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# 1. Introduction



# STEP 1 Introduction

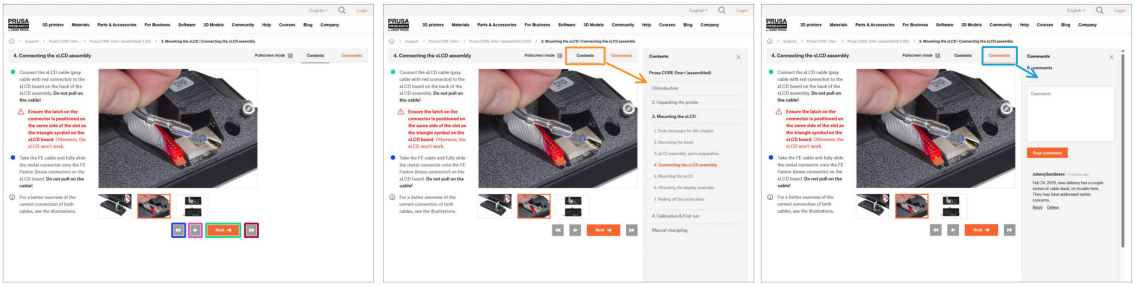


- Welcome to the guide for unboxing, calibrating, and setting up your **Prusa CORE One+ Gen 2 INDX**. Follow these steps to ensure your printer is ready for its first print.

ⓘ Although the Prusa CORE One+ Gen 2 INDX comes pre-assembled, the xLCD and the side filament sensors must be installed before printing, as it is removed for transport protection.

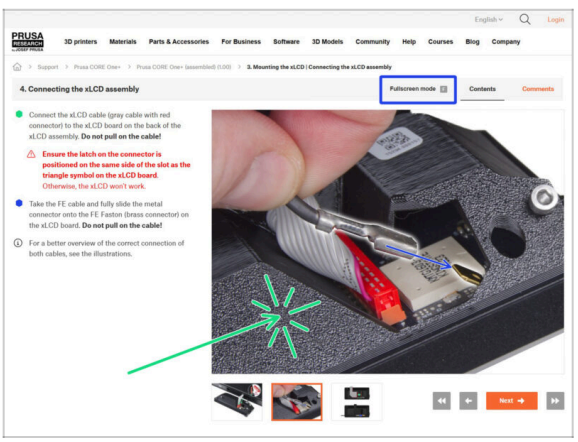
⚠ **Do not discard the packaging!** Keep the original packaging and protective foam. The product, or any of its parts, must be packed in these for service or warranty shipping to prevent damage.

## STEP 2 How to navigate through the manual



- Use the graphical navigation buttons in the bottom right corner or the arrow keys on your keyboard:
  - **Next button / Right arrow key** - Moves to the next image, or to the next step if it's the last image in the step.
  - **Left arrow button / Left arrow key** - Moves to the previous image, or to the previous step if it's the first image in the step.
  - **Play backward button / Up arrow key** - Moves to the previous step.
  - **Play forward (Next) button / Down arrow key** - Moves to the next step.
- Click on **Contents** to expand the full list of steps in this guide. This allows you to jump to any step regardless of the sequence.
- Click on **Comments** to open the discussion for a specific step and leave your feedback.

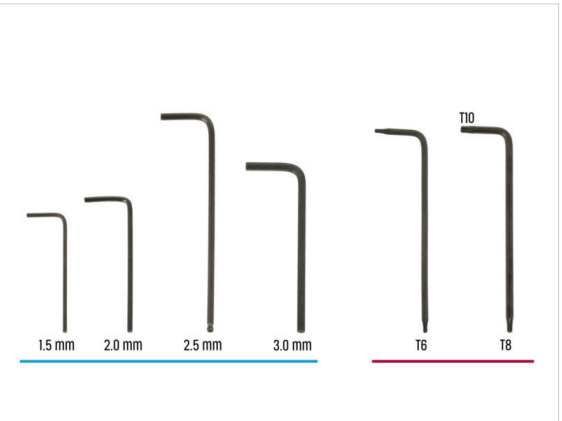
## STEP 3 View high resolution images




- When you browse the guide on help.prusa3d.com, you can view the original images in high resolution for clarity.
- Just click on the image to open it in high resolution for a detailed view.
- Click on **Fullscreen mode** or press the F key to maximize your screen space and focus entirely on the instructions.

# STEP 4 Tools included in the package



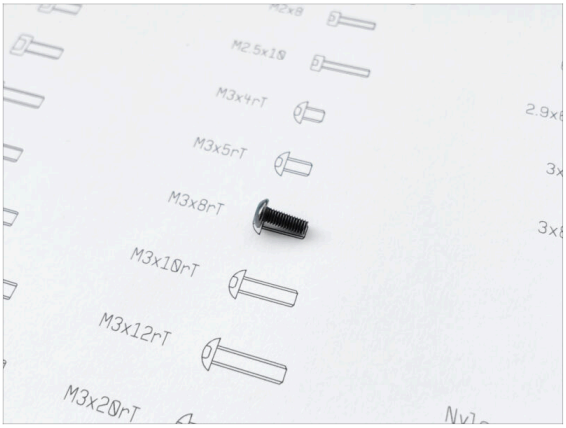



- Your Prusa CORE One+ package includes all the tools for printer operation and maintenance:
  - Phillips (PH2) screwdriver (1x)
  - Needle-nose pliers (1x)
  - Wrench size 13 mm (1x)
  - Universal wrench (1x)
  - Allen key set 1.5 mm - 3.0 mm
  - Torx key set T6 - T10
- You will come across the tool pack during unpacking the printer, we will let you know.

