

Cable Retainer, Version 1.1

By R. G. Sparber

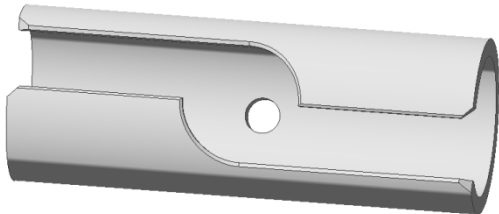
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I wanted to capture two line cords for storage. When needed, they must be easily released without any tools or loose parts to get lost.

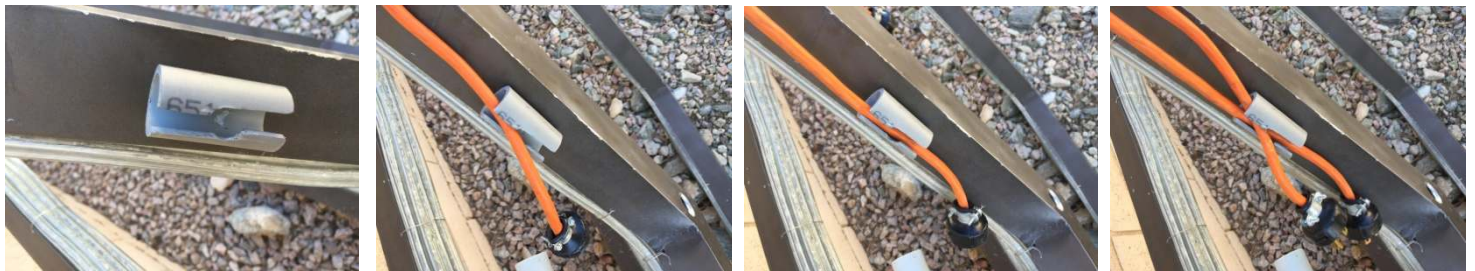
My good friend Ed Cabullo gave me a great starting point: take a short length of plastic pipe and cut a slit in it. The slit is slightly narrower than the

diameter of the wire. In this way the wires don't fall out when captured. Worked well but I enjoy trying to improve designs.



Instead of a straight slot, I cut two slots as shown here. The idea is that if the wire is reasonably straight, it can't fall out. The slot can be a little wider so less wear on the cable. The central hole

passes a self tapping screw. I fully tightened the screw but there may be times when it would be better to let the retainer spin.



Squeeze the first cable through the left end of the retainer. Then bend it slightly to get through the right end of the retainer. Repeat with the second cable. Cables retained!

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I used ABS plastic electrical conduit because it resists UV. It will see a lot of Arizona sun. Using a plastic pipe sniper, I cut off a 2 inch length.



Then I cross drilled to make a clearance hole for the self tapping screw.



Using a 1/2 end mill², I opened up the top hole. A twist drill will snatch as it breaks through but the end mill cuts with no drama.



Moving to my bench vise, I used a hacksaw to cut along the centerline.



Next I cut from the left end to a tangent of the hole. Repeat on the right end. I was not able to saw all the way through on these tangents but it was easy to break out the strips.



Looks a bit rough but fine for proof of concept. A deburring tool gives a nice bevel to the edges.



² As suggested by Nelson Collar.

Acknowledgments

Thanks to Ed Cabullo for suggesting most of this idea. Thanks to Nelson Collar for suggesting the use of an end mill to cut the ½ inch hole.

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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