



T10 3D Printer

User Manual

<http://www.comettrue3d.com/>

Safety Information

Read this manual completely before using our 3D printer. Please be sure to follow the instructions and warning information below.

- Forbid to Use Non-ComeTrue® Original Liquid Cleaners for Electronics Safety.
- Use the power specification which only indicated on the 3D printer label.
- Do not use injured power cord.
- Be careful of the power cord connection. If the plug is injured, please change the power cord or contact with professional staff. If there is any fuse in the plug, be sure to replace it with a fuse of the correct specification and rated power.
- Do not repair the 3D printer by yourself.
- Keep away from combustible materials.
- Do not block the ventilation holes of 3D printer.
- Avoid putting the 3D printer in a place where temperature and humidity may change dramatically. Avoid sun exposure, high temperature and chemicals.
- Do not put the machine in a vibrated place and do not drag the machine.
- Do not put your hand into the 3D printer or touch the binder cartridge when printing is in progress.
- Do not use your hand to move the print head, otherwise it may damage the printer.
- Do not put the 3D printer in a place where there may be interfered by electric waves, ex: megaphone or wireless telephone.
- Do not put the 3D printer near television, radio, air conditioner or humidifier.
- Install the 3D printer close to the place where you are going to put because any movement after installation is completed may cause damage to the printer.
- If the binder cartridge contact with your skin, wash it with water and soap. If the binder cartridge contact with eyes, wash them with plenty of water instantly.
- Do not use expired binder cartridge.
- Do not touch the orifice of the print head or other parts around it, or it may affect the normal operation and printing quality
- If the power cord is damaged, it must be replaced by a special wire or special components from the manufacturer or its service agent. ”
- This machine is not applicable to be used by people (including children) with physical disability, mental disability, or lack of experience and knowledge in using similar products.
- Keep this machine away from children.
- Please turn off the power after using it.
- Warning Symbols:

Mind the symbols below when using ComeTrue T10 3D printer:

	<p>General Caution: Be careful to avoid damaging the equipment.</p>
	<p>High Voltage: Be careful of the high voltage.</p>

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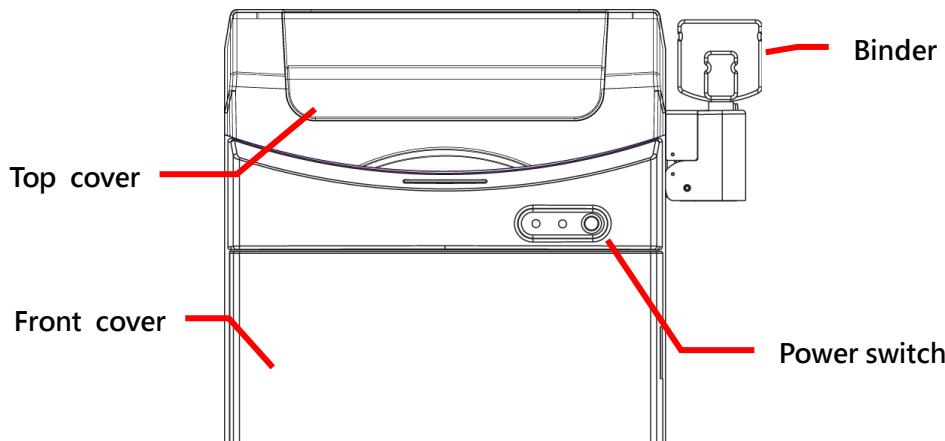
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1 ComeTrue 3D printer operating principle

ComeTrue 3D printer combines inkjet technology and rapid prototyping technology, it can produce a three-dimensional product rapidly, and its operation is similar to produce a real product which uses printing technology. The materials used are composite powders and binder, utilizing combination of binder and powder to produce a real product. The method used is lamination method, which paves one layer of powder, and then spray binder in the specific place. Paving powder and spraying binder repeatedly until the product is finished.

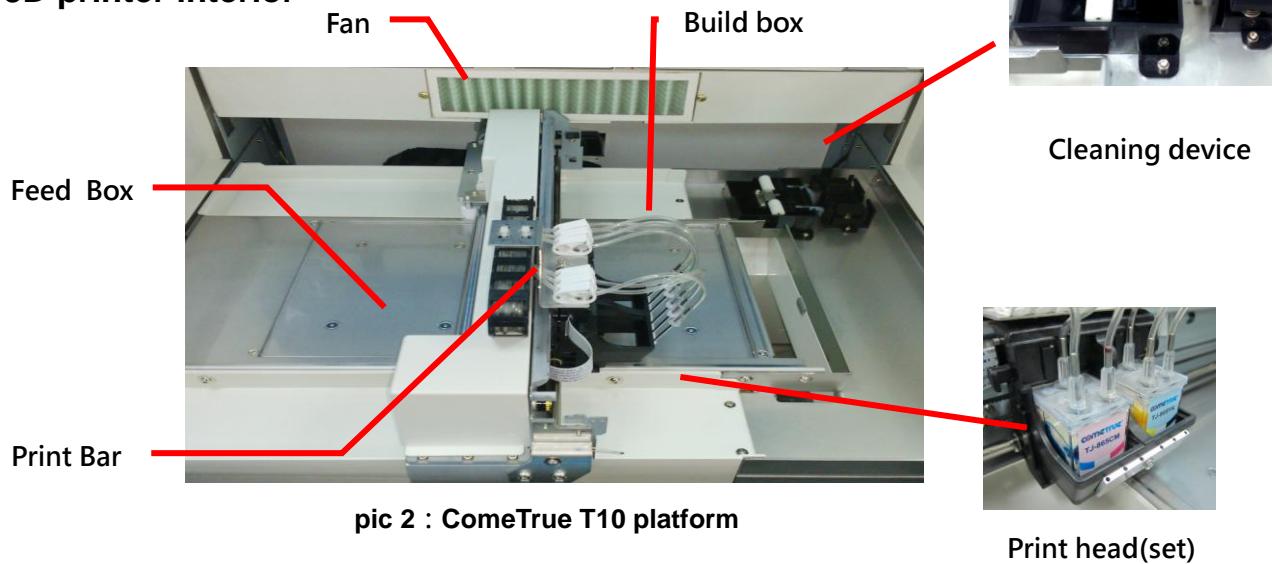
2 ComeTrue 3D printer T10 structure

2.1 ComeTrue T10 appearance

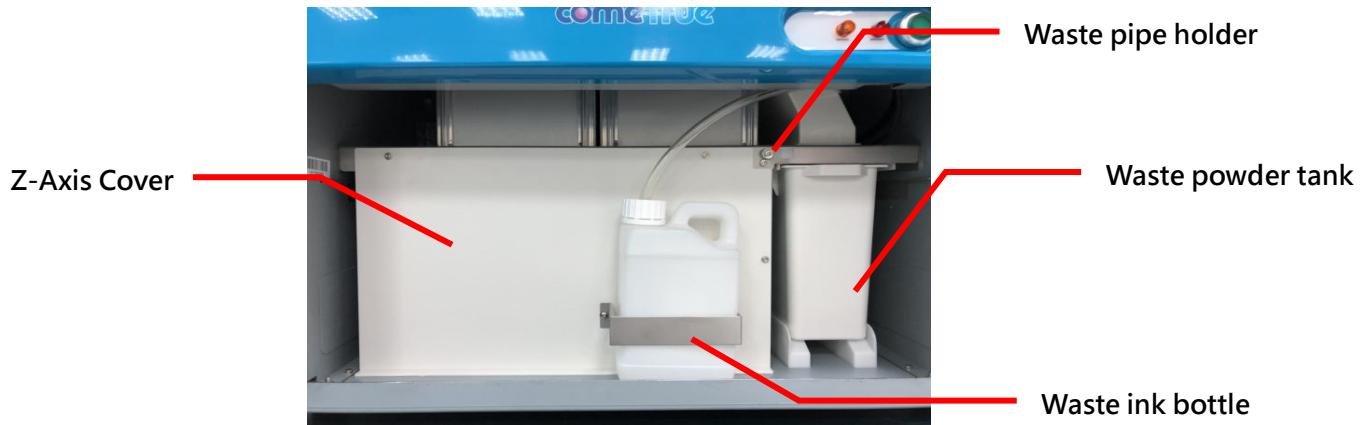


pic 1 : ComeTrue T10 appearance

2.2 3D printer interior



pic 2 : ComeTrue T10 platform



pic 3 : ComeTrue T10 bottom structure (inside the front cover)



pic 4 : ComeTrue T10 cartridge

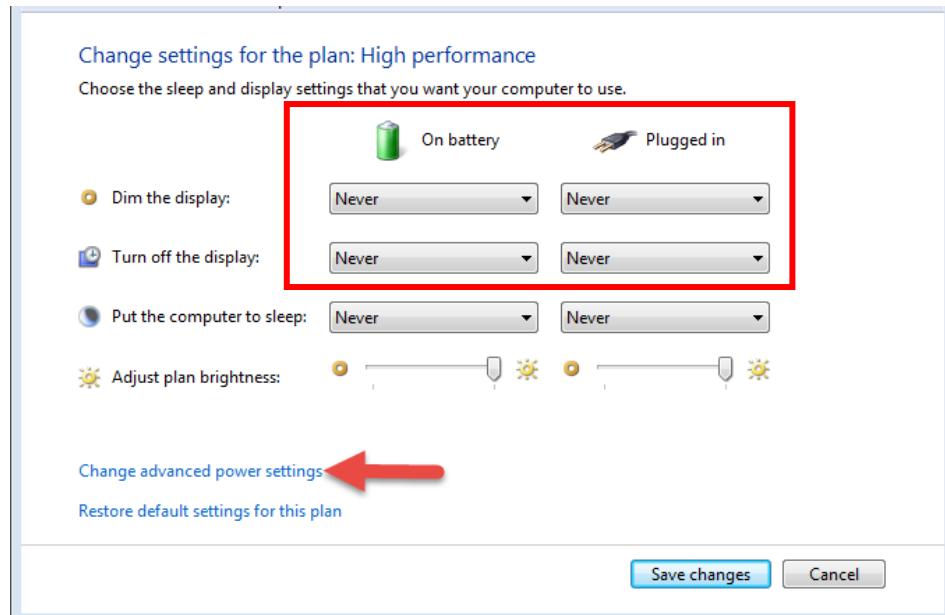
2.3 Accessories



pic 5 : ComeTrue T10 accessories

3 Before installation

1. Prepare Liquid Cleaner for the cleaning usage.
2. In order to facilitate the operation, maintain and keep ventilation, , keep at least 60 cm of space around the machine for operating.
3. Set the power setting of computer in Panel of Control → Power Setting → change the sleep time to never and the screen to never close. (as pic 6)



pic 6 : Change power setting of computer

4. It is recommended that the machine operating temperature should be 10~30°C, and humidity should be 15~60% RH.

4 3D printer slicing software ComeTrue Print installation

1. Connect the USB cable and power cord (pic 7,8), then turn on the machine.

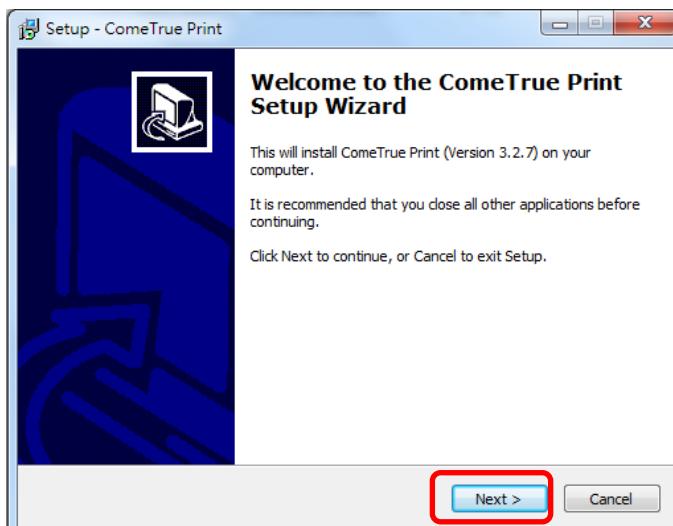


pic 7 : USB Cable



pic 8 : Power Cord

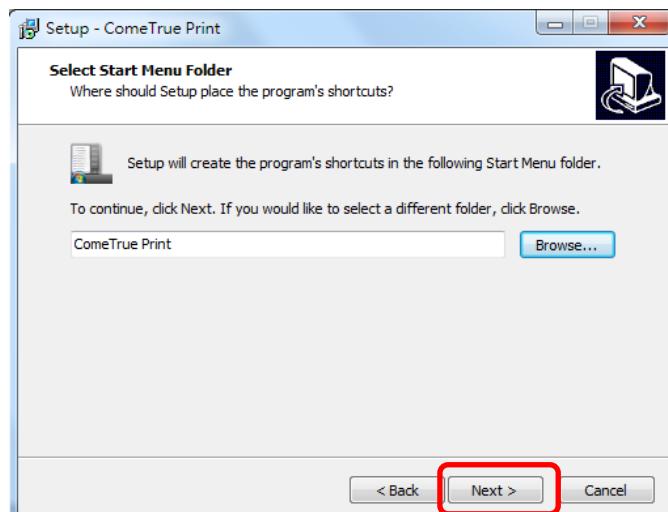
2. Insert the ComeTrue Print CD to the computer.
3. Select Setup.exe file, and run the installation.
4. Select "Next", to the next window.



pic 9 : Select Next

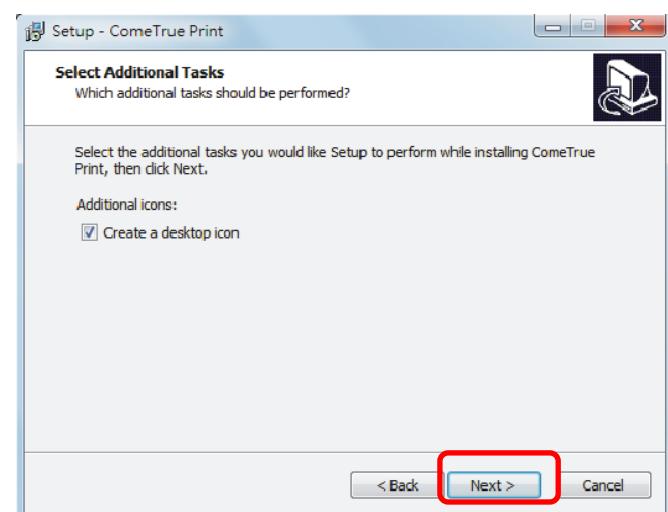
5. Select the installation folder, then press “Next”.

