

 D

Е

F

G

SR

J

Κ

L

M

Ν

0

Р

CONTENTS

PRECAUTION	3
PRECAUTIONS Precaution for Technicians Using Medical Electric Point to Be Checked Before Starting Maintenance Work Precaution for Removing 12V Battery Precaution for Supplemental Restraint System (SRS) "AIR BAG" and "SEAT BELT PRE-TEN-SIONER" Service Precaution for Work	.3 .3 .4 .4
PREPARATION	6
PREPARATIONSpecial Service Tools	
SYSTEM DESCRIPTION	7
COMPONENT PARTS	7
AIR BAG MODULE AIR BAG MODULE: Driver air bag module AIR BAG MODULE: Passenger air bag module AIR BAG MODULE: Side air bag module AIR BAG MODULE: Curtain air bag module	.7 .7 .8
INFLATORINFLATOR : Driver air bag inflatorINFLATOR : Passenger air bag inflatorINFLATOR : Side air bag inflator	.9 .9 10
MAIN COMPONENT PARTS AND FUNCTIONS1 MAIN COMPONENT PARTS AND FUNCTIONS: Spiral cable	11 11

MAIN COMPONENT PARTS AND FUNCTIONS: Air bag diagnosis sensor unit	12
BASIC INSPECTION	13
For Side and Rollover Collision	13
REMOVAL AND INSTALLATION	20
DRIVER AIR BAG MODULE Exploded View Removal and Installation	20
SPIRAL CABLE	23
PASSENGER AIR BAG MODULE Exploded View Removal and Installation	26
CURTAIN AIR BAG MODULE	29
SIDE AIR BAG MODULE	
CRASH ZONE SENSOR Exploded View Removal and Installation	33
SATELLITE SENSOR Exploded View Removal and Installation	35
DIAGNOSIS SENSOR UNIT	38

SEAT BELT PRE-TENSIONER40	OCCUPANT CLASSIFICATION SYSTEM
Exploded View40	CONTROL UNIT 42
Removal and Installation40	Exploded View42
LAP PRE-TENSIONER41	Removal and Installation42
	PASSENGER AIR BAG INDICATOR43
Removal and Installation 41	Removal and Installation 43

PRECAUTION

PRECAUTIONS

Precaution for Technicians Using Medical Electric

INFOID:0000000009347467

Α

D

OPERATION PROHIBITION

WARNING:

- Parts with strong magnet is used in this vehicle.
- Technicians using a medical electric device such as pacemaker must never perform operation on the vehicle, as magnetic field can affect the device function by approaching to such parts.

NORMAL CHARGE PRECAUTION

WARNING:

- If a technician uses a medical electric device such as an implantable cardiac pacemaker or an implantable cardioverter defibrillator, the possible effects on the devices must be checked with the device manufacturer before starting the charge operation.
- As radiated electromagnetic wave generated by PDM (Power Delivery Module) at normal charge operation may affect medical electric devices, a technician using a medical electric device such as implantable cardiac pacemaker or an implantable cardioverter defibrillator must not approach motor room [PDM (Power Delivery Module)] at the hood-opened condition during normal charge operation.

PRECAUTION AT TELEMATICS SYSTEM OPERATION

- If a technician uses implantable cardiac pacemaker or implantable cardioverter defibrillator (ICD), avoid the device implanted part from approaching within approximately 220 mm (8.66 in) from interior/exterior antenna.
- The electromagnetic wave of TCU might affect the function of the implantable cardiac pacemaker or the implantable cardioverter defibrillator (ICD), when using the service, etc.
- If a technician uses other medical electric devices than implantable cardiac pacemaker or implantable cardioverter defibrillator (ICD), the electromagnetic wave of TCU might affect the function of the device. The possible effects on the devices must be checked with the device manufacturer before TCU use.

PRECAUTION AT INTELLIGENT KEY SYSTEM OPERATION

WARNING:

- If a technician uses implantable cardiac pacemaker or implantable cardioverter defibrillator (ICD), avoid the device implanted part from approaching within approximately 220 mm (8.66 in) from interior/exterior antenna.
- The electromagnetic wave of Intelligent Key might affect the function of the implantable cardiac pacemaker or the implantable cardioverter defibrillator (ICD), at door operation, at each request switch operation, or at engine starting.
- If a technician uses other medical electric devices than implantable cardiac pacemaker or implantable cardioverter defibrillator (ICD), the electromagnetic wave of Intelligent Key might affect the function of the device. The possible effects on the devices must be checked with the device manufacturer before Intelligent Key use.

Point to Be Checked Before Starting Maintenance Work

The high voltage system may starts automatically. It is required to check that the timer air conditioner and timer charge (during EVSE connection) are not set before starting maintenance work. NOTE:

If the timer air conditioner or timer charge (during EVSE connection) is set, the high voltage system starts automatically even when the power switch is in OFF state.

Precaution for Removing 12V Battery

Check that EVSE is not connected.

NOTE:

If EVSE is connected, the air conditioning system may be automatically activated by the timer A/C function.

SR

K

Ν

INFOID:0000000008746372

INFOID:0000000008746371

PRECAUTIONS

< PRECAUTION >

- 2. Turn the power switch OFF \rightarrow ON \rightarrow OFF. Get out of the vehicle. Close all doors (including back door).
- 3. Check that the charge status indicator lamp does not blink and wait for 5 minutes or more.

NOTE:

If the battery is removed within 5 minutes after the power switch is turned OFF, plural DTCs may be detected.

4. Remove 12V battery within 1 hour after turning the power switch OFF \rightarrow ON \rightarrow OFF.

NOTE:

- The 12V battery automatic charge control may start automatically even when the power switch is in OFF state.
- Once the power switch is turned ON → OFF, the 12V battery automatic charge control does not start for approximately 1 hour.

CAUTION:

- After all doors (including back door) are closed, if a door (including back door) is opened before battery terminals are disconnected, start over from Step 1.
- After turning the power switch OFF, if "Remote A/C" is activated by user operation, stop the air conditioner and start over from Step 1.

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 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, 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 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 and wait at least three minutes before performing any service.

Service INFOID:0000000009343801

- 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.

PRECAUTIONS

< PRECAUTION >

- 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

INFOID:0000000009343802

Α

В

D

Е

F

- 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.
- 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.

SR

K

L

M

Ν

0

Р

Revision: October 2013 SR-5 2013 LEAF

PREPARATION

< PREPARATION >

PREPARATION

PREPARATION

Special Service Tools

INFOID:0000000009343803

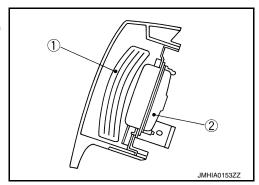
The actual shape of the tools may	differ from those illustrated here.	
Tool number (TechMate No.) Tool name		Description
 (J-46534) Trim Tool Set		Removing trim components
	AM IIA 0.49277	

SYSTEM DESCRIPTION

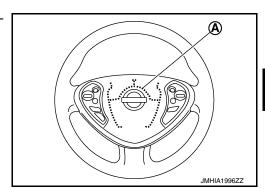
COMPONENT PARTS AIR BAG MODULE

AIR BAG MODULE: Driver air bag module

- Driver air bag module is built into steering wheel.
- Driver air bag module mainly consists of air bag (1) and inflator (2) which inflates air bag.

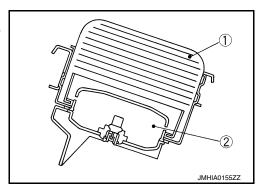


Driver air bag inflates by breaking steering wheel center pad surface (A).

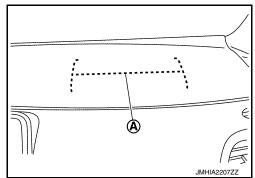


AIR BAG MODULE : Passenger air bag module

- Passenger air bag module is built into instrument panel.
- Passenger air bag module mainly consists of air bag (1) and inflator (2) which inflates air bag.



