



3DSYSTEMS®

# Cube®

3<sup>rd</sup> Generation  
Personal 3D Printer



## Quick Start Guide

See Inside for Use and Safety Information

The USB Mass Storage Device Contains the User Guide and  
Quick Start Guide in other Languages



Congratulations on the purchase of your new Cube® 3D Printer! This Quick Start Guide has the use and safety information you need to get started. Welcome to the 3D creative revolution – let the possibilities begin!

If you have any questions, do not hesitate to reach us at [cubifysupport@cubify.com](mailto:cubifysupport@cubify.com).

This Quick Start Guide will give you basic instructions on how to get your Cube® 3D Printer plugged in and printing so you can start making your own creations.

**For more detailed instructions, refer to the Cube® User Guide located on your USB mass storage device.**

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## SAFETY



**HOT SURFACE HAZARD: A HOT SURFACE IS ACCESSIBLE IN THE VICINITY OF THIS SIGN OR AT THE PRINT JET. AVOID CONTACT WITH THESE AREAS. HOT SURFACES CAN CAUSE SEVERE BURNS.**



**Caution: Indicates something may happen that could cause loss of data, damage to equipment, or could cause personal injury.**



**Caution: Indicates a pinch point hazard that could cause personal injury.**

- Follow all safety rules in this section and observe all cautions and warnings in this guide.
- DO NOT modify any safety features or make modifications to the Cube. Doing so is prohibited and voids your warranty.
- Use of print materials other than 3D Systems print materials and genuine 3D Systems components may void warranty.
- Adult supervision is required; observe children closely and intervene as necessary to prevent potential safety problems and ensure the appropriate use of the Cube. Ensure small 3D prints are not accessible to young children. These 3D prints are potential choking hazards for young children.
- DO NOT change a material cartridge during printing; doing so may damage the Cube.



**WARNING: DO NOT TOUCH THE PRINT JETS DURING SETUP AND OPERATION. THE PRINT JETS BECOME VERY HOT.**



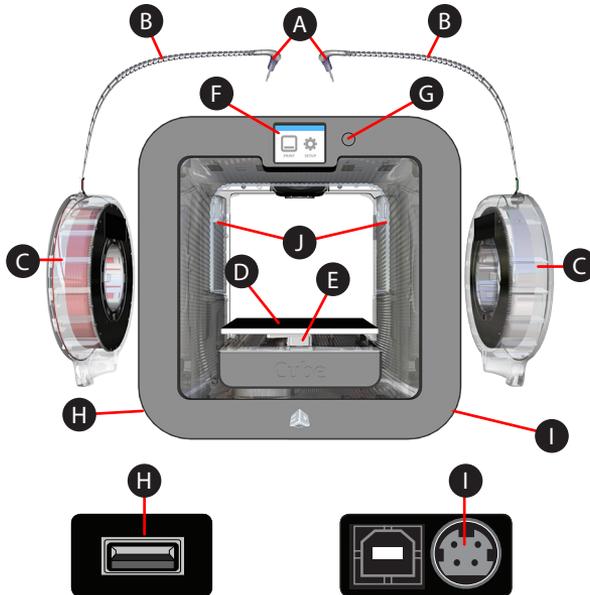
**Caution: DO NOT unplug the Cube while the print jet is hot. Refer to the touchscreen to determine when the print jets are cool enough.**



**CAUTION: Read and follow all instructions prior to setting up the printer.**

To ensure safety, please exercise caution when operating your printer. Read and follow all safety precautions as outlined in this document and the Cube User Guide. Be careful when operating your Cube 3D Printer to ensure proper printing and be mindful of and avoid hot surfaces.

