

DentCare

BQP-D15 3D Printer Maintenance Guide



The key components of the machine or 3D printer need some maintenance for having smooth performance. Additive manufacturing uses key components of mechanical and electrical systems. Mechanical components need some regular maintenance for better performance and long life. The maintenance method of DentCare BQP-D15 3D printer are provided in this guide.

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

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Z Motor Maintenance

Check Method

(1) Using Computer Interface

- Using the computer by inserting IP address in your computer browser & adding :8080 at the end of IP address. (<http://IP address:8080>)

(2) Using Touch panel

Procedure

Take Z motor downward by using touch panel or computer interface.

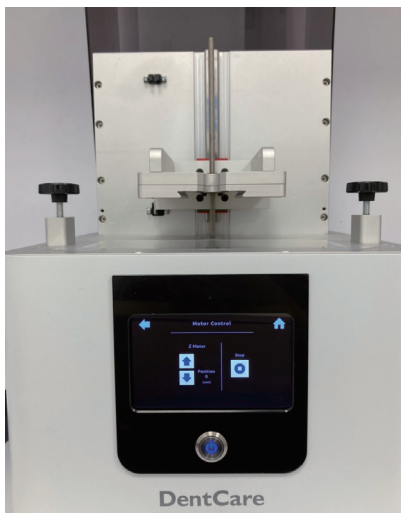
(Engineering Mode-> Motor Control)

(1) Touch on down icon, motor will move downwards and stop its movement at stopper.

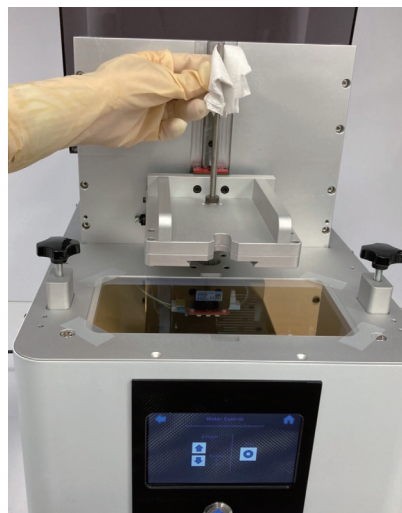
(2) Clean the Z Motor surface with a dry cloth.

(*Clean with alcohol if there is any residue.)

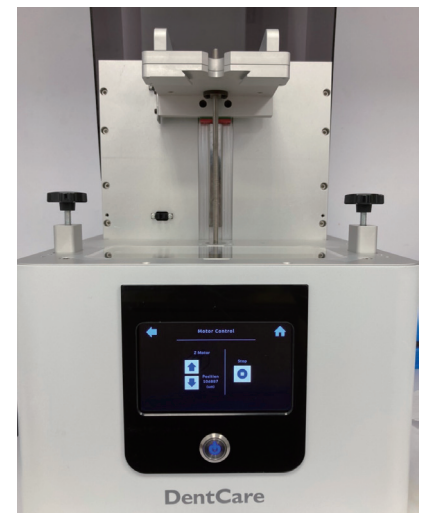
(3) Touch on up icon, motor will move upwards and stop its movement at stopper.



1



2



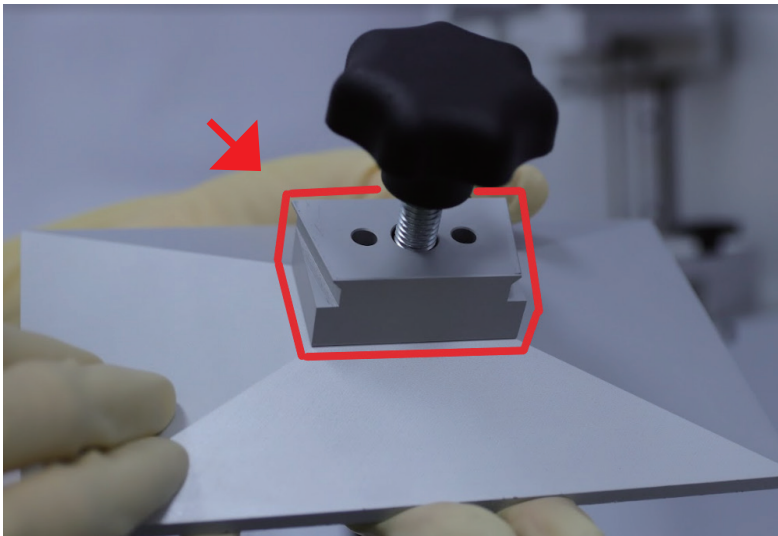
3

Building Platform Maintenance

- Clean building platform surface with alcohol & dust free wiper.



