

## SECTION **RS**

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**When you read wiring diagrams:**

- Read GI section, "HOW TO READ WIRING DIAGRAMS".
  - See EL section, "POWER SUPPLY ROUTING" for power distribution circuit.
- When you perform trouble diagnoses, read GI section, "HOW TO FOLLOW FLOW CHART IN TROUBLE DIAGNOSES" and "HOW TO PERFORM EFFICIENT DIAGNOSIS FOR AN ELECTRICAL INCIDENT".**

GI

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**RS**

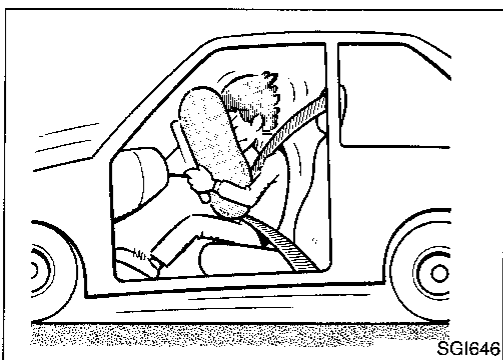
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## PRECAUTION



### Supplemental Restraint System (SRS) "AIR BAG"

The Supplemental Restraint System "Air Bag", 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 on the instrument panel on the passenger side), a diagnosis sensor unit, warning lamp, wiring harness and spiral cable.

#### WARNING:

- To avoid rendering the SRS inoperative, which could increase the risk of personal injury or death in the event of a collision which would result in air bag inflation, all maintenance must be performed by an authorized NISSAN dealer.
- Improper maintenance, including incorrect removal and installation of the SRS, can lead to personal injury caused by unintentional activation of the system.
- All SRS electrical wiring harnesses and connectors are covered with yellow outer insulation. Do not use electrical test equipment on any circuit related to the SRS.

## SEAT BELTS

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### CAUTION:

- Do not disassemble buckle or seat belt assembly.
- Replace anchor bolts if they are deformed or worn out.
- Never oil tongue and buckle.
- If any component of seat belt assembly is questionable, do not repair. Replace the seat belt assembly.
- If webbing is cut, frayed, or damaged, replace seat belt assembly.
- When replacing seat belt assembly, use a genuine NISSAN seat belt assembly.
- After any collision, inspect all seat belt assemblies, including retractors and other attached hardware.

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**RS**

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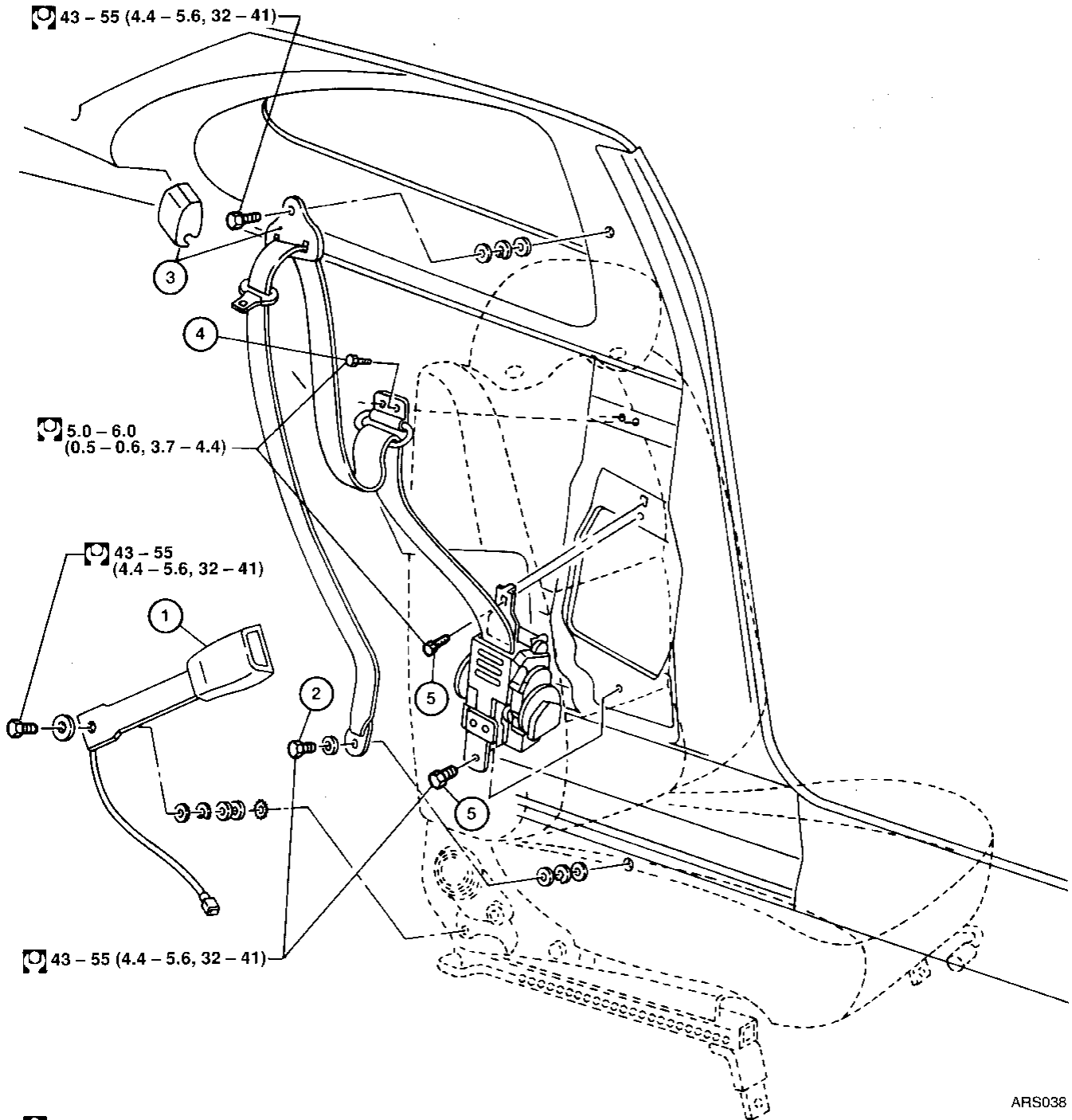
EL

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# SEAT BELTS

## Front Seat Belt

### 2-DOOR COUPE



: N·m (kg-m, ft-lb)

### Removal

Remove front seat. Refer to BT section ("Front Seat", "SEAT").

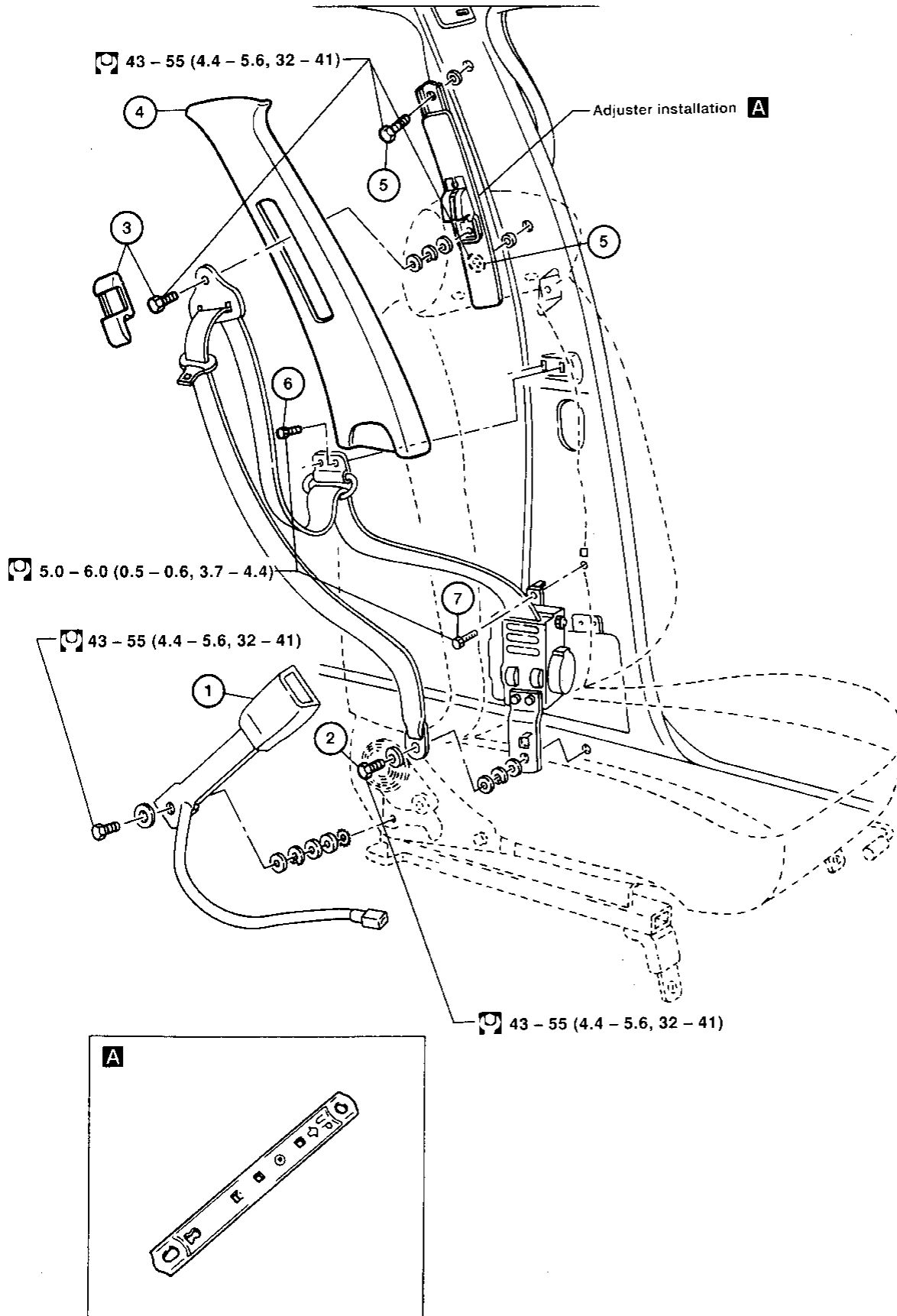
- ① Remove buckle.
- ② Remove floor anchor bolt.  
Remove rear side finisher.

- ③ Remove pillar anchor cover and anchor bolt.
- ④ Remove guide plate bolts.
- ⑤ Remove retractor bolts.  
Remove retractor.

# SEAT BELTS

## Front Seat Belt (Cont'd)

4-DOOR SEDAN



: N·m (kg-m, ft-lb)

RS-5

ARS039  
1245

GI  
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## SEAT BELTS

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### Front Seat Belt (Cont'd)

