DRIVER POWER WINDOW DOES NOT OPERATE

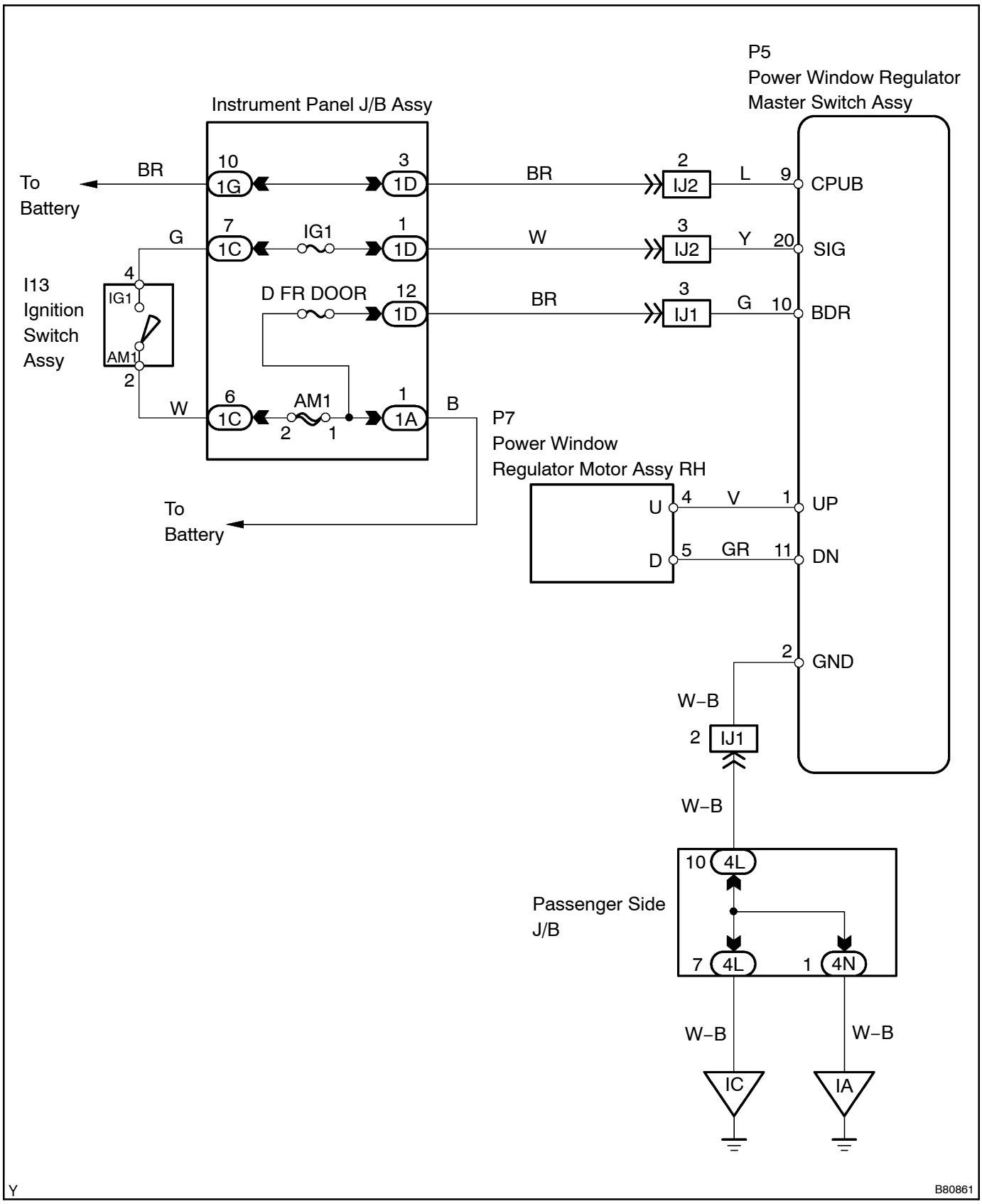
CIRCUIT DESCRIPTION

The power window regulator master switch (door ECU) controls the driver side power window by itself and drives the driver side power window motor.

HINT:

The power window system is part of the large–scale multiplex communication system. This system features shared communication wiring that reduces the wiring complexity of the communication lines. The first step in any repair is to confirm the proper operation of the communication system. Proceed with troubleshooting after the communication has been verified (see multiplex communication system).

WIRING DIAGRAM



INSPECTION PROCEDURE

1	PERFORM ACTIVE TEST USING HAND–HELD TESTER

(a) Connect the hand–held tester to the DLC3.
(b) Turn the ignition switch ON and press the hand–held tester main switch ON.
(c) Select the item below in the ACTIVE TEST and then check that the power window operates.
Standard:
Door ECU

Item	Test Detail	Diagnostic Note
P/W UP/DOWN	Operates power window UP/DOWN	–

OK: Power window operates normally.

