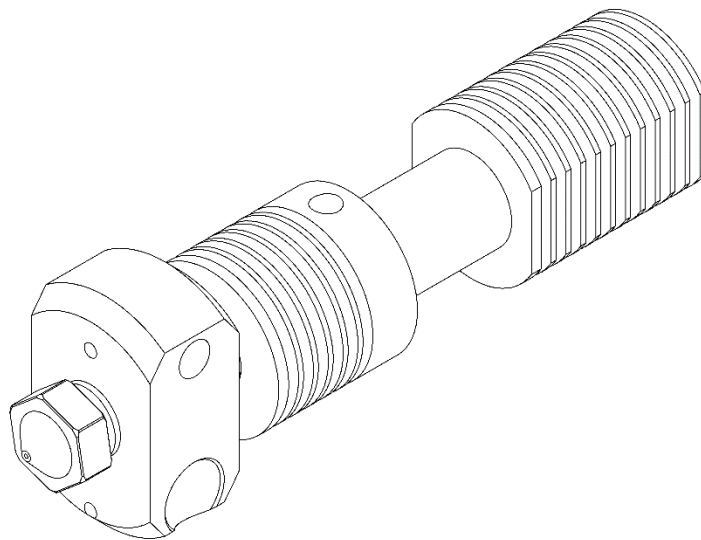


How to – Assemble Hot-End
FELIX Tec 4

9 February
2018

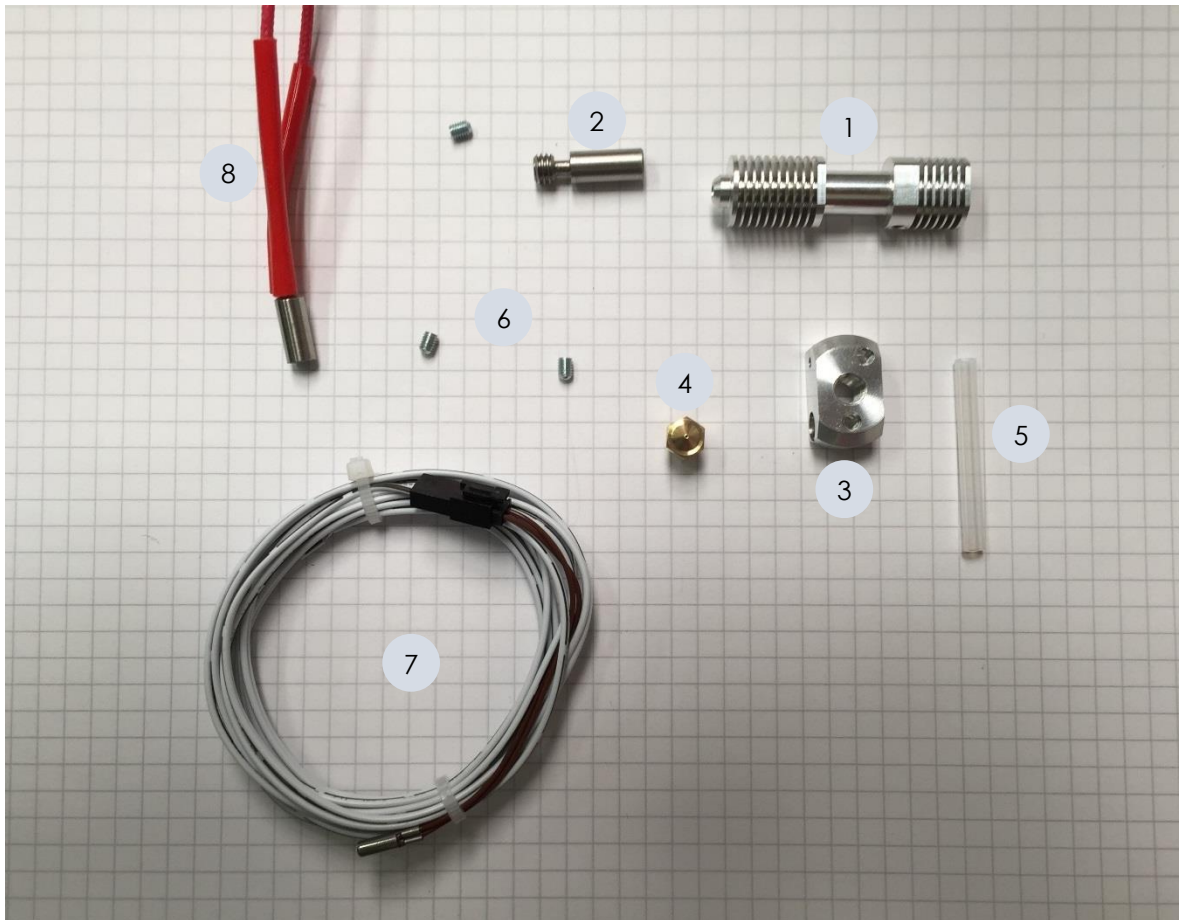
Revision 1



1 Partlist

1.1 Parts

ID	Article number	Description	Amount
1	130 029.0	Felix Tec 4 Hot-end Base	1x
2	130 030.0	Felix Tec 4 Heat break	1x
3	130 109.0	Pro 1 Heated Barrel 1,75mm	1x
4	130 110.0	Nozzle Pro Series 0,35mm	1x
