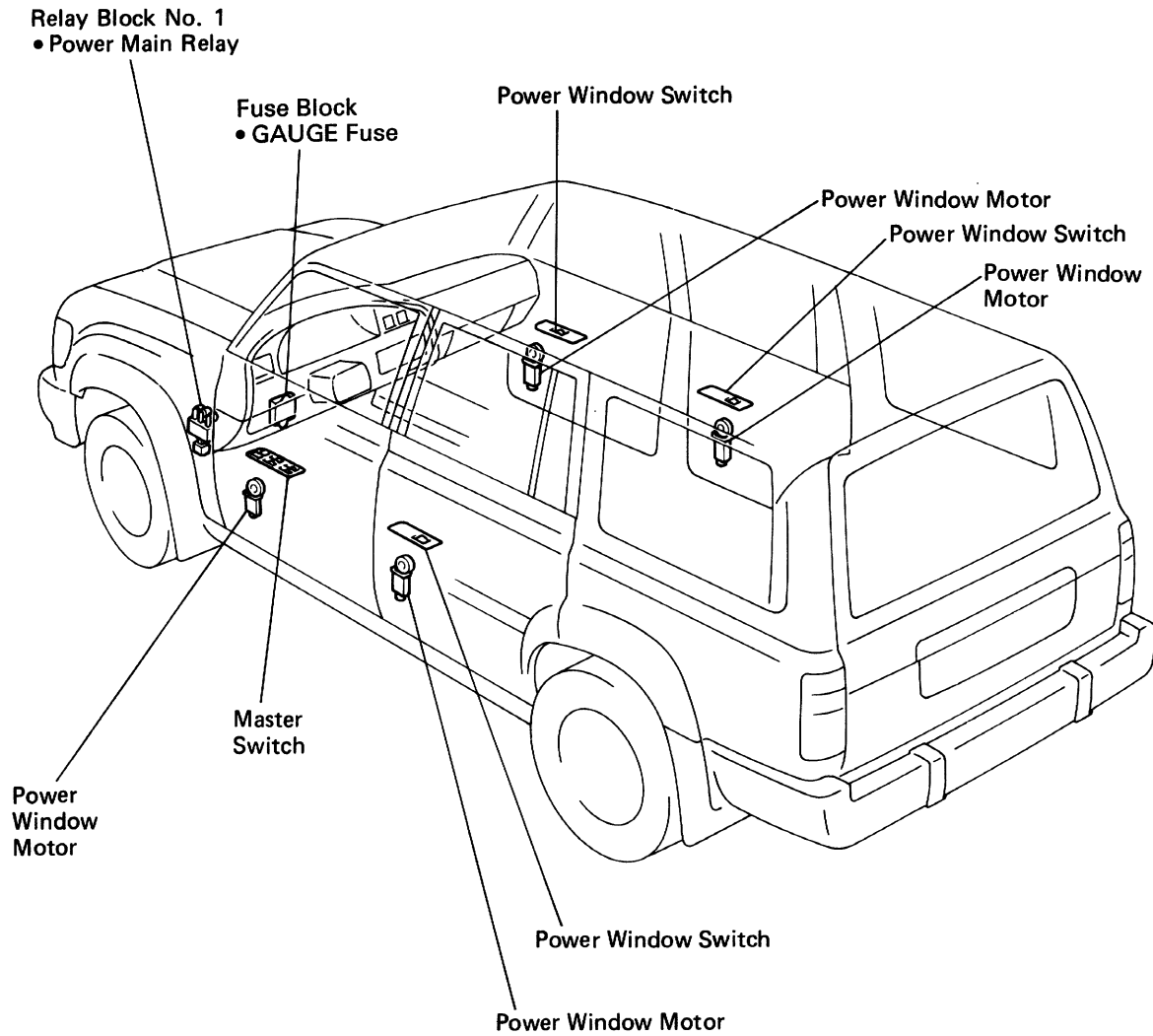


POWER WINDOW CONTROL SYSTEM PARTS LOCATION



TROUBLESHOOTING

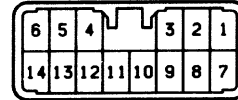
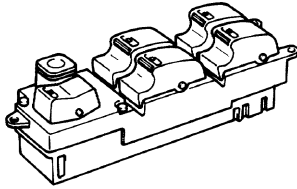
The table below will be useful for you in troubleshooting these electrical problems. The most likely causes of the malfunction are shown in the order of their probability. Inspect each part in the order shown, and replace the part when it is found to be faulty.

Trouble	Part name	See page
Power window does not operate at all	1. GAUGE Fuse 2. POWER Fuse 3. Power Main Relay 4. Wire Harness	BE-6, BE-10 BE-6, BE-10 BE-71 —
One-touch power window does not operate	1. Power Window Master Switch	BE-67
Only one window does not operate	1. Power Window Switch 2. Power Window Motor 3. Wire Harness	BE-69 BE-69 —

