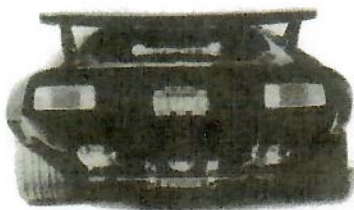


VADER RACING



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Congratulations on choosing the best Pantera Window Regulator there is! Following are the instructions for installing the Regulator. Before starting, please read

the complete instructions through once and note the parts as assembled on the Regulator assembly.

SPECIAL NOTES:

Although the Vader Regulators have more power than the stock units, they are intended to replace properly working (although slow) stock Pantera window regulators and they may not be able to overcome other problems such as out of alignment door frames or window tracks, improper (too tight) window weather-stripping, or faulty wiring.

Also, we have noticed that some early 1971 Panteras have a lower front window channel. This serves no purpose except to increase alignment problems and should be removed (as the factory did in later cars).

1. First remove the old regulator according to the Pantera Service Manual. We do, however, have a couple of hints. Before starting to remove the old regulator, run the window up to approximately 2 inches below the top, so that you can access the two nuts that attach the regulator to the glass. Use a piece of tape (packing tape works good) to hold the glass in that position while you remove the two nuts and disengage the glass from the regulator. After the glass is disengaged from the regulator, use the tape to pull the glass all the way up so that it is out of the way.



FIGURE 1

After you have the glass pulled up and before you disconnect your power to the old regulator, run your regulator all the way to the top as shown in Figure 1.



FIGURE 2



FIGURE 3

- Then disconnect the wires, remove the 4 cap screws, and move the regulator toward the back of the door. Start the arm out of the large upper hole as shown in Figures 2. As the body of the regulator gets lined up with the hole, it can be tilted out and straight up through the hole.

After you have managed to get the old regulator out, thoroughly clean the inside bottom of the door at, and around the lower attachment hole (your new regulator will go all the way to the bottom).

2. You are now ready to install the Vader Window Regulator. First, remove the $\frac{1}{4} \times 2 \frac{1}{2} \times 28$ loosely attached bolt closest to the regulator, from the motor assembly (see Figure 4). Also remove the upper and lower $\frac{1}{4} \times 20$ screws and set them aside.

3. Now carefully feed the new regulator in to the top hole, with the motor assembly first and then feeding in the bottom of the guide channel as shown in Figure 5. Be careful to not kink the cable while inserting the unit.

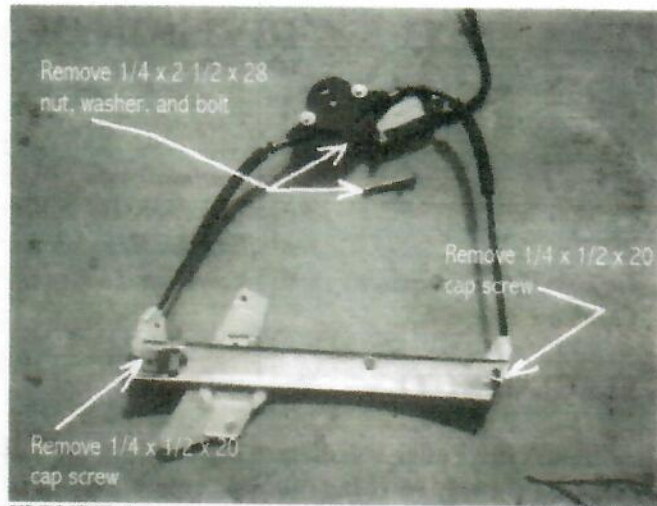


FIGURE 4



FIGURE 5

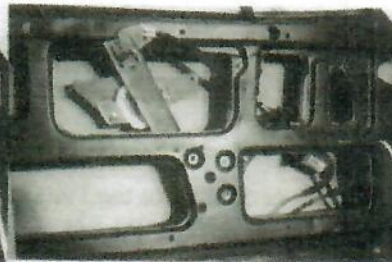


FIGURE 6



FIGURE 7

As the bottom of the guide channel enters through the hole, start rotating the whole assembly counterclockwise as shown in figures 6 & 7, until the regulator is completely within the door.



