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## **PRECAUTION**

## **PRECAUTIONS**

Precaution for Supplemental Restraint System (SRS) "AIR BAG" and "SEAT BELT PRE-TENSIONER"

The Supplemental Restraint System such as "AIR BAG" and "SEAT BELT PRE-TENSIONER", used along with a front seat belt, helps to reduce the risk or severity of injury to the driver and front passenger for certain types of collision. This system includes seat belt switch inputs and dual stage front air bag modules. The SRS system uses the seat belt switches to determine the front air bag deployment, and may only deploy one front air bag, depending on the severity of a collision and whether the front occupants are belted or unbelted. Information necessary to service the system safely is included in the "SRS AIRBAG" and "SEAT BELT" of this Service Manual.

#### **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/INFINITI dealer.
- Improper maintenance, including incorrect removal and installation of the SRS, can lead to personal injury caused by unintentional activation of the system. For removal of Spiral Cable and Air Bag Module, see the "SRS AIRBAG".
- Never use electrical test equipment on any circuit related to the SRS unless instructed to in this Service Manual. SRS wiring harnesses can be identified by yellow and/or orange harnesses or harness connectors.

## PRECAUTIONS WHEN USING POWER TOOLS (AIR OR ELECTRIC) AND HAMMERS

When working near the Airbag Diagnosis Sensor Unit or other Airbag System sensors while ignition switch is ON or engine is running, never use air or electric power tools or strike near the sensor(s) with a hammer. Heavy vibration may activate the sensor(s), deploy the airbag(s), possibly cause serious injury. When using air or electric power tools or hammers, always turn OFF ignition switch, disconnect the battery, and wait 3 minutes or more before performing any service.

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- Do not use electrical test equipment to check SRS circuits unless instructed to in this Service Manual.
- Before servicing the SRS, turn ignition switch OFF, disconnect battery negative terminal and wait at least 3
  minutes.
  - For approximately 3 minutes after the battery negative terminal is removed, it is still possible for the air bag and seat belt pre-tensioner to deploy. Therefore, do not work on any SRS connectors or wires until at least 3 minutes have elapsed.
- Diagnosis sensor unit must always be installed with their arrow marks "←" pointing towards the front of the vehicle for proper operation. Also check diagnosis sensor unit for cracks, deformities or rust before installation and replace as required.
- The spiral cable must be aligned in the neutral position since its rotations are limited. Do not turn steering wheel and column after removal of steering gear.
- Handle air bag module carefully. Always place driver and front passenger air bag modules with the pad side facing upward and seat mounted front side air bag module standing with the stud bolt side facing down.
- Conduct self-diagnosis to check entire SRS for proper functioning after replacing any components.
- After air bag inflates, the front instrument panel assembly should be replaced if damaged.
- Always replace instrument panel pad following front passenger air bag deployment.

## Occupant Classification System

Replace occupant classification system control unit and passenger front seat cushion as an assembly.
 Refer to <u>SE-106</u>, "Removal and Installation".

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# **PREPARATION**

## **PREPARATION**

## **Commercial Service Tools**

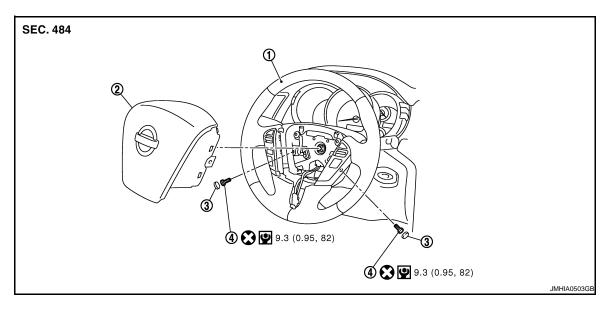
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Tool name		Description	
Tamper resistant TORX bit	S-N1757	Removes driver air bag module	
Remover tool	JMKIA30502Z	Removes clips, pawls, and metal clip	

## **ON-VEHICLE REPAIR**

## DRIVER AIR BAG MODULE

Exploded View



1. Steering wheel

- 2. Driver air bag module
- 3. Side lid (LH/RH)

4. TORX bolt (LH/RH)

Refer to GI-4, "Components" for symbols in the figure.

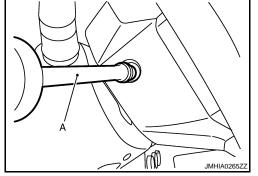
## Removal and Installation

#### **WARNING:**

- Before servicing, turn ignition switch OFF, disconnect battery negative terminal and wait at least 3 minutes.
- Always work from the side of air bag module. Never work in front of it.
- Never use the air tools or electric tools for servicing.

#### **REMOVAL**

- Remove the side lids (LH/RH).
- 2. Remove the TORX bolts (LH/RH) from the steering wheel (1) lower side using TORX bit (A).



3. Pull out the driver air bag module.

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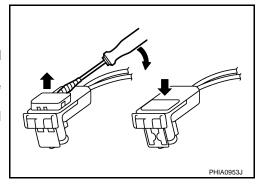
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#### [FOR USA AND CANADA]

- Disconnect the driver air bag harness connector.
   NOTE:
  - For installing/removing the driver air bag harness connector, insert thin screwdriver wrapped in tape into notch, lift lock and remove the connector.
  - Install the connector with lock raised, and push lock into the connector.
  - After installing the connector, check that the lock is pushed securely into it.

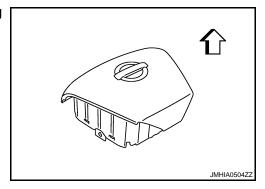


5. Remove the driver air bag module.

#### **CAUTION:**

 Always place the driver air bag module with pad side facing upward.

<□ : Upward



- Never impact the driver air bag module.
- Replace the driver air bag module if it has been dropped or sustained an impact.

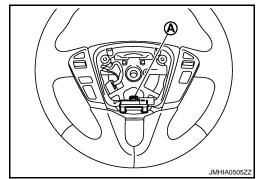


- Never insert any foreign objects (screwdriver, etc.) into the driver air bag module.
- Never disassemble the driver air bag module.
- Never expose the driver air bag module to temperatures exceeding 90 °C (194 °F).
- Never allow oil, grease, detergent, or water to come in contact with the driver air bag module.

### **INSTALLATION**

Install in the reverse order of removal.

- Never use the old TORX bolts after removal, replace with the new bolts.
- Fix the driver air bag harness to the harness fixing hook (A).



