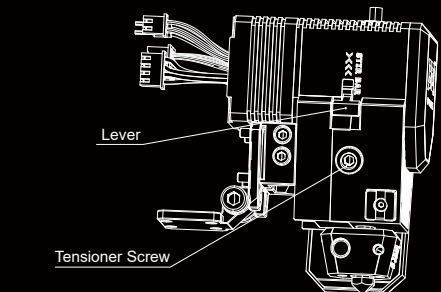


TERMINATOR

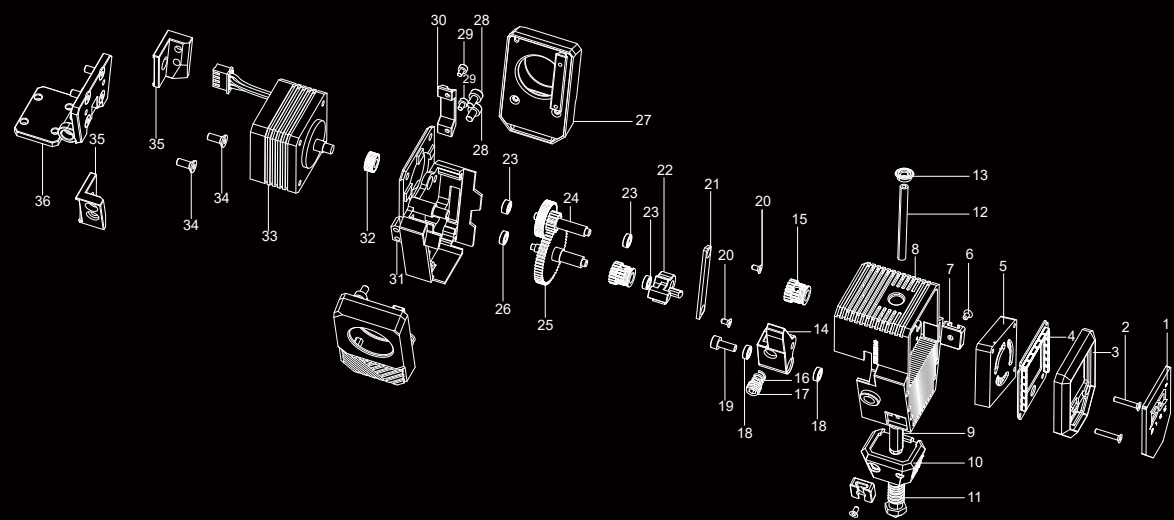
User Manual

Filament Tension Adjustment/Release

- Drive gear tension is adjustable to accommodate different filaments, turn the Tensioner Screw counterclockwise to increase pressure, clockwise to decrease pressure (when the screw stops turning, do not force it or you will damage the extruder.)
- To release the filament, switch the lever up, then turn it down when done.