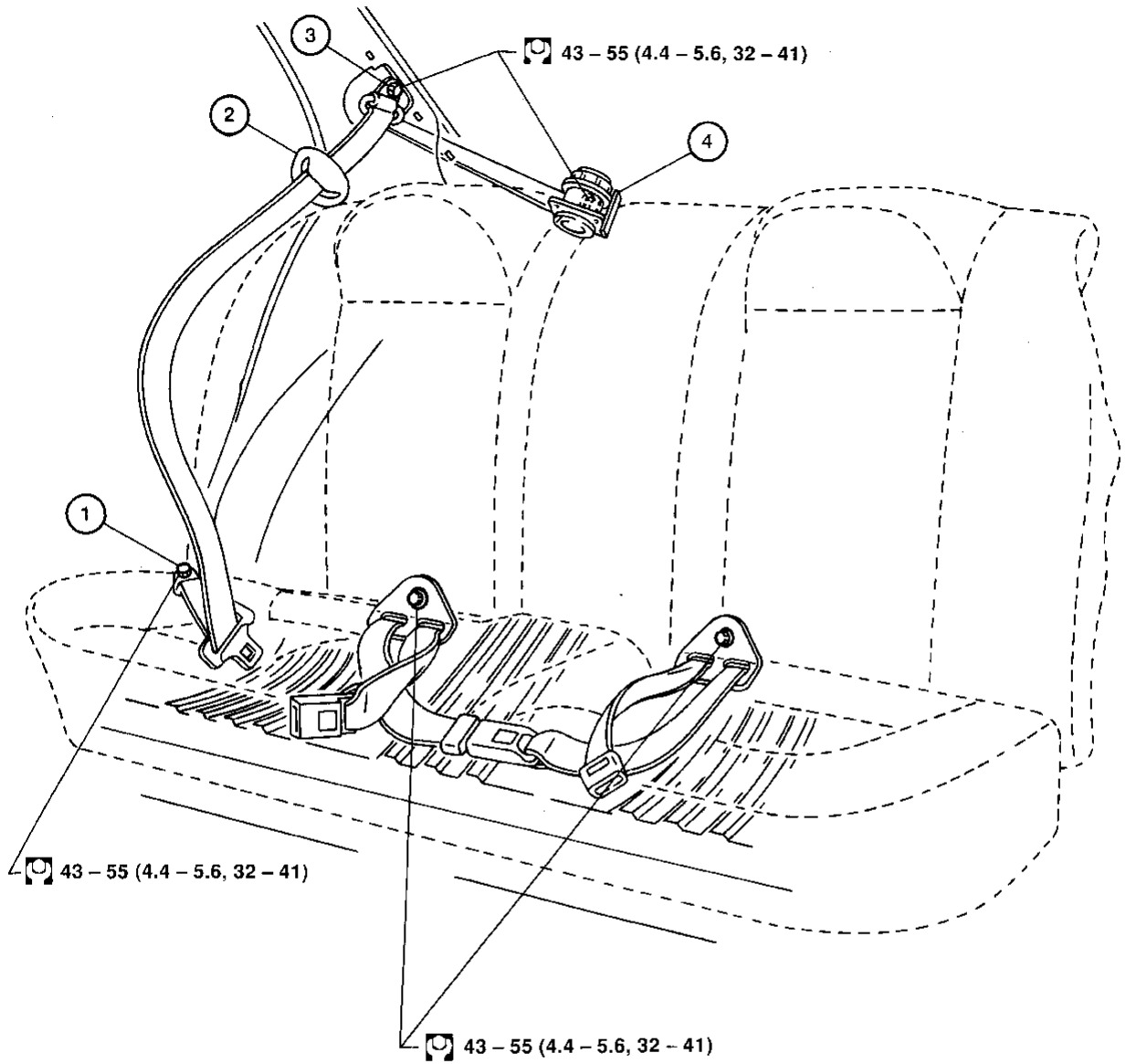
#### Removal


Remove front seat. Refer to BT section ("Front Seat", "SEAT").

- ① Remove buckle.  
Remove front and rear kick plates.
- ② Remove floor anchor bolt.  
Remove center pillar lower garnish.
- ③ Remove adjuster cover and pillar anchor bolt.
- ④ Remove center pillar upper garnish.
- ⑤ Remove two adjuster bolts and adjuster assembly. **A**
- ⑥ Remove two guide plate bolts.
- ⑦ Remove retractor bolt.  
Remove retractor.

# SEAT BELTS

## Rear Seat Belt



 : N·m (kg·m, ft·lb)

RS-7

ARS040

1247

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MA  
EM  
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## SEAT BELTS

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### Rear Seat Belt (Cont'd)

#### REMOVAL

##### 2-door coupe

Remove rear seat cushion. Refer to BT section ("Rear Seat", "SEAT").

- ① Remove floor anchor bolt.  
Remove rear side finisher.  
Remove front seat belt pillar anchor cover and anchor bolt.
- ② Remove rear seat belt guide cover.  
Remove rear pillar finisher.
- ③ Remove pillar anchor bolt.  
Remove trunk side finisher.
- ④ Remove retractor bolt.
- ⑤ Remove retractor.

##### 4-door sedan

Remove rear seat cushion. Refer to BT section ("Rear Seat", "SEAT").

- ① Remove floor anchor bolt.
- ② Remove seat belt guide cover.  
Remove rear pillar garnish.
- ③ Remove pillar anchor bolt.  
Remove trunk side finisher.
- ④ Remove retractor bolt.
- ⑤ Remove retractor.



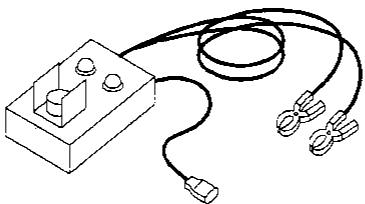
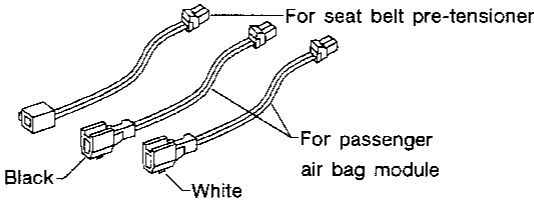
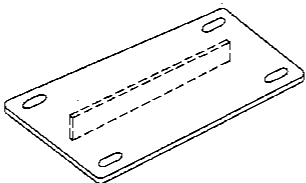
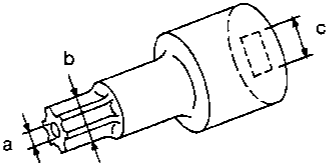
# SUPPLEMENTAL RESTRAINT SYSTEM (SRS)

## Precautions for SRS "Air Bag" Service

- Do not use a circuit tester to check SRS circuits.
- Before servicing the SRS, turn ignition switch "OFF", disconnect both battery cables and wait for at least ten minutes.  
For approximately ten minutes after the cables are removed, it is still possible for the air bag to deploy. Therefore, do not work on any SRS connectors or wires until at least ten minutes have passed.
- Diagnosis sensor unit must always be installed with arrow marks "↔" pointing towards the front of the vehicle for proper operation. Also check diagnosis sensor unit for cracks, deformities or rust before installation and replace as required.
- The spiral cable must be aligned with the neutral position since its rotations are limited. Do not attempt to turn steering wheel or column after removal of steering gear.
- Handle air bag module carefully. Always place it with the pad side facing upward.
- After removing any SRS parts, do not use old bolts. Replace with new bolts. Conduct self-diagnosis to check entire SRS for proper function.
- After air bags inflate, the front instrument panel assembly should be replaced.

## Special Service Tools

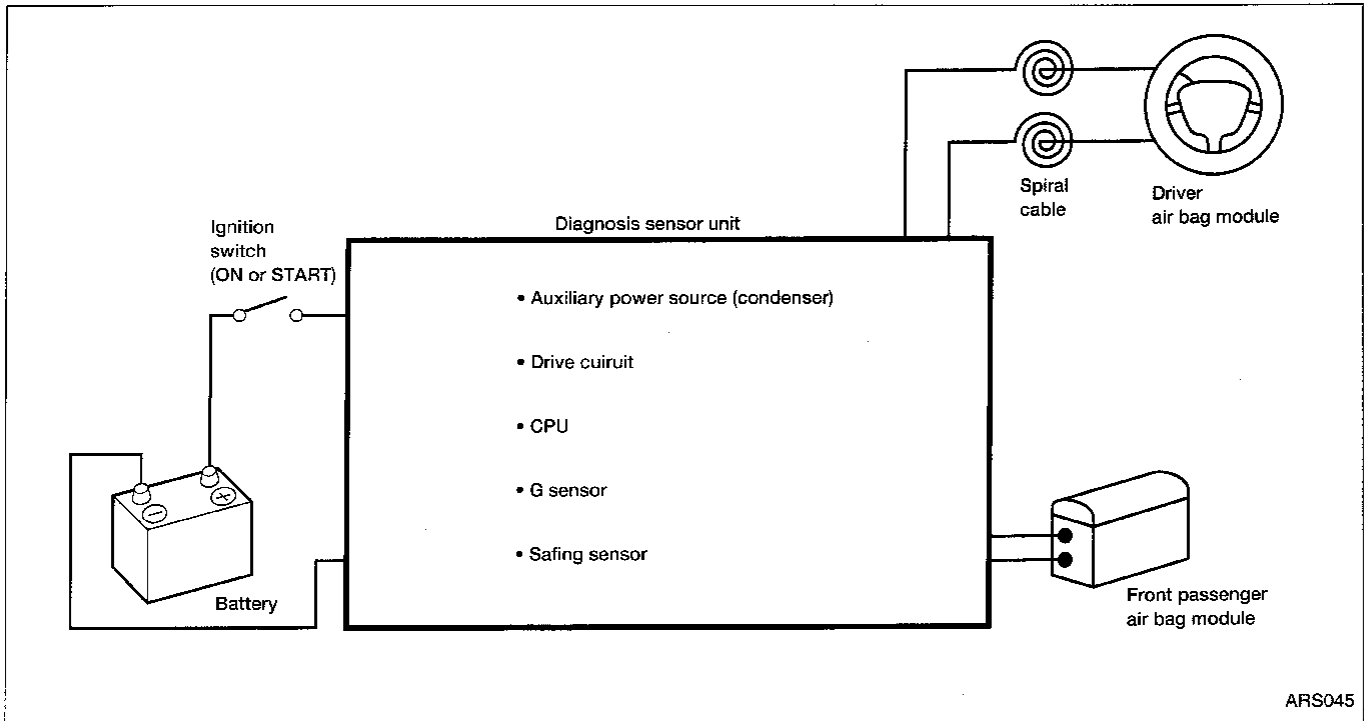
\*: Special tool or commercial equivalent

| Tool number<br>(Kent-Moore No.)<br>Tool name  | Description  |
|---|--|
| KV991072S0<br>(J38381-KIT)<br>Air bag deployment kit<br><br>KV99106400<br>(J38381)<br>Deployment tool | Disposing of air bag module<br><br><br>NT357   |
| KV991065S0<br>(J38381-30)<br>Deployment tool<br>adapters  | For seat belt pre-tensioner<br>For passenger<br>air bag module<br><br><br>NT353  |
| KV99105300<br>(J41246)<br>Passenger air bag<br>bracket  | Anchor the passenger air bag module<br>during disposal<br><br><br>NT354   |
| HT61961000 and<br>HT62152000<br>(J38219)<br>*Special torx bit   | Use for special bolts<br>[TAMPER RESISTANT TORX (Size T50)]<br><br>a: 3.5 (0.138) dia.<br>b: 8.5 - 8.6 (0.335 - 0.339) dia.<br>c: approx. 10 (0.39) sq.<br><br><br>NT361<br><br>Unit: mm (in) |

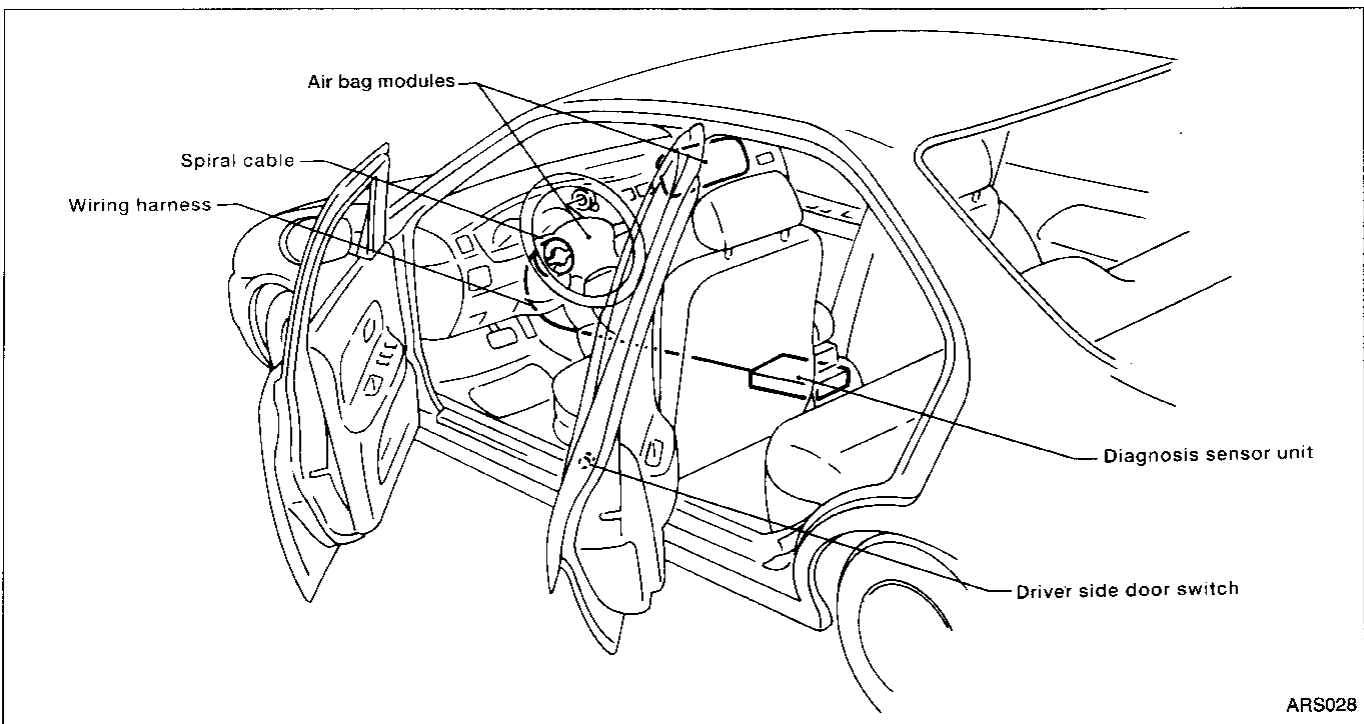
# SUPPLEMENTAL RESTRAINT SYSTEM (SRS)

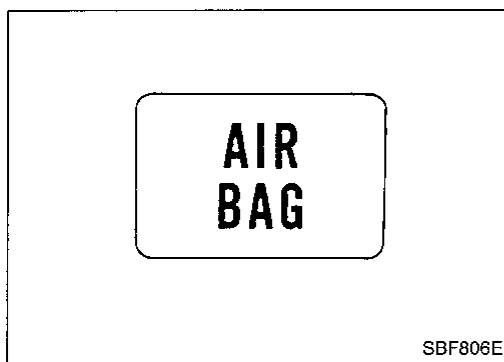
## Description

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



## SRS Component Parts Location





## Maintenance Items

1. Check "AIR BAG" warning lamp.
 

After turning ignition key to "ON" or "START" position, "AIR BAG" warning lamp illuminates. The "AIR BAG" warning lamp will go out 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 system. For details, refer to RS-27 and RS-30.

