

**CBC**

## Spoolholder assembly instructions



This device was designed by Italo David Caramagno Tauil for the competition from MatterHackers to Joel from the youtube channel 3D Printing Nerd.

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## Motivation

The design was optimized for an easy printing and assemblance, to have only 3D printed parts and keeping it resistant with pleasant looks.

With that in mind the whole device has only 2 printed parts and an optional part to help keep the spools in position for more than one spool per holder.

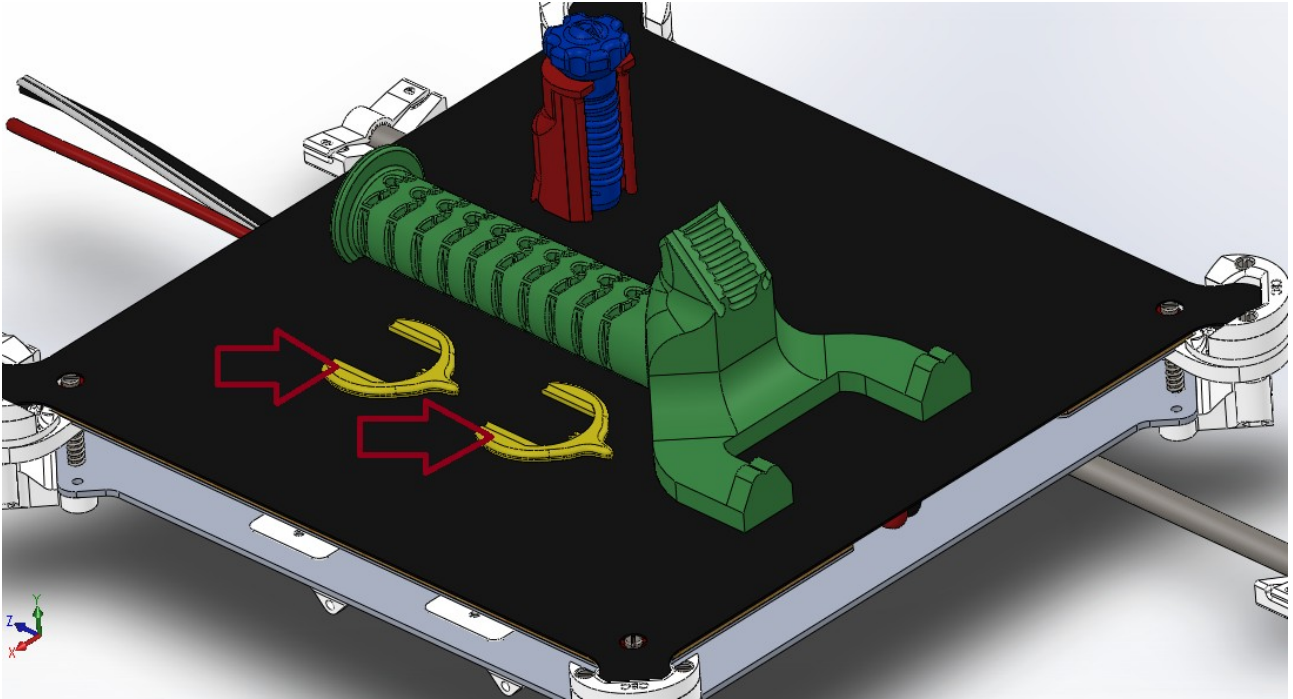
## Prototyping

The prototype chose by the team was the part with the turning mechanism since it was considered the hardest to print. The part in the photo bellow was printed in PETG with 20% infill and 0.2mm layer height.