6. Select the name of folder, then press “Next”.



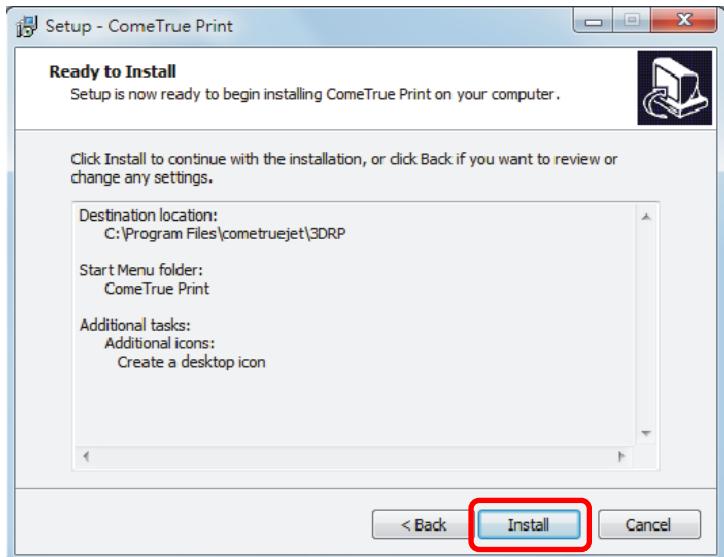
pic 10 : Select Next

7. Select “Next”, to the next process.



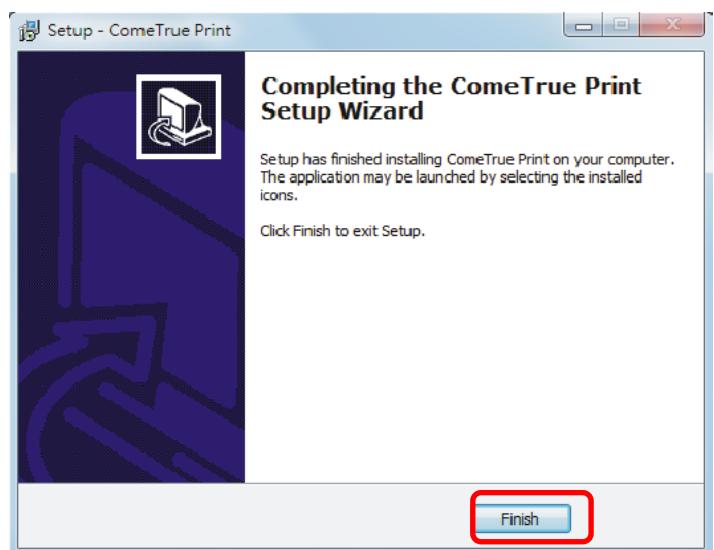
pic 11 : Select Next

8. Select Install for installation.



pic 12 : Select Install

9. Select "Finish", the installation is finished.



pic 13 : Select Finish

10. After installation, there will be an icon "ComeTrue Print" on the desktop.



pic 14 : Shortcut

NOTE : This slicing software supports VRML 2.0(*.wrl) and STL file.

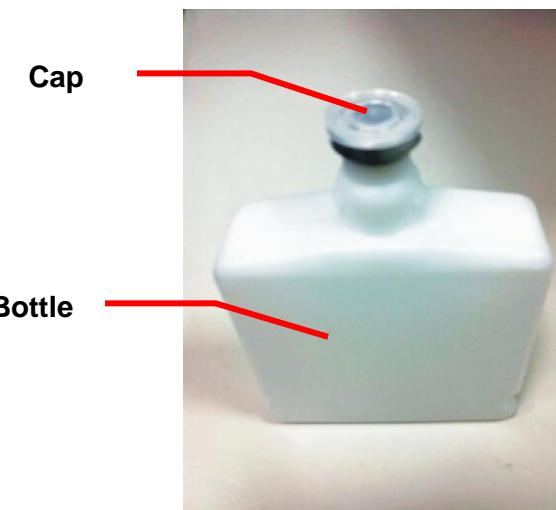
11. Before inserting 3D printing file into ComeTrue Print, use 3D repair software to ensure that the file has no broken face and convert to VRML 2.0 format to avoid failure.

5 3D printer before printing

5.1 Installing binder cartridge, cleaner and print head

5.1.1 Binder cartridge and cleaner installation

Please install the binder cartridge and cleaner when using T10 3D Printer at the first time, and make sure that the ink is enough for you to use each time.



pic 15 : Binder cartridge

pic 16 : Binder tank and adapter

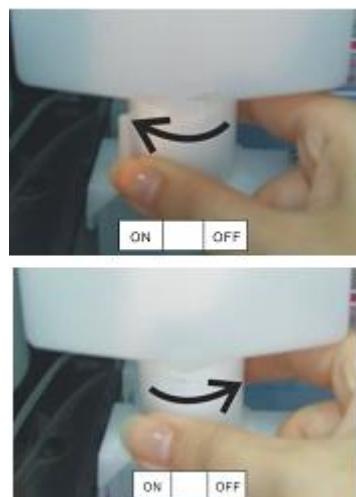
Follow the process when using or changing the binder cartridge (CMYK binder, clear binder and cleaner)

- Open the binder cartridge cap first.
- Invert the binder cartridge and insert it on the adapter, push down to break the rubber plug as follows.



pic 17 : Install the binder cartridge on the adapter

- Turn the adapter head to OFF to finish the installation. (as pic 18)

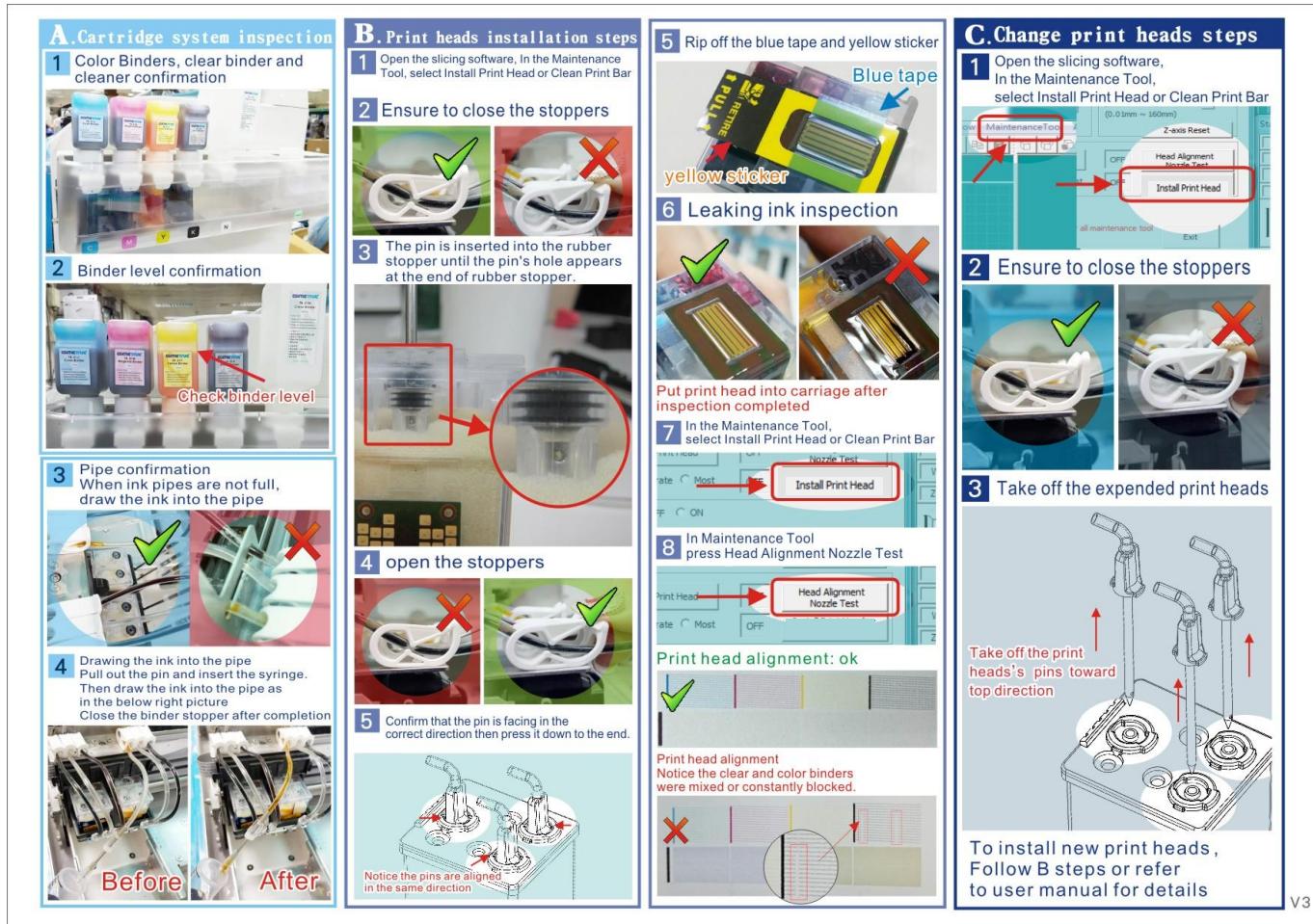


pic 18 : Power switch direction of the adapter head

5.1.2 Print head installation

Print head installation 3 steps. (as pic 19)

- Inspect cartridge system
- Install print heads
- Change print heads



pic 19 : Print head installation instructions

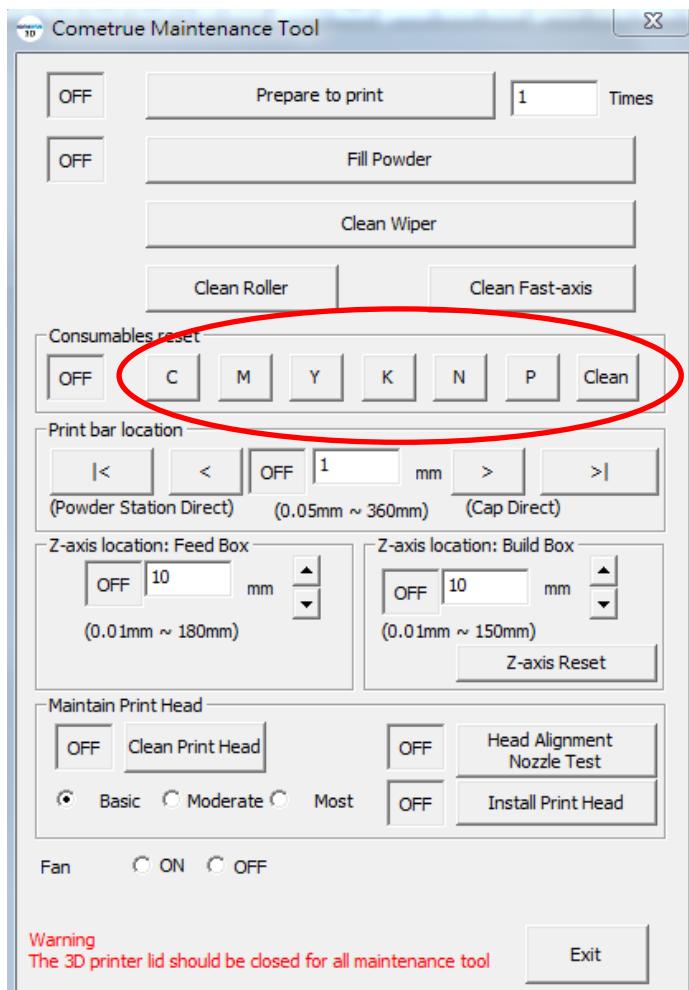
NOTE :

To avoid pipe clogging due to binder precipitation, please follow the recommendations to maintain the pipe below:

- If you print less than four times a week, use a syringe to remove 10cc of the color binder from the pipe every two weeks.
- If you do not print for more than two weeks, remove all the binder from the cartridge and the pipe then thoroughly clean the pipe with water and then reinstall the binder until next time when you use.
- The extracted binder can be stored in a clean and sealable container or empty used cartridge (the cartridge must be sealed) until next time when you use.
- After cleaning the binder pipe, please put the print head back into the Carriage and ensure that the print head has returned to the Cap to prevent it from drying out.
- For more detailed about pipe cleaning procedures, please refer to the video of ComeTrue® official website:
<https://www.cometrued3.com/en/s/support/user-videos-en>

Select the video [Cleaning the ink pipe] in video list

pic 20 : Reset buttons

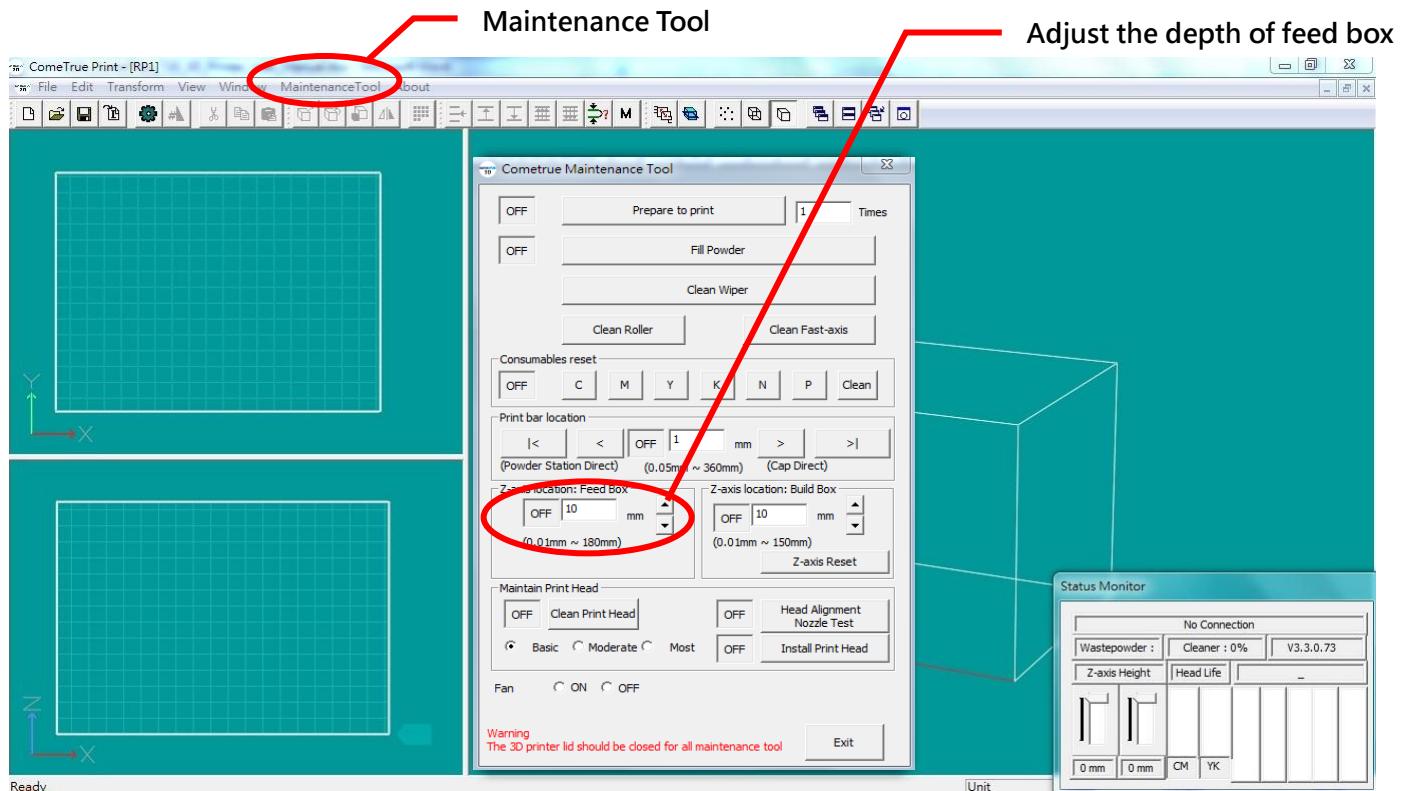
**NOTE :**

After cleaning waste powder or changing binder cartridge, please press CMYKNP Clean these 7 buttons to reset the counter.