5	130 031.0	Felix Tec 4 Teflon Tube Hot-end 36,5mm	1x
6	140 036.0	Set screw D-916 - M3 x 4	3x
7	150 162.0	Thermistor Heater cable Tec4	1x
8	150 163.0	Heater Extruder cable Tec4	1x



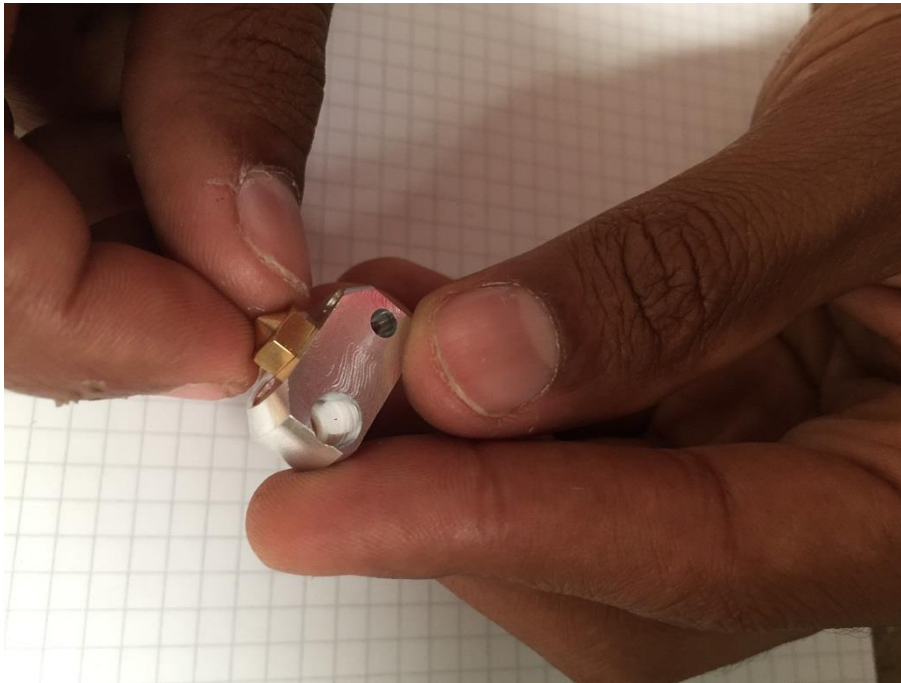
1.2 Required tools

ID	Omschrijving	Aantal
1	Caliper	1x
2	Wrench 12mm	1x
3	Ring wrench 7mm	1x
4	Cooling paste	1x
5	Allen key 1,5mm	1x