 Passenger air bag inflates by breaking instrument panel surface (A).



Α

В

INFOID:0000000008746377

D

Ε

SR

INFOID:0000000008746378

Κ

L

M

Ν

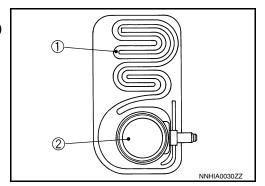
0

Ρ

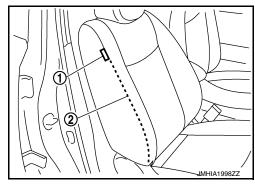
AIR BAG MODULE: Side air bag module

INFOID:0000000008746379

- · Side air bag module is built into seatback side.
- Side air bag module mainly consists of air bag (1) and inflator (2) which inflates air bag.



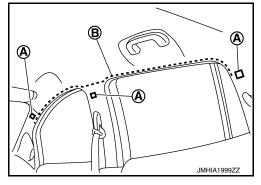
- Side air bag inflates through seatback side stitch (2).
- Identification mark (1) is installed to seatback side stitch indicating that side air bag is equipped.



INFOID:0000000008746380

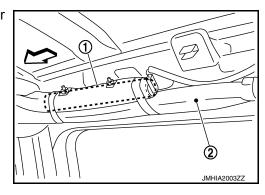
AIR BAG MODULE: Curtain air bag module

- · Curtain air bag module is built into roof side portion LH and RH.
- Identification mark (A) is installed to center pillar upper garnish upper indicating that SRS curtain air bag is equipped.
- Curtain air bag inflates through a space (B) between headliner and roof side portion.



 Curtain air bag module mainly consists of air bag (2) and inflator (1) which inflates air bag.

<□ : Vehicle front



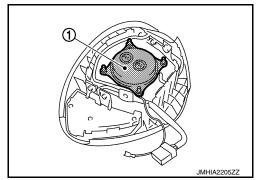
INFLATOR

INFLATOR: Driver air bag inflator

- Driver air bag inflator (1) mainly consists of electric ignition device (squib), igniting agent, gas generating agent, and filter. These items are stored in a container.
- In a frontal collision which exceeds the specified limit of the vehicle, electric ignition device (squib) ignites igniting agent. Gas generating agent burns due to heat from igniting agent. Generated gas (high temperature) inflates air bag through filter.

NOTE:

Filter removes and cools residues of gas generating agent.



CROSS-SECTION OF DRIVER AIR BAG INFLATOR

1 : Filter

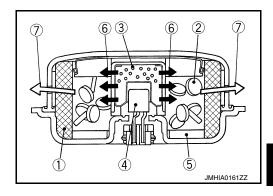
2 : Gas generating agent

3 : Igniting agent

4 : Electric ignition device (squib)

5 : Cushion6 : Flame

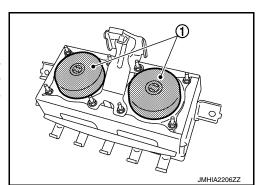
7 : Generated gas



INFLATOR: Passenger air bag inflator

- Passenger air bag inflator (1) mainly consists of electric ignition device (squib), igniting agent, gas generating agent, and filter. These items are stored in a container.
- In a frontal collision which exceeds the specified limit of the vehicle, electric ignition device (squib) ignites igniting agent. Gas generating agent burns due to heat from igniting agent. Generated gas (high temperature) inflates air bag through filter.
 NOTE:

Filter removes and cools residues of gas generating agent.



CROSS-SECTION OF PASSENGER AIR BAG INFLATOR

1 : Filter

2 : Gas generating agent

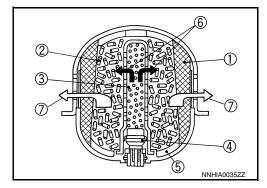
3 : Igniting agent

4 : Electric ignition device (squib)

5 : Cushion

6 : Flame

7 : Generated gas



INFOID:0000000008746381

Α

В

D

Ε

F

G

SR

INFOID:0000000008746382

M

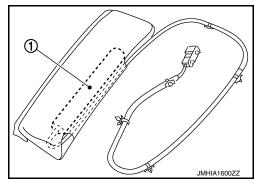
Ν

0

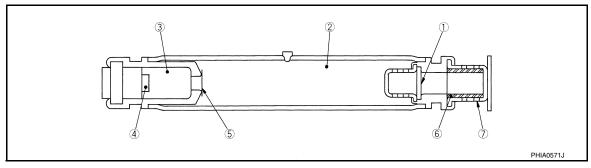
INFLATOR: Side air bag inflator

INFOID:0000000008746383

Side air bag inflator (1) mainly consists of electric ignition device (squib), heating agent, compressed gas, filter, and diffuser. These items are stored in a cylinder-type container.



CROSS-SECTION OF SIDE AIR BAG INFLATOR



1. Burst disc B

Diffuser

- 2. Compressed gas
- 4. Electric ignition device (squib)
- Burst disc A

- 3. Heating agent (propellant)
- Filter

In a frontal collision which exceeds the specified limit of the vehicle, electric ignition device (squib) ignites and burns heating agent. Compressed gas breaks burst disc A, inflates gas in compressed gas chamber, breaks burst disc B, and then inflates air bag through filter and diffuser.

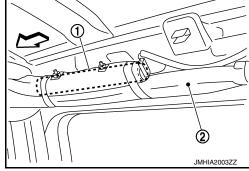
INFLATOR: Curtain air bag inflator

INFOID:0000000008746384

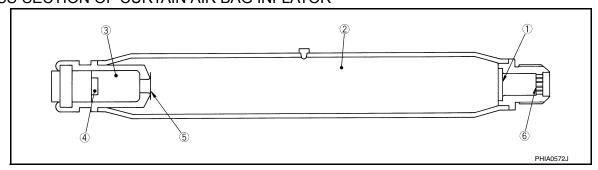
Curtain air bag inflator mainly consists of electric ignition device (squib), heating agent, compressed gas, and diffuser. These items are stored in a cylinder-type container.

1 : Curtain air bag inflator

2 : Curtain air bag: Vehicle front



CROSS-SECTION OF CURTAIN AIR BAG INFLATOR



< SYSTEM DESCRIPTION >

1. Burst disk

- 2. Compressed gas
- 3. Heating agent (propellant)

- 4. Electric ignition device (squib)
- Burst disk A

6. Diffuser

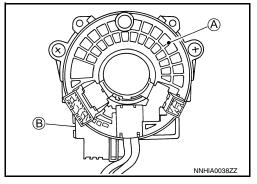
In a frontal collision which exceeds the specified limit of the vehicle, electric ignition device (squib) ignites and burns heating agent. Burned gas breaks burst disc A, inflates gas in compressed gas chamber, breaks burst disc B, and then inflates air bag through filter and diffuser.

MAIN COMPONENT PARTS AND FUNCTIONS

MAIN COMPONENT PARTS AND FUNCTIONS: Spiral cable

INFOID:0000000008746385

- Spiral cable electrically connects air bag diagnosis sensor unit and driver air bag module. Spiral cable mainly consists of the rotating portion (A) which performs the same movement as steering wheel, the fixed case (B) which is installed on steering wheel, and the cable which connects the rotating portion.
- Spiral cable is built into steering angle sensor which is installed to a space between combination switch and steering wheel.



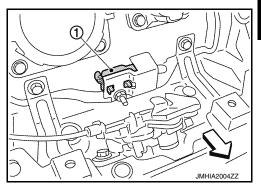
MAIN COMPONENT PARTS AND FUNCTIONS: Crash zone sensor

INFOID:0000000008746386

Crush zone sensor (1) is installed to charge port lid hinge assembly. Crash zone sensor integrates frontal collision "G" sensor which detects frontal collision impact that exceeds the specified limit of the vehicle.

: Vehicle front

 In a frontal collision that exceeds the specified limit of the vehicle, crush zone sensor detects impact. If frontal collision safing sensor in air bag diagnosis sensor unit judges that impact is due to a collision, driver air bag, passenger air bag and front pre-tensioner seat belt operate.