  - The warning lamp does not illuminate when the ignition switch is turned "ON".
  - The warning lamp does not turn off about 7 seconds after the ignition switch is turned "ON".
  - The warning lamp turns off about 7 seconds after the ignition switch is turned "ON", but it turns on or blinks again.
  
2. Visually check SRS components.
  - (1) Diagnosis sensor unit — Air bag.
    - Check case and bracket for dents, cracks or deformities.
    - Check connectors for damage, and terminals for deformities.
  
  - (2) Main harness and air bag harness.
    - Check connectors for poor connections, damage, and terminals for deformities.
    - Check harnesses for binding, chafing or cuts.
  
  - (3) Spiral cable.
    - Visually check lock (engagement) pins and combination switch for damage.
    - Check connectors, flat cable and protective tape for damage.
    - Check steering wheel for noise, binding or heavy operation.
  
  - (4) Air bag module and steering wheel.
    - Remove air bag module from steering wheel or instrument panel. Check harness cover and connectors for damage, terminals for deformities, and harness for binding.
    - Install driver side air bag module to steering wheel to check fit or alignment with the wheel.
    - Check steering wheel for excessive free play.
    - Install passenger side air bag module to instrument panel to check fit or alignment with the instrument panel.

**CAUTION:**

**Replace previously used special bolts with new ones.**

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## Removal and Installation — Diagnosis Sensor Unit


### CAUTION:

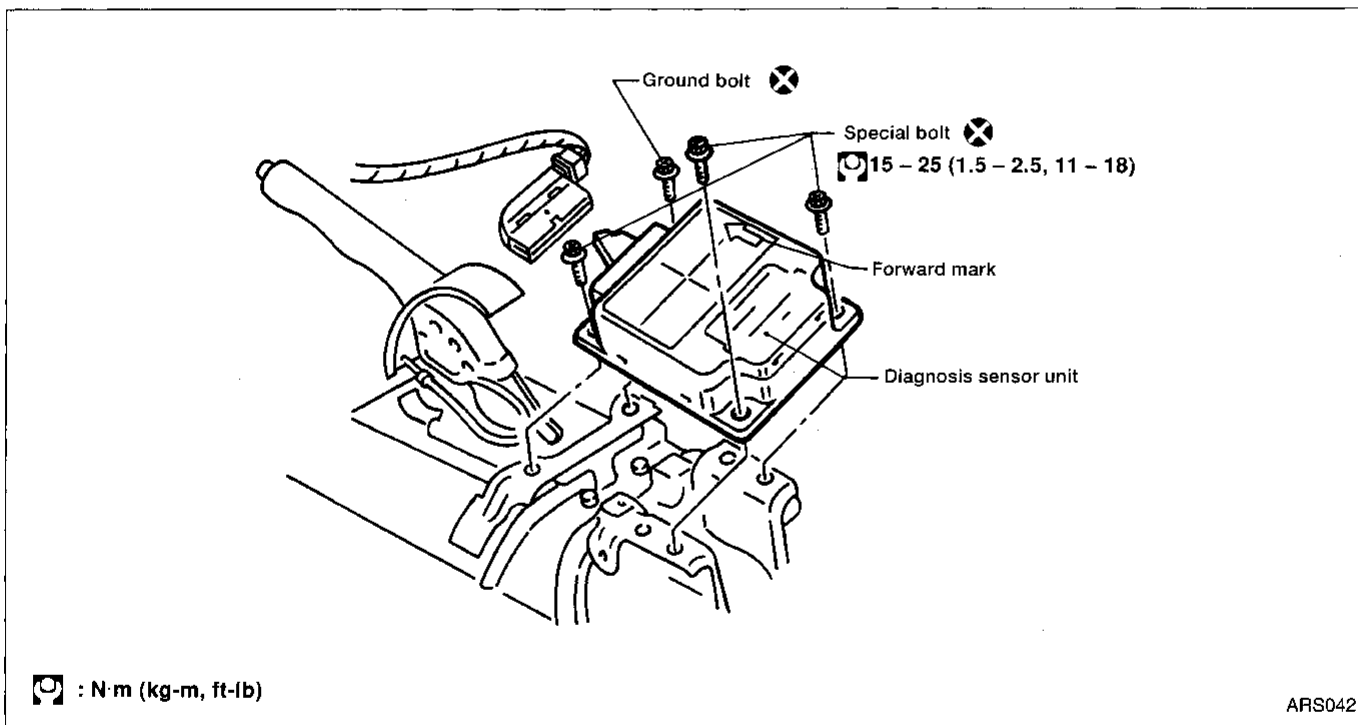
- Before servicing SRS, turn the ignition switch off, disconnect both battery cables and wait for at least ten minutes.
  - The special bolts are coated with bonding agent. Do not use old bolts after removal; replace with new coated bolts.
  - Check diagnosis sensor unit for proper installation.
  - Check diagnosis sensor unit to ensure no deformities, dents, cracks or rust. If there are any visible signs of damage, replace with new one.
  - Check diagnosis sensor unit brackets to ensure they are free of deformities or rust.
1. Disconnect driver and passenger air bag module connectors.
  2. Remove console box. Refer to BT section (“INSTRUMENT PANEL”).
  3. Disconnect diagnosis sensor unit connector.
  4. Remove ground bolt and also remove three special bolts from diagnosis sensor unit using the TAMPER RESISTANT TORX (Size T50).
  5. Remove ground the diagnosis sensor unit.

### NOTE:

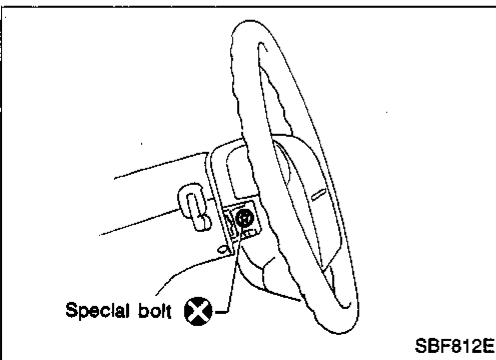
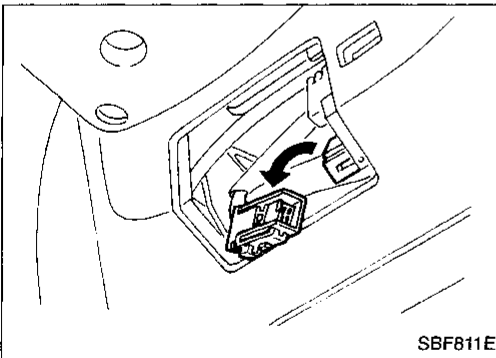
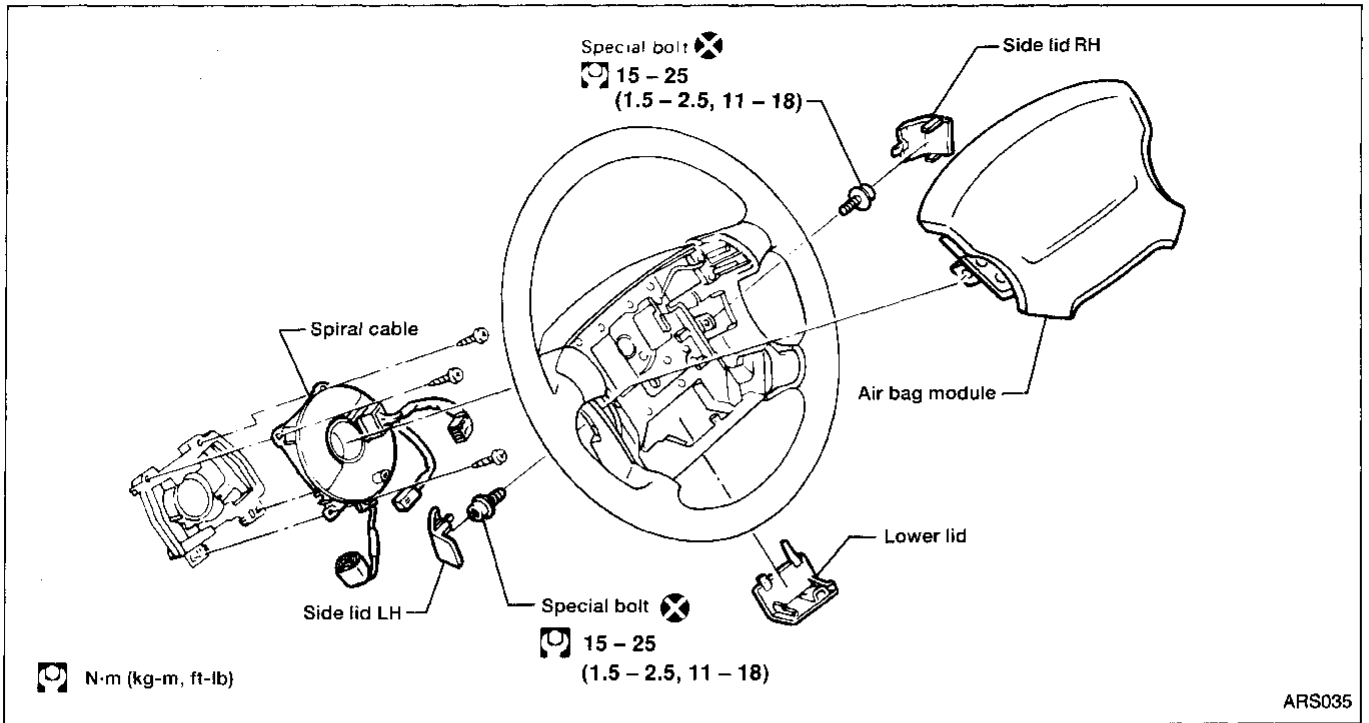
- To install, reverse the removal procedure.

### CAUTION:

- Diagnosis sensor unit must always be installed with arrow marks “” pointing towards the front of the vehicle for proper operation. Also check diagnosis sensor unit for cracks, deformities or rust before installation and replace as required.



**Removal — Driver Air Bag Module and Spiral Cable**



**CAUTION:**

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

1. Remove lower lid from steering wheel, and disconnect air bag module connector.
2. Remove side lid and ASCD switch. Using the TAMPER RESISTANT TORX (Size T50), remove left and right special bolts. Air bag module can then be removed.

