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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. Information necessary to service the system safely is included in the SR and SB section 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, it is recommended that all maintenance and repair be performed by an authorized NISSAN/INFINITI dealer.
- Improper repair, 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 SR section.
- Do not use electrical test equipment on any circuit related to the SRS unless instructed to in this Service Manual. SRS wiring harnesses can be identified by yellow and/or orange harnesses or harness connectors.

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

#### **WARNING:**

- When working near the Airbag Diagnosis Sensor Unit or other Airbag System sensors with the Ignition ON or engine running, DO NOT use air or electric power tools or strike near the sensor(s) with a hammer. Heavy vibration could activate the sensor(s) and deploy the air bag(s), possibly causing serious injury.
- When using air or electric power tools or hammers, always switch the Ignition OFF, disconnect the battery or batteries and wait at least three minutes 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 both battery cables and wait at least three minutes.
  - For approximately three minutes after the cables are 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 three minutes have passed.
- 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 with 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 function after replacing any components.
- After air bag inflates, the instrument panel assembly should be replaced if damaged.
- Always replace instrument panel pad following front passenger air bag deployment.

Precaution for Work

- When removing or disassembling each component, be careful not to damage or deform it. If a component may be subject to interference, be sure to protect it with a shop cloth.
- When removing (disengaging) components with a screwdriver or similar tool, be sure to wrap the component with a shop cloth or vinyl tape to protect it.
- Protect the removed parts with a shop cloth and prevent them from being dropped.
- Replace a deformed or damaged clip.
- If a part is specified as a non-reusable part, always replace it with a new one.
- Be sure to tighten bolts and nuts securely to the specified torque.
- After installation is complete, be sure to check that each part works properly.

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# **PRECAUTIONS**

## < PRECAUTION >

- Follow the steps below to clean components:
- Water soluble dirt:
- Dip a soft cloth into lukewarm water, wring the water out of the cloth and wipe the dirty area.
- Then rub with a soft, dry cloth.
- Oily dirt:
- Dip a soft cloth into lukewarm water with mild detergent (concentration: within 2 to 3%) and wipe the dirty area.
- Then dip a cloth into fresh water, wring the water out of the cloth and wipe the detergent off.
- Then rub with a soft, dry cloth.
- Do not use organic solvent such as thinner, benzene, alcohol or gasoline.
- For genuine leather seats, use a genuine leather seat cleaner.

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# **PREPARATION**

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# **PREPARATION**

# **PREPARATION**

# Special Service Tools

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The actual shape of the tools may	differ from those illustrated here.	
Tool number (TechMate No.) Tool name		Description
— (J-46534) Trim Tool Set		Removing trim components

## < BASIC INSPECTION >

# **BASIC INSPECTION**

# **COLLISION DIAGNOSIS**

For Frontal Collision

FOR FRONTAL COLLISION: When SRS is activated in a collision

#### **CAUTION:**

Due to varying models and option levels, not all parts listed in the chart below apply to all vehicles.

#### WORK PROCEDURE

- 1. Before performing any of the following steps, ensure that all vehicle body and structural repairs have been completed.
- Replace the diagnosis sensor unit.
- 3. Remove the front air bag modules, crash zone sensor assembly, bracket and seat belt pre-tensioner assemblies.
- Check the SRS components using the table below: Replace any SRS components showing visible signs of damage. (dents, cracks and deformation, etc.)
- 5. Install new front air bag modules, crash zone sensor assembly, bracket and seat belt pre-tensioner assemblies.
- Perform self-diagnosis using CONSULT or air bag warning lamp. Refer to <u>SRC-16</u>. "<u>Diagnosis Descrip-</u> tion" for details.
  - Ensure entire SRS operates properly.
- 7. After the work is completed, perform self-diagnosis to check that no malfunction is detected. Refer to SRC-16, "SRS Operation Check".

# SRS INSPECTION (FOR FRONTAL COLLISION)

Part	Inspection
Driver air bag module	If the driver air bag has deployed: REPLACE Install with new fasteners.
Driver knee air bag module	If the driver knee air bag has deployed: REPLACE Install with new fasteners.
Front passenger air bag module (if equipped)	If the front passenger air bag has deployed: REPLACE Install with new fasteners.
Crash zone sensor	If any of the front air bags or seat belt pre-tensioners* have been activated: REPLACE the crash zone sensor and bracket with new fasteners. *: Confirm seat belt pre-tensioner activation using CONSULT only.
Seat belt pre-tensioner assemblies (All applicable locations: buckle, retractor, lap outer)	If either the driver or passenger seat belt pre-tensioner* has been activated: REPLACE all seat belt pre-tensioner assemblies with new fasteners. *: Confirm seat belt pre-tensioner activation using CONSULT only.
Diagnosis sensor unit	If any of the SRS components have been activated: REPLACE the diagnosis sensor unit. Install with new fasteners.
Steering wheel	<ol> <li>Visually check steering wheel for deformities.</li> <li>Check harness (built into steering wheel) and connectors for damage, and terminals for deformities.</li> <li>Install driver air bag module into the steering wheel to check fit and alignment with the wheel.</li> <li>Check steering wheel for excessive free play.</li> <li>If no damage is found, reinstall.</li> <li>If damaged — REPLACE.</li> </ol>
Spiral cable	If the driver front air bag has deployed: REPLACE the spiral cable.

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## < BASIC INSPECTION >

Part	Inspection
Occupant classification system (Passenger seat)	<ol> <li>Remove passenger seat assembly.</li> <li>Check control unit case for dents, cracks of deformities.</li> <li>Check connectors for damage and terminals for deformities.</li> <li>Check seat frame and cushion pan for dents or deformities.</li> <li>If no damage is found, reinstall seat with new fasteners.</li> <li>If damaged — REPLACE seat cushion assembly with new fasteners.</li> <li>Perform zero point reset function after front passenger seat is installed in the vehicle and all bolts are tightened to specification. Refer to <a href="SRC-40">SRC-40</a>. "ZERO POINT RESET: Description".</li> </ol>
Harness and connectors	<ol> <li>Check connectors for poor connection, damage, and terminals for deformities.</li> <li>Check harness for binding, chafing, cuts, or deformities.</li> <li>If no damage is found, reinstall the harness and connectors.</li> <li>If damaged — REPLACE the damaged harness. Do not attempt to repair, splice or modify any SRS harness.</li> </ol>
Instrument panel assembly	If the passenger front air bag has deployed: REPLACE the instrument panel assembly. (integrated type)

FOR FRONTAL COLLISION: When SRS is not activated in a collision

#### **CAUTION:**

Due to varying models and option levels, not all parts listed in the chart below apply to all vehicles.

#### WORK PROCEDURE

- 1. Before performing any of the following steps, ensure that all vehicle body and structural repairs have been completed.
- 2. Check the SRS components using the table below:
  Replace any SRS components showing visible signs of damage. (dents, cracks and deformation, etc.)
- 3. Perform self-diagnosis using CONSULT or air bag warning lamp. Refer to <u>SRC-16. "Diagnosis Description"</u> for details.
  - Ensure entire SRS operates properly.
- 4. After the work is completed, perform self-diagnosis to check that no malfunction is detected. Refer to SRC-16, "SRS Operation Check".

# SRS INSPECTION (FOR FRONTAL COLLISION)

Part	Inspection
Driver air bag module	<ol> <li>If the driver air bag has NOT been activated:</li> <li>Remove driver air bag module. 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>If no damage is found, reinstall with new fasteners.</li> <li>If damaged — REPLACE. Install driver air bag modules with new fasteners.</li> </ol>
Driver knee air bag module	<ol> <li>If the driver knee air bag has NOT been activated:</li> <li>Remove driver knee air bag module. Check harness cover and connectors for damage, terminals for deformities, and harness for binding.</li> <li>Install driver knee air bag module into the instrument panel to check fit with the instrument panel.</li> <li>If no damage is found, reinstall with new fasteners.</li> <li>If damaged — REPLACE. Install driver knee air bag modules with new fasteners.</li> </ol>
Front passenger air bag module (if equipped)	<ol> <li>If the front passenger air bag has NOT been activated:</li> <li>Remove front passenger air bag module. Check harness cover and connectors for damage, terminals for deformities, and harness for binding.</li> <li>Install front passenger air bag module into the instrument panel to check fit with the instrument panel.</li> <li>If no damage is found, reinstall with new fasteners.</li> <li>If damaged — REPLACE. Install front passenger air bag modules with new fasteners.</li> </ol>

