

4. Power Seat System

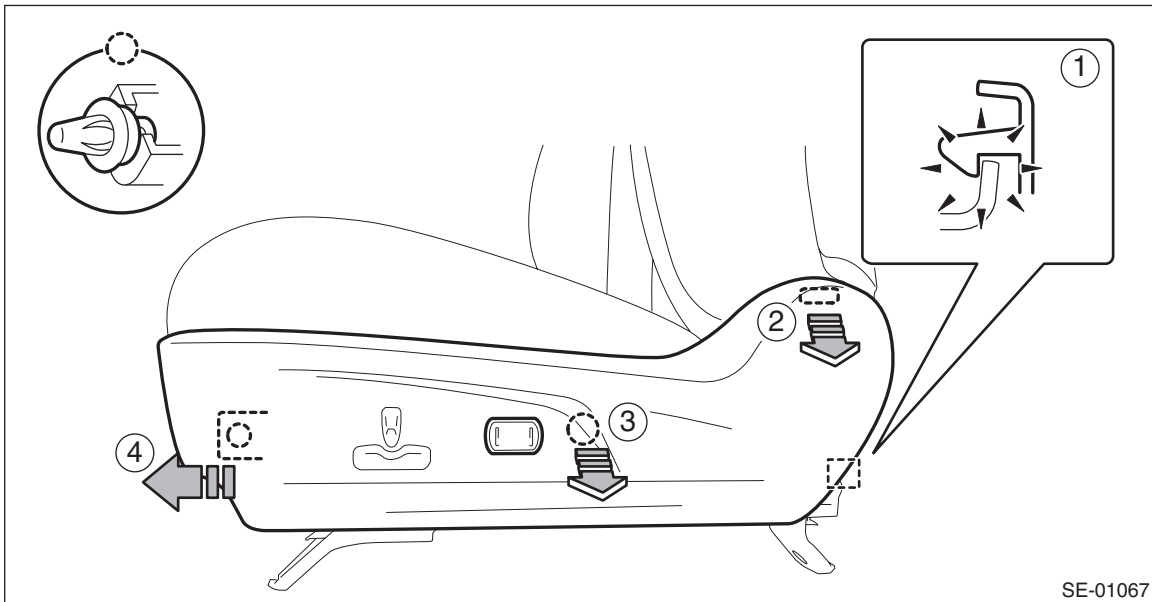
A: REMOVAL

CAUTION:

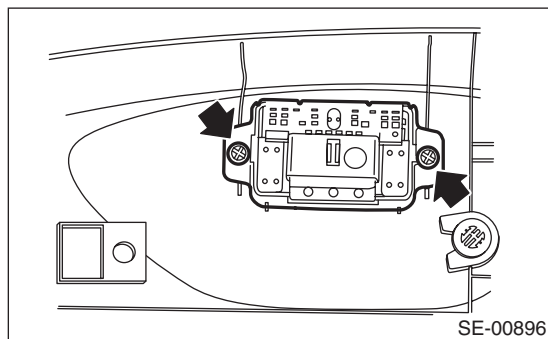
When removing the front seat, Disconnect the ground cable from battery before disconnecting the side airbag module harness connector, and wait for 60 seconds before starting the operation.

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.

