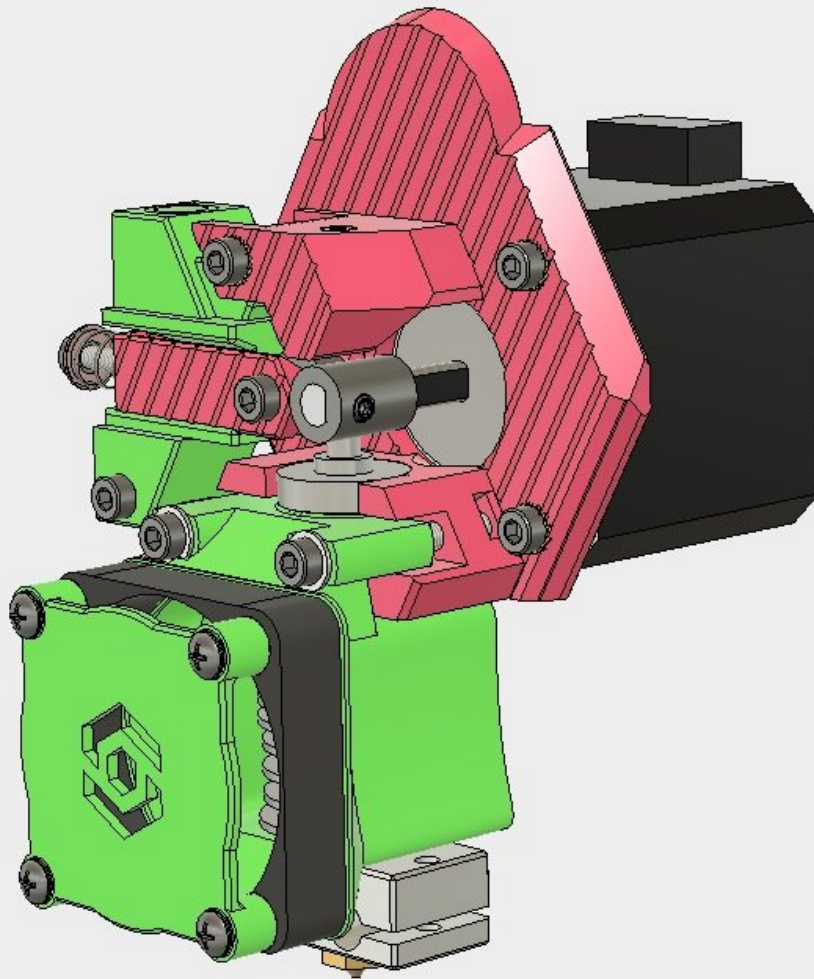




Assemble the Extruder

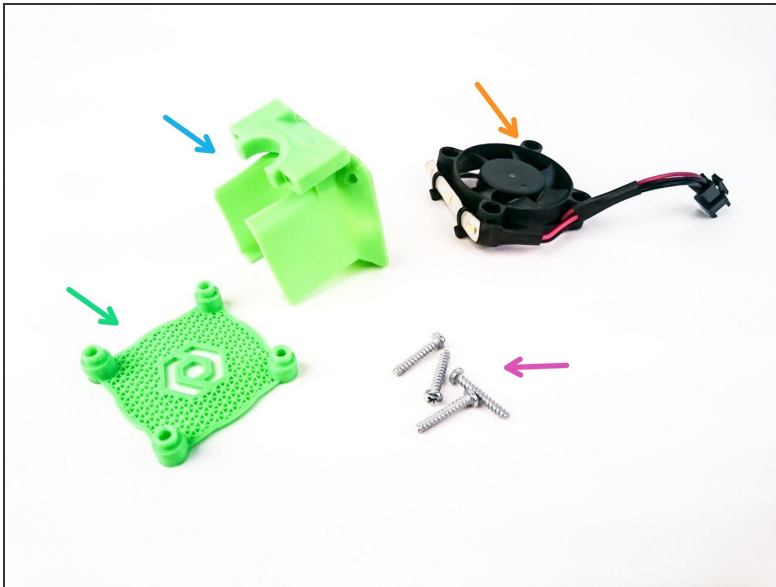
In this guide, we prepare the extruder.



