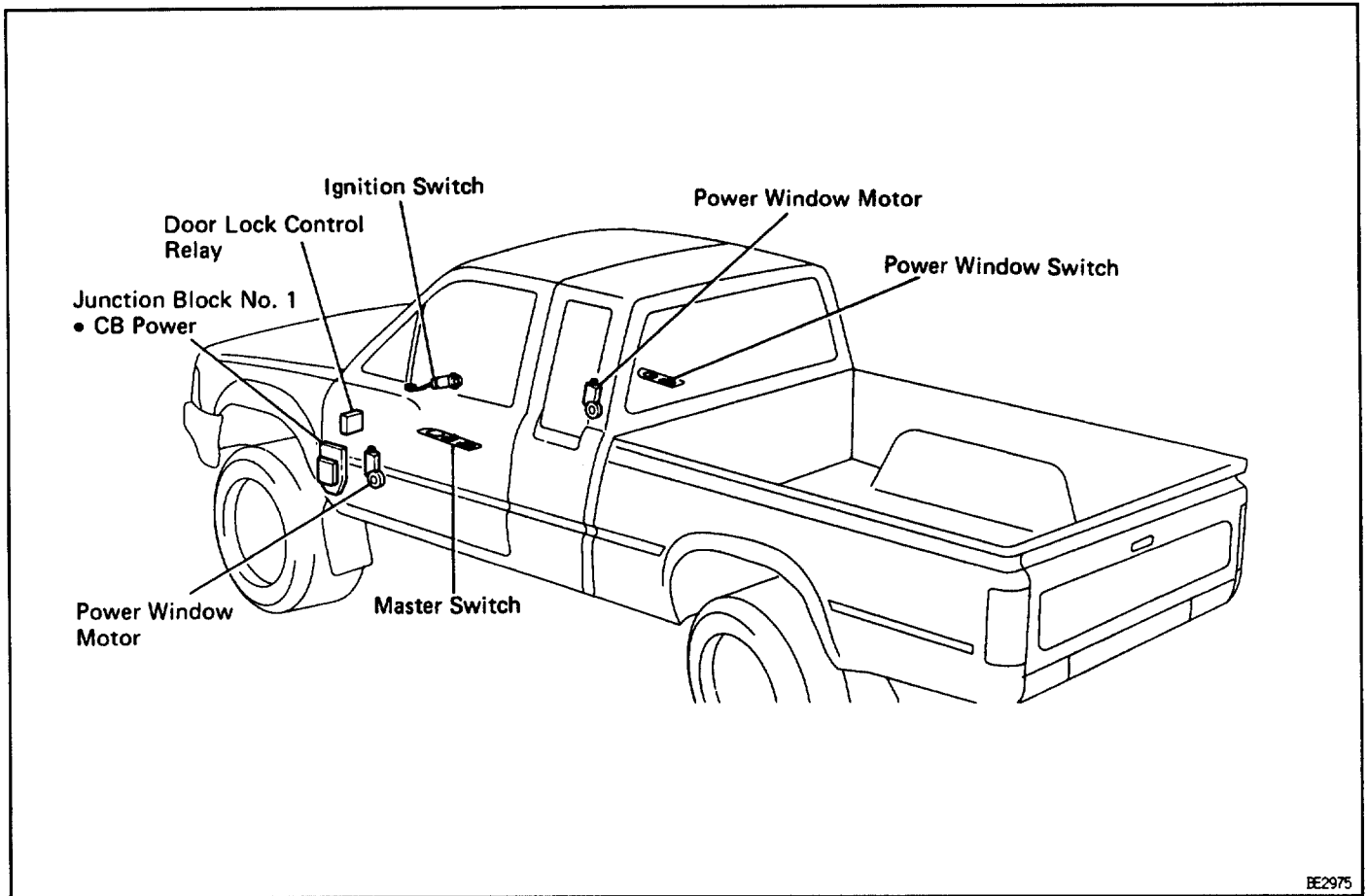


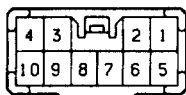
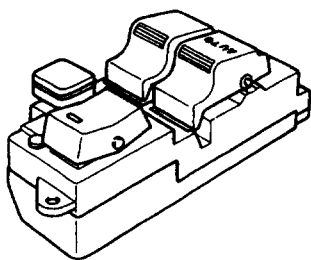
# POWER WINDOW CONTROL SYSTEM PARTS LOCATION



