

#prep Hotend: Hot-Tightening

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In this guide, we will Hot-Tighten the hotend.

You ONLY need to follow this guide if you assembled a brand new hotend and have not already hot-tightened it!

WARNING: YOU WILL BE HANDLING A 240°C HOT PIECE OF METAL. IF YOU'RE NOT CAREFUL, YOU WILL GET BURNED.

Hot tightening is essential to sealing the nozzle and heatsink together to ensure that molten plastic cannot leak out of the hotend in use. When done properly there is almost zero chance of leaks.

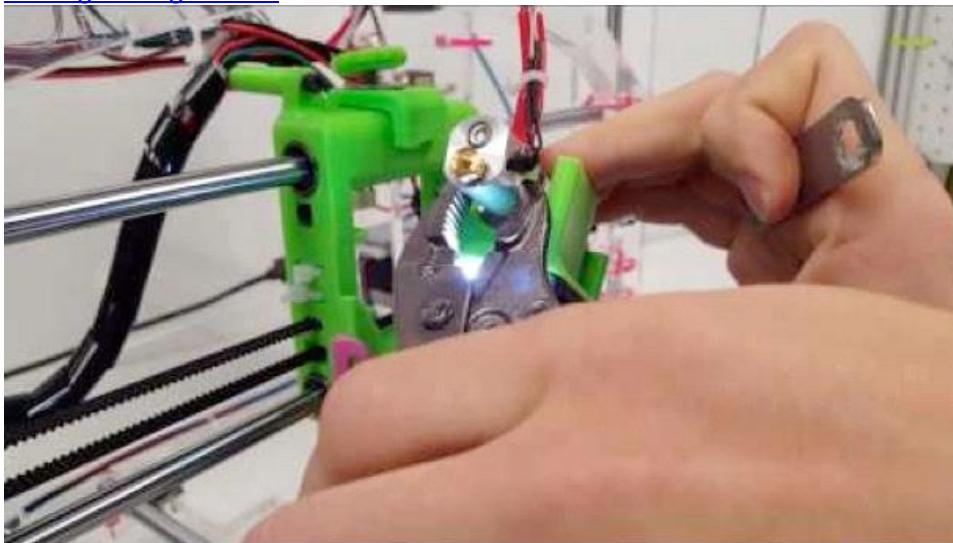


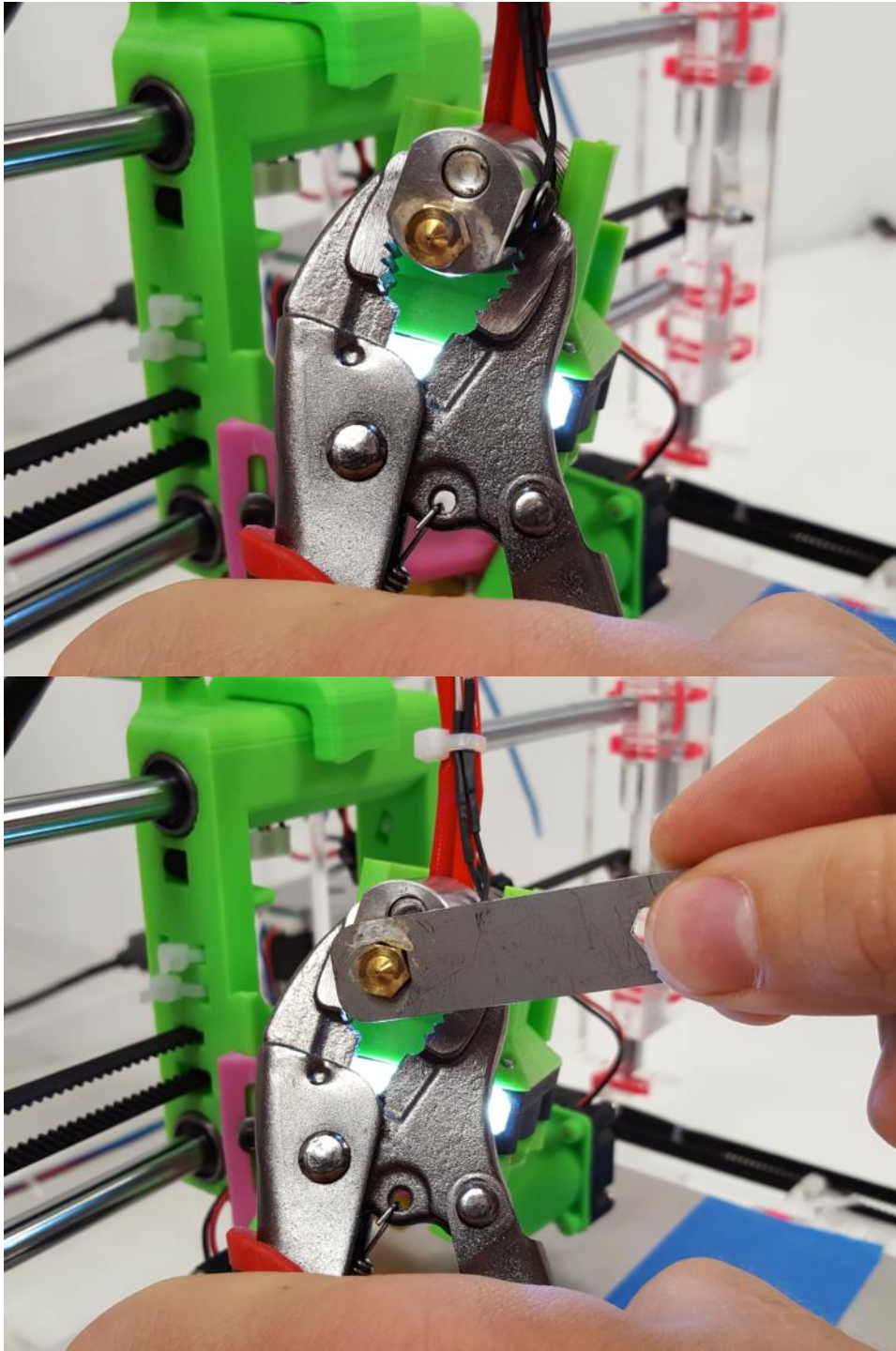


Using the controller, set the hotend temperature to 240°C. (Press > Nozzle Temp > Nozzle > 240). Allow the hotend to reach 240°C and wait one minute to allow all components to equalize in temperature. Tiny amounts of smoke are normal.

VIDEO DEMONSTRATION : Hot Tightening

[Hot-Tightening HotEnd](#)





Gently tighten the nozzle whilst holding the heater block still with a spanner and using a smaller 7mm spanner to tighten the nozzle. This will tighten the nozzle against the HeatSink and ensure that your HotEnd does not leak.

You want to aim for 3Nm of torque on the hot nozzle - this is about as much pressure as you can apply with one finger on a small spanner. The nozzle does not need to be torqued down very tightly at all to form a good seal, when at lower temperatures the aluminum will contract and lock the nozzle and heatsink together extremely securely.



Slide on the insulating sock.

The sock helps even out the temperature swings and results in a more even extrusion - especially when using filament cooling fans.

You are now ready to mount the HotEnd to your printer! Yes!

PS: Usage Guidance

- The heatsink must be cooled! The bottom 2-3 fins of the heatsink are designed to run a little bit warm, but the rest of the heatsink should run at near-ambient temperature.
- The maximum temperature at which you should use your Lite6 hotend is 245°C - exceeding this temperature will cause the PTFE liner to begin to fail. Should your PTFE liner fail for whatever reason it can be easily replaced by removing filament from the hotend, then removing the liner tubing by depressing the collet and pulling up the tubing out of the hotend. You can then insert a

new liner by following the PTFE assembly instructions above.

- If you do want to print at 245°C you have to do a PID tuning procedure! (There is a guide for that.)
- It is worth checking every now and then that the PTFE liner is secured without any ability to wiggle. (More of a concern on bowden systems, but still.)