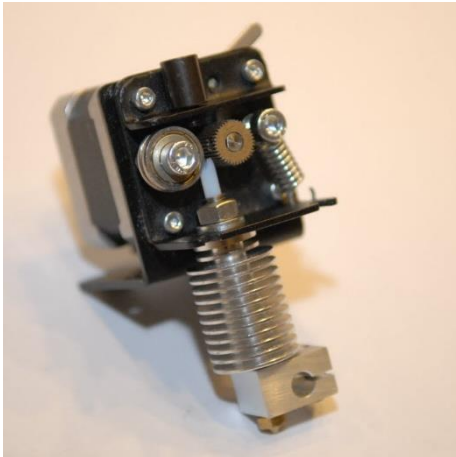


## **Instructions assembly hotend upgrade for the CraftBot and CraftBot PLUS**

**(Dis)assembly time is about 10-15 minutes.**

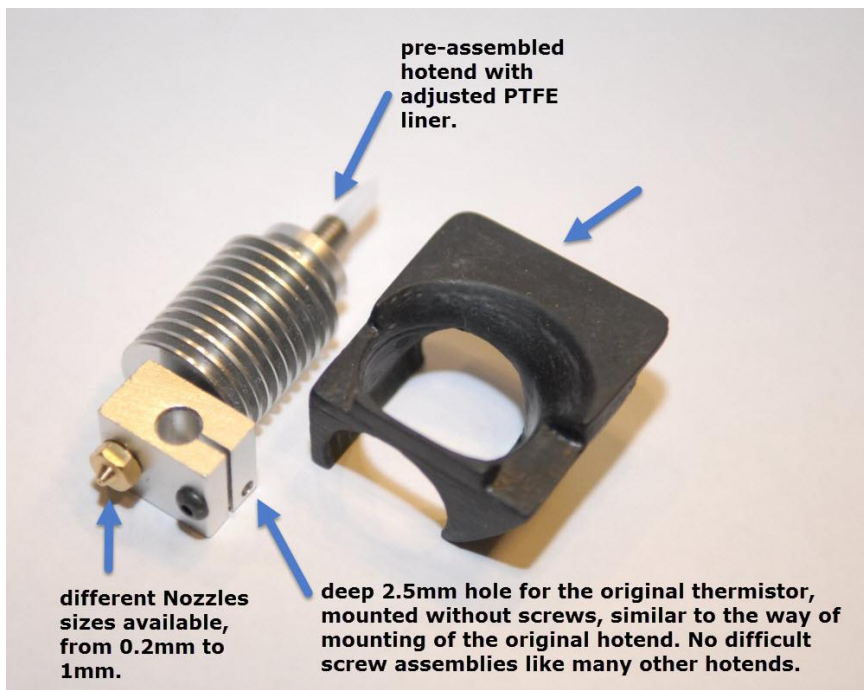
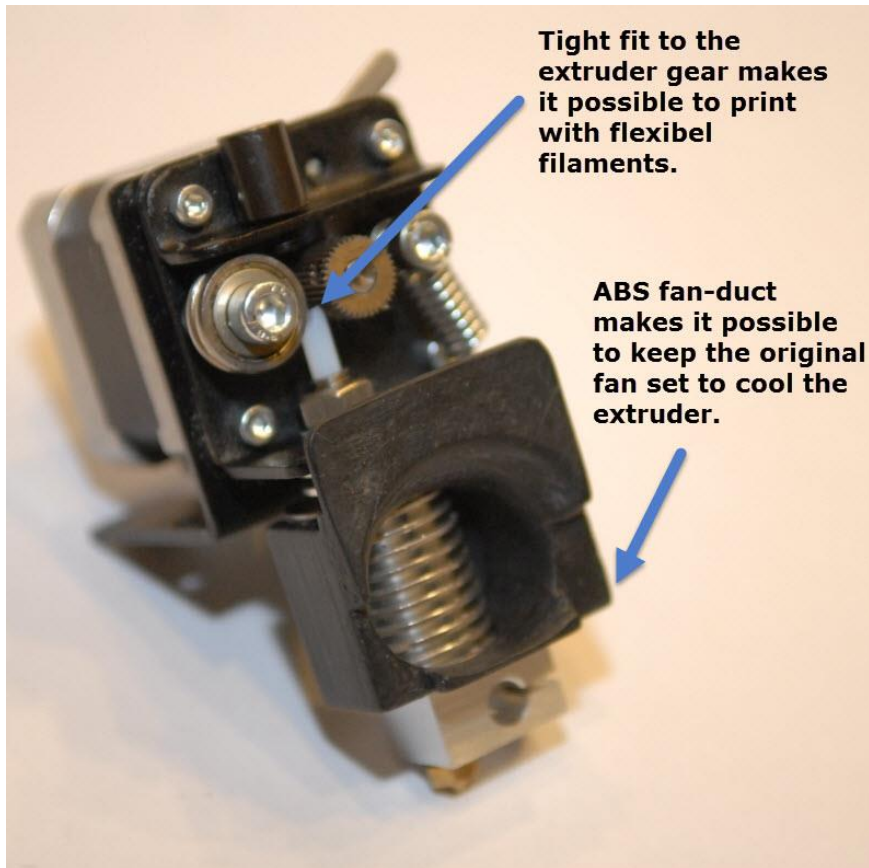


This is a “drop in” replacement for the standard hotend of the CraftBot. The standard hotend is fine, but isn’t capable to print reliable with more “exotic” filaments.

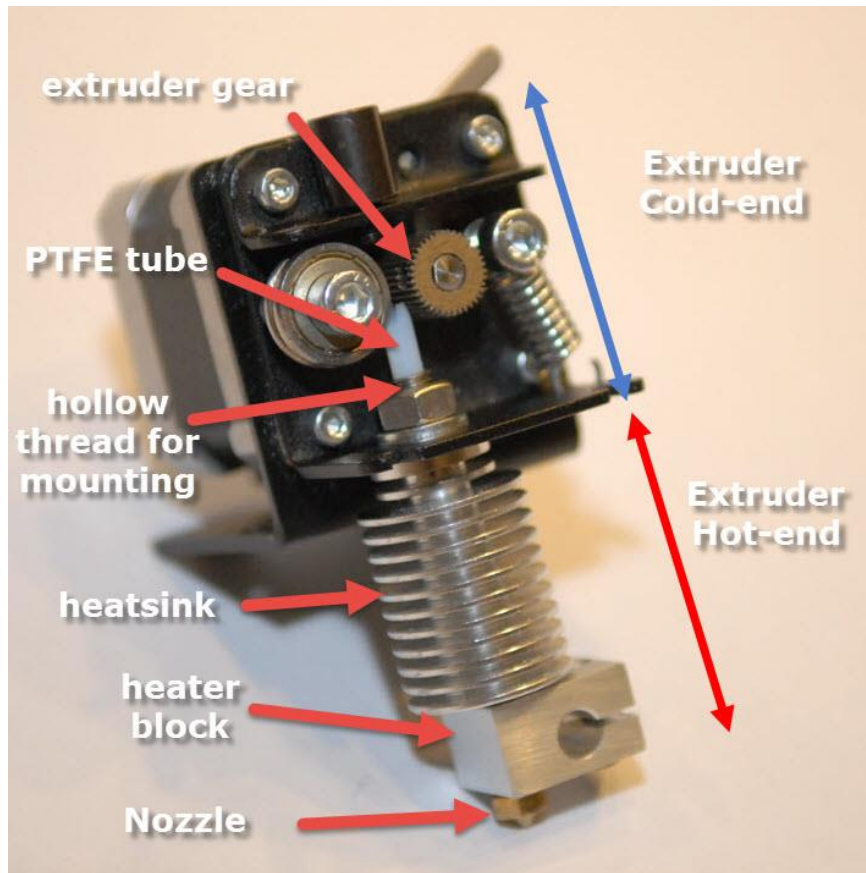
### **The advantages of this hotend upgrade are:**

- print reliable with flexible, wood or metal filled filaments
- print at max 300 degrees extruder temperature (in stead of 260 grC with PEEK)
- less clogging: print more reliable because of a more consistent filament guide and cooling performance
- all metal hotend. (the filament lining is with PTFE though)
- drop-in replacement. This hotend is mounted like the original PEEK hotend.

**With an ABS 3D printed fan-duct the hotend is properly cooled.**



### Some terminology



### What's in the box:

- a fully assembled aluminium hotend
- an ABS printed fanduct
- nut and washer for assembly. A spare washer to adjust the distance to aluminium or glass bed.
- a spare 0.4mm Nozzle and spare PTFE liner to adjust to your needs.



### Shipping, TAX and customs

Shipping costs are included in the price of the hotend upgrade. When you want the shipment to be register or insured, email us, so we can give an estimate for the additional costs.

Within the EU, the price of the Hotend is Dutch VAT included. At the moment it's 21%. For shipments outside the EU the price is excluding TAX. We provide an CN22 document on the back of the envelop with weight, price and description of the hotend. It's possible you have to pay an additional fee for customs and Tax for the hotend before or when receiving the shipment. We are not responsible for any problems with customs.

**Warranty / Returns:** if you simply don't like this hotend upgrade or it's not working as expected, you can return it within 3 months and get a full refund. We understand the hotend is used, has some minor scratches and filament in the Nozzle and Heatbreak.

When the hotend is damaged beyond what's to be expected as 'normal use' or is damaged because of overtighten the threads, it can void the warranty completely or partially, to be determined by CraftBot.nl after receiving the hotend.

When returning: you have to pay yourself for the return shipping costs (which should be a couple of dollars/ euro's). Return address at the end of this document.

### General remarks and warnings

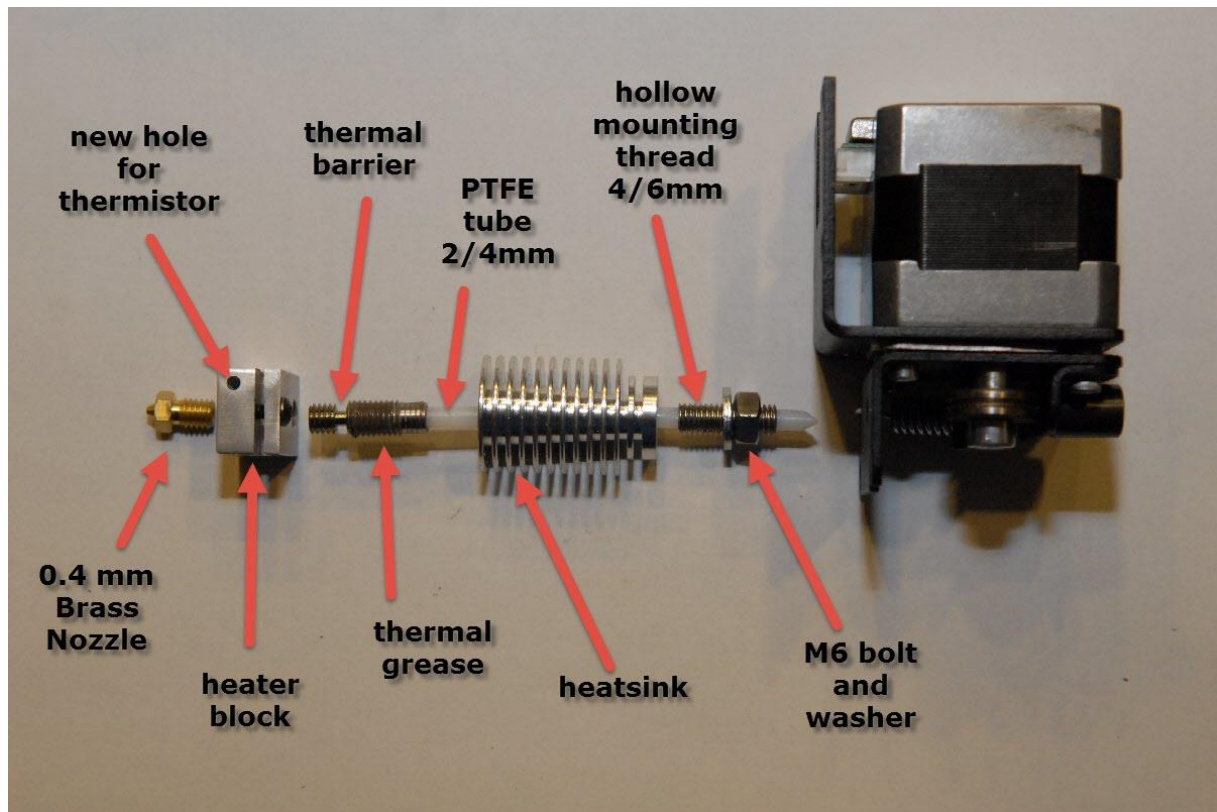
1. The fan duct is absolutely necessary: without it, the cooling of the standard extruder fan is too less and is resulting in clogging.
2. The hollow threaded rod with which the hotend is mounted is 6mm at the outside and 4mm at the inside, so leaving a 1mm thick wall. When assembling just use enough force that it's fixated. When using too much force, the hollow threaded rod is likely to break.
3. The thermistor (the small thingy which is measuring the temperature) is now mounted at the right side of the heater block (instead of the back side). It's like the original one mounted: just push it in as far as possible. When (dis)assembling the new hotend, you have to loosen the cable fastener under the extruder. Be sure when assembling again you have ordered the cables neatly. The thermistor cable is now on the right instead of the left side. Make sure the cable can't move when mounted the cable fastener again. When the temperature measurements are changing a lot when printing, or there's a red error on the LCD, displaying a temperature error, you have to re-fit the temp-sensor cable in the hole of the heater and/or be sure that the cable is fitting tight by the cable fastener.
4. The heater (the steel thing with red cables to it) is mounted the same way: just be sure it's that fastened (by fastening the little screw at the bottom) just so, it can't move anymore.
5. The heatbreak is mounted with thermal grease. When you have to assemble it again, you have to apply thermal grease again for a proper function.
6. The hotend is shipped with two 0.4mm brass Nozzles. When you use abrasive filaments like carbon or metal filled filaments it's advised to use Stainless steel Nozzles. For wood or Carbon filled filaments it's advised to choose a Nozzle with a larger opening, like 0.5 or 0.6mm, to avoid clogging in the Nozzle.
7. Abrasive filaments will also wear the filament gear. So check it if there's still enough grip on the filament, when not, replace the filament gear.

