

POWER WINDOWS

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DESCRIPTION AND OPERATION

INTRODUCTION

The window lift motors are of the permanent magnet type. A battery positive and negative connection to either of the two motor terminals will cause the motor to rotate in one direction. Reversing current through these same two connections will cause the motor to rotate in the opposite direction.

Each individual motor is grounded through the master switch.

DIAGNOSIS AND TESTING

WIRING TEST

The following wiring test determines whether or not voltage is continuous through the body harness to the power window switches.

Remove switch for testing. Connect a voltmeter positive lead to Pin 4 and negative lead to Pin 3 of the switch harness connector. Turn ignition switch to the ON position. Voltmeter should read battery voltage. If OK, go to Window Switch Diagnosis and Testing. If not OK, check the 30 amp circuit breaker in the fuse block or for a broken wire. Refer to Group 8W-Wiring Diagrams, for Connector Pin-Outs and circuit descriptions.

WINDOW SWITCH

Remove the switch from its mounting, refer to Window Switch Removal and Installation in this section. Using an ohmmeter, test the window switch for continuity in all positions Refer to Power Window Switch Continuity table to determine if continuity is correct. If the results are not obtained, replace the switch.

POWER WINDOW SWITCH CONTINUITY

SWITCH POSITION	CONTINUITY BETWEEN
OFF	PIN 1 AND 4 PIN 2 AND 5 PIN 3 AND 8
UP	PIN 1 AND 4 PIN 1 AND 8 PIN 2 AND 5
DOWN	PIN 1 AND 4 PIN 1 AND 5 PIN 3 AND 8

WINDOW MOTOR

(1) Remove door trim panel. Refer to Group 23-Body, Front Door Trim Panel Removal and Installation.

(2) Connect positive (+) lead from a test battery to either of the two motor terminals.

(3) Connect negative (-) lead from test battery to remaining motor terminal.

(4) The motor should now rotate in one direction to either move window up or down.

(a) If window happens to already be in full UP position and motor is connected so as to move it in UP direction no movement will be observed.

(b) Likewise, motor connected to move window in DOWN direction no movement will be observed if window is already in full DOWN position.

(c) Reverse battery leads in Step 2 and Step 3 and window should now move. If window does not move, remove motor. Refer to Window Motor Removal and Installation in this section.

(5) If window moved completely up or down, the test leads should be reversed one more time to complete a full window travel inspection.

DIAGNOSIS AND TESTING (Continued)

(6) If window does not move, check to make sure that it is free to move.

(7) It is necessary that the window be free to slide up and down in the glass channels. If the window is not free to move up and down, the window lift motor will not be able to move the glass.

(8) To determine if the glass is free, disconnect the regulator from the glass lift plate and slide the window up and down by hand.

REMOVAL AND INSTALLATION

WINDOW SWITCH

REMOVAL

(1) Disconnect and isolate the battery negative cable (Fig. 1).

(2) Using a trim stick (special tool #C-4755) or equivalent, gently pry up on window switch bezel and remove from door trim panel.

(3) Disconnect wire connector from switch.

(4) Remove two switch retaining screws.

INSTALLATION

For installation, reverse the above procedures.

WINDOW MOTOR

REMOVAL

(1) Disconnect and isolate the battery negative cable (Fig. 1).

(2) Move the window to the full-up position, if possible.

(3) Remove front door trim panel. Refer to Group 23-Body, Front Door Trim Panel Removal and Installation.

(4) Remove front door water shield.

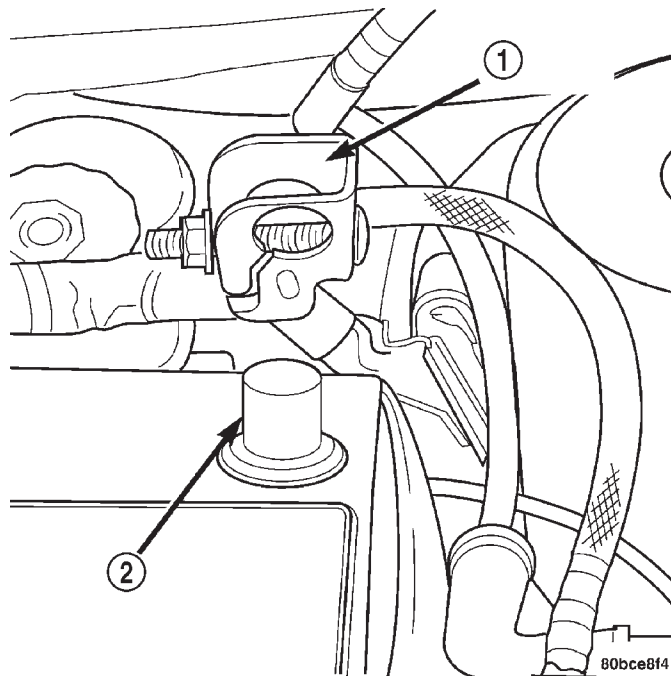


Fig. 1 Battery Negative Cable Remove/Install

1 - NEGATIVE CABLE

2 - NEGATIVE BATTERY POST

(5) Remove three screws to front door radio speaker so that motor has room to pivot.

(6) Pivot window motor out of door panel.

(7) Remove three motor retaining screws to drive cable.

(8) Remove motor from drive cable assembly.

INSTALLATION

For installation, reverse the above procedures.