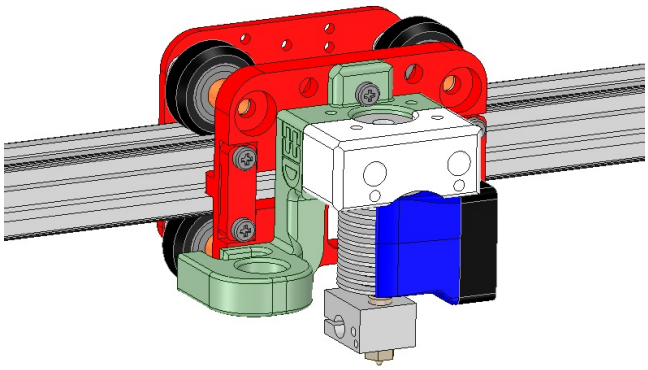
hot end installation on X axis carriage

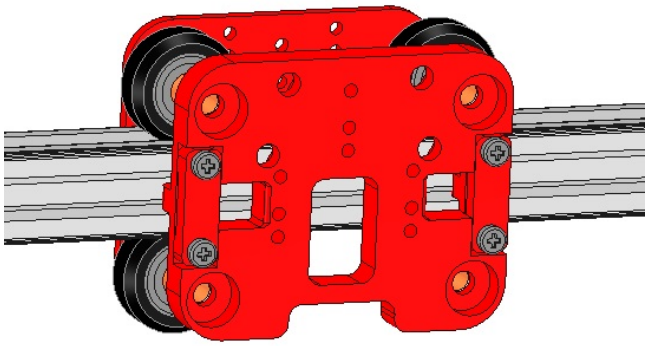


This page shows hot end installation on the X axis wheel carriage.

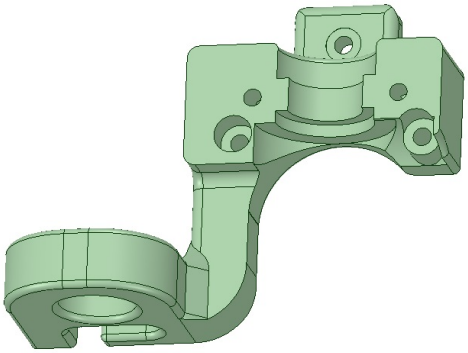
List of parts

- 1 M3x8mm thermoplastic screw
- 4 M3x20mm thermoplastic screws
- 1 t E3D V6 or E3D Lite6 hot end
- 1 5 or 12V inductance probe
- 2 hot end support (plastic parts)

The whole assembly is made on the X axis carriage side.



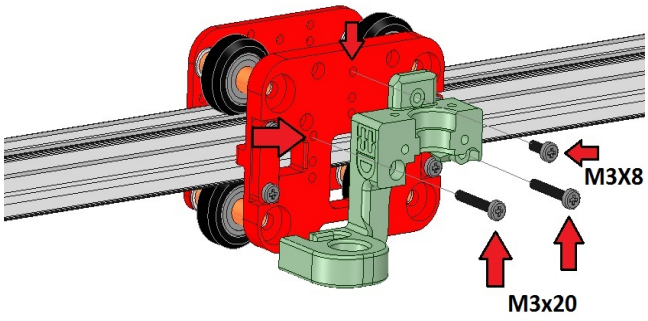
The front face is the one where you will see the 4 screws to hold the belt

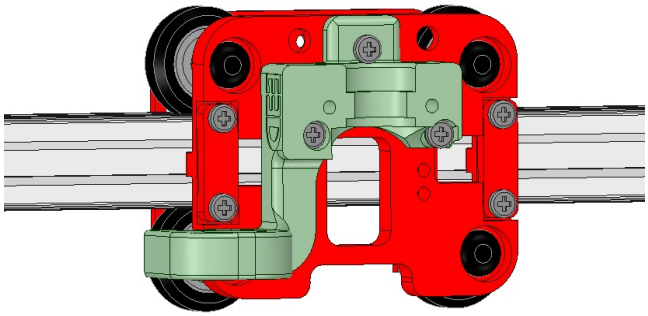


Use the back part of hot end holder. On it you will find the inductor probe holder on the left side.

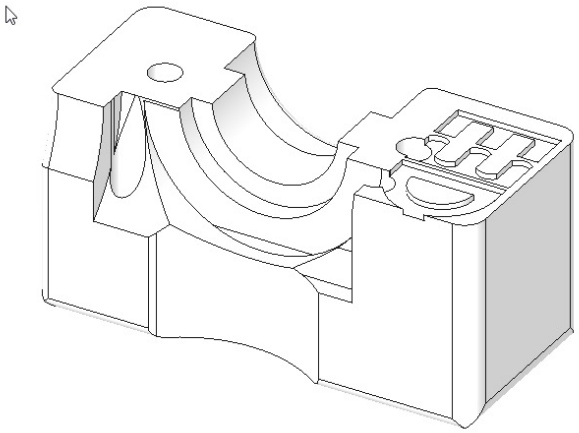
Warning: the inductor probe holder might be located on the other plastic part that you will assemble later.

use **2 M3X20mm** thermoplastic screws and **1 M3x8mm** thermoplastic screw, Use the holes pointed by the arrows.
You can use different holes in order to adjust the height of the holder. Use the ones that allows the holder to be the highest possible.



