RESTRAINT SYSTEM

SECTION RS

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Precautions

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

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The Supplemental Restraint System such as "AIR BAG" and "SEAT BELT PRE-TENSIONER" used along with a seat belt, helps to reduce the risk or severity of injury to the driver and front passenger 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, warning lamp, wiring harness, and spiral cable.

MA

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:

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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.

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

MT

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

AT

• 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

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CAUTION:

 Before removing the seat belt pre-tensioner assembly, turn the ignition switch OFF, disconnect both battery cables and wait at least 3 minutes.

SU

After replacing or reinstalling seat belt pre-tensioner assembly, or reconnecting seat belt pre-tensioner assembly connector, ensure entire SRS operates properly. Refer to "SRS Operation Check", RS-43.

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- Do not disassemble buckle or seat belt assembly.
- Do not reuse seat belt anchor bolts after removal. Replace with new ones.

ST

- 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.
 - RS

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

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AFTER A COLLISION

NERS0044

WARNING:

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

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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.

SEAT BELTS

Precautions (Cont'd)

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.

Front Seat Belt

REMOVAL AND INSTALLATION

Bucket Seats

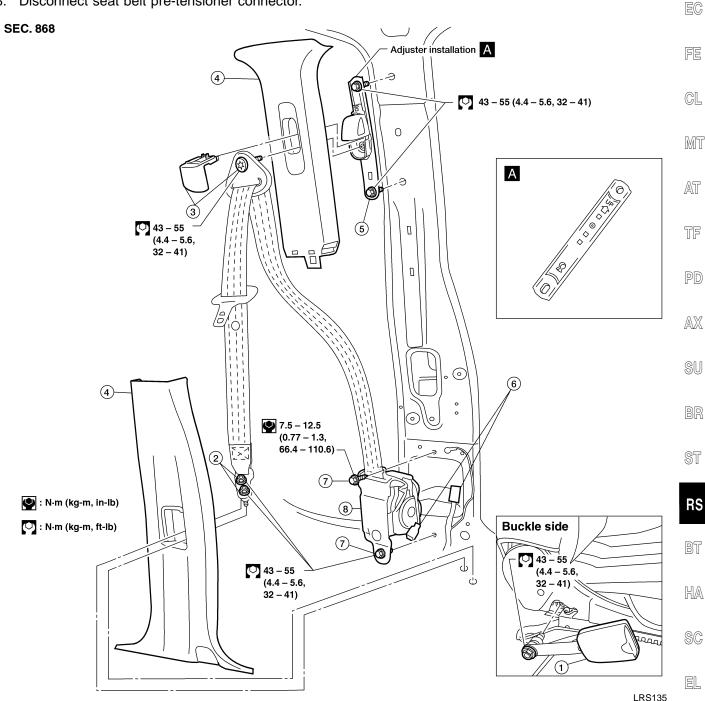
GI =NERS0003 NERS0003S01

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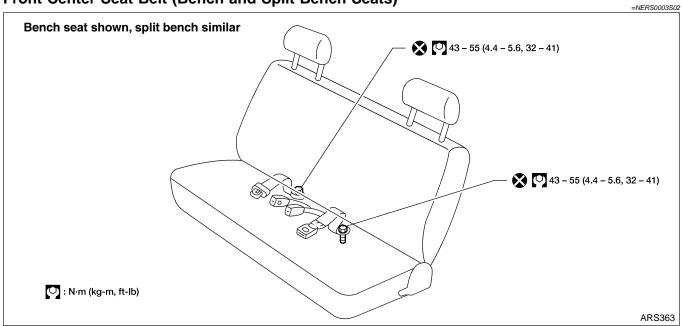
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Slide the seat all the way forward and tilt the seatback toward the front.

- 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 BT-24, "SIDE AND FLOOR TRIM".
- 5. Remove two adjuster bolts and adjuster assembly.
- 6. Remove retractor anchor bolt and screw.
- 7. Remove retractor.
- Disconnect seat belt pre-tensioner connector.



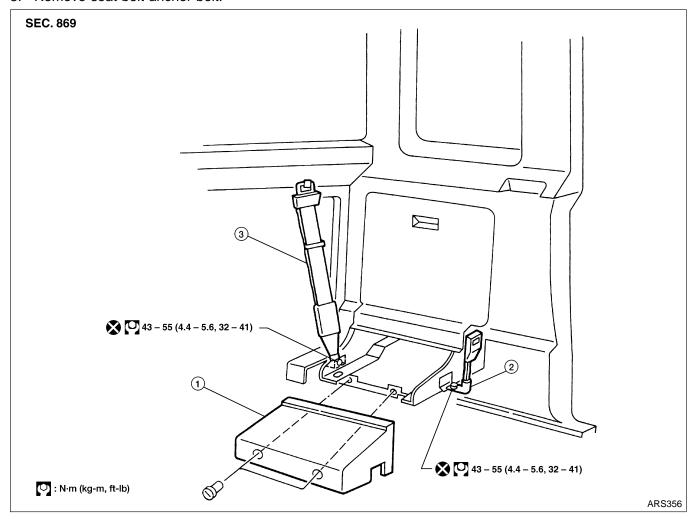
Front Center Seat Belt (Bench and Split Bench Seats)



Rear Seat Belt

REMOVAL AND INSTALLATION King Cab Models

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





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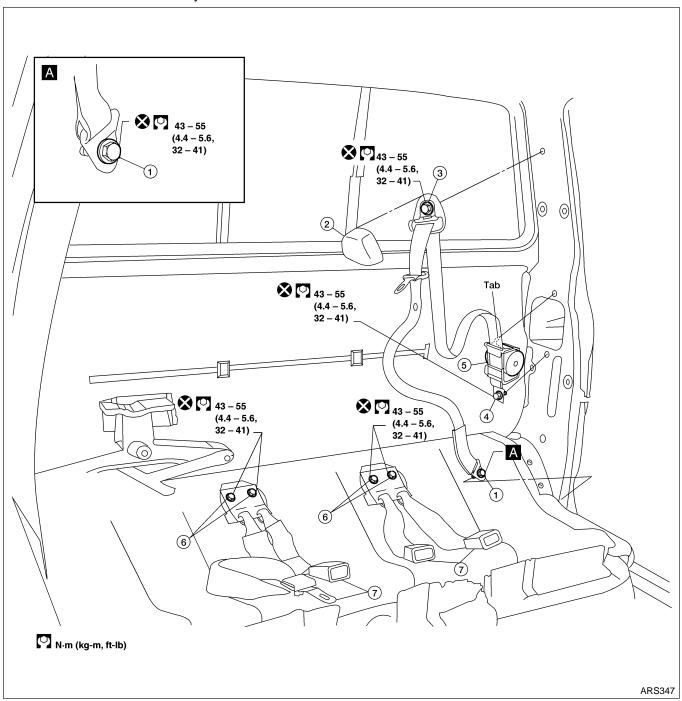
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Crew Cab Models

=NERS0004S02

- 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.



Seat Belt Inspection

AFTER A COLLISION

=NERS0029

NERS0029S01

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.

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Replace any seat belt assembly or anchor bolt if:

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• 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.).

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

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• 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:

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a. Switch ignition ON. With driver seat belt unfastened, the seat belt warning lamp should illuminate. Also, the seat belt warning chime should sound for about seven seconds.

. , at

- b. Fasten driver seat belt. The seat belt warning lamp should go out and the chime (if sounding) should stop.
- If the "AIR BAG" warning lamp is blinking, conduct self-diagnosis using CONSULT-II and "AIR BAG" warning lamp. Refer to "SRS Operation Check", RS-43.

TF

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

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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:

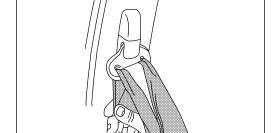
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a. Fully extend the seat belt webbing and check for twists, tears or other damage.

@I

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.

BK



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.

HA

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.

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

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SEAT BELT RETRACTOR ON-VEHICLE CHECK

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

=NERS0029S03

NERS0029S0301

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 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

NFRS0029S0304

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

During stop, seat belts should lock and not extend. If the seat belt retractor assembly does not lock, perform the retractor off-vehicle check.

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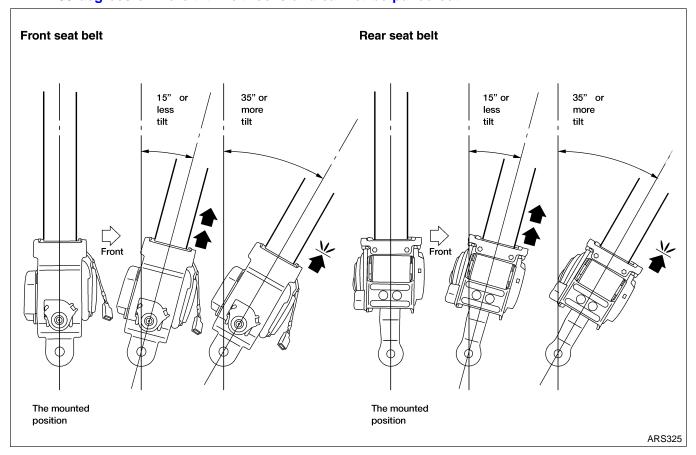
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SEAT BELT RETRACTOR OFF-VEHICLE CHECK

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

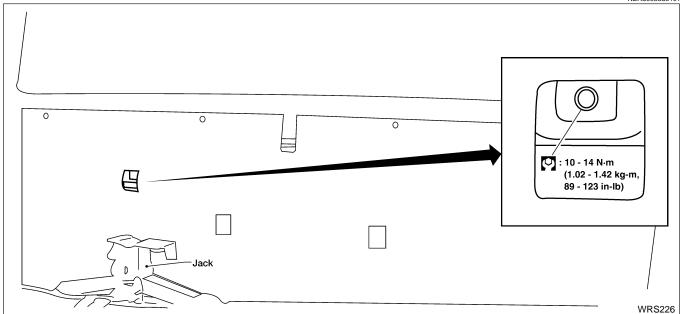


If NG, replace the retractor assembly.