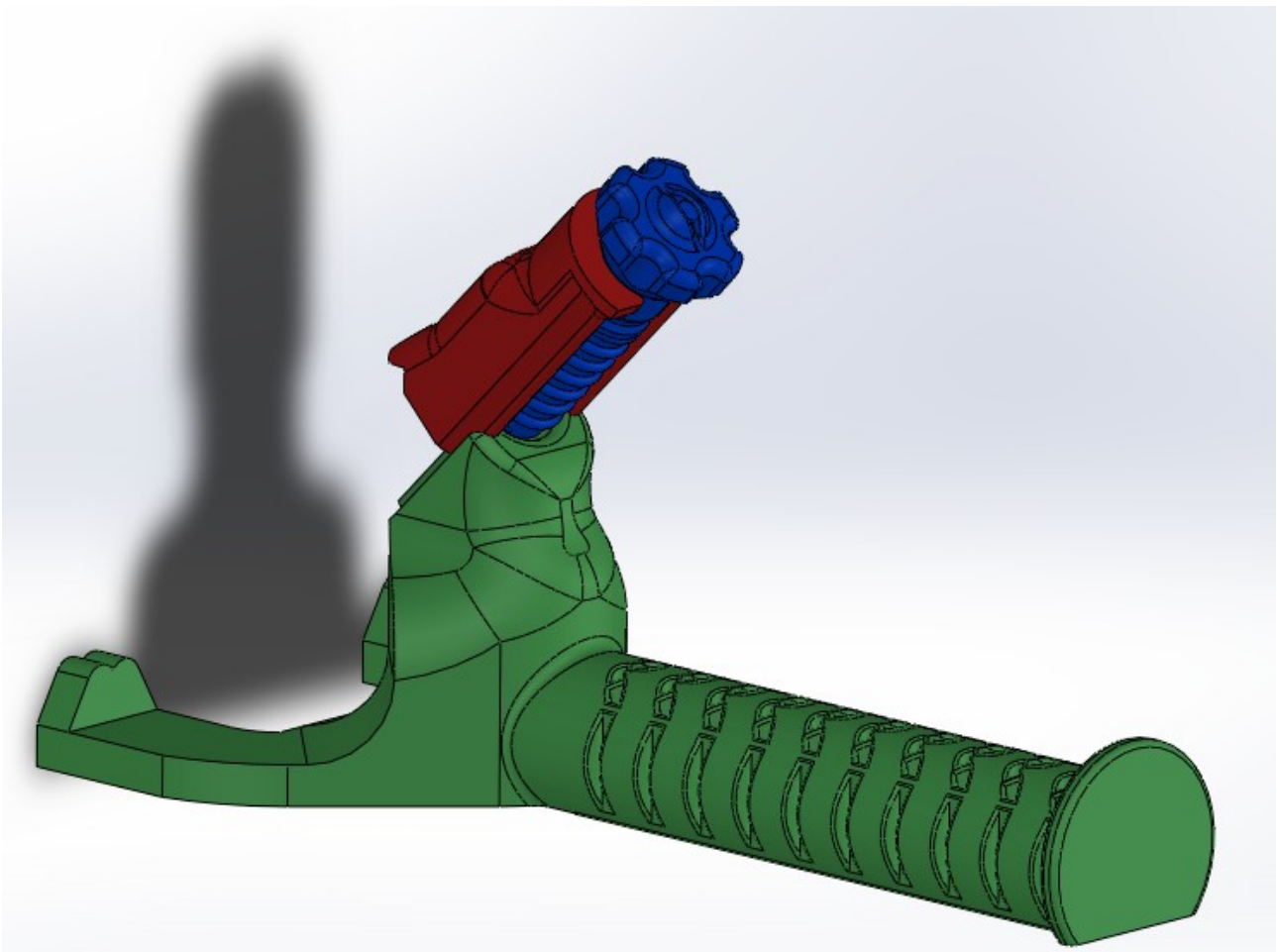
The parts were designed to be printed according to the image bellow. All parts can be printed without supports, except the spool separators in yellow, indicated by the red arrows.

The material indicated to print the spoolholder is PETG for its good mechanical resistance and easy to fit properties, tough we strongly believe PLA and ABS will perform greatly as well.

