

SEAT BELT

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دیجیتال خودرو

شرکت دیجیتال خودرو سامانه (مسئولیت محدود)

اولین سامانه دیجیتال تعمیرکاران خودرو در ایران



دیجیتال خودرو

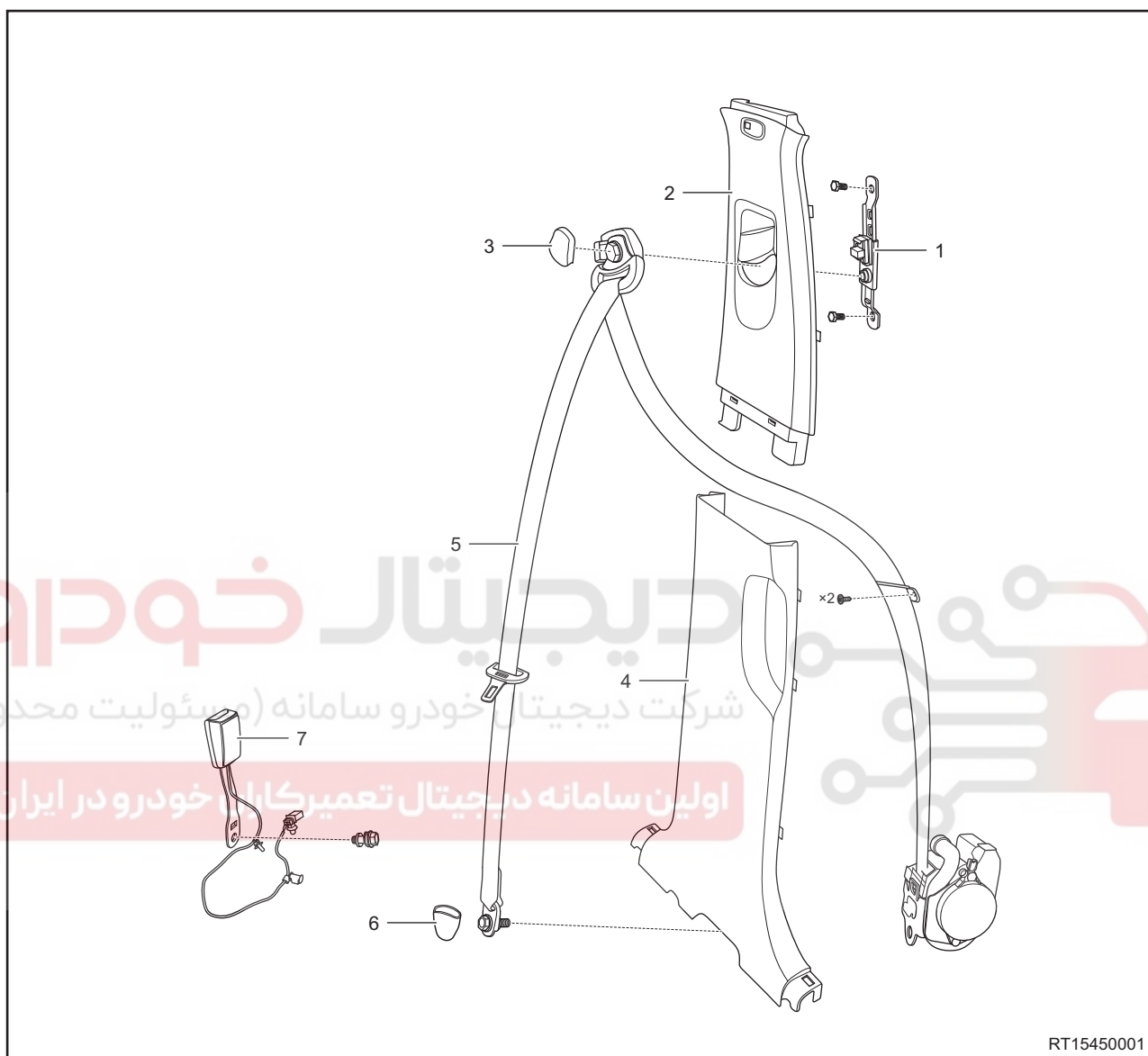
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GENERAL INFORMATION