Tether Anchor Plate REMOVAL AND INSTALLATION King Cab Models

NERS0053 NERS0053S01

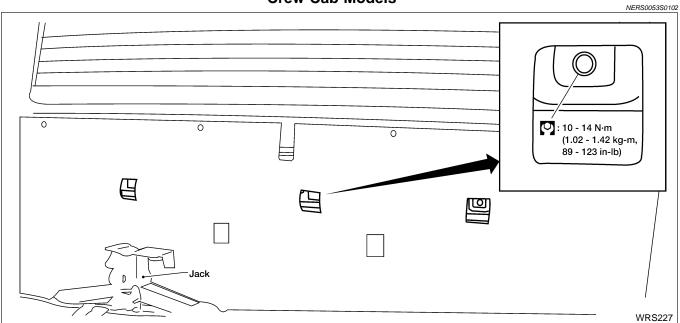
NERS0053S0101



CAUTION:

Replace anchor bolts if they are deformed or worn out.

Crew Cab Models



CAUTION:

Replace anchor bolts if they are deformed or worn out.

Precautions

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

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The Supplemental Restraint System such as "AIR BAG" and "SEAT BELT PRE-TENSIONER" used along with a seat belt, helps to reduce the risk or severity of injury to the driver and front passenger 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, warning lamp, wiring harness, and spiral cable.

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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:

FE

 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.

MT

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

AT

• 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

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Do not use a circuit tester to check SRS circuits unless instructed to in this Service Manual.

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

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

Air bag diagnosis sensor unit must always be installed with forward mark "

 —" pointing toward the front of the vehicle for proper operation. Also check air bag diagnosis sensor unit for deformities, dents, cracks and rust before installation and replace as required.

• The spiral cable must be aligned in the neutral position since its rotations are limited. Do not rotate steering column while steering gear is removed to avoid damaging spiral cable.

RS

• Handle air bag module carefully. Always place it with the pad side facing upward.

3T

 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-43.

HA

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

SC

Precautions (Cont'd)

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 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

NERS0007

When you read wiring diagrams, refer to the following:

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

When you perform trouble diagnosis, refer to the following:

- GI-34, "How to Follow Test Groups In Trouble Diagnoses"
- GI-23. "HOW TO PERFORM EFFICIENT DIAGNOSIS FOR AN ELECTRICAL INCIDENT"

Preparation

SPECIAL SERVICE TOOLS

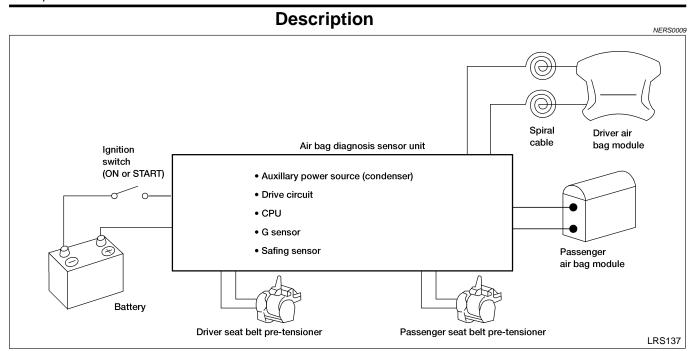
The actual shapes of Kent-Moore tools may differ from those of special service tools illustrated here.





Tool number (Kent-Moore No.) Tool name	Description		
KV991072S0 (J38381-KIT) Air bag deployment kit KV99106400 (J38381) Deployment tool		Disposing of air bag module and seat belt pre-tensioner	
2 oproyment too.	NT357		
KV991065S0 (J38381-30) Deployment tool adapters	For seat belt pre-tensioner		
			(
	For passenger air bag module White		[
	White		1
KV99105300	ARS269	Anchoring air bag module	
(J41246) Air bag module bracket			
	NT354		L
V99109000 I44230)	— For driver air		. (
eployment tool adapter	bag module and seat belt pre-tensioner		[
			7
	LRS138		
J-42057) ir bag master key set		Removing and installing accessory air bag locking bolts	
	121		,
	LRS210		[

^{*:} Special tool or commercial equivalent



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

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

Ignition	Diagnosis	sensor unit	Driver eir beg	Passanger air bag	Driver seat belt	Passenger seat
Ignition	G sensor	Safing sensor Driver air bag Passenger air bag	pre-tensioner belt pre-tensioner			
ON	ON	ON	Deploy			
ON	_	ON	Deploy			
ON	ON	ON	Deploy			

PASSENGER AIR BAG DEACTIVATION SWITCH

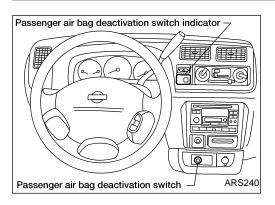
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The vehicle is equipped with a passenger air bag deactivation switch which can be operated by the customer. When the switch is turned to the ON position, the passenger air bag is enabled and could inflate in a frontal collision. When the switch is 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.

Description (Cont'd)



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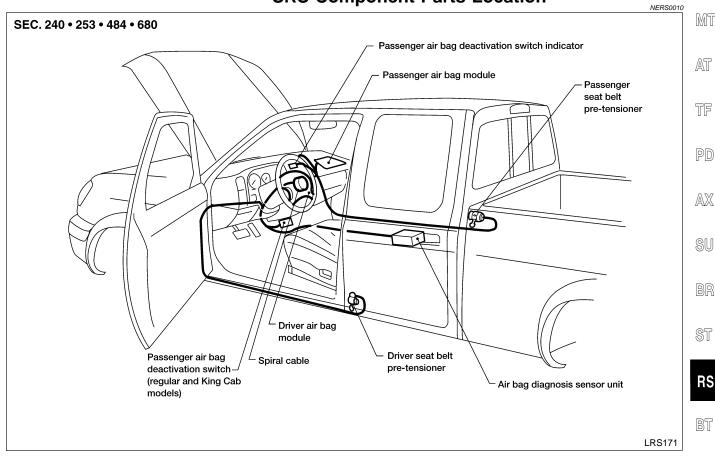
EC

IGN OFF \rightarrow ON

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

NERS0009S0301



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Maintenance Items

NERS0011

CAUTION:

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



- Check "AIR BAG" 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.
 If any of the following "AIR BAG" warning lamp conditions
 occur, immediately check the air bag or seat belt pre-tensioner
 system. Refer to "SRS Operation Check", RS-43 for details.
- The "AIR BAG" warning lamp does not illuminate when the ignition switch is turned ON.
- The "AIR BAG" warning lamp does not turn off about 7 seconds after the ignition switch is turned ON.
- The "AIR BAG" warning lamp blinks after illuminating for about 7 seconds after the ignition switch is turned ON.
- 2. Visually check SRS components
- a. 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.
- b. 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.
- c. 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.
- d. Seat belt pre-tensioner
- Check harness cover and connectors for damage, terminals for deformities and harness for binding.
- Check belts for damage and anchors for loose mounting.
- Check retractor for smooth operation.
- Perform Self-diagnosis for seat belt pre-tensioner using "AIR BAG" warning lamp or CONSULT-II. Refer to "SRS Operation Check", RS-43.
- e. Passenger air bag deactivation switch
- Check passenger air bag deactivation switch for damage.

Maintenance Items (Cont'd)

- Check harness for binding, connector for damage and terminals for deformities.
- f. 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 and ground bolt with new ones.

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Diagnosis Sensor Unit REMOVAL AND INSTALLATION

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", RS-43.



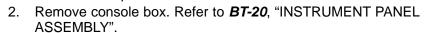
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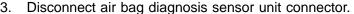
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. Disconnect driver and passenger air bag module connectors

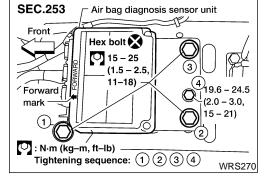




and seat belt pre-tensioner connectors.

 Remove ground bolt and also remove special bolts from air bag diagnosis sensor unit.

Then remove the air bag diagnosis sensor unit.



NOTF:

 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.



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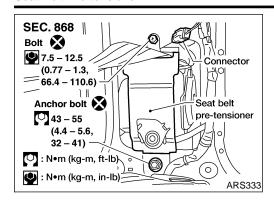
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Seat Belt Pre-tensioner



Seat Belt Pre-tensioner REMOVAL AND INSTALLATION

CAUTION:

- Before servicing SRS, turn the ignition switch OFF, disconnect both battery cables and wait at least 3 minutes.
- 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 "SRS Operation Check", RS-43.
- Do not attempt to disassemble air bag diagnosis sensor unit or seat belt pre-tensioner.
- Replace air bag diagnosis sensor unit or seat belt pretensioner if it has been dropped or sustained an impact.
- Do not expose seat belt pre-tensioner to temperatures exceeding 80°C (176°F).

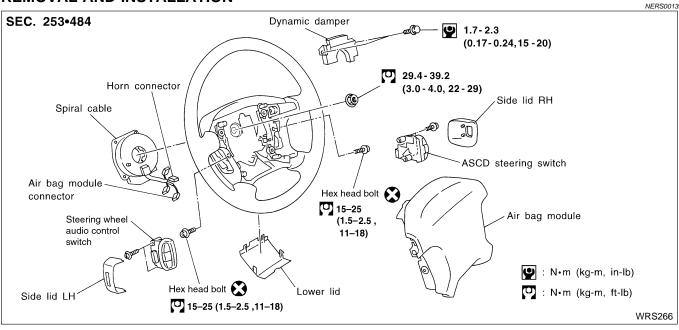
For removal of seat belt pre-tensioner, refer to "Front Seat Belt", RS-5.

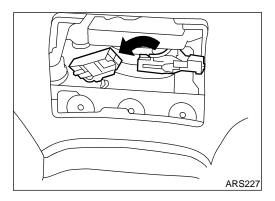
NOTE:

To install, reverse removal procedure.