### LEGAL DISCLAIMER

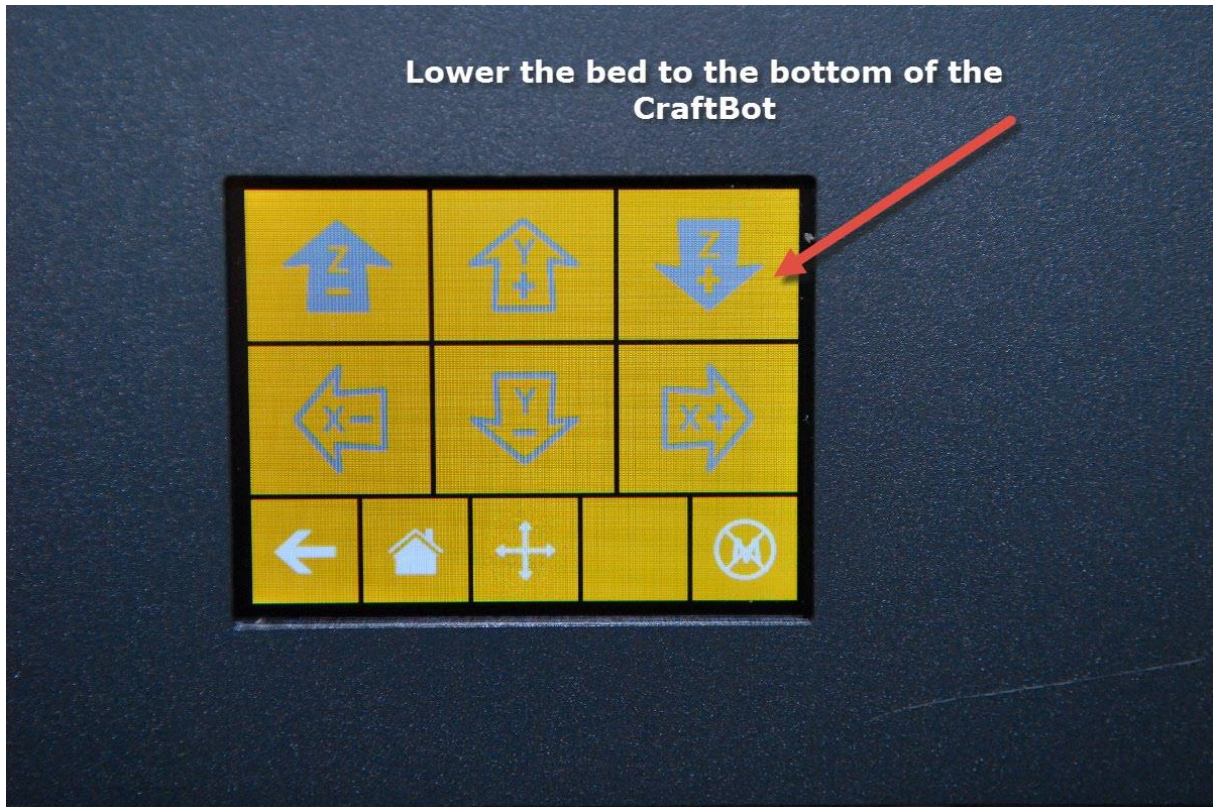
THE PRODUCTS SOLD ON THIS WEBSITE SHOULD ONLY BE USED BY EXPERIENCED INDIVIDUALS, OR UNDER THE DIRECT SUPERVISION OF EXPERTS. NO WARRANTY OF THEIR SUITABILITY FOR ANY PURPOSE WHATSOEVER IS MADE OR OFFERED BY US. YOUR USE OF THE PRODUCTS SOLD ON THIS WEBSITE IS ENTIRELY AT YOUR OWN RISK. YOUR PURCHASE OR USE OF ANY PRODUCT HEREFROM SHALL SERVE AS YOUR EXPLICIT ACKNOWLEDGEMENT THAT YOU UNDERSTAND AND CONSENT TO THE FACT THAT WE HEREBY DISCLAIM ANY RESPONSIBILITY OR LIABILITY FOR, ANY HARM, LOSS (ECONOMIC OR OTHERWISE), INJURY OR DEATH RESULTING FROM THE ASSEMBLY OR OPERATION OF OUR PRODUCTS, EITHER AS INSTRUCTED OR OTHERWISE, AND AFFIRM THAT UNDER NO CIRCUMSTANCES SHALL YOU BE ENTITLED TO ANY DAMAGES OF ANY SORT WHATSOEVER RELATED TO YOUR USE OR MISUSE OF OUR PRODUCTS.



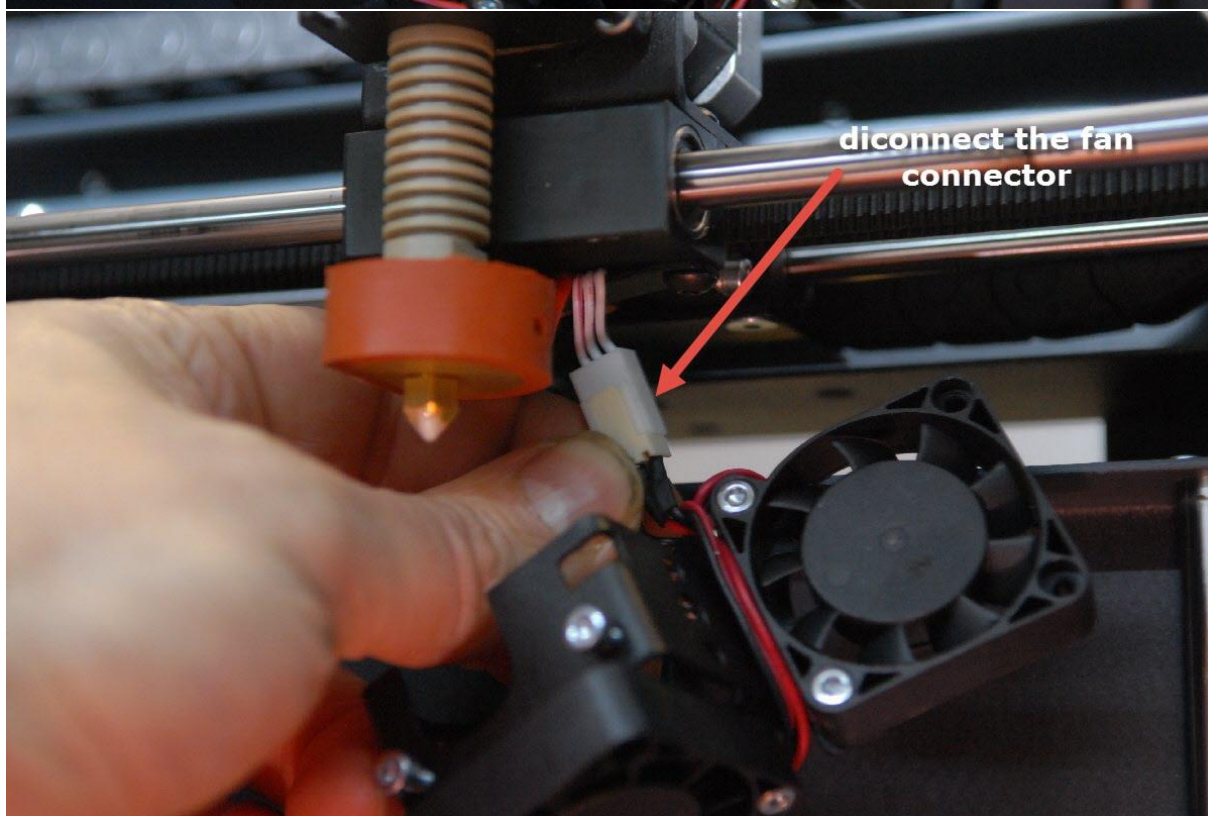
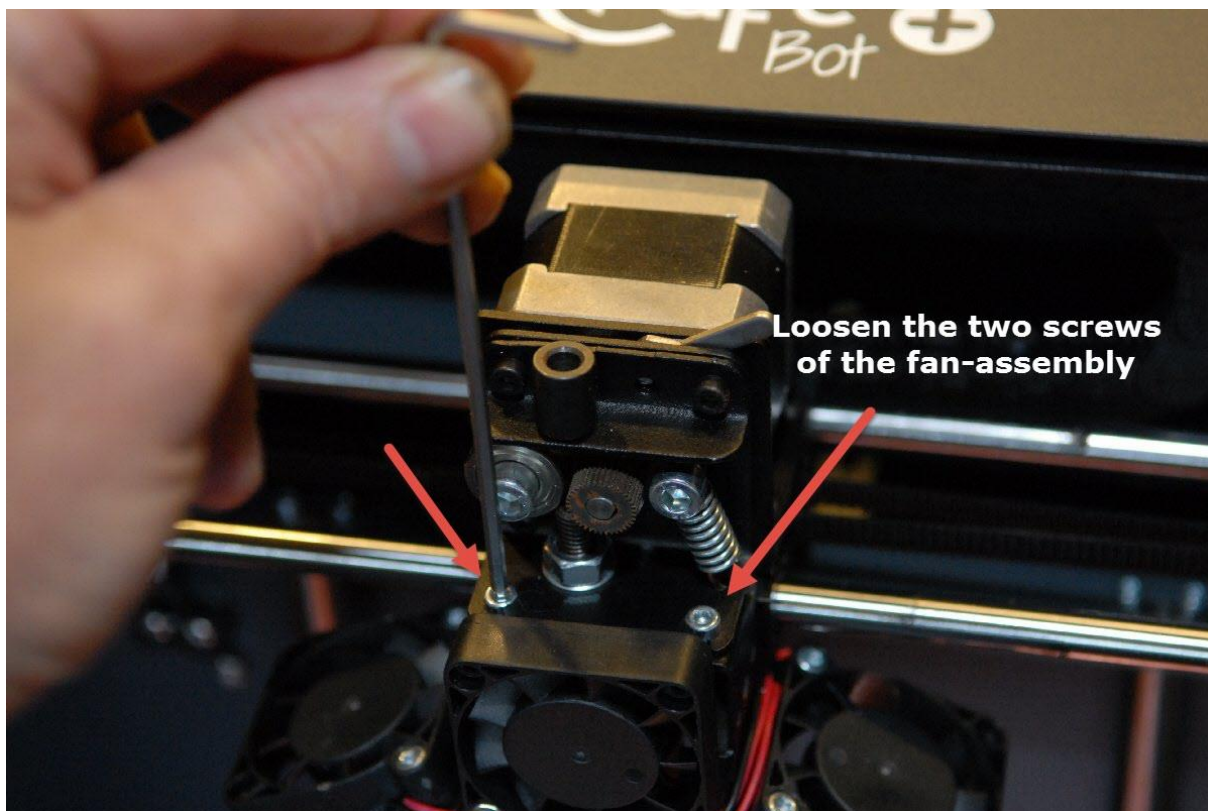
## Parts



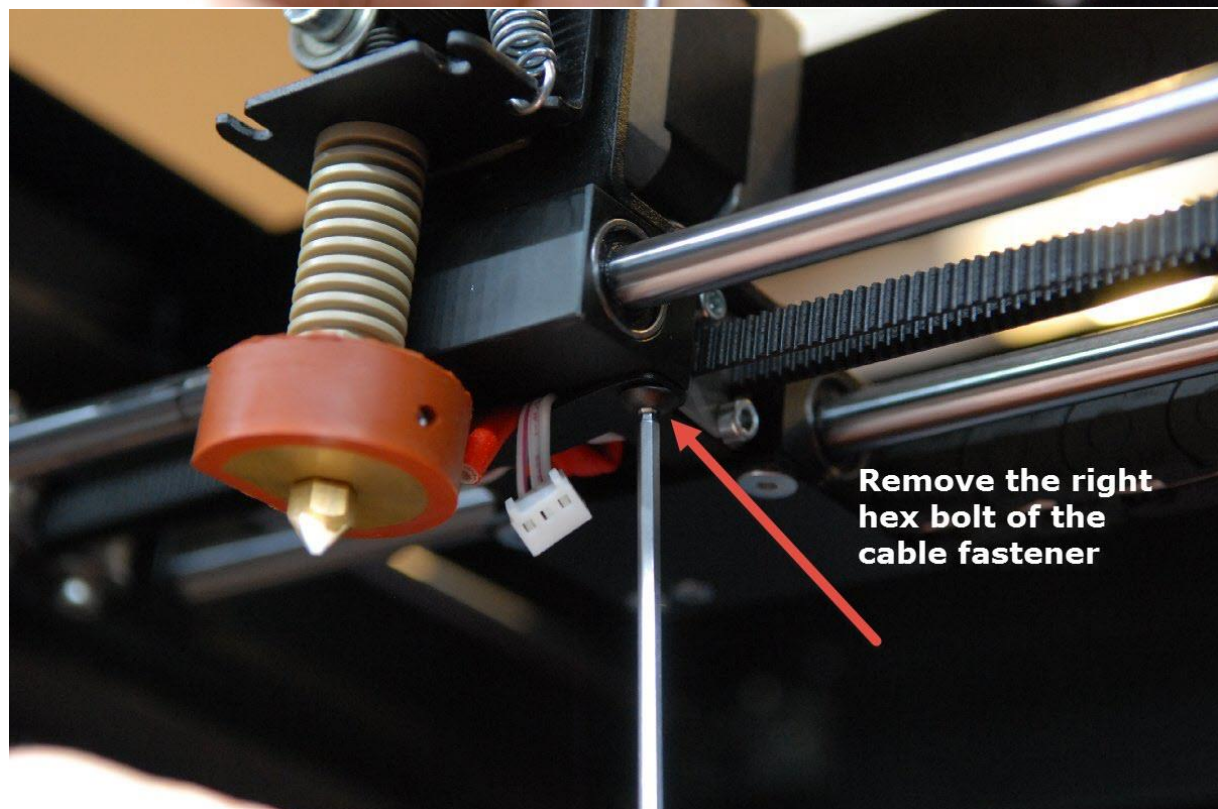
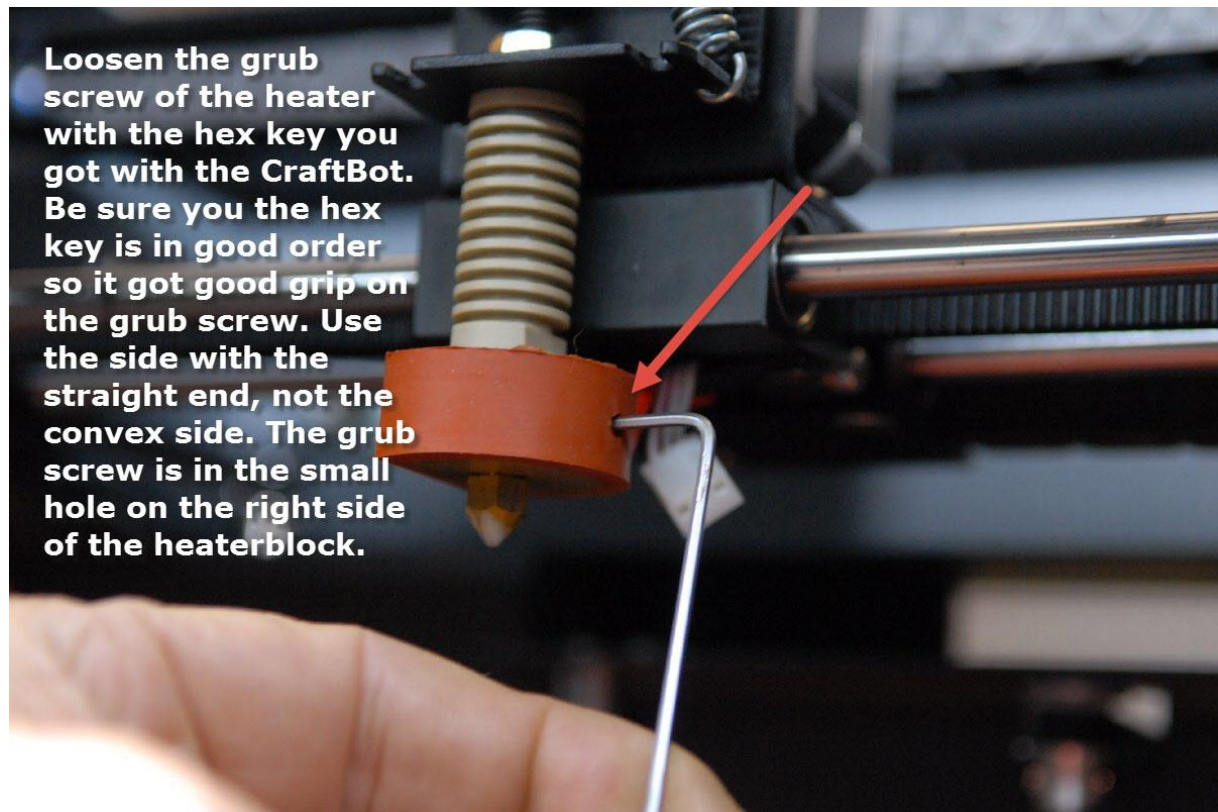
## Step by step guide

