



Rotating Spice Carousel

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Summary

This was designed as a spice rack that is low profile but can rotate to access a large number of small containers.

[3D Printers](#) > [Accessories](#)

Tags: [rotating](#) [storage](#) [spice](#) [spicerack](#)

I needed a spice rack in which it would be easy to access the large number of spices and herbs I use but didn't stick out far from the wall. Having it rotate simply added a "cool factor" that I wanted as well.

Each "car" holds 6-7 average sized spice jars. I designed it to hold 7-8 cars though more can likely be added as needed. Each car requires two sections of chain and those are meant to be printed in place with the thin edges of the chains against the print bed. (I frequently used a glue stick to help those narrow edges stay adhered) The pins to either side of the car suspend the car, join sections of chain, and allow the car to rotate while staying upright. The more cars and sections of chain added, the further apart the top and bottom axles will need to be separated. All fixed joints of the car utilize a drop or two of glue.

This is designed with the tolerances of my 3d printer in mind, such as 0.25mm size difference for a snap fit or 0.46mm for movable parts. I printed all parts at 0.2mm layer height.

I added the ability to motorize it using a 100 rpm 12V volt motor, battery pack, and button but a crank handle is also included for manual turning. The crank is meant to be print in place and be a snug glue fit onto the octagonal bottom axle.

https://www.amazon.com/gp/product/B072R57C56/ref=ppx_yo_dt_b_asin_title_o01_s00?ie=UTF8&th=1


https://www.amazon.com/gp/product/B07BHDZH7Y/ref=ppx_yo_dt_b_asin_title_o09_s00?ie=UTF8&th=1


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https://www.amazon.com/gp/product/B07XYX43X6/ref=ppx_yo_dt_b_asin_title_o02_s00?ie=UTF8&th=1


You'll need to source screws, nuts, and bolts for mounting.


Model files

 **Chain section** 1 file

 **chain-section.stl**

 **Axles and Shafts** 4 files

 **top-axle.stl**
☐ Two of these will need to be printed

 **bottom-axle.stl**
☐ Two of these wiull need to be printed



sprocket-shaft-right.stl

☐ left and right sides to be glued together with a drop of CA glue. Each printed vertically.



sprocket-shaft-left.stl

☐ Left and right sides to be glued together with a drop of CA glue. Each printed vertically.



Sprockets and Motor Gears

5 files



bottom-sprocket.stl



top-sprocket.stl

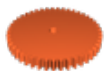


sprocket-hubcap.stl

☐ This holds the top sprocket to the top axle using a small screw.



spur-gear-9-teeth.stl



spur-gear-45-teeth.stl



Spice Car

4 files



spice-car-pin.stl

☐ Two of these will need to be printed for each car



spice-car-side.stl

☐ Two if these will need to be printed for each car



spice-car-bottom.stl



spice-car-top.stl

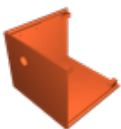


Motor Box and Crank

3 files



motor-box-top-half.stl



motor-box-bottom-half.stl



crank.obj

☐ print in place

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