Description

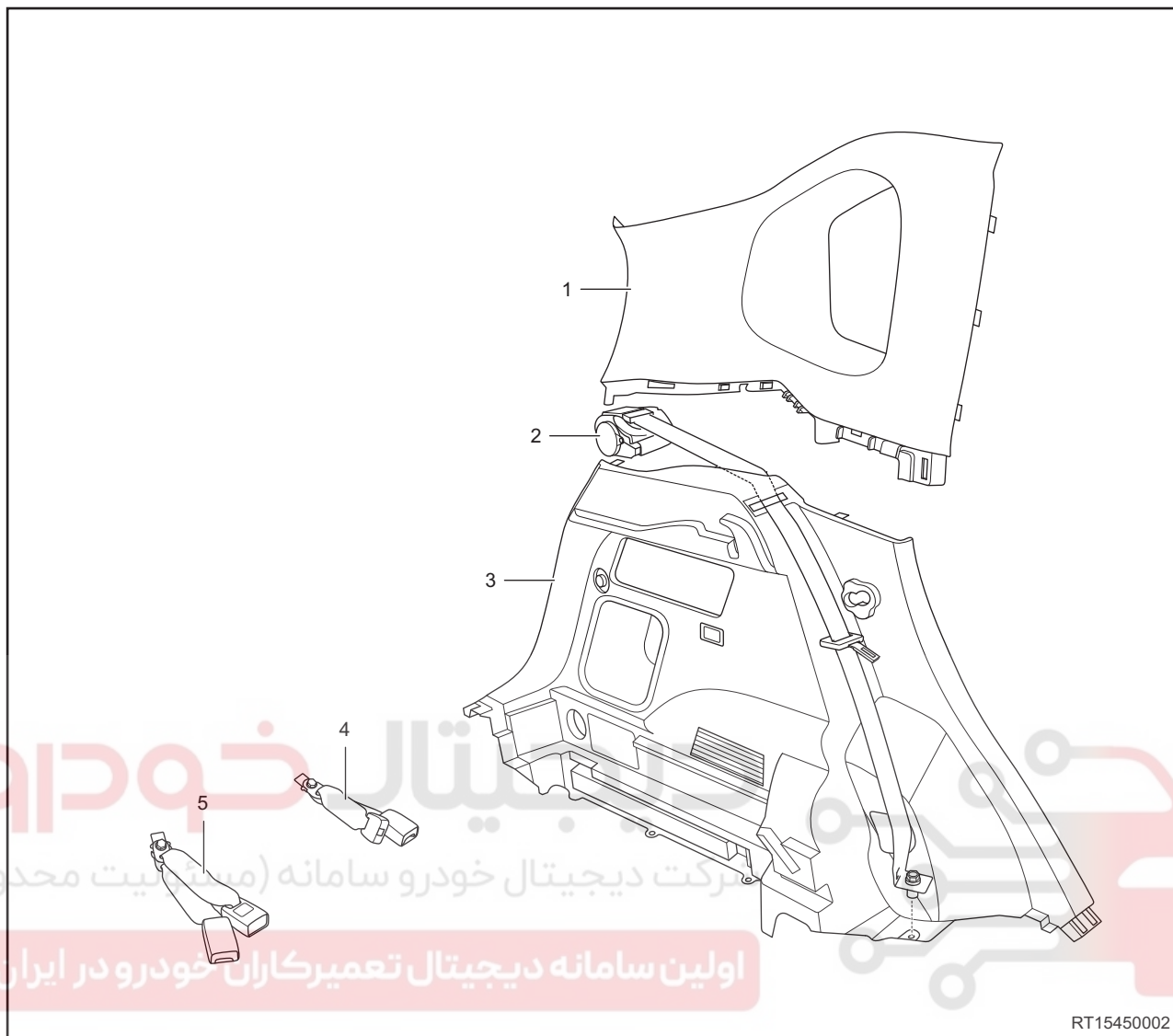


RT15450001

46

1 - Height Adjuster Assembly	2 - B-pillar Upper Protector Assembly
3 - B-pillar Upper Seat Belt Fixing Bolt Cap	4 - B-pillar Lower Protector Assembly
5 - Front Seat Belt Assembly	6 - Seat Belt Lower Bolt Protective Cap
7 - Front Seat Belt Buckle Assembly	

