

## INSPECTION

### 1. INSPECT POWER WINDOW MASTER SWITCH CONTINUITY

#### Driver's switch(Window unlock):

| Switch position | Tester connection | Specified condition |
|-----------------|-------------------|---------------------|
| UP              | 3 – 9, 4 – 6      | Continuity          |
| OFF             | 3 – 4 – 6         | Continuity          |
| DOWN            | 3 – 6, 4 – 9      | Continuity          |

#### Driver's switch(Window lock):

| Switch position | Tester connection | Specified condition |
|-----------------|-------------------|---------------------|
| UP              | 3 – 9, 4 – 6      | Continuity          |
| OFF             | 3 – 4 – 6         | Continuity          |
| DOWN            | 3 – 6, 4 – 9      | Continuity          |

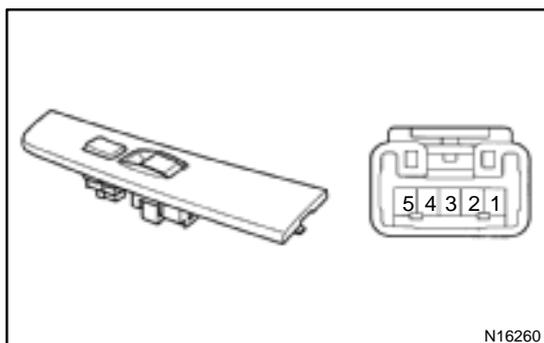
#### Passenger's switch(Window unlock):

| Switch position | Tester connection | Specified condition |
|-----------------|-------------------|---------------------|
| UP              | 6 – 7, 9 – 10     | Continuity          |
| OFF             | 6 – 7 – 10        | Continuity          |
| DOWN            | 7 – 9, 6 – 10     | Continuity          |

#### Passenger's switch(Window lock):

| Switch position | Tester connection | Specified condition |
|-----------------|-------------------|---------------------|
| UP              | 9 – 10            | Continuity          |
| OFF             | 7 – 10            | Continuity          |
| DOWN            | 7 – 9             | Continuity          |

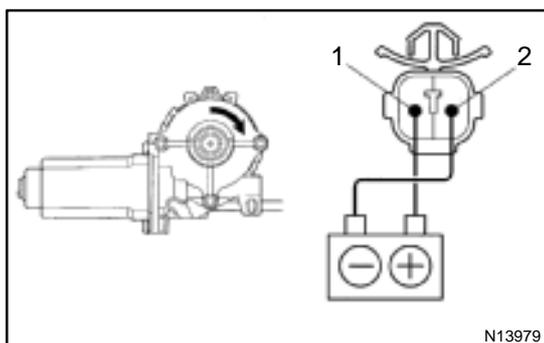
If continuity is not as specified, replace the switch.



### 2. INSPECT POWER WINDOW SWITCH CONTINUITY

| Switch position | Tester connection | Specified condition |
|-----------------|-------------------|---------------------|
| UP              | 1 – 2, 3 – 4      | Continuity          |
| OFF             | 1 – 2, 3 – 5      | Continuity          |
| DOWN            | 3 – 5, 1 – 4      | Continuity          |

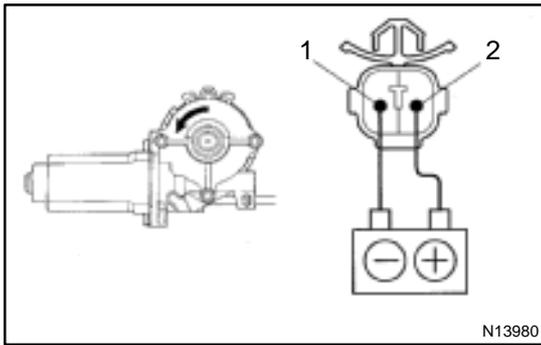
If continuity is not as specified, replace the switch.



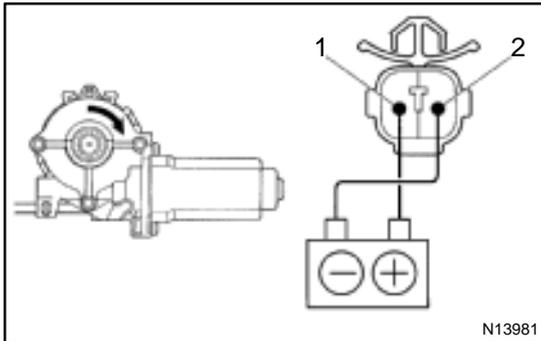
### 3. Driver's Side:

#### INSPECT POWER WINDOW MOTOR OPERATION

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



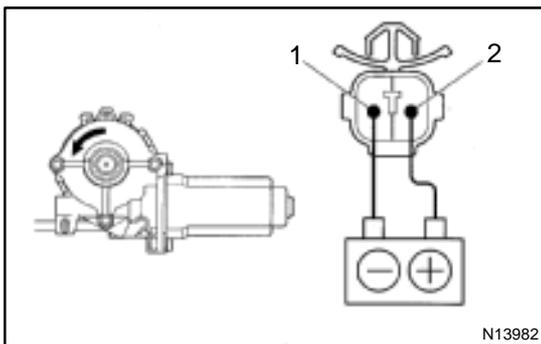
- (b) Reverse the polarity, check that the motor turns counter-clockwise.  
If operation is not as specified, replace the motor.



