# 2. Front Seat

## A: REMOVAL

## **CAUTION:**

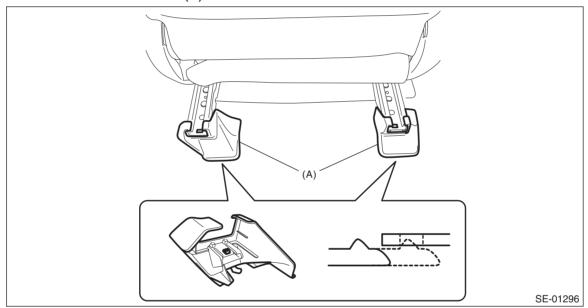
The airbag system is fitted with a backup power supply. After disconnecting the battery ground cable, the airbag may operate if you do not wait for 60 seconds before starting the service of airbag system.

- 1) Remove the headrest assembly front.
- 2) Disconnect the ground cable from battery and wait for at least 60 seconds before starting work. <Ref. to NT-5, BATTERY, NOTE, Note.>

#### NOTE:

For the 12 volt engine restart battery of HEV model, disconnect the ground terminal from 12V engine restart battery sensor.

- 3) Remove the slide rail assembly installing bolt.
  - (1) Tilt the backrest assembly forward and move the front seat to the front most position.
  - (2) Remove the cover bolt rear (A) and remove the bolts.



- (3) Move the front seat to the rearmost position, and remove the bolts.
- 4) Disconnect the connector under the front seat.
- Seat belt warning light connector (driver's seat)
- Occupant detection system harness connector (passenger's seat) <Ref. to OD(diag)-9, OCCUPANT DETECTION SYSTEM (BETWEEN AIRBAG REAR HARNESS AND SEAT HARNESS), PROCEDURE, Airbag Connector.>
- Side airbag connector <Ref. to AB-22, SIDE AIRBAG MODULE, PROCEDURE, Airbag Connector.>
- Seat heater connector (model with seat heater)
- Buckle switch RH connector (passenger's seat) <Ref. to AB-22, BUCKLE SWITCH RH, PROCEDURE, Airbag Connector.>
- 5) Take out the front seat from the vehicle.

#### **CAUTION:**

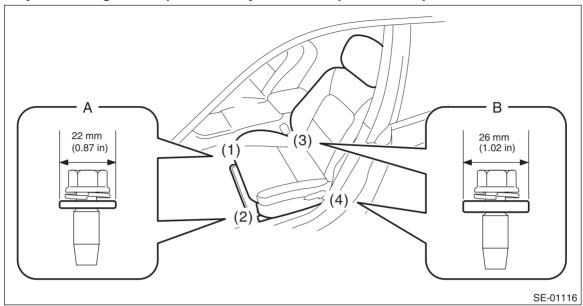
Be careful not to damage the body.

## **B: INSTALLATION**

Install each part in the reverse order of removal.

### **CAUTION:**

- The front seat mounting bolts differ between the front mounting points and the rear mounting points. When installing the front seat, make sure that you are using correct bolts at correct positions.
- Tighten the slide rail assembly installing bolts in the order as shown in the figure, in several steps by gradually increasing the torque until they reach the specified torque.



- Front (bolt A): Washer diameter 22 mm (0.87 in)
- Rear (bolt B): Washer diameter 26 mm (1.02 in)

## Tightening torque:

Front seat assembly: 53 N·m (5.40 kgf-m, 39.1 ft-lb)

# C: DISASSEMBLY

## 1. DRIVER'S SEAT

#### **CAUTION:**

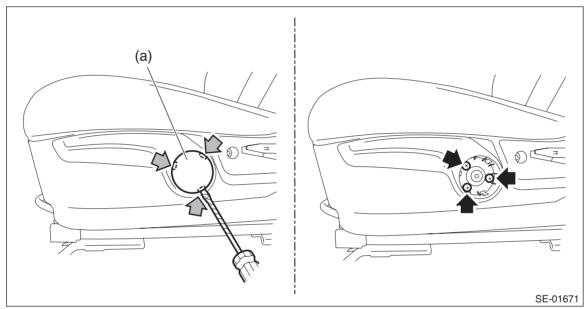
Before assembling, make sure how the harnesses such as the side airbag harness and the seat belt inner - front harness are routed in order to avoid misarranging. Assembling with harnesses improperly routed may cause the harness to get caught and short out.