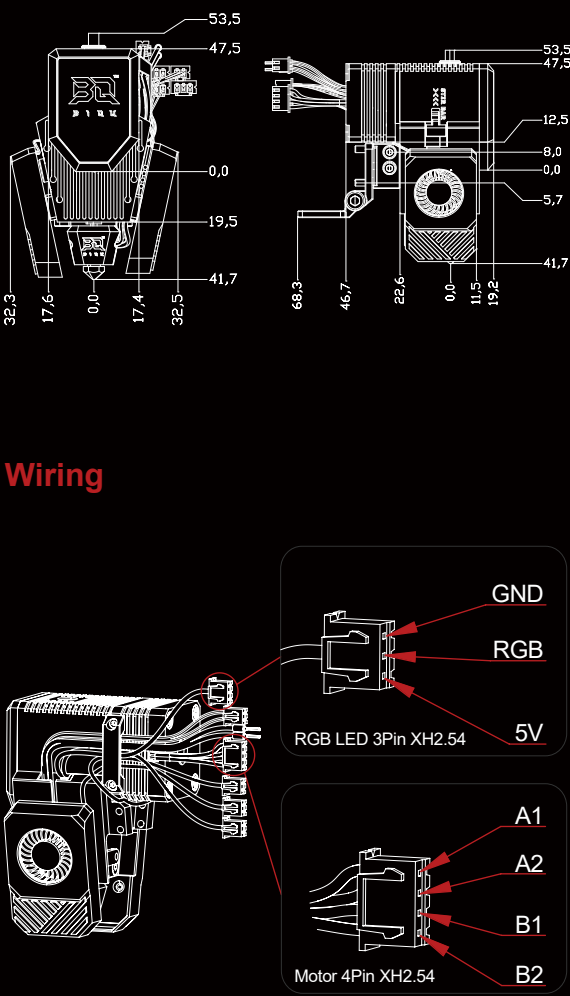


Exploded-View Drawing

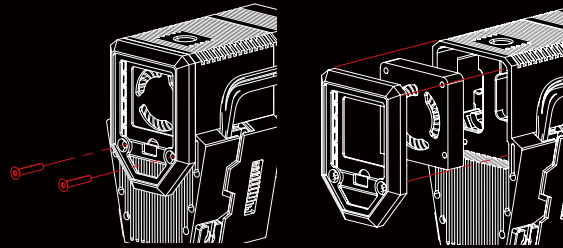


Dimensions

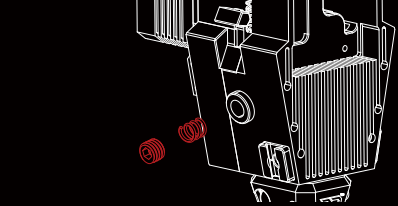
- XYZ Dimensions (fans included, but not wire terminals):
64.8 x 87.5 x 95.2 mm
- Nozzle Diameter: 0.4 mm



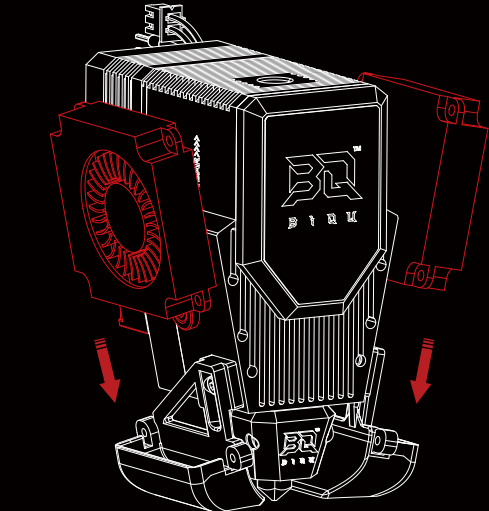
To remove the front panel frame and cooling fan:



To remove the tensioning spring:



Insert the 4010 fans as shown in the image.



Specifications

Extrusion Method	Dual Gear Extrusion
Maximum Printing Temperature	350°C
Weight	245 g (including heater block and fans)
Maximum Extrusion Force	7.5 kg (depending on the filaments)
Extrusion (based on the existing)	1800mm³/min (depending on the filaments)
E-step	932/mm at 16 microstep (need further calibration.)
Klipper Rotation Distance	3.433
Max. Motor Current	1.0A
Gear Ratio	7:1
Drive Gear Circumference	24.5mm
Filament Diameter and Tolerance	1.75 ± 0.05mm

Note: Not compatible with standard NEMA14 motor, but base on its design.

Maximum Operating Temperature

- Fan: 90°C
- Motor: 180°C
- Bearings: 100°C
- Heat Break: H2 bi-metal (copper alloy + grade5 titanium alloy) High Temperatures Version

Please note that this is the maximum working temperature of a single part, not the entire system.

Heater Block Specifications

- Heater Cartridge Head Size: 6 x 20 mm
- Power: 70W
- Voltage: 24V
- Thermistor Type: PT100
- Thermistor Size: 3 x 15 mm

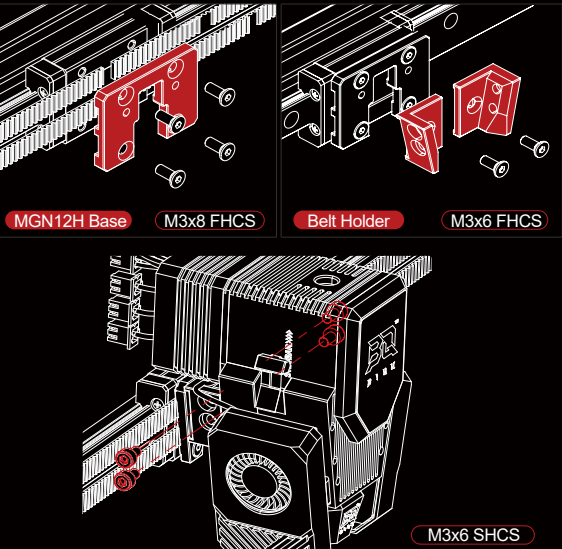
Fan Specifications

Size	30x30x7mm
Cable Length	170mm
Voltage	24V
Speed	8000±10%
Hermal Model	DuPont 2.54"

*3007 blower fans are pre-installed on both sides for printing ABS, PC, carbon fiber, and PA. For PLA, PETG, and similar filaments, users can prepare 4010 blower fans and install them using the included nylon sintered fan ducts for improved cooling and optimal printing results.

