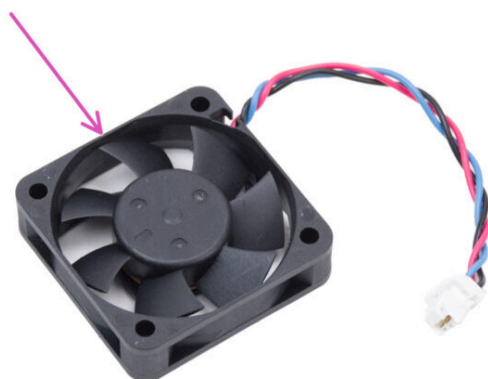


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How to replace Hotend fan (CORE One)



help.prusa3d.com/g922413

Scan the QR code to
display the latest
version of this
chapter.

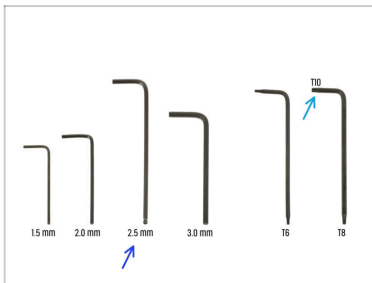


STEP 1 Introduction



- ◆ This guide will take you through the **Hotend Fan** replacement on the Prusa CORE One.
- ◆ All necessary parts are available in our eshop prusa3d.com.
- 📌 Note that you have to be logged in to have access to the spare parts section.

STEP 2 Tools necessary for this guide



- ◆ **Please prepare tools for this guide:**
 - ◆ 2.5mm Allen key
 - ◆ T10 Key / Screwdriver

STEP 3 Printer Preparation (Part 1)



- ◆ Close the printer's door.
- ◆ Unload the filament. Visit the menu **Filament** and select **Unload filament**.
- ◆ Unload the filament from the printer.
- ◆ Remove the filament spool from the printer.
- ⚠ **Ensure the printer has completely cooled down.**
 - ◆ On the printer screen, navigate to *Preheat* -> *COOLDOWN* and wait for the temperatures to drop to ambient levels. This may take several minutes.

STEP 4 Printer Preparation (Part 2)



- ◆ Open the menu **Control > Move Axis > Move Z** and set it to 100mm or more.
- ◆ Wait until the heatbed moves down.
- ◆ Turn the printer off using the switch on the back.
- ◆ Disconnect the printer from power.

STEP 5 Top Cover Removal



- 🟠 Open the printer. From the inside, reach for the nylon rivet on the front right of the top cover. Push it out to unlock it.
- 🟡 Then, remove the rivet from the outside.
- 🟢 Remove the remaining nylon rivets on the top cover using the same technique.
- 🟣 Remove the top cover.

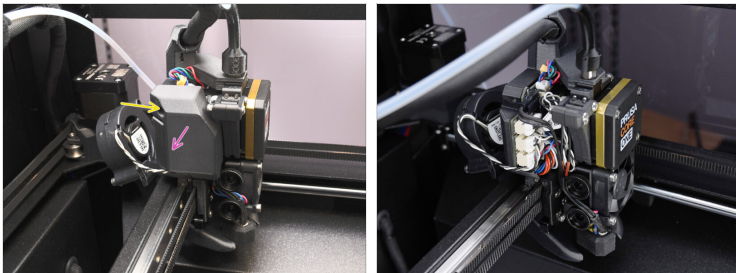
STEP 6 Heatbed Protection



⚠ Before proceeding any further, it is recommended to protect the heatbed first!

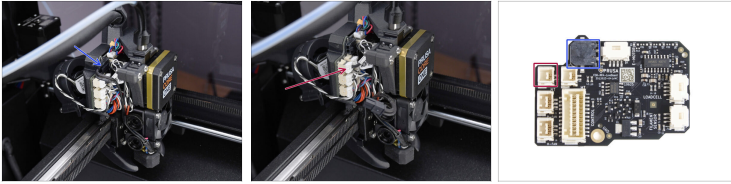
- Use a piece of fabric or other material thick enough to cover the heatbed. This will ensure you won't damage (scratch) the surface during the process.


STEP 7 Nextruder Uncovering





- Let's move onto the left side of the Nextruder.
- Using the 2.5mm Allen key, remove the M3x10 screw holding the side cover.
- Remove the cover.

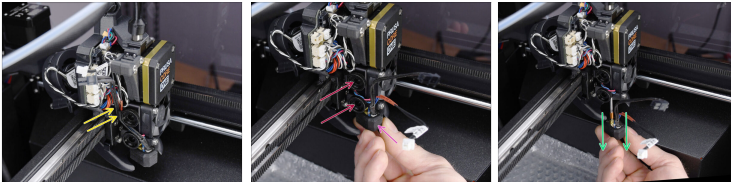
STEP 8 Hotend Disconnecting








 Each connector has a safety latch. **It is necessary to press the latch before disconnecting.** Otherwise, the connector may get damaged.

