

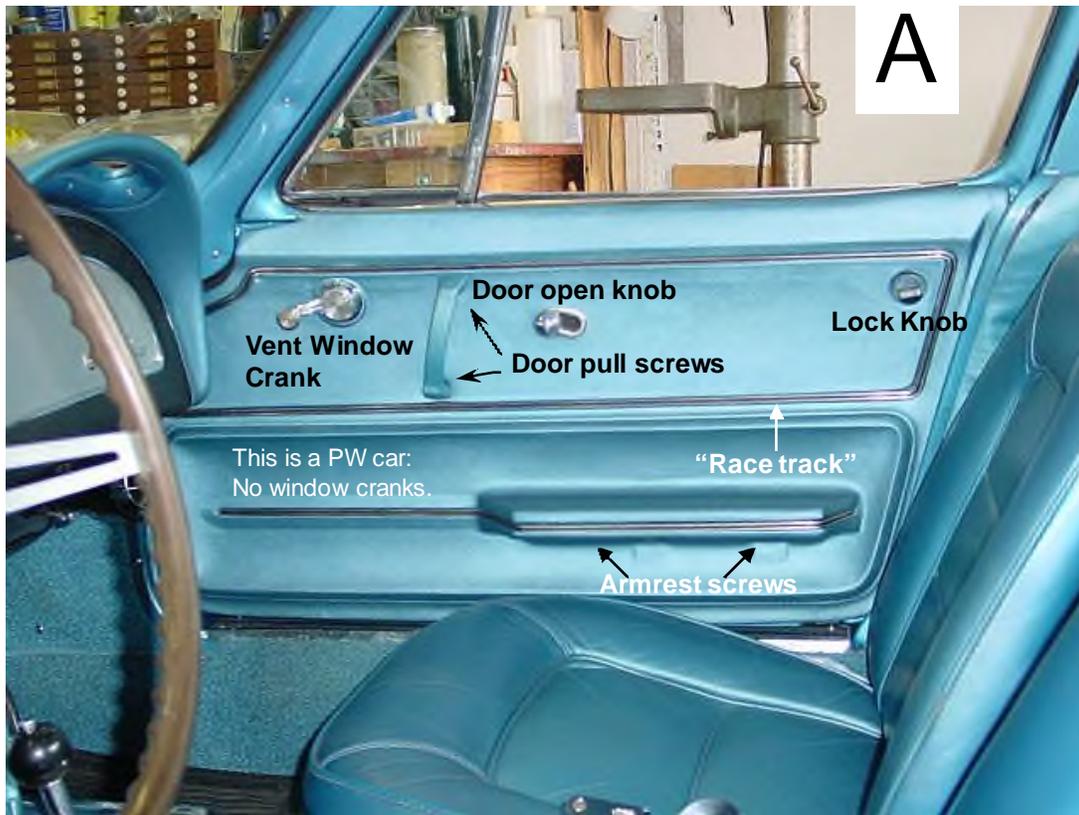
# Overview of some Corvette (mid-year) door anatomy

Dave Zuberer, updated April 2014

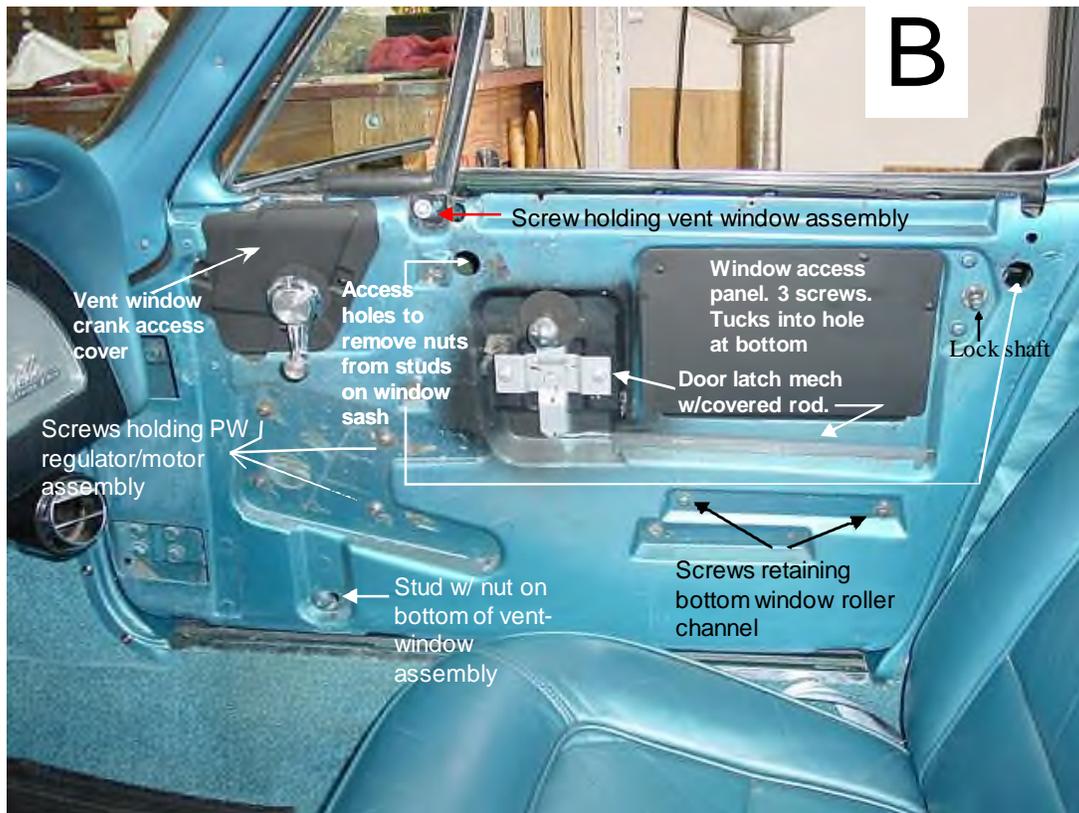
**Note:** The materials here were all derived using the doors of my 1965 Coupe as the subject. I believe the doors are similar across the mid-years but you should check the Service Manuals and the AIM for your particular year and model (coupe vs. convertible) for details not shown here. The comments here are made based on the experience of my wife and I disassembling the vent-window assemblies to replace the vent-window rubber seals., replace a broken T-post, etc. We hope you find the materials of use in your own repairs. Special thanks to Lou Rocha (Mass.) for the tip on removing the rear window channel to accomplish removal and re-insertion of the vent-window assembly!



