

Cleaning and maintenance

Item no. 1592620 RF100 XL 3D printer

1 、 Clean the extruder unit



Danger of burns! Do not touch the hot nozzle. Switch off the 3D printer, disconnect it from the power supply.

Let the 3D printer cool down to room temperature before cleaning extruder.

Required tools	2 / 2.5 mm hex key	supplied with item no. 1592620
	side cutter	
Duration	approx. 45 minutes	

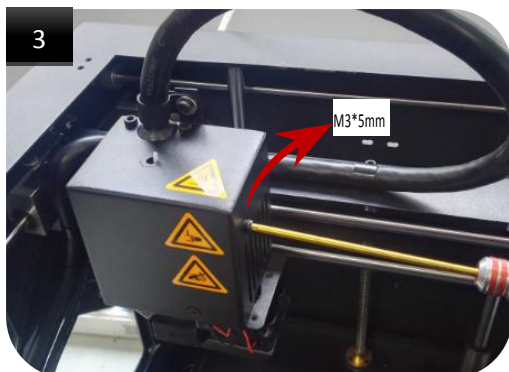
- Use a 2 or 2.5 mm hex key to remove or tight the screws.



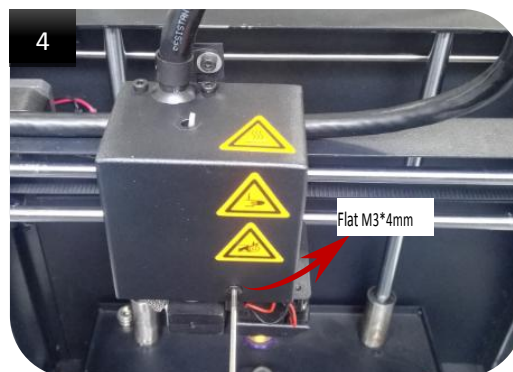
- Switch the 3D printer off.
- Unplug the power plug.



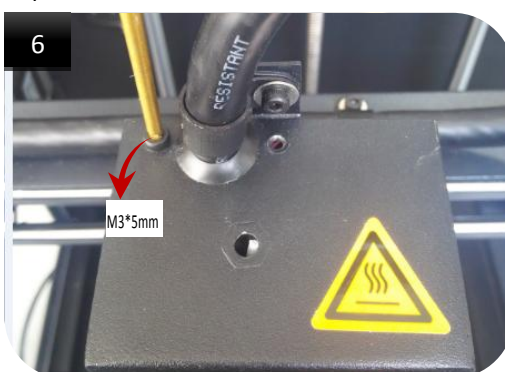
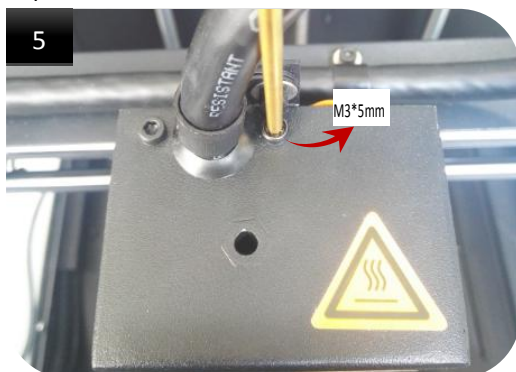
- Cut the existing filament in the extruder by using the side cutter.



- Remove the screw on the side of the protective case.



- Remove the screw on the front of the protective case.



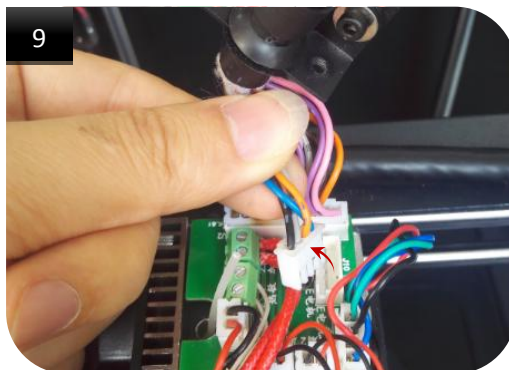
Remove the screw on the upper of the protective case.



Remove the screw on the upper of the protective case.



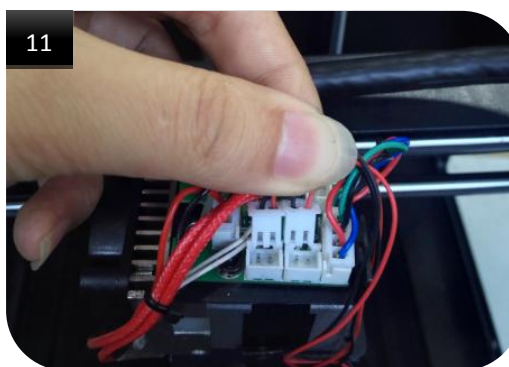
Separate Protective cover and cable sheath



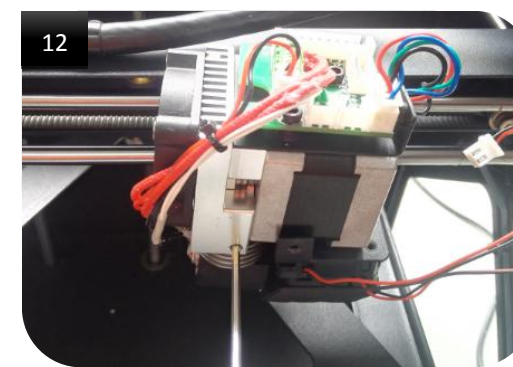
Carefully remove the protective case.