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



- Please refer user manual for understanding the printing procedure in details.

Resin Tank Maintenance

- Remove all of the residue parts from the resin tank



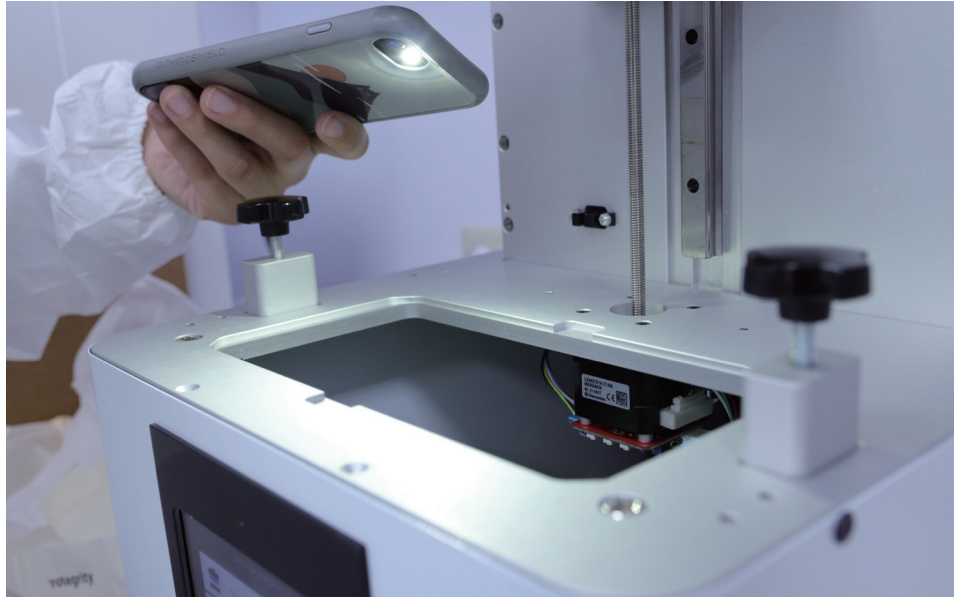
- Clean the rear side area with dust free wiper (Use alcohol if needed)



- Please refer user manual for understanding the printing procedure in details.

Light path Maintenance

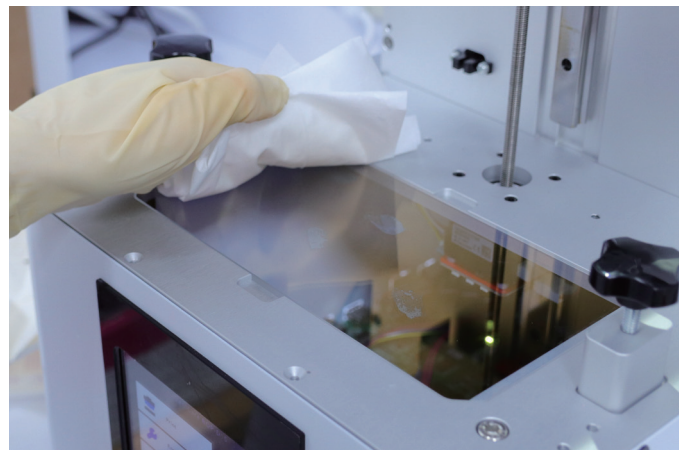
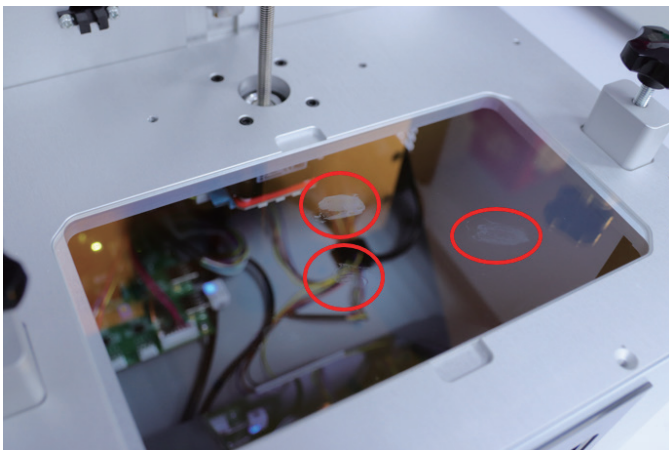
If there is any dust or dirt in the path of light, it will affect the printing quality. You can use a flashlight to aid checking the dirt.



