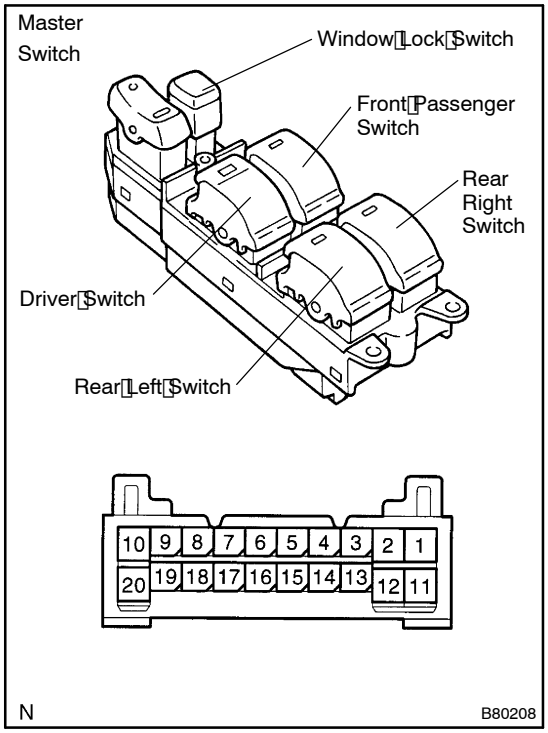
05HX1-01

INSPECTION



1. INSPECT POWER WINDOW REGULATOR MASTER SWITCH ASSY

(a) Remove the master switch (see page 75–17).

(b) 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

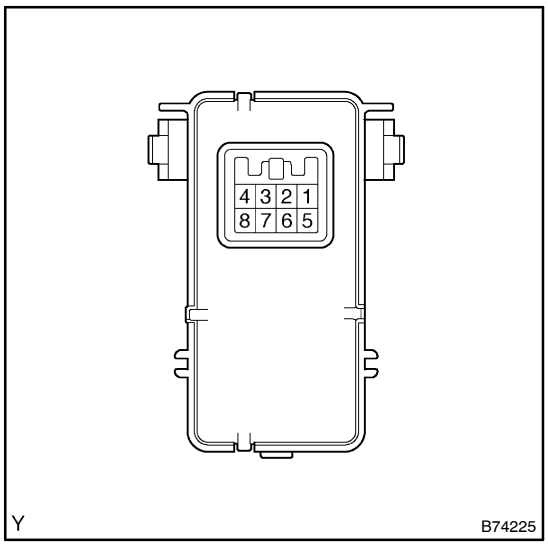
Switch Condition	Tester Connection	Specified Condition
AUTO UP	4 – 14 4 – 15	Below 1 Ω
UP	4 – 14	Below 1 Ω
OFF	–	–
DOWN	4 – 13	Below 1 Ω
AUTO DOWN	4 – 13 4 – 15	Below 1 Ω

(c) Check the window lock switch.

Standard:

Window Lock Switch Condition	Measurement Condition	Specified Condition
UNLOCK	Battery positive (+) → Terminal 8 Battery negative (–) → Terminal 10	All 4 switches light up
LOCK	Battery positive (+) → Terminal 3 Battery negative (–) → Terminal 10	Driver door window switch lights up

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



2. INSPECT POWER WINDOW REGULATOR SWITCH ASSY

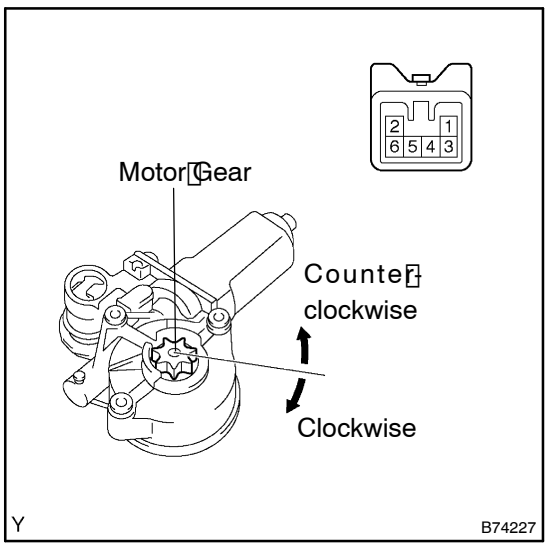
(a) Remove the regulator switch (see page 75–17).

(b) Measure the resistance between the terminals of the connector when the switch is operated.