## YOUR CUBE AT A GLANCE



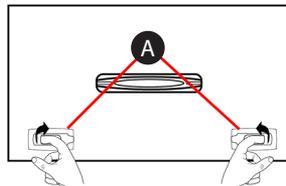
- A Print Jets
- B Print Jet Tubes
- C Material Cartridges
- D Print Pad
- E Print Platform
- F Touchscreen Display
- G On / Off Button
- H USB Inlet Port (mass storage device only)
- I Power Inlet
- J Refuse Bins with Wipers

## UNPACK YOUR CUBE

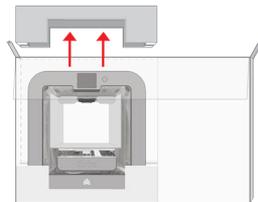


**NOTE: Keep all packing materials for future transport. Shipping the printer without the original packing materials may damage the printer and void the manufacturer's warranty.**

1. Pull the clips (A) and remove them from the top of the printer box and open the box.



2. Remove the upper foam support.



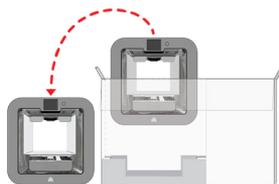
3. Remove the printer from the box and remove the protective bag from the printer. Place the printer on a solid, level base.

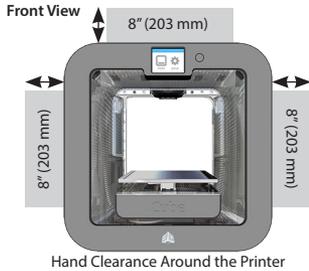


**NOTE: When installing the printer there must be a minimum of 8" (203 mm) of space on top and on either side of the printer.**

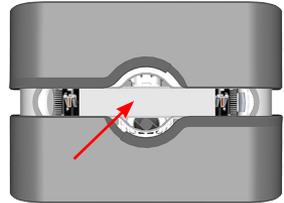


**NOTE: There must be a minimum of 4" (102 mm) space in front of and behind the printer.**

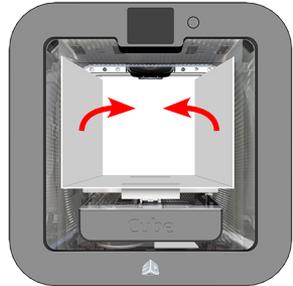




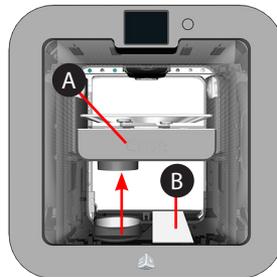
4. Remove the top insert.



5. Fold the sides inward and remove the lower insert from the printer.



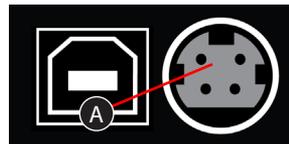
6. Raise the print platform (A) and remove the spacer (B) from the printer.



7. Open the accessories box and unpack the material cartridges, the USB mass storage device, the power supply, cord, and the Cube Glue bottle.
8. Connect the power supply cable to the power inlet port (A) on the printer.



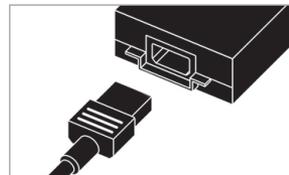
**NOTE: The cable should lock in place. To remove the cable, pull back on the outer cable end and carefully pull it out from the printer.**



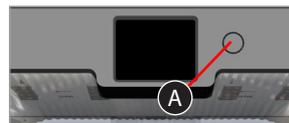
9. Connect the power cord to utility power and to the power supply.



**NOTE: Ensure the connection is secure.**



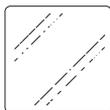
10. Power on the printer by pressing the button (A) next to the touchscreen display.



## WHAT'S INCLUDED



Cube



Removable Print Pad



Cartridges<sup>1</sup>



Cube Glue



Power Supply



Power Cord



Pliers

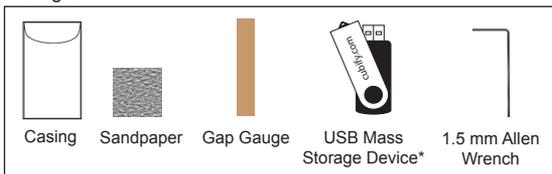


Scraper



Quick Start Guide

### Casing and its contents



<sup>1</sup>Depending on your printer model or configuration, up to two cartridges may be included.