MAIN COMPONENT PARTS AND FUNCTIONS: Satellite sensor

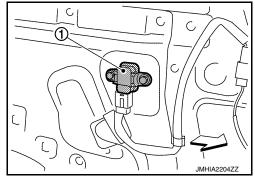
INFOID:0000000008746387

FRONT SATELLITE SENSOR

 Front door satellite sensor (1) is installed to front door panel front side.

: Vehicle front

- Front door satellite sensor integrates lateral collision "G" sensor which detects lateral collision impact that exceeds the specified limit of the vehicle. (Lateral collision "G" sensor adopts electronic sensor of which operating principles are the same as those of frontal collision "G" sensor in air bag diagnosis sensor unit.)
- In a lateral collision that exceeds the specified limit of the vehicle, front door satellite sensor detects impact. If lateral collision safing sensor in air bag diagnosis sensor unit judges that impact is due to a collision, side air bag and curtain air bag operate.



REAR SATELLITE SENSOR

SR

Α

В

D

Е

ı

J

K

L

M

Ν

Р

Revision: October 2013 SR-11 2013 LEAF

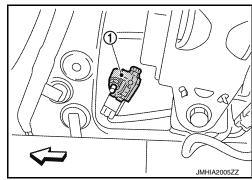
COMPONENT PARTS

< SYSTEM DESCRIPTION >

 Rear satellite sensor (1) in installed to center pillar lower portion of front seat belt retractor rear side.

<□ : Vehicle front

- Rear satellite sensor integrates lateral collision "G" sensor which detects lateral collision impact that exceeds the specified limit of the vehicle. (Lateral collision "G" sensor adopts electronic sensor of which operating principles are the same as those of frontal collision "G" sensor in air bag diagnosis sensor unit.)
- In a lateral collision that exceeds the specified limit of the vehicle, rear satellite sensor detects impact. If lateral collision safing sensor in air bag diagnosis sensor unit judges that impact is due to a collision, side air bag and curtain air bag operate.



MAIN COMPONENT PARTS AND FUNCTIONS: Air bag diagnosis sensor unit

NFOID:0000000008746388

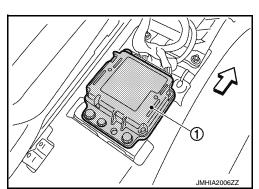
INFOID:0000000008746389

 Air bag diagnosis sensor unit (1) is installed to front seat center portion (under center console). Air bag diagnosis sensor unit integrates control functions of driver air bag, passenger air bag, side air bag, curtain air bag, and pre-tensioner seat belt.

- Air bag diagnosis sensor unit integrates frontal collision "G" sensor, frontal collision safing sensor, and lateral collision safing sensor (only for models with curtain air bag).
- Air bag diagnosis sensor unit has a function that judges impact due to frontal and lateral collisions exceeding the specified limit of the vehicle. Air bag diagnosis sensor unit also has an auxiliary power supply function that supplements 12 V battery power supply in the event battery is damaged in a collision.

 Air bag diagnosis sensor unit diagnoses electric system of entire system. Self-diagnosis function is adopted, which indicates system malfunction by blinking or turning ON air bag warning lamp on combination meter

when a malfunction is detected. Diagnosis using CONSULT is possible.



MAIN COMPONENT PARTS AND FUNCTIONS: Air bag warning lamp

 Air bag warning lamp blinks or turns ON indicating a system malfunction when a malfunction is detected for electric system of SRS air bag system and pre-tensioner seat belt system.

• For operation check purposes, air bag warning lamp turns ON for 7 seconds after power switch is turned ON. During this period of time, air bag diagnosis sensor unit performs system diagnosis.

 Air bag warning lamp indicates self-diagnosis result according to the number of times it blinks. (in diagnosis mode)
 NOTE:

SRS air bag and pre-tensioner seat belt do not operate for approximately 7 seconds (air bag warning lamp is blinking or turning ON) after power switch is turned ON.



< BASIC INSPECTION >

BASIC INSPECTION

COLLISION DIAGNOSIS

For Frontal Collision

INFOID:0000000009344502

Α

В

D

Е

F

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.
- 2. Replace the diagnosis sensor unit.
- 3. Remove the front air bag modules, crash zone sensor assembly, bracket and seat belt pre-tensioner assemblies.
- 4. 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-15, "CONSULT Function"</u> or <u>SRC-11, "On Board Diagnosis Function"</u> 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-11, "On Board Diagnosis Function".

SRS INSPECTION (FOR FRONTAL COLLISION)

Part	Inspection
Driver air bag module	If the driver 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	 Visually check steering wheel for deformities. Check harness (built into steering wheel) and connectors for damage, and terminals for deformities. Install driver air bag module into the steering wheel to check fit and alignment with the wheel. Check steering wheel for excessive free play. If no damage is found, reinstall. If damaged — REPLACE.
Spiral cable	If the driver front air bag has deployed: REPLACE the spiral cable.

SR

K

L

Ν

Р

Revision: October 2013 SR-13 2013 LEAF

< BASIC INSPECTION >

Part	Inspection
Occupant classification system (Passenger seat)	 Remove passenger seat assembly. Check control unit case for dents, cracks of deformities. Check connectors for damage and terminals for deformities. Check seat frame and cushion pan for dents or deformities. If no damage is found, reinstall seat with new fasteners. If damaged — REPLACE seat cushion assembly with new fasteners. Perform zero point reset function after front passenger seat is installed in the vehicle and all bolts are tightened to specification. Refer to SRC-50, "ZERO POINT RESET: Special Repair Requirement".
Harness and connectors	 Check connectors for poor connection, damage, and terminals for deformities. Check harness for binding, chafing, cuts, or deformities. If no damage is found, reinstall the harness and connectors. If damaged — REPLACE the damaged harness. Do not attempt to repair, splice or modify any SRS harness.
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-15</u>, "CONSULT Function" or <u>SRC-11</u>, "On <u>Board Diagnosis Function"</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-11, "On Board Diagnosis Function".

SRS INSPECTION (FOR FRONTAL COLLISION)

Part	Inspection
Driver air bag module	 If the driver air bag has NOT been activated: Remove driver air bag module. Check harness cover and connectors for damage, terminals for deformities, and harness for binding. Install driver air bag module into the steering wheel to check fit and alignment with the wheel. If no damage is found, reinstall with new fasteners. If damaged — REPLACE. Install driver air bag modules with new fasteners.
Front passenger air bag module (if equipped)	 If the front passenger air bag has NOT been activated: Remove front passenger air bag module. Check harness cover and connectors for damage, terminals for deformities, and harness for binding. Install front passenger air bag module into the instrument panel to check fit with the instrument panel. If no damage is found, reinstall with new fasteners. If damaged — REPLACE. Install front passenger air bag modules with new fasteners.
Crash zone sensor	 If the front air bags or seat belt pre-tensioners have NOT been activated: Remove the crash zone sensor. Check harness connectors for damage, terminals for deformities, and harness for binding. Check for visible signs of damage (dents, cracks, deformation) of the crash zone sensor and bracket. Install the crash zone sensor to check fit. If no damage is found, reinstall with new fasteners. If damaged — REPLACE the crash zone sensor and bracket with new fasteners.

