MiiCraft Maintenance Manual

Hyper/ Prime

Version 1.0

Specification

Item	Prime 150	Prime 110	Hyper 125	Hyper 80	Hyper 50
Area(mm)	150x84.5x120	110x62x120	125x70x120	80x45x120	57x32x120
XY Res.	55 µm	40 µm	65 µm	41.5 µm	30 µm
Z-Layer Resolution		5 µm to 500 µm			
Wavelength(LED)		385/405 nm wavelength are available for all configurations			
UI & Connectivity		Touch screen / Ethernet, USB			

The key components of the machine or 3D printer needs some maintenance for having smooth performance. Additive manufacturing uses key components of mechanical & electrical systems. Mechanical components need some regular & yearly maintenance for having better performance & long life. The common error & their maintenance method of MiiCraft 3D printer are provided in this manual.

Note - Unplug the power cable of the printer to start the maintenance procedure.

Contents

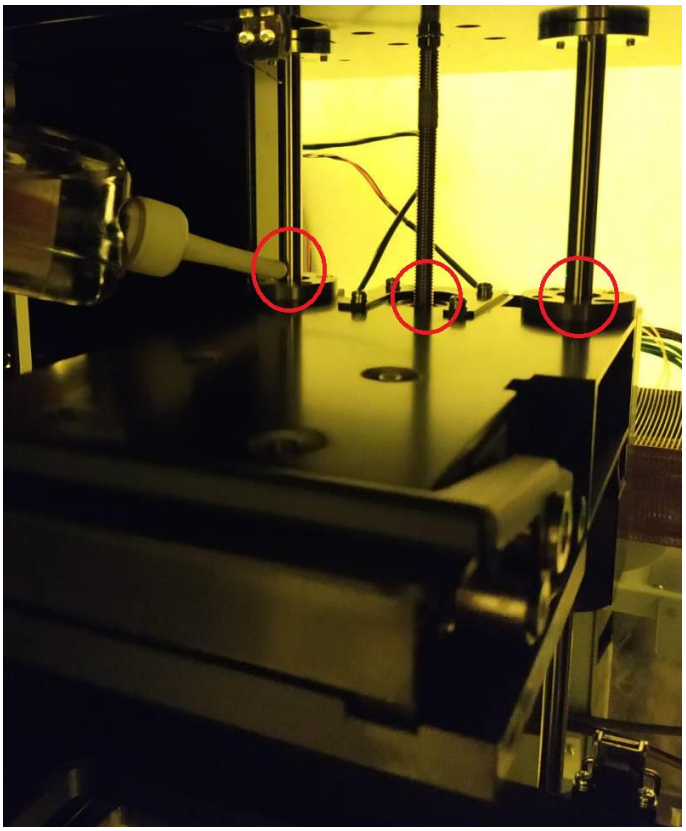
1) Z Motor Maintenance :-

Check Method :-

- Using Computer Interface
- Using Touch panel

Procedure :-

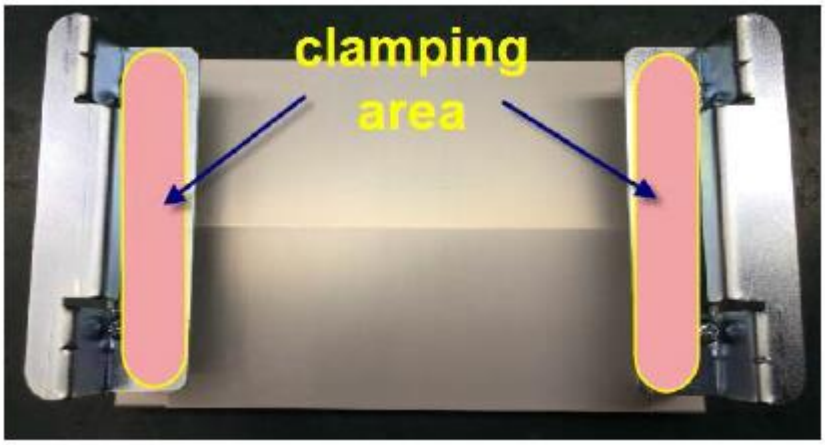
- Take Z motor downward by using touch panel or computer interface.
- When platform touches bottom limit sensor, add sewing machine oil on the guide pin shaft's & central screw.
- The amount of the oil should not exceed 0.5ml



