

Vent Window Restoration

They're Useful, Attractive and Difficult to Rebuild

BY RICHARD PRINCE

IF YOU TAKE the time to study the various parts that make up most vintage cars and trucks, you discover that many individual components and assemblies are mechanical works of art. While this is desirable insofar as it makes the vehicles look much nicer, it often does present some formidable obstacles as far as a restoration is concerned. For example, consider the subject of this article, the 1955-57 GM vent window assembly.

Each assembly is comprised of several parts, which together form a beautiful finished product that's also very practical. "Cracking" open a vent window, after all, can help to clear your windshield and keep the air circulating in your vehicle on those rainy or cool days when you aren't inclined to roll down the side glass.

But, restoring one of these assemblies is somewhat complex and certainly requires skill and patience. This article will show you how the experts at Don's East Coast Restorations in Lindenhurst, New York, make vent windows look and work like new again.

Operation Teardown

The vent window glass is in a stainless steel channel and the first step is to remove the glass and its channel from the main vent window frame.

Securely clamp the frame in a vise, but take care not to crush or otherwise damage it in the process. Pivot the glass so it's in the "open" position, push it down until the glass channel's top pin comes out of its hole in the frame, tilt it back and lift it out of the frame entirely as shown in photo #1.

With the glass out of the way, peel the window rubber out of its frame as shown in photo #2. With all body styles, the rubber is molded into a "T" shape, which fits snugly into the T-shaped channel of the frame. On sedans, this is all that holds the rubber in and it should just pull right out. With convertibles and hardtops, however, there are two small screws holding the rubber in on top and these must be unscrewed in order to remove the rubber.

Drill out the rivets holding the side glass channel into the vent window frame as shown in photo #3. The side glass channel is two sections, an upper

and a lower, and you need to remove both. The lower section is held in by several rivets and the upper section is held at its bottom by a rivet and at its top by a bent-over tab coming through the window frame from the vent window rear weather strip.

Two of the side window channel rivets, which are spaced close to one another, also hold the two sections of the window frame itself together and Don's East Coast recommends leaving

one of these rivets in so the frame doesn't flop around while you are working with it. The lower of the two closely spaced rivets holds the top of the lower side glass channel and the upper of the two closely spaced rivets holds the bottom of the upper side glass channel. As shown in photo #4, drill out the lower of the two closely spaced rivets and leave the upper one in. After unbending the tab holding the top of the upper side glass channel, just pry the bottom of the

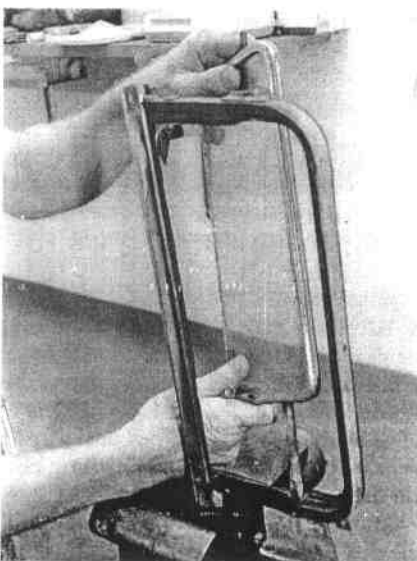


Photo 1.



Photo 2.

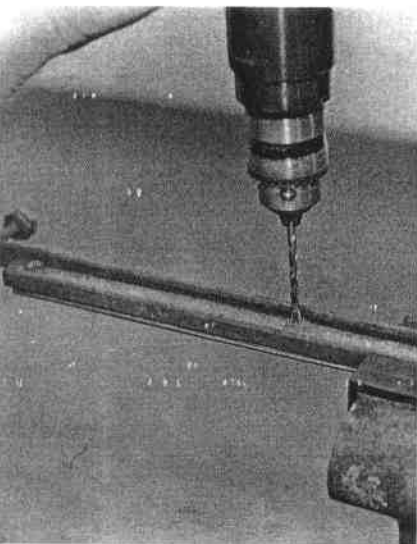


Photo 3.

