PLEASE READ
AND UNDERSTAND
THE
INSTRUCTIONS
BEFORE YOU
START WATCH
OUR YOU TUBE
VIDEO AT

http://youtu.be/xuY5pSUmIOU

1997 to 2002 Prowler

Power Window regulator replacement instructions

For additional help see our You Tube instructional video at http://youtu.be/xuY5pSUmIOU

Note: <u>Please</u> read very carefully and look at the pictures so you that you <u>completely</u> understand the instructions <u>before</u> you start the installation. You are going to remove the plastic cable and tubing assembly from your original regulator and re install the front and rear guides to use with the new regulator.

Disconnect battery (negative terminal) before proceeding.

Remove door handle bezel by pulling bezel back toward rear of car and pulling out away from the door panel slightly. (Pushing in on door panel may also help.) This could be the hardest part of the entire job. It is retained by 4 slotted posts that hold it on. See picture 1

Remove two screws from the door panels around the front of the panel and the screw in the arm rest pocket. See picture 2

Pull door panel starting at the front part (closest to the front of the car) working towards the back and pull to release clips. It will require a small amount of force. Use a trim tool or a flat blade to lift door panel to see where the retainer clips are. Be careful not to break the clip retaining sockets on the door panels. After clips have been separated from door, lift up door panel to separate from door. (Note: the clips should stay with door panel but sometimes they do not, you will need to remove them from the door and put them on door panel prior to reinstalling the door panel.)

Release window harness from window switch by pressing down on securing clip. On drivers side release mirror harness from switch by lifting securing tab.

Remove the door speaker and arm rest bracket.

Carefully remove the black plastic door water shield and put it aside to re install later.

Remove the upper window inner rubber seal at the top of the door.

Release the wiring harness clips from the inner door panel so you can move the harness aside for clearance.

Mark where the two torx head bolts are at the rear of the door glass that attach it to the rear guide so you can install it in the same place and slide the glass to the rear so it will drop out of the front guide and carefully lift the glass out of the door. See picture 3

Remove three nuts at the window motor. Before you remove the nuts at each end of the front and rear window vertical guide channels mark where they are now as the holes in the door are slotted and you can use these marks as a starting point when you adjust them later. Remove the rear lower guide channel adjuster so the rear guide will come out of the door easier. Be sure to count the number of turns so you can put it back where it was when you reinstall it in the door. Unplug the motor pigtail and plug from the wiring harness connection. And remove the regulator assembly from the door. You will have to squeeze it together to get it out of the access hole in the inner door panel.

Remove the motor from the mount on the plastic tubing to make it easier to handle and then locate the small rivets at the ends of the front and rear glass guides that are holding the plastic elbows to the guides. Grind the heads off or drill them off and push out the rivets. See picture 4. Pry up the tabs that are through the plastic elbows. See picture 5. And then loosen the elbows from the guides and rotate the guide from the tube and cable assembly. See picture 6. And they will "un screw" off of the guide lift/slider. See picture 7. You are going to use the guides for the new regulator. Do not loosen the "glass stop" on the rear guide as it shouldn't need to be adjusted with the new regulator. Flatten the tabs back out on the rear guide and lube up the slider and be sure it slides very freely. Reinstall the rear guide back in the door making sure it is at the same location in the elongated holes as it was before.

Flatten out the tabs on the front guide, or break them off if necessary. Slide the plastic "glass" guide out of the channel and install the furnished black plastic button in the top of the tab that the cable was screwed in to. See picture 8. Lube up the channel and slide the plastic guide back in. Install the furnished front upper glass stop on the upper end of the front glass guide in the hole that is already in the channel. You may have to open up the hole with a ¼ inch drill bit.

Put the square head bolt in the groove channel of the guide and slide the stop over the bolt and install the serrated nut. To adjust the stop, slide the plastic "glass" guide up against the square headed bolt and then slide the stop down with the tab against the black button and tighten the retaining nut. See picture 9. Bend the tab on the stop to get it centered over the black plastic button.

