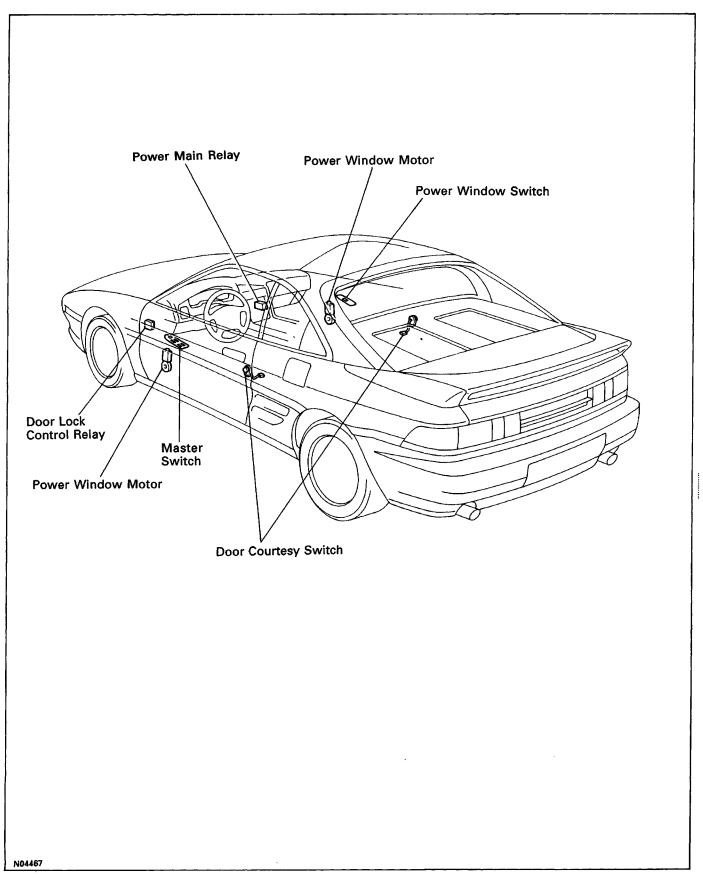
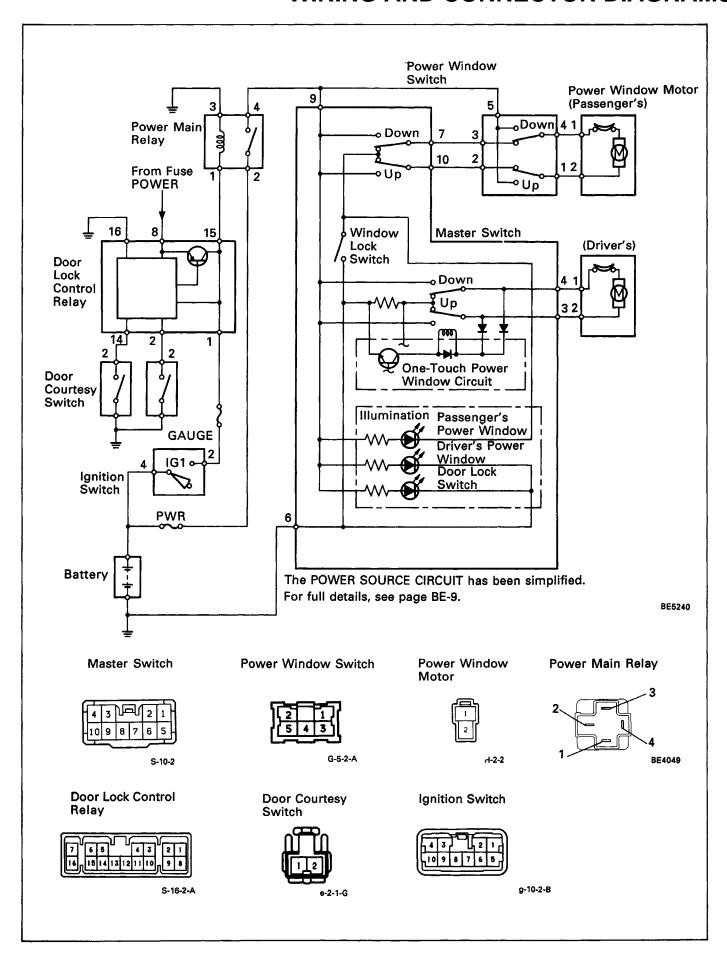
# POWER WINDOW CONTROL SYSTEM PARTS LOCATION



