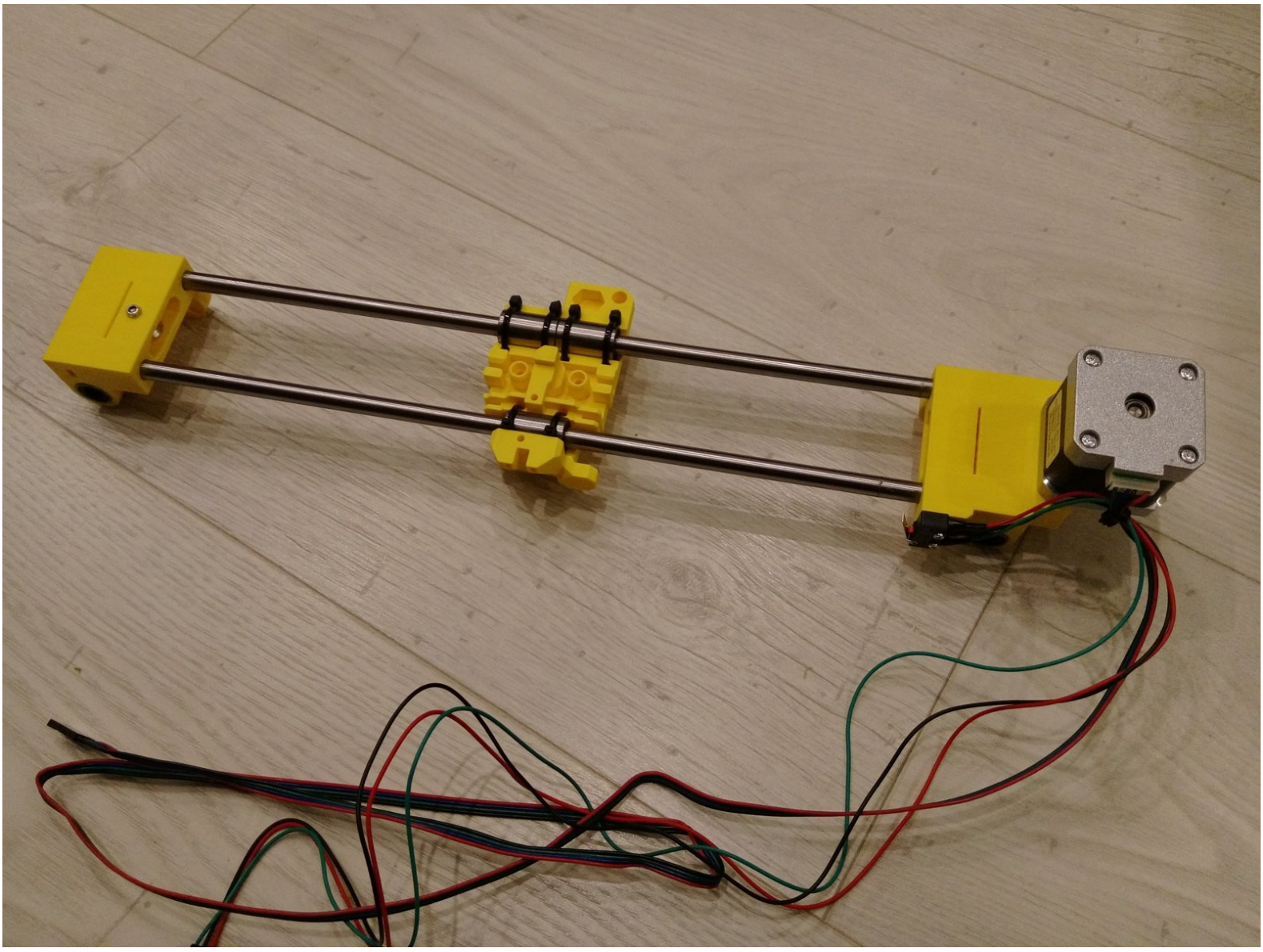
