



WaxJet 400 HD

Preventative Maintenance Guide



This guide is only applicable to FLASHFORGE WaxJet 400 HD 3D printer

Note: Please read this User Guide carefully before operating the product. Please keep this Guide properly for future reference.

Machine Maintenance

There are some necessary maintenances for WaxJet® 400 HD series regularly.



Note: For routine maintenance, the printer must be on standby and a clean build plate must be installed.

Maintain the schedule

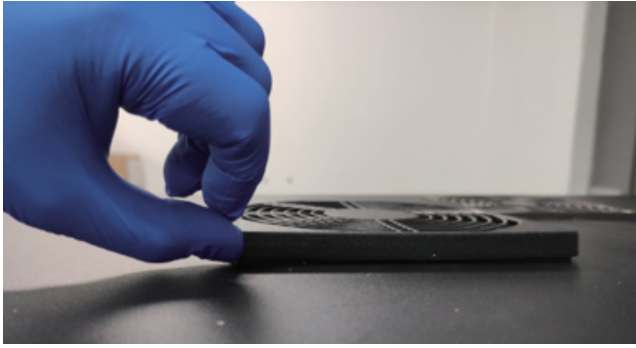
Note: Maintenance tasks must be performed regularly to ensure good operation of the equipment and the accuracy of printed objects.

Maintenance task	As needed	Every day	Every week	Every month	Every half year
Clean top fans filter			√		
Clean the primary efficient filter			√		
Replace the primary efficient filter					√
Clean the waste box	√				
Daub oil for X-axis guide					√
Daub oil for Y-axis guide and the motor screw rod					√
Daub oil for Z-axis guide and the motor screw rod					√
Clean the X-axis base		√			
Clean internal dust		√			
Clean dust around the sensors		√			
Clean the outer surface			√		
Clean build chamber		√			
Clean build plate	√				
Clean the touchscreen				√	
Clean MDM			√		
Clean the carriage of printhead			√		
Clean the bottom side of Y-beam			√		
Powder Removal for Pipes			√		
Clean the blade at HMS			√		
Clean the planarizer and its blade			√		

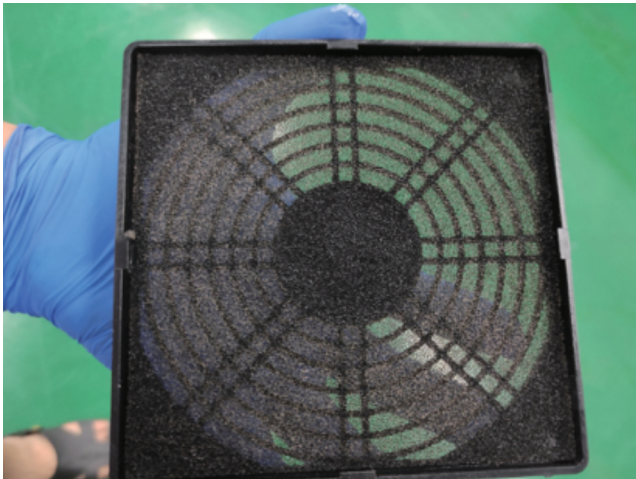
The recommended operating environment recommends operating temperature range: 18-28 degrees C (64-82 degrees F)
 Recommended temperature range: 18-24 degrees C (64-75 degrees F) Recommended humidity range : 30%-70%

Clean top fan filter

Open the protective fan cover along the corner of the fan shield.

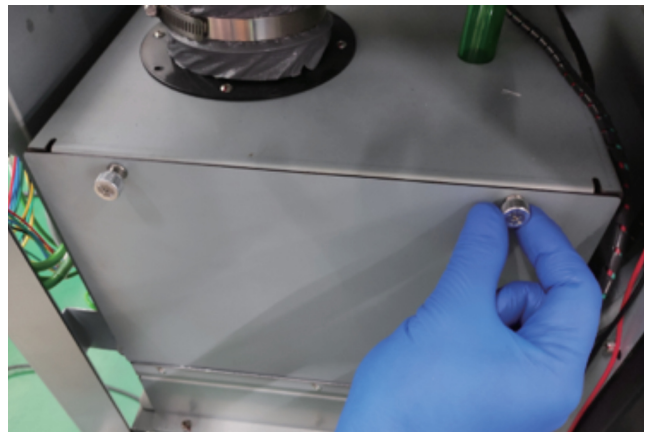


After a period of use, there has a lot of dust in the filter. Clean dust with a vacuum cleaner.



Clean the primary efficient filter

Open the left door of printer first, then loose two screws by hands.



Remove the filter cover first and take out the filter.




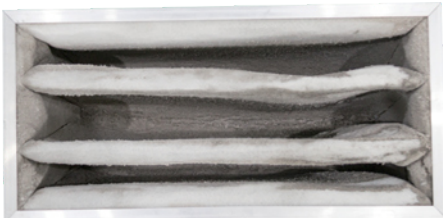
After a period of use, there has a lot of dust in the filter. Clean dust with a vacuum cleaner.



