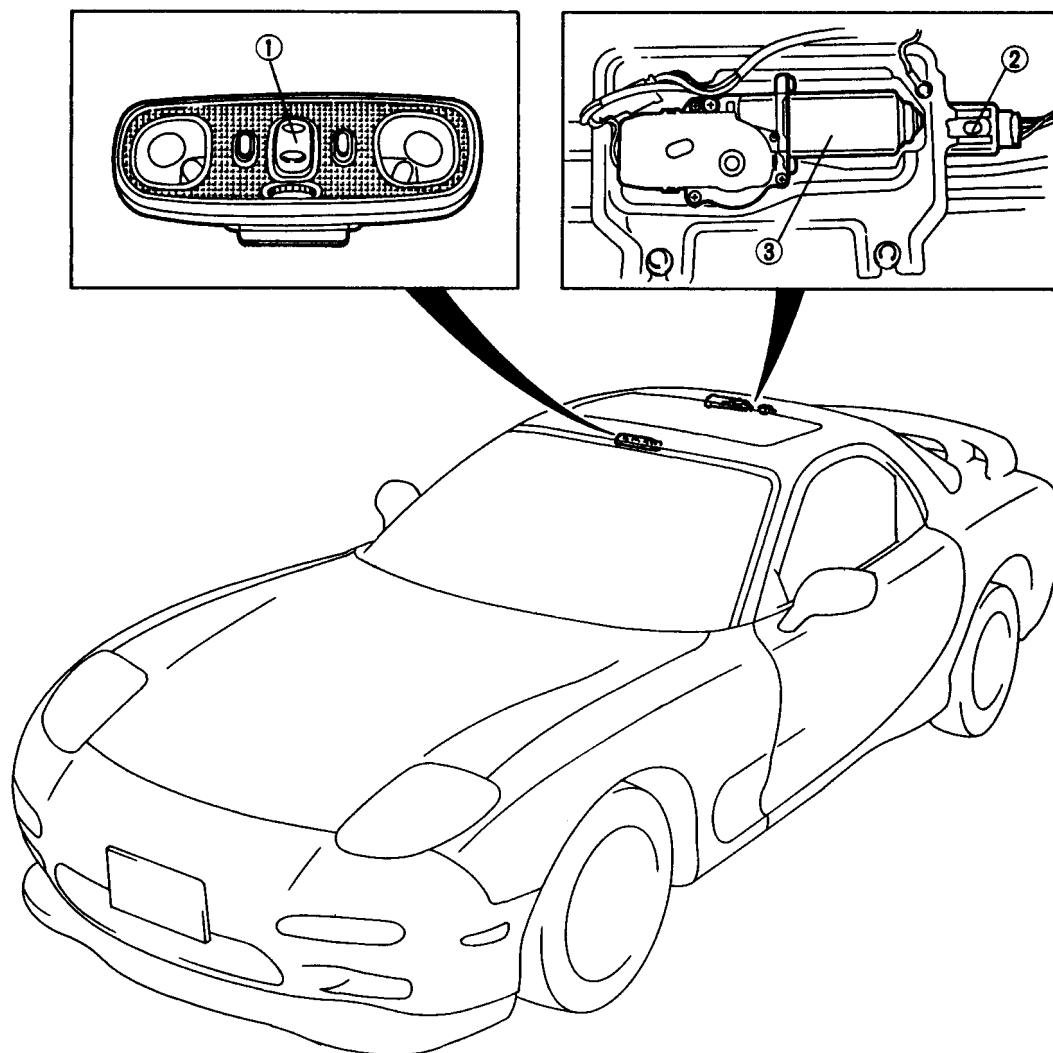


SLIDING SUNROOF

STRUCTURAL VIEW

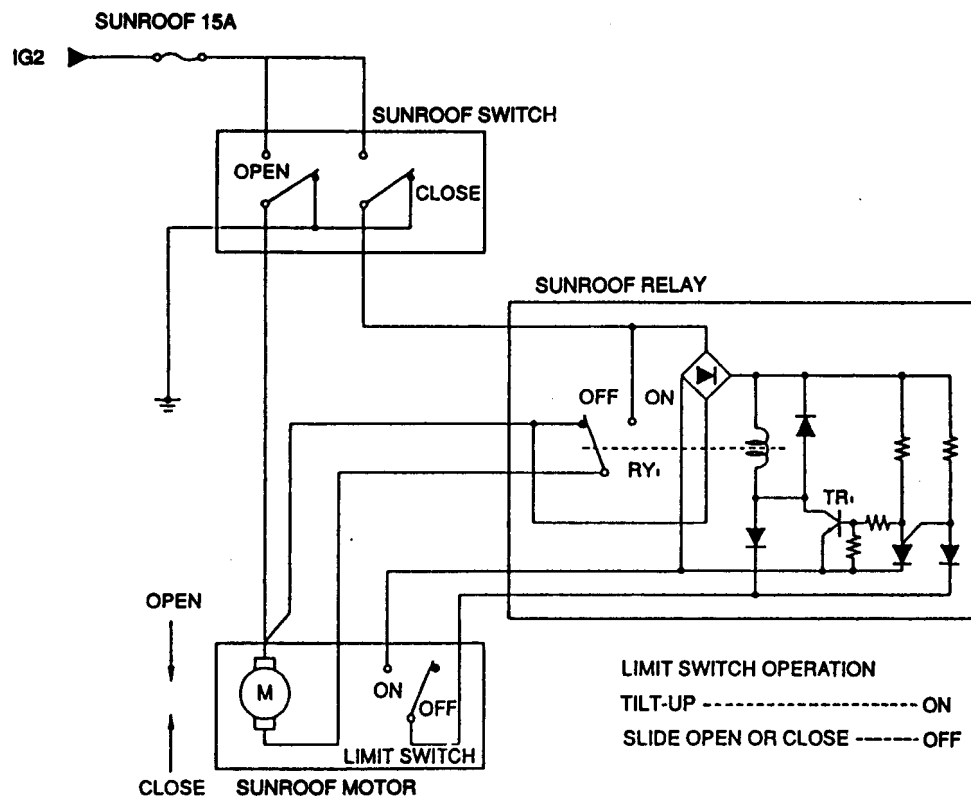
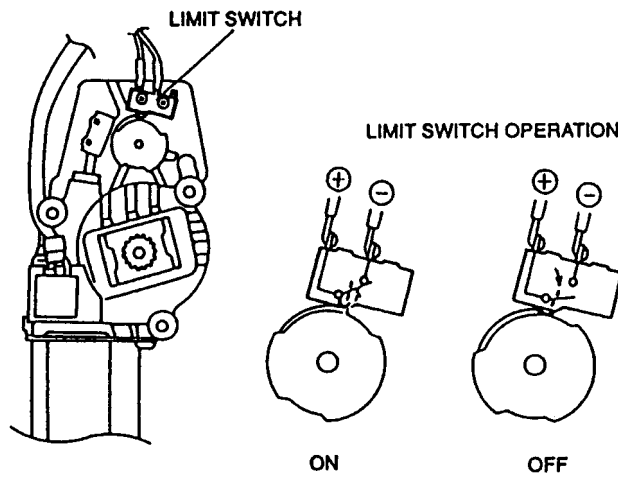


37U0SX-771

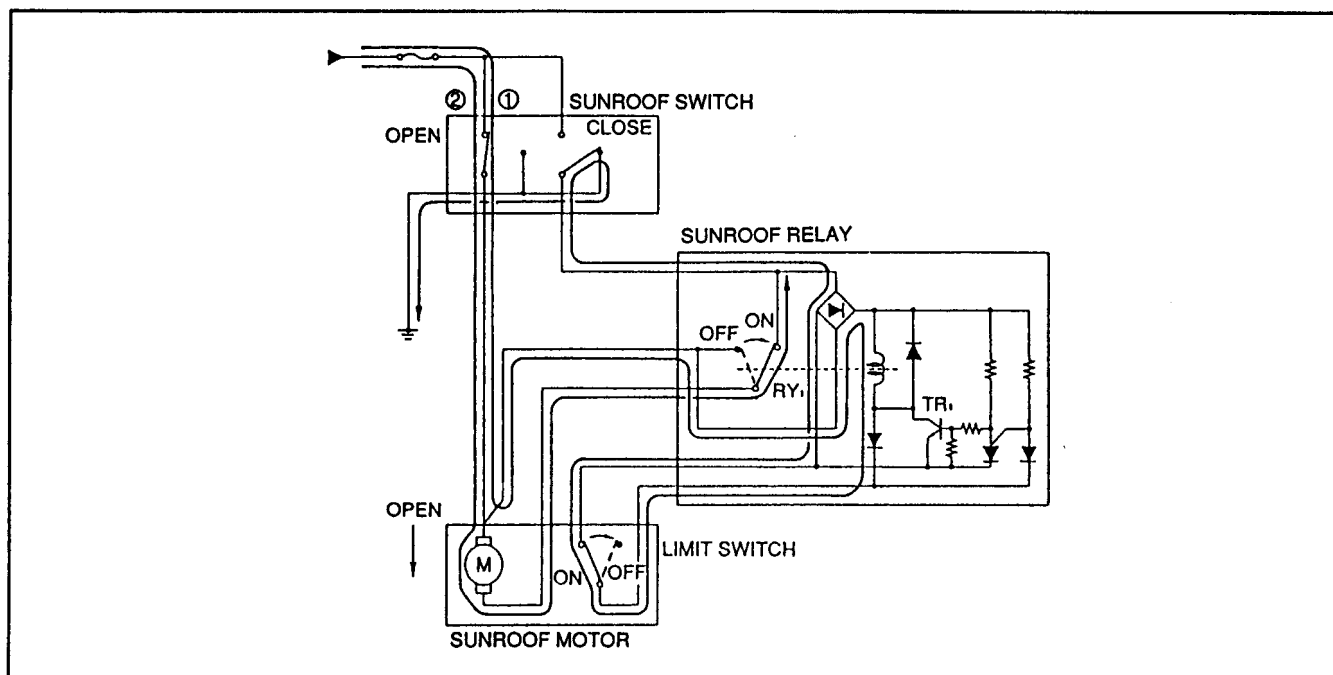
- 1. Sunroof switch
Inspection..... page M-11
- 2. Sunroof relay
Inspection..... page M-12
Removal / Installation..... page M-13

- 3. Sunroof motor
Inspection..... page M-12
Removal / Installation..... page M-13