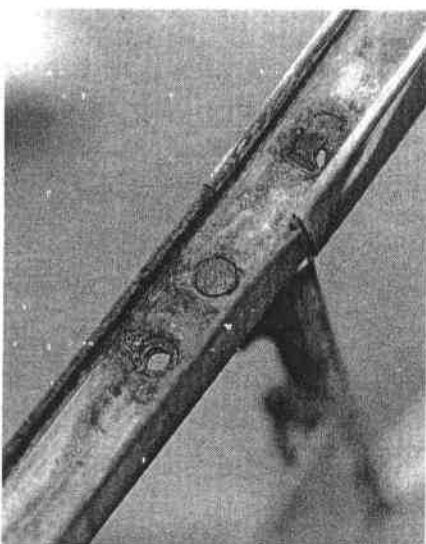


Photo 4.

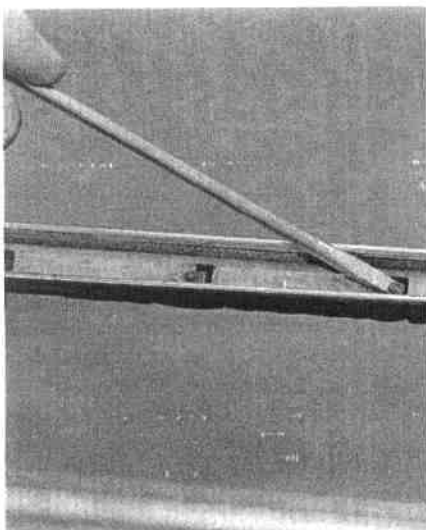


Photo 5.

upper side glass channel away from the rivet that was left in.

With both sections of side glass channel out of the way, you can access the tabs that hold the piece of weather strip at the rear of the vent window. As shown in photo #5, use a flat blade screwdriver to bend the weather strip's tabs up and pull the weather strip off.

After removing the side window channel and vent glass rear weather strip, remove the inner and outer stainless trim pieces. The inner piece of stainless simply slides off as shown in photo #6. Sometimes, there is corrosion beneath the stainless and it is stuck. You can use penetrating oil and gentle tapping with a hammer to free it, if necessary. Remember to use a small piece of wood or hard rubber rather than tapping the edge of the stainless directly.

The outer piece of stainless trim is held in place by small tabs and it actually

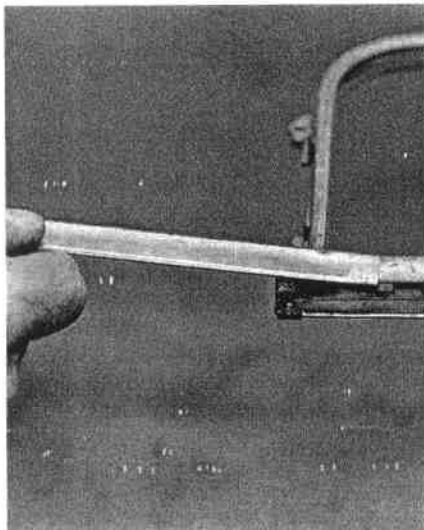


Photo 6.

"snaps" around the frame rather than sliding onto it. Very carefully pry up on the tabs with a small, flat blade screwdriver while pulling up on the trim with the other hand as shown in photo #7.

The final step in disassembling the vent window frame is to remove the adjusting/mounting stud at the very bottom. Use a wrench or socket to remove this as shown in photo #8.

Frame Restoration

The frame is now completely stripped of all extraneous parts and is ready to be refinished. Unless you are very lucky, the frame will be at least a little rusty and glass beading is the most practical way to remove all of the rust and anything else on the metal's surface.