Replace the primary efficient filter

The primary efficient filter is used to remove particles, odors, and gases from the printing area. This filter can be found behind the machine on the right. Open the door and remove the black cover and the initial filter. Replace the new filter and install the initial filter and the black cover back into place.

 Note: it is a replacement part.
PTFE filter-P/N61000289001.



The filter that needs to be replaced



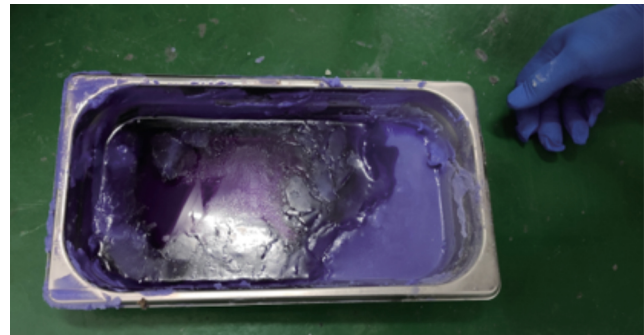
The new filter

Clean the waste box

Open the left door of printer first, and take the waste box out.



The waste wax produced in the process of printing and stored in the waste box. Install the clean waste box back to the printer after cleaning the waste box.



Daub oil for X-axis guide

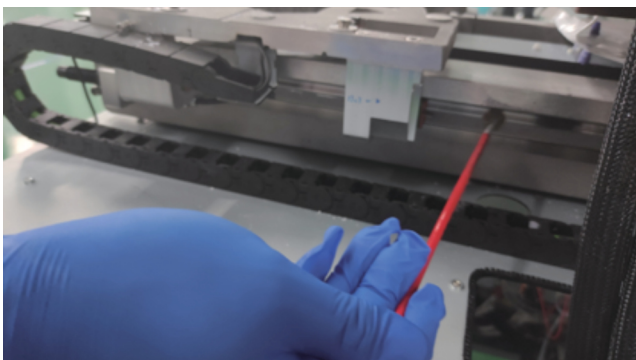
Wear rubber gloves and wet a dust-free cloth with ethanol.



Clean the guide with a dust-free cloth.

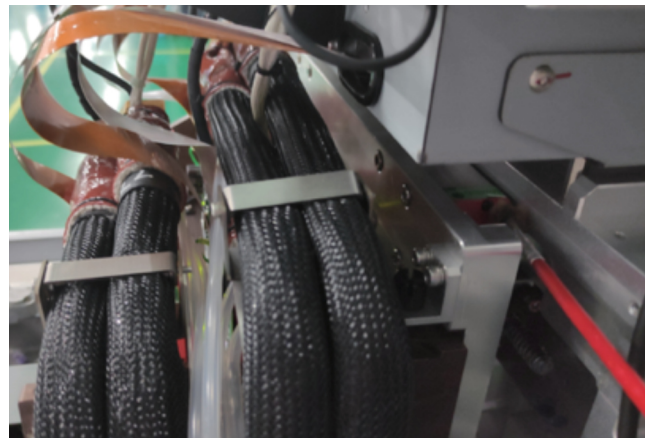


Apply oil on the X-axis guide via brush.

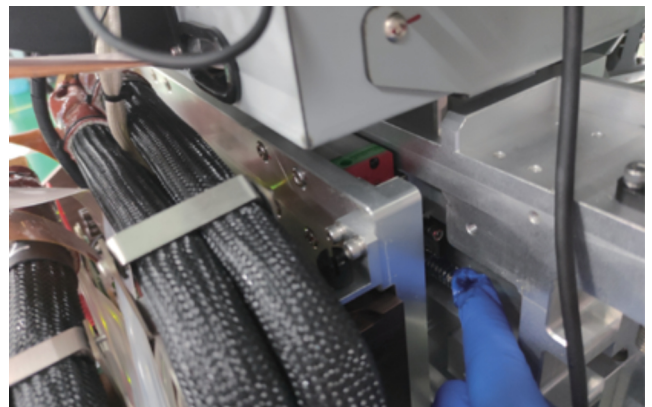
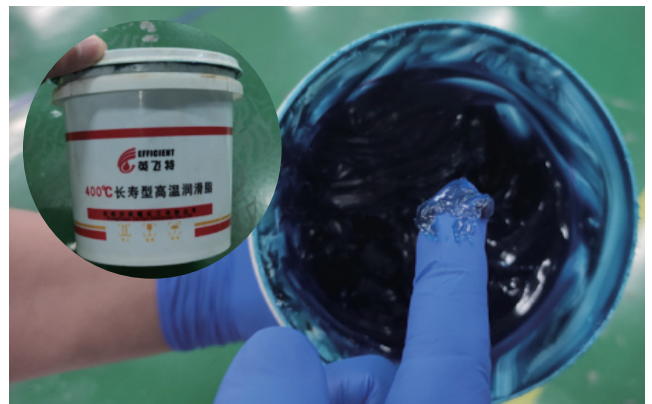


Daub oil for Y-axis guide and the motor screw rod

Apply oil on the Y-axis guide with via brush.