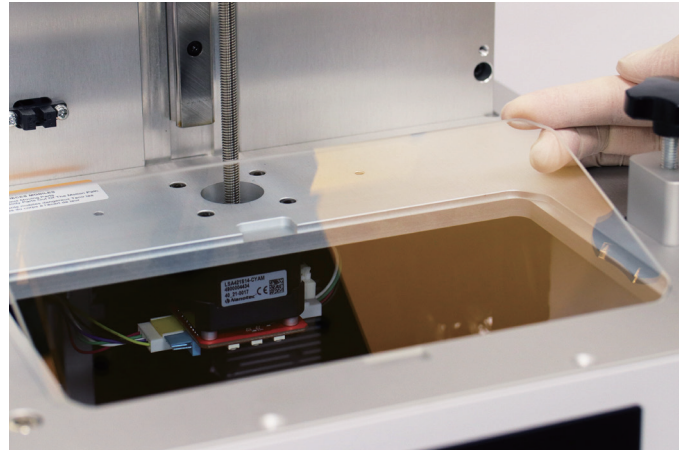
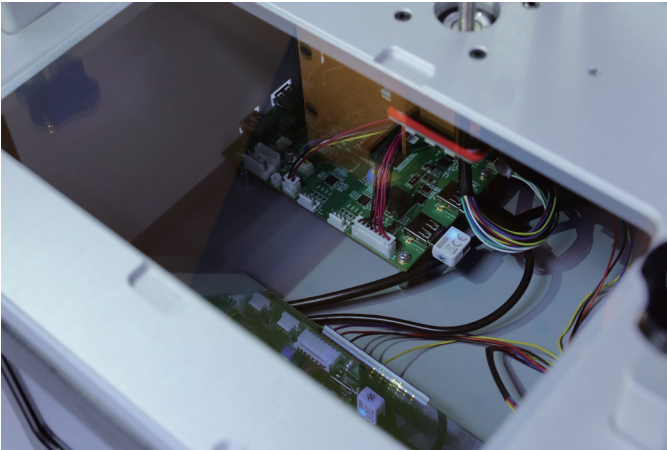
The following areas must keep clean for having smooth performance:

I. Glass Screen Maintenance

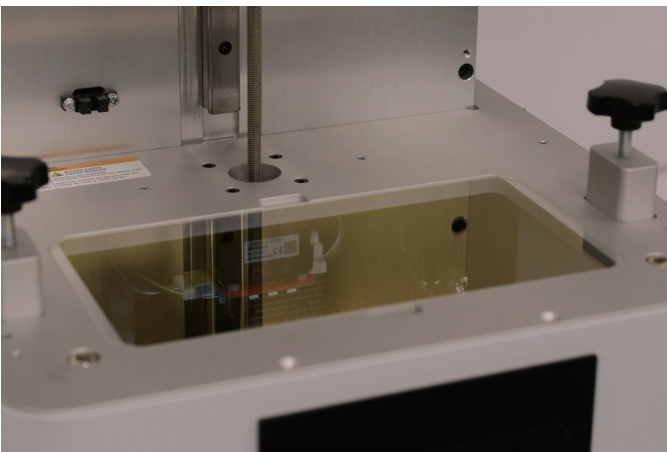
- Clean all spots & resin ink from the glass surface with dust free wiper (Use alcohol if needed)



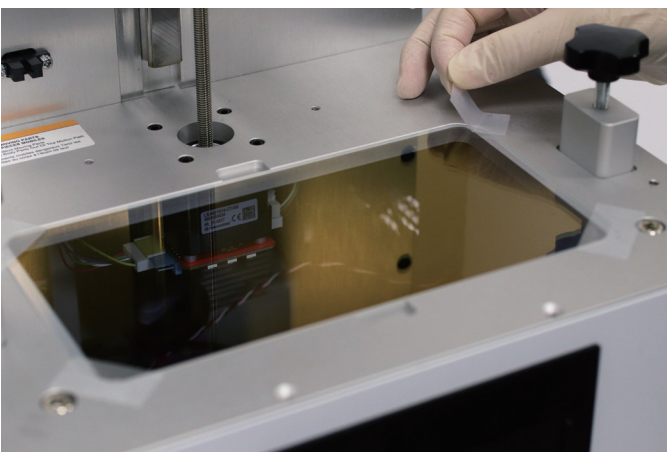
- Keep the surface clean every time.



- Ensure the glass is well setup before printing.