2 Assembly

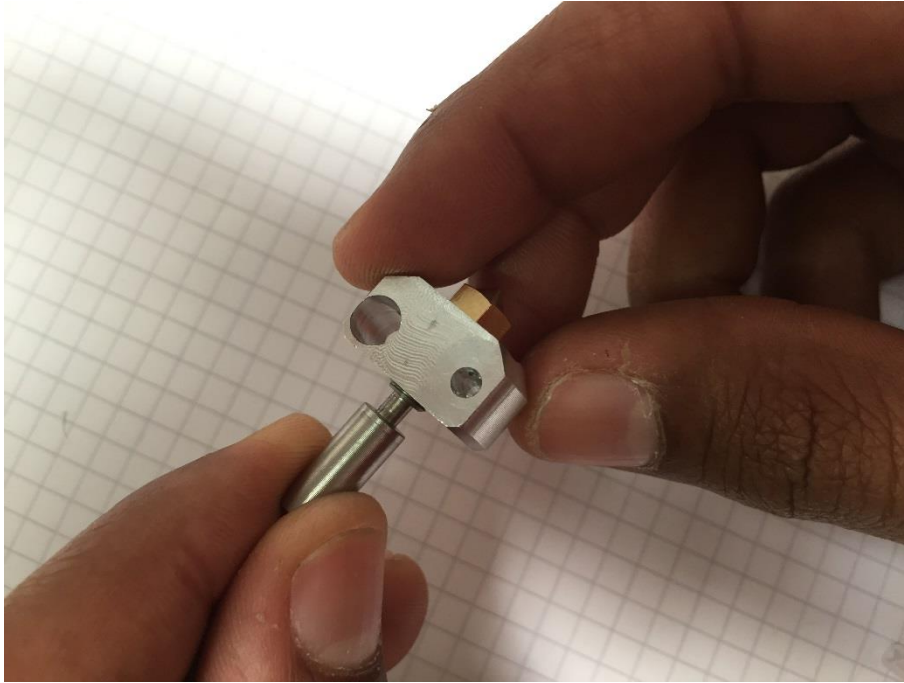
2.1 Assemble heater barrel

Screw nozzle (ID4) in the heater barrel till the flange of the nozzle touches the barrel (ID1). Note the orientation of the barrel. The nozzle should be on the side of the large chamfer.



Take Heatbreak (ID3) and turn it into the barrel until it loosely touches the nozzle.

Note: Ensure that the nozzle stays in place.



2.2 Clamp heater barrel

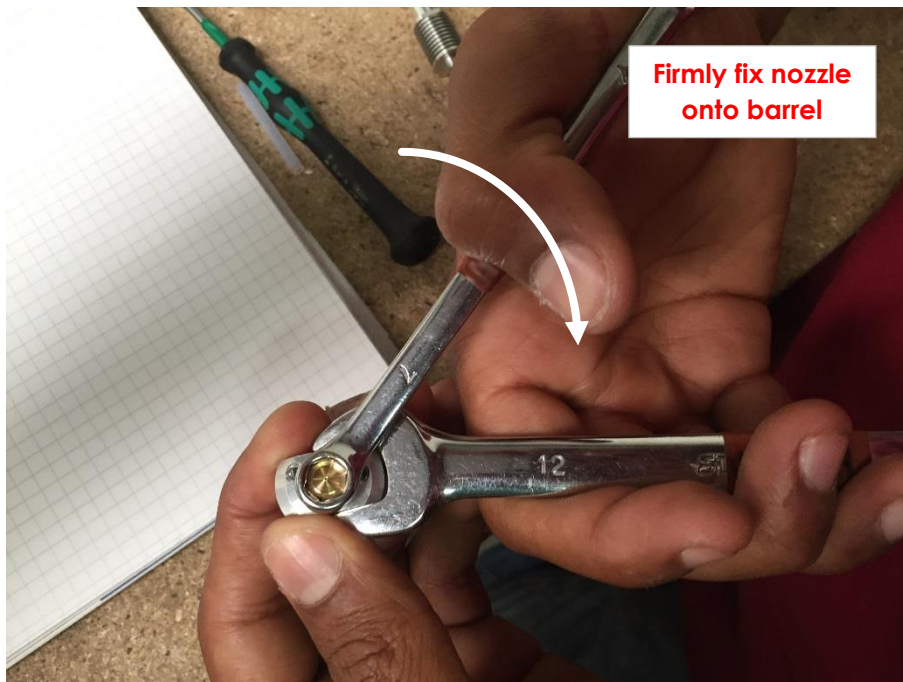
Take wrench 12 mm and 7mm. Turn the nozzle 90degrees counterclockwise en make sure that the heat break and barrel don't turn along.



Turn the heat break again loosely onto the nozzle and ensure the barrel is not turning along.



