# SEAT BELT C

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# CONTENTS

PRECAUTION2
PRECAUTIONS
SIONER"2
Precaution for Work2
Precaution for Seat Belt Service2
Inspection3
PREPARATION6
PREPARATION6
Special Service Tool6
REMOVAL AND INSTALLATION7

FRONT SEAT BELT       7         Front Seat Belt       7	F
SECOND ROW SEAT BELT10 Second Row Seat Belt10	G
THIRD ROW SEAT BELT       13         Third Row Seat Belt       13	SB
LATCH (LOWER ANCHORS AND TETHER FOR CHILDREN) SYSTEM15 Removal and Installation15	I
TOP TETHER STRAP CHILD RESTRAINT16 Removal and Installation	J
	K

# < PRECAUTION > PRECAUTION

# PRECAUTIONS

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

The Supplemental Restraint System such as "AIR BAG" and "SEAT BELT PRE-TENSIONER", used along with a front seat belt, helps to reduce the risk or severity of injury to the driver and front passenger for certain types of collision. Information necessary to service the system safely is included in the SR and SB section of this Service Manual.

# WARNING:

- To avoid rendering the SRS inoperative, which could increase the risk of personal injury or death in the event of a collision which would result in air bag inflation, 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 3 minutes before performing any service.

# Precaution for Work

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- 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.

# Precaution for Seat Belt Service

# CAUTION:

• Before removing the seat belt pre-tensioner assembly, turn the ignition switch OFF, disconnect both battery terminals and wait at least three minutes. For approximately three minutes after the battery terminals have been removed, it is still possible for the air bag and seat belt pre-tensioner to deploy.

# PRECAUTIONS

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р • А	Therefore, do not attempt work on any SRS connectors or wires until at least three minutes have bassed. After replacing or reinstalling seat belt pre-tensioner assembly, or reconnecting seat belt pre-tensioner assembly connector, make sure entire SRS operates properly. Refer to <u>SRC-15</u> , " <u>SRS Opera-</u>	А
• D	ion Check". Do not disassemble buckle or seat belt assembly. Replace anchor bolts if they are deformed or worn out.	В
• If a	Never oil tongue and buckle. f any component of seat belt assembly is questionable, do not repair. Replace the whole seat belt issembly.	С
	f webbing is cut, frayed, or damaged, replace seat belt assembly. Vhen replacing seat belt assembly, use a genuine NISSAN seat belt assembly.	D
Ins	spection INFOID:00000008507859	
AF	TER A COLLISION	Е
Ins NIS un ure	ARNING: spect all seat belt assemblies including retractors and attached hardware after any collision. SSAN/INFINITI recommends that all seat belt assemblies in use during a collision be replaced less the collision was minor and the belts show no damage and continue to operate properly. Fail- e to do so could result in serious personal injury in an accident. Seat belt assemblies not in use dur-	F
pre	g a collision should also be replaced if either damage or improper operation was noted. Seat belt e-tensioners should be replaced even if the seat belts were not in use during a frontal collision in hich the air bags were deployed.	G
Re • T	place 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 buck- es show no damage and continue to operate properly).	SB
• T • T d	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.	I
• T	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.	J
PR	RELIMINARY CHECKS	
1.		Κ
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.	Refer to SRC-16, "Trouble Diagnosis with CONSULT".	L
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.	Μ
5.	Check retractor operation:	Ν
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.	0
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.	Ρ
d.	Inspect the front seat belt D-ring anchor	
	<ol> <li>Pull the seat belt out to a length of 500 mm (19.69 in) or more.</li> <li>Hold the seat belt at the center pillar webbing opening with a clip or other device.</li> <li>Pass a thin wire through the D-ring 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.</li> </ol>	

# PRECAUTIONS

# < PRECAUTION >

- 4. Any dirt that cannot be removed with the wire can be removed by cleaning the opening with a clean cloth.
- 5. Apply tape at the point where the webbing contacts the D-ring anchor webbing opening. **NOTE:**

Apply the tape so that there is no slack or wrinkling.

