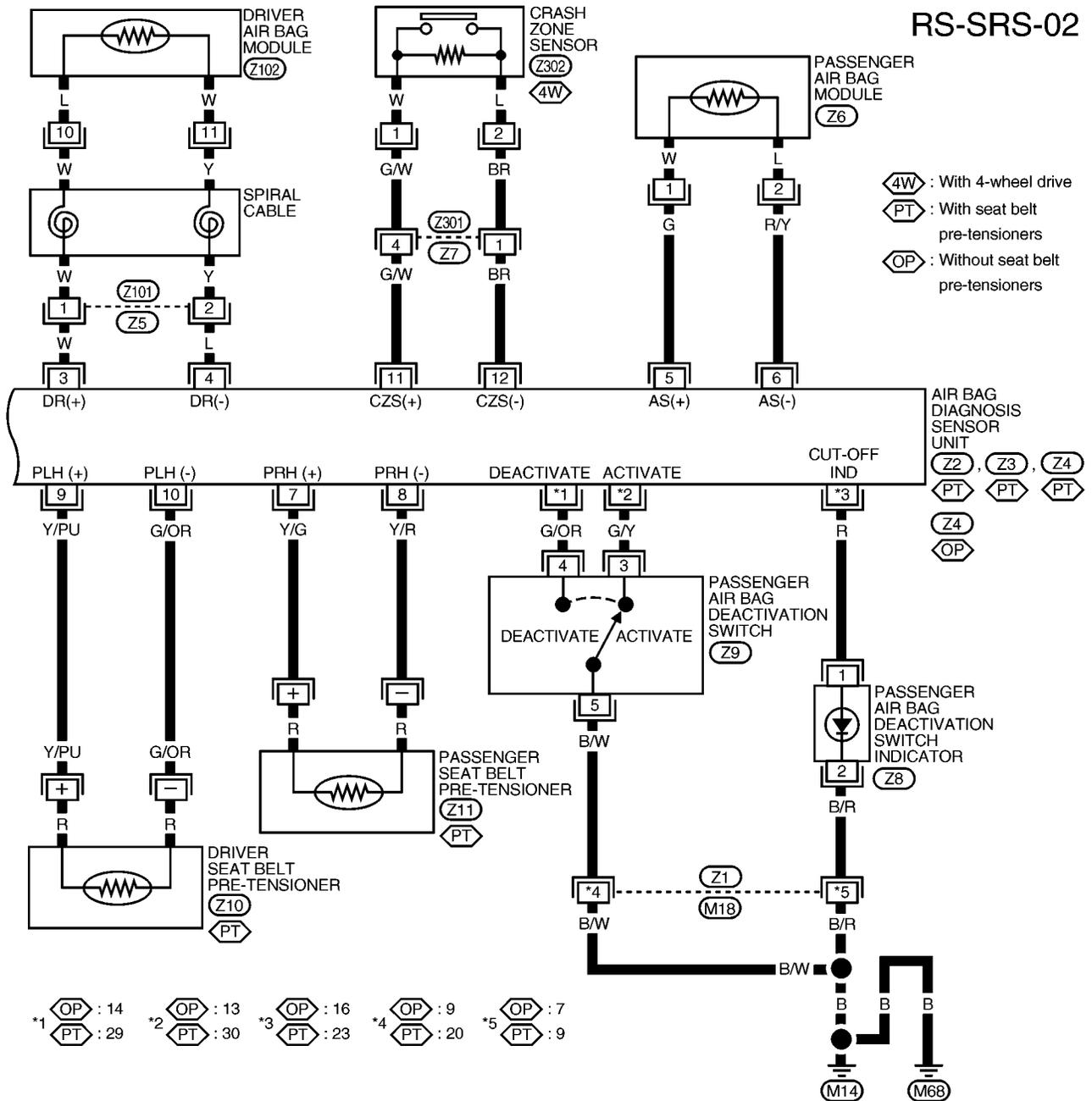
RS-SRS-01



SUPPLEMENTAL RESTRAINT SYSTEM (SRS)

Wiring Diagram — SRS — (Cont'd)

RS-SRS-02



ARS353

SUPPLEMENTAL RESTRAINT SYSTEM (SRS)

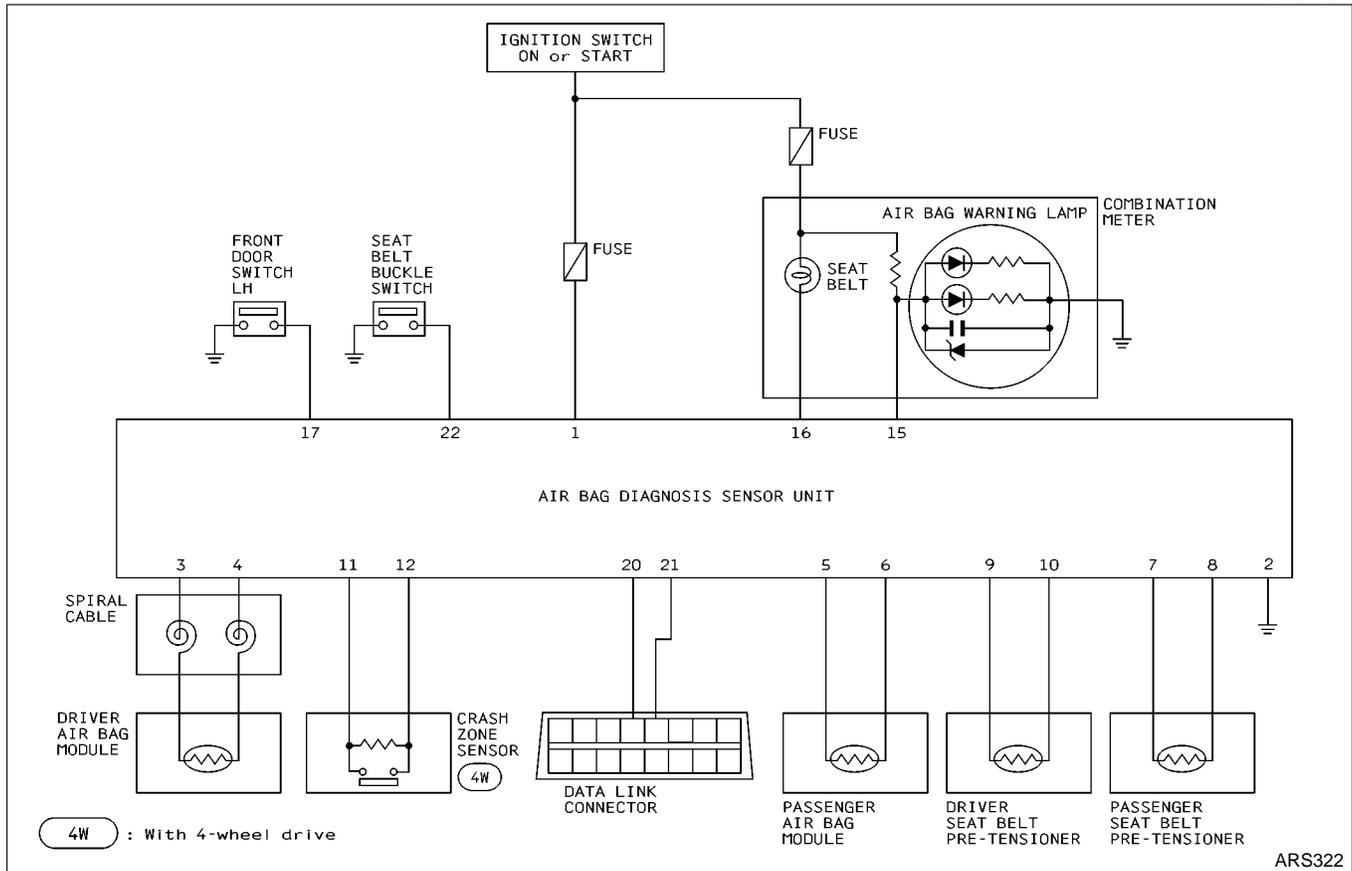
Circuit Diagram

Circuit Diagram

CREW CAB MODELS

NERS0042

NERS0042S01



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SUPPLEMENTAL RESTRAINT SYSTEM (SRS)