After the frame is completely stripped, clean it with wax and grease remover or a similar cleaning solvent. Prime the raw metal with a good, rust-inhibiting primer

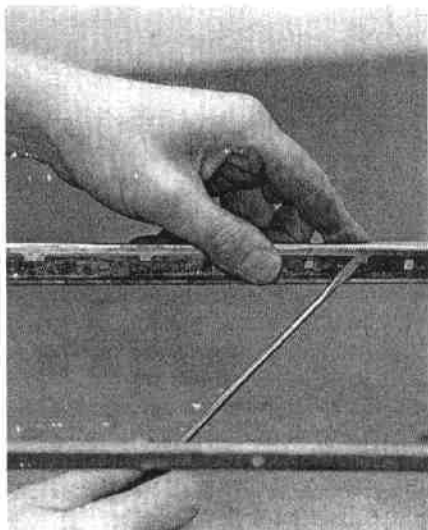


Photo 7.

and then paint it, taking care to get coverage in all the little nooks and crannies. You can use a spray gun if desired, or a can of spray paint as shown in photo #9 if it is more convenient. The frames were originally a silvery color, so Don's East Coast Restorations uses a similarly colored paint, a nice, extra touch even though the frame won't be seen after the whole assembly is put back together and installed into the car.

The two pieces of stainless steel trim removed from the frame should be restored before they are reinstalled. At the least, a high-quality polishing is called for and, if need be, dent removal and other damage repair may also be required.

Since stainless is such a hard metal, polishing it to perfection requires an electric polisher.

It also requires the right tools and materials, a considerable amount of skill and, of course, careful attention to per-

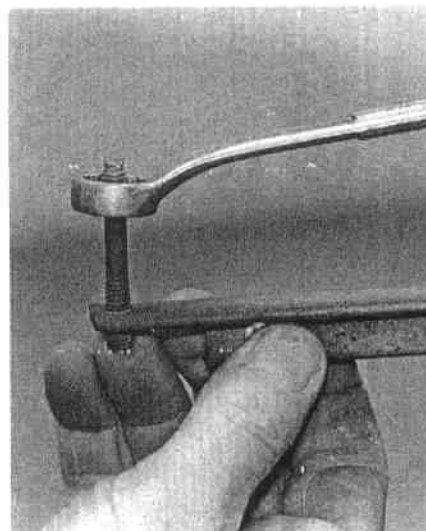


Photo 8.

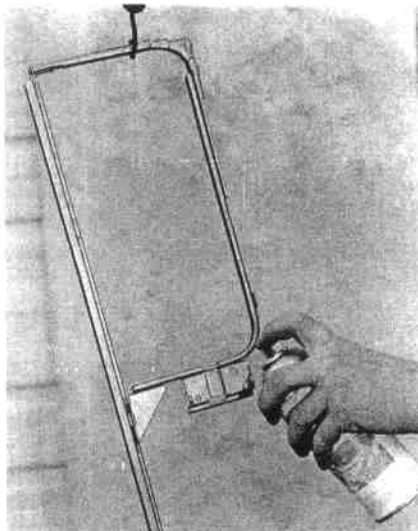


Photo 9.

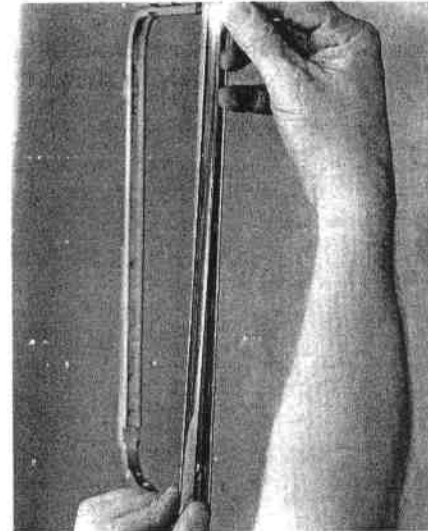


Photo 10.