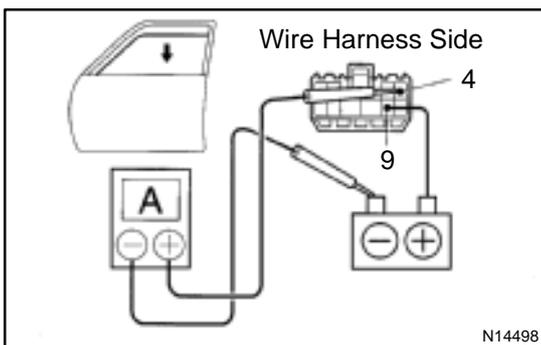
#### 4. Passenger's Side:

##### INSPECT POWER WINDOW MOTOR OPERATION

- (a) Connect the positive (+) lead from the battery to terminal 1 and negative (-) lead to terminal 2. 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.



#### 5. Using an ammeter:

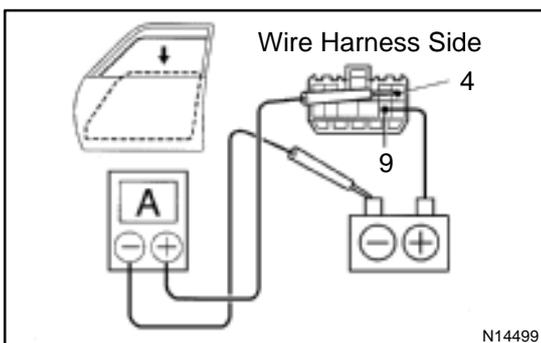
##### INSPECT ONE TOUCH POWER WINDOW SYSTEM

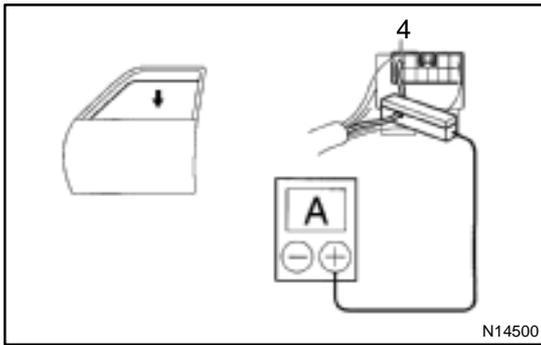
- (a) Disconnect the connector of the master switch.  
(b) Connect the positive (+) lead from the ammeter to terminal 4 on the wire harness side connector and the negative (-) lead to negative terminal of the battery.  
(c) Connect the positive (+) lead from the battery to terminal 9 on the wire harness side connector.  
(d) As the window goes down, check that the current increases to approximately 7.0 A.  
(e) Check that the current increases to approximately 14.5 A or more when the window stops going down.

##### HINT:

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

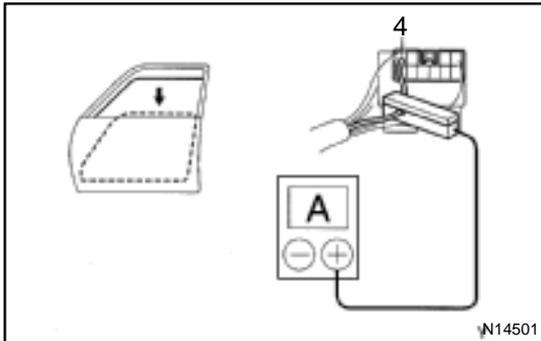
If the operation is as specified, replace the master switch.





**6. Using an ammeter with a current – measuring probe: INSPECT ONE TOUCH POWER WINDOW SYSTEM**

- Remove the master switch with the 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 increases to approximately 7.0 A.

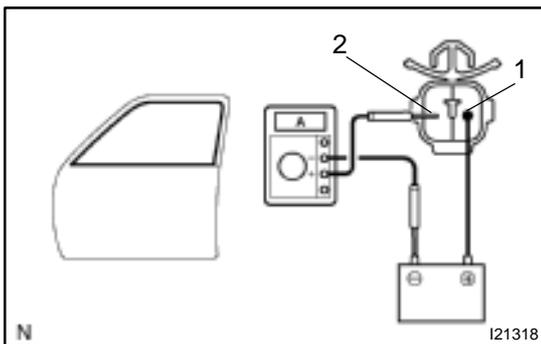


- Check that the current increases to approximately 14.5 A or more when the window stops going down.