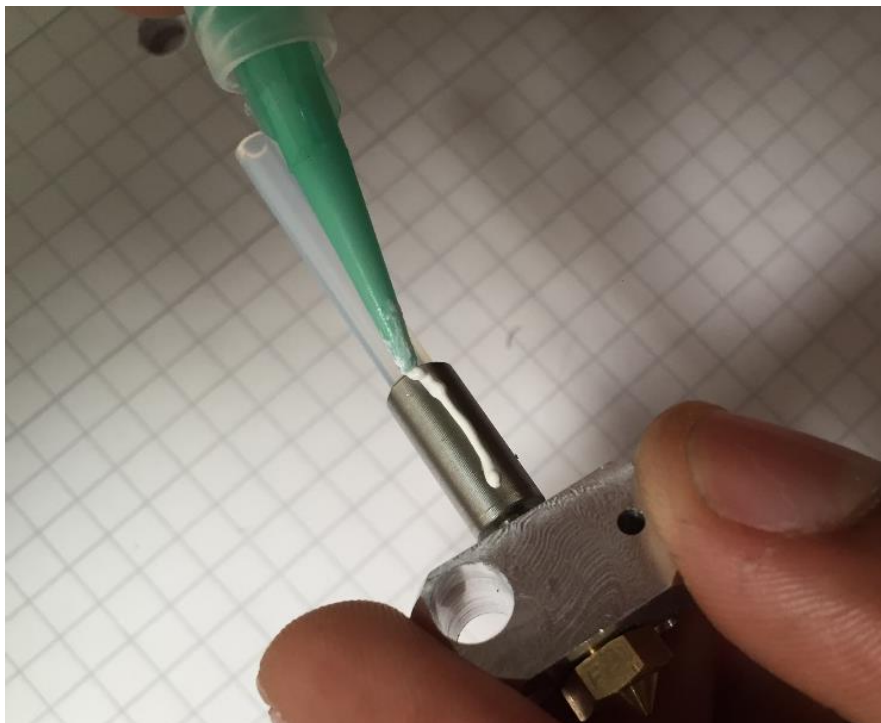
Take wrench 12 and 7mm and fix the nozzle firmly onto the heat-break.



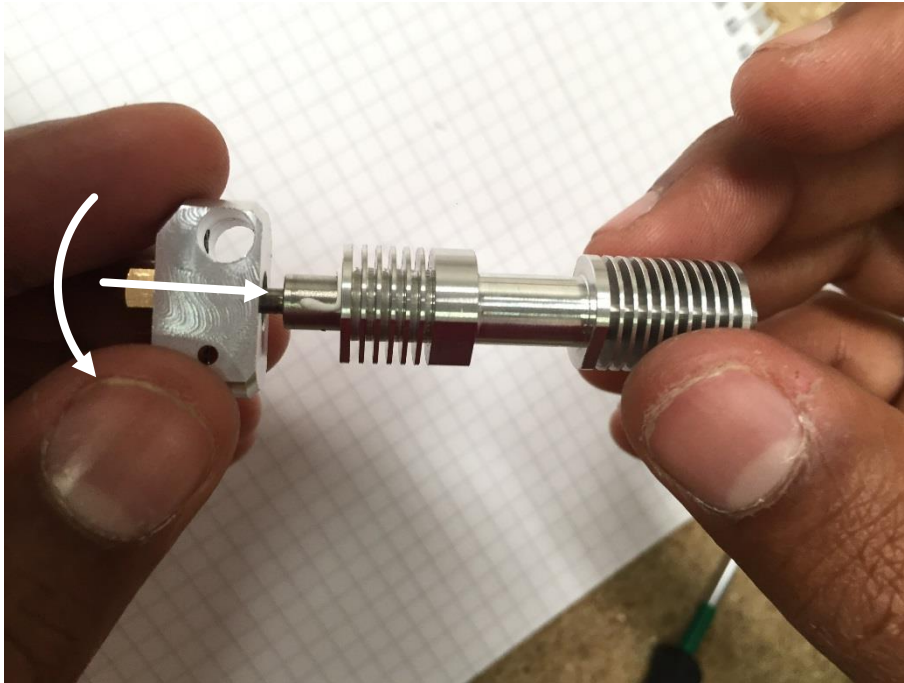
Double check if the nozzle is fixed against the heat-break and NOT the heater barrel. This can be confirmed by checking if there is a tiny gap between the nozzle flange and the heater barrel.



Place the teflon tube in the heat-break. Take some cooling paste and apply it on the top part of the heat break. This step is essential to provide proper heat transfer from heat break to hot-end base.