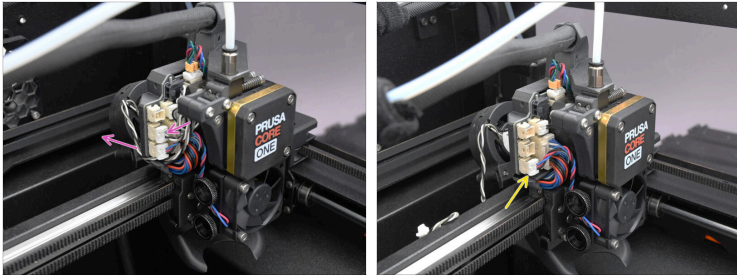
-  Disconnect the hotend heater cable.
-  Disconnect the hotend thermistor cable.

STEP 9 Hotend Assembly Removal



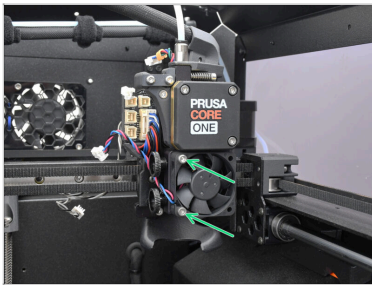
-  Remove the hotend cables from the cable guide.
-  Grasp the hotend with your hand.
-  Use your other hand to loosen the two thumb screws. **There is no need to remove them completely**, a few turns are enough.
-  Watch out, the hotend assembly may fall out!
-  Slide out the hotend assembly from the heatsink.

STEP 10 Nextruder Disconnecting



- ◆ Disconnect the print fan and move its cable away, to the back.
- ◆ Disconnect the hotend fan cable.

STEP 11 Hotend Fan Removal



- ◆ Remove the two M3x18 screws and the fan.

STEP 12 Hotend Fan Preparation



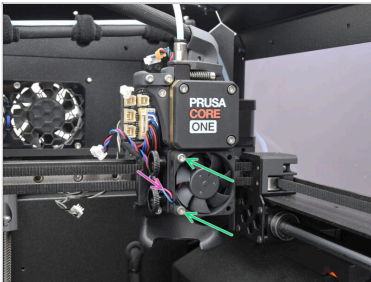
◆ For the following steps, prepare:

◆ *New Hotend Fan (1x)*



Can be obtained on Prusa E-shop

STEP 13 Hotend Fan Installation



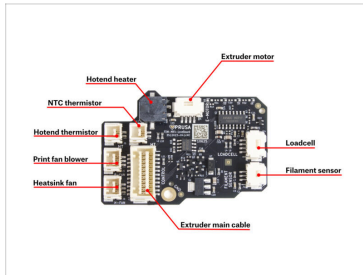
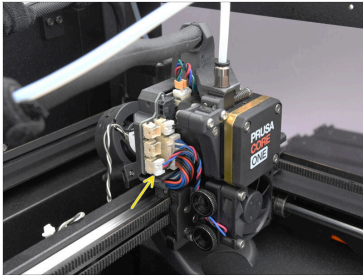
◆ Attach the fan onto the Hotend using the two M3x18 screws.



The side of the fan with the silver sticker must face the heatsink.

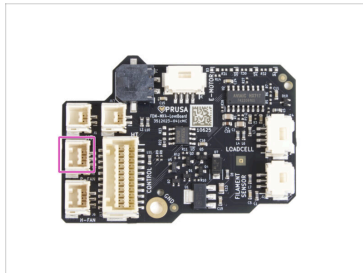
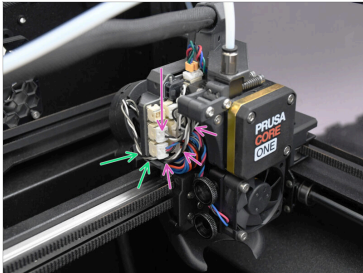
◆ Make sure the cable is oriented to the left.

STEP 14 Hotend Fan Connection



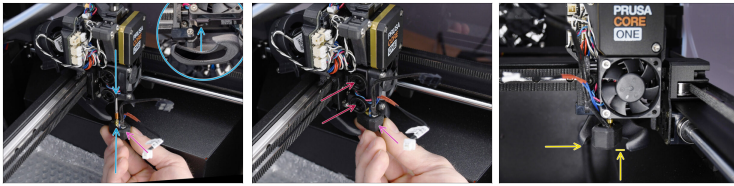
- Guide the fan cable from the front, as pictured. Connect the hotend fan into the lower connector on the left.