Wiring Diagram —SRS—

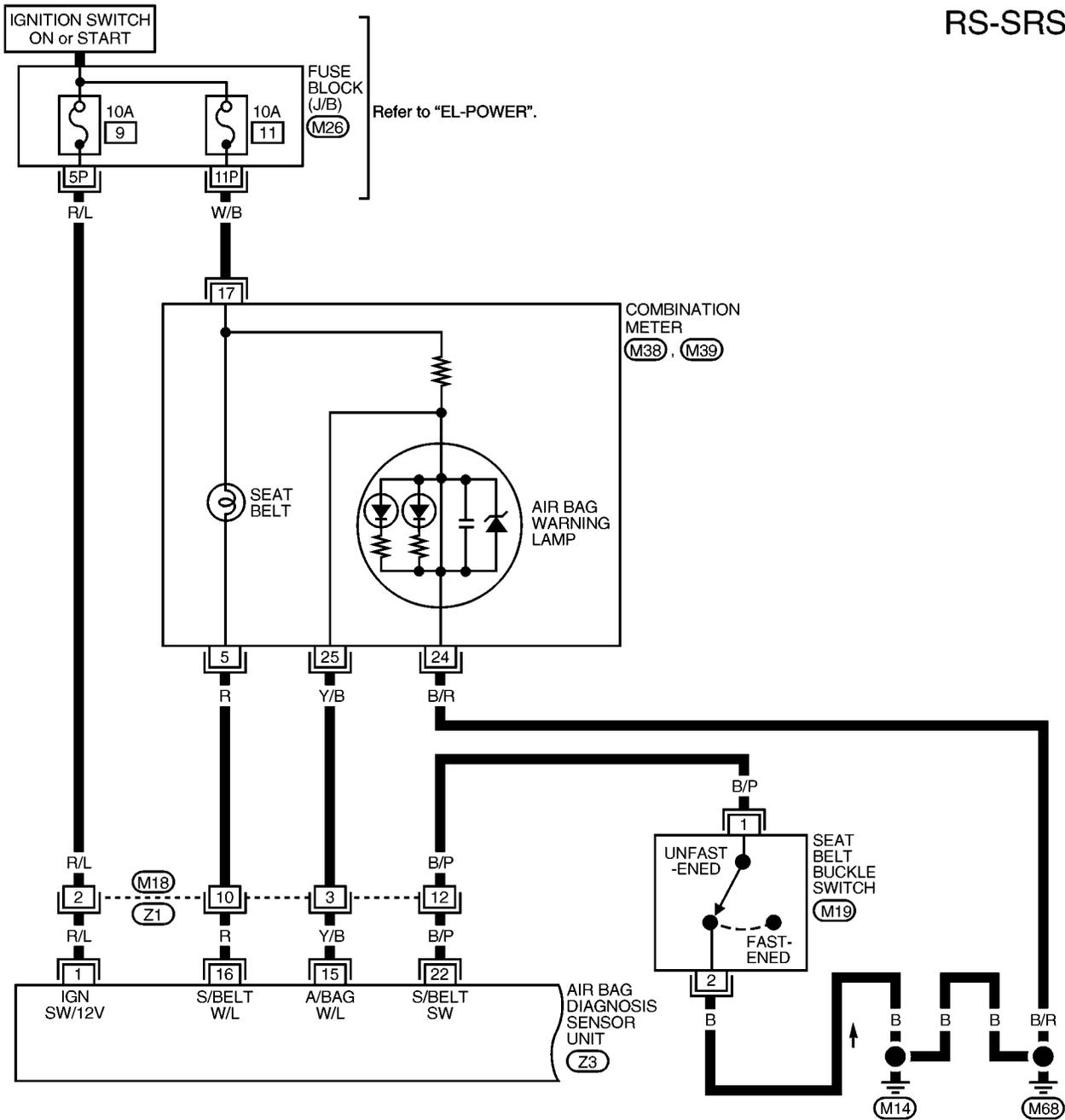
Wiring Diagram —SRS—

NERS0043

NERS0043S01

RS-SRS-03

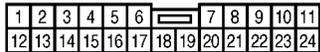
CREW CAB MODELS



(M19)
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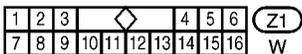
(M26)
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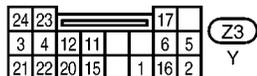
(M38)
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(M39)
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(Z1)
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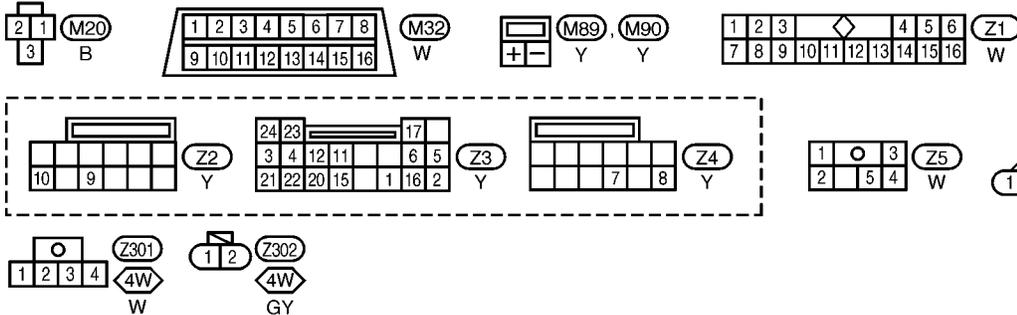
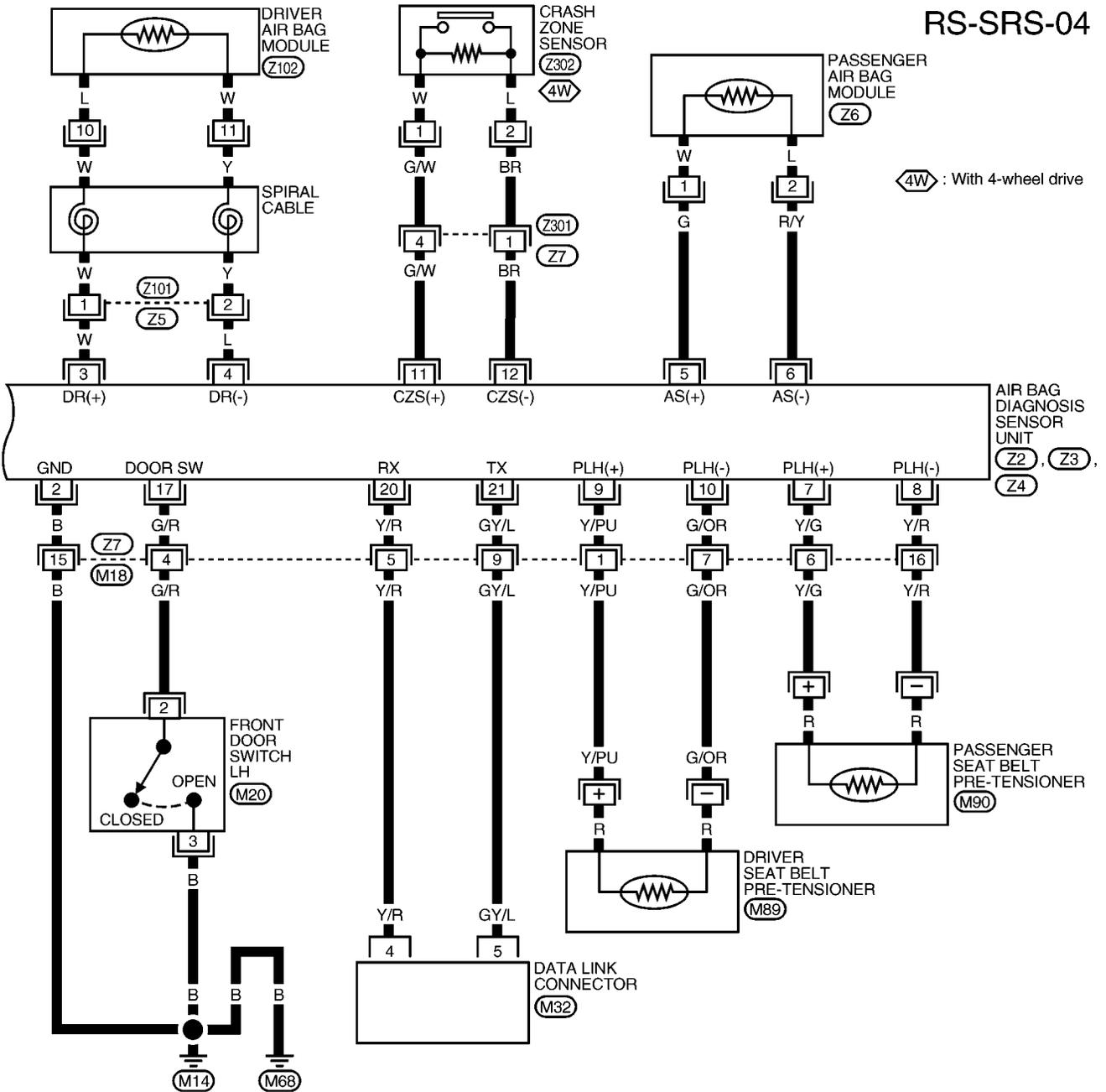
(Z3)
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ARS355

SUPPLEMENTAL RESTRAINT SYSTEM (SRS)

Wiring Diagram —SRS— (Cont'd)

RS-SRS-04



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

ARS354

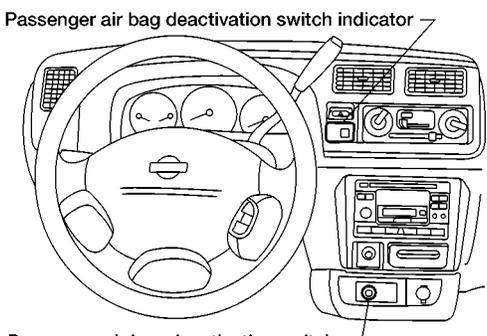
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SUPPLEMENTAL RESTRAINT SYSTEM (SRS)

Passenger Air Bag Deactivation Switch Indicator Operation Check

Passenger Air Bag Deactivation Switch Indicator Operation Check

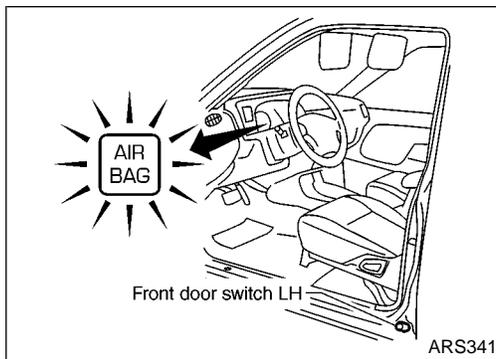
NERS0052

1	INDICATOR OPERATION CHECK							
<p>Check passenger air bag deactivation switch indicator operation when turning ignition switch ON with passenger air bag deactivation switch in ON and OFF positions.</p> <div style="text-align: center;">  </div> <p style="text-align: right;">ARS240</p>								
<table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="text-align: center;">Passenger air bag deactivation switch position</th> <th style="text-align: center;">Passenger air bag deactivation switch indicator</th> </tr> </thead> <tbody> <tr> <td style="text-align: center;">ON</td> <td style="text-align: center;">Turns off within 7 seconds</td> </tr> <tr> <td style="text-align: center;">OFF</td> <td style="text-align: center;">Remains illuminated</td> </tr> </tbody> </table>			Passenger air bag deactivation switch position	Passenger air bag deactivation switch indicator	ON	Turns off within 7 seconds	OFF	Remains illuminated
Passenger air bag deactivation switch position	Passenger air bag deactivation switch indicator							
ON	Turns off within 7 seconds							
OFF	Remains illuminated							
ARS365								
OK or NG								
OK	▶	Passenger air bag deactivation switch indicator operation is OK. Conduct "SRS Operation Check". Refer to RS-47.						
NG	▶	GO TO 2.						