< BASIC INSPECTION >

Part	Inspection	
Seat belt pre-tensioner assem-	If the pre-tensioners have NOT been activated:	
blies (All applicable locations: buckle,	Remove seat belt pre-tensioners. Check harness cover and connectors for damage, terminals for deformities, and harness for binding.	
retractor, lap outer)	binding. 2. Check belts for damage and anchors for loose mounting. 3. Check retreates for except an exception.	
	3. Check retractor for smooth operation.4. Check seat belt adjuster for damage.	
	5. Check for deformities of the center pillar inner.6. If the center pillar inner has no damage, REPLACE the seat belt pre-tensioner assembly.	
	 If no damage is found, reinstall seat belt pre-tensioner assembly. If damaged —REPLACE. Install the seat belt pre-tensioners with new fasteners. 	
Diagnosis sensor unit	If none of the SRS components have been activated:	
	 Check case for dents, cracks or deformities. Check connectors for damage, and terminals for deformities. 	
	 3. If no damage is found, reinstall with new fasteners. 4. If damaged — REPLACE. Install diagnosis sensor unit with new fasteners. 	
Steering wheel	Visually check steering wheel for deformities. Check harness (built into steering wheel) and connectors for damage, and terminals for deformities.	
	 Install driver air bag module into the steering wheel to check fit and alignment with the wheel. Check steering wheel for excessive free play. If no damage is found, reinstall. If damaged — REPLACE. 	
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.	
Occupant classification system (Passenger seat)	Remove passenger seat assembly. Check control unit case for dents, cracks of deformities.	
	 Check connectors for damage and terminals for deformities. Check seat frame and cushion pan for dents or deformities. If no damage is found, reinstall seat with new fasteners. 	
	 If damaged — REPLACE seat cushion assembly with new fasteners. Perform zero point reset function after front passenger seat is installed in the vehicle and all bolts are tightened to specification. Refer to SRC-50. "ZERO POINT RESET: Special Repair Requirement". 	
Harness and connectors	 Check connectors for poor connection, damage, and terminals for deformities. Check harness for binding, chafing, cuts, or deformities. If no damage is found, reinstall the harness and connectors. If damaged ——REPLACE the damaged harness. Do not attempt to repair, splice or modify any SRS harness. 	
nstrument 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

INFOID:0000000009344503

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

- 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.

Revision: October 2013 SR-15 2013 LEAF

< BASIC INSPECTION >

- 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.
- 3. 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.).
- Perform self-diagnosis using CONSULT and "AIR BAG" warning lamp. Refer to <u>SRC-15, "CONSULT Function"</u> and <u>SRC-11, "On Board Diagnosis Function"</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-11, "On Board Diagnosis Function".

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	 Check the center inner pillar on the collision side for damage (dents, cracks, deformation). If damaged —REPAIR the center inner pillar.
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	 Check for visible signs of damage (dents, cracks, deformation) of the interior trim on the collision side. If damaged — REPLACE the damaged trim parts.
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)	 Remove passenger seat assembly. Check control unit case for dents, cracks of deformities. Check connectors for damage and terminals for deformities. Check seat frame and cushion pan for dents or deformities. If no damage is found, reinstall seat with new fasteners. If damaged — REPLACE seat cushion assembly with new fasteners. Perform zero point reset function after front passenger seat is installed in the vehicle and all bolts are tightened to specification. Refer to SRC-50. "ZERO POINT RESET: Special Repair Requirement".
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.
- 2. 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 SRC-15, "CONSULT Function" and SRC-11, "On Board Diagnosis Function" 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 SRC-11, "On Board Diagnosis Function".

SRS INSPECTION (FOR SIDE AND ROLLOVER COLLISION)

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

SR

Α

В

D

Е

2013 LEAF

< BASIC INSPECTION >

Part	Inspection
Side air bag (satellite) sensor (LH or RH)	 If none of the SRS components have been activated: 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. Check for visible signs of damage (dents, cracks, deformation) of the side air bag (satellite) sensor (LH or RH). Install the side air bag (satellite) sensor (LH or RH) to check fit. If no damage is found, reinstall the side sir bag (satellite) sensor (LH or RH) with new fasteners. If damaged — REPLACE the side air bag (satellite) sensor (LH or RH) with new fasteners.
Door (satellite) sensor (LH or RH)	 If none of the SRS components have been activated: Remove the door (satellite) sensor (LH or RH) on the collision side. Check harness connectors for damage, terminals for deformities, and harness for binding. Check for visible signs of damage (dents, cracks, deformation) of the door (satellite) sensor (LH or RH). Install the door (satellite) sensor (LH or RH) to check fit. If no damage is found, reinstall the door (satellite) sensor (LH or RH) with new fasteners. If damaged — REPLACE the door (satellite) sensor (LH or RH) with new fasteners.
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)	 If the pre-tensioners have NOT been activated: Remove seat belt pre-tensioners. Check harness cover and connectors for damage, terminals for deformities, and harness for binding. Check belts for damage and anchors for loose mounting. Check retractor for smooth operation. Check seat belt adjuster for damage. Check for deformities of the center pillar inner. If the center pillar inner has no damage, REPLACE the seat belt pre-tensioner assembly. If no damage is found, reinstall seat belt pre-tensioners with new fasteners.
Seat (with front side air bag)	 If the front LH or front RH side air bag modules have NOT deployed: Visually check the seat on the collision side. Remove the seat on the collision side and check the following for damage and deformities. Harness, connectors and terminals Frame and recliner (for front and rear seat), and also adjuster and slides (for front seat) If no damage is found, reinstall the seat. 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.
Center inner pillar	 Check the center inner pillar on the collision side for damage (dents, cracks, deformation, etc.). If damaged - REPAIR the center inner pillar.
Trim/headlining Door-mounted curtain air bag module LH	 Check for visible signs of damage (dents, cracks, deformation, etc.) of the interior trim on the collision side. If damaged - REPLACE the damaged trim parts. Check for visible signs of damage (dents, tears, deformation, etc.) of the door finisher on the collision side. If damaged - REPLACE the door finisher LH with new fasteners. Check for visible signs of damage (tears etc.) of the door-mounted curtain air bag module LH. Check harness and connectors for damage, and terminals for deformities. 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. If damaged - REPLACE the door finisher LH and door-mounted curtain air bag module LH with new fasteners.

< BASIC INSPECTION >

Part	Inspection
Door-mounted curtain air bag module RH	 If the door-mounted curtain air bag RH has NOT deployed: Check for visible signs of damage (dents, tears, deformation, etc.) of the door finisher on the collision side. If damaged - REPLACE the door finisher RH with new fasteners. Check for visible signs of damage (tears etc.) of the door-mounted curtain air bag module RH Check harness and connectors for damage, and terminals for deformities. 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. If damaged - REPLACE the door finisher RH and door-mounted curtain air bag module RH with new fasteners.
Occupant classification system (Passenger seat)	 Remove passenger seat assembly. Check control unit case for dents, cracks of deformities. Check connectors for damage and terminals for deformities. Check seat frame and cushion pan for dents or deformities. If no damage is found, reinstall seat with new fasteners. If damaged — REPLACE seat cushion assembly with new fasteners. Perform zero point reset function after front passenger seat is installed in the vehicle and all bolts are tightened to specification. Refer to SRC-50, "ZERO POINT RESET: Special Repair Requirement".
Pop-up roll bar	 If the pop-up roll bar NOT deployed: Check for visible signs of damage (dents, tears, deformation, etc.) of the pop-up roll bar. If damaged - REPLACE the pop-up roll bar with new fasteners. Check harness and connectors for damage, and terminals for deformities. If no damage is found, reinstall the pop-up roll bar with new fasteners. Check for visible signs of damage (dents, cracks, deformation, etc.) of the seatback support brace assembly. If damaged - REPAIR the seatback support brace assembly.