### WIRING AND CONNECTOR DIAGRAMS



### **TROUBLESHOOTING**

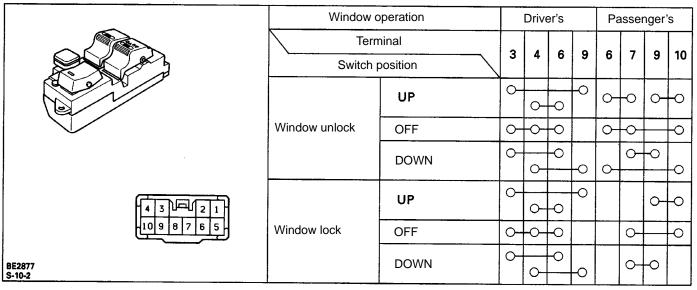
You will find the troubles easier using the table well shown below. In this table, each number shows the priority of causes in troubles. Check each part in order. If necessary, replace these parts.

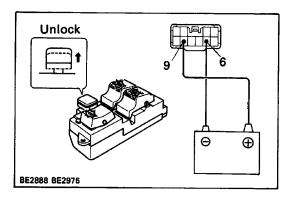
See page	BE-3	BE-3	BE-95	BE-92	BE-94	BE-94	1	BE-95	BE-11
Part name	POWER Fuse (M-Fuse)	3E Fuse	Power Main Relay	Power Window Master Switch	Power Window Switch	Power Window Motor	Wire Harness	Door Lock Control Relay	Ignition Switch
Trouble	POWE	GAUGE	Power	Power	Power	Power	Wire H	Door Lo	Ignitior
Power Window does not operate. *1	1	2	3	6			7	5	4
Power Window does not operate." *2	1	2	5	6			7	4	.3
"One Touch Power Window System" does not operate.				1					
Only one window glass does not move.				1	2	3	4		
"Window Lock System" does not operate.				1					
"Window Lock Illumination" does not light up.	_			1					

<sup>\*1:</sup> Power door lock control system does not operate.

<sup>\*2:</sup> Power door lock control is normal.

# POWER WINDOW MASTER SWITCH INSPECTION CONTINUITY

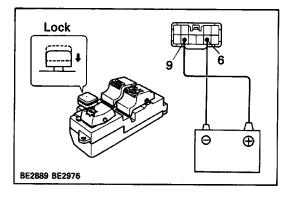




If continuity is not as specified, replace the switch.

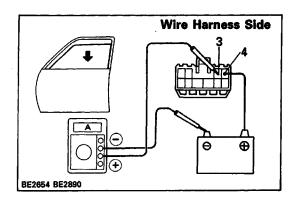
#### **ILLUMINATION**

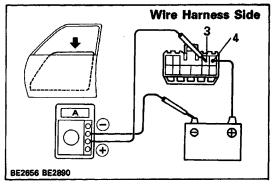
- (a) Set the window lock switch to the unlock position.
- (b) Connect the positive (+) lead from the battery to terminal 9 and the negative (-) lead to terminal 6, check that all the illuminations light up.

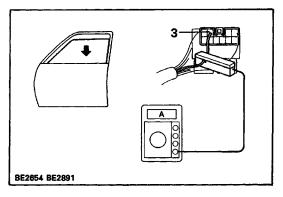


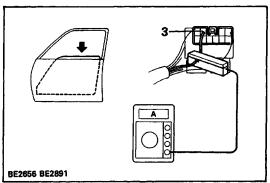
(c) Set the window lock switch to the lock position, check that the passenger's power window switch illumination goes out.

