

## 4. Power Seat System

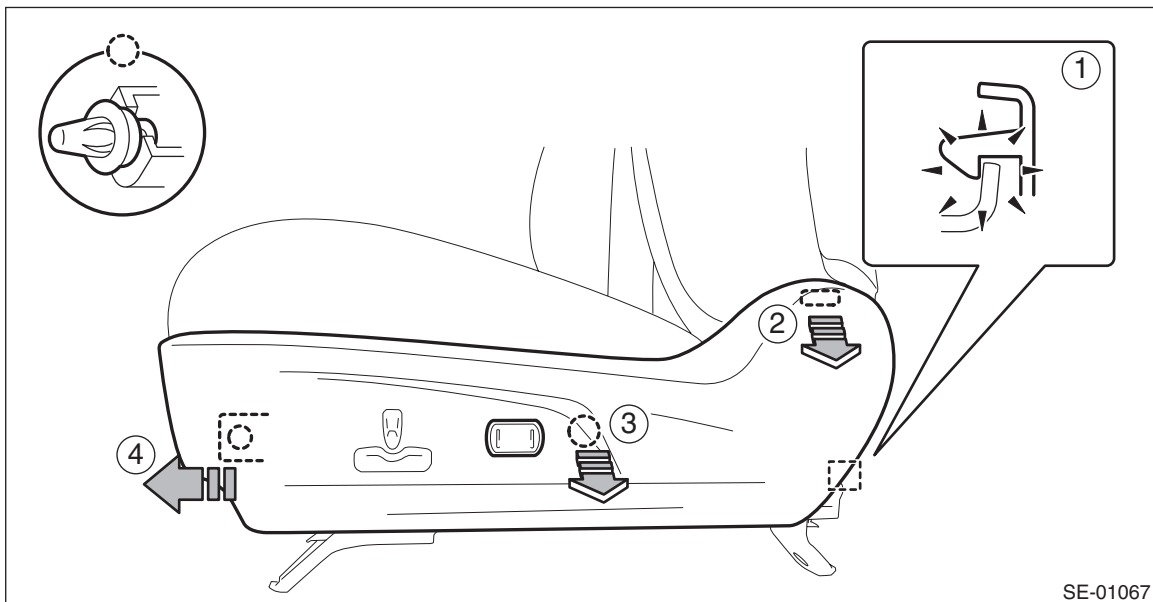
### A: REMOVAL

#### CAUTION:

When removing the front seat, Disconnect the ground cable from battery before disconnecting the side airbag module harness connector, and wait for 60 seconds before starting the operation.

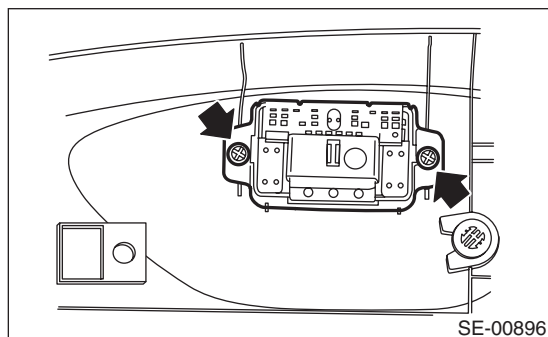
#### 1. POWER SEAT SWITCH

- 1) Remove the seat from vehicle. <Ref. to SE-10, REMOVAL, Front Seat.>
- 2) Remove the seat side cover OUT.
  - (1) Release the claw in the rear section of the seat side cover.
  - (2) Release the claw in the upper section of the seat side cover.
  - (3) Remove the clip and release the claw in the front section of the seat side cover
  - (4) Disconnect the power seat switch and lumbar switch connectors and remove the seat side cover OUT.



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- 3) Remove the screws to remove the power seat switch assembly.



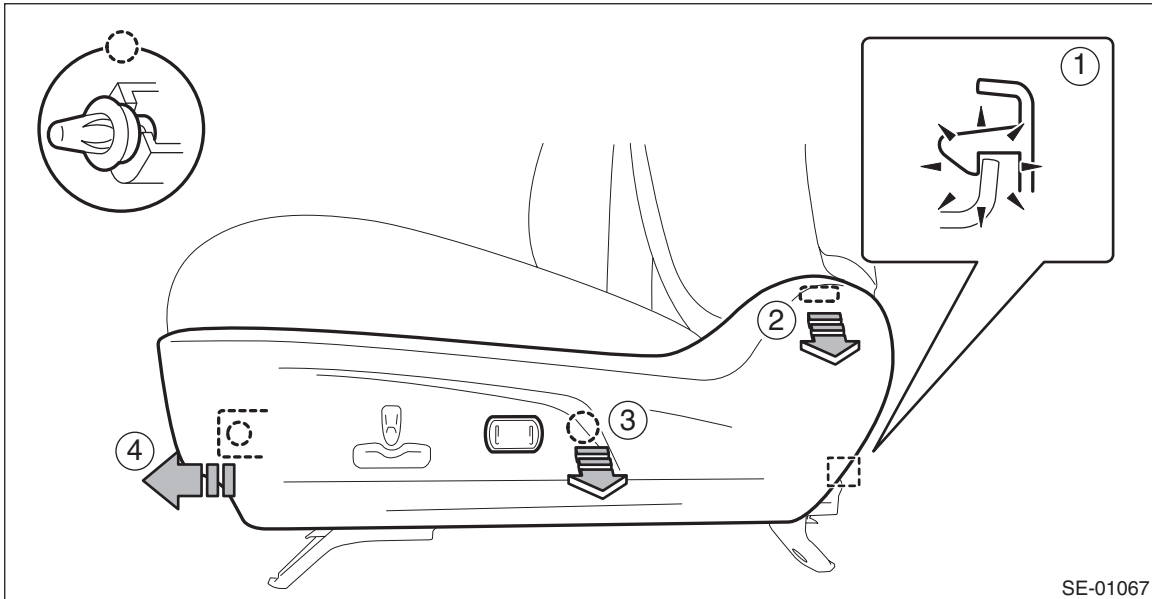
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# Power Seat System

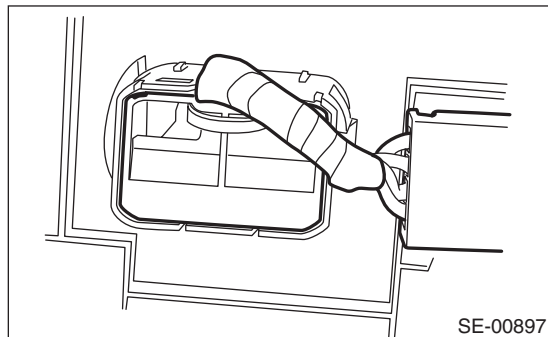
## SEATS

### 2. LUMBAR SWITCH

- 1) Remove the seat from vehicle. <Ref. to SE-10, REMOVAL, Front Seat.>
- 2) Remove the seat side cover OUT.
  - (1) Release the claw in the rear section of the seat side cover.
  - (2) Release the claw in the upper section of the seat side cover.
  - (3) Remove the clip and release the claw in the front section of the seat side cover
  - (4) Disconnect the power seat switch and lumbar switch connectors and remove the seat side cover OUT.