**NOTE: \*The User Guide can be found on your USB mass storage device.**



**NOTE: The appearance of some components may vary.**

## SETTING UP AND ACTIVATING YOUR CUBE

1. Select your language. Press the **checkmark** to confirm your selection.



**NOTE: The selected language will be indicated.**



2. Enter a name for your printer. Scroll through the letters by pressing the arrow symbols on each side of the screen. Select the letters to spell out the name. Select the **checkmark** to confirm your choice. Select **SKIP** to bypass this step. You can name your printer at any time by navigating to the System 1 screen and selecting CUBE NAME.



**NOTE: The abc button toggles between lowercase letters, uppercase letters and numerals.**



3. Connect your printer to your network. Use the up or down arrows to scroll to your network choice. Select the desired network. Select **SKIP** to bypass this step. You can connect to a wireless network at any time by navigating to the Network screen and selecting WIFI.



**NOTE: The printer can also connect to an ad hoc network. Refer to the User Guide for more information about connecting to an ad hoc network.**





**NOTE:** The printer will attempt to connect to your network.



**NOTE:** If your network is password protected, your printer will first prompt you to enter the password. Once entered, select the **checkmark** to continue.



**NOTE:** The display will indicate when the network connection has been made.



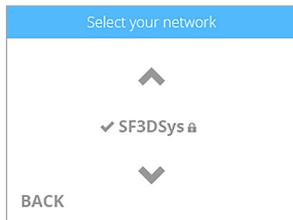


**NOTE:** If the wrong password was entered, you will be asked to enter the password again after a few seconds.



**NOTE:** Connection to a network is confirmed by a checkmark to the left of the network name. If the network is secured, a lock icon will appear to the right of the network name.

4. Select the **checkmark** to continue to the registration and warranty activation process.



5. Log in to [Cubify.com](http://Cubify.com). Go to [www.cubify.com](http://www.cubify.com) and select **My Cubify**. Enter your username and password and select **Login**.



**NOTE:** If you have not activated your account on Cubify, select **SIGN UP** and follow the instructions.

6. Go to [www.cubify.com/activate](http://www.cubify.com/activate).

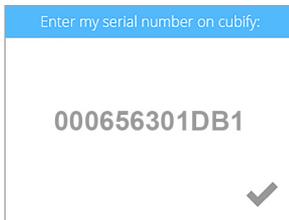


**NOTE:** The serial number for **your** printer will appear on the printer's touchscreen display. Take note of the serial number. You will need the serial number to activate your printer.

7. Select the **checkmark** to continue.



**NOTE:** This illustration provides an example of a serial number. Do not use this number to activate your printer.



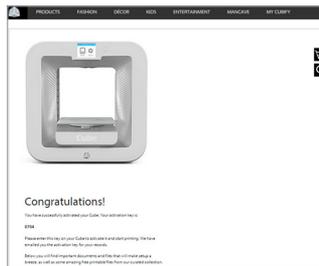
8. Enter your **serial number** twice and select **ACTIVATE**.



**NOTE:** Your 4-digit activation code will appear. Please make note of the activation code because it will need to be entered into the printer's touchscreen display to activate the printer.



**NOTE:** You can access the user guide, Cubify software, and creations.



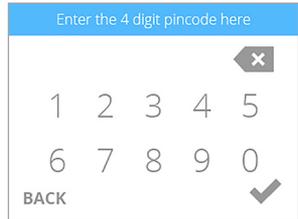
9. Enter the 4-digit **activation code** into the printer and select the **checkmark** to continue.

Enter the 4 digit pincode here

1 2 3 4 5

6 7 8 9 0

BACK



10. Select the **checkmark** to complete the registration and warranty activation process.

Congratulations!

My warranty has been activated.  
Now I'm ready to print  
anything you like!



