Electric-Life Power Window Kits

General Instructions

This sheet is intended to give power window installers some general guidelines. Use these instructions as a guide only. Your particular vehicle may vary. If so, refer to the vehicle manufacturers service manual for assistance.

Prior to beginning any installation, you should move the vehicle into a clean dry area that is well lit. The work area should allow you enough space to have both doors open and work comfortably.

TIP! Lay a clean tarp or sheet on the floor, large enough to accommodate two door panels.
   It is also a good idea to have a small bin available to place small parts into.

You will need to make sure that you have the proper tools to do the job. The following list of tools is typical of what will be necessary to install your power window kit.

SCREWDRIVERS: Standard and Phillips head in different lengths and sizes
PLIERS: Electrical pliers, Needle nose pliers, and Wire Crimpers
WRENCHES: Standard or Metric wrenches and sockets as necessary for your vehicle. You will need a 10mm socket or wrench to install your Electric-Life kit. Some late model vehicles also use Torx fasteners.
CUTTING TOOLS: Electric drill and various sized drill bits. Utility Knife and hacksaw blade.
SPECIAL TOOLS: Window crank handle removal tool and door panel clip remover. 12V test lamp or Voltmeter.

1. The first step in replacing the regulator involves removing the door trim. If the vehicle is equipped with door lock buttons mounted on top of the door, unscrew them. Your next step is to remove the window crank utilizing the window crank handle removal tool. Position the tool underneath the window crank, push the tool in until it engages the clip that holds the handle in place. On some vehicles, the door latch handle is also held on this way. Be careful not to lose the door handle clips.

2. The next step is to remove any trim from around the door handle. If screws exist, remove them. If there are small blanking plates or plugs, gently pry them out. If there is a trim ring carefully pry it off. If there is a hidden bolt or screw behind the plate remove it. On some vehicles (mainly Japanese) the door handle trim is clipped on sideways. Carefully, but firmly push in and forward on the handle and trim assembly. If it doesn’t move try pushing it towards the back. Once it is dislodged, unclip the rod and remove it from the door.

3. The next step is to remove the attaching bolts or screws located in the armrest. In most instances you will find two recessed holes located under the armrest. If the armrest is equipped with an extension arm, there will be a bolt attached at the top of the arm. The bolt is usually hidden by a small access cover which can be gently removed by prying. Check for any other trim plates mounted to the door and remove them.

TIP! When prying trim plates, wrap a small screwdriver tip with masking tape, to protect the trim.

4. There are a number of clips around the perimeter of the door panel. To unfasten these clips you will need to use the door clip removal tool. The tool is shaped like a wedged type fork. Carefully pull the door panel away from the door and insert the tool under the panel and pry the clips up. On most cars these clips snap out of their holes fairly easy. On GM vehicles you will have to get a good grip on the clips, the Christmas tree style clip they use is very hard to pull up. With the clips undone lift up on the door panel and remove it from the door. If you encounter any resistance check to make sure that you have removed any and all fasteners.

5. Behind the door panel will be a plastic or paper liner attached to the door, remove it gently and put it to the side. Do not destroy or throw away this liner. This liner is your doors moisture barrier. It also aids
in reducing wind noise.

6. Now that you have removed the door panel locate the instruction sheet that is provided with the kit. Follow the instructions to remove and replace the original manual regulator with the new Electric-Life regulator. Note that while most of the kits bolt into the original regulator mounting holes, a few of the kits bolt into different holes.

**TIP! Secure window before removing regulator.**

8. Use a suction cup tool, tape or some other means to hold window up in the door. Throw a rag over the top of the door to protect your paint. Alternately, a wood block can be placed inside of the door. Place it carefully so it won’t interfere with the removal or installation of the regulators.

**TIP! Many American cars use rivets to hold in the original regulator. Use a hammer and punch to knock in the center of the rivet and use a 1/4 inch drill bit to drill them out.**

9. When installing a scissors style regulator, a little patience must be exercised. If the channels the rollers ride in can be easily unbolted from the window and the door, do so. It will make the installation easier. If not, all three rollers will need to be placed in their respective channels simultaneously.

