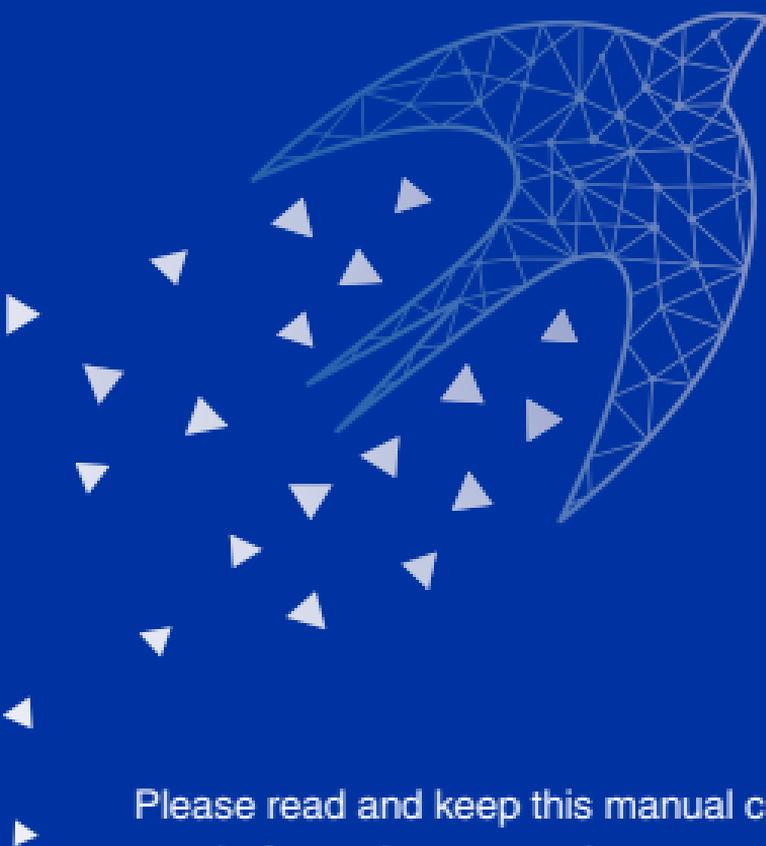


Phætus®

APUS Extruder Product Instruction



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

Product Appearance



Thank you for buying Phaetus'
APUS Extruder

Product Features

**Easy
maintenance**

**Optimized RNC
Dual Drive Gears**

**155g lightweight
all metal design**

6.3 : 1 Gear ratio

Specifications

Product Name: APUS Extruder

Product Size: 67mm*64mm*42mm

Product Color: Blue

Product Net Weight: 155g

Compatible Filaments

Compatible with all thermoplastic filaments including but not limited to PLA, ABS, PETG TPU, PP, PC, PA PEEK and PEI as well as typical composite fibre filaments such as PLA-CF, ABS-CF, PETG-CF and PA-CF/GF. Composite filaments such as steel, wood, boron carbide, tungsten and fluorescence materials can be processed by the extruder.

Parts & Accessories



Motor Extension Cable -5cm
(Molex Micro Fit 3.0-DuPont TJC8-4)

Motor Extension Cable -5cm
(Molex Micro Fit 3.0-JSTXHP-4)