11. Before installing cartridges, select the cartridge icon or select **START** to begin the process of installing your print cartridge.

Next, I need cartridge installed!



BACK

START



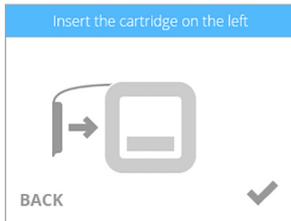
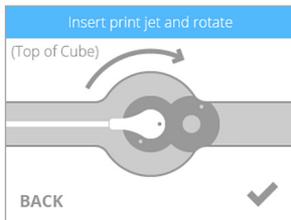
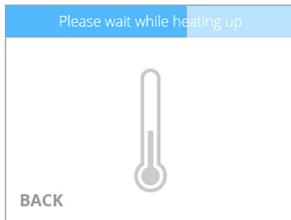
**NOTE:** The printer will begin to heat. Wait until the printer has finished heating and then follow the user prompts in the touchscreen menu.

12. Insert the print jet (from the cartridge that will be mounted on the left side of the printer) into the top of the printer. Rotate the print jet clockwise until the dots align.



**NOTE:** As you rotate the print jet, ensure the print jet tube is tucked under the top of the printer cover.

13. Select the **checkmark** to continue.
14. Mount the cartridge on the left side of the printer and select the **checkmark** to continue.



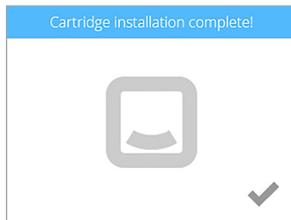


**NOTE:** The print jet will begin to heat. Once the print jet has reached the operating temperature, the printer will prime melted material into the refuse bin.

15. The left cartridge has been installed. Select the **checkmark** to continue.



**NOTE:** The printer will begin to heat. Wait until the printer has finished heating and then follow the user prompts in the touchscreen menu.



16. Insert the print jet (from the cartridge that will be mounted on the right side of the printer) into the top of the printer. Rotate the print jet clockwise until the dots align.

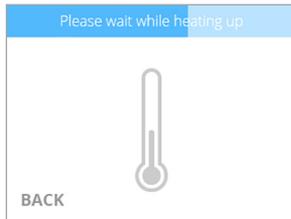
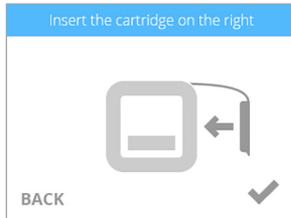
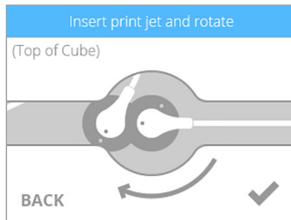


**NOTE:** As you rotate the print jet, ensure the print jet tube is tucked under the top of the printer cover.

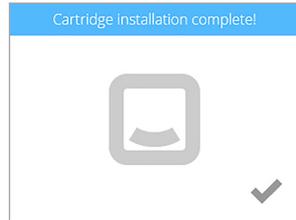
17. Select the **checkmark** to continue.
18. Mount a material cartridge on the right side of the printer and select the **checkmark** to continue.



**NOTE:** The print jet will begin to heat. Once the print jet has reached the proper temperature, the printer will prime melted material into the refuse bin.



19. The right cartridge has been installed. Select the **checkmark** to continue.



20. Press **PRINT** to continue.



21. It is recommended that Auto Level is performed prior to the first print. Ensure the print pad is clean and installed properly and then select the **checkmark** to continue to Auto Level.