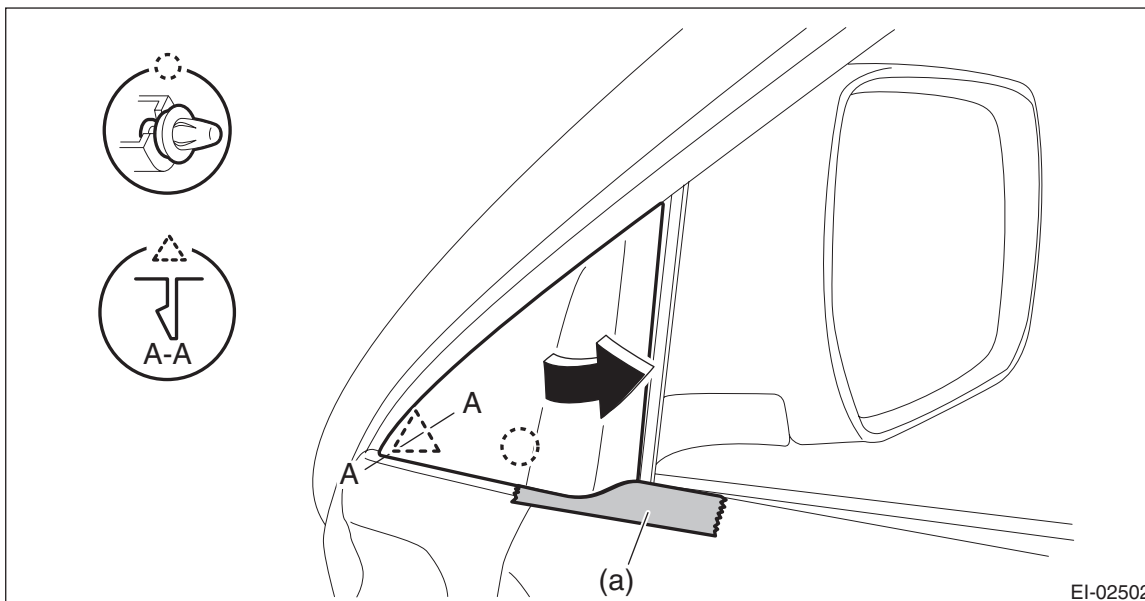


- 3) Disconnect the connector and remove the lumbar switch assembly.



## 3. SEAT MEMORY SWITCH

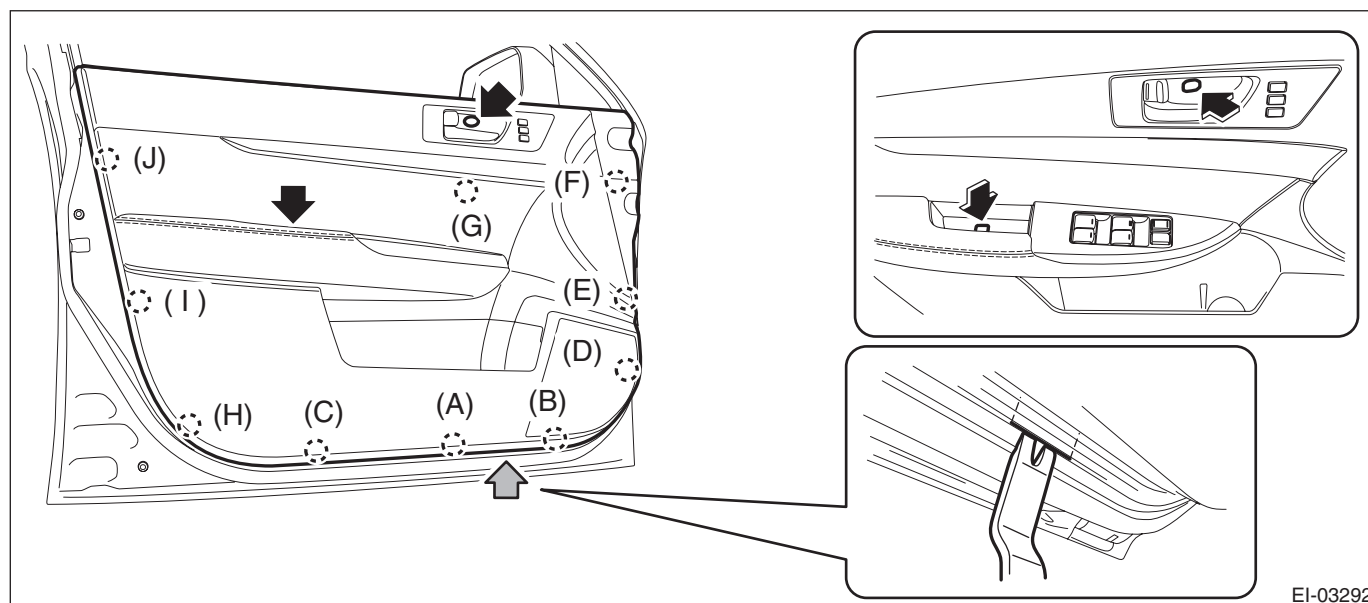
- 1) Disconnect the ground cable from battery.
- 2) Remove the gusset cover.
  - (1) Attach the protective tape (a) to the door trim.
  - (2) Release the clips and claws, then detach the gusset cover.



- 3) Remove the door trim assembly.
  - (1) Open the cover and remove the screw.
  - (2) Remove the clips in the order of (A) to (J) and remove the door trim assembly from the door panel.

**CAUTION:**

**When removing the door trim, be sure to remove the clips in the correct order. Forcibly removing clips may damage the door panel assembly.**



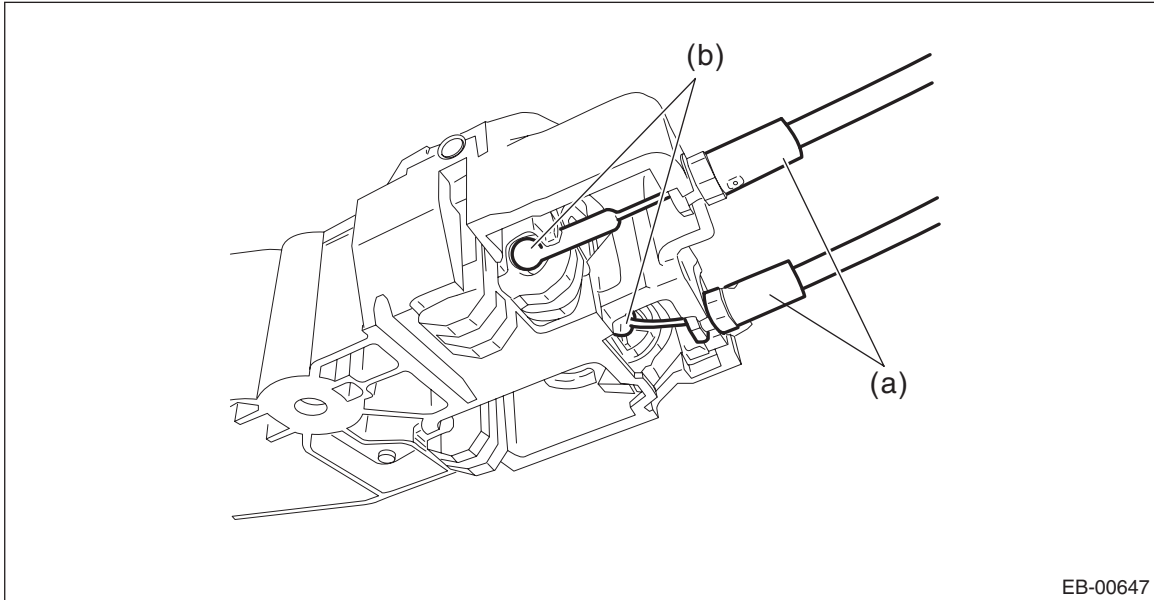
**NOTE:**

Insert a plastic clip remover into the slit at the bottom of the door trim, to lift the door trim.

# Power Seat System

## SEATS

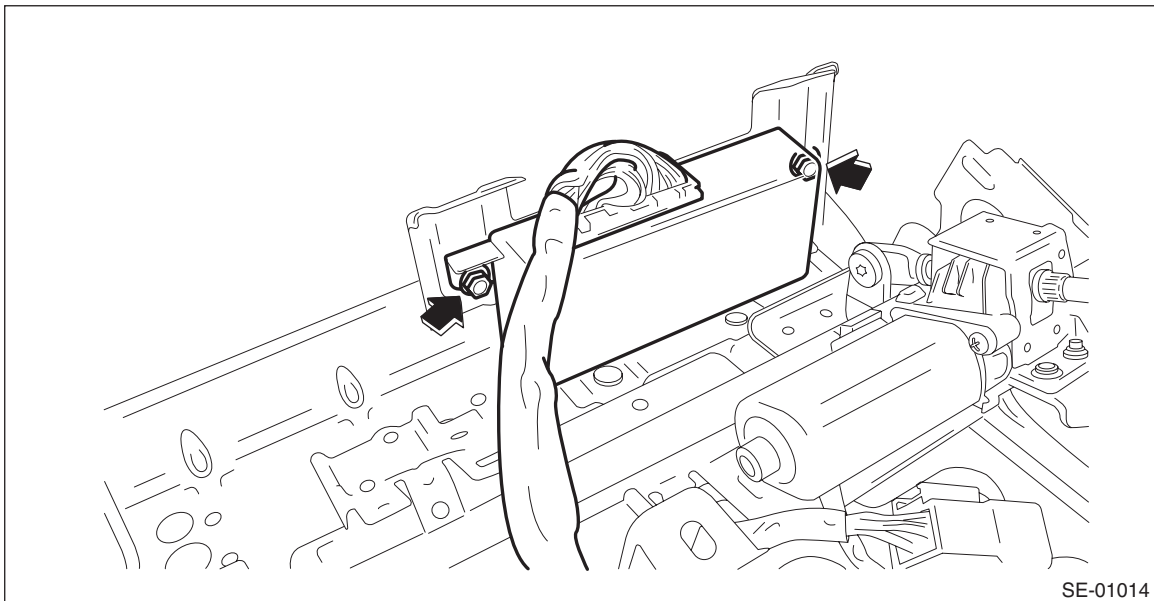
- (3) Remove the cables (a) and (b) from the cable holder of inner remote.



