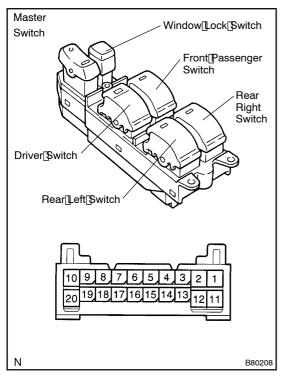
05HX1-01

## **INSPECTION**



## 1. | INSPECT\_POWER\_WINDOW\_REGULATOR\_MASTER **SWITCH** ASSY

- (a) Remove the master witch see page 75-17).
- Measure the resistance between the terminals of the connector when the switch is operated.

#### Standard:

#### **Driver Switch**

Switch Condition	Tester Connection	Specified Condition
AUTO UP	6 – 16 6 – 20	Below 1 Ω
UP	6 – 20	Below 1 Ω
OFF	-	-
DOWN	6 – 11	Below 1 Ω
AUTO DOWN	6 – 11 6 – 16	Below 1 Ω

### **Passenger Switch**

Switch Condition	Tester Connection	Specified Condition
AUTO UP	3 – 14 3 – 15	Below 1 Ω
UP	3 – 14	Below 1 Ω
OFF	-	-
DOWN	3 – 13	Below 1 Ω
AUTO DOWN	3 – 13 3 – 15	Below 1 Ω

### **Rear LH Switch**

Switch Condition	Tester Connection	Specified Condition
AUTO UP	5 – 14 5 – 15	Below 1 Ω
UP	5 – 14	Below 1 Ω
OFF	-	-
DOWN	5 – 13	Below 1 Ω
AUTO DOWN	5 – 13 5 – 15	Below 1 Ω

### **Rear RH Switch**

Switch Condition	Tester Connection	Specified Condition
AUTO UP	4 – 14 4 – 15	Below 1 Ω
UP	4 – 14	Below 1 Ω
OFF	-	-
DOWN	4 – 13	Below 1 Ω
AUTO DOWN	4 – 13 4 – 15	Below 1 Ω

### (c) Check the window lock witch.

#### Standard:

Window[Lock[Switch Condition	Measurement@ondition	Specified[Condition
UNLOCK	Battery[positive[]+)[→ Terminal[] 8 Battery[negative[]-)[→ Terminal[] 0	All[4]\$witches[light[lip
LOCK	Battery[positive[]+)[→ Terminal[8  Battery[negative[]-)[→ Terminal[] 0	Driver[door[vindow[switch lights[யுp

If the result is not as specified, replace the master switch assy.

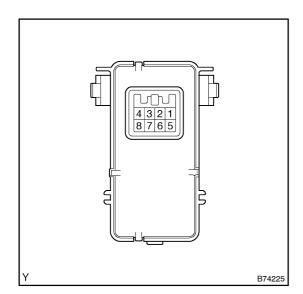
## 2. INSPECT POWER WINDOW REGULATOR SWITCH ASSY

- (a) Remove the regulator witch see page 75-17).
- (b) Measure[ther]esistance[between[ther]erminals[bf[t]her]connector[when[ther]switch[is[berated].

#### Standard:

Switch[Condition	Tester@onnection	Specified[Condition
AUTO[JJP	3 -[8 1 -[8	Below[] [Ω
UP	1 –[8	Below[] [Ω
OFF	-	-
DOWN	6 -[8	Below[] [Ω
AUTO[DOWN	3 -[8 6 -[8	Below[] [Ω

 $If \label{lem:lemma:le$ 



Motor@ear

Counter-

clockwise

Clockwise

# 3. INSPECT POWER WINDOW REGULATOR MOTOR ASSY (DRIVER SIDE)

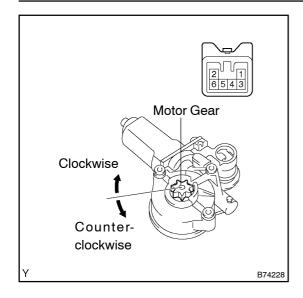
- (a) Check operation of the regulator motor.
  - (1) Remove the power window regulator motor (see page 75-17).
  - (2) Apply battery voltage to the motor terminals.
  - (3) Check that the motor operates smoothly.