H2.0 Hex Key

H2.5 Hex Key

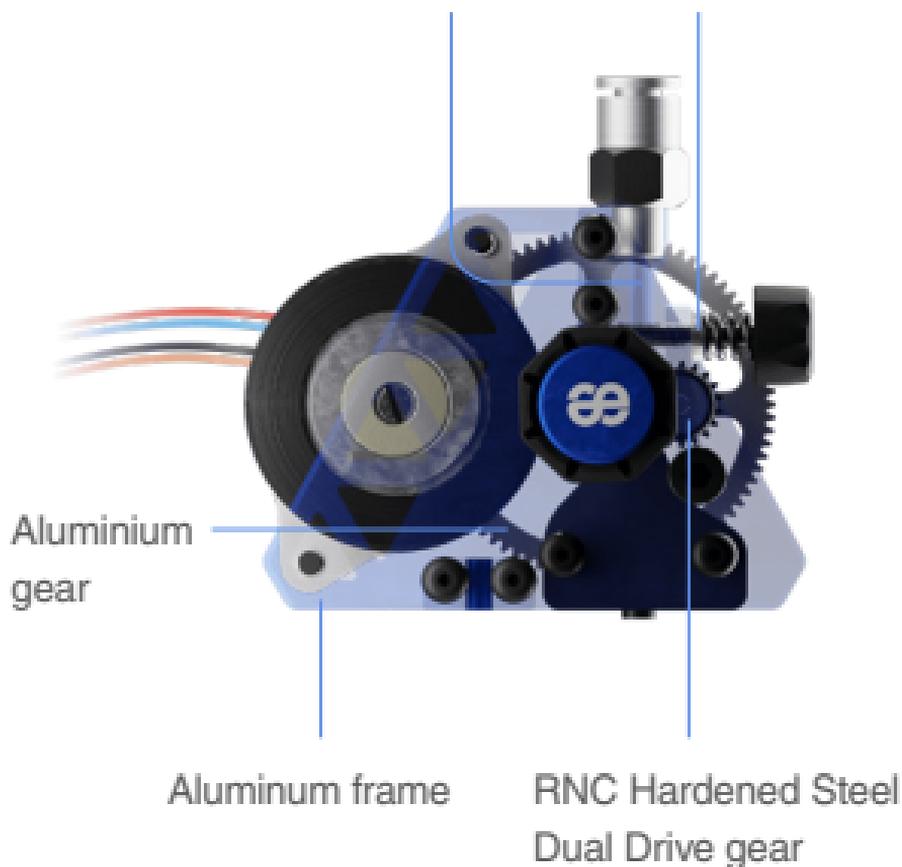
Button Head Screw M3X12

Cap Head Screw M3x12

Product Material

Aluminium
filament guide

Aluminium
Idler arm



Product Advantage

- Small Nema 14 stepper motor for high speed printing
- 6.3 : 1 Gear ratio to ensure high torque
- 155g light weight design of the aluminium frame ensures heat dissipation of the stepper motor.
- Specialized teeth design of the RNC hardened steel dual drive gear system to get a very good grip on filament with very high reliability.
- Easy loading and unloading of filament using the manual wheel.
- Gravity align to the fix mount ensure the stability of high speed printing.
- Very easy to disassemble during maintenance due to the “3-Screws-System”

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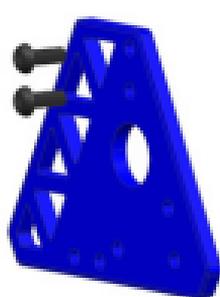


Phætus[®]

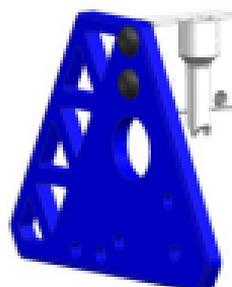
www.phaetus.com

Assembly Steps

1. Use 2 M3*8 screws to fix the filament inlet on the front plate. Pay attention to the direction of the filament inlet that it should face outward.

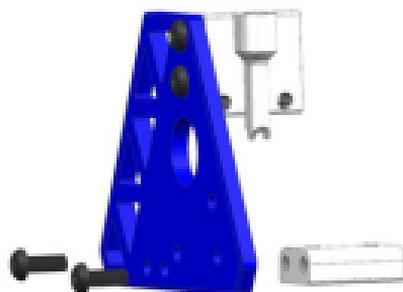


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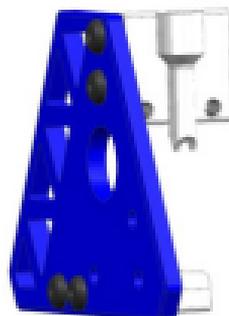


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2. Use 2 M3*8 screws, and secure the extruder connection on the front plate.