2	PERFORM SELF-DIAGNOSIS	
<p>Perform self-diagnosis using "AIR BAG" warning lamp in User mode. Refer to "SRS Operation Check", RS-47.</p> <p>NOTE: The passenger air bag deactivation switch indicator can only be self-diagnosed when a malfunction occurs and indicator illumination does not correspond to switch position.</p>		
OK or NG		
OK	▶	Replace passenger air bag deactivation including the key cylinder. Conduct "Passenger Air Bag Deactivation Switch Indicator Operation Check" as a final check.
NG	▶	Perform self-diagnosis using CONSULT-II or "AIR BAG" warning lamp in Diagnosis mode. Refer to RS-50 or RS-60 respectively. If the passenger air bag deactivation switch indicator remains illuminated with the passenger air bag deactivation switch ON, leave passenger air bag deactivation switch in ON position during diagnosis. If the passenger air bag deactivation switch indicator does not illuminate with the passenger air bag deactivation switch OFF, leave the passenger air bag deactivation switch in the OFF position during diagnosis.

SUPPLEMENTAL RESTRAINT SYSTEM (SRS)

SRS Operation Check



SRS Operation Check DIAGNOSTIC PROCEDURE 1 Checking SRS operation by using "AIR BAG" warning lamp — User mode

NERS0022

NERS0022S01

NERS0022S0101

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

"AIR BAG" warning lamp operation — User mode —	SRS condition	Reference item
<p>MRS095A</p>	No malfunction is detected. No further action is necessary.	—
<p>MRS096A</p>	The system is malfunctioning and needs to be repaired as indicated.	Go to DIAGNOSTIC PROCEDURE 2 or 6, RS-50 or RS-60.
<p>MRS097A</p>	Air bag is deployed.	Go to COLLISION DIAGNOSIS, RS-71.
<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-65.
<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-67.

NOTE:

If "AIR BAG" warning lamp operates differently from the operations shown above, refer to "AIR BAG" warning lamp operation — Diagnosis mode —, DIAGNOSTIC PROCEDURE 6 (step 4), RS-60. Then repair as necessary.

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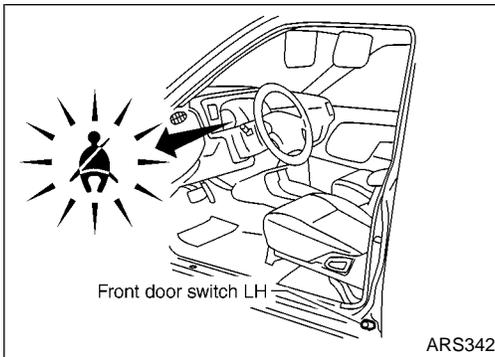
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SUPPLEMENTAL RESTRAINT SYSTEM (SRS)

SRS Operation Check (Cont'd)



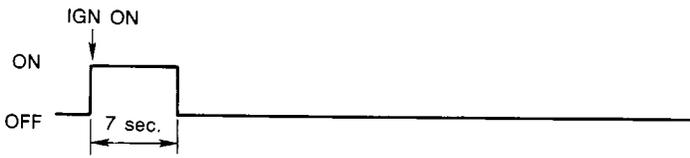
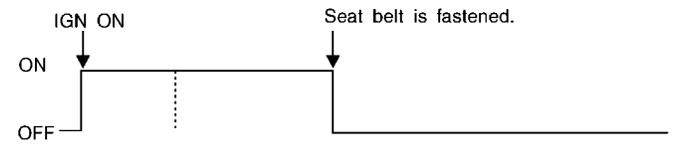
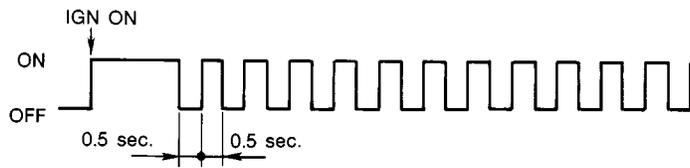
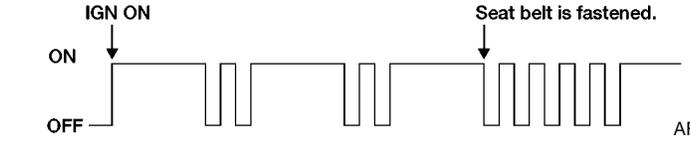
Checking seat belt pre-tensioner operation by using “SEAT BELT” warning lamp — User mode

=NERS0022S0102

1. After turning ignition switch from OFF to ON, “SEAT BELT” warning lamp operates.
2. Compare “SEAT BELT” warning lamp operation to the following chart.

SUPPLEMENTAL RESTRAINT SYSTEM (SRS)

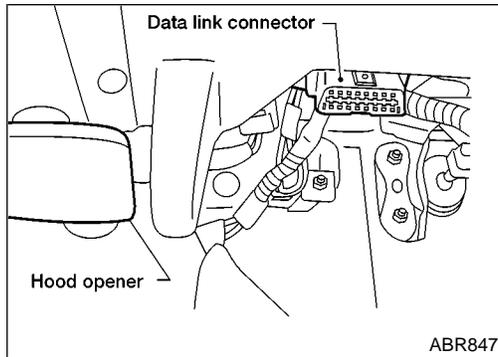
SRS Operation Check (Cont'd)

"SEAT BELT" warning lamp operation	SRS condition	Reference item	
<ul style="list-style-type: none"> After driver's seat belt has been fastened  <p>MRS095A</p>	No malfunction is detected. No further action is necessary.	—	GI MA EM
<ul style="list-style-type: none"> When driver's seat belt has not been fastened.  <p>SRS086</p>			LC EC FE
<ul style="list-style-type: none"> After driver's seat belt has been fastened  <p>MRS096A</p>	<ul style="list-style-type: none"> Seat belt pre-tensioner circuit is opened, or Seat belt pre-tensioner power supply or ground circuit is shorted 	<ul style="list-style-type: none"> If CONSULT-II is available, go to DIAGNOSTIC PROCEDURE 2, RS-50. If CONSULT-II is not available, repair the system as follows.* <ol style="list-style-type: none"> 1. Visually check the wiring harness connections. 2. Replace driver's and front passenger's seat belt assemblies. (Before disposing of them, they must be deployed.) 3. Replace air bag diagnosis sensor unit. 4. Replace air bag harness. 	CL MT AT TF PD AX
<ul style="list-style-type: none"> When driver's seat belt has not been fastened.  <p>ARS331</p>			
<ul style="list-style-type: none"> When driver's seat belt is fastened.  <p>MRS097A</p>	Seat belt pre-tensioners (and air bags) are deployed. Seat belt buckle switch, harness, combination meter assembly or air bag diagnosis sensor unit is malfunctioning and needs to be repaired.	Go to COLLISION DIAGNOSIS, RS-71. Go to DIAGNOSTIC PROCEDURE 12, RS-69	SU BR ST
<ul style="list-style-type: none"> When driver's seat belt is fastened.  <p>MRS098A</p>	Meter fuse, air bag diagnosis sensor unit, or "SEAT BELT" warning lamp circuit is shorted or open and needs to be repaired.	Go to DIAGNOSTIC PROCEDURE 13, RS-70	RS BT HA

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

SUPPLEMENTAL RESTRAINT SYSTEM (SRS)

Trouble Diagnoses with CONSULT-II

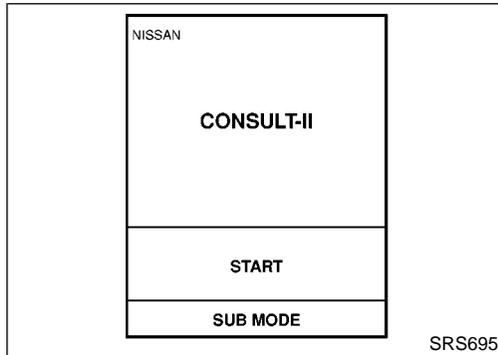


Trouble Diagnoses with CONSULT-II DIAGNOSTIC PROCEDURE 2 Inspecting SRS malfunctioning parts by using CONSULT-II — Diagnosis mode

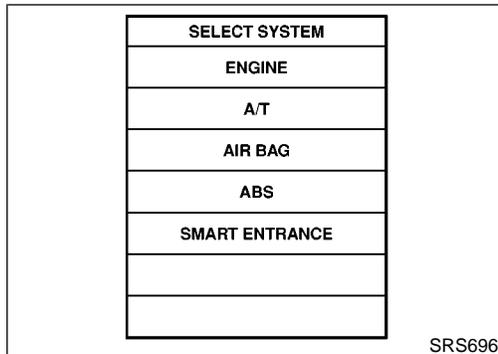
NERS0023

NERS0023S01

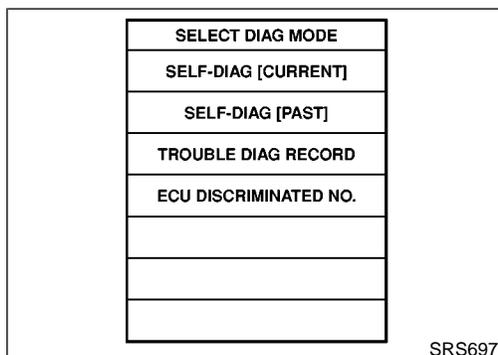
1. Turn ignition switch OFF.
2. Connect CONSULT-II to data link connector.
3. Turn ignition switch ON.