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RT15450002

1 - C-pillar Upper Protector Assembly	2 - Rear Seat Belt Assembly
3 - C-pillar Lower Protector Assembly	4 - Rear Left Double Buckle Assembly
5 - Rear Right Double Buckle Assembly	

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CAUTION

- Front seat belt assembly is a 3 point type belt with limiter and pretensioner, and driver seat belt buckle assembly is a device with unfastened alarm function. Driver seat belt is equipped with seat belt reminder light which only works with engine switch ON. If driver or front passenger seat belt is unfastened, the reminder light will flash continuously. When vehicle speed exceeds 20 km/h, the buzzer will sound to inform driver and front passenger to fasten their seat belts. The seat belt reminder light will go off immediately if seat belt is fastened.
- Rear seat belt assembly is 3 point belt.

Operation

In the event of a collision, seat belt retractor starts to work. The seat belt is locked securely and cannot be pulled out from retractor freely, so that the passenger will be restricted to seat to prevent head and chest from hitting the steering wheel, instrument panel, windshield or front seat, which can reduce the risk of second collision.

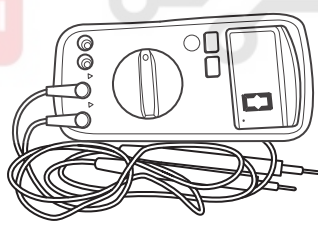
Specifications

Torque Specifications

Description	Torque (N·m)
Front Seat Belt Assembly Fixing Bolt	50 ± 5
Front Seat Belt Assembly Fixing Screw	7 ± 1
Seat Belt Buckle Assembly Fixing Nut	50 ± 5
Height Adjuster Assembly Fixing Bolt	23 ± 3.5
Rear Seat Belt Assembly Fixing Bolt	50 ± 5
Rear Seat Belt Assembly Fixing Screw	7 ± 1
Center Seat Belt Assembly Fixing Bolt	50 ± 5
Center Seat Belt Assembly Fixing Screw	7 ± 1
Double Buckle Assembly Fixing Bolt	50 ± 5

Tools

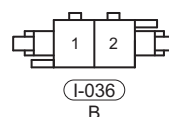
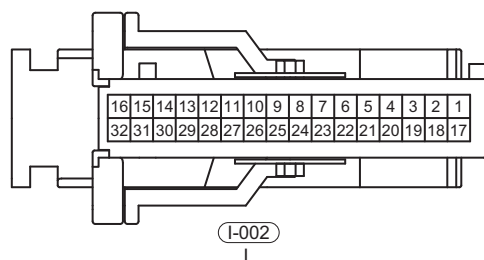
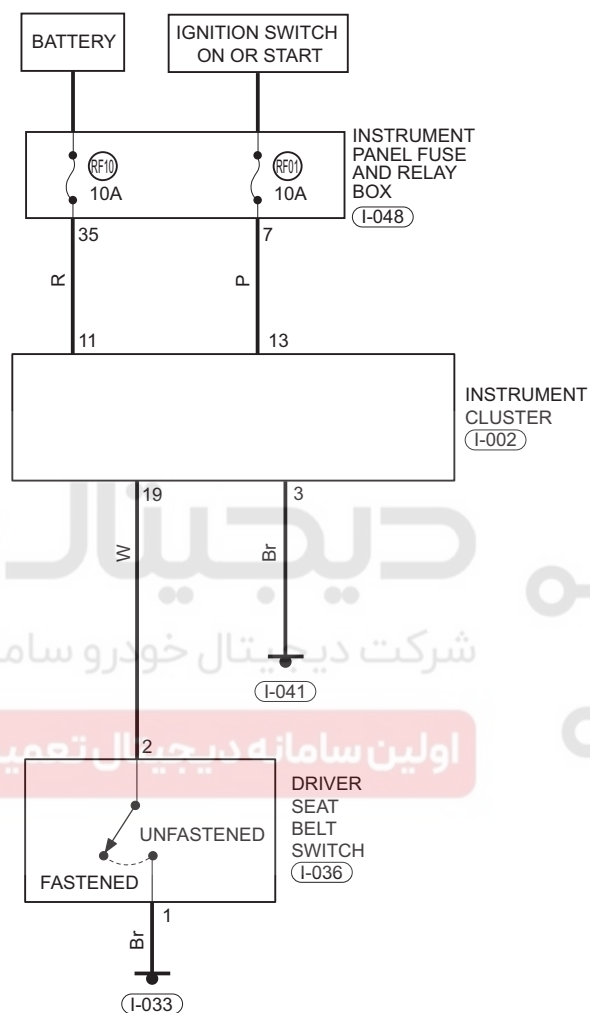
General Tool