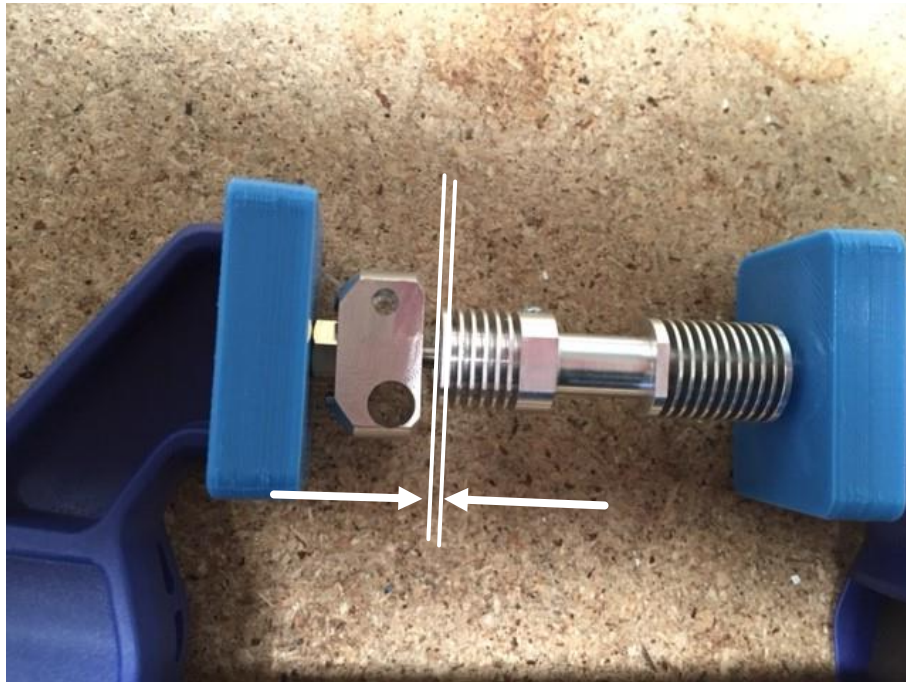
While inserting the heat break into the hot-end base. Turn it at least one turn to evenly spread the cooling paste between the two parts.



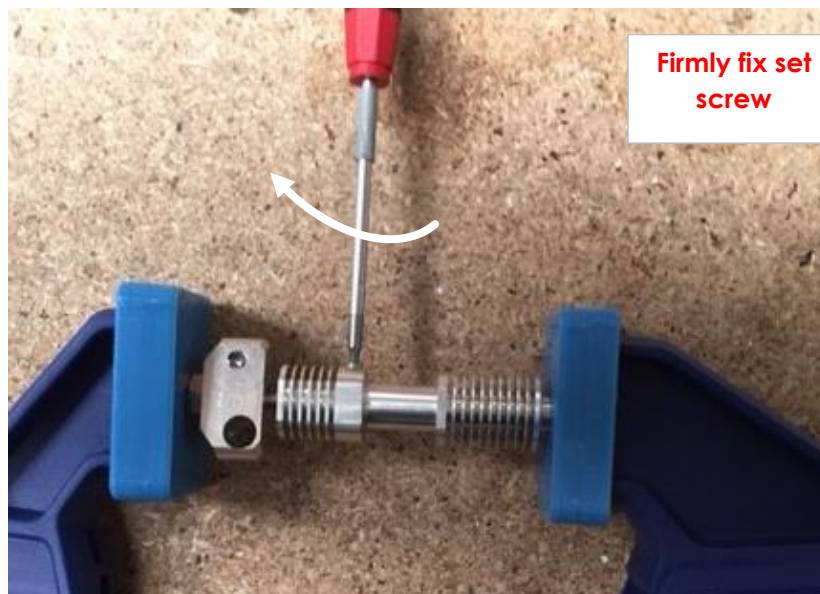
Ensure the hot-end parts are kept together. This can be done by compressing the ends by hand, but a clamp will also do the job.