## 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	Parts name	(See page)
Power Window does not operate at all	1. GAUGE Fuse 3. Door Lock Control Relay 4. Wire Harness	(BE-11) (BE-75)
One Touch Power window does not operate	1. Power Window Master Switch	(BE-65)
Only one Window does not operate	1. Power Window Switch 2. Power Window Motor 3. Wire Harness	(BE-67) (BE-68)



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## POWER WINDOW MASTER SWITCH INSPECTION

### INSPECT POWER WINDOW MASTER SWITCH

#### Driver's switch/ Window unlock

##### Continuity

Switch position	Tester connection to terminal number	Specified value
UP	3 - 9	Continuity
	4 - 6	
OFF	3 - 4 - 6	Continuity
DOWN	3 - 6	Continuity
	4 - 9	

If continuity is not as specified, replace the switch.

#### Driver's switch/ Window lock

##### Continuity

Switch position	Tester connection to terminal number	Specified value
UP	3 - 9	Continuity
	4 - 6	
OFF	3 - 4 - 6	Continuity
DOWN	3 - 6	Continuity
	4 - 9	

If continuity is not as specified, replace the switch.

#### Passenger's switch/ Window unlock

##### Continuity

Switch position	Tester connection to terminal number	Specified value
UP	6 - 7	Continuity
	9 - 10	
OFF	6 - 7 - 10	Continuity
DOWN	7 - 9	Continuity
	6 - 10	

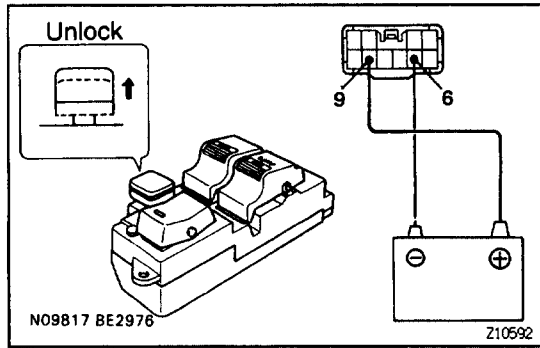
If continuity is not as specified, replace the switch.

#### Passenger's switch/ Window lock

##### Continuity

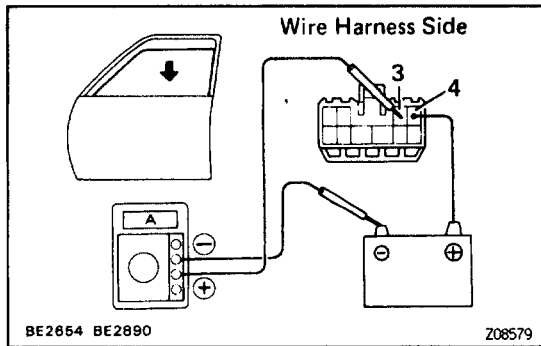
Switch position	Tester connection to terminal number	Specified value
UP	9 - 10	Continuity
OFF	7 - 10	Continuity
DOWN	7 - 9	Continuity

If continuity is not as specified, replace the switch.



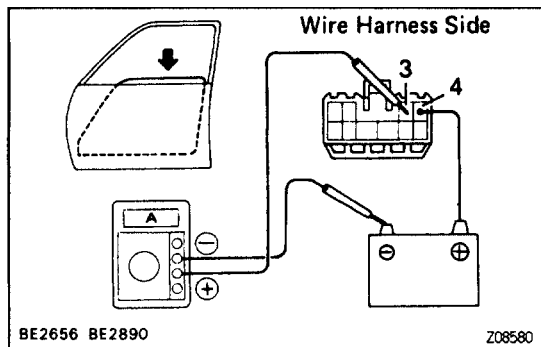
### Master Switch/ Illumination

- (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.



