

## INSPECTION

### 1. INSPECT POWER WINDOW MASTER SWITCH CONTINUITY

#### Front driver's switch:

Switch position	Tester connection	Specified condition
UP AUTO	15 - 17 5 - 15	Continuity
UP MANUAL	15 - 17	Continuity
OFF	-	No continuity
DOWN MANUAL	8 - 15	Continuity
DOWN AUTO	8 - 15 5 - 8 - 15	Continuity

#### Front passenger's switch:

Switch position	Tester connection	Specified condition
UP	20 - 23	Continuity
OFF	-	No continuity
DOWN	10 - 20	Continuity
DOWN AUTO	10 - 20 20 - 22	Continuity

#### Rear left switch:

Switch position	Tester connection	Specified condition
UP	23 - 24	Continuity
OFF	-	No continuity
DOWN	10 - 24	Continuity
DOWN AUTO	10 - 24 22 - 24	Continuity

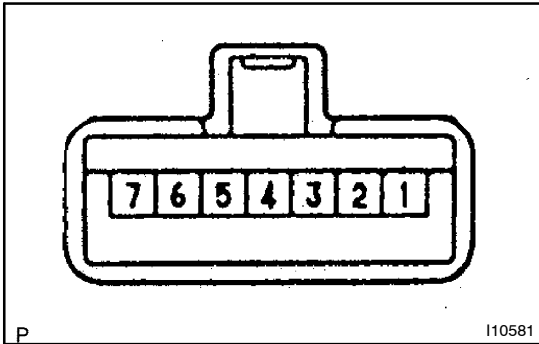
#### Rear right switch:

Switch position	Tester connection	Specified condition
UP	9 - 23	Continuity
OFF	-	No continuity
DOWN	9 - 10	Continuity
DOWN AUTO	9 - 10 9 - 22	Continuity

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

### 2. INSPECT POWER WINDOW MASTER SWITCH ILLUMINATION

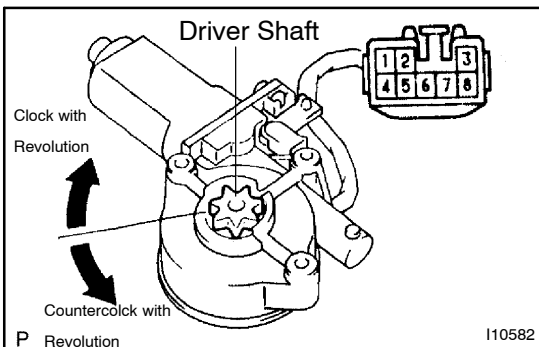
- (a) Set the window lock switch to the unlock position.
- (b) Connect the positive (+) lead from the battery to terminal 15 and the negative (-) lead to terminal 7, and check that all the illuminations light up.



**3. INSPECT POWER WINDOW SWITCH CONTINUITY**

Switch position	Tester connection	Specified condition
UP AUTO	1 - 4	Continuity
	1 - 3	
UP	1 - 4	Continuity
OFF	-	No continuity
DOWN	1 - 5	Continuity
DOWN AUTO	1 - 5	Continuity
	1 - 3 - 5	

If continuity is not as specified, replace the switch.



**4. INSPECT FRONT POWER WINDOW MOTOR OPERATION**

**NOTICE:**

- **Never apply the battery voltage to connector terminals 2 and 8 of the power window motor. Otherwise, the pulse sensor may be damaged.**
- **Always carry out reset of the power window motor (initial position setting for the limit switch) whenever the power window with regulator is installed to the door.**

Check that the motor operates smoothly when the battery voltage is applied to the following terminals.

**Standard:**

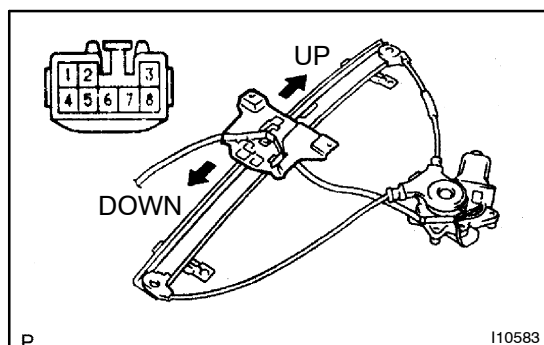
Measurement condition	Direction revolution
Battery (+) ↔ Terminal 1 Battery (-) ↔ Terminal 3	Clockwise against the drive shaft
Battery (+) ↔ Terminal 3 Battery (-) ↔ Terminal 1	Counterclockwise against the drive shaft

## 5. INSPECT REAR POWER WINDOW MOTOR OPERATION

### NOTICE:

- Never apply the battery voltage to connector terminals 2 and 8 of the power window motor. Otherwise, the pulse sensor may be damaged.
- Always carry out reset of the power window motor (initial position setting for the limit switch) whenever the power window with regulator is installed to the door.

Check that the motor operates smoothly when the battery voltage is applied to the following terminals.



Measurement condition	Direction revolution
Battery (+) ↔ Terminal 3 Battery (-) ↔ Terminal 1	Up
Battery (+) ↔ Terminal 1 Battery (-) ↔ Terminal 3	Down

## 6. INSPECT PTC IN POWER WINDOW MOTOR OPERATION

### NOTICE:

**Check with the power window regulator and door glass being installed to the vehicle.**

- Connect the Toyota electrical tester DC400A probe to the terminal 1 or 3 wiring harness.

### NOTICE:

**Coincide the probe's arrow to the current flowing direction.**

- Fully close the window glass.
- Wait for about 60 sec after (2) above, measure the time required until the current changes from about 16 through 34 A to 1 A or less after the MPX switch is set to UP (at the initial time). (Power shut-off check)

**Standard: About 4 - 90 sec**

- Wait for about 60 sec after the above power shut-off check and operate the MPX switch to UP again. Check that the window glass moves upwards. (Return check)