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1. Introduction

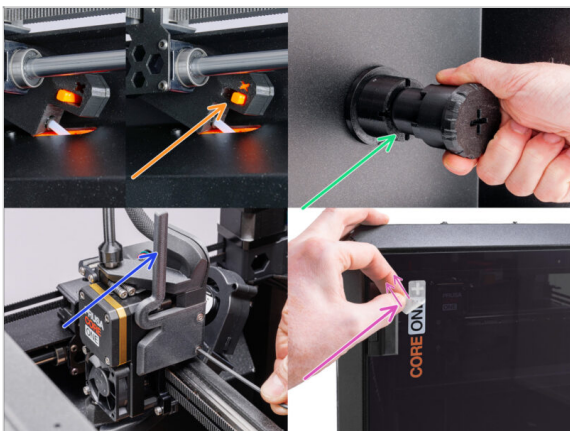


PASSO 1 Preparare il kit d'aggiornamento



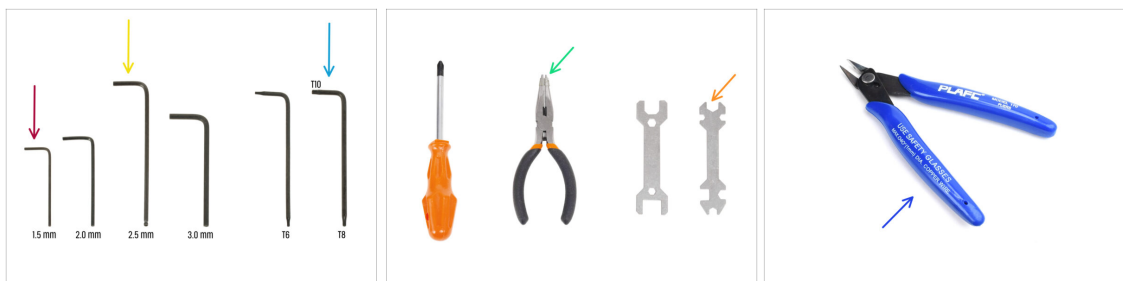
- ◆ This manual guides you through upgrading your **Prusa CORE One to CORE One+**.
- ◆ Prepara il kit d'aggiornamento ricevuto da Prusa Research.
 - ⓘ All the required plastic parts are included in the kit.
 - 📌 The printable parts are also available on Printables.

PASSO 2 Cosa verrà aggiornato?



- ◆ **CORE One to CORE One + upgrade includes these changes:**
 - ◆ New Filament sensor assembly
 - ◆ New type of Spool Holder
 - ◆ Automatic Vent control mechanism
 - ◆ Finally, a new label and a serial number sticker.

PASSO 3 Tools Required



The tools needed for this upgrade are **not included in the kit**. Please use the tools that came with your original CORE One printer.

For the following chapters, please prepare these tools:

- 1.5mm Allen key
- Chiave a brugola da 2.5mm
- T10 Torx key / Screwdriver
- Flush cutters
- Unikey with the M3 nut-sized opening.
- Si consiglia di utilizzare le tronchesi a filo come strumento opzionale.

PASSO 4 Printer Preparation 1



- Scarica il filamento. Visita il menu **Filamento** e seleziona **Scarica filamento**.
- Scarica il filamento dalla stampante.
- Rimuovi la bobina di filamento dalla stampante.

PASSO 5 Printer Preparation 2



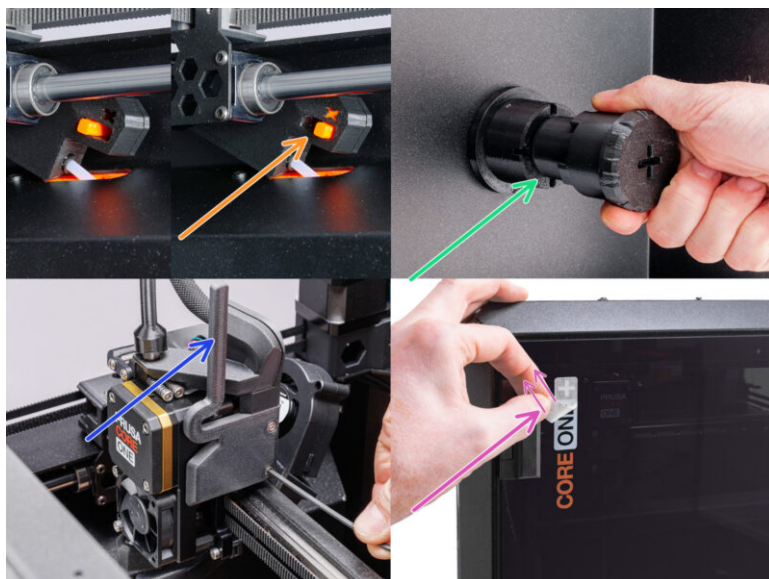
- Open the menu **Control > Move Axis > Move Z** and set it to 100mm or more.
- Aspetta che il piano riscaldato si sposti verso il basso.

PASSO 6 Printer Preparation 3



- ⚠ Prima di iniziare, assicurati che la **stampante si sia raffreddata** a temperatura ambiente.
- Turn the printer off using the switch on the back.
- Disconnect the printer from power.
- Rimuovi la piastra di acciaio, nel caso in cui sia ancora al suo posto.