SYSTEM DIAGRAM



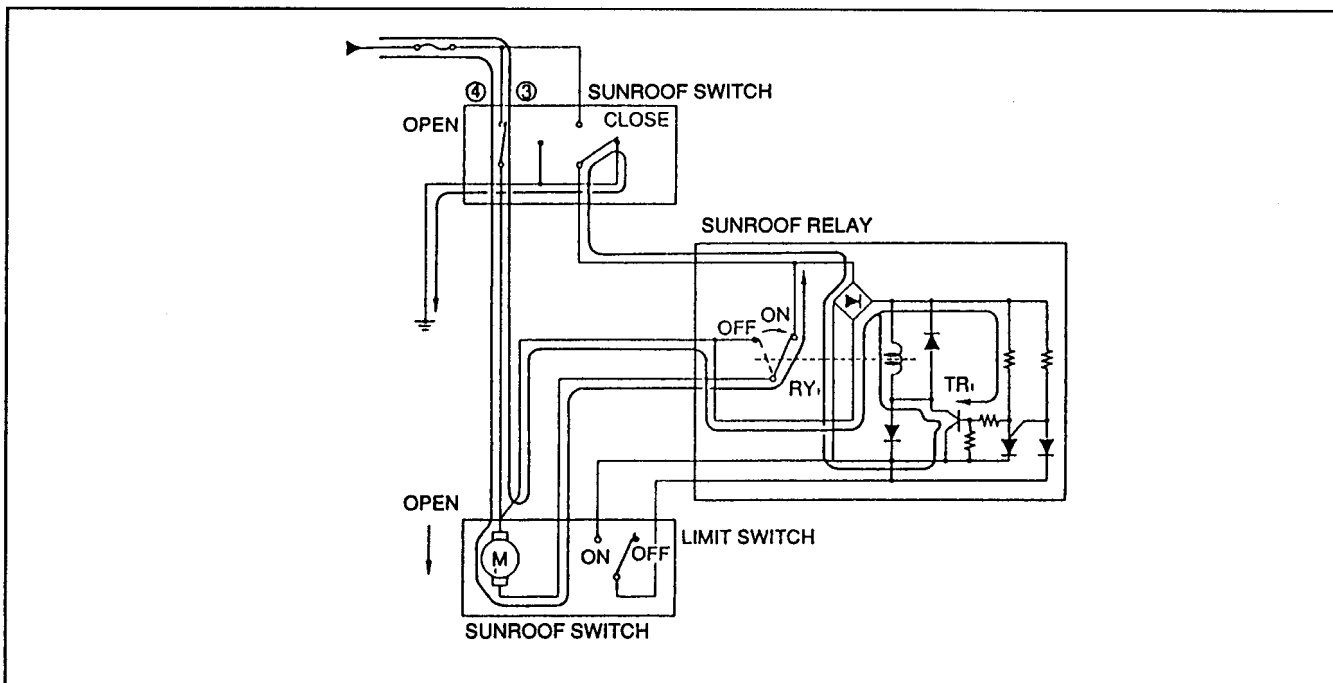
System Operation



47U0MX-502

1. Tilt-up

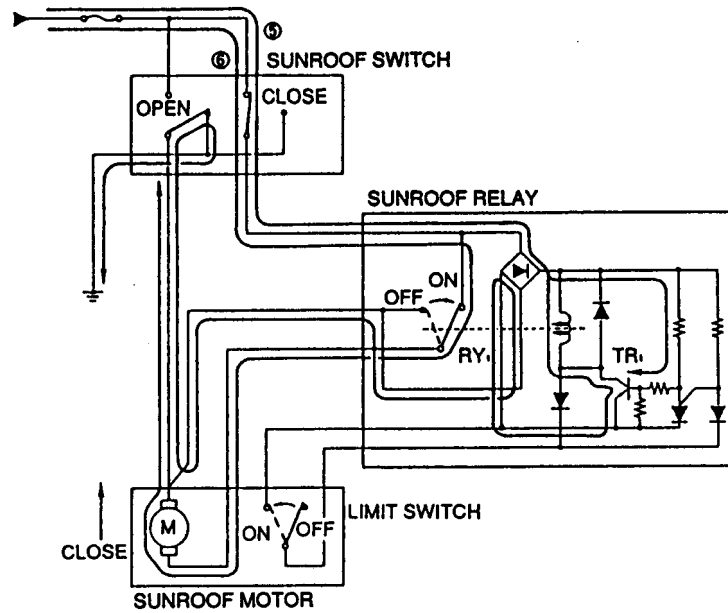
- The sunroof motor limit switch is on.
- When the back of the sunroof switch is pressed, current ① flows to coil RY₁ and turns the RY₁ switch on. Current ② also flows. The sunroof motor rotates, and the slide panel tilts up.
- After the slide panel tilts up, the limit switch in the sunroof motor turns off, stopping current flow and the sunroof motor.



47U0MX-503

2. Slide open

- The sunroof motor limit switch is off.
- When the back of the sunroof switch is pressed with the slide panel tilted up, current ③ flows to coil RY₁ and transistor TR₁, turning the RY₁ switch on. Current ④ then flows, causing the sunroof motor to rotate. The tilted-up slide panel opens.