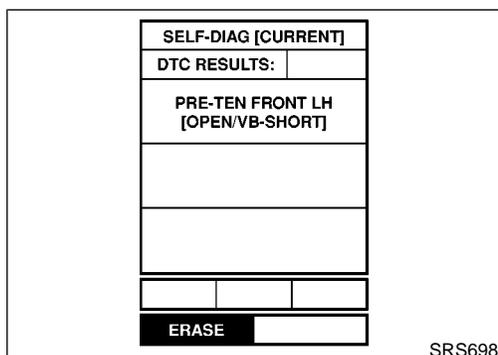
4. Touch "START".



5. Touch "AIRBAG".



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



7. Self-diagnosis result is displayed on "SELF-DIAG [CURRENT]".

SUPPLEMENTAL RESTRAINT SYSTEM (SRS)

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

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

SRS701

- If no malfunction is detected on “SELF-DIAG [CURRENT]” but malfunction is indicated by the “AIR BAG” warning lamp in User mode, go to DIAGNOSTIC PROCEDURE 4, RS-55 for diagnosing the following cases:
- Self-diagnosis result (previously stored in the memory) might not have been erased after repair.
- The SRS system is malfunctioning intermittently.

8. Touch “PRINT”.
9. Compare diagnostic codes to “CONSULT-II Diagnostic Code Chart”, RS-52.
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 both battery cables.
12. Repair the system as outlined by the repair order in “CONSULT-II Diagnostic Code Chart” that corresponds to the self-diagnosis result. For replacement procedure of component parts, refer to RS-18.
13. After repairing the system, go to DIAGNOSTIC PROCEDURE 3, RS-54 for final checking.

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SUPPLEMENTAL RESTRAINT SYSTEM (SRS)

Trouble Diagnoses with CONSULT-II (Cont'd)

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

=NERS0023S0101

Self-diagnosis result	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"> Self-diagnosis result “ SELF-DIAG [PAST]” (previously stored in the memory) might not have been erased after repair. Intermittent malfunction has been detected in the past. 	<ul style="list-style-type: none"> Go to DIAGNOSTIC PROCEDURE 4, RS-55.
	<ul style="list-style-type: none"> No malfunction is detected. 	<ul style="list-style-type: none"> Go to DIAGNOSTIC PROCEDURE 3, RS-54.
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 wiring harness connections. Replace harness if it has visible damage. Replace spiral cable. Replace driver air bag module. (Before disposing of it, it must be deployed.) Replace air bag diagnosis sensor unit. Replace the related harness.
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). 	
AIRBAG MODULE [GND-SHORT]	<ul style="list-style-type: none"> Driver air bag module circuit is shorted to ground (including the spiral cable). 	
AIRBAG MODULE [SHORT]	<ul style="list-style-type: none"> Driver air bag module circuits are shorted to each other. 	
ASSIST A/B MODULE [OPEN]	<ul style="list-style-type: none"> Passenger air bag module circuit is open. 	
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 wiring harness connections. Replace harness if it has visible damage. Replace passenger air bag module. (Before disposing of it, it must be deployed.) Replace air bag diagnosis sensor unit. Replace the related harness.
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. 	
CRASH ZONE SEN-CTR [OPEN/UPR-VB-SHORT] (4WD models)	<ul style="list-style-type: none"> Crash zone sensor circuit is open, or Crash zone sensor circuit is shorted to some power supply circuit. 	<ol style="list-style-type: none"> Visually check wiring harness connections. Replace harness if it has visible damage. Replace crash zone sensor. Replace air bag diagnosis sensor unit. Replace air bag harness for crash zone sensor. Replace the related harness.
CRASH ZONE SEN-CTR [SHORT/UPR-GND-SHORT] (4WD models)	<ul style="list-style-type: none"> Both crash zone sensor circuits are shorted, or Crash zone sensor circuit is shorted to ground. 	
PRE-TEN FRONT LH [OPEN/VB-SHORT]	<ul style="list-style-type: none"> The circuit for the driver seat belt pre-tensioner is open or shorted to some power supply circuit. 	<ol style="list-style-type: none"> Visually check wiring harness connections. Replace harness if it has visible damage. Replace the driver’s seat belt. (Before disposing of it, it must be deployed.) Replace air bag diagnosis sensor unit. Replace the related harness.
PRE-TEN FRONT LH [GND-SHORT]	<ul style="list-style-type: none"> The circuit for the driver seat belt pre-tensioner is shorted to ground. 	

SUPPLEMENTAL RESTRAINT SYSTEM (SRS)

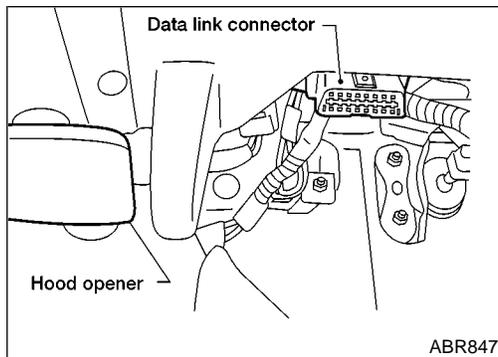
 Trouble Diagnoses with CONSULT-II (Cont'd)

Self-diagnosis result	Explanation	Repair order **“Recheck SRS at each replacement.”	
PRE-TEN FRONT RH [OPEN/VB-SHORT]	<ul style="list-style-type: none"> The circuit for the passenger seat belt pre-tensioner is open or shorted to some power supply circuit. 	<ol style="list-style-type: none"> Visually check wiring harness connections. Replace harness if it has visible damage. Replace the front passenger's seat belt. (Before disposing of it, it must be deployed.) Replace air bag diagnosis sensor unit. Replace the related harness. 	GI MA EM
PRE-TEN FRONT RH [GND-SHORT]	<ul style="list-style-type: none"> The circuit for the passenger seat belt pre-tensioner is shorted to ground. 	<ol style="list-style-type: none"> Go to DIAGNOSTIC PROCEDURE 3, RS-54 after charging battery. 	LC EC
CONTROL UNIT	<ul style="list-style-type: none"> Low battery voltage (Less than 9V). 	<ol style="list-style-type: none"> Visually check wiring harness connections. Replace harness if it has visible damage. Replace air bag diagnosis sensor unit. Replace the related harness. 	FE CL
	<ul style="list-style-type: none"> Air bag diagnosis sensor unit is malfunctioning. 	<ol style="list-style-type: none"> Go to DIAGNOSTIC PROCEDURE 3, RS-54 after charging battery. 	MT
Code B4 or PASS A/B DEACT SW	<ul style="list-style-type: none"> Activate terminal is open. 	<ol style="list-style-type: none"> Visually check wiring harness connections. Replace harness if it has visible damage. Replace passenger air bag deactivation switch. (The key cylinder of passenger air bag deactivation switch does not have to be replaced.) Replace air bag diagnosis sensor unit. Replace the related harness. 	AT TF
	<ul style="list-style-type: none"> Activate terminal is shorted to ground. 		PD
	<ul style="list-style-type: none"> Deactivate terminal is open. 		AX
	<ul style="list-style-type: none"> Deactivate terminal is shorted to ground. 		SU BR
Code B5 or PASS A/B DEACT SW INDICATOR	<ul style="list-style-type: none"> Passenger air bag deactivation switch indicator circuit is open. 	<ol style="list-style-type: none"> Visually check wiring harness connections. Replace harness if it has visible damage. Replace passenger air bag deactivation switch indicator. Replace air bag diagnosis sensor unit. Replace the related harness. 	ST
	<ul style="list-style-type: none"> Passenger air bag deactivation switch indicator circuit is shorted to some power supply circuit. 		RS
	<ul style="list-style-type: none"> Passenger air bag deactivation switch indicator circuit is shorted to ground. 		BT
INDEFINITE FAILURES [AIR BAGS]	<ul style="list-style-type: none"> Passenger air bag deactivation switch status is not identified. 	<ol style="list-style-type: none"> Visually check wiring harness connections. Replace harness if it has visible damage. Replace passenger air bag deactivation switch. Replace air bag diagnosis sensor unit. Replace the related harness. 	HA SC EL IDX

*: Follow the procedures in numerical order when repairing malfunctioning parts. Confirm whether malfunction is eliminated using the “AIR BAG” or “SEAT BELT” warning lamp (in User mode) 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.