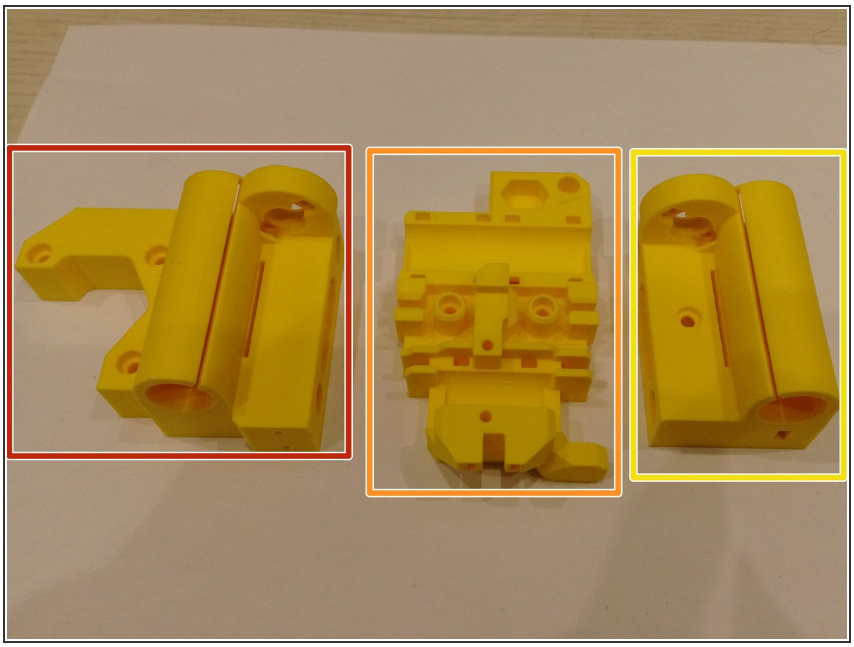
MK2Clone

