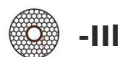




Fully functional Padlock

[VIEW IN BROWSER](#)

updated 13. 7. 2022 | published 10. 7. 2022

Summary

Fully functional padlock - You only need a spring from a pen as hardware!



4.47 hrs



2 pcs



0.15 mm



0.40 mm



PLA



34 g



Prusa
MK3/S/S+

[Gadgets](#) > [Other Gadgets](#)

Tags: [lock](#) [padlock](#)

A fully functional padlock

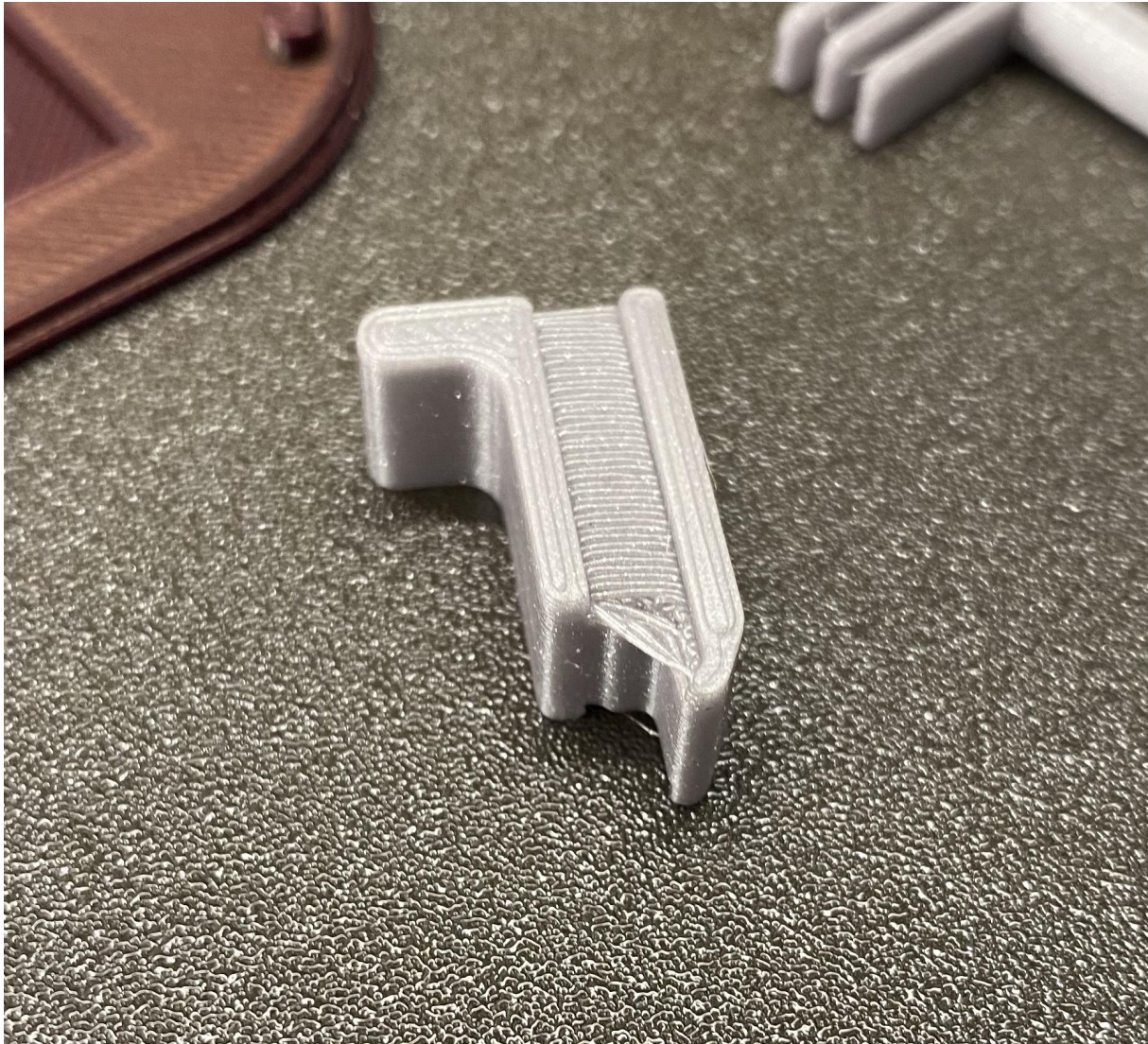
You only need a spring from a pen as hardware!

All of the parts should be printed in the orientation the .stl files already are in. Alternatively, just grab the ready .gcode files and you are ready to print.

You need a spring from a pen as hardware. Any spring with less than 5mm diameter will work.

