

MINI 13 Printable Jointed Figure



soozafone

[VIEW IN BROWSER](#)

updated 21. 8. 2024 | published 21. 8. 2024

Summary

Lucky 13's little sibling! Easier to print, easier to assemble, and more expressive and customizable than ever.



4.05 hrs



1 pcs



0.15 mm



0.40 mm



PLA



21 g



Prusa MINI /
MINI+

[Toys & Games](#) > [Action Figures & Statues](#)

Tags: [toy](#) [display](#) [modular](#) [figure](#) [articulated](#)
[customizable](#) [snapfit](#) [poseable](#) [actionfigure](#) [balljoint](#)
[jointed](#)

Mini 13 is now on a CC BY 4.0 license!

This means that you are free to share these files however you like, including selling prints, **provided that you give proper attribution.** You can give proper attribution by including this notice on your product page:

MINI 13 Printable Jointed Figure © 2023 by Lucky 13 Toys is licensed under CC BY 4.0

Please help me build my identity as a creator by referring to this design by its original name. Don't pass off my work as your own product.

If this free model brought you joy (or profit), consider making a donation: [PayPal](#) | [Stripe](#) | [Buy Me a Coffee](#)

--

Update June 29 2023: I've added two more files which put the frame and armor on "runners" to keep all the parts together when printing. You'll just need to snip away the "gates" connecting the parts together. You'll notice the Printables logo on the chest armor - in honor of these files being included with the new Prusa i3 MK4!

--

Introducing MINI 13!

Mini 13 is the next generation of [Lucky 13](#): a fully 3D printable, highly posable, snap-together, modular, customizable, jointed figure - now optimized for faster and easier printing and even easier customization.

With a jointed **frame**, a simple set of **armor**, and some example **accessories**, this starter set contains everything you need to start printing, playing, and making it your own.

Printing

The first three files give you all the parts you need to assemble the frame, armor, and extras. You can also print individual parts; the file name indicates if you will need to print more than one of each part (e.g. you would print **4** of the file mini13-frame-arm-**4x**.stl).

I recommend **PETG or ASA** for the frame parts (PLA also works but the joints will weaken faster). The armor and extras can be printed in the filament of your choice.

These are the settings I use for best results (at 100% scale and with a 0.4mm nozzle)

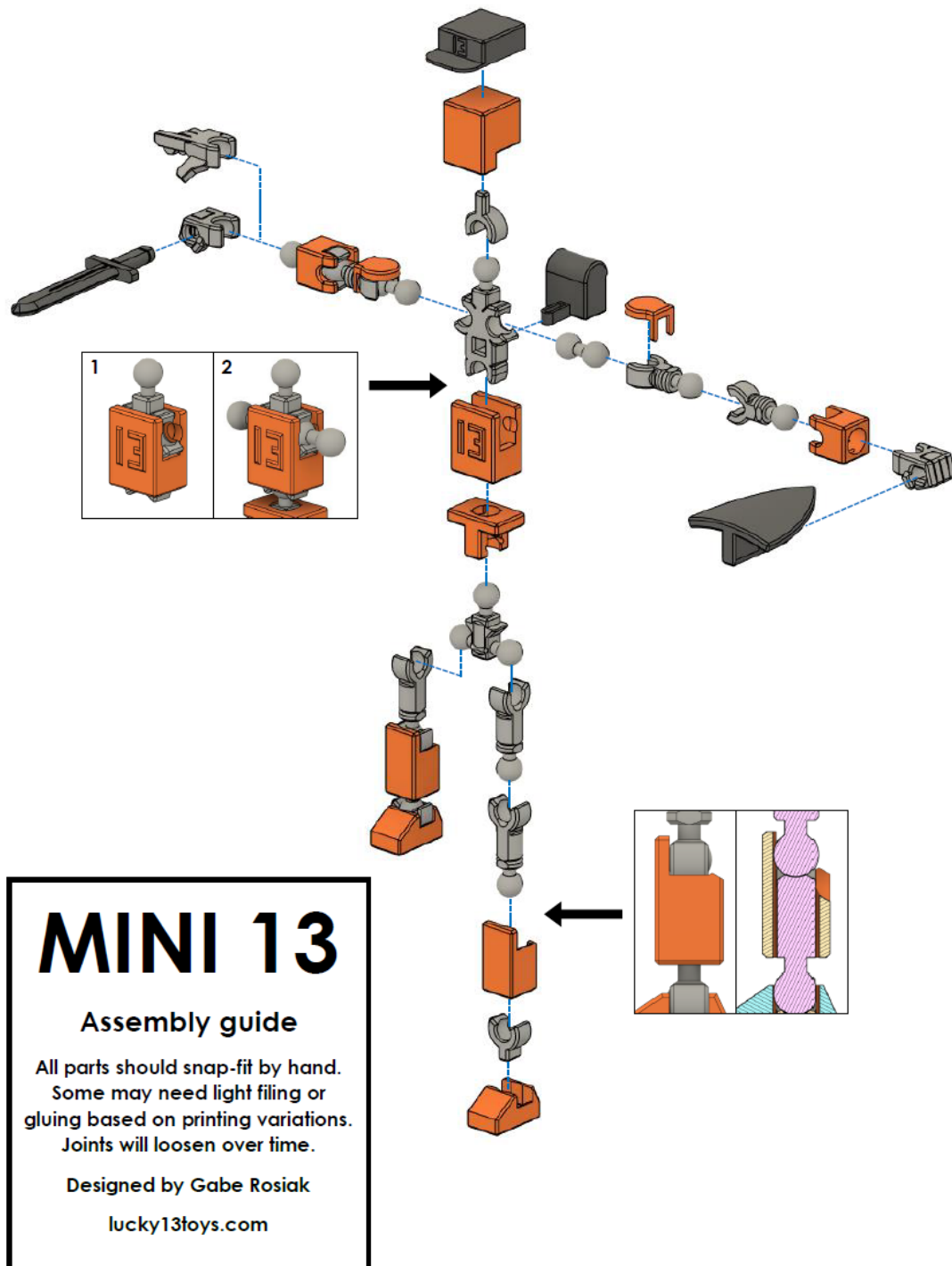
- Layer height **0.15mm** (first layer 0.2mm)
- **3** perimeters
- **30%** rectilinear infill
- Slow down the first layer print speed (**30%** of default)
- **0.25mm** elephant foot compensation