## **DRIVER AIR BAG MODULE**

## < ON-VEHICLE REPAIR >

[FOR USA AND CANADA]

- Tighten the TORX bolts after completely adjusting the centers of fixing holes on the driver air bag module side and the steering wheel side. If the holes are misaligned, the bolt threads are damaged and the module is not installed securely.
- If malfunction is detected by the air bag warning lamp, after repair or replacement of the malfunctioning parts, reset the memory using self-diagnosis or CONSULT-III. Refer to <a href="SRC-18">SRC-18</a>, "Diagnosis Description".
- After the work is completed, check that no system malfunction is detected by air bag warning lamp.

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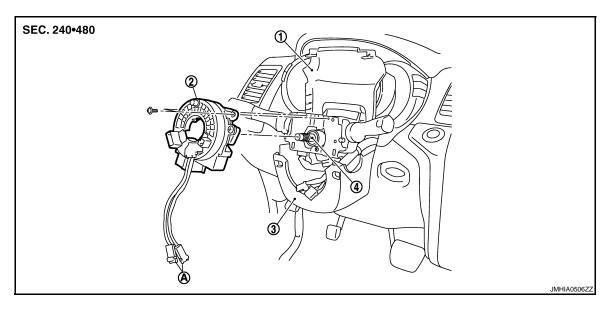
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## SPIRAL CABLE

Exploded View



- 1. Steering column cover (upper)
- 2. Spiral cable

3. Steering column cover (lower)

- 4. Steering column assembly
- A. Driver air bag harness connector

## Removal and Installation

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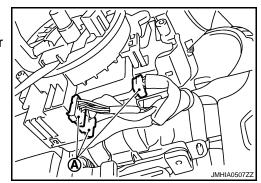
#### **WARNING:**

- Before servicing, turn ignition switch OFF, disconnect battery negative terminal and wait at least 3 minutes.
- Never use the air tools or electric tools for servicing.

### **REMOVAL**

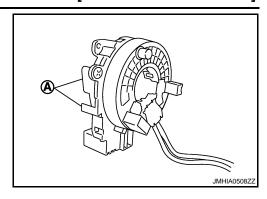
- 1. Remove the driver air bag module. Refer to <a href="SR-5">SR-5</a>, "Removal and Installation".</a>
- Remove the steering wheel. Refer to <u>ST-15, "Removal and Installation"</u>.
- 3. Remove the steering column cover (upper/lower). Refer to IP-11, "Exploded View".
- Disconnect the spiral cable body side harness connectors (A).
   NOTE:

Disconnect the spiral cable body side harness connectors after removing the spiral cable.



5. Remove the spiral cable fixing screws.

6. Remove the spiral cable side pawls (A).



7. Pull out forward the spiral cable.

#### **CAUTION:**

- Never impact the spiral cable.
- Never impact the spiral cable by dropping, etc. Replace the spiral cable if it has been dropped or sustained an impact.



- Never disassemble the spiral cable.
- Never apply lubricant to the spiral cable.
- Never allow oil, grease, detergent, or water to come in contact with the spiral cable.

#### INSTALLATION

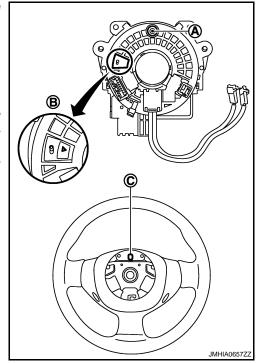
Install in the reverse order of removal.

#### **CAUTION:**

• The spiral cable may snap during steering operation if the cable is installed in an improper position.

The neutral position is set as per the following.

- Turn carefully the spiral cable clockwise to the end position. Then turn it counterclockwise (about 2 and a half turns) and stop turning at the mark (B) on which the stopper insertion holes are in the same position.
- The service part is installed in the neutral position by the stopper and can be set without adjusting after the stopper is removed.
- Never over turn the spiral cable or go beyond number of turns required. (This will cause the cable to snap.)
- Adjust the spiral cable locating pin (A) to the steering wheel locating pin hole (C).



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## **SPIRAL CABLE**

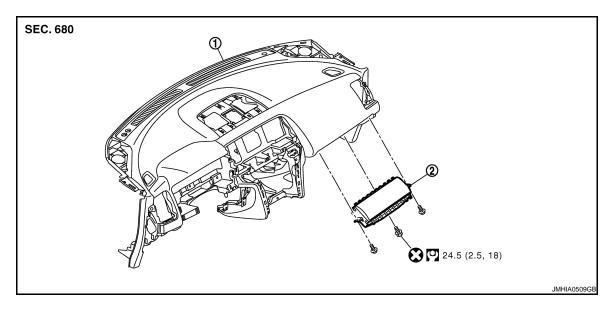
## < ON-VEHICLE REPAIR >

[FOR USA AND CANADA]

- If malfunction is detected by the air bag warning lamp, after repair or replacement of the malfunctioning parts, reset the memory using self-diagnosis or CONSULT-III. Refer to <a href="SRC-18">SRC-18</a>, "Diagnosis Description".
- After the work is completed, check that no system malfunction is detected by air bag warning lamp.

## FRONT PASSENGER AIR BAG MODULE

Exploded View



Instrument panel assembly
 Front passenger air bag module
 Refer to GI-4. "Components" for symbols in the figure.

## Removal and Installation

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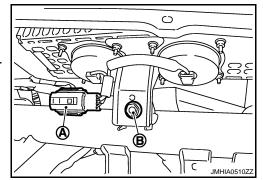
### **WARNING:**

- Before servicing, turn ignition switch OFF, disconnect battery negative terminal and wait at least 3 minutes.
- Always work from the side of air bag module. Never work in front of it.
- Never use the air tools or electric tools for servicing.

## REMOVAL

- 1. Remove the glove box lid assembly. Refer to IP-12, "Removal and Installation".
- 2. Remove the Instrument lower assist panel. Refer to IP-12, "Removal and Installation".
- 3. Disconnect the front passenger air bag harness connector (A).
- 4. Remove the front passenger air bag module fixing bolt (B). **NOTE:**

The figure shows the installed front passenger air bag module. (Under view of the module installed without glove box cover.)



5. Remove the instrument panel assembly (1). Refer to IP-12, "Removal and Installation".

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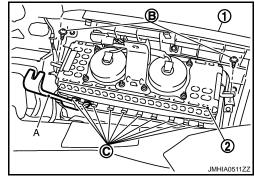
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## FRONT PASSENGER AIR BAG MODULE

## < ON-VEHICLE REPAIR >

#### [FOR USA AND CANADA]

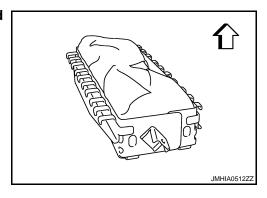
- 6. Remove the front passenger air bag module fixing screws (B).
- 7. Disconnect the pawls (C) by using remover tool (A), and then remove the front passenger air bag module (2) from instrument panel.