2. Printer Upgrade

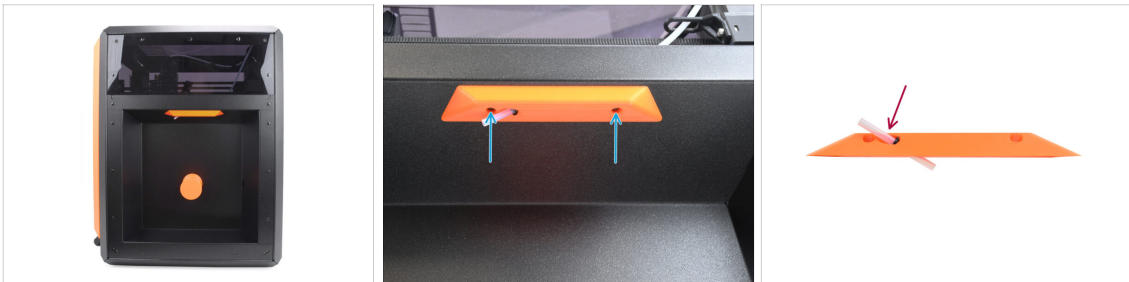


PASSO 1 Top Cover Removal



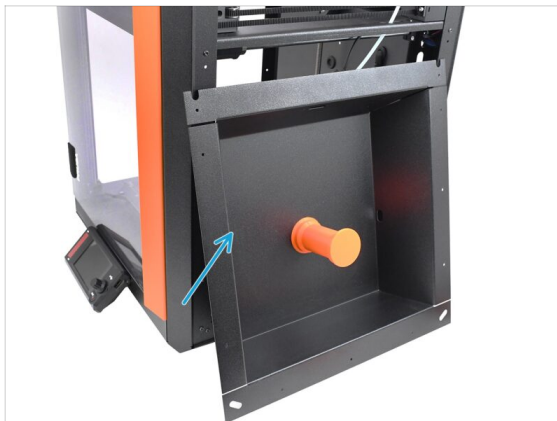
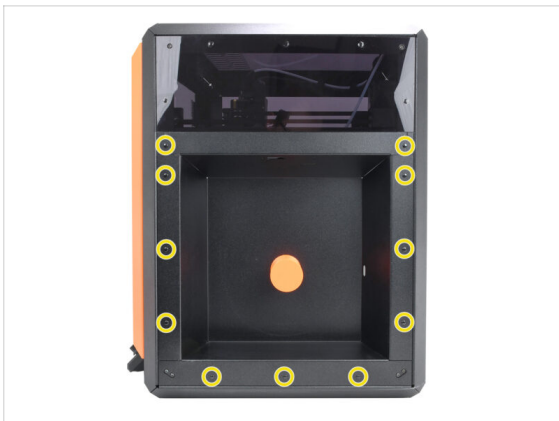
- Open the printer.
- From the inside, reach for the nylon rivet on the front left of the top cover. Push it out to unlock it.
- Remove the nylon rivet from the outside.
- Remove the remaining nylon rivets on the top cover using the same technique.
- Remove the top cover.

PASSO 2 Handle Removal



- To start, let's move onto the right side of the printer.
- Using the T10 Torx key, remove both screws from the handle.
- Remove the handle together with the short PTFE tube. Leave the tube inserted, for now.
- ① If the PTFE tube remained attached on the printer side, remove it and set it aside for later use.

PASSO 3 Rimozione del pannello laterale



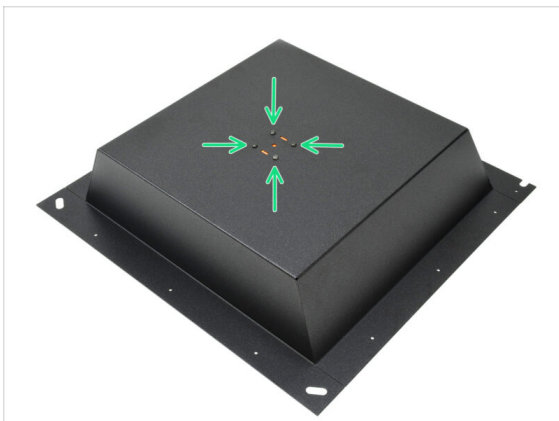
- Rimuovi gli 11 rivetti in nylon che tengono la piastra laterale in metallo.



Proceed carefully to avoid cutting the rivet into pieces.

- Remove the side panel from the printer.

PASSO 4 Spool Holder Removal



- On the inner side of the side panel, remove the four M3x8rT screws.

- Remove the spool holder.