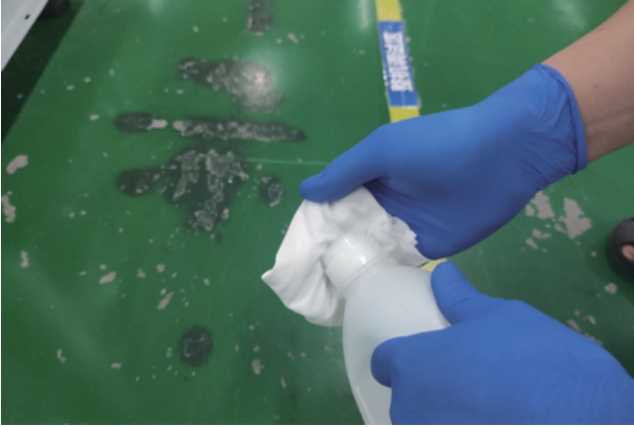


Use rubber gloves to apply grease to the Y-axis screw rod.

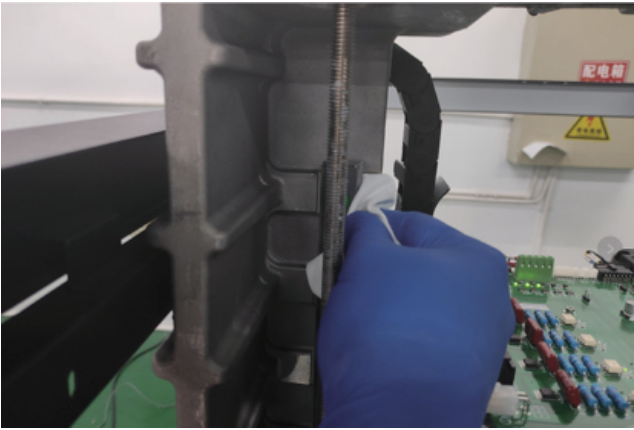


Dab oil for Z-axis guide and the motor screw rod

Wear rubber gloves and sprinkle with a little ethanol on a dust-free cloth.



Clean the guide with a dust-free cloth.



Apply oil to the Z-axis guide via brush.



Clean the X-axis base

Check that the X-axis base is clean before each printing, follow these steps to clean the X-axis base:

1. Open the right door and move the build plate to home position;
2. Use a stainless steel scraper to clean the wax drops or wax blocks on the X-axis base.



3. Close the door.

Clean internal dust

! Too much dust inside the equipment or failure to clean up the internal dust for a long time can cause nozzle damage, please follow these steps to clean up the internal dust:

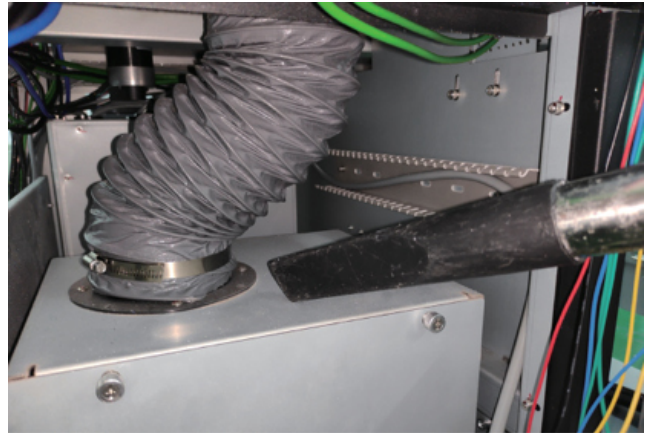
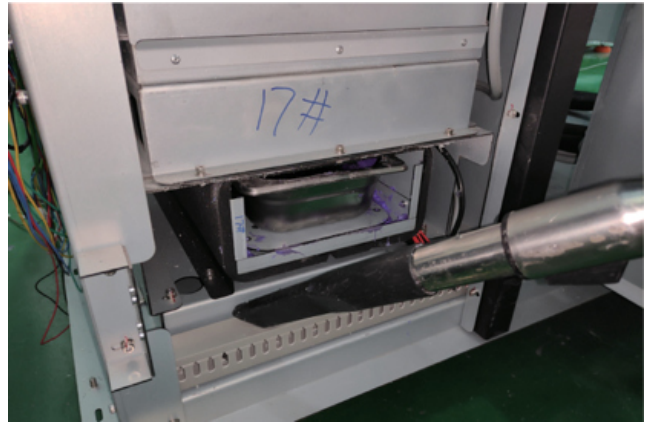
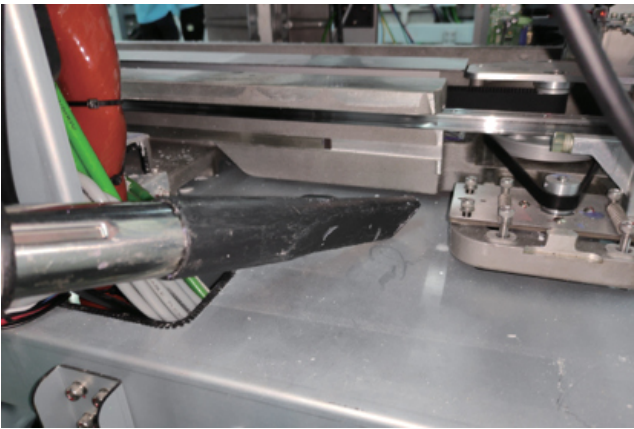
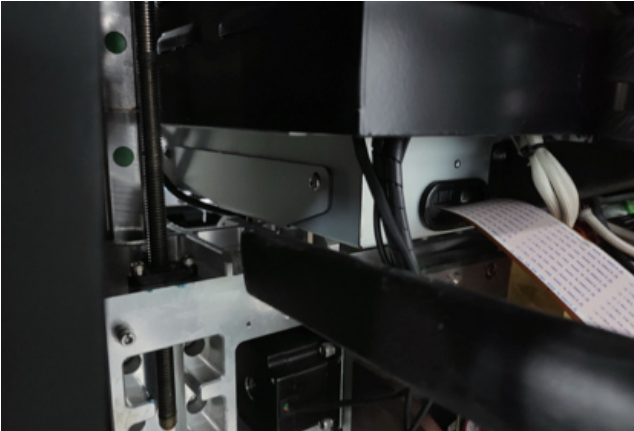
Use a vacuum cleaner to clean the wax dripping on the X-axis base.