В

D

Е

F

J

Κ

L

N /I

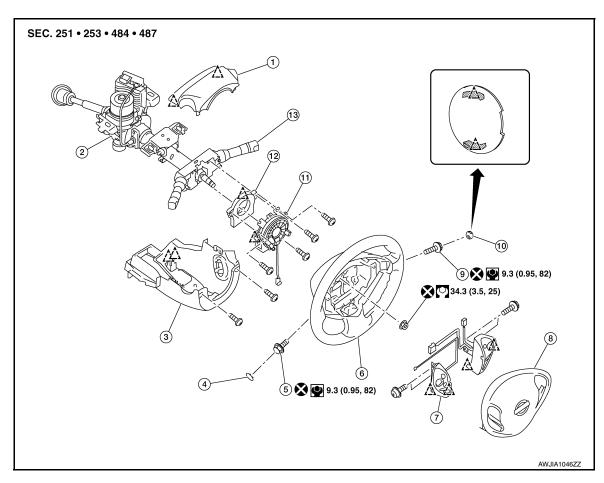
Ν

 \cap

REMOVAL AND INSTALLATION

DRIVER AIR BAG MODULE

Exploded View



- 1. Steering column upper cover
- 4. Side lid LH
- 7. Steering switch
- 10. Side lid RH
- 13. Combination switch
- △ : Pawl
- : Always replace after every disassembly.
- : N·m (kg-m, in-lb)
- : N·m (kg-m, ft-lb)

- 2. Steering column assembly
- 5. Bolt
- 8. Driver air bag module
- 11. Spiral cable

Steering column lower cover

INFOID:0000000008746395

- 6. Steering wheel
- Bolt
- 12. Steering angle sensor

Removal and Installation

WARNING.

Always observe the following items for preventing accidental activation.

- Before servicing the SRS, turn the ignition switch off, disconnect both 12V battery terminals and wait at least three minutes.
- · Always work from the side of air bag module. Never work in front of it.
- · Never use air tools or electric tools for servicing.

REMOVAL

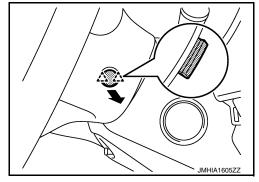
Revision: October 2013 SR-20 2013 LEAF

DRIVER AIR BAG MODULE

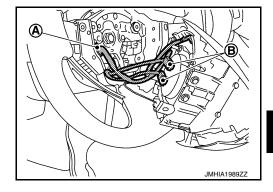
< REMOVAL AND INSTALLATION >

- 1. Disconnect the negative and positive 12V battery terminals and wait at least three minutes. Refer to <u>PG-65</u>, "Removal and Installation".
- Remove side lid (LH and RH).
 Insert flat-bladed screwdriver between side lid and steering wheel to disengage pawls as shown in the figure.



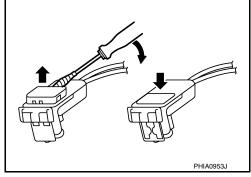


- 3. Remove bolts (LH and RH) from the steering wheel lower side.
- 4. Pull out driver air bag module.
- 5. Disconnect steering switch harness connector (A).
- 6. Disconnect driver air bag harness connectors (B).



CAUTION:

- For installing/removing the driver air bag module harness connector, insert a 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.

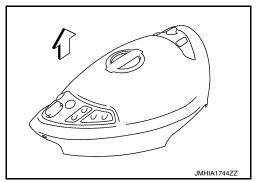


7. Remove driver air bag module.

CAUTION:

 To prevent accidental explosion, always place the driver air bag module with pad side facing upward.





В

Α

D

Е

F

G

SR

J

K

L

M

Ν

0

Р

Revision: October 2013 SR-21 2013 LEAF

DRIVER AIR BAG MODULE

< REMOVAL AND INSTALLATION >

- To prevent damage to the parts, never impact the driver air bag module.
- Replace the driver air bag module if it is dropped or sustains an impact.



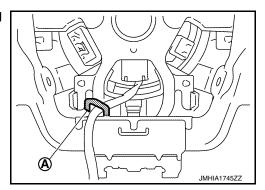
- To prevent accidental explosion, never insert any foreign objects (screwdriver, etc.) into the driver air bag module.
- To prevent accidental explosion, never disassemble the driver air bag module.
- To prevent accidental explosion, never expose the driver air bag module to temperature of more than 90°C (194°F).
- To prevent accidental explosion, never allow oil, grease, detergent, or water to come in contact with the driver air bag module.

INSTALLATION

Note the following items, and then install in the reverse order of removal.

CAUTION:

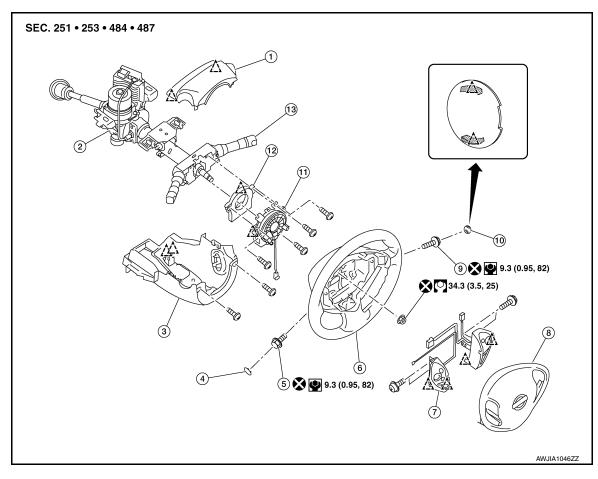
- · Never reuse bolts after removal, replace with new bolts.
- Fix the driver air bag module harnesses to the harness fixing hook (A).



- · Never damage the harness while installing.
- Tighten the 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. Refer to SRC-11, "On Board Diagnosis Function" or SRC-15, "CONSULT Function".
- After the work is complete, check that no system malfunction is detected by air bag warning lamp.

SPIRAL CABLE

Exploded View



- 1. Steering column upper cover
- 4. Side lid LH
- 7. Steering switch
- 10. Side lid RH
- 13. Combination switch
- ∴ : Pawl
- : Always replace after every disassembly.
- : N·m (kg-m, in-lb)
- : N·m (kg-m, ft-lb)

- 2. Steering column assembly
- 5. Bolt
- 8. Driver air bag module
- 11. Spiral cable

- 3. Steering column lower cover
- 6. Steering wheel
- 9. Bolt
- 12. Steering angle sensor

Removal and Installation

WARNING:

Always observe the following items for preventing accidental activation.

- Before servicing, turn the ignition switch OFF, disconnect both 12V battery cables and wait at least three minutes.
- Never use air tools or electric tools for servicing.

REMOVAL

- 1. Remove steering wheel. Refer to ST-35, "Removal and Installation".
- Remove steering column upper cover and steering column lower cover. Refer to <u>IP-17, "Removal and Installation"</u>.

SR

Α

В

D

Е

1 \

Ν

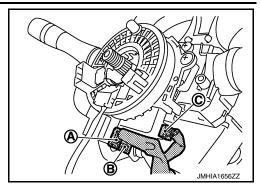
INFOID:0000000008746397

Г

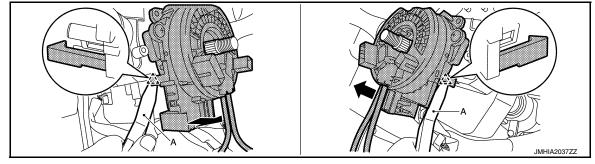
< REMOVAL AND INSTALLATION >

Disconnect the spiral cable body side harness connectors (A),
 (B) and steering angle sensor harness connectors (C).
 NOTE:

Disconnect the spiral cable body side harness connector (B) after removing the spiral cable (A).



- 4. Remove the spiral cable fixing screws.
- 5. Remove the spiral cable fixing pawls with remover tool (A).

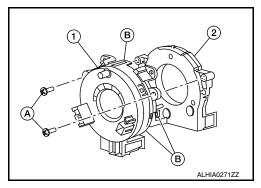




CAUTION:

Remove pawls slowly so that they are not damaged.

6. Separate the spiral cable (1) from the steering angle sensor (2) by removing two screws (A) and releasing three pawls (B).



CAUTION:

- To prevent damage to the parts, never impact the spiral cable.
- Replace the spiral cable if it is dropped or sustains an impact.
- To prevent damage to the parts, never disassemble the spiral cable.
- To prevent damage to the parts, never apply lubricant to the spiral cable.
- To prevent damage to the parts, never allow oil, grease, detergent, or water to come in contact with the spiral cable.



