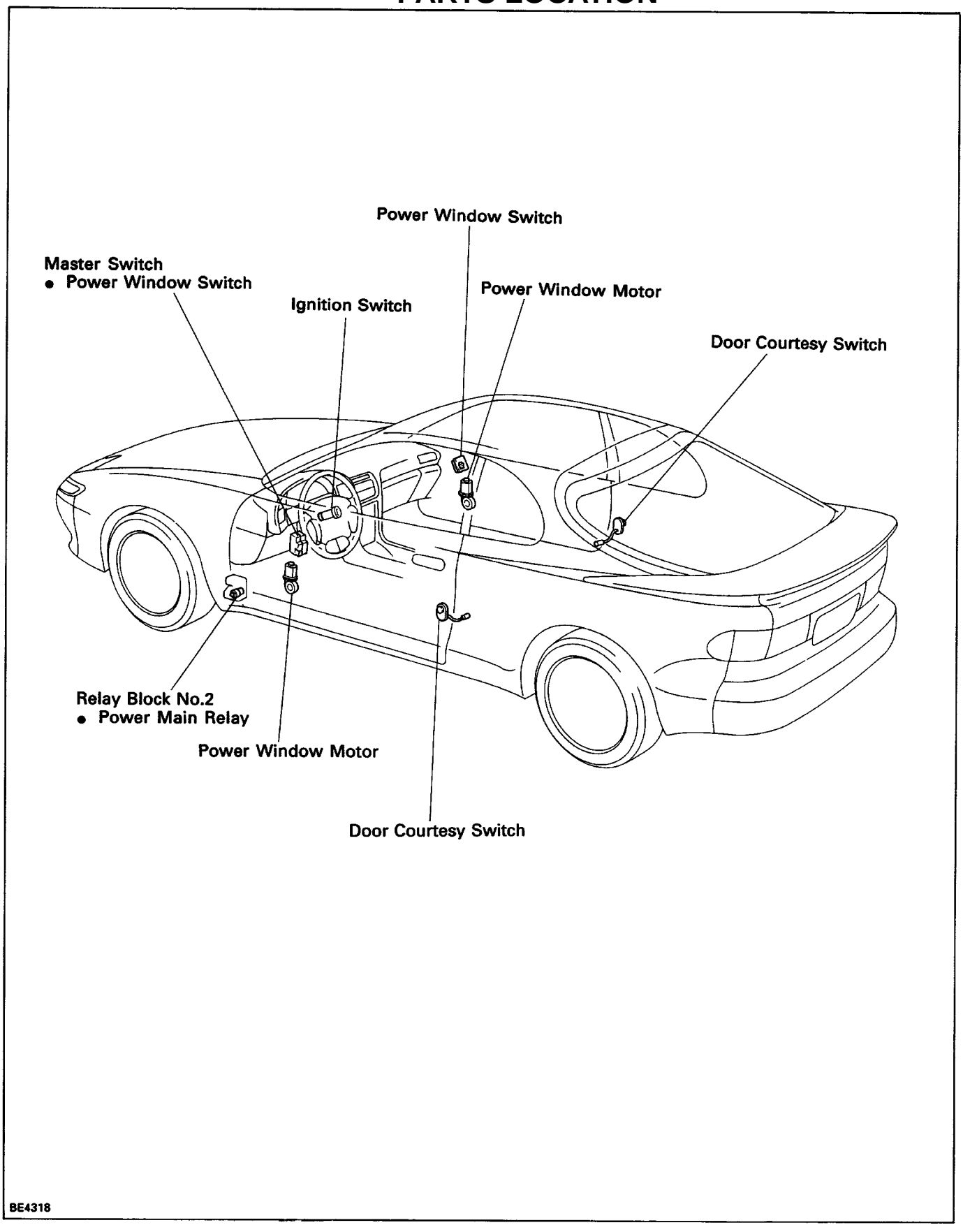
POWER WINDOW CONTROL SYSTEM

PARTS LOCATION



TROUBLESHOOTING

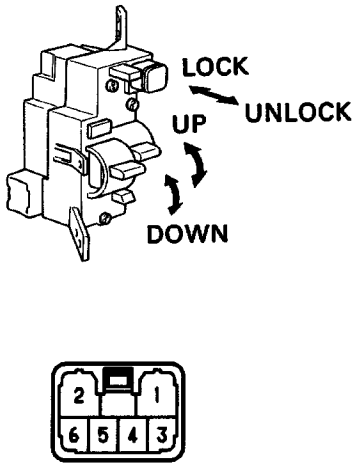
The table below will be useful for you in troubleshooting these electrical problems.
The most likely causes of the malfunction are shown in the order of their probability.
Inspect each part in the order shown, and replace the part when it is found to be faulty.

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–3 BE–3 BE–70 –
One–touch power window does not operate.	1. Power Window Master Switch	BE–67
Key–off power window does not operate.	1. Door Lock Control Relay 2. Wire Harness	BE–75 –