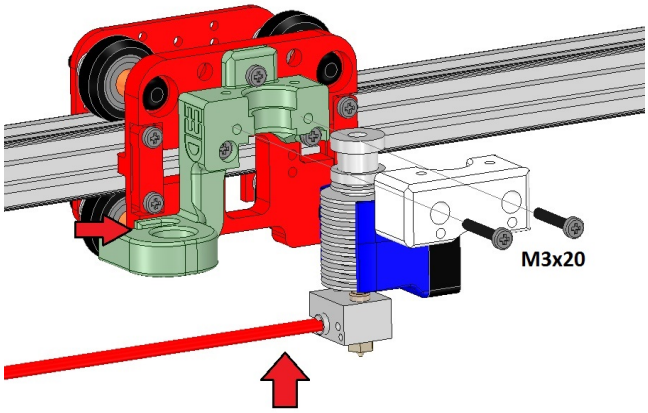


Now you need the second part of the hot end holder that is used as a clamp.

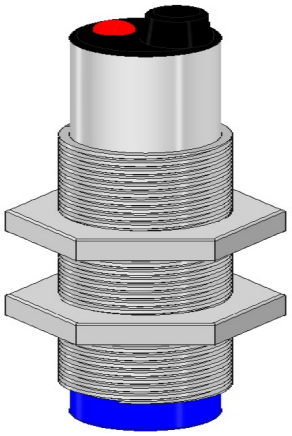


Hot end installation

Clamp the hot end using the last plastic part.and **2 M3x20mm thermoplastic screws.**
The tightening must be optimal so that the hot end cannot move or turn.Also make sure to stop tightening in order to keep the screw thread intact.



You can now install the proximity sensor.

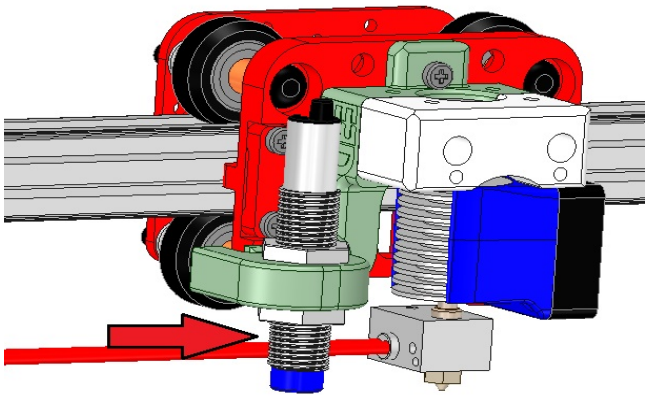


It can be either the 5V or 12V model (the connector is different and the wiring differs slightly). The cylindrical shape must fit inside the hole located on one of the plastic parts. You can use a file in order to adjust the hole

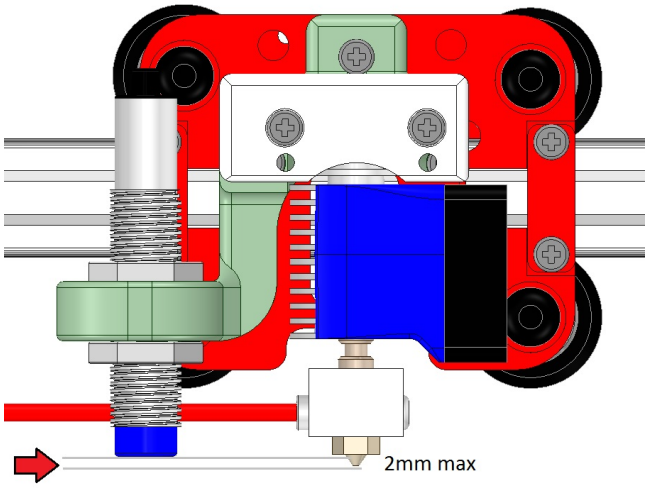
The2 nuts allows to adjust the sensor height. The sensor blue tip must be slightly higher than the nozzle tip (see the details below)

Note: The probe might be provided with large washers with teeth. They can be removed but will prevent the nuts from un-tightening with the vibrations

The sensor must be placed on the left side of the carriage. the red or blue wires of the heater cartridge can go behind the probe. (there might be a dedicated groove for these.)



The height adjustment of the sensor is made based on the blue tip of the probe and the hot end nozzle tip..



You must adjust the height of the probe so that the blue tip is less than 2mm higher than the nozzle tip.

An easy way to do it is to align both probe and nozzle tips at the same height. Then move the probe so that it corresponds to 1 or 2 turns of the nuts.

Important note:

The height of the probe is very important for the next steps.

- If it’s too high, the nozzle tip will crash into the aluminium plate when performing auto bed levelling.
- If it’s too low it will crash into the printed layer and might un stick the printed part from the bed.

PDF 3D: Hot end installation on X axis Carriage