2) Picker Maintenance

- Clean picker surface with Alcohol & dust free wiper

- Clean clamping area from both sides frequently to avoid resin addition on the picker holder

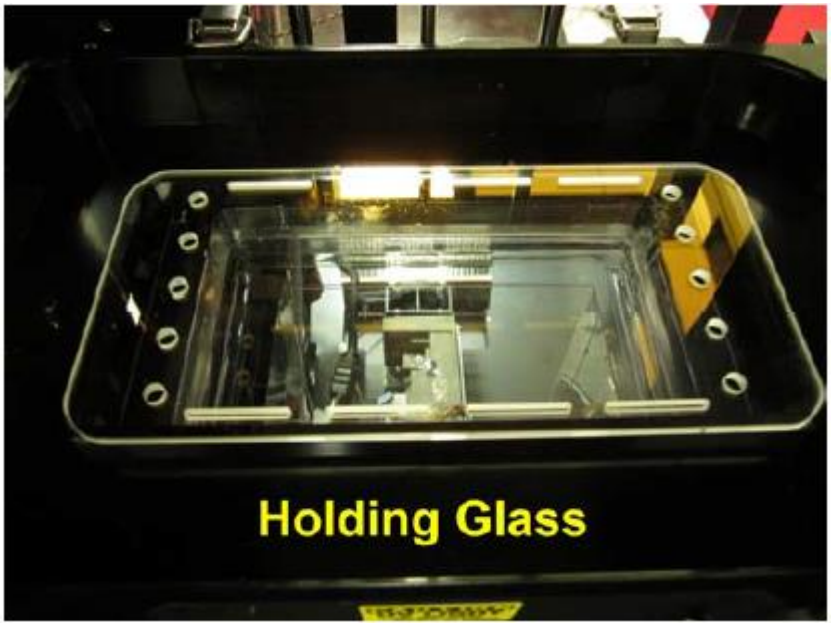


3) Teflon & holding Glass Maintenance (Prime & Hyper Series)

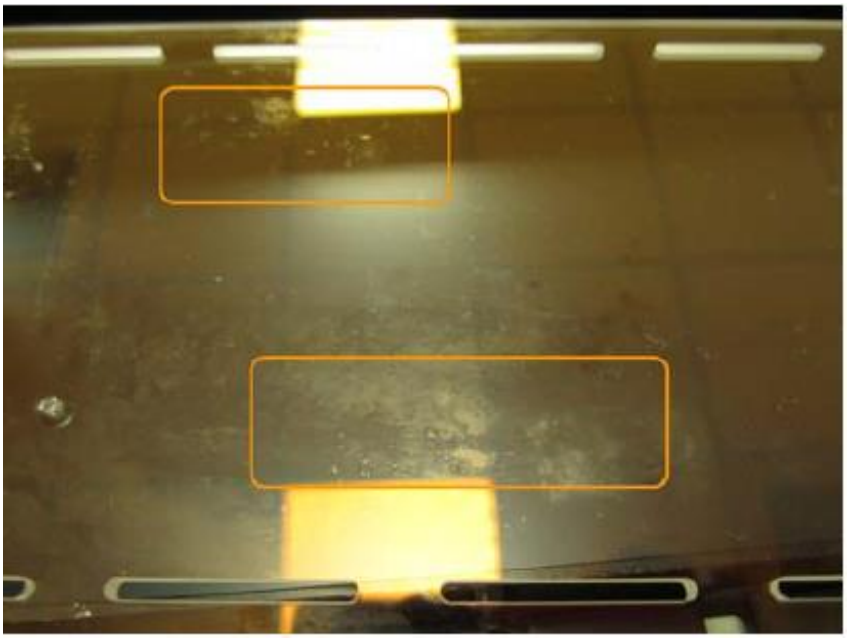
- Remove all of the failure parts from the tank

- Clean the rear side area with dust free wiper (Use alcohol if needed)

- Check the holding glass & keep the surface clean every time



- Clean all spots & resin ink from the glass surface



4) Common & frequently performed practices

The following tables present maintenance and repair guidelines connected with each section of the MiiCraft Hyper & Prime series printers, together with specific check points, necessary activities and their frequency.