**HINT:**

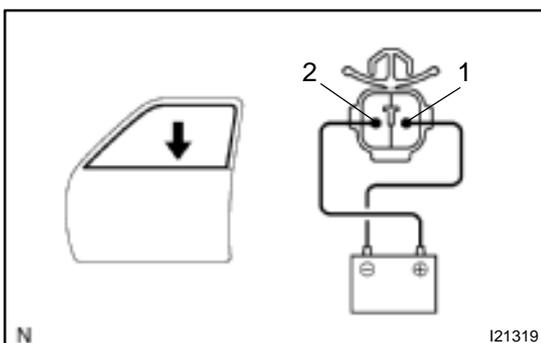
The circuit breaker opens for some 4 – 40 seconds after the window stops going down, so that the check must be done before the circuit breaker operates.

If operation is as specified, replace the master switch.



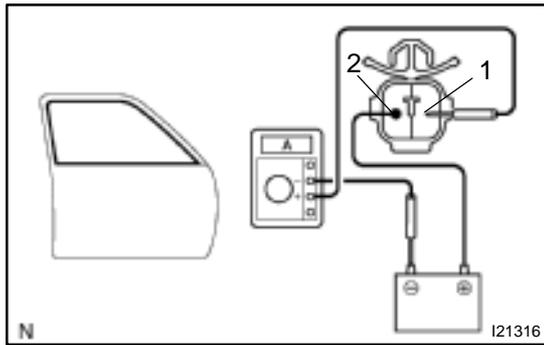
**7. Driver's door: INSPECT POWER WINDOW MOTOR PTC THERMISTOR OPERATION**

- Disconnect the connector from the power window motor.
- Connect the positive (+) lead from the ammeter to terminal 2 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 1 on the wire harness side connector, and raise the window to the fully position.
- Continue to apply voltage, and check that the current changes to less than 1 A with 4 to 90 seconds.



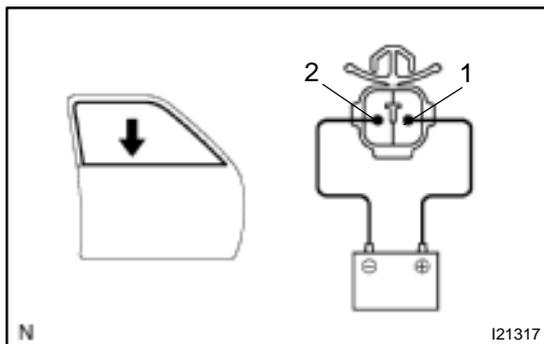
- Disconnect the leads from terminals.
- Approximately 60 seconds later, connect the positive (+) lead from the battery to terminal 2 and negative (-) lead to terminal 1, and check that the window begins to descended.

If operation is not as specified, replace the motor.



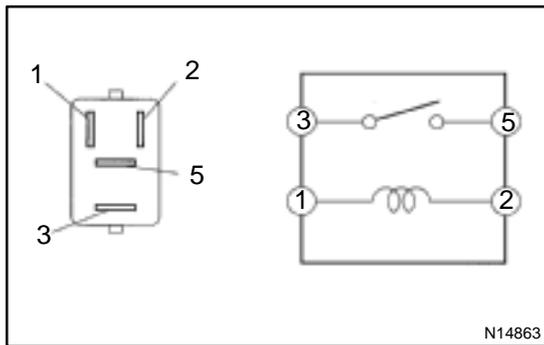
**8. Passenger's door: INSPECT POWER WINDOW MOTOR PTC THERMISTOR OPERATION**

- (a) Disconnect the connector from the power window motor.
- (b) Connect the positive (+) lead from the ammeter to terminal 1 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 2 on the wire harness side connector, and raise the window to the fully position.
- (d) Continue to apply voltage and check that the current changes to less than 1 A within 4 to 90 seconds.
- (e) Disconnect the leads from the terminals.



- (f) Approximately 60 seconds later, connect the positive (+) lead from the battery to terminal 1 and the negative (-) lead to terminal 2, and check that the window begins to descend.

If operation is not as specified, replace the motor.



**9. INSPECT POWER MAIN RELAY CONTINUITY**

| Condition                           | Tester connection | Specified condition |
|-------------------------------------|-------------------|---------------------|
| Constant                            | 1 – 2             | Continuity          |
| Apply B+ between terminals 1 and 2. | 3 – 5             | Continuity          |

If continuity is not as specified, replace the relay.

**10. INSPECT DOOR LOCK RELAY (See page BE-52)**