SUPPLEMENTAL RESTRAINT SYSTEM (SRS)

Trouble Diagnoses with CONSULT-II (Cont'd)

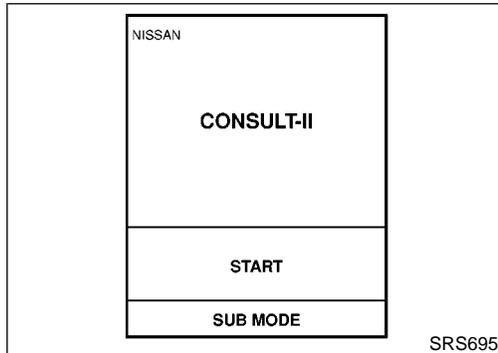


DIAGNOSTIC PROCEDURE 3

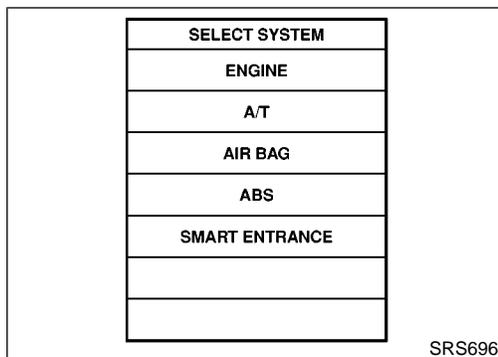
=NERS0023S02

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

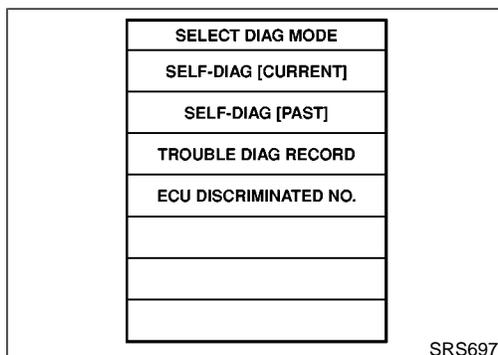
1. After repairing SRS, connect both battery cables.
2. Connect CONSULT-II to data link connector.
3. Turn ignition switch ON.



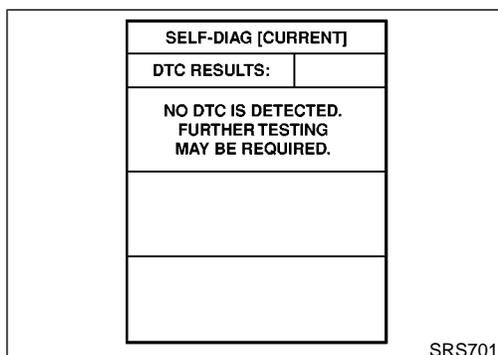
4. Touch "START".



5. Touch "AIRBAG".



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



7. If no malfunction is detected on "SELF-DIAG [CURRENT]", repair of SRS is completed. Go to step 8. (If the malfunction was only in seat belt pre-tensioner system, go to step 11.) If any malfunction was detected on "SELF-DIAG [CURRENT]", the malfunctioning part is not repaired completely or another malfunctioning part is detected. Go to DIAGNOSTIC PROCEDURE 2, RS-50 and repair malfunctioning part completely.

SUPPLEMENTAL RESTRAINT SYSTEM (SRS)

Trouble Diagnoses with CONSULT-II (Cont'd)

SELF-DIAG [CURRENT]	
DTC RESULTS:	
PRE-TEN FRONT LH [OPEN/VB-SHORT]	
ERASE	

SRS698

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 "AIR BAG" 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 DIAG MODE" 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]".

NOTE:

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

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

12. Turn ignition switch OFF, then turn off and disconnect CONSULT-II.

13. Go to "SRS Operation Check", RS-47 to check SRS operation by using "AIR BAG" and "SEAT BELT" warning lamps with User mode.

DIAGNOSTIC PROCEDURE 4 (CONTINUED FROM DIAGNOSTIC PROCEDURE 2)

INFORMATION NERS0023S03

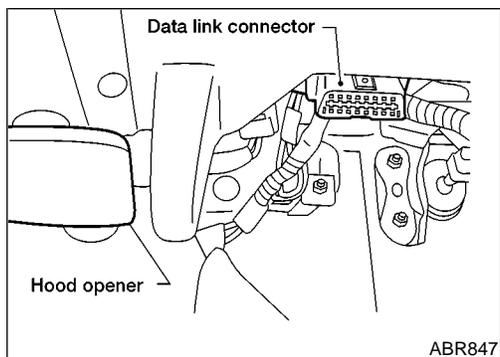
Inspecting SRS malfunction record

1	CHECK FOR PROBLEM CODE THAT MIGHT NOT HAVE BEEN ERASED AFTER PREVIOUS REPAIR	
Is it the first time for maintenance of SRS?		
Yes or No		
Yes	▶	Go to DIAGNOSTIC PROCEDURE 5, RS-56.
No	▶	Self-diagnosis result "SELF-DIAG [PAST]" (previously stored in the memory) might not have been erased after repair. Go to DIAGNOSTIC PROCEDURE 3, step 8, RS-54.

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SUPPLEMENTAL RESTRAINT SYSTEM (SRS)

Trouble Diagnoses with CONSULT-II (Cont'd)

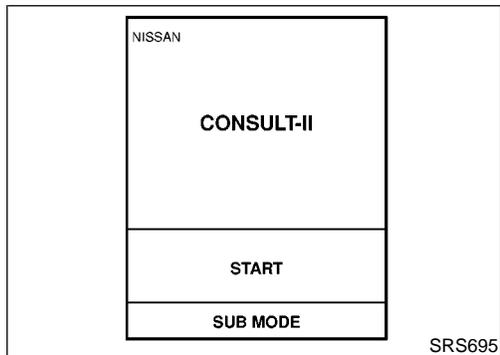


DIAGNOSTIC PROCEDURE 5

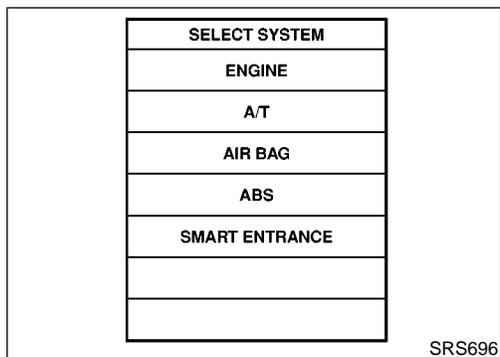
NE-RS0023S04

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

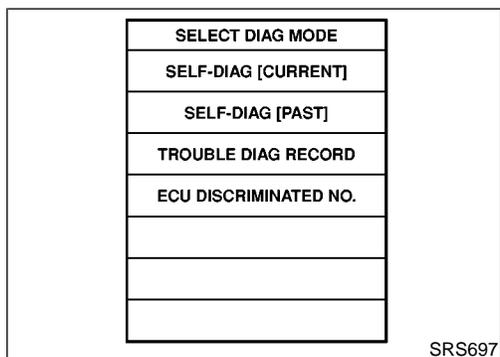
1. Turn ignition switch OFF.
2. Connect CONSULT-II to data link connector.
3. Turn ignition switch ON.



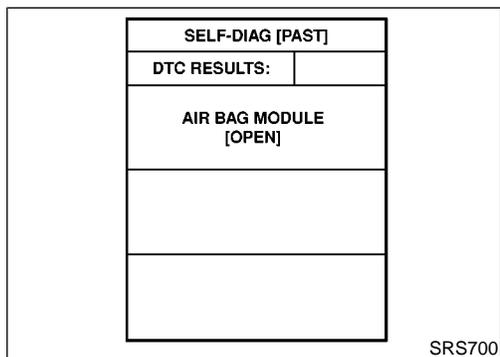
4. Touch "START".



5. Touch "AIRBAG".



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



7. If self-diagnosis result is displayed on "SELF-DIAG [PAST]", go to step 10.

SUPPLEMENTAL RESTRAINT SYSTEM (SRS)

④ Trouble Diagnoses with CONSULT-II (Cont'd)

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

SRS702

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

NOTE:

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

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

SRS697

8. Touch "TROUBLE DIAG RECORD".

NOTE:

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

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

SRS704

9. Self-diagnosis result is displayed on "TROUBLE DIAG RECORD".

10. Touch "PRINT".

11. Compare self-diagnosis result to "Intermittent Malfunction Diagnostic Code Chart", RS-58.

12. Touch "BACK" key of CONSULT-II until "SELECT SYSTEM" appears.

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

14. Repair the system as outlined by the repair order that corresponds to the self-diagnosis result in "Intermittent Malfunction Diagnostic Code Chart", RS-58. For replacement procedure of component parts, refer to RS-18.