FIGURE 8

4. Position the motor assembly as shown in Figures 8 & 9, and push the bolt and washer that you previously removed into place. Don't worry about tightening it just yet.

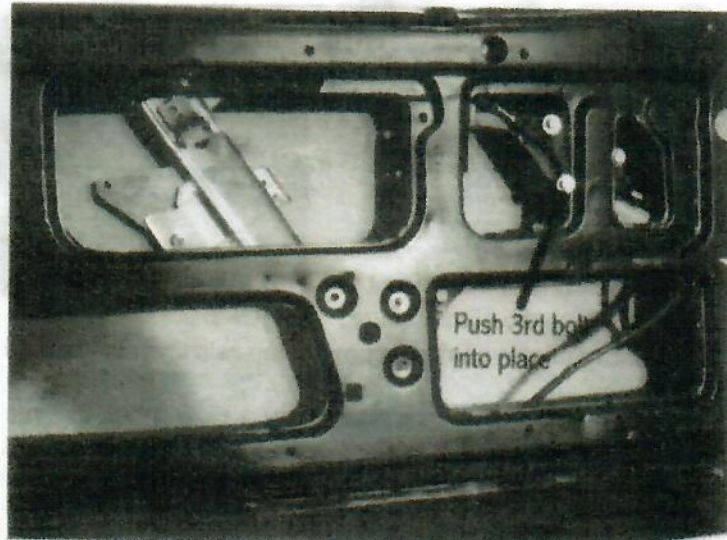


FIGURE 9

5. Position the regulator as shown in Figure 10 in the opening, and start the upper attachment $\frac{1}{4} \times \frac{1}{2} \times 20$ screw. Do not tighten yet.

Now insert the lower $\frac{1}{4} \times \frac{3}{4} \times 20$ screw into the regulator from the bottom of the door. This will be a very tight fit by design. A probe inserted through the hole will help. If the bolt will not start, be sure that the bottom of the regulator is all the way toward the front of the door. If the bottom, inside of the door is clean, and the screw still will not start, you may have to open the upper hole in the door slightly upward. Do not tighten yet.
Note: You may find it easier to reverse the above and install the bottom attachment first and then the upper.



FIGURE 10

6. After both upper and lower attachments are started, tighten the upper $\frac{1}{4} - 20$ screw (shown in Figure 10), securing the regulator track in the door.

7. Referring to Figure 10, let the gearbox housing find its natural position in the opening. Note that the motor body is aimed down and toward the front of the door, and note that the flat washers catch the door reinforcement to hold it in position. Place the Nylock nut on the back of the bolt that you last replaced and tighten all while holding the assembly in its least binding position.

You will need to use a wrench on the nuts from behind, as they are Nylocks.

8. Pull the lower end of the regulator toward you, keeping it straight in the plane of the door (you may have to twist the upper bracket slightly to keep the plane straight), as shown in Figure 11,



FIGURE 11

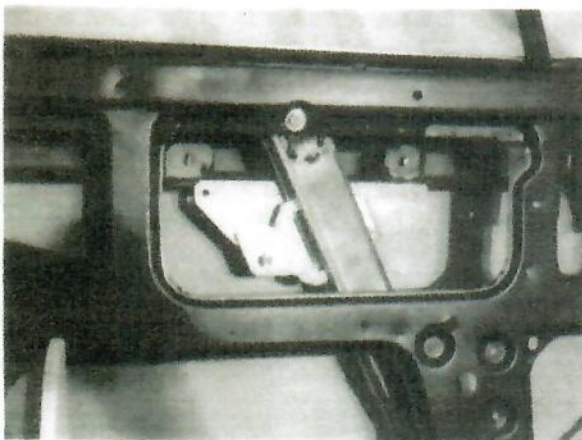


FIGURE 12

and tighten the lower $\frac{1}{4} \times \frac{3}{4} \times 20$ screw.