- (4) Disconnect the harness connector and remove the door trim assembly.
- 4) Release the claws, and remove the seat memory switch assembly.

### 4. POWER SEAT CONTROL MODULE (SEAT WITH MEMORY FUNCTION)

- 1) Raise the seat cushion by operating the switch.
- 2) Remove the front seat from the vehicle.
- 3) Remove the power seat control module.
  - (1) Release the hooks on seat front and turn over the cushion cover.
  - (2) Remove the nuts, and remove the power seat control module.



## B: INSTALLATION

Install each part in the reverse order of removal.

### **Tightening torque:**

**Power seat control module: 5.9 N·m (0.60 kgf-m, 4.4 ft-lb)**

### NOTE:

- The seat with memory function must be initialized after installed. <Ref. to SE-77, ADJUSTMENT, Power Seat System.>
- After replacing a seat with memory function and the power seat control module, check the following items.
  1. Memory is reloaded when the ignition is ON and the select lever is shifted to “P” range.
  2. Memory is not reloaded even if the seat memory switch is pressed, when the ignition is ON and the select lever is set to other than “P” range.
  3. Memory is reloaded when the ignition is OFF and the driver’s door inner switch is pressed within 45 seconds after the door is opened.
  4. Memory is reloaded automatically when the ignition is OFF and the driver’s door is opened after unlocked by access key. (model with smart key interlock function)

## C: INSPECTION

### 1. WIRING DIAGRAM

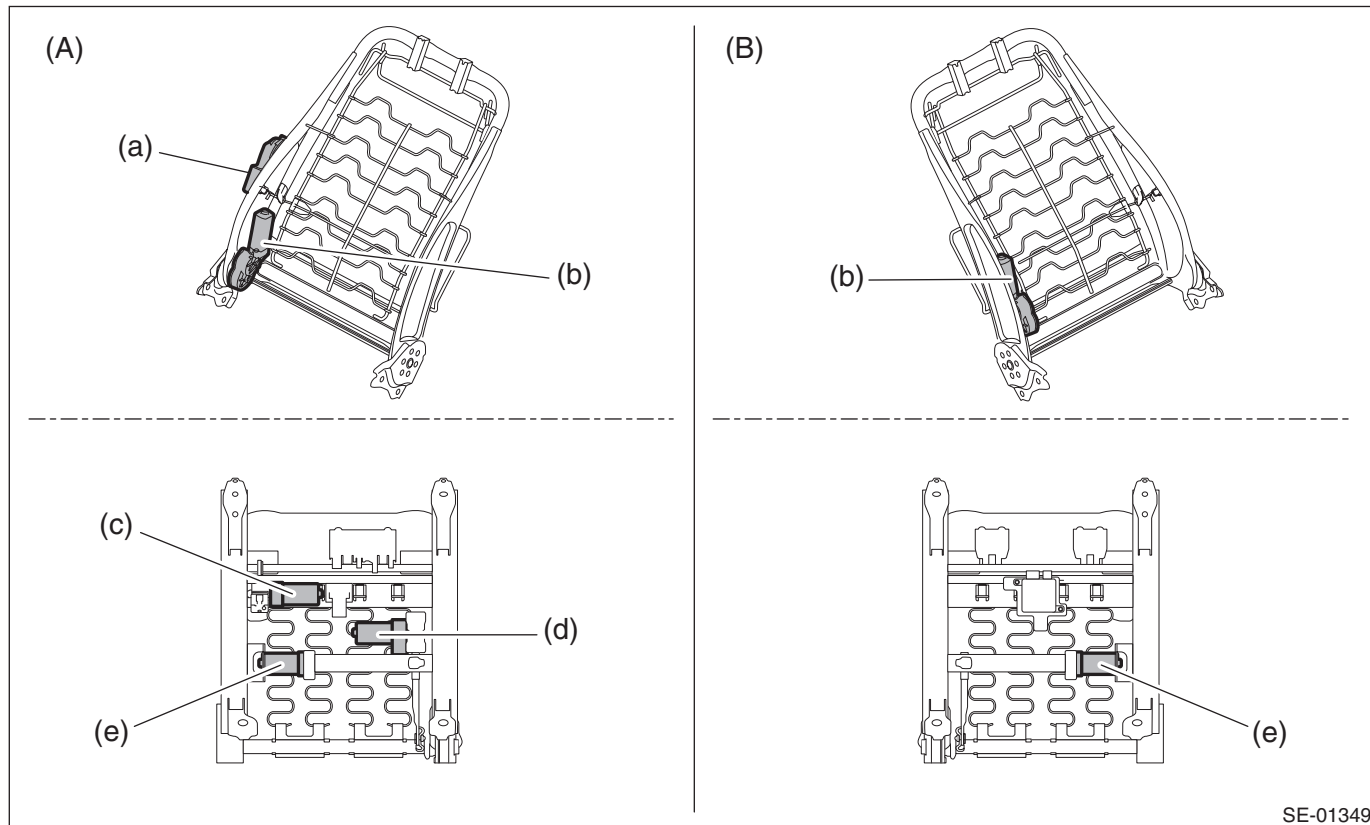
Refer to “Power Seat” in WI section.

- Driver’s seat (without memory): <Ref. to WI-233, WITHOUT MEMORY, WIRING DIAGRAM, Power Seat System.>
- Driver’s seat (with memory): <Ref. to WI-235, WITH MEMORY, WIRING DIAGRAM, Power Seat System.>
- Passenger’s seat: <Ref. to WI-233, WIRING DIAGRAM, Power Seat System.>

# Power Seat System

SEATS

## 2. NOTE



(A) Driver's seat

(B) Passenger's seat

(a) Lumber motor

(c) Tilt motor

(e) Slide motor

(b) Reclining motor

(d) Lifter motor

## 3. TROUBLE SYMPTOM

- Without memory function

Symptoms	Criteria
All functions do not operate. <Ref. to SE-67, ALL FUNCTIONS DO NOT OPERATE (WITHOUT MEMORY), INSPECTION, Power Seat System.>	<ul style="list-style-type: none"> <li>Power seat switch</li> <li>Lumbar switch</li> <li>Power seat harness</li> <li>Body harness</li> </ul>
A part of function does not operate. <Ref. to SE-67, SOME MOTORS DO NOT OPERATE (WITHOUT MEMORY), INSPECTION, Power Seat System.>	<ul style="list-style-type: none"> <li>Power seat switch</li> <li>Lumbar switch</li> <li>Power seat harness</li> <li>Relevant motor</li> </ul>