2. X-axis assembly

Written By: q3ok

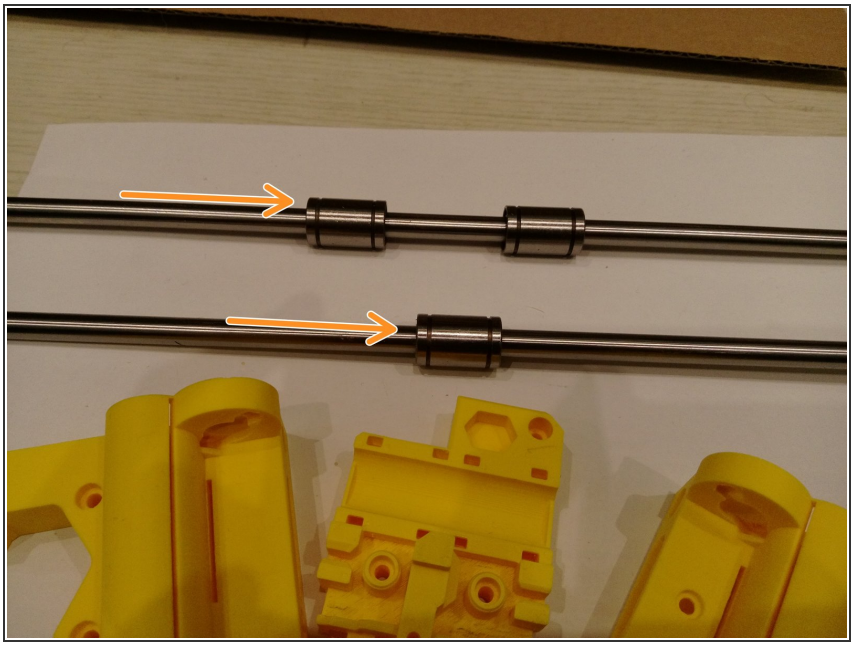


Step 1 — Printed parts needed



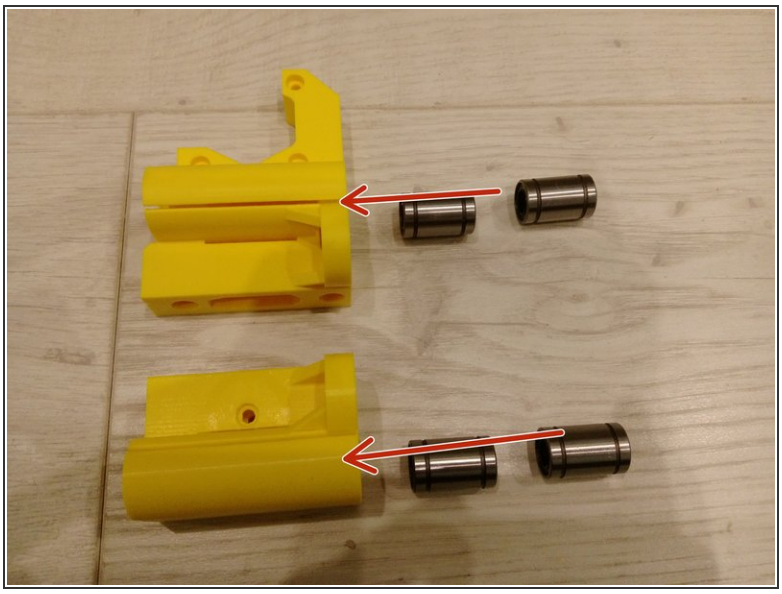
- x-end-motor
- x-carriage
- x-end-idler

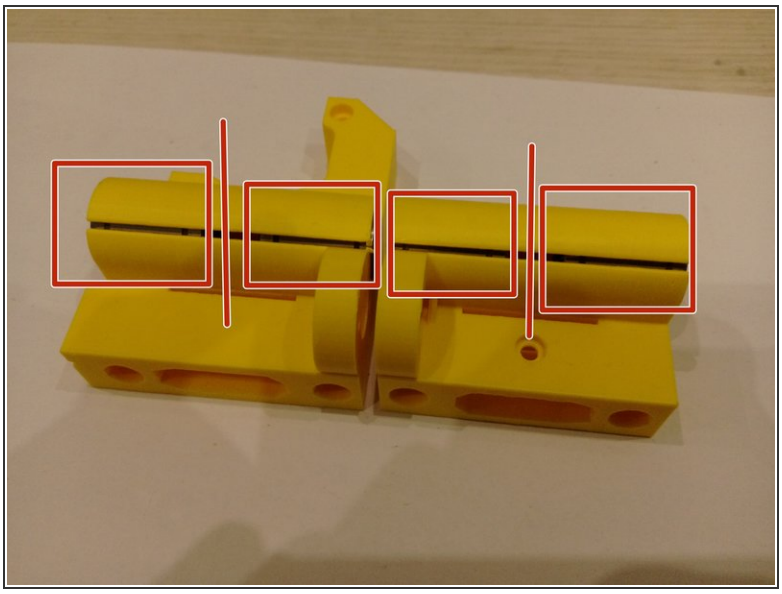
Step 2 — Prepare the smooth rods



- Take the 370mm (medium ones) smooth rods and 3x LM8UU bearing
- Put the bearings on smooth rods