INTRODUCTION

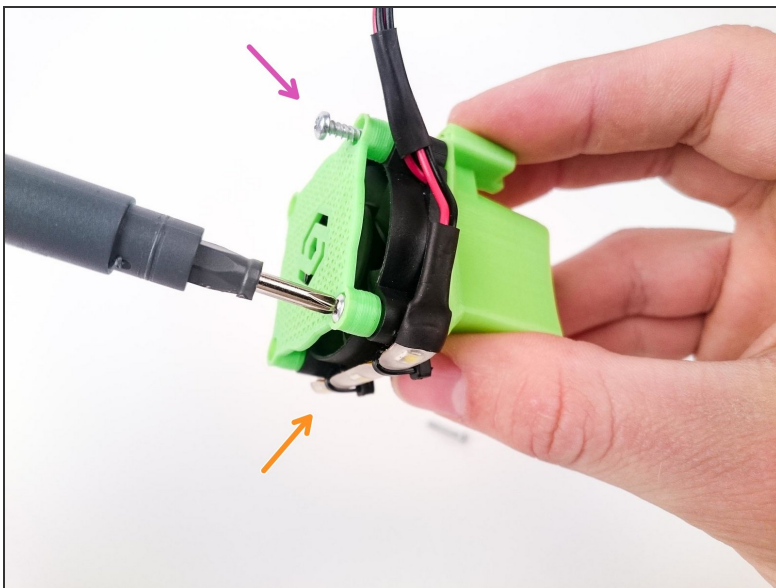
The heart of the printer, the Extruder is responsible for melting filament and extruding it with high precision out of a small orifice (hole) in the nozzle.

Step 1 — You'll need:



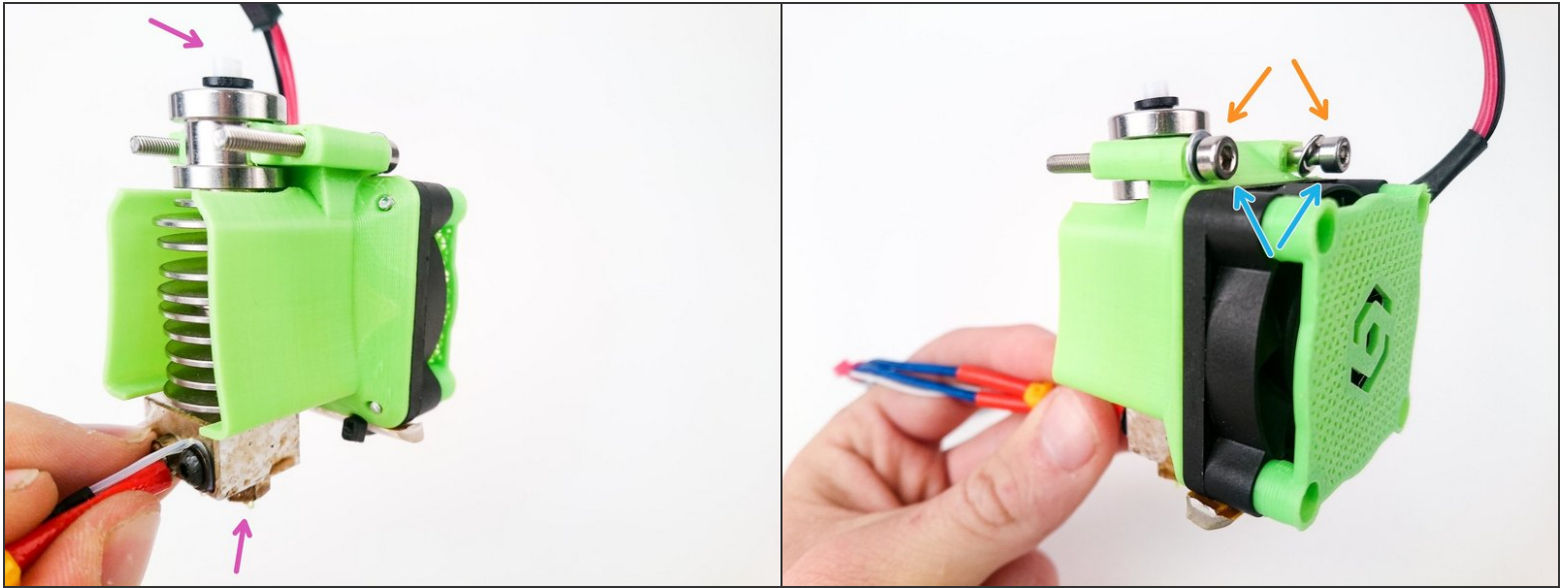
- Hotend shroud
- Hotend fan cover
- Hotend fan
- Plastite screws (super smart screws specifically designed not to get loose in plastic) (4)