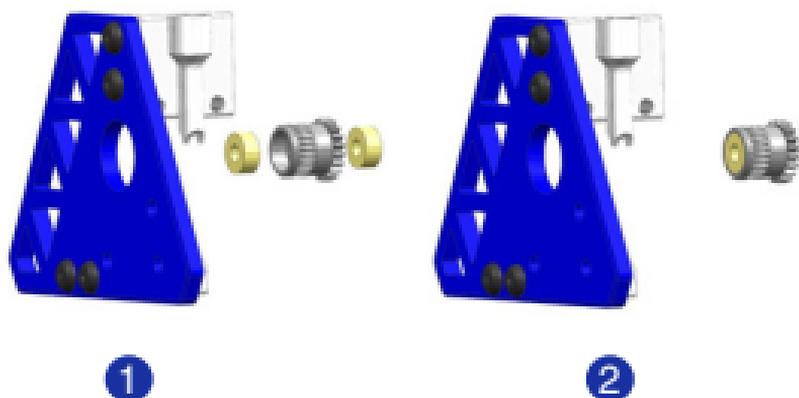


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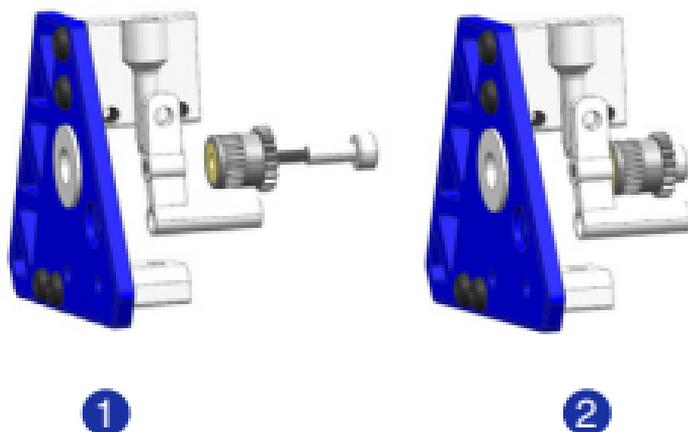


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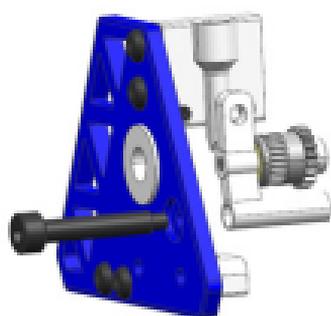
3. Press two F683ZZ bearings into the Idler Hob Gear.



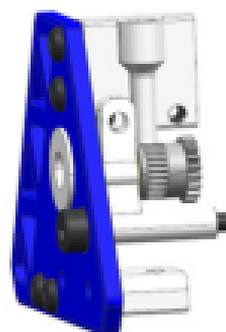
4. Use the plug screw 3*8*M2.5, lock the Idler Hob Gear to the Idler Arm.



5. Use M3*8 screws to fix the Idler Arm on the front plate.

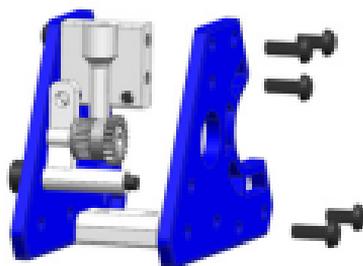


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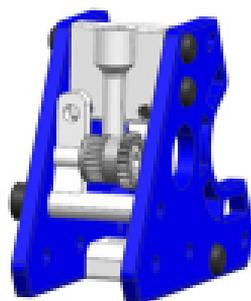


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6. Use 4 M3*8 screws, secure the back plate to the components.

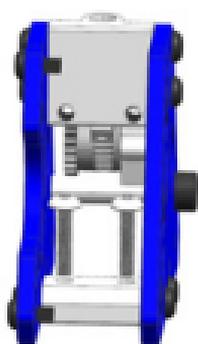


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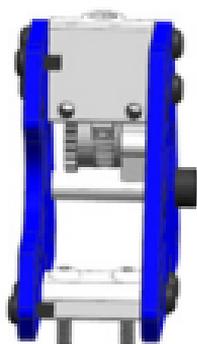


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7. Place 2 M3*12 screws into the hole of the extruder connector.

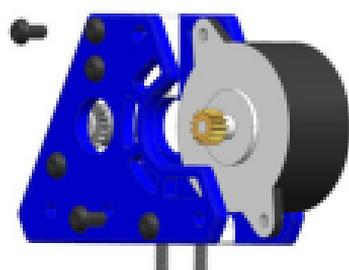


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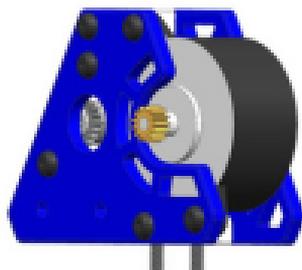


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8. Use 2 M3*6 screws, fix the stepper motor to the back plate.