Digital Multimeter	 RCH0000002
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Circuit Diagram

Seat Belt



ET15450010

DIAGNOSIS & TESTING

Seat Belt Inspection

1. When pulling seat belt downward slowly by hand, the seat belt should be pulled out smoothly from retractor and can return back after releasing. If result is not as specified, replace the seat belt assembly. The seat belt should be locked automatically as it is pulled out quickly. If not, replace the seat belt.
2. Check seat belt for cuts, wear and looseness. If damaged, replace the seat belt assembly.
3. Check seat belt for overstretch (e.g. after an accident). If damaged, replace the seat belt assembly or related components.
4. Fasten and release seat belt and seat belt buckle repeatedly to check the engagement between them. If those conditions (difficult operation, excessive sliding resistance and seizing, etc.) occur, replace the seat belt assembly or seat belt buckle assembly.

WARNING

- Seat belt system should be checked regularly to reduce the possibility and serious level of injury caused by accidents.
- When checking impacted vehicle, be sure to check seat belt system to reduce the possibility and serious level of injury caused by accidents.

دیجیتال خودرو

شرکت دیجیتال خودرو سامانه (مسئولیت محدود)

اولین سامانه دیجیتال تعمیرکاران خودرو در ایران



ON-VEHICLE SERVICE

Front Seat Belt Assembly

Removal

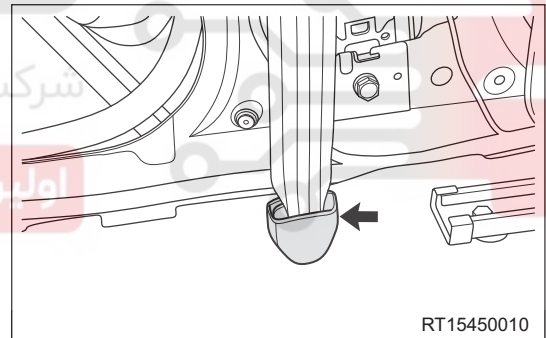
HINT:

- Use same procedures for right and left sides.
- Procedures listed below are for left side.

CAUTION

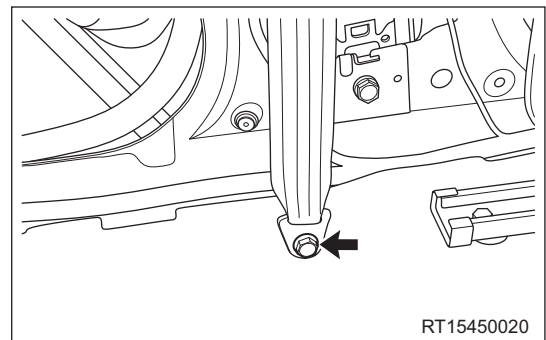
- Be sure to wear safety equipment to prevent accidents, when removing the front seat belt assembly.
- Appropriate force should be applied, when removing the front seat belt assembly. Be careful not to operate roughly.
- DO NOT scratch interior, when removing the front seat belt assembly.