Standard:

Switch Condition	Tester Connection	Specified Condition
AUTO UP	3 – 8 1 – 8	Below 1 Ω
UP	1 – 8	Below 1 Ω
OFF	–	–
DOWN	6 – 8	Below 1 Ω
AUTO DOWN	3 – 8 6 – 8	Below 1 Ω

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



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.

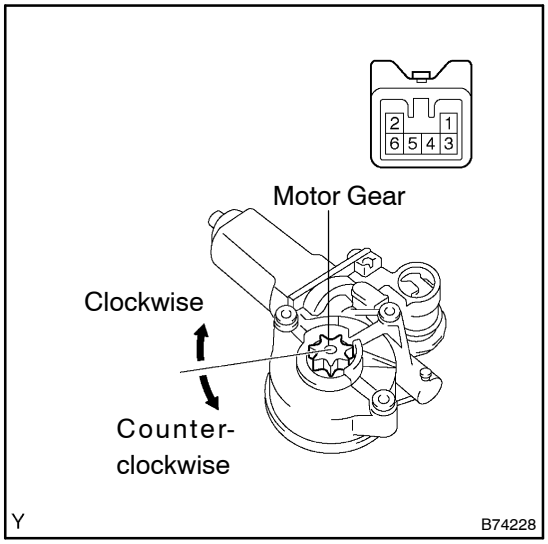
NOTICE:

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

OK:

LHD models

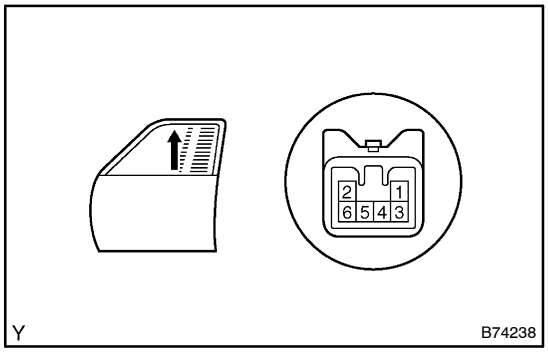
Measurement Condition	Specified Condition
Battery positive (+) → Terminal 5 Battery negative (–) → Terminal 4	Motor gear rotates clockwise
Battery positive (+) → Terminal 4 Battery negative (–) → Terminal 5	Motor gear rotates counterclockwise



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.

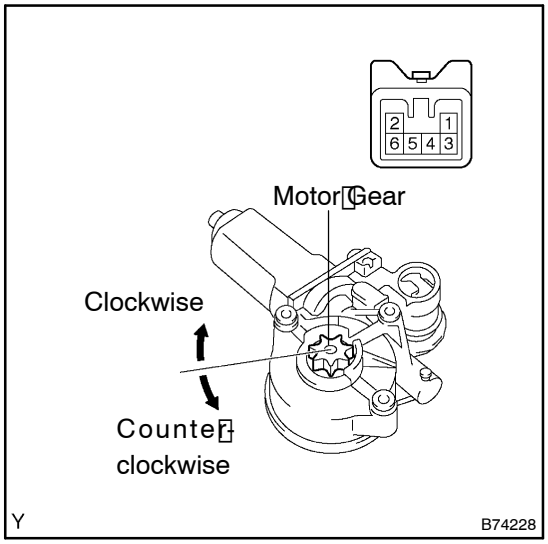


NOTICE:

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 MOTOR 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.

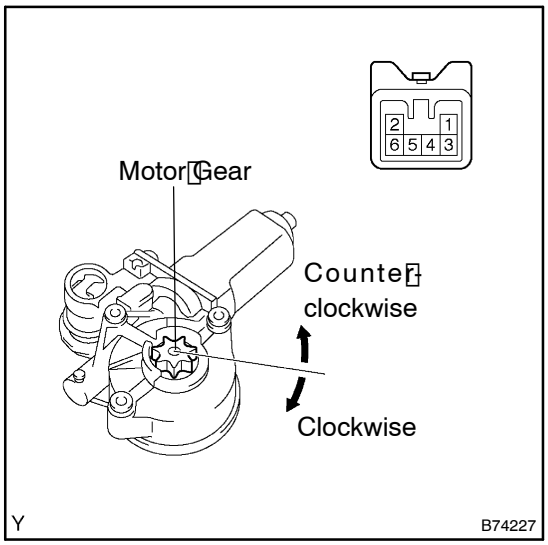
NOTICE:

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

OK:

LHD models

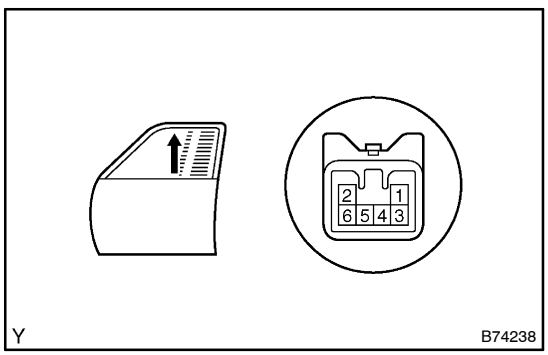
Measurement Condition	Specified Condition
Battery positive (+) → Terminal 4 Battery negative (–) → Terminal 5	Motor gear rotates clockwise
Battery positive (+) → Terminal 5 Battery negative (–) → Terminal 4	Motor gear rotates counterclockwise



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:

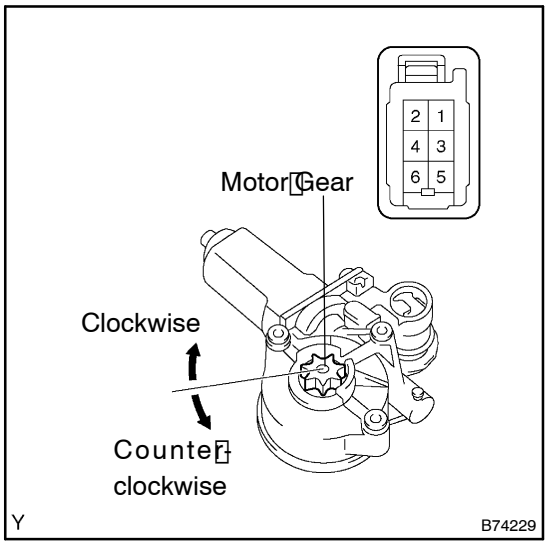
The work must be performed with the power window regulator and door glass installed in the vehicle.

(1) 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 (+) 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.



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.

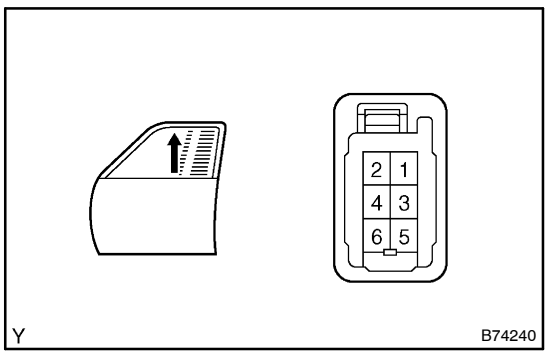
NOTICE:

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.

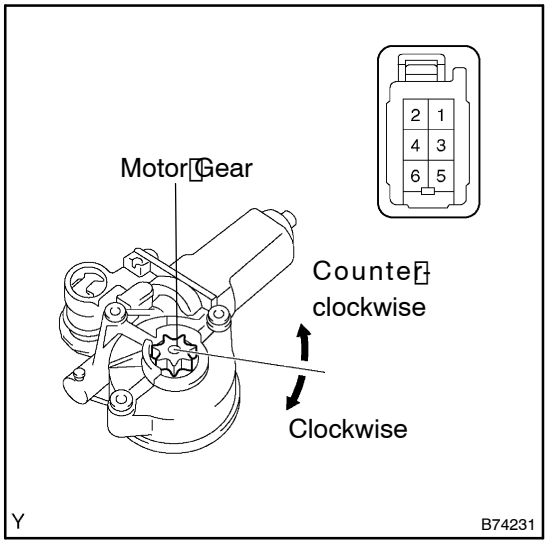


NOTICE:

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 ASSY (REAR 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.

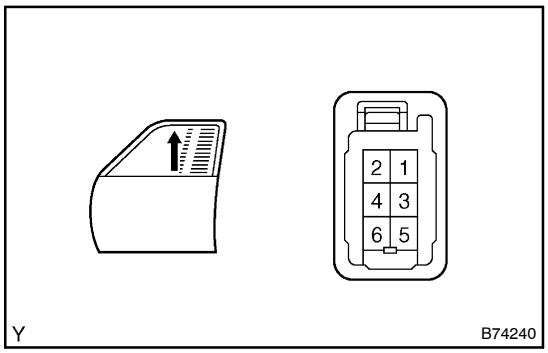
NOTICE:

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.