Symbol	C	M	Y	K	N	P	Clean
Meaning	Cyan	Magenta	Yellow	Black	Clear binder	Powder	Cleaner

5.2 Fill feed box up with powder

- a. Click Maintenance Tool. Key in 180mm in z-axis(feed box) (the maximum depth of Feed Box in this machine) then press the down button, to decline the feed box into 180mm. (pic 21)



pic 21 : Adjust the depth of feed box

- b. Pour powder into the feed box.
- c. To flatten the powder, please take mini broom to stir powders.
- d. Continue pouring and stirring powders until the feed box filled up with powder.



pic 22 : Pouring powders

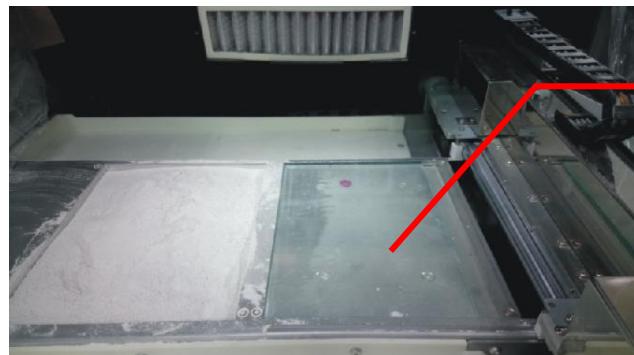


pic 23 : Stirring powders

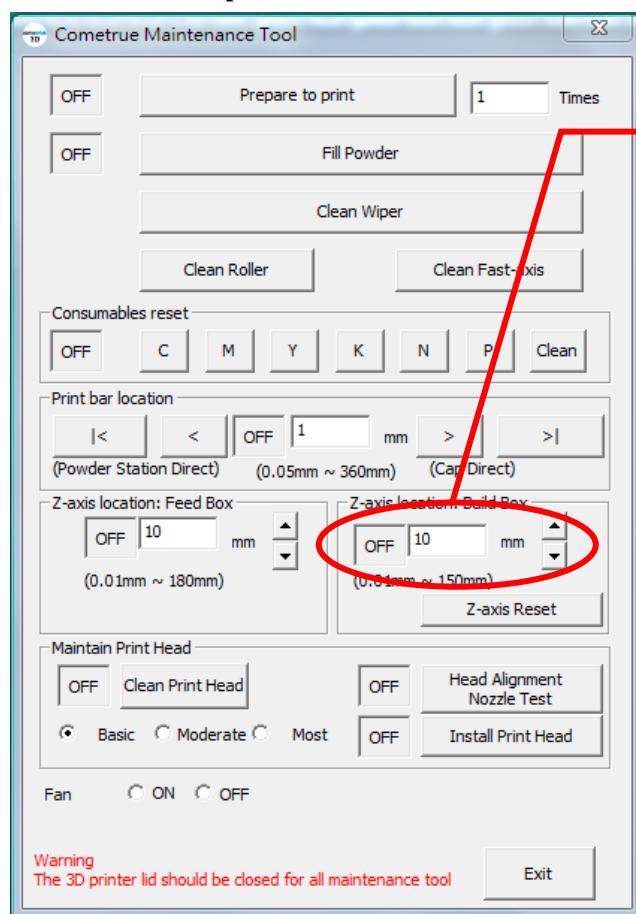
5.3 Powder spreading and print testing

5.3.1 Powder spreading

- a. Rise the Build Box to the highest level (pic 24), the height of Build Box can be controlled in Maintenance Tool → Build Box (pic 25)



pic 24 : Build box

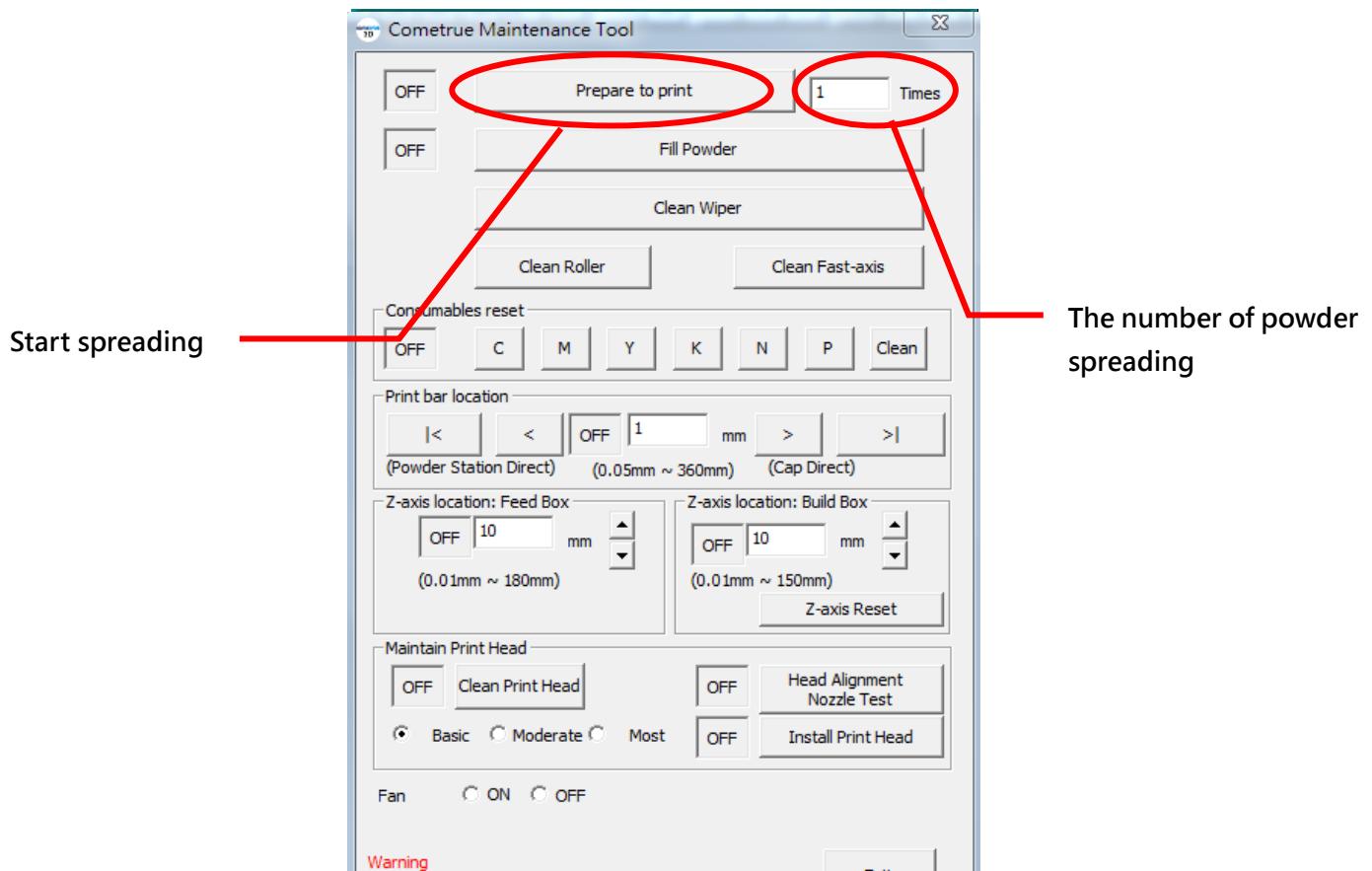


pic 25 : Slicing software Maintenance Tool to control Build Box

Build box up to
the highest level

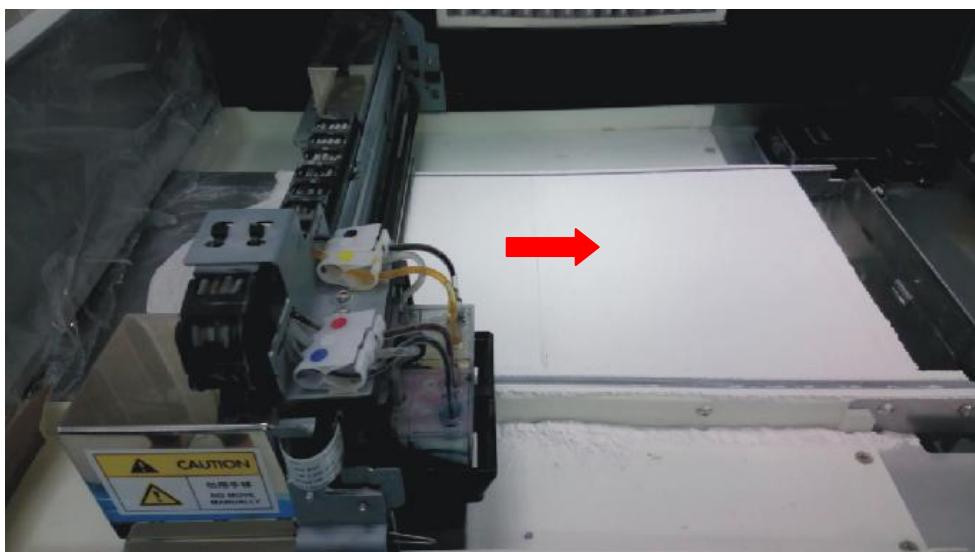
Adjust the depth of
Build Box, key in value
from up to down.

- b. In Maintenance Tool → Prepare to print, type in the times of powder spreading, then press Prepare to Print to start powder spreading (pic 26). (pic 27) shows powder spreading.



pic 26 : Powder spreading in Maintenance Tool

- c. When powders of the two boxes are almost leveled then the spreading can be finished.

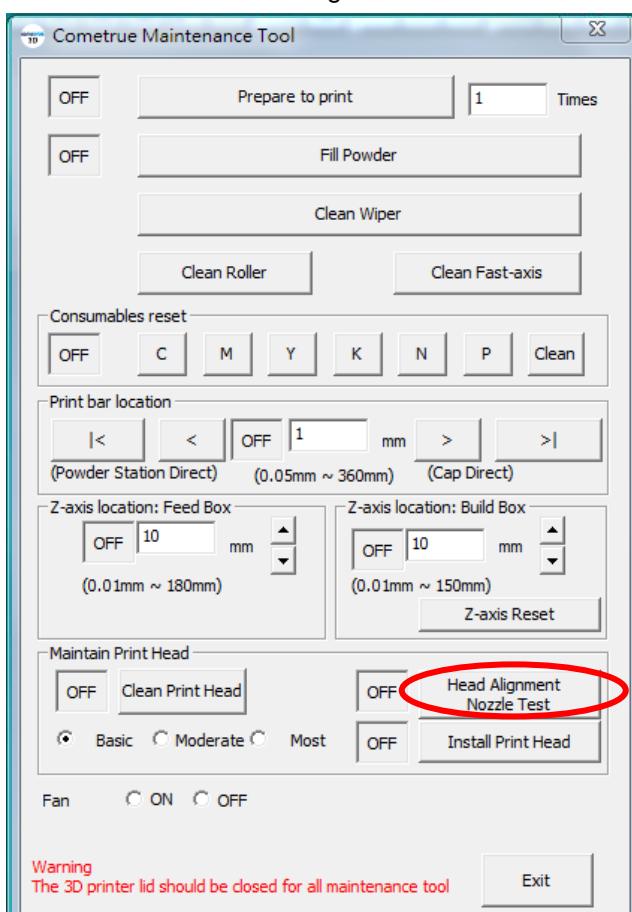


pic 27 : Powder spreading. (arrow shows the direction of spreading)

5.3.2 Print testing

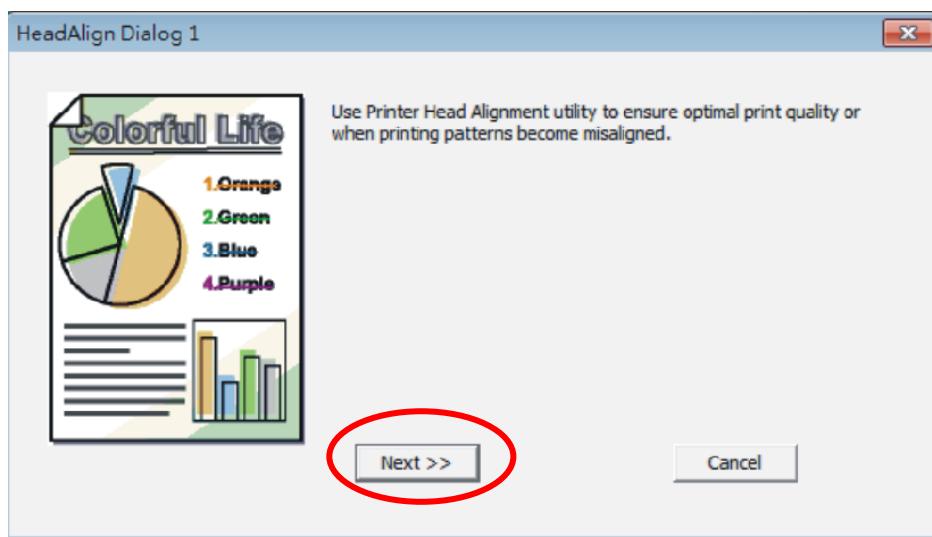
After finish powder spreading, do the print testing first, including Head Alignment and Nozzle Test. Follow the steps below:

- In Maintenance Tool → Head Alignment Nozzle Test.



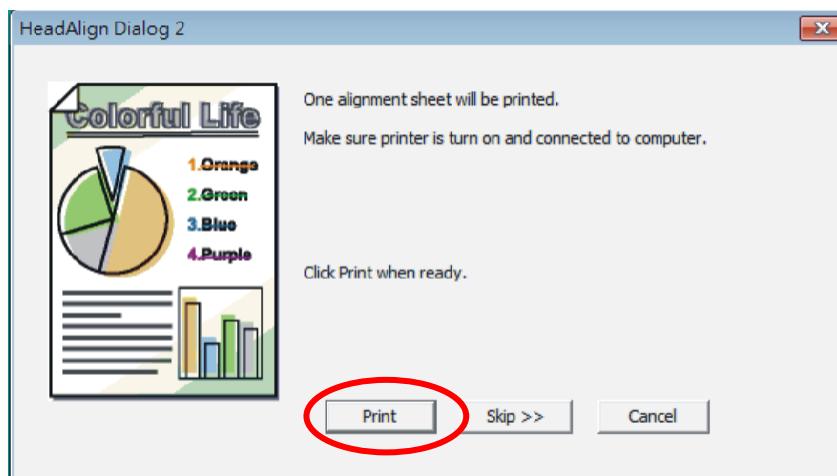
pic 28 : Press Head Alignment Nozzle Test

- In HeadAlign Dialog 1 press "Next".