15. Go to DIAGNOSTIC PROCEDURE 3, RS-54 for final checking.

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SUPPLEMENTAL RESTRAINT SYSTEM (SRS)

 Trouble Diagnoses with CONSULT-II (Cont'd)

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

=NERS0023S0401

Self-diagnosis result	Explanation	Repair order*
NO DTC IS DETECTED.	<ul style="list-style-type: none"> No malfunction is detected. 	<ul style="list-style-type: none"> Go to DIAGNOSTIC PROCEDURE 3, RS-54.
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 wiring harness connections. Replace harness if it has visible damage. If the harness visual check result is OK, replace driver air bag module (Before disposing of it, it must be deployed.), air bag diagnosis sensor unit and spiral cable.
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). 	
AIRBAG MODULE [GND-SHORT]	<ul style="list-style-type: none"> Driver air bag module circuit is shorted to ground (including the spiral cable). 	
AIRBAG MODULE [SHORT]	<ul style="list-style-type: none"> Driver air bag module circuits are shorted to each other. 	
ASSIST A/B MODULE [OPEN]	<ul style="list-style-type: none"> Passenger air bag module circuit is open. 	<ol style="list-style-type: none"> Visually check wiring harness connections. Replace harness if it has visible damage. If the harness visual check result is OK, replace passenger air bag module (Before disposing of it, it must be deployed.) and air bag diagnosis sensor unit.
ASSIST A/B MODULE [VB-SHORT]	<ul style="list-style-type: none"> Passenger air bag module circuit is shorted to some power supply circuit. 	
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. 	
CRASH ZONE SEN-CTR [OPEN/UPR-VB-SHORT] (4WD models)	<ul style="list-style-type: none"> Crash zone sensor circuit is open, or Crash zone sensor circuit is shorted to some power supply circuit. 	<ol style="list-style-type: none"> Visually check wiring harness connections. Replace harness if it has visible damage.
CRASH ZONE SEN-CTR [SHORT/UPR-GND-SHORT] (4WD models)	<ul style="list-style-type: none"> Both crash zone sensor circuits are shorted, or Crash zone sensor circuit is shorted to ground. 	<ol style="list-style-type: none"> Visually check wiring harness connections. Replace harness if it has visible damage. If the harness visual check result is OK, replace crash zone sensor.
CONTROL UNIT	<ul style="list-style-type: none"> Air bag diagnosis sensor unit is malfunctioning. 	<ol style="list-style-type: none"> Visually check wiring harness connections. Replace harness if it has visible damage. If the harness visual check result is OK, replace air bag diagnosis sensor unit.
Code B4 or PASS A/B DEACT SW	<ul style="list-style-type: none"> Activate terminal is open. Activate terminal is shorted to ground. Deactivate terminal is open. Deactivate terminal is shorted to ground. Activate terminal and deactivate terminal are shorted to each other. 	<ol style="list-style-type: none"> Visually check wiring harness connections. Replace harness if it has visible damage. If the harness visual check result is OK, replace passenger air bag deactivation switch. (The key cylinder of passenger air bag deactivation switch does not have to be replaced.)
Code B5 or PASS A/B DEACT SW INDICATOR	<ul style="list-style-type: none"> Passenger air bag deactivation switch indicator circuit is open. Passenger air bag deactivation switch indicator circuit is shorted to some power supply circuit. Passenger air bag deactivation switch indicator circuit is shorted to ground. 	<ol style="list-style-type: none"> Visually check wiring harness connections. Replace harness if it has visible damage. If the harness visual check result is OK, replace passenger air bag deactivation switch indicator.

SUPPLEMENTAL RESTRAINT SYSTEM (SRS)

 Trouble Diagnoses with CONSULT-II (Cont'd)

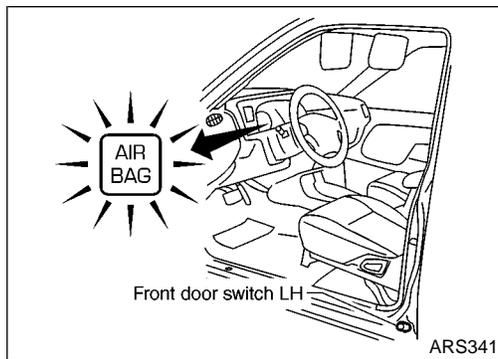
Self-diagnosis result	Explanation	Repair order*
INDEFINITE FAILURES [AIR BAGS]	<ul style="list-style-type: none"> Passenger air bag deactivation switch status is not identified. 	<ol style="list-style-type: none"> Visually check wiring harness connections. Replace harness if it has visible damage. If the harness visual check result is OK, replace passenger air bag deactivation switch and air bag diagnosis sensor unit.

*: Intermittent malfunction areas cannot be easily located. For this reason, perform the procedures outlined under the repair order, then make the final system check.

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SUPPLEMENTAL RESTRAINT SYSTEM (SRS)

⊗ Trouble Diagnoses without CONSULT-II



⊗ Trouble Diagnoses without CONSULT-II

=NERS0024

DIAGNOSTIC PROCEDURE 6

NERS0024S01

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. Open front door LH.
2. Turn ignition switch ON.
3. Press front door switch LH at least 5 times within 7 seconds after turning ignition switch ON. SRS is now in Diagnosis mode.
4. "AIR BAG" warning lamp operates in Diagnosis mode according to the following chart.

NOTE:

If SRS does not enter Diagnosis mode even though malfunction is detected in User mode, go to DIAGNOSTIC PROCEDURE 11, RS-68.

No.	"AIR BAG" warning lamp operation — Diagnosis mode —	SRS condition
1		<p>a through b are repeated.</p> <ul style="list-style-type: none"> ● Self-diagnosis result (previously stored in the memory) might not have been erased after repair. ● Intermittent malfunction has been detected in the past. <p>Go to DIAGNOSTIC PROCEDURE 8, RS-64.</p>
2		<p>a through d are repeated.</p> <p>NOTE:</p> <ul style="list-style-type: none"> a — Interval I b — Start signal (Start signal identifies display modes) c — Interval II d — Indicates malfunctioning part (0.5 sec. ON and 0.5 sec. OFF is counted as one flash.) <p>The system is malfunctioning and needs to be repaired.</p>

5. Malfunctioning part is indicated by the number of flashes (part d). Compare the number of flashes to "Warning Lamp Flash Code Chart", RS-62 and locate malfunctioning part.
6. Turn ignition switch OFF and disconnect both battery cables.
7. Repair the system as outlined by the repair order in "Warning

SUPPLEMENTAL RESTRAINT SYSTEM (SRS)

 Trouble Diagnoses without CONSULT-II (Cont'd)

Lamp Flash Code Chart" that corresponds to the flash code.
For replacement procedure of component parts, refer to RS-18.

8. After repairing the system, go to DIAGNOSTIC PROCEDURE 7, RS-63.

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SUPPLEMENTAL RESTRAINT SYSTEM (SRS)

 Trouble Diagnoses without CONSULT-II (Cont'd)

Warning Lamp Flash Code Chart

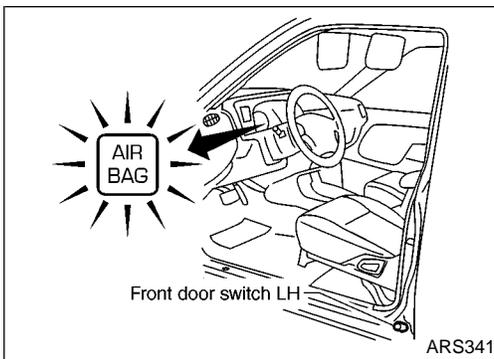
=NERS0024S0101

Warning lamp	Flash code d (# of flashes)	Explanation	Repair order *Recheck SRS at each replacement.
"AIR BAG" warning lamp	0	<ul style="list-style-type: none"> ● Self-diagnosis result (previously stored in the memory) might not have been erased after repair. ● Intermittent malfunction has been detected in the past. 	Go to DIAGNOSTIC PROCEDURE 8, RS-64.
	2	The driver air bag module circuit is malfunctioning.	<ol style="list-style-type: none"> 1. Visually check wiring harness connections. 2. Replace harness if it has visible damage. 3. Replace spiral cable. 4. Replace driver air bag module. (Before disposing of it, it must be deployed.) 5. Replace air bag diagnosis sensor unit. 6. Replace air bag harness.
	6	Crash zone sensor is malfunctioning	<ol style="list-style-type: none"> 1. Visually check wiring harness connections. 2. Replace harness if it has visible damage. 3. Replace crash zone sensor. 4. Replace air bag diagnosis sensor unit. 5. Replace air bag harness for crash zone sensor.
	7	The air bag diagnosis sensor unit is malfunctioning.	<ol style="list-style-type: none"> 1. Visually check wiring harness connections. 2. Replace harness if it has visible damage. 3. Replace air bag diagnosis sensor unit. 4. Replace air bag harness.
	8	The passenger air bag module circuit is malfunctioning.	<ol style="list-style-type: none"> 1. Visually check wiring harness connections. 2. Replace harness if it has visible damage. 3. Replace passenger air bag module. (Before disposing of it, it must be deployed.) 4. Replace air bag diagnosis sensor unit. 5. Replace air bag harness.
	9	Passenger air bag deactivation switch is not identified.	<ol style="list-style-type: none"> 1. Visually check wiring harness connections. 2. Replace harness if it has visible damage. 3. Replace passenger air bag deactivation switch. (The key cylinder of the deactivation switch does not have to be replaced.) 4. Replace air bag diagnosis sensor unit. 5. Replace air bag harness.
	10	Passenger air bag deactivation switch is malfunctioning.	<ol style="list-style-type: none"> 1. Visually check wiring harness connections. 2. Replace harness if it has visible damage. 3. Replace passenger air bag deactivation switch. (The key cylinder of the deactivation switch does not have to be replaced.) 4. Replace air bag diagnosis sensor unit. 5. Replace air bag harness.
	11	Passenger air bag deactivation switch indicator is malfunctioning.	<ol style="list-style-type: none"> 1. Visually check wiring harness connections. 2. Replace harness if it has visible damage. 3. Replace passenger air bag deactivation switch indicator. 4. Replace air bag diagnosis sensor unit. 5. Replace air bag harness.