POWER WINDOW MASTER SWITCH

POWER WINDOW MASTER SWITCH INSPECTION

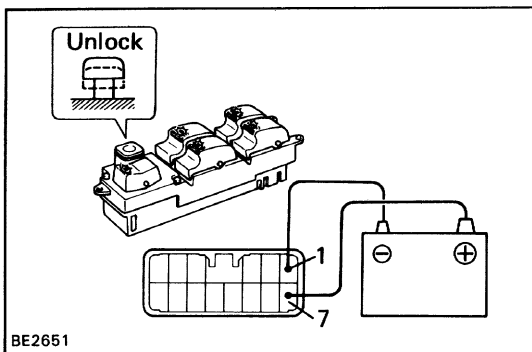
CONTINUITY



BE2594 S-14-2B

Window operation		Front								Rear							
		Driver's				Passenger's				Left				Right			
Terminal		1 and 2	6	7 and 8	13	1 and 2	5	7 and 8	12	1 and 2	7 and 8	9	10	1 and 2	7 and 8	11	14
Switch position																	
Window unlock	UP	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○
	OFF	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○
	DOWN	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○
Window lock	UP	○	○	○	○			○	○		○	○	○		○	○	
	OFF	○	○	○	○		○	○	○			○	○			○	○
	DOWN	○	○	○	○		○	○			○	○			○	○	

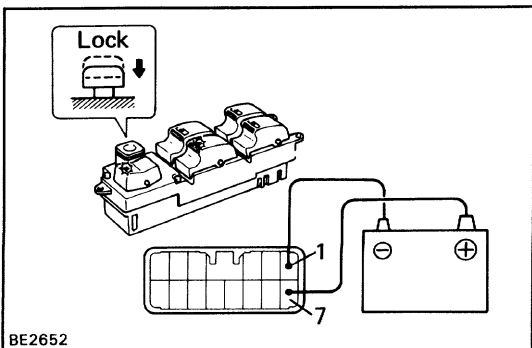
If continuity is not as specified, replace the master switch.