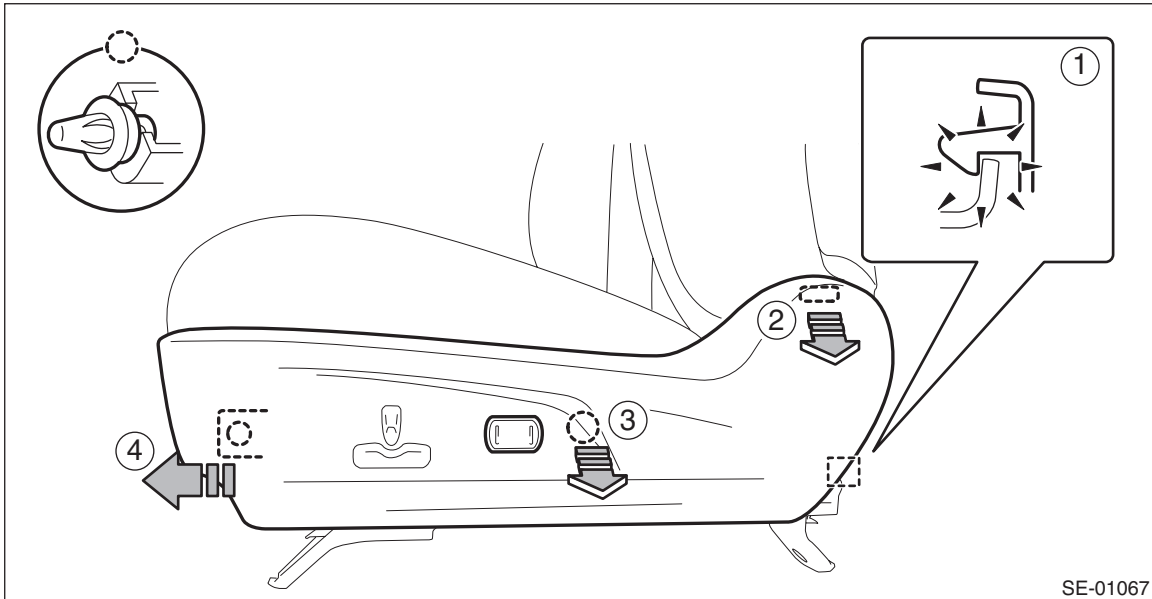


- 3) Remove the screws to remove the power seat switch assembly.

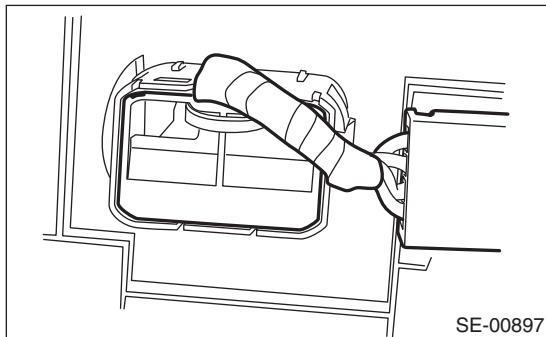


2. LUMBAR SWITCH

- 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 lumbar 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

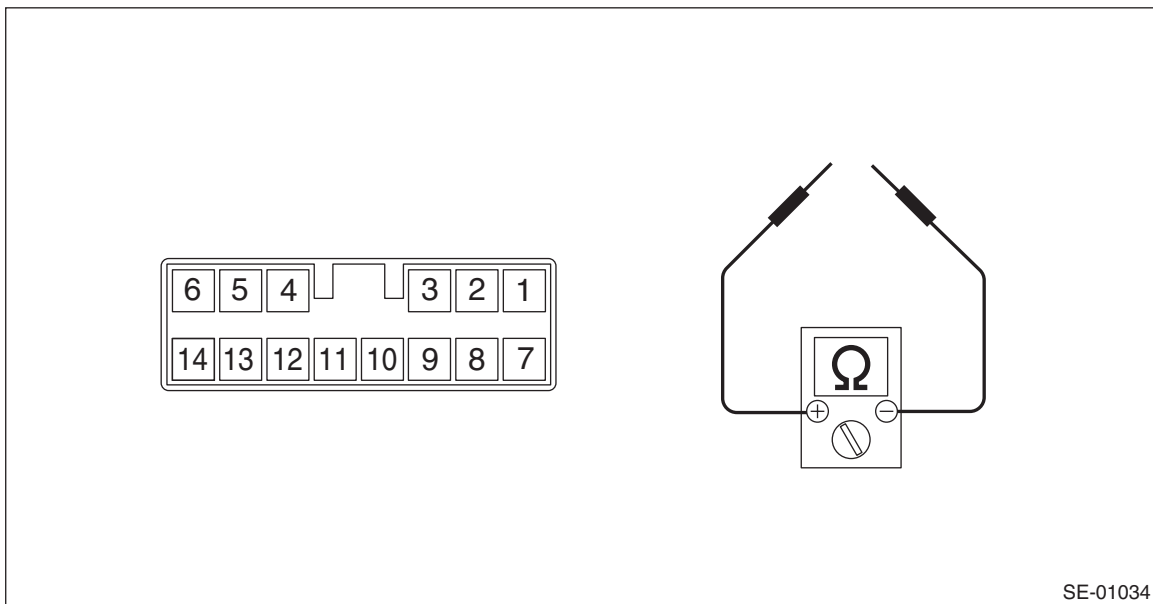
Refer to “Power Seat System” in the wiring diagram. <Ref. to WI-179, WIRING DIAGRAM, Power Seat System.>

2. TROUBLE SYMPTOM

Symptoms	Criteria
All functions do not operate. <Ref. to SE-58, ALL FUNCTIONS DO NOT OPERATE., INSPECTION, Power Seat System.>	<ul style="list-style-type: none"> • POWER SEAT SWITCH • LUMBAR SWITCH • Power seat harness • Body harness
A part of function does not operate. <Ref. to SE-59, SOME MOTORS DO NOT OPERATE., INSPECTION, Power Seat System.>	<ul style="list-style-type: none"> • POWER SEAT SWITCH • LUMBAR SWITCH • Power seat harness • Relevant motor

3. CHECK POWER SEAT SWITCH

Measure resistance between terminals while operating each switch.