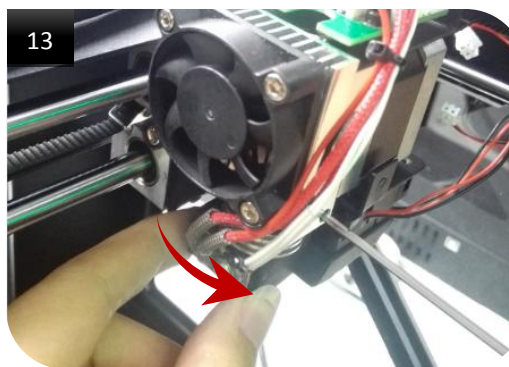
Carefully pull out the 4 pin plug.



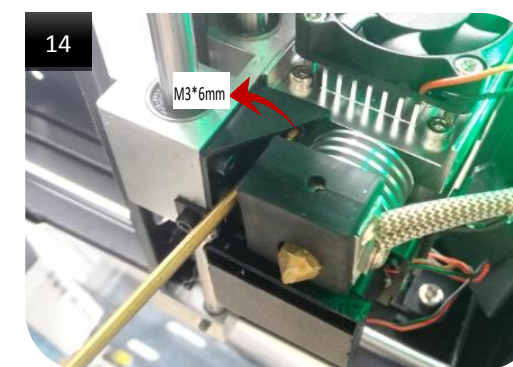
Carefully pull out the 10 pin plug.



Carefully pull out the two 2 pin plugs.

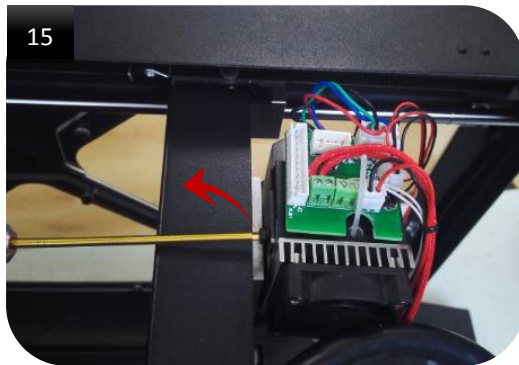


loosen the screw that lock metal pipe.

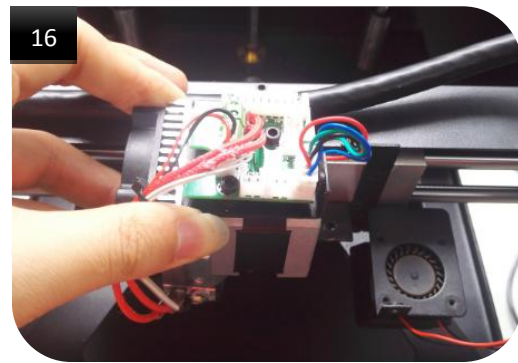


Rotate the nozzle holder counterclockwise 90 degrees.

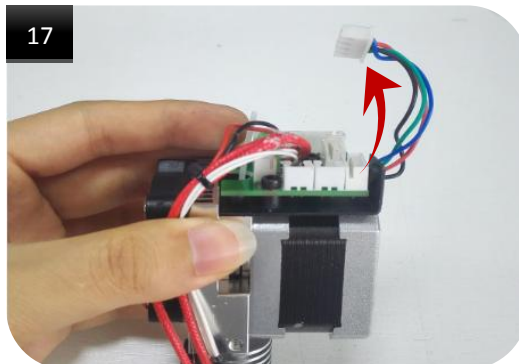
Remove the screw at the bottom of the Extruder.



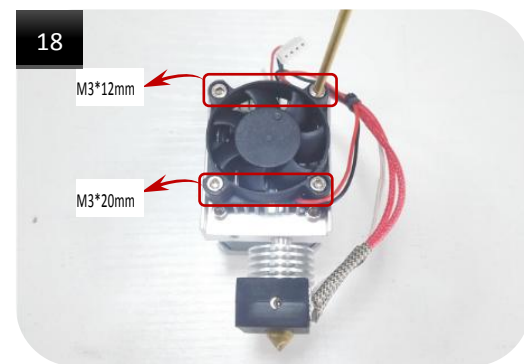
Remove the screw on side of the extruder.



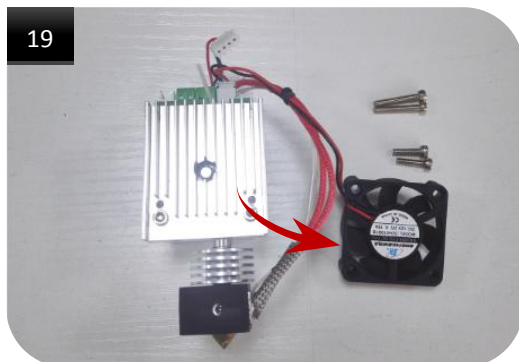
Remove the extruder from the extruder.



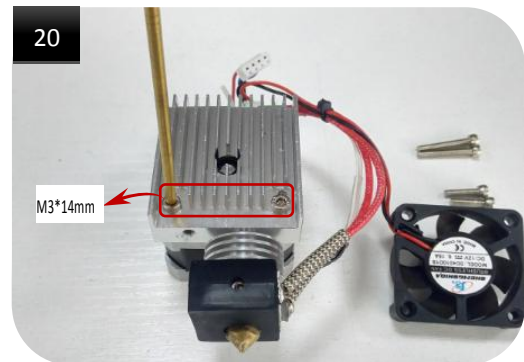
- Carefully remove the 4pin plug.



- Put the extruder into the shown position.
- Remove the screws at the fan.



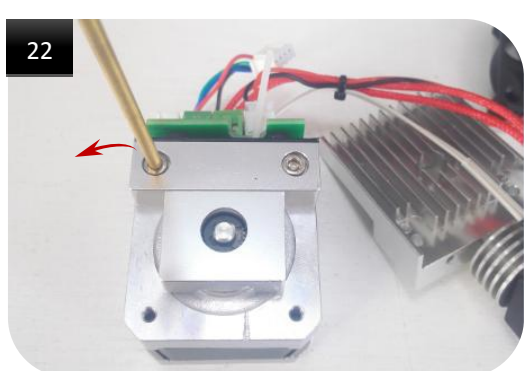
Carefully detach the fan.