47U0MX-504

3. Close

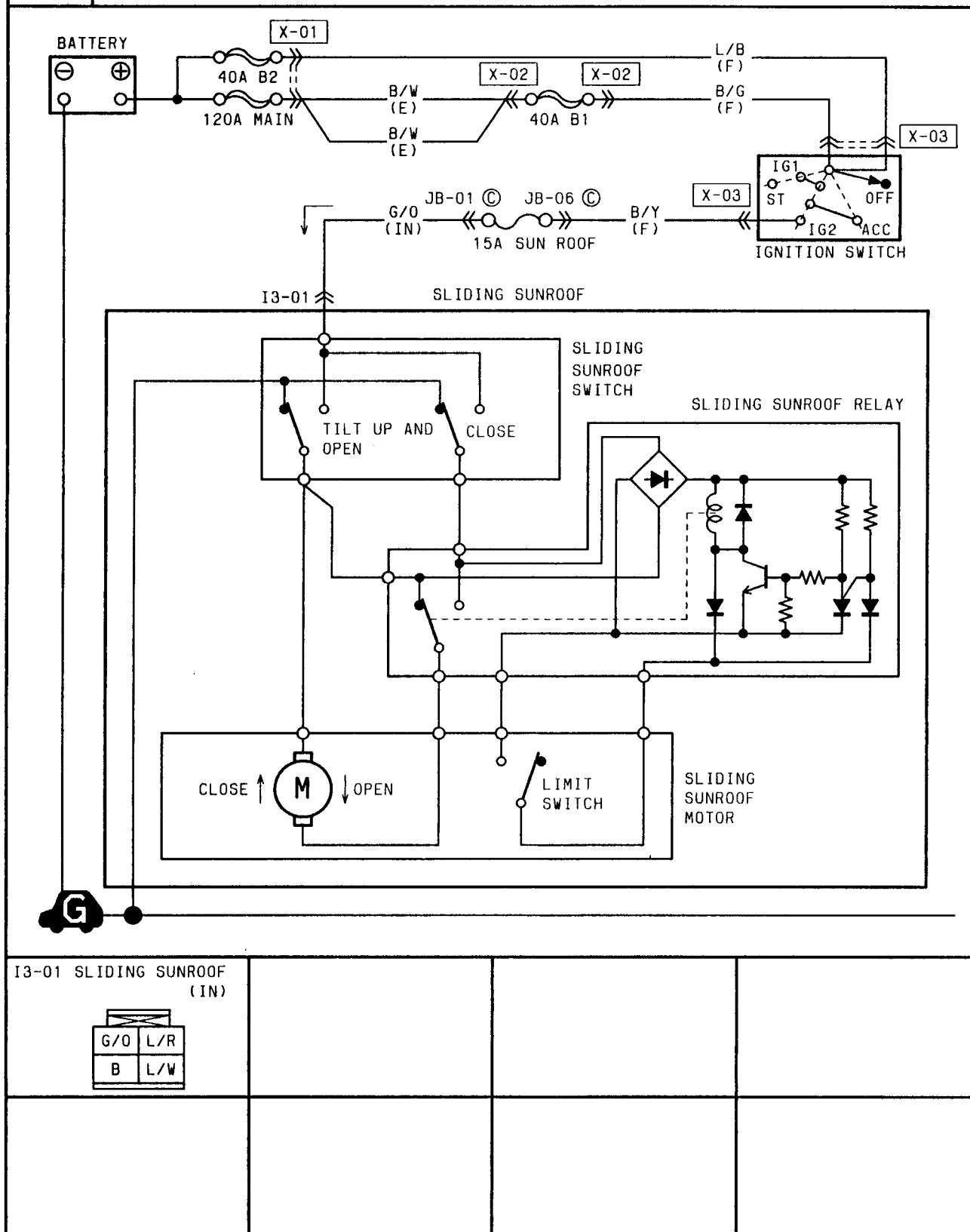
- The sunroof motor limit switch is off.
- When the front of the sunroof switch is pressed with the slide panel tilted up or fully open, current ⑤ flows to coil RY₁ and transistor TR₁, turning the RY₁ switch on. Current ⑥ then flows, causing the sunroof motor to rotate. The sunroof panel closes.
- After the sunroof closes, the limit switch turns on again.