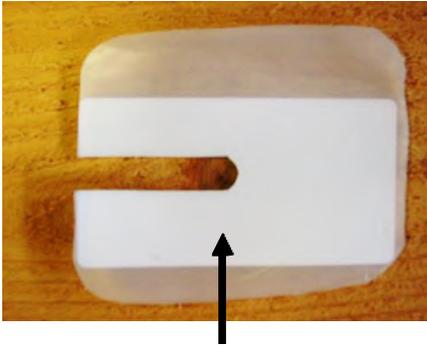
# Figure 1. Overview of coupe door



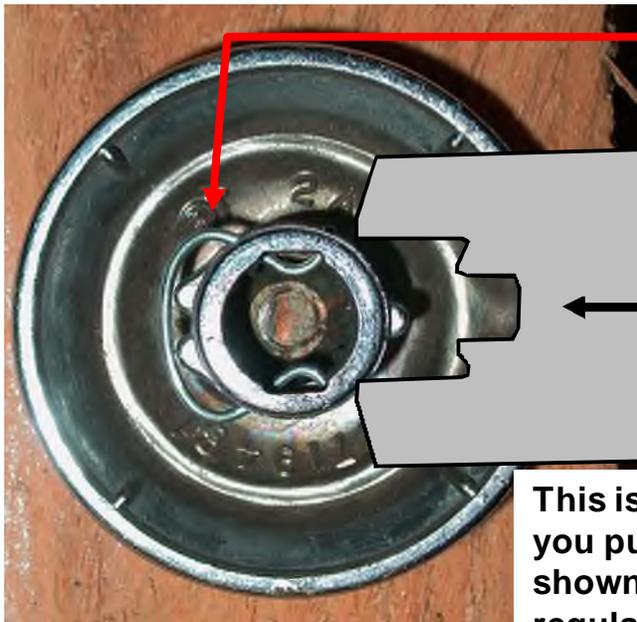
Note: This is a power window car so no window crank is shown.



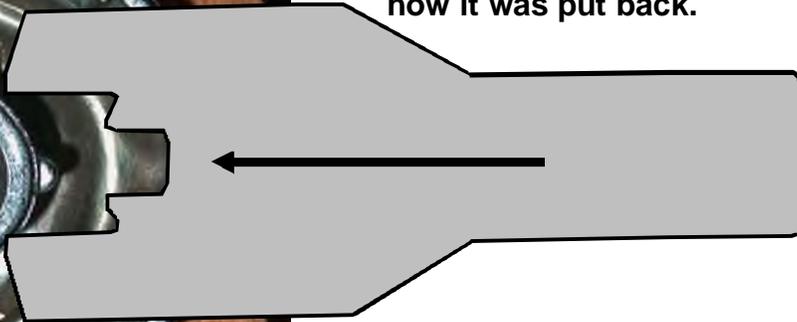
## Figure 2. Window crank and lock clip removal



Cut a "shield" (see pic below) out of a plastic milk jug or a plastic report folder to slip behind the window crank to prevent marring your door panels.



Here you can see the "Omega" / "Horseshoe" clip installed in the crank. The open side should face the handle but it might not depending on how it was put back.

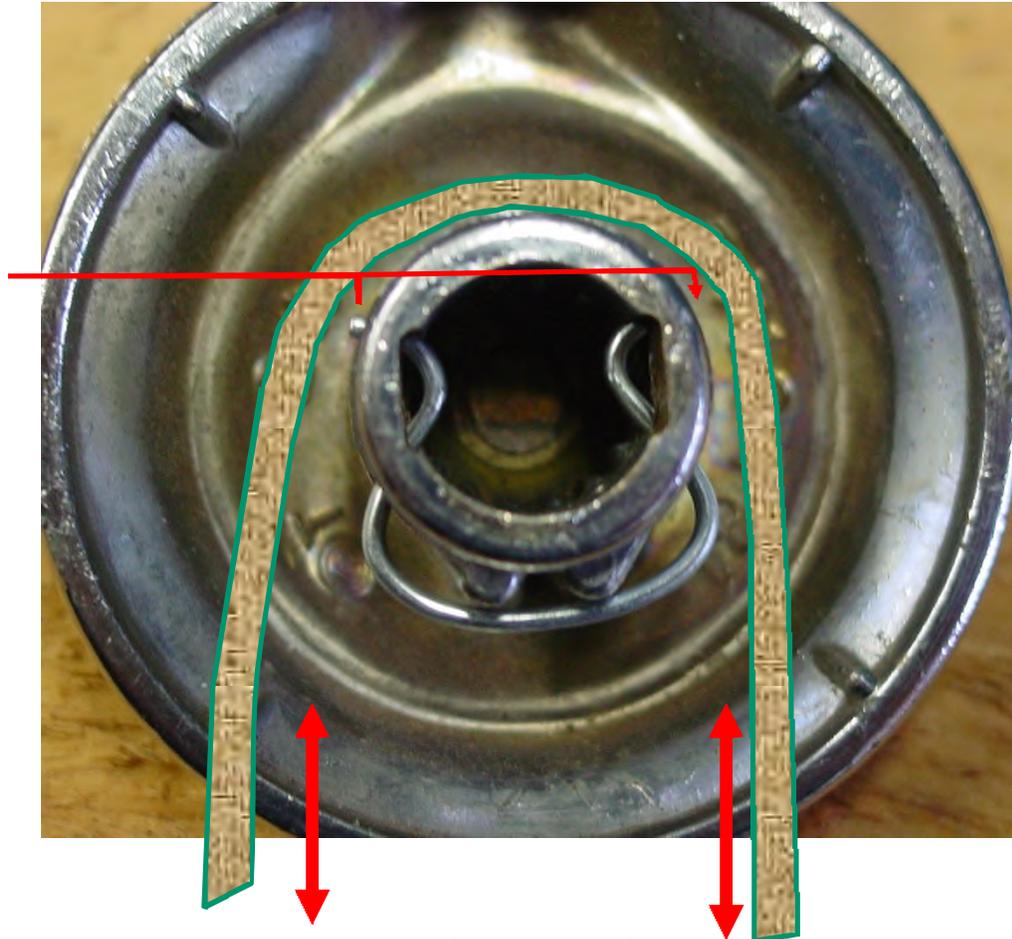


This is how the clip should be oriented when you put it back in. Just put it in the slot as shown here and then push the crank onto the regulator shaft; it will slide onto the tapered end of the shaft and clip into position



## Fabric strip method:

Fabric catches the open ends of the clip and pulls it loose.