#### **CAUTION:**

 Always place the front passenger air bag module with pad side facing upward.





- Never impact the passenger air bag module.
- Replace the front passenger air bag module if it has been dropped or sustained an impact.



- Never insert any foreign objects (screwdriver, etc.) into front passenger air bag module.
- Never disassembly the front passenger air bag module.
- Never expose the front passenger air bag module to temperatures exceeding 90 °C (194 °F).
- Never allow oil, grease, detergent, or water to come in contact with the front passenger air bag module.

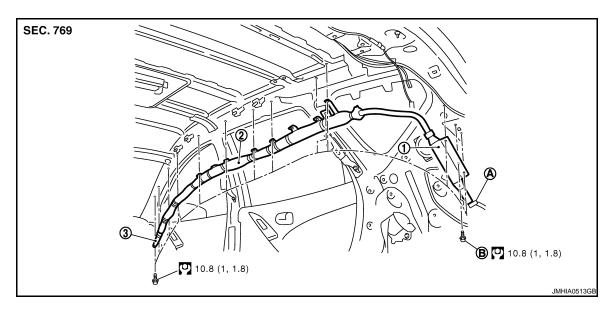
#### INSTALLATION

Install in the reverse order of removal.

- Never use the old fixing bolts after removal, replace with the new bolts.
- Never damage the harness while installing.
- If malfunction is detected by the air bag warning lamp, after repair or replacement of the malfunctioning parts, reset the memory using self-diagnosis or CONSULT-III. Refer to <a href="SRC-18">SRC-18</a>, "Diagnosis Description".
- After the work is completed, check that no system malfunction is detected by air bag warning lamp.

## SIDE CURTAIN AIR BAG MODULE

Exploded View



- 1. Side curtain air bag inflator
- 2. Side curtain air bag
- 3. Strap

A. Side curtain air bag harness connec- B. Ground bolt tor

Refer to GI-4, "Components" for symbols in the figure.

## Removal and Installation

WARNING:

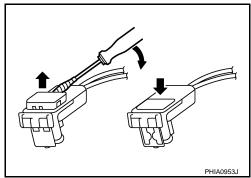
- Before servicing, turn ignition switch OFF, disconnect battery negative terminal and wait at least 3 minutes.
- Never use air tools or electric tools for servicing.

## **REMOVAL**

- 1. Remove the headlining.
  - Normal roof models: Refer to INT-26, "NORMAL ROOF: Removal and Installation".
  - Sunroof models: Refer to INT-29, "SUNROOF: Removal and Installation".
- Remove the side curtain air bag harness connector.

#### NOTE:

- For installing/removing the side curtain air bag harness connector, insert thin screwdriver wrapped in tape into notch, lift lock and remove the connector.
- Install the connector with lock raised, and push lock into the connector.
- After installing the connector, check that the lock is pushed securely into it.



3. Remove the fixing bolts, and then remove the side curtain air bag module.

### **CAUTION:**

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## SIDE CURTAIN AIR BAG MODULE

### < ON-VEHICLE REPAIR >

[FOR USA AND CANADA]

- · Never impact the side curtain air bag module.
- Replace the side curtain air bag module if it has been dropped or sustained an impact.



- Never insert any foreign objects (screwdriver, etc.) into the side curtain air bag module.
- Never disassemble the side curtain air bag module.
- Never expose the side curtain air bag module to temperatures exceeding 90 °C (194 °F).
- Never allow oil, grease, detergent, or water to come in contact with the side curtain air bag module.

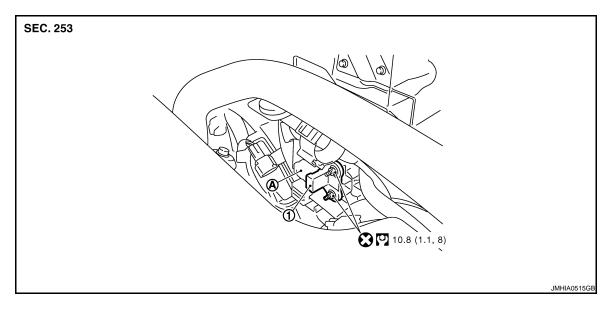
### **INSTALLATION**

Install in the reverse order of removal.

- If malfunction is detected by the air bag warning lamp, after repair or replacement of the malfunctioning parts, reset the memory using self-diagnosis or CONSULT-III. Refer to <a href="SRC-20">SRC-20</a>, "CONSULT-III Function".
- After the work is completed, check that no system malfunction is detected by air bag warning lamp.

## **CRASH ZONE SENSOR**

Exploded View



- 1. Crash zone sensor
- Crash zone sensor harness connector

Refer to GI-4, "Components" for symbols in the figure.

### Removal and Installation

## **WARNING:**

- Before servicing, turn ignition switch OFF, disconnect battery negative terminal and wait at least 3 minutes.
- Never use air tools or electric tools for servicing.

## **REMOVAL**

- 1. Remove the radiator cover grill (RH). Refer to EM-27, "Exploded View".
- Remove the air duct (inlet). Refer to <u>EM-27</u>, "<u>Exploded View</u>".
- 3. Remove the crash zone sensor fixing nuts.
- 4. Disconnect the crash zone sensor harness connector, and then remove the crash zone sensor.

#### **CAUTION:**

- Never impact the crash zone sensor.
- Replace the crash zone sensor if it has been dropped or sustained an impact.



 Replace the crash zone sensor of deployed SRS driver air bag and deployed SRS front passenger air bag.

#### INSTALLATION

Install in the reverse order of removal.

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## **CRASH ZONE SENSOR**

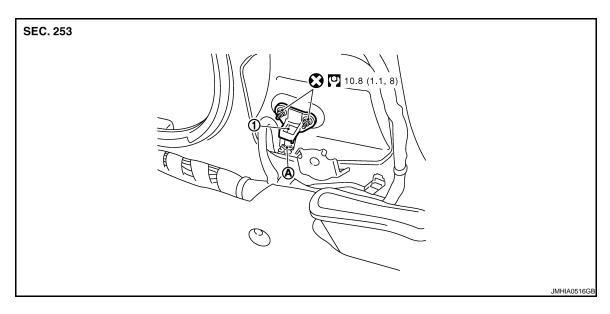
< ON-VEHICLE REPAIR >

[FOR USA AND CANADA]

- Never use the old fixing nuts after removal, replace with the new nuts.
- If malfunction is detected by the air bag warning lamp, after repair or replacement of the malfunctioning parts, reset the memory using self-diagnosis or CONSULT-III. Refer to <a href="SRC-18">SRC-18</a>, "Diagnosis Description".
- After the work is completed, check that no system malfunction is detected by air bag warning lamp.