ⓘ For this guide, you will only need the 2.5 mm Allen key.

## STEP 5 Prusa Cheatsheet



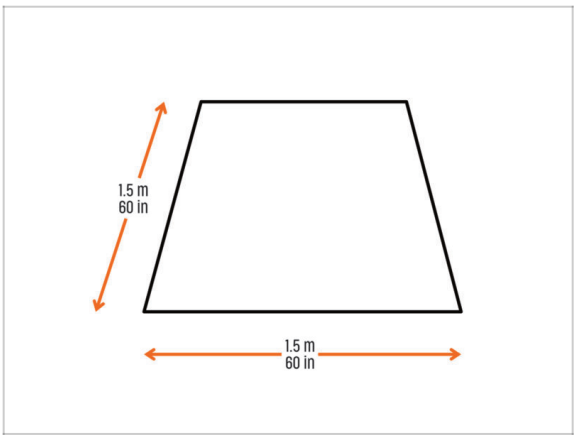




- If you're unsure whether you're using the correct screw type or size, our cheatsheet will help you. Print it at a 1:1 scale and place the fastener on the corresponding drawing to compare its type and size.

You can download the cheatsheet on prusa.io/core-one-cheatsheet.

This guide doesn't involve screws or nuts, but this option may be useful for future maintenance.

## STEP 6 Let's get everything set up!




**CAUTION: The package is heavy—handle it with care!**

- Make sure you have enough space to prepare the printer. **A clean space is essential.**
  - A minimum of 1.5 x 1.5 meters (60 x 60 inches) is recommended.
- Bring your family, friends, or pets—this will be engaging!
- Continue to the next chapter: **2. Unpacking the printer.**

# 2. Unpacking the Printer



## STEP 1 Preparing the package





- Prepare the box as shown in the picture. Notice the orange arrow on the right side. Make sure there is enough space on your workspace on the opposite side.
- Using a box cutter, open the top of the box and open it.
- Remove the items from the top of the box and set them aside.

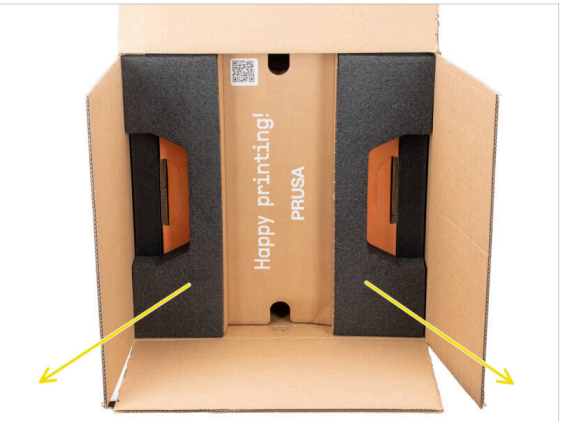
## STEP 2 Printer accessories




- Inside the box on the top layer you will find:
- Tools set (1x)
- Power cable (1x)
- Flash drive (1x)
- Prusament Colormix Sample Set (1x)
- CORE One Accessories (1x)
- Prusa 3D Printing Handbook (1x)
- Haribo Gummybears (1x)
  - ⓘ Enjoy these while you are unpacking your printer!
- Set all of the other items aside for now.

## STEP 3 Opening the outter box




- Carefully turn the box on its side. **Make sure the orange arrow is on the top!**
- Remove the protective foam.

## STEP 4 Unpacking the outter box










- Grab the two orange handles and carefully slide the inside box out of the outter one.
- Flip the box back on its bottom side.
- Cut the box open on the orange side.

## STEP 5 Opening the Inner Box








- Open the box.
- Remove the box with Prusament out of the printer and set it aside.
- Unfold the bottom handle
- Pull the printer outside of the box.

## STEP 6 Removing the Protective Materials





- Remove all protective paper and foam from the outside of the printer.
- Remove the box with the toolheads from the right side of the printer.

## STEP 7 All done!

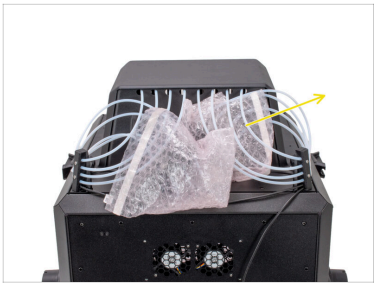


- The printer is now unpacked! Please, continue to the assembly chapter.