NG → **Go to step 3**

OK

2	REPLACE POWER WINDOW REGULATOR MASTER SWITCH ASSY

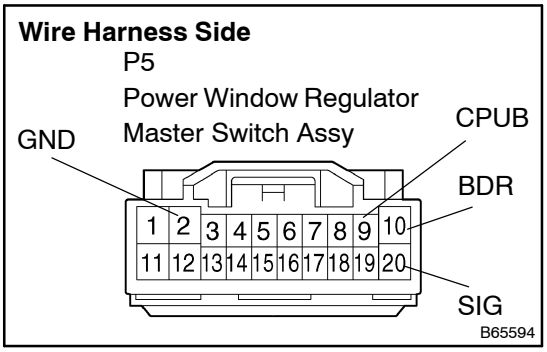
3	INSPECT FUSE (ECU–B, IG1, D FR DOOR)

(a) Remove the ECU–B fuse from the engine room J/B.
(b) Remove the IG1 and D FR DOOR fuses from the instrument panel J/B.
(c) Measure the resistance.
Standard: Below 1 Ω

NG → **REPLACE FUSE**

OK

4	CHECK WIRE HARNESS (POWER WINDOW REGULATOR MASTER SWITCH ASSY – BATTERY AND BODY GROUND)



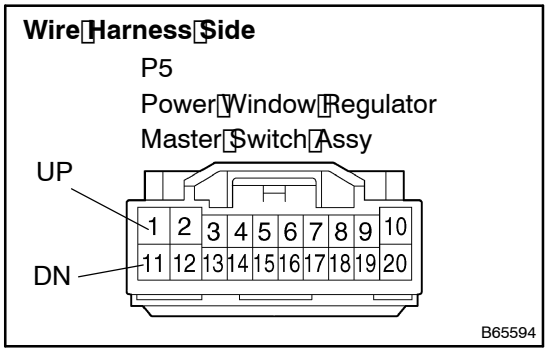
(a) Disconnect the P5 master switch connector.
(b) Measure the voltage and resistance of the wire harness side connector.
Standard:

Tester Connection	Condition	Specified Condition
P5–9 (CPUB) – Body ground	Constant	10 to 14 V
P5–10 (BDR) – Body ground	Constant	10 to 14 V
P5–20 (SIG) – Body ground	Ignition switch OFF → ON	0 V → 10 to 14 V
P5–2 (GND) – Body ground	Constant	Below 1 Ω

NG → **REPAIR OR REPLACE HARNESS AND CONNECTOR**

OK

5 CHECK POWER WINDOW REGULATOR MOTOR ASSY RH (DRIVER SIDE)



(a) Disconnect the P5 master switch connector.
(b) Apply the battery voltage to the wire harness connector.
(c) Check the door glass operation.

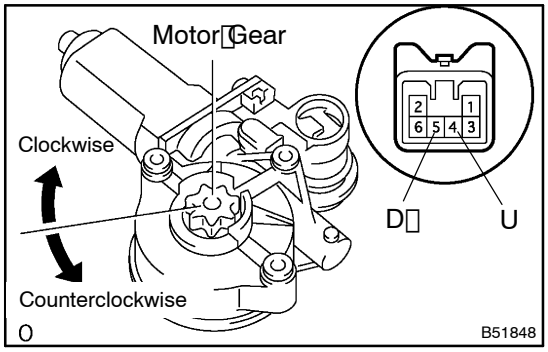
Standard:

Measurement Condition	Specified Condition
Battery positive – Terminal 1 (UP) Battery negative – Terminal 11 (DN)	Door glass moves upward
Battery positive – Terminal 11 (DN) Battery negative – Terminal 1 (UP)	Door glass moves downward

OK → **REPLACE POWER WINDOW REGULATOR MASTER SWITCH ASSY**

NG

6 INSPECT POWER WINDOW REGULATOR MOTOR ASSY RH (DRIVER SIDE)



(a) Check the power window regulator motor operation.

NOTICE:

- **To avoid damage to the pulse sensor and limit switch, do not apply battery voltage to terminals 2, 3 and 6 of the power window regulator motor connector.**
- **Be sure to reset the power window regulator motor (initial position setting of limit switch) when the driver side power window regulator motor is installed to the regulator.**

(1) Remove the motor (see page 05–107).
(2) Apply the battery voltage to the motor terminals.
(3) Check that the motor rotates smoothly.

Standard:

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

(b) Inspect the PTC operation inside the power window regulator motor.

NOTICE:

The inspection should be performed with the power window regulator and door glass installed to the vehicle.

(1) Set a DC 400 A probe of the electrical tester on the wire harness of terminal 4 or 5.

NOTICE:

Match the arrow mark of the probe with the direction of the electrical current.

(2) Set the door glass to the fully closed position.

(3) When 60 seconds have elapsed after the door glass is fully closed, turn the power window switch UP once again. Check how long the current takes to charge from a range of 16 to 34 A into less than 1 A.

Standard: Approximately 4 to 90 seconds

(4) When approximately 60 seconds have elapsed after the inspection of the current cut–off, check that the door glass moves down when the power window regulator DOWN switch is pressed.

NG → **REPLACE POWER WINDOW REGULATOR MOTOR ASSY RH**

OK

REPAIR OR REPLACE HARNESS AND CONNECTOR (POWER WIDOW REGULATOR MASTER SWITCH ASSY – POWER WINDOW REGULATOR MOTOR ASSY RH)