Step 2



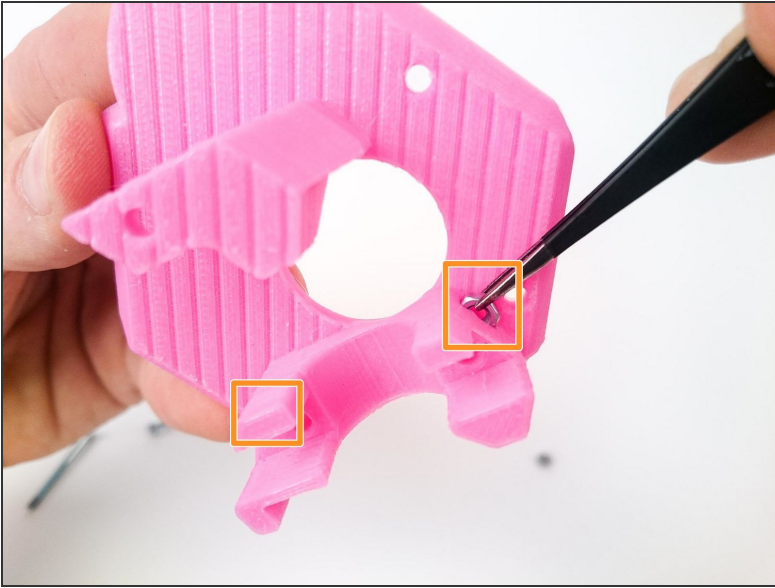
- Sandwich the fan shroud with the fan and the fan cover.
- Make sure the LED strip is at the bottom as shown.
- Plastite screws.

Step 3 — Hotend Assembly



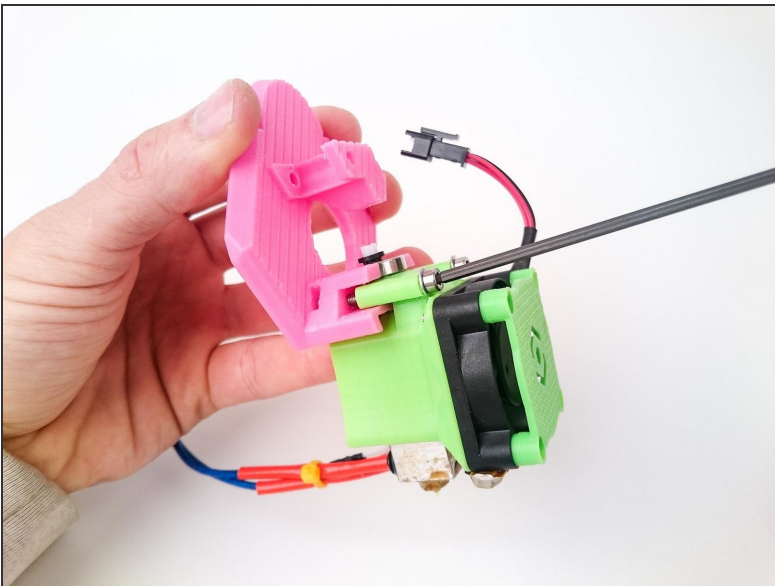
- Insert the hotend, making sure the wires are going towards the back - away from the fan.
- ⓘ If you haven't assembled your HotEnd, simply use the heatsink alone for now, and augment your extruder later.
- M3x25 screws
- M3 washers