- 1) Remove the front seat from vehicle. <Ref. to SE-7, REMOVAL, Front Seat.>
- 2) Remove the knob lifter.
  - (1) Remove the cap lifter lever (a).

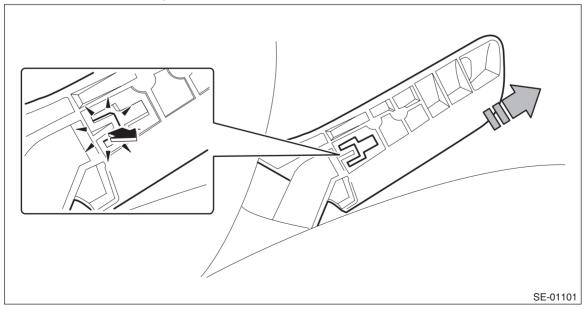
## NOTE:

Insert a flat tip screwdriver or similar tool wrapped with protective tape into the gap (shown with arrow) between the cap - lifter lever and the knob - lifter.

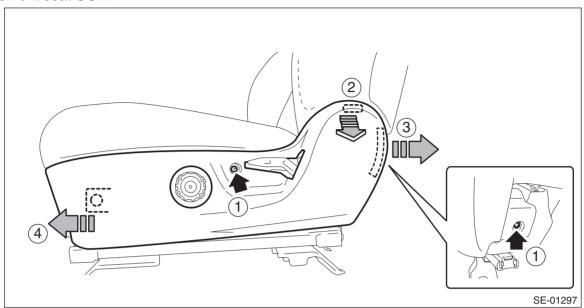
(2) Remove the screws and remove the knob - lifter.



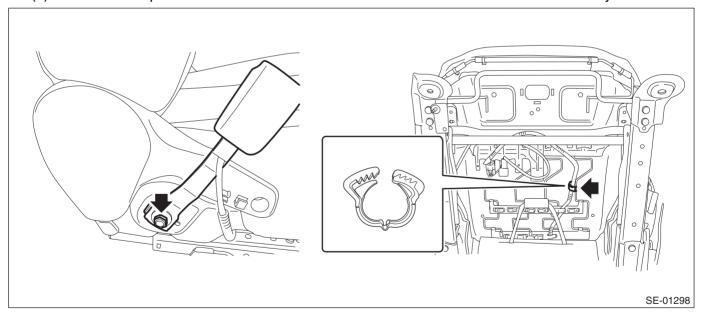
- 3) Remove the lever reclining.
  - (1) Pull up the lever reclining and release the claws on the back.
  - (2) Pull out the lever reclining.



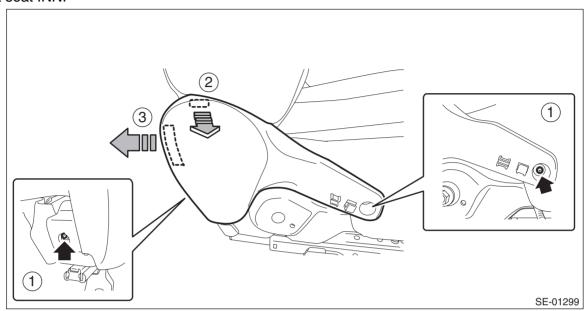
- 4) Remove the cover hinge front seat OUT.
  - (1) Remove the screws.
  - (2) Release the claw in the upper section of the cover hinge front seat OUT.
  - (3) Release the claw in the rear section of the cover hinge front seat OUT.
  - (4) Release the claw in the front section of the cover hinge front seat OUT, then remove the cover hinge front seat OUT.



