# 4. Power Seat System

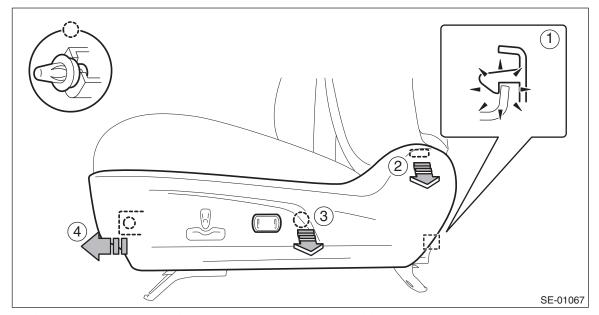
### A: REMOVAL

#### CAUTION:

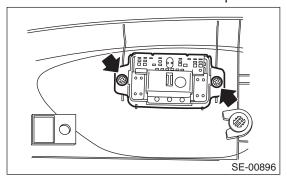
When removing the front seat, Disconnect the ground cable from battery before disconnecting the side airbag module harness connector, and wait for 60 seconds before starting the operation.

#### 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 lumber switch connectors and remove the seat side cover OUT.

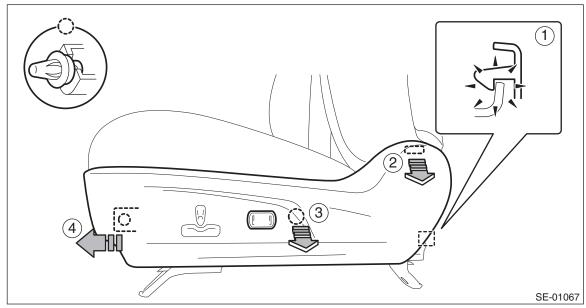


3) Remove the screws to remove the power seat switch assembly.

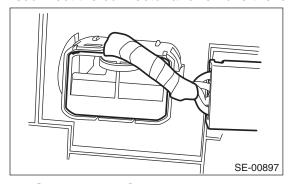


#### 2. LUMBAR SWITCH

- 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 lumber switch connectors and remove the seat side cover OUT.



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



### **B: INSTALLATION**

Install each part in the reverse order of removal.

### **C: INSPECTION**

# 1. WIRING DIAGRAM

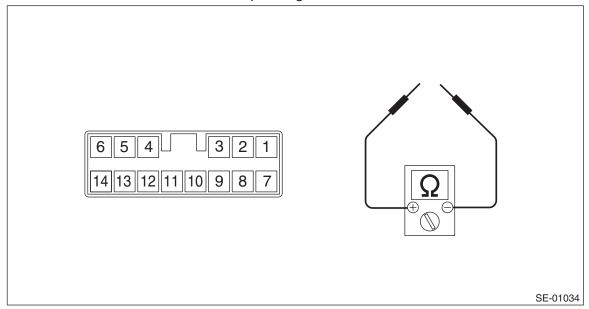
Refer to "Power Seat System" in the wiring diagram. <Ref. to WI-178, WIRING DIAGRAM, Power Seat System.>

### 2. TROUBLE SYMPTOM

Symptoms	Criteria
All functions do not operate. <ref. all="" do="" functions="" inspection,="" not="" operate.,="" power="" se-58,="" seat="" system.="" to=""></ref.>	POWER SEAT SWITCH     LUMBAR SWITCH     Power seat harness     Body harness
A part of function does not operate. <ref. do="" inspection,="" motors="" not="" operate.,="" power="" se-58,="" seat="" some="" system.="" to=""></ref.>	<ul> <li>POWER SEAT SWITCH</li> <li>LUMBAR SWITCH</li> <li>Power seat harness</li> <li>Relevant motor</li> </ul>

### 3. CHECK POWER SEAT SWITCH

Measure resistance between terminals while operating each switch.



### • Driver's side

Switch position	Terminal No.	Specification
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

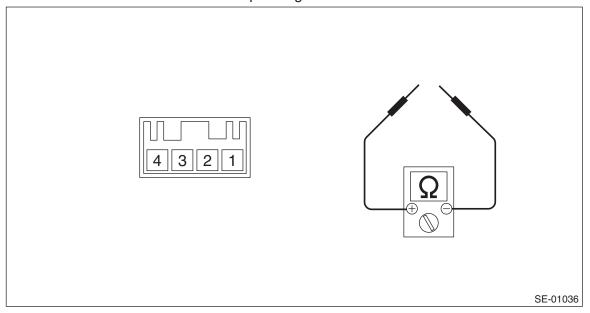
### • Passenger's side

Switch position	Terminal No.	Specification
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 $\Omega$

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

### 4. CHECK LUMBAR SWITCH

Measure resistance between terminals while operating each switch.



