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# Cleaning the Ultimaker 3

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For the best print results it is important to keep the Ultimaker 3 clean while using it. Therefore it is advised not to use the Ultimaker 3 in a room where it can easily be covered with dust and to remove small pieces of material that might be in the printer. Besides this, there are a few parts in the Ultimaker 3 that might require more regular cleaning.

## Clean the glass plate

After printing, there might be excess glue stuck to the glass plate. This can cause an uneven print surface. Removing a print may also reduce the adhesion quality of a layer of glue, so it is advised to regularly clean the glass plate and reapply glue.

Before starting a new print, always check the surface of the glass plate. At least once a month, clean the plate thoroughly by taking the following steps:

**Note:** Always make sure that the Ultimaker 3 is turned off and build plate has cooled down.

1. Manually place the build plate at the bottom of the Ultimaker 3
2. Open the build plate clamps at the front, slide the glass plate forward and take it out of the printer

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**Caution:** Leaving the build plate clamps open may damage your Ultimaker 3 when the build plate is raised.

## Clean the nozzles

While using the Ultimaker 3, material can get stuck to the nozzles. Although this will not damage your printer, it is recommended keep the nozzles clean in order to achieve the best print results.

Before starting a new print, always check the nozzles. At least once a month, remove the plastic from the outside of the nozzles by taking the following steps:

1. On the Ultimaker 3, navigate to Material/PrintCore > PrintCore 1 > Set temperature. Rotate the dial and set the temperature to 150 °C. Repeat this for print core 2 and make sure this print core is lowered
2. Wait for the plastic on the outside to get soft. When the nozzles are hot, carefully remove the material with tweezers

**Caution:** Do not touch the nozzles and be careful while cleaning it as they will become hot.



## Clean the feeders and Bowden tubes

After many hours of printing, or when material has been ground down, small filament particles can build up in the feeder. These can end up in the Bowden tubes or print cores, which can impact print quality.

Clean the feeders and Bowden tubes at least once a month, or after experiencing an issue with filament grinding.

### Clean the feeders

1. Remove the material by navigating to *Material/PrintCore > Material [x] > Unload*. After this, turn off the printer
2. Blow into the feeder to get the filament particles out. If necessary, use an air blower or compressed air



## Clean the Bowden tubes

Particles in the Bowden tubes can impede smooth movement of the filament or mix colors. To clean them, the Bowden tubes have to be removed from the printer.

1. Remove the material by navigating to *Material/PrintCore > Material [x] > Unload*. After this, turn off the printer
2. Place the print head in the front-right corner
3. Use a fingernail to remove the clamp clips from the tube coupling collets at the print head and feeders
4. Press down on the tube coupling collet in the print head and at the same time, pull the Bowden tube upwards, out of the print head. Repeat these steps for the feeder
5. Cut off a small piece of sponge or ball up a piece of tissue
6. Insert this into the feeder end of the Bowden tube and push it all the way through the tube with a length of filament. Do this for both Bowden tubes, using a clean piece of sponge or tissue for each
7. Insert the Bowden tube into the feeder by pressing down on the tube coupling collet

in the feeder and pushing the Bowden tube all the way in. Secure the tube with the clamp clip. Repeat this for the other Bowden tube

8. Insert the Bowden tube into the print head by pressing down on the tube coupling collet in the print head and pushing the Bowden tube all the way in. Secure the tube with the clamp clip. Repeat this for the other Bowden tube



## Inside of the printer

Small pieces of material can gather inside the printer, such as priming blobs. Remove these from the inside of the printer with a cloth or vacuum cleaner. Pay extra attention to the area around the Z limit switch as obstructions here can cause print problems.

**Caution:** Leaving larger objects on the bottom panel can lead to errors, as they prevent the build plate from homing properly.

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