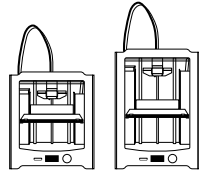


Repair manual



Replacing the Bowden tube

Instructions

The Bowden tube guides the filament from the feeder to the print head.

Forwarding improperly cut or ground down filament through the Bowden tube could scratch or damage the inside of the tube. If this happens, the filament can no longer be forwarded to the print head smoothly. This can lead to under extrusion or other print quality issues.

Also, after removing a Bowden tube multiple times, for example for cleaning the tube or nozzle, the part which is gripped by the tube coupling collet can wear out. If this happens, the tube coupling collet will no longer have a firm hold on the Bowden tube. In this case, the Bowden tube will move up and down during prints which can negatively impact print quality.

If the Bowden tube is permanently damaged, it needs to be replaced. To maintain optimal print quality it is recommended to replace the Bowden tube every year.

Equipment/supplies needed

Tools

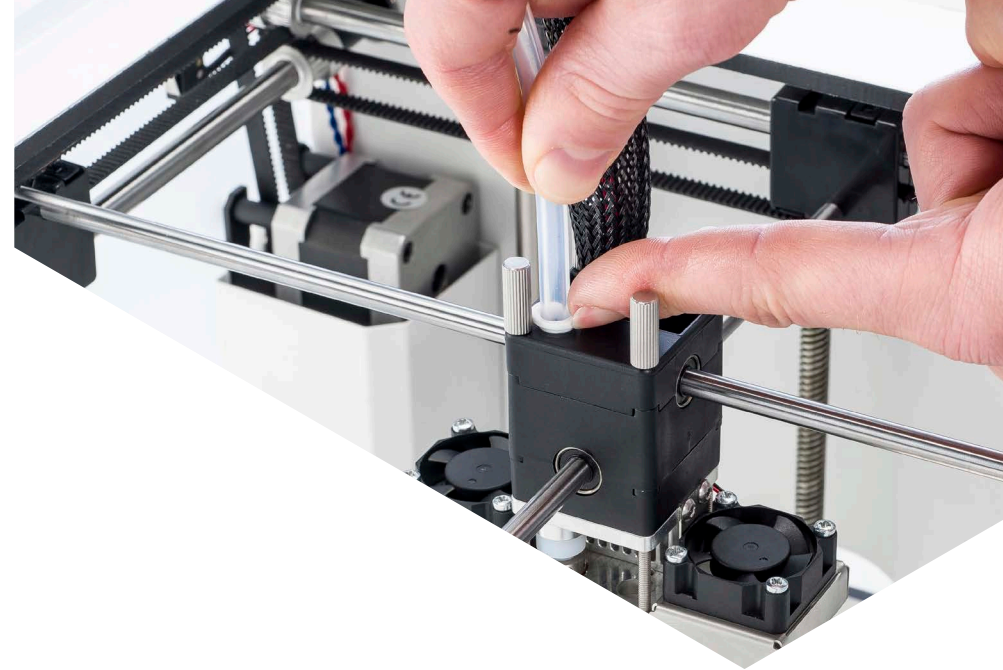
- None

Parts

- 1x 1266 - Bowden tube

Time

- 5 minutes



Disassembly



1. Remove the filament

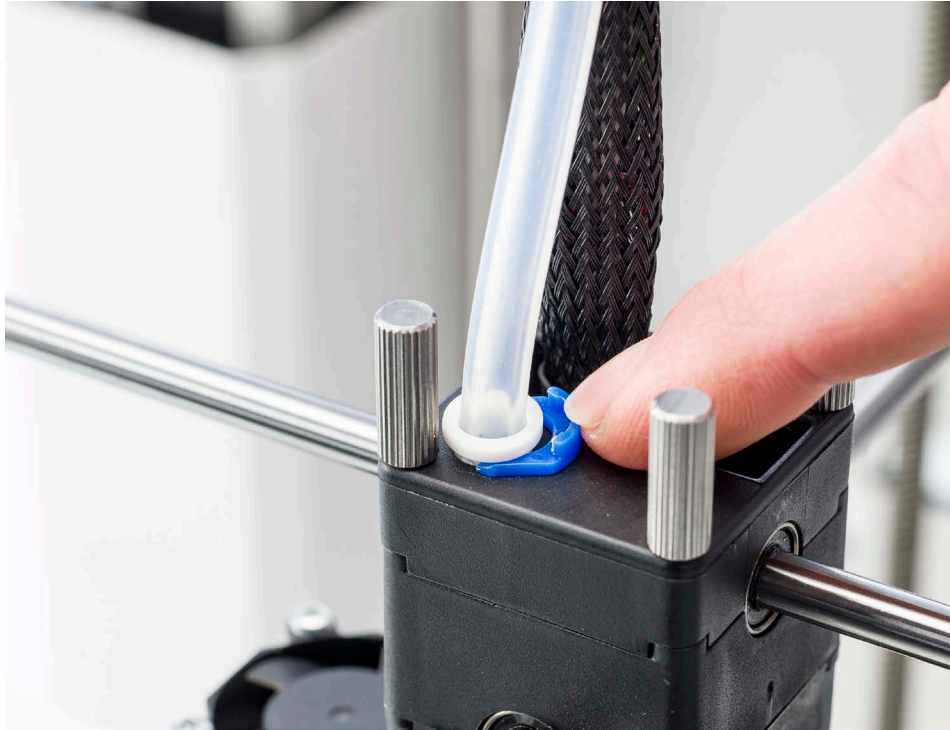
- On the Ultimaker 2+, go to "Material > Change"
- Remove the filament from the feeder and turn off the printer.



