

## Rebound Strap Replacement

About 35 years ago I had replaced my rebound straps and I'd noticed that one of the old straps was deteriorated to the point that it had broken and needed replacement

I ordered a reproduction rebound strap kit from Corvette Central – it comes with straps, rivets and rivet plates. Everything you need – except for detailed instructions and a means to install the rivets. Be advised, all rebound straps are not the same length so be certain to get the right ones for your car. For example, the straps vary a total of 2.26” from the longest to shortest.

Year	Length
53-58	27.24”
59	28.36”
60E	29.9”
60L-62	29.5”



As I mentioned there is no means to install the rivets in the kit. Fortunately, the NCRS folks in the Mid-Atlantic Chapter have the appropriate riveting tool which I made arrangements to borrow. The tool is simple to use – you just need to put it on the rivet and turn the adjusting nut with a wrench. It will mash the rivet down – does a real nice job. However, you need a pair of vice grips to hold the tool when you turn the nut as it requires more leverage to hold the tool in place when you turn the nut than you can provide by hand alone.



Once the tool and strap kit are on hand, the next step is to remove the old straps. You will need to jack the car up and remove the rear wheels to create enough access. Place your jack stands under the rear axle and let the car down on them so that there is some weight and compression on the rear springs – this gives you more room to maneuver the new strap during installation without it being under any kind of tension.

Remove the old strap, or what is left of it, by cutting it off with a sharp knife.

Feed the strap through one of the mounting brackets attached to the frame. I don't find it stated anywhere – but, I assume the short ends of the strap go inside the loop. GM riveted from the back of the frame towards the front of the car, so all rivet heads should face the rear of the car.

You'll find that 1) the rivets will be just long enough to do the job and 2) GM had spec'ed the original straps at .2" thick. New strap material may be a little thicker. I'd heard that you can put the last 6" of the strap in a vise and "crush" it back to .2" for easier installation. Perhaps so, but you have to wiggle these things around quite a bit to get them through the loops on the frame and to finally get the holes in the strapping material to line up for the rivets. So, I'm afraid that any crush you might have created with the vise would disappear before you had the new rivets installed.

I found that you need to temporarily install the rivet plates with screws or bolts to line up the holes in the straps and plates. And, by the way, some original cars have been found with the angled end of the rivet plate pointing away from the frame. I believe that would be incorrect and the plate should be and would have been installed with the angled part facing the frame as you see in this picture.



Once you have the small bolts in place, tighten them as tight as you can without shearing the bolt off. This will compress the strap material and the plates to the point where the new rivets will be long enough. After you have the two bolts in place and tightened, clamp the strap and rivet plates with some vice grips- in this picture you see the vice grips in place, the bottom bolt removed and a rivet inserted so that you can see how far it protrudes – **for the picture I have the rivet through the**



**strap/plates going the wrong direction.** Once you remove the bolt, in order to get the rivet in place you may have to use an electric drill to clean the hole out. If so, select a drill bit the same diameter as the rivet and be careful not to enlarge the holes in the rivet plates. Also, when you put the vice grips in place you need to make certain that you leave enough room so that the riveting tool can be placed on the rivet head with no interference.

I found that it helped to: 1) once the bolts were in place, to wiggle the strap around on the frame loop. It is a fairly tight fit and wiggling the strap around with the bolts in place seemed to stretch the material a little and make it easier to get the strap in position for the riveting tool. 2) depending upon the curvature of the frame and the riveting tool- you may have to try a couple of different positions inside or outside the frame rail before you get a good fit of the tool to the rivet. And, 3) you'll notice from the pictures that the rubber axle

bumper that mounts on the frame between the strap loops has been removed— I found this riveting process was easier with the bumper off and out of the way. Oh, and by the way, I tried it both ways but it seemed like the process went easier when I installed the top rivets closest to the frame loop first.



The finished job! The riveting tool does a nice professional looking job of curling the rivet shaft down to the rivet plate. Hopefully, this installation will last another 30 years

