Printables by JOSEF PRUSA

planetary gear fidget thing with three-teeth-planets

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VIEW IN BROWSER

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Summary

Nothing really new, but this is my take on these...

Gadgets > Other Gadgets

Tags: fidget gear planetary planetarygear herringbone

Who hasn't seen a print-in-place herringbone planetary gear... probably a version from Emmett. However I recently developed a different method for those gears which allows planet gears with only 3 teeth (actually also with 2 teeth, but they don't turn that smoothly), which I found quite nice, and so I thought I'd share it. The hole in the center should fit a typical screw driver bit, which can, in combination with a power drill, help breaking in the gear to run more smoothly, especially if it's quite tight in the beginning.

I uploaded 3 versions with slightly different tolerances/clearance. I suggest trying tol20 first; if you find it to loose or wobbly, try the smaller one. If you can't break the gears loose, even individually with a bit of force, try a bigger one.

Also try the little hand crank (or two) for a bit more fun →

Printing: A well tuned printer (regarding tolerances) helps. Otherwise nothing special (0.4mm nozzle, 0.2mm layer height).

Model files

threeteethplanetgear-tol24.stl

threeteethplanetgear-tol20.stl

threeteethplanetgear-tol17.3mf

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