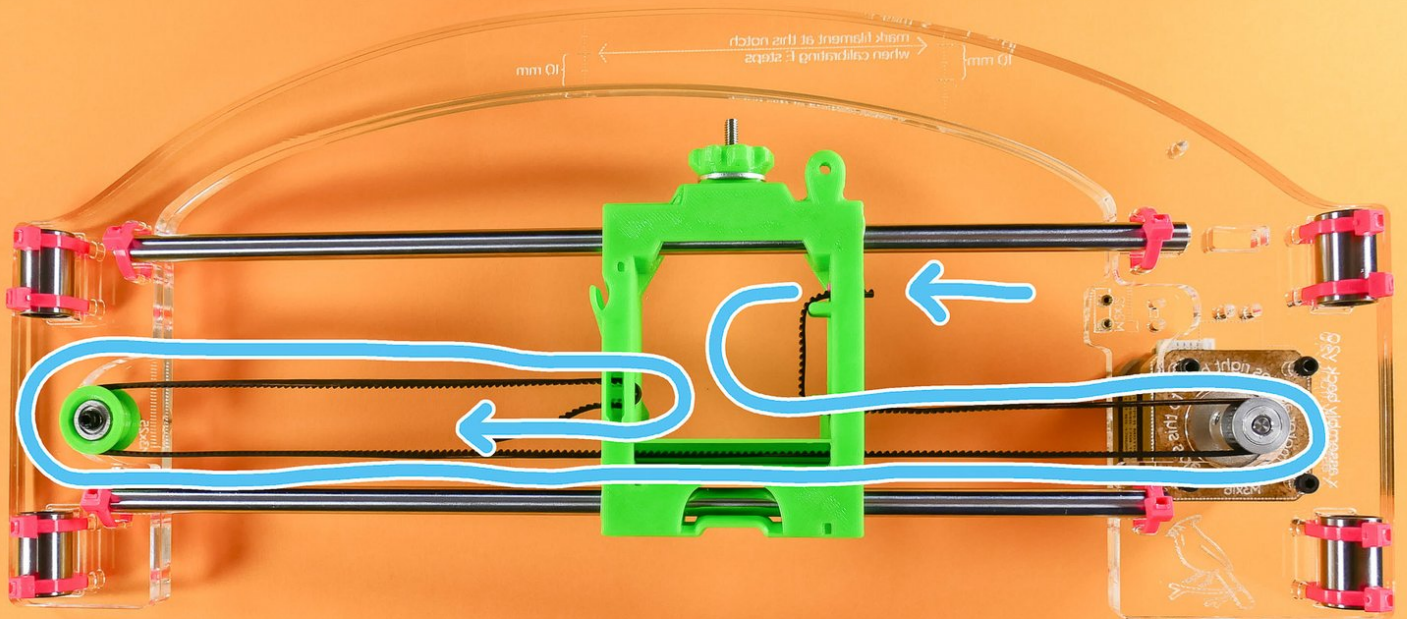




X Assembly Motion Platform



INTRODUCTION

Not the guide you are looking for?

Go back to the [← Makers Kit Build Flow.](#)

Step 1 — ↳ Install the X Pulley

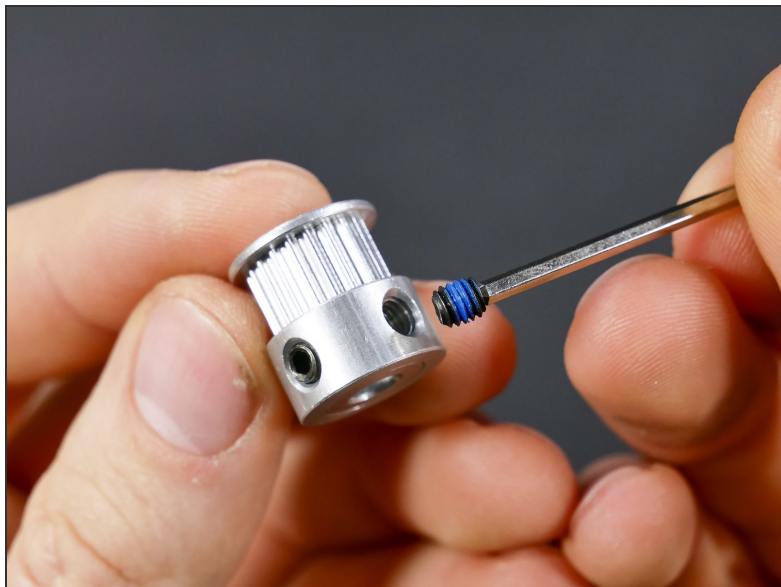
 This procedure is the *same* as installing the Y Pulley you did a while ago - just with the X Motor :-)

Step 2



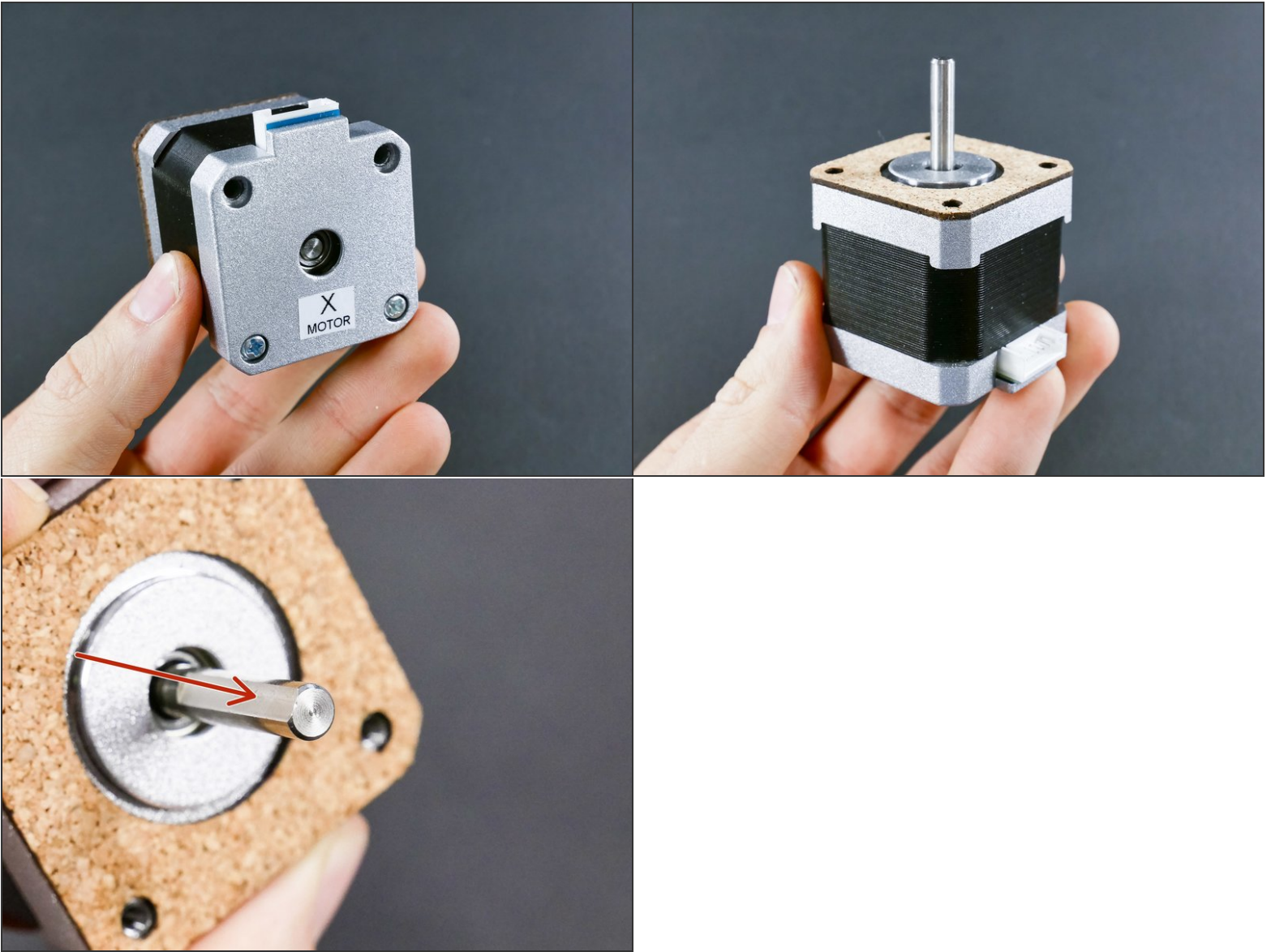
- Insert wisdom here.