# 3. Assembling the Printer



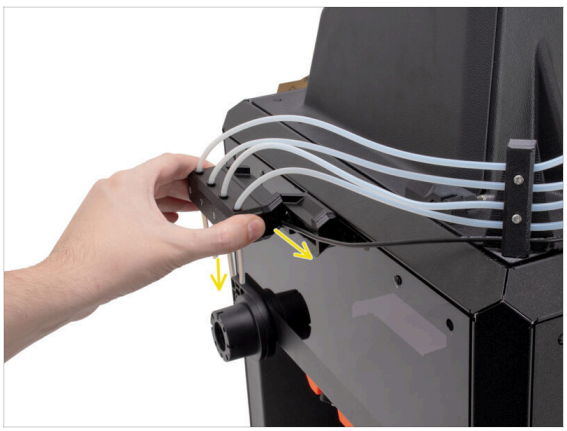
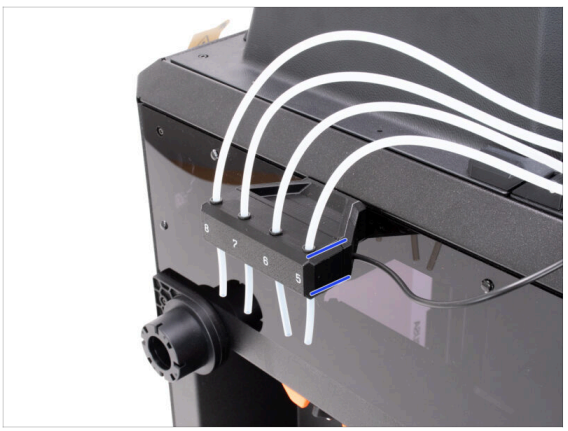
## STEP 1 Removing the Protective Foils





- Remove the bubblewrap covers from the side filament sensors at the back of the printer.
- Remove the plastic foil from the left and the right side cover.
- Remove the plastic foil from the door.

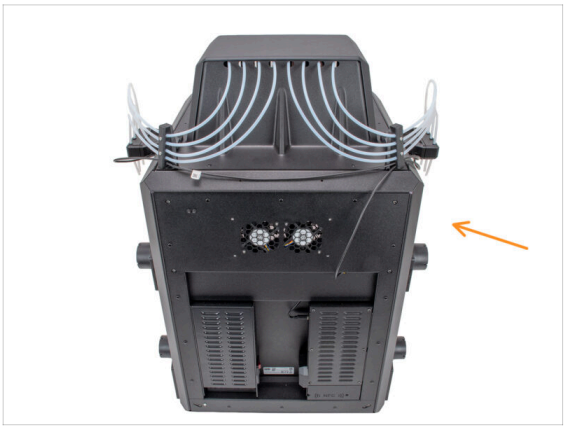
## STEP 2 Side Filament Sensor Left: Mounting

- Slide the left side filament sensor into its holder. The PTFE tubes must point downwards.
- Make sure the side filament sensor is fully inserted in the holder. The plastic parts parts must align.

## STEP 3 Side Filament Sensor Right: Mounting





- Fully slide the right side filament sensor into its holder. The plastic parts parts must align.
- Compare the back of the printer with the picture. Make sure no tubes and cables are crossed or tangled.

## STEP 4 Releasing the Nozzle Tool

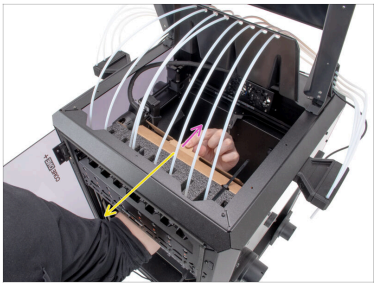
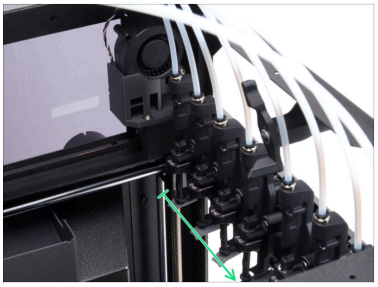
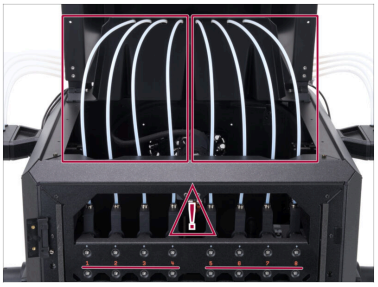






- Open the door of the printer.
- Remove the xLCD and its protective foam.
- For a brief moment, put an empty card box on the heatbed to protect it. (You may use the spoolholder box provided in the package.)
- Using wire cutters or scissors, cut the two zip ties on the nozzle tool.

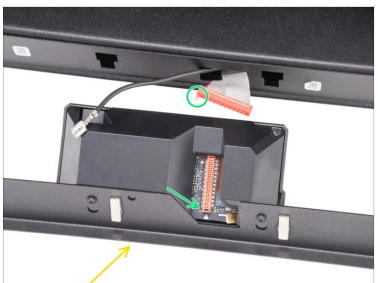
## STEP 5 Preparing the Nozzle Tool

- The picture shows the top cover of the printer open for better visibility. Do not open it.
- Release the flap on the protective cardboard and open it.
- Remove the protective cardboard and foam from the printer.
- Some of the nozzles might get released during this process. If that is the case mount them back to their positions by aligning the magnetic pins on the tools with the openings in the tool dock.

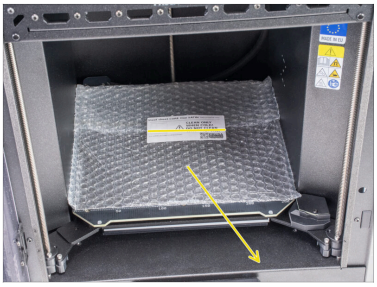
⚠ Check that the PTFE tubes are not swapped and that each tube is correctly routed to the corresponding tool position.