Switch position Terminal No.		Specification
Lumbar forward	1 and 4 2 and 3	Less than 10 $\Omega$
Lumber rearward	1 and 3 2 and 4	Less than 10 $\Omega$

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

## 5. ALL FUNCTIONS DO NOT OPERATE.

	Step	Check	Yes	No
1	CHECK SEAT FUNCTIONS.  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 motors that do not operate. <ref. se-58,<br="" to="">SOME MOTORS DO NOT OPER- ATE., INSPEC- TION, Power Seat System.&gt;</ref.>
2	CHECK FUSE.  Check the power seat fuse inside the fuse box.	Is the fuse blown out?	Replace the appropriate fuse.	Go to step 3.
3	CHECK POWER SUPPLY CIRCUIT.  1) Disconnect the connector of power seat switch assembly.  2) Measure the voltage between harness connector and chassis ground.  Connector & terminal  Driver's side  (R369) No. 7 (+) — Chassis ground (-):  Passenger's side  (R190) No. 7 (+) — Chassis ground (-):	Is the voltage 10 V or more?	Go to step 4.	Check body harness.
4	CHECK POWER SUPPLY CIRCUIT.  Measure the resistance between power seat switch harness connector and chassis ground.  Connector & terminal  Driver's side  (R369) No. 8 — Chassis ground:  Passenger's side  (R190) No. 8 — Chassis ground:	Is the resistance less than 10 $\Omega$ ?	Replace the power seat switch assembly.	

### 6. SOME MOTORS DO NOT OPERATE.

• Malfunction of slide operation

	Step	Check	Yes	No
1	CHECK SWITCH.  1) Disconnect the connector of power seat switch assembly.  2) Measure resistance between terminals while moving the switch to slide forward and slide rearward positions. <ref. check="" inspection,="" power="" se-56,="" seat="" switch,="" system.="" to=""></ref.>	Is there any problem on the inspection result?	Go to step 2.	Replace the power seat switch assembly.
2	CHECK HARNESS.  1) Disconnect the power seat switch connector and slide motor connector.  2) Measure the resistance between power seat switch connector and slide motor connector.  Connector & terminal  Driver's side  (R370) No. 2 — (R369) No. 13:  (R370) No. 1 — (R369) No. 14:  Passenger's side  (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.

	Step	Check	Yes	No
3	CHECK SLIDE MOTOR.  1) Connect the power seat switch connector and slide motor connector.  2) Apply 12 V voltage to the slide motor and check the motor rotation.  Connector & terminal  Driver's side  (R369) No. 13 (+) — (R369) No. 14 (-):  (R369) No. 14 (+) — (R369) No. 13 (-):  Passenger's side  (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 prob- lem. Replace the slide rail assembly.

# • Malfunction of tilt operation

	Step	Check	Yes	No
1	CHECK SWITCH.  1) Disconnect the connector of power seat switch assembly.  2) Measure resistance between terminals while moving the switch to tilt up and tilt down positions. <ref. check="" inspection,="" power="" se-56,="" seat="" switch,="" system.="" to=""></ref.>	Is there any problem on the inspection result?	Go to step 2.	Replace the power seat switch assembly.
2	CHECK HARNESS.  1) Disconnect the power seat switch connector and tilt motor connector.  2) Measure the resistance between power seat switch connector and tilt motor connector.  Connector & terminal  Driver's side  (R372) No. 2 — (R369) No. 1:  (R372) No. 1 — (R369) No. 2:	Is the resistance less than 10 $\Omega$ ?	Go to step 3.	Check power seat harness.
3	CHECK TILT MOTOR.  1) Connect the power seat switch connector and tilt motor connector.  2) Apply 12 V voltage to the tilt motor and check the motor rotation.  Connector & terminal  Driver's side  (R369) No. 1 (+) — (R369) No. 2 (-):  (R369) No. 2 (+) — (R369) No. 1 (-):	Does the motor rotate nor- mally?	Check for temporary poor contact or mechanical trouble in tilt mechanism.	Tilt motor problem. Replace the slide rail assembly.