Many folks report success in removing the omega clips simply by running a strip of fabric (approx. 2" wide or whatever fits) in behind the handle or lock knob and pulling it back and forth like you would if you were shining your boot tips. Once you get the right direction, the fabric catches the splayed out tips of the clips and pulls the clip loose. This has been reported to be especially effective for lock knobs which tend to be recessed in the door panel with little space behind the knob to insert the metal clip removal tools. It also helps to push in on the panel while you insert the tools or thread the fabric strip around the clips behind the lock knob.



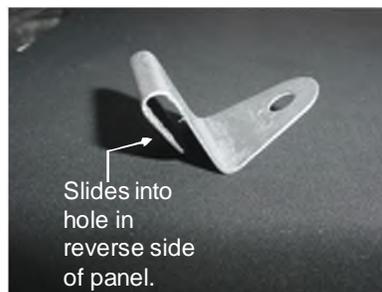
Vent window crank shaft

## Pick method:

Finally, many folks report using a curved pick to hook the clip and pull it off. Use caution not to mar your door panels.

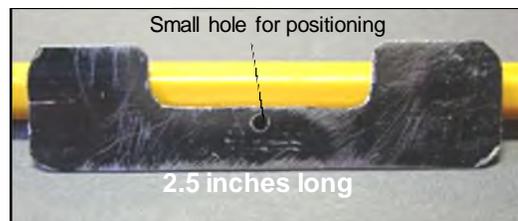
Note that the shafts of the widow cranks and lock are tapered so that you can install the clip on the crank or knob and then just push it onto the shaft until it engages the groove on the shaft.

# Figure 3. Door-panel clips: removal and installation



Installed panel clip

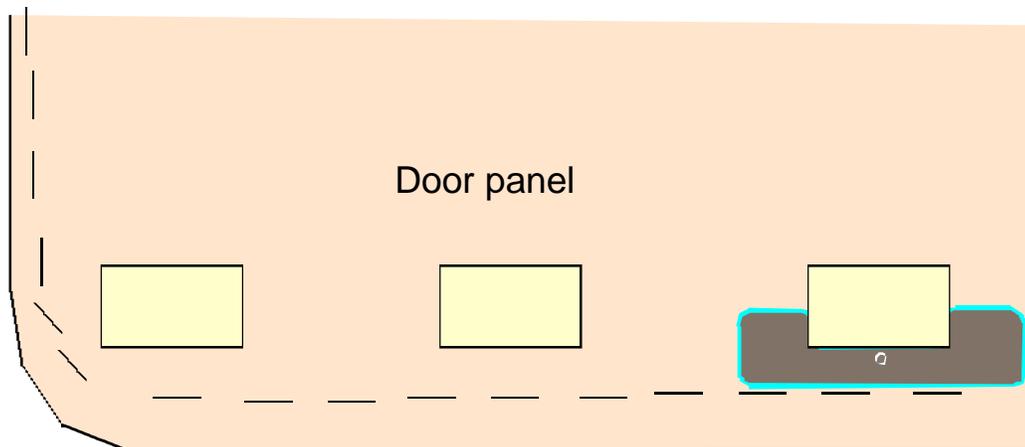
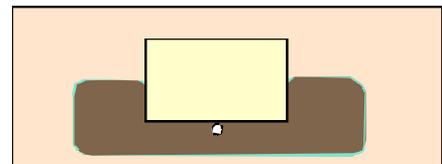
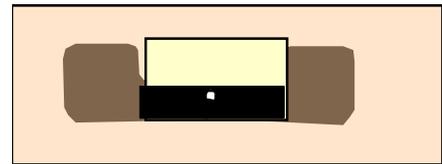
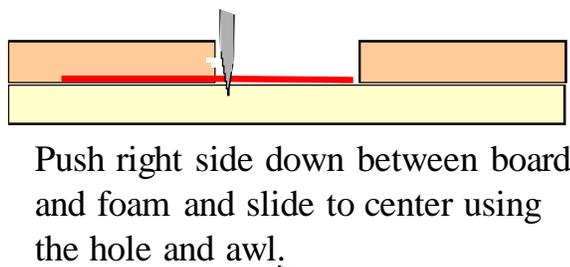
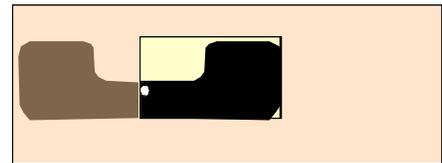
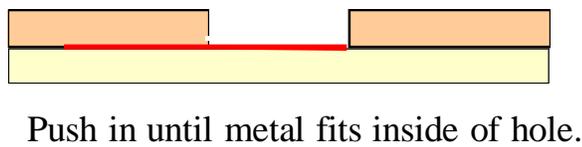
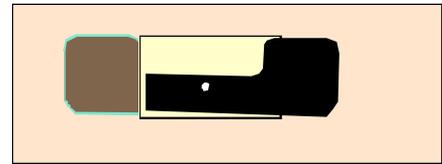
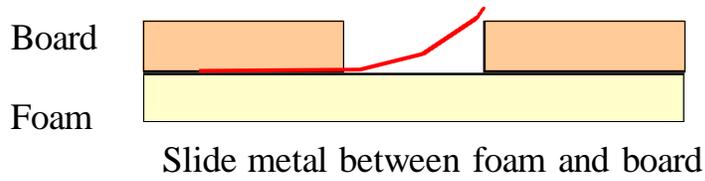
**Door panel clips.** These clips slide into the rectangular holes on the back of the door panel. We made some “butterfly” reinforcements out of the metal strapping you can find at any lumber yard. The reinforcement is slid between the foam and the pressed cardboard of the panel and centered by pulling on the small hole with an awl (see next figure). We only had to remove one staple on one panel. This could vary.



“Butterfly” reinforcement for door-panel clip holes.

# Figure 4: Door-panel clips con't.

## Inserting :”butterfly” reinforcements.

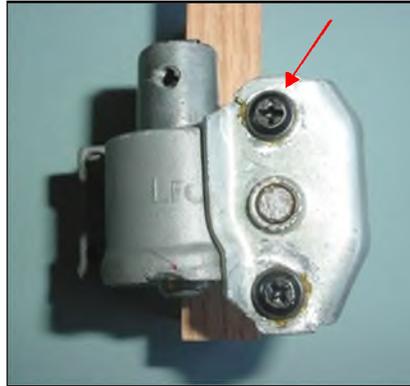


Holes obviously not to scale!