- 6. Remove the clip holding the seat belt and check that the webbing returns smoothly.
- 6. Repeat steps above if necessary to check the other seat belts.

# SEAT BELT RETRACTOR ON-VEHICLE CHECK

Emergency Locking Retractors (ELR) and Automatic Locking Retractors (ALR)

# 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. All 3-point type seat belt retractors except the driver seat belt also have an Automatic Locking Retractors (ALR) mode. The ALR mode (also called child restraint mode) is used when installing child seats. The ALR mode is activated when the seat belt is fully extended. When the webbing is then retracted partially, the ALR mode automatically locks the seat belt in a specific position so the webbing cannot be extended any further. To cancel the ALR mode, allow the seat belt to fully wind back into the retractor.

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.

ALR Function Stationary Check

- 1. Pull out the entire length of seat belt from retractor until a click is heard.
- 2. Retract the webbing partially. A clicking noise should be heard as the webbing retracts, indicating that the retractor is in the Automatic Locking Retractors (ALR) mode.
- 3. Grasp the seat belt and try to pull out the retractor. The webbing must lock and not extend any further. If it does not operate normally, replace the retractor assembly.
- 4. Allow the entire length of the webbing to retract to cancel the automatic locking mode.

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 the front seat belt retractor. Refer to <u>SB-7, "Front Seat Belt"</u>.
- 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.
- a. Front seat belt retractor

# PRECAUTIONS

# < PRECAUTION >

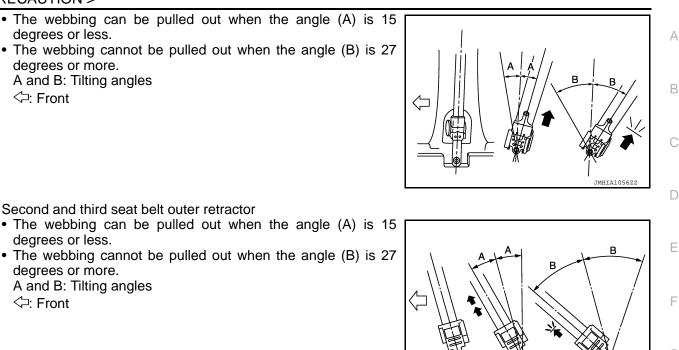
- The webbing can be pulled out when the angle (A) is 15 degrees or less.
- The webbing cannot be pulled out when the angle (B) is 27 degrees or more. A and B: Tilting angles
  - <⊐: Front

degrees or less.

degrees or more. A and B: Tilting angles

<⊐: Front

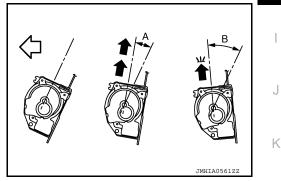
b.



Second seat belt center retractor C.

Second and third seat belt outer retractor

- 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 <⊐: Front
- 3. Slowly pull out webbing while tilting the retractor assembly forward from the mounted position without twisting the retractor assembly as shown in the figure.
- Replace the seat belt assembly if it does not operate normally. 4.



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# PREPARATION

# < PREPARATION > PREPARATION

# PREPARATION

# Special Service Tool

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The actual shapes of Kent-Moore tools may differ from those of special service tools illustrated here.

