

SECTION

SB

SEAT BELT

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PRECAUTIONS

< PRECAUTION >

PRECAUTION

PRECAUTIONS

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

INFOID:0000000010927761

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 "SRS AIR BAG" and "SEAT BELT" of this Service Manual.

WARNING:

Always observe the following items for preventing accidental activation.

- To avoid rendering the SRS inoperative, which could increase the risk of personal injury or death in the event of a collision that 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 "SRS AIR BAG".
- Never use electrical test equipment on any circuit related to the SRS unless instructed to in this Service Manual. SRS wiring harnesses can be identified by yellow and/or orange harnesses or harness connectors.

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

WARNING:

Always observe the following items for preventing accidental activation.

- When working near the Air Bag Diagnosis Sensor Unit or other Air Bag System sensors with the ignition ON or engine running, never 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 3 minutes before performing any service.

Precaution Necessary for Steering Wheel Rotation After Battery Disconnect

INFOID:0000000010927762

CAUTION:

Comply with the following cautions to prevent any error and malfunction.

- Before removing and installing any control units, first turn the ignition power source and accessory power source to the OFF, then disconnect both battery cables.
- After finishing work, confirm that all control unit connectors are connected properly, then re-connect both battery cables.
- Always use CONSULT to perform self-diagnosis as a part of each function inspection after finishing work. If a DTC is detected, perform trouble diagnosis according to self-diagnosis results.

For vehicle with steering lock unit, if the battery is disconnected or discharged, the steering wheel will lock and cannot be turned.

If turning the steering wheel is required with the battery disconnected or discharged, follow the operation procedure below before starting the repair operation.

OPERATION PROCEDURE

1. Connect both battery cables.

NOTE:

Supply power using jumper cables if battery is discharged.

2. Open driver door.
3. Turn the ignition switch to the ON position.
(At this time, the steering lock will be released.)
4. Turn the ignition switch to OFF position with driver door open.
5. Wait for 3 minutes or longer with driver door open.

NOTE:

- Do not close driver door because the steering wheel locks when driver door is closed.

PRECAUTIONS

< PRECAUTION >

- The auto acc function is adapted to this vehicle. For this reason, even when the ignition switch is turned to OFF position, the accessory power source does not turned OFF and continues to be supplied for a certain amount of time.
- 6. Disconnect both battery cables. The steering lock will remain released with both battery cables disconnected and the steering wheel can be turned.
- 7. Perform the necessary repair operation.
- 8. When the repair work is completed, re-connect both battery cables. With the brake pedal released, turn the ignition switch from OFF position to ON position, then to LOCK position. (The steering wheel will lock when the ignition switch is turned to LOCK position.)
- 9. Perform self-diagnosis check of all control units using CONSULT.

Precautions for Removing Battery Terminal

INFOID:0000000011051441

- With the adoption of Auto ACC function, ACC power is automatically supplied by operating the intelligent key or remote keyless entry or by opening/closing the driver side door. In addition, ACC power is supplied even after the ignition switch is turned to the OFF position, i.e. ACC power is supplied for a certain fixed time.
- When disconnecting the 12V battery terminal, turn off the ACC power before disconnecting the 12V battery terminal, observing "How to disconnect 12V battery terminal" described below.

NOTE:

Some ECUs operate for a certain fixed time even after ignition switch is turned OFF and ignition power supply is stopped. If the battery terminal is disconnected before ECU stops, accidental DTC detection or ECU data damage may occur.

- For vehicles with the 2-batteries, be sure to connect the main battery and the sub battery before turning ON the ignition switch.

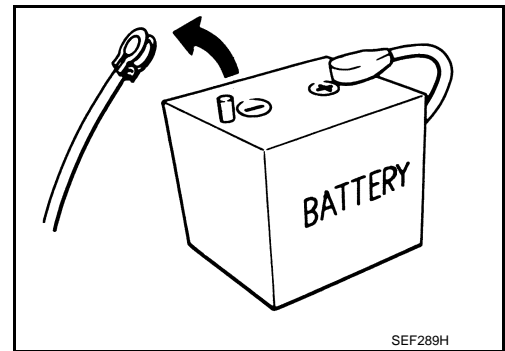
NOTE:

If the ignition switch is turned ON with any one of the terminals of main battery and sub battery disconnected, then DTC may be detected.

- After installing the 12V battery, always check "Self Diagnosis Result" of all ECUs and erase DTC.

NOTE:

The removal of 12V battery may cause a DTC detection error.



HOW TO DISCONNECT 12V BATTERY TERMINAL

Disconnect 12V battery terminal according to Instruction 1 or Instruction 2 described below.

For vehicles parked by ignition switch OFF, refer to Instruction 2.

INSTRUCTION 1

1. Open the hood.
2. Turn key switch to the OFF position with the driver side door opened.
3. Get out of the vehicle and close the driver side door.
4. Wait at least 3 minutes. For vehicle with the engine listed below, remove the battery terminal after a lapse of the specified time.

D4D engine	: 20 minutes
HRA2DDT	: 12 minutes
K9K engine	: 4 minutes
M9R engine	: 4 minutes
R9M engine	: 4 minutes
V9X engine	: 4 minutes

CAUTION:

While waiting, never operate the vehicle such as locking, opening, and closing doors. Violation of this caution results in the activation of ACC power supply according to the Auto ACC function.

5. Remove 12V battery terminal.

CAUTION:

After installing 12V battery, always check self-diagnosis results of all ECUs and erase DTC.

INSTRUCTION 2 (FOR VEHICLES PARKED BY IGNITION SWITCH OFF)

1. Unlock the door with intelligent key or remote keyless entry.

PRECAUTIONS

< PRECAUTION >

NOTE:

At this moment, ACC power is supplied.

2. Open the driver side door.
3. Open the hood.
4. Close the driver side door.
5. Wait at least 3 minutes.

CAUTION:

While waiting, never operate the vehicle such as locking, opening, and closing doors. Violation of this caution results in the activation of ACC power supply according to the Auto ACC function.

6. Remove 12V battery terminal.

CAUTION:

After installing 12V battery, always check self-diagnosis results of all ECUs and erase DTC.

Precaution for Seat Belt Service

INFOID:0000000010927764

CAUTION:

- Before removing the seat belt pre-tensioner assembly, turn the ignition switch off, disconnect battery negative terminal and wait at least 3 minutes (discharges electricity held in the additional power supply circuit of the air bag diagnosis sensor unit). (Models with seat belt pre-tensioner)
- Never use electrical test equipment for front seat belt pre-tensioner connector to prevent seat belt pre-tensioner deployment. (Models with seat belt pre-tensioner)
- After replacing or reinstalling front seat belt pre-tensioner assembly, or reconnecting front seat belt pre-tensioner connector, check the system function. Refer to [SRC-18, "DTC Index"](#). (Models with seat belt pre-tensioner)
- Never use disassembled buckle or seat belt assembly.
- Replace anchor bolts if they are deformed or worn out.
- To prevent damage to the buckle or seat belt assembly, never allow oil, grease, detergent, or water to come in contact with buckle or seat belt assembly.
- If any component of seat belt assembly is questionable, do not repair. Replace the entire seat belt assembly.
- If webbing is cut, frayed or damaged, replace seat belt assembly.
- When replacing seat belt assembly, use a genuine NISSAN seat belt assembly.

AFTER A COLLISION

WARNING:

Inspect all seat belt assemblies including retractors and attached hardware after any collision.

NISSAN recommends that all seat belt assemblies in use during a collision be replaced unless the collision was minor and the belts show no damage and continue to operate properly. Failure to do so could result in serious personal injury in an accident. Seat belt assemblies not in use during a collision should also be replaced if either damage or improper operation is noted. Seat belt pre-tensioners should be replaced even if the seat belts are not in use during a frontal collision in which the air bags are deployed.