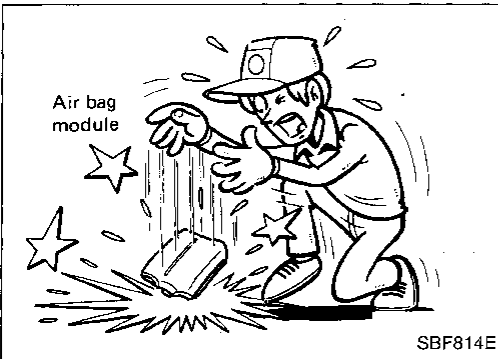
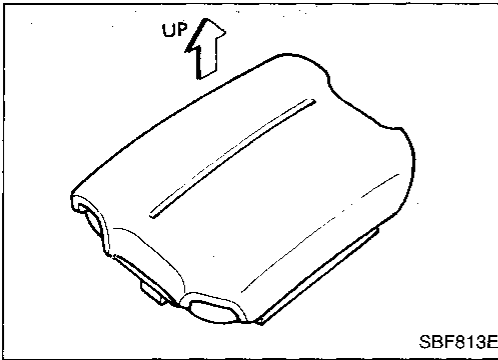
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## SUPPLEMENTAL RESTRAINT SYSTEM (SRS)

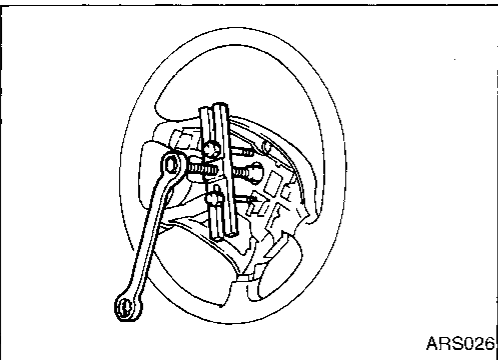
### Removal — Driver Air Bag Module and Spiral Cable (Cont'd)

#### CAUTION:

- Always place air bag module with pad side facing upward.
- Do not attempt to disassemble air bag module.
- The special bolts are coated with bonding agent. Do not use old bolts after removal; replace with new coated bolts.



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



3. Set steering wheel in the neutral position.
4. Disconnect horn connector and remove nuts.
5. Using steering wheel puller, remove steering wheel. Be careful not to over-tighten puller bolt on steering wheel.

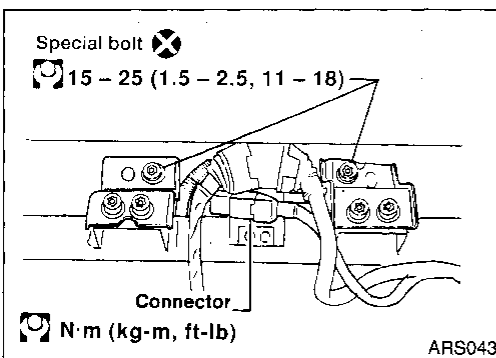
#### CAUTION:

- Do not tap or bump the steering wheel.

6. Remove steering column cover.
7. Disconnect connector and remove the four screws. The spiral cable can then be removed.

#### CAUTION:

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



### Removal — Front Passenger Air Bag Module

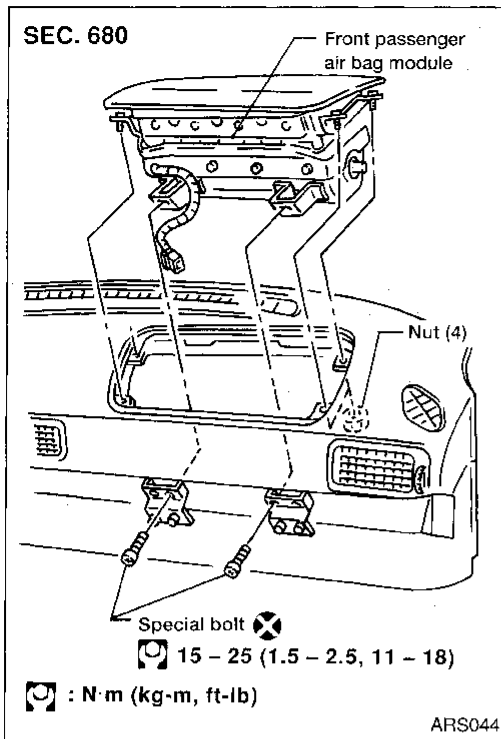
#### CAUTION:

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

1. Remove glove box assembly. Refer to BT section ("INSTRUMENT PANEL").
2. Disconnect passenger air bag module connector.
3. Using the TAMPER RESISTANT TORX (Size T50), remove two special bolts.

## SUPPLEMENTAL RESTRAINT SYSTEM (SRS)

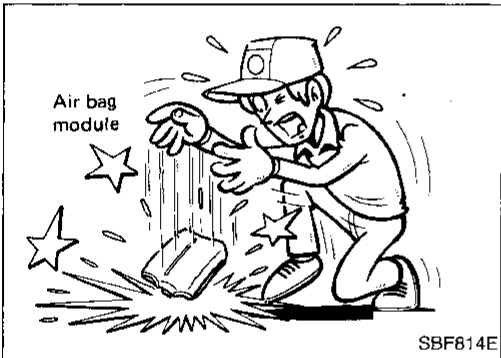
### Removal — Front Passenger Air Bag Module (Cont'd)



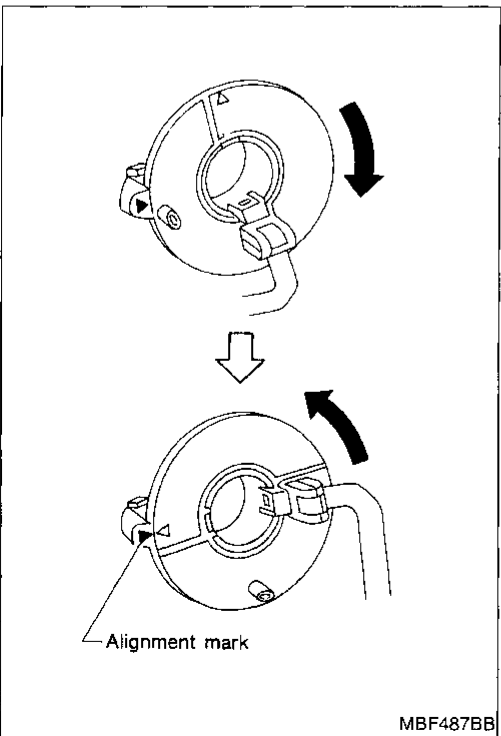
4. Remove four nuts.
  5. Remove passenger air bag module.
- Air bag module is heavy and should be supported using both hands during removal.

#### 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 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.



### Installation — Driver Air Bag Module and Spiral Cable

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

#### CAUTION:

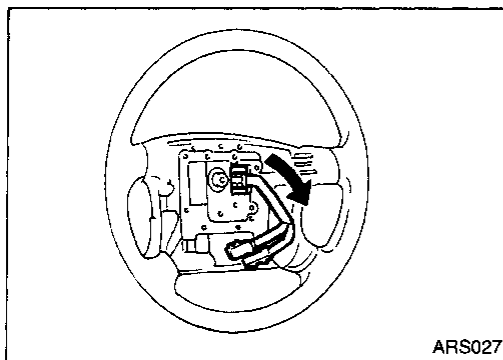
The spiral cable may snap during steering operation if the cable is installed improperly.

Also, with the steering linkage disconnected, the cable may snap by turning the steering wheel more than 2.5 turns to the left or right of the neutral position.

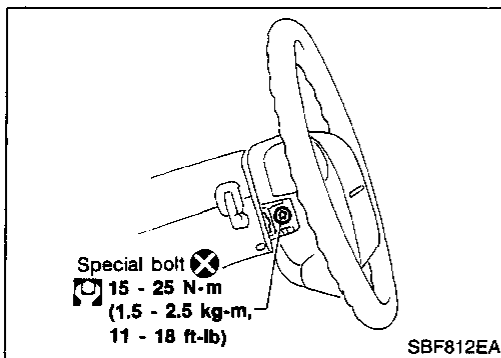
3. Connect spiral cable connector and tighten screws. Install steering column cover.



## SUPPLEMENTAL RESTRAINT SYSTEM (SRS)

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



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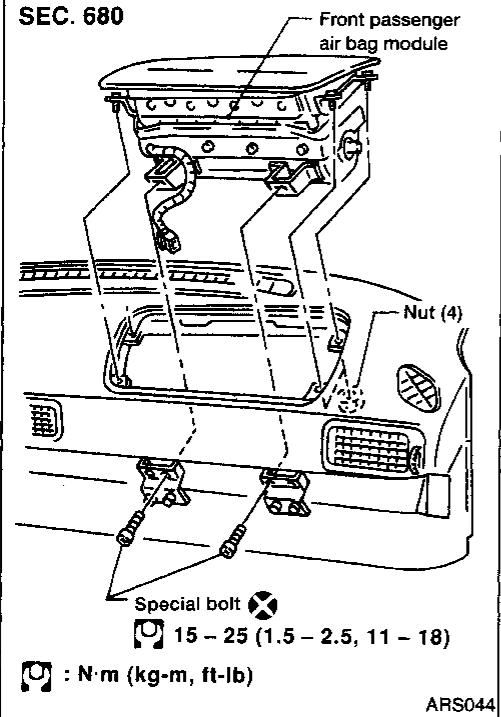
Special bolt   
 15 - 25 N·m  
 (1.5 - 2.5 kg-m,  
 11 - 18 ft-lb)



SBF812EA

4. Install steering wheel setting spiral cable pin guides, and pull spiral cable through.
5. Release ignition key lock with battery cables disconnected. Turn steering wheel to the left end and then to the right end fully to make sure that spiral cable is set in the neutral position. If air bag warning lamp blinks (at the user mode), it shows the spiral cable may be snapped due to its improper position. Perform self-diagnosis again (use CONSULT or warning lamp check). If a malfunction is detected, replace the spiral cable with a new one.
6. Connect horn connector and engage spiral cable with pawls in steering wheel.
7. Tighten nuts.
8. Position air bag module and tighten with new special bolts.
9. Connect air bag module connector.
10. Install ASCD switch and tighten screws.
11. Install all lids.
12. Conduct self-diagnosis to ensure entire SRS operates properly. (Use CONSULT or warning lamp check.) Refer to RS-25 or RS-27.  
 Before performing self-diagnosis connect both battery cables.

### Installation — Front Passenger Air Bag Module

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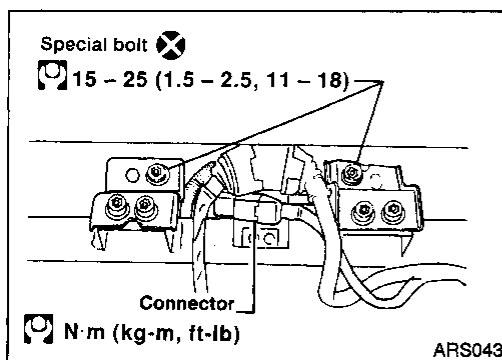


Special bolt   
 15 - 25 (1.5 - 2.5, 11 - 18)

 : N·m (kg-m, ft-lb)

ARS044

1. Install front passenger air bag module in instrument panel.
  - Ensure harness is not caught between air bag module and support bracket.
  - Install four nuts.
  - Install two new special bolts using the TAMPER RESISTANT TORX (Size T50).
2. Connect inflator connector to air bag harness.
3. Install glove box and glove box lid.



Special bolt   
 15 - 25 (1.5 - 2.5, 11 - 18)

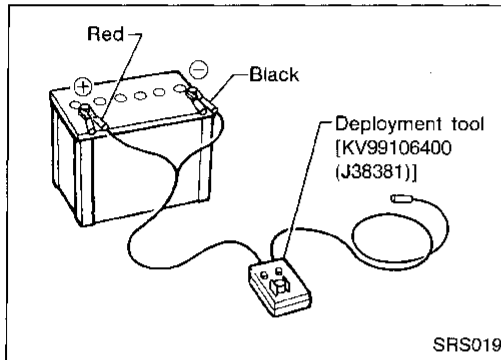
 N·m (kg-m, ft-lb)

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## Disposal of Air Bag Module

- Make sure to deactivate air bag modules before disposing them. Also, before disposing a vehicle equipped with an air bag system, deactivate air bag modules. If such a system has already been deployed due to an accident, dispose of as indicated in "DISPOSING OF AIR BAG MODULE" (RS-20).
- Do not dispose of the air bag module undeployed.
- When deploying the air bag module, always use the Special Service Tool; Deployment tool KV99106400 (Kent-Moore No. J38381).
- When deploying the air bag module, stand at least 5 m (16 ft) away from the air bag module.
- Due to heat, do not touch air bag module for at least 30 minutes after deployment.
- Be sure to wear gloves when handling a deployed air bag module.
- Never apply water to a deployed air bag module.
- Wash your hands clean after finishing work.