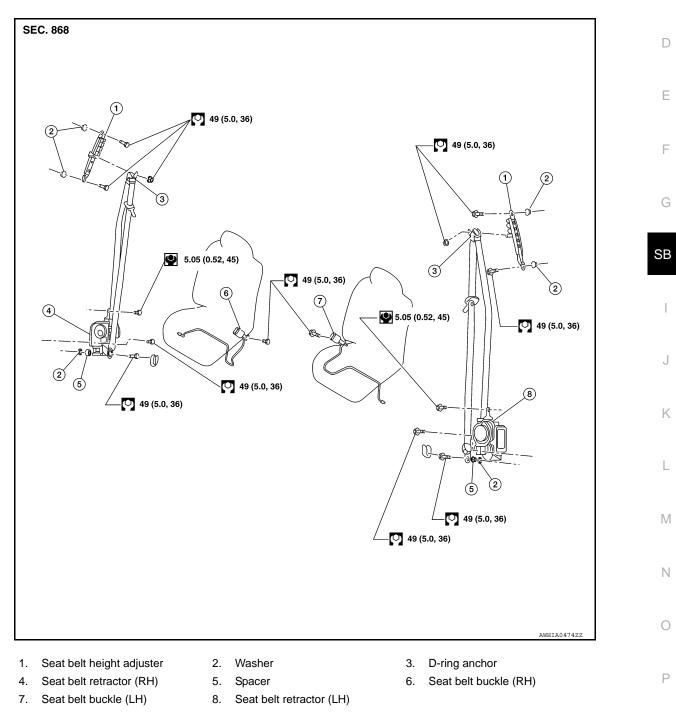
Tool number (Kent-Moore No.) Tool name		Description
 (J-46534) Trim Tool Set	AWJIA0483ZZ	Removing trim components

# < REMOVAL AND INSTALLATION > REMOVAL AND INSTALLATION FRONT SEAT BELT

# Front Seat Belt

# SEAT BELT RETRACTOR

Exploded View



# Removal CAUTION:

• Before servicing SRS, turn the ignition switch off, disconnect both battery terminals and wait at least three minutes.

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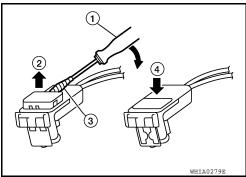
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# FRONT SEAT BELT

# < REMOVAL AND INSTALLATION >

- 1. Disconnect the negative and positive battery terminals, then wait at least three minutes. Refer to <u>PG-89.</u> <u>"Removal and Installation"</u>.
- 2. Pull back the lower anchor bolt cover and remove the lower anchor bolt.
- 3. Remove the center pillar upper finisher. Refer to <u>INT-18, "CENTER PILLAR UPPER FINISHER : Removal</u> and Installation".
- 4. Remove the D-ring anchor nut.
- 5. Disconnect the harness connector from the seat belt pre-tensioner. CAUTION:
  - For removing pre-tensioner connector, insert a thin screwdriver (1) wrapped in tape (3) into the notch. Lift the locking tab to unlock (2), then remove the connector.
  - Install the pre-tensioner connector with the locking tab raised, then push the locking tab into the connector to lock (4).
- 6. Remove the seat belt retractor anchor bolt and upper bolt, then remove the seat belt retractor.



# Installation

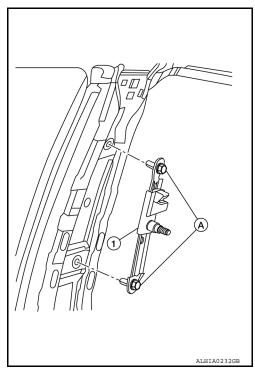
Installation is in the reverse order of removal.

- Install the seat belt retractor upper bolt first.
- Make sure that the seat belt height adjuster is locked in the lowest position and is aligned with the finisher opening during installation.
- Make sure both the D-ring anchor and seat belt height adjuster operate freely.

# SEAT BELT HEIGHT ADJUSTER

# Removal

- 1. Remove the center pillar upper finisher. Refer to <u>INT-18, "CENTER PILLAR UPPER FINISHER : Removal</u> and Installation".
- 2. Remove the D-ring anchor nut.
- 3. Remove the seat belt height adjuster bolts (A) and the seat belt height adjuster (1).



Installation Installation is in the reverse order of removal.