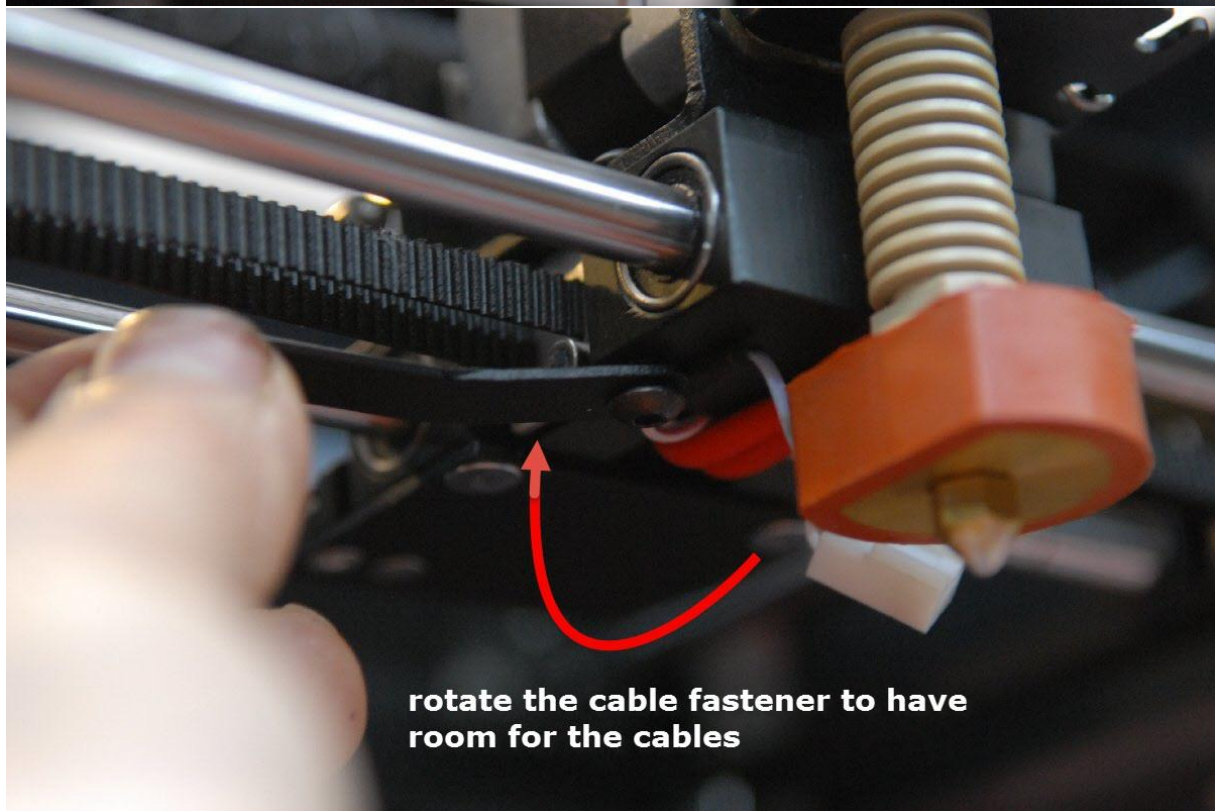
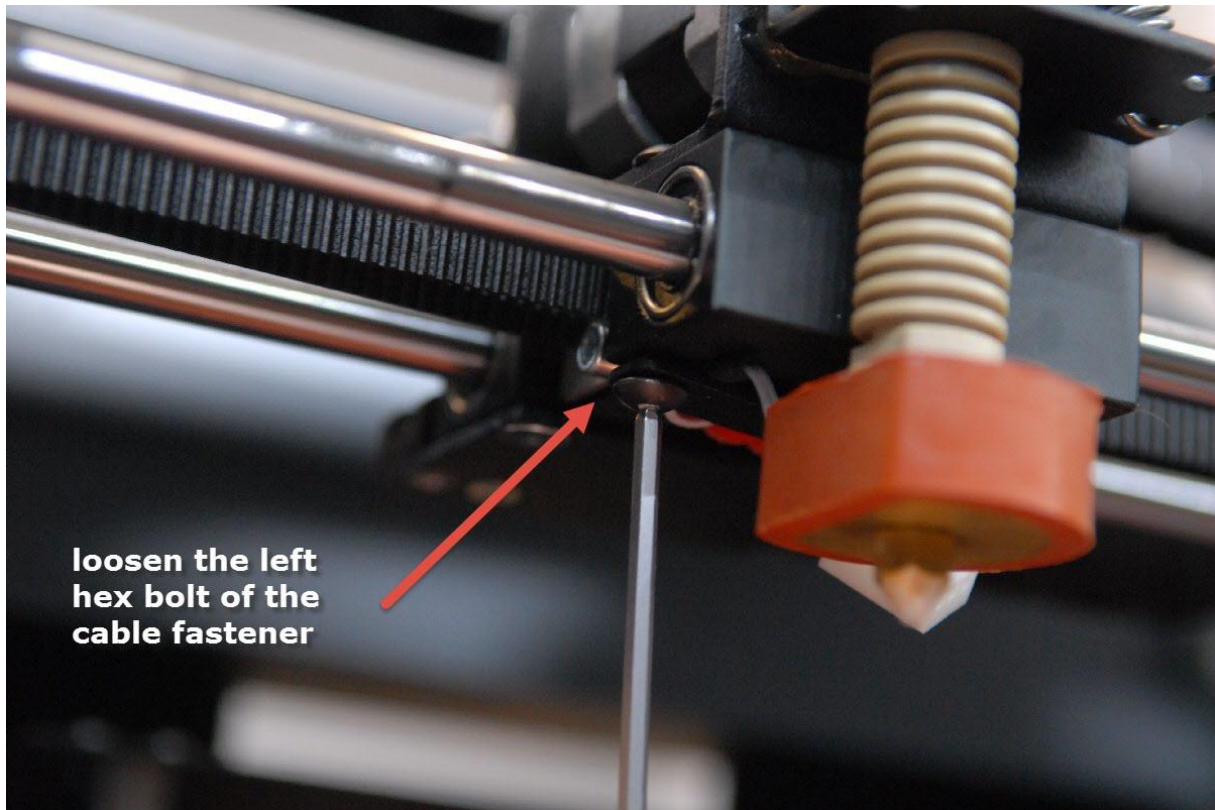




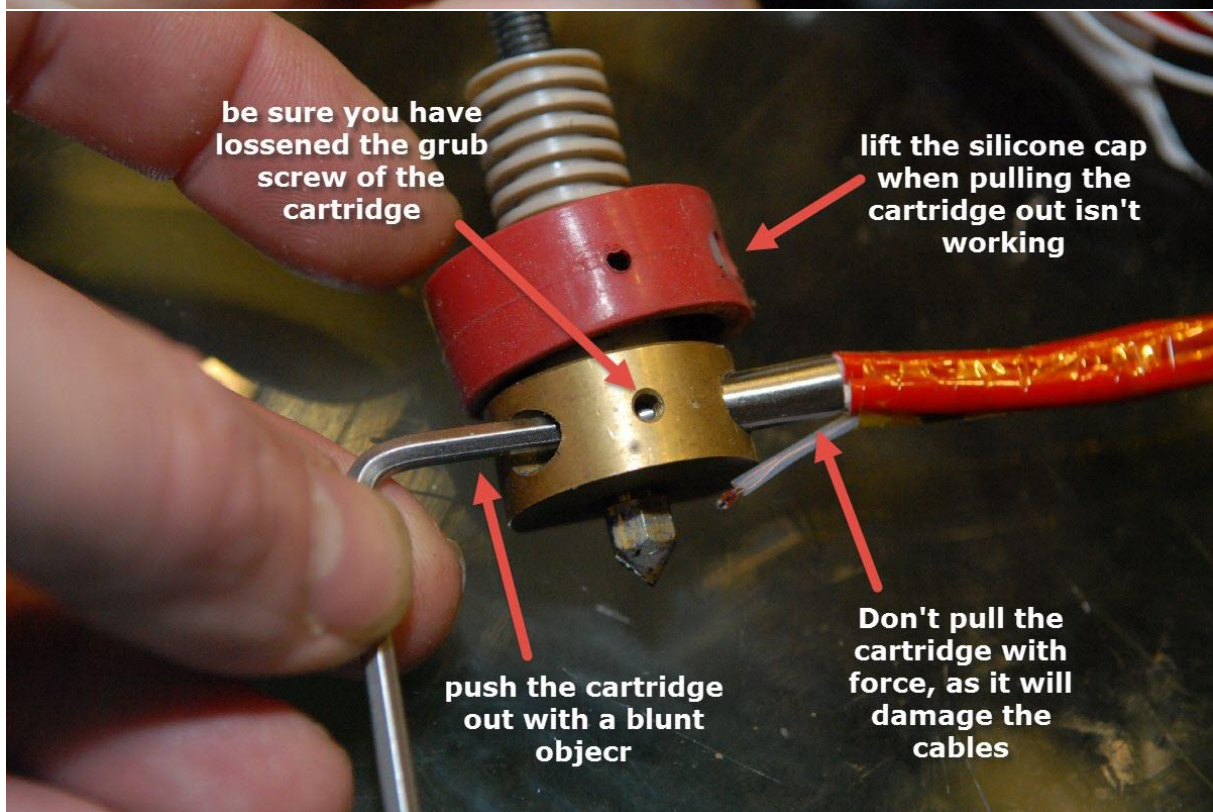
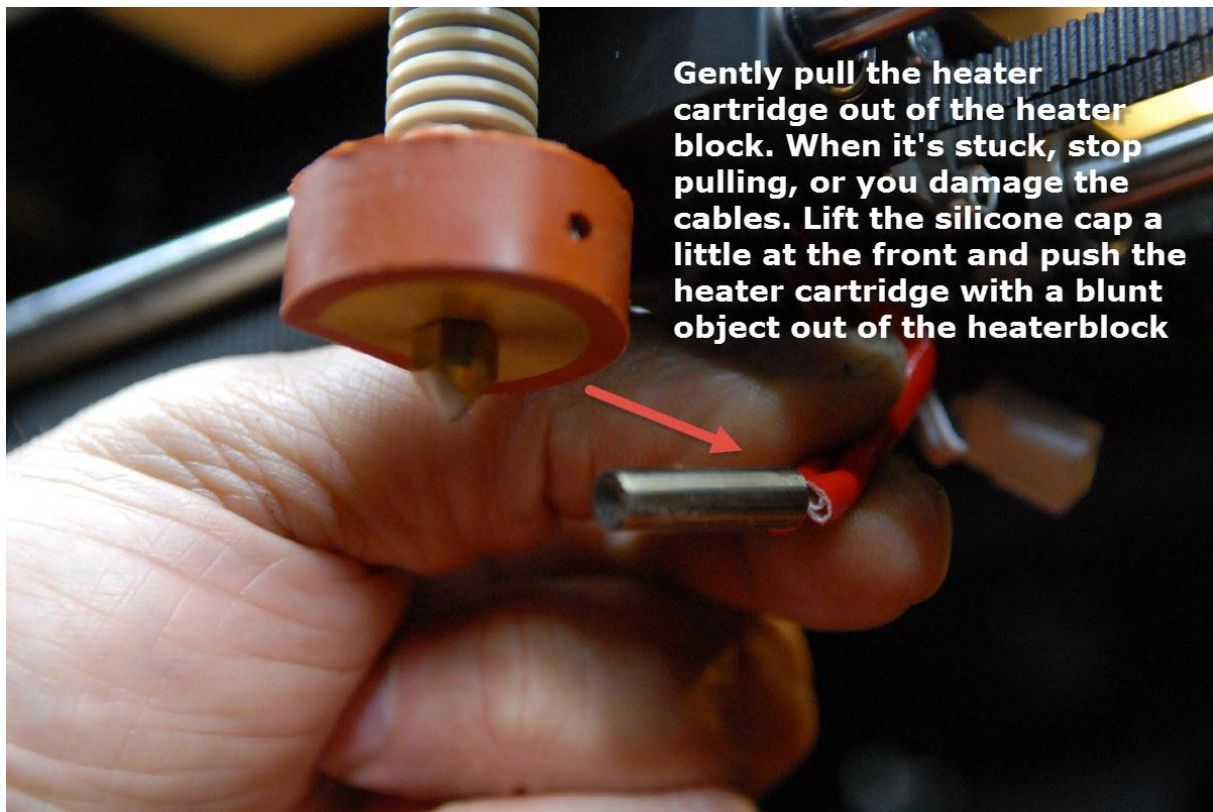