### CHECKING DEPLOYMENT TOOL

#### Connecting to battery

- Place the vehicle outdoors with an open space of at least 6 m (20 ft) on all sides.
- Use a voltmeter to make sure the vehicle battery is fully charged.

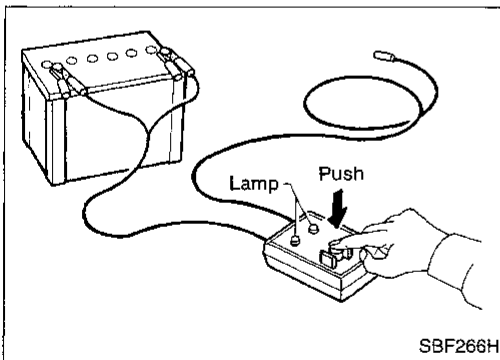
#### CAUTION:

**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 10 to 12 minutes after the vehicle battery is disconnected before proceeding.
- Connect red clip of deployment tool to battery positive terminal and black clip to negative terminal.

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



#### Deployment tool check

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

#### Air bag deployment tool lamp illumination chart (Battery connected)

| Switch operation | Left side lamp, green*<br>"AIR BAG CONNECTOR VOLTAGE" | Right side lamp, green*<br>"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.

# SUPPLEMENTAL RESTRAINT SYSTEM (SRS)

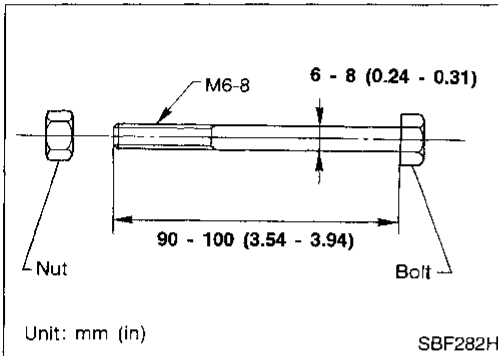
## Disposal of Air Bag Module (Cont'd) DEPLOYMENT PROCEDURES FOR AIR BAG MODULE (OUTSIDE OF VEHICLE)

Deploying air bag module while mounted in vehicle may damage the vehicle. Deploy air bag module as a unit except when disposing of vehicle.

Anchor air bag module in a vise secured to a firm foundation during deployment.

### Deployment of driver air bag module (outside of vehicle)

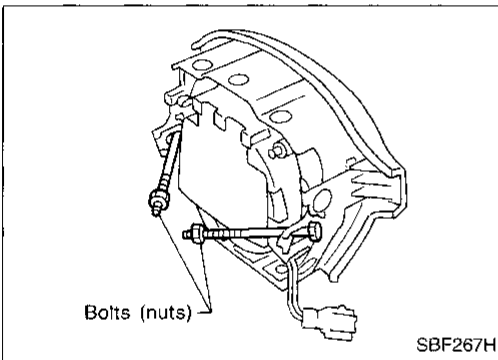
1. Prepare two sets of nuts and bolts (see figure at left). These bolts are required to secure driver air bag module to the vise.



2. Install one set of nuts and bolts to each side of the air bag module.

#### CAUTION:

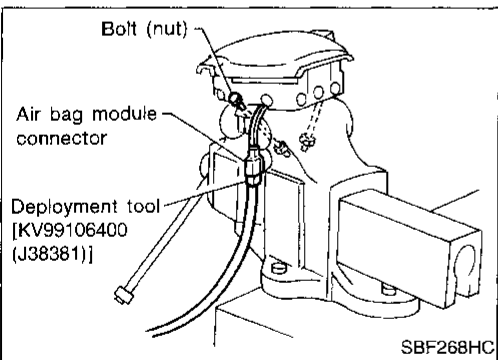
Make sure to install a bolt and nut on each side.



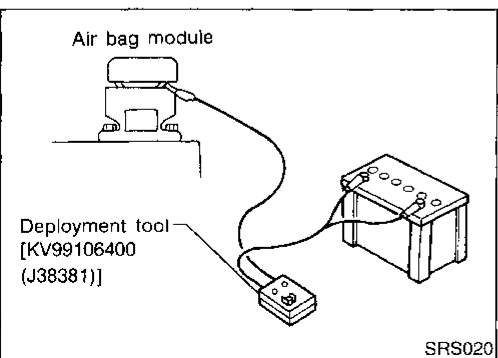
3. Firmly place two nuts (secured to air bag module) in the vise.

#### CAUTION:

Ensure these two nuts are equally placed in the vise. Never finish the installation with just one nut.



4. Connect deployment tool [SST: KV99106400 (J38381)] to air bag module connector.



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

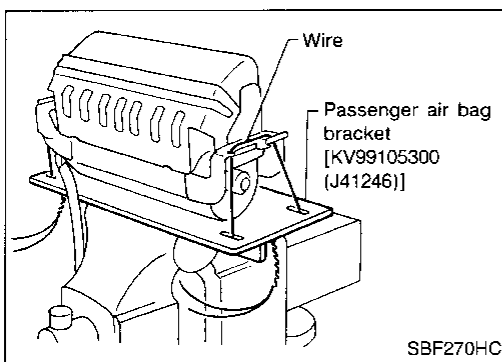
#### CAUTION:

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

## SUPPLEMENTAL RESTRAINT SYSTEM (SRS)

### Disposal of Air Bag Module (Cont'd)

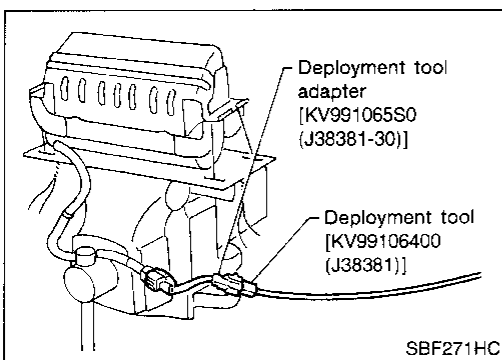
#### Deployment of passenger air bag module (outside of vehicle)



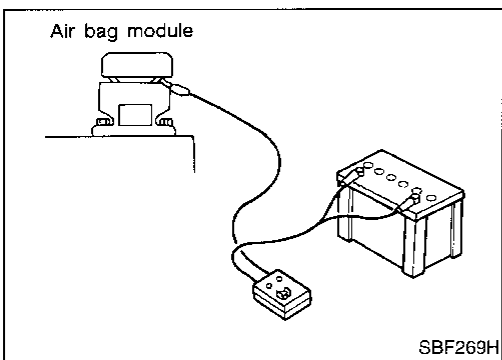
1. Using wire, secure passenger air bag module to passenger air bag bracket [SST: KV99105300 (J41246)] at two places.

#### CAUTION:

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



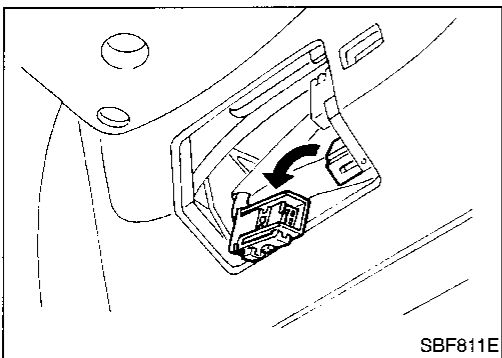
2. Firmly anchor passenger air bag bracket in a vise.
3. Connect deployment tool adapter [SST:KV991065S0 (J38381-30)] to deployment tool [SST: KV99106400 (J38381)] connector on either side of air bag module.



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

#### CAUTION:

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



#### DEPLOYMENT OF AIR BAG MODULE WHILE MOUNTED IN VEHICLE

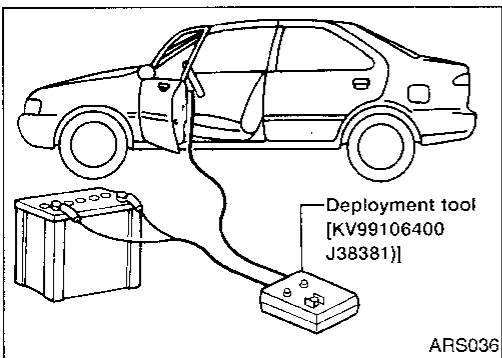
When disposing of a vehicle, deploy air bag modules while they are mounted in vehicle.

#### CAUTION:

When deploying air bag module, ensure vehicle is empty.

1. Turn ignition switch "OFF", disconnect the vehicle both battery cables and wait ten minutes.
2. Disconnect air bag module connector.
3. Connect deployment tool [SST: KV99106400 (J38381)] connector to air bag module.

For front passenger air bag module, use adapters [SST: KV991065S0 (J38381-30)] to attach module to deployment tool connector.



4. Connect red clip of deployment tool to battery positive terminal and black clip to negative terminal.
5. The lamp on the right side of the tool, marked "deployment tool power", should glow green, not red.
6. Press the button on the deployment tool. The left side lamp on the tool, marked "air bag connector voltage", will illuminate. Then air bag module will deploy.
7. After deployment, remove them from vehicle and seal them up in plastic bags. Then dispose of them. Refer to RS-20.

## SUPPLEMENTAL RESTRAINT SYSTEM (SRS)

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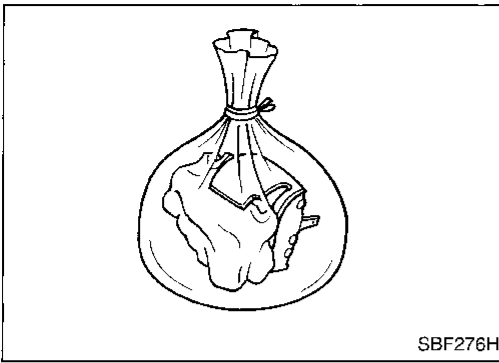
### Disposal of Air Bag Module (Cont'd)

#### DISPOSING OF AIR BAG MODULE

Deployed air bag modules are very hot. Before disposing of air bag module, wait at least 30 minutes. Seal them in a plastic bag before disposal.

