

4. Power Seat System

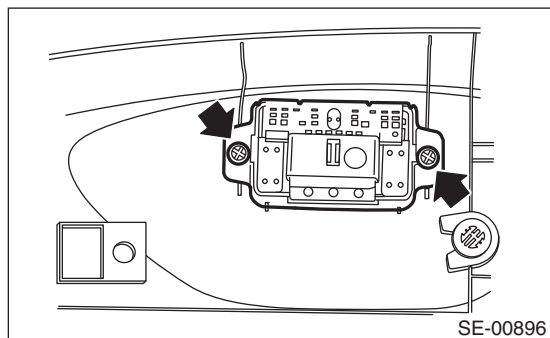
A: REMOVAL

CAUTION:

When it is necessary to remove the front seat, disconnect the ground cable from battery and wait for 20 seconds before disconnecting the side airbag module harness connector.

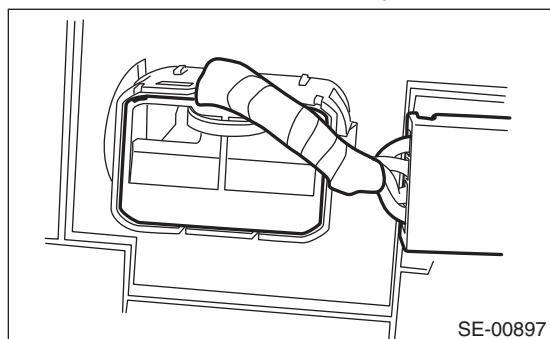
1. POWER SEAT SWITCH

- 1) Detach the connectors and remove the seat side cover outside. <Ref. to SE-9, DISASSEMBLY, Front Seat.>
- 2) Remove the screws to remove the power seat switch assembly.



2. LUMBAR SWITCH

- 1) Detach the connectors and remove the seat side cover outside. <Ref. to SE-9, DISASSEMBLY, Front Seat.>
- 2) Disconnect the lumbar switch connector and remove the lumbar switch assembly.



B: INSTALLATION

Install in the reverse order of removal.

C: INSPECTION

1. WIRING DIAGRAM

<Ref. to WI-89, WIRING DIAGRAM, Power Seat System.>

2. TROUBLE SYMPTOM

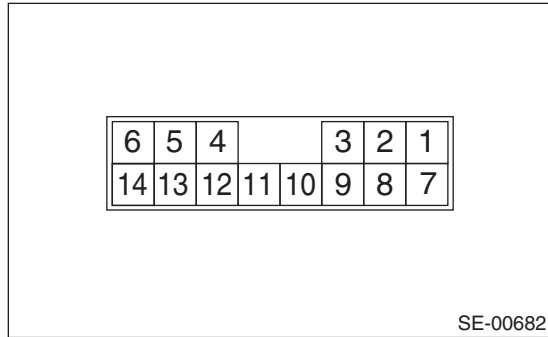
- Driver's side

Symptom	Criteria
All function fails to operate. <Ref. to SE-21, ALL FUNCTION FAILS TO OPERATE, INSPECTION, Power Seat System.>	• Power seat switch • Lumbar switch • Power seat harness • Body harness
A part of function does not operate. <Ref. to SE-21, SOME OF THE MOTORS DO NOT OPERATE (DRIVER'S SEAT), INSPECTION, Power Seat System.>	• Power seat switch • Lumbar switch • Power seat harness • Relevant motor

3. CHECK SWITCH

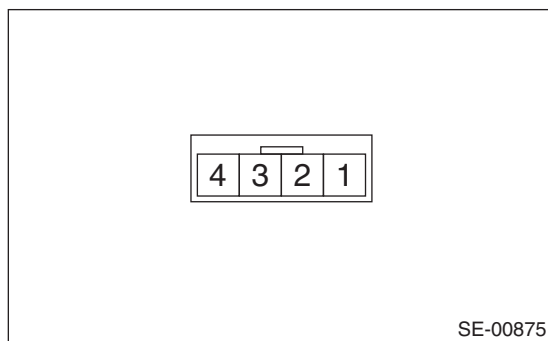
Move each switch and measure the resistance between connector terminals.

- Power seat switch



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

- Lumbar switch



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

4. ALL FUNCTION FAILS TO OPERATE

Step	Check	Yes	No
1 CHECK SEAT FUNCTION. 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-21, SOME OF THE MOTORS DO NOT OPERATE (DRIVER'S SEAT), INSPECTION, Power Seat System.>
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 connectors of the power seat switch and lumbar switch. 2) Measure the voltage between harness connector and chassis ground. Connector & terminal (R190) No. 7 (+) — Chassis ground (-): (R195) No. 1 (+) — 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 the power seat switch and lumbar switch harness connectors and chassis ground. Connector & terminal (R190) No. 8 — Chassis ground: (R195) No. 2 — Chassis ground:	Is the resistance less than 10 Ω ?	Replace the faulty switch assembly.	Check body harness.

