

I02596

## INSPECTION

### 1. 2 door models :

#### INSPECT POWER WINDOW MASTER SWITCH CONTINUITY

##### Driver's switch :

Switch position	Tester connection	Specified condition
UP	1 - 4 3 - 9	Continuity
OFF	1 - 3 1 - 4	Continuity
DOWN	1 - 3 4 - 9	Continuity

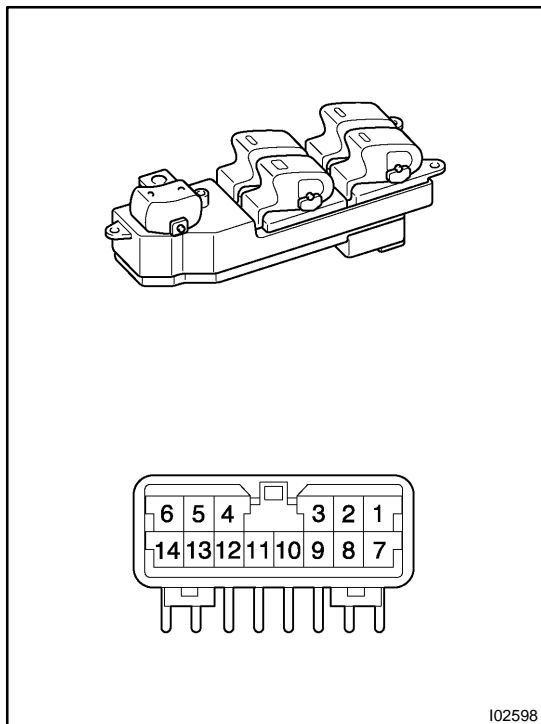
##### Passenger's switch (Window unlock) :

Switch position	Tester connection	Specified condition
UP	1 - 10 8 - 9	Continuity
OFF	1 - 8 1 - 10	Continuity
DOWN	1 - 8 9 - 10	Continuity

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

Switch position	Tester connection	Specified condition
UP	8 - 9	Continuity
OFF	8 - 10	Continuity
DOWN	9 - 10	Continuity

If continuity is not as specified, replace the switch.



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### 2. 4 door models :

#### INSPECT POWER WINDOW MASTER SWITCH CONTINUITY

##### Front driver's switch :

Switch position	Tester connection	Specified condition
UP	1 - 10, 1 - 11 3 - 5, 4 - 5	Continuity
OFF	1 - 3, 1 - 4 3 - 5, 4 - 5	Continuity
DOWN	5 - 10, 5 - 11 1 - 3, 1 - 4	Continuity

##### Front passenger's switch (Window unlock) :

Switch position	Tester connection	Specified condition
UP	10 - 14, 11 - 14 3 - 6, 4 - 6	Continuity
OFF	3 - 14, 4 - 14 3 - 6, 4 - 6	Continuity
DOWN	6 - 10, 6 - 11 3 - 14, 4 - 14	Continuity

**Front passenger's switch (Window lock) :**

Switch position	Tester connection	Specified condition
UP	10 - 14, 11 - 14	Continuity
OFF	6 - 14	Continuity
DOWN	6 - 10, 6 - 11	Continuity

**Rear left switch (Window unlock) :**

Switch position	Tester connection	Specified condition
UP	9 - 10, 9 - 11 3 - 12, 4 - 12	Continuity
OFF	3 - 9, 4 - 9 3 - 12, 4 - 12	Continuity
DOWN	10 - 12, 11 - 12 3 - 9, 4 - 9	Continuity

**Rear left switch (Window lock) :**

Switch position	Tester connection	Specified condition
UP	9 - 10, 9 - 11	Continuity
OFF	9 - 12	Continuity
DOWN	10 - 12, 11 - 12	Continuity