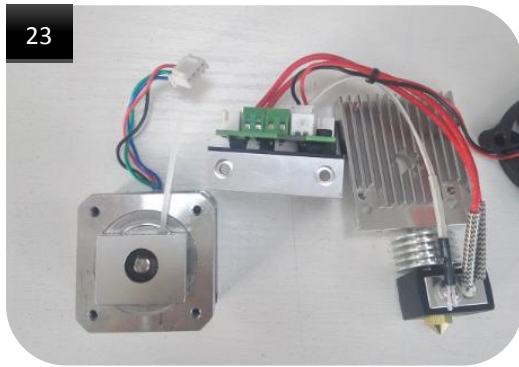
Remove the screws at the heat sink.



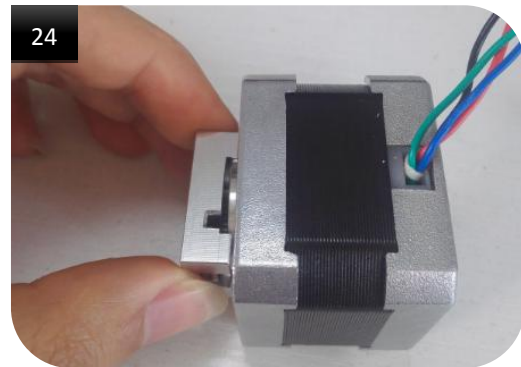
Carefully detach the heat sink.



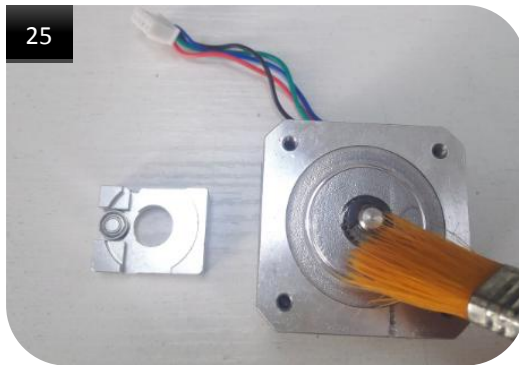
Remove the screws at the feeding module.



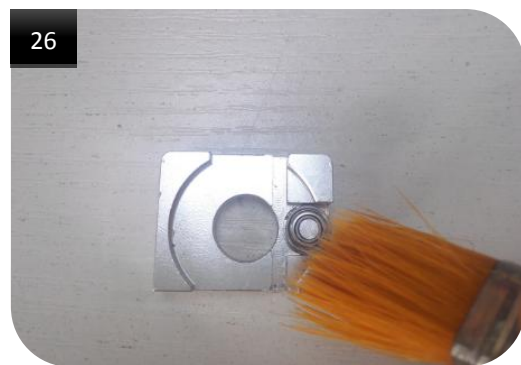
· Carefully detach the feeding module with the PCB.



· Detach the pressing block module from the motor Unit.



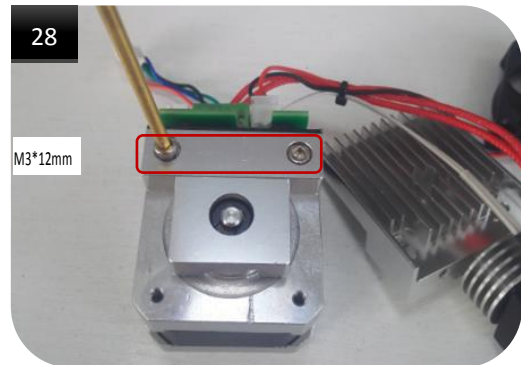
· Remove any dirt with a soft brush from the motor unit.



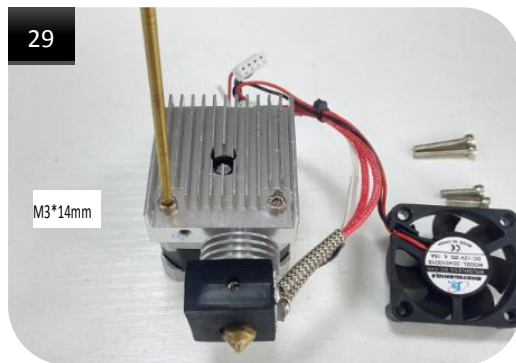
· Remove any dirt with a soft brush from the bearing.



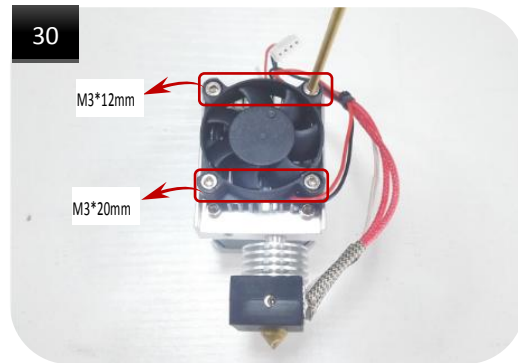
· Place the feeder with the ball bearing on the motor unit.
The opening for the filament in the feeder must point upwards.



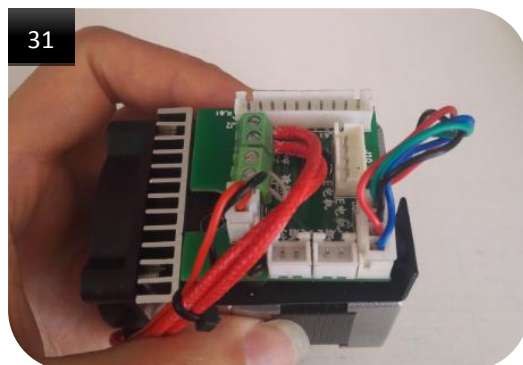
· Insert and tighten the screws to fasten the feeding module.