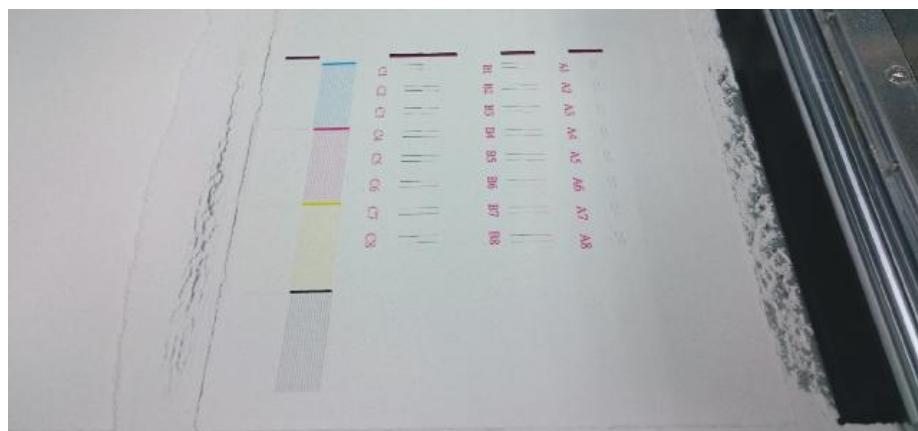


pic 29 : HeadAlign Dialog 1 window

- c. In HeadAlign Dialog 2 press Print, as pic 30. Start printing, as pic 31.



pic 30 : HeadAlign Dialog 2 window



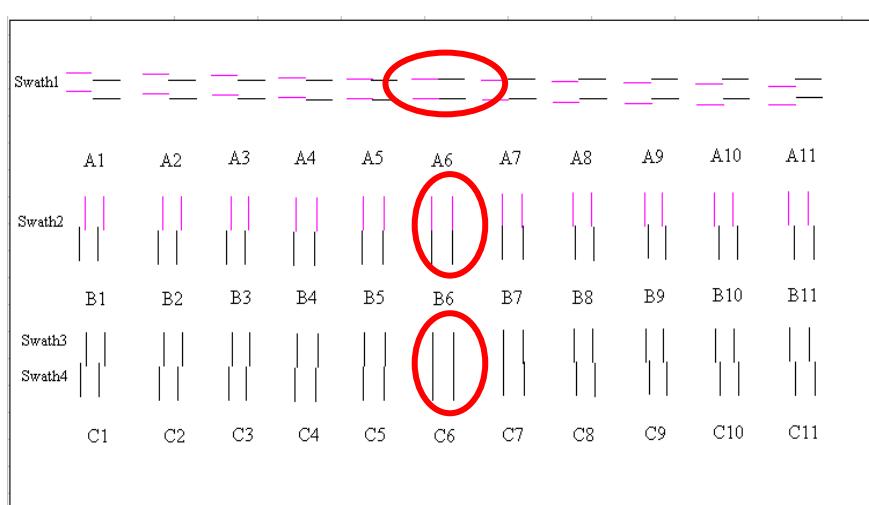
pic 31 : Straight line alignment and nozzle testing

Alignment A shows left/right deviation of the two print heads (horizontal)

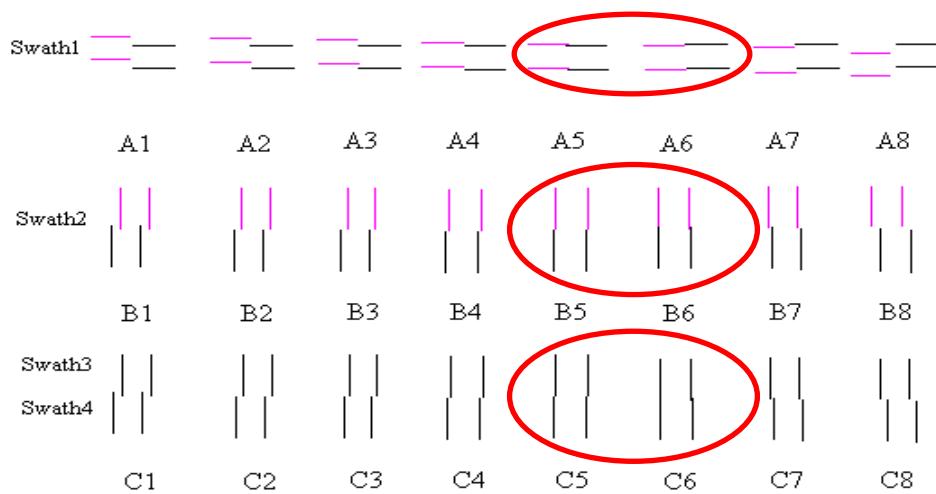
Alignment B shows up/down deviation of the two print heads (vertical)

Alignment C shows deviation of the two directions in the printing process.

- d. Remember the minimum deviation of ABC. As pic 32, choosing A6, B6, C6.

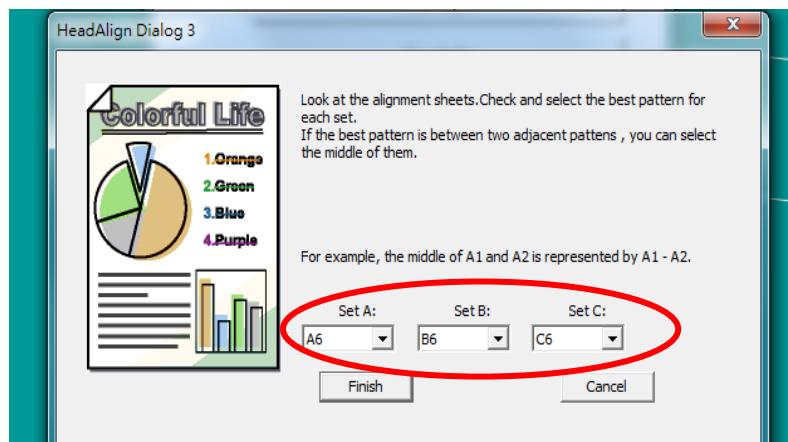


pic 32 : Confirm the alignment value(A6, B6, C6)



pic 33 : Select the alignment value(A5-A6, B5-B6, C5-C6)

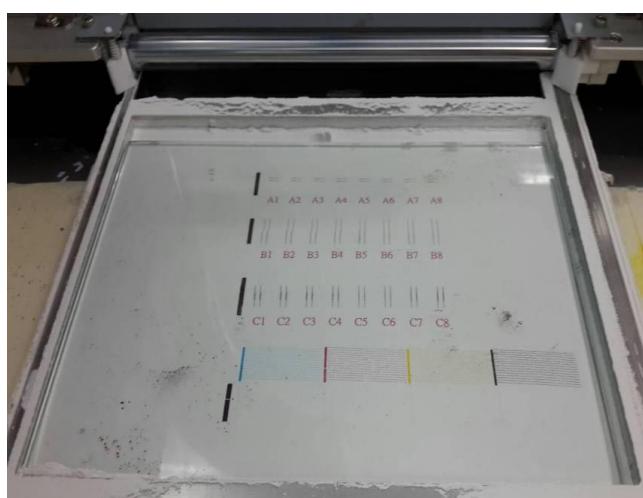
- e. Select the confirmed value (ABC) in HeadAlign Dailog 3, as pic 34.



pic 34 : Select the confirmed alignment value (in the red circle)

- f. **Declining the build box 5mm** and put the glass on it.

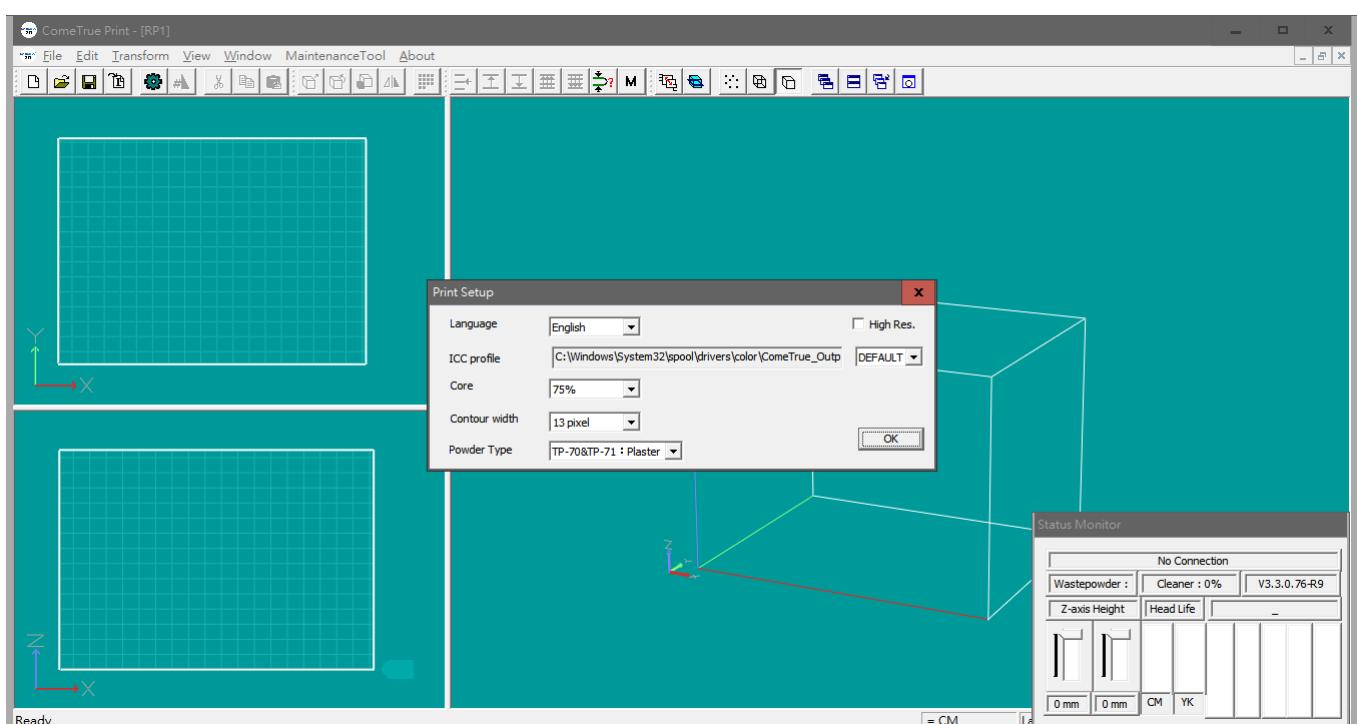
- g. Finally, spread one layer of powder onto build box then ready to print.



pic 35 : Put glass on build box

6 Quick start

- ◆ There are languages, Color Setting mode , CORE , Contour width and Powder Type in print setup.
- ◆ Languages provided are English, Traditional Chinese and Simplified Chinese.
- ◆ Slicing software supports three COLOR Setting mode. (default is DEFAULT Mode)
 - DEFAULT MODE : Strengthen dark color performance
 - CONTRAST MODE : Increase the contrast
 - STANDARD MODE :for most 3D files.
- ◆ CORE is 0%~100%, default is 75%. (Higher core for stronger parts but takes more clear binder)
- ◆ Contour width is 3 pixel~27 pixel, default is 13 pixel(width=1.12mm).
- ◆ Powder type is divided into TP-71: Plaster and TP-80:Ceramic. (default is TP-71: Plaster)



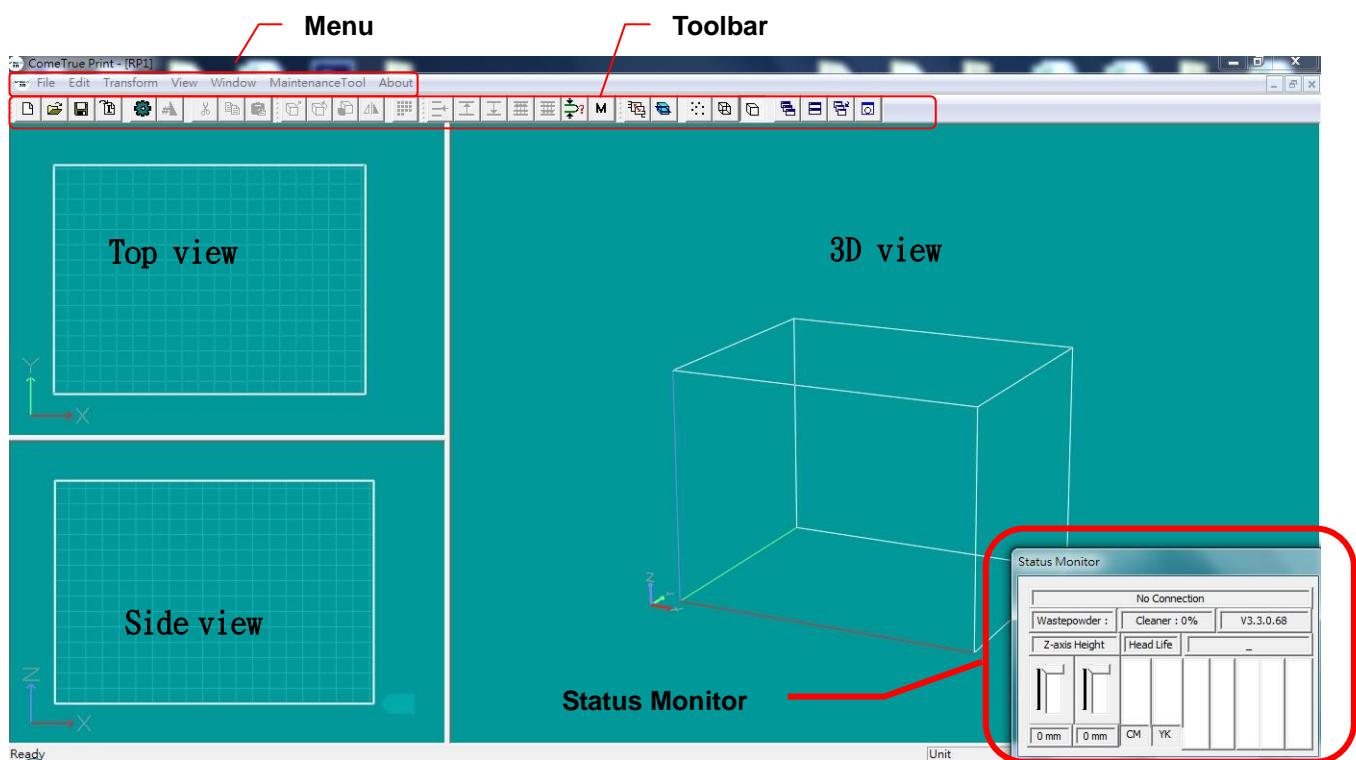
pic 36 : Print setup

Print Suggestions:

It is recommended to use hollow printing for over 10CM parts.