### Master Switch/ One Touch Power Window System Inspection using an ammeter:

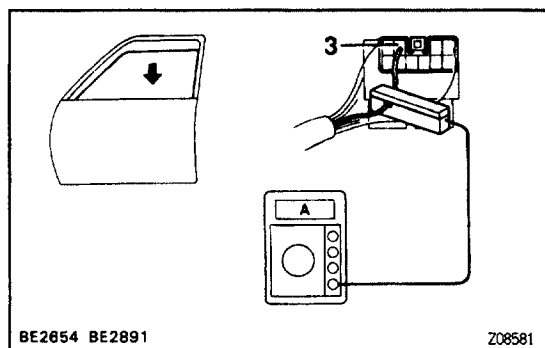
- (a) Disconnect the connector from the master switch.
- (b) Connect the positive (+) lead from the ammeter to terminal 3 on the wire harness side connector and the negative (-) lead to negative terminal of the battery.



- (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 A.
- (e) Check that the current increases approximately 14.5 A or more when the window stops going down.

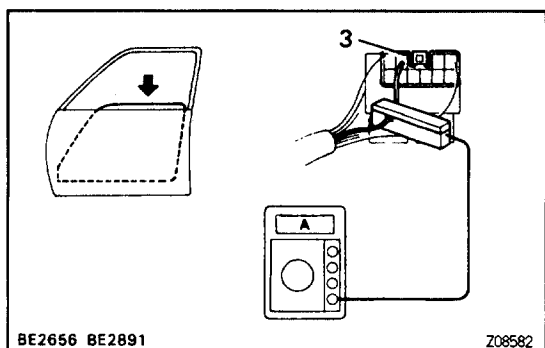
HINT: The circuit breaker opens some 4–40 seconds after the window stops going down, so the check must be made before the circuit breaker operates.

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



### Inspection using an ammeter with a current-measuring probe:

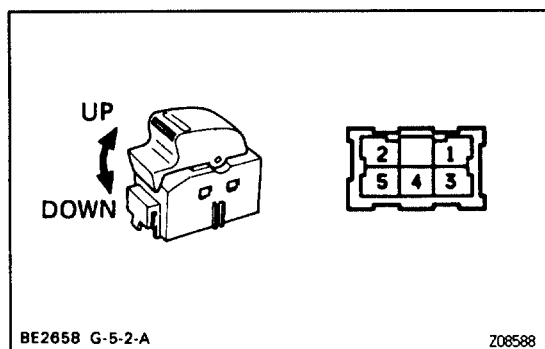
- Remove the master switch with connector connected.
- Attach a current-measuring probe to terminal 3 of the wire harness.
- Turn the ignition switch ON and set the power window switch in the down position.
- As the window goes down, check that the current flows approximately 7 A.



- 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 circuit breaker operates.

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



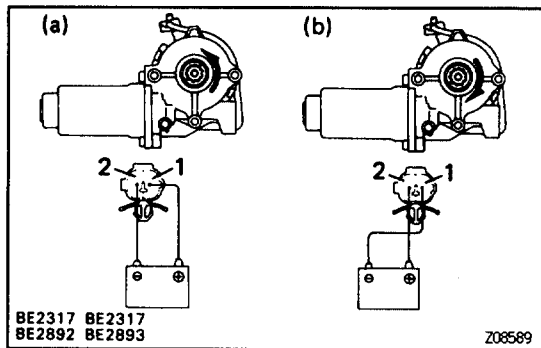
## POWER WINDOW SWITCH INSPECTION

### INSPECT POWER WINDOW SWITCH

#### Continuity

Switch position	Tester connection to terminal number	Specified value
UP	1 – 5	Continuity
	3 – 4	
OFF	1 – 2	Continuity
	3 – 4	
DOWN	1 – 2	Continuity
	4 – 5	

If continuity is not as specified, replace the switch.



