

POWER WINDOW CONTROL SYSTEM

TROUBLESHOOTING

BE02C-15

Malfunction symptoms	Applicable chart
Driver's door does not operate.	1
Passenger's and all rear doors do not operate by using the switches at each seat.	2
Any of passenger's and rear doors does not operate by using the switches of each seat.	3
Passenger's and all rear doors are not controlled remotely by using the master switch. (Switches of each door can be operated.)	4
AUTO UP and AUTO DOWN does not operate. (Prepare a normal master switch.)	5
DOWN operation operates during door glass AUTO UP operation.	6
Even though a foreign object is caught, DOWN operation does not function.	7
After ignition switch has been turned to OFF by using a key, power window function does not operate.	8

1 Driver's door does not operate.

Remove the power window regulator master switch and disconnect the connector.

Check there is voltage of 10 of 14 V between terminal 1 of vehicle side connector of master switch and body ground.

No

Wire harness defective (between power fuse terminal 1 of master switch.)

Yes

With ignition switch ON, is there voltage of 10 to 14 V between the terminal 2 and 4 of vehicle side connector of the master switch and body ground.

Yes

Wire harness (between terminal of the power main relay and 2 or 4 terminal of the master switch.)

No

Does continuity exist between 9 terminal of vehicle side connector of the master switch and body ground?

No

Wire harness defective (between 9 terminal of the master switch and body ground.)

Yes

When battery voltage is supplied to the vehicle side connector of the master switch, check if the door glass operate.

Yes

Power window regulator master switch defective.

Connection	Glass operation
Battery positive - 8 terminal Battery negative - 20 terminal	UP
Battery positive - 20 terminal Battery negative - 8 terminal	DOWN

No

Is the power motor normal?

No

Power window motor defective.

Yes

Wire harness (between 20 terminal of the master switch and 2 terminal of the power window motor or 8 terminal of the master switch and 1 terminal of the power window).

2

Passenger's and all rear doors do not operate by using the switches of each seat.

Remove the power window regulator master switch.
(with connectors connected)

With the ignition switch ON, is the voltage normal between 6
terminal of the master switch and body ground?

OK:

Window lock switch NORMAL ----- 10 to 14 V

Window lock switch LOCK ----- 0 V

No

Power window regulator master switch
detective.

Yes

Go to chart 3

3

Any of passenger's and all rear doors does not operate by using the switches at each seat.

Remove the power window regulator switch at the seat where the operation is unavailable and disconnect the connector.

With the ignition switch ON and window lock switch NORMAL, is there voltage of 10 to 14 V between 11 terminal of the vehicle side connector of the regulator switch and body ground?

No

Wire harness defective (between 6 terminal of master switch and 11 terminal of regulator.)

Yes

Is there the voltage of 10 to 14 V between 7 terminal of vehicle side connector of the regulator switch and body ground?

Yes

Wire harness defective (between POWER fuse and 7 terminal of the regulator.)

No

Is there continuity between 7 terminal of the vehicle side connector of the regulator switch and body ground.

No

Wire harness defective (between 12 terminal of the regulator and body ground.)

Yes

When battery voltage is supplied to the vehicle side connector of the regulator switch, check if the door glass operate.

Yes

Power window regulator master switch defective.

Connection	Glass operation
Battery positive - 6 terminal Battery negative - 1 terminal	UP
Battery positive - 1 terminal Battery negative - 6 terminal	DOWN

No

Is the power motor normal?