## SIDE AIR BAG (SATELLITE) SENSOR

Exploded View



- 1. Side air bag (satellite) sensor
- A. Side air bag (satellite) sensor harness connector

Refer to GI-4, "Components" for symbols in the figure.

## Removal and Installation

## **WARNING:**

- Before servicing, turn ignition switch OFF, disconnect battery negative terminal and wait at least 3 minutes.
- Never use the air tools or electric tools for servicing.

## **REMOVAL**

- 1. Remove the front seat belt. Refer to SB-5, "SEAT BELT RETRACTOR: Removal and Installation".
- Remove the side air bag (satellite) sensor fixing nuts.
- 3. Disconnect the side air bag (satellite) sensor harness connector, and then remove the side air bag (satellite) sensor.

#### **CAUTION:**

- Never impact the side air bag (satellite) sensor.
- Replace the side air bag (satellite) sensor if it has been dropped or sustained an impact.



 Replace the side air bag (satellite) sensor of deployed SRS front side air bag module and deployed SRS side curtain air bag module.

**INSTALLATION** 

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## SIDE AIR BAG (SATELLITE) SENSOR

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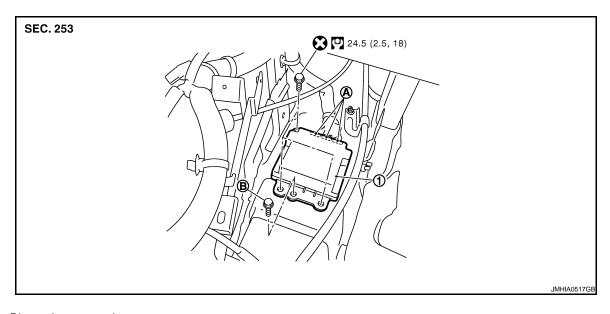
[FOR USA AND CANADA]

Install in the reverse order of removal.

- · Never use the old fixing nuts after removal, replace with the new nuts.
- If malfunction is detected by the air bag warning lamp, after repair or replacement of the malfunctioning parts, reset the memory using self-diagnosis or CONSULT-III. Refer to <a href="SRC-18">SRC-18</a>, "Diagnosis Description".
- After the work is completed, check that no system malfunction is detected by air bag warning lamp.

## **DIAGNOSIS SENSOR UNIT**

Exploded View



- Diagnosis sensor unit
- A. Diagnosis sensor unit harness con B. Ground bolt nector

Refer to GI-4, "Components" for symbols in the figure.

### Removal and Installation

## **WARNING:**

- Before servicing, turn ignition switch OFF, disconnect battery negative terminal and wait at least 3
  minutes.
- Before disconnecting the air bag sensor unit harness connector, be sure to disconnect the each harness connector of the air bag module and pre-tensioner seat belt to prevent air bag deployment by static electricity and pre-tensioner seat belt operation.
- Never use the air tools or electric tools for servicing.

## **REMOVAL**

- 1. Disconnect the each connector of all air bag modules and pre-tensioner seat belts.
- Remove the instrument lower cover (LH/RH). Refer to <u>IP-19, "Exploded View"</u>.
- Remove the rear foot duct 1 (LH/RH). Refer to <u>VTL-121, "REAR FOOT DUCT 1: Exploded View"</u>.
- 4. Remove the instrument stay LH. Refer to IP-19, "Exploded View".
- 5. Remove the front console bracket. Refer to IP-19, "Exploded View".
- 6. Disconnect the diagnosis sensor unit harness connectors.
- 7. Remove the fixing bolts, ground bolt, and then remove the diagnosis sensor unit.

#### **CAUTION:**

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## **DIAGNOSIS SENSOR UNIT**

## < ON-VEHICLE REPAIR >

[FOR USA AND CANADA]

 Replace the diagnosis sensor unit if it has been dropped or sustained an impact.



 Replace the diagnosis sensor unit of deployed SRS air bag and deployed SRS front seat belt pre-tensioner.

### **INSTALLATION**

Install in the reverse order of removal.

#### **CAUTION:**

- Never use the old fixing bolts after removal, replace with the new fixing bolts.
- If malfunction is detected by the air bag warning lamp, after repair or replacement of the malfunctioning parts, reset the memory using self-diagnosis or CONSULT-III. Refer to <a href="SRC-18">SRC-18</a>, "Diagnosis Description".
- After the work is completed, check that no system malfunction is detected by air bag warning lamp.

### ECU DISCRIMINATED NO.

After replacing the diagnosis sensor unit, confirm that the diagnosis sensor unit identification is correct for the vehicle as equipped.

Destination	Specification	ECU DISCRIMINATED No.
USA/CAN	Driver and passenger air bag, front seat belt pre-tensioner, front side air bag and side curtain air bag (+OCS/EDR)	FD08

## FRONT SEAT BELT PRE-TENSIONER

< ON-VEHICLE REPAIR >

[FOR USA AND CANADA]

## FRONT SEAT BELT PRE-TENSIONER

## Removal and Installation

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For removal and installation procedures, refer to <u>SB-5, "SEAT BELT RETRACTOR: Removal and Installation"</u>.

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## OCCUPANT CLASSIFICATION SYSTEM CONTROL UNIT

< ON-VEHICLE REPAIR >

[FOR USA AND CANADA]

## OCCUPANT CLASSIFICATION SYSTEM CONTROL UNIT

## Removal and Installation

INFOID:0000000003367300

### For removal and installation

The occupant classification system control unit and seat sensor mat are an integral part of the front passenger seat cushion and are replaced as an assembly. Refer to <u>SE-106</u>, "Removal and Installation".

## **PRECAUTIONS**

< PRECAUTION > [FOR MEXICO]

## **PRECAUTION**

## **PRECAUTIONS**

Precaution for Supplemental Restraint System (SRS) "AIR BAG" and "SEAT BELT PRE-TENSIONER"

The Supplemental Restraint System such as "AIR BAG" and "SEAT BELT PRE-TENSIONER", used along with a front seat belt, helps to reduce the risk or severity of injury to the driver and front passenger for certain types of collision. This system includes seat belt switch inputs and dual stage front air bag modules. The SRS system uses the seat belt switches to determine the front air bag deployment, and may only deploy one front air bag, depending on the severity of a collision and whether the front occupants are belted or unbelted. Information necessary to service the system safely is included in the "SRS AIRBAG" and "SEAT BELT" of this Service Manual.

#### **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/INFINITI dealer.
- Improper maintenance, including incorrect removal and installation of the SRS, can lead to personal injury caused by unintentional activation of the system. For removal of Spiral Cable and Air Bag Module, see the "SRS AIRBAG".
- Never use electrical test equipment on any circuit related to the SRS unless instructed to in this Service Manual. SRS wiring harnesses can be identified by yellow and/or orange harnesses or harness connectors.