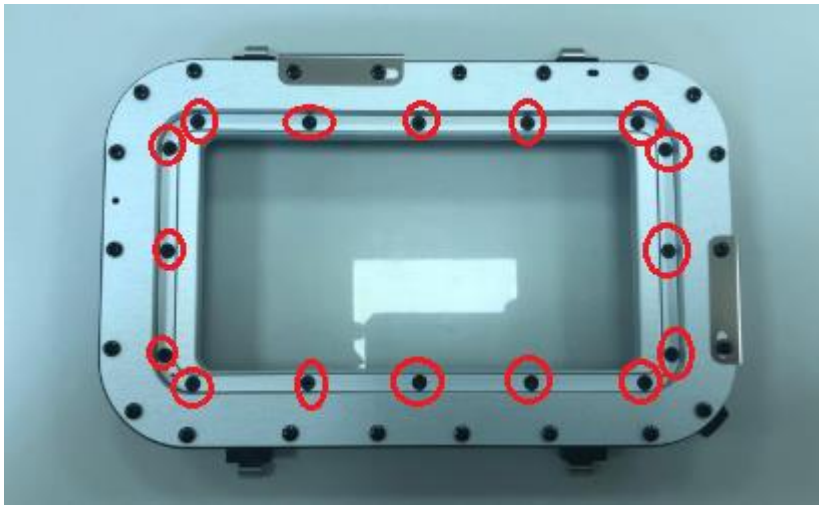
Sr. No.	Activity	Frequency
1	Cleaning & checking the machine & interior Surroundings	Before Every Print
2	Cleaning Picker Surface	Before Every Print
3	Cleaning teflon glass	After change of teflon or print failure
4	Change of Teflon	After 20 prints
5	Resin Mixing	Before Every Print
6	Check for printing residuals in the resin tank	After Printing / Must check if print failure occurs
8	Cleaning Tank	After Print Failure
9	Restart / Shut Down	Shut Down the printer if there's no use
10	Z Motor lubrication	If noise in Z motor run

5) **Prime Series Change of Teflon Film**

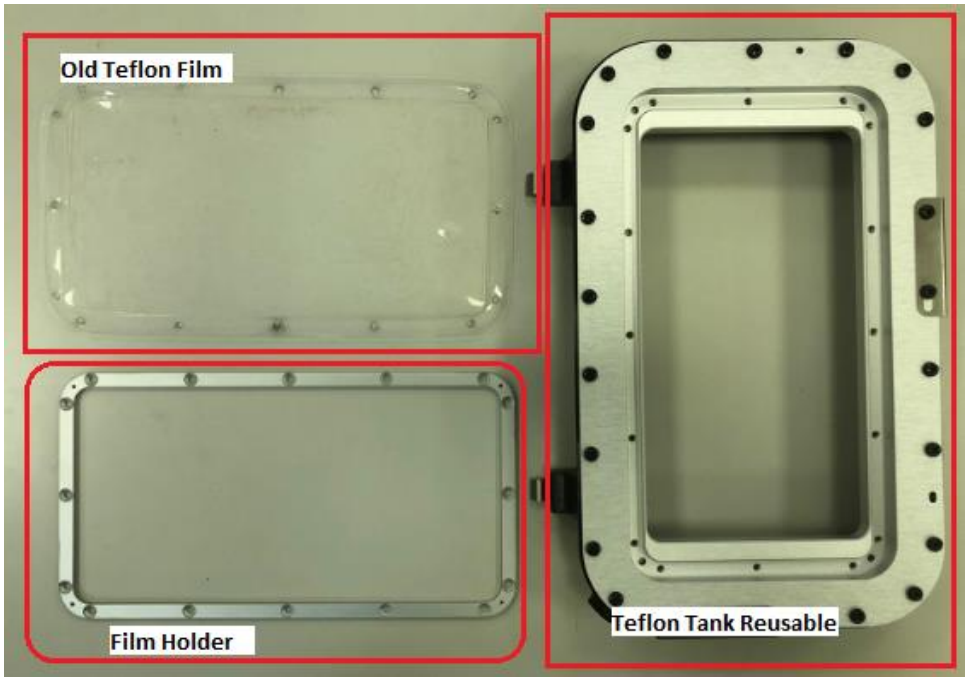
Before performing change of teflon film, remove the resin & failed printing residuals inside the tank & clean the internal surface