No

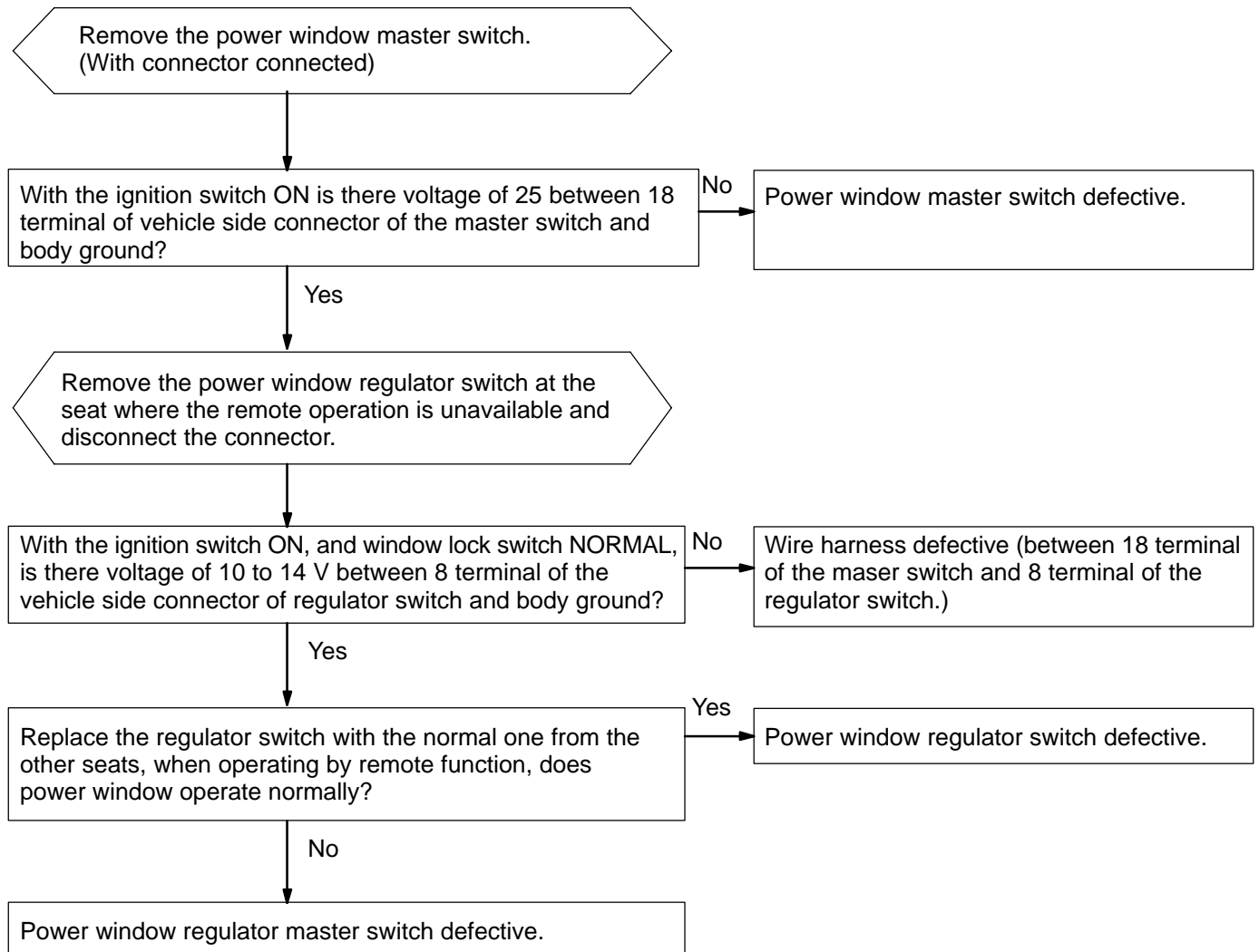
Power window motor defective.

Yes

Wire harness (between 6 terminal of the regulator switch and 4 terminal of the power window motor or 1 terminal of the regulator switch and 1 terminal of the power window motor).

4

**Passenger's and all rear doors are not controlled remotely by using the master switch.
(Switches at each door can be operated.)**



5 AUTO UP and AUTO DOWN do not operate. (Prepare a normal master switch.)

Remove the master switch or regulator switch at the seat where AUTO UP and AUTO DOWN is unavailable. (With connectors connected)

Master of regulator switch inspection:

Are the voltage and continuity of the connectors connected to the master switch or regulator switch normal?

OK:

Terminal No.		Item	Inspection condition	Standard
13	3	Voltage	Fully open by manual operation → fully close → switch OFF	Less than 1 → 10 V to 14 → 0 V
12	4	Voltage	During power window operation	Approx. 5.5 V
10	2	Continuity	Constant	Continuity

No

Disconnect the connectors of the master switch or regulator switch and power window motor.

Yes

Master or regulator switch defective.

Does continuity exist between connectors of the following vehicle side connectors?

Switch side ↔ Motor side

13 (3) terminal ↔ 3 terminal

12 (4) terminal ↔ 4 terminal

10 (2) terminal ↔ 2 terminal

The number in parenthesis shows the terminal No.

