MAKERX Designs

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Fidget Ghost Print & Play Guide

A desk fidget that changes shape with every move of the stem.

Print in Place | No Supports | 22 Rings

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A fidget toy that keeps your hands busy at your desk. It sits flat as a friendly ghost, and every way you move the stem gives it a different look.

It is **one print with no assembly**. Twenty-two nested rings and the stem come off the plate already captured inside each other, so there is nothing to glue, snap or fit together. The version in the photos is white with black eyes.



Lift with a slight twist for a cone-like shape.

Ways to play

- **Twist the stem** with the ghost flat on the desk. The rings shift against each other into new designs.
- **Push and pull** the stem from side to side and the rings move around to their stops.
- **Lift it up** with a slight twist and the rings form a cone-like shape.
- **Raise and lower it** on the desk. It makes a satisfying sound as the rings come back down.
- The stem is **textured**, so it has a tactile feel under your fingers.

In the download

File	What it is
`fidget-ghost-assembly.3mf`	**Start here.** The whole ghost on one plate, eyes assigned to black, with the tested profile already set up. 3 h 55 m.
`fidget-ghost-assembly.STL`	The same part as a plain mesh, for any slicer. It is already lying flat in print orientation.

1 · Check your bed

The part	
Footprint	**148.2 × 179.1 mm**
Height	39.0 mm with the stem; the rings are 9 mm
Rings	22, about 1 mm apart
Print time	3 h 55 m
Filament	104.86 g in two colors

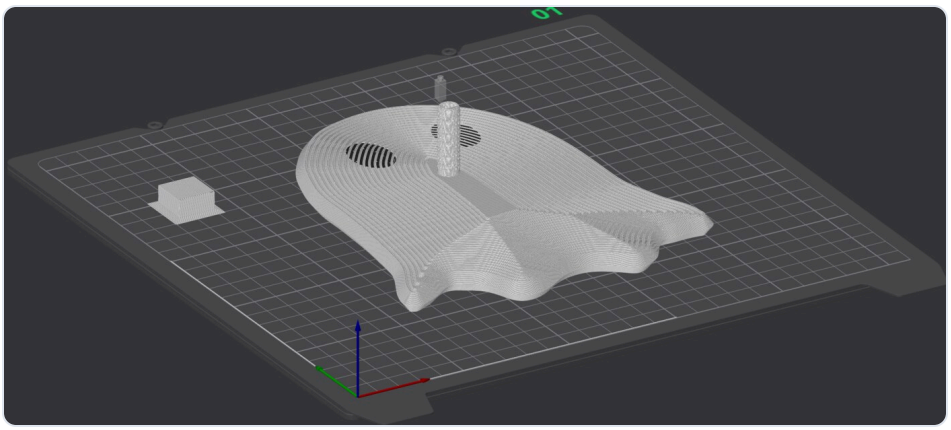


It prints flat, just as it rests.

With black eyes the slicer adds a prime tower beside the ghost, so leave room for it on the plate.

2 · Slice it

1. Open `fidget-ghost-assembly.3mf` in Creality Print, or any slicer that imports 3MF project files. When it asks whether to load the project's print settings, **say yes**.
2. The ghost is already flat on the plate and the eyes are assigned to black. Slice and print.
3. **One color instead?** Set the eye filament to the same spool as the body, or load the STL on its own. The eyes still show as a shallow recess, and there are no filament changes to wait on.
4. **Different colors?** The body and the eyes each take their own filament. Swap either to suit your spools.



As sliced: one part, flat on the plate, with the prime tower to its left.

3 · The profile baked into the 3MF

Using your own profile instead? Match these. Sliced and print-tested on a Creality Hi 1 with a 0.4 mm nozzle.

Quality	
Layer height	**0.20 mm**
First layer	0.20 mm
Nozzle	0.4 mm
Walls	2 loops
Top / bottom	5 / 5 layers
Infill	10 % grid

Material & plate	
Filament	PLA
Nozzle temp	220 °C
Bed temp	60 °C
Plate	Epoxy resin
Supports	**Off**
Brim	None

Two colors	Filament
White body	101.92 g
Black eyes, one layer deep	0.10 g
Purge and prime tower	2.84 g, for 2 filament changes

The preset says 0.12 mm. The layer height is 0.20 mm.

The process preset inside the 3MF is *named* "0.12mm Standard", but the layer height set in it is **0.20 mm**, and that is what the times and weights in this guide are for.

Built to hold together

Every ring sits about 1 mm from the next, all the way out. That even gap keeps the ghost shape intact while the rings slide, twist and drop. Keep the **2 walls** and the layer height as set: thicker walls eat into those gaps.

4 · Off the plate

1. Let the plate cool, then lift the whole ghost off in one piece. There is no support and no brim to remove.
2. Pick it up by the stem. Every ring should drop and hang below the one inside it.
3. If a ring stays flat, the first layer has joined it to its neighbor. Hold the ghost flat and work that ring gently side to side until it breaks free.

Where precision meets the printer

Thanks for printing this one. If it ends up in your hand every time you sit down at the desk, that is exactly what it was designed to do.

For years my design world existed entirely behind a screen. As a mechanical engineer I spent countless hours building complex CAD models, but there was always a missing link — the ability to hold an idea in my hands. That changed in January 2026, when I went headfirst into 3D printing. The moment that first layer stuck to the bed, the gap between concept and reality vanished.

Coming from a background where precision is everything, tolerances aren't suggestions to me — they are a religion. I didn't want to print trinkets; I wanted to apply industrial engineering discipline to desktop manufacturing. Every wall count, every layer height and every infill percentage in this guide is a deliberate decision backed by testing. If a part can't handle the environment it was built for, it goes back to the drawing board.

Three principles behind every print

01

Functional Engineering

High-utility, real-world solutions rather than purely decorative models. If it doesn't solve a practical problem, it doesn't leave the workstation.

02

Rigorous Tolerances

Designed in professional CAD with mechanical intent — press-fits that click and assemblies that work straight off the build plate. No sanding, no filing, no guesswork.

03

Bridging the Gap

Industrial structural integrity at maker speed. Proving a desktop printer can produce parts worthy of real engineering applications is what drives every release.

The workshop

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IF THIS ONE EARNED ITS SPOT

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Printed it in your own colors? Post a make with a photo — I would love to see what it looks like in something other than white.

Happy fidgeting. — MakerX Designs · makerxdesigns.com · © 2026