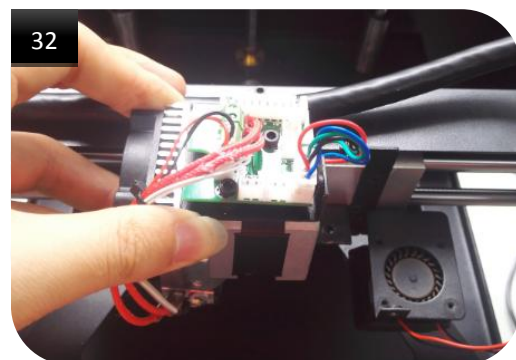
- Place the heat sink onto the motor unit, so that the holes and threaded holes are aligned. Align extruder with tapped holes in the accelerator Carriage.
- Insert and tighten the screws.



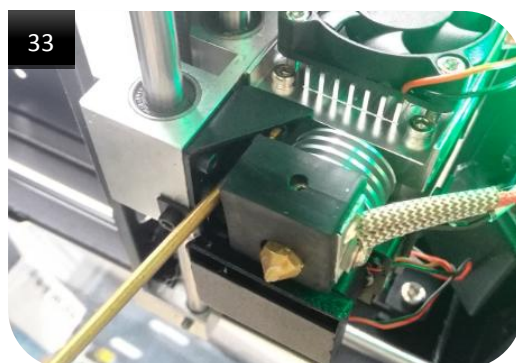
- Place the fan onto the heat sink, so that holes are aligned. Make sure the cables on the fan point toward the nozzle.
- Insert the screws and tighten them only slightly.
- Fasten the fan with the screws. There are no tapped holes in the heat sink for these screw fittings. For each screw there is a self-tapping thread between two cooling ribs.
- Tighten the screws until they are flat with the fan.



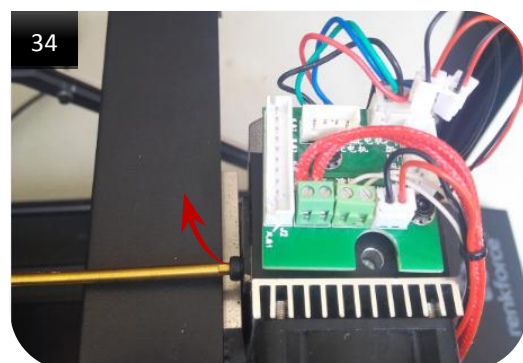
- Reconnect the 4 pin plug.



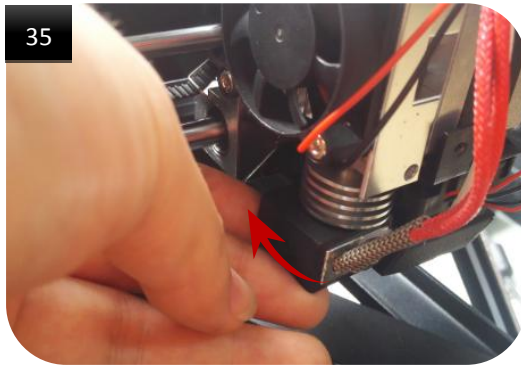
- Install extruder on the extruder bar.



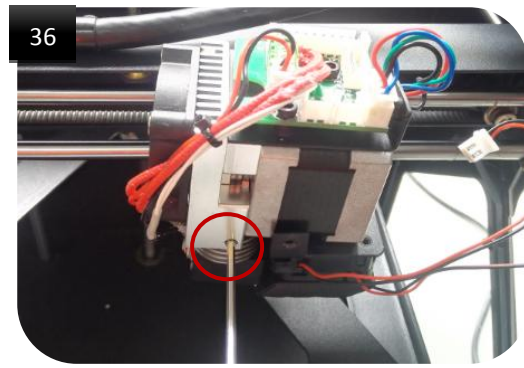
- Insert and tighten the screw to fasten the extruder at the extruder carriage.



- Insert and tighten the screw to fasten the extruder at the extruder carriage.



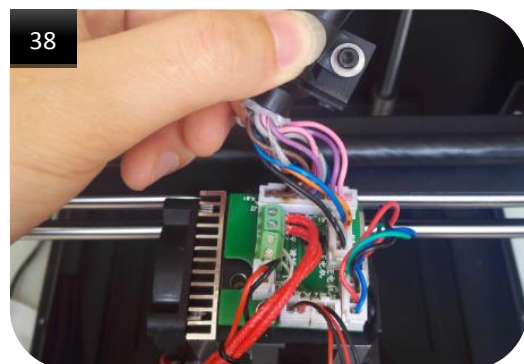
• Rotate the nozzle holder Clockwise 90 degree.



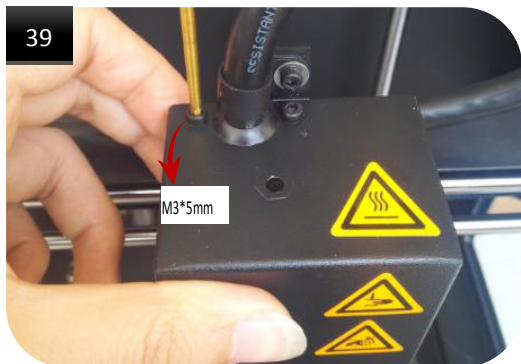
• tighten the screw that lock metal pipe.