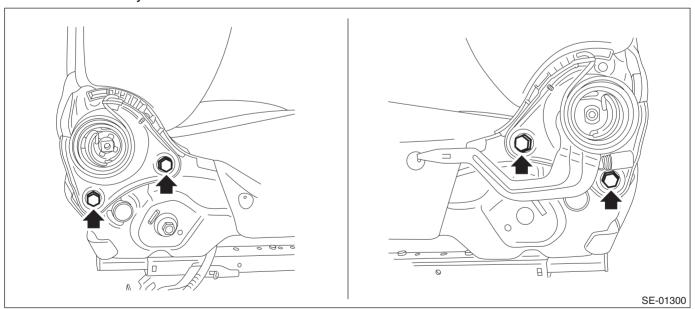
- 5) Remove the seat belt inner front.
  - (1) Remove the nut, and remove the seat belt inner front.
  - (2) Remove the clip for the seat belt inner front located under the seat cushion assembly.



- 6) Remove the cover hinge front seat INN.
  - (1) Remove the screws.
  - (2) Release the claw in the upper section of the cover hinge front seat INN.
  - (3) Release the claw in the rear section of the cover hinge front seat INN, then remove the cover hinge front seat INN.

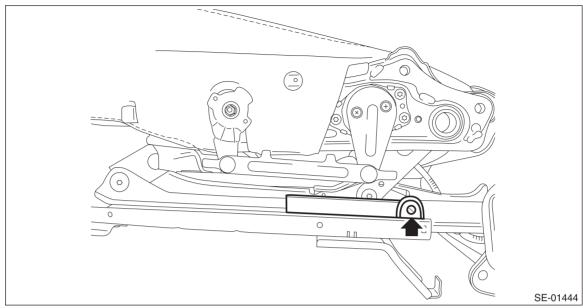


- 7) Separate the backrest assembly and the seat cushion assembly.
  - (1) Remove the clip for the side airbag harness located under the seat cushion assembly. (seat with side airbag)
  - (2) Remove the bolts from reclining hinge of both sides.
  - (3) While taking care not to damage the airbag harness, separate the backrest assembly and the seat cushion assembly.

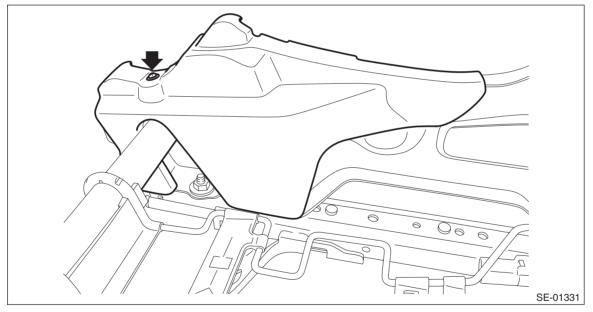


- 8) Remove the cover slide rail OUT.

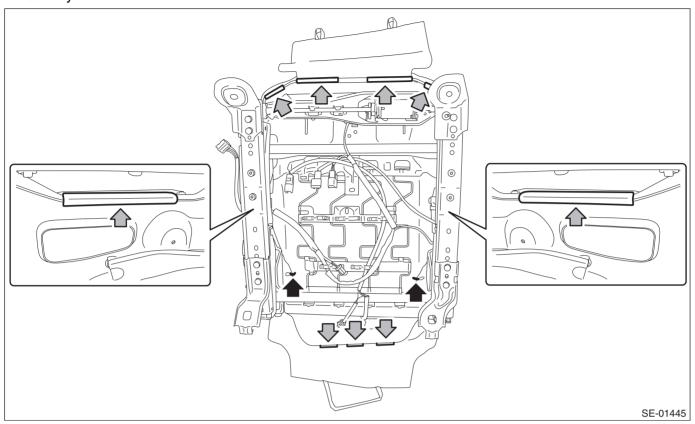
  - (1) Remove the clip.(2) Remove the hook, and detach the cover slide rail OUT.



