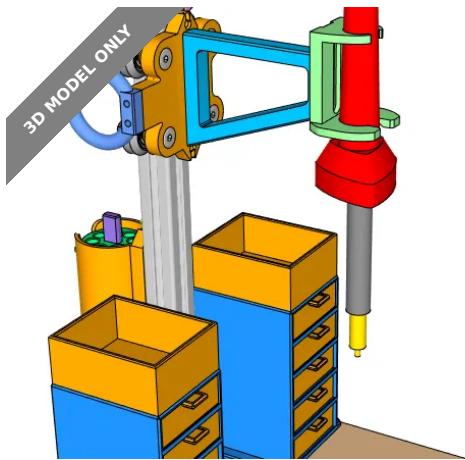




Threaded Heat Set Insert Press



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[VIEW IN BROWSER](#)

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Summary

A press using a soldering iron to accurately install threaded inserts into 3D printed models. Based on Adafruit press.

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[solderingtool](#) [insertpress](#) [brassinserts](#) [installationtool](#)

This heat set press for threaded inserts is the fourth one I've used and, so far, it works the best. Ones that use springs tend to waste the vertical space giving less range of motion. This press uses a carriage that rolls up and down in the slots of an aluminum extrusion and is kept balanced by use of a counterweight. It is roughly based on the Adafruit heat set rig created by the Ruiz brothers. A useful addition is optional drawers to hold various sizes of threaded inserts.

Included is a "Universal" soldering iron holder as well as two holders for specific Weller brand soldering irons, the SP40NUS and the WLIR3012A. The Weller holders might also work for other soldering irons.

You will need some metric screws and a few specialized parts (including a soldering iron).

I have included a set of detailed build instructions that includes a list of needed hardware and 3D printed parts. See the included PDF.

This remix is based on



Heat Set Insert Press

by Adafruit

Model files



Column Parts

11 files



column-base.stl

☐ Holder that attaches the aluminum extrusion (column) to the platform.



roller-carriage.stl

☐ Carriage on rollers that glides up and down the column. Holds the Soldering Iron Assembly.



soldering-iron-arm.stl

☐ Arm that extends the soldering iron over the platform.



pulley-base.stl

☐ Base that holds the Pulley Wheel Hood (incl. pulley) at the top of the aluminum column.



pulley-wheel-hood.stl

☐ Attaches to top of Pulley Base and holds the Pulley Wheel.



pulley-wheel.stl

☐ Fits into the Pulley Wheel Hood using a 608 radial bearing.



pull-down-handle.stl

☐ Handle that fits on either side of the Roller Carriage to pull down the carriage.



stop-flex.stl

☐ Column stop for Carriage and Counterweight (need 2)



cord-clip-flex.stl

☐ Handy optional clip to hold the soldering iron cord out of the way.



cord-wrap-a.stl

☐ Part A of the optional cord wrap for the soldering iron cord.



cord-wrap-b.stl

☐ Part B of the optional cord wrap for the soldering iron cord.



Counterweight Parts

3 files



counterweight-cup-washers.stl

☐ Slotted Counterweight Cup to hold large washers



counterweight-washer-lifter.stl

☐ To easily lift washers out of Counterweight Cup - Washers



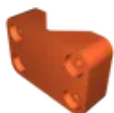
counterweight-cup-misc.stl

☐ Counterweight cup to hold misc. hardware



Soldering Iron Holder Files

4 files



iron-holder-universal-a.stl

☐ Part A of Universal Soldering Iron Holder



iron-holder-universal-b.stl

☐ Part B of Universal Soldering Iron Holder



iron-holder-weller-sp40nus.stl

☐ Holder for Weller SP40NUS Soldering Iron



iron-holder-weller-wlir3012a.stl

☐ Holder for Weller WLIR3012A Soldering Iron



Misc. Parts (optional)

3 files



t-nut.stl

☐ Alternative to purchasing metal T-Nuts. Fitted with a metric nut.



t-nut-installation-tool.stl

☐ Tool to help with the installation of T-Nuts.



heat-set-tips-tray.stl

☐ Optional tray to hold set set tips. Sits inside the Counterweight Cup.



Cabinet Parts (optional)

8 files



cabinet-large.stl

☐ Large Cabinet Case



cabinet-large-drawer.stl

☐ Large Cabinet Drawer (need 5)



cabinet-large-divider.stl

☐ Large Cabinet Drawer Divider



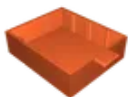
cabinet-large-box.stl

☐ Optional box to fit on top of Large Cabinet



cabinet-small.stl

☐ Small Cabinet Case



cabinet-small-drawer.stl

☐ Small Cabinet Drawer (need 5)



cabinet-small-divider.stl

☐ Small Cabinet Drawer Divider



cabinet-small-box.stl

☐ Optional box to fit on top of Small Cabinet



Templates (optional)

3 files



template-cabinet-large.stl

☐ Template for marking location of screws for the large parts cabinet.



template-cabinet-small.stl

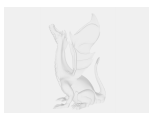
☐ Template for marking location of screws for the small parts cabinet.



template-column-base.stl

☐ Template for marking locations of screws for the Column Base.

Other files



heat-set-press-assembly.pdf

☐ Complete instructions for creation of a Threaded Insert Heat Set Press.

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