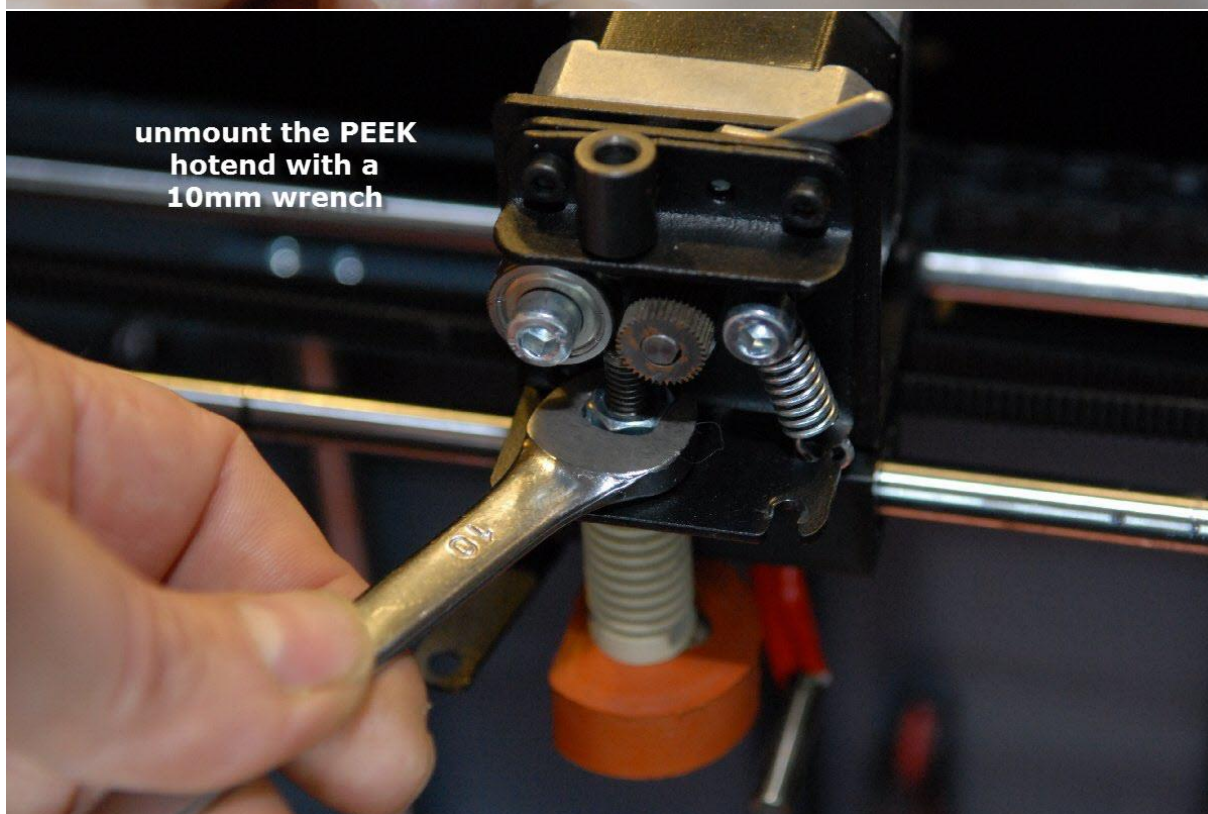
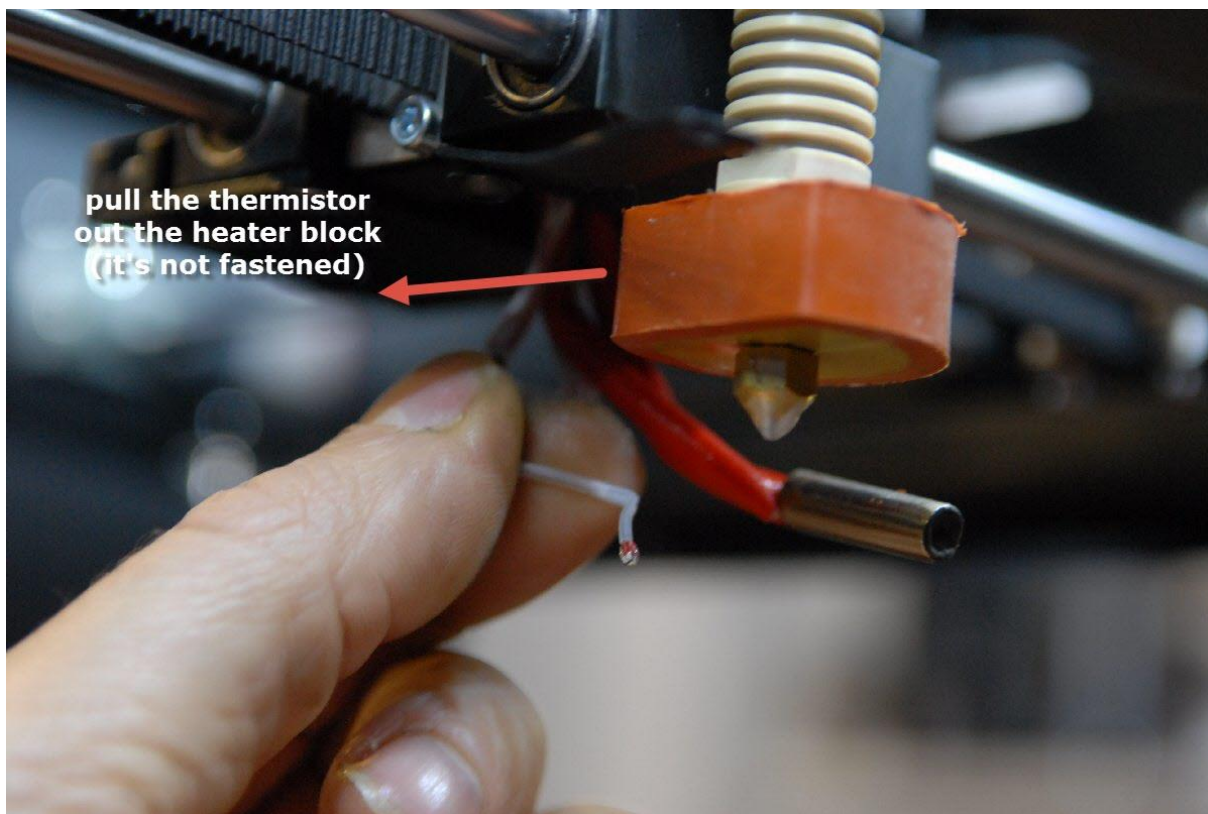




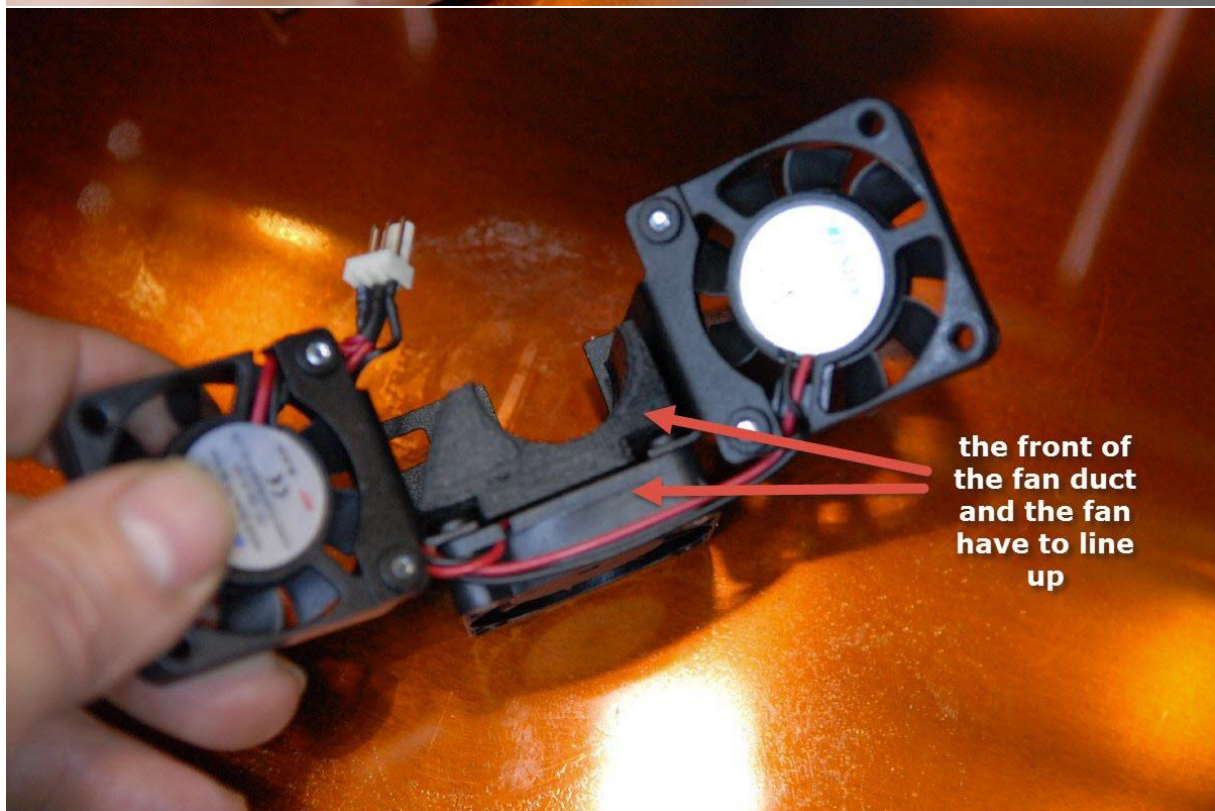
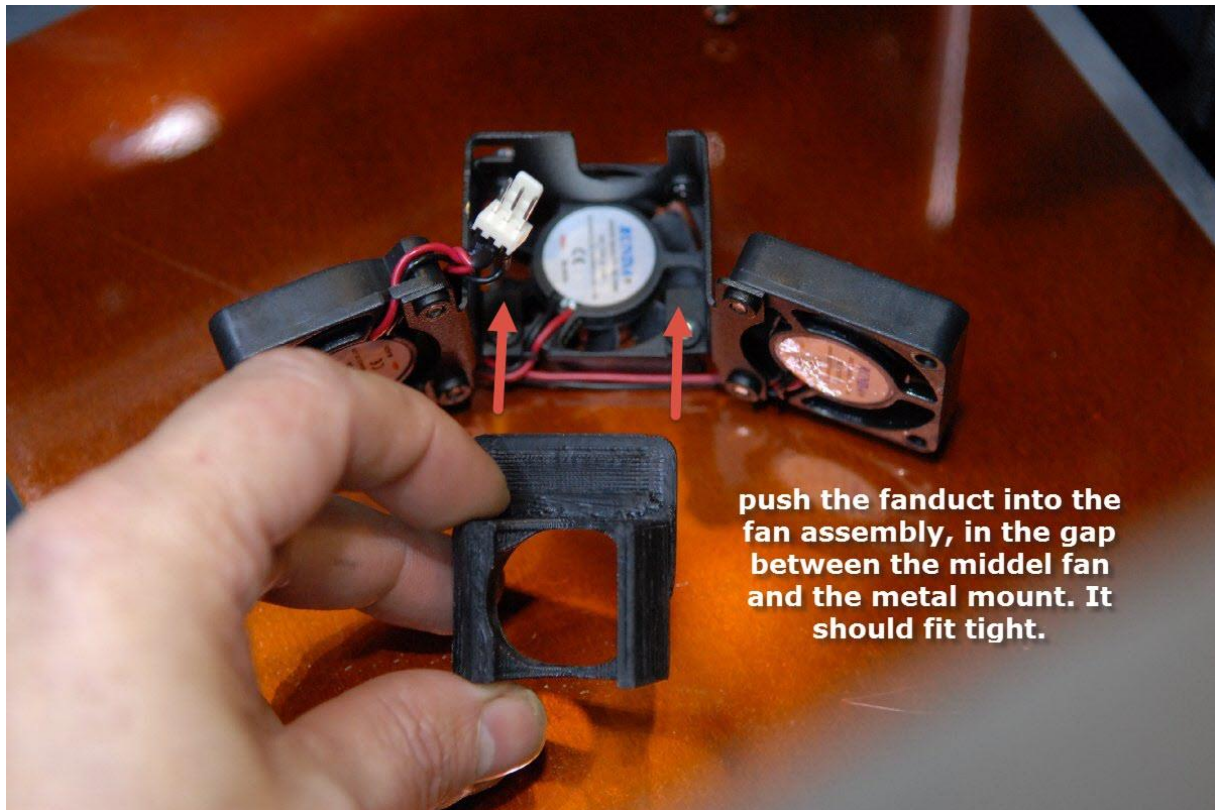