INSTALLATION

Note the following items, and then install in the reverse order of removal. The turn signal lever must be in the neutral position for spiral cable installation. **CAUTION:**

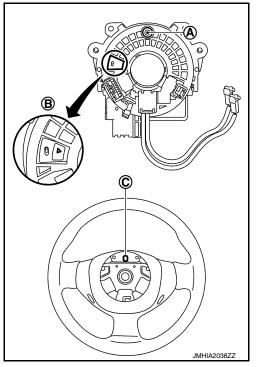
SPIRAL CABLE

< REMOVAL AND INSTALLATION >

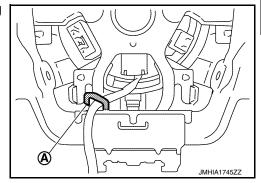
• The spiral cable may snap during steering operation if the cable is installed in an improper position.

The neutral position is set as per the following.

- Carefully turn the spiral cable clockwise to the end position.
 Then turn it counterclockwise (about 3 turns) and stop turning
 at the mark (B) when 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 the number of turns required. (This causes the cable to snap)
- Adjust the spiral cable locating pin (A) to the steering wheel locating pin hole (C).



 Fix the driver air bag module harnesses to the harness fixing hook (A).



- 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. Refer to SRC-11, "On Board Diagnosis Function" or SRC-15, "CONSULT Function".
- After the work is completed, check that no system malfunction is detected by air bag warning lamp.

SR

Α

В

D

Е

F

|

1/

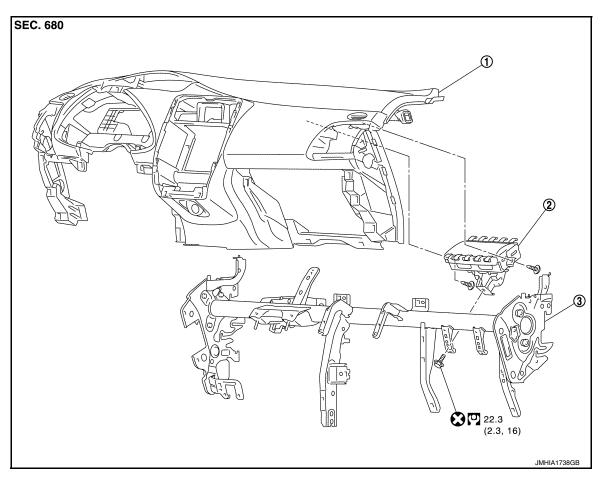
M

Ν

0

PASSENGER AIR BAG MODULE

Exploded View INFOID:0000000008746398



- Instrument panel assembly
- Passenger air bag module
- 3. Steering member assembly

: Always replace after every disassembly.

: N·m (kg-m, ft-lb)

Removal and Installation

INFOID:0000000008746399

WARNING:

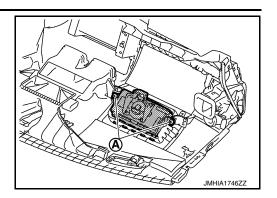
Always observe the following items for preventing accidental activation.

- · Before servicing the SRS, turn the ignition switch off, disconnect both 12V battery terminals and wait at least three minutes.
- · Always work from the side of air bag module. Never work in front of it.
- · Never use air tools or electric tools for servicing.

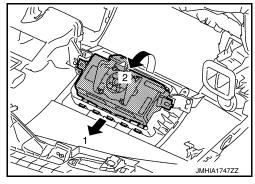
REMOVAL

Remove the instrument panel assembly. Refer to IP-17, "Removal and Installation".

2. Remove the passenger air bag module fixing screws (A).



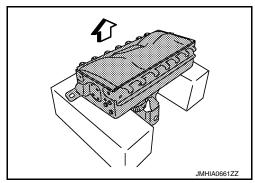
- 3. Pull up air bag grid portion of instrument panel, and then disengage the passenger air bag module as shown.
- 4. Remove passenger air bag module from instrument panel.



CAUTION:

 To prevent accidental explosion, always place the passenger air bag module with pad side facing upward.

⟨□ : Upward



- To prevent damage to the parts, never impact the passenger air bag module.
- Replace the passenger air bag module if it is dropped or sustains an impact.



- To prevent accidental explosion, never insert any foreign objects (screwdriver, etc.) into the passenger air bag module.
- To prevent accidental explosion, never disassemble the passenger air bag module.
- To prevent accidental explosion, never expose the passenger air bag module to temperature of more than 90 °C (194 °F).
- To prevent damage to the parts, never allow oil, grease, detergent, or water to come in contact with the passenger air bag module.

INSTALLATION

Note the following items, and then install in the reverse order of removal.

Revision: October 2013 SR-27 2013 LEAF

SR

Α

В

D

Е

Κ

L

M

Ν

 \cap

PASSENGER AIR BAG MODULE

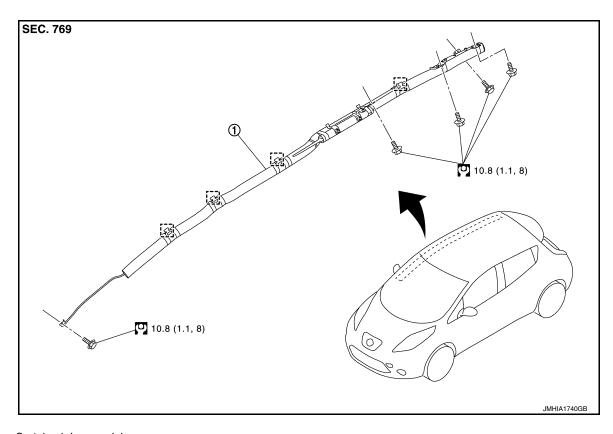
< REMOVAL AND INSTALLATION >

CAUTION:

- · Never reuse mounting bolts after removal, replace with 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. Refer to SRC-11, "On Board Diagnosis Function" or SRC-15, "CONSULT Function".
- After the work is completed, check that no system malfunction is detected by air bag warning lamp.

CURTAIN AIR BAG MODULE

Exploded View



1. Curtain air bag module

: Metal clip

: N·m (kg-m, ft-lb)

Removal and Installation

Always observe the following items for preventing accidental activation.

- Before servicing, turn the ignition switch off, disconnect both 12V battery terminals and wait at least three minutes.
- · Always work from the side of curtain air bag module. Never work in front of it.
- Never use air tools or electric tools for servicing.

REMOVAL

WARNING:

- 1. Disconnect the negative and positive 12V battery terminals and wait at least three minutes. Refer to PG-65, "Removal and Installation".
- Remove headlining assembly. Refer to <u>INT-37, "Removal and Installation"</u>.
- 3. Remove the curtain air bag module mounting bolt that is located on the front pillar.

SR

Α

В

D

Е

K

INFOID:0000000008746401

Ν

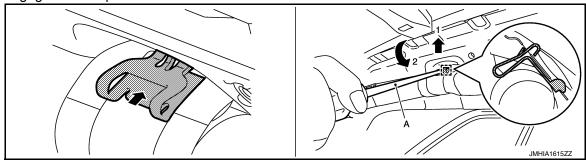
0

M

CURTAIN AIR BAG MODULE

< REMOVAL AND INSTALLATION >

Disengage metal clips on the front roof.



: Metal clip

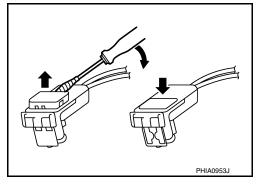
- a. Fully insert a flat-bladed screwdriver (A) into center of metal clip.
- b. Lift the flat-bladed screwdriver upward according to the numerical order 1 → 2 as shown in the figure and disengage upper side of metal clip.
- Rotate the flat-bladed screwdriver as shown in the figure and disengage lower side of metal clip.
 CAUTION:

Never deform metal clip.

5. Disconnect curtain air bag module harness connector.

CAUTION:

- For installing/removing the curtain air bag harness connector, insert a 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.



- 6. Remove the curtain air bag module mounting bolts that are located on the rear pillar.
- Remove the curtain air bag module mounting bolts that are located on the inflator, and then remove curtain air bag module.