Use a vacuum cleaner to clean the dust on the filter.



Use a vacuum cleaner to clean the internal dust of the printer.



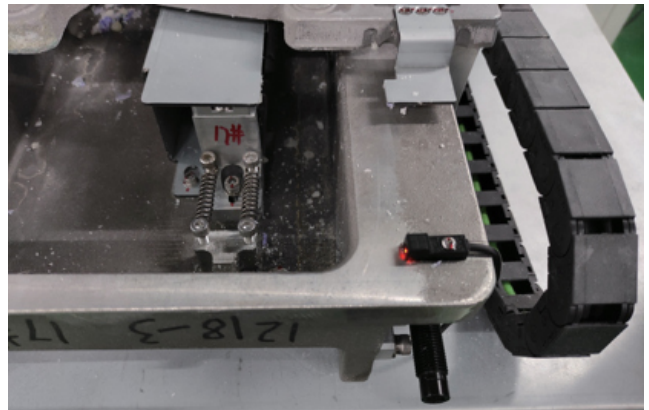
Clean dust around the sensors

After long-term use, dust is deposited near the sensor and cleaned up. Follow the procedure below to clean.

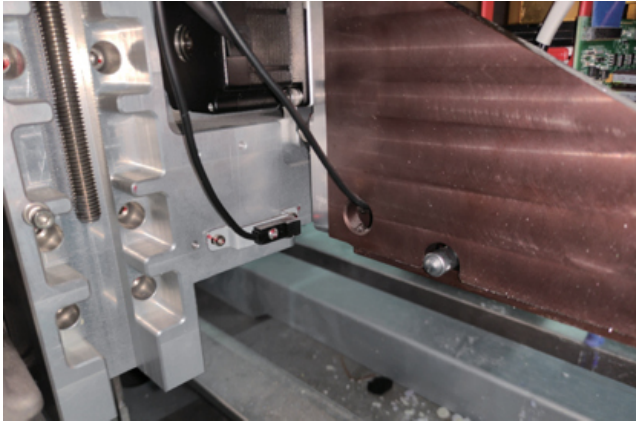
⚠ Always wear rubber gloves when cleaning the proximity sensor.

1. Open the printing chamber.
2. Find the home sensor and the maximum position sensor.

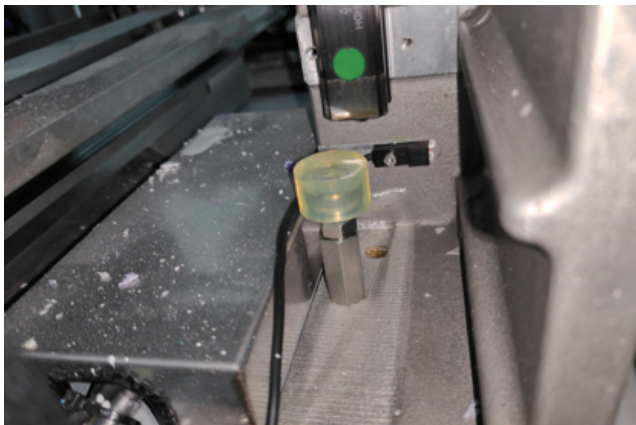
Clean photoelectric switch in the front of X-axis.