Be sure it slides freely and install the front guide in the door and temporarily tighten it down at the upper end of the elongated holes in the door.

Install the furnished lift channel on the lower edge of the glass, 7 1/16 inches from the center of the rear lower glass retainer plastic nut and washer and it will also be 21 ½ inches from the front point of the glass to the rear of the channel. See picture 10 & 11. Mark the glass with a piece of tape or a marker so you are sure to mount it in the correct place. Put the glass on a padded surface, fold the furnished rubber retaining strip over the edge of the glass, you can use tape to help hold it to start, and carefully press the channel on over it. It should be very tight to force on. You can get it started on the glass in the correct spot and then tap it on the rest of the way with a plastic hammer or a block of wood and a hammer. A little water may help it slide on if necessary. See picture 12. Be sure it is at the correct measurement on the glass because it will be very hard to take it off and move it. The lower open part of the channel where the lift roller rides is to face towards the inside of the car.

Lube up the glass lift channel and install the glass in the door being careful not to let it fall down in the door. Slide the glass into the front vertical guide plastic slide and then bolt the glass on the rear guide lift arm at the marks you made when you removed it. With your hand push the glass up and down from the lift sash channel on the bottom of the glass to be sure it is smooth and doesn't bind. If it seems to bind a little as it starts to come down from the full up position pull the rear inner rubber seal away from the glass and it should then go down without binding. This binding may also cause a little roughness when the glass goes down when you are making the final adjustments.

Install the rear mounting bracket in 2 of the original motor mounting holes and leave it loose for now. See picture 13.

Install the furnished drill template on the two upper speaker screw holes, with the wide square end towards the front, see picture 14, and drill the 2 pilot holes through the template. Remove the template and drill out the pilot holes with a ¼ inch drill bit.

Lube the regulator gear and slip the new regulator assembly into the door and slide the square nylon lift roller into the lift channel on the glass. Slide the rear stud in the rear bracket and install the metric serrated nut but do not tighten it yet.

You may have to power up the motor and move the regulator arm a little to get it to slide into the lift channel. See picture 15

Cut the wiring plug and pigtail from the <u>old motor</u> (<u>not</u> from the chassis wiring harness) and splice it on the new motor pigtail, blue to red and black to black on the left door regulator and blue to black and black to red on the right door regulator. Leave the wires long enough to run them away from the regulator gear. Plug it in to the motor. NOTE: Before making permanent connections check for proper operation of the window switch up and down as there have been a few cars that were color coded opposite of this.

Install the furnished front regulator mounting bracket at the lower end by using the 1/4X3/4 bolts and 2 spacer washers, per bolt between the door panel and the bracket, See picture 16, and bolting it on the outside of the door panel at the upper end in the existing hole, using the 1/4X1/2 bolt, and then drilling the door panel for the front bolt. Leave the bracket loose and pull the regulator up and the front mounting studs through the bracket holes and install the metric serrated nuts. When you move the regulator to get the front studs aligned with the mounting bracket holes the glass will move up or down a little with it. See picture 17

When first running the glass up and down and adjusting, be very careful, with short movements until you are sure it is free and smooth

The glass should be really close to the same front to rear fit that it was before you took it apart. Run the glass up to the stops and carefully close the door and see how the glass fits the opening. You can make it fit the opening by adjusting the rear guide up or down in the slotted holes at the guide mounting bolts or you can move the adjustable stop on the guide up or down or a combination of both. By adjusting the up stop on the regulator gear you can control the front of the glass. When you get the glass to fit the opening properly watch how the glass stops at the top.

If the glass stops at the rear before the front of the glass stops loosen the upper bolt where the glass bolts to the rear guide and raise the front of the glass by the amount that it lags behind when the rear of the glass hits the rear stop. You can get it adjusted so that the glass hits the front and rear stops at the same time.