1. Turn off all electrical equipment and the engine switch.
2. Disconnect the negative battery cable.
3. Remove the left B-pillar lower protector assembly (See page 64-19).
4. Remove the front left seat belt assembly.
 - a. Using a screwdriver wrapped with protective tape, pry off the front seat belt assembly lower bolt cover (arrow).



- b. Remove fixing bolt (arrow) from lower part of front seat belt assembly.

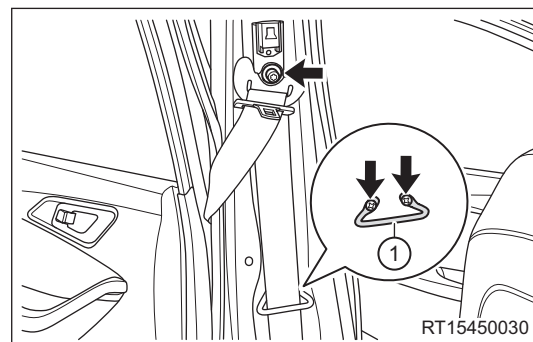
(Tightening torque: $50 \pm 5 \text{ N}\cdot\text{m}$)



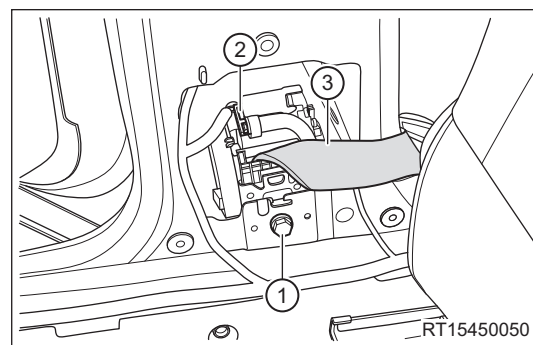
- c. Remove the left B-pillar upper protector assembly (See page 64-20).

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- d. Remove fixing bolt (arrow) from upper part of front seat belt assembly, and remove 2 fixing screws (arrow) from guide end plate of seat belt assembly.
(Tightening torque: 50 ± 5 N·m)
(Tightening torque: 7 ± 1 N·m)



- e. Remove fixing bolt (1) from front seat belt retractor.
(Tightening torque: 50 ± 5 N·m)
f. Remove connector (2) from front seat belt retractor.
g. Remove the front left seat belt assembly (3).

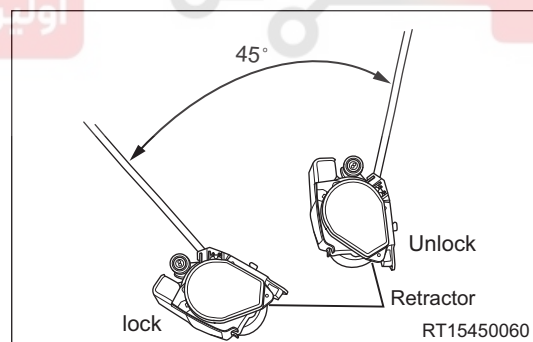


Inspection

Inspect the front seat belt retractor.

CAUTION

- DO NOT disassemble the front seat belt retractor.



- When the inclination of front seat belt retractor is 15° or less, check that front seat belt can be pulled out from front seat belt retractor. When the inclination of front seat belt retractor is over 45° , check that the front seat belt locks.
- If result is not as specified, replace the front seat belt assembly.

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Installation

Installation is in the reverse order of removal.

CAUTION

- Keep seat belt assembly clean without oil attached and check seat belt assembly for damage, when installing the front seat belt assembly.
- Be sure to tighten all fixing bolts and fixing screws according to the specified torque, when installing the front seat belt assembly.