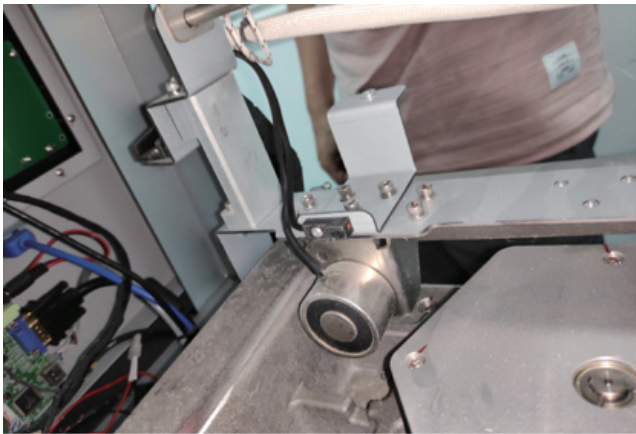
Clean photoelectric switch in the front of Y-axis.



Clean photoelectric switch in the front of Z-axis.



Clean photoelectric switch in the back of X-axis.



3. Use a cotton swab to extract isopropyl ethanol and gently wipe all dust around the sensor.

4. After removing any dust around the sensor, close the printing chamber.

Clean the outer surface

⚠ Note: The device must be on standby before cleaning to avoid disruption of printing.

Do not remove any external panels while cleaning the printer. The panel can only be removed by a qualified FlashForge technical support representative.

⚠ Note: Only use non-abrasive, non-ethanolic cleaners to clean the surface. Never use multi-purpose cleaners that contain crude oil-based polishes such as wax water.

Wipe with a dry, clean, lint-free cloth to remove dust from the outside surface of the printer. Spray the clean cloth with a multi-purpose cleaner and gently wipe away the dust and oil stains on the outside surface of the printer.

Clean build chamber

Use a dust-free cloth to extract isopropanol to clean the building door. Gently wipe off the dust from the surface using a damp cloth.

Clean build plate

⚠ Note: before installation and use, please keep the build plate clean and keep the room temperature steady.

After each printing run, it is suggested to clean up the build plate and reinsert it into the printer. Follow these steps to clean up the build plate:

1. Use a flat blade or greased knife to remove excess auxiliary material from the build plate surface.
2. Spray the build plate with isopropanol (IPA) and wipe it with a paper towel.
3. Make sure that both sides of the build plate are cleaned.

Clean the touchscreen

Remove all printed parts before cleaning the screen. Prevents any operation on the printer from accidentally pressing the control key.

Spray water-based solvents, dust-free cloths, and never wipe or spray detergent directly onto the touch screen with a dry cloth.

Gently wipe with a clean, dust-free cloth containing amino glass cleaners to remove dust and structural material residue from the touch screen.

⚠ Note: The following cleaning products will cause damage to the touch screen, do not use!

- Dry cloth;
- any cleaning product containing acetone, butronone or ethanol ;
- Any abrasive cleaning product.

Clean MDM

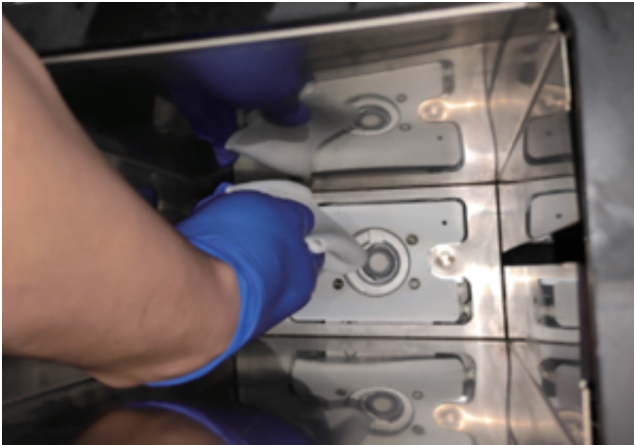
⚠ Note: When replacing the material box, there may be material that leaks into the feed silo socket after removing the box. If there is a large amount of material (the bottom is covered and touched to the box wall), do not place a cleaning material box in the socket, contact your dealer or Flashforge Account Manager.

⚠ Note: The material chamber is kept warm and avoid touching the side of the base during cleaning. Wear heat-resistant gloves and goggles.

Wear rubber gloves and sprinkle with a little ethanol on a dust-free cloth.



Wipe the wax and dust from the nozzle mounting plate with a dust-free cloth.



Clean the carriage of printhead (not the nozzles work area)

Wear rubber gloves and sprinkle with a little ethanol on a dust-free cloth.



Clean the wax and dust on the installation board of the printhead with the dust-free cloth.

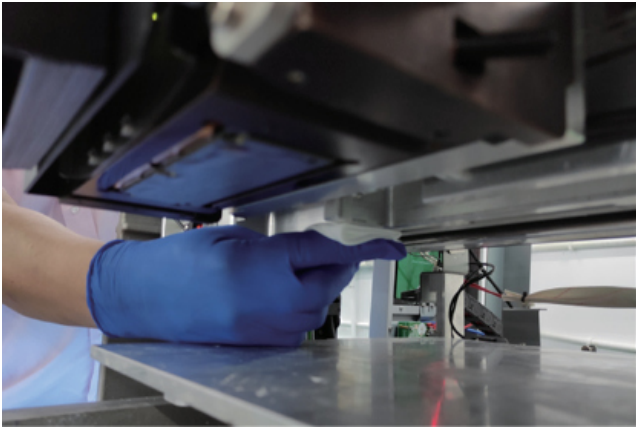


Clean the bottom side of Y-beam

Wear rubber gloves and sprinkle with a little ethanol on a dust-free cloth.