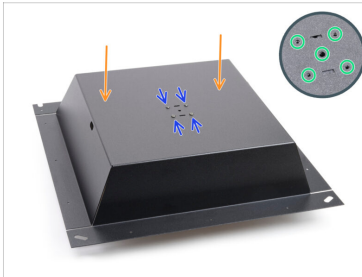
PASSO 5 Spool Holder Preparation



For the following steps:

-  CORE Spool holder (1x)
-  Puck-universal (1x)
-  O-ring 25x3,5mm (1x)

PASSO 6 Puck Installation



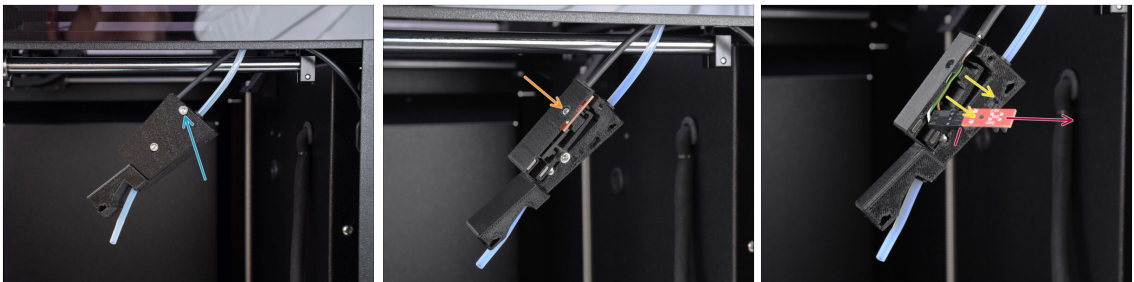
-  Place the Puck-universal on a cardboard box so that the screw holes face upward.
-  Carefully place the right panel onto the Puck-universal , positioning it at the center of the box.
-  Align the holes in the puck with the holes in the right panel.
-  Fix the puck in place using four M3x8rT screws.

PASSO 7 Spool Holder Installation



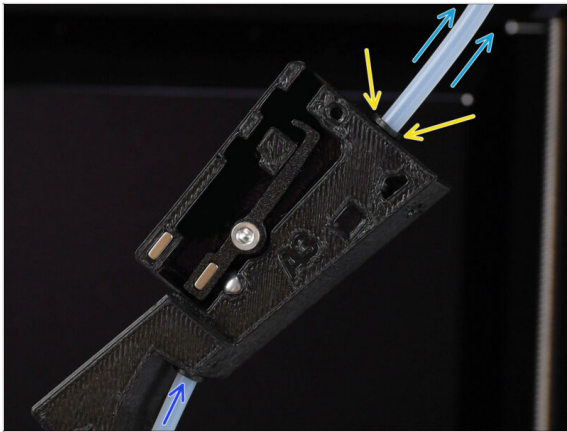
- Attach the O-ring on the spoolholder.
- Push the spoolholder into the puck part and rotate it clockwise to lock it in place.

PASSO 8 Filament Sensor Removal



- Possiamo all'assemblaggio del sensore di filamento laterale.
- Using the 2.5mm Allen key, remove the M3x10 screw on the right.
- Using the 1.5mm Allen key, remove the M2x8 screw holding the filament sensor.
- Remove the filament sensor PCB by moving it to a side.
- Remove the IR sensor with the cable still connected, away from the assembly.
- ⚠ Handle the IR sensor board by its sides only, as it is an ESD-sensitive component.

PASSO 9 Sensor Disassembly



- Push the collet around the PTFE tube.
- While keeping the collet pushed in, pull by the PTFE tube in order to remove the assembly off the tube.
- Remove the collet and save it for later use.
- On some early versions of the assembly, there may also be a short input PTFE tube secured by a collet. In that case, remove both the short tube and the collet.

PASSO 10 Sensor Disassembly 2



- On the filament sensor assembly, remove the magnet from the plastic housing.
- ⚠ This may require you to use some unorthodox persuasion techniques to cut through the plastic.**
- Proceed carefully to avoid injury. Keep in mind that the magnet is very brittle and may crack easily.**
- Save the magnet for later use.

PASSO 11 Sensor Disassembly 3



- Remove the M3x10 screw holding the lever.
- Remove the lever from the assembly.
- Remove the ball and save it for later use.
- Remove the magnet from the lever and save it for later use.

PASSO 12 Sensor Preparation



- Per le fasi successive, prepara:**
- Filament-sensor-body (1x)
 - Filament-sensor-lever (1x)
 - Filament-sensor-switch (1x)
 - M3x10 Screw (1x) *harvested from the printer*
 - 10x6x2mm magnet (2x) *harvested from the printer*
 - 7mm Ball (1x) *harvested from the printer*
 - M3w washer (1x)

PASSO 13 Sensor Base Assembly



- Inserisci uno dei magneti nell'apposita apertura della Leva.
- Insert the ball into the corresponding opening on the inside of the sensor base.
- Insert the lever with the magnet into the Base.
 - ⓘ The part with the magnet should be positioned next to the ball.
- Fix the lever in place using the M3x10 screw with the washer on top.

PASSO 14 Lever Test



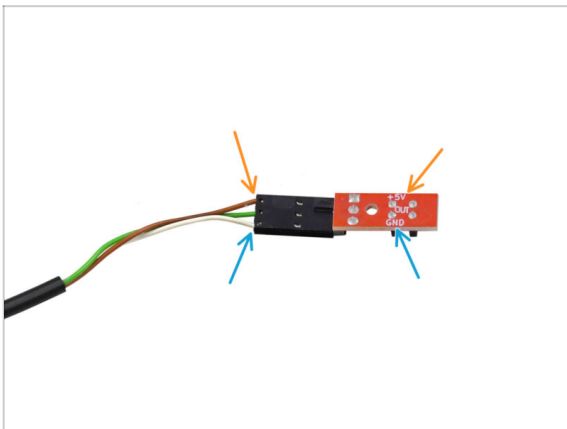
- Verifica che la leva si muova liberamente.
- ⚠ If the lever does not move freely or cannot move at all, loosen the screw by a quarter turn and test the movement again.