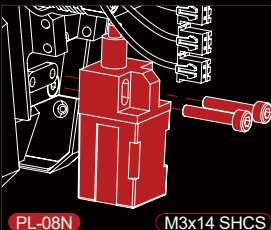
Install on MGN12H/MGN9H

For MGN12H

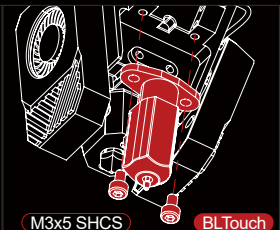


Install a Z Probe

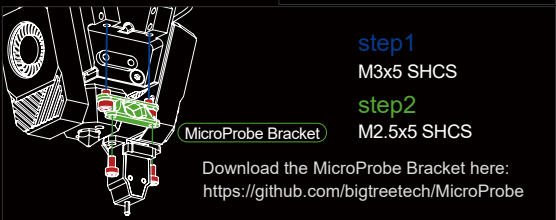
For PL-08N



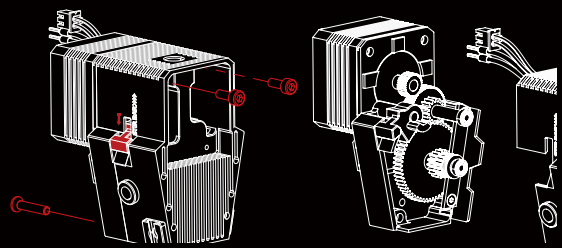
For BLTouch



For MicroProbe

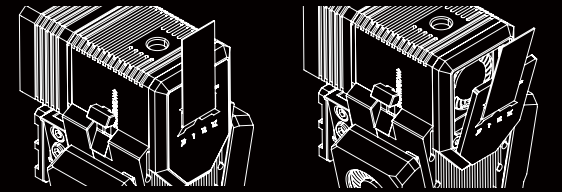


To expose the internal gearing:

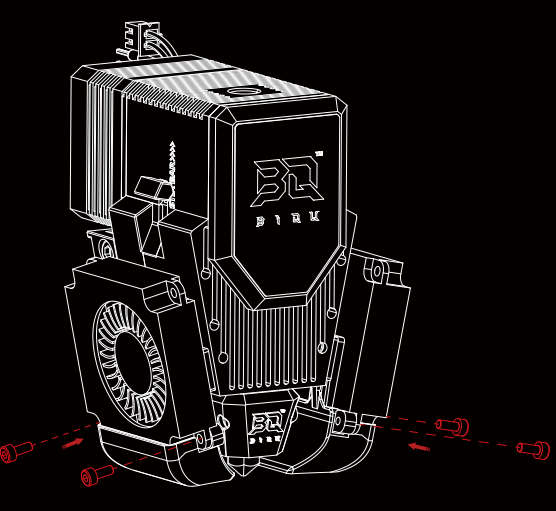


Replace with a Blank Front Panel

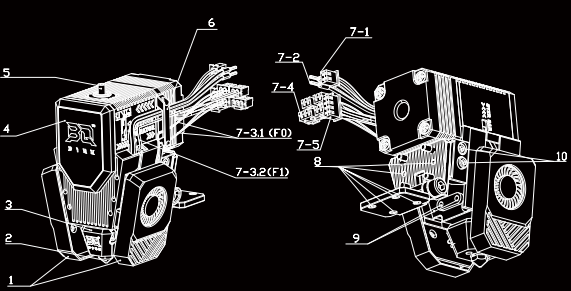
Place a piece of tape on the magnetic Logo front panel, lift it up, and replace it with the bonus panel.



Secure the 4010 fans using four M2x5 screws.



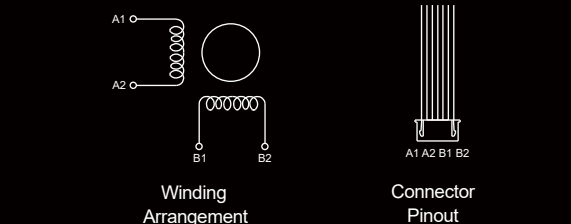
Product Overview



- | | |
|----------------------------|--|
| 1. Part Cooling Fans | 7-3.1 Part Cooling Fan F0 (2pcs) |
| 2. Nozzle | 7-3.2 Extruder Cooling Fan F1 |
| 3. Heater Block | 7-4. RGB Cable |
| 4. Front Panel | 7-5. Motor Cable |
| 5. PTFE Tube | 8. Mounting Holes for Slider |
| 6. Cable Clip | 9. Mounting Holes for Proximity Switch |
| 7-1 PT100 | 10. Fixing Holes |
| 7-2 Heater Cartridge Cable | |