Driver Air Bag Module and Spiral Cable

REMOVAL AND INSTALLATION





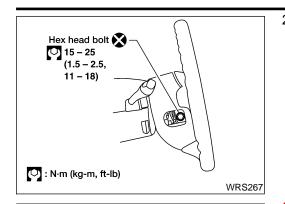
REMOVAL

CAUTION:

NFRS0014

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

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



Remove side lids. Remove the hex head bolts.



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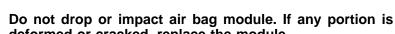
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CAUTION:

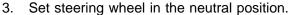
- Always place air bag module with pad side facing upward.
- Do not attempt to disassemble air bag module.
- The special bolts are coated with bonding agent. Do not use old bolts after removal; replace with new ones.
- Do not insert any foreign objects (screwdriver, etc.) into air bag module connector.



- ing 90°C (194°F).
- Do not allow oil, grease or water to come in contact with



the air bag module.



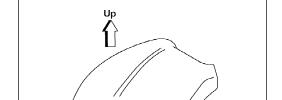
- Disconnect spiral cable connector from steering wheel subharness and remove nut.
- Using steering wheel puller, remove steering wheel. Be careful not to over-tighten puller bolt on steering wheel.

CAUTION:

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

Remove the four spiral cable retaining screws. Remove the spiral cable.

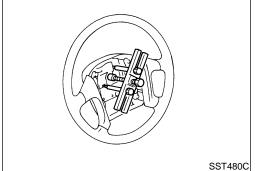
- Do not attempt to disassemble spiral cable.
 - Do not apply lubricant to the spiral cable.



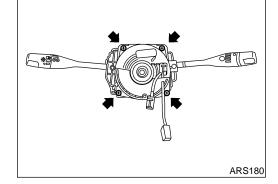
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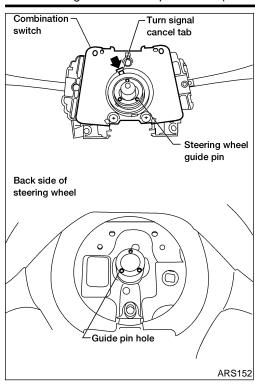
SBF814E



SST480C



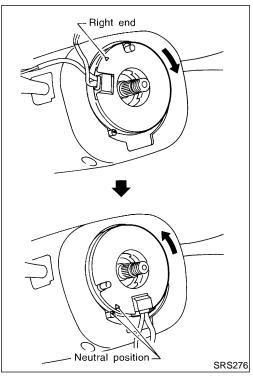
Driver Air Bag Module and Spiral Cable (Cont'd)



INSTALLATION

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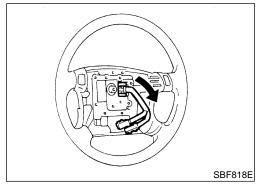
- . Set the front wheels in the straight-ahead position.
- Align the turn signal cancel tab with the notch of the combination switch as shown.



- 3. Rotate the spiral cable fully clockwise until tight.
- 4. Rotate the spiral cable counterclockwise approximately 2.25 turns and align white pin with arrow on housing.
- When the spiral cable is centered, white pin is aligned with arrow on housing and yellow wheel shows in window.

CAUTION:

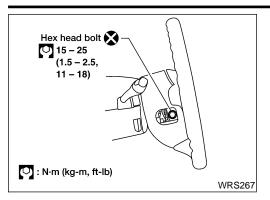
- The spiral cable may snap during steering operation if the spiral cable is installed in an improper position.
- Also, with the steering linkage disconnected, the cable may snap by turning the steering wheel beyond the limited number of turns. The spiral cable can be turned counterclockwise approximately 2.25 turns. Always perform SRS self-diagnosis after installing the air bag module. Refer to "SRS Operation Check", RS-43.
- 5. Connect spiral cable to air bag harness and tighten screws. Install steering column covers.



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

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

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

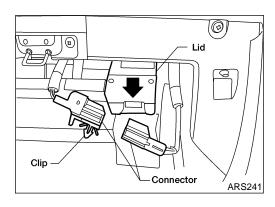


- Position driver air bag module and install two new hex head bolts.
- 10. Connect driver air bag module connector.
- 11. Install all lids and steering switches.
- 12. Connect both battery cables.
- 13. Conduct self-diagnosis to ensure entire SRS operates properly. (Use CONSULT-II or "AIR BAG" warning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

NOTE:

CAUTION:

 After replacement, perform self-diagnosis for SRS. Refer to "SRS Operation Check", RS-43.



Front Passenger Air Bag Module REMOVAL

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

Always work from the side of an air bag module.

Open glove box assembly.

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.

Remove glove box. Refer to BT-20, "INSTRUMENT PANEL ASSEMBLY".

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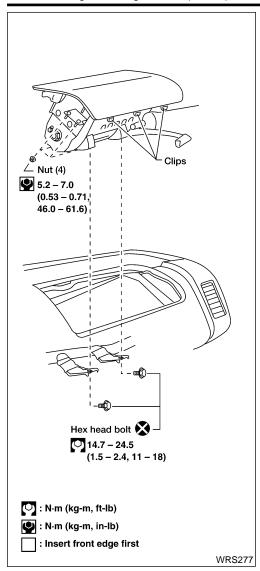
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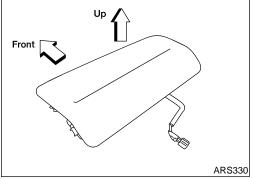
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Front Passenger Air Bag Module (Cont'd)



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

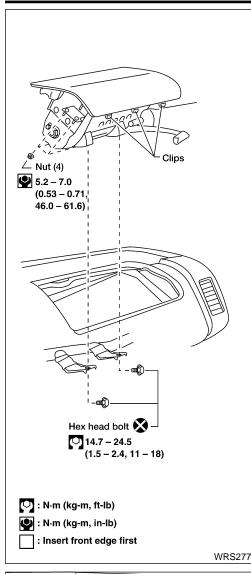


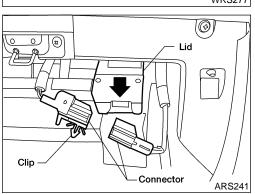


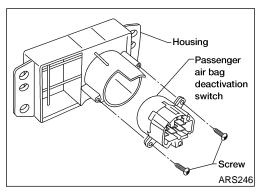
CAUTION:

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

Front Passenger Air Bag Module (Cont'd)







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.

Install two new hex head bolts.

Install glove box. Refer to BT-20, "INSTRUMENT PANEL ASSEMBLY".

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Connect passenger air bag module connector to air bag harness connector.

ness connector.

4. Attach passenger air bag module connector clip to lid.

5. Close lid and glove box.

Connect both battery cables.

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

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NOTE:

After replacement, perform self-diagnosis for SRS. Refer to "SRS Operation Check", RS-43.

RS

Passenger Air Bag Deactivation Switch REMOVAL

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

 Detach instrument stay cover lower center from instrument panel. Refer to BT-20, "Removal and Installation".

2. Disconnect passenger air bag deactivation switch harness connector and cigarette lighter harness connector.

3. Remove instrument stay cover lower center.

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 Remove two screws and remove passenger air bag deactivation switch.

INSTALLATION

CAUTION:

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

NOTE:

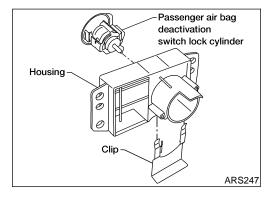
- Be sure that the passenger air bag deactivation switch and lock cylinder are in the same position as during removal for proper engagement.
- To install, reverse removal procedure.
- After replacement, perform self-diagnosis for SRS. Refer to "SRS Operation Check", RS-43.

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.



- Detach instrument stay cover lower center from instrument panel. Refer to BT-20, "Removal and Installation".
- 2. Disconnect passenger air bag deactivation switch harness connector and cigarette lighter harness connector.
- Remove instrument stay cover lower center.
- Remove four screws and housing from instrument stay cover lower center.
- Remove clip from bottom of housing.
- Remove passenger air bag deactivation switch lock cylinder from front of housing.

INSTALLATION

NOTE:

NERS0049

- 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-43.

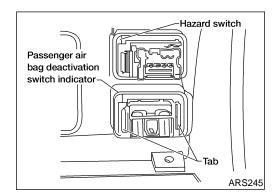
Passenger Air Bag Deactivation Switch Indicator

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.

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Remove meter cover. Refer to **BT-20**, "Removal and Installation".

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Release passenger air bag deactivation switch indicator tabs from back side of meter cover.

Remove passenger air bag deactivation switch indicator from front side of meter cover.

INSTALLATION

NOTE:

To install, reverse removal procedure.

After replacement, perform self-diagnosis for SRS. Refer to "SRS Operation Check", RS-43.

Disposal of Air Bag Module and Seat Belt Pretensioner

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Before disposing of air bag modules and seat belt pretensioners, 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-32.

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When deploying air bag module or seat belt pre-tensioner, always use the Special Service Tool; Deployment tool KV99106400 (Kent-Moore No. J38381).

AX

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.

RS

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.

HA

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.

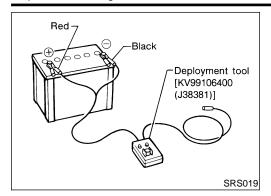
SC

Use a voltmeter to make sure the vehicle battery is fully charged.

EL

Do not dispose of the air bag module or seat belt pre-tensioner un-deployed.

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



CHECKING DEPLOYMENT TOOL Connecting to Battery

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NERS0018S0101

CAUTION:

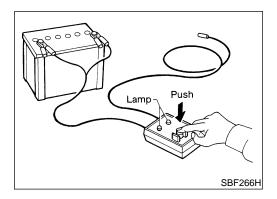
The battery must show voltage of 9.6V or more.

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.

CAUTION:

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



Deployment Tool Check

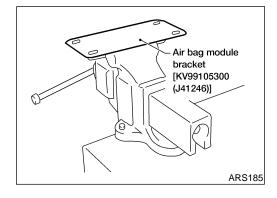
Press the deployment tool [SST: KV99106400 (J38381)] switch to the ON position. The left side lamp on the deployment tool [SST: KV99106400 (J38381)], marked "AIR BAG CONNECTOR VOLTAGE", should illuminate. If it does not illuminate, replace the tool.