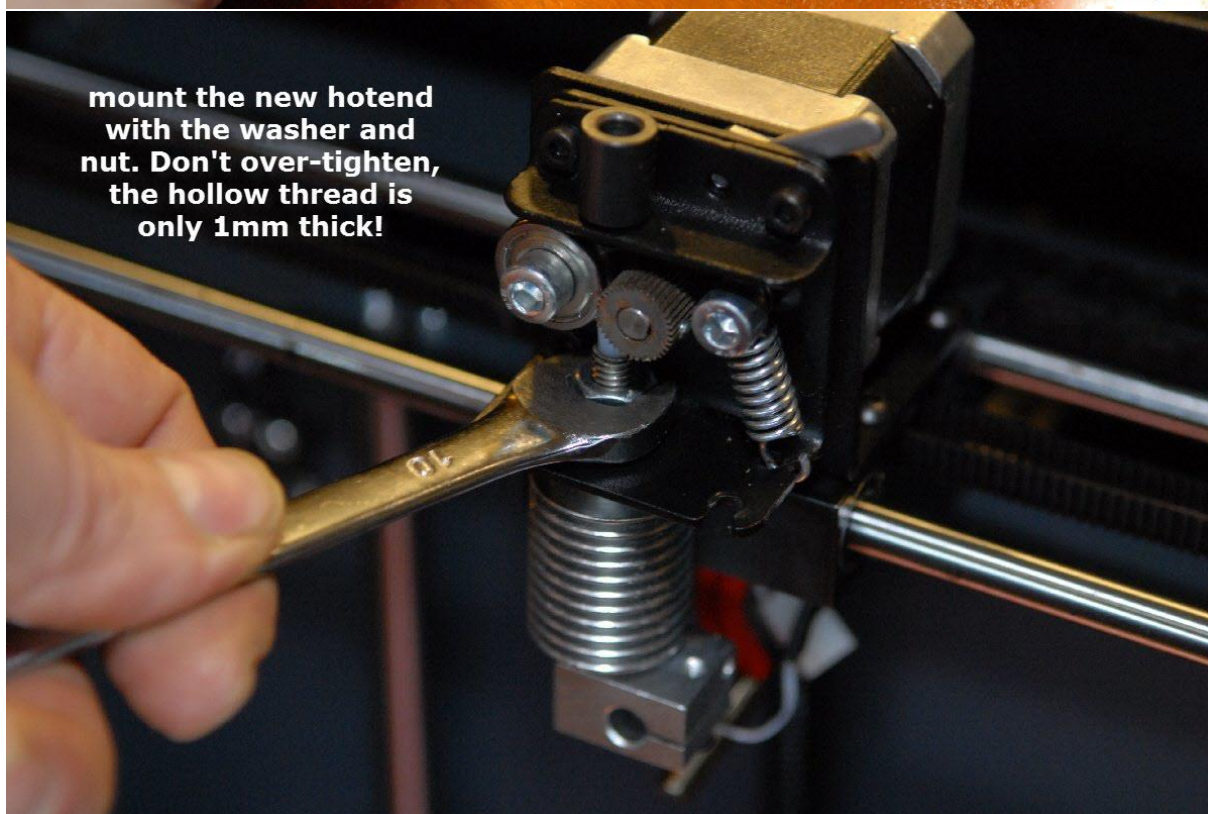




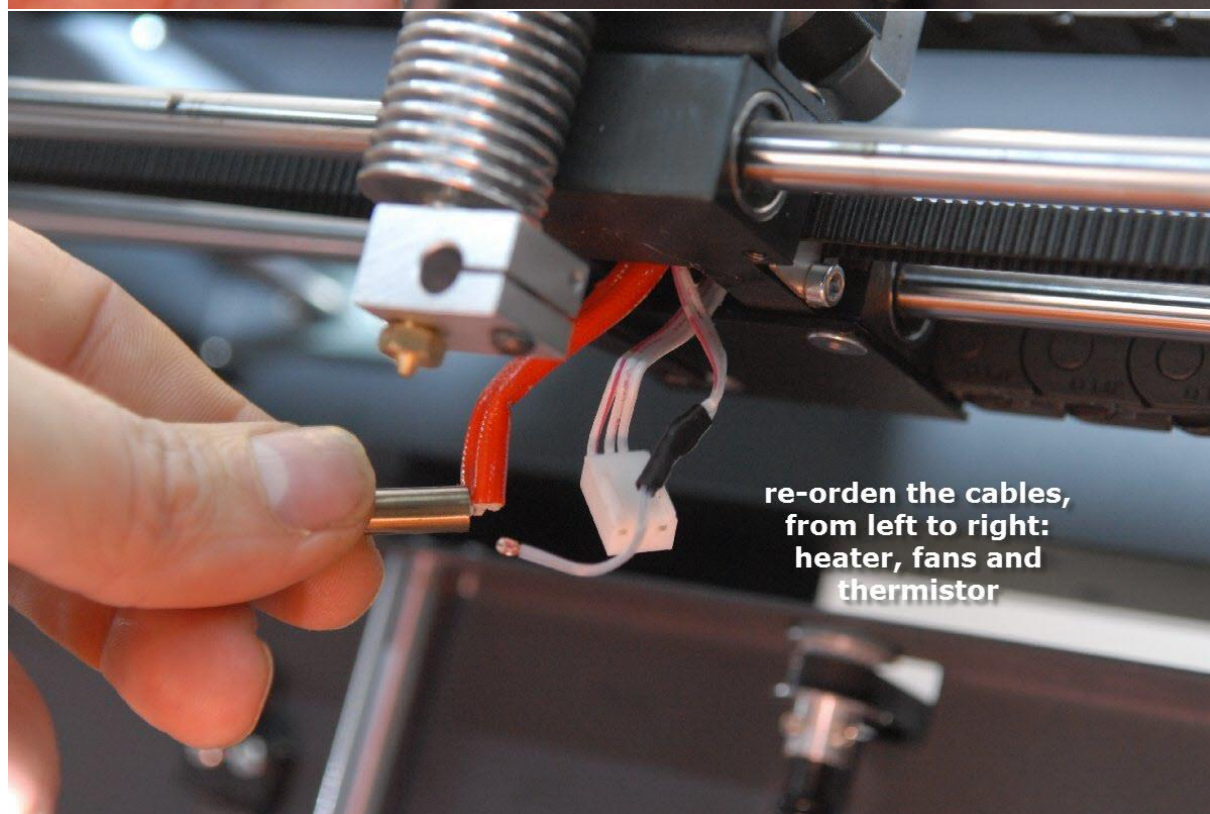
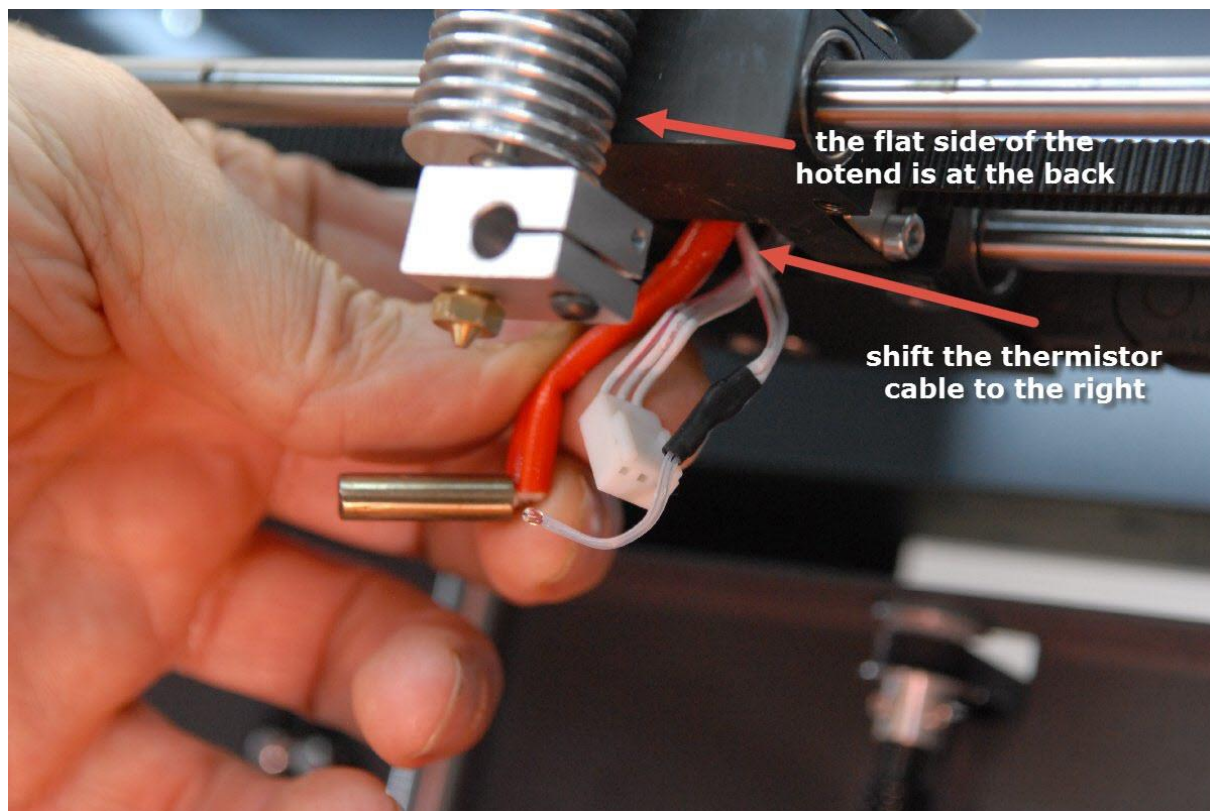




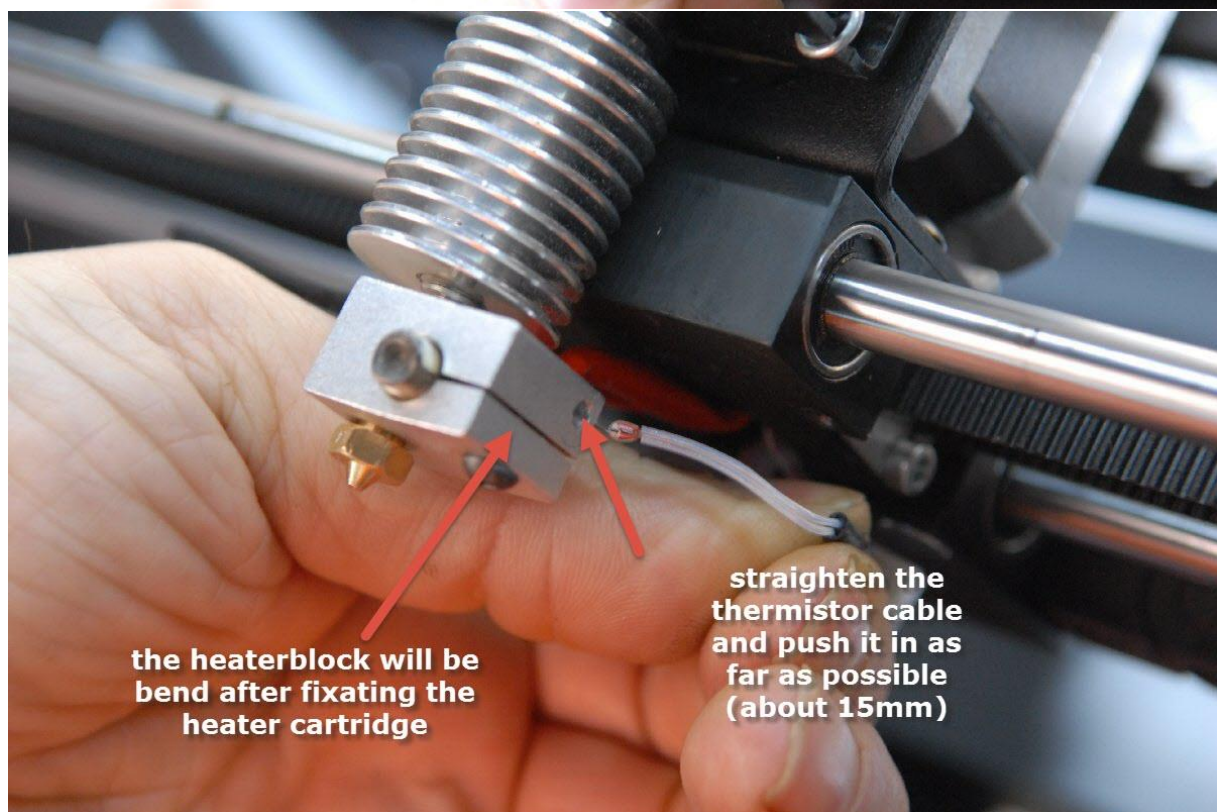
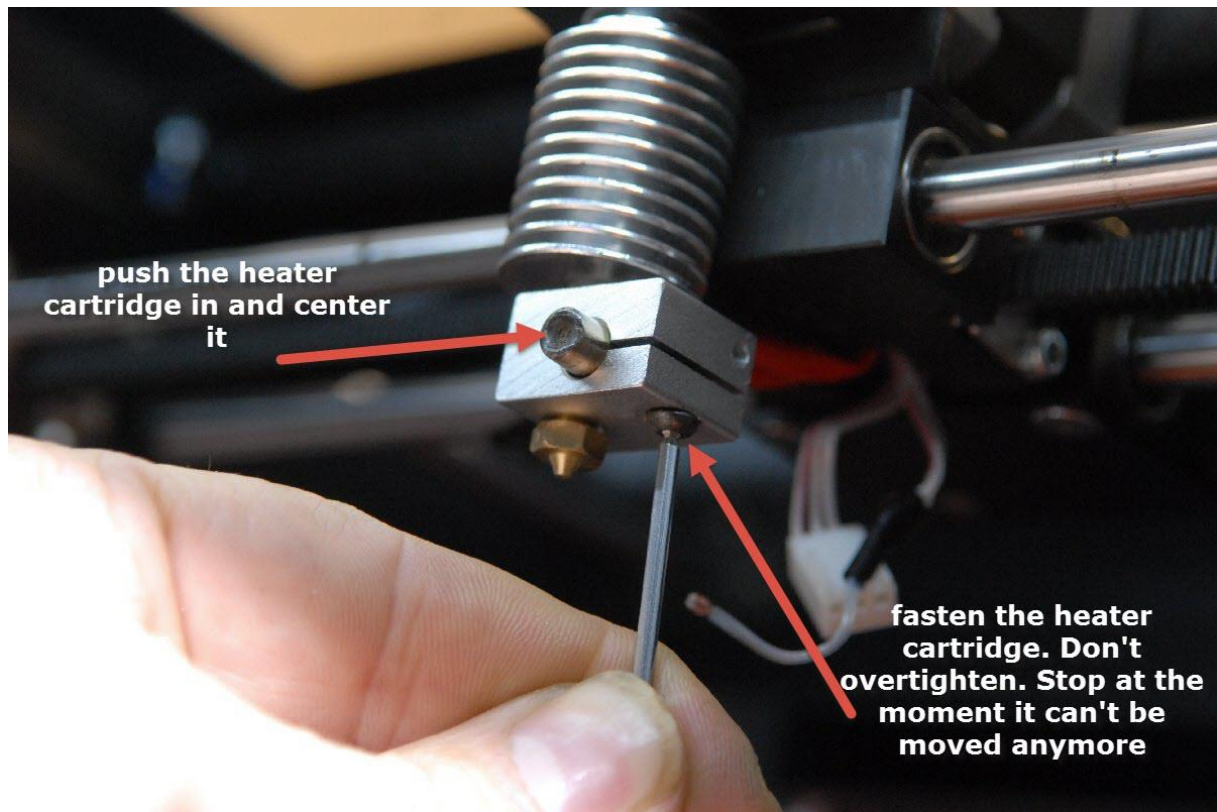




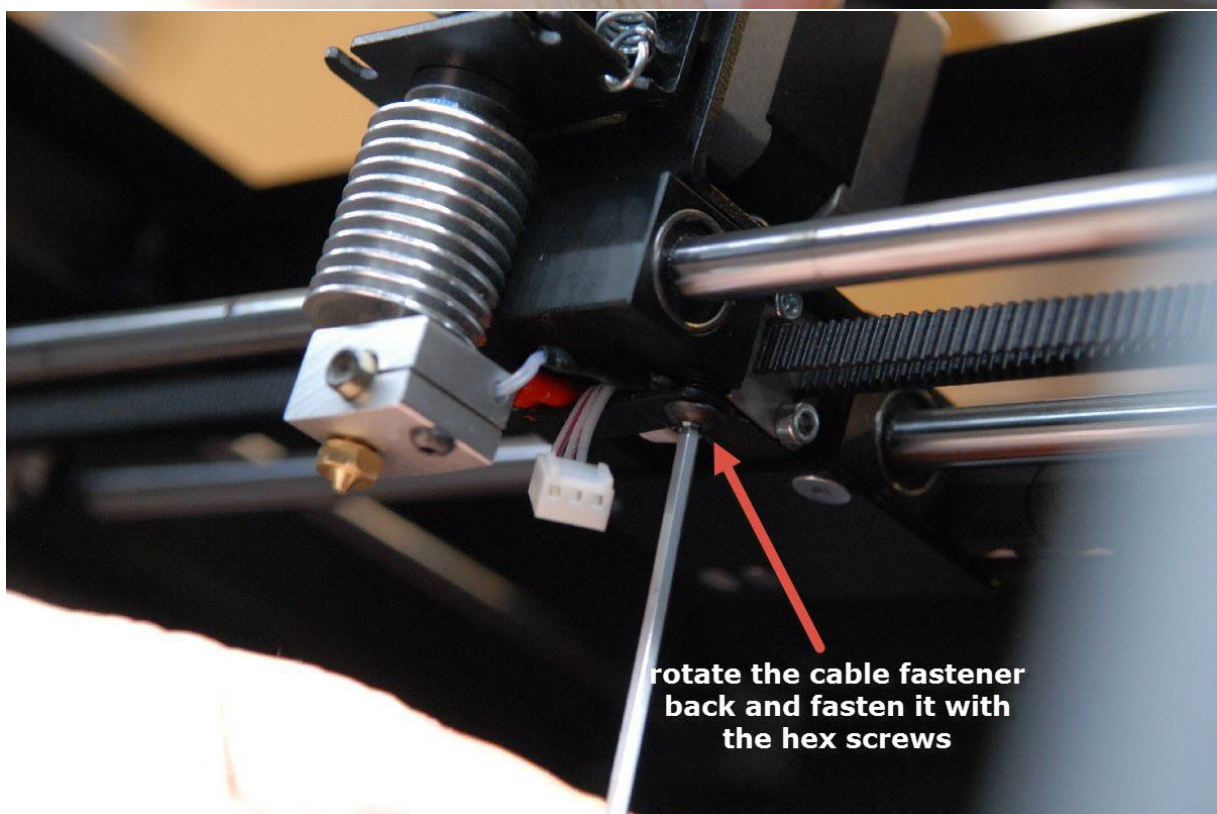
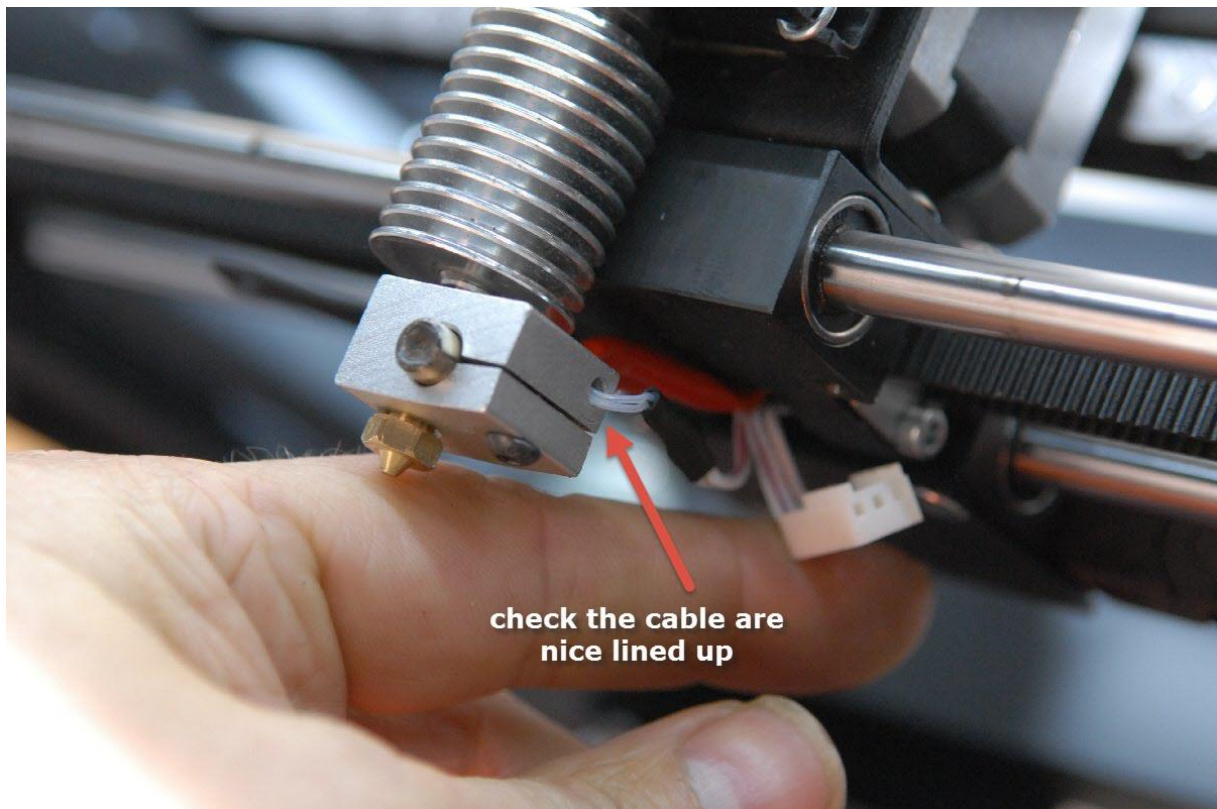