No

Wire harness defective (Open circuit in each terminal)

Yes

Does continuity exist between 13 (3), 12 (4) and 10 (2) terminals on the switch side or 3, 4, 2 terminals and body ground?

No

Wire harness defective (Short circuit).

Yes

Connect the connector of power window motor.

Connect the normal master switch or regulator switch and check if AUTO UP and DOWN operates.

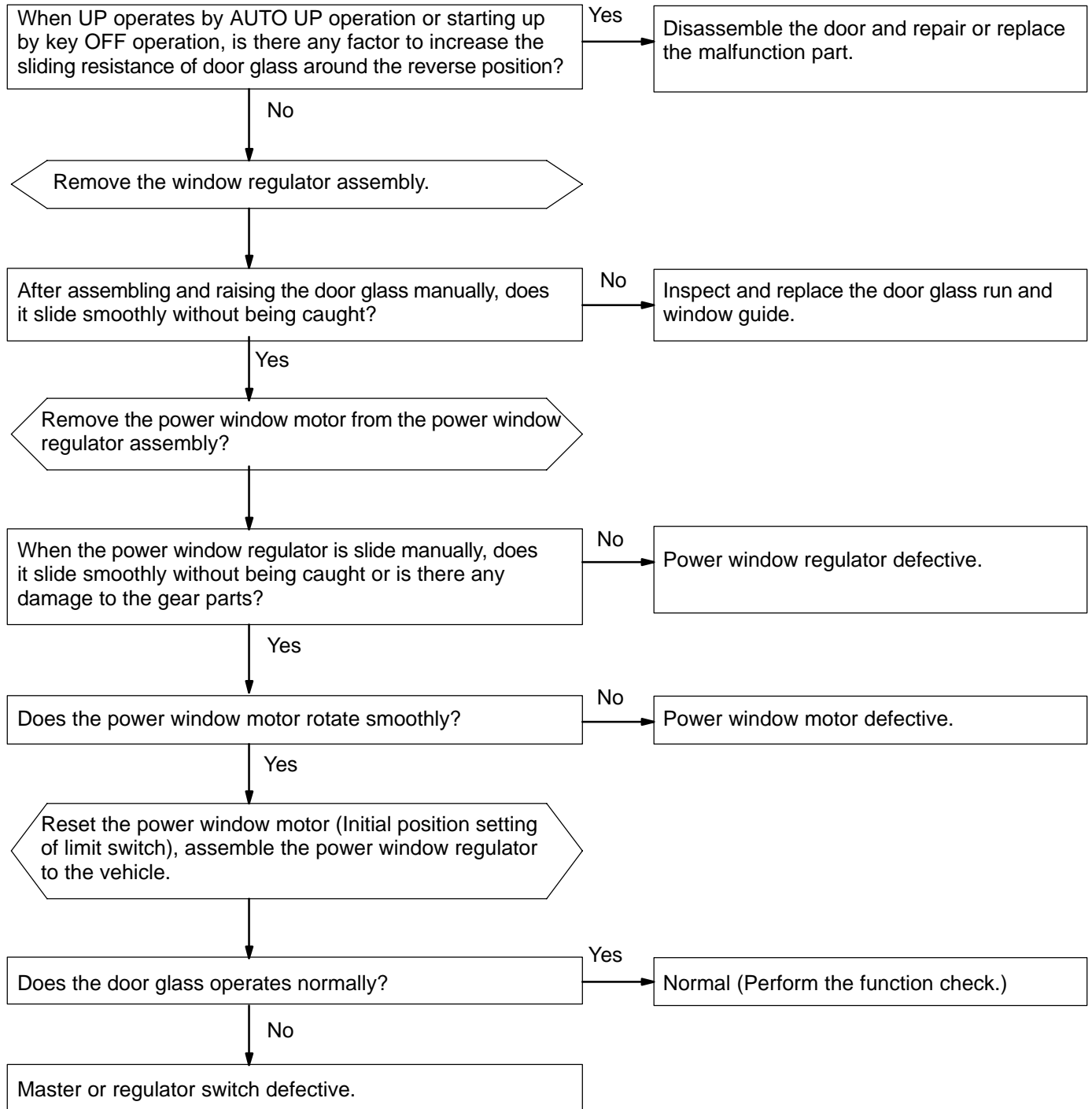
Yes

Master switch or regulator switch.