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.

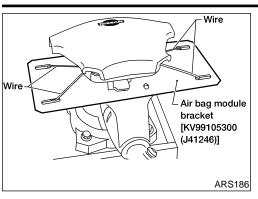


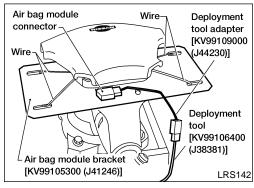
DEPLOYMENT PROCEDURES FOR AIR BAG MODULE (OUTSIDE OF VEHICLE)

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.

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





Deployment of Driver Air Bag Module (Outside of vehicle)

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

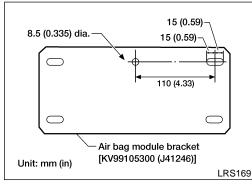
If a gap exists between driver air bag module and air bag module bracket, use a piece of wood inserted in the gap to stabilize the air bag module.

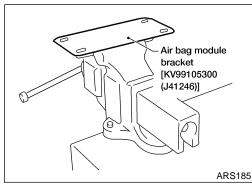
Use wire of at least 1 mm (0.04 in) diameter.

- Firmly secure air bag module bracket [SST: KV99105300 (J41246)] with driver air bag module attached, in a vise.
- Connect deployment tool adapter [SST: KV99109000 (J44230)] to deployment tool [SST: KV99106400 (J383810)] and driver air bag module connector.
- Connect red clip of deployment tool [SST: KV99106400 (J38381)] to battery positive terminal and black clip to negative
- The right side lamp on the deployment tool [SST: KV99106400 (J38381)], marked "DEPLOYMENT TOOL POWER", should glow green, not red.
- Press the button on the deployment tool [SST: KV99106400 (J38381)]. The left side lamp on the deployment tool [SST: KV99106400 (J38381)], 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)

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

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

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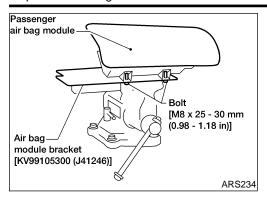
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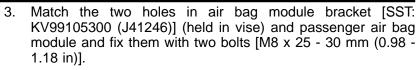
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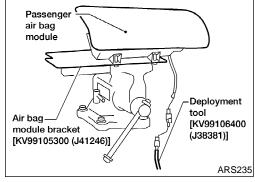
Disposal of Air Bag Module and Seat Belt Pre-tensioner (Cont'd)



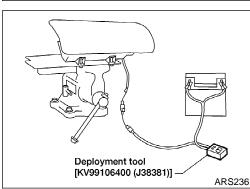


CAUTION:

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



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

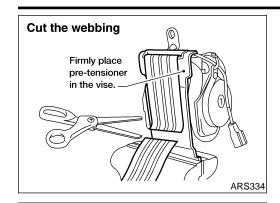


- Connect red clip of deployment tool [SST: KV99106400 (J38381)] to battery positive terminal and black clip to negative terminal.
- 6. The right side lamp on the deployment tool [SST: KV99106400 (J38381)], marked "DEPLOYMENT TOOL POWER", should glow green, not red.
- Press the button on the deployment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

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



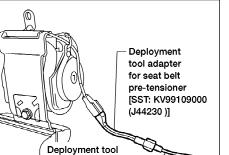
Deployment of Seat Belt Pre-tensioner (Outside of vehicle)

1. Firmly anchor seat belt pre-tensioner in a vise, then cut webbing off.



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[KV99106400 (J38381)]

Deployment tool

[KV99106400 (J38381)]

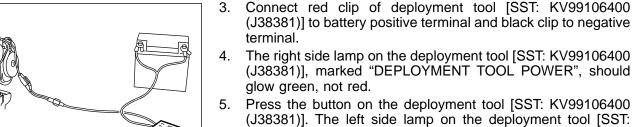
2. Connect deployment tool adapter [SST: KV99109000 (J44230)] to deployment tool [SST: KV99106400 (J38381)] connector and seat belt pre-tensioner connector.



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KV99106400 (J38381)], marked "AIR BAG CONNECTOR VOLTAGE", will illuminate and the seat belt pre-tensioner will

AX

CAUTION:

deploy.

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



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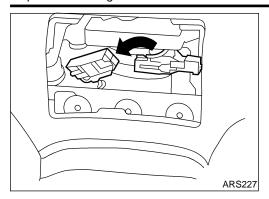
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Disposal of Air Bag Module and Seat Belt Pre-tensioner (Cont'd)



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

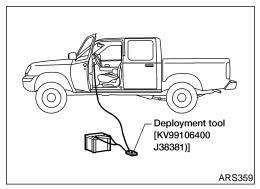
When disposing of a vehicle, deploy air bag modules and seat belt pre-tensioners while they are mounted in vehicle.

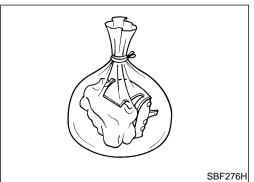
CAUTION:

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

- 1. Disconnect both battery cables and wait 3 minutes.
- 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, use deployment tool adapter [SST: KV991065S0 (J38381–30)] to attach air bag module to deployment tool [SST: KV99106400 (J38381)] connector. For seat belt pre-tensioner and driver air bag module, use deployment tool adapter [SST: KV99109000 (J44230)] to attach seat belt pre-tensioner and driver air bag module 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.
- The right side lamp on the deployment tool [SST: KV99106400 (J38381)], marked "DEPLOYMENT TOOL POWER", should glow green, not red.
- Press the button on the deployment tool [SST: KV99106400 (J38381)]. The left side lamp on the deployment tool [SST: KV99106400 (J38381)], 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 pretensioners, wait at least 30 minutes and 10 minutes, respectively. Seal them in a plastic bag before disposal.

CAUTION:

- Never apply water to a deployed air bag module or seat belt pre-tensioner.
- Be sure to wear gloves when handling a deployed air bag module or seat belt pre-tensioner.
- No poisonous gas is produced upon air bag module or seat belt pre-tensioner deployment. However, be careful not to inhale gas since it irritates the throat and can cause choking.
- Do not attempt to disassemble air bag module or seat belt pre-tensioner.
- Air bag module or seat belt pre-tensioner cannot be reused
- Wash your hands clean after finishing work.

Trouble Diagnoses Introduction

Trouble Diagnoses Introduction

CAUTION:

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

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Do not attempt to repair, splice or modify the SRS wiring harness. If the harness is damaged, replace it with a new one.

Keep ground portion clean.

DIAGNOSIS FUNCTION

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

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

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

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

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

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NOTE:

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

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DIAGNOSIS MODE FOR CONSULT-II

"SELF-DIAG [CURRENT]"

NERS0030S02

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.

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"SELF-DIAG [PAST]"

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

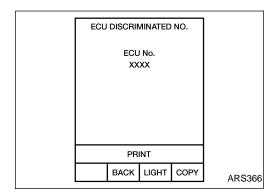
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"TROUBLE DIAG RECORD"

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

"ECU DISCRIMINATED NO."

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



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ECU Discriminated No. Model ECU Part No. Regular Cab 28556 9Z715 A602 King Cab 28556 97815 A605

Trouble Diagnoses Introduction (Cont'd)

Crew Cab	28556 9Z410	A603
	28556 9Z510	A604

Trouble Diagnoses Introduction (Cont'd)

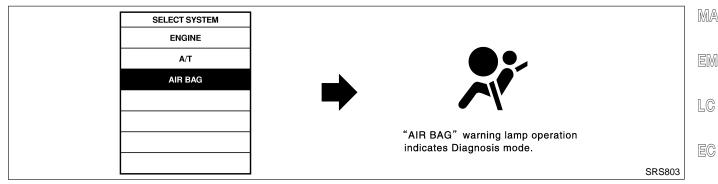
(P) HOW TO CHANGE SELF-DIAGNOSIS MODE WITH CONSULT-II

From User Mode to Diagnosis Mode

=NERS0030S03

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



From Diagnosis Mode to User Mode

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

SELECT SYSTEM ENGINE A/T AIR BAG	"AIR BAG" warning lamp operation indicates User mode.	
		SRS804

NOTE: HOW TO CHANGE SELF-DIAGNOSIS MODE WITHOUT CONSULT-II

From User Mode to Diagnosis Mode

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

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

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

From Diagnosis Mode to User Mode

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

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

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

NERS0030S05

NERS0030S0501

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Trouble Diagnoses Introduction (Cont'd)

HOW TO ERASE SELF-DIAGNOSIS RESULTS

(P) With CONSULT-II

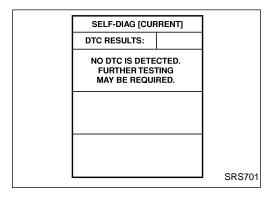
=NERS0030S04

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 warning lamp even if the malfunction is repaired completely.



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

⋈ Without CONSULT-II

/FD0000000

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

How to Perform Trouble Diagnoses for Quick and Accurate Repair

How to Perform Trouble Diagnoses for Quick and Accurate Repair

=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.

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INFORMATION FROM CUSTOMER

WHAT Vehicle model

WHEN Date, Frequencies

WHERE Road conditions

HOW Operating conditions, Symptoms

NERS0031S01

PRELIMINARY CHECK

Check that the following parts are in good order.