#### CAUTION:

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



# SUPPLEMENTAL RESTRAINT SYSTEM (SRS)

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## NOTE

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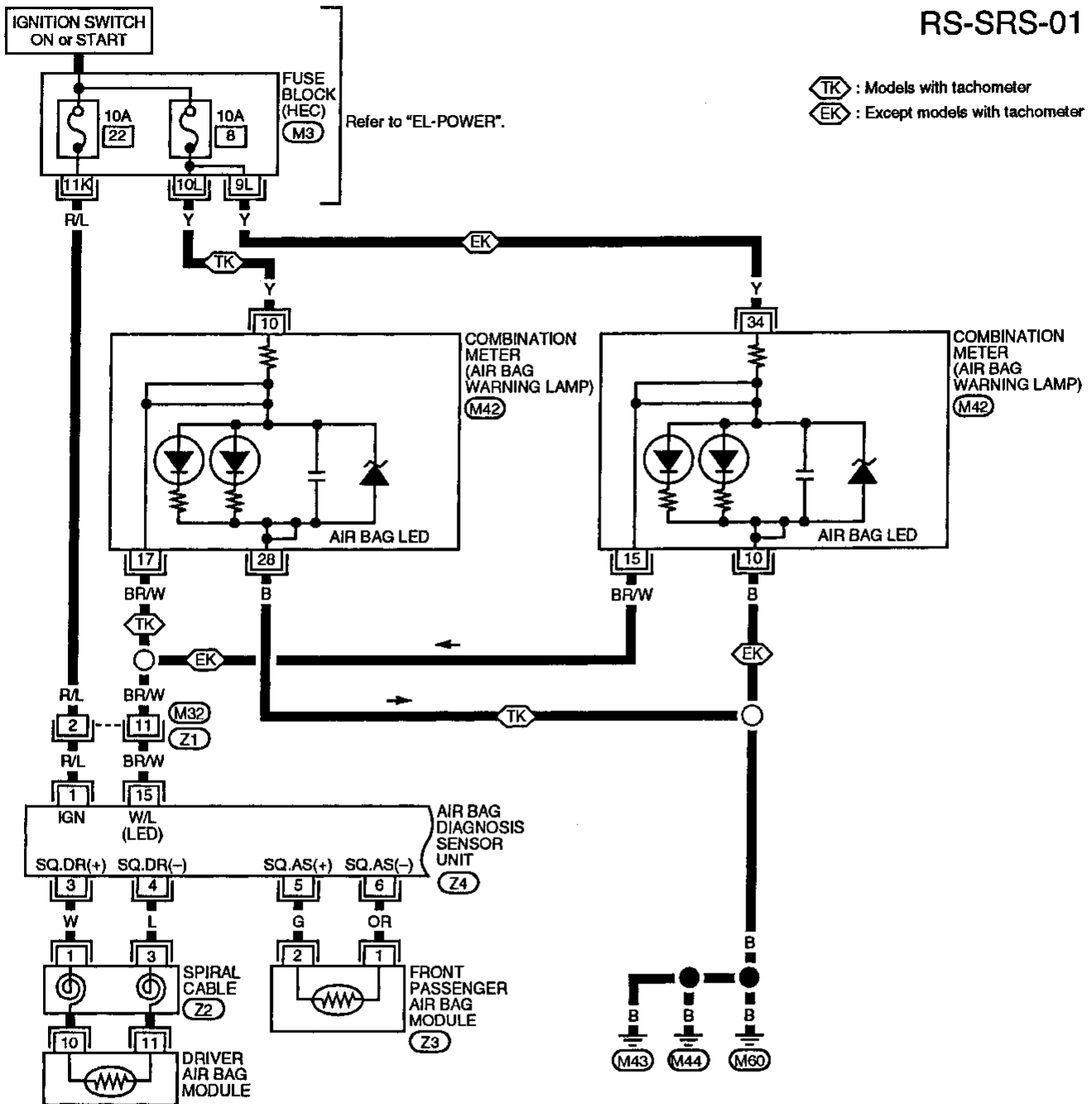
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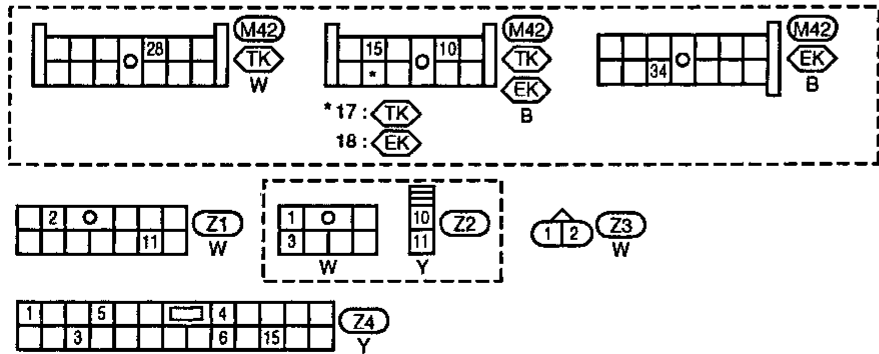
IDX

Wiring Diagram —SRS—

RS-SRS-01



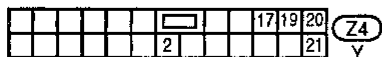
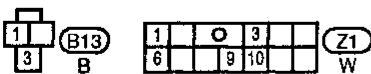
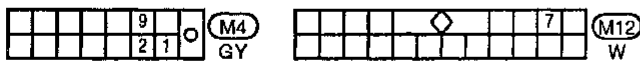
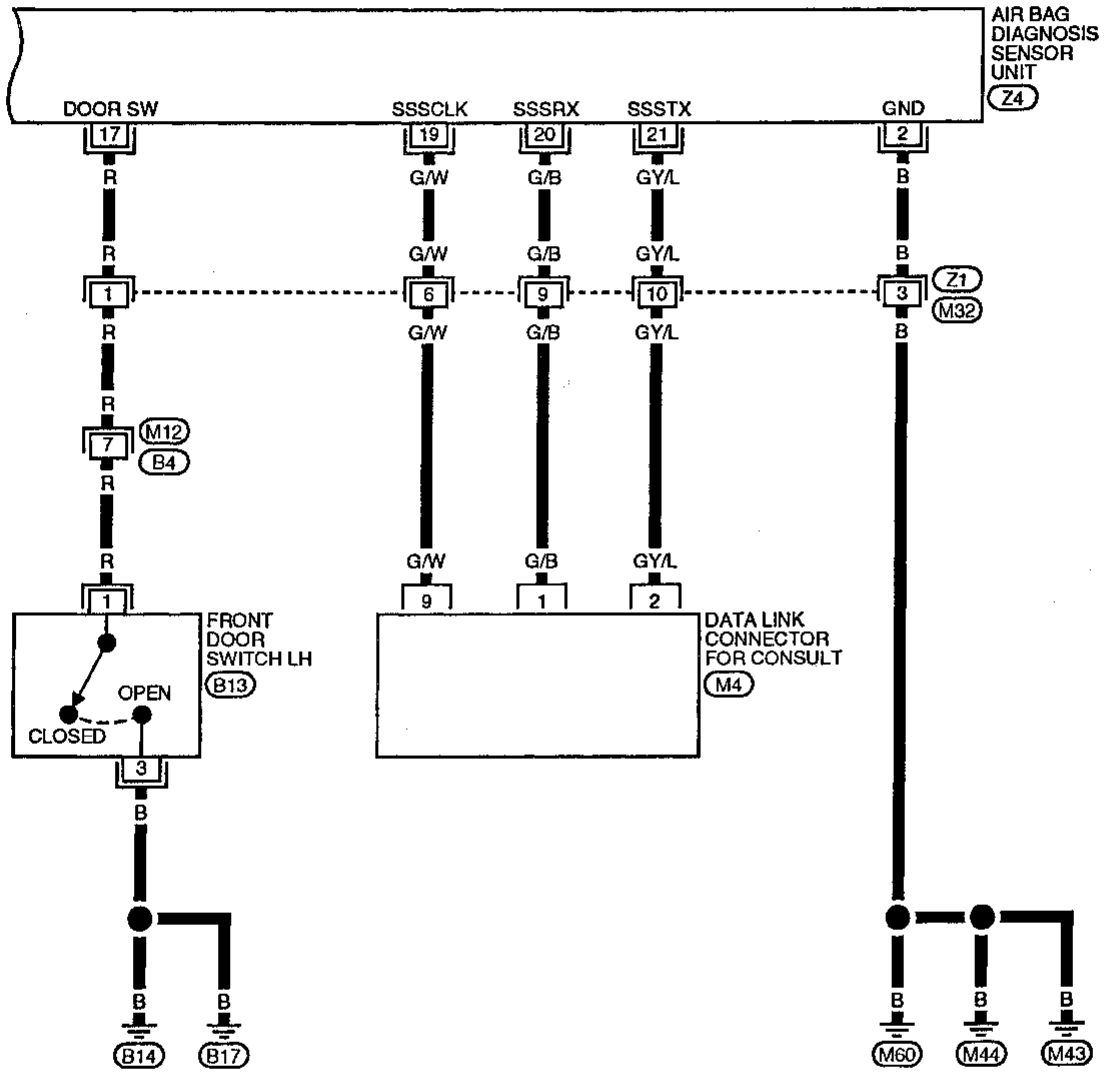
TK : Models with tachometer  
 EK : Except models with tachometer



Refer to last page (Foldout page).  
 M3

**TROUBLE DIAGNOSES — Supplemental Restraint System (SRS)**  
**Wiring Diagram — SRS — (Cont'd)**

RS-SRS-02



ARS032B

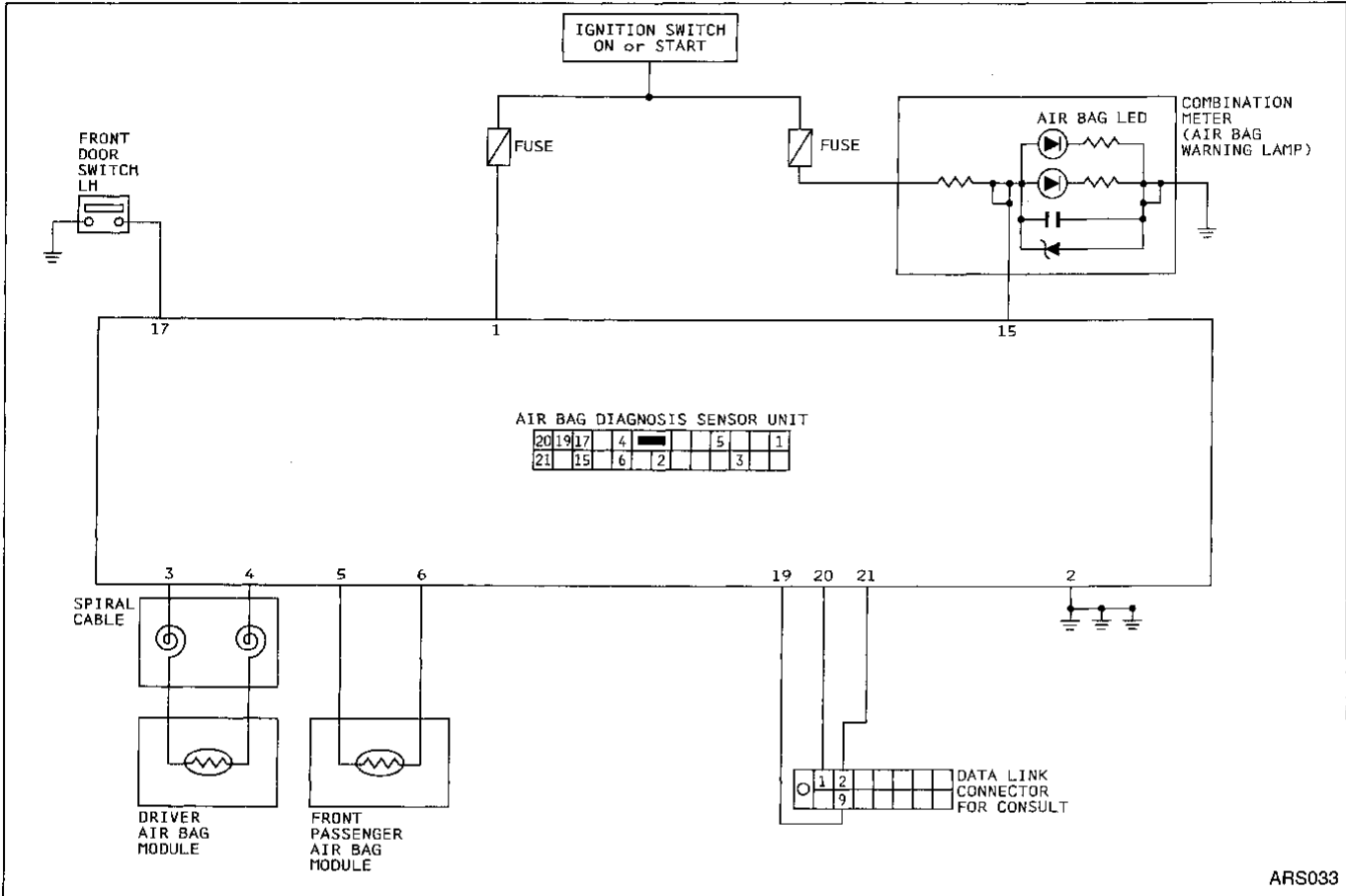
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# TROUBLE DIAGNOSES — Supplemental Restraint System (SRS)

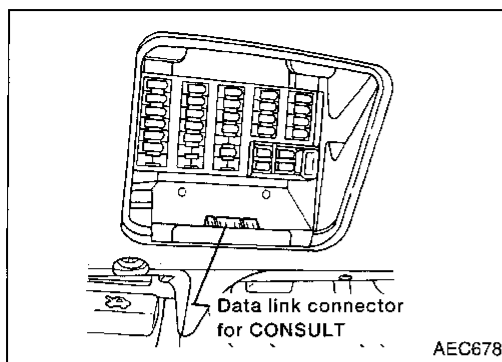
## Schematic

### CAUTION:

- Do not use a circuit tester to check SRS harness connectors. The wiring harness and connectors have yellow outer insulation for easy identification.
- Do not attempt to repair, splice or modify the SRS wiring harness. If the harness is damaged, replace it with a new one.
- Keep ground portion clean.







## Self-diagnosis

### USING CONSULT

#### Operation procedure

The self-diagnosis results can be read by CONSULT, as follows:

1. Connect "CONSULT" to data link connector.  
Data link connector for CONSULT is located in left side of dash panel.



2. Turn ignition switch "ON". (When CONSULT is connected, the "AIR BAG" warning lamp will be changed to diagnosis mode.)



3. Touch "START" to operate "CONSULT".



4. Touch "AIRBAG" to choose air bag system.



5. Touch "SELF DIAG RESULTS" to read self-diagnosis results.



6. Problem codes are displayed on "SELF DIAG RESULTS".



7. When "PRINT" is pressed, information displayed on "SELF DIAG RESULTS" is printed out.

- While CONSULT is displaying this "SELF-DIAG RESULTS" information, do not disconnect CONSULT from data link connector.
- When finishing diagnosis, make sure to change CONSULT display to SELECT SYSTEM mode by using BACK key.