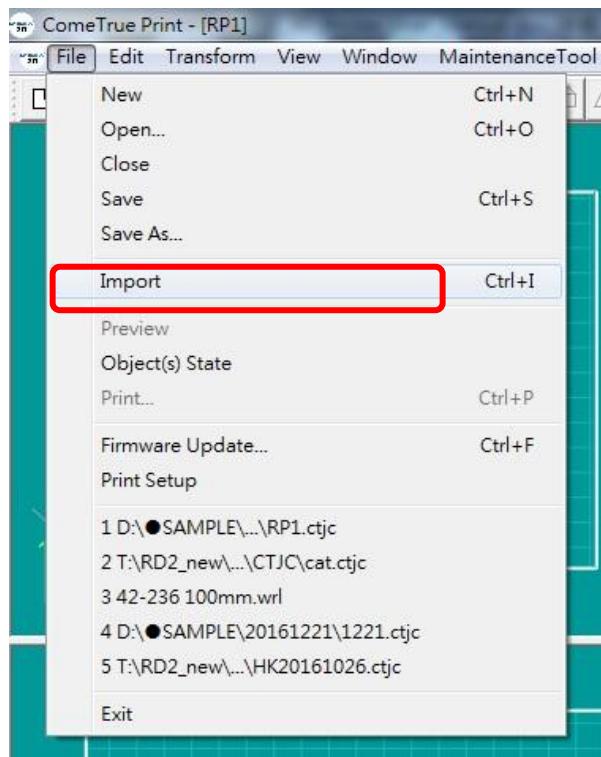
It can save material and get the best printing quality (relatively no deformation).

1. Open ComeTrue Print as the graph below



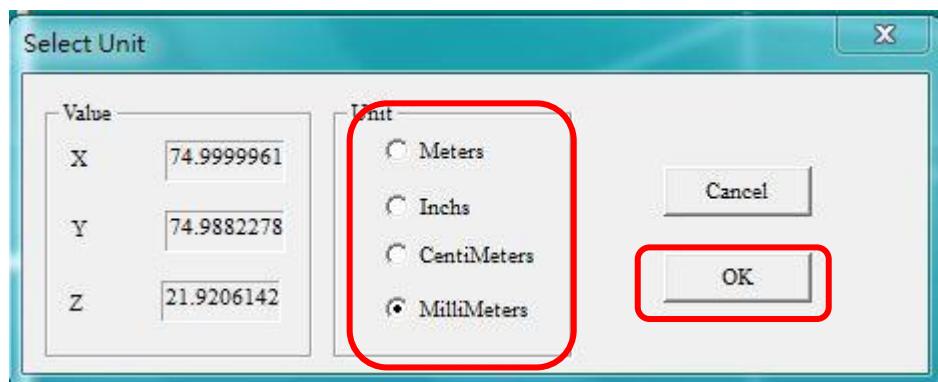
pic 37 : ComeTrue Print interface

2. Select File → Import → insert the file (wrl, stl).

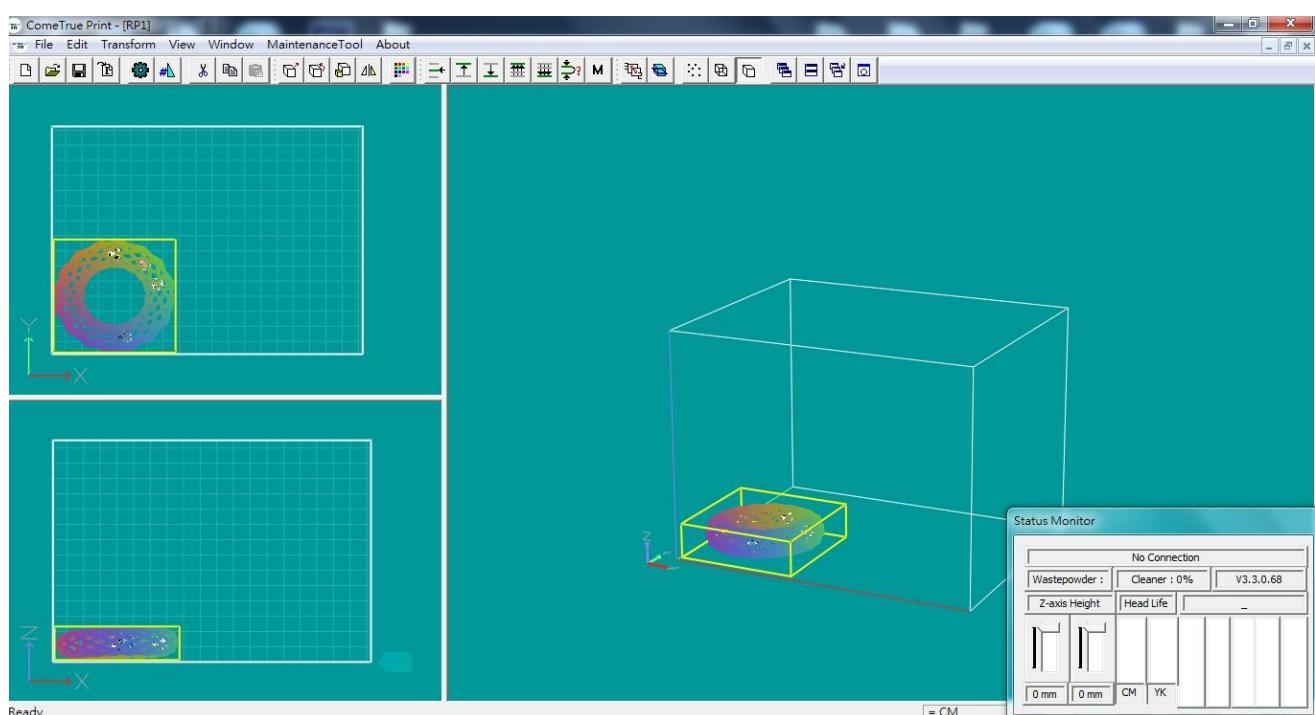


pic 38 : Select Import

3. The Select Unit will pop up, choose the appropriate unit(pic 39), select “OK” to import file.(pic 40)

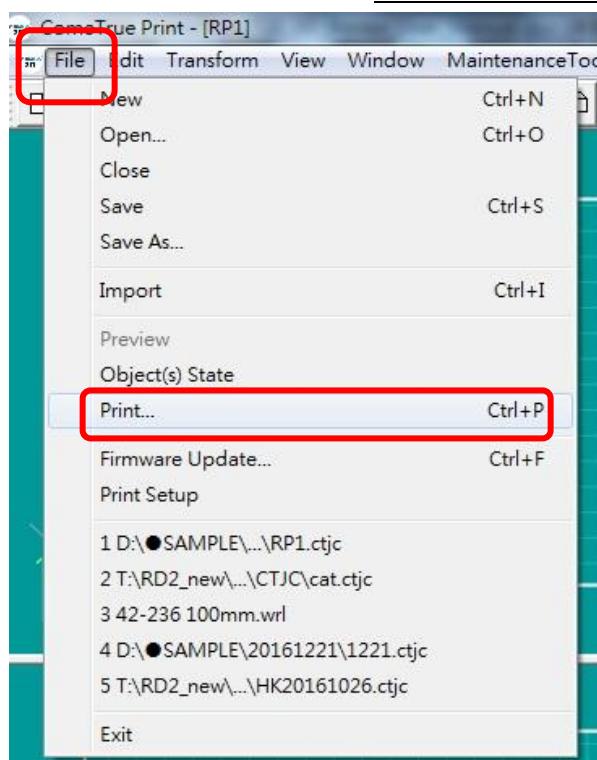


pic 39 : After choosing unit then select OK

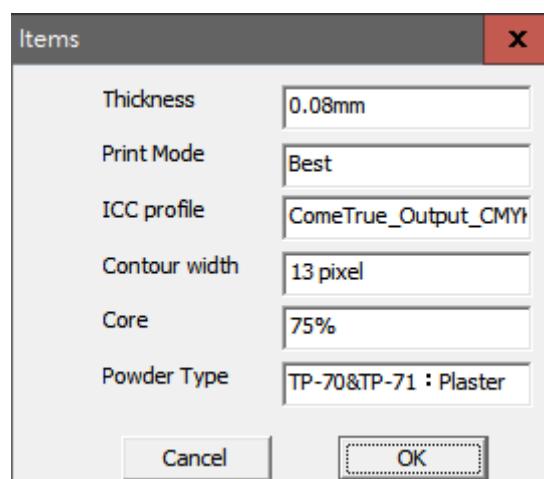


pic 40 : File inserts successfully

4. Confirm the file, then go to print. Select “File → Print” (as pic 41). Then, confirm the print settings (pic 42). When ComeTrue Print Tool pops up, **Confirm the Notice**, and click Ready to finish (pic 43). One more window will pop up to ensure the fast-axis has already been cleaned. Press "OK" to continue (as pic 44) and select “START JOB” to start printing (as pic 45).

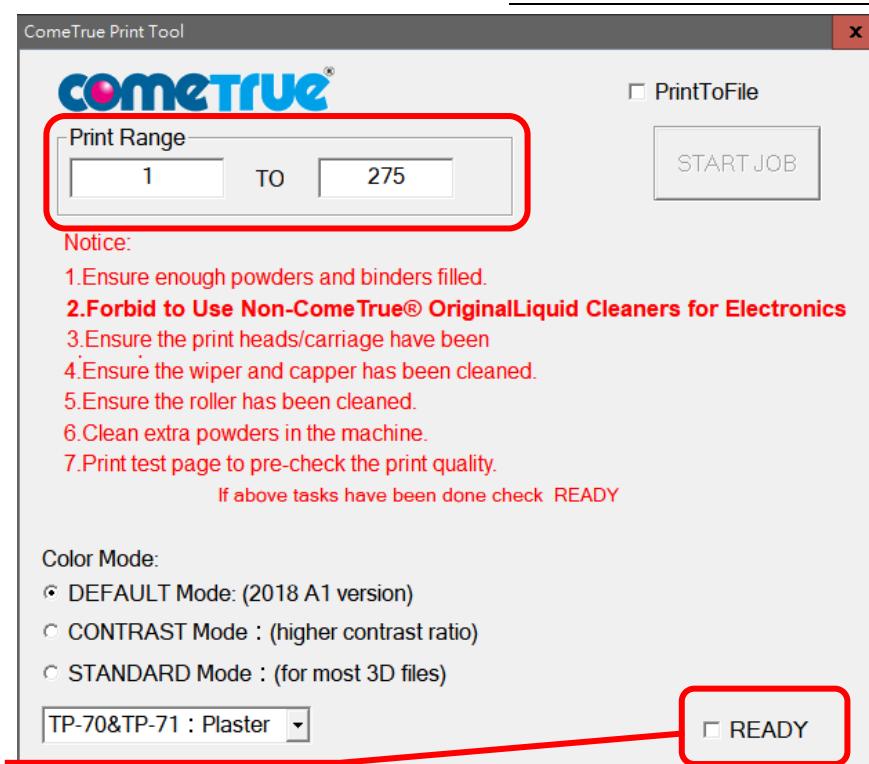


pic 41 : File → Print



pic 42 : Confirm the print settings

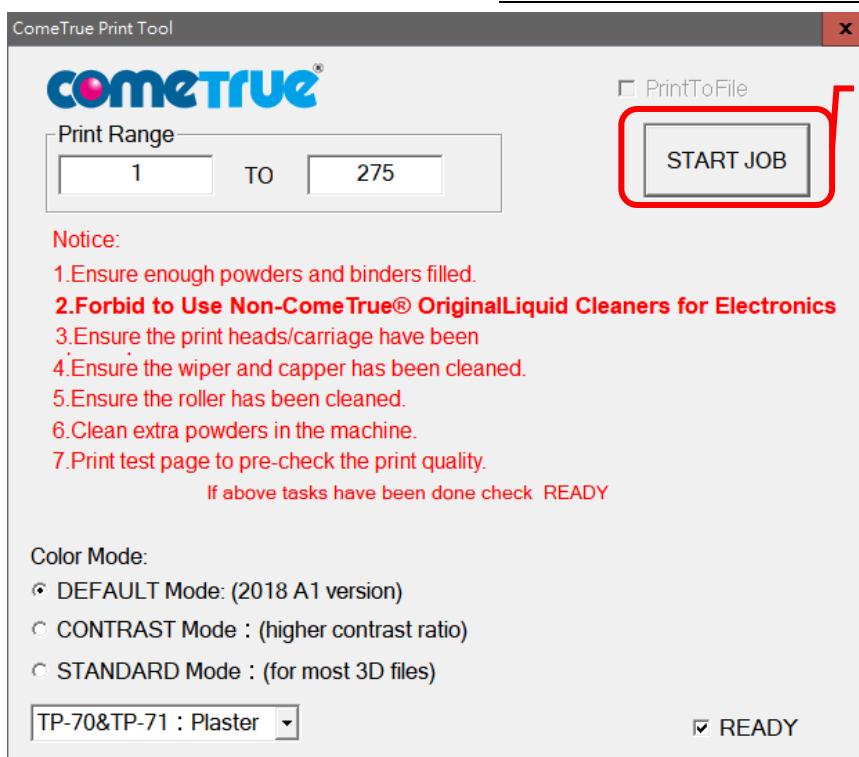
READY checking



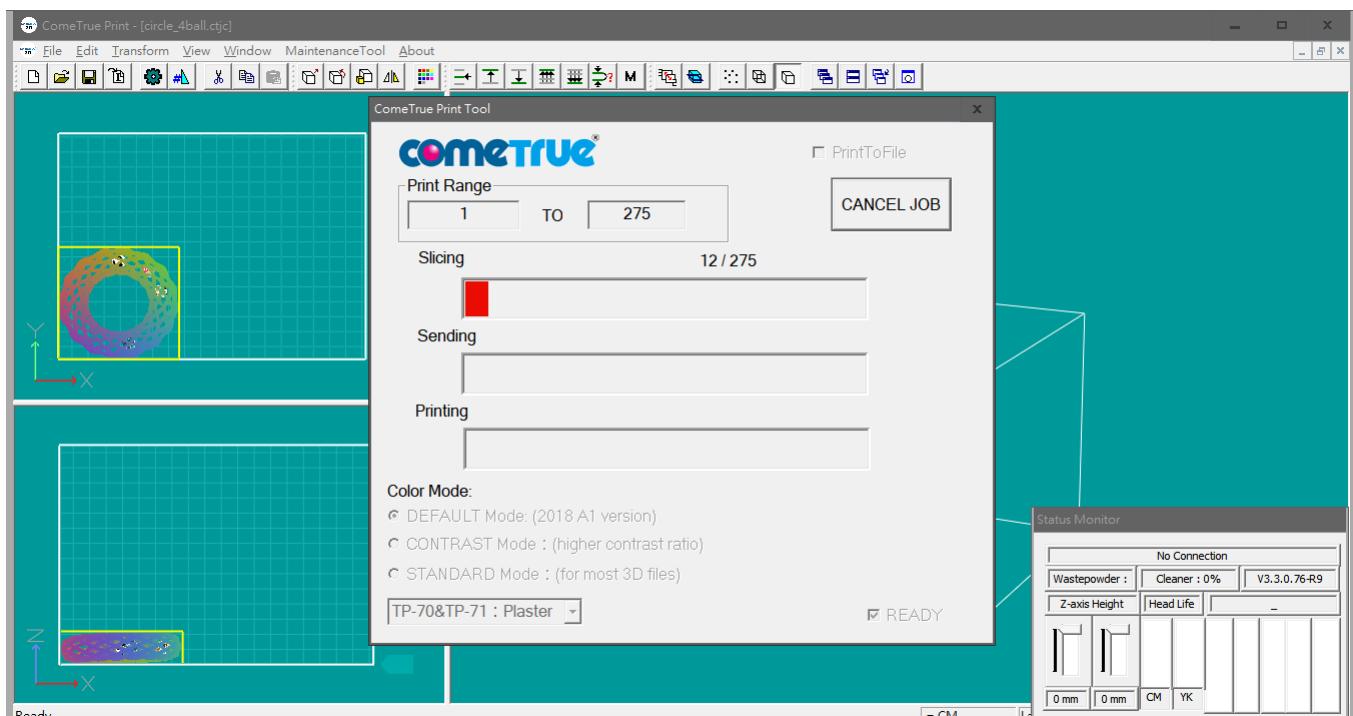
pic 43 : ComeTrue Print Tool window



pic 44 : Ensure the print bar has already been cleaned.