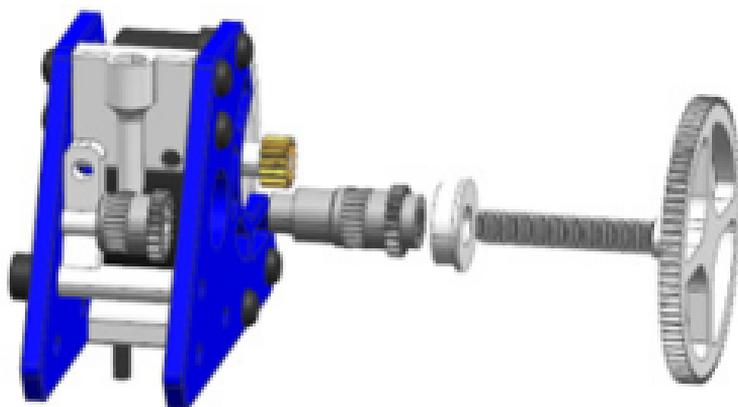


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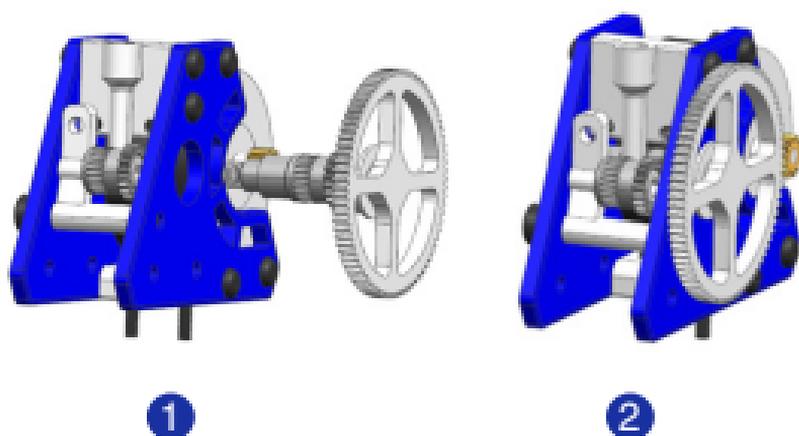


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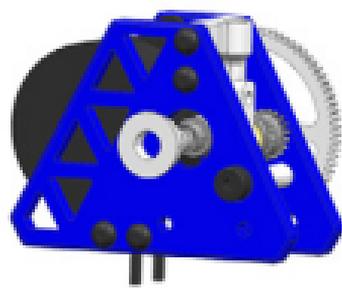
9. Install the MF126ZZ bearing into the gear shaft firstly, and then screw the drive hob gear to the bottom of the gear shaft.



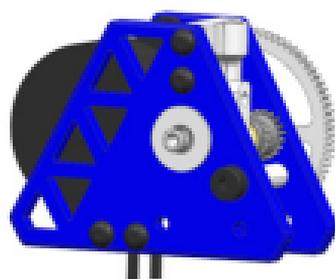
10. Install the mounted gear shaft into the back plate, and note that the flange of the bearing is close to the side back plate.



11. Install the bearing MF126ZZ on the front plate, and note that the flange of the bearing is close to the front plate.

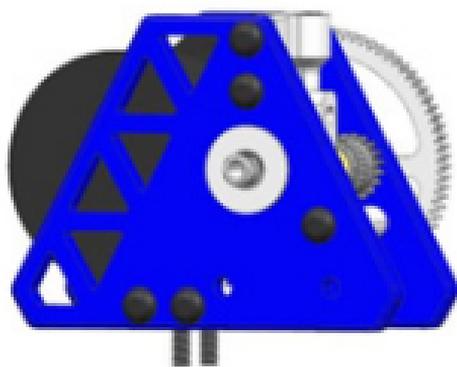


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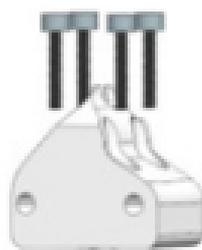


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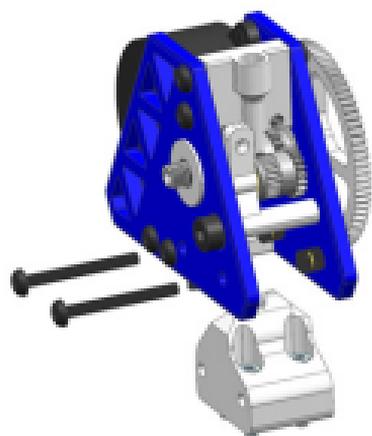
12. Put 4 M3*12 screws into the hot end connector.