Step 3



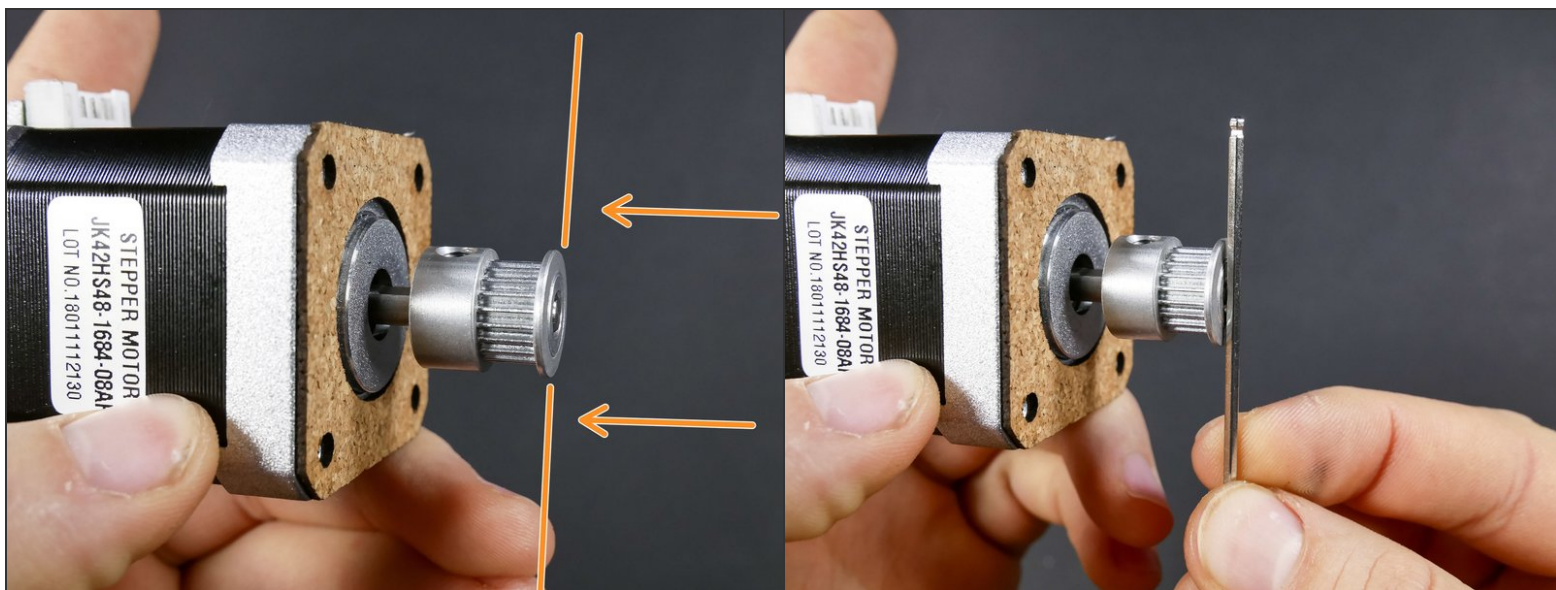
i These little things are called **set screws** or **grub screws**. Our set screws also have a *blue nylon patch* that prevents loosening by vibrations (the patches are a kind of *threadlock*)

Step 4



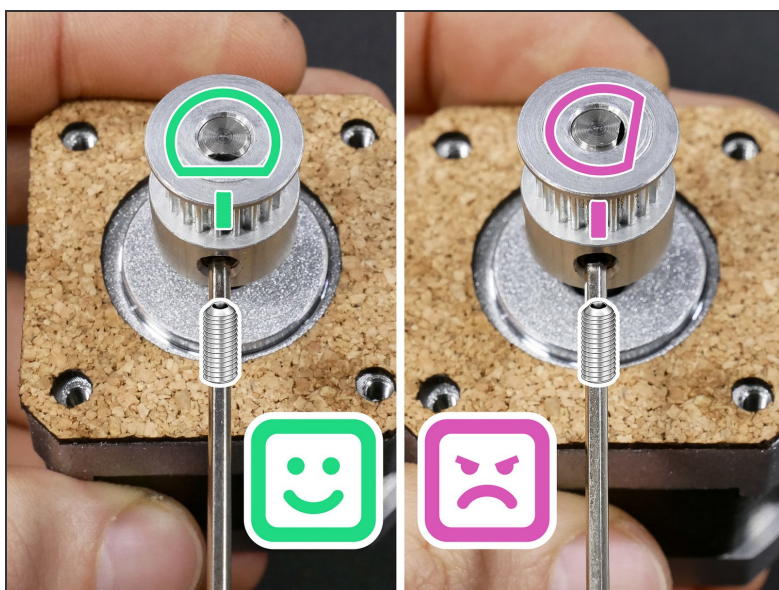
Notice that the motor shaft has one **flat side**.

Step 5



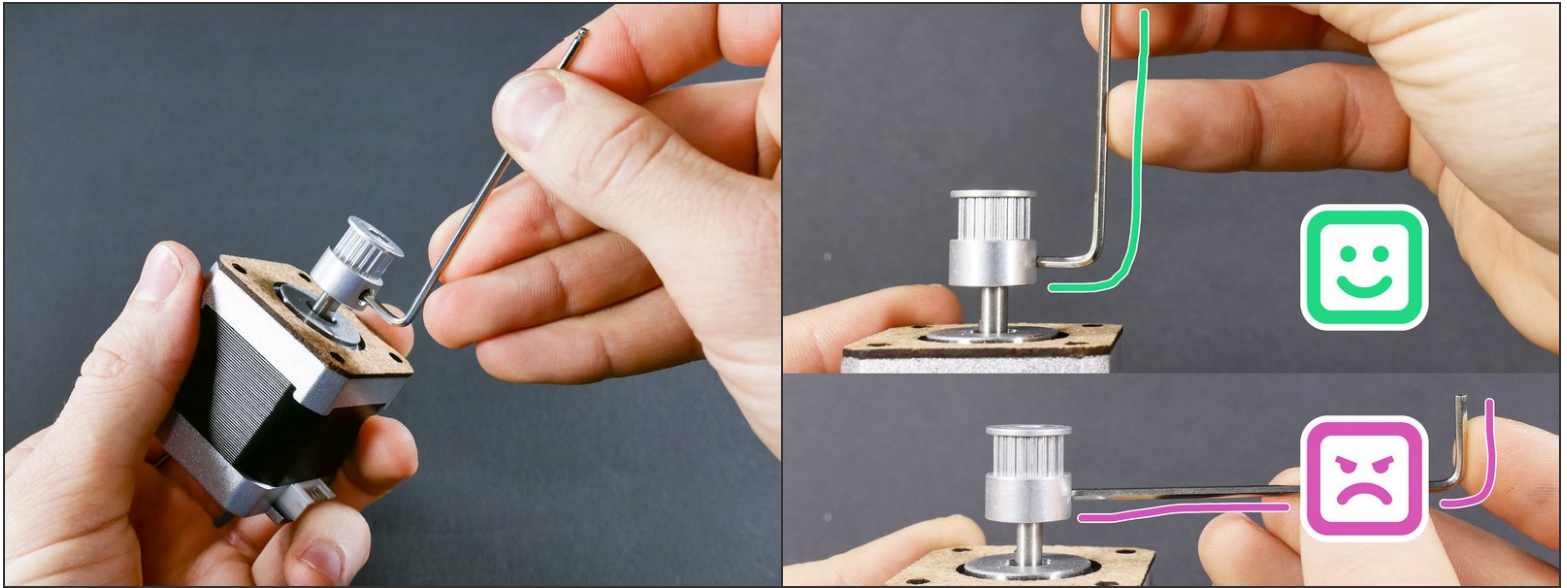
- Make the top of the motor shaft **flush** with the top of the pulley.

Step 6



- ⚠ Rotate the pulley so that one **set screw** is against a **flat side** of the motor shaft. This is extremely important.

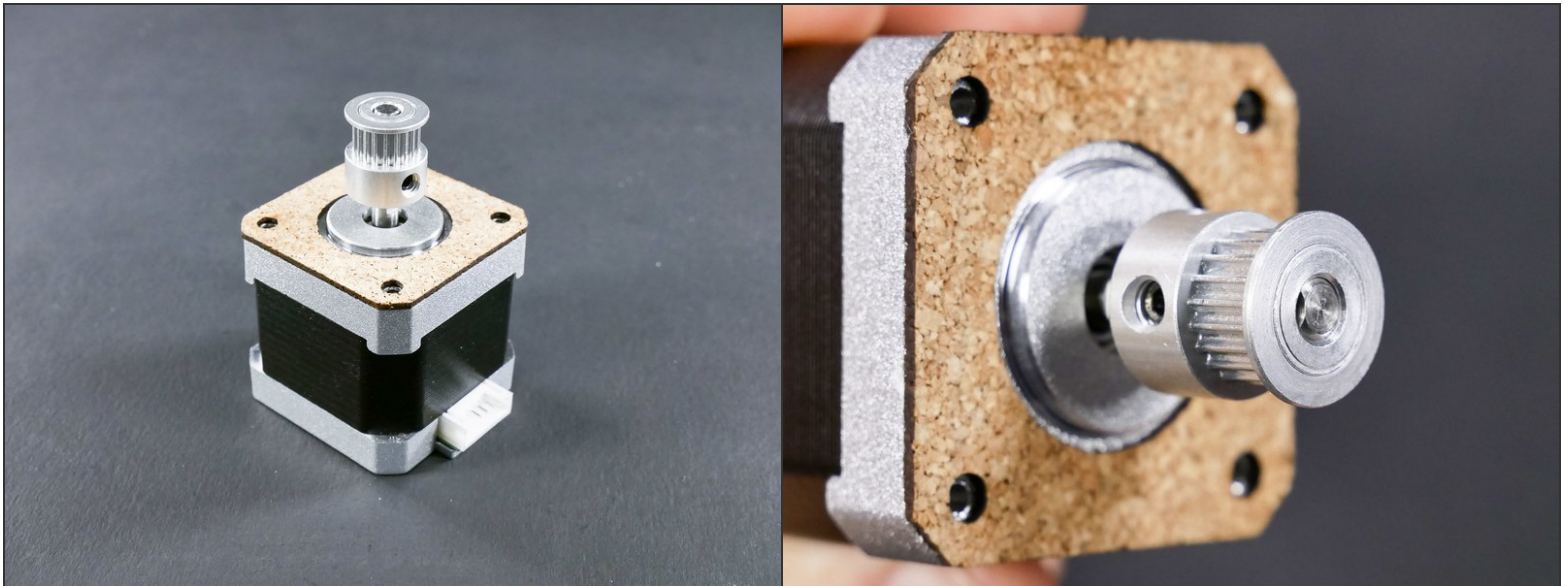
Step 7



⚠ Tighten both set screws well using the long side of the hex key. We do not want these to be loose.