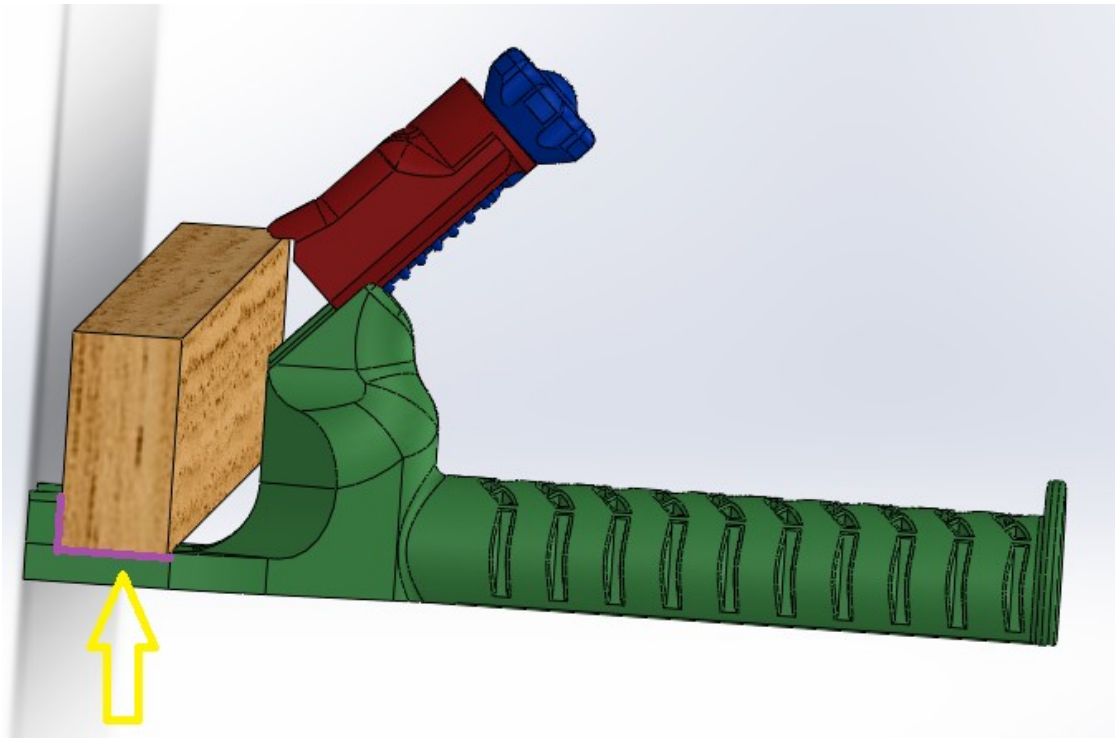


## Assemblance

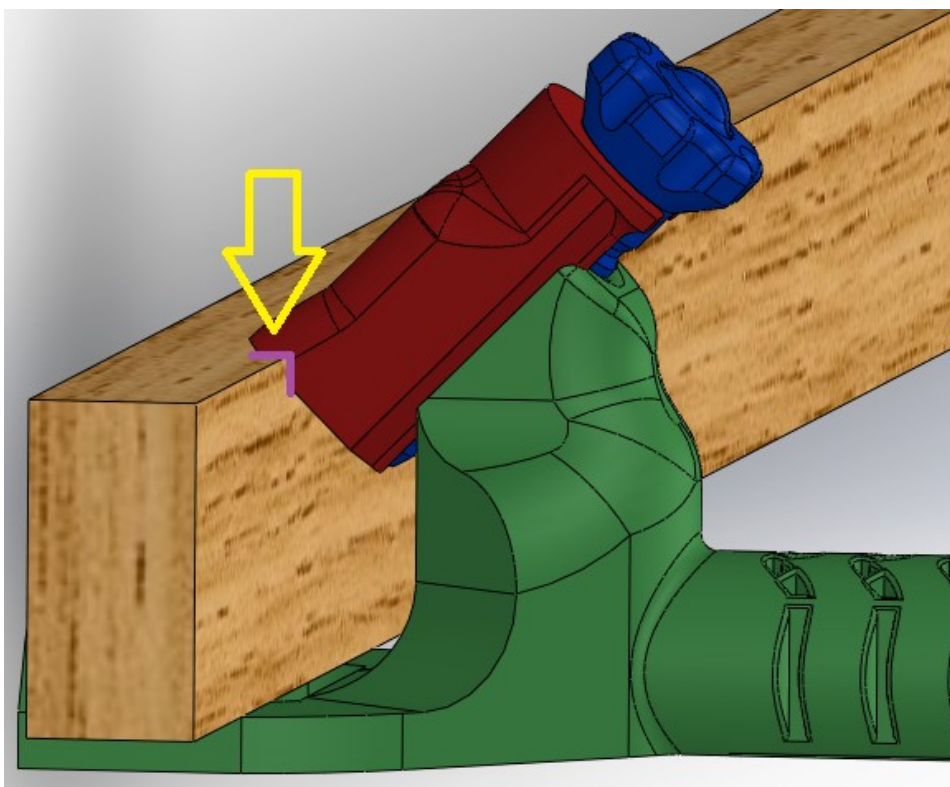
For assembling rest the **red part** on top of the spoolholder **body**, aligning the **screw** with the **body**. Turn the **screw** until the **red part** starts moving.



Now place the wood shelf on the **body**.



Turn the screw until the **red part** is secured placed over the shelf wood



Your spoolholder is now ready to use, if more than one spool will be placed in one holder the **spool separators** will keep them apart, they should be fitted as the image bellow as needed.