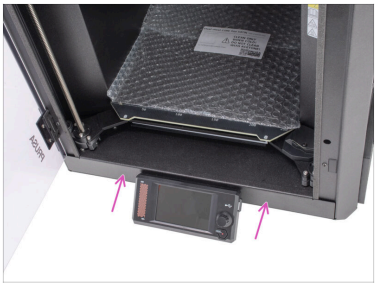
## STEP 6 xLCD: Cable Work


- Remove the two orange protective covers from the xLCD profile.
- Put the xLCD assembly in front of the printer, as pictured.
- Pull the appropriate cables out from the front of the printer to make connecting them easier.
- There is a small red tab on the main connector. This tab must be oriented towards the triangle symbol on the PCB. Connect the main connector into the xLCD.
- Connect the grounding faston connector.

## STEP 7 xLCD: Mounting





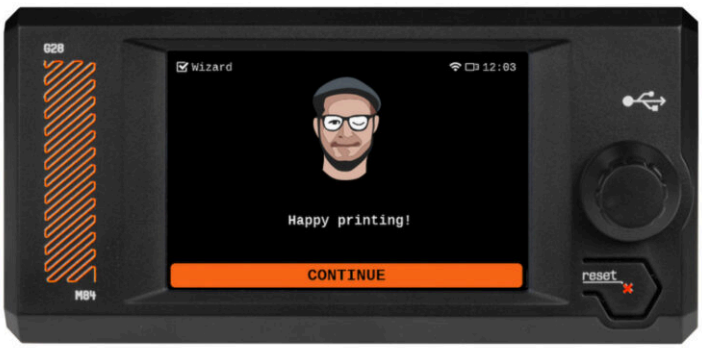
- Remove the protective box from the heatbed.
- ⚠ Proceed carefully to ensure none of the cables get pinched or disconnected.
- Hook the tiny tab on the left side of the bezel behind the left vertical profile of the printer.
- Hook the right tab behind the right vertical profile and slide the xLCD assembly down.
- Push the xLCD assembly down further to ensure it sits in the bottommost position. The magnets should hold it there safely.

## STEP 8 All done!




- All done! Your printer is almost ready for its first print. Please, proceed to the final chapter.

# 4. Calibration & First Run



## STEP 1 Print sheet





ⓘ This chapter will guide you through calibrating and preparing the printer for its first run.

- Remove the bubble wrap from the print sheet.

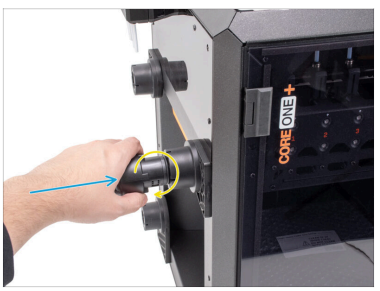
⚠ **Make sure there is nothing on the heatbed.** The heatbed must be clean. Any dirt can damage the surface of both the heatbed and the print sheet.

- **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.

## STEP 2 Spool holders: assembly







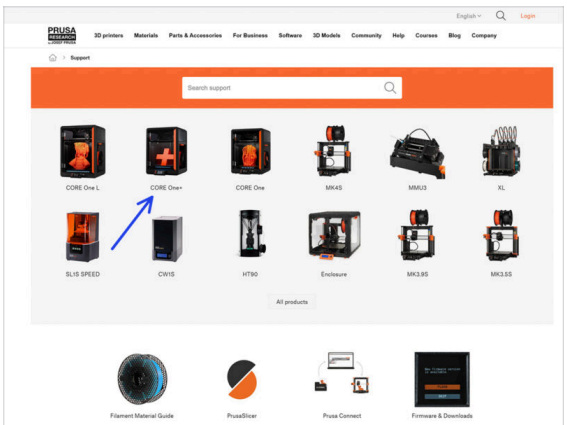

- In the box with spoolholder you will find either 8 or 4 individually wrapped spoolholders and O-rings.
- Put the O-ring onto the telescopic spoolholder.
- Push the telescopic spoolholder into the Puck-universal dock.
- Lock the telescopic spoolholder by turning it clockwise.

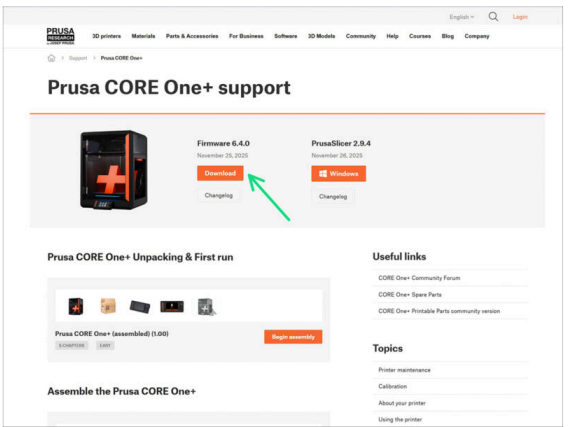
## STEP 3 Spool holders: installing



- Repeat the process for the other 4/8 spoolholders.

## STEP 4 Firmware update




ⓘ All shipped printer packages include a USB drive with the latest firmware. However, it is recommended to check and possibly upgrade the firmware version.