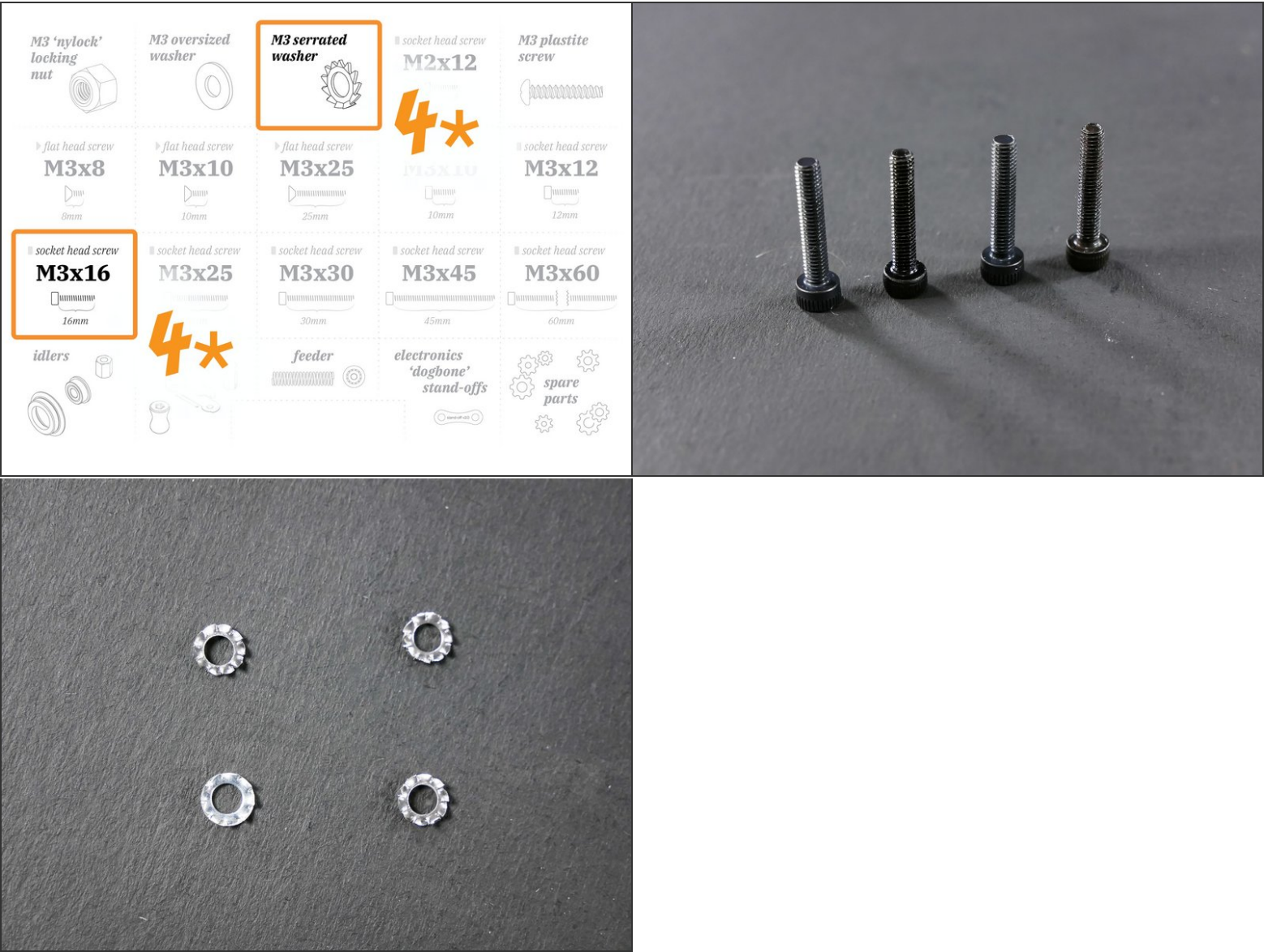
⚠ Tightening well does not mean tightening with unrestrained force. You can strip the set screw threads or its hex head if you use too much force.

Step 8 — Tadaaa!



- Insert wisdom here.