Step 3 — Insert bearings into printed parts



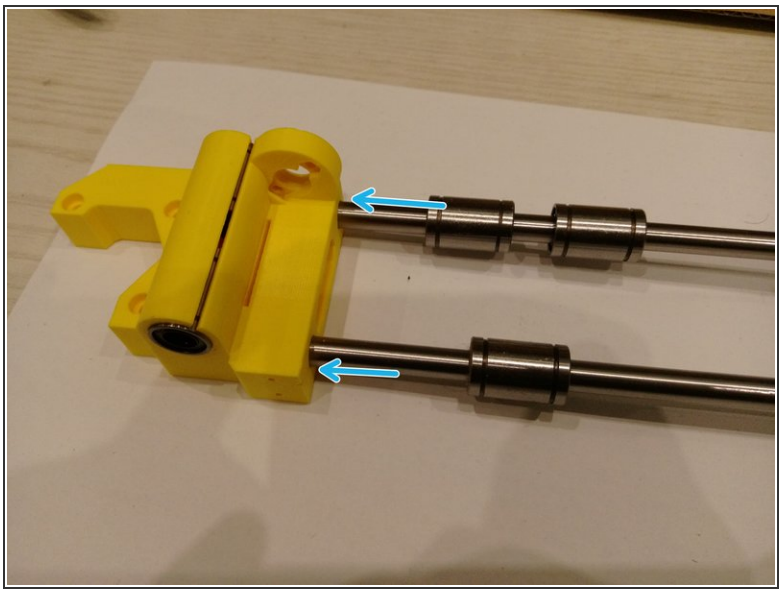


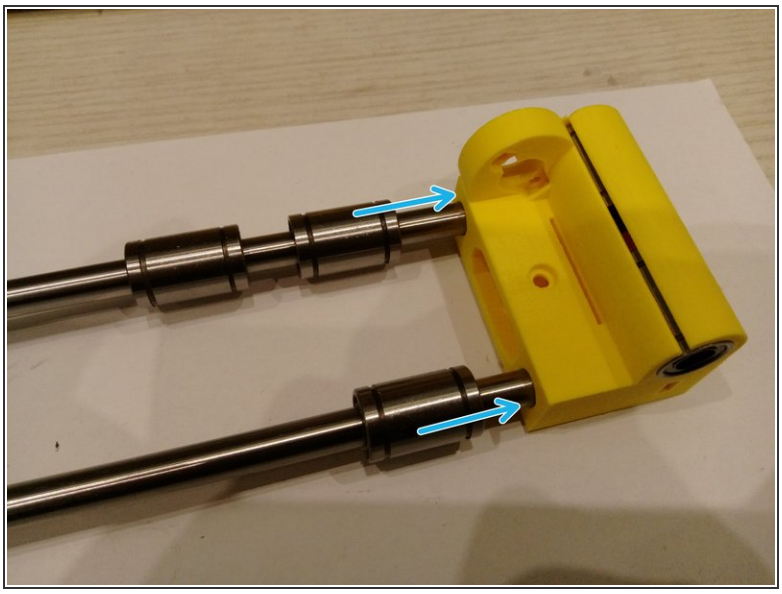
Take the x-end-idler, x-end-motor and 4x LM8UU bearing

- Insert the bearings to plastic parts (2 in each part)

The bearings can be inserted only from the top (there is a rim on bottom)