Step 4



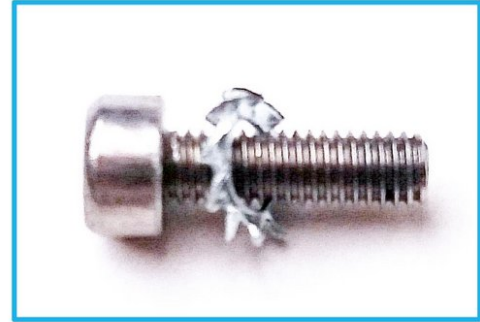
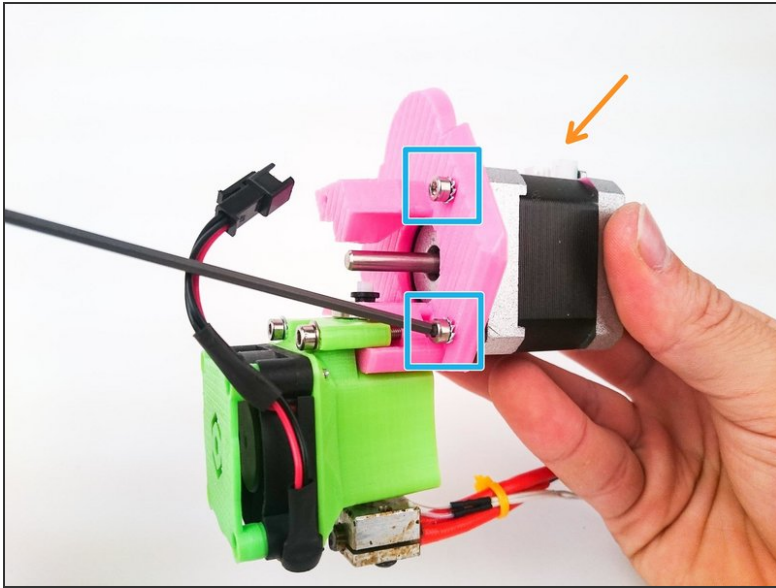
- Drop two M3 nuts into slots in the extruder base.

Step 5 — Extruder Plate



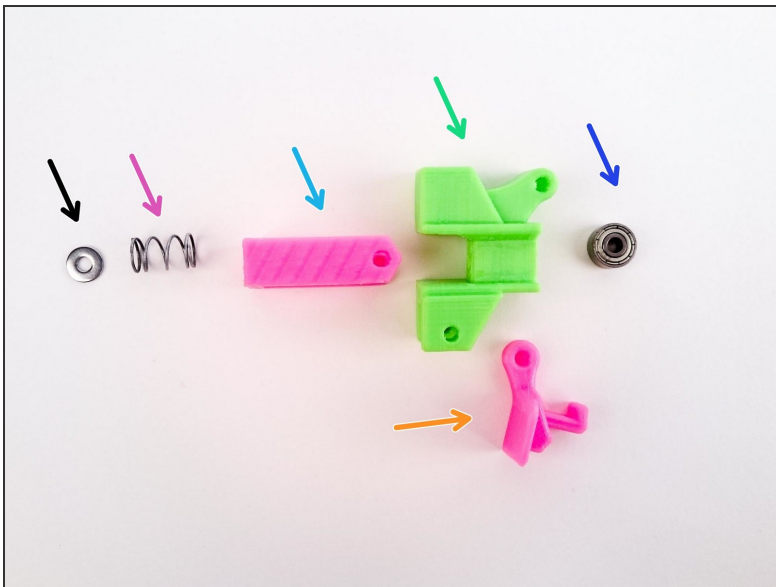
- Attach the hotend assembly to the extruder plate.
- Don't over tighten! As soon as you can't easily rotate the hotend by hand, you have plenty of holding power.

Step 6 — Add the E stepper



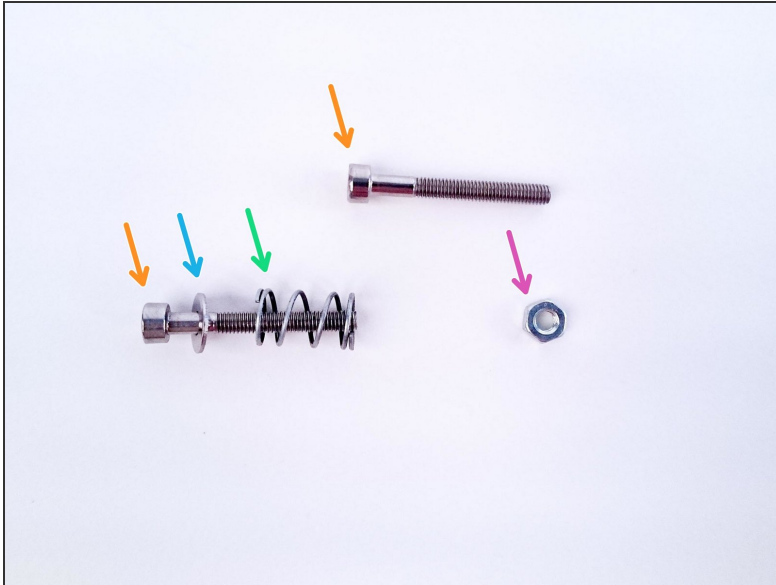
- Use M3x10 screws and M3 serrated washer to attach the E motor.
- Make sure the motor connector is facing UP.
- (Again). Do not over tighten. You will compromise the plastic.