- Visit the help.prusa3d.com page.
- Navigate to the Prusa CORE One/+ INDX.
- Save the firmware file (*.bbf) onto the bundled USB drive.*

ⓘ Pro tip: To access Prusa CORE One/+ INDX homepage you can use the URL: prusa.io/core-one-indx

## STEP 5 Turning it ON



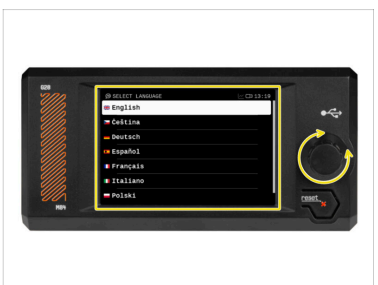


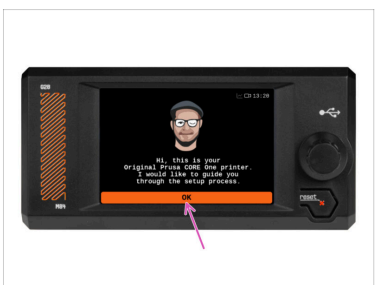




- Insert the USB drive included in your kit into your printer.
  - ⓘ The included USB drive contains the latest firmware file.
- Connect the power cable and plug the printer into a wall outlet.
- Turn the printer on using the switch on the back.
- ⓘ The printer will now detect if a new firmware file is available on the USB drive.
- If the "New firmware available" screen appears, hit **FLASH** by pressing the rotary knob to upgrade to the latest firmware.
  - If no such message appears, the printer is running the latest firmware already. Proceed to the next step.

## STEP 6 Setting up the printer: Intro



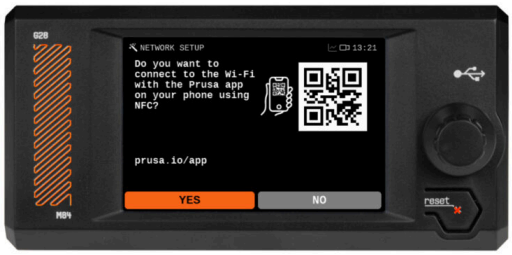







- The printer displays on the screen a prompt to select your language. Use the control knob or touchscreen to set your preference.
- After selecting your language, the printer will display the welcome screen. Hit **OK** to continue through the setup process.
- The next screen will prompt you to select your printer model. Since the assembled Prusa CORE One+ INDX is fully tested in our facility, it has been pre-selected for COREONEINDX during these tests. Hit **Done** to continue.

## STEP 7 Setting up the printer: Network setup







- The Network Setup screen will ask you to connect to a Wi-Fi network using our official Prusa mobile app.

  ⓘ Read more on prusa.io/app.

- If you select **No**, the printer will show alternative ways to connect to Wi-Fi. This step is optional and can be done later.

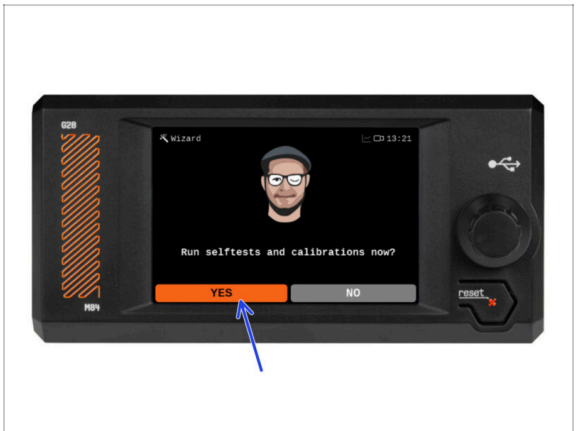
ⓘ You can skip this screen and set up the network connection later.

## STEP 8 Wizard: Gantry Squareness Check



- xxxx

## STEP 9 Wizard: Intro




ⓘ The printer will prompt you to run self-tests and calibrations for all important components. The entire process takes a few minutes, with some parts requiring direct user interaction.

- Hit **YES** to begin the self-test and follow the instructions on screen.

⚠ During the self-test, **keep the door closed** until you are prompted. Opening the door will interrupt the process.

- **There are HOT and moving parts inside during the self-test.**

ⓘ Some of the automatic tests that do not require direct input from the user are not mentioned in this guide.

## STEP 10 Wizard: Door sensor calibration

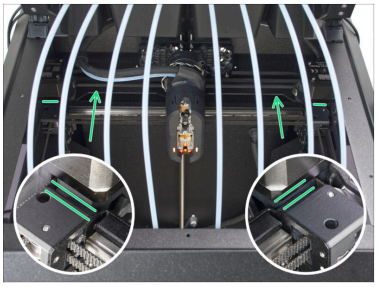



ⓘ **This step can be skipped**. The door sensor is only calibrated during assembly and has a dedicated calibration section at the end of its own guide.

- Hit the **Skip** button to proceed to the next calibration.
- Follow the instructions on the screen. The printer will now run the automatic X-axis and Y-axis test, and the Z alignment calibration.

## STEP 11 Wizard: Belt tensioning






- The printer will now prompt you to fine-tune the belts. Follow the on-screen instructions.
- Open the top lid and manually move the INDX Tool head **as far back as possible** and check that there are **no gaps between the stops** on the left and right.

⚠ **WARNING: Incorrect procedure may result in damage to plastic parts or seizing of screws. Before adjusting the belt tension, read the dedicated article:**

  - Adjusting **belt tension (CORE One)**

- The belts are adjusted using the tensioning mechanism on each side for each belt:
  - The **left screw** adjusts the **upper belt**.
  - The **right screw** adjusts the **lower belt**.
- Once the belts are perfectly tuned, press **Continue** and follow the on-screen instructions.