**NOTE: When installed properly, the print pad magnetically attaches to the adjustment knobs.**



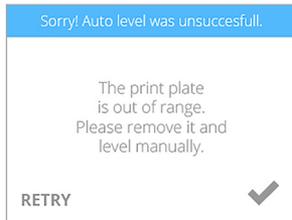
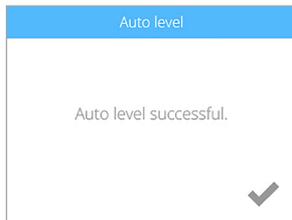
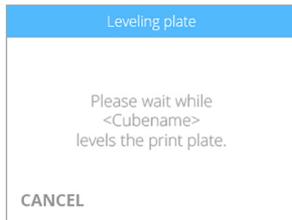


**NOTE:** The printer will begin the Auto Level procedure. This may take a few minutes.

22. Select the **checkmark** to continue.



**NOTE:** If the print pad is not level, remove the print pad and select the **checkmark** to continue. The print pad is magnetically attached to the adjustment knobs. To remove it, lift up the front of the print pad and pull it out of the printer.





**NOTE:** Follow the instructions on the screen. Use the included 1.5 mm Allen wrench to loosen the set screws securing the adjustment knobs to the bracket before turning the knobs. Select the **checkmark** to continue. You will be prompted to perform the Auto Level procedure again.



**NOTE:** The set screw for knob A can be accessed from behind the printer. The set screw for knob B can be accessed from the front of the printer.



**NOTE:** Once adjustments have been completed, tighten the set screws before continuing.

23. It is recommended that Auto Gap is performed after performing the Auto Level procedure. Ensure the print pad is clean and installed properly and then select the **checkmark** to continue to Auto Gap.



**NOTE:** To install the print pad, place it on top of the adjustment knobs. When the print pad is centered properly, the magnets will secure the print pad to the printer.



**NOTE:** The printer will perform an automated gap measurement.

#### Leveling plate manually



Rotate screw A 1/4 turn  
to the right

BACK



#### Check the print plate

Ensure that the print plate is  
cleaned of glue and debris  
and properly installed.

BACK



#### Setting the Z-gap.

Please wait while  
<Cubename>  
sets the Z-gap.

CANCEL

24. Select the **checkmark** to continue.



**NOTE:** The value presented on the touchscreen display is the absolute print pad position. Note and refer to this value when performing the **Manual Level** procedure. Your number may differ from the illustration.



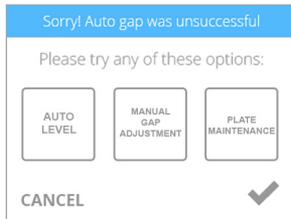
**NOTE:** If Auto Gap is not successful, it is recommended that you perform Auto Level and Auto Gap again. Select **AUTO LEVEL** to continue.



**NOTE:** If Auto Gap is not successful the second time, select **PLATE MAINTENANCE**. For more information, refer to the section titled **PRINT PAD MAINTENANCE**. Once the **PLATE MAINTENANCE** procedure has been performed, perform Auto Level and Auto Gap.



**NOTE:** If Auto Gap is still not successful, select **MANUAL GAP ADJUSTMENT**. Refer to the section titled Manual Gap Adjustment for more information. Once the Manual Gap Adjustment has been performed, note the final reading for future reference.



25. Select **PRINT**.



**NOTE:** If the color built into the test print does not match a color of one of the installed print cartridges, the printer will assign an installed cartridge color to the test print. Select the **checkmark** to continue.

26. Gently squeeze the bottle and apply a thin layer of Cube Glue to the print pad. Select the **checkmark** to continue.



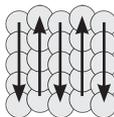
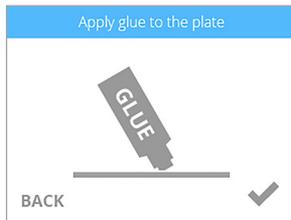
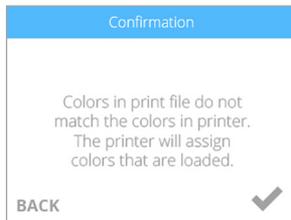
**NOTE:** Apply enough glue to cover a square area of 5"/15 cm.