Step 9 — ↪ X Motor



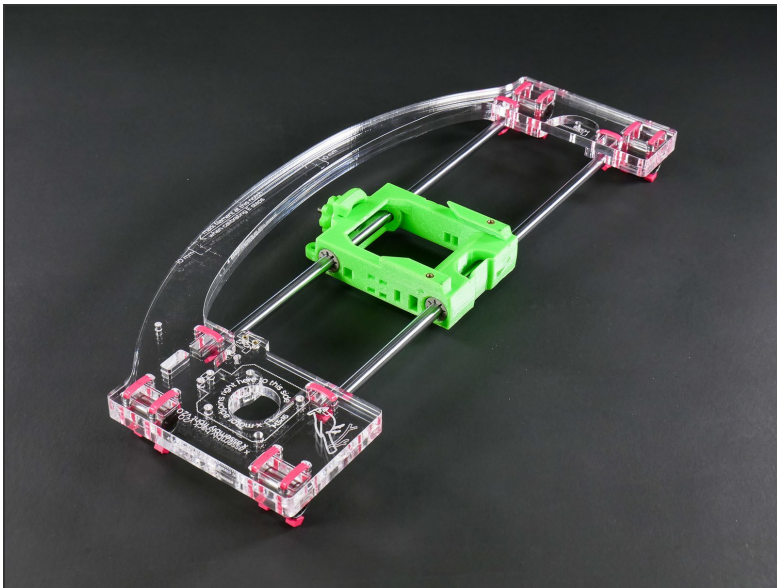
● M3x16

Step 10



- M3x16

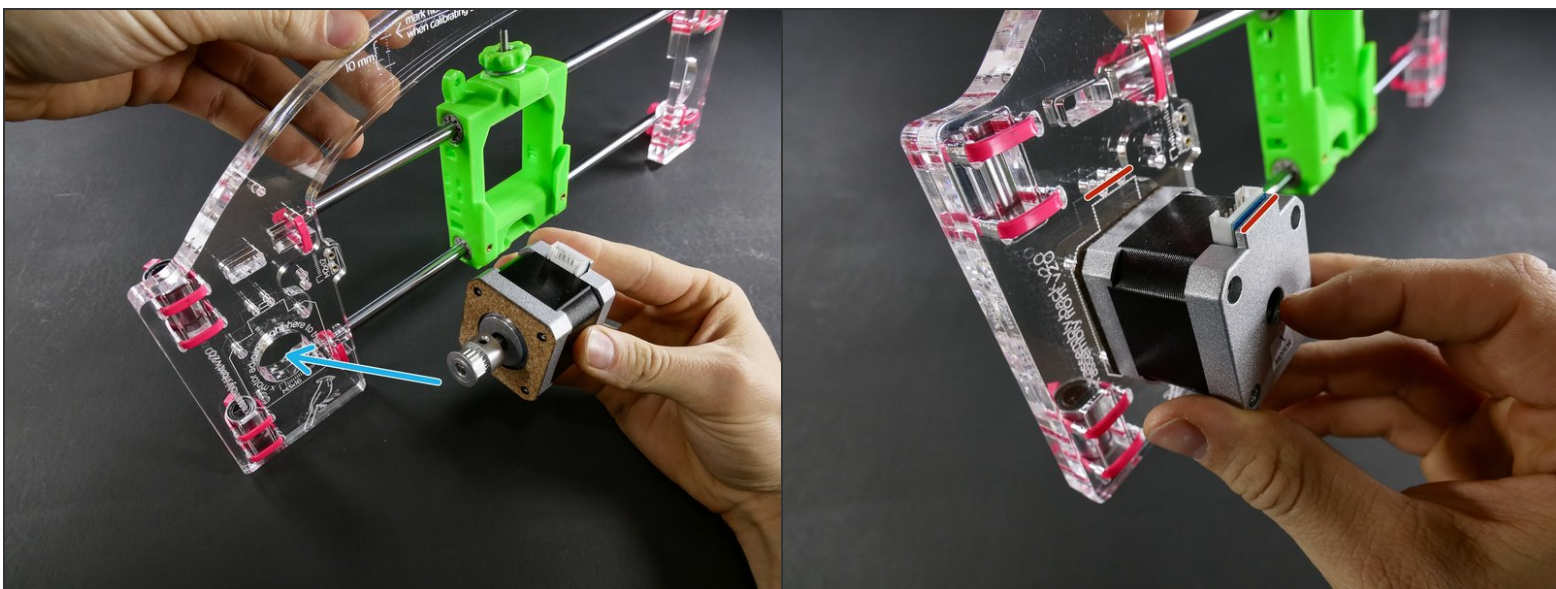
Step 11



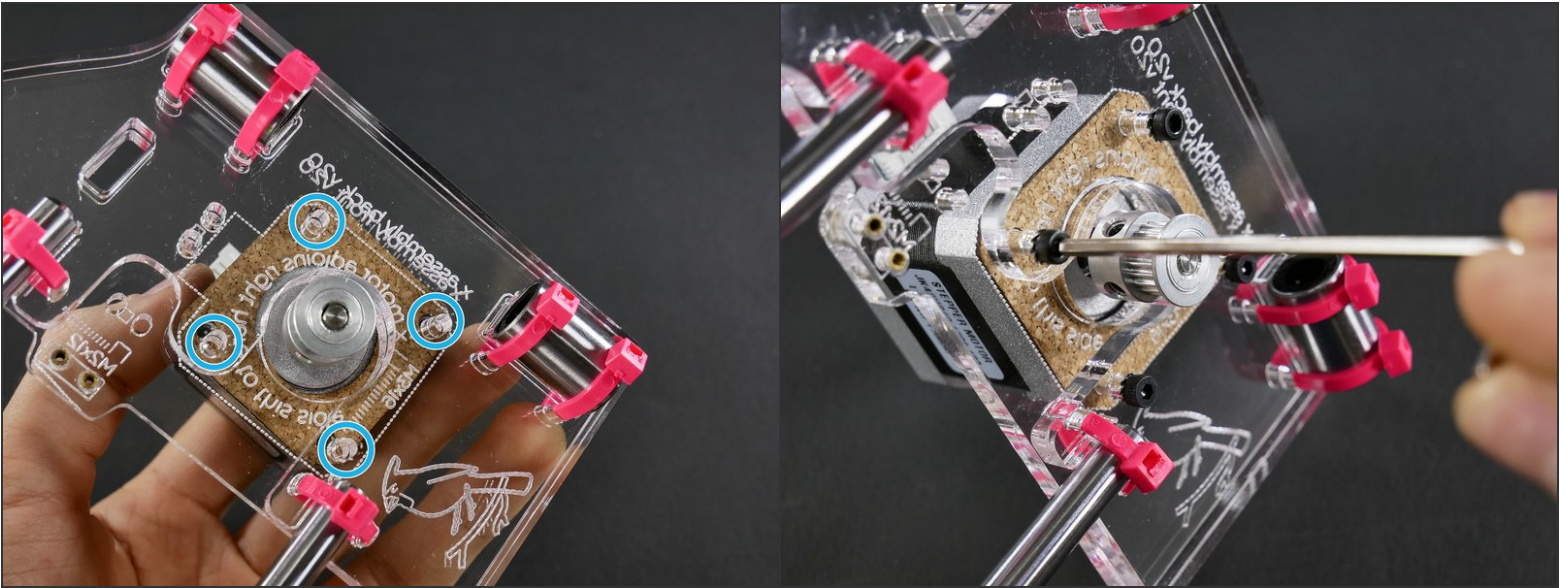
Step 12



Step 13

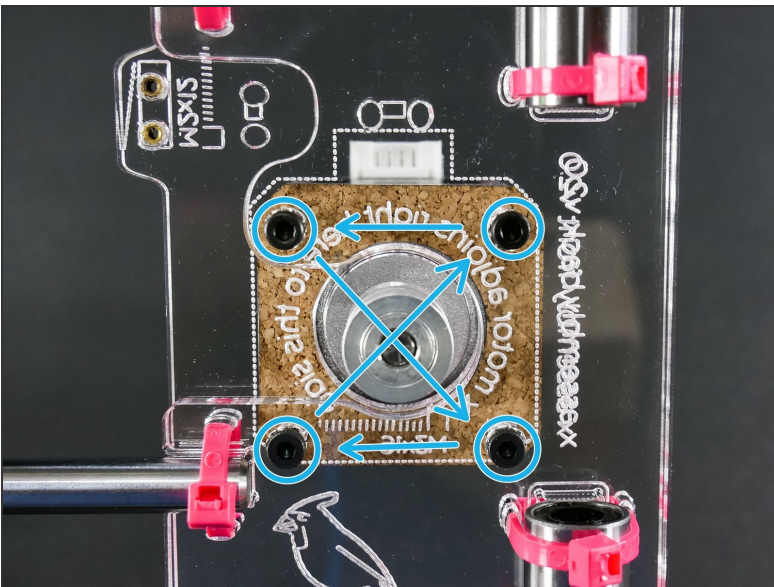


Step 14



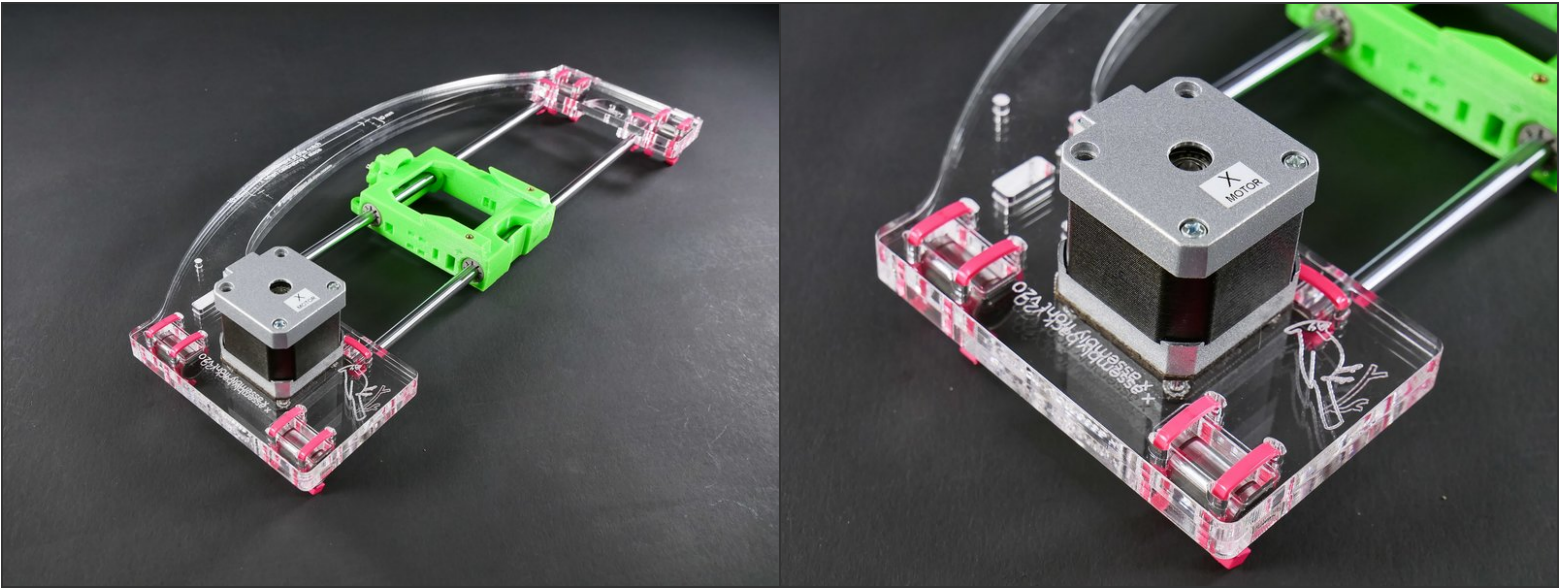
- M3x16

Step 15 — ✂ Technique: Cross Tightening



- Avoid alignment issues by tightening the screws **little by little in a diagonal pattern**.
- This is called "cross-tightening", and you should do it *every time** you have more than one screw to tighten.
- * *even when you're not building a JellyBOX*
- Fancy a [▶ VIDEO?](#)

Step 16 — It's done!