M

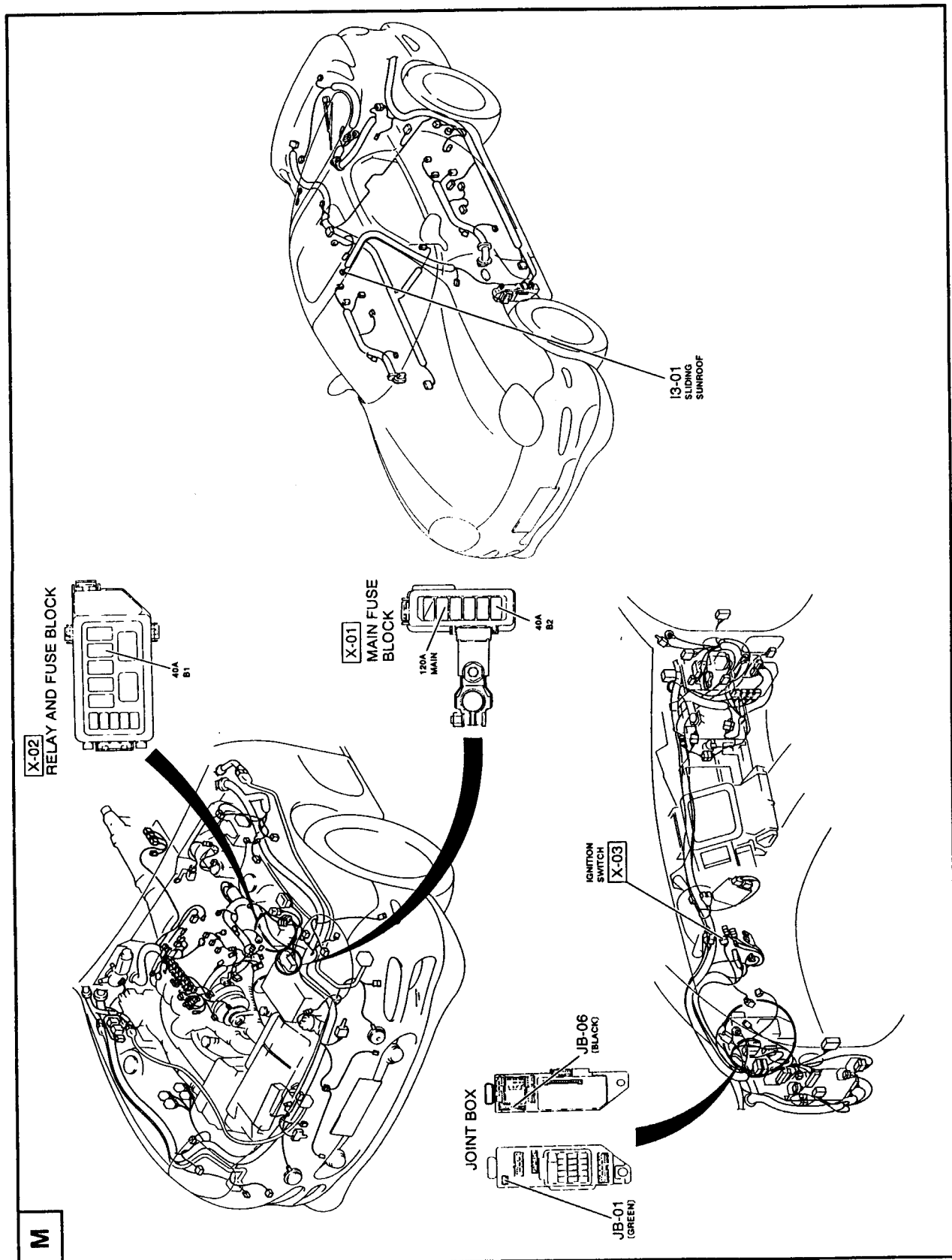
TROUBLESHOOTING

Circuit Diagram

M ■ SLIDING SUNROOF



Connector Locations



M

M

Checklist

	Procedure / Proper operation	Symptom	Flowchart No.
	Operate sunroof switch and verify that sunroof tilts up and slides open.	Sliding sunroof does not move	1
		Sunroof tilts up, but does not slide open	2
		Sliding sunroof does not stop temporarily at tilted-up position	3

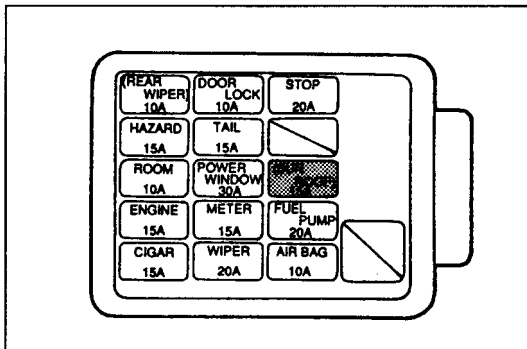
47U0MX-505

Flowchart No.1	Symptom
	Sliding sunroof does not move

Possible cause

- Burnt SUNROOF 15A fuse
- Damaged sunroof switch
- Damaged sunroof relay
- Damaged sunroof motor
- Open or short circuit in wiring harness
- Poor connection of connector

47U0MX-506

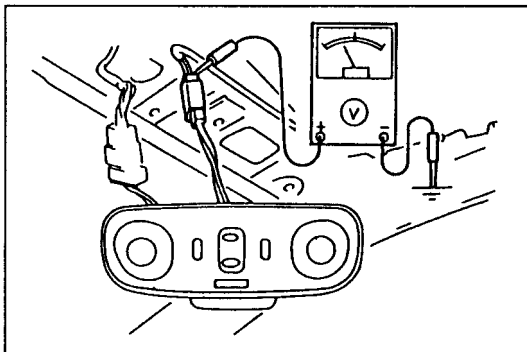


37U0SX-787

Step 1

Check the SUNROOF 15A fuse in the fuse block.

Fuse	Action
OK	Go to Step 2
Burnt	Replace fuse after checking and repairing wiring harness



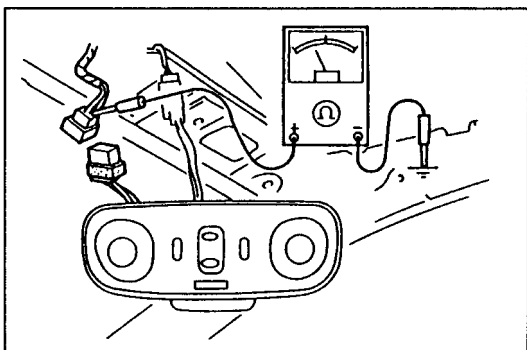
47U0MX507

Step 2

1. Remove the overhead console. (Refer to section I2.)
2. Turn the ignition switch to ON.
3. Measure the voltage at the (G/O) terminal wire of the sunroof switch harness connector.