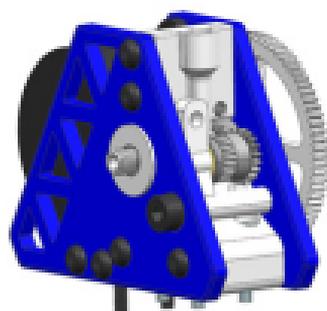
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13. Use 2 M3*25 screws. Start from the front plate and secure the hot end connector. The screws lead to the back plate.

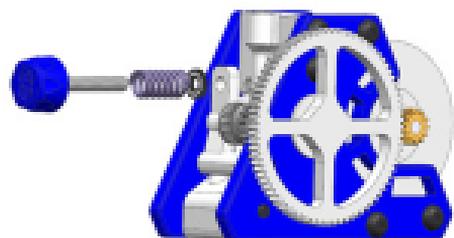


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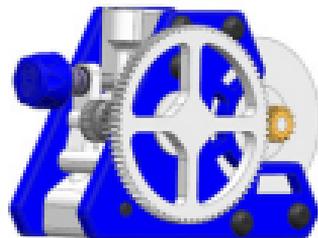


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14. Install the adjustment screw. Pass them through the spring and idler arm, and then fix them on the filament inlet.

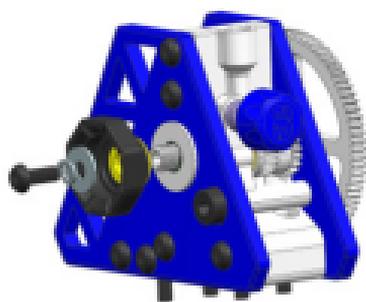


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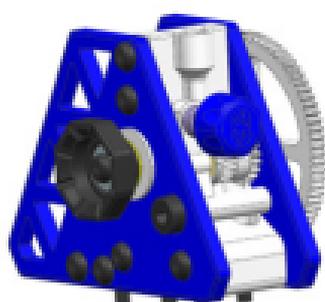


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15. Install the manual wheel on the gear shaft, and then thread the M3*8 screws through the elastic pad and the flat pad in turn and fix them on the gear shaft.

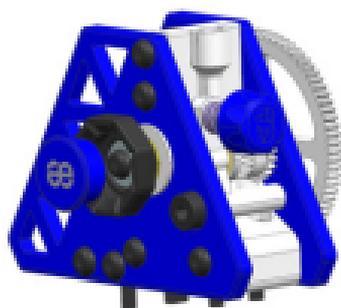


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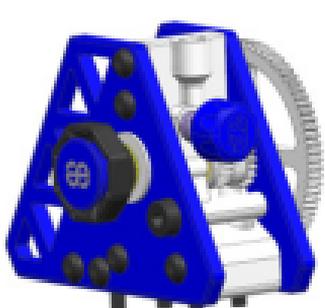


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16. Attach the cap to the manual wheel.

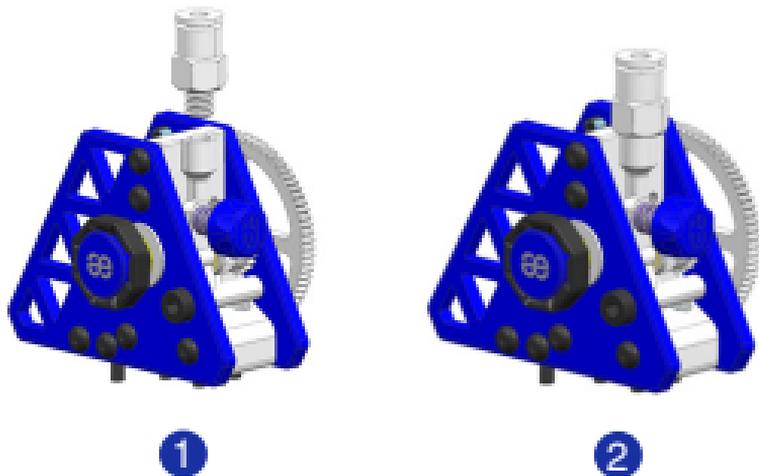


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17. Install the pneumatic interface.



18. The exploded view of the entire product is shown below.

