



TS101 Rugged Box (Magnetic Version)



VIEW IN BROWSER

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Summary

After using the rugged Pinecil/TS100 box for a while I decided to make a few enhancements to better suit my needs.

Hobby & Makers > Tools

Tags: ts100 solderingstation magnetic soldering ts101

pinecil rugged

After using the very nice TS100 box from @pjotrstrog I decided to make a few small improvements according to my own needs. The inserts will fit into the original box as I didn't want to reprint the main box.

Here are the changes I've made:

- There is now a lid to cover the tip cleaning tray to prevent the solder balls from getting into the rest of the case when it's stowed (held in place with magnets).
- I've added holders in the lid for 3 tips, I've also made it easier to remove the tips from the case.
 - There is still enough room under the tips in the lid to store two small bags of heat shrink tubing.

- Solder spools:
 - The solder spools are held in place magnetically instead of with a clip as I prefer to hold the spool in my left hand when soldering. This makes them easier to remove & stow.
 - I removed the solder guide loop as I never used it.
 - The spools now hold more solder.
 - There is an internal loop to make winding easier.
 - I've added notches to the top to make stowing easier.
 - Walls are thicker so everything is more rigid and they hold together better.
- I've added two small desoldering wick holders so that it is easier now to get at my 1mm & 2.5mm wicks.
- The iron stand is now held in place magnetically when stowed, this is easier to remove and less likely to fall out when being transported.
- The screw for the stand is self tapping.
 - I've not tested this as I didn't want to re-print it and waste filament. However, I used the same measurements I've used on many other models to achieve this.
- I've added two small 4mm screw driver bodies with magnetic retainers. These are for the tip stabilising & earth screws on the iron itself. You will need some 4mm hex bits for these bodies.
- I've added a TS101 label to the lid, if you don't want the box labeled just print it in one colour.

You will need the following hardware to make this:

- 6x M3x20 screws
- 1x 608 bearing.
- 4x 5x1mm round neodymium magnets
- 10x 4x2mm round neodymium magnets
- 2 6x3mm round neodymium magnets
- 1x 8x1.5mm round neodymium magnets
- 4mm hex bit Hex 1.5mm
- 4mm hex bit Flat 3mm

I've tried to make all of the magnets a friction fit but you may need to epoxy some into place. I needed to epoxy the 6mm & 8mm magnets.

I strongly recommend printing the soldering stand in PETG or some other high temperature filament, I suspect PLA will sag.

The models I've uploaded have 2 very small changes from the model I printed:

 I've shortened the retaining posts for the solder spools so that the magnets are easier to install and the spools are easier to stow/ unstow. 2. I've moved the 8mm magnet by a few mm so that it holds the 608 bearing a little further from the solder spools.

I've included a STEP file for anyone wanting to make their own modifications.

This remix is based on



Rugged Multipart Pinecil/TS100/TS80 Case (V2)

by PjotrStrog

Model files



ts101-box.step



ts101-box.3mf



ts101-box.stl



ts101-box-magnetic-desolder-braid-holder.3mf

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