Step 7 — What you need for the Feeder Assembly:



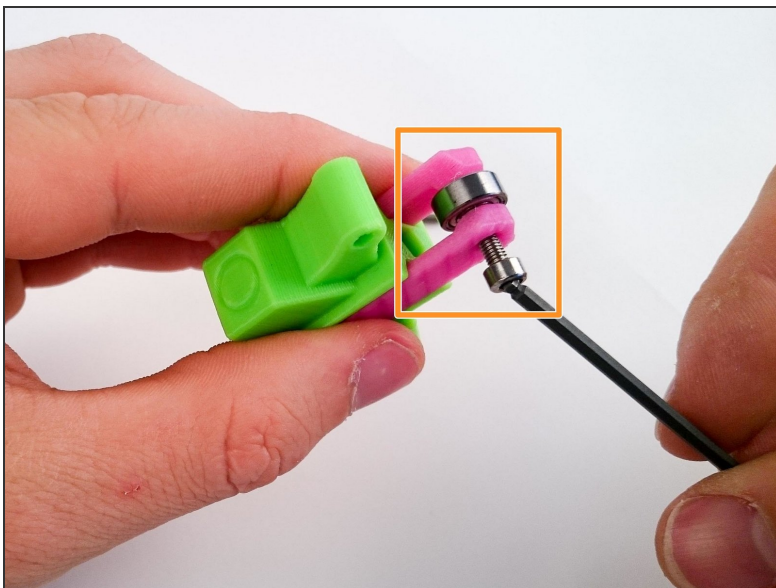
- ① You will find all the needed part in a packet alongside your extruder.
- Oversized M3 Washer
- Spring. (Your spring may look different! That's ok. Recent JellyBOXes use a longer, thinner spring.)
- Feeder Yoke
- Feeder Arm
- Feeder Latch
- 623Z Bearing

Step 8 — Extruder DONE.



- M3x35 (only one)
- M3 oversized washer
- Spring
- M3 nut

Step 9 — Arm and Yoke



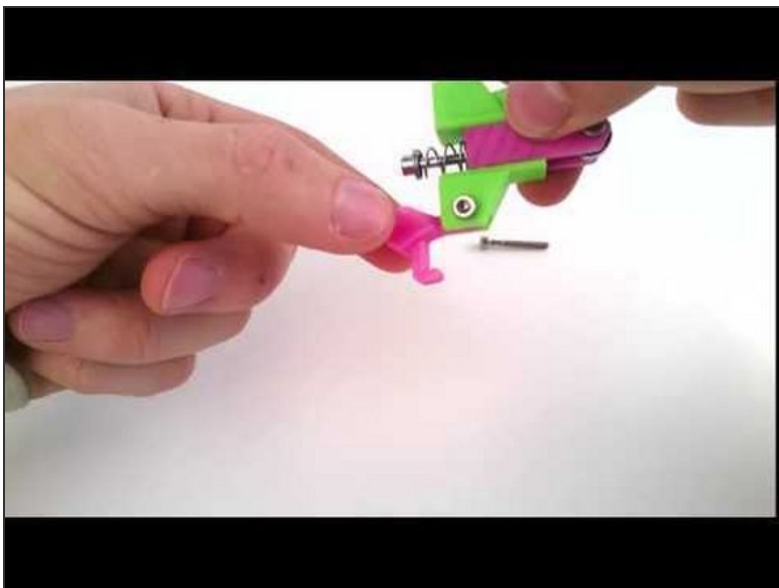
- Attach the bearing to the yolk with M3x14 screw.
- The M3x14 screw goes right into the plastic. Do not over tighten. The bearing should spin, and the yoke should move move back and forth freely.