10. When installing a cable style regulator, you will notice that the regulator is bolted to the glass. By moving the window up and down you will be able to find a position where the bolts are accessible through access holes in the door. Once glass is unbolted pull it up and secure it to the top of the door.

**TIP! Place wires on the motor before installing the regulators.**

11. Most Electric-Life regulators are bolted to the door using 6mm bolts with 10mm hex heads. Finger tighten all regulator bolts, tightening them up when everything is installed and lined up properly.

12. Once the new regulator is in place check its operation by applying power to one motor wire and ground to the other. Reverse the wires to reverse the travel of the regulator. Insure that everything moves smoothly and that nothing is binding or dragging.

**Installing the switch and wiring kit**

13. Once the mechanism is functioning properly, proceed to installing the wiring harness. On kits with a one piece wiring harness, start by running the wiring across the underside of the dash, starting under the left side of the dash (the power and ground wires come out of the loom here) tying it up and out of the path of any moving objects. Avoid the brake and gas pedals, the heater controls and the ashtray. Run the wiring behind the kick panels and through the door jamb wiring boots into the doors.

14. On kits with 2 piece looms the wires need to be run from the door through the jambs and into the vehicle, with the 2 ends meeting under the left side of the dash.

15. Locate a position on the door panels to mount the switches. (the dash or center console with a 2 switch kit) Verify that the location is enough mounting depth for the switches and wiring. Avoid mounting the wiring may get caught in the window mechanism or interfere with any of the linkage rods. You may need to cut the sheet metal in the door to gain clearance for some of the switch kits. Do not cut away any structural parts of the door or any of the mechanism!

16. Carefully mark the position where the switches will go using supplied templates or the switch mounting panels. Carefully drill the holes for the mounting panels (if used) with a 3/16 inch drill bit. Cut out the holes the switches will protrude through
using a utility knife or drill a couple of holes and use a hacksaw blade. Make sure that your switches are straight before cutting the holes and mounting them. *This is critical!* *This is the only part of the job that you will be able to see when you are finished.*

17. You may have to drill a hole in the door and the chassis to run the harnesses. If you are required to drill holes through the door and chassis, make sure that you place grommets in the holes to prevent the wires from chaffing. It is usually easier to drill your holes from the inside of the door out to the door jamb and from behind the kick panel out to the door jamb.

18. Follow the wiring diagram included with the switch kit to place the wires into their perspective spots in the terminal blocks. This needs to be done on one piece wiring harnesses only. Two piece harnesses come with the terminal blocks preinstalled.

19. Connect the two wires from the wire harness to the two wires on the motor.

20. Your power window kit needs a good power source in order to work properly. It should be wired to a circuit capable of handling 20 amps. We recommend connecting it to a circuit that is controlled by the ignition switch. We do not recommend connecting to a constant power source. The best place to connect the power wire is the main loom coming off of the ignition switch. The wire you tap into should be a minimum of 14 gauge. On some vehicles (such as some earlier GM’s) there is a panel above the fuse box where you can tap in to.

   **TIP! If you are uncomfortable with this phase of the wiring,**
   **Take your car to a professional.**

21. The ground wire from the wire harness needs to be connected to a good chassis ground. The sheet metal behind the drivers side kick panel is an excellent place. Make sure that you scrape off any paint or debris before screwing down your ground. Please note that many of our switch kits use Brown as the ground wire.

22. Connect the switches to the wiring and test the system. If both windows work backwards, reverse the 2 wires going to the motors.

23. Reassemble the door panels and any other panels that you removed to run your wiring. While reassembling the door panels, verify that the wiring is clear of any moving parts.

   **THE INSTALLATION IS NOW COMPLETE, ENJOY YOUR NEW POWER WINDOWS**