* Follow the procedures in numerical order when repairing malfunctioning parts. Confirm whether malfunction is eliminated using the "AIR BAG" warning lamp (in User mode) 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.

SUPPLEMENTAL RESTRAINT SYSTEM (SRS)

Trouble Diagnoses without CONSULT-II (Cont'd)



DIAGNOSTIC PROCEDURE 7

=NERS0024S02

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

1. After repairing SRS, connect both battery cables.
2. Open front door LH.
3. Turn ignition switch from OFF to ON.
4. "AIR BAG" warning lamp operates in Diagnosis mode according to the following chart.

No.	"AIR BAG" warning lamp operation — 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>NOTE: a — Interval I b — Start signal (Start signal identifies display modes) c — Interval II d — Indicates 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>

NOTE:

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

5. If "AIR BAG" warning lamp operates as shown in No. 1 in previous chart, 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 in previous chart, the malfunctioning part is not repaired completely or another malfunctioning part is detected. Go to DIAGNOSTIC PROCEDURE 6, RS-60 and repair malfunctioning part completely.

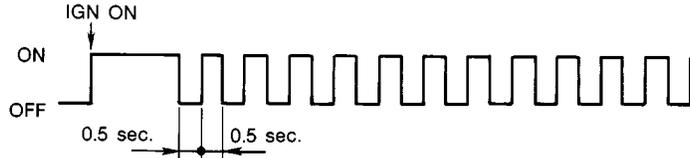
6. Turn ignition switch ON. "AIR BAG" warning lamp operates in User mode. Compare "AIR BAG" warning lamp operation to the following chart.

NOTE:

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

SUPPLEMENTAL RESTRAINT SYSTEM (SRS)

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

"AIR BAG" warning lamp operation — User mode —	SRS condition	Reference item
 <p>MRS095A</p>	<p>No malfunction is detected. No further action is necessary.</p>	<p>—</p>
 <p>MRS096A</p>	<p>The system is malfunctioning and needs to be repaired.</p>	<p>Go to DIAGNOSTIC PROCEDURE 2 or 6, RS-50 or RS-60.</p>
 <p>MRS097A</p>	<p>Air bag is deployed. Air bag fuse, air bag diagnosis sensor unit or harness is malfunctioning and needs to be repaired.</p>	<p>Go to COLLISION DIAGNOSIS, RS-71. Go to DIAGNOSTIC PROCEDURE 9, RS-65.</p>
 <p>MRS098A</p>	<p>One of the following has occurred and needs to be repaired.</p> <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. 	<p>Go to DIAGNOSTIC PROCEDURE 10, RS-67.</p>

DIAGNOSTIC PROCEDURE 8 (CONTINUED FROM DIAGNOSTIC PROCEDURE 6)

Inspecting SRS malfunction record

NERS0024S03

1	CHECK FOR PROBLEM CODE THAT MIGHT NOT HAVE BEEN ERASED AFTER PREVIOUS REPAIR	
Is it the first time for maintenance of SRS?		
Yes or No		
Yes	▶	Go to DIAGNOSTIC PROCEDURE 5, RS-56. (Further inspection cannot be performed without CONSULT-II.)
No	▶	Self-diagnosis result (previously stored in the memory) might not have been erased after repair. Go to DIAGNOSTIC PROCEDURE 7, step 5, RS-63.

SUPPLEMENTAL RESTRAINT SYSTEM (SRS)

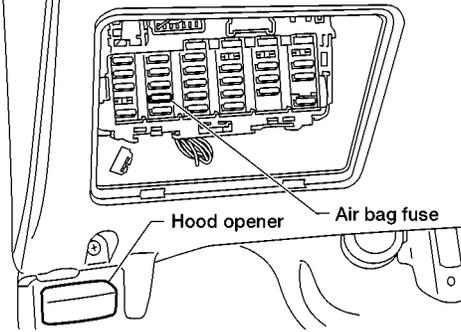
Trouble Diagnoses: "AIR BAG" Warning Lamp Does Not Turn Off

Trouble Diagnoses: "AIR BAG" Warning Lamp Does Not Turn Off DIAGNOSTIC PROCEDURE 9

=NERS0025

NERS0025S01

1	CHECK FOR DEPLOYMENT OF AIR BAG MODULE	
Is air bag module deployed?		
Yes or No		
Yes	▶	Refer to COLLISION DIAGNOSIS, RS-71.
No	▶	GO TO 2.

2	CHECK AIR BAG FUSE	
Is air bag fuse OK?		
		
ARS349		
OK or NG		
OK	▶	GO TO 4.
NG	▶	GO TO 3.

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

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SUPPLEMENTAL RESTRAINT SYSTEM (SRS)

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

4	CHECK AIR BAG DIAGNOSIS SENSOR UNIT									
<p>Ⓢ</p> <ol style="list-style-type: none"> 1. Turn ignition switch OFF. 2. Connect CONSULT-II. 3. Turn ignition switch ON. 4. Touch "START" on CONSULT-II screen. <p>Is "AIRBAG" displayed on CONSULT-II?</p> <div style="text-align: center; margin: 10px 0;"> <table border="1" style="margin: auto; border-collapse: collapse;"> <tr><td style="text-align: center;">SELECT DIAG MODE</td></tr> <tr><td style="text-align: center;">SELF-DIAG [CURRENT]</td></tr> <tr><td style="text-align: center;">SELF-DIAG [PAST]</td></tr> <tr><td style="text-align: center;">TROUBLE DIAG RECORD</td></tr> <tr><td style="text-align: center;">ECU DISCRIMINATED NO.</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> </div> <p style="text-align: right; margin-right: 20px;">SRS697</p> <p style="text-align: center;">Yes or No</p>			SELECT DIAG MODE	SELF-DIAG [CURRENT]	SELF-DIAG [PAST]	TROUBLE DIAG RECORD	ECU DISCRIMINATED NO.			
SELECT DIAG MODE										
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SELF-DIAG [PAST]										
TROUBLE DIAG RECORD										
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Yes	▶	GO TO 5.								
No	▶	Visually check wiring harness connection of air bag diagnosis sensor unit. If harness connection check result is OK, replace air bag diagnosis sensor unit.								

5	CHECK HARNESS CONNECTION	
<p>Are harness connections between "AIR BAG" warning lamp and air bag diagnosis sensor unit OK?</p> <p style="text-align: center;">OK or NG</p>		
OK	▶	Replace air bag diagnosis sensor unit.
NG	▶	Connect combination meter, air bag diagnosis sensor unit and inline harness connectors properly. If "AIR BAG" warning lamp still does not go off, repair main harness and/or replace air bag harness.

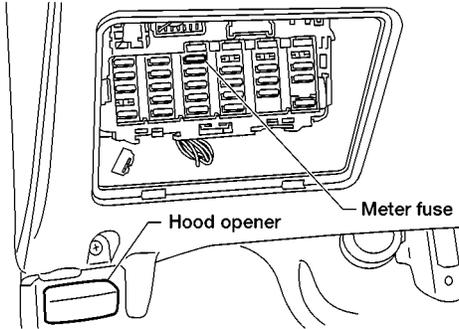
SUPPLEMENTAL RESTRAINT SYSTEM (SRS)

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

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

=NERS0026

NERS0026S01

1	CHECK "AIR BAG" WARNING LAMP FUSE	
Is meter fuse OK?		
 <p style="text-align: center;">OK or NG</p>		
OK	▶	GO TO 3.
NG	▶	GO TO 2.

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

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

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

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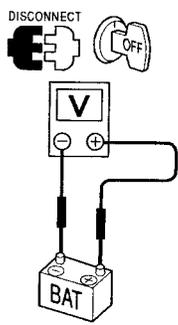
SUPPLEMENTAL RESTRAINT SYSTEM (SRS)

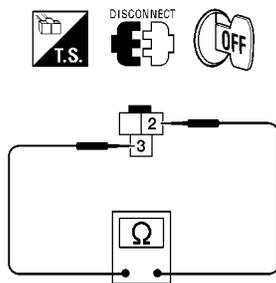
Trouble Diagnoses: SRS Does Not Enter Diagnosis Mode Using Door Switch

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

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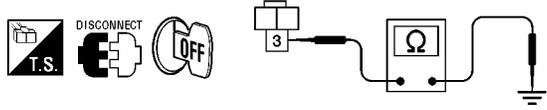
NERS0027S01

1	CHECK BATTERY VOLTAGE	
<p>Disconnect both battery cables and check battery voltage using circuit tester.</p> <div style="text-align: center;">  </div>		
SRS058		
Is battery voltage more than 9V?		
Yes	▶	GO TO 2.
No	▶	Charge battery and return to DIAGNOSTIC PROCEDURE 6, RS-60.

2	CHECK FRONT DOOR SWITCH LH	
<p>Remove front door switch LH and check continuity between front door switch LH connector terminals 2 and 3 under the following conditions.</p> <div style="text-align: center;">  </div>		
ARS197		
<p>Continuity: Door switch is depressed (Door is closed). NO Door switch is released (Door is open). YES</p>		
OK or NG		
OK	▶	GO TO 3.
NG	▶	Replace front door switch LH.

SUPPLEMENTAL RESTRAINT SYSTEM (SRS)

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

3	CHECK GROUND CIRCUIT FOR FRONT DOOR SWITCH LH	
Check harness continuity between front door switch LH connector terminal 3 and body ground.		
		