## PRECAUTIONS WHEN USING POWER TOOLS (AIR OR ELECTRIC) AND HAMMERS

When working near the Airbag Diagnosis Sensor Unit or other Airbag System sensors while ignition switch is ON or engine is running, never use air or electric power tools or strike near the sensor(s) with a hammer. Heavy vibration may activate the sensor(s), deploy the airbag(s), possibly cause serious injury. When using air or electric power tools or hammers, always turn OFF ignition switch, disconnect the battery, and wait 3 minutes or more before performing any service.

Service INFOID:0000000003367302

- Do not use electrical test equipment to check SRS circuits unless instructed to in this Service Manual.
- Before servicing the SRS, turn ignition switch OFF, disconnect battery negative terminal and wait at least 3
  minutes.
  - For approximately 3 minutes after the battery negative terminal is removed, it is still possible for the air bag and seat belt pre-tensioner to deploy. Therefore, do not work on any SRS connectors or wires until at least 3 minutes have elapsed.
- Diagnosis sensor unit must always be installed with their arrow marks "←" pointing towards the front of the
  vehicle for proper operation. Also check diagnosis sensor unit for cracks, deformities or rust before installation and replace as required.
- The spiral cable must be aligned in the neutral position since its rotations are limited. Do not turn steering wheel and column after removal of steering gear.
- Handle air bag module carefully. Always place driver and front passenger air bag modules with the pad side facing upward and seat mounted front side air bag module standing with the stud bolt side facing down.
- Conduct self-diagnosis to check entire SRS for proper functioning after replacing any components.
- After air bag inflates, the front instrument panel assembly should be replaced if damaged.
- Always replace instrument panel pad following front passenger air bag deployment.

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Revision: 2008 October SR-23 2009 Murano

< PREPARATION > [FOR MEXICO]

# **PREPARATION**

## **PREPARATION**

## **Commercial Service Tools**

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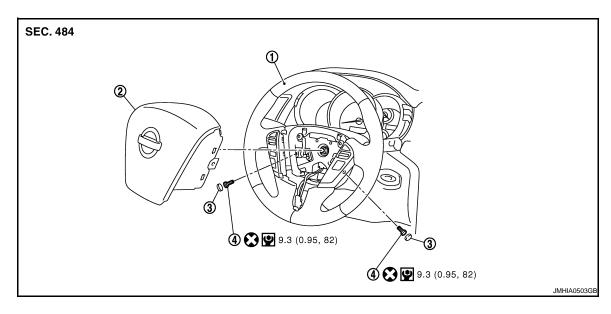
	Tool name	Description
Tamper resistant TORX bit	S-NT757	Removes driver air bag module
Remover tool	JMKIA3050ZZ	Removes clips, pawls, and metal clip

## [FOR MEXICO]

## **ON-VEHICLE REPAIR**

## DRIVER AIR BAG MODULE

Exploded View



1. Steering wheel

- 2. Driver air bag module
- 3. Side lid (LH/RH)

4. TORX bolt (LH/RH)

Refer to GI-4, "Components" for symbols in the figure.

## Removal and Installation

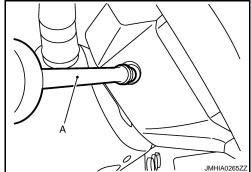
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#### **WARNING:**

- Before servicing, turn ignition switch OFF, disconnect battery negative terminal and wait at least 3
  minutes.
- Always work from the side of air bag module. Never work in front of it.
- Never use the air tools or electric tools for servicing.

#### **REMOVAL**

- Remove the side lids (LH/RH).
- 2. Remove the TORX bolts (LH/RH) from the steering wheel (1) lower side using TORX bit (A).



3. Pull out the driver air bag module.

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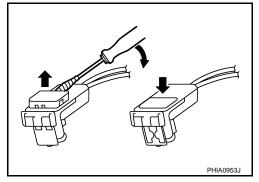
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### < ON-VEHICLE REPAIR >

- Disconnect the driver air bag harness connector.
   NOTE:
  - For installing/removing the driver air bag harness connector, insert thin screwdriver wrapped in tape into notch, lift lock and remove the connector.
  - Install the connector with lock raised, and push lock into the connector.
  - After installing the connector, check that the lock is pushed securely into it.

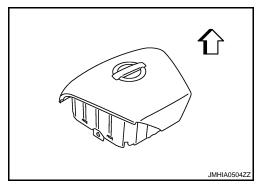


5. Remove the driver air bag module.

#### **CAUTION:**

 Always place the driver air bag module with pad side facing upward.

<□ : Upward



- Never impact the driver air bag module.
- Replace the driver air bag module if it has been dropped or sustained an impact.

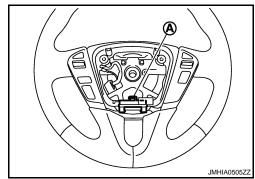


- Never insert any foreign objects (screwdriver, etc.) into the driver air bag module.
- Never disassemble the driver air bag module.
- Never expose the driver air bag module to temperatures exceeding 90 °C (194 °F).
- Never allow oil, grease, detergent, or water to come in contact with the driver air bag module.

### **INSTALLATION**

Install in the reverse order of removal.

- Never use the old TORX bolts after removal, replace with the new bolts.
- Fix the driver air bag harness to the harness fixing hook (A).



## **DRIVER AIR BAG MODULE**

< ON-VEHICLE REPAIR > [FOR MEXICO]

• Tighten the TORX bolts after completely adjusting the centers of fixing holes on the driver air bag module side and the steering wheel side. If the holes are misaligned, the bolt threads are damaged and the module is not installed securely.

• If malfunction is detected by the air bag warning lamp, after repair or replacement of the malfunctioning parts, reset the memory using self-diagnosis or CONSULT-III. Refer to <a href="SRC-18">SRC-18</a>, "Diagnosis Description".

After the work is completed, check that no system malfunction is detected by air bag warning lamp.

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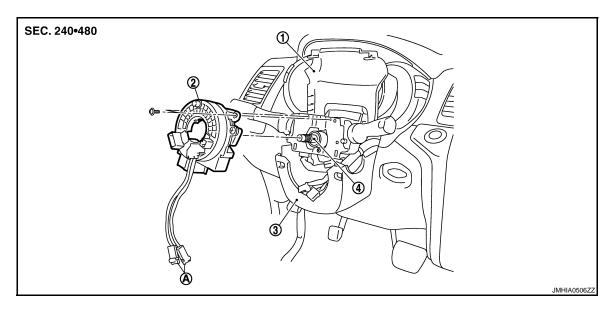
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## SPIRAL CABLE

Exploded View



- 1. Steering column cover (upper)
- 2. Spiral cable

3. Steering column cover (lower)

- 4. Steering column assembly
- A. Driver air bag harness connector

## Removal and Installation

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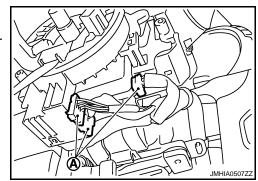
#### **WARNING:**

- Before servicing, turn ignition switch OFF, disconnect battery negative terminal and wait at least 3 minutes.
- Never use the air tools or electric tools for servicing.