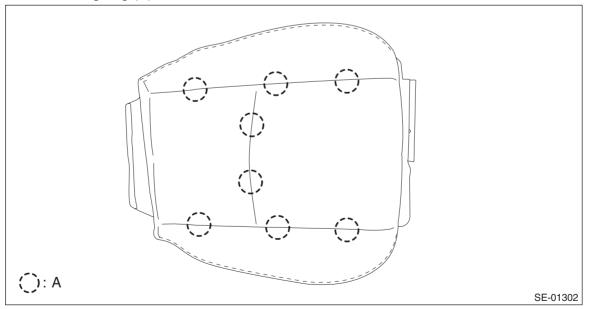
9) Remove the screws and detach the cover - slide rail INN.



- 10) Remove the pad assembly front seat cushion and the cover front cushion.
  - (1) Remove the hooks and hog rings.
  - (2) Remove the pad assembly front seat cushion and the cover front cushion from the seat cushion assembly.



- 11) Remove the cover front cushion.
  - (1) Remove the hog ring (A).

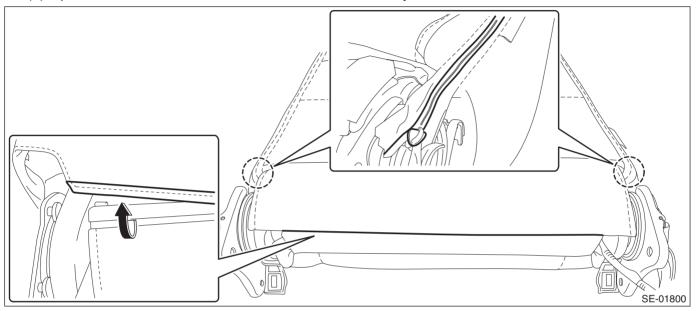


(2) Pull out the pad assembly - front seat cushion from the cover - front cushion.

(3) Remove the seat heater module from the pad assembly as necessary.

#### **CAUTION:**

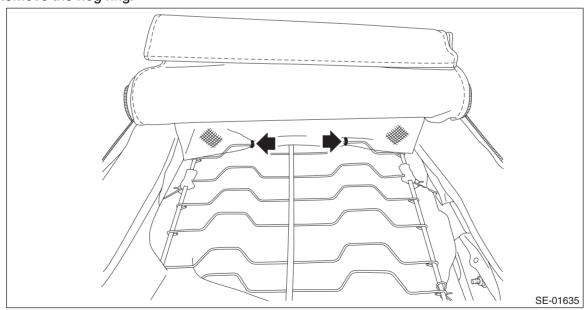
- If the seat heater module is removed, replace the pad assembly with a new part.
- If the seat heater module is reused, remove the polyurethane section from the reverse side completely.
- 12) Remove the pad assembly front seat backrest and the cover COMPL front backrest.
  - (1) Remove the plastic fastener at the back side (bottom) of backrest assembly.
  - (2) Open the fastener at the rear side of backrest assembly.



#### NOTE:

If it is hard to open, use a metal clip, etc.

(3) Remove the hog ring.



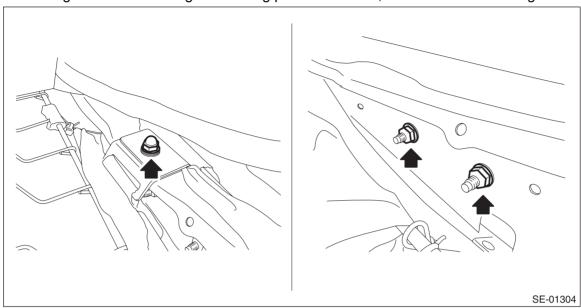
(4) Remove the pad assembly - front seat backrest and the cover COMPL - front backrest from the backrest assembly.

13) Remove the side airbag module.

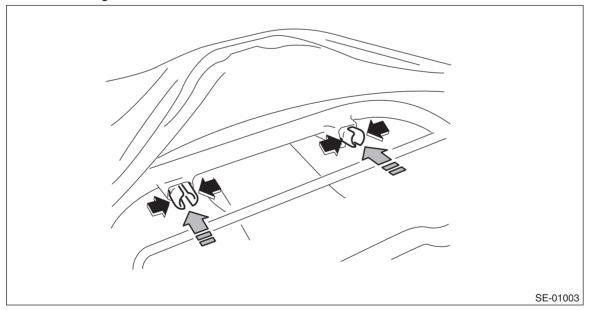
## **CAUTION:**

Do not open the protective cover of the side airbag. If any damage is present in the protective cover or the cloth of side airbag module comes out from the protective cover slit, replace the side airbag module with a new part.