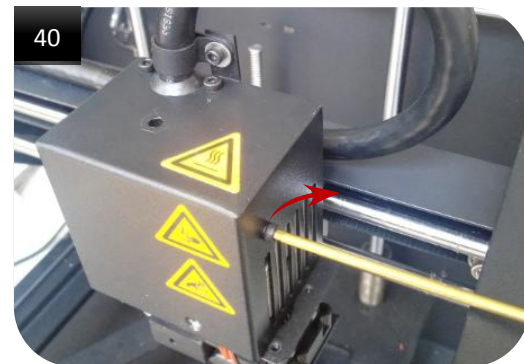
• Reconnect the two 2 pin plugs.



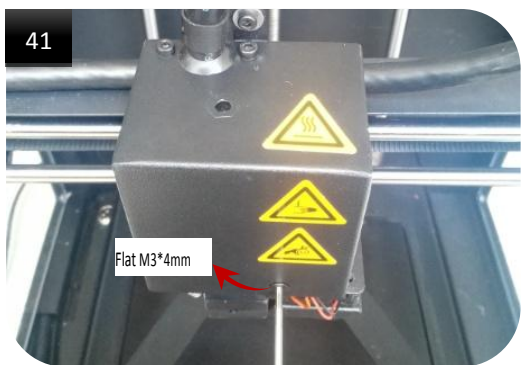
• Reconnect the 4 pin and 10 Pin plugs.



• Insert and tighten the two screws on the upper of the protective case.



• Insert and tighten the screw on the side of the protective case.



• Insert and tighten the screw on the front of the protective case.



• Plug in the power cable.
• Switch on the 3D printer.

2 、 Clean the nozzle and the plastic tube

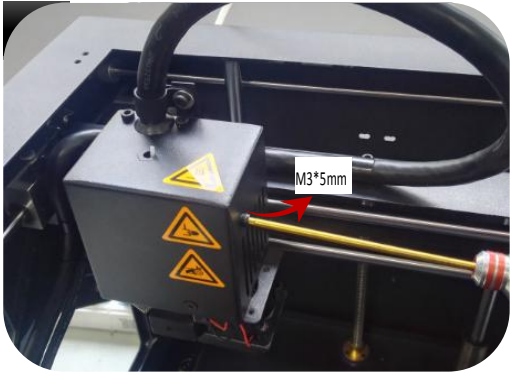


Do not clean the nozzle unless you are familiar with it and have experience. Otherwise, cleaning and maintenance are to be performed exclusively by an expert or at a qualified shop.

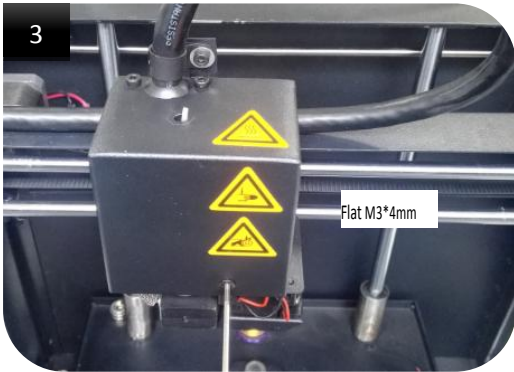
Required tools	Tweezers	supplied with item no. 1592620
	Adjustable spanner	
	8 mm open-ended spanner	
	Pliers	
	Metal wire	
Duration	approx. 45 minutes	



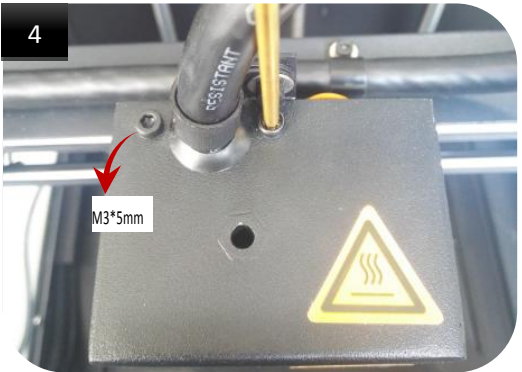
- Cut the existing filament in the extruder with the side cutter.



- Remove the screw at the side of the protective case.



- Remove the screw on the front of the protective case.



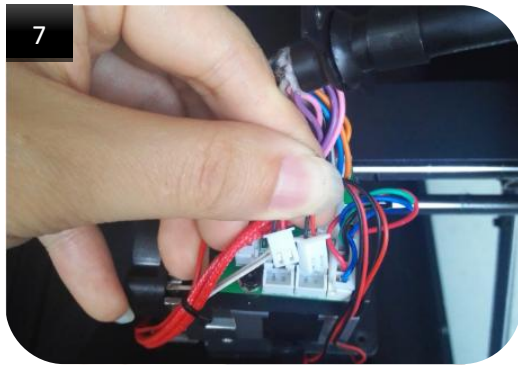
- Remove the two screws on the upper of the protective case.



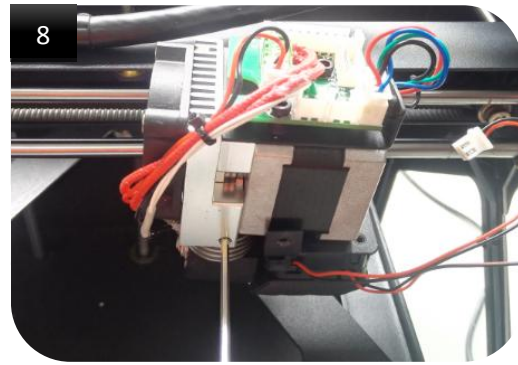
- Separate Protective cover and cable sheath



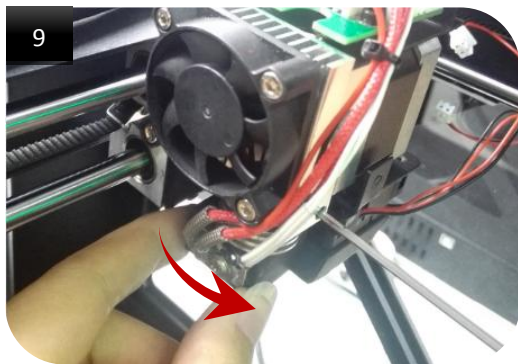
- Carefully remove the protective case.