**NOTE:** Ensure the glue is dry prior to printing.



**NOTE:** For best results, apply a thin layer of glue using slow, circular motions.



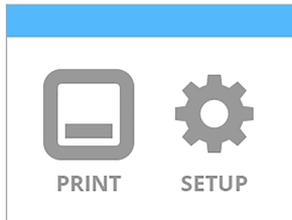
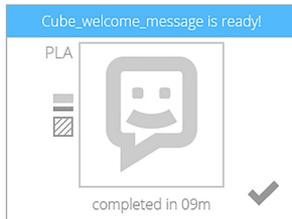


**NOTE:** The print jets will begin to heat and then begin printing the welcome message.

27. Select the **checkmark** to go to the main screen.



**NOTE:** You may also press and release the button next to the touchscreen display to return to the main menu.



## Function Checklist

If you skip or exit from a function during the printer setup sequence below, that function can be performed at any time using the utilities in the menu.

**LANGUAGE**



**CUBE NAME**



**WIFI**



**ACTIVATE  
PRINTER**

**INSTALL  
CARTRIDGES**



**AUTO LEVEL**



**TEST PRINT**



## FINISHING YOUR CREATION

### REMOVING YOUR CREATION FROM THE PRINT PAD

1. Remove the print pad and place it in a container filled with warm tap water. Allow it to soak for approximately ten minutes or until your creation can be easily removed from the print pad. After it has soaked, gently pry the creation from the print pad using the included scraper.



**Caution:** Always move the scraper away from the body. The scraper can cause injury if not used correctly.



**Caution:** Exercise caution when using a tool to remove a part from the print pad. The print pad can become damaged if the tool is not used properly.

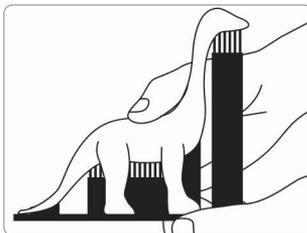
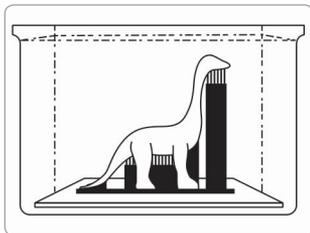
2. Clean the glue from the print pad by rinsing it under tap water.
3. Dry the print pad with a lint-free cloth.

### REMOVING SUPPORTS AND RAFTS (IF REQUIRED)

1. Use small pliers to remove supports and rafts.



**NOTE:** In places where the supports are inside your creation, and are difficult to reach, use small wire cutters (not supplied) to remove the supports.

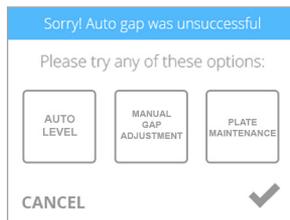


## MAINTENANCE

### PRINT PAD MAINTENANCE

Auto Level and Auto Gap can be affected by a residual glue or print material adhered to the print pad. These procedures can also be affected by a print pad that is too shiny.