Replace any seat belt assembly (including anchor bolts) if:

- The seat belt was in use at the time of a collision (except for minor collisions and the belts, retractors and buckles show no damage and continue to operate properly).
- The seat belt was damaged in an accident (i.e. torn webbing, bent retractor or guide).
- The seat belt attaching point was damaged in an accident. Inspect the seat belt attaching area for damage or distortion and repair as necessary before installing a new seat belt assembly.
- Anchor bolts are deformed or worn out.
- The front seat belt pre-tensioner should be replaced even if the seat belts are not in use during the collision in which the air bags are deployed.

COMPONENT PARTS

< SYSTEM DESCRIPTION >

SYSTEM DESCRIPTION

COMPONENT PARTS

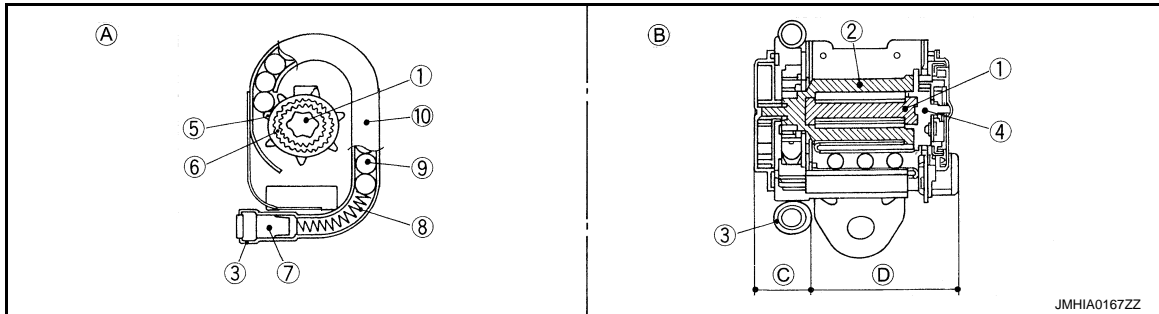
Seat belt pre-tensioner with Load limiter

INFOID:0000000010927765

DESCRIPTION

The seat belt system is equipped with pre-tensioner mechanism, load limiter mechanism, and ELR mechanism.

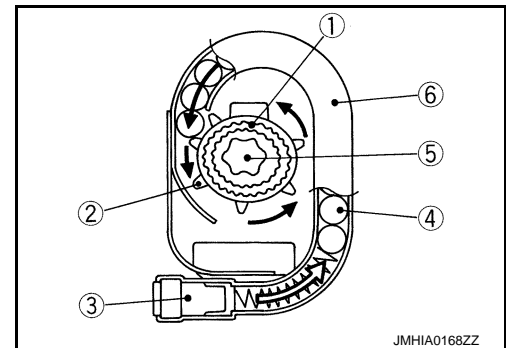
STRUCTURE



- | | | |
|---|---|-------------------------------------|
| ① ELR shaft (torsion bar) | ② Bobbin | ③ Manifold case |
| ④ Lock portion | ⑤ Ring gear | ⑥ Pinion gear |
| ⑦ Gas generator | ⑧ Spring | ⑨ Ball |
| ⑩ Pipe | | |
| (A) Pre-tensioner mechanism cross section | (B) ELR mechanism portion cross section | (C) Pre-tensioner mechanism portion |
| (D) Load limiter portion | | |

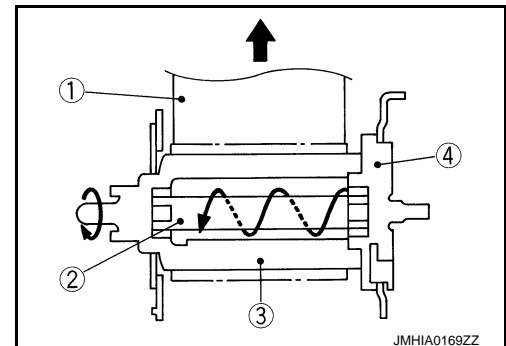
PRE-TENSIONER MECHANISM

- In a frontal collision that exceeds the specified limit, air bag sensor unit detects the collision, transmits an electrical signal to gas generator ③ in manifold case, and activates gas generator. Gas is generated.
- The pressure of the generated gas moves the ball ④ inside of pipe ⑥. The ball then presses ring gear ② which is engaged to the pinion gear ①.
- The rotation of the ring gear rotates the shaft ⑤ in the retracting direction of the seat belt. Seat belt is retracted.



LOAD LIMITER (ELR) MECHANISM

- In a collision, when ELR shaft ② is locked, a load caused by impact is applied to webbing ①
- When a load is continuously applied to webbing and reaches or exceeds the specified level, a rotating force is applied to ELR shaft that is engaged to lock portion ④ and bobbin ③. ELR shaft twists.
- As ELR shaft is twisted, webbing is pulled out while keeping a certain level of tension and easing the impact to the chest of front seat passenger.



COMPONENT PARTS

< SYSTEM DESCRIPTION >

Double pre-tensioner seat belt

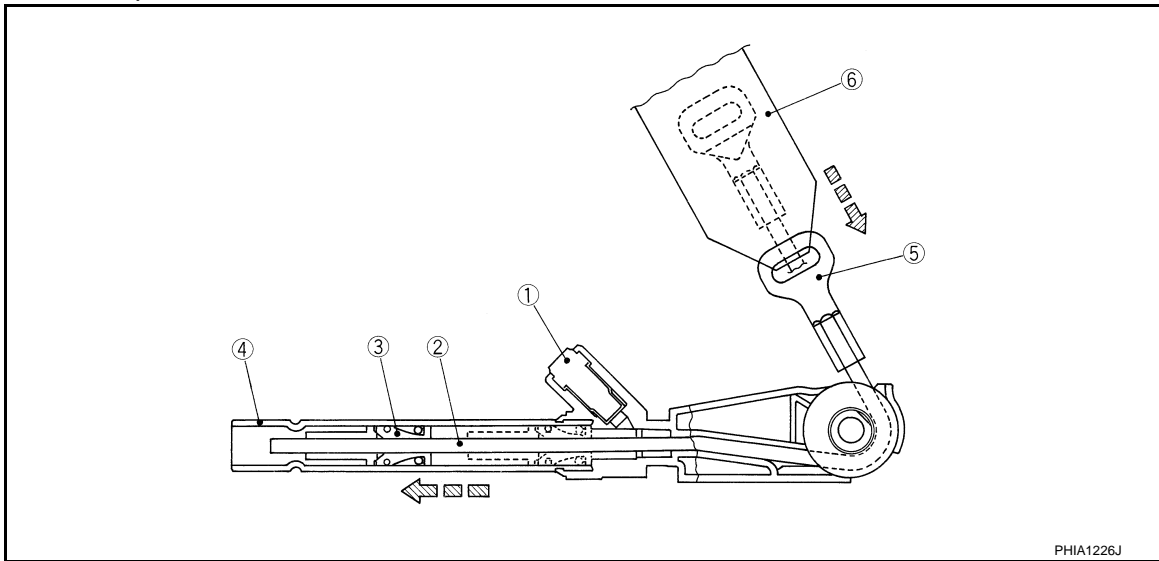
INFOID:0000000010927766

DESCRIPTION

The system combines lap pre-tensioner mechanism for lumbar seat belt and pre-tensioner seat belt with load limiter. The system upgrades passenger restraint by reducing lumbar movement during a frontal collision.

LAP PRE-TENSIONER MECHANISM

- In a frontal collision that exceeds the specified limit, air bag sensor unit detects the collision, transmits an electrical signal to gas generator ① in pipe, and activates gas generator. Gas is generated. The pressure of the generated gas moves the piston inside of pipe toward pipe front direction, and retracts wire.
- Lap anchor is installed to end of the wire and end of seat belt is connected to lap anchor. The wire therefore retracts seat belt.
- When piston stops, clutch mechanism integrated to piston prevents piston from moving in the original direction. Wire and lap anchor therefore remain in the retracted status.



