Brass Thread Insert Press

JEO

VIEW IN BROWSER

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Summary

A bought hand drill press modified for pressing in brass threaded inserts

3D Printers > Accessories

I have seen another press using the same hand drill press. I have not downloaded or modified any files from that published work. All files are from scratch, designed by me. The original I saw: Adapter PRESS Soldering iron Drill by papa50 - Thingiverse

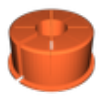
I am starting out with the purchased pieces from Amazon. **Drill Press Stand** AMGSH Drill Press Stand Bench Clamp Tool for Hand Drill Workstation | Adjustable Benchtop Single Hole Table Repair Tool with Aluminum Base Compatible, Portable, Rotating Fixed Frame Design - Amazon.com **Soldering Pencil** Amazon.com: 9-in-1 Soldering Kits, [Upgraded] 60W Adjustable Temperature Welding Tool with ON-Off Switch, 5pcs Soldering Iron Tips, Solder Wire, Y Type Soldering Iron Stand (Light Blue) : Tools & Home Improvement **Soldering Iron Tips** 6pcs Soldering Iron Tips Screw in Set, Soldering Iron Heat Set Insert Tips for Sizes M2, M2.5, M3, M4, M5 and M6 3D Printing Supplies Compatible with FX888D FX600 WLC100 SPG40 SP40NUS 939D - Amazon.com

As for the printed pieces, the soldering iron Bushing is the only necessary part needed. The rim of the bushing goes to the bottom side of the press. It has a slight taper to fit the soldering iron. The SW (switch) Holder is in three parts. Print the holder with holes down and use support. They snap

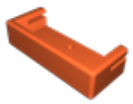
out very easily. Printing that way provides strong tabs to hold the cord. SW Inner screws to the holder with two 4mm button head screws. SW Cord Holder is an option. If you **do not** want to store the cord, use Pole Clamp Outer. Next is the holder for the soldering iron tips for the inserts. That is the Box. It prints both parts at once. If the clamp part does not adhere well and comes loose, like it did me once during testing, let it run to finish the box and use Pole Clamp Outer to reprint clamp. The clamps use a 5mm screw and nut. The part that looks like a clevis holds the supplied Allen wrench. The wrench kept falling from the drill press clip on the right side. Use a short 6mm screw to mount it on the left side. Instead of using the allen wrench to adjust the travel lock I found a 6mm hex screw and made the Hex Lever to press on or glue on if needed. Use 100% infill for strength. There is little instability at the back of the drill stand base. I used a piece of 3⁄4" plywood under it and mounted it by two Plate Hold Downs. I used two 1 1⁄4" drywall screws. Not pictured are two thin flat Washers. The pull-down handle had some slop in it from side to side, and I used them at two different points to stiffen them up. I also replaced the return spring with another lighter one I found in my assortment of parts. That provided a better feel when pressing in the inserts.

Parts designed with TinkerCad, Printed on Ender 3 S1, PEI build plate, 0.2 layers, 25% infill, 3 walls

Model files



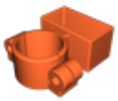
bushing.stl



sw-holder.stl

sw-pole-inner.stl

sw-cord-holder.stl



box.stl

pole-clamp-outer.stl

allen.stl

hex-lever.stl

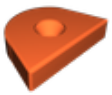


plate-hold-down.stl

washer.stl

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