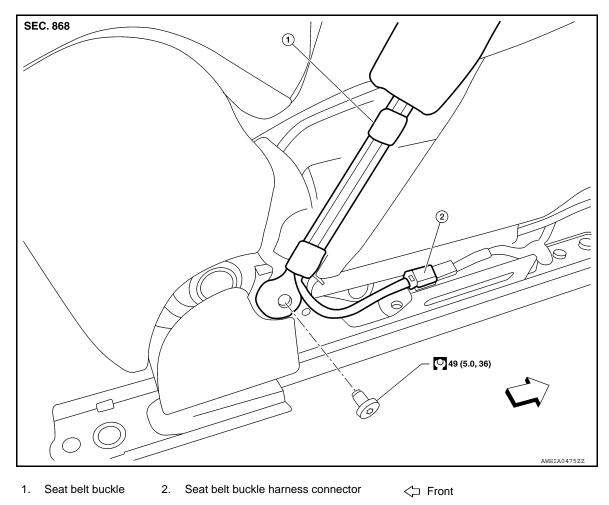
# FRONT SEAT BELT

# < REMOVAL AND INSTALLATION >

- Make sure that the seat belt height adjuster is locked in the lowest position and is aligned with the finisher opening during installation.
- Make sure both the D-ring anchor and seat belt height adjuster operate freely.

# SEAT BELT BUCKLE

Exploded View



#### NOTE:

Driver side shown; passenger side similar.

#### Removal

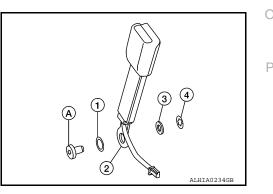
- 1. Remove the front seat. Refer to SE-85, "Removal and Installation".
- 2. Disconnect the harness connector from seat belt buckle.
- 3. Remove the seat belt buckle anchor bolt and the seat belt buckle.

#### Installation

Installation is in the reverse order of removal.

• During installation, make sure the seat belt buckle anchor bolt (A) is inserted through the components in the following order:

1.	Wave washer
2.	Seat belt buckle
3.	Spacer
4.	Star washer



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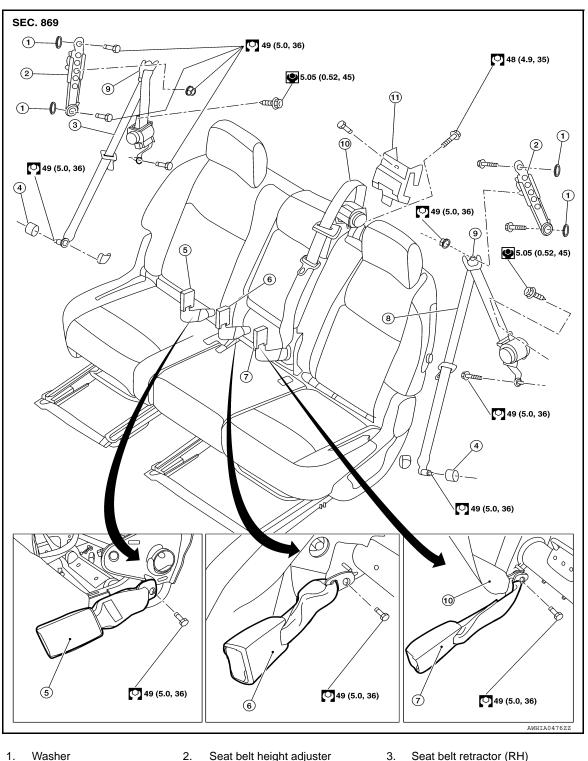
# < REMOVAL AND INSTALLATION >

# SECOND ROW SEAT BELT

# Second Row Seat Belt

**EXPLODED VIEW** 

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- Washer
- 4. Spacer
- 7. Seat belt buckle (LH)
- 10. Seat belt retractor (center)
- Seat belt height adjuster 2.
- Seat belt buckle (RH) 5.
- 8. Seat belt retractor (LH)
- 11. Seat belt retractor shield (center)
- 3. Seat belt retractor (RH)
- 6. Seat belt buckle (center)

9. D-ring anchor

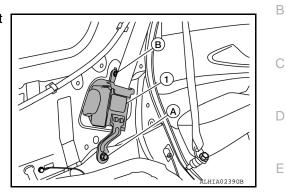
Revision: October 2012

# SECOND ROW SEAT BELT

# < REMOVAL AND INSTALLATION >

#### Removal

- 1. Remove the lower anchor bolt cover and the lower anchor bolt.
- 2. Remove the rear pillar finisher. Refer to INT-27, "REAR PILLAR FINISHER : Removal and Installation".
- 3. Remove the D-ring anchor nut.
- 4. Remove the seat belt retractor anchor bolt (A) and upper bolt (B), then remove the seat belt retractor (1).