① Gas generator

② Wire

③ Piston

④ Pipe

⑤ Lap anchor

⑥ Seat belt

Seat belt warning lamp/indicator

INFOID:0000000010927767

SEAT BELT WARNING LAMP

Seat belt warning lamp on combination meter turns ON during a period when power switch is turned ON until front seat belts are fastened. Seat belt warning lamp turns OFF when front seat belt is fastened. Seat belt warning lamp turns ON again when front seat belt is unfastened.



REAR SEAT BELT WARNING

COMPONENT PARTS

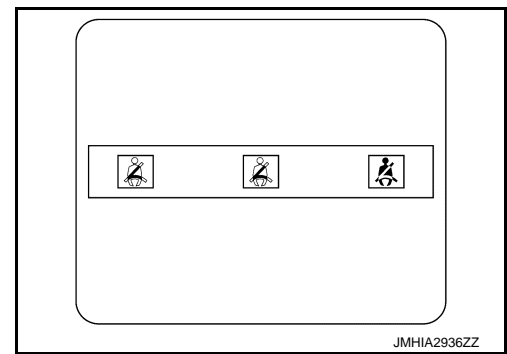
< SYSTEM DESCRIPTION >

Seat belt warning is displayed on information display for approximately 35 seconds when the following conditions.

- Ignition switch is ON and engine starts running.
- Rear seat belt buckle switch is turned ON (rear seat belt is not fastened) and vehicle speed is 15 km/h (9.3 MPH) or more.

Seat belt warning is canceled when the following conditions.

- Ignition switch is turned OFF.
- Approximately 35 seconds are passed since rear seat belt warning is displayed.



Seat belt warning chime

INFOID:0000000010927768

- Front seat belt warning chime sounds for approximately 90 seconds when the vehicle speed is approximately 15 km/h (9.3 MPH) or more while front seat belts are not fastened. Front seat belt warning chime stops when front seat belt is fastened.
- Rear seat belt warning chime sounds for approximately 0.05 seconds after rear seat belt warning is displayed. When any of the rear seat belt buckle (LH, RH or center) is unfastened from the fastened status at a vehicle speed of 15 km/h (9.3 MPH) or more, a chime integrated in the seat belt warning unit sounds for 0.05 seconds.

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SYSTEM



< SYSTEM DESCRIPTION >

SYSTEM

WARNING/INDICATOR/CHIME LIST

WARNING/INDICATOR/CHIME LIST : Warning Lamp/Indicator Lamp

INFOID:0000000010927769

Item	Design	Reference
Seat belt warning lamp		For layout, refer to MWI-10, "METER SYSTEM : Design" .
		For function, refer to MWI-54, "WARNING LAMPS/INDICATOR LAMPS : Seat Belt Warning Lamp" .
Rear seat belt warning lamp		For layout, refer to SBC-8, "INFORMATION DISPLAY (COMBINATION METER) : Rear Seat Belt Warning" .
		For function, refer to SBC-7, "SEAT BELT WARNING LAMP CONTROL SYSTEM : System Description" .

WARNING/INDICATOR/CHIME LIST : Warning Chime

INFOID:0000000010927770

Item	Reference
Seat belt warning	Refer to WCS-17, "WARNING CHIME : Seat Belt Warning" .

WARNING/INDICATOR/CHIME LIST : Warning Lamp/Indicator (Information Display)

INFOID:0000000010927771

Item	Reference
Rear seat belt warning	Refer to SBC-7, "SEAT BELT WARNING LAMP CONTROL SYSTEM : System Description"

FRONT SEAT BELT

< REMOVAL AND INSTALLATION >

- | | | |
|---|----------------------------------|-------------------------------------|
| ① Anchor bolt | ② Seat belt adjuster | ③ Retaining washer |
| ④ Spacer | ⑤ Shoulder anchor | ⑥ Adjuster cover |
| ⑦ Seat belt pre-tensioner retractor assembly (Driver side) | ⑧ Seat belt buckle (Driver side) | ⑨ Seat belt buckle (Passenger side) |
| ⑩ Seat belt pre-tensioner retractor assembly (Passenger side) | | |

○ : Clip

△ : Pawl

Ⓜ : N·m (kg·m, ft·lb)

SEAT BELT RETRACTOR

SEAT BELT RETRACTOR : Removal and Installation

INFOID:0000000010927773

WARNING:

Before servicing, turn ignition switch OFF, disconnect battery negative terminal and wait for 3 minutes or more (discharges electricity held in the additional power supply circuit of the air bag diagnosis sensor unit).

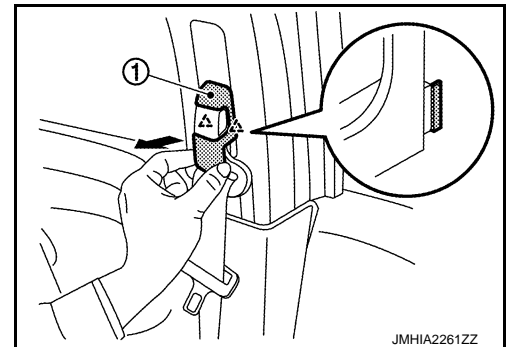
CAUTION:

When removing, always use a remover tool that is made of plastic to prevent damage to the parts.

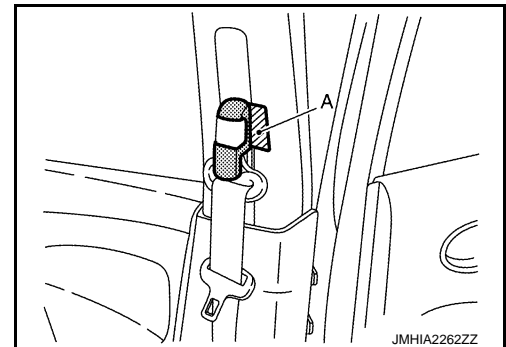
REMOVAL

1. Remove shoulder anchor.
 - a. Slide the front seat to front most position.
 - b. Remove adjuster cover.
 - i. Pull the adjuster cover ① lower side, and then disengage the adjuster cover lower side fixing pawls.

△ : Pawl




- ii. Apply protective tape (A) on the parts to protect it from damage.

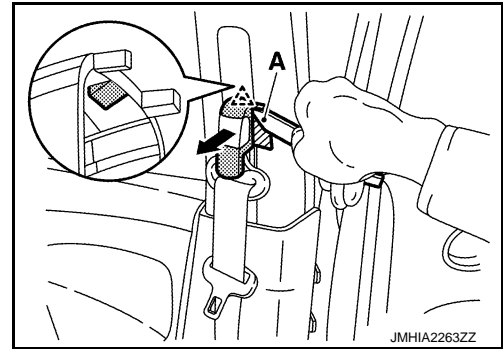


FRONT SEAT BELT

< REMOVAL AND INSTALLATION >

- iii. Disengage adjuster cover upper side fixing pawl using a remover tool (A).

 : Pawl

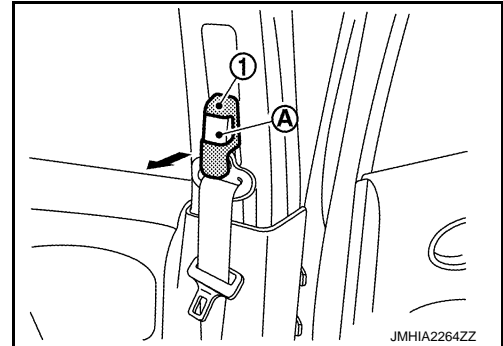


- iv. Pull the adjuster cover ①, and then remove adjuster cover.

NOTE:

When remove an adjuster cover, the release button ④ of the seat belt adjuster may come off.

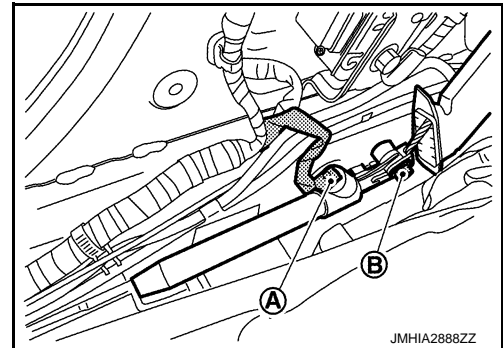
Install a release button according to the installation procedure of seat belt after removed a center pillar upper garnish. Refer to [INT-28. "CENTER PILLAR UPPER GARNISH : Removal and Installation"](#).