- Battery, refer to SC-4, "BATTERY"
- Fuse
- System component-to-harness connections

NERS0031S02

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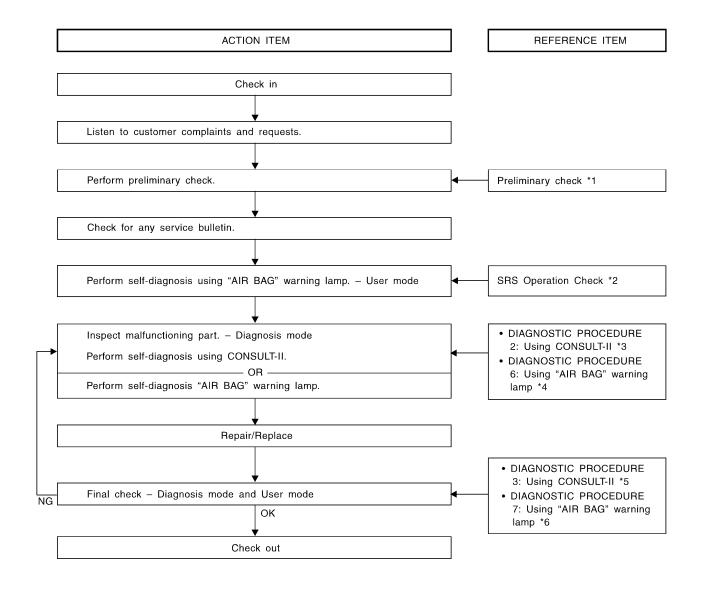
EL

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

WORK FLOW

NOTE:

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

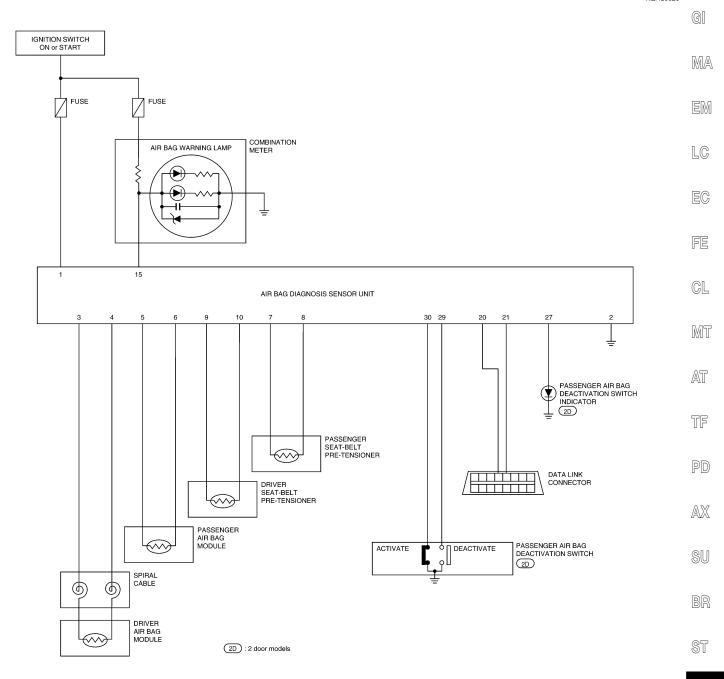


SRS799

*1: RS-37 *2: RS-43 *3: RS-43 *4: RS-54 *5: RS-48 *6: RS-58

Circuit Diagram

NERS0020



RS

37

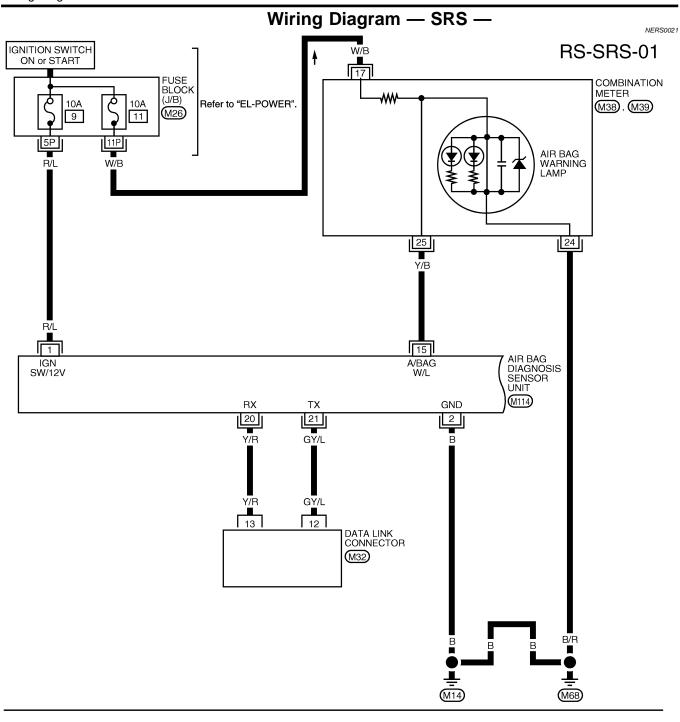
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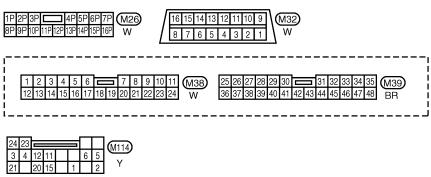
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WRS203

IDX





LRS112

Wiring Diagram — SRS — (Cont'd)

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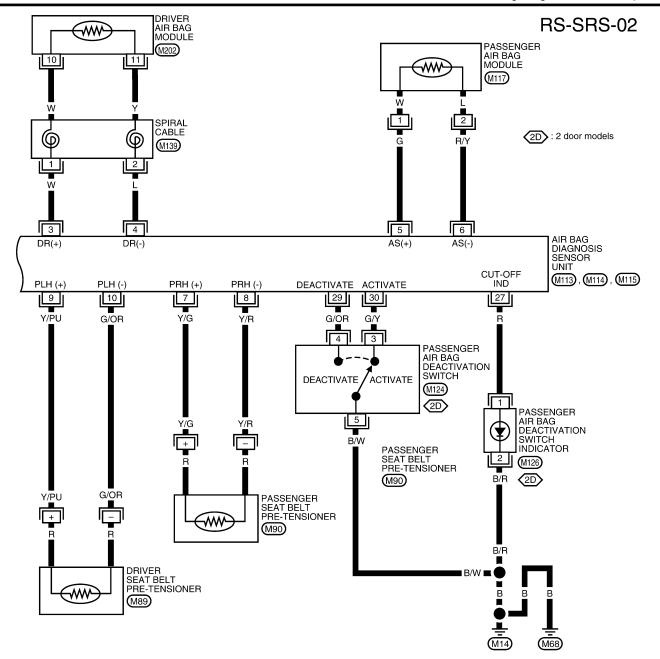
RS

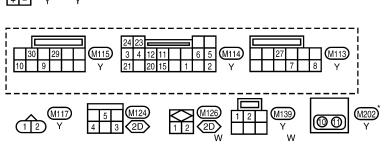
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*: This connector is not shown in "HARNESS LAYOUT" of EL section.

□ (M89), (M90)

WRS279

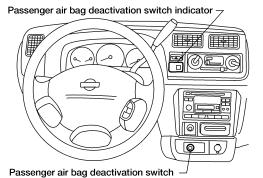
Passenger Air Bag Deactivation Switch Indicator Operation Check

Passenger Air Bag Deactivation Switch Indicator Operation Check

NERS0052

INDICATOR OPERATION CHECK

Check passenger air bag deactivation switch indicator operation when turning ignition switch ON with passenger air bag deactivation switch in ON and OFF positions.



ARS240

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 "SRS Operation Check", RS-43.
NG •	GO TO 2.

2 PERFORM SELF-DIAGNOSIS

OK

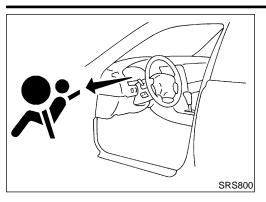
Perform self-diagnosis using "AIR BAG" warning lamp in User mode. Refer to "SRS Operation Check", RS-43. **NOTE:**

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.

OK or NG

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 "SRS Operation Check", RS-43 or "DIAGNOSTIC PROCEDURE 6", RS-54 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.



SRS Operation Check DIAGNOSTIC PROCEDURE 1

NERS0022

Checking Air Bag Operation by Using "AIR BAG" Warning Lamp — User Mode After turning ignition switch from "OFF" to "ON", "AIR BAG"

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- warning lamp operates.

Compare "AIR BAG" warning lamp operation to the chart

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"AIR BAG" warning lamp operation — User mode —	SRS condition	Reference item	_
IGN ON ↓	No malfunction is detected. No further action is necessary.	_	E(
	The system is malfunctioning and needs to be repaired as indicated.	Go to "DIAGNOSTIC PROCEDURE 2", RS-43 or "DIAGNOSTIC PROCE- DURE 6" RS-54.	C M
IGN ON	Air bag is deployed. Seat belt pre-tensioner is deployed.	Go to "Collision Diagnosis", RS-63.	A' T
OFF MRS097A	Air bag fuse, diagnosis sensor unit or harness is malfunctioning and needs to be repaired.	Go to "DIAGNOSTIC PROCEDURE 9", RS-60.	P
IGN ON	One of the following has occurred and needs to be repaired. • Meter fuse is blown. • "AIR BAG" warning lamp circuit has open or	Go to "DIAGNOSTIC PROCEDURE 10", RS-62.	A S
OFF MRS098A	short. • Diagnosis sensor unit is malfunctioning.		B

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Trouble Diagnoses with CONSULT-II **DIAGNOSTIC PROCEDURE 2**

NFRS0023

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

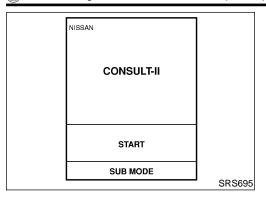
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- 1. Turn ignition switch "OFF".
- Connect "CONSULT-II" to data link connector.

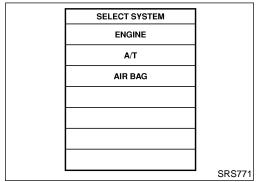
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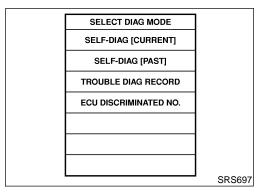
(P) Trouble Diagnoses with CONSULT-II (Cont'd)



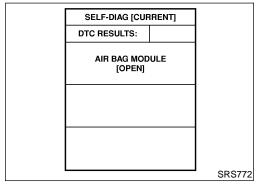
- 3. Turn ignition switch "ON".
- 4. Touch "START".