## Figure 5: Vent-Window regulators



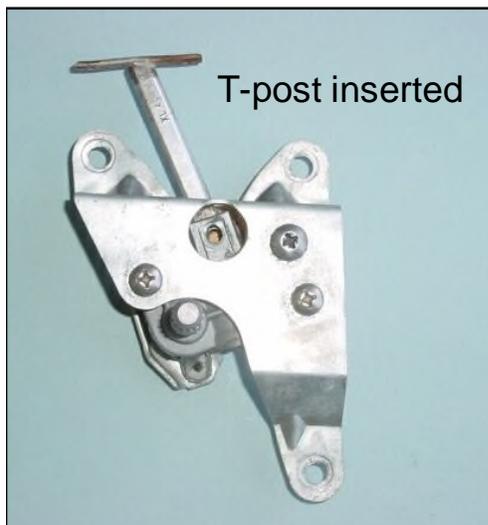
“Front” view of vent-window regulator



Repaired regulator  
Note screws (arrows)



Regulator showing the normal “peened” pot-metal studs holding the backing plate.

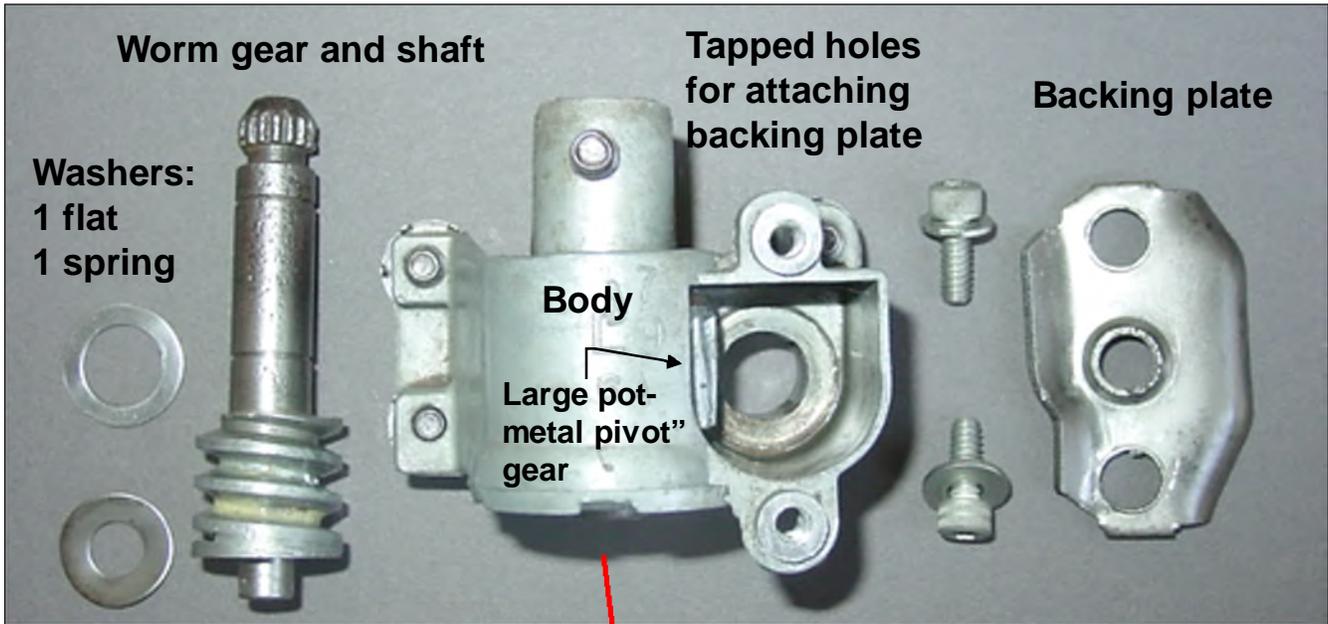


Vent-window regulator attached to bracket that attaches it to the door. T-post from vent window shown for reference.

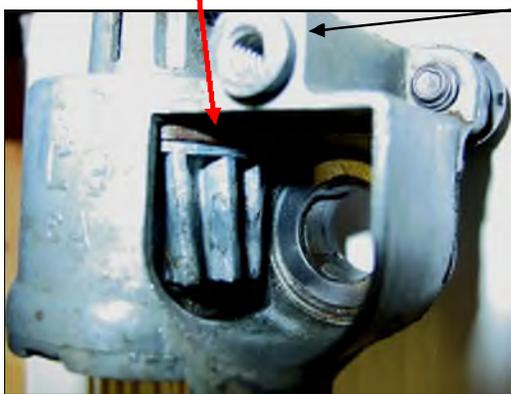


Vent-window regulator installed in door

# Figure 6: Components of a vent-window regulator:



This is one I fished out of an old Chevy at a "junk" (treasure?) yard.



Peened pot metal ground to be flush with surface of backing plate and drilled & tapped to accept screws to attach the plate as below.