## < BASIC INSPECTION >

Part	Inspection	_
Crash zone sensor	<ol> <li>If the front air bags or seat belt pre-tensioners have NOT been activated:</li> <li>Remove the crash zone sensor. Check harness connectors for damage, terminals for deformities, and harness for binding.</li> <li>Check for visible signs of damage (dents, cracks, deformation) of the crash zone sensor and</li> </ol>	
	bracket. 3. Install the crash zone sensor to check fit. 4. If no damage is found, reinstall with new fasteners. 5. If damaged — REPLACE the crash zone sensor and bracket with new fasteners.	
Seat belt pre-tensioner assemblies (All applicable locations: buckle,	If the pre-tensioners have NOT been activated:  1. Remove seat belt pre-tensioners.  Check harness cover and connectors for damage, terminals for deformities, and harness for	
retractor, lap outer)	<ol> <li>binding.</li> <li>Check belts for damage and anchors for loose mounting.</li> <li>Check retractor for smooth operation.</li> <li>Check seat belt adjuster for damage.</li> </ol>	
	<ol> <li>Check for deformities of the center pillar inner.</li> <li>If no damage is found, reinstall seat belt pre-tensioner assembly with new fasteners.</li> <li>If damaged —REPLACE. Install the seat belt pre-tensioner assembly with new fasteners.</li> </ol>	-
Diagnosis sensor unit	<ol> <li>If none of the SRS components have been activated:</li> <li>Check case 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 fasteners.</li> <li>If damaged — REPLACE. Install diagnosis sensor unit with new fasteners.</li> </ol>	_
Steering wheel	<ol> <li>Visually check steering wheel for deformities.</li> <li>Check harness (built into steering wheel) and connectors for damage, and terminals for deformities.</li> <li>Install driver air bag module into the steering wheel to check fit and alignment with the wheel.</li> <li>Check steering wheel for excessive free play.</li> <li>If no damage is found, reinstall.</li> <li>If damaged — REPLACE.</li> </ol>	
Spiral cable	If the driver front air bag has not deployed:  1. Visually check spiral cable and combination switch for damage.  2. Check connectors and protective tape for damage.  3. Check steering wheel for noise, binding or heavy operation.  4. If no damage is found, reinstall.  5. If damaged — REPLACE.	٠
Occupant classification system (Passenger seat)	<ol> <li>Remove passenger seat assembly.</li> <li>Check control unit case for dents, cracks of deformities.</li> <li>Check connectors for damage and terminals for deformities.</li> <li>Check seat frame and cushion pan for dents or deformities.</li> <li>If no damage is found, reinstall seat with new fasteners.</li> <li>If damaged — REPLACE seat cushion assembly with new fasteners.</li> <li>Perform zero point reset function after front passenger seat is installed in the vehicle and all</li> </ol>	٠
Harness and connectors	<ol> <li>bolts are tightened to specification. Refer to <u>SRC-40</u>, "<u>ZERO POINT RESET</u>: <u>Description</u>".</li> <li>Check connectors for poor connection, damage, and terminals for deformities.</li> <li>Check harness for binding, chafing, cuts, or deformities.</li> <li>If no damage is found, reinstall the harness and connectors.</li> <li>If damaged ——REPLACE the damaged harness. Do not attempt to repair, splice or modify any SRS harness.</li> </ol>	
Instrument panel assembly	If the passenger front air bag has NOT deployed:  1. Visually check instrument panel for damage.  2. If no damage is found, reinstall the instrument panel assembly.  3. If damaged—REPLACE the instrument panel assembly.	•

# For Side and Rollover Collision

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FOR SIDE AND ROLLOVER COLLISION: When SRS is activated in a collision

**CAUTION:** 

Due to varying models and option levels, not all parts listed in the chart below apply to all vehicles.

WORK PROCEDURE

## < BASIC INSPECTION >

- 1. Before performing any of the following steps, ensure that all vehicle body and structural repairs have been completed.
- 2. Replace the following components:
- Front seat back assembly (on the side on which side air bag is activated).
- Door finisher (on the side on which door-mounted curtain air bag is activated).
- Pop-up roll bar assemblies and pop-up roll bar covers.
- Side air bag (satellite) sensor LH/RH (on the side on which side air bag is activated).
- Diagnosis sensor unit.
- Seat belt pre-tensioner assemblies.
- Check the SRS components and the related parts using the following table.
   Replace any SRS components and the related parts showing visible signs of damage (dents, cracks, deformation, etc.).
- 4. Perform self-diagnosis using CONSULT and "AIR BAG" warning lamp. Refer to <u>SRC-16, "Diagnosis Description"</u> for details. Make sure entire SRS operates properly.
- 5. After the work is completed, perform self-diagnosis to check that no malfunction is detected. Refer to SRC-16, "SRS Operation Check".

# SRS INSPECTION (FOR SIDE AND ROLLOVER COLLISION)

Part	Inspection
Side curtain air bag module LH	If the side curtain air bag LH has deployed: REPLACE the side curtain air bag module LH. Install with new fasteners.
Side curtain air bag module RH	If the side curtain air bag RH has deployed: REPLACE the side curtain air bag module RH. Install with new fasteners.
Front side air bag module LH	If the front side air bag LH has deployed: REPLACE front seatback assembly LH.
Front side air bag module RH	If the front side air bag RH has deployed: REPLACE front seatback assembly RH.
Side air bag (satellite) sensor (LH or RH)	If any of the SRS components have deployed: REPLACE the side air bag (satellite) sensor on the collision side with new fasteners.
Door (satellite) sensor (LH or RH)	If any of the SRS components have deployed: REPLACE the door (satellite) sensor on the collision side with new fasteners.
Diagnosis sensor unit	If any of the SRS components have deployed: REPLACE the diagnosis sensor unit with new fasteners.
Seat belt pre-tensioner assemblies (All applicable locations: buckle, retractor, lap outer)	If either the driver or passenger seat belt pre-tensioner* has been activated: REPLACE all seat belt pre-tensioner assemblies with new fasteners. *: Confirm seat belt pre-tensioner activation using CONSULT only.
Center inner pillar	<ol> <li>Check the center inner pillar on the collision side for damage (dents, cracks, deformation).</li> <li>If damaged —REPAIR the center inner pillar.</li> </ol>
Seat (if equipped with front side air bag)	If either the front LH or front RH side air bag modules has been deployed: REPLACE front seatback assembly on the deployed side.
Trim/headlining	<ol> <li>Check for visible signs of damage (dents, cracks, deformation) of the interior trim on the collision side.</li> <li>If damaged — REPLACE the damaged trim parts.</li> </ol>
Door-mounted curtain air bag module LH	If the door-mounted curtain air bag module LH has been deployed: REPLACE the door finisher LH and door-mounted curtain air bag module. Install with new fasteners.
Door-mounted curtain air bag module RH	If the door-mounted curtain air bag module RH has been deployed: REPLACE the door finisher RH and door-mounted curtain air bag module. Install with new fasteners.

## < BASIC INSPECTION >

Part	Inspection	
Occupant classification system (Passenger seat)	<ol> <li>Remove passenger seat assembly.</li> <li>Check control unit case for dents, cracks of deformities.</li> <li>Check connectors for damage and terminals for deformities.</li> <li>Check seat frame and cushion pan for dents or deformities.</li> <li>If no damage is found, reinstall seat with new fasteners.</li> <li>If damaged — REPLACE seat cushion assembly with new fasteners.</li> <li>Perform zero point reset function after front passenger seat is installed in the vehicle and all bolts are tightened to specification. Refer to <a href="SRC-40">SRC-40</a>, "ZERO POINT RESET: Description".</li> </ol>	
Pop-up roll bar assemblies	If the pop-up roll bar has deployed: REPLACE pop-up roll bar assemblies and pop-up roll bar covers. Install with new fasteners.	

# FOR SIDE AND ROLLOVER COLLISION: When SRS is not activated in a collision **CAUTION**:

Due to varying models and option levels, not all parts listed in the chart below apply to all vehicles.

#### WORK PROCEDURE

- 1. Before performing any of the following steps, ensure that all vehicle body and structural repairs have been completed.
- Check the SRS components and the related parts using the following table.
- If the front seat back assembly is damaged, the front seat back assembly must be replaced.
- If the door finisher assembly is damaged, the door finisher assembly and door-mounted curtain air bag module must be replaced.
- 3. Perform self-diagnosis using CONSULT and "AIR BAG" warning lamp. Refer to <u>SRC-16, "Diagnosis Description"</u> for details. Make sure entire SRS operates properly.
- 4. After the work is completed, perform self-diagnosis to check that no malfunction is detected. Refer to <a href="SRC-16">SRC-16</a>, "SRS Operation Check".

# SRS INSPECTION (FOR SIDE AND ROLLOVER COLLISION)

Part	Inspection
Side curtain air bag module LH	<ol> <li>If the side curtain air bag LH has NOT deployed:</li> <li>Check for visible signs of damage (dents, tears, deformation) of the center pillar on the collision side.</li> <li>If damaged - Remove the side curtain air bag module LH.</li> <li>Check for visible signs of damage (tears etc.) of the side curtain air bag module LH.</li> <li>Check harness and connectors for damage, and terminals for deformities.</li> <li>If no damage is found, reinstall the side curtain air bag module LH with new fasteners.</li> <li>If damaged — REPLACE the side curtain air bag module LH with new fasteners.</li> </ol>
Side curtain air bag module RH	<ol> <li>If the side curtain air bag RH has NOT deployed:</li> <li>Check for visible signs of damage (dents, tears, deformation) of the center pillar on the collision side.</li> <li>If damaged - Remove the side curtain air bag module RH.</li> <li>Check for visible signs of damage (tears etc.) of the side curtain air bag module RH.</li> <li>Check harness and connectors for damage, and terminals for deformities.</li> <li>If no damage is found, reinstall the side curtain air bag module RH with new fasteners.</li> <li>If damaged — REPLACE the side curtain air bag module RH with new fasteners.</li> </ol>
Front side air bag module LH	<ol> <li>If the front LH side air bag has NOT deployed:</li> <li>Check for visible signs of damage (dents, tears, deformation) of the seat back on the collision side.</li> <li>Check harness and connectors for damage, and terminals for deformities.</li> <li>If damaged — REPLACE the front seatback assembly LH.</li> </ol>
Front side air bag module RH	<ol> <li>If the front side air bag RH has NOT deployed:</li> <li>Check for visible signs of damage (dents, tears, deformation) of the seat back on the collision side.</li> <li>Check harness and connectors for damage, and terminals for deformities.</li> <li>If damaged — REPLACE the front seatback assembly RH.</li> </ol>

