Hose Clamp Tool, version 1.0

By R. G. Sparber

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A friend once accused me of wanting to know the 10 ways to do something so I could find 2 more. Guilty.

I'm also guilty of not throwing away small bits of metal. They have been useful too many times for me to give up that "religion".

So recently I became fascinated with a hose clamp tool built by "brianhw" on homemadetools.net. Brian had constructed a very nice tool for forming tight hose clamps from common bailing wire. He also set off a small firestorm of alternate ways to form the same clamps. With this rich collection of great ideas to sift through, I came up with another tool to throw on the pile.

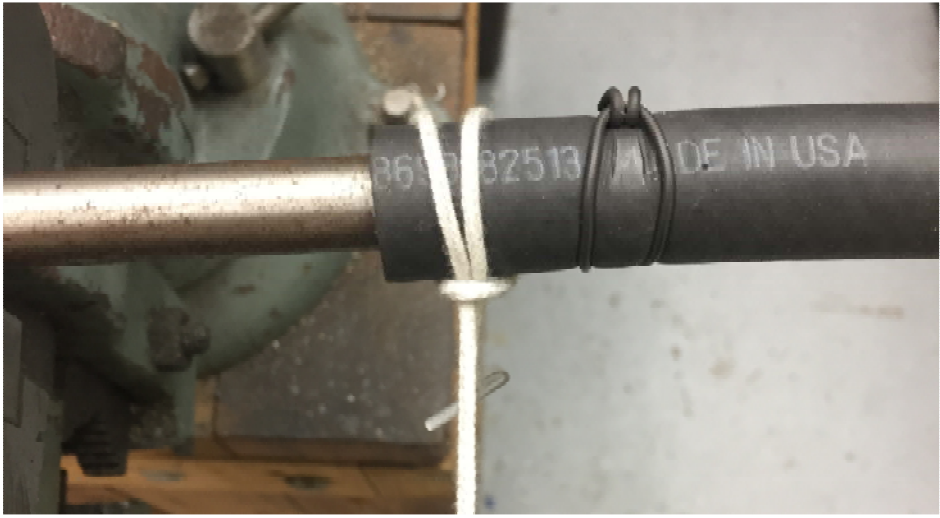This top view almost looks like a nice looking tool.

The side view reveals that this is a heavily reused scrap.

A closer look at the bolt shows that it too has been reused a few times.

No use in making the tool look nice if it doesn't work.

Let's give it a try.

I had already formed a clamp on this hose and am about to form a second one. I used a length of cord to estimate how much wire was needed.

Keeping the wire as short as possible made it easier to loop plus saves on wire.
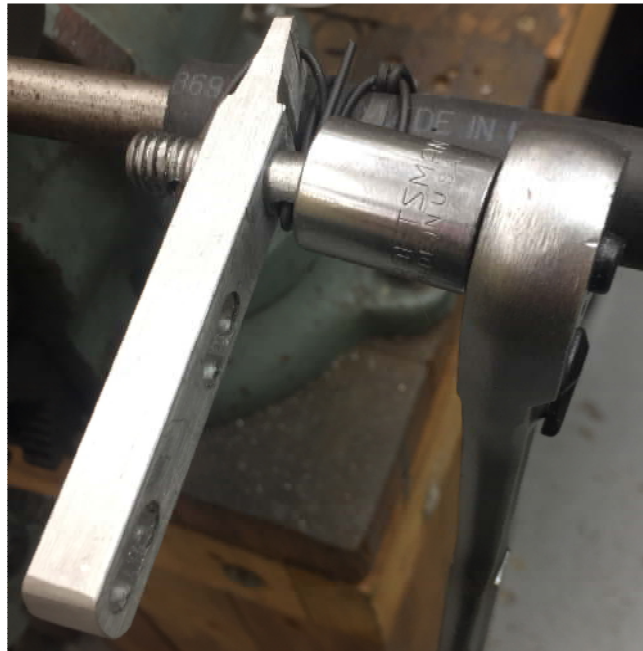
Then I bent it in half.

Since the excess wire was short, it was easy to form the loop.

The tool was installed with the wire ends going through the cross drilled holes in the 3/8" bolt. These holes are 1/8 inch in diameter with the ends countersunk to make it easier to fit in the wires.

The notched end accepts the midpoint of the wire.

I first turned the bolt by hand to wrap the wires around its shank. Then came the large force. Care must be taken while turning the bolt with the socket wrench. I could easily snap the wire.

Given that little excess wire existed, it took less than one turn of the bolt.

Next, I pivoted the tool in order to form the end hook.

This bend is enough to hold the clamp tight.

I then turned the bolt backwards about half a turn and slide it off of the wires.

I pushed the wires down a little more and then trim them.

The final step was to use my pliers to mash the ends all the way down.

The loop is a bit wide because my tool is wide. I think I could remake the body of the tool using 1/8 inch thick CRS which would help a lot here. If the body was thinner, the cross drilled holes must be moved in too.

Another minor improvement would be to screw an acorn nut on the end of the bolt so it doesn't separate from the body. The threads are badly chewed up but they will hold a nut snug.

This tool is functional but very far from being a fine, hand crafted, device. I'll leave it to others to make a version that is presentable. Send me a picture and I will proudly include it in this article.

Acknowledgments

Thanks to "brianhw" for bringing this design to my attention. Thanks also to Marv Klotz for alternate designs and to homemadetools.net for bringing us all together.

I welcome your comments and questions.

If you wish to be contacted each time I publish an article, email me with just "Article Alias" in the subject line.

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