## **Electronic Tool Tip #2 – Vacuum Tube Puller**



It is funny how you sometimes find a great idea when you are looking for something else. I was on *ebay.com* one day looking to purchase some NOS vacuum tubes of the 12AU7 type, when my search for that tube number brought me to this little wonder.

I have often struggled to remove vacuum tubes from down inside a host of other tubes, transformers, and capacitors, with little or no room for getting a decent grip on the vacuum tube, which is slick and slippery glass to

begin with. On occasion, I have even broken a tube or two trying to get them out under really tight space conditions. As a result, I was very quick to jump on this nifty tool when I found it. The illustration above shows two of these tools together with two vacuum tubes; the price discussed near the end of this article will get you a single puller.

The concept is quite simple. The tool is a molded pliable thermoplastic tube with a "flattened" mushroom profile and a closed dome at the upper end. To remove a vacuum tube, the tool is placed down over the top of the tube, and then the tube can be wiggled and pulled straight up and out. The tool is then easily removed from the vacuum tube by just pulling it off at a slight angle to break the suction.

It is an easy task to use the tool as an aid in the installation of the vacuum tube(s) back into the equipment chassis. Insert the tube into the puller, align the pins with the tube socket properly, and push the tube into place. To remove the tool from the installed tube, once again pull the tool off at a slight angle to the tube to break the suction.

This puller fits many of the miniature seven-pin, nine-pin, and ten-pin tubes, and is quite useful when space around the tube location is limited. I heartily recommend this tool to anyone who does more than just occasional vacuum tube removal and installation.

The tool costs \$10.95 (USD) from *spin4cards* via their ebay storefront, where this vendor has a 100% positive rating over 15,500 transactions. Shipping was quite reasonable at \$4.95 from Cicero, NY.

Go to <a href="https://www.ebay.com/itm/394061782564">https://www.ebay.com/itm/394061782564</a> to investigate this tool for yourself.