BE2651

ILLUMINATION

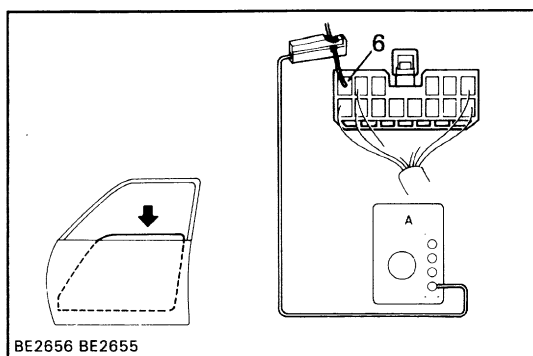
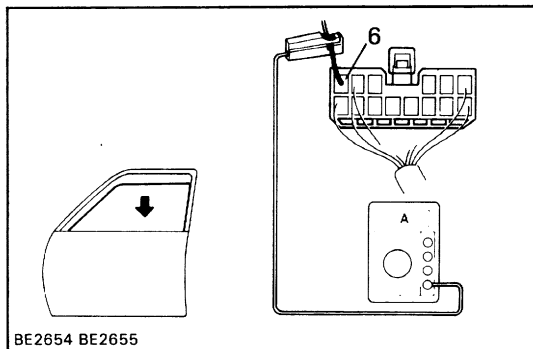
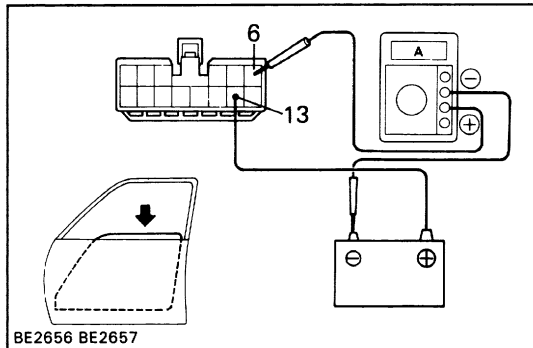
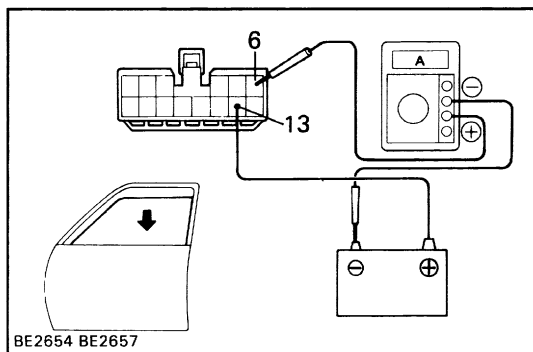
- Set the window lock switch to the unlock position.
- Connect the positive (+) lead from the battery to terminal 7 and the negative (-) lead to terminal 1, check that all the illuminations light up.



BE2652

- Set the window lock switch to the lock position, check that all the passenger's power window switch illuminations go out.

If operation is not as specified, replace the master switch.



ONE TOUCH POWER WINDOW SYSTEM/CURRENT OF CIRCUIT INSPECTION USING AN AMMER

- Disconnect the connector from the master switch.
- Connect the positive (+) lead from the ammeter to terminal 6 on the wire harness side connector and the negative (-) lead to negative terminal of the battery.
- Connect the positive (+) lead from the battery to terminal 13 on the wire harness side connector.
- As the window goes down, check that the current flows approximately 7 amperes.
- Check that the current increases approximately 14.5 amperes or more when the window stops going down.

HINT: The circuit breaker opens some 4 – 40 seconds after the window stops going down, so that check must be made before the circuit breaker operates.

If the operation is as specified, replace the master switch.

INSPECTION USING AN AMMETER WITH A CURRENT-MEASURING PROBE

- Remove the master switch with connector connected.
- Attach a current-measuring probe to terminal 6 of the wire harness.
- Turn the ignition switch ON and set the power window switch in the down position.
- As the window goes down, check that the current flows approximately 7 amperes.
- Check that the current increases approximately 14.5 amperes or more when the window stops going down.

HINT: The circuit breaker opens some 4 – 40 seconds after the window stops going down, so that check must be made before the circuit breaker operates.

If operation is as specified, replace the master switch.