- (1) Remove the hexagon cap nut and nuts.
- (2) While taking care not to damage the airbag protective cover, remove the side airbag module.



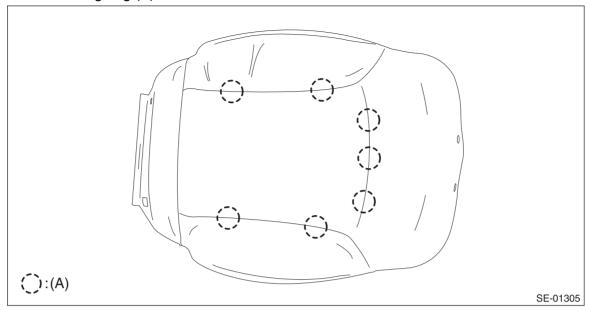
14) Remove the bushing - headrest.



## NOTE:

Catch the tip of the bushing - headrest with pliers and push it outward from the inside of seat to remove it. 15) Pull out the frame assembly - front backrest.

- 16) Remove the cover COMPL front backrest.
  - (1) Remove the hog ring (A).



- (2) Pull out the pad assembly front seat backrest from the cover COMPL front backrest.
- (3) Remove the seat heater module from the pad assembly as necessary.

#### **CAUTION:**

- If the seat heater module is removed, replace the pad assembly with a new part.
- If the seat heater module is reused, remove the polyurethane section from the reverse side completely.

## 2. PASSENGER'S SEAT

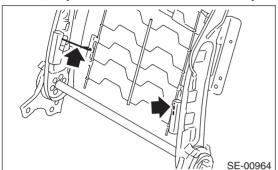
#### **CAUTION:**

- The occupant detection system (passenger's seat only) control module, the occupant detection sensor, the pad assembly front seat cushion and the frame assembly front cushion are considered as a single seat cushion pad & frame assembly. Never remove the occupant detection control module or the occupant detection sensor from the frame assembly front cushion.
- If the cover front cushion is removed, make sure to replace the hang wire on the cover front cushion side with a new wire.
- Never remove the occupant detection sensor connector from the occupant detection control module.
- When replacing the seat cover, be careful not to damage the occupant detection sensor while installing the hog ring.
- When removing or replacing the seat cover, perform "Occupant Detection System Inspection" after installing the seat to check if the occupant detection system operates normally. <Ref. to PI-15, SEAT, PRE-DELIVERY INSPECTION (PDI) PROCEDURE, Pre-delivery Inspection.>
- If the seat heater module is removed, replace the seat cushion pad & frame assembly with a new part.
- If the seat heater module is reused, remove the polyurethane section from the reverse side completely.
- 1) Remove the front seat (passenger's side) from vehicle. <Ref. to SE-7, REMOVAL, Front Seat.>
- 2) Refer to the disassembly procedures for the driver's seat. <Ref. to SE-9, DRIVER'S SEAT, DISASSEMBLY, Front Seat.>

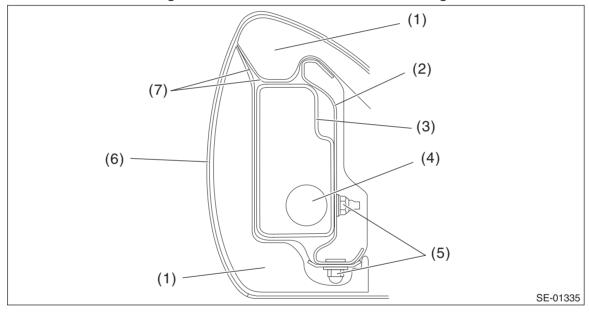
## D: ASSEMBLY

#### **CAUTION:**

- Do not confuse the harness routing of the side airbag harness and the seat belt inner front harness, etc. Assembling with harnesses improperly routed may cause the harness to get caught and short out.
- If the flat mat hook of the frame assembly front backrest is deformed or comes off due to the deformation, replace the hook with a new part.