2. Remove the cable clips

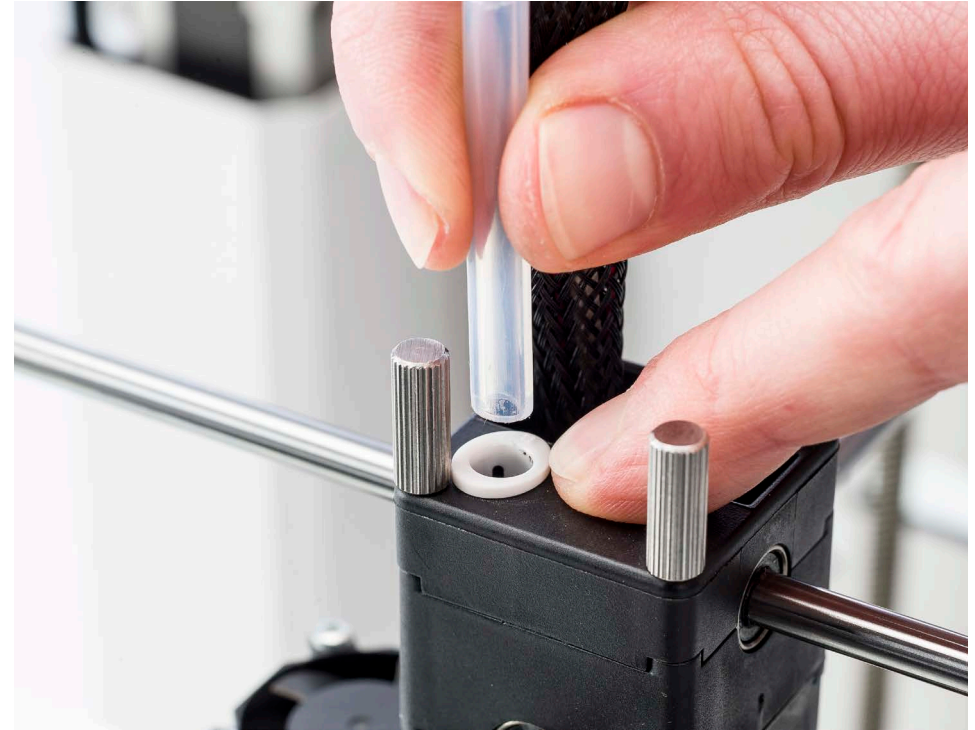
- Bend the four cable clips open to loosen them from the Bowden tube.
- Leave the clips around the braided sleeve.

Disassembly



3. Remove the clamp clips

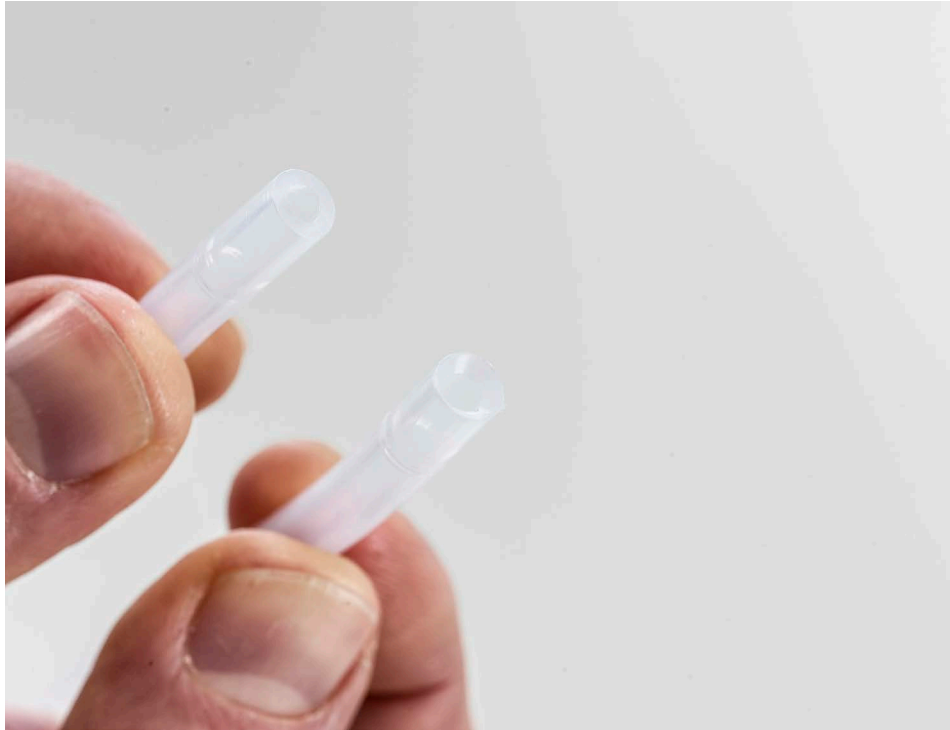
- Place the print head in the front-right corner.
- Use your fingernail to remove the clamp clips from the tube coupling collets at the print head and feeder.