- Print **external** perimeters first
- **No** brim or support material

You may need to tweak these settings and find what works best with your printer.

Assembly

The video and image below show how to assemble the model. All parts should snap snugly into place - no tools needed!

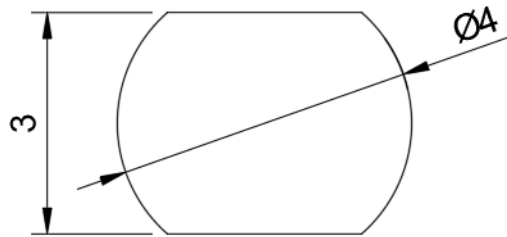


Customizing

Mini 13 is meant to be customized! I'll be making my own expansions too, but I love seeing community remixes. Here are some tips to get started.

- Mini 13 uses the same **head connection** and **hand size** as Lucky 13, so any existing **Lucky 13 remixes** for alternate heads and handheld items should also work for Mini!

- The **ball joint** size is 6mm (also the same as Lucky 13). The **handheld** accessories use a 4mm-diameter handle with a flat 3mm across:



- The basic armor provided here is intentionally simple, so you can use it as a starting point for your own designs!

More tips

- Mini 13 is 3.5 inches or 9cm tall at 100% scale.
- Printing a lot of small parts can be tricky. In my experience, the best way to keep prints from coming off the bed is to **s l o w d o w n** the first layer print speed!
- You can also try adding a brim, printing parts one at a time, and increasing the scale of the parts.
- The joints will inevitably get looser over time due to wear and the plastic relaxing. One solution is to disassemble the joint and apply a thin coat of super glue or clear nail polish to the ball. Let it dry completely, then reassemble.

Enjoy!

I hope you have a great time with Mini 13. If you enjoyed this print, please consider making a donation [here](#).

Model files



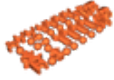
mini13-all-armor.stl

☐ All armor parts in one file



mini13-all-extras.stl

☐ All accessories in one file



mini13-all-frame.stl

☐ All frame parts in one file



mini13-armor-arm-2x.stl



mini13-armor-chest.stl



mini13-armor-foot-2x.stl



mini13-armor-head.stl



mini13-armor-leg-2x.stl



mini13-armor-shoulder-2x.stl



mini13-armor-waist.stl



mini13-extras-backpack.stl



mini13-extras-hat.stl



mini13-extras-shield.stl



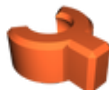
mini13-extras-sword.stl



mini13-frame-arm-4x.stl



mini13-frame-chest.stl



mini13-frame-foot-2x.stl



mini13-frame-handclosedleft.stl



mini13-frame-handclosedright.stl



mini13-frame-handopenleft.stl



mini13-frame-handopenright.stl



mini13-frame-head.stl



mini13-frame-shoulder-2x.stl



mini13-frame-leg-4x.stl



mini13-frame-waist.stl



mini13-frame-runner.stl



mini13-armor-runner.stl

Print files



mini13_all_pla_208658g_4h3m.gcode

🌀 PLA 🌀 0.40 mm ≡ 0.15 mm ⌚ 4.05 hrs ⚖️ 21 g 📄 Prusa MINI / MINI+

📄 This gcode is provided only to show print settings and estimates. Please slice your own files!

Other files

assembly-guide-mini13.pdf

📄 one-page assembly guide

License ©

This work is licensed under a
Creative Commons (4.0 International License)



Attribution

- ✗ | Sharing without ATTRIBUTION
- ✓ | Remix Culture allowed
- ✓ | Commercial Use
- ✓ | Free Cultural Works
- ✓ | Meets Open Definition