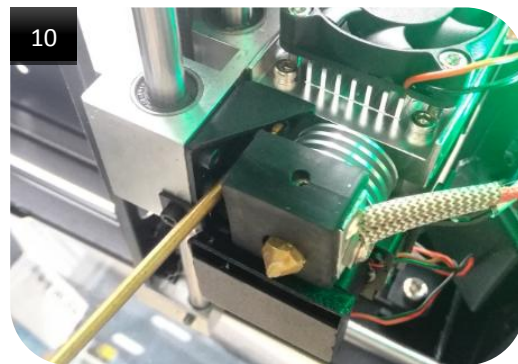
·Carefully pull out the two 2 pin plugs.



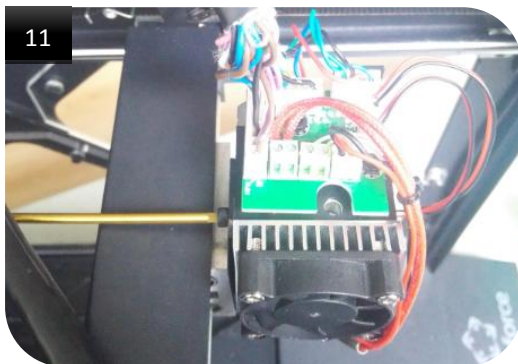
·loosen the screw that lock metal pipe.



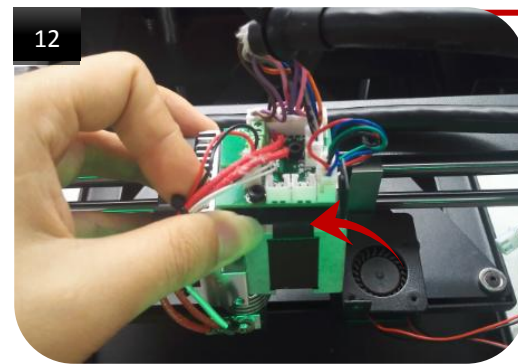
·Rotate the nozzle holder counterclockwise 90 degrees.



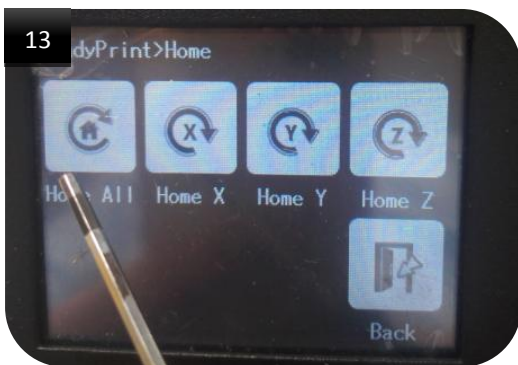
·Remove the screw at the bottom of the Extruder.



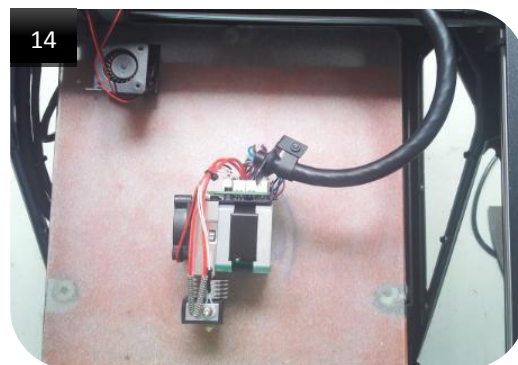
·Remove the screw on side of the extruder.



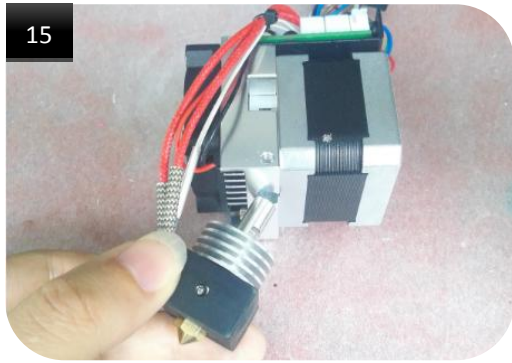
·Remove the extruder from the extruder.
CANN'T pull out pull out the 10 pin plug.



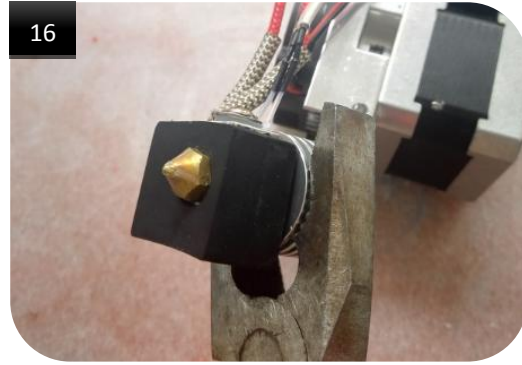
·Reset operation screen Home→Home All



·Put the extruder module on the bed.



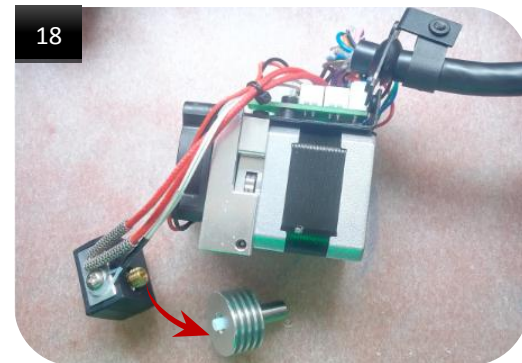
15
·Pull out metal pipe from the extruder.