pic 45 : After checking Ready, select START JOB

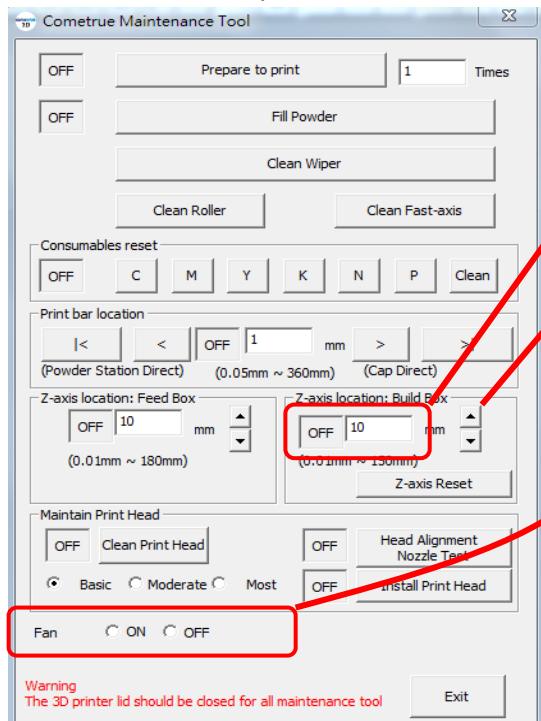


pic 46 : Print the part

7 After printing

7.1 Pick up the part

1. Enter Maintenance Tool, select ON in the Fan Status to open the fan. Key in the height of build box in Z-axis, select the up arrow to rise the build box (pic 47).



pic 47 : Control the height of build box

Type in the height of the build box to rise up

Rise the build box

Turn on the fan



pic 48 : Increasing the height of build box

2. Use the paint brush to clean the extra powder(pic 49).
3. Pick up the part by hand or take it along with glass (pic 50).
4. After taking the part out, put it into TD3 depowder recycling system, and bake the part at least 2~4 hours (press Heater button).Then depowder (press Depowder button, and press airbrush for operation). For more detailed information about the depowder recycling system, please refer to the user manual of depowder recycling system.
5. After depowdering, the part should be solidified for reinforcement and surface embellished. Please refer to chapter 0 Curing and post process.



pic 49 : Cleaning the extra powder



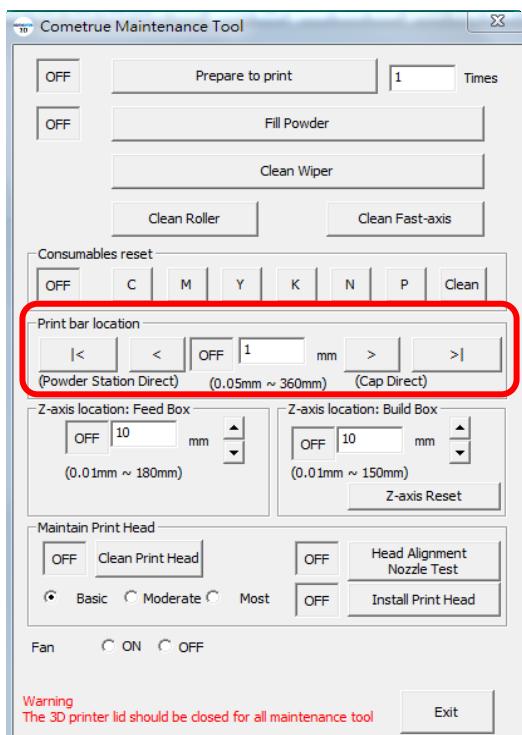
pic 50 : Pick up the part

7.2 Platform cleaning

After printing is completed, the platform must be cleaned, which will be more convenient until next time when you use.

7.2.1 Platform powder cleaning

1. Open the maintenance tool to control the Print Bar,(as pic 51), key in numbers then press left/right button to move Print Bar to the better place for cleaning.



pic 51 : Print Bar control

2. Use brush to clean the platform, wipe powders to the gutter(as pic 52).



pic 52 : Wiping powders (The red circle is gutter)

3. Not only using brush, but also the industrial vacuum cleaner which can be used to clean. And we highly recommend using attached long soft straw (as pic 53) to clean some specific positions below.



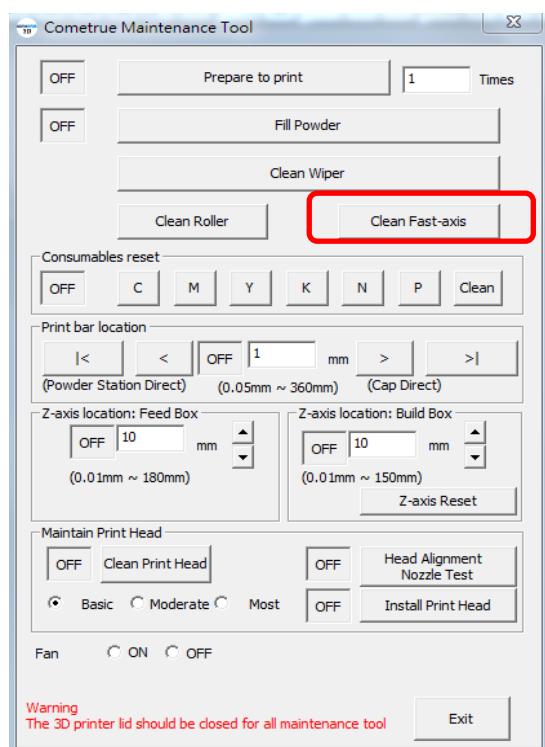
pic 53 : Positions where you had better use industrial vacuum cleaner to clean



pic 54 : The long soft straw

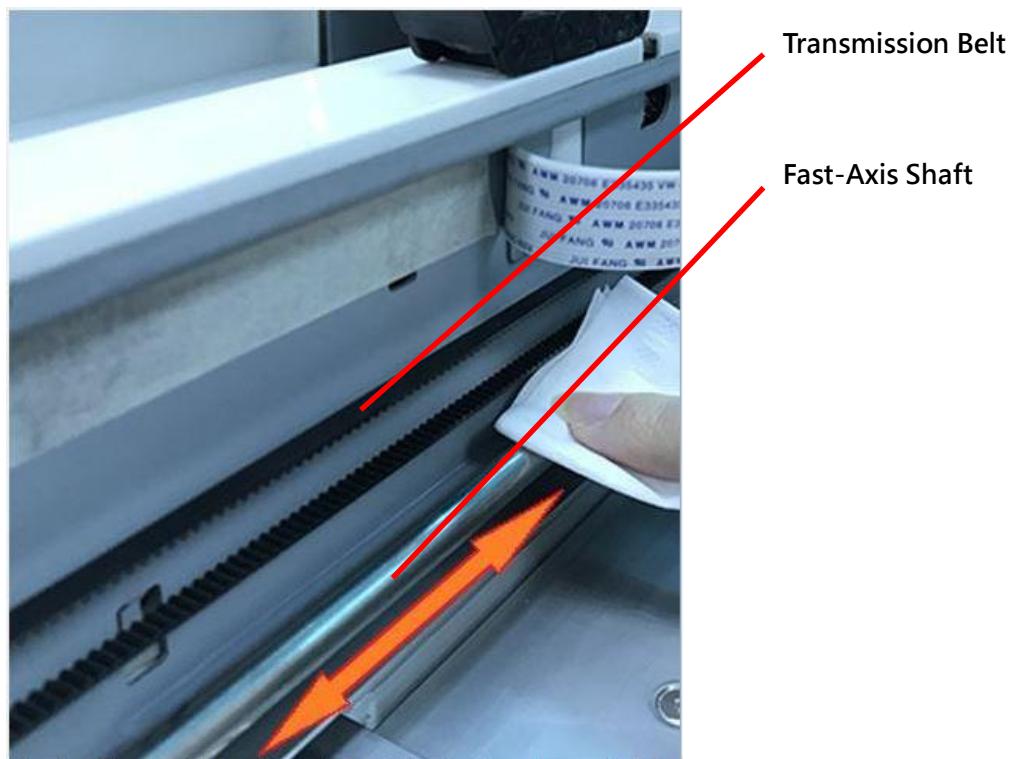
7.2.2 Print bar cleaning

1. In the maintenance tool, click "Clean Fast-axis"



pic 55 : Clean Fast-axis

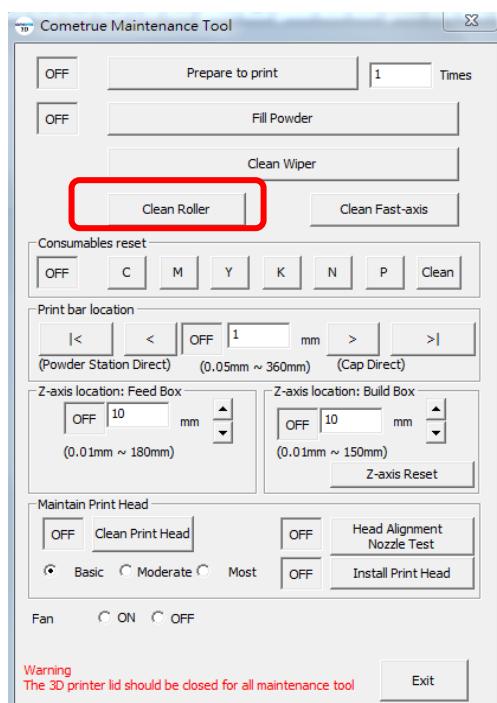
2. While the print bar goes to the right position, using dry towels to clean the print shaft and transmission belt.



pic 56 : The position of print shaft and transmission belt

7.2.3 Powder- spread roller cleaning

1. In maintenance tool. Select "Clean Roller" to spin the roller.



pic 57 : Select Clean Roller



pic 58 : Roller spinning

2. Using the brush to clean the whole extra powder which onto the Print Bar.
3. Using wet towel to clean the roller then dry up by dried towel. After cleaning, press "Clean Roller" again to back the roller to its original position.

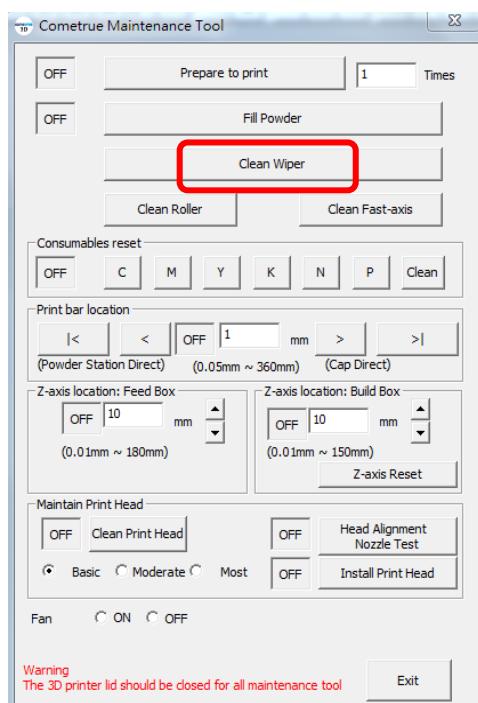


pic 59 : Roller cleaning

7.2.4 Wiper maintenance

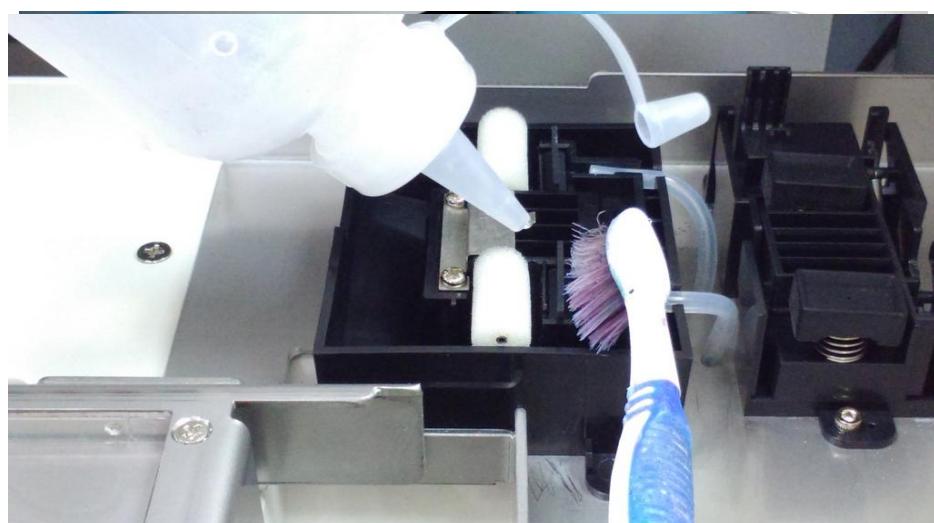
7.2.4.1 Wiper cleaning

1. In maintenance tool. Select Clean Wiper (as pic 60), wait until the Print bar go to the best place for cleaning Wiper



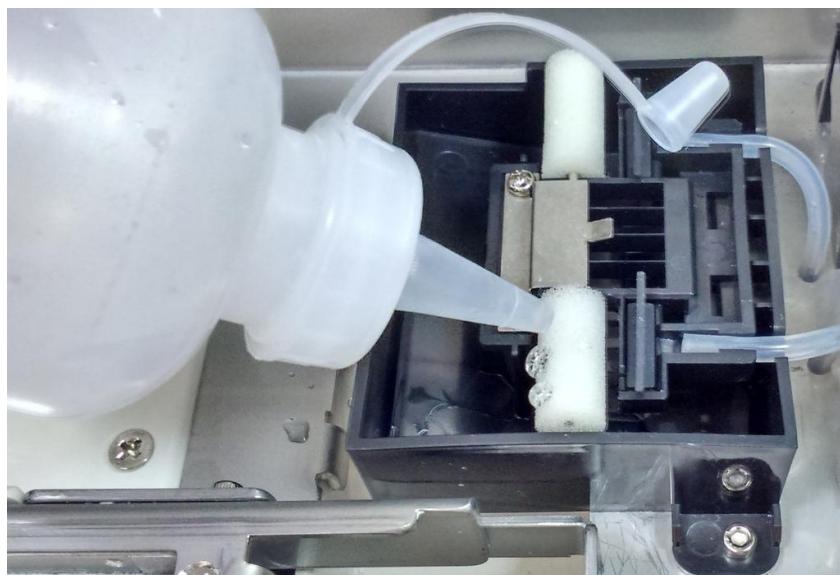
pic 60 : Select Clean Wiper

2. Using toothbrush and water to clean the wiper (pic 61).



pic 61 : Cleaning Wiper

3. Using water to clean the sponge.



pic 62 : clean the sponge

4. Lightly press the sponge with paper towel to soak up the water on the sponge.



pic 63 : press the sponge with paper towel

5. After cleaning, using tissue to wipe the remaining water of the wiper box. Afterwards, click "Clean Wiper" again to move the print bar back to its original position.