### **REMOVAL**

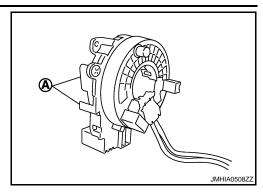
- 1. Remove the driver air bag module. Refer to <a href="SR-25">SR-25</a>, "Removal and Installation".
- Remove the steering wheel. Refer to <u>ST-15, "Removal and Installation"</u>.
- 3. Remove the steering column cover (upper/lower). Refer to IP-11, "Exploded View".
- Disconnect the spiral cable body side harness connectors (A).
   NOTE:

Disconnect the spiral cable body side harness connectors after removing the spiral cable.



Remove the spiral cable fixing screws.

6. Remove the spiral cable side pawls (A).



7. Pull out forward the spiral cable.

#### **CAUTION:**

- Never impact the spiral cable.
- Never impact the spiral cable by dropping, etc. Replace the spiral cable if it has been dropped or sustained an impact.



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- Never disassemble the spiral cable.
- Never apply lubricant to the spiral cable.
- Never allow oil, grease, detergent, or water to come in contact with the spiral cable.

#### INSTALLATION

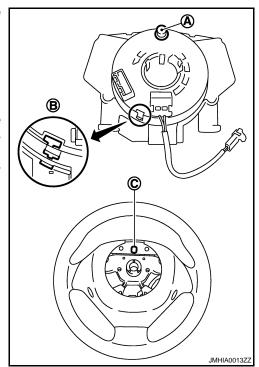
Install in the reverse order of removal.

#### **CAUTION:**

• The spiral cable may snap during steering operation if the cable is installed in an improper position.

The neutral position is set as per the following.

- Turn carefully the spiral cable clockwise to the end position. Then turn it counterclockwise (about 2 and a half turns) and stop turning at the mark (B) on which the stopper insertion holes are in the same position.
- The service part is installed in the neutral position by the stopper and can be set without adjusting after the stopper is removed.
- Never over turn the spiral cable or go beyond number of turns required. (This will cause the cable to snap.)
- Adjust the spiral cable locating pin (A) to the steering wheel locating pin hole (C).



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## **SPIRAL CABLE**

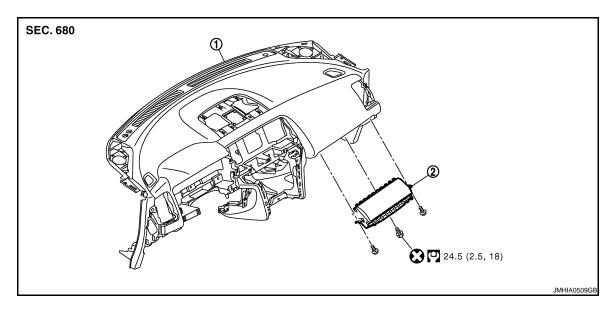
< ON-VEHICLE REPAIR > [FOR MEXICO]

- If malfunction is detected by the air bag warning lamp, after repair or replacement of the malfunctioning parts, reset the memory using self-diagnosis or CONSULT-III. Refer to <a href="SRC-18">SRC-18</a>, "Diagnosis Description".
- After the work is completed, check that no system malfunction is detected by air bag warning lamp.

[FOR MEXICO]

## FRONT PASSENGER AIR BAG MODULE

Exploded View



Instrument panel assembly
 Front passenger air bag module
 Refer to GI-4. "Components" for symbols in the figure.

## Removal and Installation

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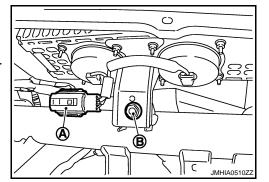
### **WARNING:**

- Before servicing, turn ignition switch OFF, disconnect battery negative terminal and wait at least 3 minutes.
- Always work from the side of air bag module. Never work in front of it.
- Never use the air tools or electric tools for servicing.

## REMOVAL

- 1. Remove the glove box lid assembly. Refer to IP-12, "Removal and Installation".
- 2. Remove the Instrument lower assist panel. Refer to IP-12, "Removal and Installation".
- 3. Disconnect the front passenger air bag harness connector (A).
- Remove the front passenger air bag module fixing bolt (B).
   NOTE:

The figure shows the installed front passenger air bag module. (Under view of the module installed without glove box cover.)



Remove the instrument panel assembly (1). Refer to <u>IP-12, "Removal and Installation"</u>.

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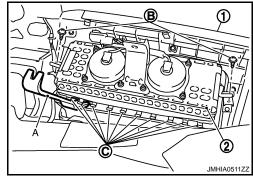
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## FRONT PASSENGER AIR BAG MODULE

< ON-VEHICLE REPAIR > [FOR MEXICO]

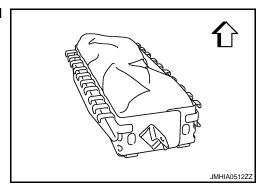
- Remove the front passenger air bag module fixing screws (B).
- 7. Disconnect the pawls (C) by using remover tool (A), and then remove the front passenger air bag module (2) from instrument panel.



#### **CAUTION:**

 Always place the front passenger air bag module with pad side facing upward.





- Never impact the passenger air bag module.
- Replace the front passenger air bag module if it has been dropped or sustained an impact.



- Never insert any foreign objects (screwdriver, etc.) into front passenger air bag module.
- Never disassembly the front passenger air bag module.
- Never expose the front passenger air bag module to temperatures exceeding 90 °C (194 °F).
- Never allow oil, grease, detergent, or water to come in contact with the front passenger air bag module.

#### INSTALLATION

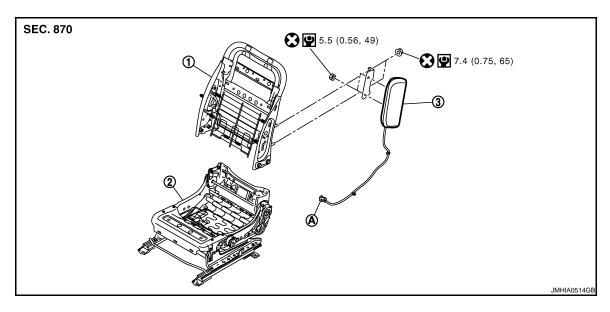
Install in the reverse order of removal.