5. SOME OF THE MOTORS DO NOT OPERATE (DRIVER'S SEAT)

- Malfunction of slide operation

Step	Check	Yes	No
1 CHECK SWITCH. 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-20, CHECK SWITCH, INSPECTION, Power Seat System.>	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 the power seat switch connector and slide motor connector. Connector & terminal (R192) No. 1 — (R190) No. 14: (R192) No. 2 — (R190) No. 13:	Is the resistance less than 10 Ω ?	Go to step 3.	Check power seat harness.
3 CHECK SLIDE MOTOR. 1) Connect the power seat switch connector and slide motor connector. 2) Apply 12 V to the slide motor and check the motor rotation. Connector & terminal (R190) No. 14 (+) — (R190) No. 13 (-): (R190) No. 13 (+) — (R190) No. 14 (-):	Does the motor rotate normally?	Check for temporary poor contact or mechanical trouble in slide rail.	Slide motor problem. Replace the slide rail assembly.

Power Seat System

SEATS

• Malfunction of tilt operation

Step	Check	Yes	No
1 CHECK SWITCH. 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-20, CHECK SWITCH, INSPECTION, Power Seat System.>	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 (R193) No. 2 — (R190) No. 2: (R193) No. 3 — (R190) No. 1:	Is the resistance less than 10 Ω?	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 to the tilt motor and check the motor rotation. Connector & terminal (R190) No. 2 (+) — (R190) No. 1 (-): (R190) No. 1 (+) — (R190) No. 2 (-):	Does the motor rotate normally?	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
1 CHECK SWITCH. 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-20, CHECK SWITCH, INSPECTION, Power Seat System.>	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 lifter motor connector. 2) Measure the resistance between the power seat switch connector and lifter motor connector. Connector & terminal (R194) No. 4 — (R190) No. 5: (R194) No. 3 — (R190) No. 6:	Is the resistance less than 10 Ω?	Go to step 3.	Check power seat harness.
3 CHECK LIFTER MOTOR. 1) Connect the power seat switch connector and lifter motor connector. 2) Apply 12 V to the lifter motor and check the motor rotation. Connector & terminal (R190) No. 5 (+) — (R190) No. 6 (-): (R190) No. 6 (+) — (R190) No. 5 (-):	Does the motor rotate normally?	Check for temporary poor contact or mechanical trouble in lifter mechanism.	Lifter motor problem. Replace the slide rail assembly.

• Malfunction of reclining operation

Step	Check	Yes	No
1 CHECK SWITCH. 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-20, CHECK SWITCH, INSPECTION, Power Seat System.>	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 the power seat switch connector and reclining motor connector. Connector & terminal (R191) No. 2 — (R190) No. 3: (R191) No. 1 — (R190) No. 4:	Is the resistance less than 10 Ω?	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 to the reclining motor and check the motor rotation. Connector & terminal (R190) No. 3 (+) — (R190) No. 4 (-): (R190) No. 4 (+) — (R190) No. 3 (-):	Does the motor rotate normally?	Check for temporary poor contact or mechanical trouble in reclining hinge.	Reclining motor problem. Replace the backrest hinge and motor assembly.

• Malfunction of lumbar operation

Step	Check	Yes	No
1 CHECK SWITCH. 1) Disconnect the connector of the lumbar switch assembly. 2) Measure the resistance between connector terminals when moving the switch to lumbar forward and lumbar backward. <Ref. to SE-20, CHECK SWITCH, INSPECTION, Power Seat System.>	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 the lumbar switch connector and lumbar motor connector. Connector & terminal (R198) No. 1 — (R195) No. 3: (R198) No. 2 — (R195) No. 4:	Is the resistance less than 10 Ω?	Go to step 3.	Check power seat harness.
3 CHECK LUMBAR MOTOR. 1) Disconnect the lumbar switch connector and lumbar motor connector. 2) Apply 12 V to the lumbar motor and check the motor rotation. Connector & terminal (R195) No. 3 (+) — (R195) No. 4 (-): (R195) No. 4 (+) — (R195) No. 3 (-):	Does the motor rotate normally?	Check for temporary poor contact or mechanical trouble in the lumbar section.	Lumbar motor problem. Replace the lumbar motor assembly.