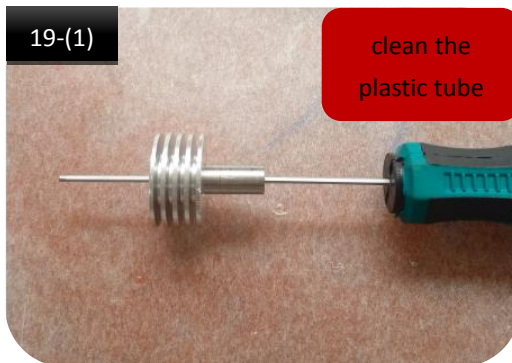
16
·Use a pair of pliers to lock the heat sink.



- Use the 8 mm open-ended spanner to rotate the nozzle holder (in a counterclockwise direction).



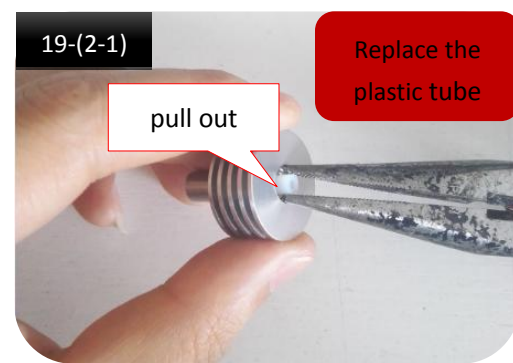
- Separate the nozzle holder and metal pipe.



19-(1)

clean the
plastic tube

·Carefully push a metal wire through the plastic tube to remove stubborn filament residues. Make sure that the plastic tube is not damaged!

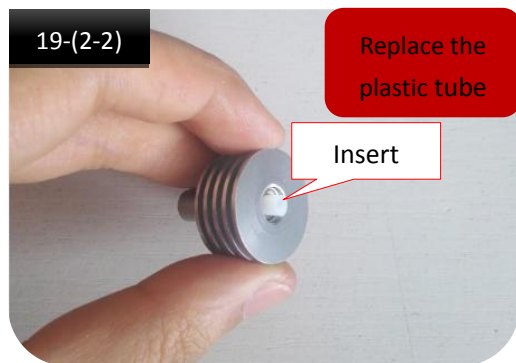


19-(2-1)

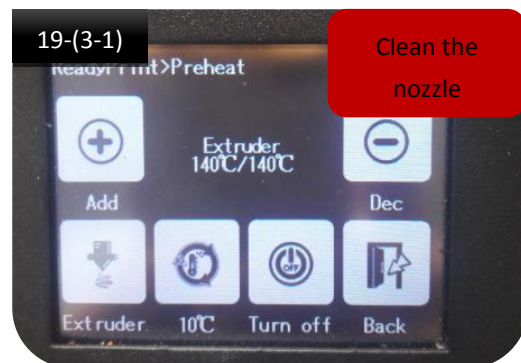
Replace the
plastic tube

pull out

·Use a pair of pliers to carefully pull out the used plastic tube.



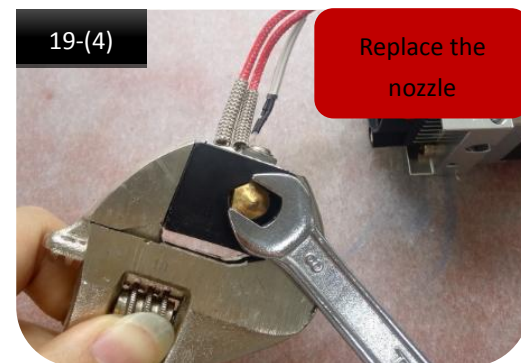
- Press the new plastic tube carefully until stops.



- Press " Filament" button on the ReadyPrint it screen and select "Preheat", press "+" button to adjust the nozzle temperature to 140°C .
- Attention for high temperature proof.



- Once the nozzle temperature is reached 140°C .
- Hold the nozzle holder with a pair of pliers and remove the filament residues from the nozzle with the tweezers.



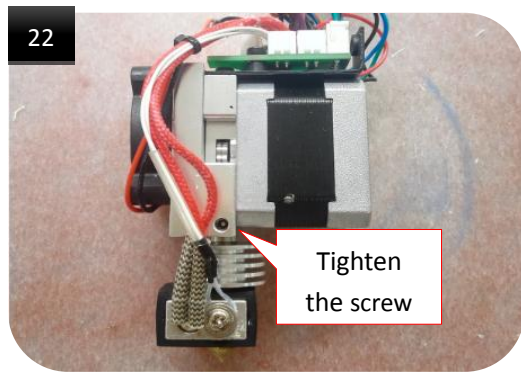
- Remove the used nozzle (in a counterclockwise direction) with a open-ended spanner.
- Tighten the new nozzle (in a clockwise direction) with a open-ended spanner.
- While you do so, make sure you lock the nozzle holder against twisting with the adjustable spanner.



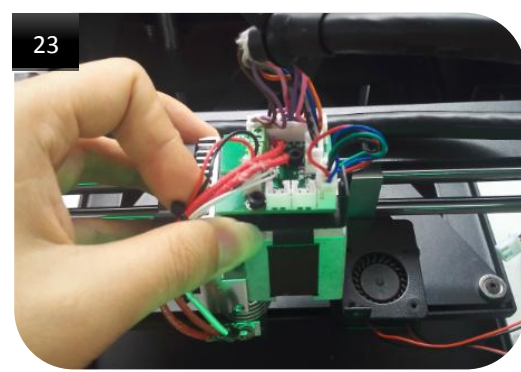
- Press " Filament" button on the ReadyPrint it screen and select "Preheat", press "Turn off" button to stop the nozzle heat.