- New teflon module will be provided in following format

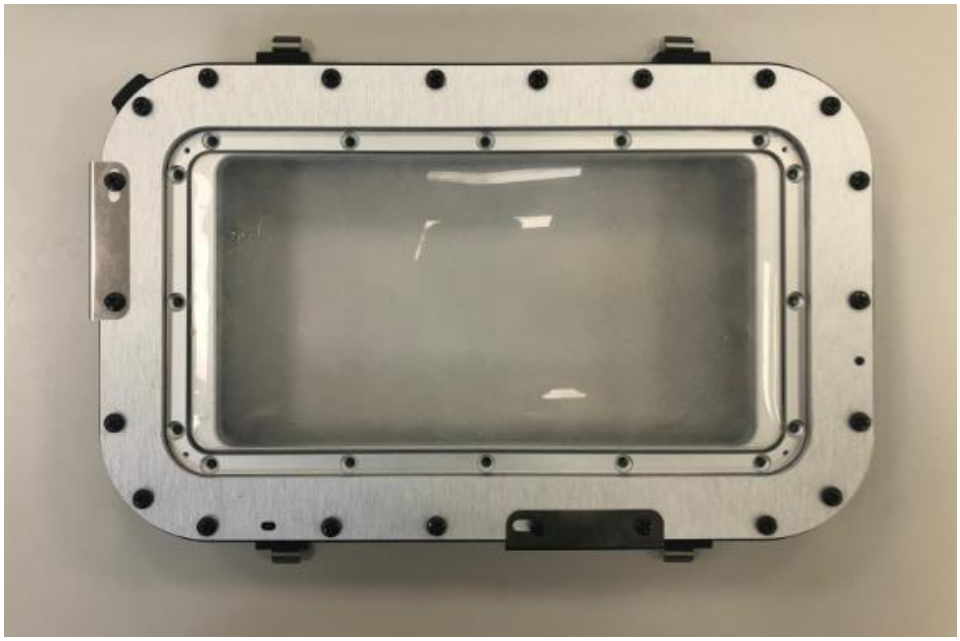
- Place the teflon tank upside down & remove 16 screws (M3X6) highlighted in red circles using screw driver



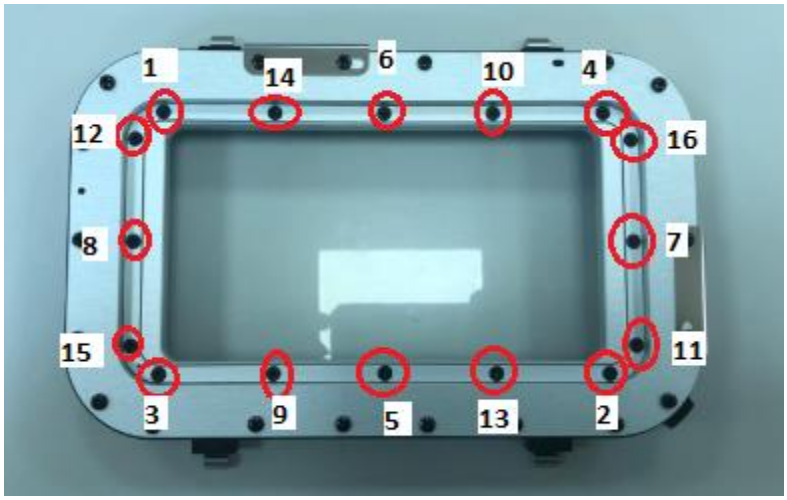
- Separate the teflon film & film holder from the tank module



- Add new teflon & telon holder on the tank as shown in following Image



- Add 16 screws provided with the teflon film module on the tank surface
  Screw should be inserted in following order 1 to 16



- We suggest the use of **Stanley 65-167** screw driver should be done while changing teflon film module on prime series printers
  Specifications :-
  Philips Tip Type
  Tip size : 2 (Blade: #2)

Thanks for reading carefully,

Team MiiCraft.