8. After repairing malfunctioning parts, press "ERASE" to clear self-diagnosis results.

- "ERASE" function requires selecting "ERASE", and completing step 9.



9. Push BACK key of CONSULT until SELECT SYSTEM mode appears to display "SELF-DIAGNOSIS" user mode.

- If malfunctioning parts are not completely repaired, "AIR BAG" warning lamp will blink every 0.5 seconds.



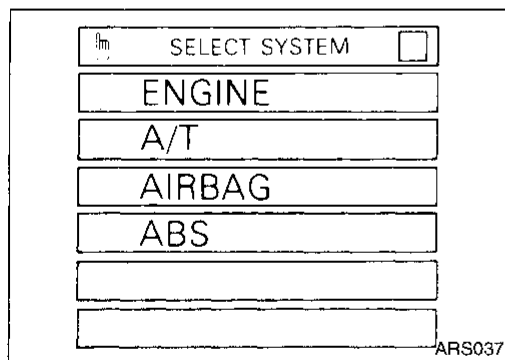
10. Push the power off switch.



11. Turn off ignition switch, disconnect CONSULT.



12. Turn ignition switch "ON".  
"AIR BAG" warning lamp should come on for about 7 seconds and then go off.



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# TROUBLE DIAGNOSES — Supplemental Restraint System (SRS)

## Self-diagnosis (Cont'd)

### Self-diagnosis results

| Diagnostic item                      | Explanation/Possible causes   | Repair order<br>*Recheck SRS using CONSULT<br>at each replacement   |
|--------------------------------------|---|---|
| NO SELF DIAGNOSTIC FAILURE INDICATED | <ul style="list-style-type: none"> <li>● No malfunction is detected.</li> </ul>   | —   |
| AIRBAG MODULE [OPEN]                 | <ul style="list-style-type: none"> <li>● Driver air bag module circuit is open (including the spiral cable).</li> </ul>                                 | <ol style="list-style-type: none"> <li>1. Visually check the wiring harness connections.</li> <li>2. Replace spiral cable.</li> <li>3. Replace driver air bag module. (Before disposing of it, it must be deployed.)</li> <li>4. Replace diagnosis sensor unit.</li> <li>5. Replace air bag harness.</li> </ol> |
| AIRBAG MODULE [VB-SHORT]             | <ul style="list-style-type: none"> <li>● Driver air bag module circuit is shorted to some power supply circuit (including the spiral cable).</li> </ul> |   |
| AIRBAG MODULE [GND-SHORT]            | <ul style="list-style-type: none"> <li>● Driver air bag module circuit is shorted to ground (including the spiral cable).</li> </ul>                    |   |
| AIRBAG MODULE [SHORT]                | <ul style="list-style-type: none"> <li>● Driver air bag module circuits are shorted to each other.</li> </ul>   |   |
| ASSIST A/B MODULE [OPEN]             | <ul style="list-style-type: none"> <li>● Front passenger air bag module circuit is open.</li> </ul>   |   |
| ASSIST A/B MODULE [VB-SHORT]         | <ul style="list-style-type: none"> <li>● Front passenger air bag module circuit is shorted to some power supply circuit.</li> </ul>                     | <ol style="list-style-type: none"> <li>1. Visually check wiring harness connections.</li> <li>2. Replace front passenger air bag module. (Before disposing of it, it must be deployed.)</li> <li>3. Replace diagnosis sensor unit.</li> <li>4. Replace air bag harness.</li> </ol>                              |
| ASSIST A/B MODULE 1 [GND-SHORT]      | <ul style="list-style-type: none"> <li>● Front passenger air bag module circuit is shorted to ground.</li> </ul>  |   |
| ASSIST A/B MODULE 1 [SHORT]          | <ul style="list-style-type: none"> <li>● Front passenger air bag module circuits are shorted to each other.</li> </ul>                                  |   |
| CONTROL UNIT                         | <ul style="list-style-type: none"> <li>● Diagnosis sensor unit is out of order.</li> </ul>  | <ol style="list-style-type: none"> <li>1. Visually check wiring harness connections.</li> <li>2. Replace diagnosis sensor unit.</li> <li>3. Replace air bag harness.</li> <li>4. Replace main harness.</li> </ol>   |
| INDEFINITE FAILURES [AIR BAG]        | <ul style="list-style-type: none"> <li>● A problem which cannot be specified occurs because more than two parts are out of order.</li> </ul>            | <ol style="list-style-type: none"> <li>1. Visually check wiring harness connections.</li> <li>2. Replace diagnosis sensor unit.</li> <li>3. Replace spiral cable and air bag modules.</li> <li>4. Replace air bag harness.</li> <li>5. Replace the main harness.</li> </ol>                                     |

\*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 each time repair is finished. If malfunction is still observed, proceed to the next step. When malfunction is eliminated, further repair work is not required.

# TROUBLE DIAGNOSES — Supplemental Restraint System (SRS)

## Self-diagnosis (Cont'd)

### USING AIR BAG WARNING LAMP

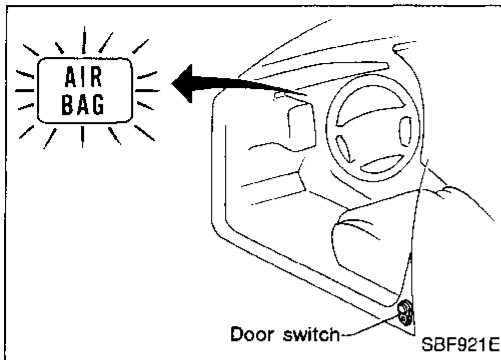
Self-diagnosis results can be also read by using the "AIR BAG" warning lamp for SRS.

The "AIR BAG" warning lamp operates as shown below:

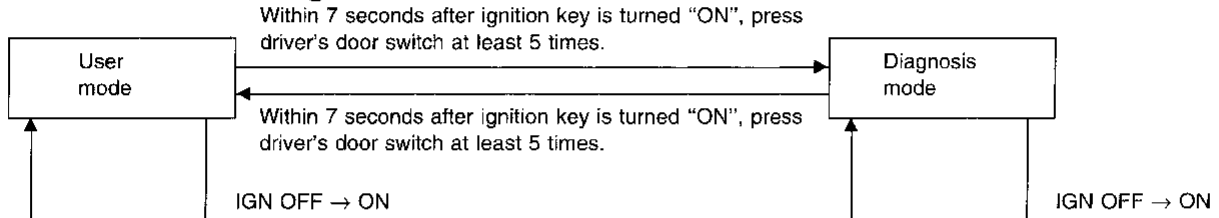
If "AIR BAG" warning lamp does not illuminate, refer to RS-30 for details.

#### WARNING:

When the "AIR BAG" warning lamp is flashing, compare the flash time to the chart below.



### How to alternate self-diagnosis



Problem codes are displayed in diagnosis mode (self-diagnosis results).

### Warning lamp indication

- After repairing malfunctioning part, use driver's door switch to return the system to user mode. This will clear self-diagnosis results from memory.
- If a malfunctioning part is not completely repaired, self-diagnosis results will not be cleared.

#### User mode

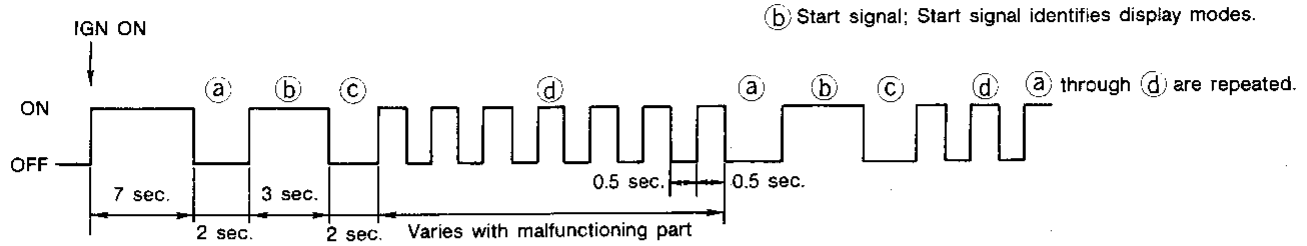
|  |  |
|--|--|
| <p>① Normal (OFF)</p> <p>IGN ON<br/>ON<br/>OFF<br/>7 sec.</p> <p>SBF298HA</p>  | <p>No problem.</p>   |
| <p>② Malfunction (blinking)</p> <p>ON<br/>OFF<br/>0.5 sec. 0.5 sec.</p> <p>SBF299HA</p>  | <p>The system has problem. Perform self-diagnosis with "Diagnosis mode". Refer to RS-28.</p> |
| <p>③ Air bag is deployed or diagnosis sensor unit is malfunctioning and continuously sends an "ON" signal.</p> <p>ON<br/>OFF</p> <p>SBF284HA</p> | <p>The system needs to be repaired. Refer to RS-29.</p>                                      |
| <p>④ Diagnosis sensor unit or warning lamp circuit is malfunctioning.</p> <p>ON<br/>OFF<br/>IGN ON</p> <p>SRS016</p>                             | <p>The system needs to be repaired. Refer to RS-30.</p>                                      |

# TROUBLE DIAGNOSES — Supplemental Restraint System (SRS)

## Self-diagnosis (Cont'd)

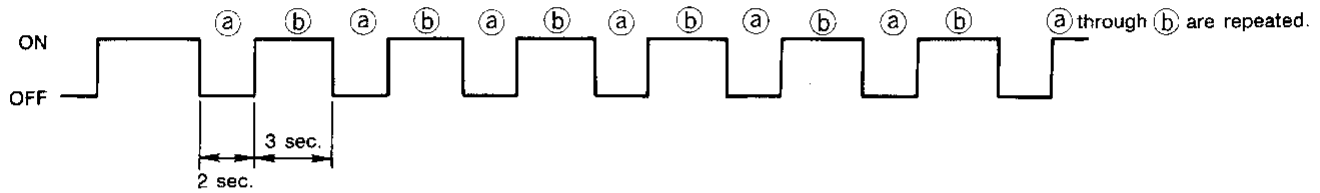
### Diagnosis mode (Self-diagnosis result)

- Indicate malfunctioning part — The system needs to be repaired.



SRS017

- No malfunction (or intermittent trouble/repair completion)



ARS046

### WARNING:

- After the malfunctioning parts have been repaired, return the system to "User mode".

Self-diagnosis results in diagnosis mode can be identified by number of flashes (a). Refer to table on next page for identifying the malfunctioning part.

# TROUBLE DIAGNOSES — Supplemental Restraint System (SRS)

## Self-diagnosis (Cont'd)

### Warning lamp flashing times and repair order

| Warning lamp           | Flash code <sup>(d)</sup><br>(# of flashes) | Explanation   | Repair order<br>*Recheck SRS at each replacement   |
|------------------------|---|---|--|
| "AIR BAG" warning lamp | 0   | <ul style="list-style-type: none"> <li>No malfunction is detected.</li> </ul>                                 | —  |
|                        | 2   | <ul style="list-style-type: none"> <li>The driver air bag module circuit is out of order.</li> </ul>          | <ol style="list-style-type: none"> <li>Visually check the wiring harness connections.</li> <li>Replace the spiral cable.</li> <li>Replace the driver air bag module.<br/>(Before disposing of it, it must be deployed.)</li> <li>Replace the diagnosis sensor unit.</li> <li>Replace the air bag harness.</li> </ol> |
|                        | 7   | <ul style="list-style-type: none"> <li>The diagnosis sensor unit is out of order.</li> </ul>                  | <ol style="list-style-type: none"> <li>Visually check the wiring harness connections.</li> <li>Replace the diagnosis sensor unit.</li> <li>Replace the air bag harness.</li> <li>Replace the main harness.</li> </ol>  |
|                        | 8   | <ul style="list-style-type: none"> <li>The front passenger air bag module circuit is out of order.</li> </ul> | <ol style="list-style-type: none"> <li>Visually check the wiring harness connections.</li> <li>Replace the front passenger air bag module.<br/>(Before disposing of it, it must be deployed.)</li> <li>Replace the diagnosis sensor unit.</li> <li>Replace the air bag harness.</li> </ol>                           |
|                        | 9   | <ul style="list-style-type: none"> <li>More than two parts groups are out of order.</li> </ul>                | <ol style="list-style-type: none"> <li>Visually check the wiring harness connections.</li> <li>Replace the diagnosis sensor unit.</li> <li>Replace spiral cable and air bag module.</li> <li>Replace the air bag harness.</li> <li>Replace the main harness.</li> </ol>  |

\*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 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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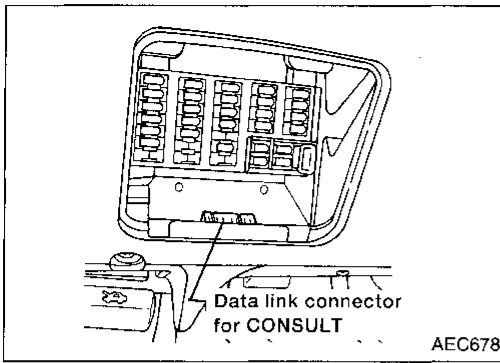
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## Trouble Diagnoses for Air Bag

### DIAGNOSTIC PROCEDURE 1

**SYMPTOM:** "AIR BAG" warning lamp flashes.

**WARNING:**

Determine if the flash rate is every 0.5 seconds, or 3 seconds "ON" and 2 seconds "OFF".