PASSO 15 Switch Assembly



- Inserisci il secondo magnete 10x6x2 nel filament-sensor-switch.
- Install the filament-sensor-switch into the filament-sensor-body.
- Move the filament-sensor-switch to the left end position so that the magnets face each other.
- Make sure the magnets **repel** - they should push away one from each other.
- If the magnets attract - pull toward each other, remove the magnet from the filament-sensor switch, flip its polarity, and check again.
- ⓘ Pro tip: Use one of the thin hex keys to remove the magnet.

PASSO 16 Sensor Connection Check



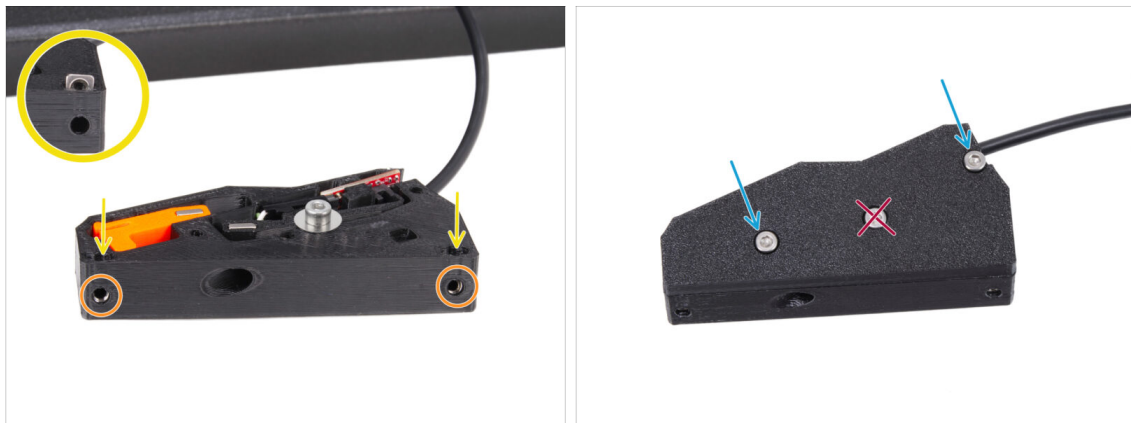
- On the inside of the printer, make sure the IR filament sensor is connected to the cable.
- ⚠ The cable color coding is somewhat non-standard on this printer model. Ensure the connector is plugged in correctly:
- The **brown** cable must connect to the **+5V** pin.
- The **white** cable connects to the **GND** pin.

PASSO 17 IR Sensor Installation



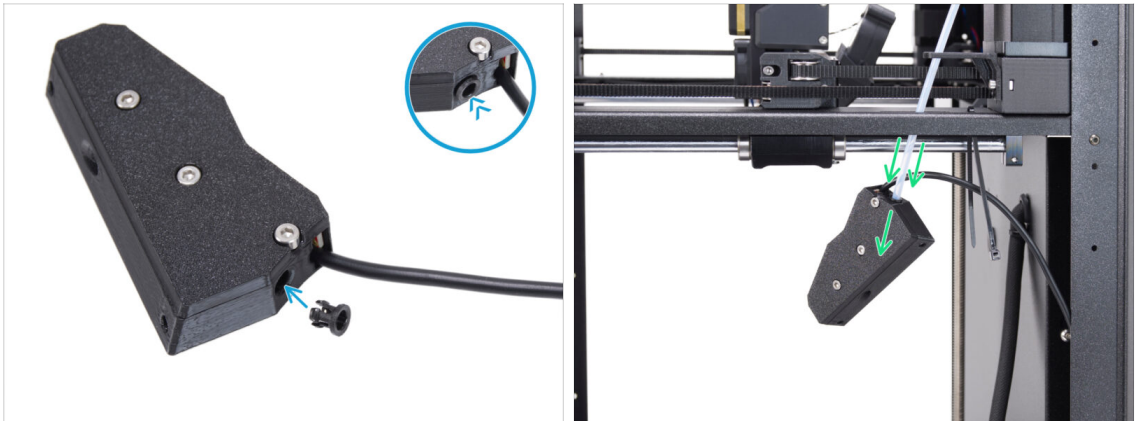
- First, insert the cable into the groove in the assembly. The connector should be approximately in the middle of the sensor base.
- Insert the IR sensor itself into the dedicated groove.
 - The lever must fit into the optical gate part.
- Make sure neither the connector nor the cables touch the lever, as this may prevent the sensor from functioning correctly.
- Using the 1.5mm Allen key, fix the sensor in place with the M2x8 screw.

PASSO 18 Sensor Cover Installation



- Insert the two M3nS nuts into the designated openings. Use a 1.5mm Allen key to push them all the way in.
- View the part from side to ensure the nuts align with the openings.
- Add the cover part onto the assembly and fix it in place using two M3x8 screws.
 - ⚠ Do not tighten the middle screw, as this may prevent the sensor from working.