Normal regulator

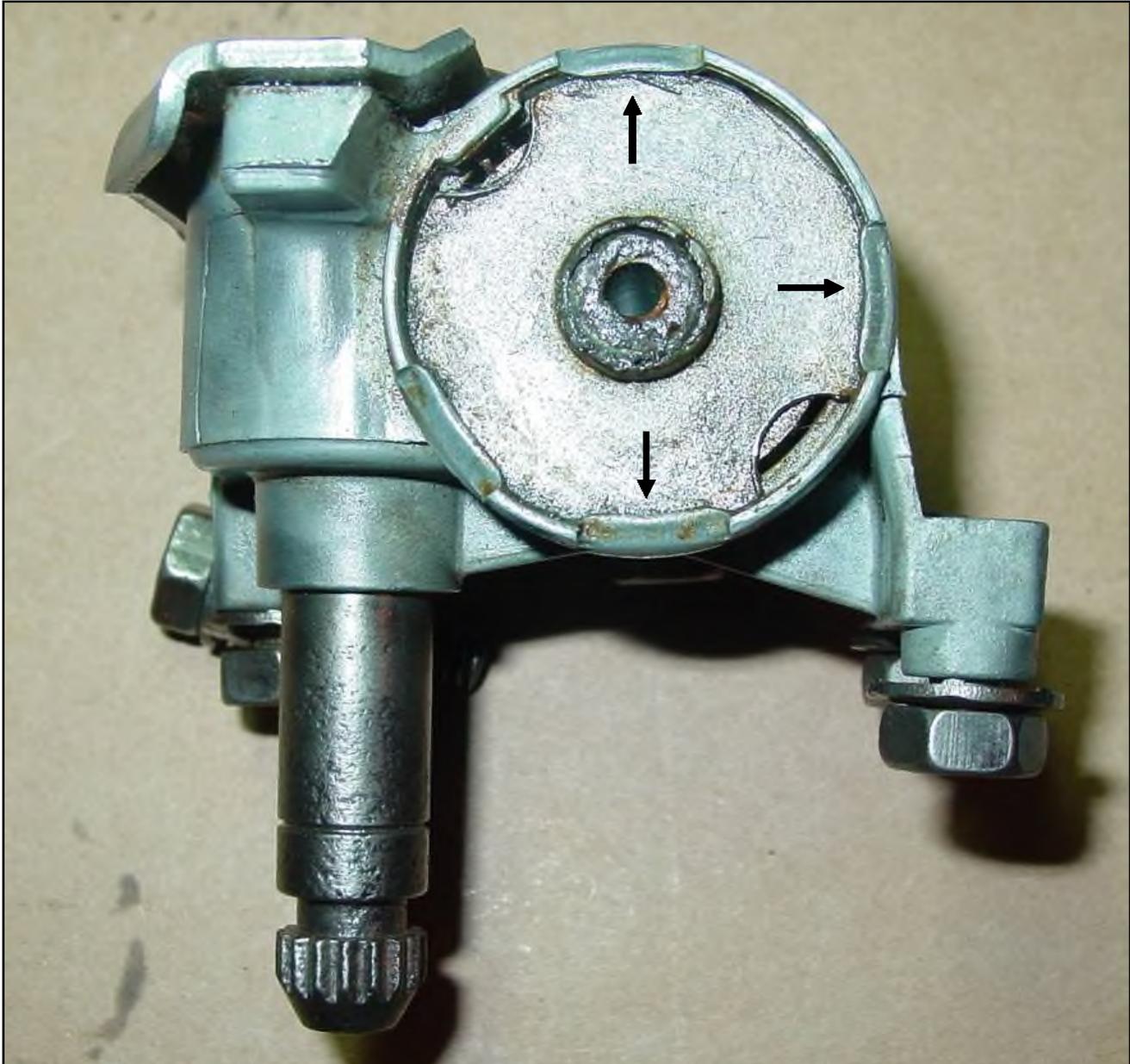


Repaired regulator



# Mid-year Corvette vent-window regulator gear replacement

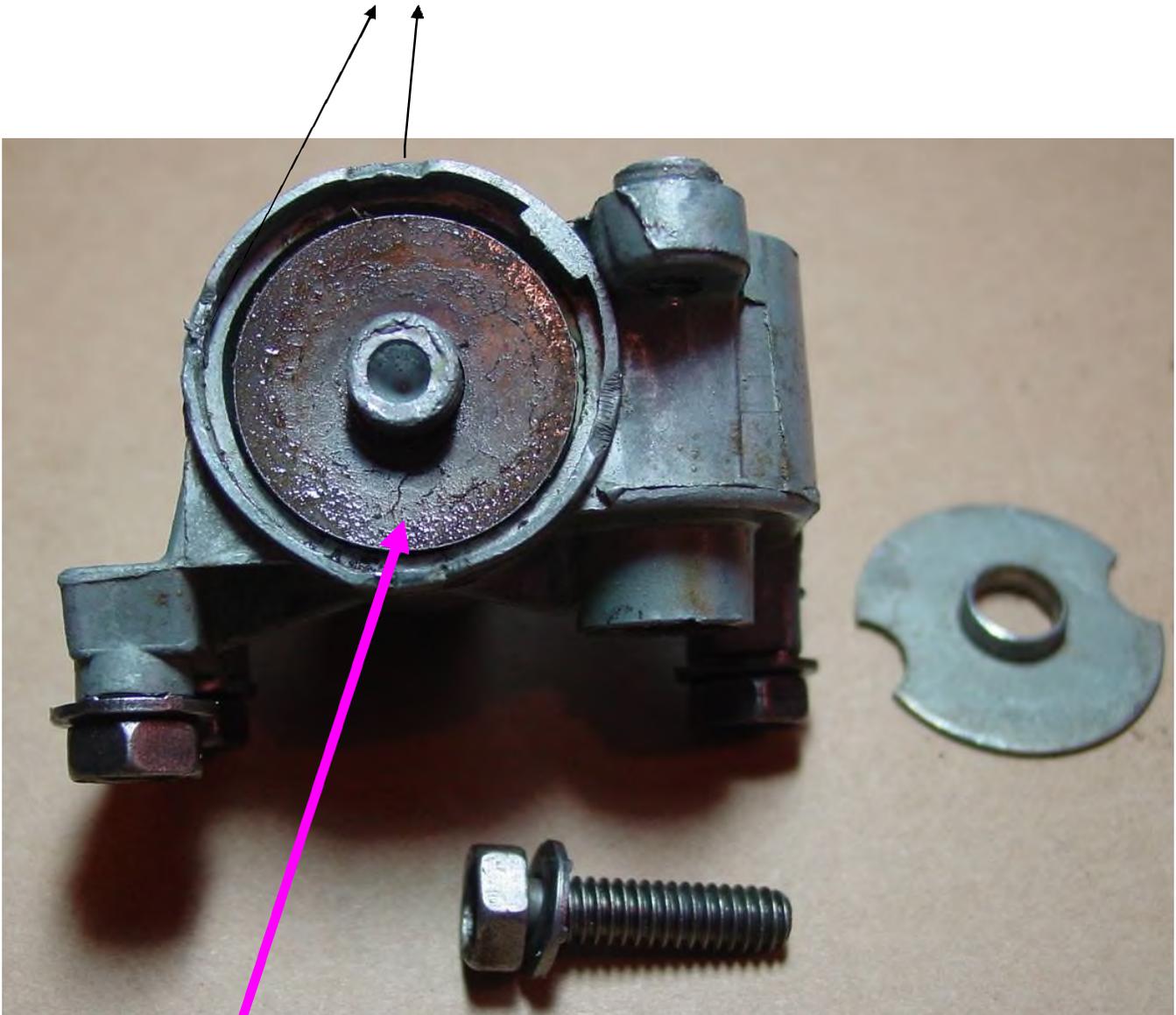
Dave Zuberer



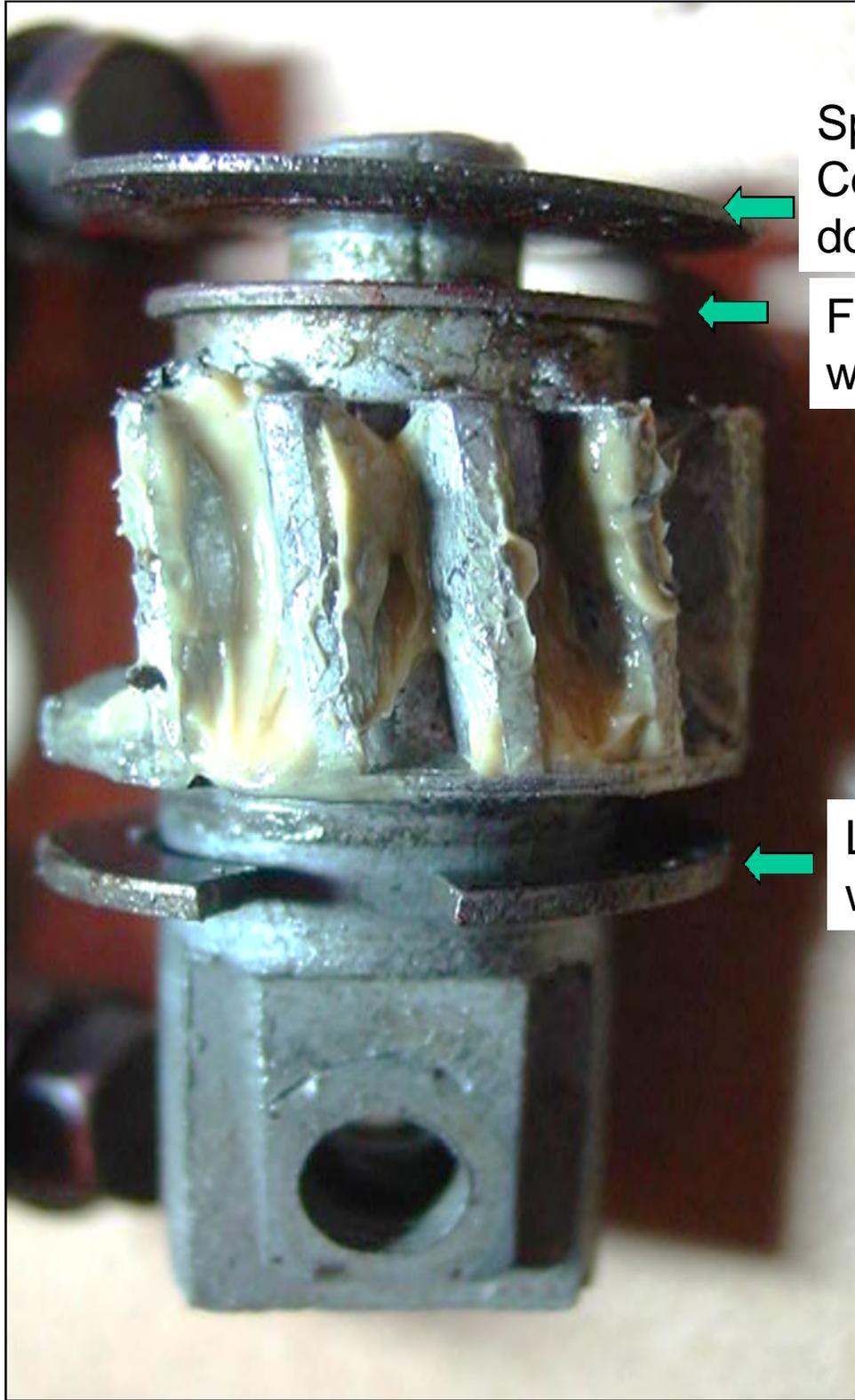
To get to the main gear you have to carefully pry or tap these peened over tabs. The backing plate must be removed to get the worm drive gear out first.

