



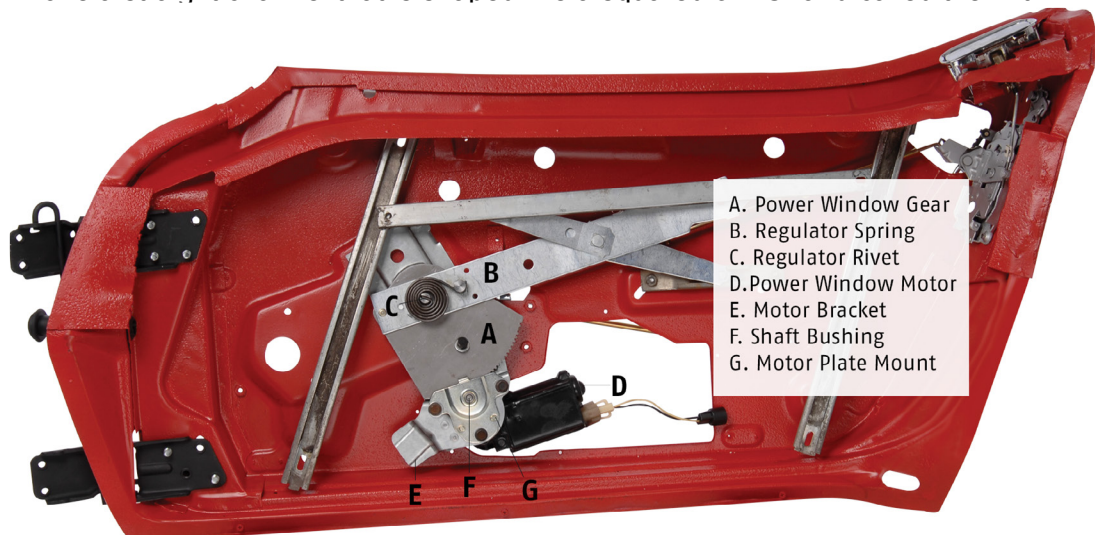
# Power Window Regulators: Restore Window Function

*Introduced as an unprecedented option for the Corvette in 1956, Power Windows have become as commonplace as the steering wheel in automotive design. Sooner or later it is a fair bet that you will experience an operational failure of one or both of your Corvette Power Windows. Want tips to determine if your window regulator is failing? How about solutions to the problem? Mid America Motorworks can help!*

## What is a Window Regulator?

Simply put, the Window Regulator is the mechanism that allows you to put your window up or down. It is located inside the door and attaches within the door, below the window opening. Though the configuration varies from one Corvette generation to the next, they typically all have a straight channel that is shaped like a squared off "C" and called the Lift Channel. The window has 2 holes through the glass at the bottom, and rollers are attached through these holes. This Lift channel lays flat and the rollers on the window fit into, and roll back and forth in, this captive Lift Channel. Once the rollers are slid into the Lift Channel from either end, the channel's edge keeps the rollers from coming out.

The regulator lifts or lowers the Lift Channel in a motion similar to scissors opening and closing as the window crank is turned, whether by hand or electrically. Later designs use a flexible gear track or ribbon lifting or lowering the window as it passes over the motor drive gear. Current designs utilize a continuous cable loop fed through a reel on the motor. As the cable is retracted or expelled from the reel it carries the lift channel up or down, lifting or lowering the glass.



- A. Power Window Gear
- B. Regulator Spring
- C. Regulator Rivet
- D. Power Window Motor
- E. Motor Bracket
- F. Shaft Bushing
- G. Motor Plate Mount





## Heed the Warning Signs

Think your Corvette's safe from regulator failure if it's in storage most of the year? Think again. Whether you have a windows-down daily driver or a Corvette that only comes out during show season, the regulators can still fail over time. Luckily, there are signs you can look for.

### Noisy Operation

If you can hear the motor running, but nothing is happening, the cable or gears have likely broken and the regulator needs to be replaced.

### Slow in Lift Mode

If you're constantly waiting for your windows to close, it's time to replace the regulator.

### Sporadic Function

If the only thing more unpredictable than the weather is your window's ability to roll up or down, a new regulator is a must.



## Potential Causes of Power Window Failure

### Electrical

Occasionally, poor Power Window performance or failure is due to problems within the electrical circuit that supplies power to the unit. Various switches, fuses, and relays can cause a problem. This can usually be determined through a simple voltage test at the power window motor connector.

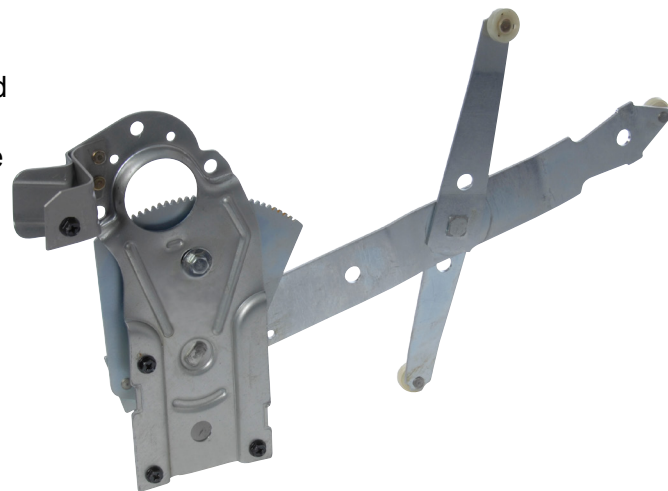
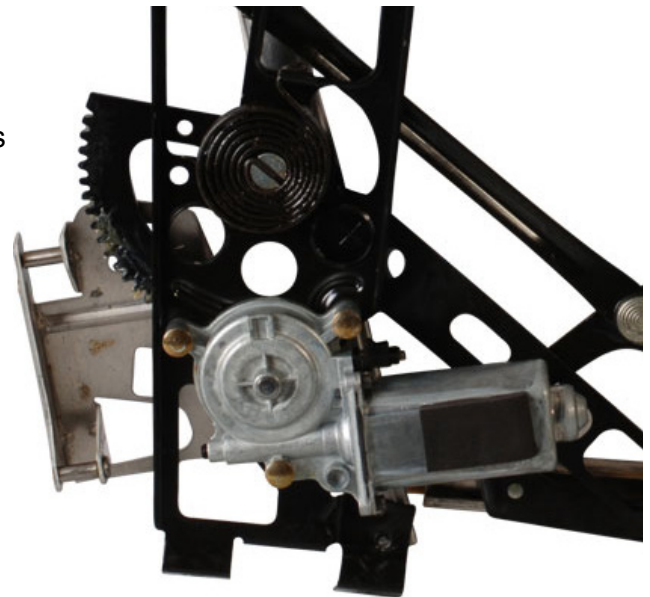
Remove the door panel to gain access to the motor connector and disconnect the lead from the motor. Ground a test light or volt/ohm meter and probe each cavity of the connector. As you move the appropriate window switch between the up and down positions, battery voltage should alternate between the two connector cavities.

### Fatigue

Age, exposure, general wear or mechanical breakage of the regulator or window lift assembly tend to be most frequent causes of power window failure. Window regulators seldom see any lubrication or inspection from the time they leave the assembly line until failure. Removal, repair or replacement procedures vary through different generations of Corvette and can be found within the instructions provided with a variety of replacement assemblies and associated components or are detailed within the Corvette Service Manuals.

### Replacement

As mentioned above, replacement procedures vary, depending on which Corvette generation you own. This video gives you an overview of the C4 Corvette Window Regulator.



[1984-1996 C4 Regulator product review](#)