#### NOTICE:

Do not apply voltage to the terminals except 4 and 5. OK:

#### LHD models

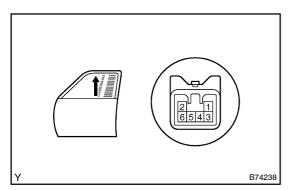
Measurement Condition	Specified Condition
Battery positive (+) → Terminal 5	Motor gear rotates clockwise
Battery negative (-) → Terminal 4	
Battery positive (+) → Terminal 4	Motor goor rotatos countercloslavias
Battery negative (-) → Terminal 5	Motor gear rotates counterclockwise



#### **RHD** models

Measurement Condition	Specified Condition
Battery positive (+) → Terminal 4 Battery negative (-) → Terminal 5	Motor gear rotates clockwise
Battery positive (+) → Terminal 5 Battery negative (-) → Terminal 4	Motor gear rotates counterclockwise

(b) Check the PTC operation inside the regulator motor.

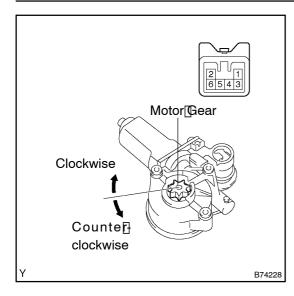


#### **NOTICE:**

The work must be performed with the power window regulator and door glass installed in the vehicle.

- (1) Disconnect the driver side power window regulator motor.
- (2) Connect the ammeter's positive (+) lead to terminal 2 of the wire harness side connector and the negative (-) lead to the battery's negative terminal.
- (3) Connect the battery's positive (+) lead to terminal 1 of the wire harness side connector, and raise the window to the fully closed position.
- (4) Continue to apply voltage, and check that the current changes to less than 1 A within 4 to 90 seconds.
- (5) Disconnect the leads from the terminals.
- (6) Approximately 60 seconds later, connect the battery's positive (+) lead to terminal 2 and the negative (-) lead to terminal 1. Check that the window begins to descend.

If the result is not as specified, replace the motor assy.



# 4. INSPECT\_POWER\_WINDOW\_REGULATOR\_MOIJOR ASSY[PASSENGER[SIDE)

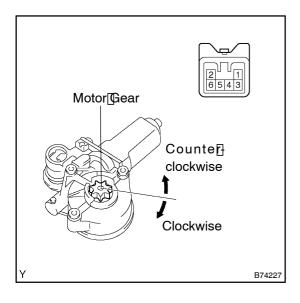
- (a) Check operation of the regulator motor.
  - (1) Remove the power window regulator motor (see page 75-17).
  - (2) Apply battery voltage to the motor terminals.
  - (3) Check that the motor operates smoothly.

#### **NOTICE:**

Do not apply voltage to the terminals except 4 and 5. OK:

#### LHD models

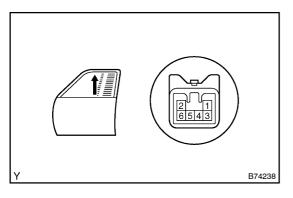
Measurement Condition	Specified Condition
Battery positive (+) $\rightarrow$ Terminal 4 Battery negative (-) $\rightarrow$ Terminal 5	Motor gear rotates clockwise
Battery positive (+) → Terminal 5 Battery negative (-) → Terminal 4	Motor gear rotates counterclockwise



#### **RHD** models

Measurement Condition	Specified Condition
Battery positive (+) → Terminal 5 Battery negative (-) → Terminal 4	Motor gear rotates clockwise
Battery positive (+) → Terminal 4 Battery negative (-) → Terminal 5	Motor gear rotates counterclockwise

(b) Check the PTC operation inside the regulator motor.



#### **NOTICE:**

The work must be performed with the power window regulator and door glass installed in the vehicle.

- Disconnect the passenger side power window regulator motor.
- (2) Connect the ammeter's positive (+) lead to terminal 2 of the wire harness side connector and the negative (-) lead to the battery's negative terminal.