Only one window glass does not move.	1. Power Window Master Switch 2. Power Window Switch 3. Power Window Motor 4. Wire Harness	BE–67 BE–69 BE–69 –

POWER WINDOW MASTER SWITCH

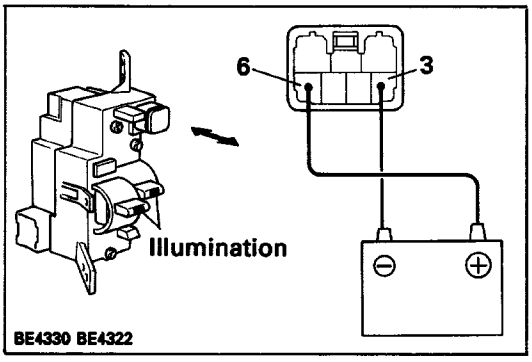
POWER WINDOW MASTER SWITCH INSPECTION

MASTER SWITCH/CONTINUITY



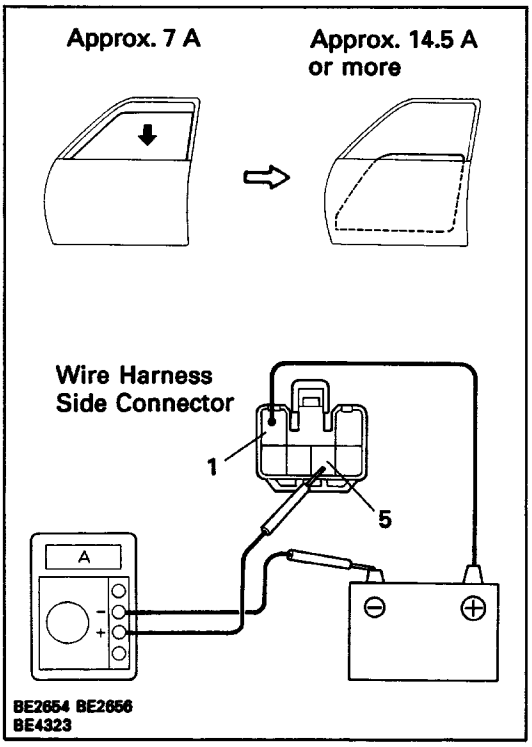
Window operation		Driver's				Passenger's			
Terminal / Switch position		1	3	5	6	2	3	4	6
Window unlock	UP	○	○	○	○	○			○
							○	○	
	OFF	○	○			○	○		
			○	○			○	○	
	DOWN	○			○	○	○		
			○	○				○	○
Window lock	UP	○	○		○	○			○
				○	○				
	OFF	○	○			○		○	
			○	○					
	DOWN	○			○				
			○	○				○	○

If continuity is not as specified, replace the switch.