1. Select **PLATE MAINTENANCE**.



2. Remove the print pad.



**NOTE: The print pad is magnetically attached to the adjustment knobs.**

3. Using the fine-grit sandpaper, buff the print pad.

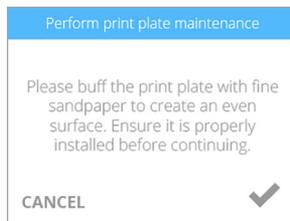


**NOTE: Refer to the section titled Clean The Print Pad for specific instructions.**



**NOTE: Ensure the print pad is clean and dry before installing it in the printer.**

4. Select the **checkmark** to continue.
5. Perform the Auto Level and Auto Gap procedures.



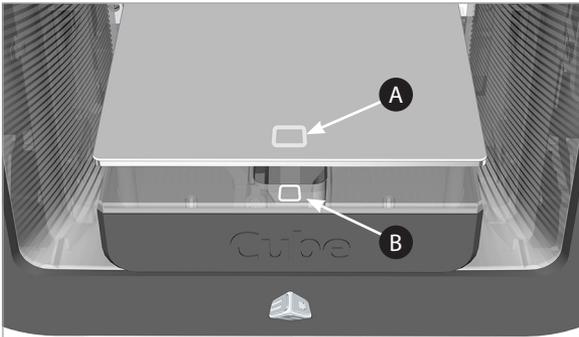
### Clean The Print Pad

1. Remove the print pad from the printer.
2. Wash all glue and print material from the print pad with warm tap water. If necessary, scrub the print pad with a soft brush.
3. Dry the print pad thoroughly.
4. If residual print material is still adhered to the print pad, gently use the scraper to remove it. Refer to the User Guide for more information.
5. Using the included fine-grit sandpaper, lightly sand the print pad left-to-right in .5" (12.7 mm) swirling motions until the entire print pad has been treated.



**NOTE: It is most important to gently sand all shiny parts of the print pad so the print pad surface appears matte in texture.**

6. Clean and dry the print pad thoroughly.
7. Reinstall the print pad with the Cube symbol (A) on the front of the print pad aligned the Cube symbol (B) on print platform.



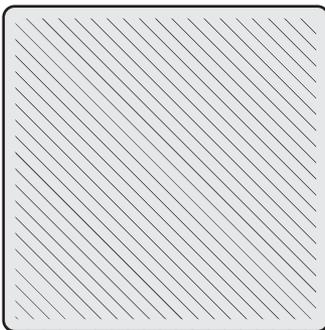
8. Perform Auto Level and Auto Gap Procedures.

## **GAP VERIFICATION**

After the welcome message has printed and has been removed from the print pad, visually inspect the first (bottom) layer of the print and verify the quality. Turn the print upside down and inspect the printing grain. When the gap is optimal, the bottom of the print should appear smooth and the lines should be very light and fused together.

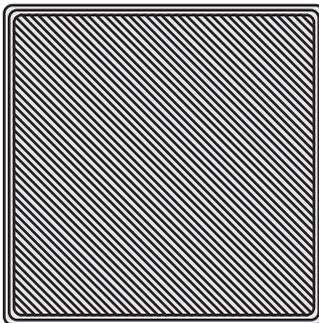
### **Correct Gap**

The gap is correct when the bottom of the print appears smooth and the lines will be tightly fused together.



### Gap Is Too Large

If the lines are more prominent (see the illustration below) and not tightly fused, the gap is too large. Auto Level and Set Plate Z-Height should be performed.



If the first layer begins to fray when removing the print from the print pad, the gap is too large.

### Gap Is Too Narrow

When the gap is too narrow, the part may be very difficult to remove from the print pad. In addition, the bottom layers may break off from the rest of the part while removing it. The bottom of the first layer will appear very smooth and shiny with almost no visible lines.



**NOTE:** If the bottom of the part appears shiny, make sure all glue has been removed and then reinspect it.

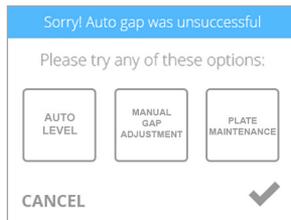


**Caution:** Damage to the print pad can occur if the gap is too narrow.

## MANUAL GAP ADJUSTMENT

If Auto Gap is unsuccessful, you may perform a manual gap adjustment to ensure the first layer of the part prints properly.

1. Select **MANUAL GAP ADJUSTMENT**.



2. Place the gap gauge on top of the print pad under the left print jet. Select the **checkmark** to continue.



**NOTE: Ensure the left cartridge is installed before performing this procedure.**



**NOTE: The Gap Gauge is a thin polyester strip approximately 8.5" (216 mm) long and 1.5" (38 mm) wide.**

3. Gently slide the gap gauge back and forth between the print pad and the left print jet. Using the arrows, raise or lower the print pad until you feel a slight resistance on the gauge. Select the checkmark when you feel the proper resistance.



**Caution: Exercise caution to prevent the print jet from pressing into the print pad. Once you feel a slight resistance in the Gap Gauge as it moves between the print pad and the left print jet, the gap is correct.**





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