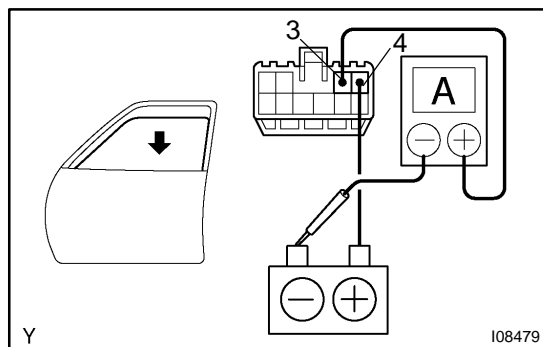
**Rear right switch (Window unlock) :**

Switch position	Tester connection	Specified condition
UP	8 - 10, 8 - 11 3 - 13, 4 - 13	Continuity
OFF	3 - 8, 4 - 8 3 - 13, 4 - 13	Continuity
DOWN	10 - 13, 11 - 13 3 - 8, 4 - 8	Continuity

**Rear right switch (Window lock) :**

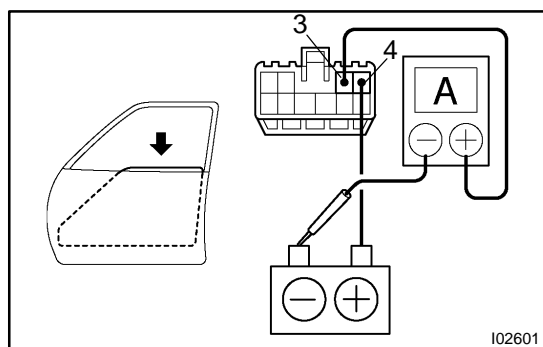
Switch position	Tester connection	Specified condition
UP	8 - 10, 8 - 10	Continuity
OFF	8 - 13	Continuity
DOWN	10 - 13, 11 - 13	Continuity

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



**3. 2 door models :  
INSPECT ONE TOUCH POWER WINDOW SYSTEM  
(Using an ammeter)**

- Disconnect the connector from the master switch.
- Connect the positive (+) lead from the ammeter to terminal 3 on the wire harness side connector and the negative (-) lead to the negative (-) terminal of the battery.
- Connect the positive (+) lead from the battery to terminal 4 on the wire harness side connector.
- As the window goes down, check that the current is approximately 7 A.

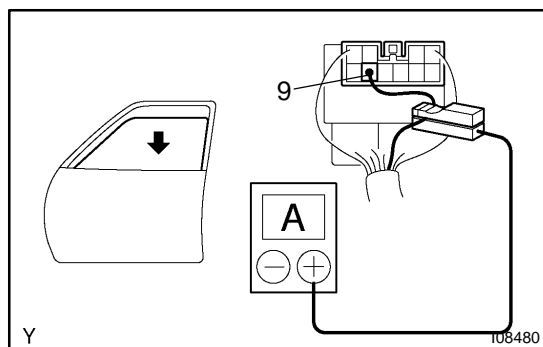


- Check that the current increases up to approximately 14.5 A or more when the window stops going down.

**HINT:**

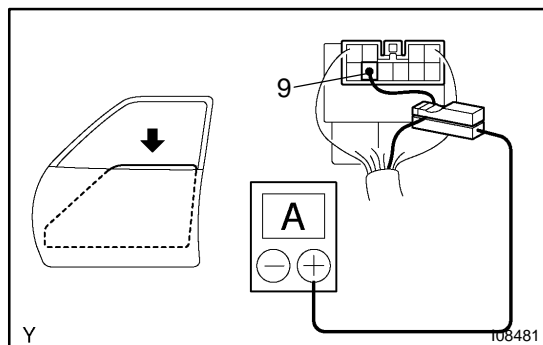
The circuit breaker opens for 7 - 13 seconds after the window stops going down, so that check must be made before the circuit breaker operates.

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



**4. 2 door models :  
INSPECT ONE TOUCH POWER WINDOW SYSTEM  
(Using an ammeter with a current - measuring probe)**

- Remove the master switch with connector connected.
- Attach a current - measuring probe to terminal 9 of the wire harness.
- Turn the ignition switch ON, and set the power window switch in the down position.