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# < BASIC INSPECTION >

Part	Inspection
Side air bag (satellite) sensor (LH or RH)	<ol> <li>If none of the SRS components have been activated:</li> <li>Remove the side air bag (satellite) sensor (LH or RH) on the collision side. Check harness connectors for damage, terminals for deformities, and harness for binding.</li> <li>Check for visible signs of damage (dents, cracks, deformation) of the side air bag (satellite) sensor (LH or RH).</li> <li>Install the side air bag (satellite) sensor (LH or RH) to check fit.</li> <li>If no damage is found, reinstall the side sir bag (satellite) sensor (LH or RH) with new fasten ers.</li> <li>If damaged — REPLACE the side air bag (satellite) sensor (LH or RH) with new fasteners.</li> </ol>
Door (satellite) sensor (LH or RH)	<ol> <li>If none of the SRS components have been activated:</li> <li>Remove the door (satellite) sensor (LH or RH) on the collision side. Check harness connectors for damage, terminals for deformities, and harness for binding.</li> <li>Check for visible signs of damage (dents, cracks, deformation) of the door (satellite) sensor (LH or RH).</li> <li>Install the door (satellite) sensor (LH or RH) to check fit.</li> <li>If no damage is found, reinstall the door (satellite) sensor (LH or RH) with new fasteners.</li> <li>If damaged — REPLACE the door (satellite) sensor (LH or RH) with new fasteners.</li> </ol>
Diagnosis sensor unit	If none of the SRS components have been activated:  1. Check case and bracket for dents, cracks or deformities.  2. Check connectors for damage, and terminals for deformities.  3. If no damage is found, reinstall the diagnosis sensor unit with new fasteners.  4. If damaged — REPLACE the diagnosis sensor unit with new fasteners.
Seat belt pre-tensioner assemblies (All applicable locations: buckle, retractor, lap outer)	<ol> <li>If the pre-tensioners have NOT been activated:</li> <li>Remove seat belt pre-tensioners.         Check harness cover and connectors for damage, terminals for deformities, and harness for binding.</li> <li>Check belts for damage and anchors for loose mounting.</li> <li>Check retractor for smooth operation.</li> <li>Check seat belt adjuster for damage.</li> <li>Check for deformities of the center pillar inner.</li> <li>If no damage is found, reinstall seat belt pre-tensioner assembly with new fasteners.</li> <li>If damaged —REPLACE. Install the seat belt pre-tensioner assembly with new fasteners.</li> </ol>
Seat (with front side air bag)	<ol> <li>If the front LH or front RH side air bag modules have NOT deployed:</li> <li>Visually check the seat on the collision side.</li> <li>Remove the seat on the collision side and check the following for damage and deformities.         <ul> <li>Harness, connectors and terminals</li> <li>Frame and recliner (for front and rear seat), and also adjuster and slides (for front seat)</li> </ul> </li> <li>If no damage is found, reinstall the seat.</li> <li>If damaged— REPLACE the damaged seat parts using new fasteners. If the front seat back is damaged, the front seat back assembly must be replaced.</li> </ol>
Center inner pillar	<ol> <li>Check the center inner pillar on the collision side for damage (dents, cracks, deformation, etc.).</li> <li>If damaged - REPAIR the center inner pillar.</li> </ol>
Trim/headlining	<ol> <li>Check for visible signs of damage (dents, cracks, deformation, etc.) of the interior trim on the collision side.</li> <li>If damaged - REPLACE the damaged trim parts.</li> </ol>
Door-mounted curtain air bag module LH	<ol> <li>If the door-mounted curtain air bag LH has NOT deployed:</li> <li>Check for visible signs of damage (dents, tears, deformation, etc.) of the door finisher on the collision side.</li> <li>If damaged - REPLACE the door finisher LH with new fasteners.</li> <li>Check for visible signs of damage (tears etc.) of the door-mounted curtain air bag module LH</li> <li>Check harness and connectors for damage, and terminals for deformities.</li> <li>If no damage is found, reinstall door finisher.         CAUTION:         When removing door mounted curtain air bag module from door finisher, do not reuse door finisher.     </li> <li>If damaged - REPLACE the door finisher LH and door-mounted curtain air bag module LH with new fasteners.</li> </ol>

# < BASIC INSPECTION >

Part	Inspection
Door-mounted curtain air bag module RH	<ol> <li>If the door-mounted curtain air bag RH has NOT deployed:</li> <li>Check for visible signs of damage (dents, tears, deformation, etc.) of the door finisher on the collision side.</li> <li>If damaged - REPLACE the door finisher RH with new fasteners.</li> <li>Check for visible signs of damage (tears etc.) of the door-mounted curtain air bag module RH</li> <li>Check harness and connectors for damage, and terminals for deformities.</li> <li>If no damage is found, reinstall door finisher.         CAUTION:         When removing door mounted curtain air bag module from door finisher, do not reuse door finisher.     </li> <li>If damaged - REPLACE the door finisher RH and door-mounted curtain air bag module RH with new fasteners.</li> </ol>
Occupant classification system (Passenger seat)	<ol> <li>Remove passenger seat assembly.</li> <li>Check control unit case for dents, cracks of deformities.</li> <li>Check connectors for damage and terminals for deformities.</li> <li>Check seat frame and cushion pan for dents or deformities.</li> <li>If no damage is found, reinstall seat with new fasteners.</li> <li>If damaged — REPLACE seat cushion assembly with new fasteners.</li> <li>Perform zero point reset function after front passenger seat is installed in the vehicle and all bolts are tightened to specification. Refer to <a href="SRC-40">SRC-40</a>, "ZERO POINT RESET: Description".</li> </ol>
Pop-up roll bar	<ol> <li>If the pop-up roll bar NOT deployed:</li> <li>Check for visible signs of damage (dents, tears, deformation, etc.) of the pop-up roll bar.</li> <li>If damaged - REPLACE the pop-up roll bar with new fasteners.</li> <li>Check harness and connectors for damage, and terminals for deformities.</li> <li>If no damage is found, reinstall the pop-up roll bar with new fasteners.</li> <li>Check for visible signs of damage (dents, cracks, deformation, etc.) of the seatback support brace assembly.</li> <li>If damaged - REPAIR the seatback support brace assembly.</li> </ol>

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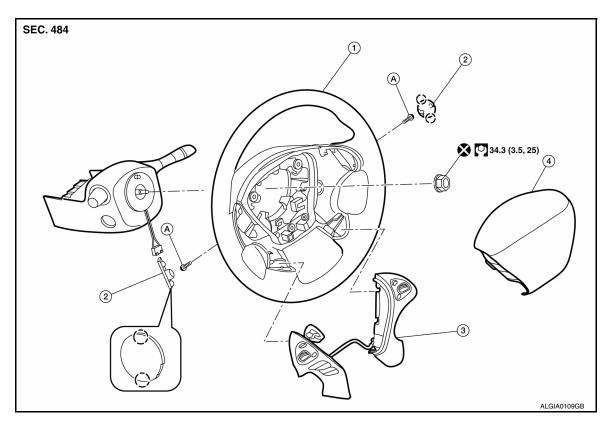
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# REMOVAL AND INSTALLATION

# DRIVER AIR BAG MODULE

Exploded View



- 1. Steering wheel
- 2. Cover
- A. Driver air bag module screw
- 3. Steering switches
- ( Pawl

## Removal and Installation

Driver air bag module

INFOID:0000000012876848

## **WARNING:**

- Before servicing the SRS, turn ignition switch OFF, disconnect both battery terminals then wait at least three minutes.
- · Always work from the side of air bag module. Do not work in front of it.
- Do not use air tools or electric tools for servicing.

#### **REMOVAL**

- 1. Disconnect negative and positive battery terminals then wait at least three minutes. Refer to <u>PG-112</u>, "Removal and Installation".
- 2. Remove the side lids (LH/RH).
- Remove the driver air bag module bolts (LH/RH). CAUTION:

## Do not reuse the driver air bag module bolts.

4. Lift the driver air bag module from the steering wheel.

## **DRIVER AIR BAG MODULE**

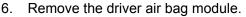
## < REMOVAL AND INSTALLATION >

Disconnect the harness connectors from the driver air bag module and horn.

#### **CAUTION:**

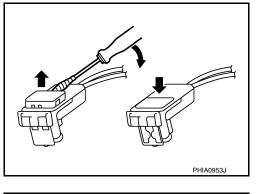
- For removing/installing the driver air bag module harness connector, insert a thin screwdriver wrapped in tape into the notch then lift the lock and remove the harness connector as shown.
- Install the harness connector with the lock raised, and push the lock into the connector as shown.
- After installing the connector, check that the lock is pushed in securely.

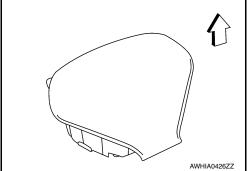




#### **CAUTION:**

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





- Replace the driver air bag module if it has been dropped or sustained an impact.
- Do not strike the driver air bag module.



- Do not insert any foreign objects (screwdriver, etc.) into the driver air bag module.
- Do not disassemble the driver air bag module.
- Do not expose the driver air bag module to temperatures exceeding 90° C (194°F).
- Do not allow oil, grease, detergent or water to come in contact with the driver air bag module.

