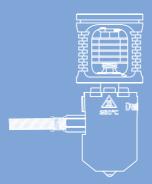
## DROPEFFECT®

# neXt G Hotend Assembly Instruction



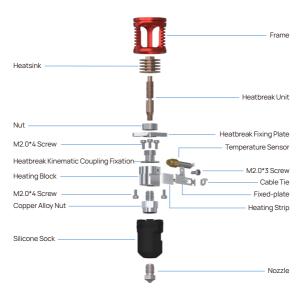
Please read and keep this manual carefully before using our products properly

## **Product Appearance**



Dear customer, firstly thank you for purchasing the neXt G Hotend from DropEffect.

## Components Exploded View



## Parts & Accessories

# When you open the package, you will find the following components.

No.	Name	Quantity
1	Phaetus Nozzle (Parts)	2
2	adapter(Parts)	1
3	UHF silicone protective case (Parts)	1
4	copper alloy adapter nut (Parts)	1
5	H5.0 Open Spanner	1
6	H6.0 Open Spanner	1
7	H7.0 Open Spanner	1
8	H9.0 Open Spanner	1
9	H10.0 Open Spanner	1
10	H1.5 Hex Key	1
11	H2.0 Hex Key	1
12	Heater Extension Cable (1m)	1
13	White Temperature Sensor Extension Cable (1m)	1
14	Internal Hexagon Countersunk Screw M3*8	4
15	M2.0*4.0Titanium Alloy Screw	1
16	Internal Hexagon Cup Head Screw M2.0*4	2
17	Internal Hexagon Countersunk Screw M2.5*5	4
18	Cable Tie	3
19	Thermal Grease	1
20	Collet Clip	1
21	Bowden Collet	1

## **Assembly Steps**

#### Step 1

Screw the heartbreak into the heatblock and tighten it using the H4.0 Open Spanner.

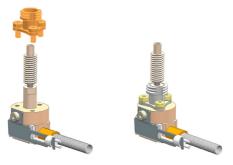


#### Step 2

Put the heating plate into the side groove of the heating block, and tighten the fixing plate with the screw to make the heating plate fixed. Then use cable ties to secure the cable of the heating plate and fixing plate through the side grooves of the fixing plate, install the temperature sensor on the heating block through the threaded hole of M4.

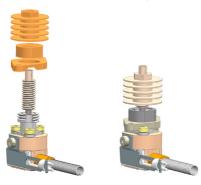


Step 3
Using the three M2\*4 titanium screws to secure the heatbreak onto the heatblock.



#### Step 4

Place the Kinematic-Coupling-Fixation (KC-Fixation) onto the three M2\*4 titanium screws so that the V-Groove of the KC-Fixation will fit firmly on those screws. Secure the KC-Fixation using the M8 threaded nut with the H9.0 open spanner and tighten it firmly. Screw the heatsink onto the M4 threads of the heatbreak tube. The finished assembly is the "neXt G core" which can be attached to the frame, and evenly coat the external thread of the heatbreak with thermal grease.



Step 5

Tight the "neXt G core" to the frame with two M2\*4 screws by using the  $H1.5~{\rm hex}$  key.





**Step 6**Put the silicone protective cover onto the Heater.





#### Step 7

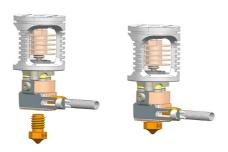
Adapter installation: Use two M3\*2.5 internal hexagon countersunk screws to attach the Groove Mount adapter onto the frame.





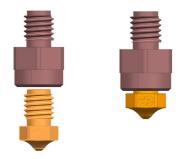
#### Step 8

Hot-tightening the nozzle: On this procedure no filament should be in the hotend. Heat the hotend to 285 C and wait for 2-5 minutes so that the hotend is uniformly heated. Now use a H7 open spanner to tighten the nozzle. Be careful not burn your hands. The tightening torque should be around 2.0-2.5 Nm (see the Nozzle Hot-Tightening Instruction). This product comes with an anti-torsion structure. Please do not use an open-end spanner or other tools to secure the heating block, as it may cause damage to the ceramic heating plate due to excessive force.



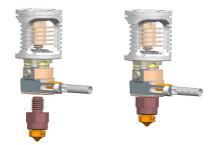
## **UHF Version Assembly Steps**

Step 1 Install the copper alloy adapter nut onto the nozzle.

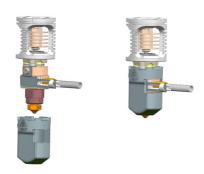


#### Step 2

Install the nozzle into the copper alloy nut and use hot-tightening method on the copper alloy nut and the nozzle, which will ensure that all components are leak proof (the tightening torque for the hot nozzle should be around 2.0-2.5 Nm) (This product comes with an anti-torsion structure. Please do not use an open-end spanner or other tools to secure the heating block, as it may cause damage to the ceramic heating plate due to excessive force.)



**Step 3**Put on the silicone protective cover.



## Hot - Tightening

- Hot-tightening is the last step before neXt G Hotend is ready! It is essential for the sealing of the nozzle and heatbreak to ensure that the polymer melt does not leak out of the hotend during use. Please ensure that no filament is loaded inside the hotend for this procedure.
- 2. Using the printer's control software (or LCD screen) set the hotend's temperature to 285°C. Wait a minute or two to ensure that all components are evenly heated and your hotend has reached a steady state.
- 3. Use an open-end spanner to tighten the nozzle. This will ensure that the nozzle is tightly against the heatbreak and prevent any leakage from the Hotend. (This product comes with an anti-torsion structure. Please do not use an open-end spanner or other tools to secure the heating block, as it may cause damage to the ceramic heating plate due to excessive force.)
- 4. The tightening torque of the hot nozzle should be about 2.5 Nm, which is about the pressure applied by one finger on the small spanner.
- 5. As a last step you should perform a PID tune, so that your 3D printer can keep a stable temperature on the hotend. A PID tune can sometimes be performed directly from the LCD screen on your 3D printer, if not use google how to perform a PID tune for your particular 3D printer and/or Mainboard.



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