Table of Contents

1. Introduction 7
- Step 1 - How to navigate through the manual 8
- Step 2 - View high resolution images 8
- Step 3 - Before you begin 9
- Step 4 - All the required tools are included 10
- Step 5 - Labels guide 11
- Step 6 - Spare bag 11
- Step 7 - Printed parts - versioning 12
- Step 8 - We are here for you! 13
- Step 9 - Pro tip: inserting the nuts 14
- Step 10 - Electronics protection (ESD) 15
- Step 11 - Optional CORE One+ Gen 2 upgrade 16
- Step 12 - Removing the MMU3 16
- Step 13 - Reward yourself 17
- Step 14 - Prepare your desk 18

2. Printer preparation & disassembly 19
- Step 1 - Tools necessary for this chapter 20
- Step 2 - Important: Update the firmware 20
- Step 3 - Moving the Z-axis 21
- Step 4 - Unloading filament 21
- Step 5 - Powering off & protecting the printer 22
- Step 6 - Disconnect the Buddy3D camera 22
- Step 7 - Do not discard removed parts 23
- Step 8 - Removing the top nylon rivets 23
- Step 9 - Removing the top panel 24
- Step 10 - Removing the top profile 24
- Step 11 - Removing the door 25
- Step 12 - Accessing the electronics 25
- Step 13 - Accessing the buddy board 26
- Step 14 - Unplugging the cable I. 27
- Step 15 - Unplugging the cables II. 27
- Step 16 - Removing the cables 28
- Step 17 - Pushing the cables in 28
- Step 18 - Guiding the heatbed cables in 29
- Step 19 - Releasing the main cable 29
- Step 20 - Removing the LoveBoard cover 30
- Step 21 - Disconnecting the Nextruder cables - left 30
- Step 22 - Disconnecting the Nextruder cables - top 31
- Step 23 - Disconnecting the Nextruder cables - right 31
- Step 24 - Disconnecting the PTFE tube 32
- Step 25 - Removing the Nextruder fitting 32
- Step 26 - Removing the Nextruder 33
- Step 27 - Removing the print fan 33
- Step 28 - Removing the LoveBoard 34
- Step 29 - Removing the fan shroud 34
- Step 30 - Removing the side handle 35
- Step 31 - Removing the side filament sensor 35
- Step 32 - Removing the spoolholder 36
- Step 33 - Parts recap I. 36
- Step 34 - Parts recap II. 37

Step 35 - Haribo time! 37
Step 36 - Final step 38
3. Z-axis upgrade 39
Step 1 - Tools necessary for this chapter 40
Step 2 - Optional: Installing the Buddy3D Camera USB-C cable 40
Step 3 - Removing the heatbed cable cover 41
Step 4 - Releasing the heatbed 41
Step 5 - Removing the heatbed 42
Step 6 - Heatbed spacers: parts preparation 42
Step 7 - Inserting the spacer - left 43
Step 8 - Securing the bed spacer - left 43
Step 9 - Inserting the spacer - right 44
Step 10 - Securing the bed spacer - right 44
Step 11 - Removing the rear bed spacer 45
Step 12 - Assembling the INDX-bed-spacer-rear 45
Step 13 - Mounting the INDX-bed-spacer-rear 46
Step 14 - Offset sensor: parts preparation 46
Step 15 - Mounting the INDX offset sensor 47
Step 16 - Connecting the offset sensor cable 47
Step 17 - Securing the offset sensor assembly 48
Step 18 - Guiding the offset sensor cable 48
Step 19 - Securing the offset sensor cable 49
Step 20 - Removing the Bed-cable-cover-bottom 49
Step 21 - Heatbed cable covers: parts preparation 50
Step 22 - Assembling the Bed-cable-cover-bottom 50
Step 23 - Securing the heatbed: parts preparation 51
Step 24 - Inserting the heatbed 51
Step 25 - Securing the heatbed 52
Step 26 - Wrapping the heatbed cables 53
Step 27 - Covering the heatbed cables 53
Step 28 - Guiding the heatbed cable bundle I. 54
Step 29 - Guiding the heatbed cable bundle II. 54
Step 30 - Securing the textile sleeve 55
Step 31 - Removing the Bed-stop-rear 55
Step 32 - INDX-C1-Bed-stop-rear: parts preparation 56
Step 33 - Assembling the Bed-stop-rear 56
Step 34 - Installing the new Bed-stop-rear 57
Step 35 - Securing the Bed-stop-rear 57
Step 36 - Connecting the RGB LED + offset sensor cables 58
Step 37 - Connecting the heatbed cables 58
Step 38 - Haribo time 59
Step 39 - Done 59
4. INDX Toolhead & Side filament sensors 60
Step 1 - Tools necessary for this chapter 61
Step 2 - Loosening the belts 61
Step 3 - Releasing the belts 62
Step 4 - Gantry aligner tool: parts preparation 62
Step 5 - Installing the Gantry-aligner-tool - right 63
Step 6 - Installing the Gantry-aligner-tool - left 63
Step 7 - Aligning the linear rail 64
Step 8 - Removing the Gantry-aligner-tool 64
Step 9 - Toolhead mount: parts preparation 65
Step 10 - Securing the belts 65
Step 11 - Installing the Head-mounting-plate 66