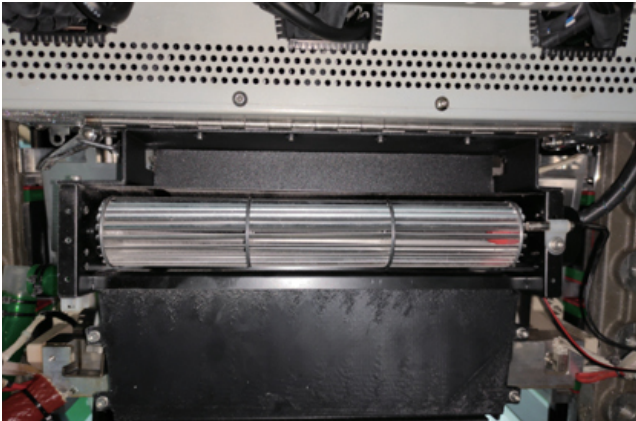


Wipe the wax and dust on the whole Y-beam with the dust-free cloth.

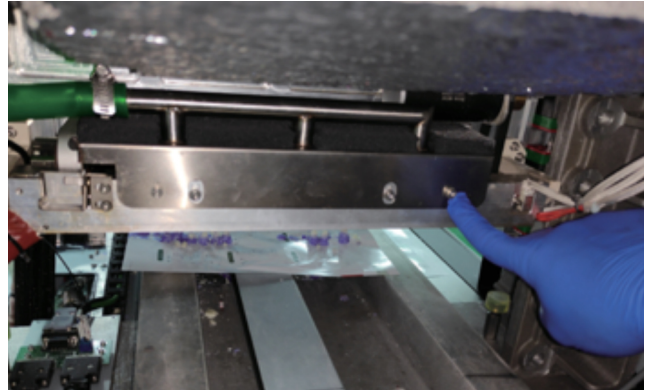
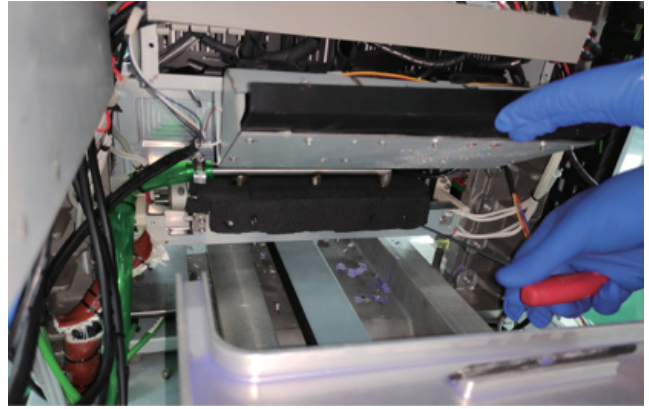


Powder Removal for Pipes

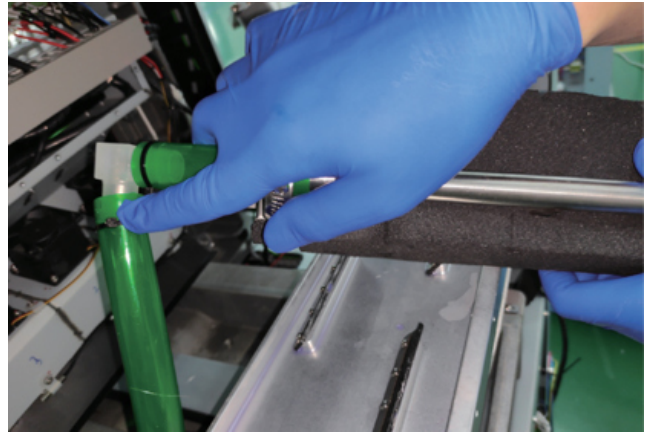
Release the hook on both sides of the rear fan.



Unload two fixing screws on the cover of the planarizer.



Unload the rubber pipe from the direct connection.

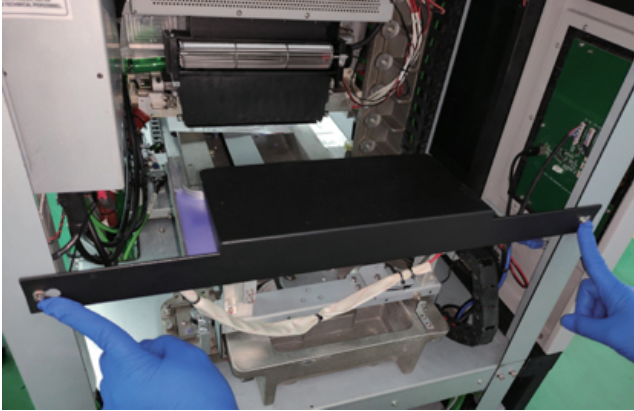


Clean up the dust in the pipe via vacuum.