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









### ONE TOUCH POWER WINDOW SYSTEM/CURRENT OF CIRCUIT

#### INSPECTION USING AN AMMETER:

- (a) Disconnect the connector from the master switch.
- (b) Connect the positive (+) lead from the ammeter to terminal 3 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 4 on the wire harness side connector.
- (d) As the window goes down, check that the current flows approximately 7 amperes.
- (e) 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.

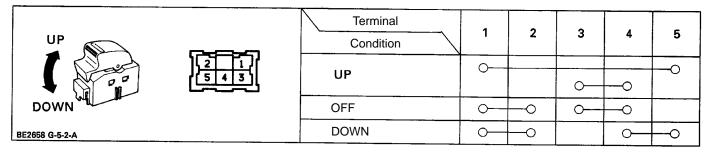
### INSPECTION USING AN AMMETER WITH A CURRENT MEASUREMENT PROBE:

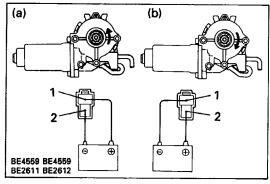
- (a) Remove the master switch with connector connected.
- (b) Attach a current-measuring probe to terminal 3 of the wire harness.
- (e) Turn the ignition switch ON and set the power window switch in the down position.
- (d) As the window goes down, check that the current flows approximately 7 amperes.
- (e) Check that the current increases approximately 14.5 amperes or more when the window stops going down.

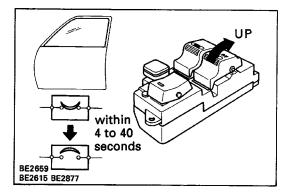
HINT: The circuit breaker opens some 4 – 40 seconds after the window stops going down, so that check must be made before the circuit breaker operates.

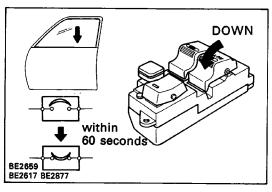
If operation is as specified, replace the master switch.

## POWER WINDOW SWITCH POWER WINDOW SWITCH INSPECTION CONTINUITY









If continuity is not as specified, replace the switch.

## POWER WINDOW MOTOR POWER WINDOW MOTOR INSPECTION

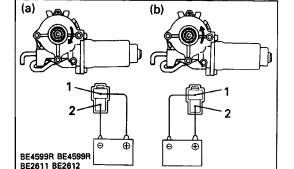
### LEFT SIDE DOOR MOTOR/MOTOR OPERATION

- (a) Connect the positive (+) lead from the battery to terminal 1 and the negative (-) lead to terminal 2, check that the motor turns counterc ckwise.
  - (b) Reverse the polarity, check that the motor turns clock—wise.

If operation is not as specified, replace the motor.

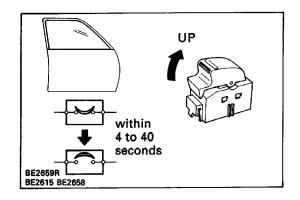
### LEFT SIDE DOOR MOTOR/CIRCUIT BREAKER OPERATION

- (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 with in 60 seconds.
  - If operation is not as specified, replace the motor.



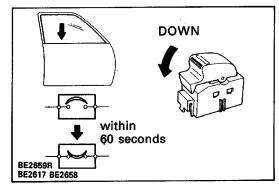
#### RIGHT SIDE DOOR MOTOR/MOTOR OPERATION

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



### RIGHT SIDE DOOR 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.

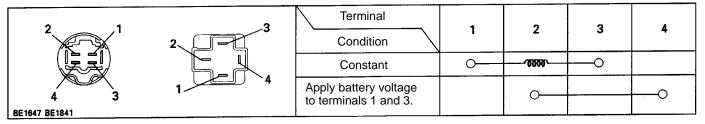


(b) With the window in the full closed position, hold the switch in "DOWN" and check that the window begins todescend within 60 seconds.If operation is not as specified, replace the motor.

## DOOR LOCK CONTROL RELAY INSPECTION

See Door Lock Control System on page BE-102.

# POWER MAIN RELAY INSPECTION CONTINUITY



If continuity is not as specified, replace the relay.