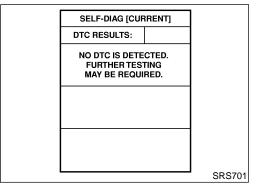
Touch "AIR BAG".



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



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



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

If the battery voltage is less than 9V, charge the battery. Then go to "DIAGNOSTIC PROCEDURE 3", RS-48.

If the battery voltage is OK, refer to "DIAGNOSTIC PROCEDURE 4 (CONTINUE FROM DIAGNOSTIC PROCEDURE 2)", RS-49, to diagnose the following cases:

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

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

- Touch "COPY". 8.
- Compare diagnostic codes to "CONSULT-II Diagnostic Code Chart". Refer to "CONSULT-II Diagnostic Code Chart ('SELF-DIAG [CURRENT]')", RS-46.
- 10. Touch "BACK" key of CONSULT-II until "SELECT SYSTEM" appears in order to return to User mode from Diagnosis mode.
- MA
- 11. Turn ignition switch "OFF", then turn off and disconnect CONSULT-II, and disconnect both battery cables.
- 12. Repair the system as outlined by the "Repair order" in "CON-SULT-II Diagnostic Code Chart", that corresponds to the selfdiagnostic result. For replacement procedure of component parts, refer to the applicable Removal and Installation procedure.
- 13. After repairing the system, refer to "DIAGNOSTIC PROCE-DURE 3", RS-48 for final checking.

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

=NERS0023S0101

		,	=NERS0023S0101
Self-diagnosis result		Explanation	Repair order *"Recheck SRS at each replace- ment."
NO DTC IS DETECTED.	When malfunction is indicated by the "AIR BAG" warning lamp in User mode	 Low battery voltage (Less than 9V) 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. 	 Go to "DIAGNOSTIC PROCE- DURE 3", RS-48 after charging battery. Go to "DIAGNOSTIC PROCE- DURE 4", RS-49.
	No malfunction is determined to the second sec	ected.	Go to "DIAGNOSTIC PROCE- DURE 3", RS-48.
AIRBAG MODULE [OPEN]	Driver air bag module cable).	circuit is open (including the spiral	Visually check wiring harness connections.
AIRBAG MODULE [VB-SHORT]	Driver air bag module circuit (including the s	circuit is shorted to some power supply piral cable).	Replace harness if it has visible damage. Replace spiral cable. Replace driver air bag module.
AIRBAG MODULE [GND-SHORT]	Driver air bag module circuit is shorted to ground (including the spiral cable).		(Before disposing of it, it must be deployed.)
AIRBAG MODULE [SHORT]	Driver air bag module	circuits are shorted to each other.	Replace air bag diagnosis sensor unit. Replace the related harness.
ASSIST A/B MODULE [OPEN]	Passenger air bag mo	dule circuit is open.	Visually check wiring harness connections.
ASSIST A/B MODULE [VB-SHORT]	 Passenger air bag mo supply circuit. 	dule circuit is shorted to some power	Replace harness if it has visible damage. Replace passenger air bag mod-
ASSIST A/B MODULE [GND-SHORT]	Passenger air bag mo	dule circuit is shorted to ground.	ule. (Before disposing of it, it must be deployed.) 4. Replace air bag diagnosis sensor
ASSIST A/B MODULE [SHORT]	Passenger air bag mo	dule circuits are shorted to each other.	unit. 5. Replace the related harness.
PRE-TEN FRONT LH [OPEN/VB-SHORT]	The circuit for the driv shorted to some power	er seat belt pre-tensioner is open or er supply circuit.	 Visually check wiring harness connections. Replace harness if it has visible damage. Replace the driver's seat belt.
PRE-TEN FRONT LH [GND-SHORT]	The circuit for the driv ground.	er seat belt pre-tensioner is shorted to	(Before disposing of it, it must be deployed.)4. Replace air bag diagnosis sensor unit.5. Replace the related harness.
PRE-TEN FRONT RH [OPEN/VB-SHORT]	The circuit for the pas or shorted to some po	senger seat belt pre-tensioner is open wer supply circuit.	Visually check wiring harness connections. Replace harness if it has visible damage. Replace the front passenger's seat
PRE-TEN FRONT RH [GND-SHORT]	The circuit for the pas shorted to ground.	senger seat belt pre-tensioner is	belt. (Before disposing of it, it must be deployed.) 4. Replace air bag diagnosis sensor unit. 5. Replace the related harness.

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

Self-diagnosis result	Explanation	Repair order *"Recheck SRS at each replace- ment."	
CONTROL UNIT	Air bag diagnosis sensor unit is malfunctioning.	 Visually check wiring harness connections. Replace harness if it has visible damage. Replace air bag diagnosis sensor unit. Replace the related harness. 	
Code B4 or	Activate terminal is open.	Visually check wiring harness connections.	
PASS A/B DEACT SW	Activate terminal is shorted to ground.	Replace harness if it has visible damage.	
	Deactivate terminal is open.	Replace passenger air bag deactivation switch. (The key cylinder of passenger air bag deactivation	
	Deactivate terminal is shorted to ground.	switch does not have to be replaced.)	
	Activate terminal and deactivate terminal are shorted to each other.	Replace air bag diagnosis sensor unit. Replace the related harness.	
Code B5 or PASS A/B DEACT SW	Passenger air bag deactivation switch indicator circuit is open.	Visually check wiring harness connections. Replace harness if it has visible	
INDICATOR	Passenger air bag deactivation switch indicator circuit is shorted to some power supply circuit.	damage. 3. Replace passenger air bag deactivation switch indicator.	
	Passenger air bag deactivation switch indicator circuit is shorted to ground.	4. Replace air bag diagnosis sensor unit.5. Replace the related harness.	
INDEFINITE FAILURES [AIR BAGS]	Passenger air bag deactivation switch status is not identified.	Visually check wiring harness connections.	
		2. Replace harness if it has visible damage.3. Replace passenger air bag deacti-	
		vation switch. 4. Replace air bag diagnosis sensor unit.	
		5. Replace the related harness.	

^{*:} Follow the procedures in numerical order when repairing malfunctioning parts. Confirm whether malfunction is eliminated using the "AIR BAG" warning lamp (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.





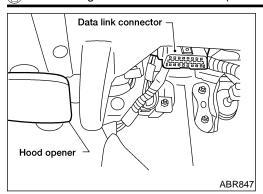


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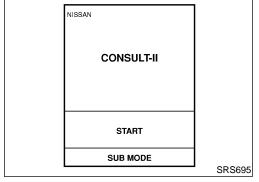
(P) Trouble Diagnoses with CONSULT-II (Cont'd)



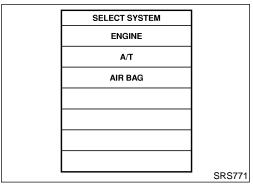
DIAGNOSTIC PROCEDURE 3

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

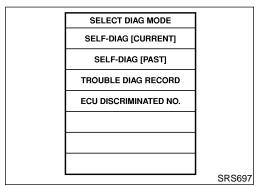
- 1. After repairing SRS, connect both battery cables.
- 2. Connect CONSULT-II to data link connector.
- 3. Turn ignition switch ON.



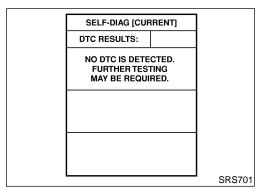
Touch "START".



5. Touch "AIR BAG".



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



7. If no malfunction is detected on "SELF-DIAG [CURRENT]", repair of SRS is completed. Refer to step 8. If any malfunction was detected on "SELF-DIAG [CURRENT]", the malfunctioning part is not repaired completely or another malfunctioning part is detected. Refer to "DIAGNOSTIC PROCEDURE 2", RS-43 and repair malfunctioning part completely.

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

SELF-DIAG [CURRENT] DTC RESULTS: PRE-TEN FRONT LH [OPEN/VB-SHORT] **ERASE** SRS698

SELECT DIAG MODE

SELF-DIAG [CURRENT] SELF-DIAG [PAST] TROUBLE DIAG RECORD

ECU DISCRIMINATED NO.

SELF-DIAG [PAST]

NO DTC IS DETECTED. **FURTHER TESTING**

MAY BE REQUIRED

DTC RESULTS:

SRS697

SRS702

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.

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

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

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

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

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13. Go to "SRS Operation Check", RS-43 to check SRS operation by using "AIR BAG" warning lamp with User mode.

DIAGNOSTIC PROCEDURE 4 (CONTINUED FROM **DIAGNOSTIC PROCEDURE 2)**

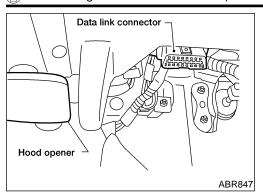
Inspecting SRS malfunction record

NERS0023S03

1	CHECK FOR PROBLE	M CODE THAT MIGHT NOT HAVE BEEN ERASED AFTER PREVIOUS REPAIR		
Is it th	Is it the first time for maintenance of SRS?			
	Yes or No			
Yes	>	Go to "DIAGNOSTIC PROCEDURE 5", RS-50.		
No	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-48.			

SC

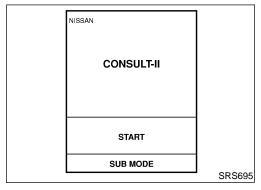
(P) Trouble Diagnoses with CONSULT-II (Cont'd)



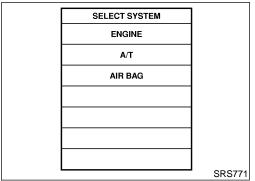
DIAGNOSTIC PROCEDURE 5

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

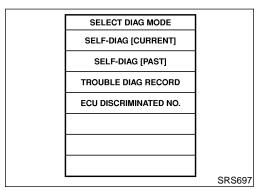
- 1. Turn ignition switch OFF.
- 2. Connect CONSULT-II to data link connector.
- 3. Turn ignition switch ON.



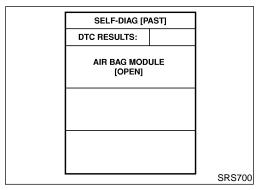
4. Touch "START".