Step 17 — ↳ Prep an Idler

M3 'nylock' locking nut

M3 oversized washer

M3 serrated washer

socket head screw M2x12

M3 plastite screw

flat head screw M3x8

flat head screw M3x10

flat head screw M3x25

socket head screw M3x10

socket head screw M3x12

socket head screw M3x16

socket head screw M3x25

socket head screw M3x30

socket head screw M3x45

socket head screw M3x60

idlers

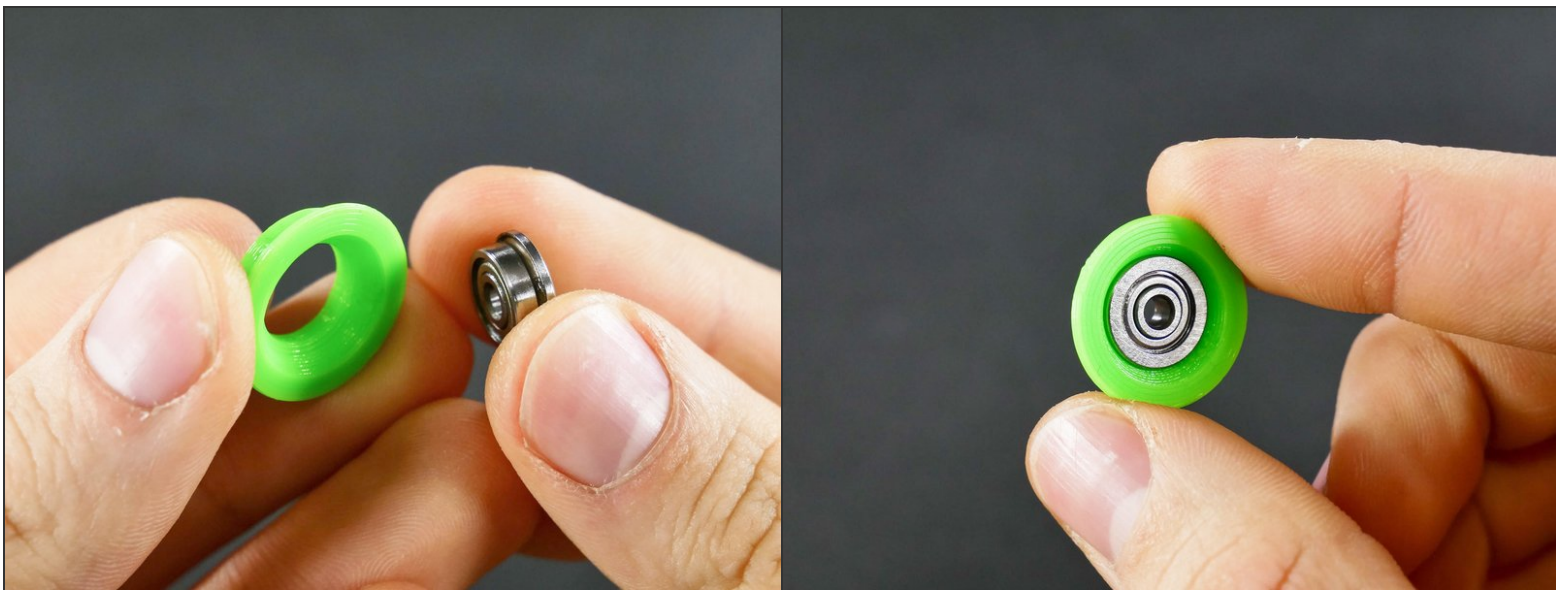
2*

feeder

electronics 'dogbone' stand-offs

spare parts

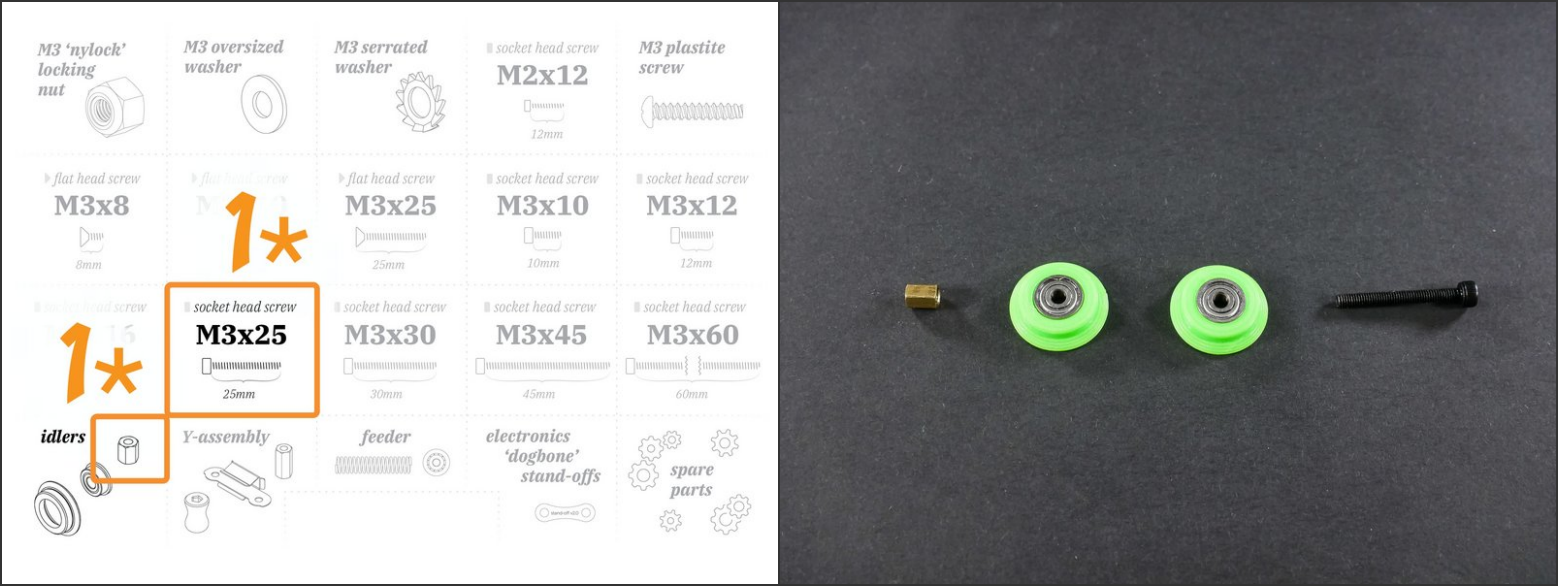
Step 18



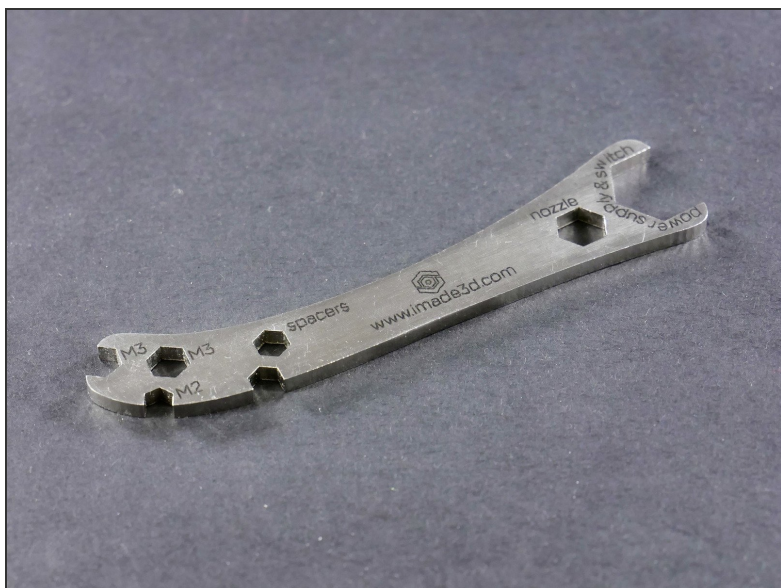
Step 19



Step 20



Step 22



Step 23




- Tighten well.
- This is metal-on-metal tightening, so you do not have to be as gentle as usual.

Step 24 — Looking good!