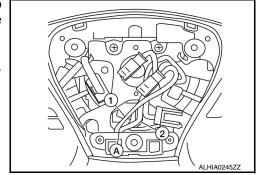
#### **INSTALLATION**

Installation is in the reverse order of removal.

 Route the driver air bag module harness through the hook (A) so that the orange connector wire (1) and the yellow connector wire (2) are routed as shown then attach the connectors.

#### NOTE:

For removal and installation of the direct-connect SRS connectors, refer to <u>SRC-10</u>, "<u>SRS Component Connectors</u>".



#### **CAUTION:**

- Do not reuse the driver air bag module bolts.
- If driver air bag module is being replaced due to deployment, the spiral cable must also be replaced. Refer to <a href="SR-15">SR-15</a>, "Removal and Installation".

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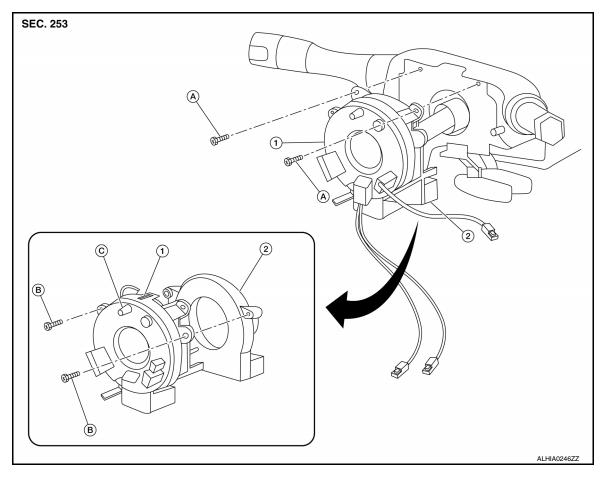
# **DRIVER AIR BAG MODULE**

## < REMOVAL AND INSTALLATION >

- After installation is complete, check that no system malfunction is detected causing the air bag warning lamp to illuminate.
- If a malfunction is indicated by the air bag warning lamp after repair or replacement of the malfunctioning parts, perform the SRS final check. Refer to <a href="SRC-17">SRC-17</a>, "SRS Final Check".

# SPIRAL CABLE

Exploded View



- 1. Spiral cable
- B. Steering angle sensor screws
- 2. Steering angle sensor
- C. Locating pin
- A. Spiral cable screws

## Removal and Installation

## **WARNING:**

- Before servicing the SRS, turn ignition switch OFF, disconnect both battery terminals then wait at least three minutes.
- · Do not use air tools or electric tools for servicing.

## **REMOVAL**

- 1. Disconnect negative and positive battery terminals, then wait at least three minutes. Refer to <u>PG-112.</u> "Removal and Installation".
- 2. Remove steering wheel. Refer to ST-30, "Removal and Installation".
- 3. Remove steering column upper and lower covers. Refer to ST-32, "Removal and Installation".

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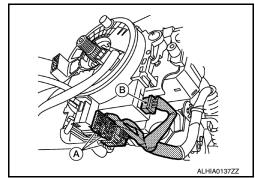
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# SPIRAL CABLE

#### < REMOVAL AND INSTALLATION >

Disconnect harness connectors (A) from spiral cable and harness connector (B) from steering angle sensor.

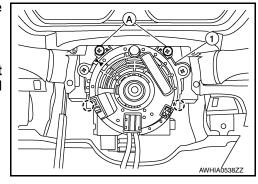


5. Remove screws (A) then release pawls and remove spiral cable and steering angle sensor (1) as an assembly.

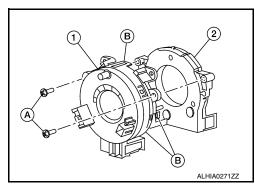
( ): Pawl

## **CAUTION:**

Do not turn the spiral cable quickly or beyond the limit number of turns (approximately 2.5 turns from the neutral position), this may cause the cable to snap.



6. Remove screws (A) then release pawls (B) and separate steering angle sensor (2) from spiral cable (1).



#### **CAUTION:**

- Do not strike or drop the spiral cable or steering angle sensor.
- Replace the spiral cable or steering angle sensor if it has been dropped or sustained an impact.
- Do not disassemble the spiral cable or steering angle sensor.
- Do not allow oil, grease, detergent or water to come in contact with the spiral cable or steering angle sensor.



#### **INSTALLATION**

Installation is in the reverse order of removal.

• The turn signal lever must be in the neutral position for spiral cable installation.

## SPIRAL CABLE

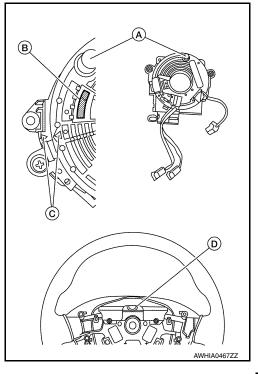
#### < REMOVAL AND INSTALLATION >

Set the spiral cable neutral position by carefully turning the spiral cable clockwise to the end position. Turn the spiral cable counterclockwise 2.5 turns stopping when the locating pin (A) is at the top most position, the triangles (C) are pointing at each other as shown and the clear window (B) appears white.

#### NOTE:

If a new part is installed, the neutral position is already set with a stopper in place and should not be adjusted after the stopper clip is removed. Make sure the stopper clip is removed after the spiral cable/steering angle sensor assembly is installed but before the steering wheel is installed.

- During steering wheel installation, make sure the locating pin hole (D) is aligned with the locating pin (A) of the spiral cable.
- Perform the neutral position adjustment for the steering angle sensor. Refer to BRC-62, "Description".



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## **CAUTION:**

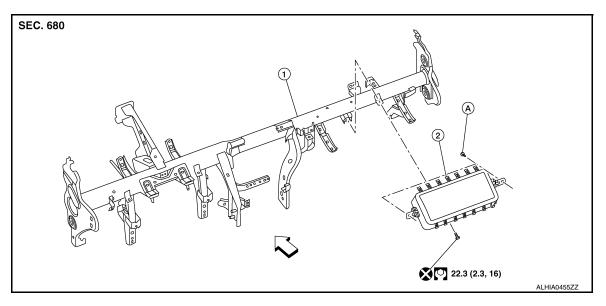
- The spiral cable may snap during steering operation if the spiral cable is installed in an improper
- Do not overturn the spiral cable or go beyond the maximum number of turns allowed. This will cause the cable to snap.
- The turn signal lever must be in the neutral position for spiral cable installation.
- Do not apply lubricant to the spiral cable.
- Do not allow oil, grease, detergent or water to come in contact with the spiral cable.
- After installation is completed, check that no system malfunction is detected using CONSULT or the air bag warning lamp.
- If no malfunction is detected using CONSULT or the air bag warning lamp after repair or replacement of the malfunctioning parts, perform the SRS final check. Refer to SRC-17, "SRS Final Check".

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# FRONT PASSENGER AIR BAG MODULE

Exploded View



- 1. Steering member assembly
- $\mbox{2.} \quad \mbox{Front passenger air bag module} \quad \mbox{A.}$
- Front passenger air bag module screws

<□ Front

## Removal and Installation

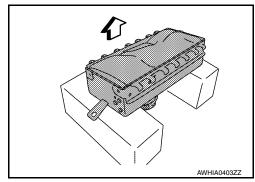
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#### **WARNING:**

- Before servicing the SRS, turn ignition switch OFF, disconnect both battery terminals then wait at least three minutes.
- Always work from the side of air bag module. Do not work in front of it.
- · Do not use air tools or electric tools for servicing.

## **REMOVAL**

- Disconnect negative and positive battery terminals then wait at least three minutes. Refer to <u>PG-112</u>, "<u>Removal and Installation</u>".
- 2. Remove instrument panel assembly. Refer to <u>IP-15, "INSTRUMENT PANEL ASSEMBLY : Removal and Installation"</u>.
- 3. Remove front passenger air bag module screws.
- 4. Disconnect front passenger air bag module pawls using a suitable tool and remove. **CAUTION:** 
  - Always place front passenger air bag module with pad side facing upward as shown.



## FRONT PASSENGER AIR BAG MODULE

#### < REMOVAL AND INSTALLATION >

- · Replace front passenger air bag module if it has been dropped or sustained an impact.
- · Do not strike front passenger air bag module.



- Do not insert any foreign objects (screwdriver, etc.) into front passenger air bag module.
- Do not disassemble front passenger air bag module.
- Do not expose front passenger air bag module to temperatures exceeding 90 °C (194 °F).
- Do not allow oil, grease, detergent, or water to come in contact with front passenger air bag module.

**INSTALLATION** 

Installation is in the reverse order of removal.

#### **CAUTION:**

- · Do not reuse front passenger air bag module bolts.
- Do not damage front passenger air bag module harness during installation.
- After installation is complete, check that no system malfunction is detected causing the air bag warning lamp to illuminate.
- If a malfunction is indicated by the air bag warning lamp after repair or replacement of the malfunctioning parts, perform the SRS final check. Refer to SRC-17, "SRS Final Check".