Step 4 — X-axis rods assembly

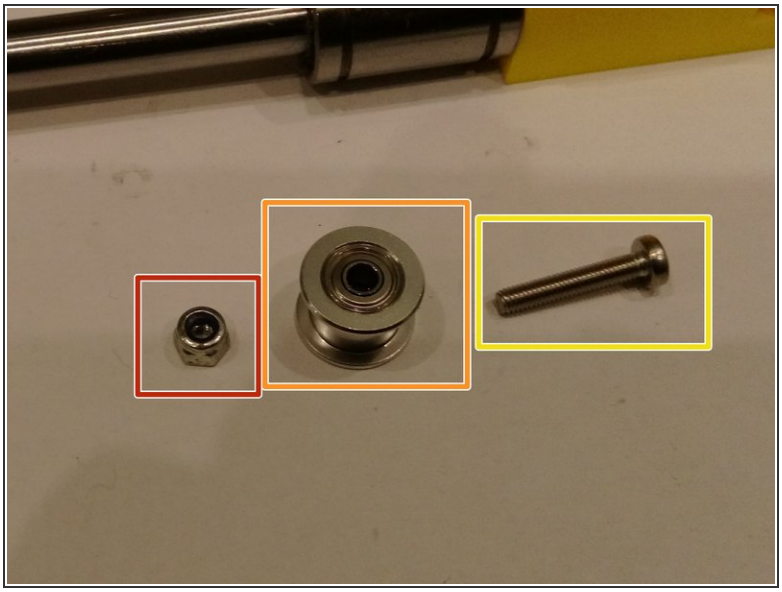


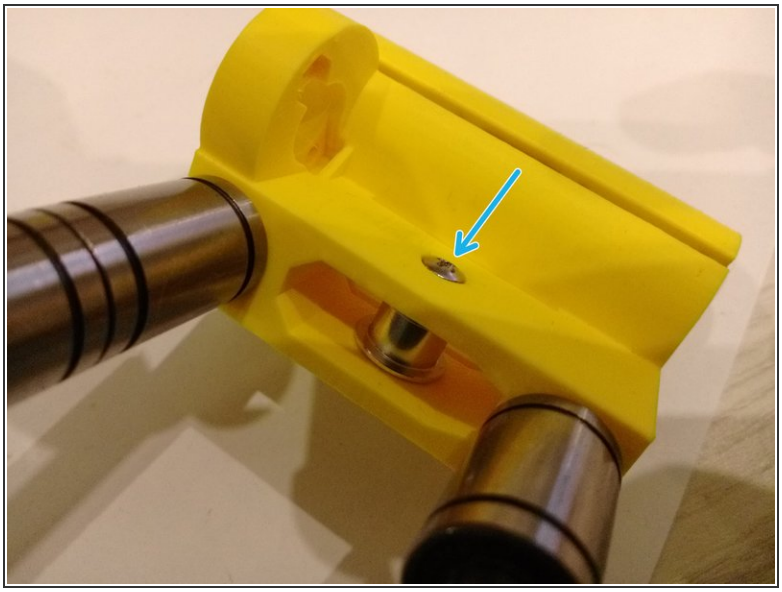


- Insert the prepared before linear shafts into plastic parts as shown on photos

Make sure that you put the linear shaft with two bearings on top

Step 5 — X-end idler



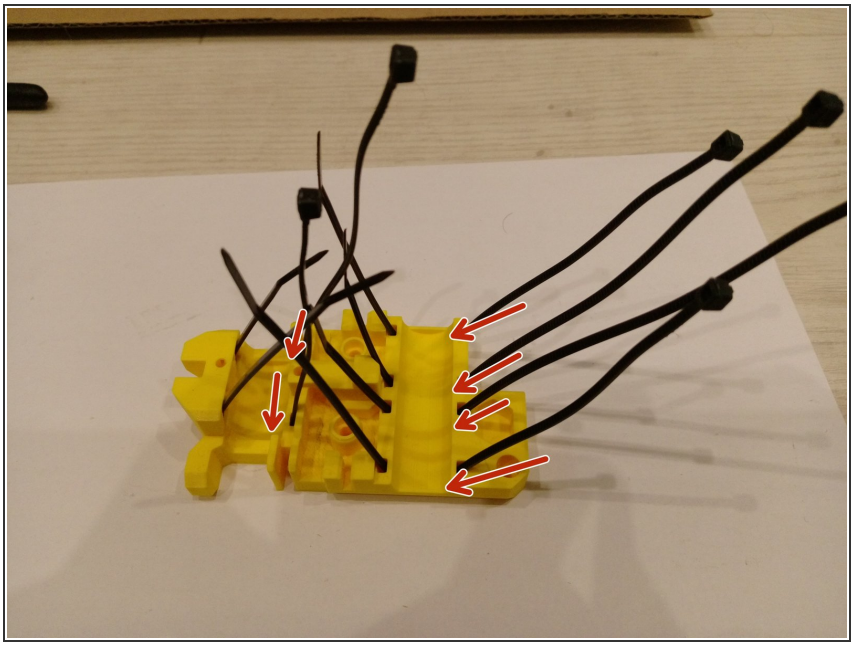


- GT2-16 idler pulley, bore 3mm
- M3 self-locking nut
- M3x15 screw
- Insert the screw as shown on image, guide thru idler pulley and lock using nut.

