

# Car & Garage

by Rick Muscoplat

## Power window stuck?



Spend \$10 on the proper instructions and \$115 on the part, and save \$225 on labor!

**S**o one of your power windows doesn't work. Check the fuse first. If that's good, the problem is either a bad switch or motor or a broken regulator (the device that actually lifts and lowers the glass). A shop will charge you upward of \$350 to replace the motor/regulator, but you can do the job yourself in about four hours. The regulator for this Buick Century was \$115 at rockauto.com.

You need a basic set of metric sockets, screwdrivers, a drill and most important, a subscription to an online service manual. That way, you can download instructions and diagrams that are specific to your car (see "Online Repair Manuals," p. 78). Use our instructions as a rough guide, and refer to your manual for specifics.

Start the repair by removing all the trim panel fasteners to access the switch for testing. Remove the trim panel and peel off the vapor barrier. A trim panel removal tool is cheap (about \$5 at auto parts stores) and saves you a lot of time.

Reach into the door panel and disconnect the power connector to the window motor (wear leather gloves to protect against cuts). Connect the leads of your voltmeter to the two terminals on the connector. Turn the key to the "on" position and toggle the window switch up and down. If the switch is good, you'll see the





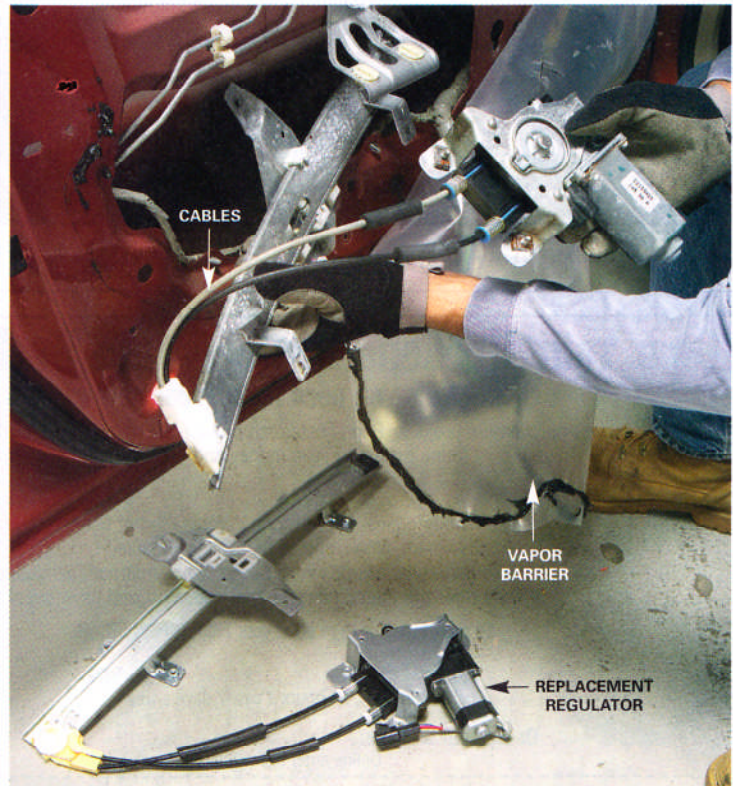
**1** Pry out the switch panel and disconnect the electrical connectors. Then remove the door trim panel.



**2** Reconnect the switch panel and attach the voltmeter test leads to the motor connector. Then toggle the window switch. If the switch is good, replace the regulator.



**3** Remove the glass-to-regulator bolts (if needed, cut the mechanical cables to raise or lower the glass). Tilt the window up and out and set it in a safe place.



**4** Remove regulator-to-door fasteners and snake the regulator out through one of the holes in the door. Install the new regulator.

voltage reading change from plus-12 volts to minus-12 volts. That means the problem is the motor/regulator. If your meter doesn't display those readings, you've got a bad switch or a broken power or ground wire. Download an electrical diagram and check the power and ground wires leading to the switch to isolate the problem.

Replace the entire regulator assembly,

not just the motor. Start by removing the window-to-regulator bolts (have someone hold the glass while you do this).

Then remove the glass by tilting it away from the door and lifting it out. Next, remove the regulator bolts or rivets (drill them out and snake the old regulator out through one of the door panel openings. Reverse the procedure to install the new

regulator. Bolt the regulator in place and then reinstall the motor and window switch electrical connectors and the window glass. Test the window for proper operation. If the glass binds, you may have to loosen the bolts and make minor adjustments to the regulator. Then tighten everything and replace the vapor barrier and trim panel.