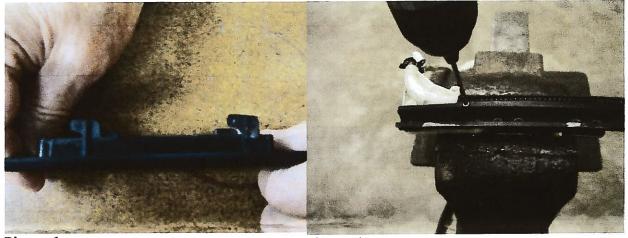
Now you can adjust the regulator down stop on the regulator gear so the glass goes all the way down being careful not to let it go so far that it wants to pull the lift channel off the glass. This is what stops the regulator on the automatic "one touch down feature", the <u>only</u> thing that stops the glass. You want the glass to stop just as it gets to the door top weather seal

When you are satisfied with the glass adjustment, loosen the front guide retaining nuts, with the glass in the up position and slide the front guide down in the slotted holes in the door as far down as it will go and tighten the retaining nuts. This will adjust the front guide stop in unison with the gear stop as they need to stop at the same time. The adjustments take a little patients but are very do able. As you can see there is a lot of adjustment built in to the door.

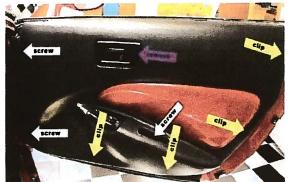
When you are sure the adjustment is satisfactory, re route the wiring, see picture 18, you will have to re position and re-tape one of the harness retainers to fit.

Re-install the upper door inner rubber seal, the speaker, the black water shield, arm rest bracket and door trim panel. And you should be "GOOD TO GO" and not have to worry about breaking your regulator again.

If you have **any** questions at all please call me and I will get them answered for you. 574-259-6875



Picture 1

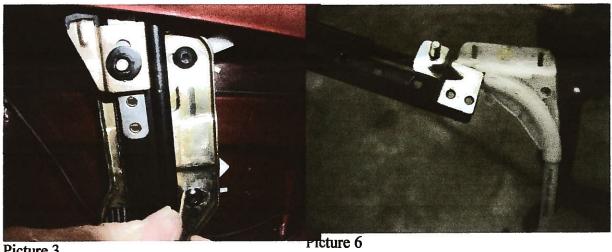


Picture 2

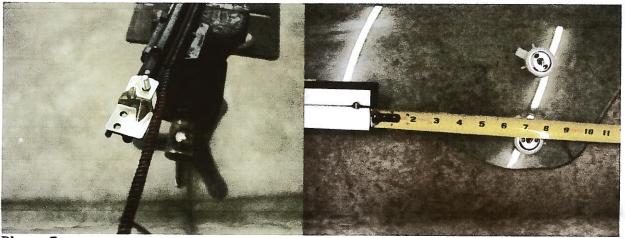




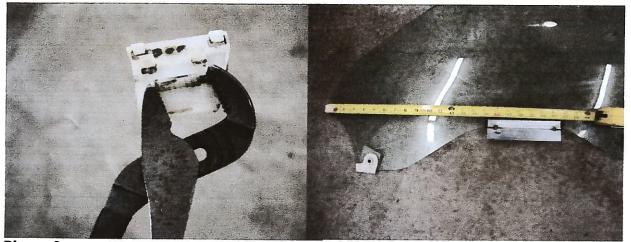
Picture 5



Picture 3



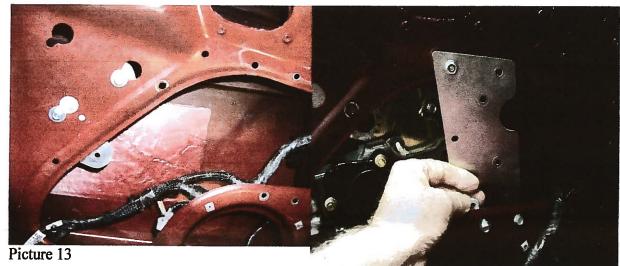
Picture 7 Picture 10



Picture 8 Picture 11



Picture 9 Picture 12



Picture 16

Picture 14 Picture 17



Picture 15 Picture 18