Note: these photos are from a regulator salvaged from a '65 Nova wagon but they are nearly identical to the Corvette regulators.

Carefully pry these back to release the gear retainer. A gentle tap on the other end may help pop the cover loose.



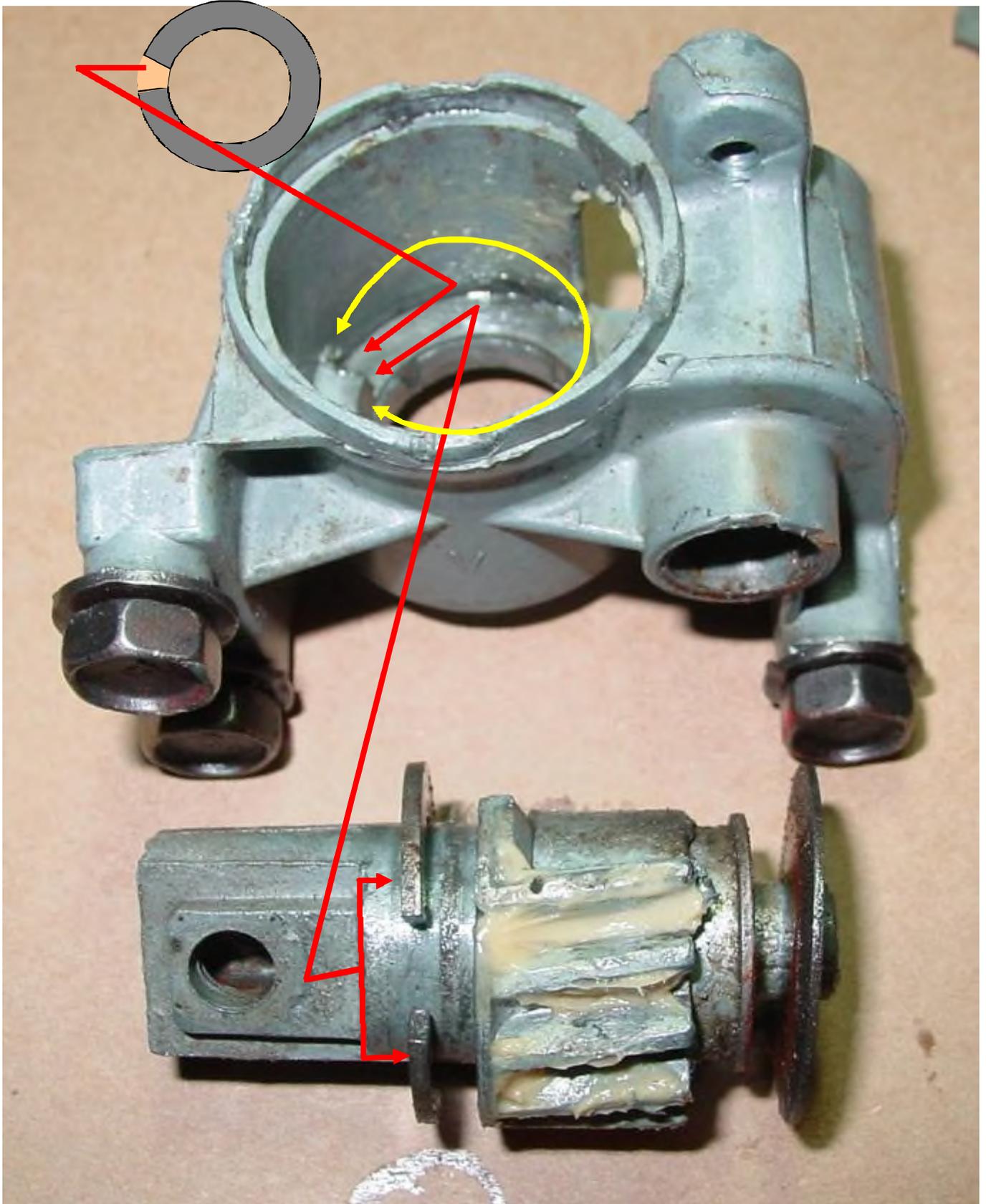
Spring washer with convex side facing the gear. There is a flat washer below the spring washer (see next pg.).