4. Loosen the Bowden tube from the printer

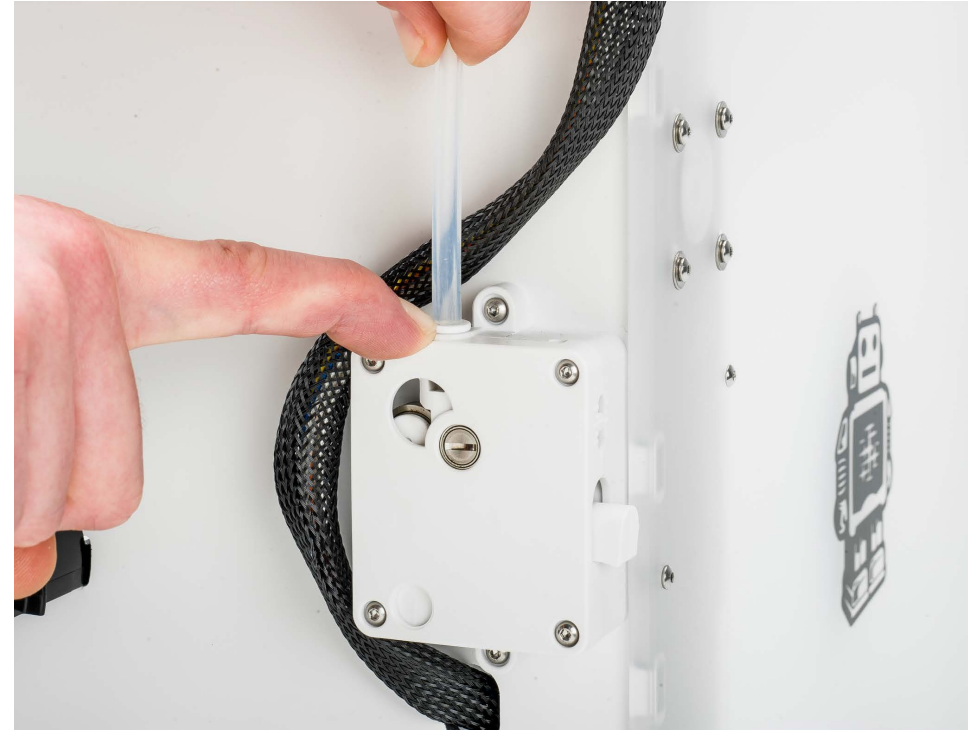
- Press down on the white tube coupling collet.
- At the same time, pull the Bowden tube upwards, out of the print head.
- Repeat these steps for the feeder.