PASSO 19 Sensor Installation

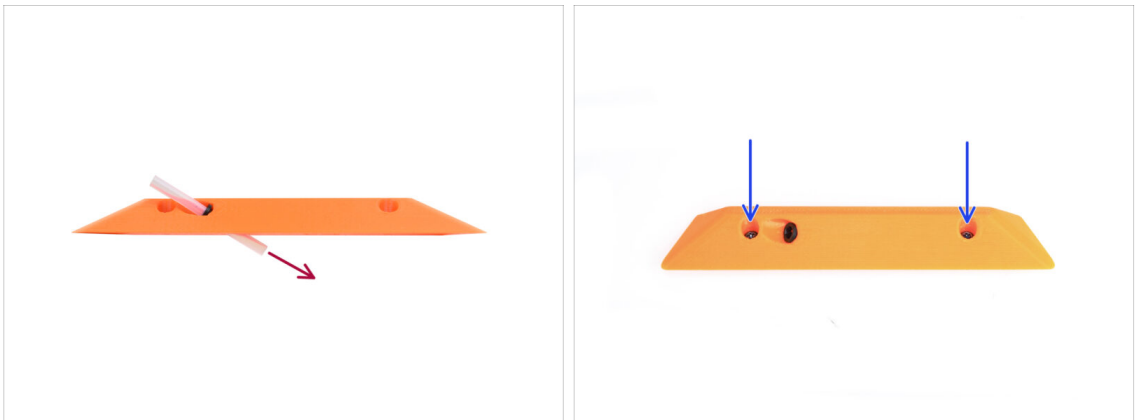


● Inserisci il colletto nell'apertura contrassegnata sul gruppo sensore.

● Attach the sensor assembly onto the PTFE tube in the printer.

⚠ Make sure the tube is pushed all the way in.

PASSO 20 Side Handle Preparation



● Prendi la maniglia con il tubo in PTFE.

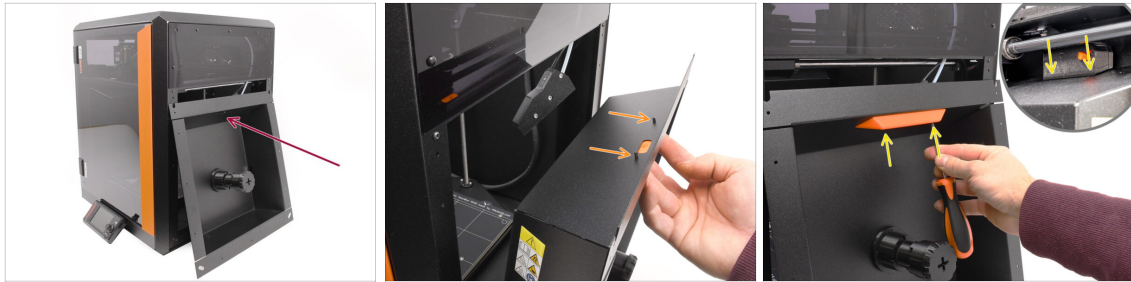
● Push the PTFE tube all the way through the handle and the collet, in order to remove it.



In the unlikely case you have the earliest version of the printer without the collet in the handle, you need to print the latest revision of the part.

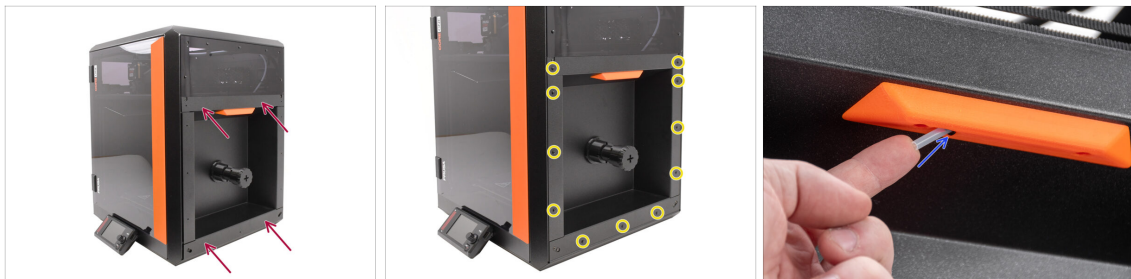
● Reinstall the two M3x10rT screws into the handle.

PASSO 21 Sensor / Handle Attachment



- Move the side panel next to the printer, as shown.
 - Align the handle with the side panel so that the screws pass through. Make sure the PTFE opening is aligned with the larger hole in the panel.
 - From the inside of the printer, align the nuts in the sensor assembly with the screws and tighten both screws to secure the assembly.
- ⚠ This part is tricky. Make sure the threads are perpendicular to the screws. Space is limited inside the printer and visibility is poor, so be prepared to fiddle with the parts a bit to get everything aligned correctly.