## STEP 12 Wizard: Dock calibration I.



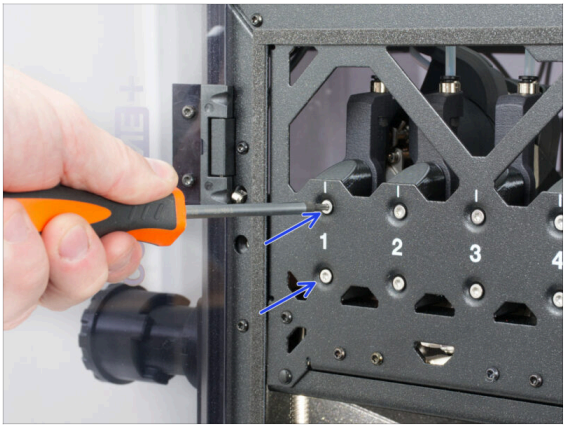





- Once the automatic homing calibration is complete, calibrate the docks. Hit **Continue** and follow the on-screen instructions.
- The printer will ask you to enter the number of docks on your printer.
  - It means how many tool dock positions are installed on the front profile (nozzle holders). This is typically 4 or 8.
- On the next screen, ensure that all dock positions are **set to** and not to .
- Once all docks are ready to be calibrated, scroll down and hit **Continue**.

## STEP 13 Wizard: Dock calibration II.



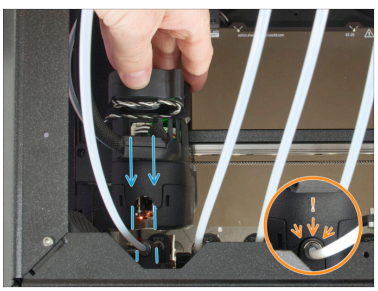




- The screen will now prompt you to tighten the silver screws securing each dock to the front profile.
  - Use a T10 key/screwdriver to tighten the silver screws **in all positions**.
  - **Do not overtighten them**, as they will be loosened again later.
  - Hit **Continue**.

ⓘ Make sure to **follow the on-screen guide in the next step**. The printer will inform you when it is safe to touch it and calibrate the docks.

## STEP 14 Wizard: Dock calibration III.



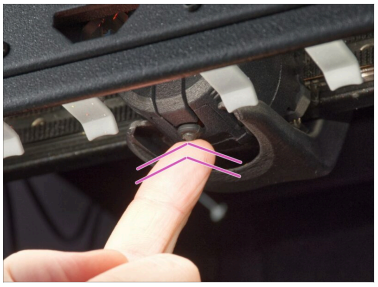



Keep the top lid open.

- You are now prompted to manually move the head onto the dock.
- From above, carefully slide the INDX Tool head onto tool dock **position 1** by hand.
  - Watch the alignment from above to ensure the **head seats perfectly onto the hotend**.
  - Once properly seated, you will feel a click indicating the correct position.
- Hit **Continue** and repeat the same process for the remaining docks, **following the on-screen instructions**.
- After all docks have been aligned, loosen the silver screws securing all dock positions by one full turn.

## STEP 15 Wizard: Loadcell Test





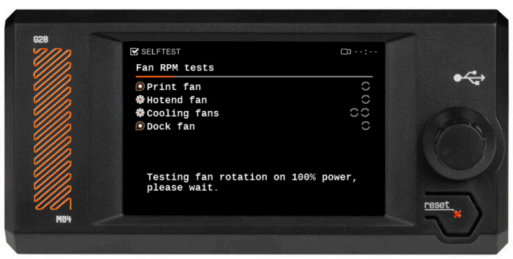

- The next step of the wizard will prompt you to touch the nozzle to test and calibrate the Loadcell. During this procedure, the **parts of the printer are not heated up,** so you can touch them. Press **Continue**.

Loadcell calibration requires the door to be open, as you must interact directly inside the printer.

- Do not touch the nozzle yet, wait until prompted by the **Tap nozzle NOW** message.
- Tap the nozzle from below. In case the Loadcell does not detect the touch, you will be prompted to repeat the step. Otherwise, you will see **Loadcell test passed OK** when it succeeds.
- To allow the printer to continue with the Wizard, **close the door**.

After this test, the printer will run the automatic Z-axis test.

## STEP 16 Wizard: Fan test







- The printer will test all the fans during this process. Be aware—it can get quite noisy for a while!

## STEP 17 Wizard: Tool offsets calibration




- Select **Continue,** and the printer will proceed with testing the offsets for each toolhead.

## STEP 18 Wizard: Nozzle cleaner calibration




- In the following steps, you will calibrate the nozzle with the wiper bin.

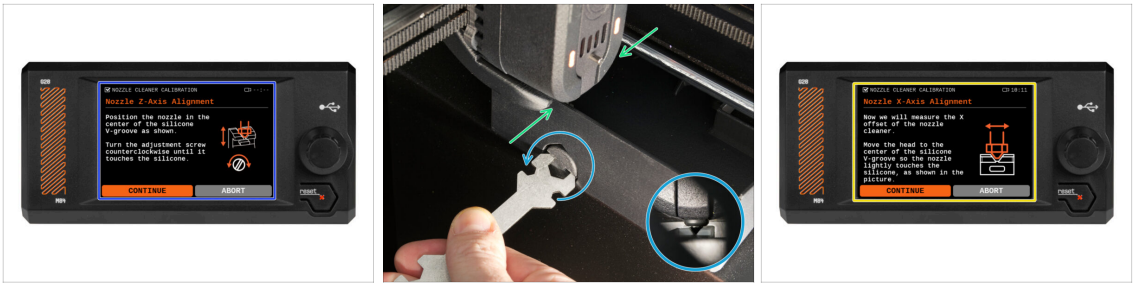
**Only use the 0.4 mm nozzle for this calibration.** Other nozzle sizes have different tip shapes and are not suitable.