Step 25 — ↪ Install the X Idler


M3 'nylock' locking nut




M3 oversized washer



2*




1*




flat head screw

M3x10




flat head screw

M3x25




socket head screw

M2x12




M3 plastite screw




socket head screw

M3x16




socket head screw

M3x25




socket head screw

M3x30




socket head screw

M3x10




socket head screw

M3x12




socket head screw

M3x45




socket head screw


M3x60




idlers




Y-assembly




feeder




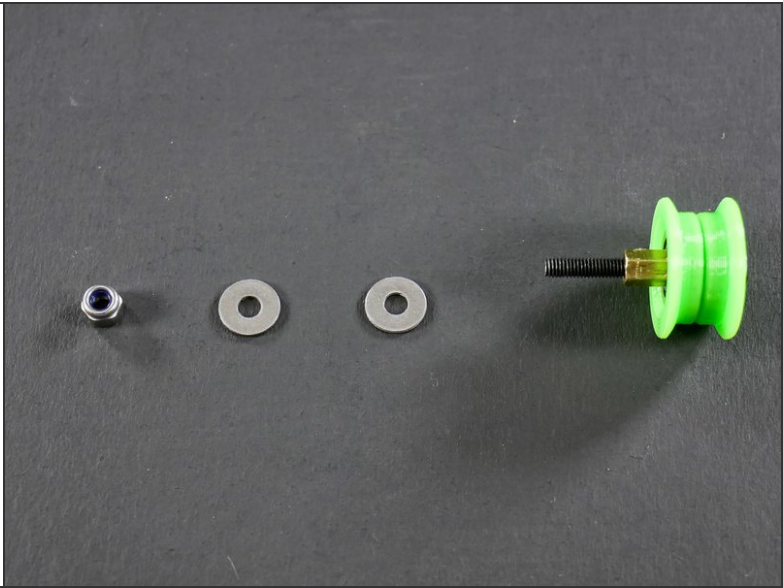
electronics 'dogbone' stand-offs



spare parts



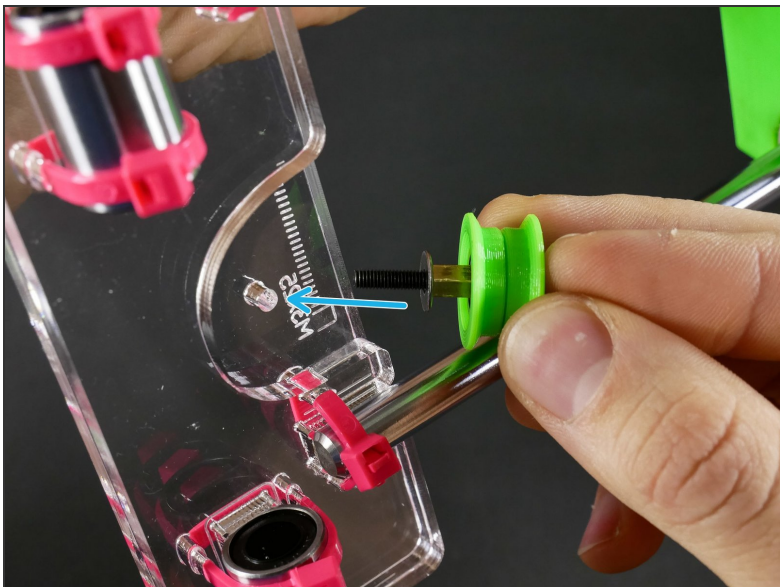




Step 26



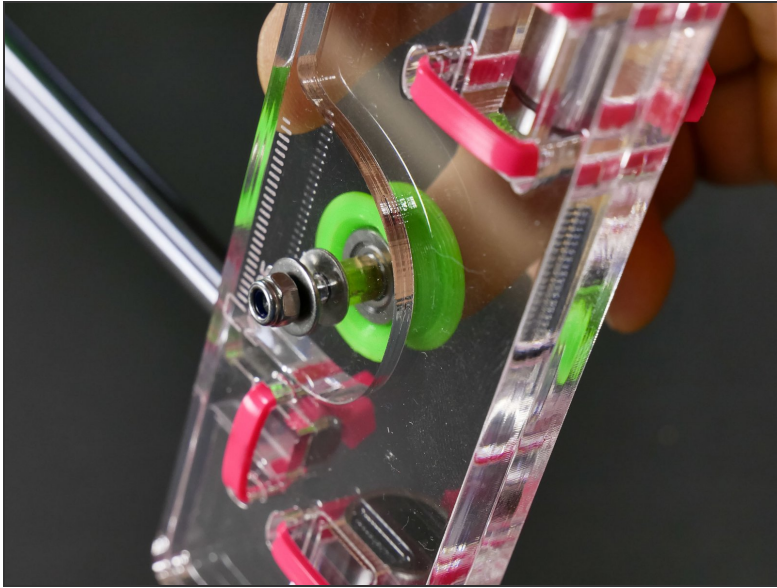
Step 27



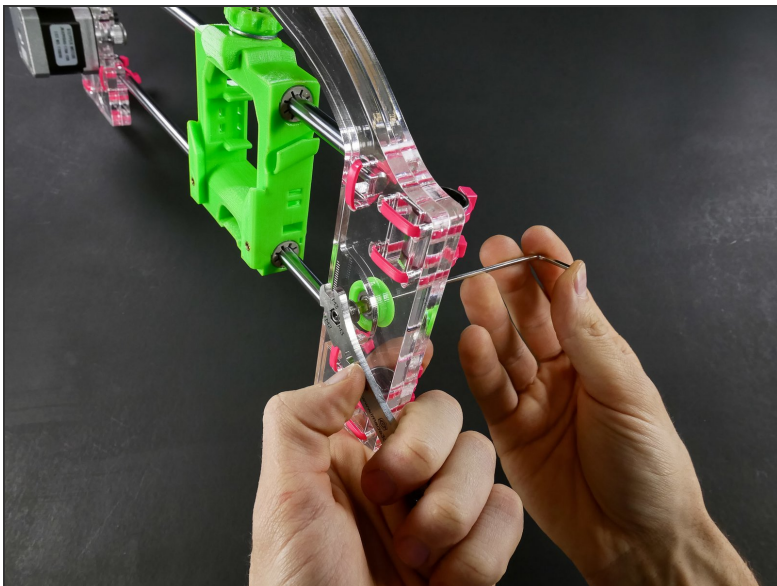
Step 28



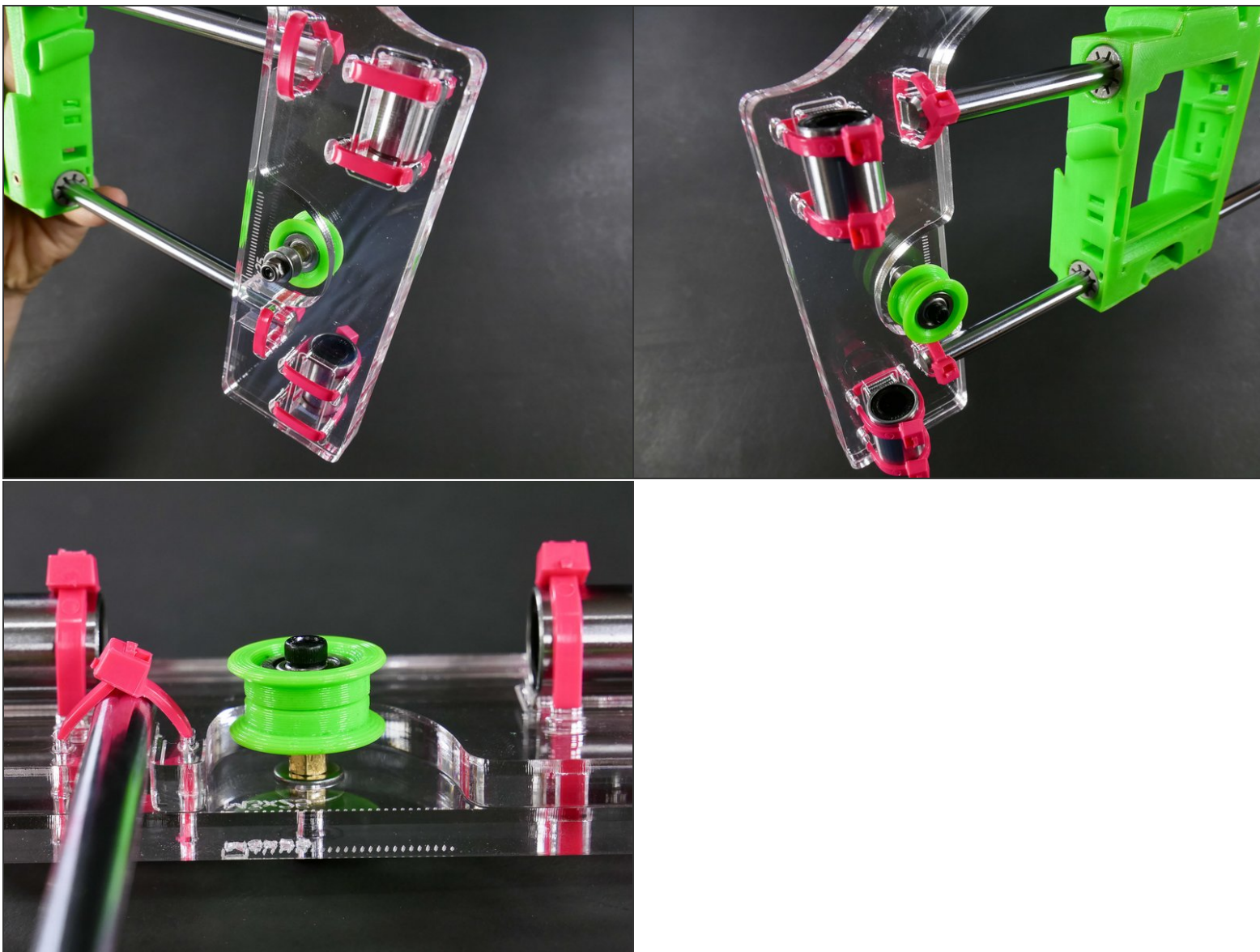
Step 29



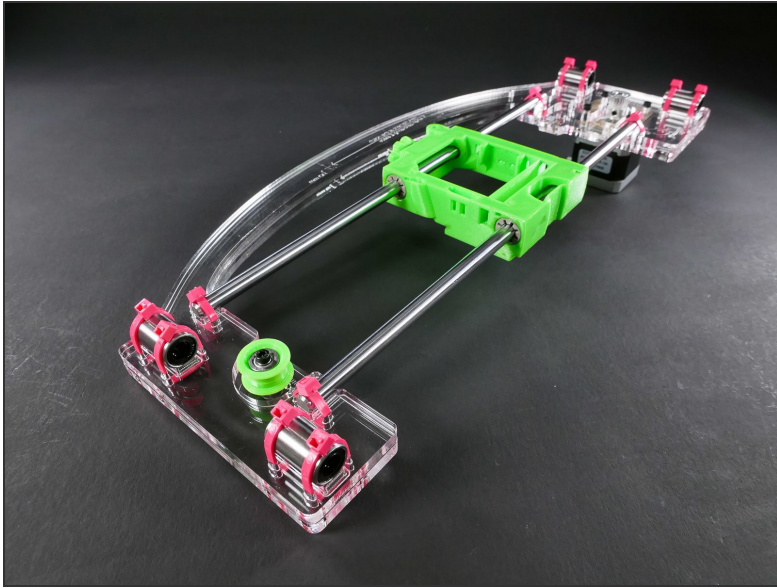
Step 30



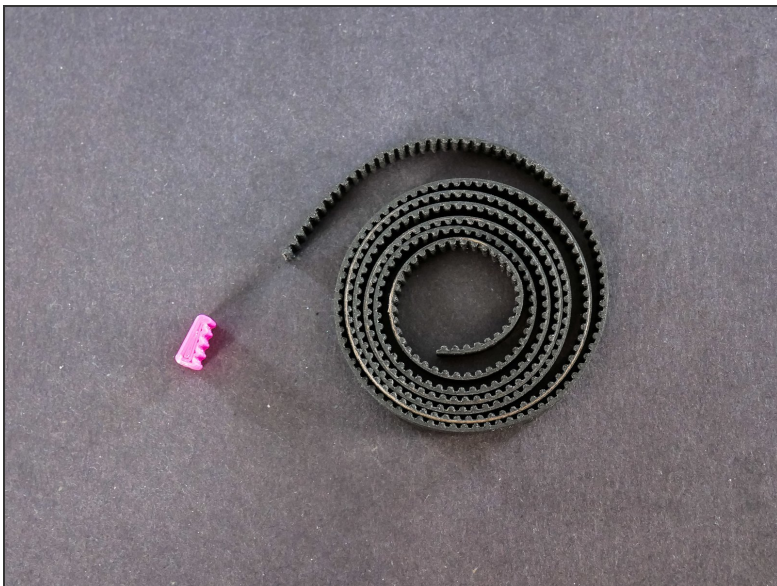
Step 31



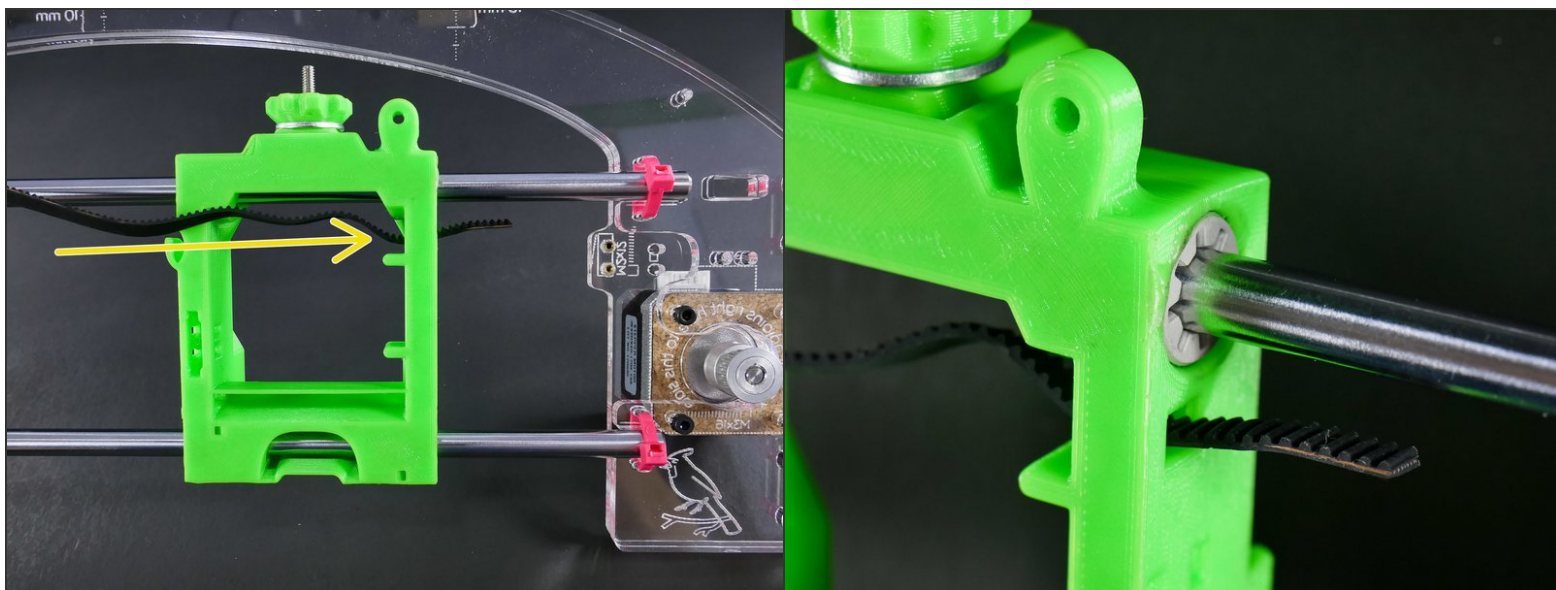
Step 32 — It's done!



