



Planetary Exercise Wheel (Step files and 4 different clearances)



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[VIEW IN BROWSER](#)

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Summary

An exercise wheel but over engineering (Working in Progress) Read carefully the instructions below.

[Sports & Outdoor](#) > [Indoor Sports](#)

Tags: [wheel](#) [gear](#) [workout](#) [indoor](#) [sports](#) [nosupport](#)
[planetarygear](#) [nosupportneeded](#) [excercise](#) [tpu95a](#)
[calisthenics](#) [indoors](#)

Note, this file is in the development and testing phase, small corrections and future upgrades will be made soon!

The entire wheel is approximately 180mm in diameter, so it is compatible with the vast majority of printers

1. I recommend printing the outside of the Wheel in TPU, but if you want to print it entirely on just one material, I've left the files below with the word "Full Wheel" at the end of the name.
2. I also made the Wheel available with different tolerances to be more compatible with printer variations.

3. For those who don't know at what tolerance to print, I recommend printing the first layers, just with the walls, without the top, base and Infill.
4. In the photos above you can also find the recommended printing positions.
5. If you printed the outside of the wheel and Hand Grippers in TPU, check if they are fitting under pressure, if not, I recommend using Super glue or whatever you like to hold the tight.
6. For those who want to edit the files, I made them available in Step format as well,
7. Be careful with the gears, they can hurt if you get your fingers caught (I'll try to make the file safer!)

Print Settings:

**(The Planetary Wheel gear is a print In place model, there is no way to assemble later if you print the internal gears separately)
PETG is recommended but PLA do the Job as Well.**

No Supports needed

Planetary Wheel:

At least 8 Walls

0,2 Layer height

40% infill

Internal Axis and Nut:

At least 8 Walls

0,2 Layer height

100% infill is recommended

External Wheel and Grippers (TPU):

5 Walls works well

0,2 Layer height

At least 25% infill

Feel free to leave your comments and suggestions

Model files



planetary-wheel-025-gear.3mf



planetary-wheel-03-gear.3mf



planetary-wheel-02-gear-tight.3mf



planetary-wheel-035-gear-loose.3mf



planetary-wheel-03-gear-full.3mf



planetary-wheel-025-gear-full.3mf



planetary-wheel-035-gear-loose-full.3mf



planetary-wheel-02-gear-tight-full.3mf



axis-nut.3mf



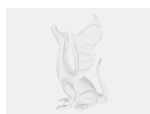
internal-axis.3mf



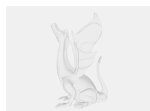
hand-grip.3mf



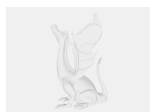
ring-tpu.3mf



planetary-wheel-02-gear-tight.step



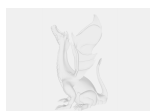
planetary-wheel-035-gear-loose.step



planetary-wheel-025-gear.step



planetary-wheel-03-gear.step



planetary-wheel-gear-complete-assembly.step

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