⚠ Do not overtighten as you can easily damage the plastic part

ⓘ To help guiding the screw thru idler you can hold the idler by pliers

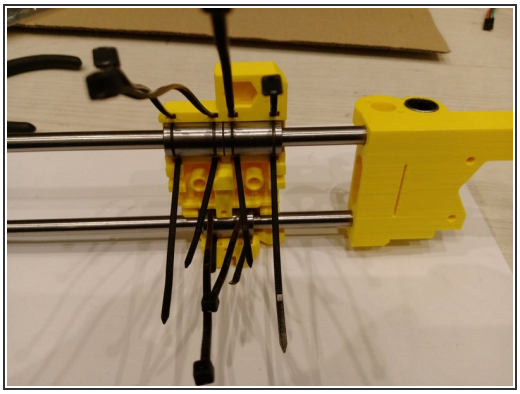
Step 6 — X-carriage zipties

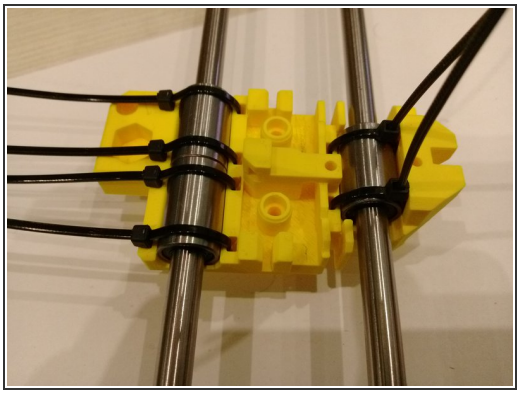


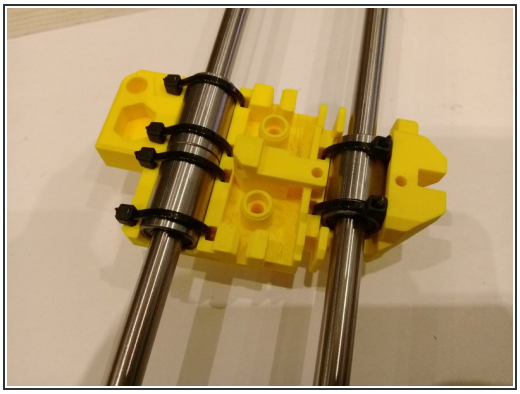
- Put the zipies on X-carriage as shown on image