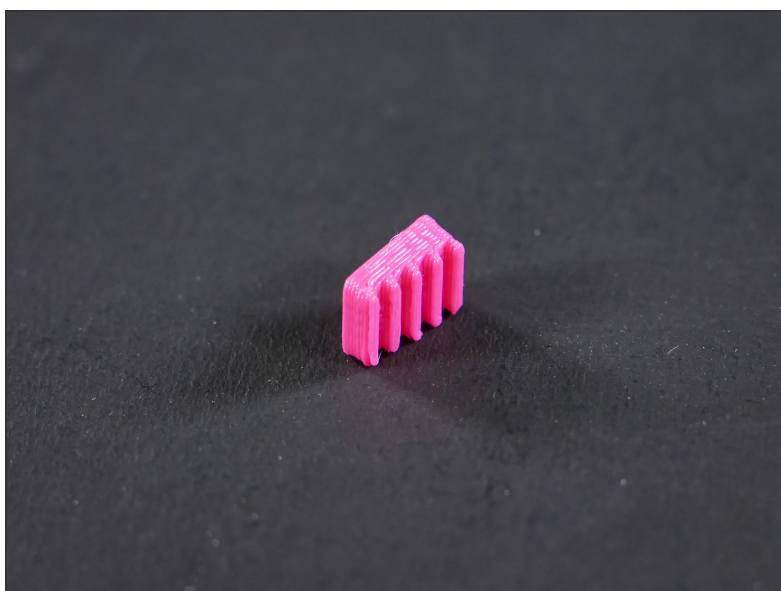
Step 33 — ↳ X Belt



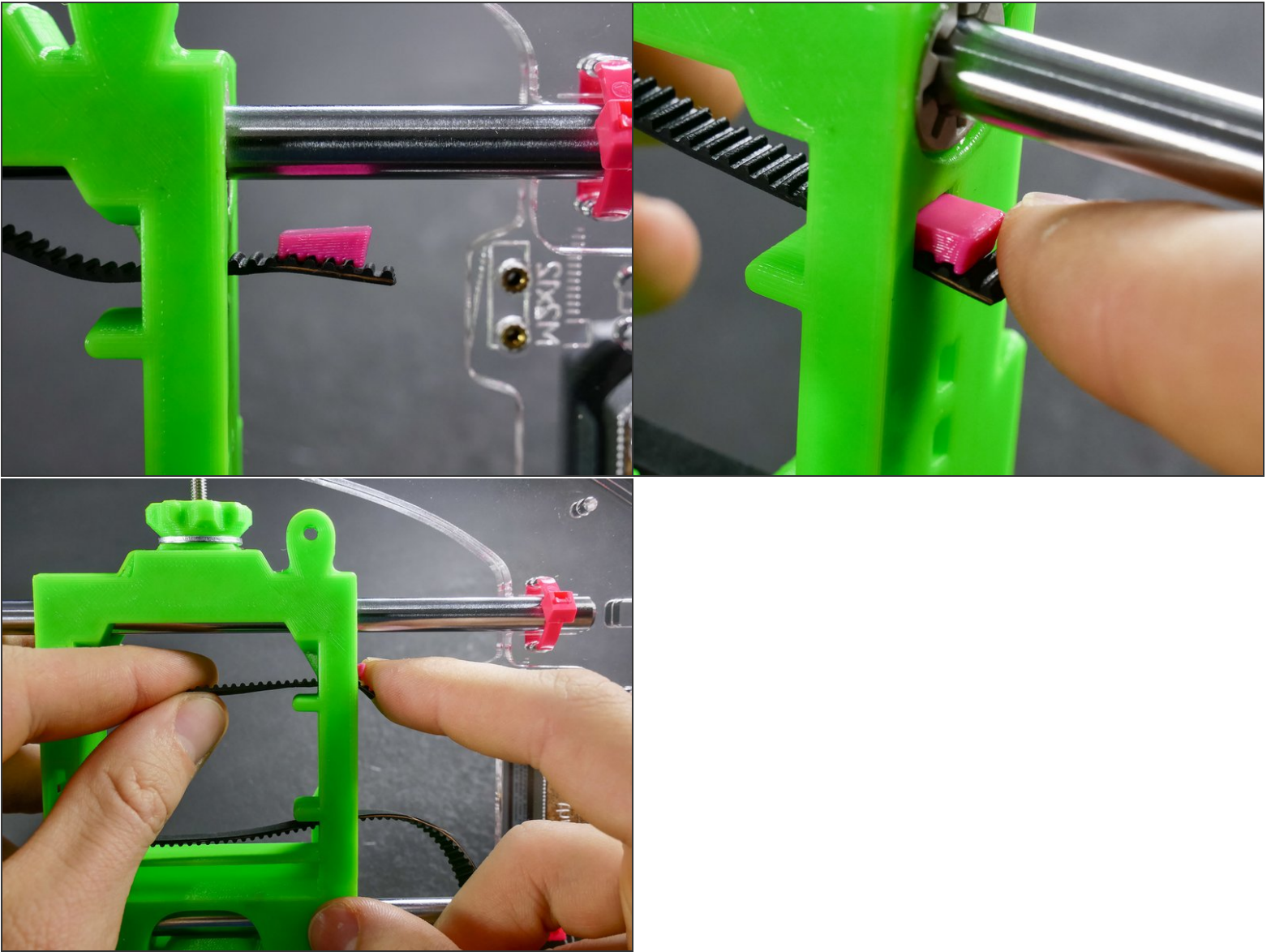
Step 34



Step 35

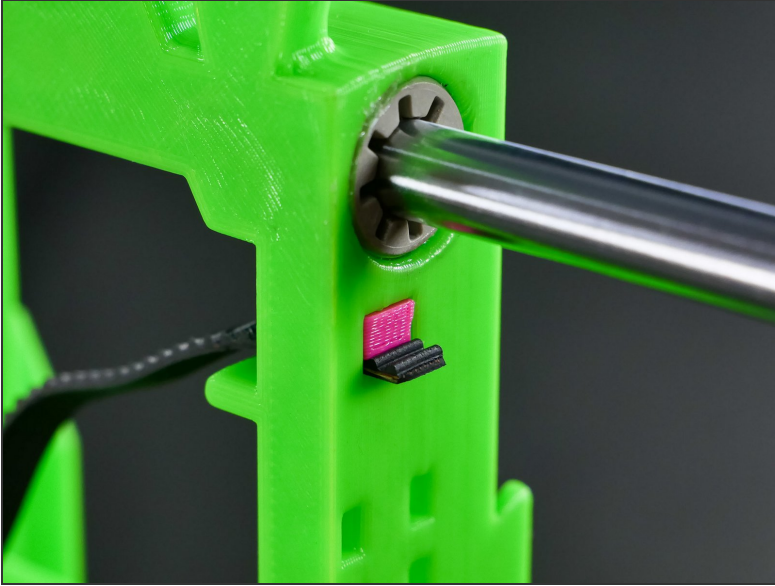


Step 36



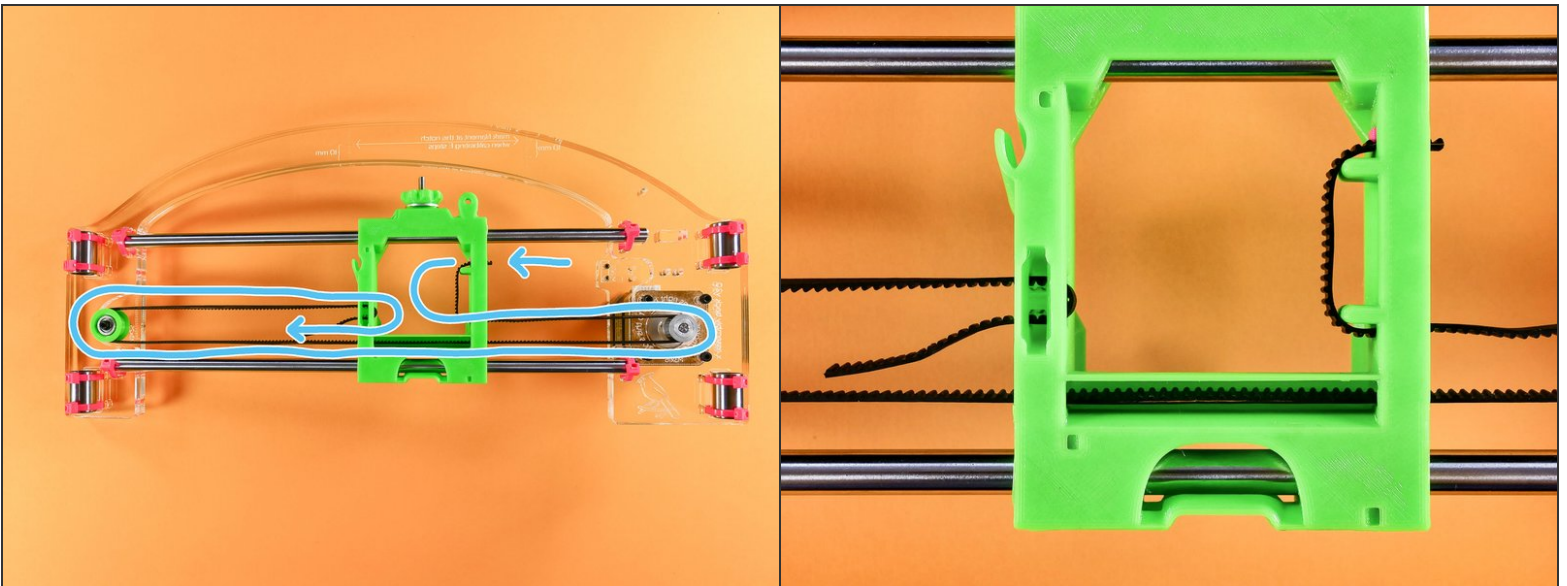
- The position of the wedge on the belt is not precise - you only need to make sure *to fit the belt teeth into the wedge teeth.*

Step 37

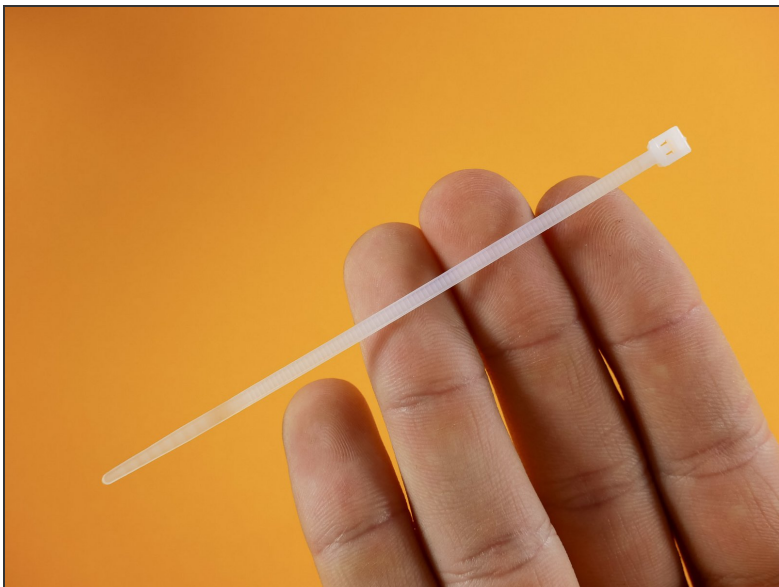


- You may cut off the excess if you wish.

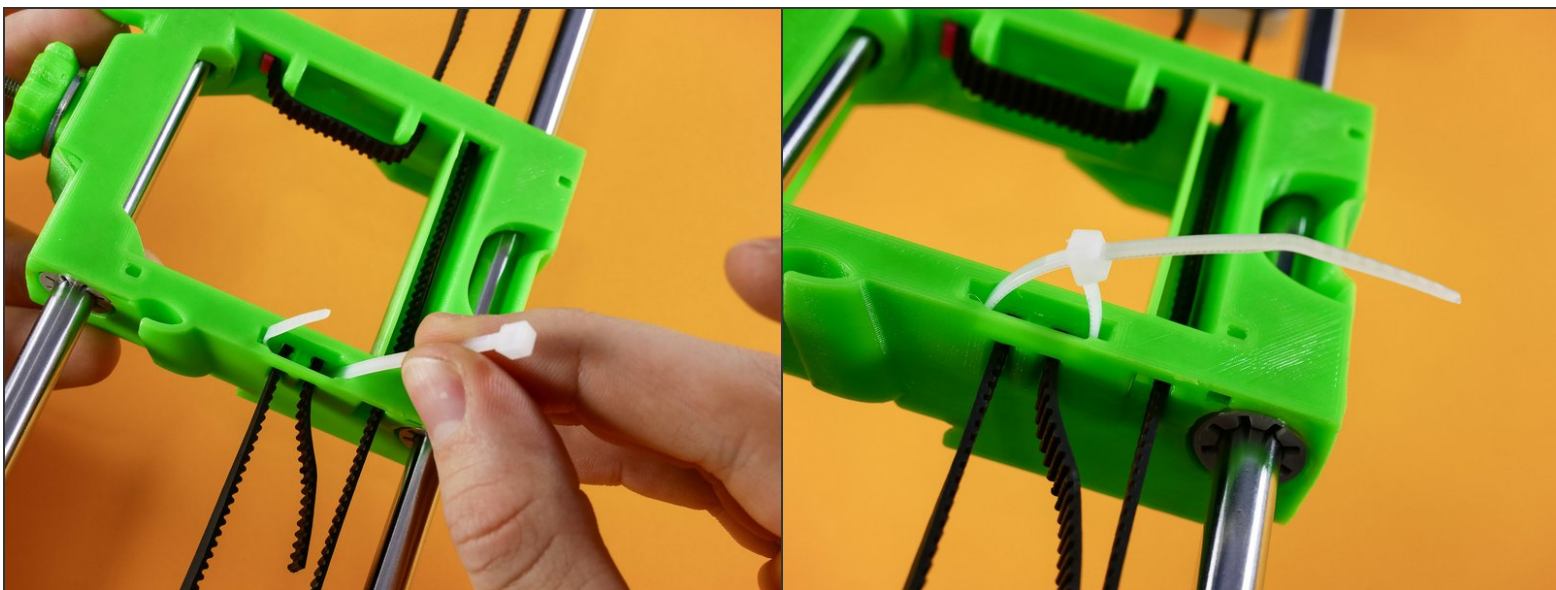
Step 38



Step 39

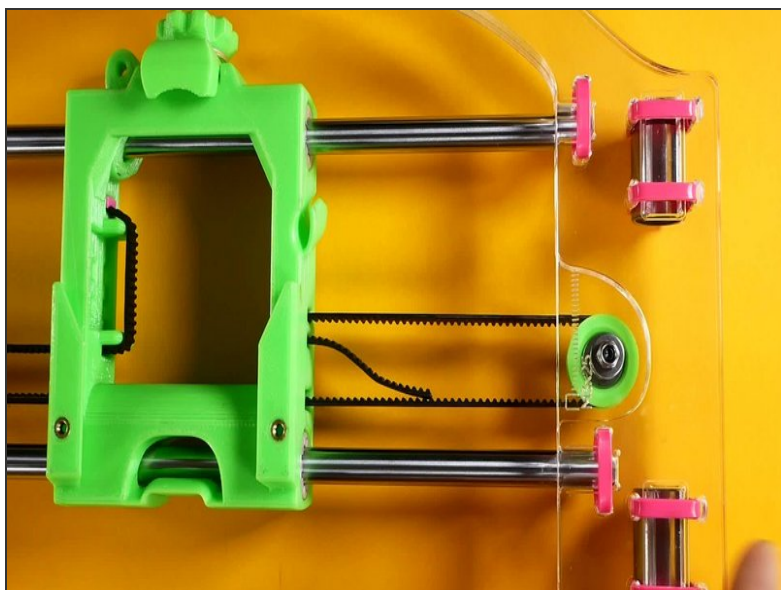