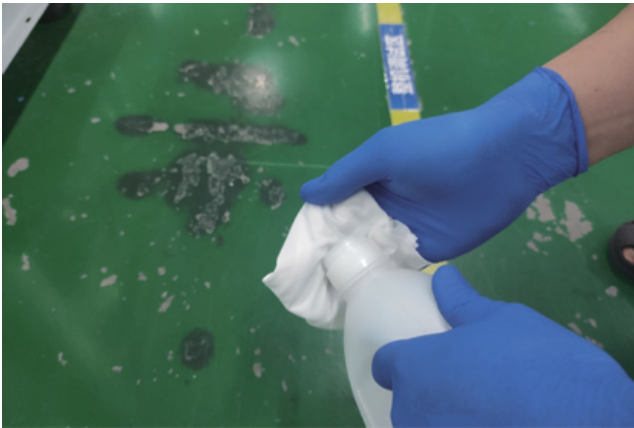


Clean the blade at HMS

Unload two fixing screws on the cover of HMS.



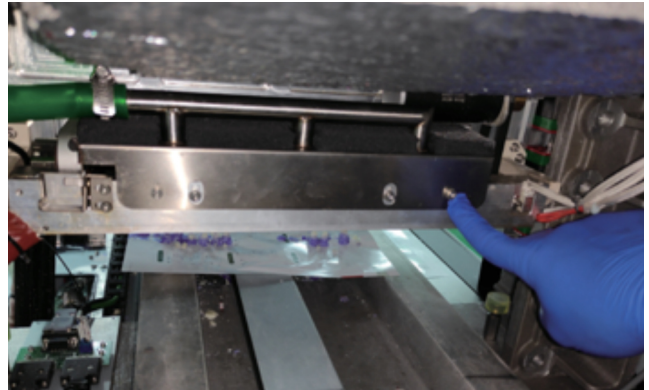
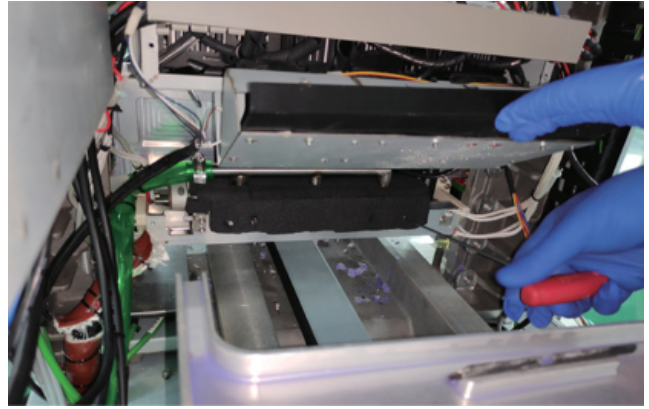
Wear rubber gloves and sprinkle with a little ethanol on a dust-free cloth.



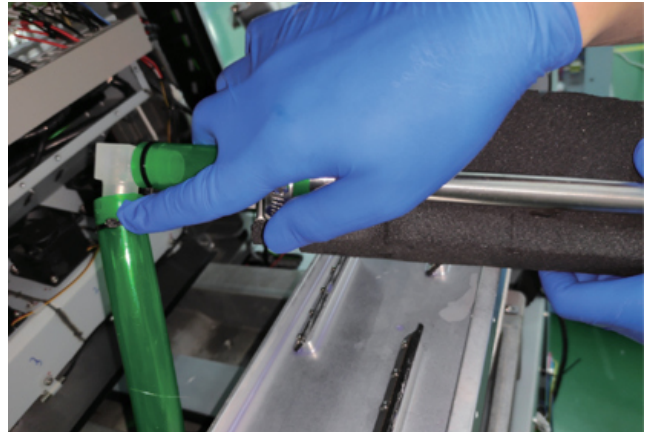
Clean the rubber blade with the dust-free cloth.



Unload two fixing screws on the cover of the planarizer.



Unload the rubber pipe from the direct connection.

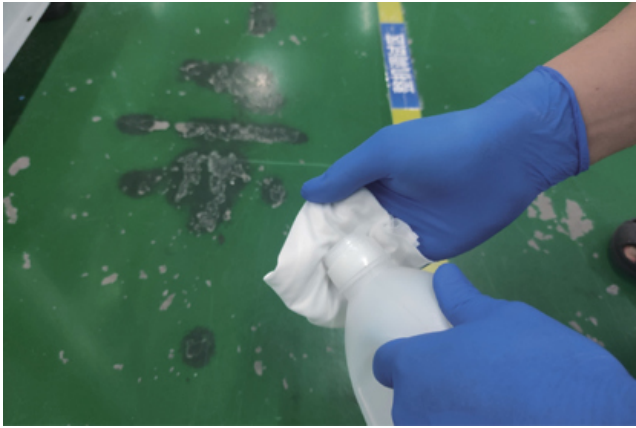


Clean up the dust in the pipe via the vacuum.