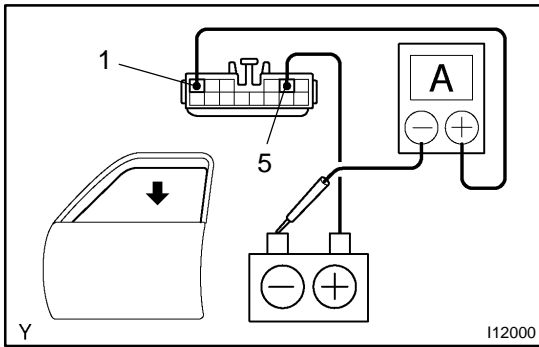


- As the window goes down, check that the current is approximately 7 A.
- Check that the current increases up to approximately 14.5 A or more when the window stops going down.

**HINT:**

The circuit breaker opens for 7 - 13 seconds after the window stops going down, so that check must be made before the circuit breaker operates.

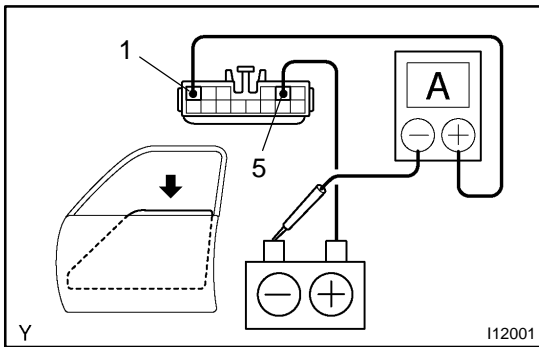
If operation is not as specified, replace the master switch.



#### 5. 4 door models :

##### INSPECT ONE TOUCH POWER WINDOW SYSTEM (Using an ammeter)

- Disconnect the connector from the master switch.
- Connect the positive (+) lead from the ammeter to terminal 1 on the wire harness side connector and the negative (-) lead to the negative terminal of the battery.
- Connect the positive (+) lead from the battery to terminal 5 on the wire harness side connector.
- As the window goes down, check that the current flow is approximately 7 A.

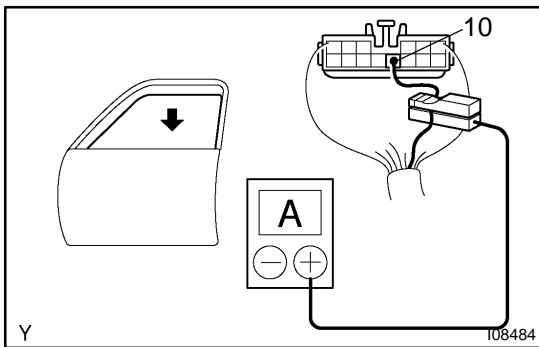


- Check that the current increases up to approximately 14.5 A or more when the window stops going down.

##### HINT:

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

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



#### 6. 4 door models :

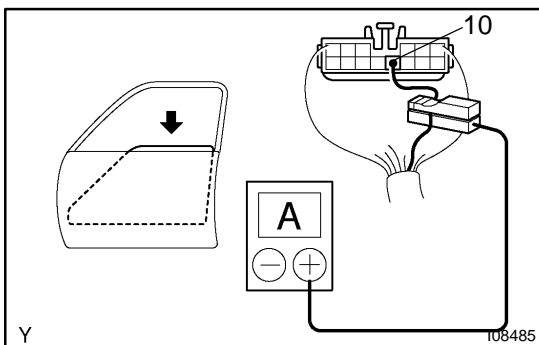
##### INSPECT ONE TOUCH POWER WINDOW SYSTEM (Using an ammeter with a current - measuring probe)

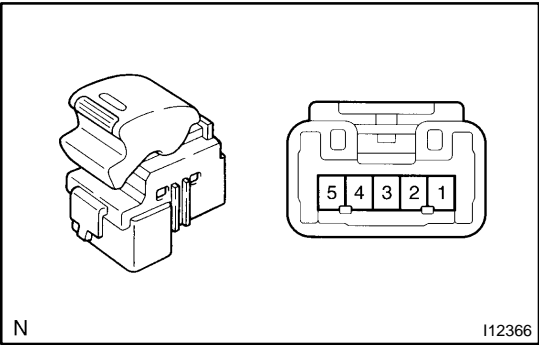
- Remove the master switch with connector connected.
- Attach a current - measuring probe to terminal 10 of the wire harness.
- Turn the ignition switch ON and set the power window switch in the down position.
- As the window goes down, check that the current flow is approximately 7 A.
- Check that the current increases up to approximately 14.5 A or more when the window stops going down.