- Never use the old fixing bolts after removal, replace with the new bolts.
- Never damage the harness while installing.
- If malfunction is detected by the air bag warning lamp, after repair or replacement of the malfunctioning parts, reset the memory using self-diagnosis or CONSULT-III. Refer to <a href="SRC-18">SRC-18</a>, "Diagnosis Description".
- After the work is completed, check that no system malfunction is detected by air bag warning lamp.

[FOR MEXICO]

## FRONT SIDE AIR BAG MODULE

Exploded View



Seatback flame

- 2. Seat cushion flame
- 3. Front side air bag module

A. Front side air bag harness connector

Refer to GI-4, "Components" for symbols in the figure.

## Removal and Installation

## REMOVAL

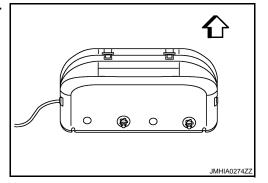
**WARNING:** 

- Before servicing, turn ignition switch OFF, disconnect battery negative terminal and wait at least 3 minutes.
- Always work from the rear of the front side air bag module.
- Never use the air tools or electric tools for servicing.
- Remove the front seat. Refer to <u>SE-106, "Removal and Installation"</u>.
- Remove the seatback board. Refer to <u>SE-99, "Exploded View"</u>.
- Remove the front side air bag module fixing nuts, and/or harness connector.
- 4. Remove the front side air bag module.

#### **CAUTION:**

Always place the front side air bag module with pad side facing upward.

⟨□ : Upward



Never impact the front side air bag module.

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## FRONT SIDE AIR BAG MODULE

< ON-VEHICLE REPAIR > [FOR MEXICO]

 Replace the front side air bag module if it has been dropped or sustained an impact.



- Never insert any foreign objects (screwdriver, etc.) into front side air bag module.
- Never disassemble the front side air bag module.
- Never expose the front side air bag module to temperatures exceeding 90 °C (194 °F).
- Never allow oil, grease, detergent, or water to come in contact with the front side air bag module.

### **INSTALLATION**

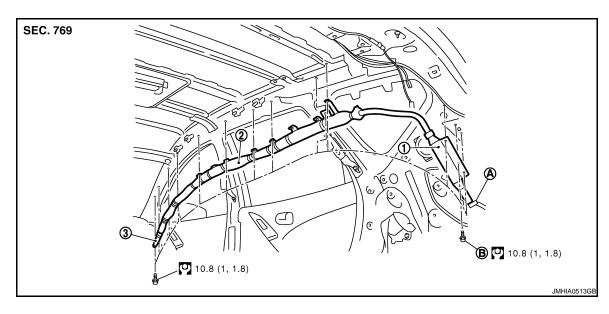
Install in the reverse order of removal.

- Never use the old fixing nuts after removal, replace with the new nuts.
- If malfunction is detected by the air bag warning lamp, after repair or replacement of the malfunctioning parts, reset the memory using self-diagnosis or CONSULT-III. Refer to <a href="SRC-177">SRC-177</a>, "Diagnosis Description".
- After the work is completed, check that no malfunctioning system is detected by air bag warning lamp.

< ON-VEHICLE REPAIR > [FOR MEXICO]

## SIDE CURTAIN AIR BAG MODULE

Exploded View



- Side curtain air bag inflator
- 2. Side curtain air bag
- 3. Strap

A. Side curtain air bag harness connec- B. Ground bolt tor

Refer to GI-4, "Components" for symbols in the figure.

### Removal and Installation

 Before servicing, turn ignition switch OFF, disconnect battery negative terminal and wait at least 3 minutes.

Never use air tools or electric tools for servicing.

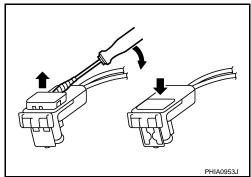
## **REMOVAL**

**WARNING:** 

- 1. Remove the headlining.
  - Normal roof models: Refer to INT-26, "NORMAL ROOF: Removal and Installation".
  - Sunroof models: Refer to INT-29, "SUNROOF: Removal and Installation".
- 2. Remove the side curtain air bag harness connector.

## NOTE:

- For installing/removing the side curtain air bag harness connector, insert thin screwdriver wrapped in tape into notch, lift lock and remove the connector.
- Install the connector with lock raised, and push lock into the connector.
- After installing the connector, check that the lock is pushed securely into it.



3. Remove the fixing bolts, and then remove the side curtain air bag module.

**CAUTION:** 

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## SIDE CURTAIN AIR BAG MODULE

< ON-VEHICLE REPAIR > [FOR MEXICO]

- · Never impact the side curtain air bag module.
- Replace the side curtain air bag module if it has been dropped or sustained an impact.



- Never insert any foreign objects (screwdriver, etc.) into the side curtain air bag module.
- Never disassemble the side curtain air bag module.
- Never expose the side curtain air bag module to temperatures exceeding 90 °C (194 °F).
- Never allow oil, grease, detergent, or water to come in contact with the side curtain air bag module.

### **INSTALLATION**

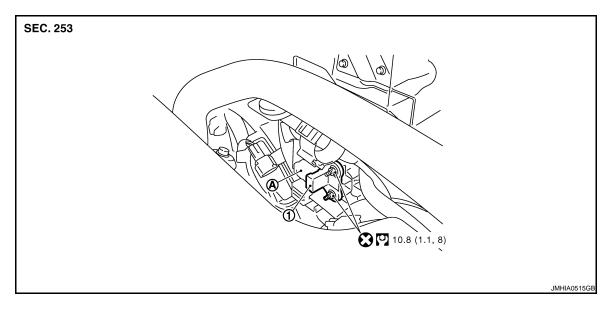
Install in the reverse order of removal.

- If malfunction is detected by the air bag warning lamp, after repair or replacement of the malfunctioning parts, reset the memory using self-diagnosis or CONSULT-III. Refer to <a href="SRC-18">SRC-18</a>, "Diagnosis Description".
- After the work is completed, check that no system malfunction is detected by air bag warning lamp.

[FOR MEXICO]

## **CRASH ZONE SENSOR**

Exploded View



- 1. Crash zone sensor
- Crash zone sensor harness connector

Refer to GI-4, "Components" for symbols in the figure.

## Removal and Installation

**WARNING:** 

- Before servicing, turn ignition switch OFF, disconnect battery negative terminal and wait at least 3 minutes.
- Never use air tools or electric tools for servicing.

## **REMOVAL**

- 1. Remove the radiator cover grill (RH). Refer to EM-27, "Exploded View".
- Remove the air duct (inlet). Refer to <u>EM-27</u>, "<u>Exploded View</u>".
- 3. Remove the crash zone sensor fixing nuts.
- 4. Disconnect the crash zone sensor harness connector, and then remove the crash zone sensor.

