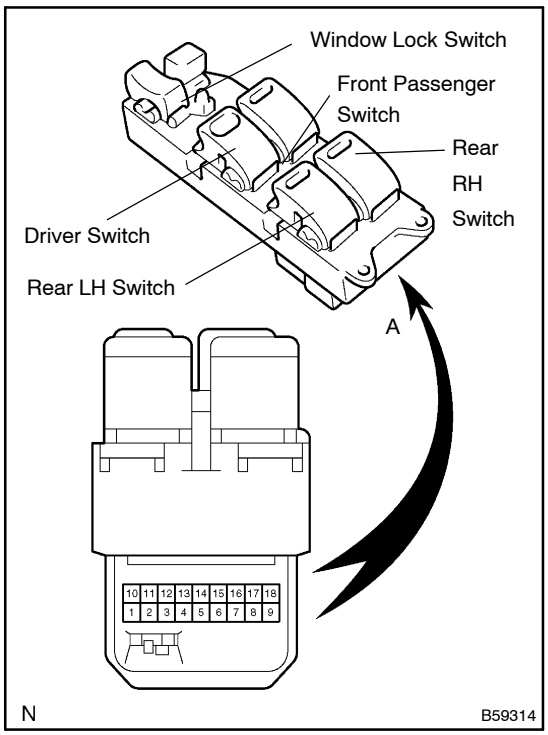
05IDZ–01

# INSPECTION




**1. INSPECT POWER WINDOW REGULATOR MASTER SWITCH ASSY**

(a) Remove the master switch assembly (see page 75–9).

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

**Standard:**

**Driver switch**

| Window Lock Switch Condition | Power Window Switch Condition | Tester Connection | Specified Condition |
|---|---|---|---|
| Constant (ON/OFF) | UP | 1 – 9<br>4 – 7 | Below 1 Ω |
| Constant (ON/OFF) | AUTO UP | 1 – 9<br>4 – 7 | Below 1 Ω |
| Constant (ON/OFF) | OFF | 1 – 4<br>1 – 9 | Below 1 Ω |
| Constant (ON/OFF) | DOWN | 1 – 4<br>7 – 9 | Below 1 Ω |
| Constant (ON/OFF) | AUTO DOWN | 1 – 4<br>7 – 9 | Below 1 Ω |

**Passenger switch**

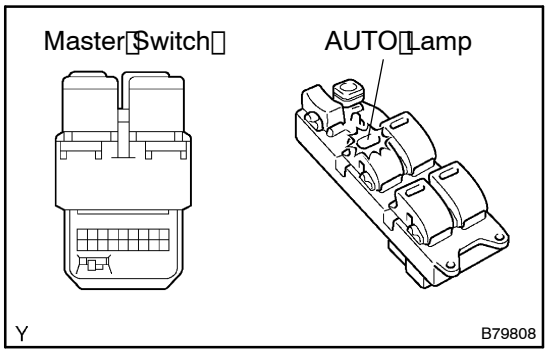
| Window Lock Switch Condition | Power Window Switch Condition | Tester Connection | Specified Condition |
|---|---|---|---|
| OFF | UP | 1 – 15<br>6 – 13 | Below 1 Ω |
| OFF | OFF | 1 – 13<br>1 – 15 | Below 1 Ω |
| OFF | DOWN | 1 – 13<br>6 – 15 | Below 1 Ω |
| ON | UP | 6 – 13 | Below 1 Ω |
| ON | OFF | 13 – 15 | Below 1 Ω |
| ON | DOWN | 6 – 15 | Below 1 Ω |

**Rear LH switch**

| Window Lock Switch Condition | Power Window Switch Condition | Tester Connection | Specified Condition |
|---|---|---|---|
| OFF | UP | 1 – 10<br>6 – 12 | Below 1 Ω |
| OFF | OFF | 1 – 12<br>1 – 10 | Below 1 Ω |
| OFF | DOWN | 1 – 12<br>6 – 10 | Below 1 Ω |
| ON | UP | 6 – 12 | Below 1 Ω |
| ON | OFF | 12 – 10 | Below 1 Ω |
| ON | DOWN | 6 – 10 | Below 1 Ω |

**Rear RH switch**

| Window Lock Switch Condition | Power Window Switch Condition | Tester Connection | Specified Condition |
|---|---|---|---|
| OFF | UP | 1 – 16<br>6 – 18 | Below 1 Ω |
| OFF | OFF | 1 – 18<br>1 – 16 | Below 1 Ω |
| OFF | DOWN | 1 – 18<br>6 – 16 | Below 1 Ω |
| ON | UP | 6 – 18 | Below 1 Ω |
| ON | OFF | 18 – 16 | Below 1 Ω |
| ON | DOWN | 6 – 16 | Below 1 Ω |

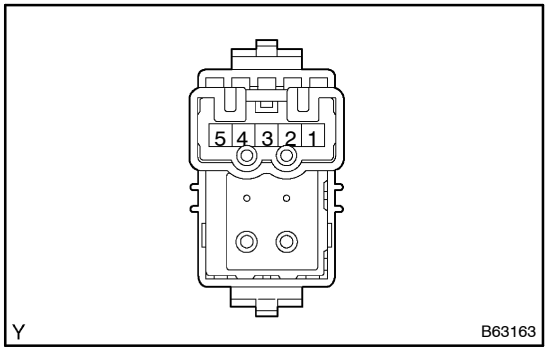



(c) Check the master switch assembly AUTO lamp.