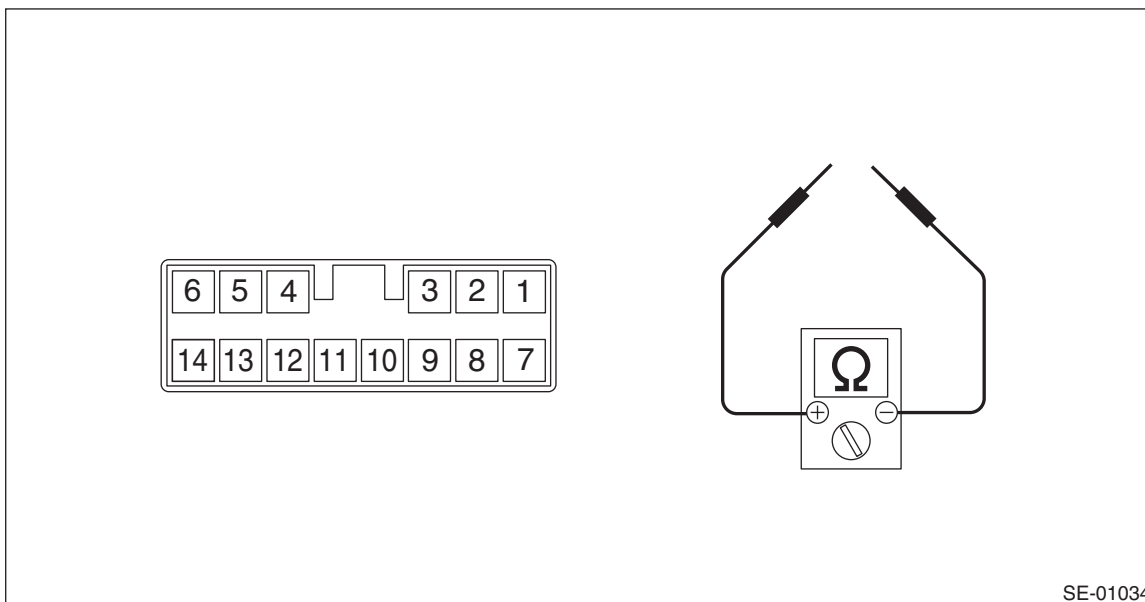
• With memory function

Symptoms	Criteria
Does not operate by manual operation. <Ref. to SE-70, IT DOES NOT FUNCTION WITH MANUAL OPERATION (WITH MEMORY), INSPECTION, Power Seat System.>	<ul style="list-style-type: none"> <li>• Power seat switch</li> <li>• Lumbar switch</li> <li>• Power seat harness</li> <li>• Body harness</li> <li>• Relevant motor and encoder</li> </ul>
A part of function does not operate. <Ref. to SE-71, SOME MOTORS DO NOT OPERATE (WITH MEMORY), INSPECTION, Power Seat System.>	<ul style="list-style-type: none"> <li>• Power seat switch</li> <li>• Lumbar switch</li> <li>• Power seat harness</li> <li>• Relevant motor and encoder</li> <li>• Power seat control module</li> </ul>
Fails to store the location to the memory <Ref. to SE-75, UNABLE TO SET POSITIONS INTO MEMORY (WITH MEMORY), INSPECTION, Power Seat System.>	<ul style="list-style-type: none"> <li>• Memory switch</li> <li>• Power seat harness</li> <li>• Power seat control module</li> </ul>
Restoring operation is impossible <Ref. to SE-75, UNABLE TO PERFORM THE RELOADING OPERATION (DRIVER'S SEAT WITH MEMORY), INSPECTION, Power Seat System.>	<ul style="list-style-type: none"> <li>• Memory switch</li> <li>• Power seat control module</li> <li>• Motor and encoder</li> <li>• Power seat harness</li> </ul>
No interlock with smart keyless <Ref. to SE-76, NO INTERLOCK WITH SMART KEYLESS, INSPECTION, Power Seat System.>	<ul style="list-style-type: none"> <li>• Body integrated unit</li> <li>• Power seat control module</li> <li>• Motor and encoder</li> <li>• Power seat harness</li> </ul>
Initial setting is impossible <Ref. to SE-77, UNABLE TO PERFORM INITIALIZATION, INSPECTION, Power Seat System.>	<ul style="list-style-type: none"> <li>• Power seat harness</li> <li>• Power seat control module</li> </ul>

## 4. CHECK POWER SEAT SWITCH

• Without memory function

Measure resistance between terminals while operating each switch.



# Power Seat System

## SEATS

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- Driver's seat

Switch position	Terminal No.	Standard
Slide forward	7 and 14 8 and 13	Less than 10 Ω
Slide rearward	7 and 13 8 and 14	Less than 10 Ω
Tilt up	7 and 2 8 and 1	Less than 10 Ω
Tilt down	7 and 1 8 and 2	Less than 10 Ω
Lifter up	7 and 5 8 and 6	Less than 10 Ω
Lifter down	7 and 6 8 and 5	Less than 10 Ω
Reclining forward	7 and 3 8 and 4	Less than 10 Ω
Reclining rearward	7 and 4 8 and 3	Less than 10 Ω

- Passenger's seat

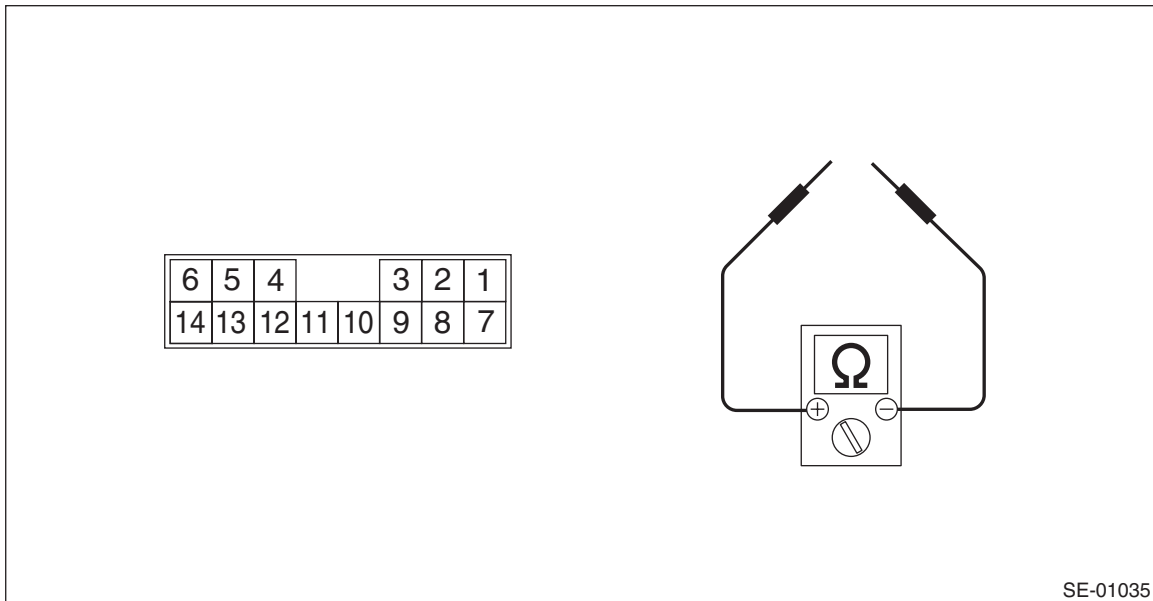
Switch position	Terminal No.	Standard
Slide forward	7 and 13 8 and 14	Less than 10 Ω
Slide rearward	7 and 14 8 and 13	Less than 10 Ω
Reclining forward	7 and 4 8 and 3	Less than 10 Ω
Reclining rearward	7 and 3 8 and 4	Less than 10 Ω

Replace the power seat switch if the inspection result is not within the standard value.



- With memory function

Measure resistance between terminals while operating each switch.



Switch position	Terminal No.	Standard
Slide forward	13 and 7	Less than 10 Ω
Slide rearward	14 and 7	Less than 10 Ω
Tilt up	2 and 7	Less than 10 Ω
Tilt down	1 and 7	Less than 10 Ω
Lifter up	5 and 7	Less than 10 Ω
Lifter down	6 and 7	Less than 10 Ω
Reclining forward	4 and 7	Less than 10 Ω
Reclining rearward	3 and 7	Less than 10 Ω