- (3) Connect[the[battery's[positive[]+)[]ead[to[terminal]] of[the[wire[harness[side[connector,[and[raise[the window[to[the]fully[closed[position.]]]
- (4) Continue of apply voltage, and check of hat the current changes to less than Awithin to 90 seconds.
- (5) Disconnect[the leads[from[the lerminals.
- (6) Approximately 60 seconds ater, connect he battery's positive + lead to tery's positive + lead to tery's connect he battery's positive lead to tery's positive lead to tery's positive lead to tery's positive to lead to tery in the lead to term in the lead to term in the lead to tery in the lead to term in the lead to

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# 5. INSPECT POWER WINDOW REGULATOR MOTOR ASSY (REAR LH)

- (a) Check operation of the regulator motor.
  - (1) Remove the power window regulator motor (see page 75-32).
  - (2) Apply battery voltage to the motor terminals.
  - (3) Check that the motor operates smoothly.

#### NOTICE:

3

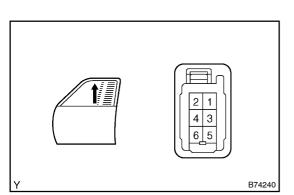
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## Do not apply voltage to the terminals except 1 and 2. OK:

Measurement Condition	Specified Condition
Battery positive (+) → Terminal 1 Battery negative (-) → Terminal 2	Motor gear rotates clockwise
Battery positive (+) → Terminal 2 Battery negative (-) → Terminal 1	Motor gear rotates counterclockwise

(b) Check the PTC operation inside the regulator motor.



Motor Gear

Clockwise

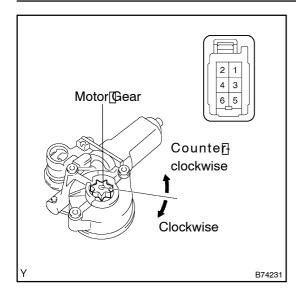
Counter clockwise

#### **NOTICE:**

The work must be performed with the power window regulator and door glass installed in the vehicle.

- (1) Disconnect the rear LH side power window regulator motor.
- (2) Connect the ammeter's positive (+) lead to terminal 2 of the wire harness side connector and the negative (-) lead to the battery's negative terminal.
- (3) Connect the battery's positive (+) lead to terminal 1 of the wire harness side connector, and raise the window to the fully closed position.
- (4) Continue to apply voltage, and check that the current changes to less than 1 A within 4 to 90 seconds.
- (5) Disconnect the leads from the terminals.
- (6) Approximately 60 seconds later, connect the battery's positive (+) lead to terminal 2 and the negative (-) lead to terminal 1. Check that the window begins to descend.

If the result is not as specified, replace the motor assy.



## 6. INSPECT POWER WINDOW REGULATOR MOTOR ASSYTREAR RH)

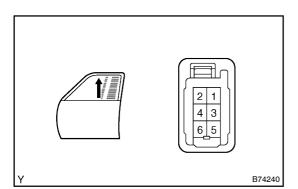
- (a) Check operation of the regulator motor.
  - (1) Remove the power window regulator motor (see page 75-17).
  - (2) Apply battery voltage to the motor terminals.
  - (3) Check that the motor operates smoothly.

#### **NOTICE:**

## Do not apply voltage to the terminals except 1 and 2. OK:

Measurement Condition	Specified Condition
Battery positive (+) → Terminal 2 Battery negative (-) → Terminal 1	Motor gear rotates clockwise
Battery positive (+) → Terminal 1 Battery negative (-) → Terminal 2	Motor gear rotates counterclockwise

(b) Check the PTC operation inside the regulator motor.



#### NOTICE:

The work must be performed with the power window regulator and door glass installed in the vehicle.

- (1) Disconnect the rear RH side power window regulator motor.
- (2) Connect the ammeter's positive (+) lead to terminal 2 of the wire harness side connector and the negative (-) lead to the battery's negative terminal.
- (3) Connect the battery's positive (+) lead to terminal 1 of the wire harness side connector, and raise the window to the fully closed position.
- (4) Continue to apply voltage, and check that the current changes to less than 1 A within 4 to 90 seconds.
- (5) Disconnect the leads from the terminals.
- (6) Approximately 60 seconds later, connect the battery's positive (+) lead to terminal 2 and the negative (-) lead to terminal 1. Check that the window begins to descend.

If the result is not as specified, replace the motor assy.