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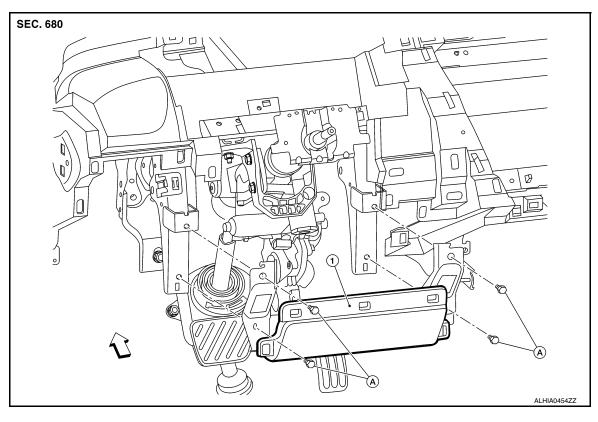
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# LEFT KNEE AIR BAG MODULE

Exploded View



1. Left knee air bag module

← Front

A. Refer to installation

## Removal and Installation

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#### **WARNING:**

- Before servicing the SRS, turn ignition switch OFF, disconnect both battery terminals then wait at least three minutes.
- · Always work from the side of air bag module. Do not work in front of it.
- Do not use air tools or electric tools for servicing.

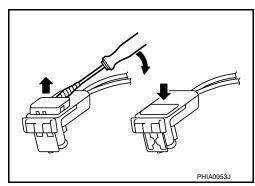
#### REMOVAL

- 1. Disconnect negative and positive battery terminals then wait at least three minutes. Refer to <u>PG-112.</u> "Removal and Installation".
- 2. Remove instrument lower panel LH. Refer to IP-24, "Removal and Installation".
- 3. Remove left knee air bag module bolts.

#### **CAUTION:**

Do not reuse the left knee air bag module bolts.

- 4. Disconnect harness connectors from left knee air bag module. **CAUTION:** 
  - For removing/installing the left knee air bag module harness connector, insert a thin screwdriver wrapped in tape into the notch then lift the lock and remove the harness connector as shown.
  - Install harness connector with the lock raised, and push the lock into the connector as shown.
  - After installing connector, check that the lock is pushed in securely.



# LEFT KNEE AIR BAG MODULE

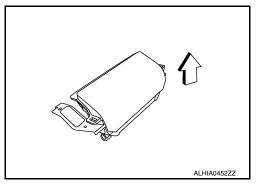
## < REMOVAL AND INSTALLATION >

Lift left knee air bag module upward and remove from steering member.

#### **CAUTION:**

Always place left knee air bag module with pad side facing upward.

Upward
 □: Upward



 Replace left knee air bag module if it has been dropped or sustained an impact.

Do not strike left knee air bag module.



• Do not insert any foreign objects (screwdriver, etc.) into left knee air bag module.

• Do not disassemble left knee air bag module.

Do not expose left knee air bag module to temperatures exceeding 90°C (194°F).

• Do not allow oil, grease, detergent or water to come in contact with left knee air bag module.

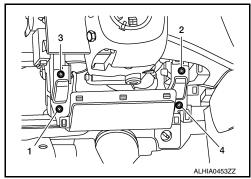
#### INSTALLATION

Installation is in the reverse order of removal.

# **CAUTION:**

 When installing left knee air bag module, first hand-tighten the bolts in the order shown then tighten bolts to specification in the order shown. Refer to <u>SR-20</u>, "<u>Exploded View</u>".

Left knee air bag module :10.8 N·m (1.1 kg-m, 8 ft-lb) bolts



Do not reuse left knee air bag module bolts.

 Make sure that the left knee air bag module supporting hooks are securely seated into steering member slots before releasing left knee air bag module during installation to avoid damaging left knee air bag module.

 After installation is complete, check that no system malfunction is detected causing the air bag warning lamp to illuminate.

 If a malfunction is indicated by the air bag warning lamp after repair or replacement of malfunctioning parts, perform SRS final check. Refer to <u>SRC-17</u>, "SRS Final Check".

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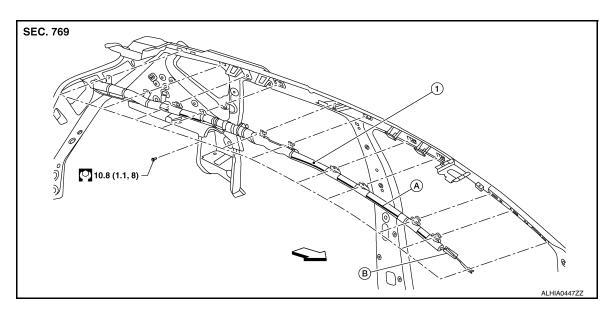
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Revision: December 2015 SR-21 2016 Murano NAM

# SIDE CURTAIN AIR BAG MODULE

Exploded View



- 1. Side curtain air bag module A.
- Side curtain air bag module anti-twist B. stripe
- Side curtain air bag module double faced adhesive tape

#### NOTE:

LH side shown, RH side similar.

## Removal and Installation

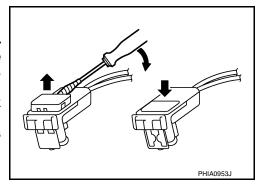
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#### **WARNING:**

- Before servicing the SRS, turn ignition switch OFF, disconnect both battery terminals then wait at least three minutes.
- · Always work from the side of air bag module. Do not work in front of it.
- Do not use air tools or electric tools for servicing.

#### REMOVAL

- 1. Disconnect negative and positive battery terminals then wait at least three minutes. Refer to <u>PG-112</u>, "Removal and Installation".
- 2. Remove headlining. Refer to <a href="INT-27">INT-27</a>, "Removal and Installation".
- 3. Disconnect harness connector from side curtain air bag module. CAUTION:
  - For removing/installing side curtain air bag module harness connector, insert a thin screwdriver wrapped in tape into notch, lift the lock and remove harness connector as shown.
  - Install harness connector with lock raised, and push lock into harness connector as shown.
  - After installing harness connector, check that the lock is pushed in securely.



- 4. Remove side curtain air bag module bolts.
- Disconnect side curtain air bag module bracket supporting hooks and remove side curtain air bag module.CAUTION:
  - Replace side curtain air bag module if it has been dropped or sustained an impact.
  - Do not strike side curtain air bag module.

# SIDE CURTAIN AIR BAG MODULE

## < REMOVAL AND INSTALLATION >

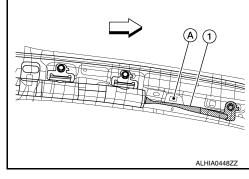
- Do not insert any foreign objects (screwdriver, etc.) into side curtain air bag module.
- Do not disassemble side curtain air bag module.
- Do not expose side curtain air bag module to temperatures exceeding 90°C (194°F).
- Do not allow oil, grease, detergent or water to come in contact with side curtain air bag module.

#### INSTALLATION

Installation is in the reverse order of removal.

#### **CAUTION:**

- Do not damage harness while installing side curtain air bag module.
- Make sure that the side curtain air bag module bracket supporting hooks are securely seated into the body slots before releasing side curtain air bag module during installation to avoid damaging side curtain air bag module.
- Make sure that the anti-twist stripe (red for RH side, blue for LH side) is visible along entire length of side curtain air bag module. Refer to <u>SR-22, "Exploded View"</u>.
- Make sure side curtain air bag module front strap (1) is routed below front pillar finisher attachment point (A) as shown.
  - ⟨□: Front



 After installation is complete, check that no system malfunction is detected causing air bag warning lamp to illuminate.

 If a malfunction is indicated by air bag warning lamp after repair or replacement of malfunctioning parts, perform SRS final check. Refer to <u>SRC-17</u>, "SRS Final Check".

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# FRONT SIDE AIR BAG MODULE

# < REMOVAL AND INSTALLATION >

# FRONT SIDE AIR BAG MODULE

# Removal and Installation

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The front side air bag module is part of the front seatback. For removal and installation of the front seatback, refer to <u>SE-155</u>, "Seatback".

# CRASH ZONE SENSOR

# **Exploded View**

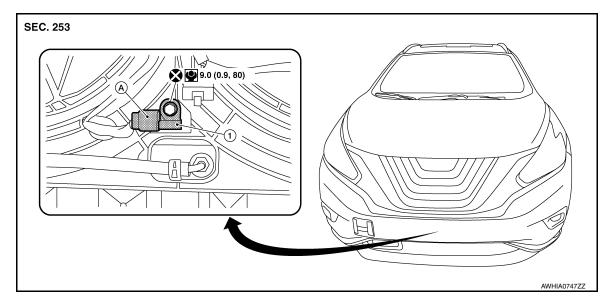
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1. Crash zone sensor

A. Crash zone sensor harness connector

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## Removal and Installation

WARNING:

 Before servicing SRS, turn ignition switch OFF, disconnect both battery terminals then wait at least three minutes.

Do not use air tools or electric tools for servicing.

## REMOVAL

- 1. Disconnect negative and positive battery terminals then wait at least three minutes. Refer to PG-112. "Removal and Installation".
- Remove front under cover. Refer to EXT-40, "FRONT UNDER COVER: Removal and Installation".
- 3. Disconnect harness connector from crash zone sensor.
- Remove crash zone sensor bolt.

#### **CAUTION:**

Do not reuse crash zone sensor bolt.

5. Remove crash zone sensor.

#### **CAUTION:**

- Replace crash zone sensor if it has been dropped or sustained an impact.
- Do not strike crash zone sensor.
- Replace crash zone sensor if either driver air bag or front passenger air bag has been deployed.

#### INSTALLATION

Installation is in the reverse order of removal.