ARS332		
Does continuity exist?		
Yes	▶	Replace air bag diagnosis sensor unit. Go to "SRS Operation Check", RS-47.
No	▶	Repair main harness and/or replace air bag harness.

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

NER50037

NER50037S03

1	CHECK FOR DEPLOYMENT OF SEAT BELT PRE-TENSIONER	
Is seat belt pre-tensioner deployed?		
Yes or No		
Yes	▶	Refer to COLLISION DIAGNOSIS, RS-71.
No	▶	GO TO 2.

2	CHECK DRIVER'S SEAT BELT	
Is driver's seat belt fastened?		
Yes or No		
Yes	▶	GO TO 3.
No	▶	Check "SEAT BELT" warning lamp operation after the driver's seat belt is fastened.

3	CHECK SEAT BELT BUCKLE SWITCH	
1. Disconnect seat belt buckle switch harness connector. 2. Check continuity between terminals 1 and 2. Seat belt unfastened. Continuity should exist. Seat belt fastened. Continuity should not exist. WARNING: Do not measure resistance with harness side connector.		
OK or NG		
OK	▶	GO TO 4.
NG	▶	Replace seat belt buckle switch.

SUPPLEMENTAL RESTRAINT SYSTEM (SRS)

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

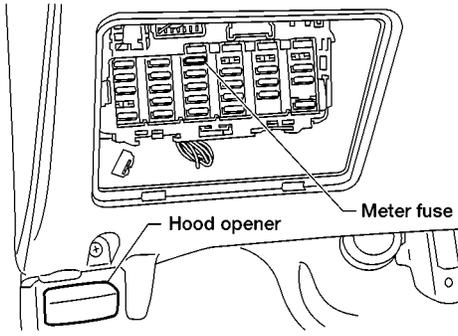
4	CHECK "SEAT BELT" WARNING LAMP OPERATION	
<ol style="list-style-type: none"> 1. Visually check wiring harness connections. 2. Replace air bag diagnosis sensor unit. 3. Fasten driver's seat belt. 4. Turn ignition switch ON. 5. Does "SEAT BELT" warning lamp illuminate for about 7 seconds and then turn off? 		
Yes or No		
Yes	▶	System is OK.
No	▶	GO TO 5.

5	CHECK "SEAT BELT" WARNING LAMP OPERATION AGAIN	
<ol style="list-style-type: none"> 1. Replace combination meter assembly. 2. Fasten driver's seat belt. 3. Turn ignition switch ON. 4. Does "SEAT BELT" warning lamp illuminate for about 7 seconds and then turn off? 		
Yes or No		
Yes	▶	System is OK.
No	▶	Repair main harness and/or replace air bag harness.

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

NERS0039

NERS0039S01

1	CHECK "SEAT BELT" WARNING LAMP FUSE	
Is meter fuse OK?		
		
OK or NG		
OK	▶	GO TO 3.
NG	▶	GO TO 2.

ARS350

2	CHECK "SEAT BELT" WARNING LAMP FUSE AGAIN	
Replace meter fuse and turn ignition switch ON.		
Is meter fuse blown again?		
Yes	▶	Repair main harness and/or replace air bag harness.
No	▶	INSPECTION END

SUPPLEMENTAL RESTRAINT SYSTEM (SRS)

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

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

4	CHECK "SEAT BELT" WARNING LAMP OPERATION	
<ol style="list-style-type: none"> 1. Visually check wiring harness connections. 2. Replace air bag diagnosis sensor unit. 3. Fasten driver's seat belt. 4. Turn ignition switch ON. 5. Does "SEAT BELT" warning lamp illuminate for about 7 seconds and then turn off? 		
Yes or No		
Yes	▶	System is OK.
No	▶	GO TO 5.

5	CHECK "SEAT BELT" WARNING LAMP OPERATION AGAIN	
<ol style="list-style-type: none"> 1. Replace combination meter assembly. 2. Fasten driver's seat belt. 3. Turn ignition switch ON. 4. Does "SEAT BELT" warning lamp illuminate for about 7 seconds and then turn off? 		
Yes or No		
Yes	▶	System is OK.
No	▶	Repair main harness and/or replace air bag harness.

Collision Diagnosis

NER50028

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-tensioners.
- 3) Check the SRS components using the following table:
 - Replace any SRS components showing visible signs of damage (dents, cracks and deformation).
- 4) Install new air bag modules and seat belt pre-tensioners.
- 5) Conduct Self-diagnosis using CONSULT-II or "AIR BAG" and "SEAT BELT" warning lamps. Refer to "SRS Operation Check", "TROUBLE DIAGNOSES — Supplemental Restraint System (SRS)", RS-47. Ensure entire SRS operates properly.

When SRS is not activated in a collision:

- 1) Check the SRS components using the following table:
 - Replace any SRS components showing visible signs of damage (dents, cracks and deformation).
- 2) Conduct Self-diagnosis using CONSULT-II or "AIR BAG" and "SEAT BELT" warning lamps. Refer to "SRS Operation Check", "TROUBLE DIAGNOSES — Supplemental Restraint System (SRS)", RS-47. Ensure entire SRS operates properly.

SUPPLEMENTAL RESTRAINT SYSTEM (SRS)

Collision Diagnosis (Cont'd)

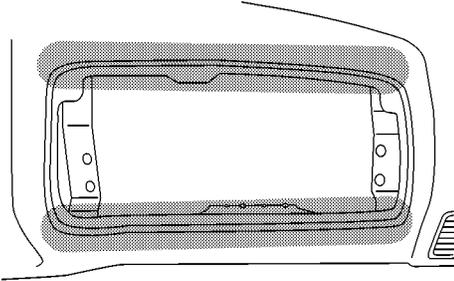
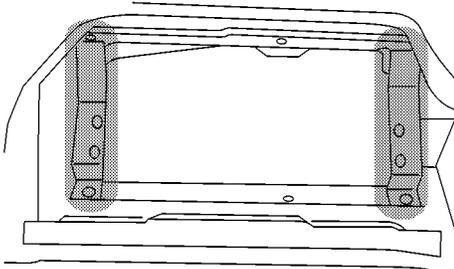
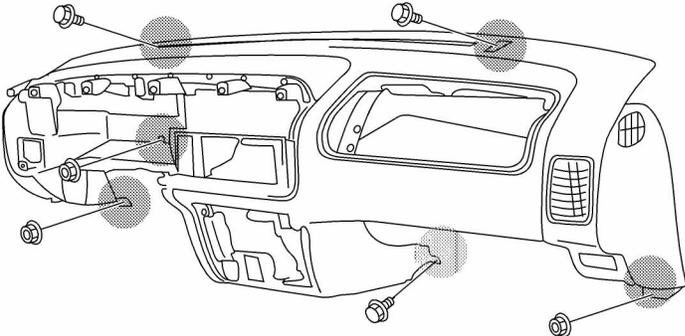
SRS INSPECTION

NERS0028S01

Part	SRS is activated	SRS is NOT activated
Air bag module (driver and passenger side)	REPLACE Install with new bolts.	<ol style="list-style-type: none"> 1. Remove air bag module. Check harness cover and connectors for damage, terminals for deformities, and harness for binding. 2. <ol style="list-style-type: none"> a. Install driver air bag module into the steering wheel to check fit and alignment with the wheel. b. Install passenger air bag module into the instrument panel to check fit with the instrument panel. 3. If no damage is found, reinstall with new bolts. 4. If damaged — REPLACE. Air bag must be deployed before disposal.
Seat belt pre-tensioner (driver and passenger side)	REPLACE Install with new bolts.	<ol style="list-style-type: none"> 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 with new bolts. 5. If damaged — REPLACE.
Air bag diagnosis sensor unit	REPLACE Install with new special bolts and new ground bolt.	<ol style="list-style-type: none"> 1. Check case for dents, cracks and deformities. 2. Check connectors for damage, and terminals for deformities. 3. If no damage is found, reinstall with new special bolts and new ground bolt. 4. If damaged — REPLACE. Install new air bag diagnosis sensor unit with new special bolts and new ground bolt.
Crash zone sensor (4WD models)		<ol style="list-style-type: none"> 1. Check body and sensor bracket for deformities and rust. 2. Check sensor case for dents, cracks, scratches, deformities and rust. 3. Check sensor harness, connector and terminals for binding, damage and deformities. 4. If no damage is found, reinstall with new bolts. 5. If damaged — REPLACE.
Steering wheel		<ol style="list-style-type: none"> 1. Visually check steering wheel for deformities. 2. Check harness (built into steering wheel) 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 the steering wheel. 6. If damaged — REPLACE.
Spiral cable		<ol style="list-style-type: none"> 1. Visually check spiral cable and combination switch for damage. 2. Check connectors, flat cable and protective tape for damage. 3. Check steering wheel for noise, binding and heavy operation. 4. If no damage is found, reinstall the spiral cable. 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, and deformities. 3. If no damage is found, reinstall. 4. If damaged — REPLACE damaged section of harness. Do not attempt to repair, splice or modify any SRS harness.
Passenger air bag deactivation switch and indicator		<ol style="list-style-type: none"> 1. Visually check passenger air bag deactivation switch and indicator for dents, cracks and deformities. 2. Check the harness and connectors for damage, and terminals for deformities. 3. If damaged—REPLACE. <p>WARNING: After SRS maintenance or repair, make sure the passenger air bag deactivation switch is in the same position (ON or OFF) as when the vehicle arrived for service.</p>

SUPPLEMENTAL RESTRAINT SYSTEM (SRS)

Collision Diagnosis (Cont'd)

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

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