PASSO 22 Side Panel Attachment



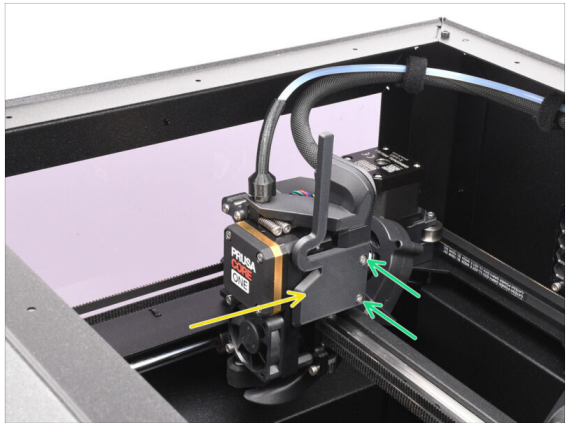
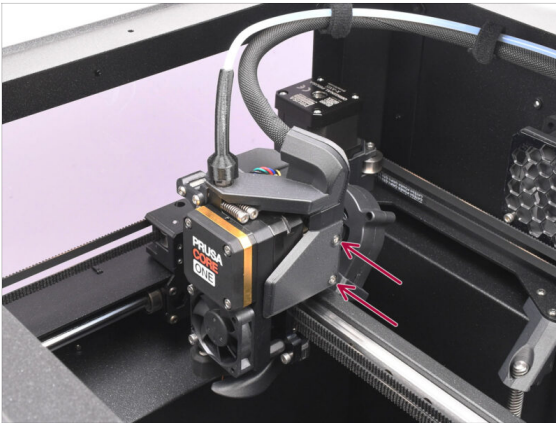
- Push the side panel to the inside of the printer. Be careful to prevent damaging the sensor assembly and the tube leading to it, on the inside.
- Fix it in place using the 11 Nylon rivets.
- Reinstall the short PTFE tube into the handle. Push it through the collet and make sure it is inserted all the way in.

PASSO 23 Vent Lever Preparation



- For the following steps, prepare:
- Cover Right Lever (1x)

PASSO 24 Vent Lever Installation



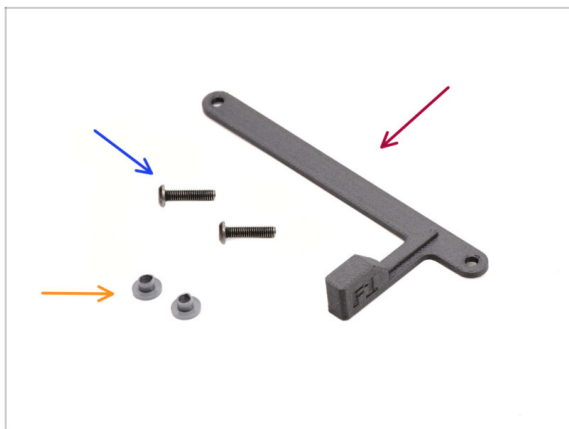
- Let's move to the inside of the printer.
- Undo the two M3x6 screws on the side of the print head and remove the cover on the right.
- Install the updated Cover-Right-Lever part instead.
- Fix it in place using the same two M3x6 screws.

PASSO 25 Top Cover Disassembly



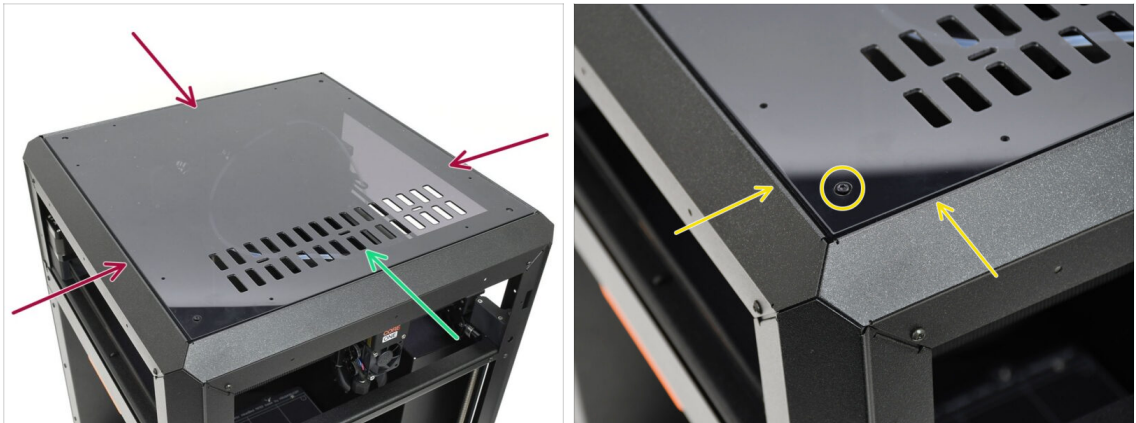
- Take the top cover you have removed earlier.
- Using the needle-nose pliers, reach for the M3nN nuts on the bottom of the cover.
- While holding the nuts, remove the three M3x10rT screws on top.
- Remove the plastic insulating inserts from **two** of the screws.