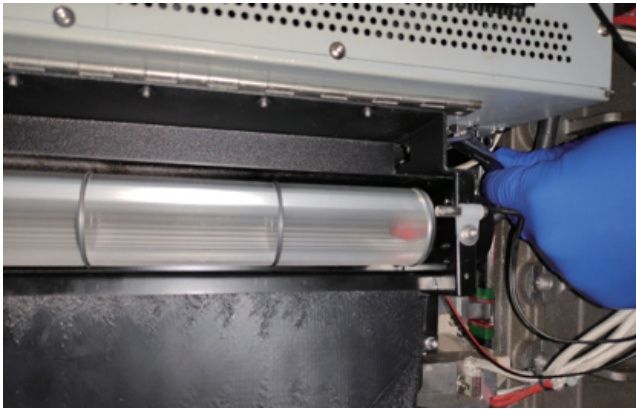


Clean the planarizer and its blade

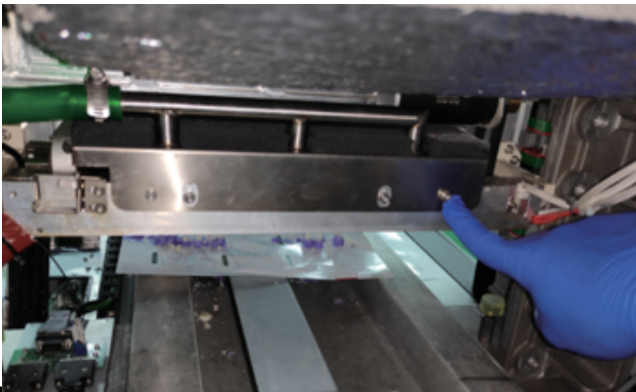
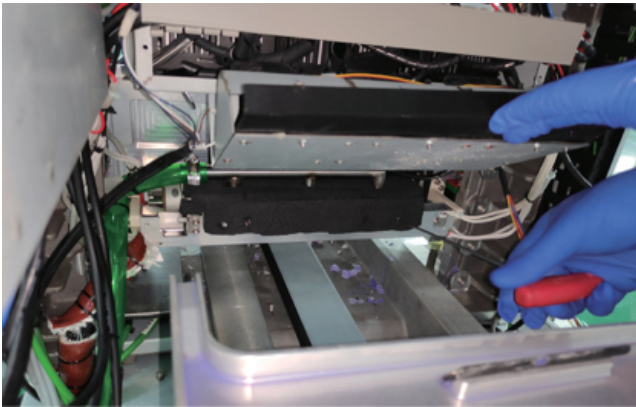
Wear rubber gloves and sprinkle with a little ethanol on a dust-free cloth.



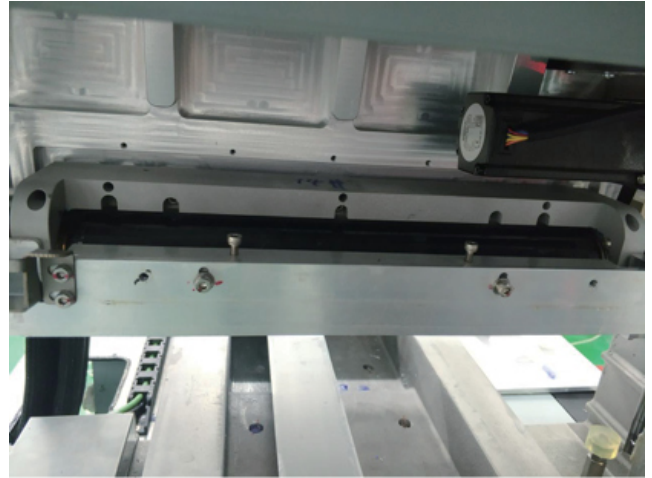
Release the hook on the both sides of the rear fan.



Unload two fixing screws on the cover of the planarizer.



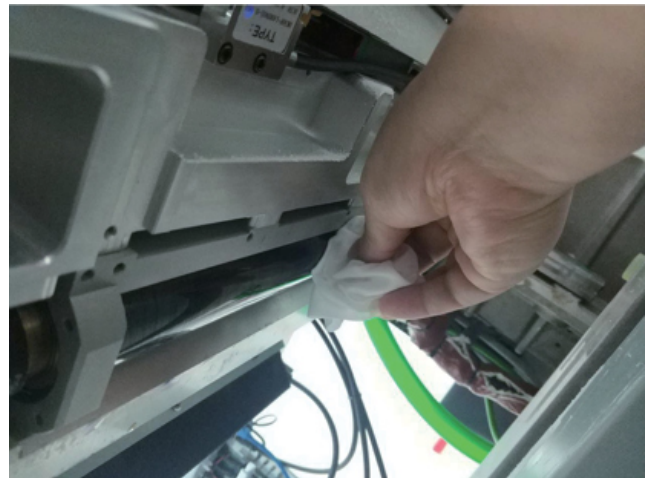
Unload the cover for powder filter.



Clean the blade with the dust-free cloth in ethanol.



Clean the planarizer from the back lower side of the printhead carriage with the dust-free cloth in ethanol.





After-Sales Service: support@romanoff.com