• Driver's seat

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

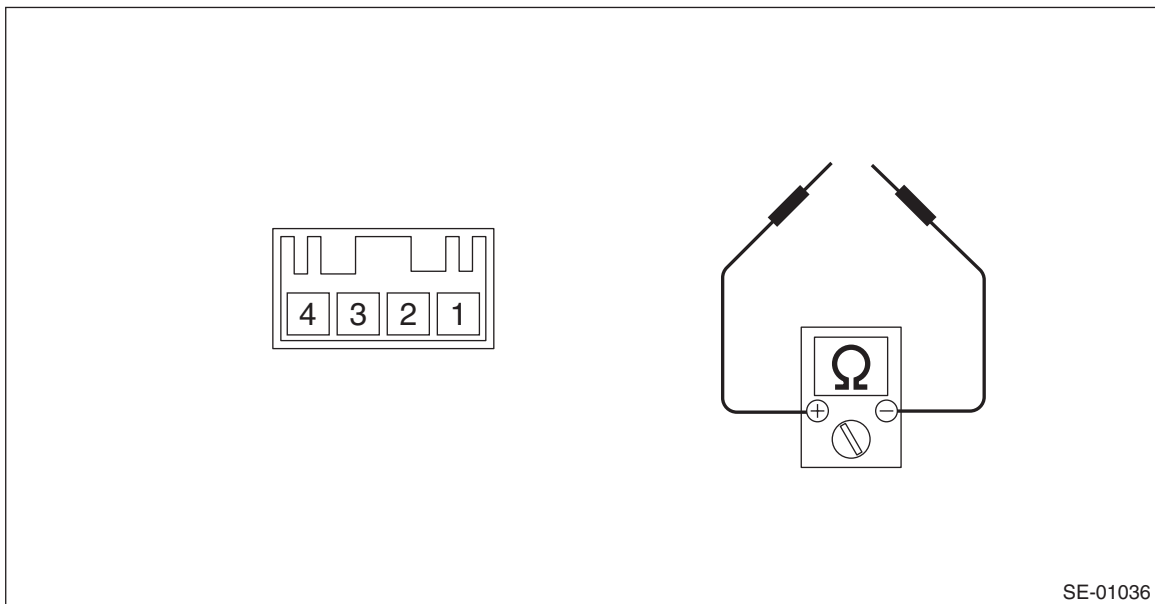
- Passenger's seat

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 Ω

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 Ω
Lumber rearward	1 and 3 2 and 4	Less than 10 Ω