**Standard:**

| Measurement Condition | Specified Condition |
|---|---|
| Battery positive (+) → Terminal 11<br>Battery negative (–) → Terminal 1 | AUTO lamp illuminates |

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




**2. INSPECT POWER WINDOW REGULATOR SWITCH ASSY**

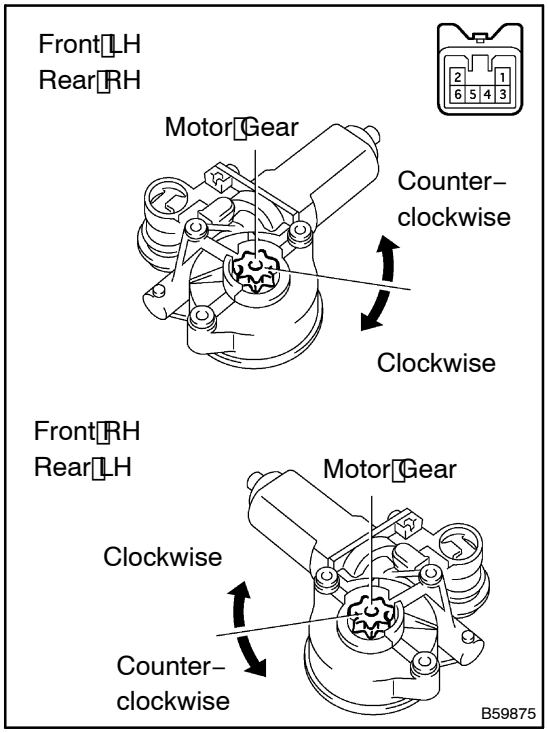
(a) Remove the power window regulator switch (see page 75–9).

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

**Standard:**

| Switch Condition | Tester Connection | Specified Condition |
|---|---|---|
| UP | 1–2<br>3–4 | Below 1 Ω |
| OFF | 1–2<br>3–5 | Below 1 Ω |
| DOWN | 1–4<br>3–5 | Below 1 Ω |

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




**3. INSPECT POWER WINDOW REGULATOR MOTOR ASSY**

(a) Check operation of the regulator motor.

HINT:

- The front passenger side and rear RH regulator motors should be inspected using the same procedure.
- The front passenger side and rear LH regulator motors should be inspected using the same procedure.

(1) Remove the power window regulator motor (see page 75–9).

(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:**

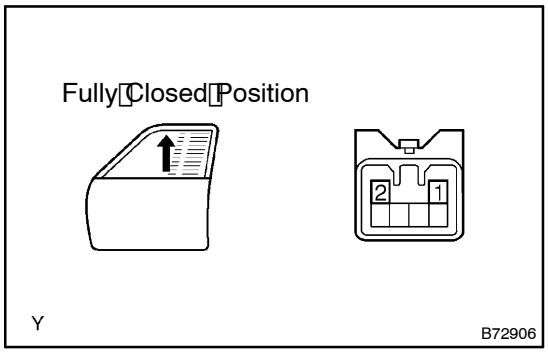
**Front Passenger and Rear RH**

| Measurement Condition | Specified Condition |
|---|---|
| Battery positive (+) → Terminal 2<br>Battery negative (–) → Terminal 1 | Motor gear rotates clockwise |
| Battery positive (+) → Terminal 1<br>Battery negative (–) → Terminal 2 | Motor gear rotates counterclockwise |

**Front Passenger and Rear LH**

| Measurement Condition | Specified Condition |
|---|---|
| Battery positive (+) → Terminal 1<br>Battery negative (–) → Terminal 2 | Motor gear rotates clockwise |
| Battery positive (+) → Terminal 2<br>Battery negative (–) → Terminal 1 | Motor gear rotates counterclockwise |

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




(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 battery's negative terminal.

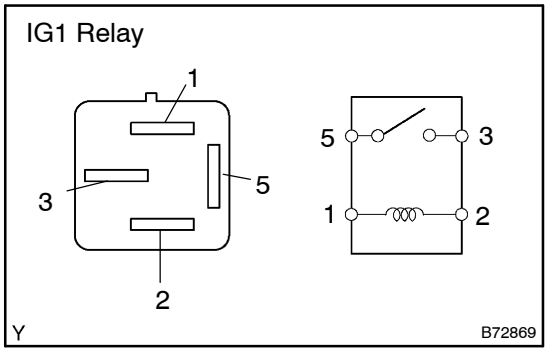
(3) Connect the battery's positive (+) lead to terminal 1 of the wire harness side connector, and raise the window to the fully closed position.

(4) Continue to apply voltage, and check that the current changes to less than 1A 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, and check that the window begins to lower.

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




**4. INSPECT RELAY (IG1)**

(a) Remove the IG1 relay from the instrument panel J/B.

(b) Measure the resistance.

**Standard:**

| Tester Connection | Specified Condition |
|---|---|
| 3 – 5 | 10 kΩ or higher |
| 3 – 5 | Below 1 Ω (when battery voltage is applied to terminals 1 and 2) |

If the result is not as specified, replace the relay.