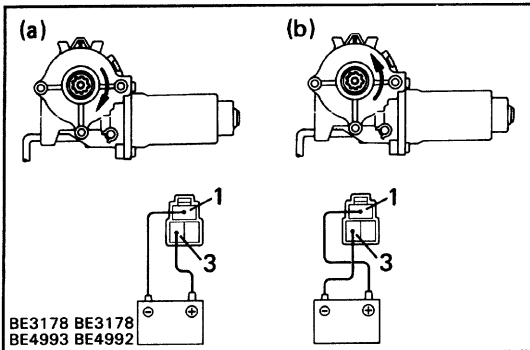
POWER WINDOW SWITCH

POWER WINDOW SWITCH INSPECTION

CONTINUITY

Terminal Switch position	1	2	3	4	5
UP					
OFF					
DOWN					

If continuity is not as specified, replace the switch.



POWER WINDOW MOTOR

LEFT SIDE DOOR MOTOR/MOTOR OPERATION

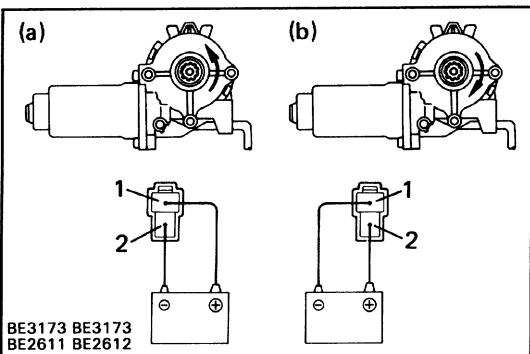
FRONT DOOR:

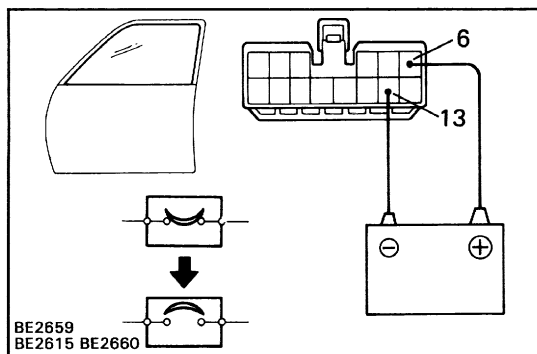
- Connect the positive (+) lead from the battery to terminal 3 and the negative (-) lead to terminal 1, check that the motor turns clockwise.
- Reverse the polarity, check that the motor turns counter-clockwise.

If operation is not as specified, replace the motor.

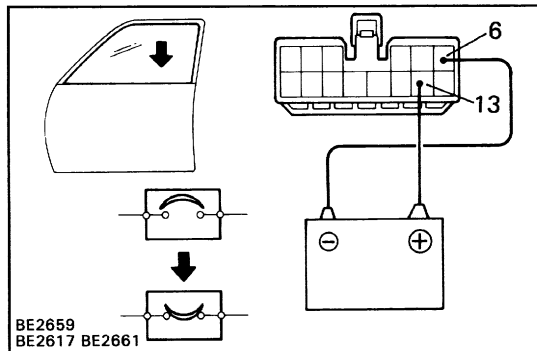
REAR DOOR:

- Connect the positive (+) lead from the battery to terminal 1 and the negative (-) lead to terminal 2, check that the motor turns counterclockwise.
 - Reverse the polarity, check that the motor turns clockwise.
- If operation is not as specified; replace the motor.

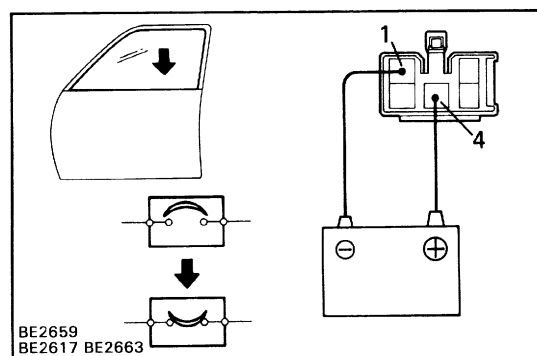
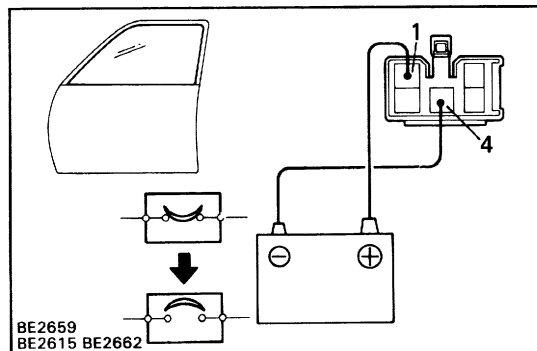