#### **CAUTION:**

- · Do not reuse crash zone sensor bolt.
- Do not damage harness connector during installation.
- After installation is complete, check that no system malfunction is detected causing air bag warning lamp to illuminate.
- If a malfunction is indicated by air bag warning lamp after repair or replacement of malfunctioning parts, perform SRS final check. Refer to SRC-17, "SRS Final Check".

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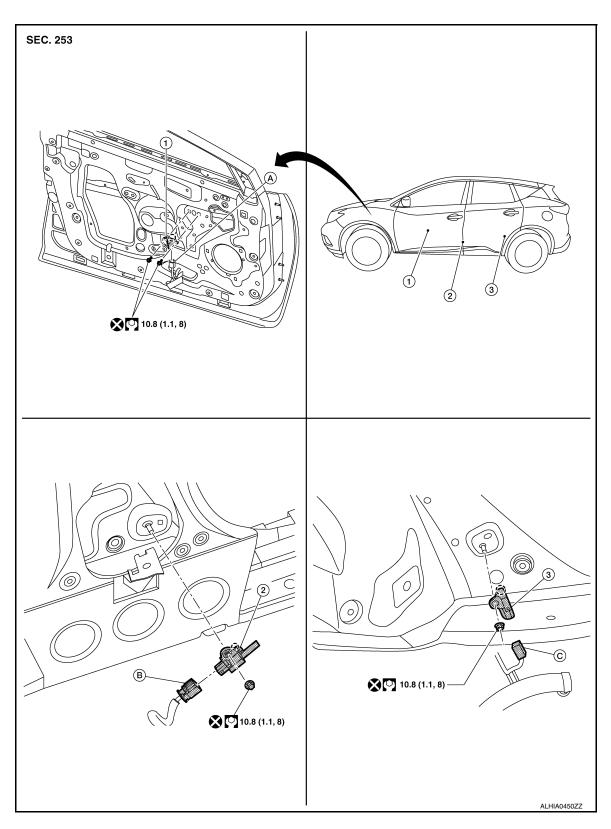
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# SATELLITE SENSOR

Exploded View



- 1. Front door satellite sensor 2.
- Front side air bag satellite sensor
- 3. Rear side air bag satellite sensor

SATELLITE SENSOR									
< REMOVAL AND INSTALLATION > A. Front door satellite sensor B. Front side air bag satellite sensor har- C. Rear side air bag satellite sensor									
	harness connector ness connector harness connector	Α							
	(_) Pawl								
	side shown, RH side similar.	В							
Re	Removal and Installation								
10/0	PNING.	С							
• B	ARNING: Sefore servicing SRS, turn ignition switch OFF, disconnect both battery terminals then wait at least bree minutes. So not use air tools or electric tools for servicing.	D							
FR	ONT SIDE AIR BAG SATELLITE SENSOR								
Rer	moval	Е							
1.	1. Disconnect negative and positive battery terminals then wait at least three minutes. Refer to <u>PG-112.</u> "Removal and Installation".								
2.	Remove front seat belt retractor. Refer to SB-8, "SEAT BELT RETRACTOR: Removal and Installation".								
3.	Remove front side air bag satellite sensor nut.  CAUTION:								
	Do not reuse front side air bag satellite sensor nut.	G							
4.	Disconnect harness connector from front side air bag satellite sensor.								
5.	Remove front side air bag satellite sensor.	SR							
	<ul> <li>CAUTION:</li> <li>Replace front side air bag satellite sensor if it has been dropped or sustained an impact.</li> <li>Do not strike front side air bag satellite sensor.</li> </ul>								
Inst	allation								

Installation is in the reverse order of removal.

#### **CAUTION:**

- Position front side air bag satellite sensor using pawl before tightening nut to specification.
- Do not reuse front side air bag satellite sensor nut.
- Do not damage harness connector during installation.
- After installation is complete, check that no system malfunction is detected causing air bag warning lamp to illuminate.
- If a malfunction is indicated by air bag warning lamp after repair or replacement of malfunctioning parts, perform SRS final check. Refer to <a href="SRC-17">SRC-17</a>, "SRS Final Check".

#### REAR SIDE AIR BAG SATELLITE SENSOR

# Removal

- Disconnect negative and positive battery terminals then wait at least three minutes. Refer to PG-112. "Removal and Installation".
- 2. Remove luggage side lower finisher. Refer to INT-30, "LUGGAGE SIDE LOWER FINISHER: Removal and Installation".
- Remove rear side air bag satellite sensor nut.

#### **CAUTION:**

Do not reuse rear side air bag satellite sensor nut.

- Disconnect harness connector from rear side air bag satellite sensor.
- Remove rear side air bag satellite sensor.

## **CAUTION:**

- Replace rear side air bag satellite sensor if it has been dropped or sustained an impact.
- Do not strike rear side air bag satellite sensor.

#### Installation

Installation is in the reverse order of removal.

#### **CAUTION:**

- Position rear side air bag satellite sensor using pawl before tightening bolt to specification.
- Do not reuse rear side air bag satellite sensor nut.

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## SATELLITE SENSOR

#### < REMOVAL AND INSTALLATION >

- · Do not damage harness connector during installation.
- After installation is complete, check that no system malfunction is detected causing air bag warning lamp to illuminate.
- If a malfunction is indicated by air bag warning lamp after repair or replacement of malfunctioning parts, perform SRS final check. Refer to <a href="SRC-17">SRC-17</a>, "SRS Final Check".

#### FRONT DOOR SATELLITE SENSOR

#### Removal

- Disconnect negative and positive battery terminals then wait at least three minutes. Refer to <u>PG-112</u>. "Removal and Installation".
- 2. Remove front door finisher. Refer to <a href="INT-15">INT-15</a>, "Removal and Installation".
- 3. Remove front door satellite sensor bolts.

#### **CAUTION:**

Do not reuse front door satellite sensor bolts.

- Disconnect harness connector from front door satellite sensor.
- 5. Remove front door satellite sensor.

#### **CAUTION:**

- Replace front door satellite sensor if it has been dropped or sustained an impact.
- Do not strike front door satellite sensor.

#### Installation

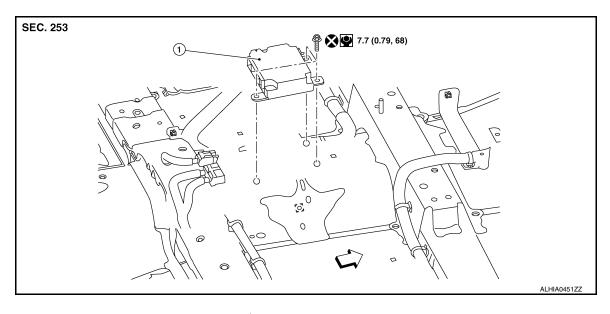
Installation is in the reverse order of removal.

## **CAUTION:**

- Position front door satellite sensor using pawl before tightening bolts to specification.
- Do not reuse front door satellite sensor bolts.
- Do not damage harness connector during installation.
- After installation is complete, check that no system malfunction is detected causing air bag warning lamp to illuminate.
- If a malfunction is indicated by air bag warning lamp after repair or replacement of malfunctioning parts, perform SRS final check. Refer to <a href="SRC-17">SRC-17</a>, "SRS Final Check".

# AIR BAG DIAGNOSIS SENSOR UNIT

Exploded View



1. Air bag diagnosis sensor unit

← Front

## Removal and Installation

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## WARNING:

- Before servicing SRS, turn ignition switch OFF, disconnect both battery terminals then wait at least three minutes.
- Before disconnecting air bag diagnosis sensor unit harness connectors, be sure to disconnect each
  harness connector of side curtain air bag modules, front seat belt pre-tensioner, and front side air
  bag module, to prevent accidental air bag deployment by static electricity and seat belt pre-tensioner
  operation.
- Do not use air tools or electric tools for servicing.
- When replacing air bag diagnosis sensor unit, always check with parts department for latest parts information. Installing an incorrect air bag diagnosis sensor unit may or may not cause air bag warning lamp to illuminate and may cause incorrect deployment of supplemental air bags and seat belt pre-tensioners in a collision resulting in serious personal injury or death.

#### REMOVAL

## NOTE:

Before replacing air bag diagnosis sensor unit, perform "Before Replace ECU" of "Read / Write Configuration" to save or print current vehicle specification. Refer to <a href="SRC-39">SRC-39</a>, "ADDITIONAL SERVICE WHEN REPLACING CONTROL UNIT: Description".

- 1. Always check air bag diagnosis sensor unit ECU discriminated number (identification number) or part number using CONSULT.
- Disconnect negative and positive battery terminals then wait at least three minutes. Refer to <u>PG-112</u>, <u>"Removal and Installation"</u>.
- 3. Remove center console assembly. Refer to IP-19, "Removal and Installation".
- 4. Disconnect harness connectors for the following SRS components: <u>SR-22</u>, "Removal and Installation" (side curtain air bag modules), <u>SR-31</u>, "Removal and Installation" (front seat belt pre-tensioner) and <u>SR-24</u>, "Removal and Installation" (front side air bag module).
- Remove air bag diagnosis sensor unit bolts.

## **CAUTION:**

Do not reuse air bag diagnosis sensor unit bolts.

Disconnect harness connectors from air bag diagnosis sensor unit and remove.CAUTION:

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## AIR BAG DIAGNOSIS SENSOR UNIT

#### < REMOVAL AND INSTALLATION >

- Replace air bag diagnosis sensor unit if it has been dropped or sustained an impact.
- · Do not strike air bag diagnosis sensor unit.