- c. Remove shoulder anchor mounting bolt, and then remove shoulder anchor.
2. Remove floor anchor bolt.

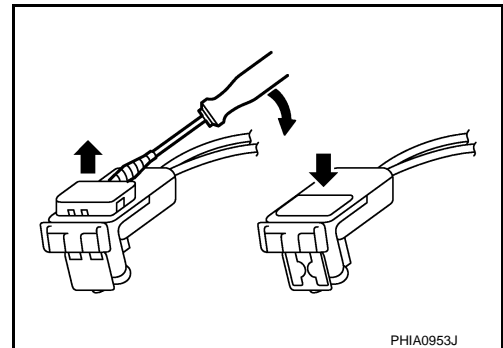
Driver Side

1. Remove front seat (driver side). Refer to [SE-41. "Removal and Installation"](#).
2. Remove center pillar lower garnish. Refer to [INT-27. "CENTER PILLAR LOWER GARNISH : Removal and Installation"](#).
3. Disconnect lap pre-tensioner harness connector ④ and remove anchor bolt ⑤ while pull up carpet, and then remove lap pre-tensioner as a set.



CAUTION:

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



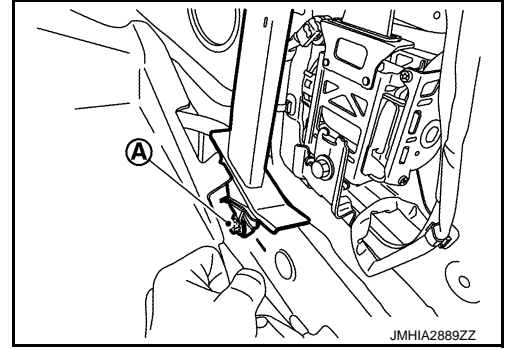
Passenger Side

1. Remove front seat (passenger side). Refer to [SE-41. "Removal and Installation"](#).

FRONT SEAT BELT

< REMOVAL AND INSTALLATION >

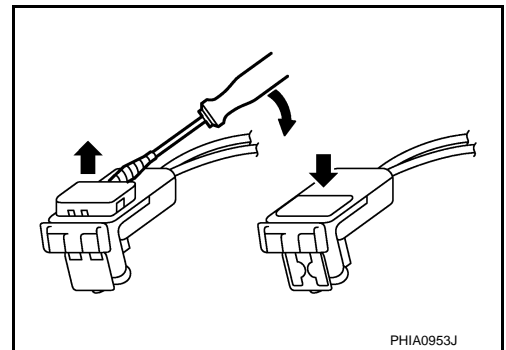
2. Remove center pillar lower garnish. Refer to [INT-27. "CENTER PILLAR LOWER GARNISH : Removal and Installation"](#).
3. Remove anchor bolt ① while pull up carpet.



3. Remove pre-tensioner retractor.
- a. Disconnect pre-tensioner retractor harness connector.

CAUTION:

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



- b. Remove pre-tensioner retractor mounting bolt, and then remove pre-tensioner retractor.

CAUTION:

Never place pre-tensioner retractor and lap pre-tensioner in an area where the temperature reaches 80°C (176°F) or more.

4. Remove seat belt adjuster.
- a. Remove center pillar upper garnish. Refer to [INT-28. "CENTER PILLAR UPPER GARNISH : Removal and Installation"](#).
- b. Remove seat belt adjuster mounting bolts, and then remove seat belt adjuster.

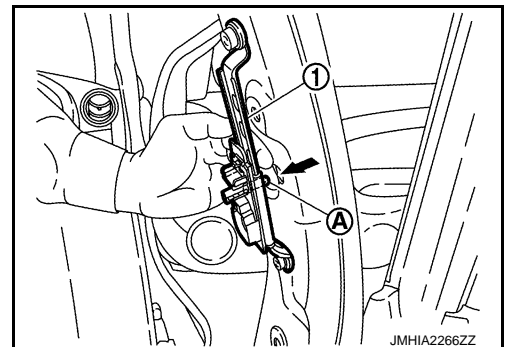
INSTALLATION

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

CAUTION:

Installation procedure is following items, when come off release button from seat belt adjuster.

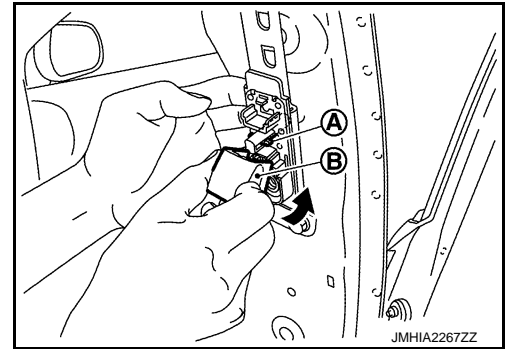
1. Put a hand in the backside of seat belt adjuster ① and push out a pin ②.



FRONT SEAT BELT

< REMOVAL AND INSTALLATION >

2. Install the release button ② to protruding portion ① of pin.



SEAT BELT RETRACTOR : Inspection

INFOID:000000010927774

AFTER A COLLISION

WARNING:

Inspect all seat belt assemblies including retractors and attached hardware after any collision.

NISSAN/INFINITI recommends that all seat belt assemblies in use during a collision be replaced unless the collision was minor and the belts show no damage and continue to operate properly. Failure to do so could result in serious personal injury in an accident. Seat belt assemblies not in use during a collision should also be replaced if either damage or improper operation was noted. Seat belt pre-tensioners should be replaced even if the seat belts were not in use during a frontal collision in which the air bags were deployed.

Replace any seat belt assembly (including anchor bolts) if:

- The seat belt is in use at the time of a collision (except for minor collisions and the belts, retractors and buckles show no damage and continue to operate properly).
- The seat belt is damaged in an accident (i.e. torn webbing, bent retractor or guide, etc.).
- The seat belt attaching point is damaged in an accident. Inspect the seat belt attaching area for damage or distortion and repair if necessary before installing a new seat belt assembly.
- Anchor bolts are deformed or worn out.
- The seat belt pre-tensioners must be replaced even if the seat belts were not in use during the collision in which the air bags were deployed.

PRELIMINARY CHECKS

1. Check the seat belt warning lamp for proper operation as per the following:
 - a. Turn ignition switch ON. The seat belt warning lamp should illuminate.
 - b. Fasten the seat belt. The seat belt warning lamp should turn OFF.
2. If the air bag warning lamp turns ON, perform self-diagnosis using CONSULT. Refer to [SRC-17, "CONSULT Function"](#).
3. Check that the seat belt retractor, seat belt anchor and buckle bolts are tightened firmly.
4. Check the shoulder seat belt guide and shoulder belt height adjuster for front seats. Check that guide swivels freely and that webbing lays flat and does not bind in guide. Check that height adjuster operates properly and holds securely.
5. Check retractor operation:
 - a. Fully extend the seat belt webbing and check for twists, tears or other damage.
 - b. Allow the seat belt to retract. Check that webbing returns smoothly and completely into the retractor. If the seat belt does not return smoothly, wipe the inside of the loops with a clean paper cloth. Dirt build-up in the loops of the upper anchors can cause the seat belts to retract slowly.
 - c. Fasten the seat belt. Check that seat belt returns smoothly and completely to the retractor. If the webbing does not return smoothly, the cause may be an accumulation of dust or dirt. Use the "SEAT BELT TAPE SET" and perform the following steps.

Inspect The Front Seat Belt Shoulder Anchor

1. Pull the seat belt out to a length of 500 mm (19.69 in) or more.
2. Fix the seat belt at the center pillar webbing opening with a clip or other device.
3. Pass a thin wire through the shoulder anchor webbing opening. Hold both ends of the wire and pull it tightly while moving it up and down several times along the webbing opening surface to remove dirt stuck there.