ⓘ 6x zipties is needed

Step 7 — X-carriage assembly





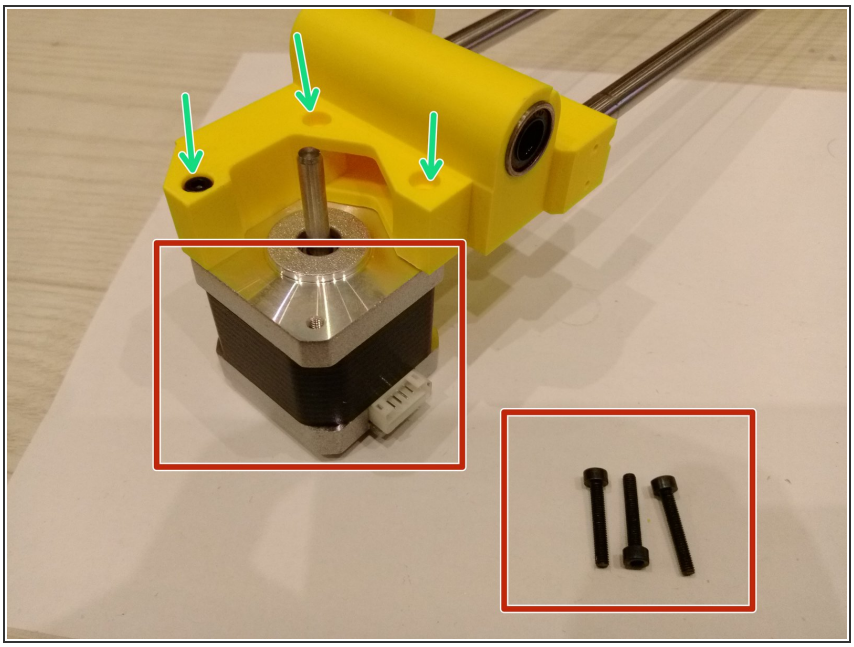


- Mount the x-carriage on bearings as shown on image

⚠ Make sure the correct orientation of X-axis

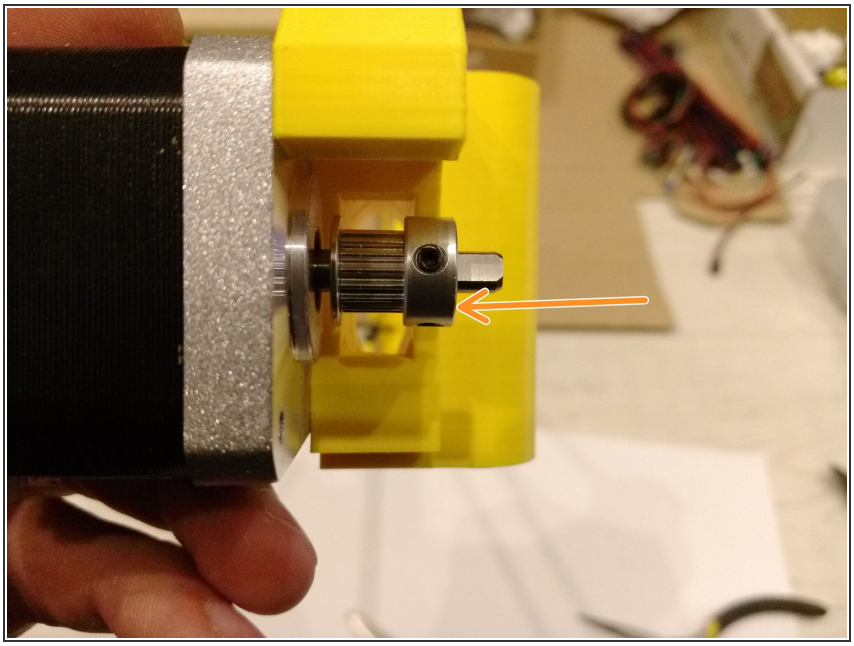
- Tighten the zipties and then cut the leftovers

Step 8 — X-axis motor



- 1x 17HS4401 stepper motor, 3x M3x18 screw
- Take the 17HS4401 stepper motor and mount it to the x-end-motor with screws