STEP 15 Print Fan Connection



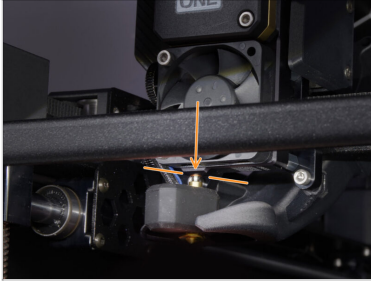
- Guide the print fan cable through the channel in the plastic cover.
- Create a loop with the print fan cable in the cable area and plug it into the middle connector in the LoveBoard.

STEP 16 Hotend Insertion



- ◆ Locate the corresponding opening on the bottom of the extruder heatsink and fully insert the hotend into the heatsink.
- ◆ At the same time, keep the hotend cables pointing to the front, at a slight angle.
- ⓘ The assembly must fit into the recess in the fan shroud with appropriate clearance
- ◆ Keep pushing the hotend assembly upward and tighten both thumbscrews to secure it in place.
- ◆ Ensure the hotend is fully inserted into the heatsink. It should align as shown in the picture and must not protrude below the fan shroud.

STEP 17 Nozzle Insertion Check

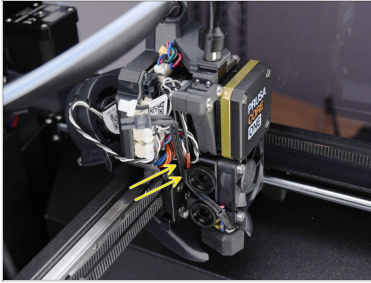


- Verify that the nozzle is **fully inserted** into the heatsink. The copper ring on the nozzle should not be visible if properly seated.

⚠ If not fully inserted, it can cause poor heat transfer, potentially leading to nozzle clogs.

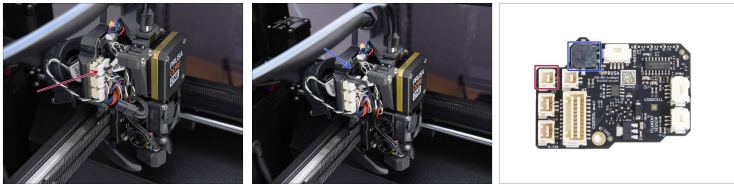
i To adjust the nozzle position, loosen the thumbscrews, reposition the nozzle, and then retighten the screws, while pushing the hotend assembly up.

STEP 18 Hotend Cables Guidance



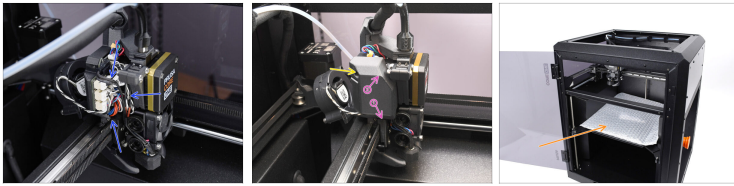
- ◆ Locate the cable guide (plastic hook) behind the thumb screws. Guide the thermistor cable first. Then insert the hotend heater cable.

STEP 19 Hotend Connection



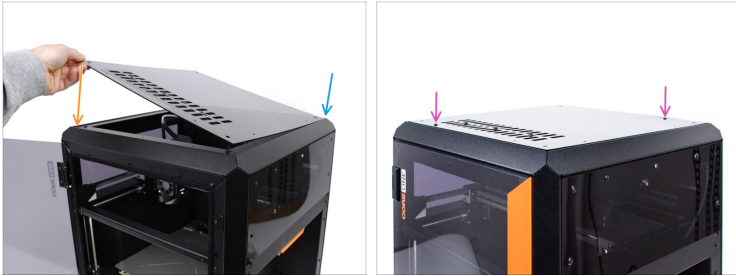
- ◆ Connect the hotend thermistor to the top left slot on the LoveBoard.
- ◆ Connect the hotend heater to the black slot on the upper part of the LoveBoard.

STEP 20 Nextruder Cover



- ◆ Organize the cables to ensure they do not protrude.
- ◆ Attach the cover to the left side of the Nextruder assembly.
 - ◆ Hook it at the bottom first.
 - ◆ Push it towards the Nextruder.
- ◆ Fix the cover in place using the M3x10 screw.
- ◆ Remove the protective material from the heatbed.

STEP 21 Top Cover



- Now, we can reinstall the top cover.
- Align the cover with the metal frame in the far-right corner.
- Align the cover with the recess in the front part as well
- Secure the cover in place using two nylon rivets in the marked openings.

STEP 22 Turning the Printer On



- Close the door.
- Connect the printer to electricity.
- Turn the printer on.

STEP 23 Final check



Visit the menu
**Control >
Calibrations &
Tests**

and run the Selftest.



Follow the on-screen instructions, and once all tests pass with a green check mark, you may continue using the printer as usual.
