



Print-in-Place Fidget Toggle Switch

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Summary

8 grams of filament, 20 minutes to print, and absolutely zero assembly!

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Taking inspiration from my [original fidget toggle switch](#), I designed a print-in-place version that uses about 8 grams of filament and takes about 20 minutes to print on my X1C. This model is experimental (it's definitely still a work-in-progress), so please report any issues you encounter.

Want to sell prints of this model? Check out my [Printables Club!](#)

Update: I added a new model for a switch with increased tolerances. It's less "clicky" than the standard version, but should print easier if you're encountering problems with the toggle fusing to the body. Check out "PIP-Fidget-Switch_Loose.3mf"

Print Settings

- **Material:** PLA (see below)
- **Nozzle Size:** 0.4mm

- **Layer Height:** 0.2mm
- **Vertical Walls:** 3
- **Top/Bottom Layers:** 5
- **Infill:** 15%
- **Supports/Brims:** Nope

The switch has been tested with several different filaments. All PLA variants that I tested (standard, matte, CF, silk, and Plus/Pro/Max) worked great, but standard and CF worked best. PETG was also tested, but the switch's "click" action wasn't very strong.

The model has some areas with limited bed contact, so make sure you have decent bed adhesion. Brims are difficult to use on this model, so a glue stick or another adhesive is very helpful here.

After printing, you'll need to "break" the toggle from the axle. This requires a small amount of force, but you should be able to accomplish this using only your hands. You'll also need to flip the switch a few times to fully wear it in and smooth out the action.

I designed the tolerances to be fairly loose for a 0.4mm nozzle. If you're having trouble with the toggle fusing to the axle, lower your extrusion flow ratio by a percentage point or two.

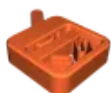
If you print one, please post a make! If you encounter any issues, post a comment. Thanks!

Model files



pip-fidget-switch.3mf

☐ Be sure to keep the two objects together!



pip-fidget-switch_loose.3mf

☐ Be sure to keep the two objects together!

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