If every 0.5 seconds, perform self-diagnosis.

If 3 seconds "ON" and 2 seconds "OFF", the system is in diagnosis mode, refer to RS-27 for instructions.



Connect the CONSULT and operate it. Read the "Self-diagnosis". Refer to RS-25.

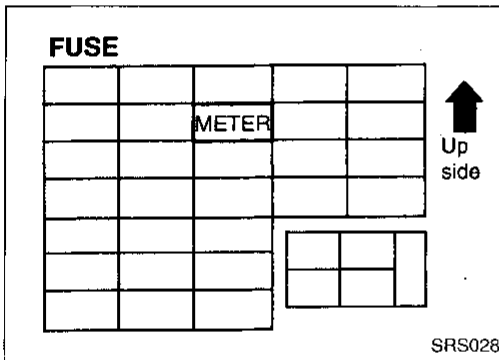
Refer to SELF-DIAGNOSIS RESULTS and repair.

OR



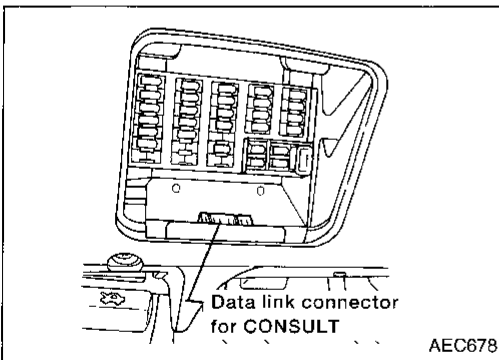
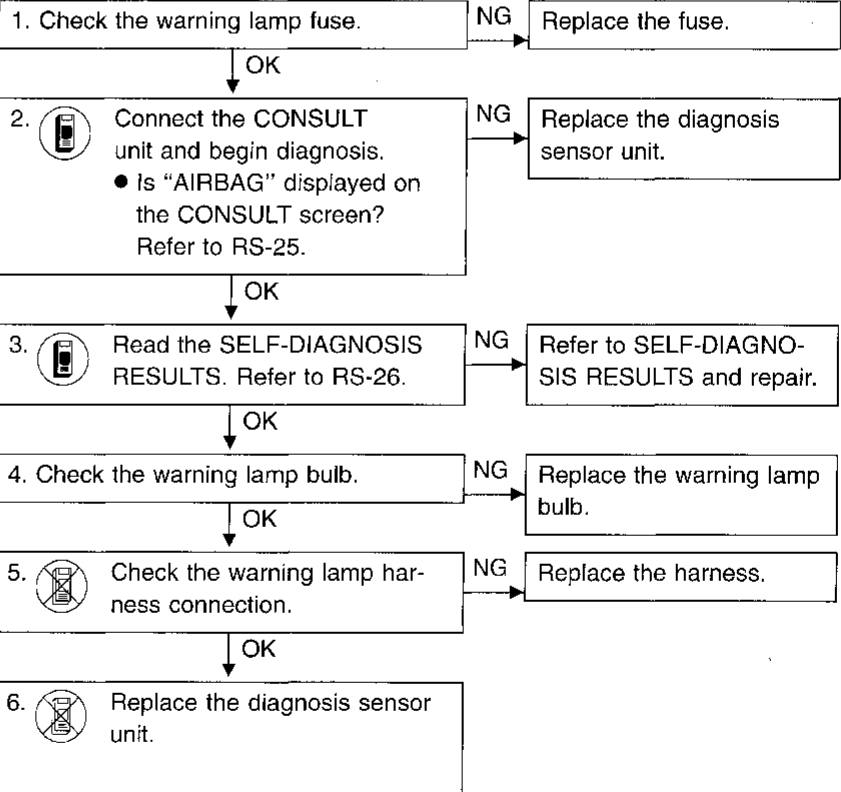
Diagnosis using warning lamp. Refer to RS-27.

Refer to the number of warning lamp flashes. Repair as necessary.



### DIAGNOSTIC PROCEDURE 2

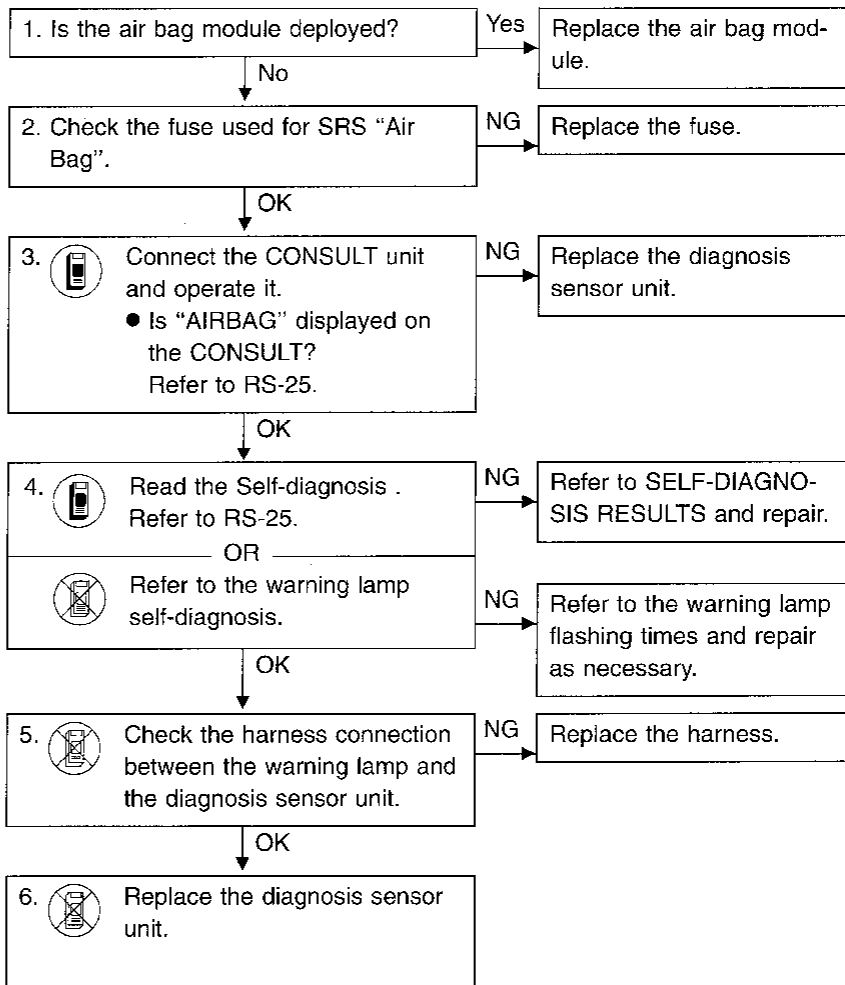
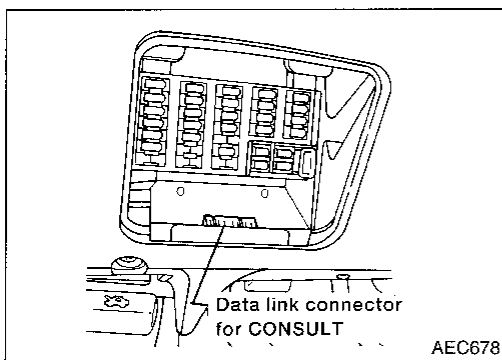
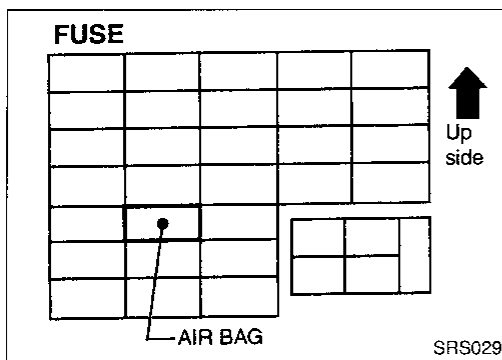
**SYMPTOM:** "AIR BAG" warning lamp does not come on.



**Trouble Diagnoses for Air Bag (Cont'd)**

**DIAGNOSTIC PROCEDURE 3**

**SYMPTOM: Warning lamp does not turn off.**



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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.
3. Check the SRS components using the table shown below:
  - Replace any SRS components showing visible signs of damage (dents, cracks, deformation).
4. Conduct self-diagnosis using CONSULT or “AIR BAG” warning lamp. Open circuits of air bag module will appear as problem codes. Ensure no other malfunction is detected. Refer to RS-25 or RS-27.
5. Install new air bag modules.
6. Conduct self-diagnosis again.

### 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, deformation).
2. Conduct self-diagnosis using CONSULT or “AIR BAG” warning lamp to ensure no malfunction is detected. Refer to RS-25 or RS-27.

### SRS inspection

| Part                                       | Air bag deployed   | Air bag did NOT deploy  |
|--|--|---|
| Air bag module (driver and passenger side) | REPLACE<br>Install with new bolts.   | <ul style="list-style-type: none"> <li>● Remove air bag modules. Check harness cover and connectors for damage, terminals for deformities, and harness for binding.</li> <li>● Install driver air bag module into the steering wheel to check fit and alignment with the wheel.</li> <li>● Install passenger air bag module into the instrument panel to check fit with the instrument panel.</li> <li>● No damage found, reinstall with new bolts.</li> <li>● If damaged—REPLACE. Air bag must be deployed before discarding.</li> </ul> |
| Instrument panel                           | REPLACE<br>Install with new bolts.   | <ul style="list-style-type: none"> <li>● Check instrument panel for bending, deformities, or cracks.</li> <li>● If no damage is found, reinstall with new bolts.</li> <li>● If damaged—REPLACE.</li> </ul>  |
| Diagnosis sensor unit                      | REPLACE<br>Install with new bolts.   | <ul style="list-style-type: none"> <li>● Check case and bracket for dents, cracks or deformities.</li> <li>● Check connectors for damage, and terminals for deformities.</li> <li>● If no damage is found, reinstall with new bolts.</li> <li>● If damaged—REPLACE.</li> </ul>  |
| Steering wheel                             | <ul style="list-style-type: none"> <li>● Check harness (built into steering wheel) and connectors for damage, and terminals for deformities.</li> <li>● Install air bag module to check fit or alignment with steering wheel.</li> <li>● Check steering wheel for excessive free play.</li> <li>● If no damage is found, reinstall with new bolts.</li> <li>● If damaged—REPLACE.</li> </ul> |   |
| Spiral cable                               | <ul style="list-style-type: none"> <li>● Visually check lock (engagement) pins and combination switch for damage.</li> <li>● Check connectors, flat cable and protective tape for damage.</li> <li>● Check steering wheel for noise, binding or heavy operation.</li> <li>● If no damage is found, reinstall with new bolts.</li> <li>● If damaged—REPLACE.</li> </ul>                       |   |
| Harness and connectors                     | <ul style="list-style-type: none"> <li>● Check connectors for poor connections, damage, and terminals for deformities.</li> <li>● Check harness for binding, chafing, cuts, or deformities.</li> <li>● If no damage is found, reinstall.</li> <li>● Damaged—REPLACE damaged section of harness. Do not attempt to repair, splice or modify any SRS harness.</li> </ul>                       |   |