 Replace air bag diagnosis sensor unit if any SRS air bag has been deployed or if any front seat belt pre-tensioner has been deployed.

## INSTALLATION

#### **CAUTION:**

Be sure to perform "After Replace ECU" of "Read / Write Configuration" or "Manual Configuration" when replacing air bag diagnosis sensor unit. Refer to <a href="SRC-40">SRC-40</a>, "CONFIGURATION: Work Procedure". Installation is in the reverse order of removal.

#### **CAUTION:**

- · Do not reuse air bag diagnosis sensor unit bolts.
- The air bag diagnosis sensor unit must always be installed with label arrow mark "←" pointing toward front of vehicle for proper operation.
- Do not damage air bag diagnosis sensor unit harness connectors during installation.
- After installation is complete, check that no system malfunction is detected causing air bag warning lamp to illuminate.
- If a malfunction is indicated by air bag warning lamp after repair or replacement of malfunctioning parts, perform SRS final check. Refer to <u>SRC-17</u>, "SRS Final Check".
- After replacing air bag diagnosis sensor unit, confirm using CONSULT that ECU discriminated number (identification number) or part number of new replacement air bag diagnosis sensor unit matches ECU discriminated number (identification number) or part number of replaced (old) air bag diagnosis sensor unit.

#### NOTE:

If ECU discriminated number or part number of new replacement air bag diagnosis sensor unit differs from ECU discriminated number or part number of replaced air bag diagnosis sensor unit, reconfirm parts information and verify that the correct air bag diagnosis sensor unit was installed.

# **SEAT BELT PRE-TENSIONER**

# < REMOVAL AND INSTALLATION >

# SEAT BELT PRE-TENSIONER

# Removal and Installation

INFOID:0000000012876864

For removal and installation procedures, refer to  $\underline{\sf SB-8}$ , "SEAT BELT RETRACTOR: Removal and Installation".

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## FRONT SEAT BELT BUCKLE SWITCH

# < REMOVAL AND INSTALLATION >

# FRONT SEAT BELT BUCKLE SWITCH

# Removal and Installation

INFOID:0000000012876865

The front seat belt buckle switch is part of the front seat belt buckle. For removal and installation of the front seat belt buckle, refer to <u>SB-12</u>, "FRONT SEAT BELT BUCKLE: Removal and Installation".

## < REMOVAL AND INSTALLATION >

# OCCUPANT CLASSIFICATION SYSTEM

## Removal and Installation

#### INFOID:0000000013388234

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#### OCCUPANT CLASSIFICATION SYSTEM SENSORS

#### **WARNING:**

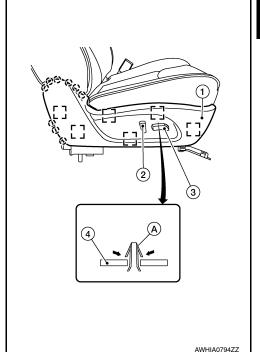
- When working near the Airbag Diagnosis Sensor Unit or other Airbag System sensors with the Ignition ON or engine running, DO NOT use air or electric power tools or strike near the sensor(s) with a hammer. Heavy vibration could activate the sensor(s) and deploy the air bag(s), possibly causing serious injury.
- Before servicing SRS, turn ignition switch OFF, disconnect both battery terminals then wait at least 3
  minutes.

#### **CAUTION:**

- · When working with the metal seat frame, use caution to avoid injury from sharp edges.
- When removing or installing the seat trim, handle it carefully to keep dirt out and to avoid damage.
- When removing or installing the seat, use shop cloths to protect components from damage.
- When disconnecting or connecting the harness and harness connectors, handle them carefully to avoid damage.

#### Removal

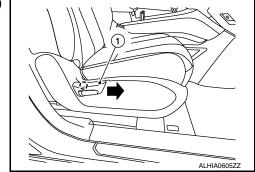
- 1. Remove the seat cushion outer finisher (RH) from the front passenger seat using the following procedure.
- a. For models with power front passenger seat, use the following steps.
  - 1. Release the seat cushion outer finisher (RH) pawls.
  - 2. Release the metal clips (A) from the seat frame (2) as shown, and pull the seat cushion outer finisher (RH) (1) away from the seat assembly.
    - : Metal clip
  - 3. Disconnect the harness connector from the power seat switch.



For models with manual front passenger seat, use the following steps.

1. Release the pawl and remove the recline lever finisher (1) from the recline lever as shown.

( ): Pawl



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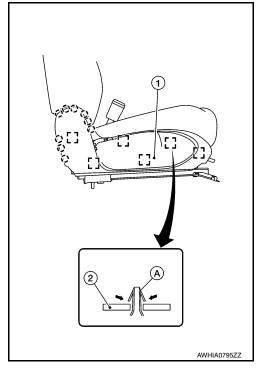
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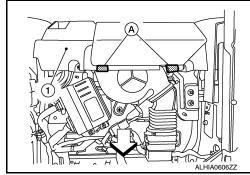
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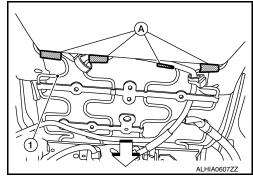
- 2. Release the seat cushion outer finisher (RH) pawls.
- 3. Release the metal clips (A) from the seat frame (2) as shown, and pull the seat cushion outer finisher (RH) (1) away from the seat assembly.
  - : Metal clip



- 2. From under the rear of the front passenger seat, release the seatback J-clips and position aside.
- 3. Remove the front passenger seat cushion assembly from the seat frame assembly using the following procedure.
- a. Release the rear hinge cover J-hooks.



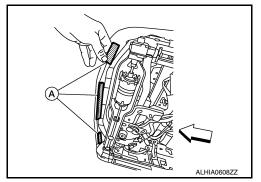
- For models without climate controlled passenger seat, release the rear hinge cover J-hooks (A) from the seat frame assembly (1).
  - <: Front



## < REMOVAL AND INSTALLATION >

b. Release the seat cushion trim J-hooks (A) from the front of the seat frame assembly.

<: Front

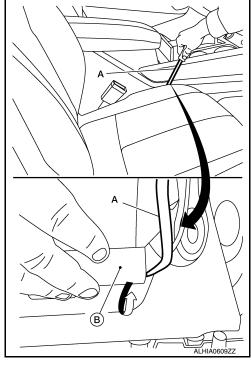


Release the seat cushion trim J-hook (B) from the LH (inboard) side of the seat frame assembly using suitable tool (A).
 CAUTION:

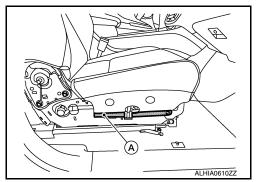
Do not damage center console finishers or seat cushion trim.

# NOTE:

Push the J-hook (B) down and away from the seat frame assembly using suitable tool (A) as shown.



d. Release the seat cushion trim J-hook (A) from the RH (outboard) side of the seat frame assembly.



- e. Remove the seat cushion assembly from the seat frame assembly.
- 4. Release the harness clip and disconnect the harness connectors from the front passenger seat.

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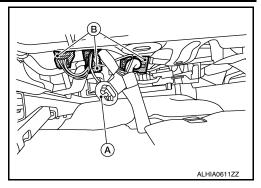
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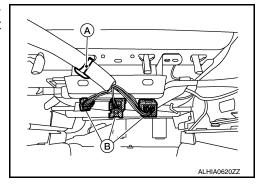
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## < REMOVAL AND INSTALLATION >

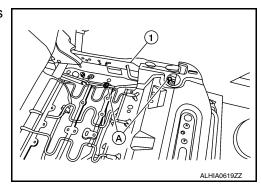
• For models with power front passenger seat, release the harness clip (A) from the seat frame assembly, then disconnect the harness connectors (B).



• For models with manual front passenger seat, release the harness clip (A) from the seat frame assembly, then disconnect the harness connectors (B).



5. Release the occupant classification system sensors harness clips (A) from the seat frame assembly (1).

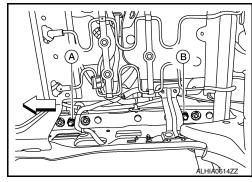


- 6. Remove the seat frame assembly nuts from the seat tracks using the following procedure.
- a. Remove washer and nut (A) from the front LH (inboard) side of the seat frame assembly, and nut (B) from the rear LH (inboard) side of the seat frame assembly.

#### **CAUTION:**

- Do not move the seat track while the nuts (A,B) are removed.
- Do not reuse washer and nut (A) or nut (B).

<: Front



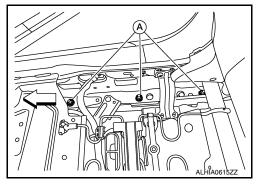
#### < REMOVAL AND INSTALLATION >

b. Remove nuts (A) from the RH (outboard) side of the seat frame assembly.

#### **CAUTION:**

- Do not move the seat track while nuts (A) are removed.
- Do not reuse nuts (A).

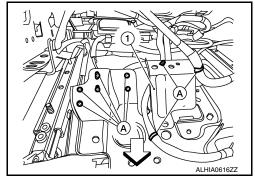
<⊅: Front



- Tilt the front passenger seat forward and disconnect the harness connector from the rear occupant classification system sensor.
- 8. Disconnect the harness connector from the front occupant classification system sensor.
- 9. For models with power front passenger seat, perform the following procedure.
- a. Tilt the front passenger seat rearward and release the harness clips (A) from the seat frame assembly (1).