1. This model is recommended to be printed in 0.15mm layer height due to the tight tolerances and small moving parts.

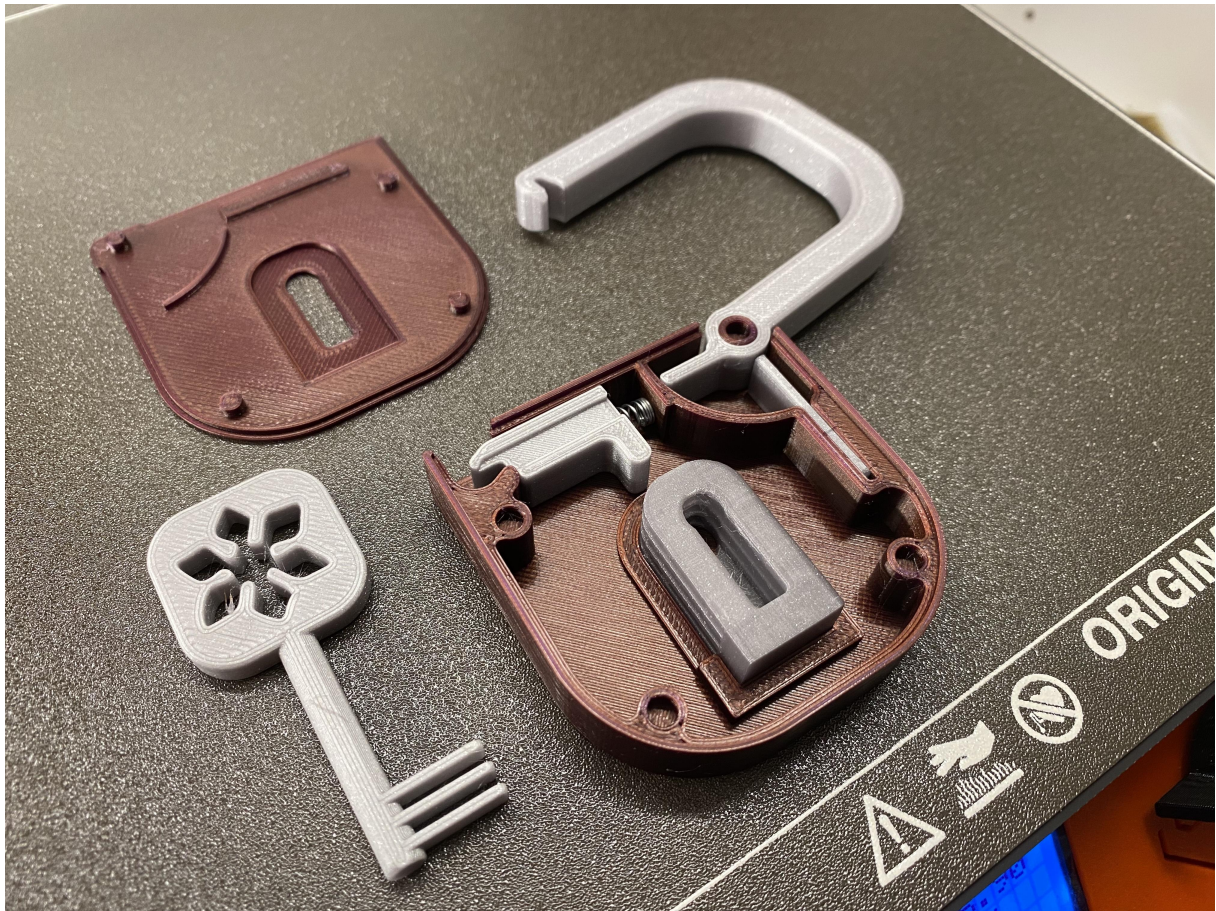
2. Make sure that you have a good adhesion on the first layer. Some of the parts are small and doesn't have a very large contact patch to the bed.
3. After printing, check that the moving parts are smooth. If necessary, clean them up with a sharp knife. Silicone lube will increase the smoothness of the locking mechanism.
4. After assembling, make sure that everything is working as expected. Add a small drop of superglue to the four round connecting points to lock the frame together.



Note: Be prepared that the “slide” part might have a slight failure on the print due to the geometry. You need to clean this with a sharp knife after printing it if it happens.

It does not affect the functionality of the print and it is hidden inside the frame.

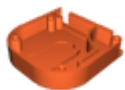
Note 2: Depending on the strength of your spring, you might not be able to simply push to lock the padlock. You might need to use the key to assist while locking.



To assemble the lock, check the correct location for the parts from this picture:

I hope you enjoy this model!

Model files



padlock_frame.stl



padlock_top.stl



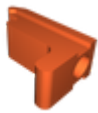
padlock_shackle.stl



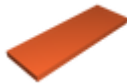
padlock_key.stl



padlock_keybody.stl



padlock_slide.stl



padlock_leafspring.stl

Print files



padlock_parts_015mm_pla_mk3s_2h12m.gcode

🌀 PLA 📏 0.40 mm 📐 0.15 mm ⌚ 2.20 hrs ⚖️ 13 g 🖨️ Prusa MK3/S/S+



padlock_frame_015mm_pla_mk3s_2h16m.gcode

🌀 PLA 📏 0.40 mm 📐 0.15 mm ⌚ 2.27 hrs ⚖️ 20 g 🖨️ Prusa MK3/S/S+

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