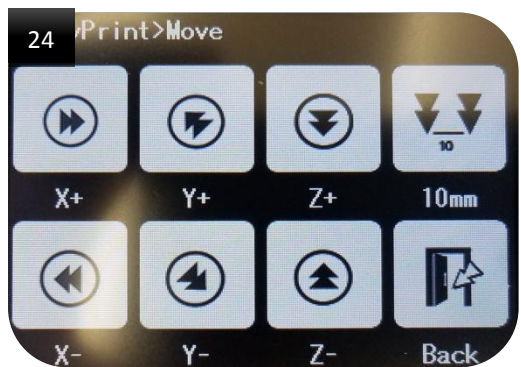
- Rotate the nozzle (in a clockwise direction) with a open-ended spanner until stop.
- While you do so, make sure you lock the heat sink with a pair of pliers



- Put metal pipe into the extruder until stop.
To turn nozzle.
- Tighten the screw that lock metal pipe.



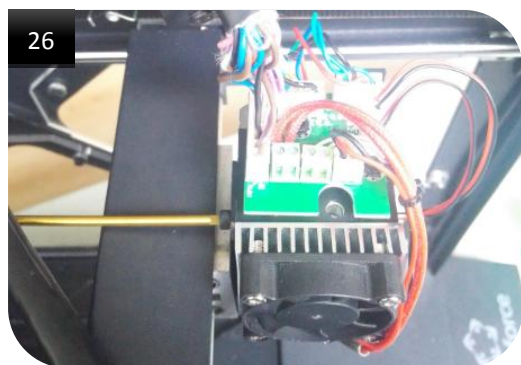
- Take off the print bed
- Install extruder on the extruder bar



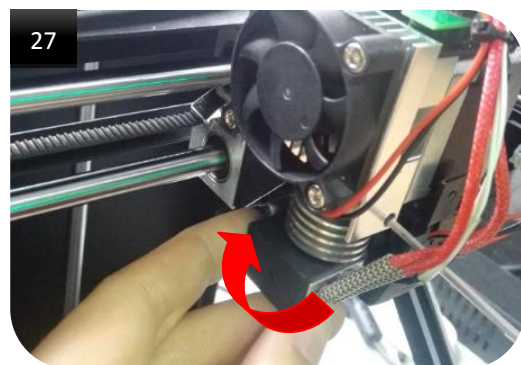
- Press "Move" button on the ReadyPrint screen, press Z+ button and adjust the distance between nozzle and platform to 150mm.



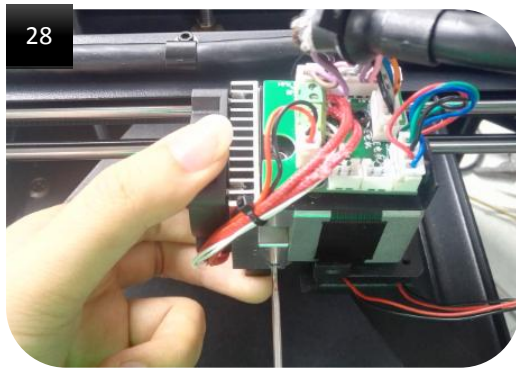
- Insert and tighten the screw to fasten the extruder at the extruder carriage.



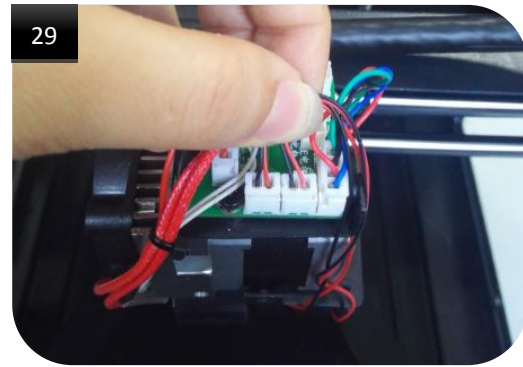
- Insert and tighten the screw to fasten the extruder at the extruder carriage.



- loosen the screw that lock metal pipe.
- Rotate the nozzle holder clockwise 90 degrees.



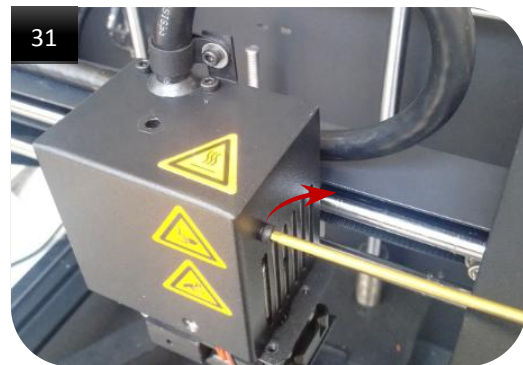
- Tighten the screw that lock metal pipe.



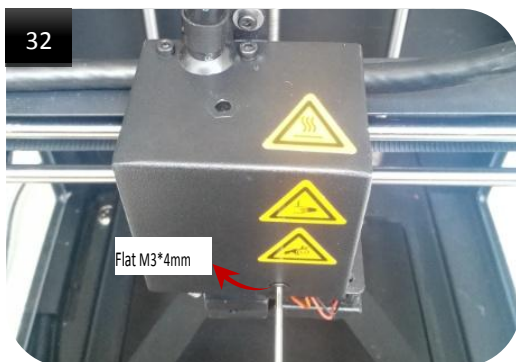
- Reconnect the two 2 pin plugs.



- Insert and tighten the two screws on the upper of the protective case.



- Insert and tighten the screw on the side of the protective case.



- Insert and tighten the screw on the front of the protective case.