5. Touch "AIR BAG".



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



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

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

SELF-DIAG [PAST] DTC RESULTS: NO DTC IS DETECTED. FURTHER TESTING MAY BE REQUIRED. SRS702

SELECT DIAG MODE

SELF-DIAG [CURRENT]

SELF-DIAG [PAST]

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

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8. Touch "TROUBLE DIAG RECORD".

NOTE:

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

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

- Self-diagnosis result is displayed on "TROUBLE DIAG RECORD".
- 10. Touch "PRINT".
- 11. Compare self-diagnosis result to "Intermittent Malfunction Diagnostic Code Chart", RS-52.
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- 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-52. For replacement procedure of component parts, refer to RS-19.
- 15. Go to "DIAGNOSTIC PROCEDURE 3", RS-48 for final checking.

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

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

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Self-diagnosis result		Explanation	Repair order*
NO DTC IS DETECTED.	When malfunction is indicated by the "AIR BAG" warning lamp in User mode	Low battery voltage (Less than 9V)	Go to "DIAGNOSTIC PROCE- DURE 3", RS-48 after charging battery.
	No malfunction is determined to the second sec	cted.	Go to "DIAGNOSTIC PROCE- DURE 3", RS-48.
AIRBAG MODULE [OPEN]	Driver air bag module cable)	circuit is open. (including the spiral	Visually check the wiring harness connection.
AIRBAG MODULE [VB-SHORT]	Driver air bag module circuit is shorted to some power supply ircuit (including the apiral cable)		2. Replace the harness if it has visible damage.3. If the harness check result is OK,
AIRBAG MODULE [GND-SHORT]	Driver air bag module the spiral cable)	circuit is shorted to ground. (including	replace driver air bag module (Before disposal of it, it must be deployed.), diagnosis sensor unit
AIRBAG MODULE [SHORT]	Driver air bag module	circuits are shorted to each other.	and spiral cable.
ASSIST A/B MODULE [VB-SHORT]	Front passenger air ba power supply circuit.	g module circuit is shorted to some	Visually check the wiring harness connection.
ASSIST A/B MODULE [OPEN]	Front passenger air ba	g module circuit is open.	2. Replace the harness if it has visible damage.3. If the harness check result is OK,
ASSIST A/B MODULE [GND-SHORT]	Front passenger air ba	g module circuit is shorted to ground.	replace front passenger air bag module (Before disposal of it, it must be deployed.), and diagnosis
ASSIST A/B MODULE [SHORT]	Front passenger air ba other.	g module circuits are shorted to each	sensor unit.
PRE-TEN FRONT LH [OPEN/VB-SHORT]	The circuit for driver se shorted to some power	eat belt pre-tensioner is open or r supply circuit.	 Visually check the wiring harness connections. Replace the harness if it has visible damage. If the harness check is OK,
PRE-TEN FRONT LH [GND-SHORT]	The circuit for driver seground.	eat belt pre-tensioner is shorted to	replace the diagnosis sensor unit and driver seat belt. (Before disposing the driver seat belt pre-tensioner, it must be deployed.)
PRE-TEN FRONT RH [OPEN/VB-SHORT]	The circuit for passeng shorted to some power	er seat belt pre-tensioner is open or r supply circuit.	 Visually check the wiring harness connections. Replace the harness if it has visible damage. If the harness check is OK,
PRE-TEN FRONT RH [GND-SHORT]	The circuit for passeng ground.	er seat belt pre-tensioner is shorted to	replace the diagnosis sensor unit and front passenger seat belt. (Before disposing the passenger seat belt pre-tensioner, it must be deployed.)
CONTROL UNIT	Diagnosis sensor unit i	s malfunctioning.	 Visually check the wiring harness connection. Replace the harness if it has visible damage. If the harness check is OK, replace the diagnosis sensor unit.

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

Self-diagnosis result	Explanation	Repair order*
Code B4	Activate terminal is open.	Visually check wiring harness con- nections.
PASS A/B DEACT SW	Activate terminal is shorted to ground.	Replace harness if it has visible damage.
	Deactivate terminal is open.	If the harness visual check result is OK, replace passenger air bag
	Deactivate terminal is shorted to ground.	deactivation switch. (The key cylin-
	Activate terminal and deactivate terminal are shorted to each other.	der of passenger air bag deactiva- tion switch does not have to be replaced.)
Code B5 or	Passenger air bag deactivation switch indicator circuit is open.	Visually check wiring harness connections.
PASS A/B DEACT SW INDICATOR	Passenger air bag deactivation switch indicator circuit is shorted to some power supply circuit.	2. Replace harness if it has visible damage.3. If the harness visual check result
	Passenger air bag deactivation switch indicator circuit is shorted to ground.	is OK, replace passenger air bag deactivation switch indicator.
INDEFINITE FAILURES [AIR BAGS]	Passenger air bag deactivation switch status is not identified.	Visually check wiring harness connections.
[runt Bride]		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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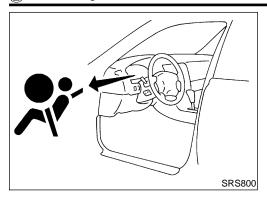
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▼ Trouble Diagnoses without CONSULT-II DIAGNOSTIC PROCEDURE 6

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

NOTE:

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

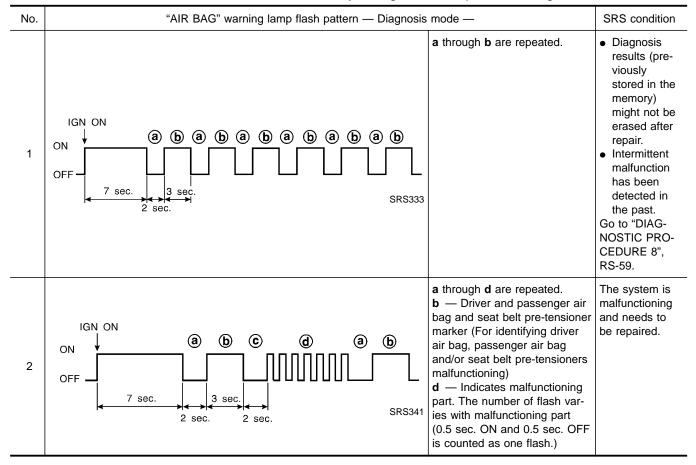
- 1. Turn ignition switch "ON".
- 2. After "AIR BAG" warning lamp lights for 7 seconds, turn ignition switch "OFF" within 1 second.
- Wait more than 3 seconds.
- 4. Repeat steps 1 to 3 three times.
- Turn ignition switch "ON".SRS is now in Diagnosis mode.
- "AIR BAG" warning lamp operates in Diagnosis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

NOTE:

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

If the battery voltage is less than 9V, charge the battery. Then refer to "DIAGNOSTIC PROCEDURE 7", RS-58.

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



- Malfunctioning part is indicated by the number of flashes (part d). Compare the number of flashes to "Air Bag Warning Lamp Flash Code Chart". Refer to "Air Bag Warning Lamp Flash Code Chart (Diagnosis Mode)", RS-56, and locate malfunctioning part.
- 8. Turn ignition switch "OFF", and disconnect both battery cables.

Trouble Diagnoses without CONSULT-II (Cont'd)

- 9. Repair the system as outlined by the "Repair order" in "Warning Lamp Flash Code Chart" that corresponds to the flash code. For replacement procedure of component parts, refer to the applicable Removal and Installation procedure.
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- 10. After repairing the system, refer to "DIAGNOSTIC PROCE-DURE 7", RS-58.

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Air Bag Warning Lamp Flash Code Chart (Diagnosis Mode)

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Warning lamp	Flash code d (# of flashes)	Explanation	Repair order *Recheck SRS at each replacement.
	0	 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-59.
	2	The driver seat belt pre-tensioner circuit is mal- functioning.	 Visually check wiring harness connections. Replace harness if it has visible damage. Replace driver seat belt pre-tensioner. (Before disposing, it must be deactivated.) Replace air bag diagnosis sensor unit. Replace the related harness.
dw		The driver air bag module circuit is malfunctioning.	 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.
"AIR BAG" warning lamp	3	The passenger seat belt pre-tensioner circuit is malfunctioning.	 Visually check wiring harness connections. Replace harness if it has visible damage. Replace passenger seat belt pre-tensioner. (Before disposing of it, it must be deactivated.) Replace air bag diagnosis sensor unit. Replace the related harness.
3.	7	The air bag diagnosis sensor unit is malfunctioning.	 Visually check wiring harness connections. Replace harness if it has visible damage. Replace air bag diagnosis sensor unit. Replace the related harness.
		The passenger air bag module circuit is malfunctioning.	 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.
	9	Passenger air bag deactivation switch is not identified.	 Visually check wiring harness connections. Replace harness if it has visible damage. Replace passenger air bag deactivation switch. (The key cylinder of the deactivation switch does not have to be replaced.) Replace air bag diagnosis sensor unit. Replace the related harness.

Trouble Diagnoses without CONSULT-II (Cont'd)

Warning Iamp	Flash code d (# of flashes)	Explanation	Repair order *Recheck SRS at each replacement.
"AIR BAG" warning lamp	10	Passenger air bag deactivation switch is mal- functioning.	 Visually check wiring harness connections. Replace harness if it has visible damage. Replace passenger air bag deactivation switch. (The key cylinder of the deactivation switch does not have to be replaced.) Replace air bag diagnosis sensor unit. Replace the related harness.
	11	Passenger air bag deactivation switch indicator is malfunctioning.	 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.

^{*} 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.