☐: Front

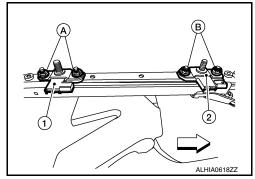
b. Disconnect the harness connector from the seat slide motor.



- 10. Remove the front passenger seat frame assembly from the seat tracks and position to the rear.
- 11. Remove the occupant classification system sensors using the following procedure.

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□: Front

- a. Remove the rear occupant classification system sensor nuts (A).
- b. Remove the rear occupant classification system sensor (1).
- c. Remove the front occupant classification system sensor nuts (B).
- d. Remove the front occupant classification system sensor (2).



## Installation

## **WARNING:**

- After installation is complete, perform additional services (Zero point reset) when installing occupant classification system sensors. Refer to <u>SRC-40, "ZERO POINT RESET: Special Repair Require-</u> ment".
- Zero point reset must be performed every time the front passenger seat is removed.
- Zero point reset is done after the front passenger seat is installed in vehicle and all nuts and bolts are tightened to specification.

#### **CAUTION:**

- After installation is complete, check that no system malfunction is detected causing the air bag warning lamp to illuminate.
- If a malfunction is indicated by the air bag warning lamp after repair or replacement of the malfunctioning parts, perform the SRS final check. Refer to <a href="SRC-17">SRC-17</a>, "SRS Final Check".
- 1. Install the occupant classification system sensors using the following procedure.

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## < REMOVAL AND INSTALLATION >

Install the rear occupant classification system sensor (1) and nuts (A) and tighten to specification.

#### **CAUTION:**

Do not reuse nuts (A).

⟨□: Front

Occupant classification : 22 N·m (2.2 kg-m, 16 ft-lb) system sensor nuts (A)

b. Install the front occupant classification system sensor (2) and nuts (B) and tighten to specification.

**CAUTION:** 

Do not reuse nuts (B).

**Occupant classification** 

: 22 N·m (2.2 kg-m, 16 ft-lb)

system sensor nuts (B)

2. Install the seat frame assembly onto the four studs.

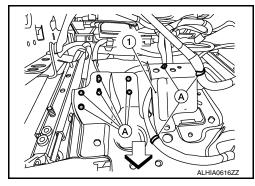
#### **CAUTION:**

Make sure the seat frame assembly is installed correctly on all four studs.

- 3. For models with power front passenger seat, perform the following procedure.
- Tilt the front passenger seat rearward and attach the harness clips (A) to the seat frame assembly (1).

<: Front

Connect the seat slide motor harness connector.



- 4. Connect the front occupant classification system sensor harness connector.
- Tilt the front passenger seat forward and connect the rear occupant classification system sensor harness connector.
- 6. Install the front passenger seat frame assembly using the following procedure.
- a. Install washer and nut (A) to the front LH (inboard) side of the seat frame assembly and hand tighten.

#### **CAUTION:**

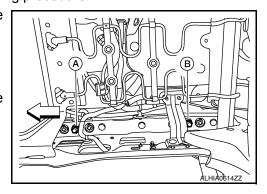
Do not reuse washer and nut (A).

<: Front

b. Install nut (B) to the rear LH (inboard) side of the seat frame assembly and hand tighten.

### **CAUTION:**

Do not reuse nut (B).



## < REMOVAL AND INSTALLATION >

Install nuts (A) to the RH (outboard) side of the seat frame assembly and tighten to specification.

## **CAUTION:**

Do not reuse nuts (A).

⟨□: Front

**Seat frame assembly** : 45 N·m (4.6 kg-m, 33 ft-lb)

nuts (A)

d. Tighten nut (A) on the front LH (inboard) side of the seat frame assembly to specification.

#### **CAUTION:**

Do not reuse washer and nut (A).

<: Front

Seat frame assembly : 45 N·m (4.6 kg-m, 33 ft-lb) nut (A)

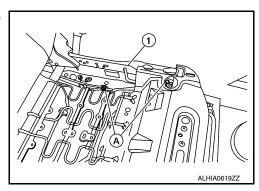
Tighten nut (B) on the rear LH (inboard) side of the seat frame assembly to specification.

#### **CAUTION:**

Do not reuse nut (B).

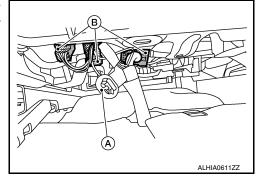
Seat frame assembly : 45 N·m (4.6 kg-m, 33 ft-lb) nut (B)

7. Attach the occupant classification system sensors harness clips (A) to the seat frame assembly (1).



8. Attach the harness clip and connect the harness connectors to the front passenger seat.

• For models with power front passenger seat, attach the harness clip (A) to the seat frame assembly, then connect the harness connectors (B).



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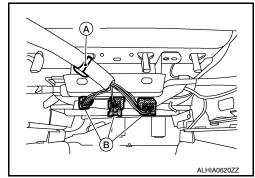
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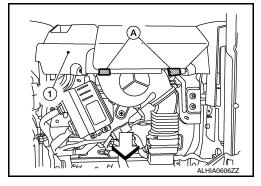
## < REMOVAL AND INSTALLATION >

For models with manual front passenger seat, attach the harness clip (A) to the seat frame assembly, then connect the harness connectors (B).



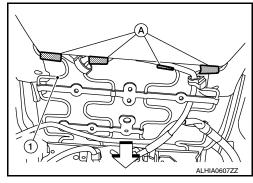
- 9. Install the seat cushion assembly using the following procedure.
- a. Attach the rear hinge cover J-hooks.
  - For models with climate controlled passenger seat, attach the rear hinge cover J-hooks (A) to the rear lower cover (1).





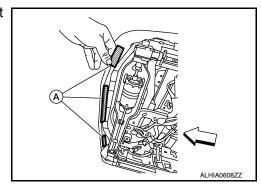
 For models without climate controlled passenger seat, attach the rear hinge cover J-hooks (A) to the seat frame assembly (1).

<: Front



b. Attach the seat cushion trim J-hooks (A) to the front of the seat frame assembly.

<: Front



## < REMOVAL AND INSTALLATION >

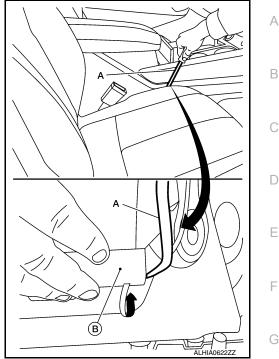
c. Attach the seat cushion trim J-hook (B) to the LH (inboard) side of the seat frame assembly.

## **CAUTION:**

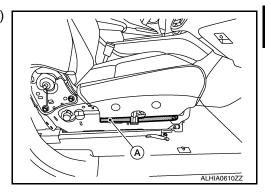
Do not damage center console finishers or seat cushion trim.

## NOTE:

Push the J-hook (B) down and towards the seat frame assembly using suitable tool (A) as shown.



d. Attach the seat cushion trim J-hook (A) to the RH (outboard) side of the seat frame assembly.



- 10. Attach the seatback J-clips under the rear of the front passenger seat.
- 11. Install the seat cushion outer finisher (RH) to the front passenger seat using the following procedure.

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# < REMOVAL AND INSTALLATION >

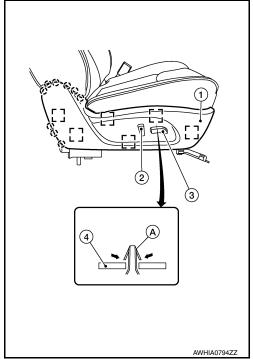
- a. For models with power front passenger seat, use the following steps.
  - 1. Connect the power seat switch harness connector.
  - 2. Install the seat cushion outer finisher (RH) (1) to the front passenger seat.

#### NOTE:

Make sure the metal clips (A) are secured into the seat frame (2).

(\_): Pawl

ि: Metal clip



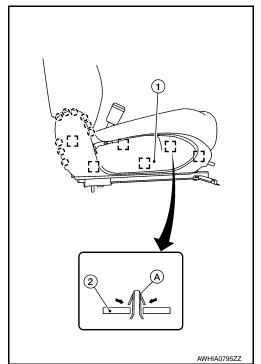
- b. For models with manual front passenger seat, use the following steps.
  - 1. Install the seat cushion outer finisher (RH) (1) to the front passenger seat.

#### NOTE:

Make sure the metal clips (A) are secured into the seat frame (2).

( ): Pawl

: Metal clip

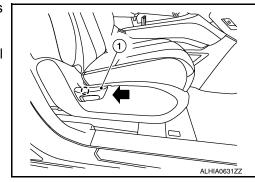


2. Install the recline lever finisher (1) to the recline lever as shown.

#### NOTE:

Push recline lever finisher onto recline lever until the pawl locks into place.

( ): Pawl



#### < REMOVAL AND INSTALLATION >

For models with manual each adjustment point.	, operate	seat slide	and make	sure both	tracks lock in	place at A
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## FRONT PASSENGER AIR BAG OFF INDICATOR

# < REMOVAL AND INSTALLATION >

# FRONT PASSENGER AIR BAG OFF INDICATOR

# Removal and Installation

#### INFOID:0000000012876867

# **REMOVAL**

- 1. Remove A/C switch assembly. Refer to <a href="HAC-91">HAC-91</a>, "Removal and Installation".
- 2. Remove screws and front passenger air bag OFF indicator.

## **INSTALLATION**

Installation is in the reverse order of removal.