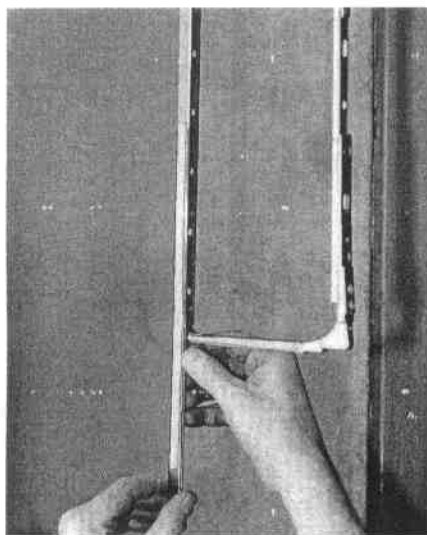


Photo 11.

sonal safety including the wearing of gloves, goggles and a respirator.

Trim and Rubber Installation

After the window frame is painted and the stainless trim is polished and repaired as needed, the trim can be installed. Put the outer piece on by catching one edge, rolling the other edge over the frame and snapping it into position as shown in photo #10. The inner piece of trim installs the opposite way it was removed, by simply sliding it onto the frame as shown in photo #11.

Install the vent window rubber surround by coercing it into the T-shaped channel that retains it. There is a left and a right side, so make sure you install the correct one on each side. (They are marked "left" and "right".)

Also, remember that hardtops and convertibles have a pair of very small screws at the top that helps to hold the

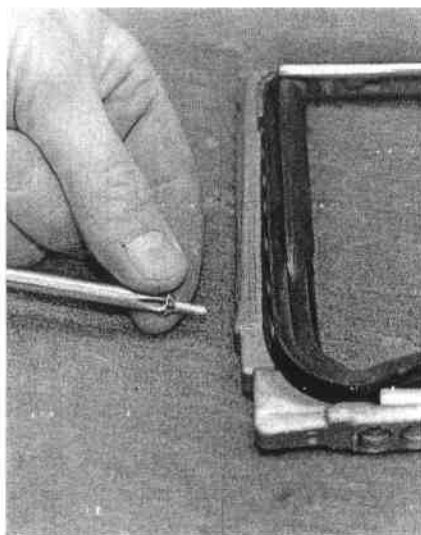


Photo 12.

rubber in place while sedans don't. If you are working on an assembly out of a hardtop or convertible, start the rubber installation by screwing the two screws in at the top as shown in photo #12.

After the two screws are tightened, gently force the rubber into its channel using your fingers and a small screwdriver or similar tool, working your way around until it is all in place as shown in photo #13.

Install the new vent window rear weather strip by inserting its tabs through the holes in the window frame as shown in photo #14. Then use a flat blade screwdriver or similar tool to firmly bend all of the tabs over except the very top one so the weather strip stays in place as shown in photo #15. The top tab also holds the side glass channel in position so it shouldn't be bent over until the channel is in place.

The replacement side glass channel



Photo 13.

sections are sometimes too long and must be trimmed prior to installation. The two sections of channel should meet each other such that the two closely spaced rivets (one of which, you'll remember, was left in place so the frame didn't flop around as you worked with it) hold the top of the lower channel and the bottom of the upper channel respectively. Lay the channel into the frame to determine if it is too long and, if it is, trim the bottom of one or both (which can't be seen once the assembly is back in the car) to get a perfect fit.

The side glass channel does not come drilled for the rivets that hold it to the frame and, therefore, you need to drill it every place a rivet is to be installed. Once the length of the lower side glass channel is correct, lay it back into the frame and use a marking pen to show where the rivets that hold it in place need to go as demonstrated in photo #16.