#### **CAUTION:**

- Never impact the crash zone sensor.
- Replace the crash zone sensor if it has been dropped or sustained an impact.



 Replace the crash zone sensor of deployed SRS driver air bag and deployed SRS front passenger air bag.

#### INSTALLATION

Install in the reverse order of removal.

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## **CRASH ZONE SENSOR**

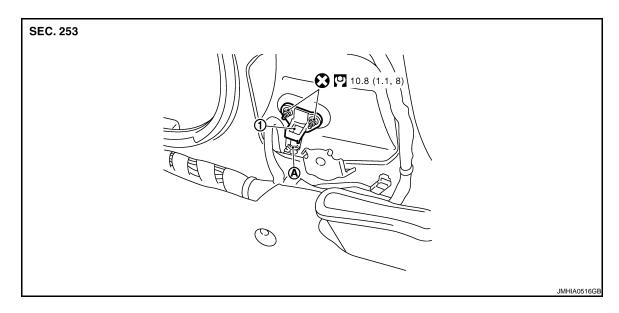
< ON-VEHICLE REPAIR > [FOR MEXICO]

- Never use the old fixing nuts after removal, replace with the new nuts.
- If malfunction is detected by the air bag warning lamp, after repair or replacement of the malfunctioning parts, reset the memory using self-diagnosis or CONSULT-III. Refer to <a href="SRC-18">SRC-18</a>, "Diagnosis Description".
- After the work is completed, check that no system malfunction is detected by air bag warning lamp.

< ON-VEHICLE REPAIR > [FOR MEXICO]

## SIDE AIR BAG (SATELLITE) SENSOR

Exploded View



- Side air bag (satellite) sensor
- A. Side air bag (satellite) sensor harness connector

Refer to GI-4, "Components" for symbols in the figure.

### Removal and Installation

**WARNING:** 

- Before servicing, turn ignition switch OFF, disconnect battery negative terminal and wait at least 3 minutes.
- Never use the air tools or electric tools for servicing.

#### **REMOVAL**

- 1. Remove the front seat belt. Refer to SB-5, "SEAT BELT RETRACTOR: Removal and Installation".
- Remove the side air bag (satellite) sensor fixing nuts.
- 3. Disconnect the side air bag (satellite) sensor harness connector, and then remove the side air bag (satellite) sensor.

#### **CAUTION:**

- Never impact the side air bag (satellite) sensor.
- Replace the side air bag (satellite) sensor if it has been dropped or sustained an impact.



 Replace the side air bag (satellite) sensor of deployed SRS front side air bag module and deployed SRS side curtain air bag module.

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## SIDE AIR BAG (SATELLITE) SENSOR

< ON-VEHICLE REPAIR > [FOR MEXICO]

Install in the reverse order of removal.

- · Never use the old fixing nuts after removal, replace with the new nuts.
- If malfunction is detected by the air bag warning lamp, after repair or replacement of the malfunctioning parts, reset the memory using self-diagnosis or CONSULT-III. Refer to <a href="SRC-18">SRC-18</a>, "Diagnosis Description".
- After the work is completed, check that no system malfunction is detected by air bag warning lamp.

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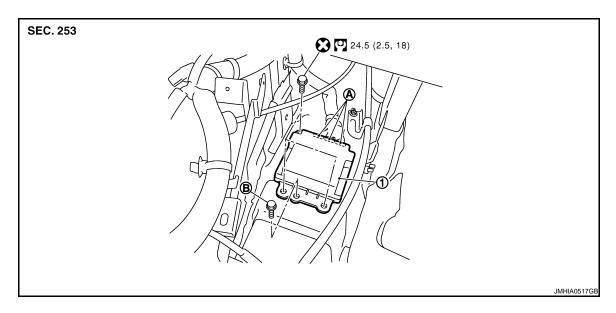
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## **DIAGNOSIS SENSOR UNIT**

Exploded View



- 1. Diagnosis sensor unit
- A. Diagnosis sensor unit harness con B. Ground bolt nector

Refer to GI-4, "Components" for symbols in the figure.

## Removal and Installation

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### **WARNING:**

- Before servicing, turn ignition switch OFF, disconnect battery negative terminal and wait at least 3
  minutes.
- Before disconnecting the air bag sensor unit harness connector, be sure to disconnect the each harness connector of the air bag module and pre-tensioner seat belt to prevent air bag deployment by static electricity and pre-tensioner seat belt operation.
- · Never use the air tools or electric tools for servicing.

## REMOVAL

- 1. Disconnect the each connector of all air bag modules and pre-tensioner seat belts.
- Remove the instrument lower cover (LH/RH). Refer to <a href="IP-19">IP-19</a>, "Exploded View".
   Remove the rear foot duct 1 (LH/RH). Refer to <a href="VTL-121">VTL-121</a>, "REAR FOOT DUCT 1: Exploded View".
- 4. Remove the instrument stay LH. Refer to IP-19, "Exploded View".
- 5. Remove the front console bracket. Refer to IP-19, "Exploded View".
- 6. Disconnect the diagnosis sensor unit harness connectors.
- 7. Remove the fixing bolts, ground bolt, and then remove the diagnosis sensor unit.

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## DIAGNOSIS SENSOR UNIT

< ON-VEHICLE REPAIR > [FOR MEXICO]

 Replace the diagnosis sensor unit if it has been dropped or sustained an impact.



 Replace the diagnosis sensor unit of deployed SRS air bag and deployed SRS front seat belt pre-tensioner.

### **INSTALLATION**

Install in the reverse order of removal.

#### **CAUTION:**

- Never use the old fixing bolts after removal, replace with the new fixing bolts.
- If malfunction is detected by the air bag warning lamp, after repair or replacement of the malfunctioning parts, reset the memory using self-diagnosis or CONSULT-III. Refer to <a href="SRC-18">SRC-18</a>, "Diagnosis Description".
- After the work is completed, check that no system malfunction is detected by air bag warning lamp.

### ECU DISCRIMINATED NO.

After replacing the diagnosis sensor unit, confirm that the diagnosis sensor unit identification is correct for the vehicle as equipped.

Destination	Specification	ECU DISCRIMINATED No.
USA/CAN	Driver and passenger air bag, front seat belt pre-tensioner, front side air bag and side curtain air bag (+OCS/EDR)	FD08

## FRONT SEAT BELT PRE-TENSIONER

< ON-VEHICLE REPAIR > [FOR MEXICO]

## FRONT SEAT BELT PRE-TENSIONER

Removal and Installation

For removal and installation procedures, refer to <u>SB-5, "SEAT BELT RETRACTOR: Removal and Installation"</u>.

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