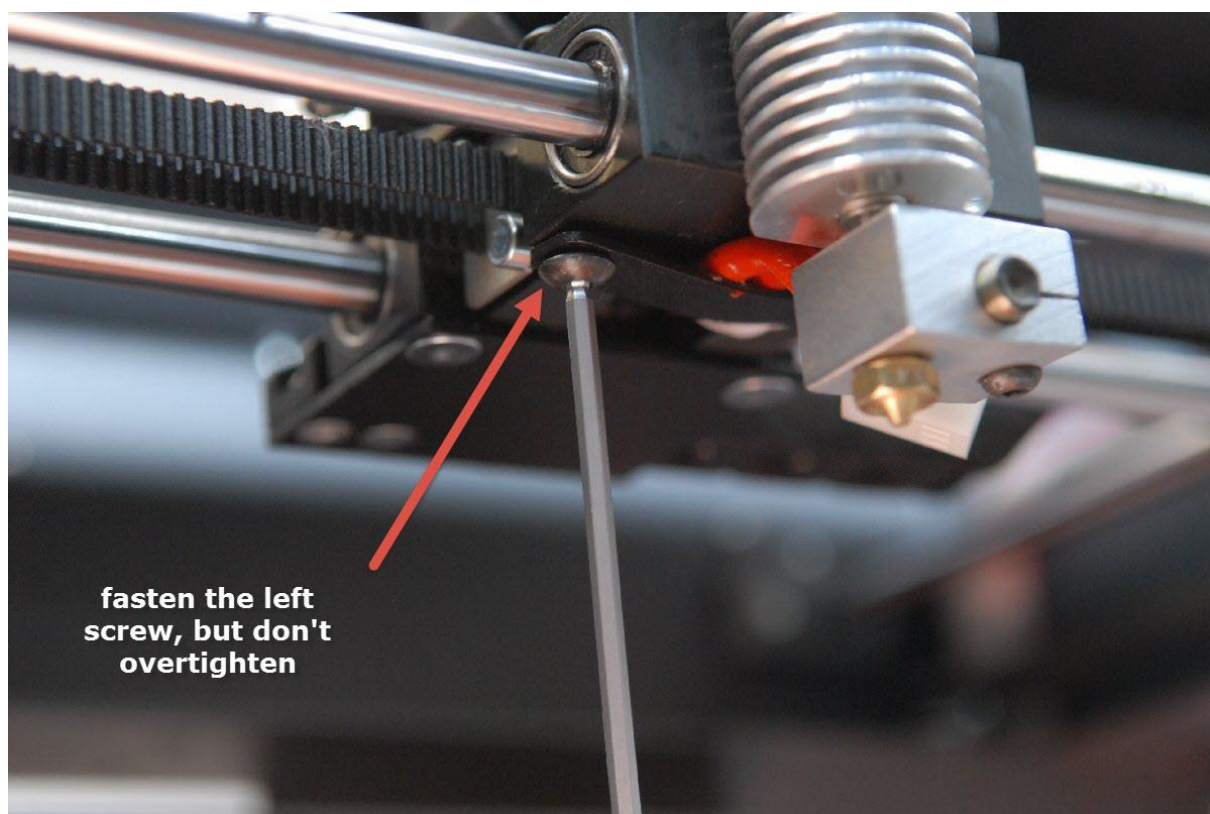


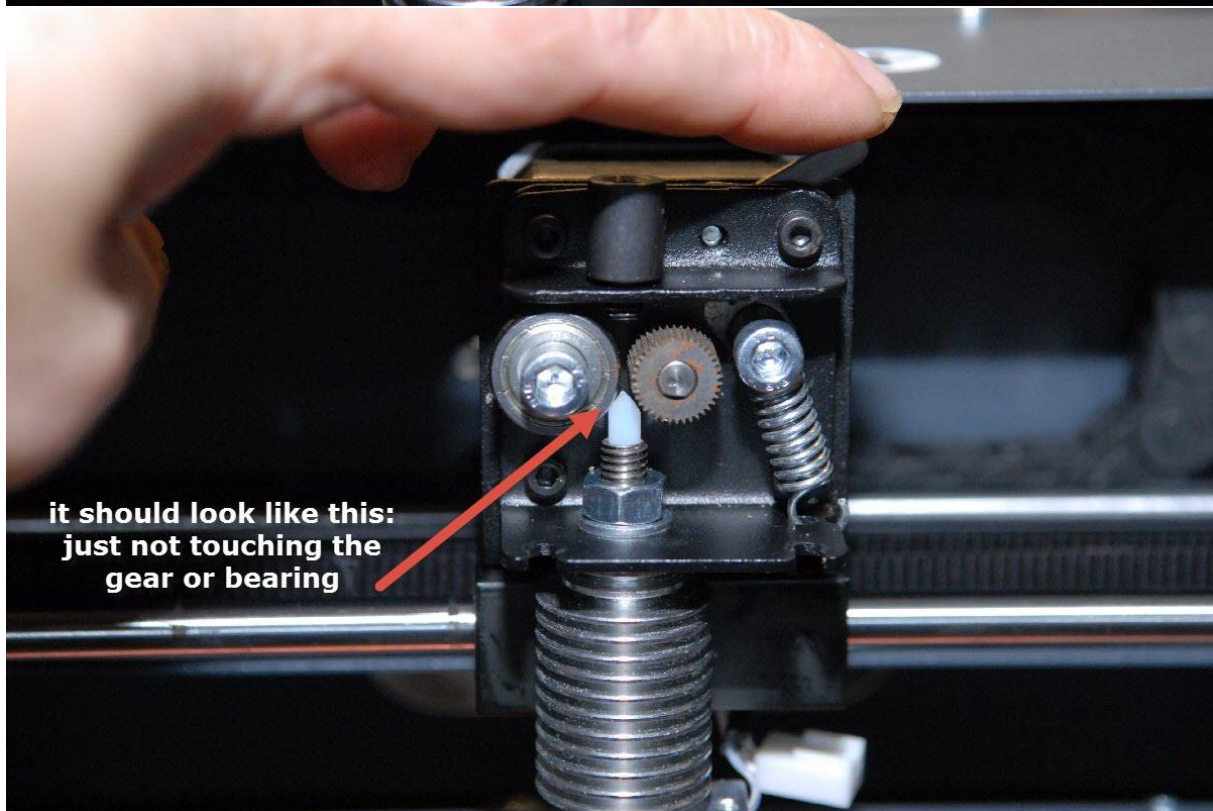
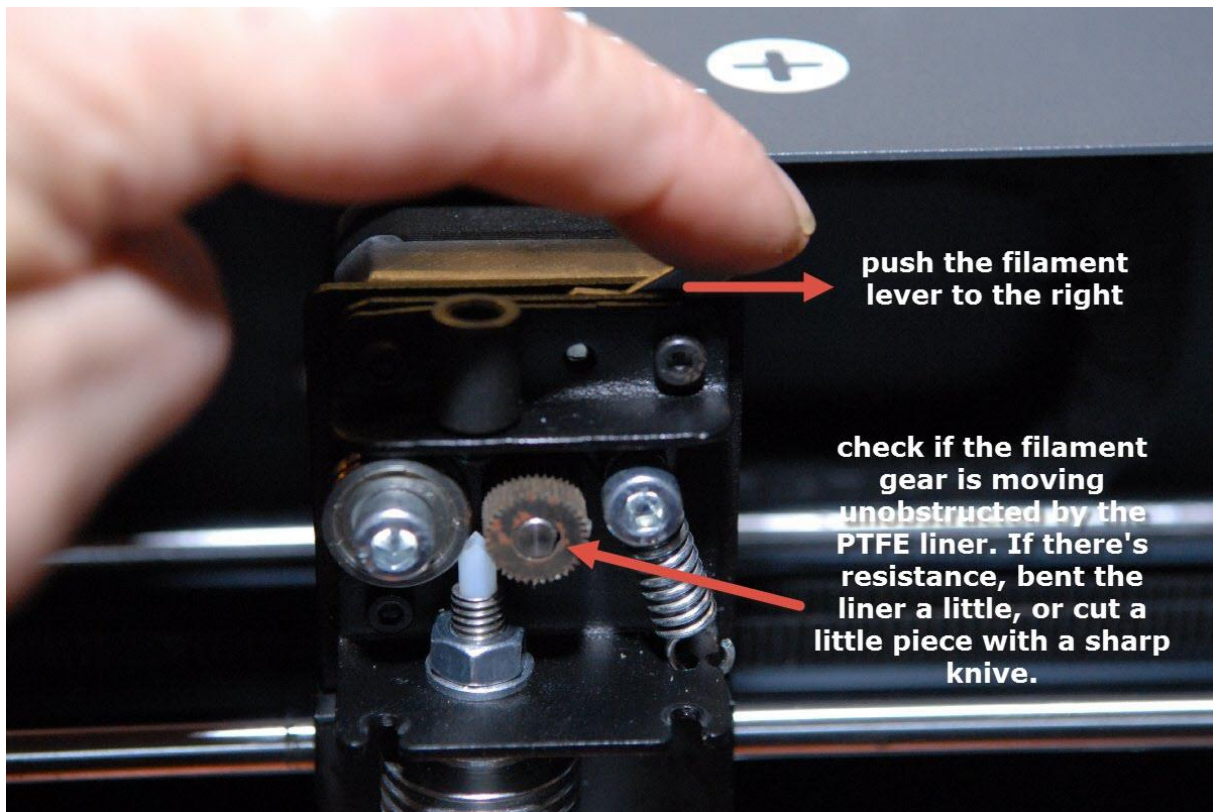