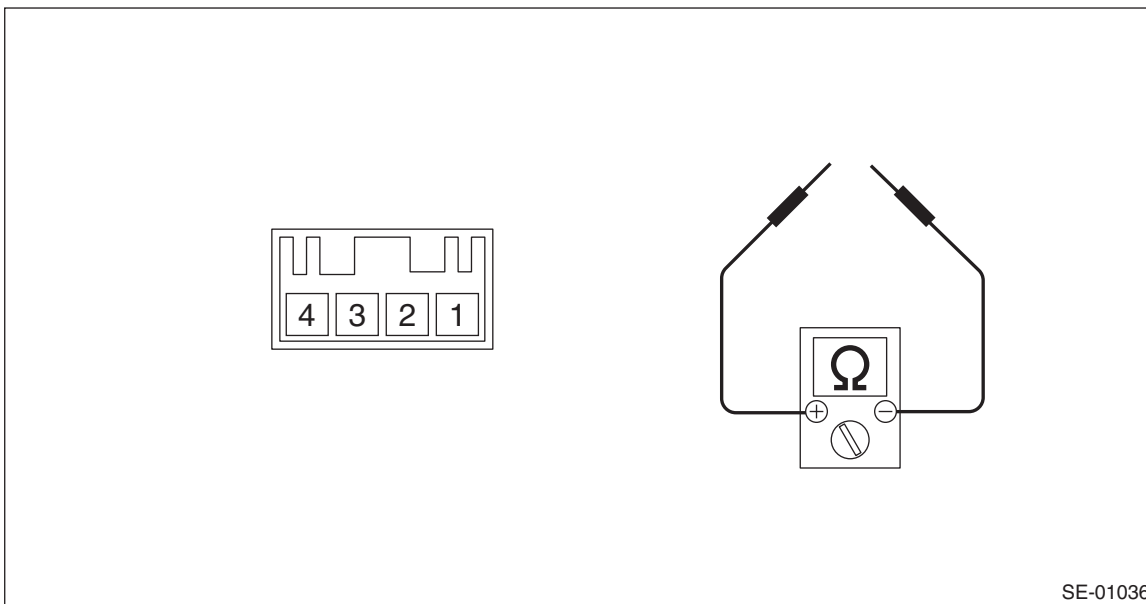
Replace the power seat switch if the inspection result is not within the standard value.

# Power Seat System

SEATS

## 5. CHECK LUMBAR SWITCH

Measure resistance between terminals while operating each switch.

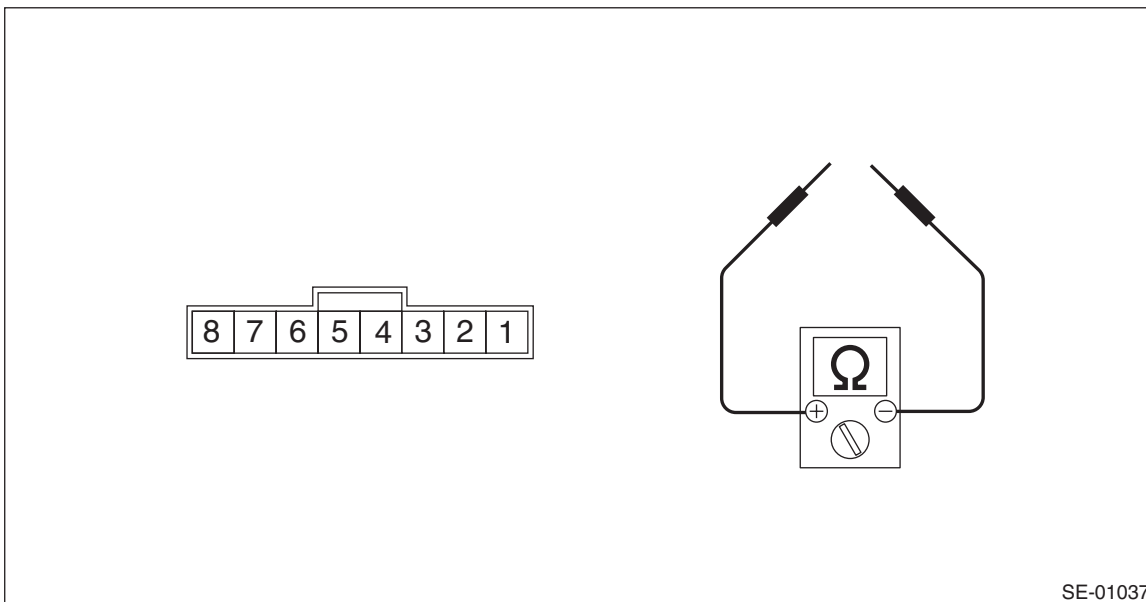


Switch position	Terminal No.	Standard
Lumbar forward	1 and 4	Less than 10 Ω
	2 and 3	
Lumbar backward	1 and 3	Less than 10 Ω
	2 and 4	

Replace the lumbar switch if the inspection result is not within the standard value.

## 6. CHECK MEMORY SWITCH (WITH MEMORY FUNCTION)

Measure resistance between terminals while operating each switch.



Switch position	Terminal No.	Standard
Memory 1	2 and 1	Less than 10 Ω
Memory 2	3 and 1	Less than 10 Ω
Set	8 and 1	Less than 10 Ω

Replace the memory switch if the inspection result is not within the standard value.

## 7. ALL FUNCTIONS DO NOT OPERATE (WITHOUT MEMORY)

Step	Check	Yes	No
<b>1</b> <b>CHECK SEAT FUNCTIONS.</b> Operate each power seat switch and check that each power seat function operates normally.	Does all function fails to operate?	Go to step 2.	Check the motor which does not operate. <Ref. to SE-67, SOME MOTORS DO NOT OPERATE (WITHOUT MEMORY), INSPECTION, Power Seat System.>
<b>2</b> <b>CHECK FUSE.</b> Check the power seat fuse inside the fuse box.	Is the fuse blown out?	Replace the appropriate fuse.	Go to step 3.
<b>3</b> <b>CHECK POWER SUPPLY CIRCUIT.</b> 1) Disconnect the connector of power seat switch assembly. 2) Measure the voltage between harness connector and chassis ground. <i>Connector &amp; terminal</i> <i>Driver's seat</i> (R369) No. 7 (+) — Chassis ground (-): <i>Passenger's seat</i> (R190) No. 7 (+) — Chassis ground (-):	Is the voltage 10 V or more?	Go to step 4.	Check body harness.
<b>4</b> <b>CHECK POWER SUPPLY CIRCUIT.</b> Measure the resistance between power seat switch harness connector and chassis ground. <i>Connector &amp; terminal</i> <i>Driver's seat</i> (R369) No. 8 — Chassis ground: <i>Passenger's seat</i> (R190) No. 8 — Chassis ground:	Is the resistance less than 10 $\Omega$ ?	Replace the power seat switch assembly.	Check body harness.

## 8. SOME MOTORS DO NOT OPERATE (WITHOUT MEMORY)

- Slide operation failure

Step	Check	Yes	No
<b>1</b> <b>CHECK SWITCH.</b> 1) Disconnect the connector of power seat switch assembly. 2) Measure the resistance between connector terminals when moving the switch to slide forward and slide backward. <Ref. to SE-63, CHECK POWER SEAT SWITCH, INSPECTION, Power Seat System.>	Is there any problem on the inspection result?	Go to step 2.	Replace the power seat switch assembly.
<b>2</b> <b>CHECK HARNESS.</b> 1) Disconnect the power seat switch connector and slide motor connector. 2) Measure the resistance between power seat switch connector and slide motor connector. <i>Connector &amp; terminal</i> <i>Driver's seat</i> (R370) No. 2 — (R369) No. 13: (R370) No. 1 — (R369) No. 14: <i>Passenger's seat</i> (R192) No. 2 — (R190) No. 13: (R192) No. 1 — (R190) No. 14:	Is the resistance less than 10 $\Omega$ ?	Go to step 3.	Check power seat harness.

# Power Seat System

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Step	Check	Yes	No
<b>3 CHECK SLIDE MOTOR.</b> 1) Connect the power seat switch connector and slide motor connector. 2) Apply 12 V to the slide motor and check the motor rotation. <b>Connector &amp; terminal</b> <b>Driver's seat</b> (R369) No. 13 (+) — (R369) No. 14 (-): (R369) No. 14 (+) — (R369) No. 13 (-): <b>Passenger's seat</b> (R190) No. 13 (+) — (R190) No. 14 (-): (R190) No. 14 (+) — (R190) No. 13 (-):	Does the motor rotate normally?	Check for temporary poor contact or mechanical trouble in slide rail.	Slide motor problem. Replace the seat cushion frame assembly.