MASTER SWITCH/ILLUMINATION

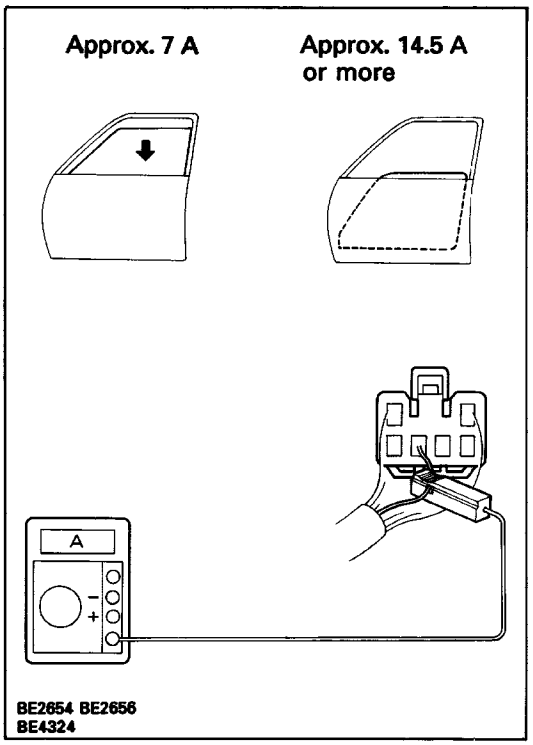
(a) Connect the positive (+) lead from the battery to terminal 6 and the negative H lead to terminal 3.
(b) Check that the illuminations light up.
(c) When the window lock switch pushed in, check that the passenger's illumination goes off.
If operation is not as specified, replace the master switch.



MASTER SWITCH: ONE TOUCH POWER WINDOW SYSTEM

INSPECTION USING AN AMMETER

(a) Disconnect the connector from the master switch.
(b) Connect the positive (+) lead from the ammeter to terminal 5 on the wire harness side connector and the negative (–) lead to negative terminal of the battery.
(c) Connect the positive (+) lead from the battery to terminal 1 on the wire harness side connector.
(d) As the window goes down, check that the current flows approximately 7 A.
(e) Check that the current increases approximately 14.5 A or more when the window stops going down.
HINT: The circuit breaker opens some 4 – 40 seconds after the window stops going down, so the check must be made before the circuit breaker operates.
If operation is as specified, replace the master switch.



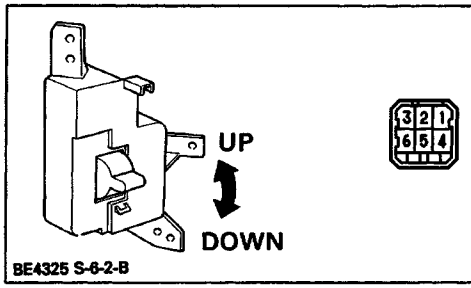
INSPECTION USING AN AMMETER WITH A CURRENT–MEASURING PROBE

(a) Remove the master switch with connector connected.
(b) Attach a current–measuring probe to terminal 5 of the wire harness.
(e) Turn the ignition switch ON and set the power window switch in the down position.
(d) As the window goes down, check that the current flows approximately 7 A.
(e) Check that the current increases approximately 14.5 A 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 circuit breaker operates.
If operation is as specified, replace the master switch.

POWER WINDOW SWITCH

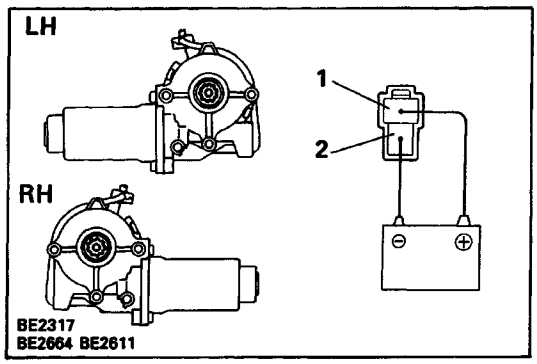
POWER WINDOW SWITCH INSPECTION

CONTINUITY



Terminal / Switch position	1	2	3	4	5
UP	○——	——○		○——	——○
OFF	○——	——○	○——	——○	
DOWN	○——		——○	——○	——○

If continuity is not as specified, replace the switch.