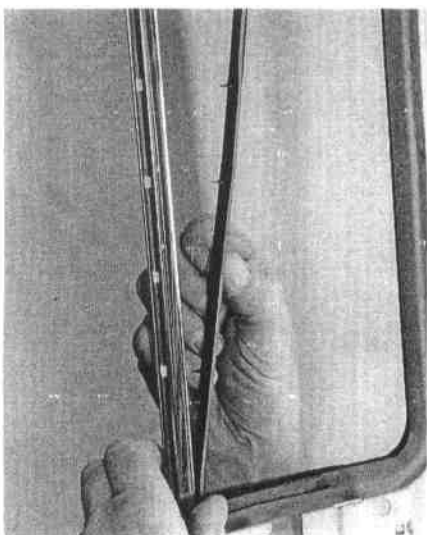


Photo 14.

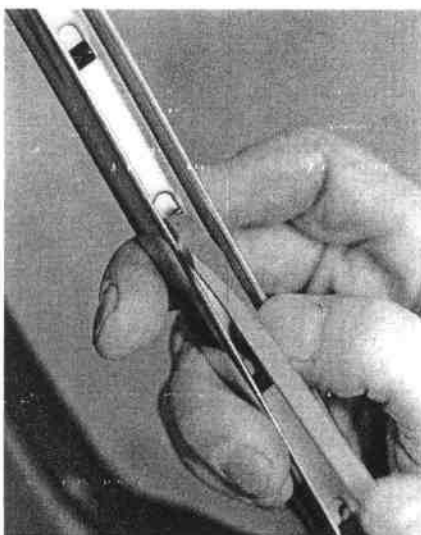


Photo 15.

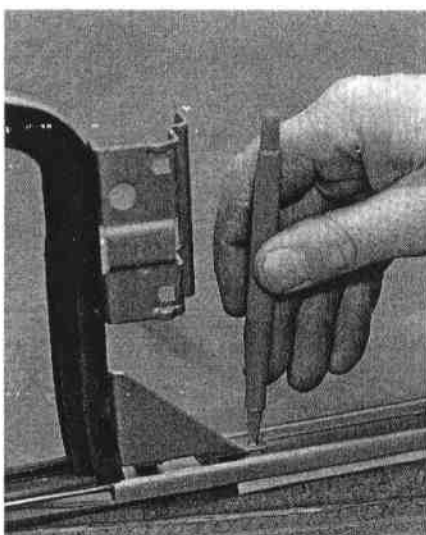


Photo 16.

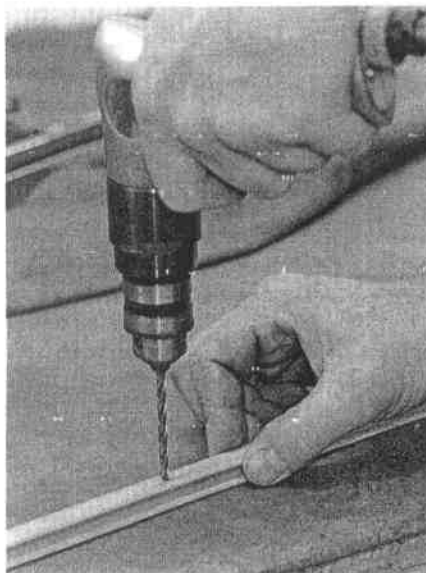


Photo 17.

Remove the channel from the frame and place it on its edges on a secure surface. Then drill the holes needed for the rivets as shown in photo #17. Use aluminum pop rivets to retain the lower channel as shown in photo #18. After the new lower channel is riveted in place, you can drill out the one remaining original rivet that was left in to hold the frame together as shown in photo #19.

Lay the upper side glass channel into place and mark where the rivet hole at its bottom needs to go. Then mark where the vent window rear weather strip tab is. Remember, this tab passes through the side glass channel at its top edge and is bent over to hold the channel in place. After marking where the rivet and tab go, remove the channel and drill the two needed holes.