PASSO 26 Vent Block Preparation



- **Per le fasi successive, prepara:**
- Upg-vent-block
- Vite M3x12rT (2x)
- Insulating insert (2x) *previously removed*

PASSO 27 Top Cover Test Fit



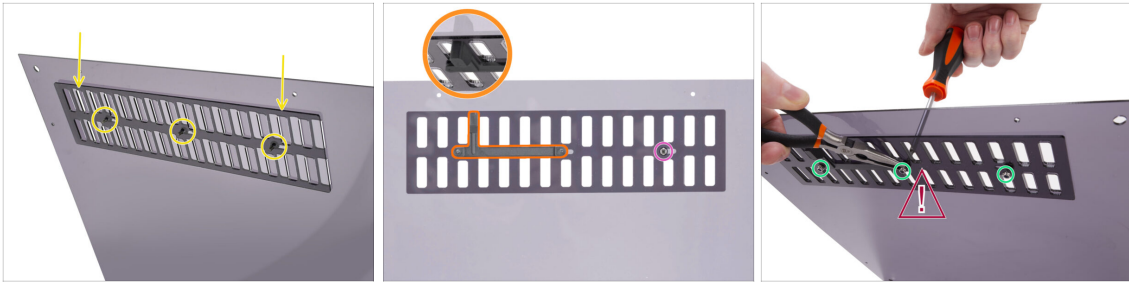
-  The cover isn't symmetrical. Make sure it is oriented the same way as when installed in the printer.
-  Maintain the cover in this orientation.
-  If oriented correctly, the cover must align with the recess, and the bolt heads in the corners will fit into the cutouts.

PASSO 28 Top Cover Assembly



-  Run two of the longer M3x12rT screws through the insulating inserts.
-  Make sure the flanged part of the insert is oriented toward the screw head.
-  Inserisci le viti M3x12rT più lunghe con gli inserti attraverso le aperture centrale e sinistra della presa d'aria.
-  Insert the previously removed M3x10rT screw into the right slot.
-  Orient the vent cover so that the screw holes align with the left side of the rectangular openings.

PASSO 29 Top Cover Assembly 2



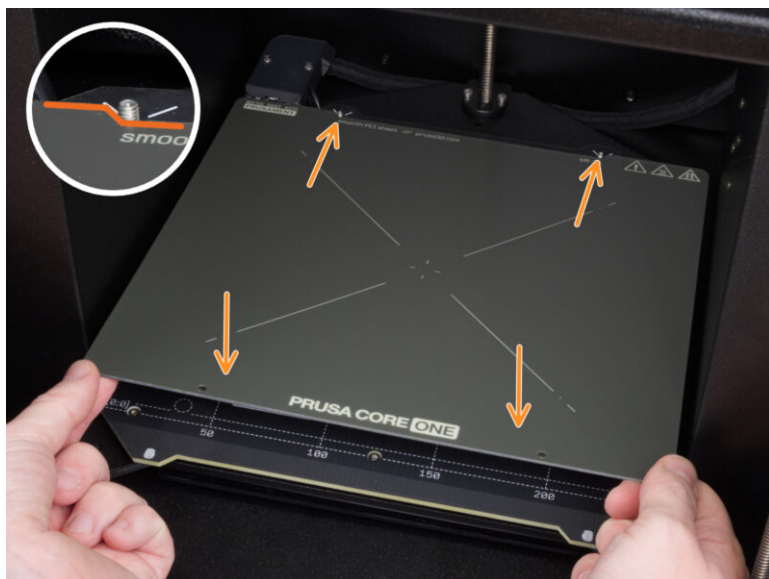
- ✦ Allinea la copertura della presa d'aria con le estremità delle viti sul fondo.
 - ✦ Stringi a mano il dado M3nN più a destra sulla vite M3x10rT per fissare il coperchio.
 - ✦ Attach the Upg-vent-block to the ventilation cover. Make sure that it is positioned correctly, as seen in the picture.
 - ✦ Secure the Upg-vent-block to the ventilation cover with M3nN nuts. Use the needle-nose pliers to hold the nuts while tightening the screws.
- ⚠ The screws should be tightened just enough to remove the slack, remaining slightly loose so the ventilation cover can open and close properly.

PASSO 30 Top Cover Installation



- ✦ Try moving one of the three screws with your hand.
- ⓘ The vent openings should open and close smoothly without any effort.
- ⚠ If the movement is difficult, loosen the screw that is causing the restriction.
- ✦ Align the cover with the recess on the printer, making sure the vent faces forward.
- ✦ Secure the cover to the frame using four nylon rivets in the marked openings.
- 📌 There are eight openings, but four rivets should be sufficient.

3. Final Setup



PASSO 1 Plus Sticker Preparation



- For the following steps, prepare:
- CORE One+ plexi sticker

PASSO 2 Plus Sticker Installation



- Peel off the sticker from the backing layer.
- Align the sticker with the **ONE** sign on the printer's front door. Press firmly to secure the sticker in place.
- Carefully peel off the transparent layer, making sure the + symbol stays adhered and does not lift off.

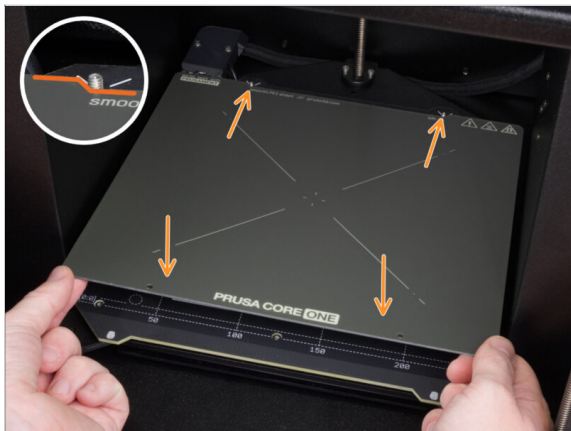
PASSO 3 S/N Sticker



⚠ This step is required in order to provide a warranty! Don't throw the label away!