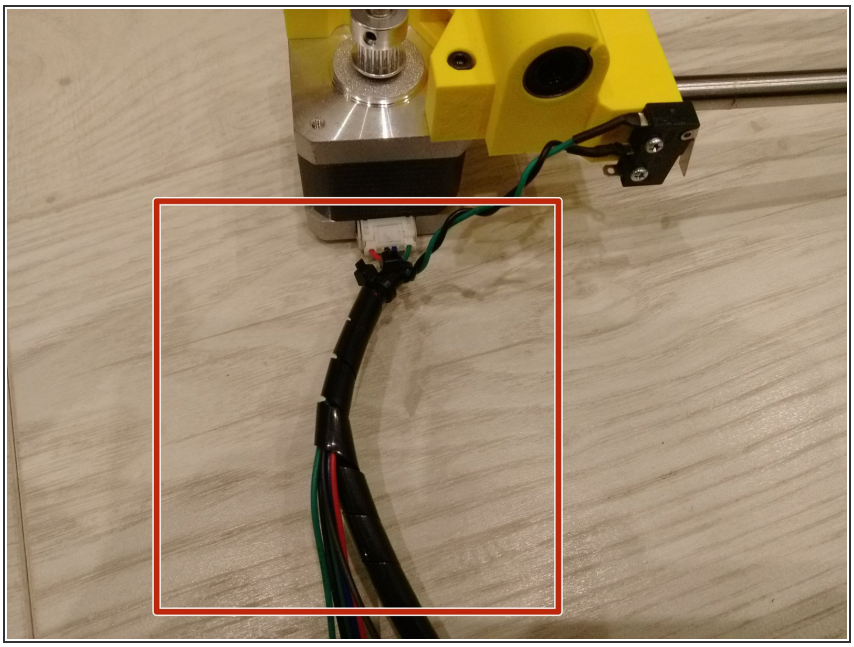
Step 9 — X-axis pulley



- Take the GT2-16 pulley and mount it on the motor shaft

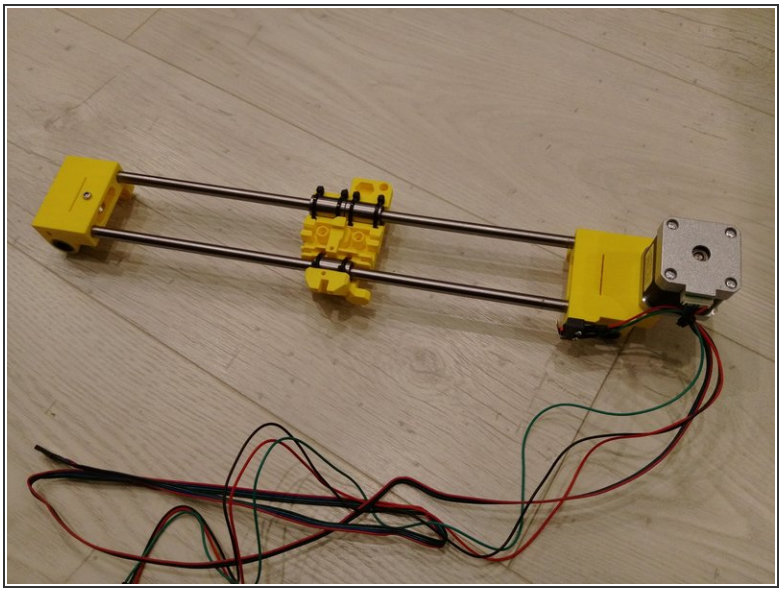
Make sure that one of the screws in pulley are touching the flat side of motor shaft

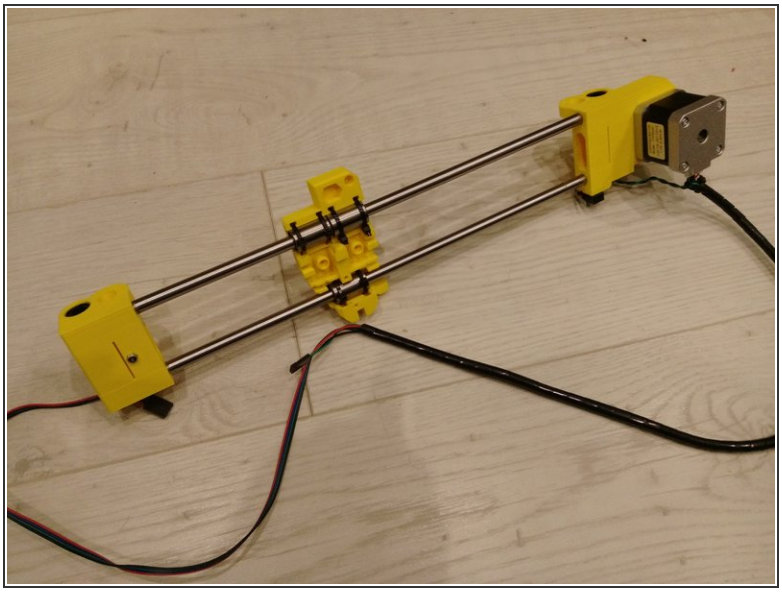
Step 10 — Cable wrap



- Take the spiral wrap and bend it over the cables from X axis, starting as shown on image

Step 11 — X-axis is ready!





- The X-axis is ready, you can now go to Z-axis assembly!

If your already finished your beverage, go to fridge for another one