7.2.4.2 Roller sponge cleaning

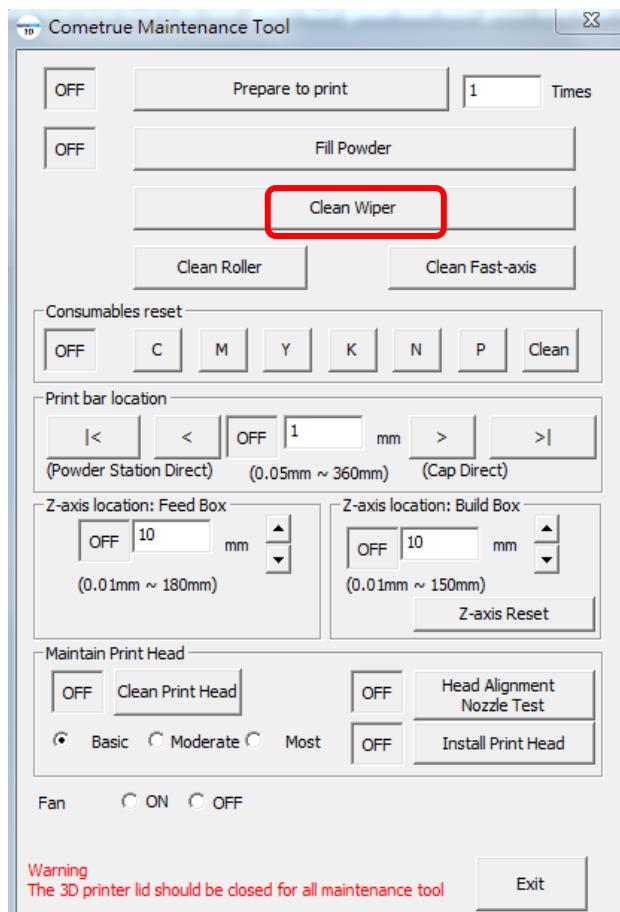
After using the sponge for a period of time, the cleaning effect will be reduced. Therefore, changing it regularly is necessary. Every single new print head has a set of sponge. While changing the print head, please change the sponge as well.



pic 64 : sponge

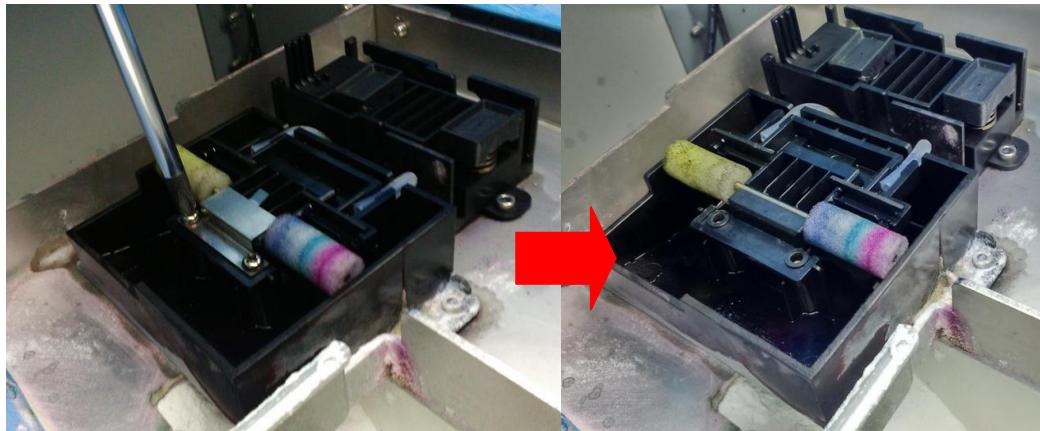
Please follow the steps to change the sponge.

1. In maintenance tool. Select Clean Wiper (as pic 65), wait until the Print bar go to the best place for cleaning Wiper.



pic 65 : Click “Clean Wiper”

2. Using Phillips screwdriver to remove the screw then take out the plate.



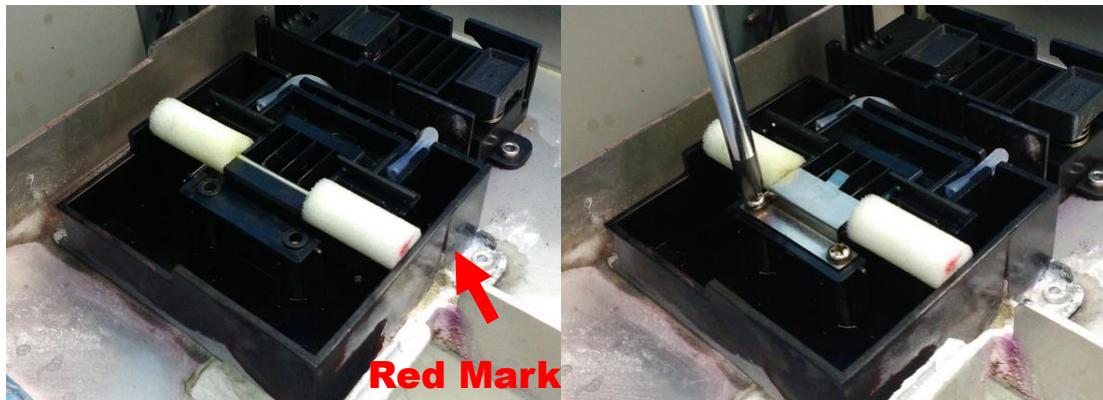
pic 66: remove the screw

3. Take out the old sponge and shaft from the holder then remove the old sponge from the shaft. Then change to a new one.



pic 67: change new sponge

4. Place the shaft with a new sponge and replace it to the groove of the holder. When installing, place a sponge with a red mark on the CM side. After the shaft is inserted, lock the plate to the holder.



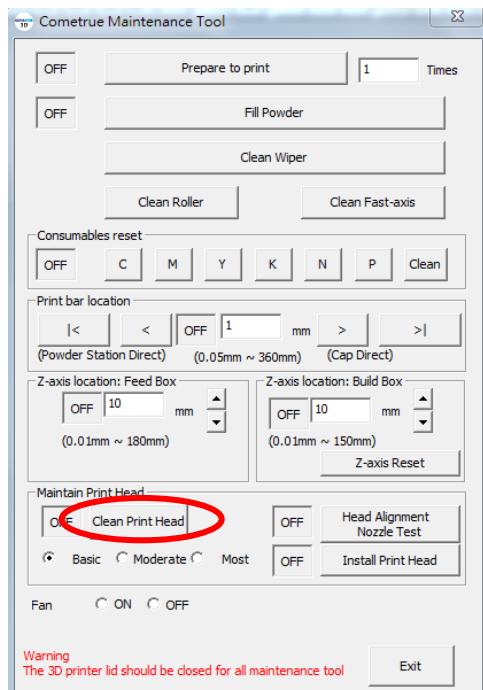
pic 68: lock the plate to the holder

5. After the replacement is completed, select Clean Wiper in maintenance tool to let it go back to the right position.

7.2.5 Print head cleaning

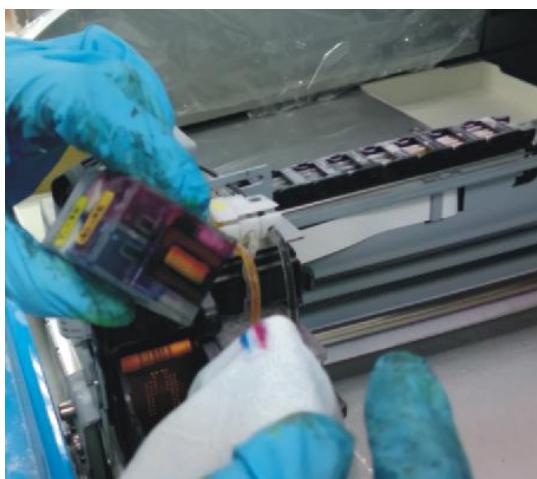
- In maintenance tool, Select the cleaning level in Print Head maintenance. Then select "Clean Print Head" to clean print head automatically. (pic 69)

Attention: For the printing quality, please select "Most" if the machine will not be used for over 5 days.

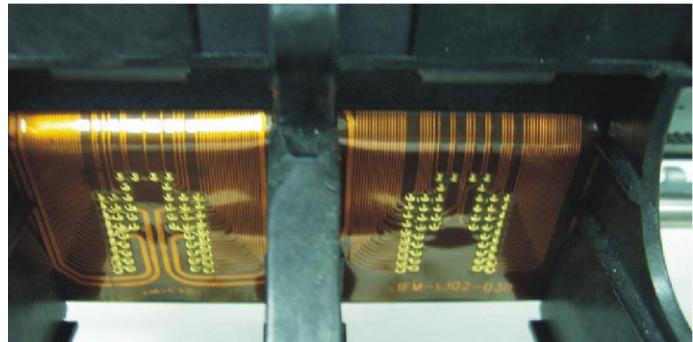


pic 69 : Click “Clean Print Head”

- Remove the print head (see 5.1.2 Print head installation), then using dry tissue to wipe it.(pic 70).



pic 70 : Wiping print head



pic 71 : Carriage Dimple Board

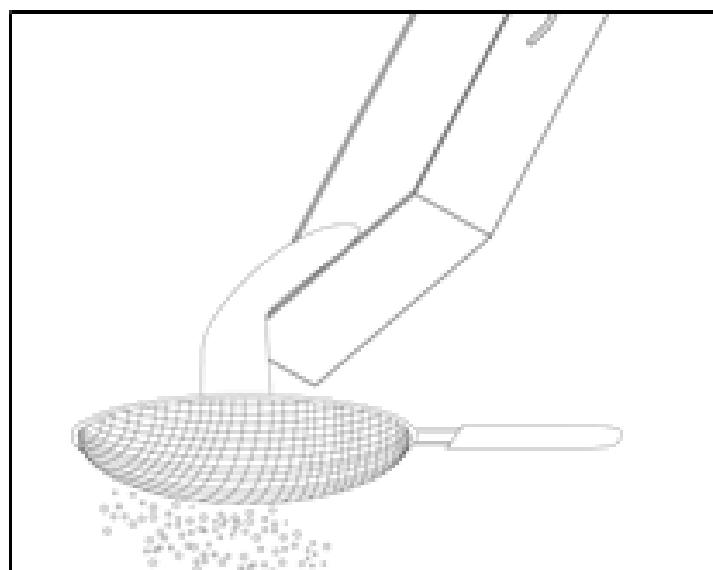
- Carriage Dimple Board should also be cleaned. Then, install the print head back to its base.

Attention: Please do print head alignment if the print head has been reinstalled. (See 5.3.2 Print testing)

7.2.6 Waste ink and waste powder handling



pic 72 : Waste ink bottle and waste powder tank



pic 73 : filter the waste powder for reusing

Pour away the waste ink. Use the sieve to filter the waste powder for reusing.

7.2.7 Advanced maintenance

For the printing quality and machine reliability, please contact with certified engineer from your agents to do advanced maintenance every 2 months.



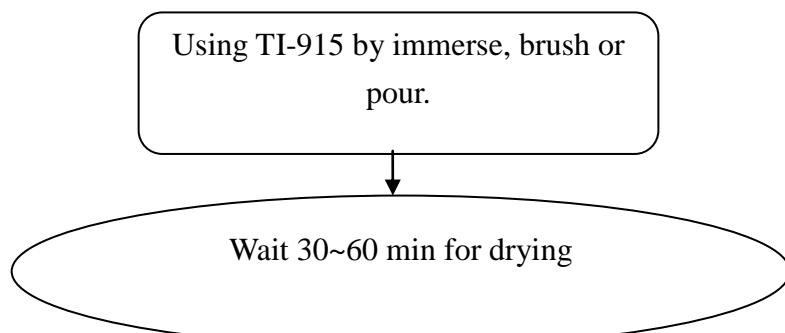
pic 74 : Advanced maintenance

8 Post process

After the process of drying and depowder, all the printing parts can be used by different kinds of infiltrant for curing to achieve different quality and characteristic.

TI-915 is a single part instant infiltrant, it possesses low viscosity, low odor, fast-drying, etc. It provides rapid curing process and increases the reinforcement. Because of the reaction of this product is very fast, gloves, masks, protective cloth, goggle should be prepared before using.

TI-915 process :



pic 75 : TI-915 progress

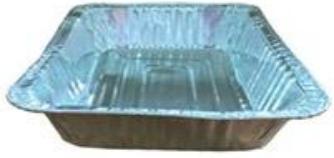
Note: Repeat the process to make parts shiny.