Spring washer;  
Convex side  
downward

Flat  
washer

Large "split"  
washer



The notch in the lower washer fits over the tab in the bottom of the gear housing. The tab limits the gear rotation.

A regulator repair kit is available from America's Finest Corvettes ([corvetteusa.com](http://corvetteusa.com)) at the url below.



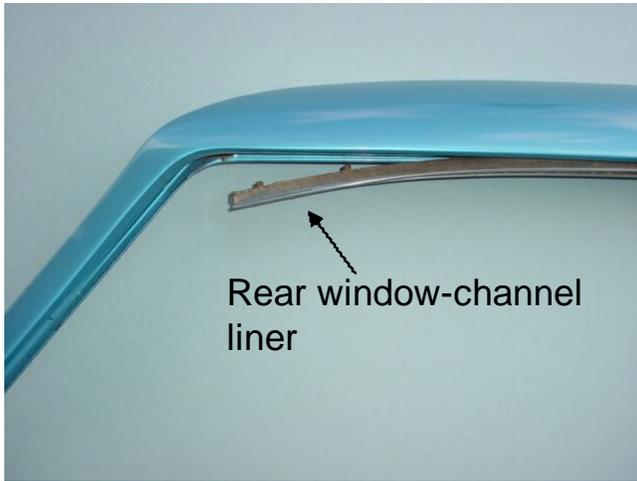
<http://www.corvetteusa.com/vent.html>

### 1963-67 Vent Window Regulator Repair Kit [AFC607]

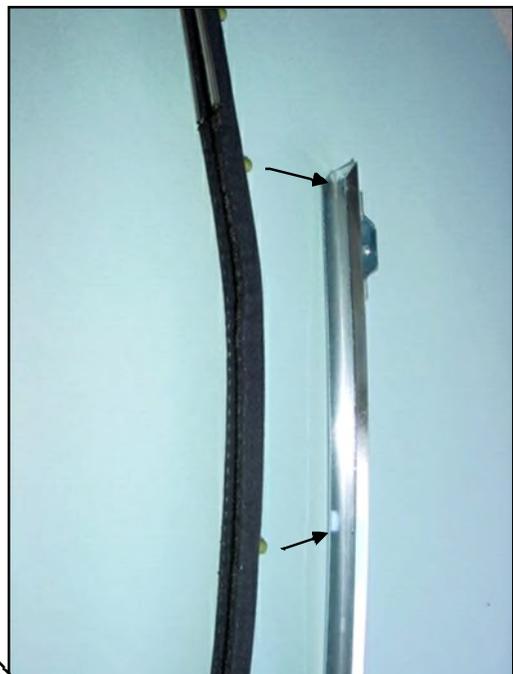
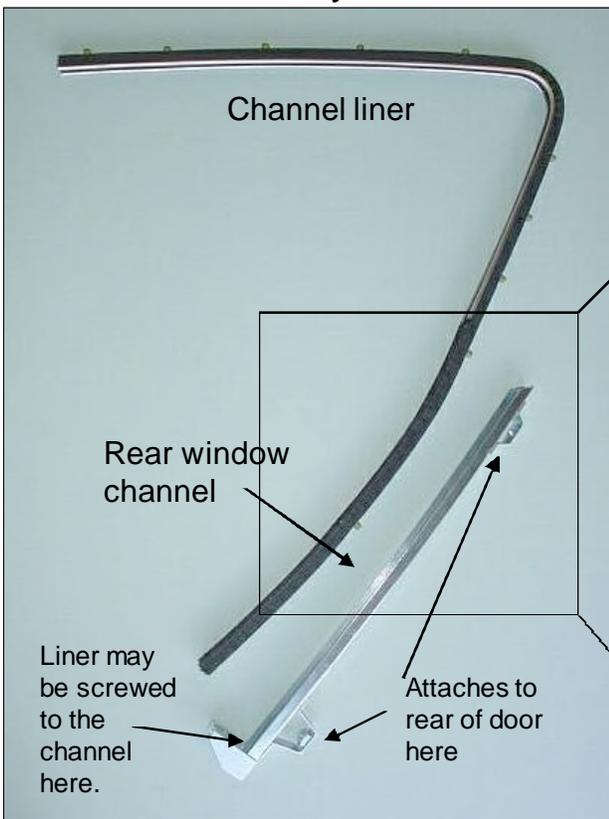
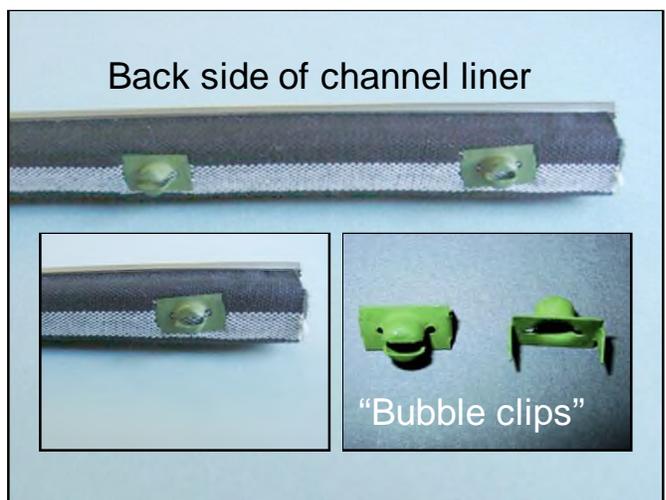
Rebuild kit for vent window regulator with new T/6 aircraft aluminum helical gear. The vent window mechanical gear for 1963-1967 Corvettes, that opens and closes windows, was poor in design. The gear quickly wore out causing the helical gear inside these mechanisms to wear out, which in turn caused sloppy opening and closing windows. Soon the windows would not close tightly, and whistled going down the road. No need to replace your whole regulator. Lifetime Warranty! Price is per side, 2 kits required per car.