##### HINT:

The circuit breaker opens for 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.

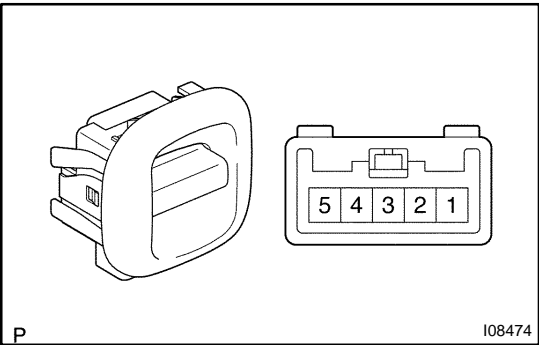




7. INSPECT PASSENGER'S POWER WINDOW SWITCH CONTINUITY

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

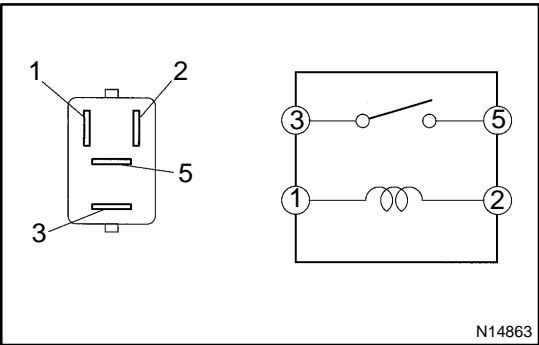
If continuity is not as specified, replace the switch.



8. 4 door models:  
INSPECT REAR DOOR POWER WINDOW SWITCH CONTINUITY

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

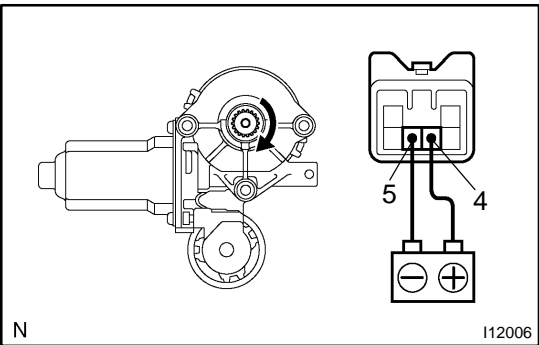
If continuity is not as specified, replace the switch.



9. INSPECT POWER MAIN RELAY CONTINUITY

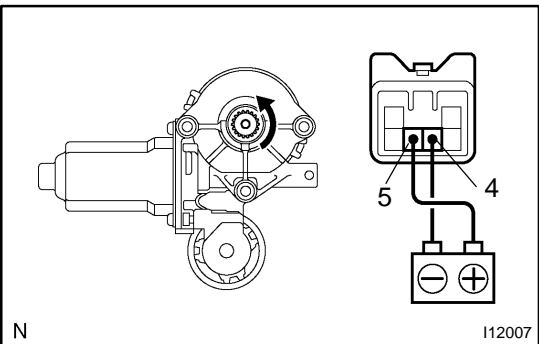
Condition	Tester connection	Specified condition
Constant	1 - 2	Continuity
Apply B + between terminals 1 and 2	3 - 5	Continuity

If continuity is not as specified, replace the switch.