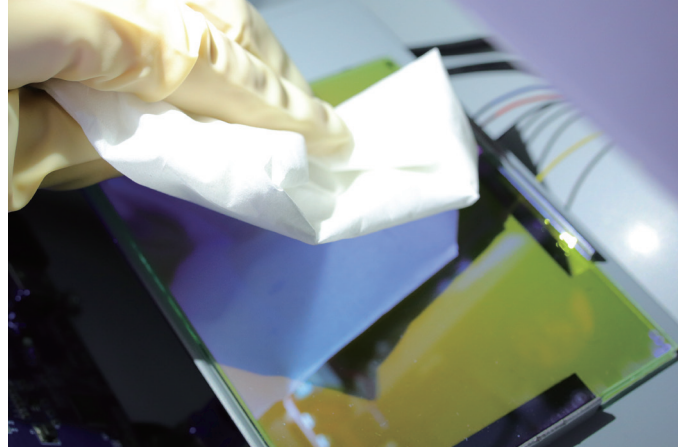
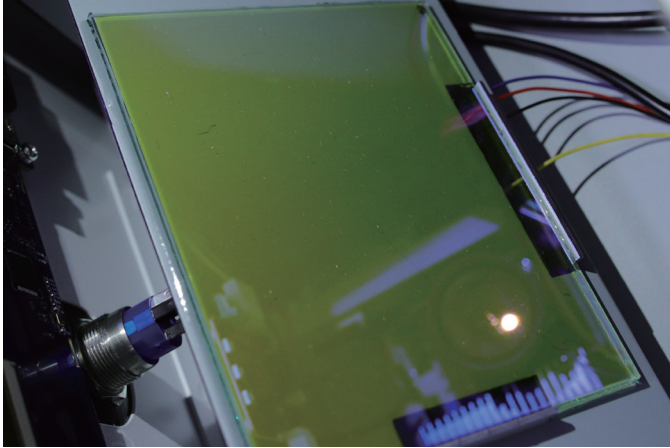
- Place thin tape on all four corners for stable and avoid damaging printer while printing.



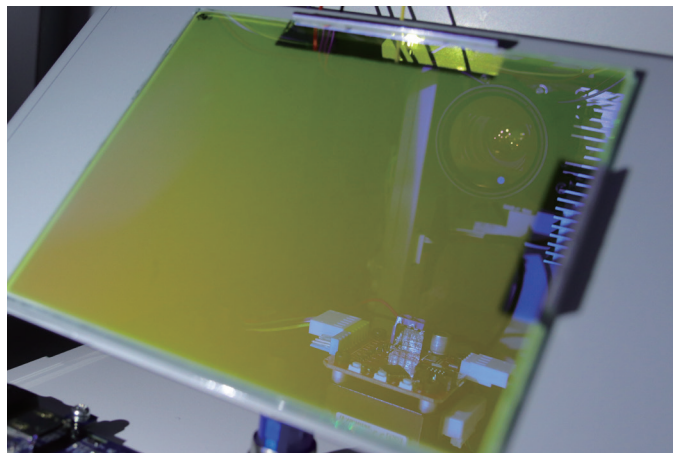
II. Reflect Mirror Maintenance

The reflect mirror is under the protective screen, you need to remove the protective screen before cleaning the reflect mirror.

- Clean all dust from the glass surface with dust free wiper (Use alcohol if needed)