Step 10



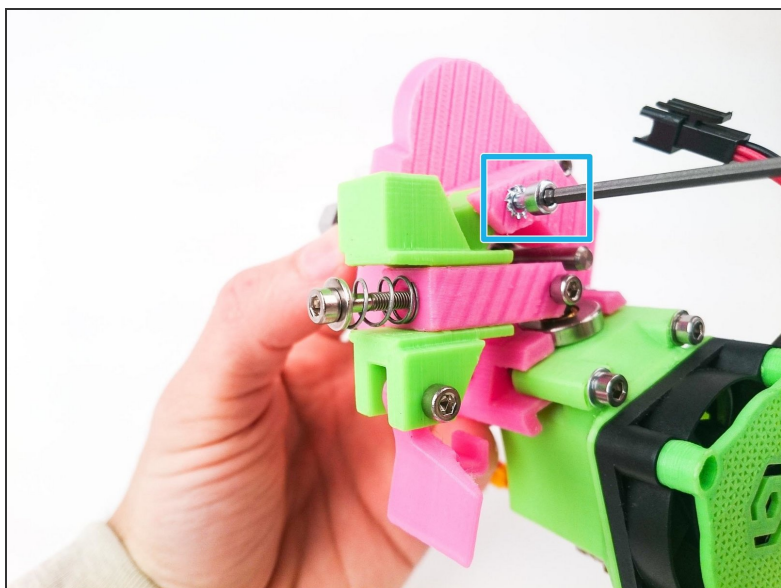
- Attach the feeder latch with an M3x14. Do not over tighten.

Step 11



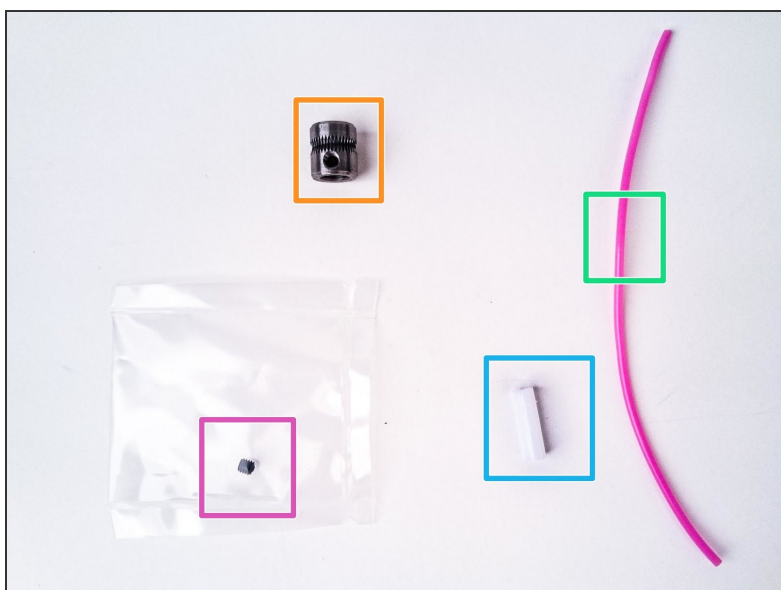
- Checkpoint: the latch should be loose.

Step 12



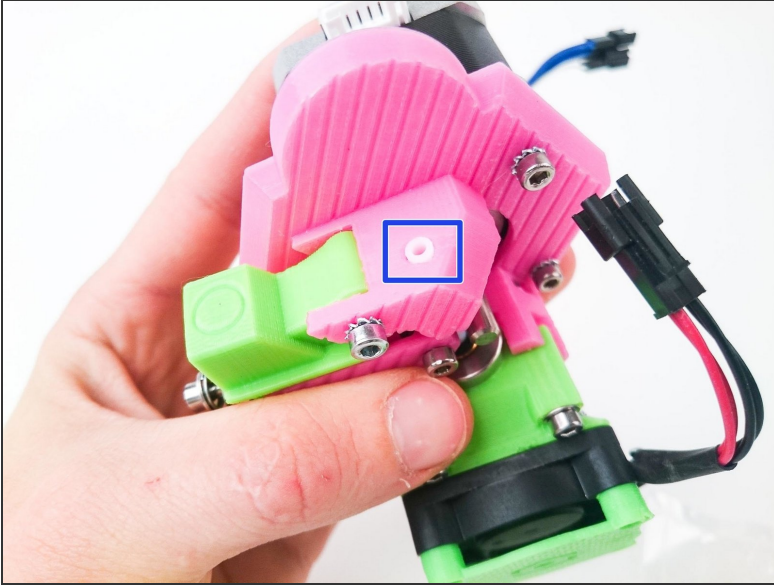
- Attach the feeder arm with m3x30 and M3 serrated washer. Do not overtighten. The feeder arm should be able to move.