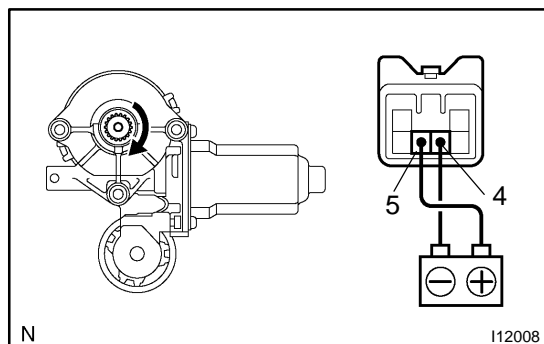


10. Front left side door:  
INSPECT POWER WINDOW MOTOR OPERATION

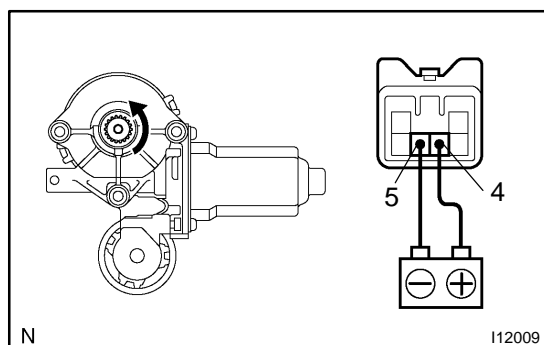
- (a) Connect the positive (+) lead from the battery to terminal 4 and the negative (-) lead to terminal 5, and check that the motor turns clockwise.



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

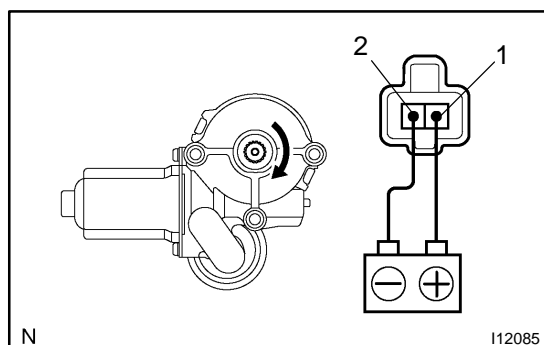
**11. Front right side door:****INSPECT POWER WINDOW MOTOR OPERATION**

- (a) Connect the positive (+) lead from the battery to terminal 5 and the negative (-) lead to terminal 4, and check that the motor turns clockwise.

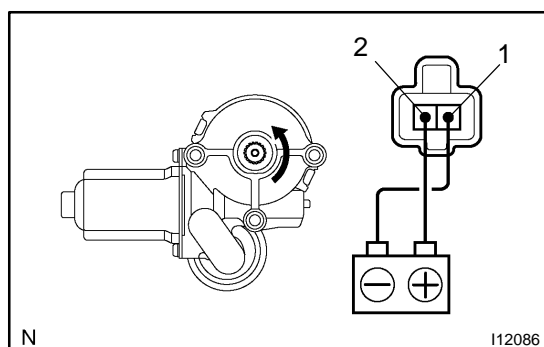


- (b) Reverse the polarity, check that the motor turns counter-clockwise.

If operation is not as specified, replace the motor.

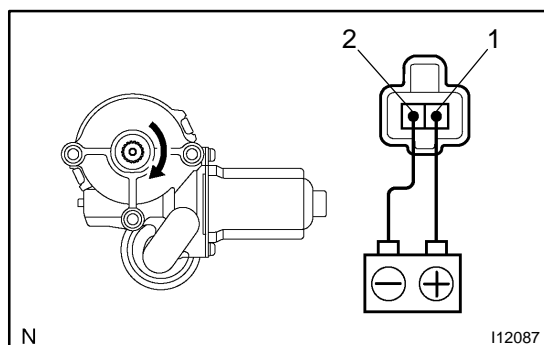
**12. Rear left side door:****INSPECT POWER WINDOW MOTOR OPERATION**

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

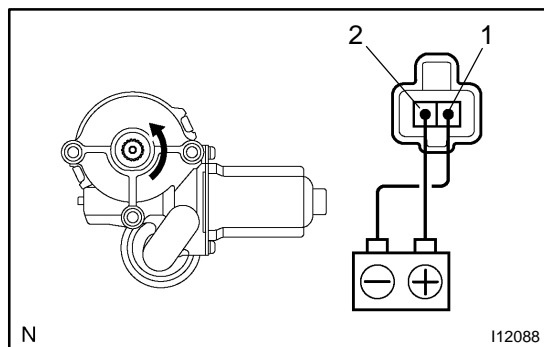


- (b) Reverse the polarity, check that the motor turns counter-clockwise.

If operation is not as specified, replace the motor.

