



Mechanical Laser Show No-Support Version



Archie

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Summary

Edit: Both X and Y Cams updated for better tolerance. Edit2: Realized I didn't add a change to the base I had...

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Edit: Both X and Y Cams updated for better tolerance.

Edit2: Realized I didn't add a change to the base I had intended. Notches to allow the snap-together crank handle to move freely around.

My slicer doesn't do supports and I hate having to clean up after them anyway. So with a bit of creative re-engineering I made everything support-free friendly. One extra advantage is that the separation of the gears and cams means less printing time.

Print one of everything plus one extra Bolt.stl (I actually just used 1/4" socket head machine screws.)

On the bottom of the Cam(s) pull the extra ring of material free from around the hole.

The X and Y gears should fit into the gear-shaped holes on the bottoms of the cams. Your tolerances may vary.

Thanks to AdditiveTech for an amazing design!

Print Settings

Printer:

Dremel Idea Builder

Rafts:

No

Supports:

No

Resolution:

.2

Infill:

15%

Notes:

Worked in PET-G for this project. Does OK (not great) at 230° which is my printers max temp.

Reprinted X Cams in PLA and it bridged a bit better.

How I Designed This

Used Tinkercad to scale and add/subtract parts.

Category: Mechanical Toys

Model files

y_gear.stl





y_axle.stl



heart_y_cam_v2.stl



crank_gear.stl



bat_x_cam_v2.stl



x_gear.stl



no-support_base_v2.stl



crank_parts.stl



bat_y_cam_v2.stl



club_x_cam_v2.stl



heart_x_cam_v2.stl



star_x_cam_v2.stl



club_y_cam_v2.stl



x_axle.stl



bolt.stl



star_y_cam_v2.stl



front_plate.stl

Other files



sources.txt

[Find source .stl files on Thingiverse.com](#)

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