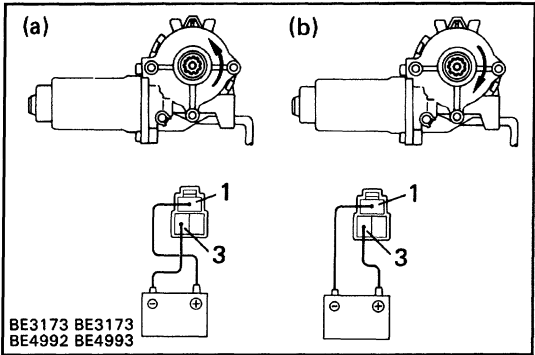
**LEFT SIDE MOTOR/CIRCUIT BREAKER OPERATION****DRIVER'S DOOR:**

- Disconnect the connector from the master switch.
- Connect the positive (+) lead from the battery to terminal 6 and the negative (-) lead to terminal 13 on the wire harness side connector and raise the window to full closed position.
- Continue to apply voltage, check that there is a circuit breaker operation noise within approximately 4 to 40 seconds.
- Reverse the polarity, check that the window begins to descend within approximately 60 seconds. If operation is not as specified, replace the motor.

**PASSENGER'S DOOR:**

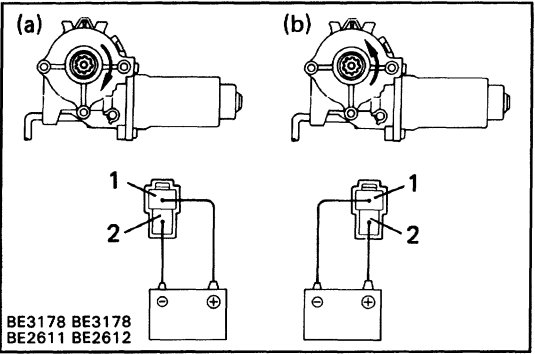
- Disconnect the connector from the power window switch.
- Connect the positive (+) lead from the battery to terminal 1 and the negative (-) lead to terminal 4 on the wire harness side connector, and raise the window to full closed position.
- Continue to apply voltage, check that there is a circuit breaker operation noise within approximately 4 to 40 seconds.
- Reverse the polarity, check that the window begins to descend within approximately 60 seconds. If operation is not as specified, replace the motor.





**RIGHT SIDE DOOR MOTOR/MOTOR OPERATION
FRONT DOOR:**

- (a) Connect the positive (+) lead from the battery to terminal 1 and the negative (-) lead to terminal 3, check that the motor turns clockwise.
- (b) Reverse the polarity, check that the motor turns counter-clockwise.



REAR DOOR:

- (a) Connect the positive (+) lead from the battery to terminal 2 and the negative (-) lead to terminal 1, check that the motor turns counterclockwise.
 - (b) Reverse the polarity, check that the motor turns clockwise.
- If operation is not as specified, replace the motor.

**RIGHT SIDE DOOR MOTOR/CIRCUIT BREAKER
OPERATION**

See step of left side motor on page [BE-70](#).

**POWER MAIN RELAY
POWER MAIN RELAY INSPECTION
CONTINUITY**

	Terminal	1	2	3	4
	Condition				
	Constant	○	○	○	
Apply battery positive voltage to terminals 1 and 3.			○		○

BE1647 BE1841

If continuity is not as specified, replace the relay.