Make sure that the side airbag module is installed as shown in the figure.



- (1) Pad ASSY front seat backrest
- (4) Side airbag module inflator
- Side airbag guide cloth

- (2) Frame ASSY front backrest
  - Side airbag module protective cover
- (5) Nut
- (6) Cover COMPL front backrest

Besides, if the cover COMPL - front backrest is not installed securely, the side airbag may not be activated properly, therefore keep strictly to the following procedures.

- Be careful not to stain or damage the cover COMPL front backrest during assembly.
- Do not reuse hog rings.
- Secure the hog ring using hog ring pliers.
- Install the hog rings to the specified points securely and make sure that there is no wrinkle or twisting on the cover COMPL front backrest.

1) Install the seat heater module.

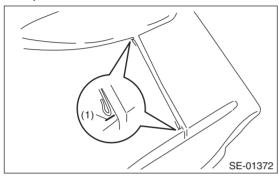
#### **CAUTION:**

- If the seat heater module is removed, replace the pad assembly with a new part. (Driver's seat)
- If the seat heater module is removed, replace the seat cushion pad & frame assembly with a new part. (Passenger's seat)
- If the seat heater module is reused, remove the polyurethane section from the reverse side completely and attach a new pad assembly with a double-sided tape.

## Double-sided tape:

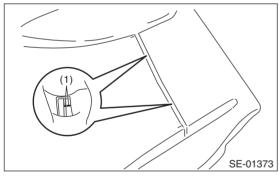
# NITTO DENKO 501L or equivalent

- 2) Make sure that there is no foreign matter on side airbag module.
- 3) Assemble the seat cover.
  - (1) Adjust so that the left and right clearances between wire and seat pad become equal, and mark the seat pad.



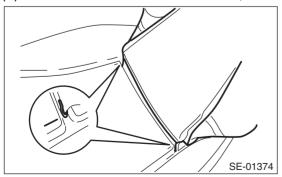
(1) Marking

(2) Mark the center of the wire on the pad side to which the hog ring is attached.

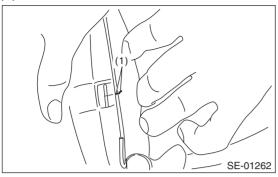


(1) Marking

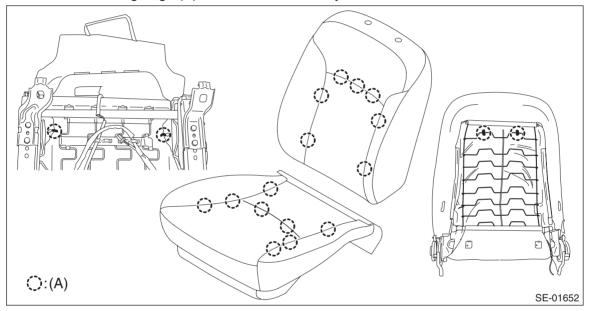
(3) Insert the wire into the seat cover, and align the wire with the position marked in step 1).



(4) Mark the wire on the seat cover side according to the markings on the seat pad.



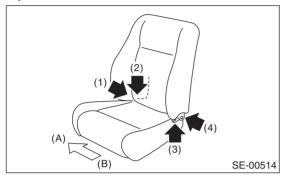
- (1) Marking
- (5) Perform steps 1) 4) to all sections to which the hog rings are attached.
- (6) Make sure that all hog rings (A) are attached securely.



4) Assemble remaining parts in the reverse order of disassemble.

#### NOTF:

- When installing the seat belt inner front, follow the procedures described in the seat belt section. <Ref. to SB-25, INSTALLATION, Front Seat Belt.>
- Install the backrest assembly and seat cushion assembly in the following procedure.
  - 1. Temporarily tighten the four reclining hinge bolts.
  - 2. Place the backrest in the most upright position.
  - 3. Tighten the reclining hinge bolts in order from (1) to (4) two or three times, until they reach the specified torque.