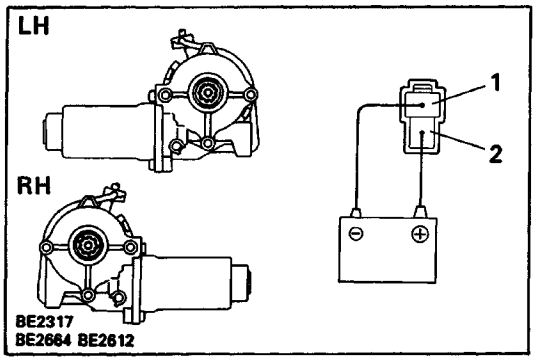


POWER WINDOW MOTOR

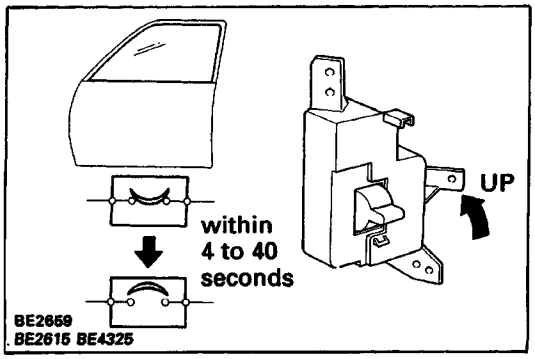
POWER WINDOW MOTOR INSPECTION

MOTOR OPERATION

(a) Connect the positive (+) lead from the battery to terminal 1 and the negative (–) lead to terminal 2, check that the motor turns downward.

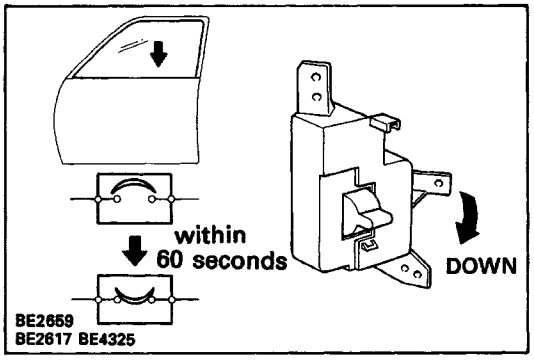


(b) Reverse the polarity, check that the motor turns upward.
If operation is not as specified, replace the motor.



CIRCUIT BREAKER/OPERATION

(a) With the window in the full closed position, hold the power window switch in “up” position and check that there is a circuit breaker operation noise within 4 to 40 seconds.

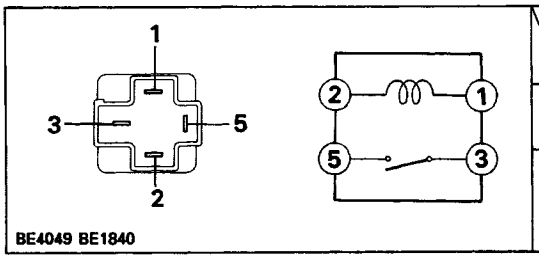


(b) With the window in the full closed position, hold the switch in “DOWN” and check that the window begins to descend within 60 seconds.
If operation is not as specified, replace the motor.

POWER MAIN RELAY

POWER MAIN RELAY INSPECTION

CONTINUITY



Terminal / Condition	1	2	3	5
Constant	○—∿∿∿—○			
Apply battery positive voltage to terminals 1 and 2.			○——○	

If continuity is not as specified, replace the relay.

DOOR LOCK CONTROL RELAY

See page BE–75**.**