

# Disassembling and Assembling 3D Printer Nozzle

This guide will show you how to check disassemble the nozzle from your 3D print head.

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# Step 1 — Disassembling the Hotend







- After removing the nozzle from the canister, as detailed in this <u>guide</u>, unscrew the silver hotend from the black, plastic coldend.
- Once the hotend is disconnected, clean off all the white Teflon Tape from the threads on the screw and within the coldend. Use tweezers if you are having issues removing all traces of the tape.
- After all the Teflon Tape is removed, unscrew the silver hose fitting at the top of the coldend.
- Once you have unscrewed the hose fitting and removed it from the coldend, your pieces should appear as in the third picture. Remove the white hose fitting for the next step.

## **Step 2** — Beginning Reassembly







- After you have diassembled the nozzle and performed whatever test you desired, you can begin reassembling the nozzle.
- If there was a washer or M3 nut in the recess of the hose fitting, re-insert it, as shown in the first picture.
- Next, place the white tube into the flat end of the coldend with the tube's recessed end pointing up.
- If you are unsure which ends of the coldend and tube should point up or down, reference the second and third photos.

### Step 3 — Reassembly

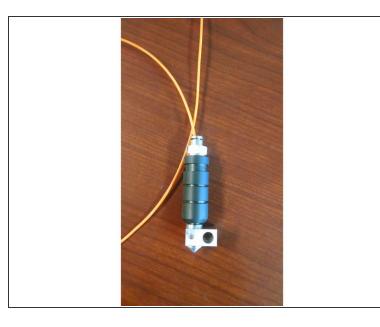


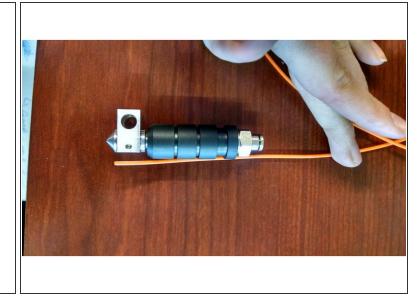




- Hold the hose fitting, with the nut inside, with the nut end facing upwards.
- Next, screw the flat end of the coldend (the one you inserted the tube into) onto the hose fitting.
   Tighten it as firmly as possible.
- When you begin this process, be sure to hold the hose fitting upwards to avoid dislodging the nut inside.
- Next, you will need to wrap the hotend screw threads in Teflon Tape. You only want to cover the screw threads so you will need to fold the Teflon tape in half before beginning to wrap. Note: the tape in the second picture is not folded.
- Once you have folded the tape in half, begin wrapping it around the screw threads. You must always install the tape in the direction of the threads to avoid stripping when reinstalling.
- Wrap the tape around the threads four to six times before moving on to the next step.

### Step 4 — Reassembling Hotend





- After you have thoroughly wrapped the threads in Teflon Tape, begin to screw the hotend back into the coldend.
- The screw will be stiff because of the Teflon Tape, but you still must be careful not to strip the tape away from the screw.
- As you begin to tighten the coldend down, insert a piece of filament into the end bit. Lightly push it down until it is in the end of the nozzle. Continue to tighten the coldend down until you feel any additional resistance on the filament when pulling it up and down.
- It is important to note that how far down you tighten the coldend depends on the tolerance in your specific part. Once you feel the resistance increase, turn the coldend 1/16" more before stopping. If you feel significant increased resistance when installing the filament, unscrew the portions until it slides in and out easily once again.
- If the resistance does not increase while tightening, continue to tighten until just before touching the main square portion of the aluminum hotend. There should be a paper-thin space between the coldend and the square portion of the hotend.