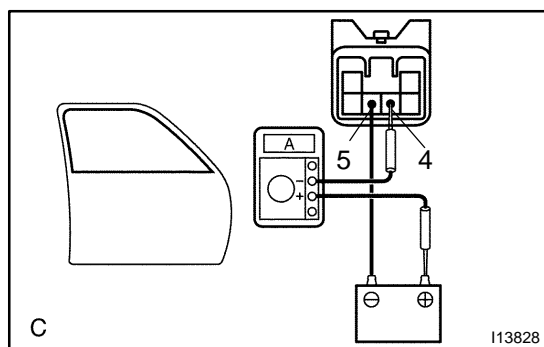
**13. Rear right side door:****INSPECT POWER WINDOW MOTOR OPERATION**

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

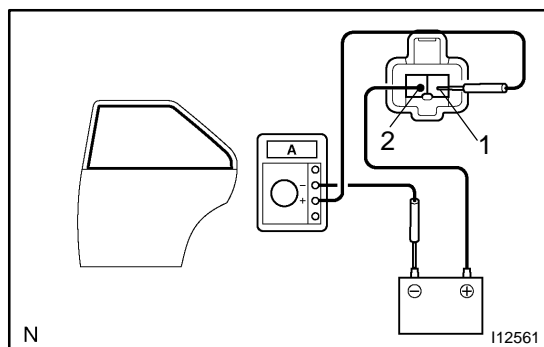
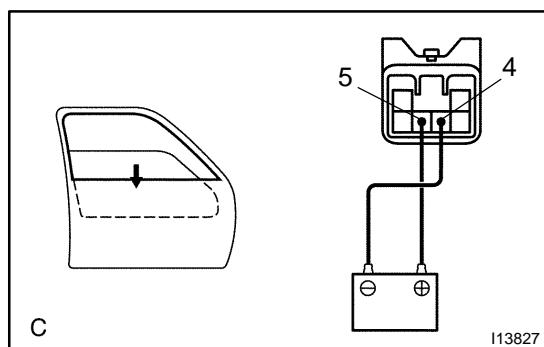


#### 14. Front Door:

##### INSPECT POWER WINDOW MOTOR PTC THERMISTOR OPERATION

- Disconnect the connector from the Driver door Window motor.
- 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.
- Connect the positive (+) lead from the battery to terminal 4 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 within 4 to 90 seconds.
- Disconnect the leads from the terminals.
- Approximately 60 seconds later, connect the positive (+) lead from the battery to terminal 5 and the negative (-) lead to terminal 4, and check that the window begins to descend.

If operation is not as specified, replace the motor.

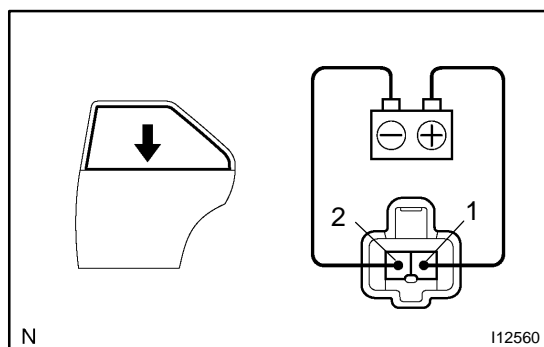


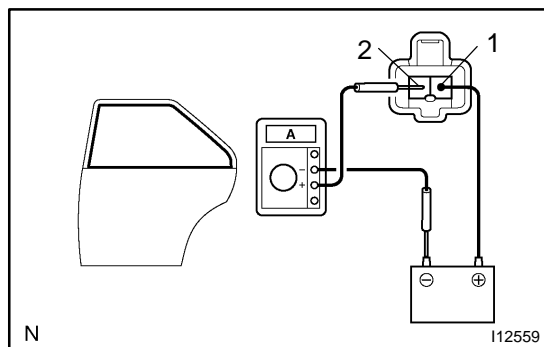
#### 15. Rear LH door:

##### INSPECT POWER WINDOW MOTOR PTC THERMISTOR OPERATION

- Disconnect the connector from the power window motor.
- Connect the positive (+) lead from the ammeter to terminal 1 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 2 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 within 4 to 90 seconds.
- Disconnect the leads from the terminals.
- 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.





**16. Rear RH 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 2 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, 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 2 and the negative (-) lead to terminal 1, and check that the window begins to descend.