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# Installation

Installation is in the reverse order of removal.

- Install the seat belt retractor upper bolt first.
- Make sure that the seat belt height adjuster is locked in the lowest position and is aligned with the finisher opening during installation.
- Make sure both the D-ring anchor and seat belt height adjuster operate freely.

# SEAT BELT HEIGHT ADJUSTER

#### Removal

- 1. Remove the rear pillar finisher. Refer to INT-27, "REAR PILLAR FINISHER : Removal and Installation".
- 2. Remove the D-ring anchor nut.
- 3. Remove the seat belt height adjuster bolts and the seat belt height adjuster.

# Installation

Installation is in the reverse order of removal.

- Make sure that the seat belt height adjuster is locked in the lowest position and is aligned with the finisher opening during installation.
- Make sure both the D-ring anchor and seat belt height adjuster operate freely.

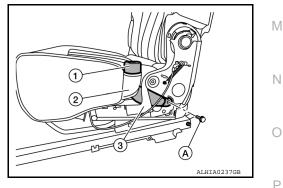
# SEAT BELT BUCKLE - RH SEAT

# Removal

- 1. Slide the second row LH bench seat to the full forward position and move the second row RH seat to the full rearward position.
- Release the pawls and remove the seat cushion outer finisher (LH).

(3): Seat cushion inner finisher (LH)

- 3. Remove seat belt buckle (RH) anchor bolt (A).
- 4. Route the seat belt buckle (RH) (1) through the opening in the seat cushion trim (2) and remove.



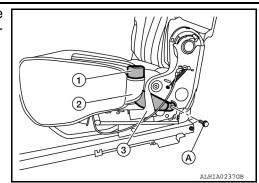
Installation

Installation is in the reverse order of removal.

# SECOND ROW SEAT BELT

# < REMOVAL AND INSTALLATION >

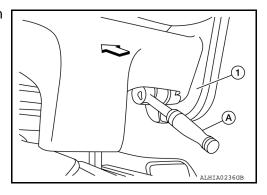
- Make sure that the seat belt buckle (RH) (1) is routed through the opening in the seat cushion trim (2) and also behind the seat cushion inner finisher (LH) (3).
- (A): Seat belt buckle (RH) anchor bolt



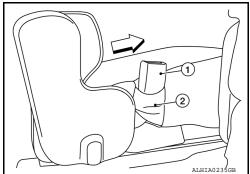
# SEAT BELT BUCKLE - LH BENCH SEAT

# Removal

- 1. Remove the seat belt buckle.
- a. For seat belt buckle (center).
  - Remove the seat belt buckle (center) anchor bolt from behind the second row seat (1) using a suitable tool (A).
     <⊐: Front</li>



 Route the seat belt buckle (center) (1) through the opening in the seat cushion trim (2) and remove.
 <⊐: Front</li>



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- b. For seat belt buckle (LH)
  - 1. Remove the seat belt buckle (LH) anchor bolt (A) that retains the seat belt buckle (LH) (2) and the seat belt retractor (center) lower anchor (1) to the LH bench seat frame (3).
  - 2. Route the seat belt buckle (LH) through the opening in the seat cushion trim and remove.

Installation

Installation is in the reverse order of removal.