- Once you press **Continue**, the Toolhead will move itself closer to the priming block on the nozzle cleaner.
- In the tooldock, **under position 8, there is an opening** through which you can directly observe nozzle alignment on the silicone priming block.

  If you look closely through the opening, you will see the V-shaped cutouts in the wiper base and the silicone priming block.

- Manually move the head above the bin on the right side of the printer. Position it in the middle of the priming block as shown on the screen.
- Through the opening, observe and align the head with the V-shaped cutout in the front priming block, as shown on the screen.

# STEP 19 Wizard: Nozzle cleaner calibration Z/X-axis




- The printer will now prompt you to align the nozzle cleaner.
- Manually adjust the head position so the nozzle is placed in the **V-shaped cutout in the silicone priming block**. Observe the alignment through the front opening in the tooldock.

Only use the 0.4 mm nozzle for this calibration. Other nozzle sizes have different tip shapes and are not suitable.

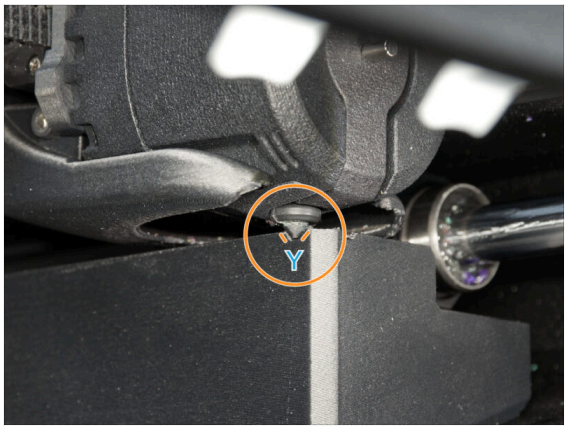
- The printer will **lock the motors** and warn you to **remove your hands from the printer** before proceeding with the calibration.
- Use the universal wrench to **precisely adjust** the Wiper-adjuster until the nozzle **fully fills the V-shaped cutout**, touching both angled sides and the bottom. Check the alignment through the opening.

The Wiper-adjuster allows the bin position to be adjusted up or down.

- Once the position is correctly set (see reference detail), select **Continue** and follow the on-screen instructions.

# STEP 20 Wizard: Nozzle cleaner calibration Y-axis

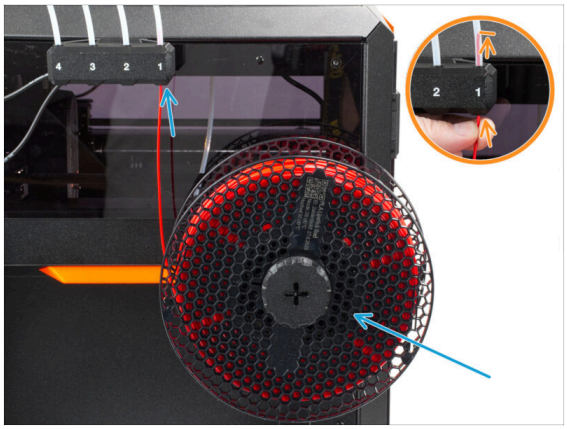



- Now, the printer screen prompts you to align the nozzle on the Y-axis.
- Manually move the INDX Tool head into the V-shaped cutout on the left side of the nozzle cleaner bin and **precisely align it**. The nozzle must not touch the walls.
- Only use the 0.4 mm nozzle for this calibration. Other nozzle sizes have different tip shapes and are not suitable.
- The correct cutout is marked with "Y"
  - Observe through the open door.
- The printer will **lock the motors** and warn you to **remove your hands from the printer** before proceeding with the calibration.
- Once the alignment is perfect, press **Continue** and follow the on-screen instructions.

## STEP 21 Wizard: Filament sensors calibration



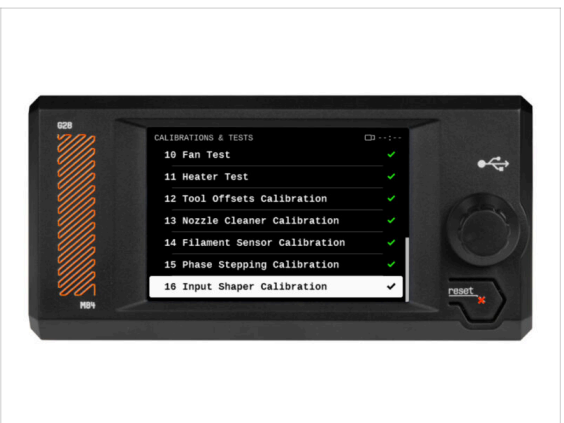

- During each tool filament sensor calibration, you will need a short piece of filament. Prepare the filament and select **Continue**.