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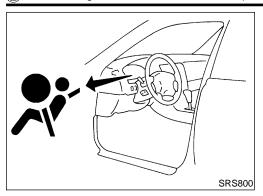
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Trouble Diagnoses without CONSULT-II (Cont'd)



DIAGNOSTIC PROCEDURE 7

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

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

No.	"AIR BAG" warning lamp flash pattern — Diagnosis mode —		
1	IGN ON ON ON OFF 7 sec. 2 sec. SRS333	a through b are repeated.	No malfunction is detected or repair is com- pleted. No further action is nec- essary.
2	OFF 7 sec. 2 sec. 2 sec. SRS341	a through d are repeated. b — Driver and passenger air bag and seat belt pre-tensioner marker (For identifying driver air bag, passenger air bag and/or seat belt pre-tensioners malfunctioning) d — Indicates malfunctioning part. The number of flashes varies with malfunctioning part (0.5 sec. ON and 0.5 sec. OFF is counted as one flash.)	The system is malfunctioning and needs to be repaired.

NOTE:

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

- 5. If "AIR BAG" warning lamp operates as shown in No. 1 in chart above, turn ignition switch "OFF" to reset from Diagnosis mode to User mode and to erase the memory of the malfunction. Then go to step 6.
 - If "AIR BAG" warning lamp operates as shown in No. 2 or No. 3 in chart above, the malfunctioning part is not repaired completely, or another malfunctioning part is detected. Refer to "DIAGNOSTIC PROCEDURE 6", RS-54, and repair malfunctioning part completely.
- 6. Turn ignition switch "ON". "AIR BAG" warning lamp operates in User mode. Compare "AIR BAG" warning lamp operation to the chart below.

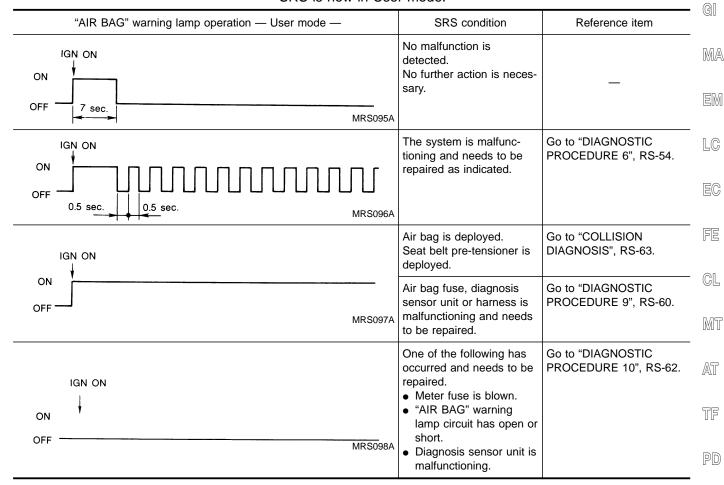
NOTE:

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

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

Trouble Diagnoses without CONSULT-II (Cont'd)

5) Turn ignition switch "ON". SRS is now in User mode.



DIAGNOSTIC PROCEDURE 8 (CONTINUED FROM DIAGNOSTIC PROCEDURE 6)

Inspecting SRS malfunction record

1	CHECK FOR PROBLEM CODE THAT MIGHT NOT HAVE BEEN ERASED AFTER PREVIOUS REPAIR		
Is it t	Is it the first time for maintenance of SRS?		
	Yes or No		
•		Go to "DIAGNOSTIC PROCEDURE 5", RS-50. (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-58.	

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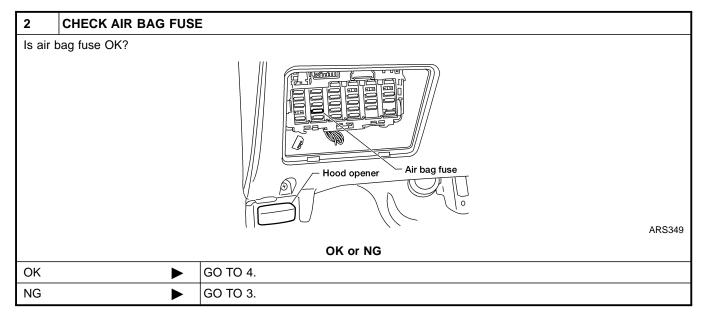
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Trouble Diagnoses: "AIR BAG" Warning Lamp Does Not Turn Off

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

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1	CHECK FOR DEPLOYMENT OF AIR BAG MODULE			
Is ai	r bag module deployed?			
	Yes or No			
Yes	Yes Refer to "Collision Diagnosis", RS-63.			
No	No ▶ GO TO 2.			



3	CHECK AIR BAG FUSE AGAIN			
Replac	Replace air bag fuse and turn ignition switch ON.			
	Does air bag fuse blow again?			
Yes	/es ▶ Repair main harness.			
No	No INSPECTION END			

		Trouble Diagnoses: "AIR BAG" Warning Lamp Does Not Turn Off (Cont'd)		
4	CHECK AIR BAG DIAG	GNOSIS SENSOR UNIT		
 Color Tu To 	urn ignition switch OFF. connect CONSULT-II. urn ignition switch ON. couch "START" on CONSUL uIRBAG" displayed on CC		GI M	
		SELECT DIAG MODE	EN	
		SELF-DIAG [CURRENT]		
		SELF-DIAG [PAST]	LC	
		TROUBLE DIAG RECORD		
		ECU DISCRIMINATED NO.	E(
			FE	
		SRS697		
		Yes or No	Gl	
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.	M'	
5	CHECK HARNESS CO	MINIECTION	At	
		7 7		
Are r	are harness connections between "AIR BAG" warning lamp and air bag diagnosis sensor unit OK?			
	OK or NG			

5	CHECK HARNESS CONNECTION			
Are h	arness connections betwee	n "AIR BAG" warning lamp and air bag diagnosis sensor unit OK?		
	OK or NG			
OK	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.	- P[

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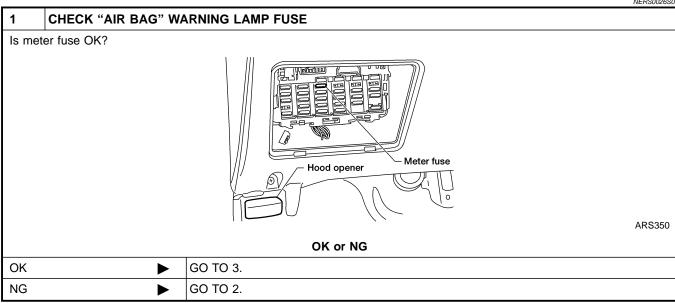
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Trouble Diagnoses: "AIR BAG" Warning Lamp Does Not Turn On

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

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2	CHECK "AIR BAG" WARNING LAMP FUSE AGAIN			
Repla	Replace meter fuse and turn ignition switch ON.			
	Does meter fuse blow again?			
Yes	Yes ► Repair main harness.			
No	No INSPECTION END			

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

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

Collision Diagnosis

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Collision Diagnosis

To repair the SRS, perform the following steps.

When SRS is activated in a collision:

- 1) Replace the diagnosis sensor unit.
- 2) Remove the air bag modules and seat belt pre-tensioner assemblies.
- 3) Check the SRS components using the table shown below:
- Replace any SRS components showing visible signs of damage (dents, cracks and deformation).
- 4) Install new air bag modules and seat belt pre-tensioner assemblies.
- 5) Conduct self-diagnosis using CONSULT-II or "AIR BAG" warning lamp. Refer to "SRS Operation Check", RS-43. Ensure entire SRS operates properly.

When SRS is not activated in a collision:

- 1) Check the SRS components using the table shown below:
- Replace any SRS components showing visible signs of damage (dents, cracks and deformation).
- Conduct self-diagnosis using CONSULT-II or "AIR BAG" warning lamp. Refer to "SRS Operation Check", RS-43. Ensure entire SRS operates properly.

SRS INSPECTION

Part	SRS is activated	SRS is NOT activated
Air bag module (driver and passenger side)	REPLACE Install with new bolts coated with bonding agent.	 Remove air bag module. Check harness cover and connectors for damage, terminals for deformities, and harness for binding. 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. No damage found, reinstall with new bolts coated with bonding agent. If damaged—REPLACE. Install air bag modules with new bolts coated with bonding agent. Air bag must be deployed before discarding.
Seat belt pre-tensioner assembly	REPLACE Install seat belt pre- tensioner with new bolts.	Remove seat belt pre-tensioners. Check harness cover and connectors for damage, terminals for deformities, and harness for binding. Check belts for damage and anchors for loose mounting.
	Solid.	 Check retractor for smooth operation. If no damage is found, reinstall seat belt pre-tensioner assembly. If damaged—REPLACE. Install the seat belt pre-tensioners with new bolts coated with bonding agent. Seat belt pre-tensioners must be deployed before discarding.
Diagnosis sensor unit	REPLACE Install with new bolts coated with bonding agent.	 Check case for dents, cracks or deformities. Check connectors for damage, and terminals for deformities. If no damage is found, reinstall with new bolts and ground bolt coated with bonding agent. If damaged—REPLACE. Install diagnosis sensor unit with new bolts and ground bolt coated with bonding agent.
Steering wheel	 Install air bag modul Check steering when 	ing wheel for deformities. le to check fit or alignment with steering wheel. el for excessive free play. nd, reinstall with new bolts. ACE.
Spiral cable	2. Check connectors a3. Check steering when	I cable and combination switch for damage. nd protective tape for damage. el for noise, binding or heavy operation. nd, reinstall with new bolts. ACE.
Harness and Connectors	2. Check harness for b3. If no damage is four	or poor connection, damage, and terminals for deformities. binding, chafing, cuts, or deformities. nd, reinstall the harness and connectors. CE damaged harness. Do not attempt to repair, splice or modify any SRS harness.

Collision Diagnosis (Cont'd)

Part	SRS is activated	SRS is NOT activated
Passenger air bag deactivation switch and indicator	ation switch 2. Check the harness and connectors for damage, and terminals for deformities.	
nstrument panel	When passenger air bag infla Opening portion for passenger	tes, check the following points for bending, deformities and cracks:
	_	
	Passenger air bag module bra Back face of instrument pan	: Check points ckets el
	-	
		: Check points
	The portions securing the instr	rument panel
	2. If no damage is found, reinsta 3. If damaged — REPLACE the	all the instrument panel. instrument panel with new nuts and bolts.