- Malfunction of tilt operation

Step	Check	Yes	No
<b>1 CHECK SWITCH.</b> 1) Disconnect the connector of power seat switch assembly. 2) Measure the resistance between connector terminals when moving the switch to tilt up and tilt down. <Ref. to SE-63, CHECK POWER SEAT SWITCH, INSPECTION, Power Seat System.>	Is there any problem on the inspection result?	Go to step 2.	Replace the power seat switch assembly.
<b>2 CHECK HARNESS.</b> 1) Disconnect the power seat switch connector and tilt motor connector. 2) Measure the resistance between power seat switch connector and tilt motor connector. <b>Connector &amp; terminal</b> <b>Driver's seat</b> (R372) No. 2 — (R369) No. 1: (R372) No. 1 — (R369) No. 2:	Is the resistance less than 10 Ω?	Go to step 3.	Check power seat harness.
<b>3 CHECK TILT MOTOR.</b> 1) Connect the power seat switch connector and tilt motor connector. 2) Apply 12 V to the tilt motor and check the motor rotation. <b>Connector &amp; terminal</b> <b>Driver's seat</b> (R369) No. 1 (+) — (R369) No. 2 (-): (R369) No. 2 (+) — (R369) No. 1 (-):	Does the motor rotate normally?	Check for temporary poor contact or mechanical trouble in tilt mechanism.	Tilt motor problem. Replace the seat cushion frame assembly.

- Malfunction of lifter operation

Step	Check	Yes	No
<b>1 CHECK SWITCH.</b> 1) Disconnect the connector of power seat switch assembly. 2) Measure the resistance between connector terminals when moving the switch to lifter up and lifter down. <Ref. to SE-63, CHECK POWER SEAT SWITCH, INSPECTION, Power Seat System.>	Is there any problem on the inspection result?	Go to step 2.	Replace the power seat switch assembly.

# Power Seat System

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Step	Check	Yes	No
<b>2</b> <b>CHECK HARNESS.</b> 1) Disconnect the power seat switch connector and lifter motor connector. 2) Measure the resistance between power seat switch connector and lifter motor connector. <b>Connector &amp; terminal</b> <b>Driver's seat</b> (R371) No. 2 — (R369) No. 6: (R371) No. 1 — (R369) No. 5:	Is the resistance less than 10 Ω?	Go to step 3.	Check power seat harness.
<b>3</b> <b>CHECK LIFTER MOTOR.</b> 1) Connect the power seat switch connector and lifter motor connector. 2) Apply 12 V voltage to the lifter motor and check the motor rotation. <b>Connector &amp; terminal</b> <b>Driver's seat</b> (R369) No. 6 (+) — (R369) No. 5 (-): (R369) No. 5 (+) — (R369) No. 6 (-):	Does the motor rotate normally?	Check for temporary poor contact or mechanical trouble in lifter mechanism.	Lifter motor problem. Replace the seat cushion frame assembly.

• Malfunction of reclining operation

Step	Check	Yes	No
<b>1</b> <b>CHECK SWITCH.</b> 1) Disconnect the connector of power seat switch assembly. 2) Measure the resistance between connector terminals when moving the switch to reclining forward and reclining backward. <Ref. to SE-63, CHECK POWER SEAT SWITCH, INSPECTION, Power Seat System.>	Is there any problem on the inspection result?	Go to step 2.	Replace the power seat switch assembly.
<b>2</b> <b>CHECK HARNESS.</b> 1) Disconnect the power seat switch connector and reclining motor connector. 2) Measure the resistance between power seat switch connector and reclining motor connector. <b>Connector &amp; terminal</b> <b>Driver's seat</b> (R375) No. 2 — (R369) No. 4: (R375) No. 1 — (R369) No. 3: <b>Passenger's seat</b> (R368) No. 2 — (R190) No. 4: (R368) No. 1 — (R190) No. 3:	Is the resistance less than 10 Ω?	Go to step 3.	Check power seat harness.
<b>3</b> <b>CHECK RECLINING MOTOR.</b> 1) Connect the power seat switch connector and reclining motor connector. 2) Apply 12 V voltage to the reclining motor and check the motor rotation. <b>Connector &amp; terminal</b> <b>Driver's seat</b> (R369) No. 4 (+) — (R369) No. 3 (-): (R369) No. 3 (+) — (R369) No. 4 (-): <b>Passenger's seat</b> (R190) No. 4 (+) — (R190) No. 3 (-): (R190) No. 3 (+) — (R190) No. 4 (-):	Does the motor rotate normally?	Check for temporary poor contact or mechanical trouble in reclining hinge.	Reclining motor problem. Replace the backrest frame assembly.

# Power Seat System

## SEATS

- Malfunction of lumbar operation

Step	Check	Yes	No
<b>1 CHECK SWITCH.</b> 1) Disconnect the connector of lumbar switch assembly. 2) Measure the resistance between connector terminals when moving the switch to lumbar forward and lumbar backward. <Ref. to SE-66, CHECK LUMBAR SWITCH, INSPECTION, Power Seat System.>	Is there any problem on the inspection result?	Go to step 2.	Replace the lumbar switch assembly.
<b>2 CHECK HARNESS.</b> 1) Disconnect the lumbar switch connector and lumbar motor connector. 2) Measure the resistance between lumbar switch connector and lumbar motor connector. <b>Connector &amp; terminal</b> <b>Driver's seat</b> <b>(R379) No. 1 — (R376) No. 4:</b> <b>(R379) No. 2 — (R376) No. 3:</b>	Is the resistance less than 10 Ω?	Go to step 3.	Check power seat harness.
<b>3 CHECK LUMBAR MOTOR.</b> 1) Connect the lumbar switch connector and lumbar motor connector. 2) Apply 12 V voltage to the lumbar motor and check the motor rotation. <b>Connector &amp; terminal</b> <b>Driver's seat</b> <b>(R376) No. 4 (+) — (R376) No. 3 (-):</b> <b>(R376) No. 3 (+) — (R376) No. 4 (-):</b>	Does the motor rotate normally?	Check for temporary poor contact or mechanical trouble in lumbar mechanism.	Lumbar motor problem. Replace the backrest frame assembly.

## 9. IT DOES NOT FUNCTION WITH MANUAL OPERATION (WITH MEMORY)

Step	Check	Yes	No
<b>1 CHECK SEAT FUNCTIONS.</b> Operate each power seat switch and check that each power seat function operates normally.	Does all function fail to operate?	Go to step 2.	Check the motor which does not operate. <Ref. to SE-71, SOME MOTORS DO NOT OPERATE (WITH MEMORY), INSPECTION, Power Seat System.>
<b>2 CHECK FUSE.</b> Check the power seat fuse inside the fuse box.	Is the fuse blown out?	Replace the appropriate fuse.	Go to step 3.
<b>3 CHECK POWER SUPPLY CIRCUIT.</b> 1) Disconnect the power seat control module connector. 2) Measure the voltage between harness connector and chassis ground. <b>Connector &amp; terminal</b> <b>(R388) No. 10 (+) — Chassis ground (-):</b> <b>(R389) No. 8 (+) — Chassis ground (-):</b> <b>(R389) No. 3 (+) — Chassis ground (-):</b>	Is the voltage 10 V or more?	Go to step 4.	Check body harness.
<b>4 CHECK POWER SUPPLY CIRCUIT.</b> Measure the resistance between power seat control module harness connector and chassis ground. <b>Connector &amp; terminal</b> <b>(R389) No. 14 — Chassis ground:</b> <b>(R389) No. 12 — Chassis ground:</b>	Is the resistance less than 10 Ω?	Go to step 5.	Check body harness.

# Power Seat System

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Step	Check	Yes	No
<b>5 CHECK IGNITION CIRCUIT.</b> Measure the voltage between harness connector and chassis ground while turning the ignition switch to ON. <b>Connector &amp; terminal</b> <b>(R388) No. 11 (+) — Chassis ground (-):</b>	Is the voltage 10 V or more?	Go to step 6.	Check body harness.
<b>6 CHECK TRANSMISSION CIRCUITS.</b> Measure the resistance between harness connector and chassis ground under the following condition. <ul style="list-style-type: none"> <li>• AT/CVT model: Shift the select lever to "P" position.</li> <li>• MT model: Pull parking brake lever.</li> </ul> <b>Connector &amp; terminal</b> <b>(R388) No. 12 — Chassis ground:</b>	Is the resistance less than 10 $\Omega$ ?	Go to step 7.	Check body harness.
<b>7 CHECK SWITCH.</b> 1) Disconnect the connector of power seat switch assembly. 2) Measure the resistance between connector terminals when moving the switch to reclining forward and reclining backward. <Ref. to SE-63, CHECK POWER SEAT SWITCH, INSPECTION, Power Seat System.>	Is there any problem on the inspection result?	Replace the power seat control module.	Replace the power seat switch assembly.