B+: Battery positive voltage

Voltage	Action
B+	Go to Step 3
Other	Repair wiring harness (Fuse block—Sunroof switch)

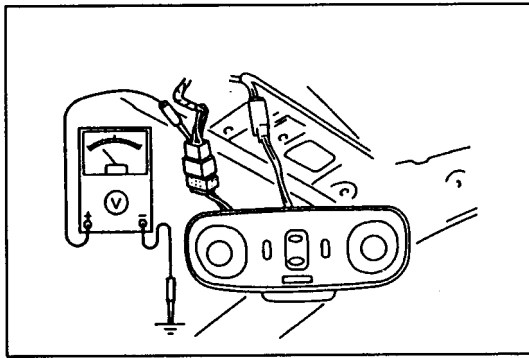


47U0MX-508

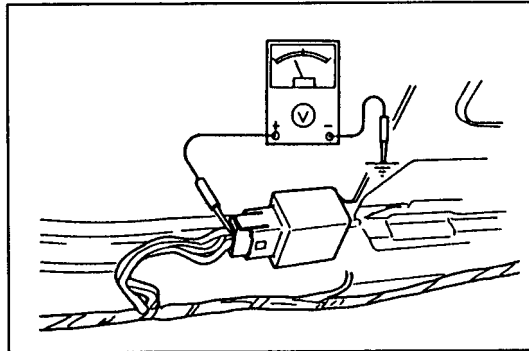
Step 3

1. Turn the ignition switch to OFF.
2. Disconnect the sunroof switch harness connector and check for continuity between the (B) terminal wire and ground.

Voltage	Action
Yes	Reconnect the connector and go to Step 4
No	Repair wiring harness (Sunroof switch—GND)



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47U0MX-510

Step 4

1. Turn the ignition switch to ON.
2. Measure the voltage at the terminal wires of the sunroof switch harness connector.

B+: Battery positive voltage

Switch position		Terminal	Voltage
OPEN	TILT	(Y/R) wire	B+
	SLIDE		
CLOSE		(Y/L) wire	B+

3. If correct, go to Step 5.
4. If not as specified, check the sunroof switch.
(Refer to page M-11.)

Step 5

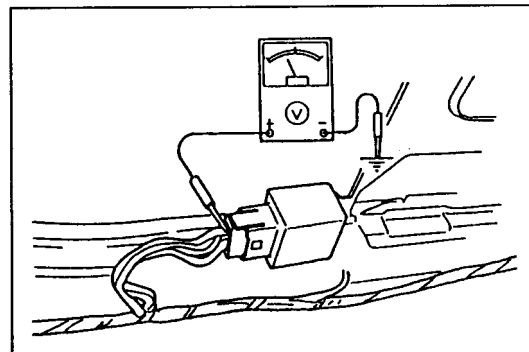
1. Remove the headliner.
(Refer to the 1994 RX-7 Workshop Manual, section S.)
2. Measure the voltage at the terminal wires of the sunroof relay harness connector.

B+: Battery positive voltage

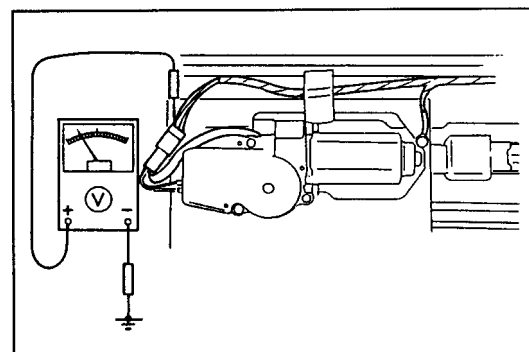
Switch position		Terminal	Voltage
OPEN	TILT	(Y/R) wire	B+
	SLIDE		
CLOSE		(Y/L) wire	B+

3. If correct, go to Step 6.
4. If not as specified, repair the wiring harness (sunroof switch—sunroof relay).

M



47U0MX-511



47U0MX-512

Step 6

1. Measure the voltage at the terminal wires of the sunroof relay harness connector.

B+: Battery positive voltage

Switch position		Terminal	Voltage
OPEN	TILT	(LG) wire	B+
	SLIDE	(Y/L) wire	B+
CLOSE		(Y) wire	B+

2. If correct, go to Step 7.
3. If not as specified, check the sunroof relay.
(Refer to page M-12.)

Step 7

1. Measure the voltage at the terminal wires of the sliding sunroof motor harness connector.

B+: Battery positive voltage

Switch position		Terminal	Voltage
OPEN	TILT	(Y/R) wire	B+
	SLIDE		
CLOSE		(Y) wire	B+

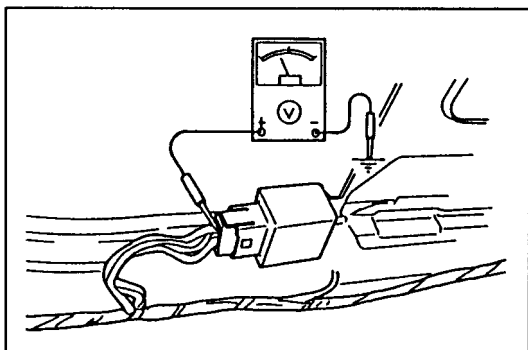
2. If correct, check the sunroof motor assembly.
(Refer to page M-12.)
3. If not as specified, repair the wiring harness (sunroof relay—sunroof motor assembly).

Flowchart No.2	Symptom	Sunroof tilts up, but does not slide open
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Possible cause

- Damaged sunroof relay
- Open or short circuit in wiring harness
- Poor connection of connector

47U0MX-513



47U0MX-515

Step 1

1. Remove the headliner.
(Refer to the 1994 RX-7 Workshop Manual, section S.)
2. Measure the voltage at the terminal wires of the sunroof relay harness connector.