FRONT SEAT BELT

< REMOVAL AND INSTALLATION >

- Any dirt that cannot be removed with the wire can be removed by cleaning the opening with a clean cloth.
- Apply tape at the point where the webbing contacts the shoulder anchor webbing opening.
NOTE:
Apply the tape so that there is no slack or wrinkling.
- Remove the clip fixing the seat belt and check that the webbing returns smoothly.
- Repeat steps above if necessary to check the other seat belts.

SEAT BELT RETRACTOR ON-VEHICLE CHECK

Emergency Locking Retractors (ELR)

NOTE:

All seat belt retractors are Emergency Locking Retractors (ELR) type. In an emergency (sudden stop) the retractor will lock and prevent the webbing from extending any further.

Check the seat belt retractors with the following test(s) to determine if a retractor assembly is operating properly.

ELR Function Stationary Check

Grasp the shoulder webbing and pull forward quickly. The retractor should lock and prevent the belt from extending further.

ELR Function Moving Check

WARNING:

Perform the following test in a safe, open area clear of other vehicles and obstructions (for example, a large, empty parking lot). Road surface must be paved and dry. Never perform the following test on wet or gravel roads or on public streets and highways. This could result in an accident and serious personal injury. The driver and passenger must be prepared to brace themselves in the event that the retractor does not lock.

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

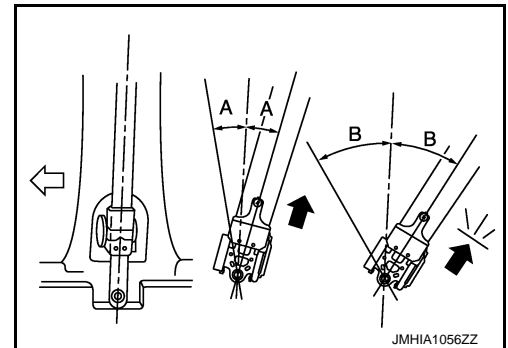
During stopping, seat belts should lock and not be extended. If the seat belt retractor assembly does not lock, perform the retractor off-vehicle check.

SEAT BELT RETRACTOR OFF-VEHICLE CHECK

- Remove front seat belt retractor assembly. Refer to [SB-10. "SEAT BELT RETRACTOR : Removal and Installation"](#).
- Slowly pull out webbing while tilting the retractor assembly forward from the mounted position without twisting the retractor assembly as shown in the figure.
 - The webbing can be pulled out when the angle (A) is 15 degrees or less.
 - The webbing cannot be pulled out when the angle (B) is 27 degrees or more.

A and B : Tilting angles

← : Vehicle front



- Replace the seat belt assembly if it does not operate normally.

SEAT BELT BUCKLE

SEAT BELT BUCKLE : Removal and Installation

REMOVAL

INFOID:0000000010927775

FRONT SEAT BELT

< REMOVAL AND INSTALLATION >

1. Remove front seat. Refer to [SE-41, "Removal and Installation"](#).
2. Disconnect seat belt buckle harness connector and disengage harness clip.
3. Remove seat belt buckle mounting anchor bolt, and then remove seat belt buckle. Refer to [SB-9, "Exploded View"](#).

INSTALLATION

Install in the reverse order of removal.

SEAT BELT BUCKLE : Inspection

INFOID:0000000010927776

AFTER A COLLISION

WARNING:

Inspect all seat belt assemblies including retractors and attached hardware after any collision. NISSAN/INFINITI recommends that all seat belt assemblies in use during a collision be replaced unless the collision was minor and the belts show no damage and continue to operate properly. Failure to do so could result in serious personal injury in an accident. Seat belt assemblies not in use during a collision should also be replaced if either damage or improper operation was noted. Seat belt pre-tensioners should be replaced even if the seat belts were not in use during a frontal collision in which the air bags were deployed.

Replace any seat belt assembly (including anchor bolts) if:

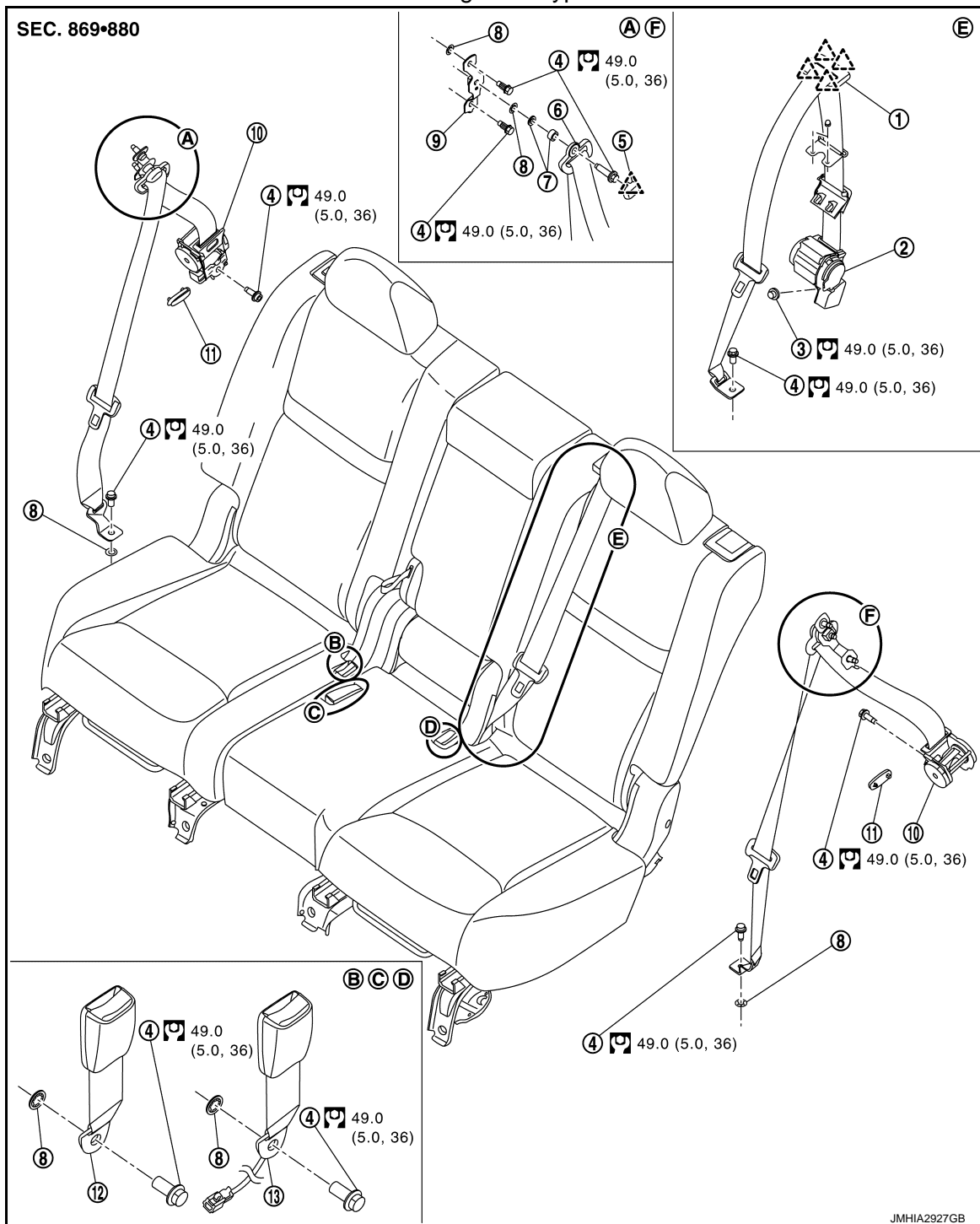
- The seat belt is in use at the time of a collision (except for minor collisions and the belts, retractors and buckles show no damage and continue to operate properly).
- The seat belt is damaged in an accident (i.e. torn webbing, bent retractor or guide, etc.).
- The seat belt attaching point is damaged in an accident. Inspect the seat belt attaching area for damage or distortion and repair if necessary before installing a new seat belt assembly.
- Anchor bolts are deformed or worn out.
- The seat belt pre-tensioner must be replaced even if the seat belts were not in use during the collision in which the air bags were deployed.