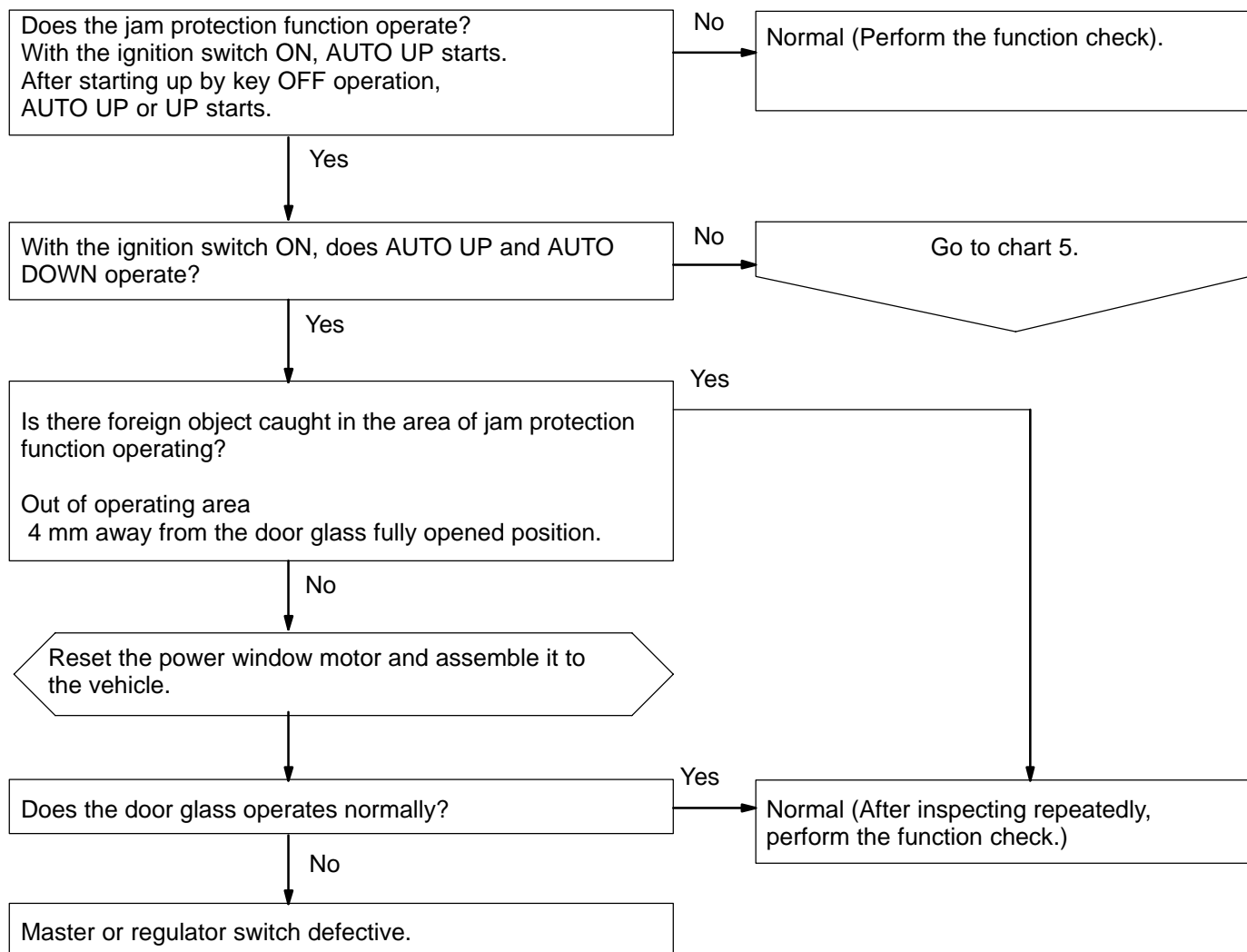
No

Power window motor defective.

6	DOWN operates during door glass AUTO UP operation.
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7

Even through a foreign object is caught, DOWN operation does not function.

8

After ignition switch has been turned OFF by using a key, power window function does not operate.