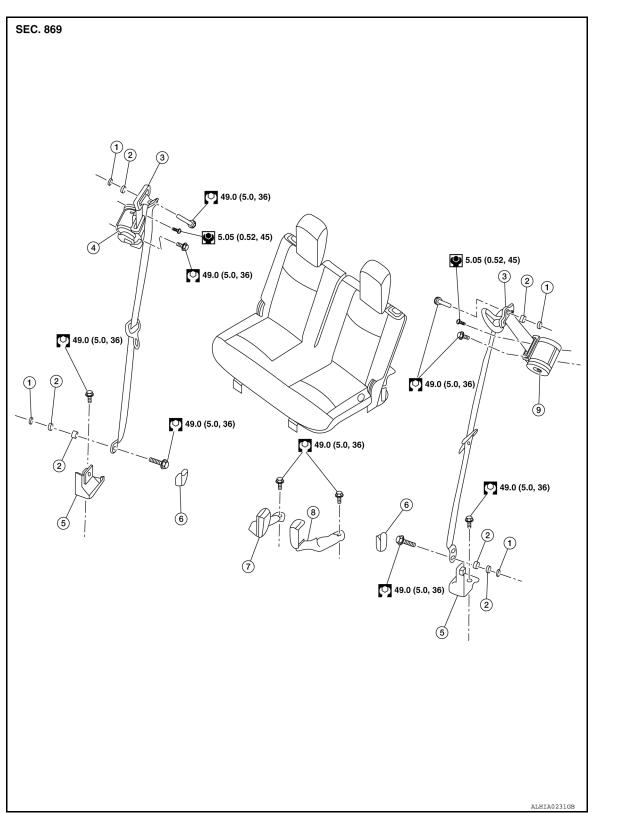
• Make sure that the seat belt buckle (LH) is routed through the opening in the seat cushion trim.

# < REMOVAL AND INSTALLATION >

# THIRD ROW SEAT BELT

# Third Row Seat Belt

# EXPLODED VIEW



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# THIRD ROW SEAT BELT

# < REMOVAL AND INSTALLATION >

1. Washer

- 2. Spacer
- 4. Seat belt retractor (RH)

7. Seat belt buckle (RH)

- 5. Lower anchor bolt bracket
- 8. Seat belt buckle (LH)
- 3. D-ring anchor
- 6. Lower anchor bolt cover
- 9. Seat belt retractor (LH)

# SEAT BELT RETRACTOR

# Removal

- 1. Remove the third row seat. Refer to <u>SE-100, "Removal and Installation"</u>.
- 2. Pull back the lower anchor bolt cover and remove the lower anchor bolt.
- 3. Remove the back pillar finisher. Refer to INT-29, "BACK PILLAR FINISHER : Removal and Installation".
- 4. Remove the D-ring anchor bolt.
- 5. Remove the seat belt retractor anchor bolt and upper bolt, then remove the seat belt retractor.

# Installation

Installation is in the reverse order of removal.

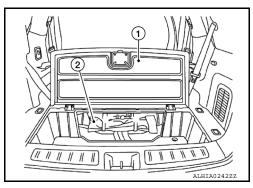
• Install the seat belt retractor upper bolt first.

• Make sure the D-ring anchor operates freely.

# SEAT BELT BUCKLE

# Removal

- 1. Open the storage box lid (1).
- 2. Remove spare tire compartment lid and the spare tire jack assembly (2).



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3. Remove the seat belt buckle anchor bolt (A). <□: Front

4. Route the seat belt buckle (1) through the opening in the seat cushion trim and remove.

Installation Installation is in the reverse order of removal.

# LATCH (LOWER ANCHORS AND TETHER FOR CHILDREN) SYSTEM

# < REMOVAL AND INSTALLATION >

# LATCH (LOWER ANCHORS AND TETHER FOR CHILDREN) SYSTEM

# Removal and Installation

The LATCH (Lower Anchors and Tether for Children) system is not serviceable.

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# TOP TETHER STRAP CHILD RESTRAINT

< REMOVAL AND INSTALLATION >

# TOP TETHER STRAP CHILD RESTRAINT

Removal and Installation

The Top Tether Strap Child Restraint system is not serviceable.