PRELIMINARY CHECKS

1. Check the seat belt warning lamp for proper operation as per the following:
 - a. Turn ignition switch ON. The seat belt warning lamp should illuminate.
 - b. Fasten driver seat belt. The seat belt warning lamp should turn OFF.
2. If the air bag warning lamp turns ON, perform self-diagnosis using CONSULT. Refer to [SRC-17, "CONSULT Function"](#).
3. Check that the seat belt retractor, seat belt anchor and buckle bolts are tightened firmly.
4. Repeat steps above if necessary to check the other seat belts.

INFOID:0000000010927777

Sliding Seat Type



- | | | |
|--------------------------------------|---------------------------------------|---|
| ① Seat belt finisher | ② Center seat belt retractor assembly | ③ Anchor nut |
| ④ Anchor bolt | ⑤ Shoulder anchor cover | ⑥ Shoulder anchor |
| ⑦ Spacer | ⑧ Retaining washer | ⑨ Shoulder bracket |
| ⑩ Seat belt retractor assembly LH/RH | ⑪ Seat belt hook | ⑫ Seat belt buckle (without seat belt reminder) |

REAR SEAT BELT

< REMOVAL AND INSTALLATION >

- ⑬ Seat belt buckle (with seat belt reminder)
- △ : Pawl
- Ⓢ : N·m (kg-m, ft-lb)

SEAT BELT RETRACTOR

SEAT BELT RETRACTOR : Removal and Installation

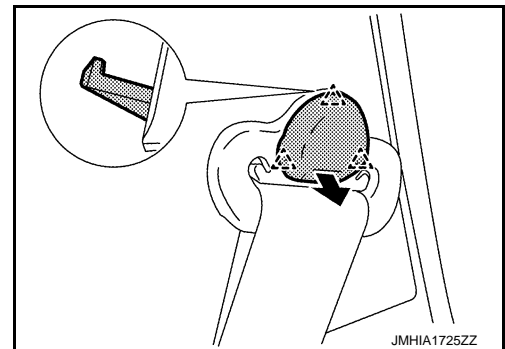
INFOID:0000000010927778

REMOVAL

Seat Belt Retractor LH/RH

1. Remove luggage side lower finisher. Refer to [INT-43. "LUGGAGE SIDE LOWER FINISHER : Removal and Installation"](#).
2. Remove shoulder anchor.
- a. Disengage shoulder anchor cover fixing pawls, and then remove shoulder anchor cover.

△ : Pawl



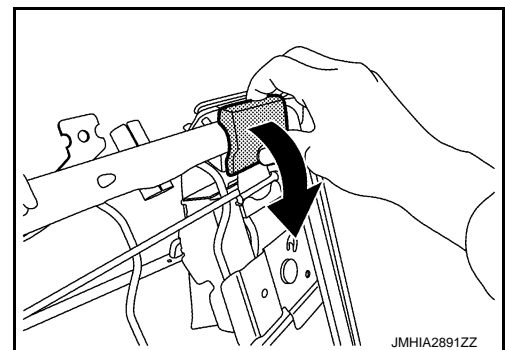
- b. Remove shoulder anchor mounting anchor bolt, and then remove shoulder anchor.
3. Remove seat belt retractor assembly mounting anchor bolt, and then remove seat belt retractor.

Center Seat Belt Retractor

1. Remove seatback trim.
Sliding seat type: Refer to [SE-58. "SEATBACK : Disassembly and Assembly"](#).
2. Remove seat belt guide.

Sliding Seat Type

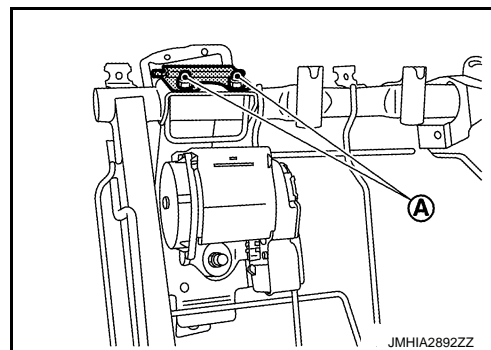
1. Remove webbing guide.



REAR SEAT BELT

< REMOVAL AND INSTALLATION >

2. Remove seat belt guide mounting nuts (A), and then remove seat belt guide.



3. Remove seat belt retractor mounting anchor nut, and then remove seat belt retractor.

INSTALLATION

Install in the reverse order of removal.

SEAT BELT RETRACTOR : Inspection

INFOID:0000000010927779

AFTER A COLLISION

WARNING:

Inspect all seat belt assemblies including retractors and attached hardware after any collision.

NISSAN/INFINITI recommends that all seat belt assemblies in use during a collision be replaced unless the collision was minor and the belts show no damage and continue to operate properly. Failure to do so could result in serious personal injury in an accident. Seat belt assemblies not in use during a collision should also be replaced if either damage or improper operation was noted. Seat belt pre-tensioners should be replaced even if the seat belts were not in use during a frontal collision in which the air bags were deployed.

Replace any seat belt assembly (including anchor bolts) if:

- The seat belt is in use at the time of a collision (except for minor collisions and the belts, retractors and buckles show no damage and continue to operate properly).
- The seat belt is damaged in an accident (i.e. torn webbing, bent retractor or guide, etc.).
- The seat belt attaching point is damaged in an accident. Inspect the seat belt attaching area for damage or distortion and repair if necessary before installing a new seat belt assembly.
- Anchor bolts are deformed or worn out.

PRELIMINARY CHECKS

1. Check the seat belt warning lamp for proper operation as per the following:
 - a. Turn ignition switch ON. The seat belt warning lamp should illuminate.
 - b. Fasten driver seat belt. The seat belt warning lamp should turn OFF.
2. Check that the seat belt retractor, seat belt anchor and buckle bolts are tightened firmly.
3. Check retractor operation:
 - a. Fully extend the seat belt webbing and check for twists, tears or other damage.
 - b. Allow the seat belt to retract. Check that webbing returns smoothly and completely into the retractor. If the seat belt does not return smoothly, wipe the inside of the loops with a clean paper cloth. Dirt build-up in the loops of that upper anchors can cause the seat belts to retract slowly.
4. Repeat steps above if necessary to check the other seat belts.

SEAT BELT RETRACTOR ON-VEHICLE CHECK

Emergency Locking Retractors (ELR)

NOTE:

All seat belt retractors are Emergency Locking Retractors (ELR) type. In an emergency (sudden stop) the retractor will lock and prevent the webbing from extending any further.

Check the seat belt retractors with the following test(s) to determine if a retractor assembly is operating properly.

ELR Function Stationary Check

REAR SEAT BELT

< REMOVAL AND INSTALLATION >

Grasp the shoulder webbing and pull forward quickly. The retractor should lock and prevent the belt from extending further.

ELR Function Moving Check

WARNING:

Perform the following test in a safe, open area clear of other vehicles and obstructions (for example, a large, empty parking lot). Road surface must be paved and dry. Never perform the following test on wet or gravel roads or on public streets and highways. This could result in an accident and serious personal injury. The driver and passenger must be prepared to brace themselves in the event that the retractor does not lock.

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

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

SEAT BELT RETRACTOR OFF-VEHICLE CHECK

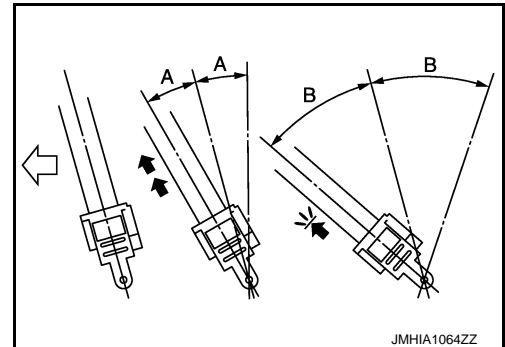
1. Remove rear seat belt retractor assembly. Refer to [SB-17. "SEAT BELT RETRACTOR : Removal and Installation"](#).
2. Slowly pull out webbing while tilting the retractor assembly forward from the mounted position without twisting the retractor assembly as shown in the figure.