دیجیتال خودرو

شرکت دیجیتال خودرو سامانه (مسئولیت محدود)

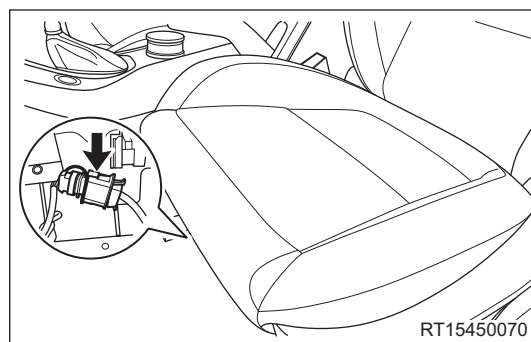
اولین سامانه دیجیتال تعمیرکاران خودرو در ایران



Front Seat Belt Buckle Assembly

On-vehicle Inspection

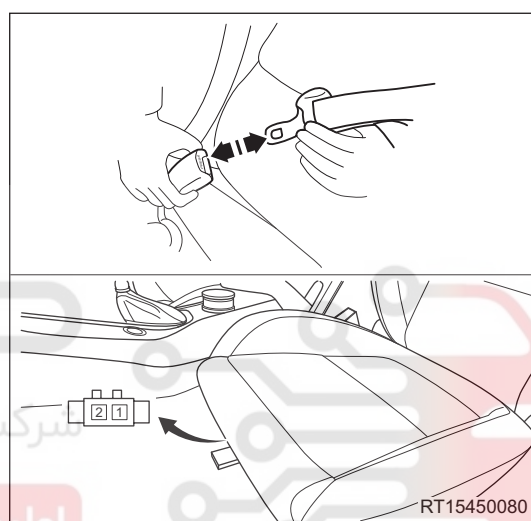
1. Inspect the front seat belt buckle assembly.
 - a. Disconnect the front seat belt buckle connector (arrow).



- b. Using a digital multimeter, measure resistance between terminals 1 and 2 of front seat belt buckle assembly connector.

Under normal condition, the measured resistance should be $\infty \Omega$ (no continuity) when the front seat belt assembly is fastened and the measured resistance is less than 1Ω (continuity) when the front seat belt assembly is unfastened.

If result is not as specified, replace the front seat belt buckle assembly.



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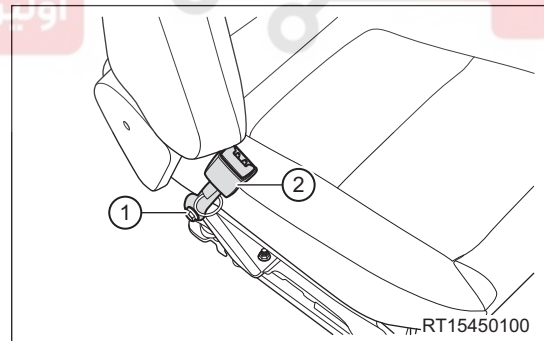
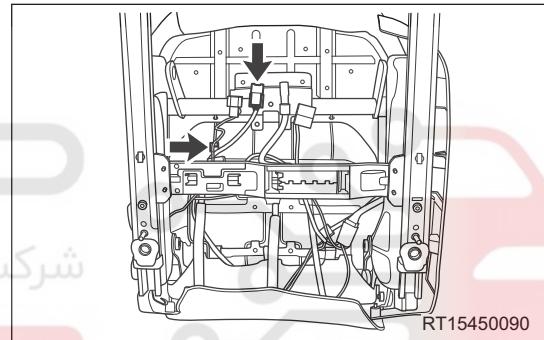
Removal**HINT:**

- Use same procedures for front passenger seat belt buckle assembly and driver seat belt buckle assembly.
- Procedures listed below are for driver seat belt buckle assembly.

CAUTION

- Be sure to wear safety equipment to prevent accidents, when removing the front seat belt buckle assembly.
- DO NOT scratch interior, when removing the front seat belt buckle assembly.
- DO NOT damage wire harness and connector, when removing the front seat belt buckle assembly.

1. Turn off all electrical equipment and the engine switch.
2. Disconnect the negative battery cable.
3. Remove the front seat assembly (See page 61-8).
4. Remove the driver seat belt buckle assembly.
 - a. Disengage clip (arrow) from wire harness connector on bottom of seat belt buckle.
 - b. Disengage clip (arrow) from wire harness connector on bottom left side of seat belt buckle.
 - c. Remove fixing bolt (1) from seat belt buckle assembly, and remove driver seat belt buckle assembly (2).
(Tightening torque: $50 \pm 5 \text{ N}\cdot\text{m}$)

**Installation**

Installation is in the reverse order of removal.