B+: Battery positive voltage

Switch position		Terminal	Voltage
OPEN	TILT	(Y/R) wire	B+
	SLIDE		
CLOSE		(Y/L) wire	B+

3. If correct, check the sunroof relay.
(Refer to page M-12.)
4. If not as specified, repair the wiring harness (sunroof switch—sunroof relay).

Flowchart No.1

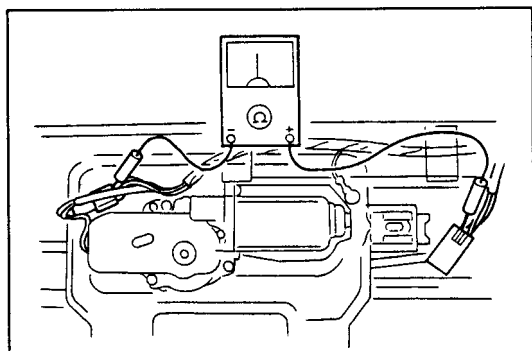
Symptom

Sliding sunroof does not stop temporarily at tilted-up position

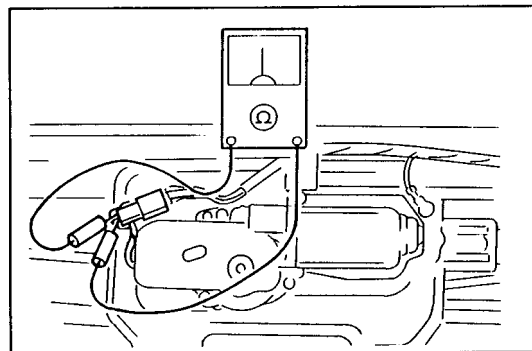
Possible cause

- Damaged sunroof relay
- Damaged sunroof motor
- Open or short circuit in wiring harness
- Poor connection of connector

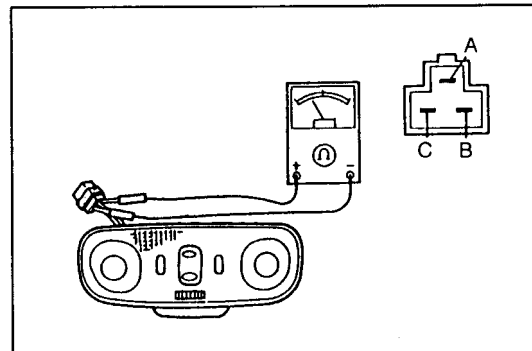
47U0MX-516



47U0MX-517



47U0MX-518



47U0MX-519

Step 1

1. Remove the headliner.
(Refer to the 1994 RX-7 Workshop Manual, section S.)
2. Move the sliding sunroof to the tilt-up position by using the emergency handle.
3. Disconnect the sunroof relay and sunroof motor connectors, and check for continuity between the (L/G) and (L) terminal wires.

Continuity	Action
Yes	Go to Step 2
No	Repair wiring harness (Sunroof relay—Sunroof motor)

Step 2

Check for continuity between the (L/G) and (L) terminal wires of the sunroof motor connector.

Continuity	Action
Yes	Check the sunroof relay (Refer to page M-12)
No	Replace the sunroof motor (Refer to page M-12)

SUNROOF SWITCH

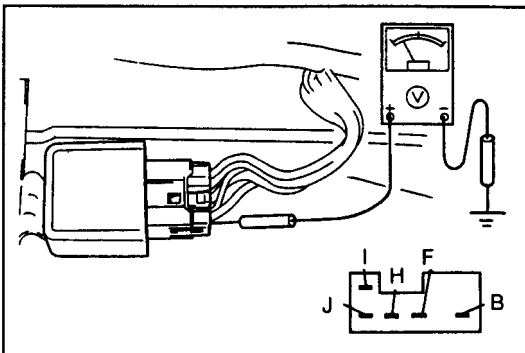
Inspection

1. Remove the overhead console.
(Refer to section I2.)
2. Disconnect the sunroof switch harness connector and check for continuity between the switch terminals as indicated below.

Terminal		A	B	C
Switch Operation	TILT	○ — ○	○ — ○	
	SLIDE		○ — ○	○ — ○
CLOSE				

○—○ : Continuity

3. If not as specified, replace the overhead console.



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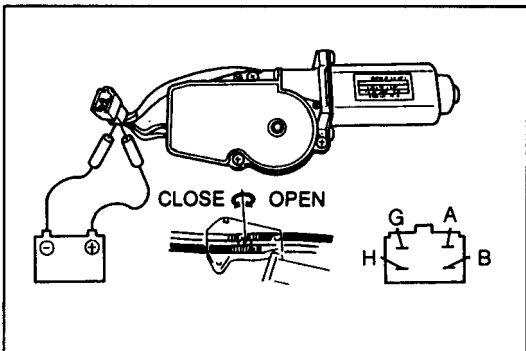
SUNROOF RELAY**Inspection**

1. Measure the voltage between the sunroof relay terminals as indicated below.
2. If correct, replace the sunroof relay.
3. If not as specified, repair the wiring harness.