## 10.SOME MOTORS DO NOT OPERATE (WITH MEMORY)

- Slide operation failure

Step	Check	Yes	No
<b>1 CHECK OPERATION.</b> Check the slide motor rotation while moving the switch to slide forward and slide backward.	Does the motor operate at least 1 second when the switch is operated?	Go to step 2.	Encoder defec-tion. Replace the seat cushion frame assembly.
<b>2 CHECK SWITCH.</b> 1) Disconnect the harness connector of power seat switch assembly. 2) Measure the resistance between connector terminals when moving the switch to slide forward and slide backward. <Ref. to SE-63, CHECK POWER SEAT SWITCH, INSPECTION, Power Seat System.>	Is the inspection result normal?	Go to step 3.	Replace the power seat switch assembly.
<b>3 CHECK HARNESS.</b> 1) Disconnect the power seat switch connector and slide motor connector. 2) Measure the resistance between the power seat control module connector and power seat switch connector. <b>Connector &amp; terminal</b> <b>(R388) No. 7 — (R369) No. 13:</b> <b>(R388) No. 6 — (R369) No. 14:</b>	Is the resistance less than 10 $\Omega$ ?	Go to step 4.	Check power seat harness.
<b>4 CHECK HARNESS.</b> 1) Disconnect the slide motor connector. 2) Measure the resistance between power seat control module connector and slide motor connector. <b>Connector &amp; terminal</b> <b>(R389) No. 15 — (R370) No. 2:</b> <b>(R389) No. 16 — (R370) No. 1:</b>	Is the resistance less than 10 $\Omega$ ?	Go to step 5.	Check power seat harness.

# Power Seat System

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	Step	Check	Yes	No
5	<b>CHECK SLIDE MOTOR.</b> 1) Connect the slide motor connector. 2) Apply battery voltage to the power seat control module connector and check the motor rotation. <b>Connector &amp; terminal</b> <b>(R389) No. 15 (+) — (R389) No. 16 (-):</b> <b>(R389) No. 16 (+) — (R389) No. 15 (-):</b>	Does the motor rotate normally?	Replace the power seat control module.	Slide motor problem. Replace the seat cushion frame assembly.

- Malfunction of tilt operation

	Step	Check	Yes	No
1	<b>CHECK OPERATION.</b> Check the tilt motor rotation while moving the switch to tilt up and tilt down.	Does the motor operate at least 1 second when the switch is operated?	Go to step 2.	Encoder deflection. Replace the seat cushion frame assembly.
2	<b>CHECK SWITCH.</b> 1) Disconnect the harness connector of power seat switch assembly. 2) Measure the resistance between connector terminals when moving the switch to tilt up and tilt down. <Ref. to SE-63, CHECK POWER SEAT SWITCH, INSPECTION, Power Seat System.>	Is the inspection result normal?	Go to step 3.	Replace the power seat switch assembly.
3	<b>CHECK HARNESS.</b> 1) Disconnect the power seat switch connector and tilt motor connector. 2) Measure the resistance between the power seat control module connector and power seat switch connector. <b>Connector &amp; terminal</b> <b>(R388) No. 5 — (R369) No. 2:</b> <b>(R388) No. 4 — (R369) No. 1:</b>	Is the resistance less than 10 $\Omega$ ?	Go to step 4.	Check power seat harness.
4	<b>CHECK HARNESS.</b> 1) Disconnect the tilt motor connector. 2) Measure the resistance between power seat control module connector and tilt motor connector. <b>Connector &amp; terminal</b> <b>(R389) No. 5 — (R372) No. 2:</b> <b>(R389) No. 4 — (R372) No. 1:</b>	Is the resistance less than 10 $\Omega$ ?	Go to step 5.	Check power seat harness.
5	<b>CHECK TILT MOTOR.</b> 1) Connect the tilt motor connector. 2) Apply battery voltage to the power seat control module connector and check the motor rotation. <b>Connector &amp; terminal</b> <b>(R389) No. 5 (+) — (R389) No. 4 (-):</b> <b>(R389) No. 4 (+) — (R389) No. 5 (-):</b>	Does the motor rotate normally?	Replace the power seat control module.	Tilt motor problem. Replace the seat cushion frame assembly.



• Malfunction of lifter operation

Step	Check	Yes	No
<b>1 CHECK OPERATION.</b> Check the lifter motor rotation while turning the switch to lifter up and lifter down.	Does the motor operate at least 1 second when the switch is operated?	Go to step 2.	Encoder defec-tion. Replace the seat cushion frame assembly.
<b>2 CHECK SWITCH.</b> 1) Disconnect the harness connector of power seat switch assembly. 2) Measure the resistance between connector terminals when moving the switch to lifter up and lifter down. <Ref. to SE-63, CHECK POWER SEAT SWITCH, INSPECTION, Power Seat System.>	Is the inspection result normal?	Go to step 3.	Replace the power seat switch assem-bly.
<b>3 CHECK HARNESS.</b> 1) Disconnect the power seat switch connector and lifter motor connector. 2) Measure the resistance between the power seat control module connector and power seat switch connector. <i>Connector &amp; terminal</i> <i>(R388) No. 3 — (R369) No. 5:</i> <i>(R388) No. 2 — (R369) No. 6:</i>	Is the resistance less than 10 Ω?	Go to step 4.	Check power seat harness.
<b>4 CHECK HARNESS.</b> 1) Disconnect the lifter motor connector. 2) Measure the resistance between power seat control module connector and lifter motor connector. <i>Connector &amp; terminal</i> <i>(R389) No. 2 — (R371) No. 2:</i> <i>(R389) No. 1 — (R371) No. 1:</i>	Is the resistance less than 10 Ω?	Go to step 5.	Check power seat harness.
<b>5 CHECK LIFTER MOTOR.</b> 1) Connect the lifter motor connector. 2) Apply battery voltage to the power seat control module connector and check the motor rotation. <i>Connector &amp; terminal</i> <i>(R389) No. 2 (+) — (R389) No. 1 (-):</i> <i>(R389) No. 1 (+) — (R389) No. 2 (-):</i>	Does the motor rotate nor-mally?	Replace the power seat control mod-ule.	Lifter motor prob-lem. Replace the seat cushion frame assembly.

• Malfunction of reclining operation

Step	Check	Yes	No
<b>1 CHECK OPERATION.</b> Check the reclining motor rotation while moving the switch to reclining forward and reclining backward.	Does the motor operate at least 1 second when the switch is operated?	Go to step 2.	Encoder defec-tion. Replace the backrest frame assembly.
<b>2 CHECK SWITCH.</b> 1) Disconnect the harness connector of power seat switch assembly. 2) Measure the resistance between connector terminals when moving the switch to reclining forward and reclining backward. <Ref. to SE-63, CHECK POWER SEAT SWITCH, INSPEC-TION, Power Seat System.>	Is the inspection result normal?	Go to step 3.	Replace the power seat switch assem-bly.

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Step	Check	Yes	No
<b>3 CHECK HARNESS.</b> 1) Disconnect the power seat switch connector and reclining motor connector. 2) Measure the resistance between the power seat control module connector and power seat switch connector. <b>Connector &amp; terminal</b> <b>(R388) No. 9 — (R369) No. 4:</b> <b>(R388) No. 8 — (R369) No. 3:</b>	Is the resistance less than 10 Ω?	Go to step 4.	Check power seat harness.
<b>4 CHECK HARNESS.</b> 1) Disconnect the slide motor connector. 2) Measure the resistance between power seat control module connector and reclining motor connector. <b>Connector &amp; terminal</b> <b>(R389) No. 6 — (R375) No. 1:</b> <b>(R389) No. 7 — (R375) No. 2:</b>	Is the resistance less than 10 Ω?	Go to step 5.	Check power seat harness.
<b>5 CHECK RECLINING MOTOR.</b> 1) Connect the slide motor connector. 2) Apply battery voltage to the power seat control module connector and check the motor rotation. <b>Connector &amp; terminal</b> <b>(R389) No. 6 (+) — (R389) No. 7 (-):</b> <b>(R389) No. 7 (+) — (R389) No. 6 (-):</b>	Does the motor rotate normally?	Replace the power seat control module.	Reclining motor problem. Replace the backrest frame assembly.

