



Extruder Idler Assembly

 defaultex

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Summary

A simple extruder idler assembly that I designed to replace the lever style assembly that came with my printer.

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I designed this idler to replace the lever action idler that came packaged with my printer. I didn't like how it kinked the filament on the way into the hot end so I opted for something to enforce a more straight path for the filament. This idler reuses the barring that came packaged with an Ender 3's idler, so a similar barring will be needed or modification to the design.

Assembly is fairly straightforward, insert the barring into the arm bottom, pop a screw through and then drop the arm top on and tighten down a nut to lock it together. Slide the assembled arm into the body bottom section from the longer side, slide two m3 nuts into the slots on the long side with a little rubber cement to keep them from falling out, insert an appropriate spring then bolt the top down. Adjust the tightness of the m3 screws holding the spring seat in place as needed, there isn't much clearance so they will need to be sized accordingly.

Second version of the body is to address problems that arose with use of the first version. A slightly better nut capture and thicker base. Highly

suggest printing from PETG as PLA gradually become brittle over time being so close to the heat block.

Model files



spring_seat.stl



body_bottom.stl



arm_bottom.stl



arm_top.stl



body_top.stl



extruder_idler_assembly.fcstd



body_bottom_mk2.stl

☐ Second version of the bottom. Beefed up the thickness a bit.



body_top_mk2.stl

☐ Second version of the top. Beefed up the thickness a bit.

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