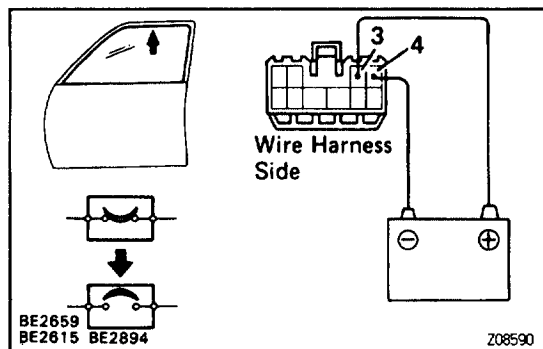
## POWER WINDOW MOTOR INSPECTION

### INSPECT POWER WINDOW MOTOR

#### Left Side Door Motor

##### Motor Operation

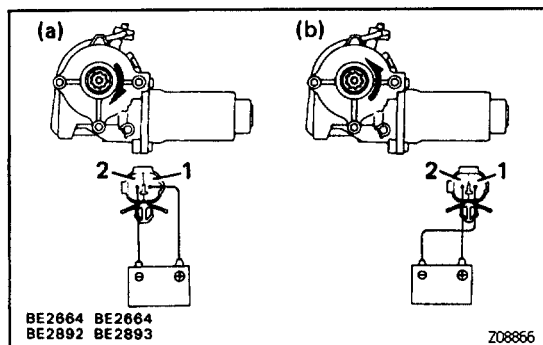
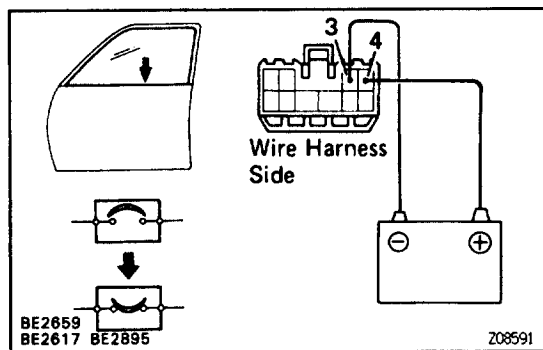
- Connect the positive (+) lead from the battery to terminal 1 and the negative (-) lead to terminal 2, check that the motor turns counterclockwise.
- Reverse the polarity, check that the motor turns clockwise. If operation is not as specified, replace the motor.



#### Left Side Door Motor

##### Circuit Breaker/ Operation

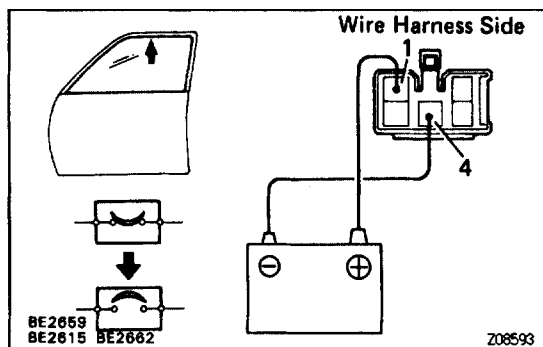
- Disconnect the connector from the master switch.
- Connect the positive (+) lead from the battery to terminal 3 and the negative (-) lead to terminal 4 on the wire harness side connector, and raise the window to full closed position.
- Continue to apply voltage, check that there is a circuit breaker operation noise within approximately 4-40 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

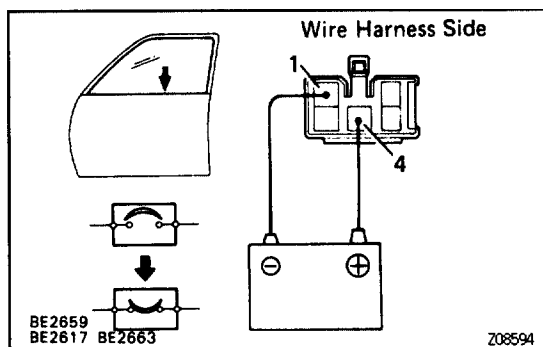
##### Motor Operation

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

- 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 – 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.

## POWER DOOR LOCK CONTROL RELAY INSPECTION

INSPECT POWER DOOR LOCK CONTROL RELAY  
(See page [BE-75](#))