CAUTION:

- To prevent damage to the parts, never impact the curtain air bag module.
- Replace the curtain air bag module if it is dropped or sustains an impact.



- To prevent accidental explosion, never insert any foreign objects (screwdriver, etc.) into the curtain air bag module.
- To prevent accidental explosion, never disassemble the curtain air bag module.
- To prevent accidental explosion, never expose the curtain air bag module to temperature of more than 90°C (194°F).
- To prevent damage to the parts, never allow oil, grease, detergent, or water to come in contact with the curtain air bag module.

CURTAIN AIR BAG MODULE

< REMOVAL AND INSTALLATION >

Note the following items, and then install in the reverse order of removal.

CAUTION:

- Insert metal clips of front roof until a locking sound is heard. Pull metal clips and check that it is fully locked to the vehicle body.
- Check perforation of curtain air bag module to check that curtain air bag module is not twisted.
- · 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. Refer to SRC-11, "On Board Diagnosis Function" or SRC-15, "CONSULT Function".
- After the work is completed, check that no system malfunction is detected by air bag warning lamp.

SR

Α

В

D

Е

F

K

L

M

Ν

0

Р

Revision: October 2013 SR-31 2013 LEAF

SIDE AIR BAG MODULE

< REMOVAL AND INSTALLATION >

SIDE AIR BAG MODULE

Removal and Installation

INFOID:0000000009345417

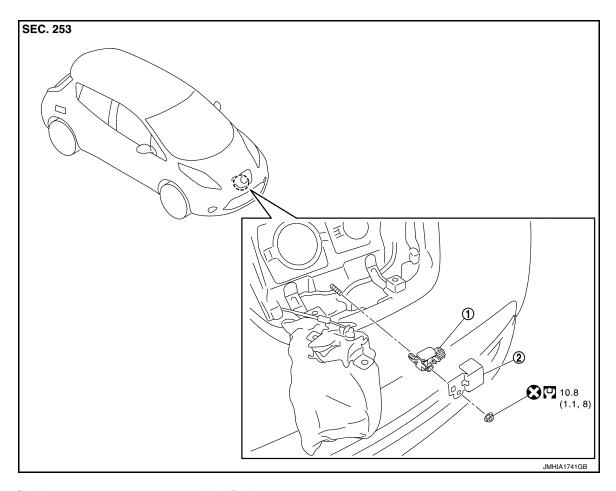
The front side air bag module is part of the front seatback. For removal and installation of the front seatback, refer to <u>SE-29</u>, "<u>SEATBACK</u>: <u>Disassembly and Assembly</u>".

NOTE:

If the vehicle has been involved in a collision and the front side air bag has deployed, the front seatback must be replaced.

CRASH ZONE SENSOR

Exploded View INFOID:0000000008746402



Crash zone sensor

2. **Bracket**

: Always replace after every disassembly.

: N·m (kg-m, ft-lb)

Removal and Installation

INFOID:0000000008746403

WARNING:

Always observe the following items for preventing accidental activation.

- Before servicing, turn the ignition switch off, disconnect both 12V battery terminals and wait at least three minutes.
- Never use air tools or electric tools for servicing.

REMOVAL

- Disconnect the negative and positive 12V battery terminals and wait at least three minutes. Refer to PG-65, "Removal and Installation".
- Remove charge port cover. Refer to <u>DLK-175, "CHARGE PORT COVER: Removal and Installation"</u>.
- Remove charge port lid lock. Refer to DLK-205, "CHARGE PORT LID LOCK: Removal and Installation".

SR

Α

В

D

Е

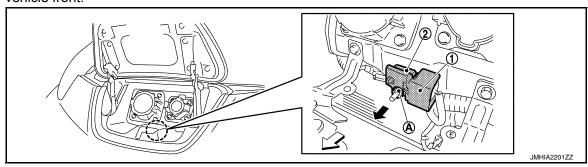
SR-33 Revision: October 2013 2013 LEAF Ν

0

CRASH ZONE SENSOR

< REMOVAL AND INSTALLATION >

4. Remove the crash zone sensor mounting nut (A), and then pull the bracket (1) and crash zone sensor (2) for vehicle front.



< : Vehicle front

5. Disconnect the crash zone sensor harness connector, and then remove crash zone sensor.

CAUTION:

- To prevent damage to the parts, never impact the crash zone sensor.
- Replace the crash zone sensor if it is dropped or sustains an impact.



• Replace the crash zone sensor of deployed driver air bag, deployed passenger air bag, seat belt pre-tensioner and deployed lap pre-tensioner.

INSTALLATION

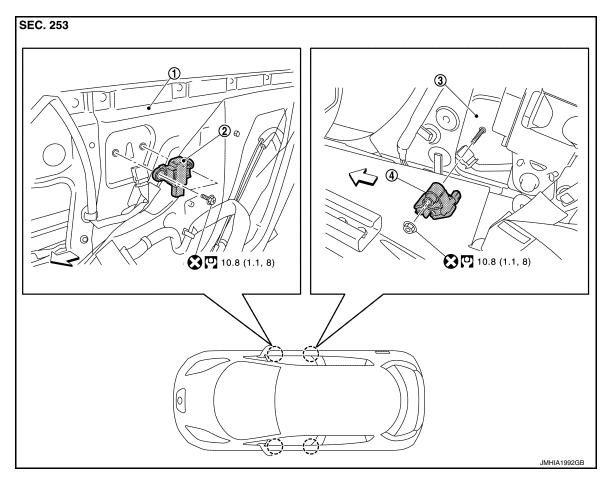
Note the following items, and then install in the reverse order of removal.

CAUTION:

- Never reuse mounting nut after removal, replace with new nut.
- Never damage the harness while installing.
- Always install normally aligning to the cutout hole, because performance of the crash zone sensor excessively fluctuates according to the installation position.
- 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. Refer to SRC-11, "On Board Diagnosis Function" or SRC-15, "CONSULT Function".
- After the work is completed, check that no system malfunction is detected by air bag warning lamp.

SATELLITE SENSOR

Exploded View INFOID:0000000008746404



- Front door panel
- 2. Front satellite sensor
- Center pillar outer panel

- Rear satellite sensor
- : Vehicle front
- : Always replace after every disassembly.
- : N·m (kg-m, ft-lb)

Removal and Installation

WARNING:

Always observe the following items for preventing accidental activation.

- · Before servicing the SRS, turn the ignition switch off, disconnect both 12V battery terminals and wait at least three minutes.
- · Never use air tools or electric tools for servicing.

FRONT SATELLITE SENSOR

Removal

- Disconnect the negative and positive 12V battery terminals and wait at least three minutes. Refer to PG-65. "Removal and Installation".
- Remove the front door finisher. Refer to INT-19, "Removal and Installation".
- Remove sealing screen partially.

NOTE:

Cut the butyl-tape with utility knives so that some parts of the butyl-tape do not remain on the sealing screen, if the sealing screen is reused.

SR-35 Revision: October 2013 2013 LEAF SR

Α

В

D

Е

M INFOID:0000000008746405

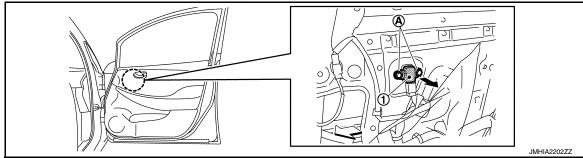
Ν

0

SATELLITE SENSOR

< REMOVAL AND INSTALLATION >

4. Remove the front satellite sensor mounting bolts (A), and then pull the front satellite sensor (1).



<□ : Vehicle front

5. Disconnect the harness connector and then remove the front satellite sensor.

CAUTION:

- To prevent damage to the parts, never impact the front satellite sensor.
- Replace the front satellite sensor if it is dropped or sustains an impact.



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

Installation

Note the following items, and then install in the reverse order of removal.