# • Malfunction of lifter operation

	Step	Check	Yes	No
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1	CHECK SWITCH.	Is there any problem on the	Go to step 2.	Replace the power
	Disconnect the connector of power seat	inspection result?		seat switch assem-
	switch assembly.			bly.
	Measure resistance between terminals			
	while moving the switch to lifter up and lifter			
	down positions. <ref. check<="" se-56,="" td="" to=""><td></td><td></td><td></td></ref.>			
	POWER SEAT SWITCH, INSPECTION, Power			
	Seat System.>			
2	CHECK HARNESS.	Is the resistance less than 10	Go to step 3.	Check power seat
	1) Disconnect the power seat switch connector	$\Omega$ ?		harness.
	and lifter motor connector.			
	<ol><li>Measure the resistance between power</li></ol>			
	seat switch connector and lifter motor connec-			
	tor.			
	Connector & terminal			
	Driver's side			
	(R371) No. 2 — (R369) No. 6:			
	(R371) No. 1 — (R369) No. 5:			
3	CHECK LIFTER MOTOR.	Does the motor rotate nor-	Check for tempo-	Lifter motor prob-
	1) Connect the power seat switch connector	mally?	rary poor contact	lem. Replace the
	and lifter motor connector.		or mechanical	slide rail assembly.
	2) Apply 12 V voltage to the lifter motor and		trouble in lifter	
	check the motor rotation.		mechanism.	
	Connector & terminal			
	Driver's side			
	(R369) No. 6 (+) — (R369) No. 5 (-):			
	(R369) No. 5 (+) — (R369) No. 6 (–):			

# • Malfunction of reclining operation

	Step	Check	Yes	No
1	CHECK SWITCH.  1) Disconnect the connector of power seat switch assembly.  2) Measure resistance between terminals while moving the switch to reclining forward and reclining rearward positions. <ref. check="" inspection,="" power="" se-56,="" seat="" switch,="" system.="" to=""></ref.>	Is there any problem on the inspection result?	Go to step 2.	Replace the power seat switch assembly.
2	CHECK HARNESS.  1) Disconnect the power seat switch connector and reclining motor connector.  2) Measure the resistance between power seat switch connector and reclining motor connector.  Connector & terminal  Driver's side  (R375) No. 2 — (R369) No. 4:  (R375) No. 1 — (R369) No. 3:  Passenger's side  (R368) No. 2 — (R190) No. 3:  (R368) No. 1 — (R190) No. 4:	Is the resistance less than 10 $\Omega$ ?	Go to step 3.	Check power seat harness.
3	CHECK RECLINING MOTOR.  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.  Connector & terminal  Driver's side  (R369) No. 4 (+) — (R369) No. 3 (-):  (R369) No. 3 (+) — (R369) No. 4 (-):  Passenger's side  (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 reclining motor assembly.

# • Malfunction of lumbar operation

	Step	Check	Yes	No
1	CHECK SWITCH.  1) Disconnect the connector of lumbar switch assembly.  2) Measure resistance between terminals while moving the switch to lumbar forward and lumbar rearward positions. <ref. check="" inspection,="" lumbar="" power="" se-57,="" seat="" switch,="" system.="" to=""></ref.>	Is there any problem on the inspection result?	Go to step 2.	Replace the lumbar switch assembly.
2	CHECK HARNESS.  1) Disconnect the lumbar switch connector and lumbar motor connector.  2) Measure the resistance between lumbar switch connector and lumbar motor connector.  Connector & terminal  Driver's side  (R379) No. 1 — (R376) No. 4:  (R379) No. 2 — (R376) No. 3:	Is the resistance less than 10 $\Omega$ ?	Go to step 3.	Check power seat harness.
3	CHECK LUMBAR MOTOR.  1) Connect the lumbar switch connector and lumbar motor connector.  2) Apply 12 V voltage to the lumbar motor and check the motor rotation.  Connector & terminal  Driver's side  (R376) No. 4 (+) — (R376) No. 3 (-):  (R376) No. 3 (+) — (R376) No. 4 (-):	Does the motor rotate nor- mally?	Check for temporary poor contact or mechanical trouble in lumbar mechanism.	Lumbar motor problem. Replace the lumbar motor assembly.