9. Lower the window glass (using tape to hold it) to expose the glass attaching studs (Figure 12). Push the studs back through the glass slightly and work the regulator carrier up over the studs, then push the studs from behind back

through the holes in the carrier (Figure 13). Insure the glass attaching studs are centered in the glass holes with lip of bracket UNDER glass, and alignment of the window glass at the top and the rear edge (there will be a slight gap at this position) is good. Install the original metric nuts and washers. **CAUTION - DO NOT OVER TIGHTEN THESE NUTS AS YOU COULD BREAK YOUR WINDOW.** Just snug up good and the rubber will keep the nuts from coming loose.

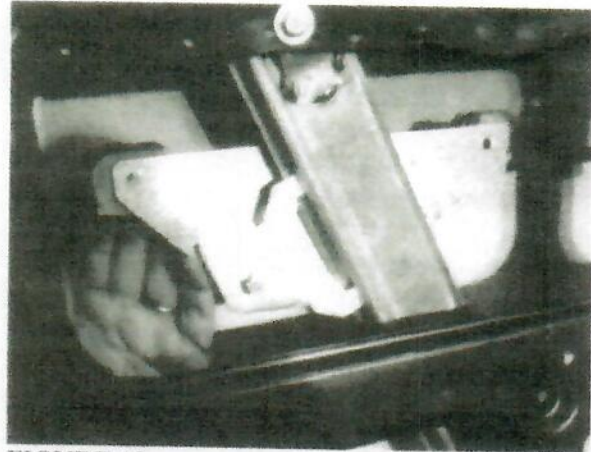


FIGURE 13

10. Clip the new motor wiring to your original, with Red to Red, and Yellow to Black. See Figure 14.

Run the window up and down to check for any binding. If the glass attaching studs were not perfectly aligned in the glass, there may be a little binding when the glass is about 3 inches from the top in the "UP" movement. If this happens, cycle the window down and then up again, stopping just as the bind occurs. Loosen the window attaching nuts and let the glass center itself. Check for visual

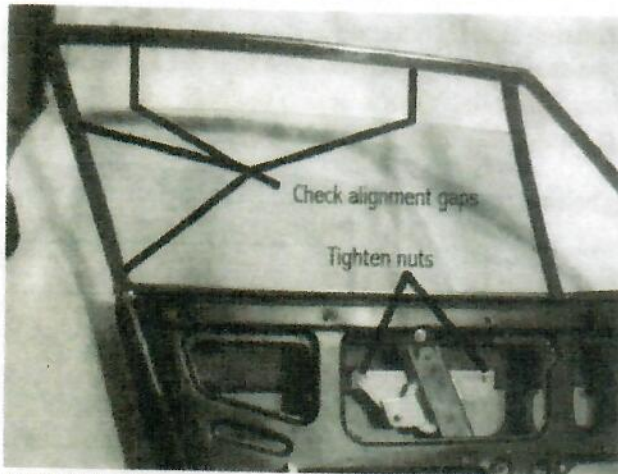


FIGURE 15

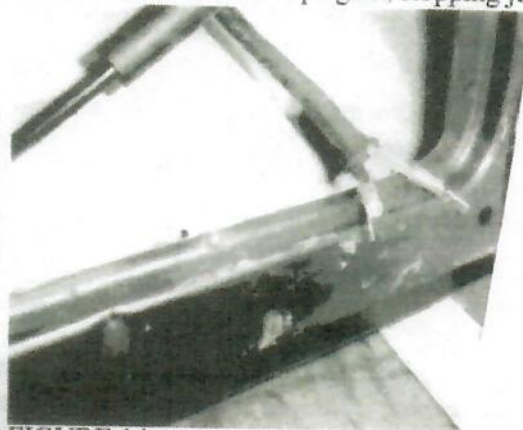


FIGURE 14

alignment at the top of the glass and the rear edge (this moves away from the frame as the window lowers). If all is well re-tighten the nuts and recycle the window. It should now

raise and lower smoothly, FAST, and go all the way to the bottom, so you can hang your arm out the window and look cool. Note: In the unlikely event that the window does not seal tightly at the top, you may have to place a washer under the lower mount and elongate the upper mount hole. **CONGRATULATIONS! YOU NOW HAVE DEPENDABLE, STATE OF THE ART, VADER WINDOW REGULATORS.**