CAUTION:

- Never reuse mounting bolts after removal, replace with new bolts.
- · Never damage the harness while installing.
- Always install normally aligning to the cutout hole, because performance of the front satellite sensor excessively fluctuates according to the installation position.
- 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. Refer to SRC-11, "On Board Diagnosis Function" or SRC-15, "CONSULT Function".
- After the work is completed, check that no system malfunction is detected by air bag warning lamp.

REAR SATELLITE SENSOR

Removal

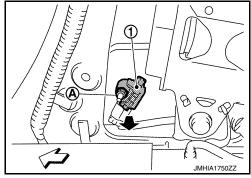
- 1. Disconnect the negative and positive 12V battery terminals and wait at least three minutes. Refer to PG-65, "Removal and Installation".
- 2. Remove the center pillar lower garnish. Refer to INT-31, "CENTER PILLAR UPPER GARNISH: Removal and Installation".

SATELLITE SENSOR

< REMOVAL AND INSTALLATION >

3. Remove the rear satellite sensor mounting nut (A), and then pull the rear satellite sensor (1).

: Vehicle front



4. Disconnect the harness connector and then remove the rear satellite sensor. **CAUTION:**

- To prevent damage to the parts, never impact the rear satellite sensor.
- Replace the rear satellite sensor if it is dropped or sustains an impact.



 Replace the rear satellite sensor of deployed SRS side air bag module and deployed SRS curtain air bag module.

Installation

Note the following items, and then install in the reverse order of removal.

CAUTION:

- Never reuse mounting nut after removal, replace with new nut.
- · Never damage the harness while installing.
- Always install normally aligning to the cutout hole, because performance of the rear satellite sensor excessively fluctuates according to the installation position.
- 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. Refer to SRC-11, "On Board Diagnosis Function" or SRC-15, "CONSULT Function".
- After the work is completed, check that no system malfunction is detected by air bag warning lamp.

Α

В

D

Е

G

SR

L

K

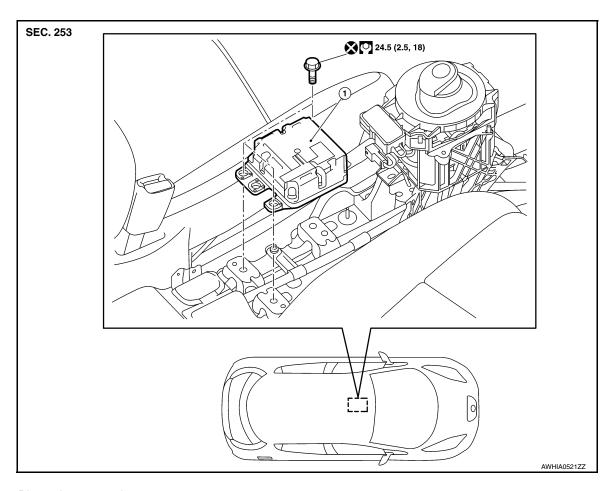
N

M

0

DIAGNOSIS SENSOR UNIT

Exploded View



Diagnosis sensor unit

: Always replace after every disassembly.

∴ N·m (kg-m, ft-lb)

Removal and Installation

INFOID:0000000008746407

WARNING:

Always observe the following items for preventing accidental activation.

- Before servicing the SRS, turn the ignition switch off, disconnect both 12V battery terminals and wait at least three minutes.
- Before disconnecting the air bag diagnosis sensor unit harness connectors, be sure to disconnect
 each harness connector of the seat belt pre-tensioners and lap pre-tensioner to prevent air bag
 deployment by static electricity and seat belt pre-tensioner operation.
- Never use air tools or electric tools for servicing.
- When replacing the air bag diagnosis sensor unit, always check with the parts department for the latest parts information. Installing an incorrect air bag diagnosis sensor unit may or may not cause the air bag warning lamp to illuminate and may cause incorrect deployment of the supplemental air bags and seat belt pre-tensioners in a collision resulting in serious personal injury or death.

REMOVAL

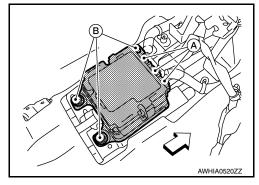
- Always check the air bag diagnosis sensor unit ECU discriminated number (identification number) or part number using CONSULT.
- Disconnect the negative and positive 12V battery terminals and wait at least three minutes. Refer to PG-65, "Removal and Installation".

DIAGNOSIS SENSOR UNIT

< REMOVAL AND INSTALLATION >

- 3. Remove the center console assembly. Refer to IP-30, "Removal and Installation".
- 4. Disconnect the harness connectors for the following SRS components: <u>SB-8</u>, "<u>SEAT BELT RETRACTOR</u> : <u>Removal and Installation</u>" (front seat belt pre-tensioners and lap pre-tensioner).
- 5. Disconnect the diagnosis sensor unit harness connectors (A).
- 6. Remove the diagnosis sensor unit mounting bolts (B), and then remove the diagnosis sensor unit.

⟨□ : Vehicle front



CAUTION:

- To prevent damage to the parts, never impact the diagnosis sensor unit.
- Replace the diagnosis sensor unit if it is dropped or sustains an impact.



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

INSTALLATION

Note the following items, and then install in the reverse order of removal.

CAUTION:

- · Never reuse bolts after removal, replace with 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. Refer to SRC-11, "On Board Diagnosis Function" or SRC-15, "CONSULT Function".
- After the work is completed, check that no system malfunction is detected by air bag warning lamp.
- After replacing the air bag diagnosis sensor unit, confirm using CONSULT that the ECU discriminated number (identification number) or part number of the new replacement air bag sensor unit matches the ECU discriminated number (identification number) or part number of the replaced (old) air bag diagnosis sensor unit.

NOTE:

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

SR

D

Е

L

K

N

Ν

Р

0

Revision: October 2013 SR-39 2013 LEAF

SEAT BELT PRE-TENSIONER

< REMOVAL AND INSTALLATION >

SEAT BELT PRE-TENSIONER

Exploded View

Refer to SB-7, "Exploded View".

Removal and Installation

INFOID:0000000008746409

For removal and installation procedures, refer to <u>SB-8. "SEAT BELT RETRACTOR: Removal and Installation"</u>.

LAP PRE-TENSIONER

< REMOVAL AND INSTALLATION > LAP PRE-TENSIONER **Exploded View** INFOID:0000000008746410 Refer to SB-7, "Exploded View". Removal and Installation INFOID:0000000008746411 For removal and installation procedures, refer to SB-8, "SEAT BELT RETRACTOR: Removal and Installation". SR

K

Α

В

 D

Е

F

G

L

M

Ν

0

OCCUPANT CLASSIFICATION SYSTEM CONTROL UNIT

< REMOVAL AND INSTALLATION >

OCCUPANT CLASSIFICATION SYSTEM CONTROL UNIT

Exploded View

Refer to SE-25, "Exploded View".

Removal and Installation

INFOID:0000000008746413

Removal

- 1. Remove the front passenger seat. Refer to <u>SE-28, "Removal and Installation"</u>.
- Disconnect the harness connector from the occupant classification system control unit.
- 3. Remove the screws and the occupant classification system control unit.

Installation

Installation is in the reverse order of removal.

Perform additional services when replacing control unit. Refer to <u>SRC-50</u>, "ADDITIONAL SERVICE WHEN <u>REPLACING CONTROL UNIT</u>: Special Repair Requirement".

PASSENGER AIR BAG INDICATOR

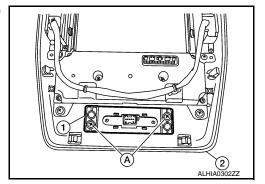
< REMOVAL AND INSTALLATION >

PASSENGER AIR BAG INDICATOR

Removal and Installation

Removal

- 1. Remove cluster lid C. Refer to IP-17, "Removal and Installation".
- 2. Remove screws (A) then the passenger air bag indicator (1) from cluster lid C (2).



Installation

Installation is in the reverse order of removal.

SR

G

Α

В

С

D

Ε

INFOID:0000000009345416

K

L

M

Ν

0