Step 40



Step 41 — ► Video: Secure the X Belt (25s)

- ► Video: Secure the X Belt (25s)

Step 42 — ► Video: Clip the X Belt (35s)

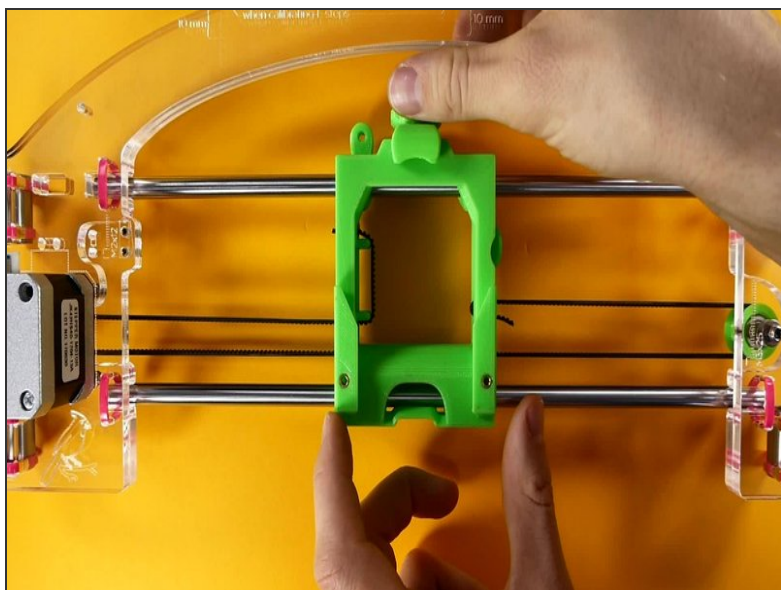
- ► Video: Clip the X Belt (35s)

Step 43



- \approx Leave a bit less than a centimeter ($3/8$ inch) of the x belt intact in case you ever need to dis-or-re-assembly your JellyBOX.

Step 44 — ► Video: X Mechanical Checkpoint #1



- ► Video: X Mechanical Checkpoint #1

What's Next?

Get back to the [← Makers Kit Build Flow](#) and continue with the next guide.