• Malfunction of lumbar operation

Step	Check	Yes	No
<b>1 CHECK SWITCH.</b> 1) Disconnect the connector of lumbar switch assembly. 2) Measure the resistance between connector terminals when moving the switch to lumbar forward and lumbar backward. <Ref. to SE-66, CHECK LUMBAR SWITCH, INSPECTION, Power Seat System.>	Is the inspection result normal?	Go to step 2.	Replace the lumbar switch assembly.
<b>2 CHECK HARNESS.</b> 1) Disconnect the lumbar switch connector and lumbar motor connector. 2) Measure the resistance between lumbar switch connector and lumbar motor connector. <b>Connector &amp; terminal</b> <b>(R376) No. 4 — (R379) No. 1:</b> <b>(R376) No. 3 — (R379) No. 2:</b>	Is the resistance less than 10 Ω?	Go to step 3.	Check power seat harness.
<b>3 CHECK LUMBAR MOTOR.</b> 1) Connect the lumbar switch connector and lumbar motor connector. 2) Apply 12 V voltage to the lumbar motor and check the motor rotation. <b>Connector &amp; terminal</b> <b>(R376) No. 4 (+) — (R376) No. 3 (-):</b> <b>(R376) No. 3 (+) — (R376) No. 4 (-):</b>	Does the motor rotate normally?	Check for temporary poor contact or mechanical trouble in lumbar mechanism.	Lumbar motor problem. Replace the backrest frame assembly.

## 11.UNABLE TO SET POSITIONS INTO MEMORY (WITH MEMORY)

Step	Check	Yes	No
<b>1 CHECK SWITCH.</b> 1) Disconnect the harness connector of memory switch assembly. 2) Check memory switch. <Ref. to SE-66, CHECK MEMORY SWITCH (WITH MEMORY FUNCTION), INSPECTION, Power Seat System.>	Is there any problem on the inspection result?	Go to step 2.	Replace the memory switch assembly.
<b>2 CHECK HARNESS.</b> Measure the resistance between the memory switch connector and power seat control module connector. <i>Connector &amp; terminal</i> <i>(R388) No. 13 — (D143) No. 2:</i> <i>(R388) No. 14 — (D143) No. 3:</i> <i>(R388) No. 15 — (D143) No. 8:</i>	Is the resistance less than 10 Ω?	Go to step 3.	Check power seat harness.
<b>3 CHECK COMBINATION METER.</b> Turn the ignition switch to ON and check the indicator light inside the meter. • AT/CVT model: Select lever shifted to “P” position.	Does the indicator display “P”?	Go to step 4.	Check the combination meter. <Ref. to IDI-14, INSPECTION, Combination Meter System.>
<b>4 SYSTEM INITIALIZATION.</b> Initialize memory seat system. <Ref. to SE-77, ADJUSTMENT, Power Seat System.>	Is the initialization completed successfully?	Replace the power seat control module.	<Ref. to SE-77, UNABLE TO PERFORM INITIALIZATION, INSPECTION, Power Seat System.>

## 12.UNABLE TO PERFORM THE RELOADING OPERATION (DRIVER’S SEAT WITH MEMORY)

Step	Check	Yes	No
<b>1 CHECK MEMORY FUNCTIONS.</b> Perform the memory operation of the seat position, and check the memory replay operation.	Does the seat position memory replay correctly?	Memory function is normal. It is considered that the memory was cleared because the voltage falls below the operation-ensured voltage temporarily during memory restoration or manual operation. It operates normally by registering a memory.	Go to step 2.
<b>2 CHECK MEMORY FUNCTIONS.</b> At the memory operation of step 1, check the beep sound (once).	Was it possible to confirm the beep sound?	Go to step 3.	<Ref. to SE-75, UNABLE TO SET POSITIONS INTO MEMORY (WITH MEMORY), INSPECTION, Power Seat System.>

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## SEATS

Step	Check	Yes	No
<b>3</b> <b>CHECK SWITCH.</b> 1) Disconnect the harness connector of memory switch assembly. 2) Check memory switch. <Ref. to SE-66, CHECK MEMORY SWITCH (WITH MEMORY FUNCTION), INSPECTION, Power Seat System.>	Is there any problem on the inspection result?	Go to step 4.	Replace the memory switch assembly.
<b>4</b> <b>CHECK HARNESS.</b> Measure the resistance between the memory switch connector and power seat control module connector. <b>Connector &amp; terminal</b> <b>(R388) No. 13 — (D143) No. 2:</b> <b>(R388) No. 14 — (D143) No. 3:</b> <b>(R388) No. 15 — (D143) No. 8:</b>	Is the resistance less than 10 $\Omega$ ?	Go to step 5.	Check power seat harness.
<b>5</b> <b>CHECK COMBINATION METER.</b> Turn the ignition switch to ON and check the indicator light inside the meter. • AT/CVT model: Select lever shifted to “P” position.	Does the indicator display “P”?	Go to step 6.	Check the combination meter. <Ref. to IDI-14, INSPECTION, Combination Meter System.>
<b>6</b> <b>CHECK OPERATION.</b> Operate all power seat switches to check operation of each motor.	Does each motor rotate for one second or more when operating each switch?	Replace the power seat control module.	Encoder deflection. Replace the appropriate motor as a frame assembly.

### 13.NO INTERLOCK WITH SMART KEYLESS

Step	Check	Yes	No
<b>1</b> <b>CHECK DTC.</b> Read the DTC of body integrated unit using Subaru Select Monitor.	Is a DTC detected?	Perform a check according to the DTC.	Go to step 2.
<b>2</b> <b>CHECK MEMORY FUNCTIONS.</b> Perform the memory operation of the seat position, and check the memory replay operation.	Does the seat position memory replay correctly?	Function is normal. It is considered that the memory was cleared because the voltage falls below the operation-ensured voltage temporarily during memory restoration or manual operation. It operates normally by registering a memory.	Perform the check item for “UNABLE TO PERFORM THE RELOADING OPERATION (DRIVER’S SEAT WITH MEMORY)”.

## 14.UNABLE TO PERFORM INITIALIZATION

Step	Check	Yes	No
<b>1 CHECK OPERATION.</b> Operate all power seat switches to check operation of each motor.	Does each motor rotate for one second or more when operating each switch?	Go to step 2.	Encoder defec-tion. Replace the appropriate motor as a frame assem-bly.
<b>2 CHECK SWITCH.</b> 1) Disconnect the harness connector of power seat switch assembly. 2) Measure resistance between all terminals of power seat switch assembly. <Ref. to SE-63, CHECK POWER SEAT SWITCH, INSPEC-TION, Power Seat System.>	Is there any problem on the inspection result?	Replace the power seat control mod-ule.	Replace the power seat switch assem-bly.

## D: ADJUSTMENT

### NOTE:

System calibration is necessary for driver's side seat with memory function only.

### 1. CONDITIONS FOR INITIALIZATION

The power seat control module must be initialized if the following conditions are met.

- The seat is removed from vehicle.
- Power seat control module is replaced.
- Slide rail assembly or backrest frame assembly is removed or replaced.
- Pulse generated when seat is moved do not match with the amount of actual travel. (When memory is not correctly reloaded.)

### 2. INITIALIZATION PROCEDURES

#### NOTE:

- Initialize the records inside the module by performing all the following steps regardless the item order.
  - With each seat locked\*, operating switches for 3 seconds make the buzzer sound once.
  - If initialization is done after completing all items, the buzzer sounds three times when the last operation is completed and the switch is turned on then off.
- 1) Move the seat rearward using the slide switch, and keep the seat lock\* status for three seconds or more.
  - 2) Move the seat downward using tilt switch, and keep the seat lock\* status for three seconds or more.
  - 3) Move the seat downward using lifter switch, and keep the seat lock\* status for three seconds or more.
  - 4) Move the seat forward using reclining switch, and keep the seat lock\* status for three seconds or more.
- \*: Seat lock is the status that there is no pulse output from the encoder within the specified period of time although it reaches the movable position end.

#### NOTE:

When the following conditions are met, the initializing operation is cancelled even though the procedure is carried out halfway.

- Interval between each initialization procedure of 1) to 4) exceeds 10 seconds.
- If any of initialization procedures 1) to 4) are not performed.
- The battery runs out or the voltage to the power seat control module falls out of the operation range during initialization.