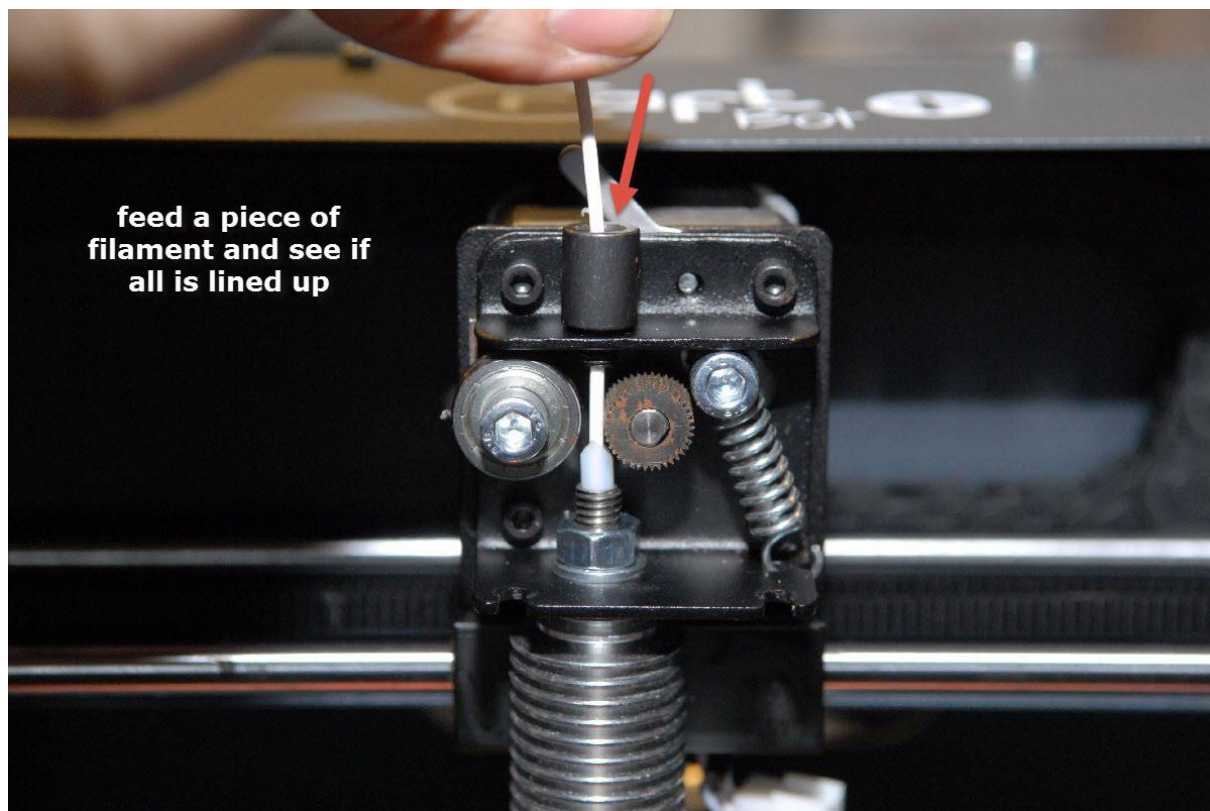




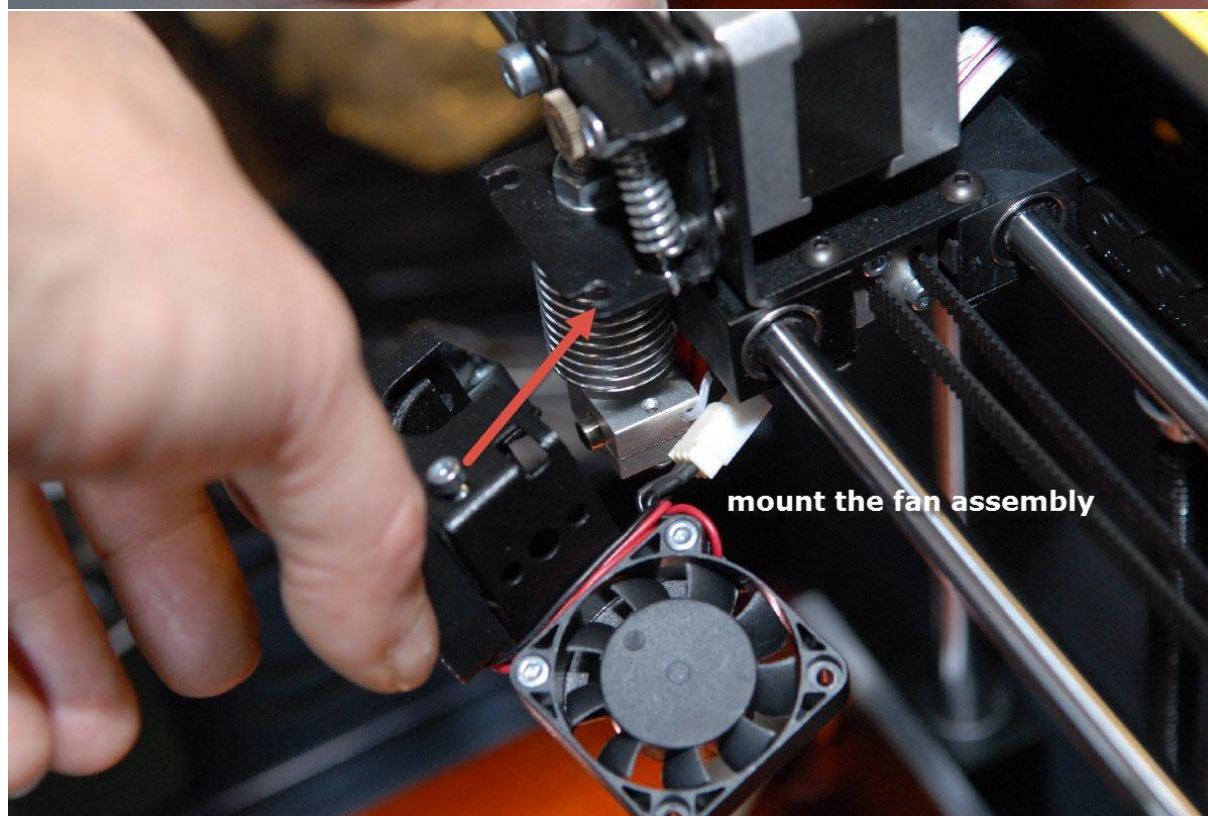
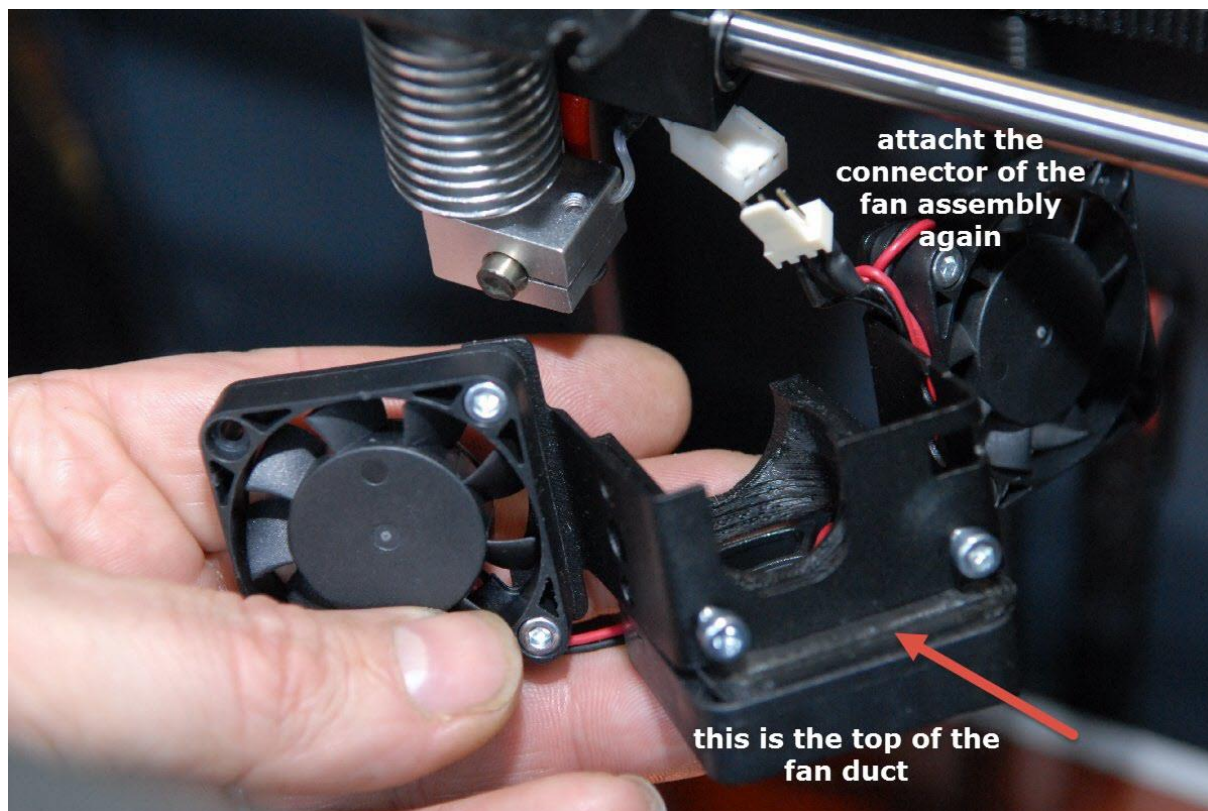




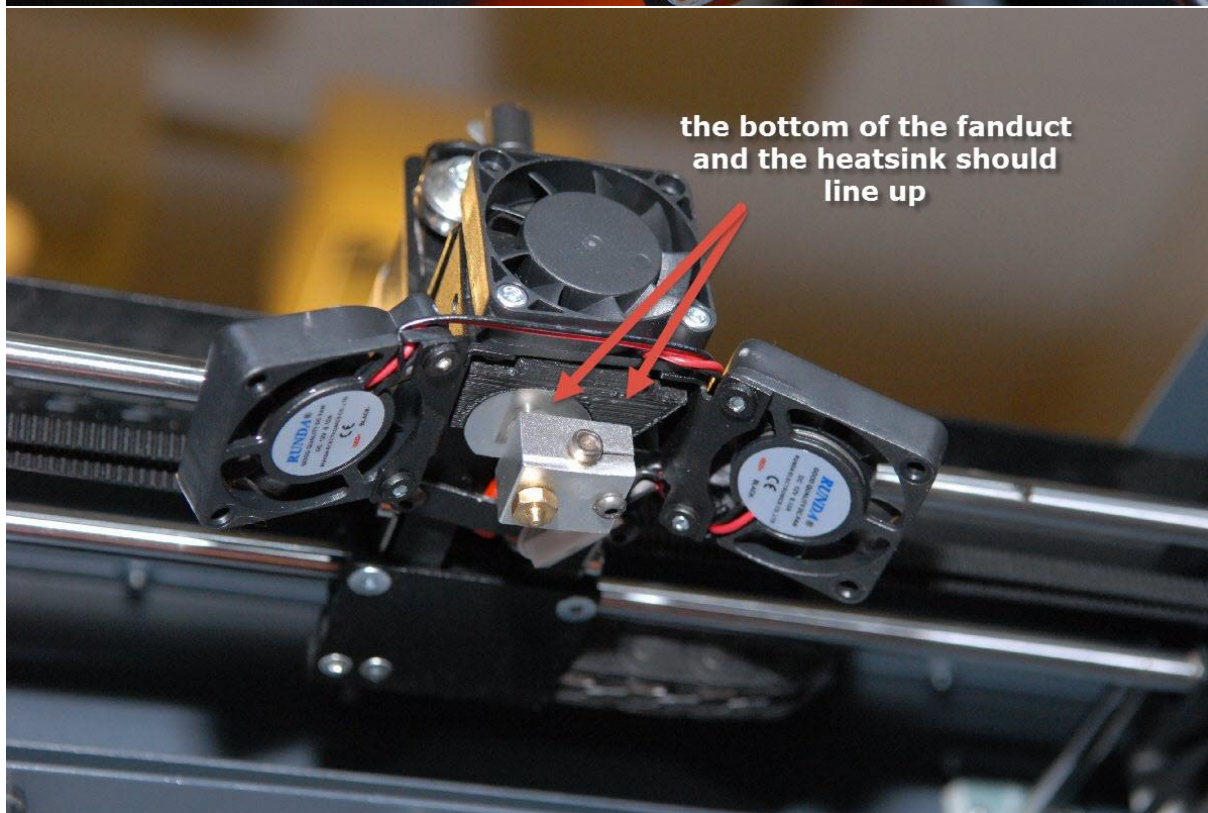
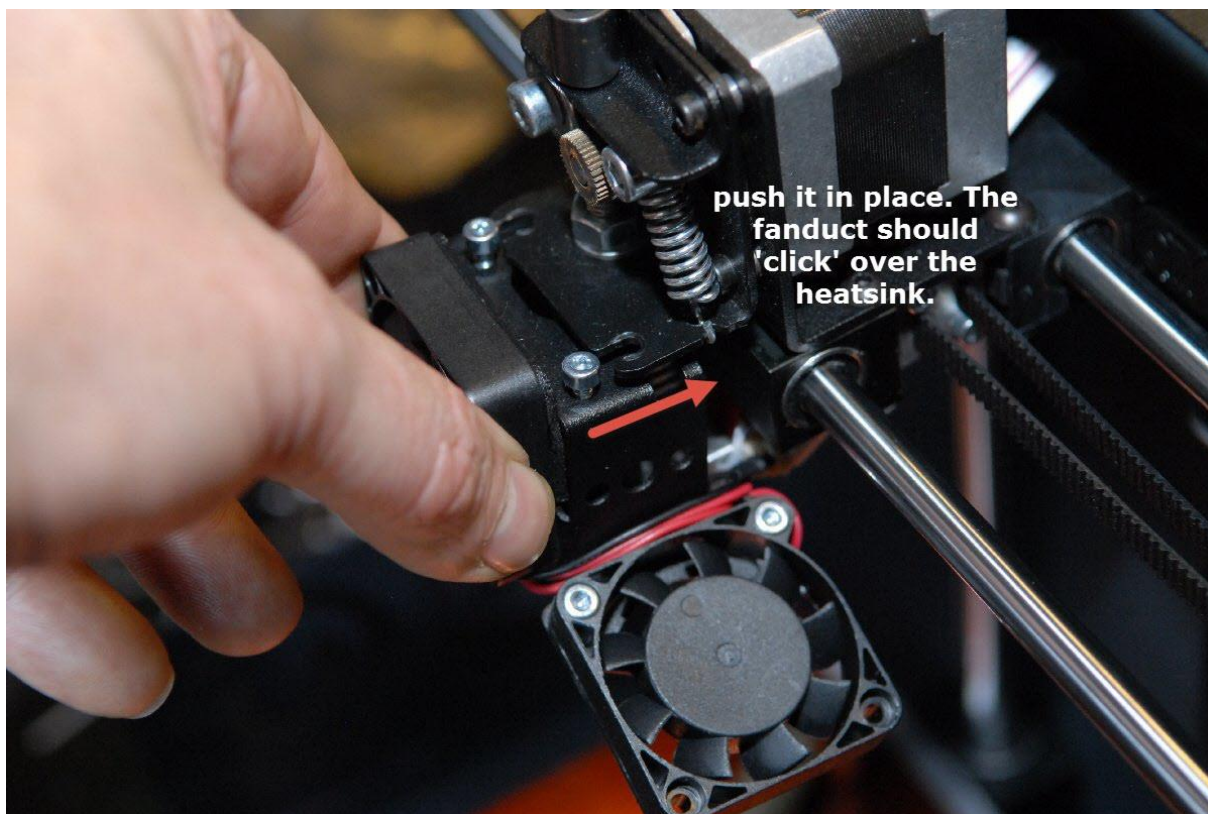