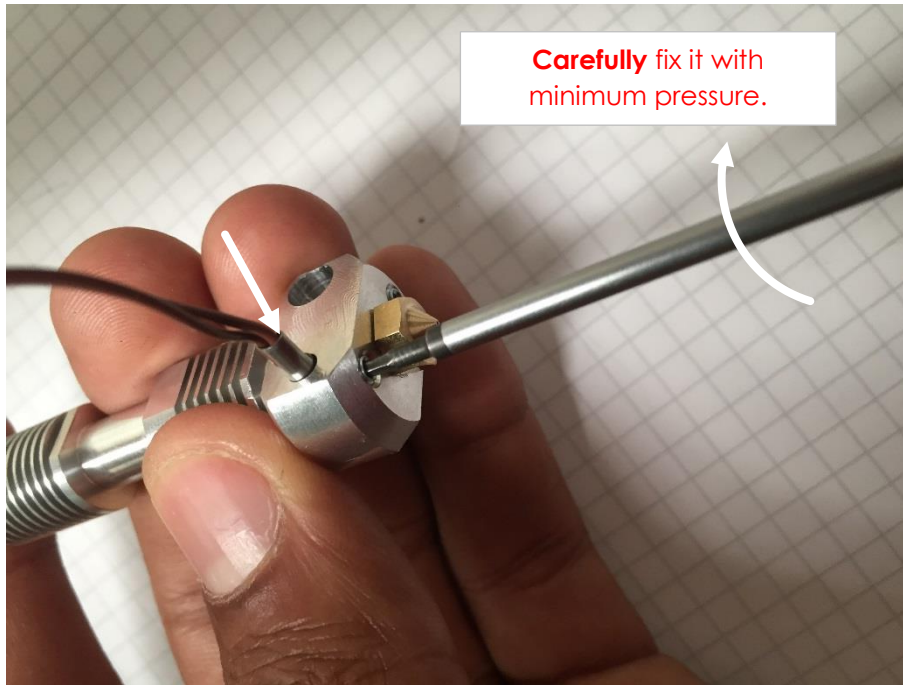
Push the parts together, and ensure the wide part of the heatbreak is fully inserted into the hot-end base.



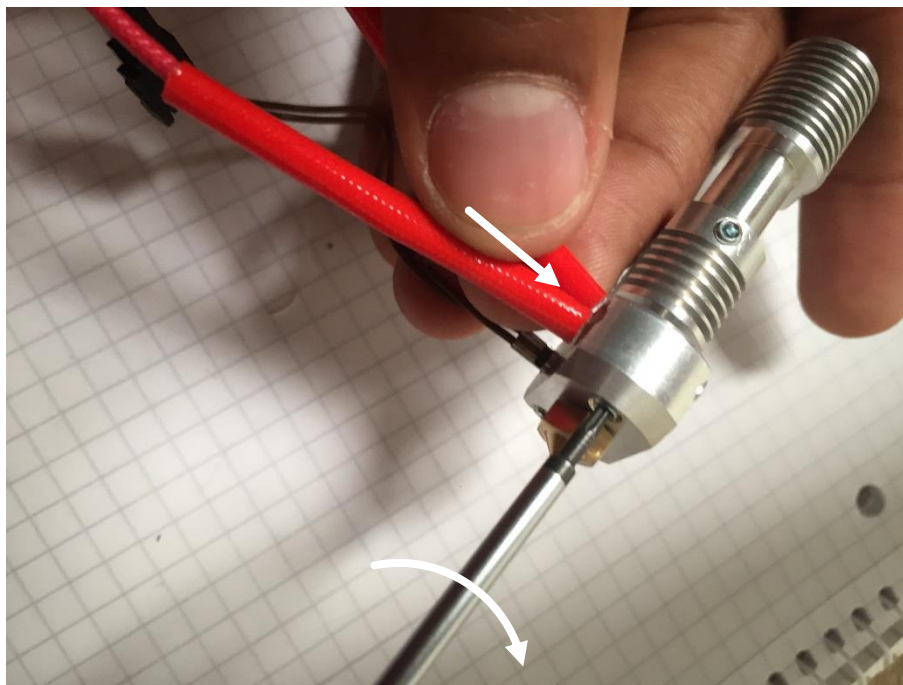
Fix the Set screw D-916 - M3 x 4 as tight as possible, without damaging the threads.



Take the thermistor (ID7) and insert it into the small hole of the barrel. **Carefully** fix the set screw. The thermistor is very sensitive, so carefully fix it.



Take the heater for extruder (ID8). Push the heater till the end of the barrel. Ensure it doesn't stick out. The heater is not so vulnerable as the thermistor and can be fixed firmly.



Check the length of the hot-end. It should range between 64,0 and 64,5mm.