Outer Seat Belt Retractor

- The webbing can be pulled out when the angle (A) is 12 degrees or less.
- The webbing cannot be pulled out when the angle (B) is 27 degrees or more.

A and B : Tilting angles

← : Vehicle front

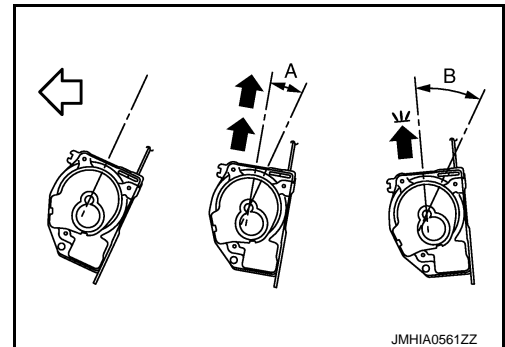


Center Seat Belt Retractor

- The webbing can be pulled out when the angle (A) is 12 degrees or less.
- The webbing cannot be pulled out when the angle (B) is 27 degrees or more.

A and B : Tilting angles

← : Vehicle front



3. Replace the seat belt assembly if it does not operate normally.

SEAT BELT BUCKLE

SEAT BELT BUCKLE : Removal and Installation

INFOID:0000000010927780

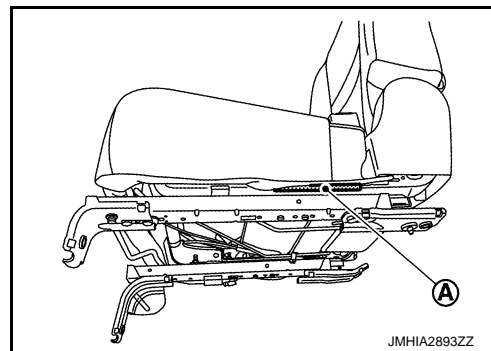
REMOVAL

Sliding Seat Type

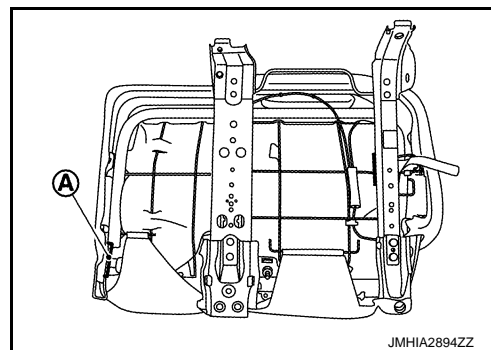
REAR SEAT BELT

< REMOVAL AND INSTALLATION >

1. Remove second seat. Refer to [SE-54. "Removal and Installation"](#).
2. Disengage seat cushion trim fixing retainer (A).
 - Seat belt buckle RH



- Center seat belt buckle



3. Disengage seat belt buckle harness connector and harness clips (if equipped).
4. Remove seat belt buckle mounting anchor bolt, and then remove seat belt buckle. Refer to [SB-16. "Exploded View"](#).

INSTALLATION

Install in the reverse order of removal.

SEAT BELT BUCKLE : Inspection

INFOID:0000000010927781

AFTER A COLLISION

WARNING:

Inspect all seat belt assemblies including retractors and attached hardware after any collision. NISSAN/INFINITI recommends that all seat belt assemblies in use during a collision be replaced unless the collision was minor and the belts show no damage and continue to operate properly. Failure to do so could result in serious personal injury in an accident. Seat belt assemblies not in use during a collision should also be replaced if either damage or improper operation was noted.

Replace any seat belt assembly (including anchor bolts) if:

- The seat belt is in use at the time of a collision (except for minor collisions and the belts, retractors and buckles show no damage and continue to operate properly).
- The seat belt is damaged in an accident (i.e. torn webbing, bent retractor or guide, etc.).
- The seat belt attaching point is damaged in an accident. Inspect the seat belt attaching area for damage or distortion and repair if necessary before installing a new seat belt assembly.
- Anchor bolts are deformed or worn out.

PRELIMINARY CHECKS

1. Check the seat belt warning lamp for proper operation as per the following:
 - a. Turn ignition switch ON. The seat belt warning lamp should illuminate.
 - b. Fasten driver seat belt. The seat belt warning lamp should turn OFF.
2. Check that the seat belt retractor, seat belt anchor and buckle bolts are tightened firmly.
3. Repeat step above if necessary to check the other seat belts.

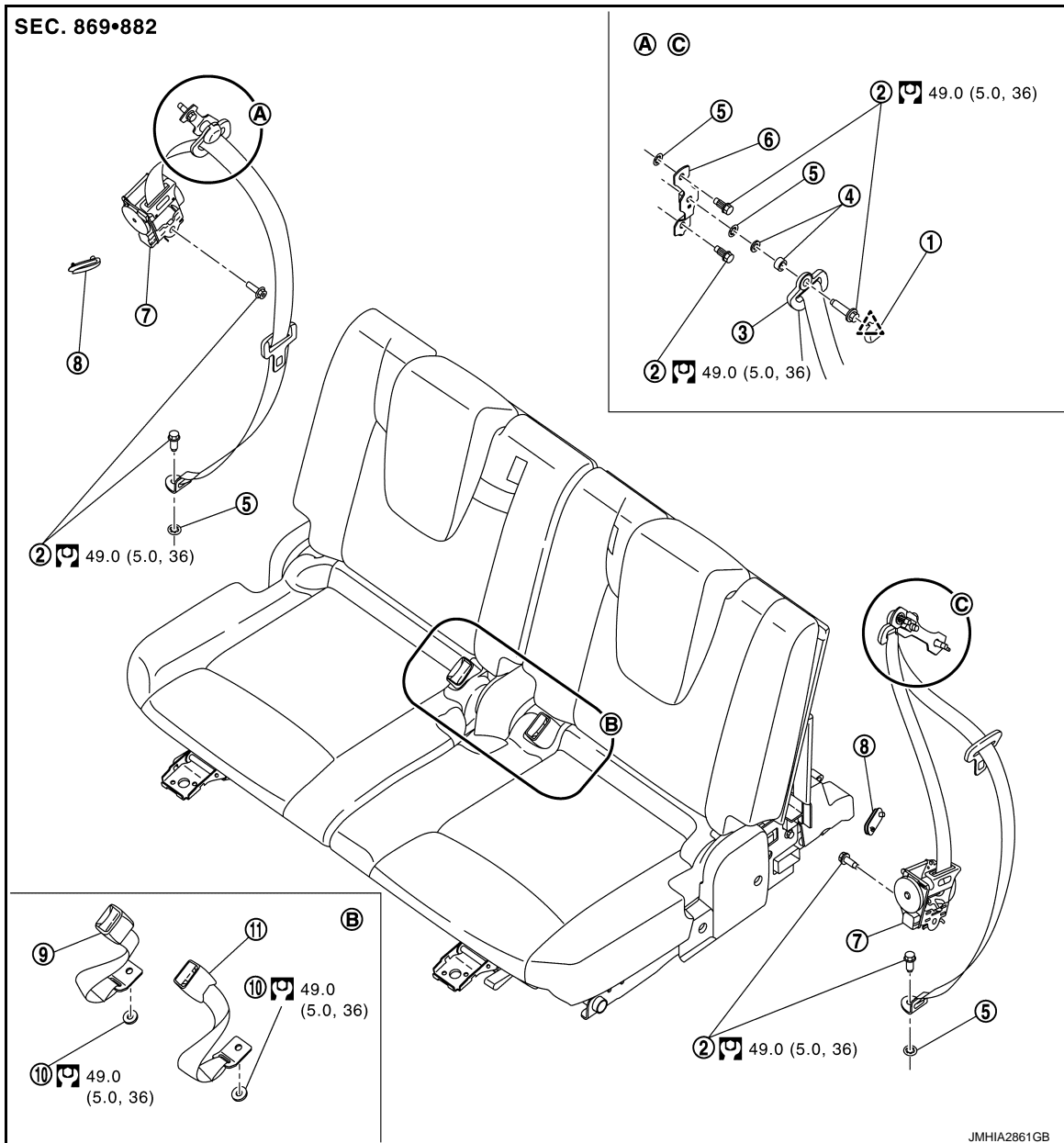
THIRD SEAT BELT

< REMOVAL AND INSTALLATION >

THIRD SEAT BELT

Exploded View

INFOID:000000010927782



- | | | |
|--------------------------------------|-----------------------|-----------------------|
| ① Shoulder anchor cover | ② Anchor bolt | ③ Shoulder anchor |
| ④ Spacer | ⑤ Retaining washer | ⑥ Shoulder bracket |
| ⑦ Seat belt retractor assembly LH/RH | ⑧ Seat belt hook | ⑨ Seat belt buckle RH |
| ⑩ Anchor nut | ⑪ Seat belt buckle LH | |