1. Tools: Please prepare those tools for the process

NBR gloves	Goggles	Aluminum foil bowl or Disposable plastic bowl
Brush	Paper towels	Banana oil

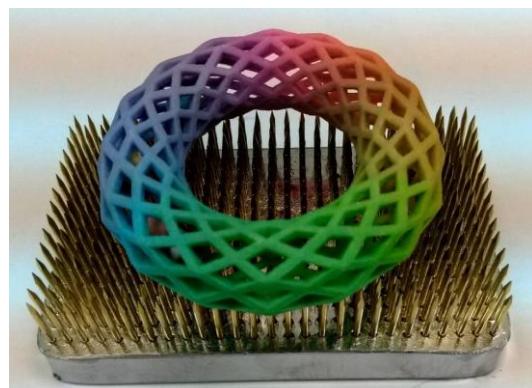
pic 76 : Tools required

2. Process: immerse, brush or pour the part.

		
Take a bowl and fill in TI-915	Immerse the part into TI-915 for few minutes	Using paper towel to wipe the extra 915 out
		
Take a bowl and fill in TI-915	Brush TI-915 on the part	Using paper towel to wipe the extra 915 out
		
Take a bowl and fill in TI-915	Pour TI-915 into the part	Using paper towel to wipe the extra 915 out

pic 77 : Processing method

3. Drying: Put the part on wire-netting or needle bed for drying.

**pic 78 : Drying the part**

9 3D printer operating and maintenance

9.1 ComeTrue T10 maintenance table

Item	Method	Period	Chapter
Print head surface, print head FPC, Carriage FPC	Use dry soft tissue to wipe its surface.	Every time after printing	7.2.5
Binder pipe	Use syringe to pump when there's air or bubble in pipe.	Every time before printing	0
Wiper	Use clean soft tissue and distilled water to wipe its surface.	Every time after printing	7.2.4
Powder in feed box	Filled powders in build box before printing molded.	Every time before printing	5.2
Powder spreading roller	Use clean soft tissue to clean	Every time after printing	7.2.2
Binder cartridge supplement bottle	When the binder is run out (can change it during printing).	Check while printing	5.1.1
Waste ink bottle	Pour away the waste liquid	Every time after printing	7.2.6
Print Bar	Use oil brush or vacuum cleaner	Every time after printing	5.2
Platform	Use oil brush to clean powders	Every time after printing	7.2.1
Waste powder tank	Pour away powders for sieving	Every time after printing	7.2.6
Slow axis advanced maintenance	Contact your agents for certified engineer	Every 2 months	7.2.7
Fast axis advanced maintenance	Contact your agents for certified engineer	Every 2 months	7.2.7
Z axis advanced maintenance	Contact your agents for certified engineer	Every 2 months	7.2.7

9.2 Print head maintenance

Item	Method	Period	Chapter
Print head surface, print head FPC, Carriage FPC	Use clean soft tissue to wipe its surface	Every time after printing	7.2.5

9.3 Service Station maintenance

Item	Method	Period	Chapter
Wiper	Use brush to clean the surface of wiper	Every time after printing	7.2.4

9.4 Confirm powders in feed box

Item	Method	Period	Chapter
Powders in feed box	Filled powders in build box before printing molded.	Every time before printing	5.2

9.5 Binder cartridge changing

Item	Method	Period	Chapter
Binder cartridge supplement bottle	When the binder is run out (can change during printing).	Check while printing	5.1.1
Binder pipe	Use syringe to pump when there's air or bubble in pipeline	Every time before printing	0

9.6 Interior cleaning

Item	Method	Period	Chapter
Powder spreading roller	Use wet soft tissue to clean, then use dry soft tissue to wipe it	Every time after printing	5.2
Waste ink bottle	Pour away waste liquid after printing	Every time after printing	7.2.6
Print Bar	Use oil brush or vacuum cleaner to clean	Every time after printing	5.2
Platform	Use oil brush to clean powders which onto the platform	Every time after printing	7.2.1
Slow axis advanced maintenance	Contact your agents for certified engineer	Every 2 months	7.2.7
Fast axis advanced maintenance	Contact your agents for certified engineer	Every 2 months	7.2.7
Z axis advanced maintenance	Contact your agents for certified engineer	Every 2 months	7.2.7

9.7 3D printer troubleshooting

Fault condition	Reason	Solution
LED green power unlighted	No AC power to the machine	1. confirm AC power is in supplied to the machine
Cannot open the machine	Power Cord did not connect correctly	1. confirm Power Cord is working 2. confirm Power Cord did connect correctly
LED yellow lights on	Top cover is opened	Close the top cover
3D printer cannot work	1. USB between printer and computer did not connect correctly 2. Print type did not choose correctly 3. Defect in machine	1. confirm USB connection 2. setting T10_86 as the default printer in computer 3. contact with dealer for maintenance
Print head is operating abnormally	Printing process is abnormal or interference during operation	1. Restart 2. contact with dealer for maintenance if it still abnormal after restart 3. check if there is any interference while operating.
Powder spreading is not smooth	1. spreading roller stick some powder 2. spreading roller is not working 3. interference in spreading area	1. clean spreading roller 2. contact with dealer for maintenance 3. clean the interference in spreading area
The cleaner of wiper is not working	1. cleaner is run out 2. pump of cleaner is not working	1. add more cleaner 2. contact with dealer for maintenance
Binder pipe is leaking	1. binder pipe is connecting badly	1. contact with dealer for maintenance
Binder head is not spraying	1. binder head is blocked or dirty 2. defect in print head	1. do Clean Print Head for cleaning 2. change new print head
Print head is printing with white line	1. print head is blocked or dirty 2. print head and Carriage CFP is dirty or connecting badly 3. defect in print head	1. do Clean Print Head for cleaning 2. clean the connection between print head and Carriage CFP 3. change new print head
Slow axis (PRINT BAR) is shaking	1. interference between print bar and build box 2. the screw of print bar is loosing	1. remove interference 2. lock the screw tightly
Powder is too coarse when spreading powder	1. roller of print bar stick some spreading powder	1. use clean paper to wipe it out

Dirt is still in print head after cleaning	1. Defaced wiper of SERVICE STATION cleaner is not enough	1. clean with water or cleaner 2. add more cleaner
Dirty water in printer	1. waste ink pipe is falling 2. pulling of silicon pipe in cleaner system 3. waste tank is full	1. reinstall the pipe 2. rearrange silicon pipe 3. pour away waste liquid
Feed box is not feeding or uneven	Powder is not enough in feed box	1. add more powders

9.8 Status Monitor

(※Status Monitor display and flash error light/warning message※)

Status Monitor	Light	Reason	Solution
Ready to print!	Yellow indicator flashing	Top cover is opened when standby	Close top cover
The top cover is opened!	Yellow indicator flashing	Top cover is opened when printing	Close top cover
Fast-axis error!	Red indicator flashing slowly	Fast-axis moves abnormally	1. Check if there is any interference in Fast-axis 2. clean the roller of Fast-axis 3. restart to test 4. contact with technicians for maintenance
Slow-axis error!	Red indicator flashing rapidly	Slow-axis is not in its right position	1. check if there is any interference in Slow-axis 2. restart to test 3. contact with technicians for maintenance
1. The sensor detected error upon the feed box! 2. The sensor detected error under the feed box! 3. The sensor detected error upon the build box! 4. Build box down sensor detected error under the	Red indicator flashing one long and two short then check the message from Status Monitor.	Z-axis of Feed box and build box moves up or down abnormally.	1. Restart to test the moving function of Z-axis 2. contact with technicians for maintenance

build box!			
Voltage is abnormal in print head!	Red indicator flashing 4 times	13 V voltage print head reads abnormally when printing	1. restart to test 2. contact with technicians for maintenance
1. Print head CM is overheated! 2. Print head YK is overheated! 3. Both print head CM and YK are overheated!	Red indicator flashing 3 times then check the message from Status Monitor	When printing 1. Temperature of print head CM is abnormal 2. Temperature of print head YK is abnormal 3. Both temperature of CM and YK are abnormal	1. open top cover, reconnect the print head then close it 2. change new print head (need to reprint after correct it) 3. contact with technicians for maintenance
Job stops!	Red indicator on	1. computer may shut down, hibernate or crashed	1. make sure your computer will not shut down or into hibernate mode when standby 2. restart to test
No Connection	Red indicator flashing two times	USB cable is disconnected or falls off	1. the printer or USB cable falls off 2. reconnect the printer or USB cable 3. restart printer and slicing software 4. replace with a new USB cable 5. contact with technicians for maintenance

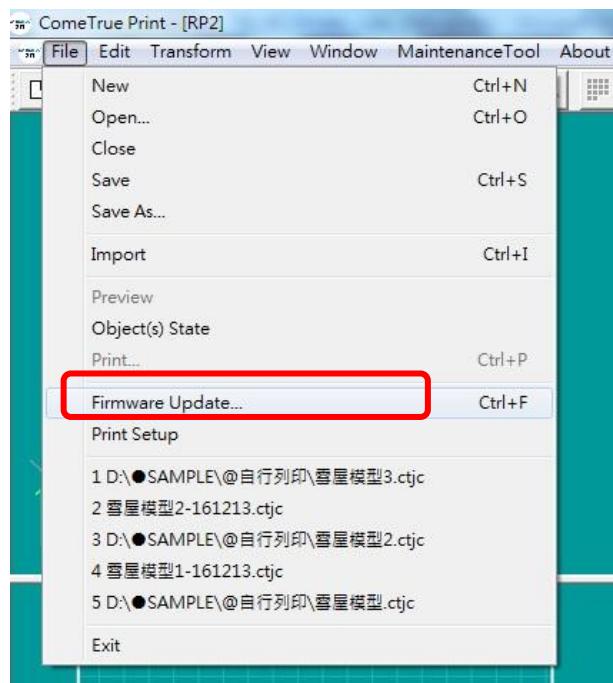
(※Status Monitor Printer Operation Display※)

Status Monitor	Printer Operating Action
Machine initial!	Initialization
Ready to print!	Standby
3Dparts are under printing!	Printing
The top cover is opened!	Top cover is opened when printing
Powders are under manual spreading!	Spreading powder manually
Wipers are under cleaning!	Cleaning Wiper base
Rollers are under cleaning!	Cleaning roller
Slow-axis is under moving!	Slow-axis is moving
Z-axis is under moving!	Feed box or build box is moving
The print head is under cleaning!	Cleaning print head
The print head is under installing!	Installing print head
The fan is opened!	Start to run powder absorbing fan

10 Firmware update

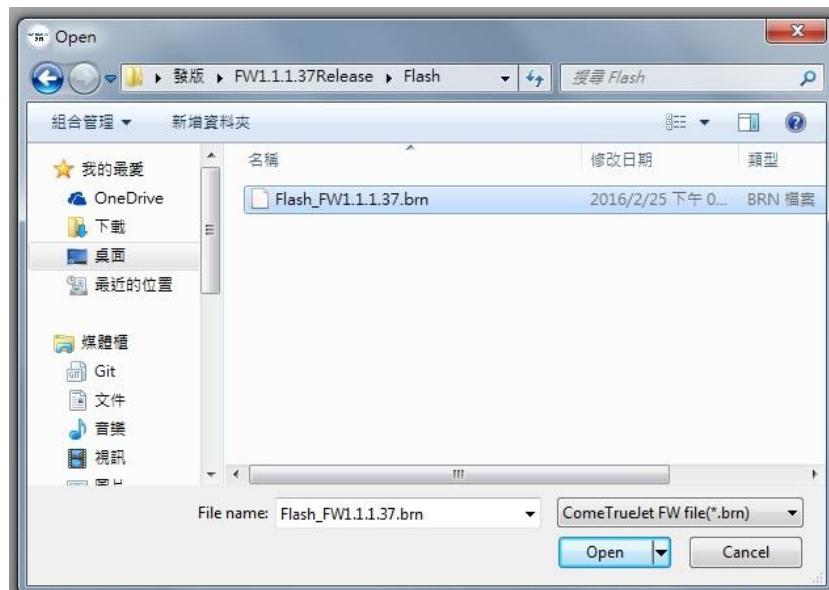
When a new version of the firmware is released, please manually update the firmware through the following process to achieve better print quality and stability. Updating firmware by follow the steps below:

1. Select "File" -> "Firmware Update"



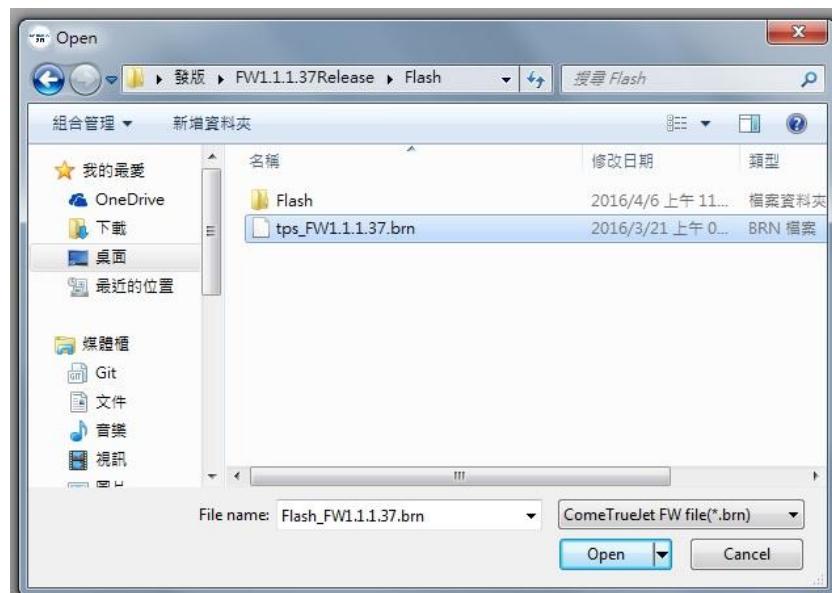
pic 79 : Firmware update

2. Attention:**Please update flash data first** (File name: Flash_FWx.x.x.x.brn)
3. Select Flash file



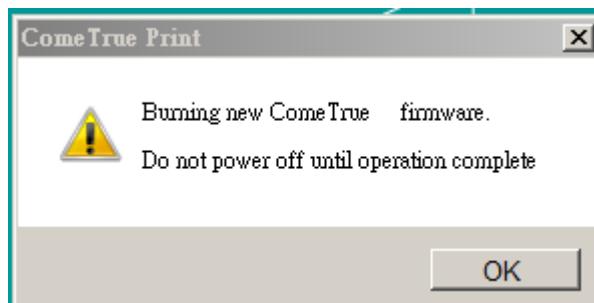
4. Carrier will slightly move out then move back to make the sound "Click!" when Flash is updated to finish. The flash updating process takes about 3 seconds.

5. And repeat the process above to update the main program(File name: tps_FWx.x.x.x.brn)



When the main program is updated to finish, T10 will automatically restart. DO NOT power off during this period.

The main program update takes about three minutes.



pic 80 : Updating message

6. Unexpected power failure when firmware is updating:
- Power on after power is repaired.
 - Wait 1 minute to confirm that the machine does not enter the setup program. .(No any actions.)
 - Open ComeTrue print to update the main program.
 - Wait 3 minutes after pressing update button
 - Restart the printer manually, then the firmware should be updated.

11 Reference material

Color plate TC2.83 RGB As a reference color