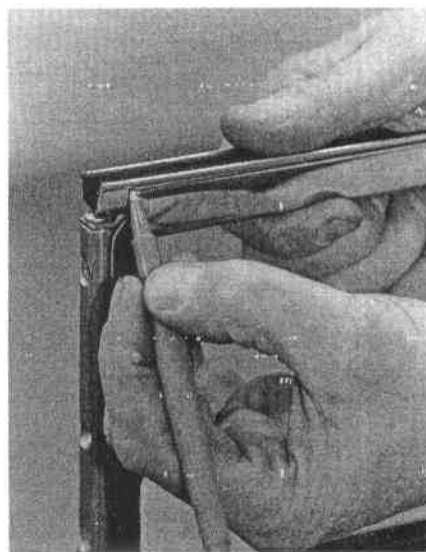


Photo 20.

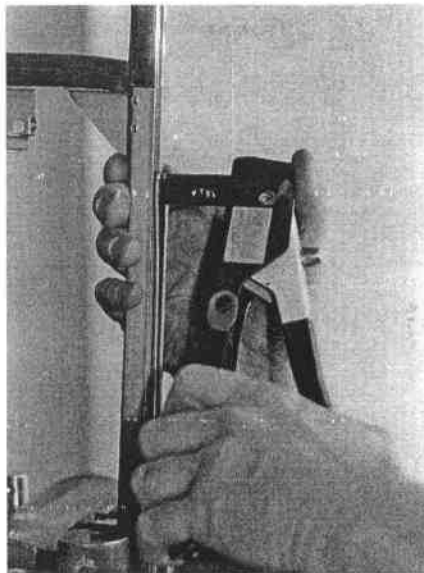


Photo 18.

If you are working on a sedan, you are finished with the upper side glass channel and can rivet the bottom in place and bend the top tab over to retain it. If, however, you are working on a hardtop or convertible, there is one modification you need to perform to the upper side window channel.

Lay the channel back into place in the frame and mark the sides of the channel where they stick out past the frame on the top as shown in photo #20.

Use tin snips to carefully cut away the side sections of the upper side window channel you marked, as shown in photo #21. You need to cut away the two sides of the channel only, while leaving the bottom in place.

When you are finished cutting the top of the upper channel, it should look like

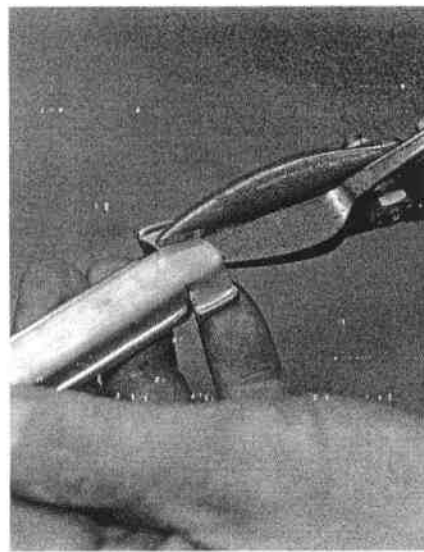


Photo 21.

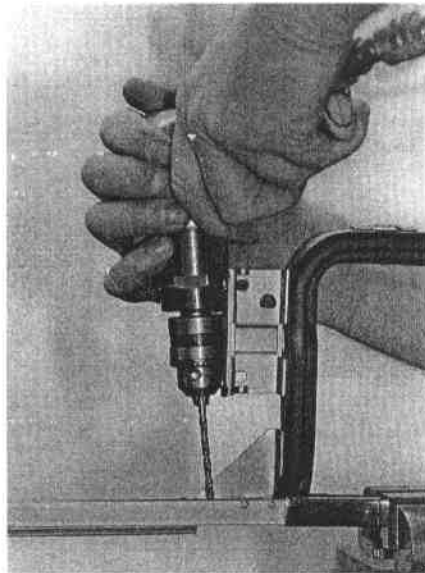


Photo 19.

the one shown in photo #22. The little tab this cutting procedure leaves behind runs up into the upper window stop after the assembly is in the car. This duplicates the more finished look the car originally came with from the factory.