△ : Pawl

Ⓜ : N·m (kg·m, ft·lb)

SEAT BELT RETRACTOR

SEAT BELT RETRACTOR : Removal and Installation


INFOID:000000010927783

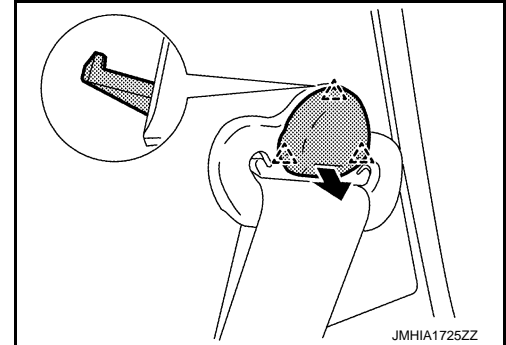
REMOVAL

THIRD SEAT BELT

< REMOVAL AND INSTALLATION >

1. Remove luggage side lower finisher. Refer to [INT-43, "LUGGAGE SIDE LOWER FINISHER : Removal and Installation"](#).
2. Remove shoulder anchor.
 - a. Disengage shoulder anchor cover fixing pawls, and then remove shoulder anchor cover.

 : Pawl



- b. Remove shoulder anchor mounting anchor bolt, and then remove shoulder anchor.
3. Remove seat belt retractor assembly mounting anchor bolt, and then remove seat belt retractor.

INSTALLATION

Install in the reverse order of removal.

SEAT BELT RETRACTOR : Inspection

INFOID:0000000010927784

AFTER A COLLISION

WARNING:

Inspect all seat belt assemblies including retractors and attached hardware after any collision. NISSAN/INFINITI recommends that all seat belt assemblies in use during a collision be replaced unless the collision was minor and the belts show no damage and continue to operate properly. Failure to do so could result in serious personal injury in an accident. Seat belt assemblies not in use during a collision should also be replaced if either damage or improper operation was noted. Seat belt pre-tensioners should be replaced even if the seat belts were not in use during a frontal collision in which the air bags were deployed.

Replace any seat belt assembly (including anchor bolts) if:

- The seat belt is in use at the time of a collision (except for minor collisions and the belts, retractors and buckles show no damage and continue to operate properly).
- The seat belt is damaged in an accident (i.e. torn webbing, bent retractor or guide, etc.).
- The seat belt attaching point is damaged in an accident. Inspect the seat belt attaching area for damage or distortion and repair if necessary before installing a new seat belt assembly.
- Anchor bolts are deformed or worn out.

PRELIMINARY CHECKS

1. Check that the seat belt retractor, seat belt anchor and buckle bolts are tightened firmly.
2. Check retractor operation:
 - a. Fully extend the seat belt webbing and check for twists, tears or other damage.
 - b. Allow the seat belt to retract. Check that webbing returns smoothly and completely into the retractor. If the seat belt does not return smoothly, wipe the inside of the loops with a clean paper cloth. Dirt build-up in the loops of that upper anchors can cause the seat belts to retract slowly.
3. Repeat steps above if necessary to check the other seat belts.

SEAT BELT RETRACTOR ON-VEHICLE CHECK

Emergency Locking Retractors (ELR)

NOTE:

All seat belt retractors are Emergency Locking Retractors (ELR) type. In an emergency (sudden stop) the retractor will lock and prevent the webbing from extending any further.

Check the seat belt retractors with the following test(s) to determine if a retractor assembly is operating properly.

ELR Function Stationary Check

THIRD SEAT BELT

< REMOVAL AND INSTALLATION >

Grasp the shoulder webbing and pull forward quickly. The retractor should lock and prevent the belt from extending further.

ELR Function Moving Check

WARNING:

Perform the following test in a safe, open area clear of other vehicles and obstructions (for example, a large, empty parking lot). Road surface must be paved and dry. Never perform the following test on wet or gravel roads or on public streets and highways. This could result in an accident and serious personal injury. The driver and passenger must be prepared to brace themselves in the event that the retractor does not lock.

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

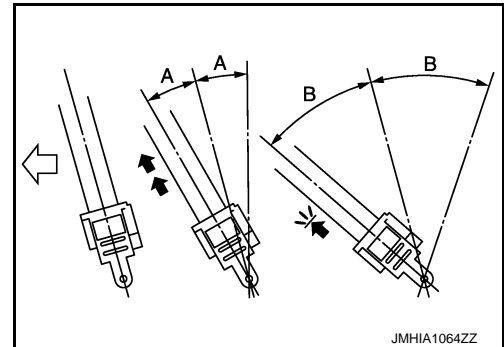
During stopping, seat belts should lock and not be extended. If the seat belt retractor assembly does not lock, perform the retractor off-vehicle check.

SEAT BELT RETRACTOR OFF-VEHICLE CHECK

1. Remove rear seat belt retractor assembly. Refer to [SB-21, "SEAT BELT RETRACTOR : Removal and Installation"](#).
2. Slowly pull out webbing while tilting the retractor assembly forward from the mounted position without twisting the retractor assembly as shown in the figure.
 - The webbing can be pulled out when the angle (A) is 12° degrees or less.
 - The webbing cannot be pulled out when the angle (B) is 27° degrees or more.

A and B : Tilting angles

↩ : Vehicle front



3. Replace the seat belt assembly if it does not operate normally.

SEAT BELT BUCKLE

SEAT BELT BUCKLE : Removal and Installation

INFOID:0000000010927785

REMOVAL

1. Remove third seat cushion. Refer to [SE-70, "Removal and Installation"](#).
2. Remove seat belt buckle mounting anchor bolt, and then remove seat belt anchor. Refer to [SB-21, "Exploded View"](#).

INSTALLATION

Install in the reverse order of removal.

SEAT BELT BUCKLE : Inspection

INFOID:0000000010927786

AFTER A COLLISION

WARNING:

Inspect all seat belt assemblies including retractors and attached hardware after any collision. NISSAN/INFINITI recommends that all seat belt assemblies in use during a collision be replaced unless the collision was minor and the belts show no damage and continue to operate properly. Failure to do so could result in serious personal injury in an accident. Seat belt assemblies not in use during a collision should also be replaced if either damage or improper operation was noted.

THIRD SEAT BELT

< REMOVAL AND INSTALLATION >

Replace any seat belt assembly (including anchor bolts) if:

- The seat belt is in use at the time of a collision (except for minor collisions and the belts, retractors and buckles show no damage and continue to operate properly).
- The seat belt is damaged in an accident (i.e. torn webbing, bent retractor or guide, etc.).
- The seat belt attaching point is damaged in an accident. Inspect the seat belt attaching area for damage or distortion and repair if necessary before installing a new seat belt assembly.
- Anchor bolts are deformed or worn out.

PRELIMINARY CHECKS

1. Check that the seat belt retractor, seat belt anchor and buckle bolts are tightened firmly.
2. Repeat step above if necessary to check the other seat belts.