Year(s): 1963, 1964, 1965, 1966, 1967

# Figure 7: Rear window channel liner removal



The upper window-channel liner can be removed by pulling down gently with pliers to release the green “bubble” (my term) channel-liner clips. The channel liner is attached to the lower window channel (attached to the inside rear of the door) with two of these clips and a small screw at the bottom. The lower rear channel may be removed without removing the whole liner by detaching the two clips and the small screw then removing the two large screws that mount the channel to the door (Fig.8). With the channel removed, the side window can be removed without having to take the vent-window assembly out of the car.

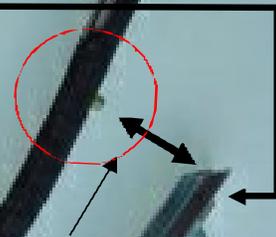
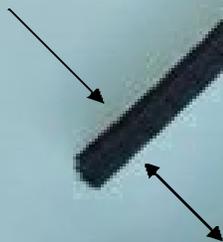


## Lower window channel installation tip:

Cut away the end of the channel so that it can be slid up around the "bubble clip" just at the base of the window (circled). The two sides will still grip the clip. Makes it a lot easier to reinstall the lower window channel!



**Small screw holds bottom of channel liner to channel here:**





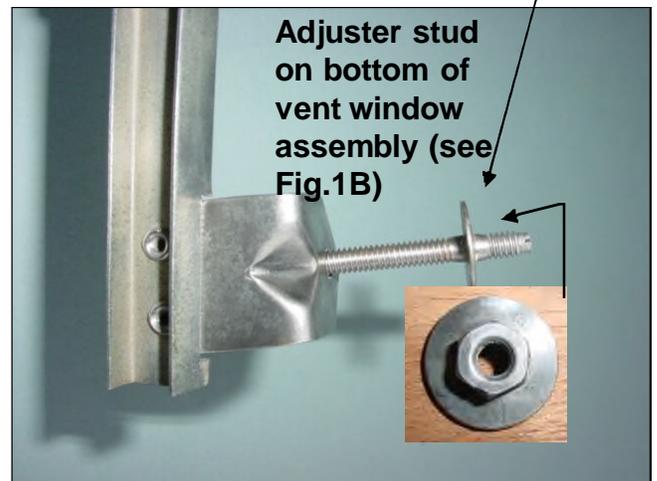
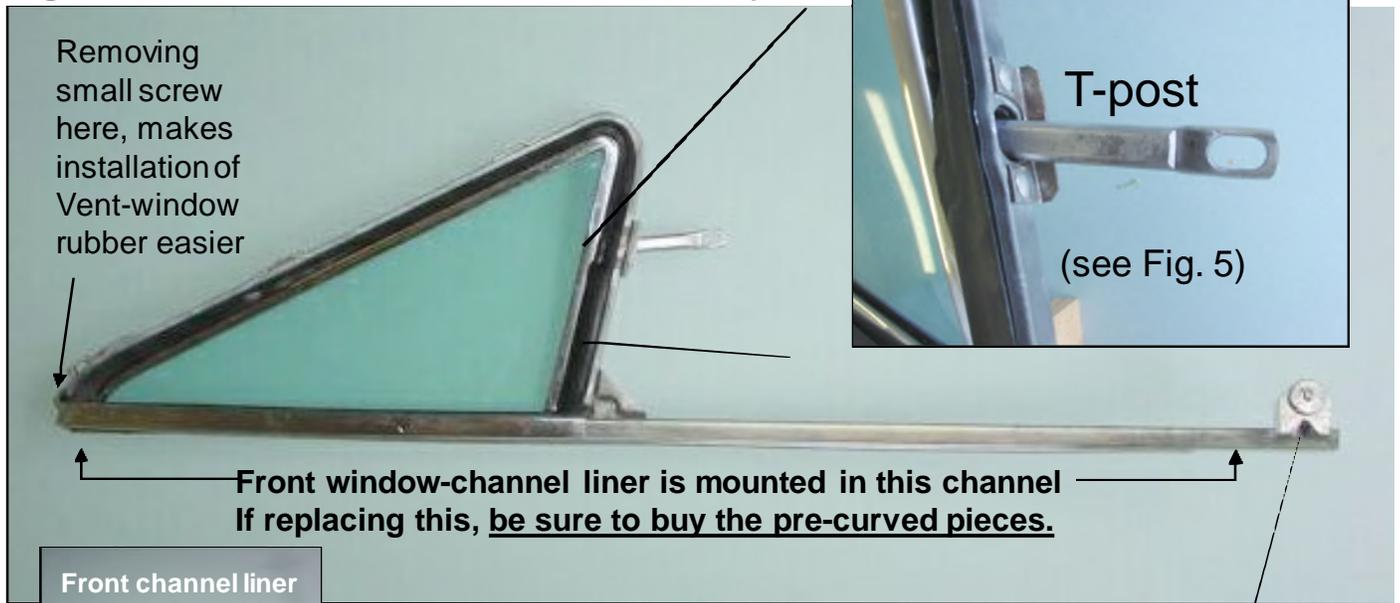
**Figure 8: Rear channel mounting screws. These retain the rear window channel (see Fig. 7) to the back of the door.**

**Figure 9: Window sash and mounting studs.**



These studs mount to the upper roller track with hex nuts with captured star washers. The nuts are accessible when the window is positioned so that you can see them through the holes in the fiberglass door panel (Figure 1B)

**Figure 10: Vent-window assembly**



## Figure 11: Vent window screw locations

Vent-window mounting screws (4)



Peel back door weather strip to reveal the 4 small screws retaining the vent-window assembly to the door frame.