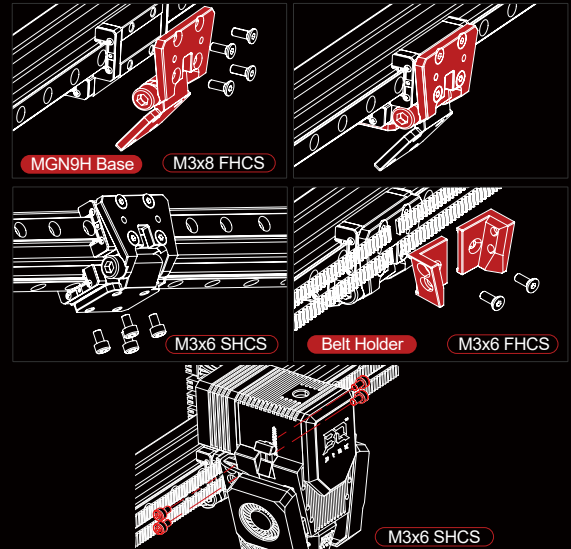
Motor Specifications

Motor Cable Length	Standard 30mm
Rated Voltage	DC3.3V
Rated Current	DC 1.0A/phase
Phase	2
Winding DC Resistance (25°C)	3.3X (1±10%)Ω
Winding Inductance	3.4X (1±20%) mH
Holding Torque	≥120mN·m
Insulation Resistance	≥100MΩ (DC 500V)
Insulation Level	Class H
Weight	0.1kg REF.



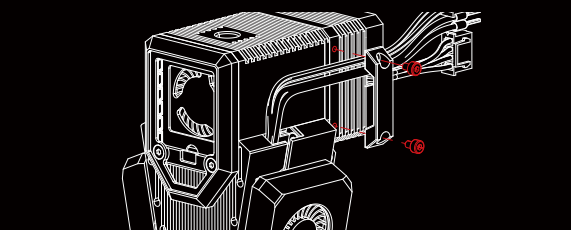
- | | |
|---------------------------|----------------------------|
| 1. Front Panel | 19. M3 x 8 Screws |
| 2. M2x12 Screws | 20. M2 x 4 Screws |
| 3. LED Frame | 21. Tie Bar |
| 4. LED Matrix | 22. Filament Release Lever |
| 5. 3007 Blower Fan F1 | 23. 673zz Bearing |
| 6. M2 x 4 Screws | 24. Spur Gear |
| 7. Part Cooling Fan Mount | 25. Output Gear |
| 8. Front Heat Sink | 26. 682zz Bearing |
| 9. Heat Break | 27. 3007 Blower Fan F0 |
| 10. Heater Block | 28. M3 x 5 Screws |
| 11. Nozzle | 29. M2 x 3 Screws |
| 12. PTFE Tube | 30. Cable Clip |
| 13. PTFE Quick Connector | 31. Main Body |
| 14. Idler Arm | 32. Pinion Gear |
| 15. Idler Gear | 33. Motor |
| 16. Spring | 34. M3 x 8 Screws |
| 17. Tensioner Screw | 35. Belt Holder |
| 18. MR63 Bearing | 36. Mounting Plate |

For MGN9H

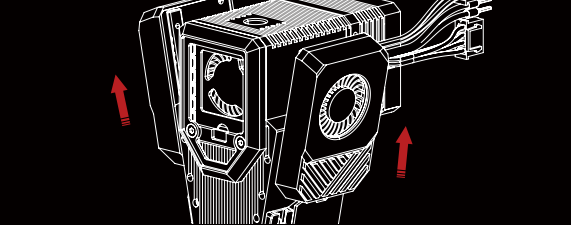


Disassembly Guide

To remove the cable clip:



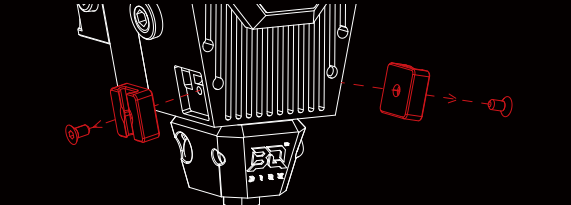
To remove the part cooling fans:



Fan Replacement

After removing the fan, loosen the two M2 screws and take off the fan clip.

Note: Safely store the removed parts, as you may want to reassemble them in the future.



Insert the 4010 fan ducts and tighten the M2x5 screw.