Step 13 — What you'll need for the driving mechanism



- White PTFE tube (teflon)
- A piece of filament - some is included in your kit
- Drive gear (hobbed gear, hob screw)
- Locking set screw (with a red or blue nylon patch)

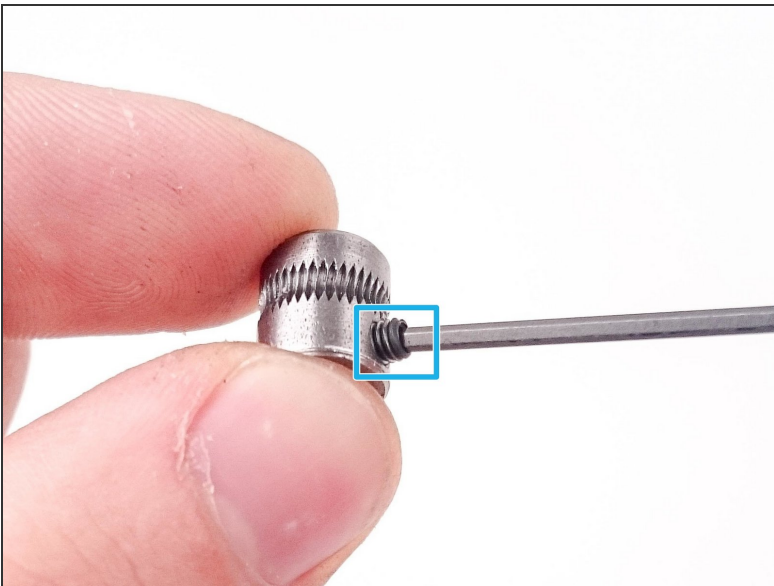
Step 14 — Driving Mechanism



Install the PTFE tube at the top of the extruder.

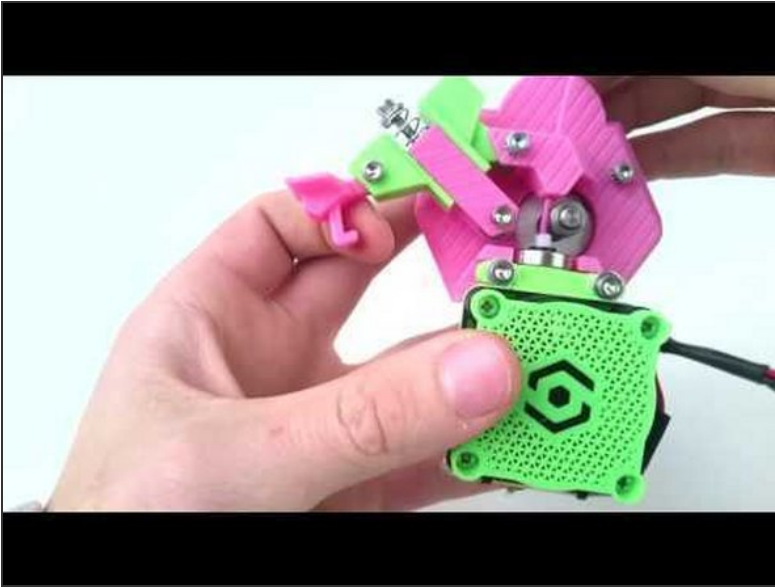
- There's an inner retention mechanism, so you shouldn't need to worry about the PTFE getting out.

Step 15



- There may be a set screw preinstalled in the drive gear. Verify that the screw has the nylon locking patch!
- If needed, replace the preinstalled set screw with the locking one.

Step 16 — Align Drive Gear (VIDEO)



- This is the last step in assembling the EXTRUDER.
- Follow the video :-) and note that the *audio is useful*.



Position the set screw CLOSE to the motor and NOT away from the motor as shown in the video. Disobey the video; it is outdated. Thanks and sorry for this temporary suspension of clarity.