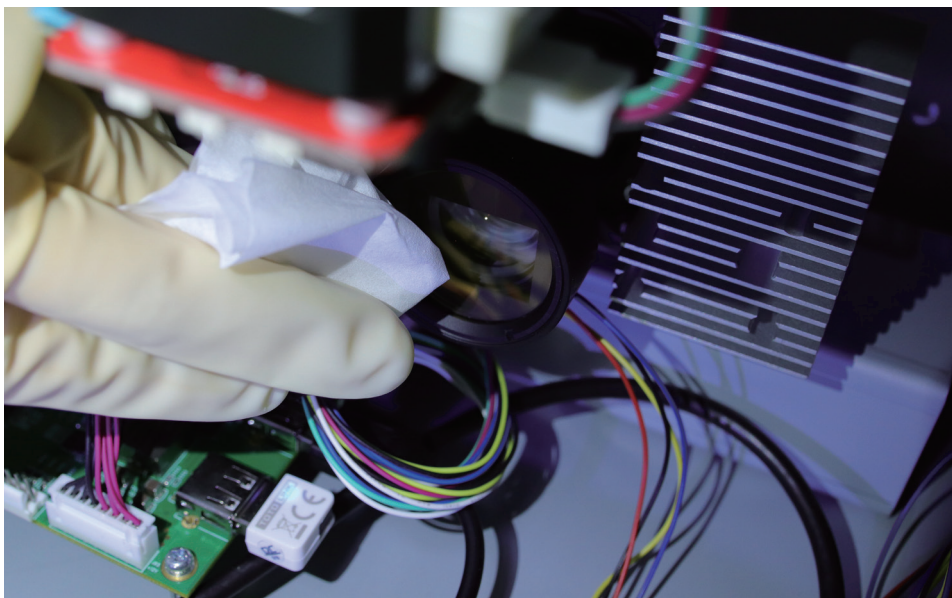
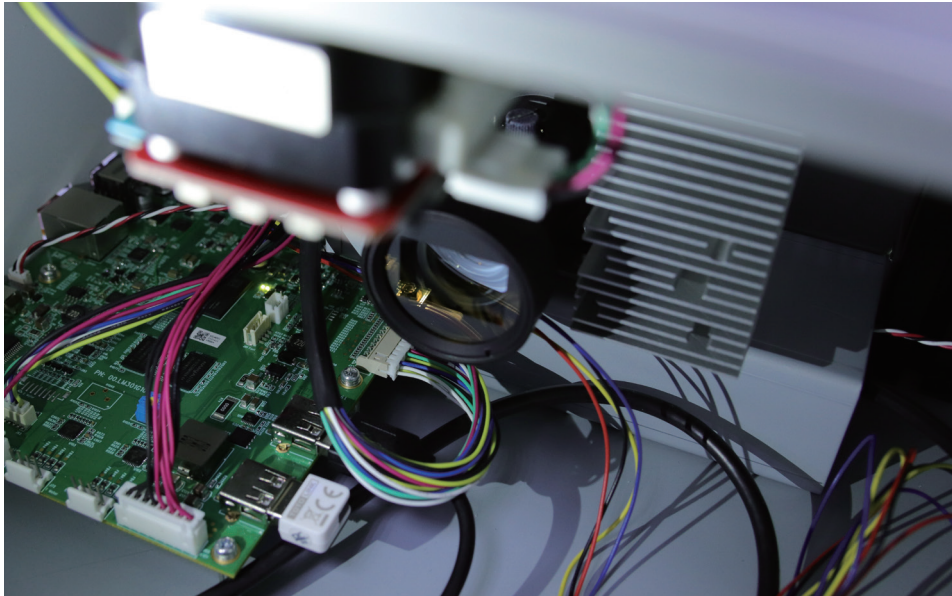
- Keep the mirror clean



III. Optical Lens Maintenance

The optical lens is under the protective screen, you need to remove the protective screen before cleaning the optical lens surface.

- Clean all dust from the optical lens surface with dust free wiper (Use alcohol if needed)
- Keep the optical lens surface clean



Common & Frequently Performed Practices

The following tables present maintenance and repair guidelines with DentCare BQP-D15 printer and specific checkpoints, necessary activities, and their frequency.

Item	Activity	Frequency
Common Maintenance		
1	Clean and check the printer	<ul style="list-style-type: none"> • Before every print
2	Clean and check the interior surroundings of the printer	<ul style="list-style-type: none"> • Before every print
3	Shut down the printer	<ul style="list-style-type: none"> • If there's no use
Z Motor Maintenance		
1	Clean the Z motor	<ul style="list-style-type: none"> • 1month or if necessary • If noise in Z motor run
2	Check the Z motor movement	<ul style="list-style-type: none"> • 1month or if necessary • If noise in Z motor run
Building Platform Maintenance		
1	Clean building platform surface	<ul style="list-style-type: none"> • After every print
Resin Tank Maintenance		
1	Clean resin tank	<ul style="list-style-type: none"> • After pouring out materials • After printing failure
2	Replace with a new resin tank	<ul style="list-style-type: none"> • Lifespan reached <p>(The resin tank lifetime depends on different materials, it can print about 15kg with BenQ DM5 materials)</p>
3	Mix the materials	<ul style="list-style-type: none"> • Before every print
4	Check the residuals in the resin tank and clean complete	<ul style="list-style-type: none"> • After every print • After printing failure
Light path Maintenance		
1	Clean the protective screen	<ul style="list-style-type: none"> • If seeing dust and resin ink on the glass surface
2	Clean the reflect mirror	<ul style="list-style-type: none"> • If seeing dust on the reflect mirror
3	Clean the optical lens surface	<ul style="list-style-type: none"> • If seeing dust on the optical lens surface

Support

More detailed operation steps can be viewed at :

<https://www.youtube.com/channel/UCB-KilG9-bINsZQS5iOV55Q>



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