

Cantilever Box v1.0

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Designed using Autodesk Fusion 360 and exported using Adobe Illustrator.

Inspired by mid-century sewing boxes, and [James Hatch's design on the Glowforge forums](#).

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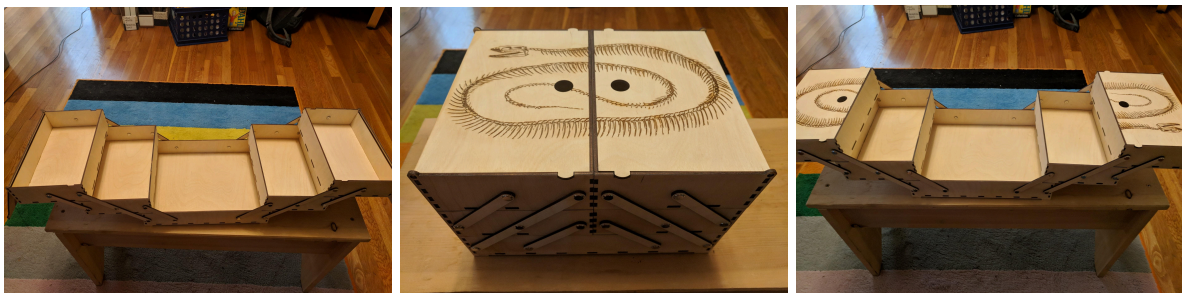
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Changelog:

v1.0.0 (27 May 2018): Initial release.

Assembly instructions (WIP)



Material: 8 pieces of 12"x12"x1/8" laserable wood or acrylic

Parts: 28 6mm Chicago screws (5mm rod diameter, 6mm rod length; [example on Amazon](#))

Required: glue, cotton swabs to remove excess glue

Recommended: Loctite Blue thread sealer, wood clamps to hold pieces together while gluing

Wait for the glue to dry before touching each separate piece again.

1. Make any desired adjustments and cut each of the 8 pages onto 1/8" material.
 - Pages **2** and **3** are identical, as are pages **4** and **5**. They are kept separate for the sake of art customization and clarity. Feel free to cut pages 2 and 4 twice for convenience.
 - The red layer is explanatory text and should be disabled or ignored.
 - The blue layer is engraving.
 - The green layer cuts out interlocking pieces and hinge holes. Cut this first.
 - The black layer cuts out the outer lines. Cut this second.
 - (If you cut the black layer before the green layer, it's no problem, but the newly-cut pieces might move and slightly misalign the green/inner layer.)
2. Assemble each drawer separately. Don't forget to insert the lid pieces while assembling the top drawer; the lid does not need to be glued and should spin freely.
 - Most pieces are symmetrical. If you customize the design to add art, keep careful track of the pieces.
 - Even if you don't add art, you can get a very neat effect by keeping track of which pieces were cut together, and matching the wood grain so it aligns when the box is closed.
 - Also, the top outside pieces are shorter in height than the lower two outer walls. Don't get them mixed up!
 - Because so many pieces are similar/interchangeable, you'll need to keep careful track if you want to do this, or prepare for the world's least-interesting jigsaw puzzle. *You may want to apply some masking tape, painters tape, or removable labels to label the pieces after they've been cut and had their masking removed.*
3. Add polyurethane or other protection, if you'd like.
4. From the bottom drawer moving upwards, attach the cantilever arms on the outside of the box using the Chicago rivets. Remember to check the orientation of each layer before you attach the rivets; the layers can be rotated 180 degrees and still fit, but the art and wood grain will not line up!