CAUTION

- Be sure to tighten fixing nuts according to the specified torque, when installing the front seat belt buckle assembly.
- Install connectors in place, when installing the front seat belt buckle assembly.

Height Adjuster Assembly

Removal

HINT:

- Use same procedures for right and left sides.
- Procedures listed below are for left side.

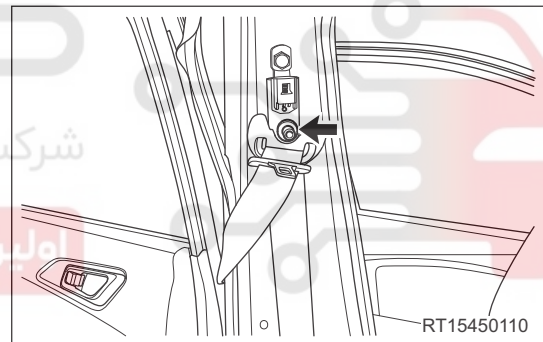
CAUTION

- Be sure to wear safety equipment to prevent accidents, when removing the height adjuster assembly.
- Appropriate force should be applied, when removing the height adjuster assembly. Be careful not to operate roughly.
- DO NOT scratch interior, when removing the height adjuster assembly.

1. Turn off all electrical equipment and the engine switch.
2. Disconnect the negative battery cable.
3. Remove the left B-pillar lower protector assembly (See page 64-19).
4. Remove the left B-pillar upper protector assembly (See page 64-20).
5. Remove the height adjuster assembly.

- a. Remove fixing bolt (arrow) from upper part of front seat belt assembly.

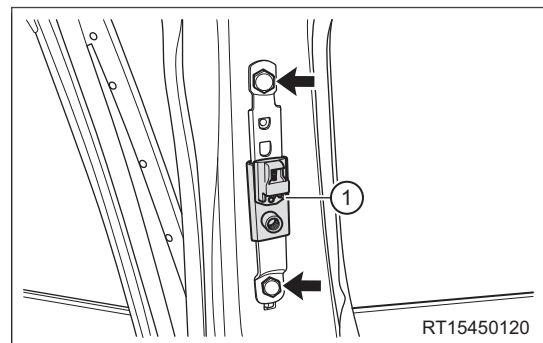
(Tightening torque: 50 ± 5 N·m)



- b. Remove 2 fixing bolts (arrow) from height adjuster assembly.

(Tightening torque: 23 ± 3.5 N·m)

- c. Remove height adjuster assembly (1) from dowel pin.



Installation

Installation is in the reverse order of removal.

CAUTION

- Be sure to tighten all fixing bolts according to the specified torque, when installing the height adjuster assembly.

Rear Seat Belt Assembly

Removal

HINT:

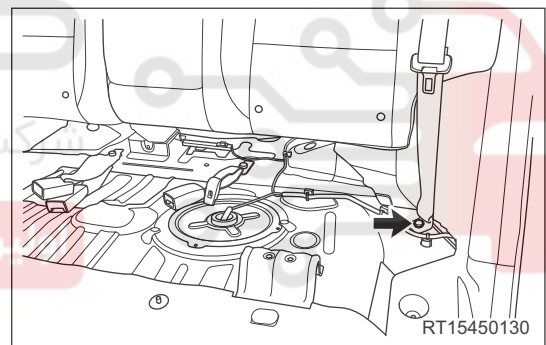
- Use same procedures for right side and center part.
- Procedures listed below are for left side.