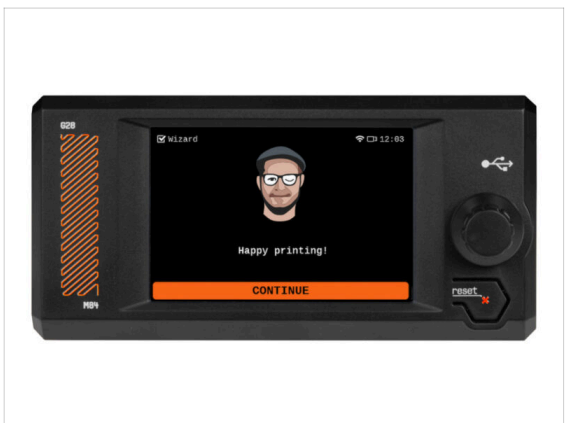
ⓘ There should be **no filament** inside the extruder before the calibration process starts.

- You still have the 210 mm piece of filament from attaching the PTFE tubes. You can use it instead of attaching a whole spool to make the filament sensor calibration easier.
- Place the filament spool on the spoolholder and, **when prompted**, guide the filament into the filament sensor at **position 1**.
  - Insert the filament **only through the filament sensor**; there is no need to feed it through the full length of the PTFE tube.
- After calibration finishes press **Continue** to calibrate the next position.

Once all the positions are calibrated, continue to the automatic calibrations of phase stepping and input shaper.

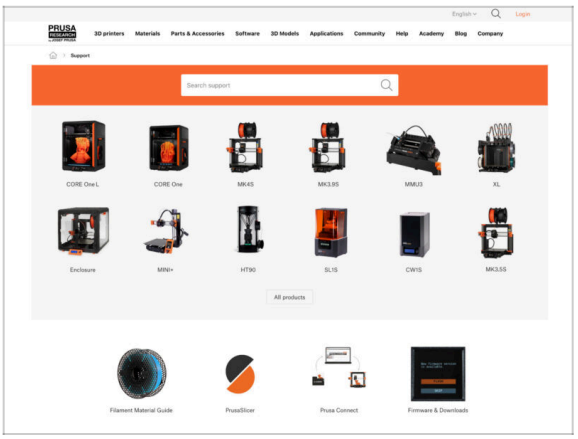
## STEP 22 Wizard complete




- Congratulations! The Wizard is complete. Now let's test some prints.

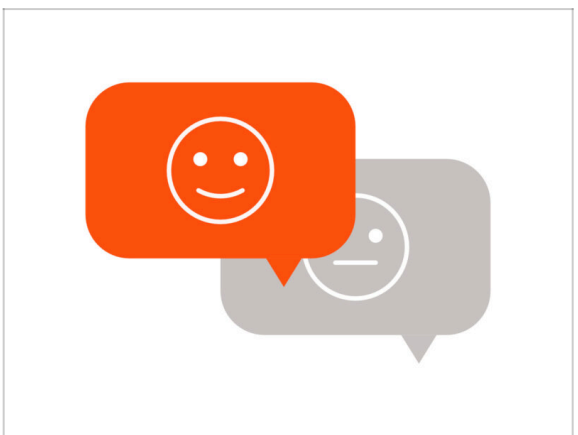
## STEP 23 Prusa knowledge base




- Go to the **CORE One/+ INDX** product page at prusa.io/coreone-indx and navigate to the **Getting started** section for additional information and resources.
- **You can also find more information at help.prusa3d.com:**
  - Find software downloads, product manuals, and detailed assembly guides.
  - Access troubleshooting tips and solutions for common questions.
  - Tutorials and articles to help you get the most out of your printer.

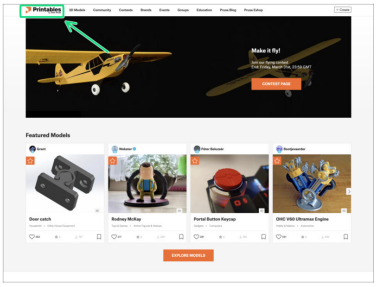
ⓘ We are adding new topics every day!

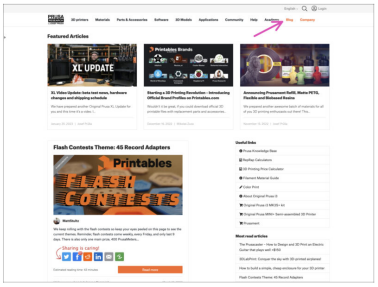
## STEP 24 Give us feedback

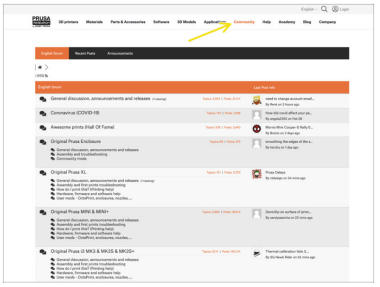


- We know you're eager to start printing, but we'd really appreciate it if you could take 3–4 minutes to **share your thoughts** on this manual: how clear it was, how easy it was to follow, and any ideas to improve it.
  - ⓘ This feedback is a little different from the usual comments you might leave on individual steps.
- **Share your feedback here.**
- Thank you for helping us make our manuals even better!

# STEP 25 Join Printables!



- Don't forget to join the biggest Prusa community! Download the latest models in STL or G-code tailored for your printer. Register at Printables.com
- Looking for inspiration on new projects? Check our blog for weekly updates.
- If you need help with the build, check out our forum with a great community :-)

ⓘ All Prusa services share one user account.

**Notes:**

**Notes:**

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