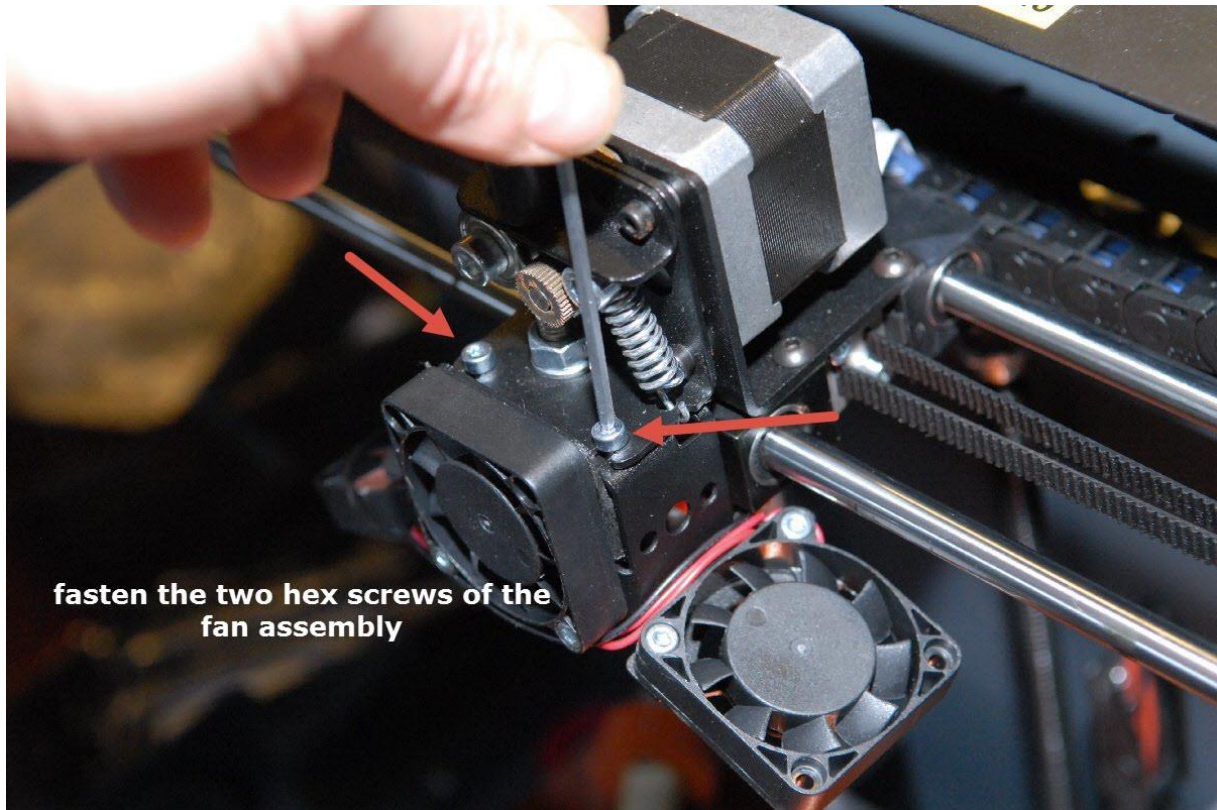




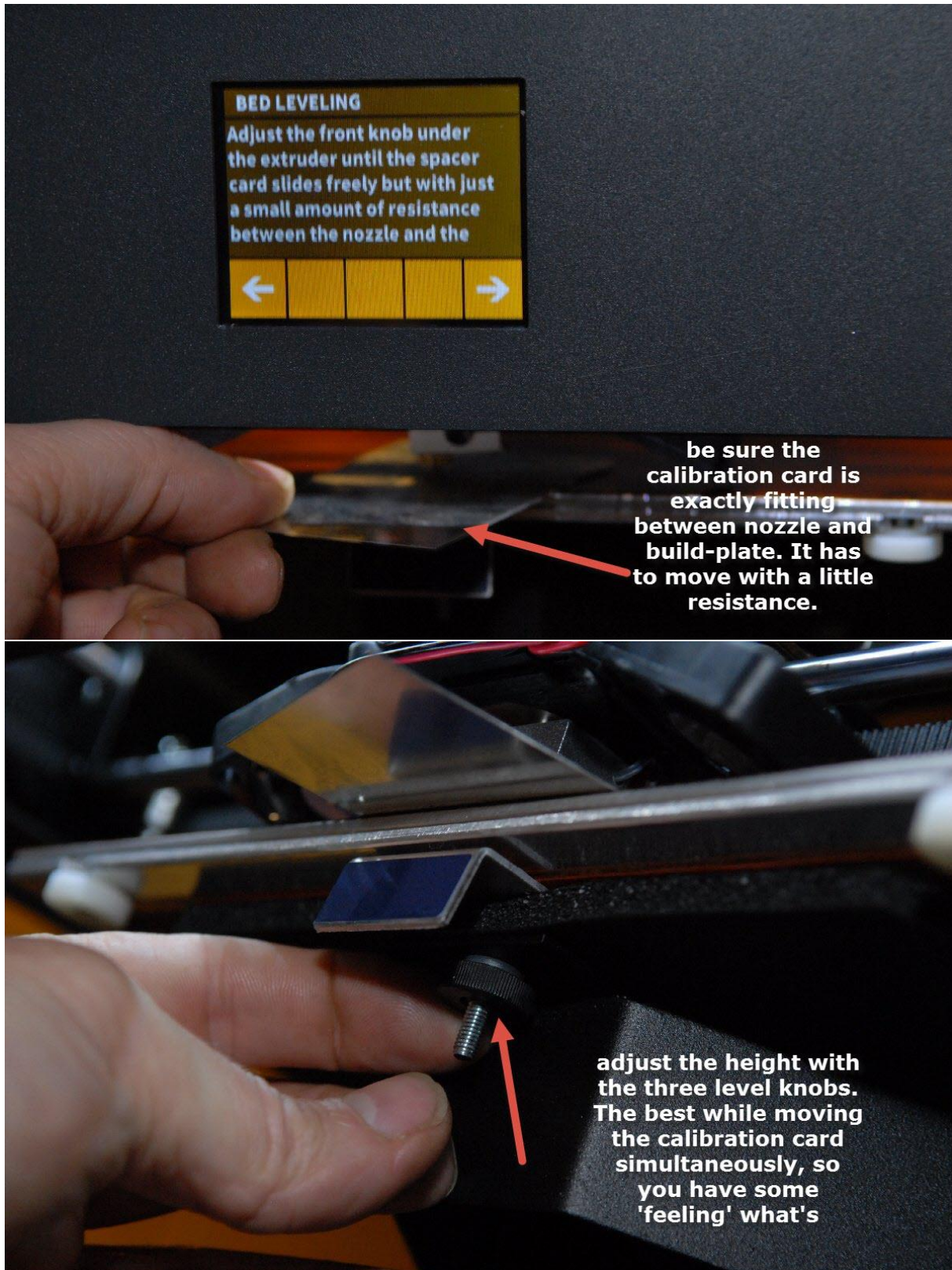




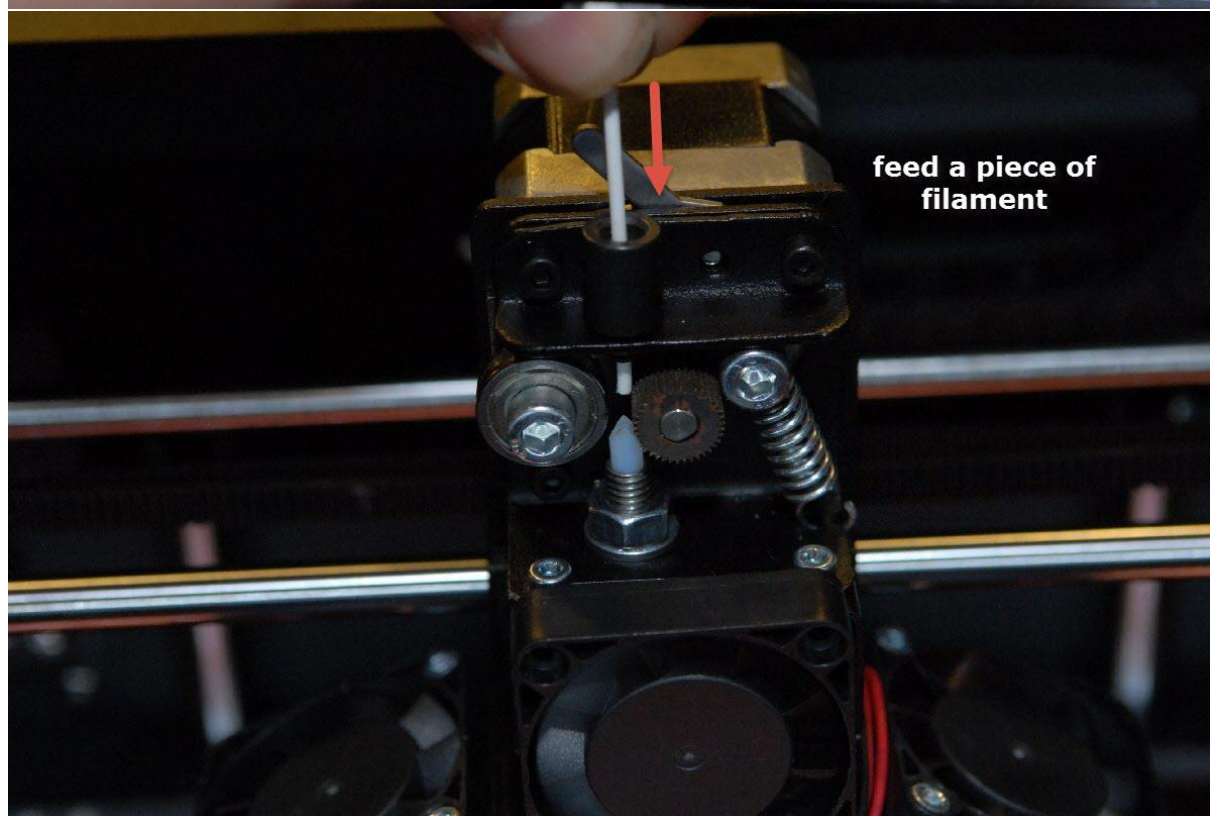
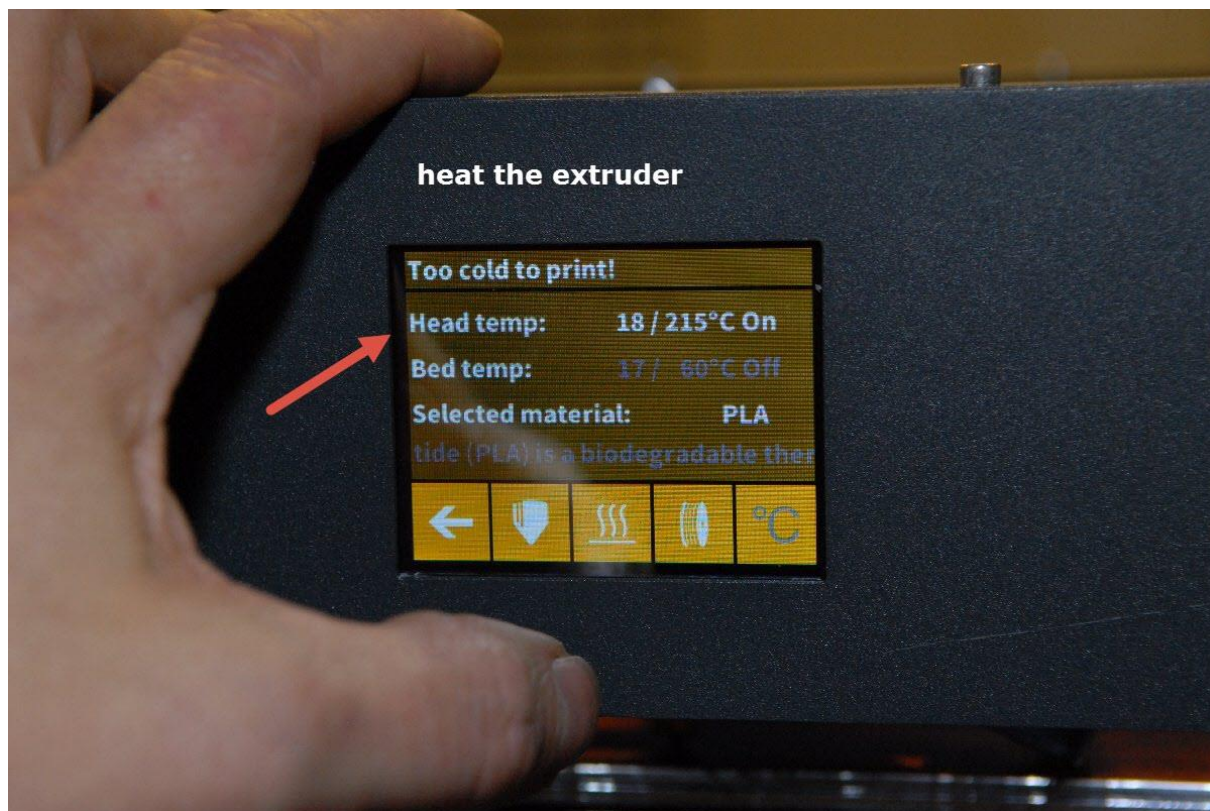


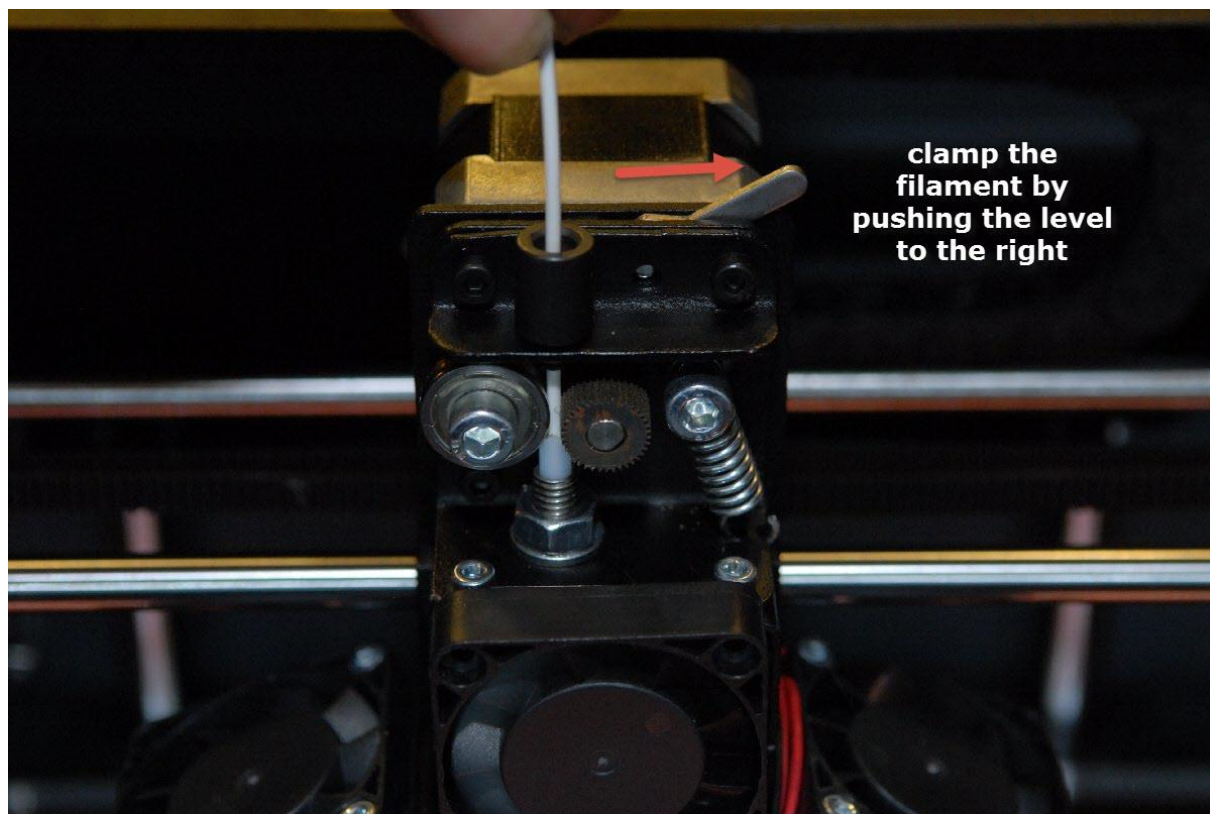




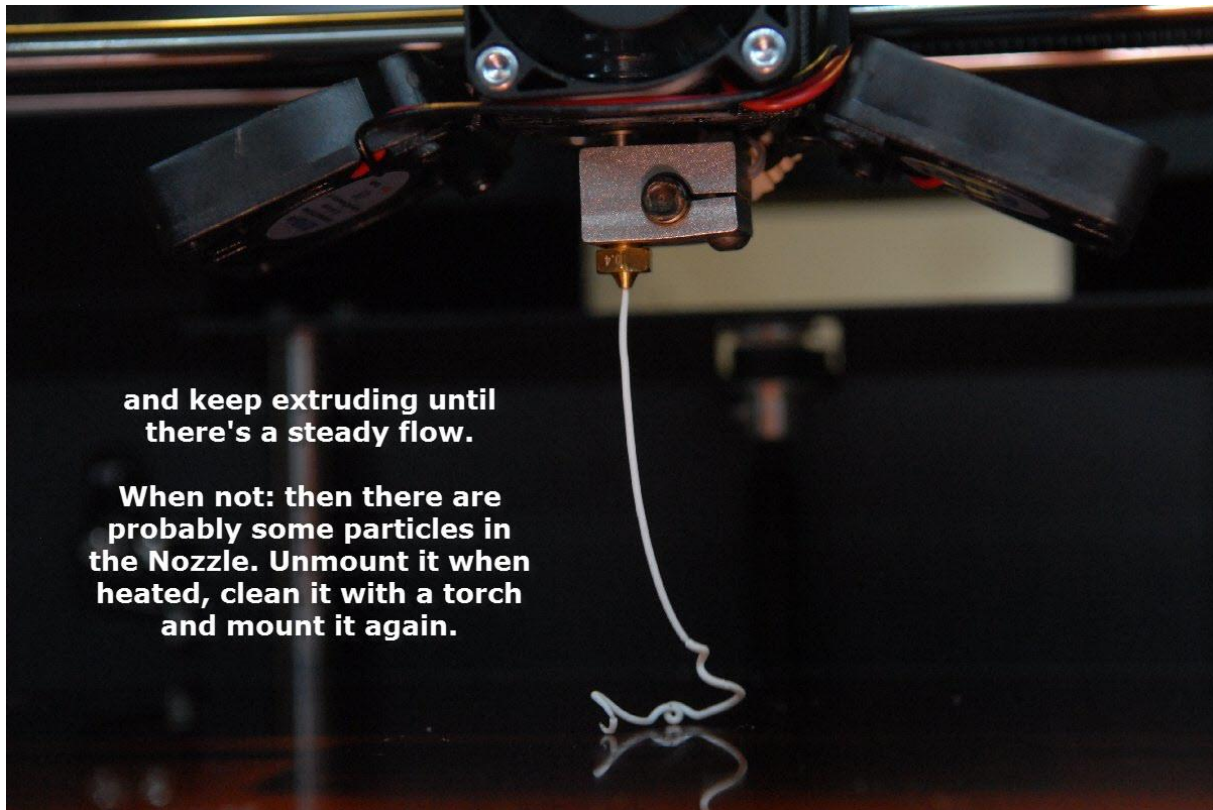












**That's it ;-)**

If you have questions, please mail at [info@CraftBot.nl](mailto:info@CraftBot.nl)

**Bart ter Haar**

## **Conditions**

General conditions CraftBot.nl: see <https://www.craftbot.nl/voorwaarden/>.

General warranty conditions see: <https://www.craftbot.nl/wp-content/uploads/2016/01/CraftBot-1-jaar-garantie-2016.pdf>

## **Return address:**

CraftBot.nl  
t.a.v. B. ter Haar  
Claes de Vrieselaan 47  
3021JC Rotterdam  
The Netherlands

+31(0)104778804