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

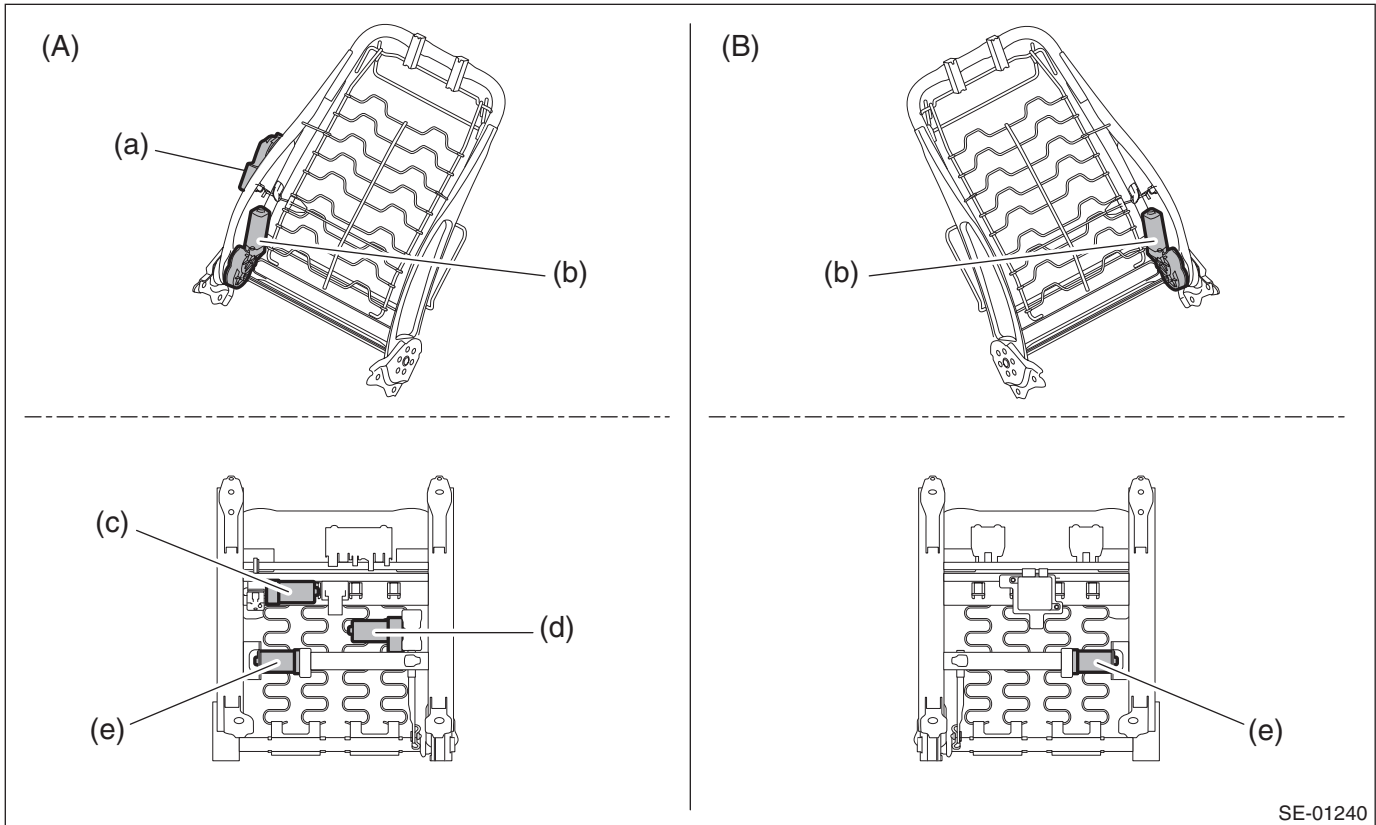
Power Seat System

SEATS

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. to SE-59, SOME MOTORS DO NOT OPERATE., 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 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 Ω ?	Replace the power seat switch assembly.	Check body harness.

6. SOME MOTORS DO NOT OPERATE.



(A) Driver's seat

(B) Passenger's seat

(a) Lumbar motor

(c) Tilt motor

(e) Slide motor

(b) Reclining motor

(d) Lifter motor

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- Slide operation failure

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-56, 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.
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 seat (R370) No. 2 — (R369) No. 13: (R370) No. 1 — (R369) No. 14: Passenger's seat (R192) No. 2 — (R190) No. 13: (R192) No. 1 — (R190) No. 14:	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 Driver's seat (R369) No. 13 (+) — (R369) No. 14 (–): (R369) No. 14 (+) — (R369) No. 13 (–): Passenger's seat (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
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-56, 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.
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 seat (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.
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 Driver's seat (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
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-56, 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.
2 CHECK HARNESS. 1) Disconnect the power seat switch connector and lifter motor connector. 2) Measure the resistance between power seat switch connector and lifter motor connector. Connector & terminal Driver's seat (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.
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 Driver's seat (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.

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• 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-56, 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.
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 seat (R375) No. 2 — (R369) No. 4: (R375) No. 1 — (R369) No. 3: Passenger's seat (R368) No. 2 — (R190) No. 3: (R368) 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 Driver's seat (R369) No. 4 (+) — (R369) No. 3 (-): (R369) No. 3 (+) — (R369) No. 4 (-): Passenger's seat (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.

- 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. to SE-57, CHECK LUMBAR 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 lumbar switch connector and lumbar motor connector. Connector & terminal Driver's seat (R379) No. 1 — (R376) No. 4: (R379) No. 2 — (R376) No. 3:	Is the resistance less than 10 Ω?	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 to the lumbar motor and check the motor rotation. Connector & terminal Driver's seat (R376) No. 4 (+) — (R376) No. 3 (-): (R376) No. 3 (+) — (R376) No. 4 (-):	Does the motor rotate normally?	Check for temporary poor contact or mechanical trouble in lumbar mechanism.	Lumbar motor problem. Replace the backrest frame assembly.