CAUTION

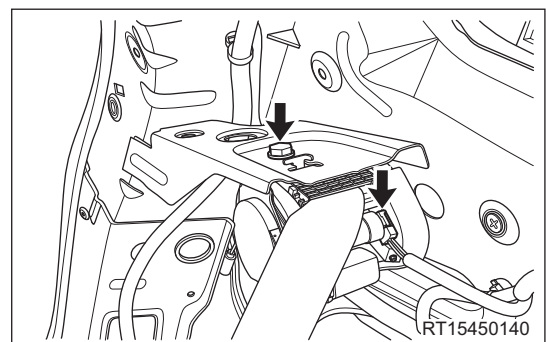
- Be sure to wear safety equipment to prevent accidents, when removing the rear seat belt assembly.
- Appropriate force should be applied, when removing the rear seat belt assembly. Be careful not to operate roughly.
- DO NOT scratch interior, when removing the rear seat belt assembly.

1. Turn off all electrical equipment and the engine switch.
2. Disconnect the negative battery cable.
3. Remove the rear seat cushion assembly (See page 46-14).
4. Remove the tonneau cover assembly (See page 64-35).
5. Remove the rear left seat belt assembly.

- a. Remove fixing bolt (arrow) from lower part of rear seat belt assembly.



- b. Remove the rear seat back cushion assembly.
- c. Remove the C-pillar lower protector assembly (See page 64-22).
- d. Remove the C-pillar upper protector assembly (See page 64-24).
- e. Remove fixing bolt (arrow) from rear left seat belt retractor, and remove retractor connector (arrow).
(Tightening torque: 50 ± 5 N·m)



- f. Remove the rear left seat belt assembly.

Inspection

Check the rear seat belt retractor.

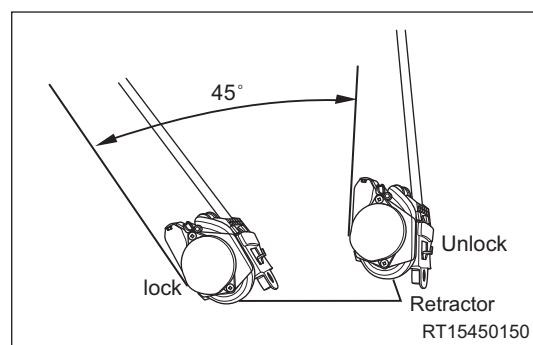
CAUTION

- DO NOT disassemble the rear seat belt retractor.

HINT:

When the inclination of rear seat belt retractor is 15° or less, check that rear seat belt can be pulled out from rear seat belt retractor. When the inclination of rear seat belt retractor is over 45° , check that rear seat belt locks.

If result is not as specified, replace the rear seat belt assembly.



Installation

Installation is in the reverse order of removal.

CAUTION

- Keep seat belt assembly clean without oil attached and check seat belt assembly for damage, when installing the rear seat belt assembly.
- Be sure to tighten all fixing bolts and fixing screws according to the specified torque, when installing the rear seat belt assembly.

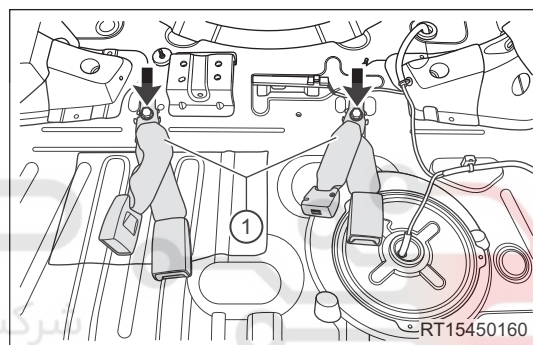
Double Buckle Assembly

Removal

CAUTION

- Be sure to wear necessary safety equipment to prevent accidents, when removing double buckle assembly.
- DO NOT scratch interior, when removing the double buckle assembly.

1. Turn off all electrical equipment and the engine switch.
2. Disconnect the negative battery cable.
3. Remove the rear seat cushion assembly (See page 46-14).
4. Remove the rear seat back cushion assembly.
5. Remove the double buckle assembly.
 - a. Remove 2 fixing bolts (arrow from double buckle assembly, and remove double buckle assembly (1).
(Tightening torque: 50 ± 5 N·m)



Installation

Installation is in the reverse order of removal.

CAUTION

- Be sure to tighten fixing bolts according to the specified torque, when installing the double buckle assembly.