Install the upper side window channel by riveting the bottom and bending over the tab that passes through it on the top as shown in photo #23. This completes the restoration of the vent window frame and you can next turn your attention to the vent window glass and stainless steel channel retaining it.

Glass and Stainless

The vent window glass is just pressed into its stainless frame but after many years it is usually stuck in there pretty securely. Use a wooden block and ham-

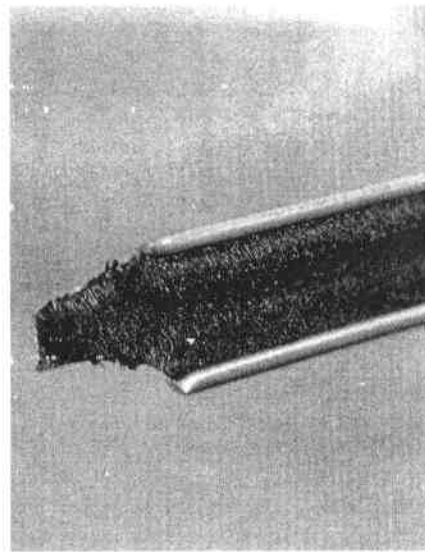


Photo 22.

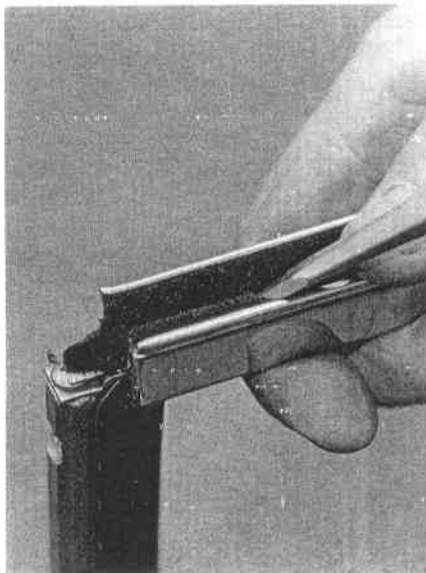


Photo 23.

mer to "whack" the frame off the glass. If you are reusing the glass that you removed, clean it with Windex or a similar product and set it aside for the time being. If your glass is damaged, new glass is readily available. If desired, new glass can be marked with the same manufacturer's logo and date code the car originally came with.

The vent window lock is riveted to the secondary frame that holds the vent glass. Drill the two pressed-over rivets out as shown in photo #24 to remove the lock. Be careful not to lose the tension strip that's inserted in the lock. This frame can now be sent out to be rechromed.

After this frame comes back from the chrome shop, you need to reinstall the lock and glass. Before riveting the lock in place, make sure the tension strip is

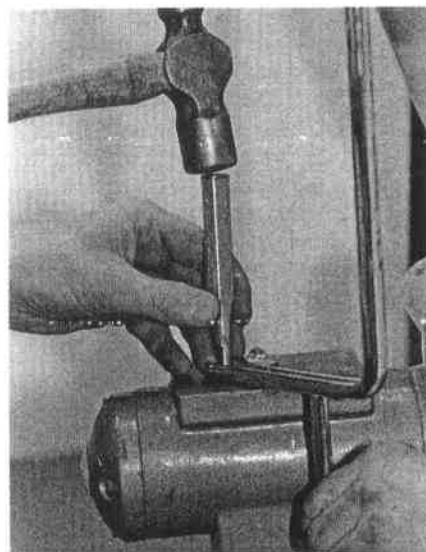


Photo 26.