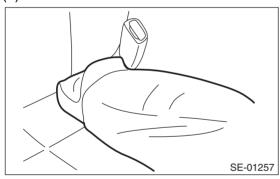


- (A) Vehicle inside
- (B) Vehicle outside

## Tightening torque:

Refer to "COMPONENT" of "General Description". <Ref. to SE-2, FRONT SEAT, COMPONENT, General Description.>

- 5) If any wrinkles are found after the assembly of the seat cover, finish the seat cover with iron.
  - (1) Place the wet towel on wrinkles.



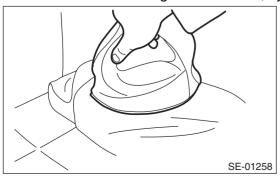
(2) Touch up with warm iron.

#### **CAUTION:**

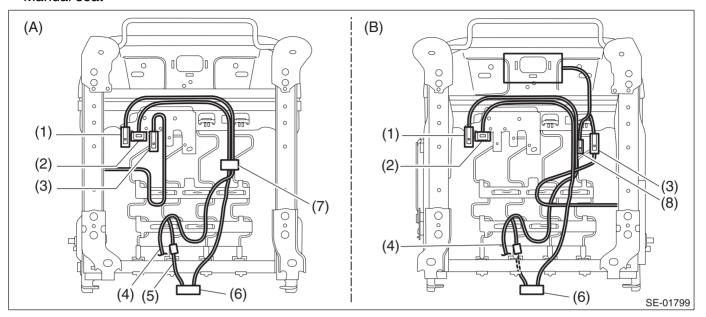
Keep moving the iron, otherwise the seat cover surface can be damaged.

## NOTE:

This method is available for genuine leather, synthetic leather, cloth, etc.



- 6) Install connectors located under the front seat.
- Manual seat



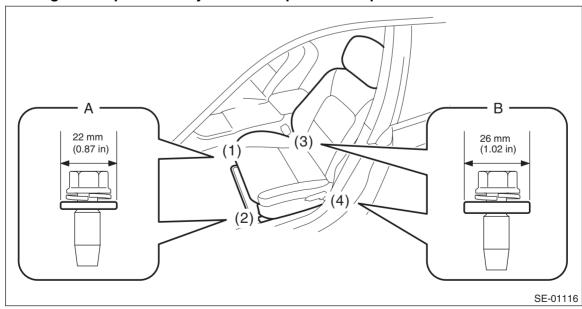
- (A) Driver's seat (six-way)
- (B) Passenger's seat (four-way)
- (1) Seat cushion heater connector
- (2) Side airbag connector
- (3) Seat belt switch connector
- (4) Seat cushion heater harness
- (5) Backrest heater harness
- (6) Velcro

- (7) Band A
- (8) Occupant detection control module

7) Install the seat assembly.

#### **CAUTION:**

- The seat mounting bolts differ between the front mounting points and the rear mounting points. Make sure that you are using correct bolts at correct positions.
- Tighten the slide rail installing bolts in the order as shown in the figure, in several steps by gradually increasing the torque until they reach the specified torque.



- Front (bolt A): Washer diameter 22 mm (0.87 in)
- Rear (bolt B): Washer diameter 26 mm (1.02 in)

Tightening torque: 53 N⋅m (5.40 kgf-m, 39.1 ft-lb)

# **E: INSPECTION**

## 1. SEAT COVER

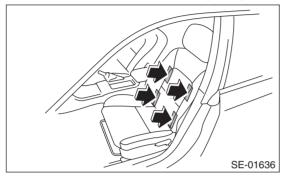
Check that there is no tear or fray on the cover COMPL - front backrest and the cover - front cushion.

## NOTE:

For model with side airbag, if the door side of the cover COMPL - front backrest is torn or frayed, the side airbag may not be deployed properly. In this case, replace the cover COMPL - front backrest with a new part.

## 2. FLAT MAT HOOK

Check the flat mat hook by applying weight to the backrest assembly.



## NOTE:

If the appropriate stiffness is not obtained by applying weight to the backrest assembly, the hook may be disengaged.

If it is due to the deformation of the hook, replace the hook with a new part.