B+: Battery positive voltage

Connector	Terminal	Connection	Test condition	Voltage
5-pin	B	Sunroof switch	Sunroof closing	B+
			Other	0V
	F	Sunroof switch	Sunroof tilting up or opening	B+
			Other	0V
	H	Limit switch	Sunroof tilting up	B+
			Other	0V
	I	Sunroof motor	Sunroof closing	B+
			Other	0V
	J	Limit switch	Constant	B+

47U0MX-521



47U0MX-522

SUNROOF MOTOR ASSEMBLY**Inspection****Motor**

1. Disconnect the sunroof motor harness connector.
2. Apply battery positive voltage to terminal G and ground to terminal H. Verify that the motor rotates in the opening direction.
3. Reverse the above connections and verify that the motor rotates in the closing direction.
4. If not as specified, replace the sunroof motor.

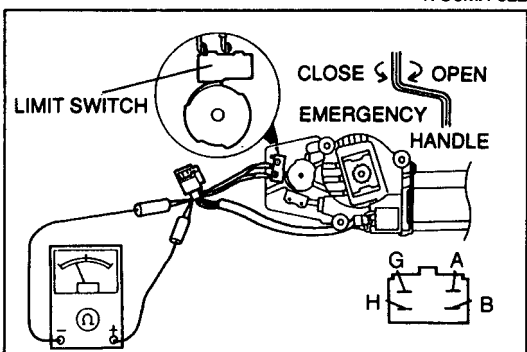
LIMIT SWITCH

1. Operate the slide panel by using the emergency handle (hex-head wrench). Check for continuity between terminals A and G of the sunroof motor.

Panel position	Terminal A	Terminal G
Open		
Closed		
Tilted up	○	○

○-○ : Continuity

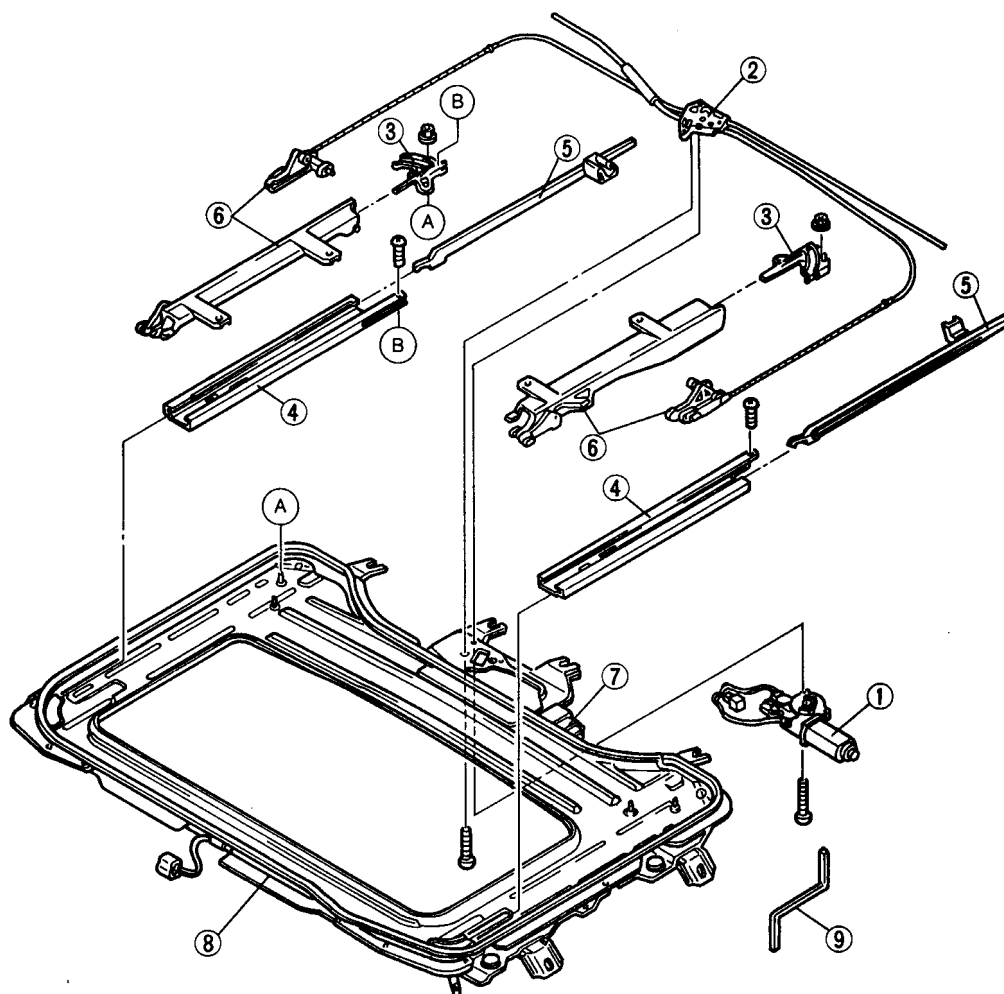
2. If not as specified, replace the sunroof motor.



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SUNROOF DRIVE UNIT ASSEMBLY**Disassembly / Assembly**

1. Disassemble in the order shown in the figure. To remove the sunroof drive unit assembly, remove the headliner. (Refer to the 1994 RX-7 Workshop Manual, section S.)
2. Assemble in the reverse order of disassembly.



47U0MX-524

1. Sunroof motor
2. Drive unit assembly
3. Guide plate
4. Guide rail
5. Shutting assembly

6. Shutting
7. Sunroof relay
8. Sunroof frame
9. Emergency handle