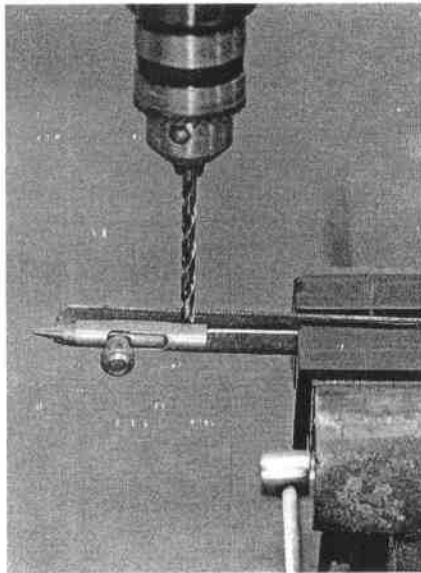


Photo 24.

inserted as shown in photo #25. If your lock is broken or worn out, you can buy a new one from Don's East Coast.

To rivet the lock back in place, use two small flat-top, hollow-shank rivets like the ones that originally held it in. Place the flat head of the rivets on a piece of heavy steel, put the window frame over the rivets so they protrude through their holes in the frame, drop the lock over the rivets, and then use a small punch and hammer topeen the tips of the rivets over as shown in photo #26.

Lay the glass-setting channel into the vent window frame and slide the vent window down into the channel as far as it will go.

Then use a rubber mallet to gently tap the glass down into place as shown in photo #27. It's helpful to lubricate the

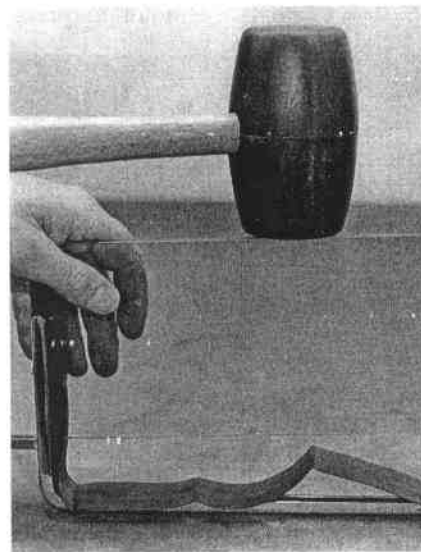


Photo 27.

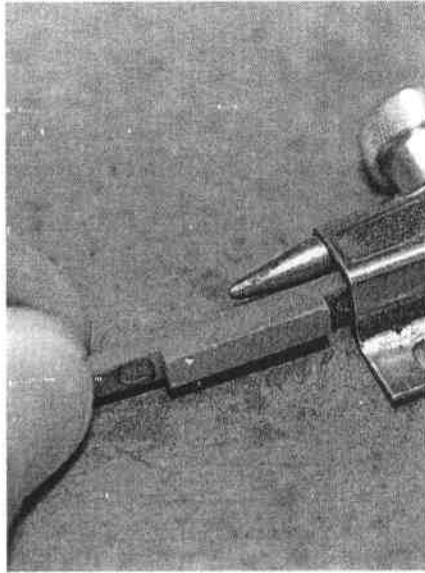


Photo 25.

setting channel with Windex or a similar cleaner to help the glass slide into place.

After the glass is installed into its frame as far as it can go, trim the excess setting channel rubber away. A single-edge razor blade works well for this procedure. Just be careful not to scratch either the glass or the chrome on the vent window frame.

Install the newly restored vent window into the newly restored vent window frame the reverse of the way you removed it. Secure the frame in a vise by clamping it just below the stainless trim. Insert the bottom pivot of the window channel into the frame, push down, and insert the top pin into its hole in the frame.

That completes the restoration of the vent window assembly.

By renewing all the rubber and side window channels, polishing the stainless trim and rechroming the glass frame, you restore the assembly to its original beauty and function, and bring your vehicle that much closer to perfection. ■



PARTS

Don's East Coast Restorations, Inc.
250 Akron St.
Lindenhurst, NY 11757
516/226-7982