Reassembly



1. Note the orientation of the Bowden tube

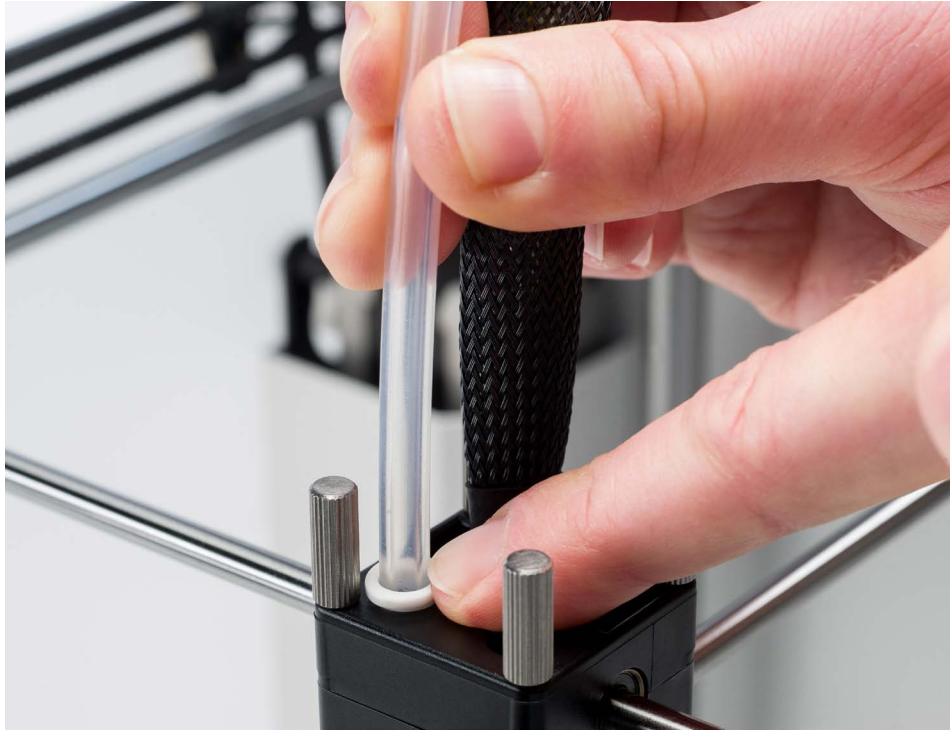
- Take the new Bowden tube and note the two different sides.
- The side which is drilled should be inserted into the feeder. This allows easier access of the filament into the Bowden tube.
- The flat side should be inserted into the print head.



2. Insert the Bowden tube into the feeder

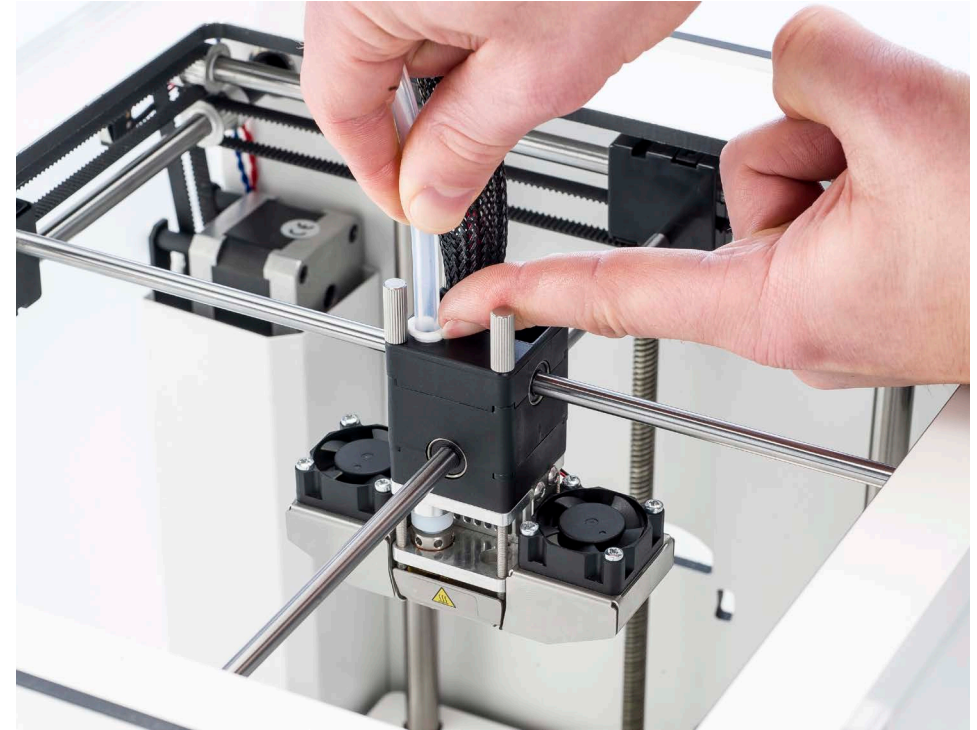
- Press down on the tube coupling collet in the feeder.
- Push the Bowden tube all the way in.
- Make sure that the braided sleeve goes behind the Bowden tube, from left to right.
- Secure the tube with the clamp clip.

Reassembly



3. Insert the Bowden tube into the print head

- Press down on the tube coupling collet in the print head.
- Push the Bowden tube all the way in.



4. Ensure the Bowden tube is correctly inserted

- Let go of the tube coupling collet and gently pull the Bowden tube, along with the tube coupling collet, approximately 2 mm upwards.
- Hold the tube coupling collet up with your fingernail.
- While holding the tube coupling collet up, push the Bowden tube down again.

Note: This step ensures that the end of the Bowden tube connects correctly to the TFM coupler. This prevents room between the parts as well as play on the Bowden tube.

Reassembly



5. Secure the clamp clip

- Place the blue clamp clip around the tube coupling collet to secure the Bowden tube.



6. Place the cable clips

- Click the cable clips onto the Bowden tube.
- Equally divide the clips over the Bowden tube.