- 🟡 Peel off the old SN label on the back of the printer and replace it with the new CORE One + sticker.

PASSO 4 Print Sheet



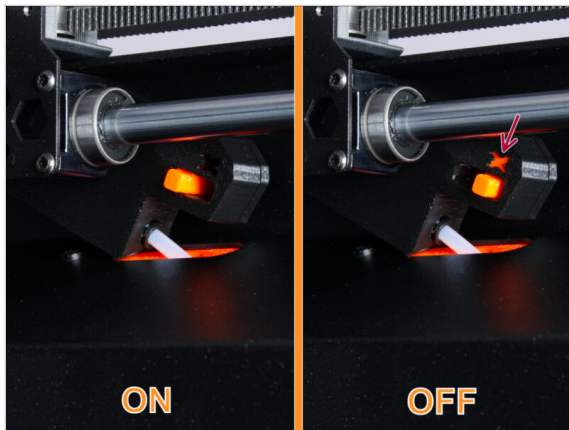
- 🛡 Reinstall the print sheet.

⚠ **Make sure there is nothing on the heatbed.** The heatbed must be clean. Any dirt can damage the surface of both the heatbed and the print sheet.

- 🟡 **Attach the sheet by first aligning the rear cutout with the locking pins on the back of the heated bed.** Hold the sheet by the front two corners and slowly lay it down onto the heated bed - **watch your fingers!**

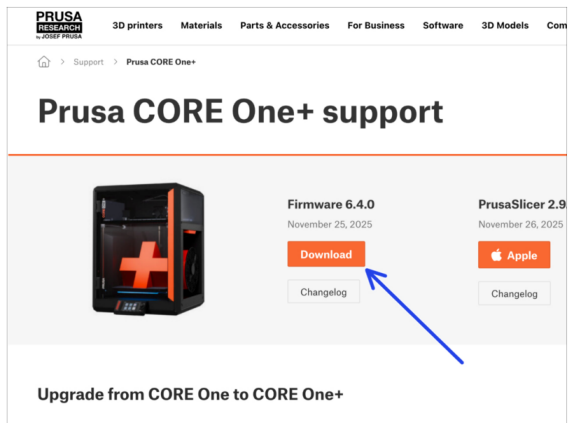
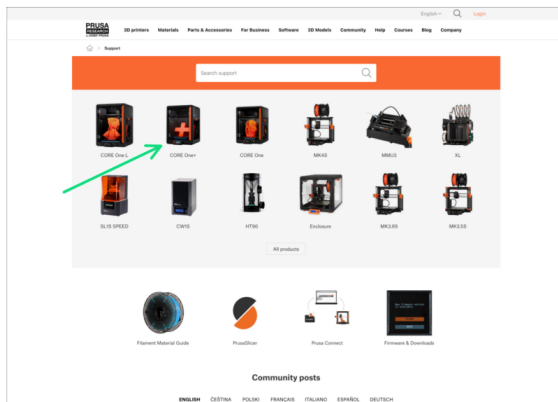
- 🛡 Keep the **print sheet** clean for optimum performance.
- 🛡 #1 cause of prints detaching from the print surface is a greasy print sheet. **Use IPA (Isopropyl alcohol) to degrease it** if you have touched its surface before.

PASSO 5 Interruttore del Sensore di Filamento



- Check that the filament sensor switch is set to the **ON position**.
- The OFF position can be identified by the orange part of the sliding switch visible through the “X” symbol on the switch.

PASSO 6 Firmware Download



- We will have to upgrade the firmware.
- i** The CORE One+ requires firmware version 6.4.0 or newer.
- Visit the **CORE One+ support page on help.prusa3d.com**.
- Download the latest firmware file (.bbf).
Save the file onto a USB drive.

PASSO 7 Firmware Flash



- ✿ Insert the USB drive with the firmware file into the printer.
- ✿ Connect the power cable.
- ✿ Turn the printer on using the switch on the back.
- ✿ Once the "New firmware available" screen appears, select the **FLASH** option.

PASSO 8 Selftest



- ✿ After finishing the upgrade, we recommend visiting the menu **Control -> Calibrations & Tests** and run the Selftest from the start.

PASSO 9 Impostazioni di Ventilazione Camera



- ◆ To enable automatic opening of the top grille, go to **Settings -> Hardware -> Chamber Vent Control** and set it to **Auto**.

PASSO 10 Finish



- 📌 Congratulations! Your upgraded CORE One + is ready to roll!

- ◆ Happy printing!

Manual changelog



PASSO 1 Version history



- **Versions of the Prusa CORE One to CORE One+ upgrade manual:**
- 12/2025 - Initial version 1.00

[illegible]

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This image shows a full page of blank, lined paper. It features approximately 20 evenly spaced horizontal grey lines across the entire width of the page, typical of notebook or composition paper. There are no margins, text, or other markings present.