Step 12 - Lubricating the belt tensioner screw 66
Step 13 - Adjusting the belts 67
Step 14 - INDX Toolhead assembly: Parts preparation 67
Step 15 - Attaching the head cable cover front 68
Step 16 - INDX Toolhead: parts preparation 68
Step 17 - Mounting the INDX Toolhead 69
Step 18 - Fan shroud: parts preparation 69
Step 19 - Attaching the Fan-shroud 70
Step 20 - Inserting the nut 70
Step 21 - Print fan: parts preparation 71
Step 22 - Installing the print fan 71
Step 23 - Connecting the print fan 72
Step 24 - INDX head cable: parts preparation I. 72
Step 25 - INDX head cable: parts preparation II. 72
Step 26 - Guiding the head cable 73
Step 27 - Inserting the nylon string 74
Step 28 - Connecting the head cable 75
Step 29 - Attaching the head cable 76
Step 30 - Securing the swing arm clip 77
Step 31 - Securing the head cable 77
Step 32 - Installing the Head cable clip 78
Step 33 - Connecting the head cable: parts preparation 78
Step 34 - Inserting the zip ties 79
Step 35 - Connecting the head cable 79
Step 36 - Securing the cables 80
Step 37 - Haribo time! 80
Step 38 - INDX PTFE holders: parts preparation 81
Step 39 - Installing the PTFE-holder-left 81
Step 40 - Installing the PTFE-holder-right 82
Step 41 - Side filament sensors: parts preparation 82
Step 42 - Inserting the sleeves 83
Step 43 - Inserting the collets 83
Step 44 - Installing the magnets 84
Step 45 - Assembling the FS: parts preparation I 84
Step 46 - Assembling the FS: parts preparation II 85
Step 47 - Inserting the steel balls 85
Step 48 - Attaching the magnets 86
Step 49 - Assembling the FS-top left 86
Step 50 - Covering the FS - left 87
Step 51 - Assembling the FS-top right 87
Step 52 - Covering the FS - right 88
Step 53 - PTFE tubes - left side: parts preparation 88
Step 54 - Preparing the FS - left 89
Step 55 - Mounting the FS - left 89
Step 56 - Connecting the PTFE tube - left 90
Step 57 - PTFE measurement: parts preparation 91
Step 58 - Attaching the PTFE tubes - left 92
Step 59 - Measurement info 92
Step 60 - Inserting the PTFE tubes (position 1,2) 93
Step 61 - Inserting the PTFE tubes (position 3,4) 93
Step 62 - PTFE tubes - right side: parts preparation 94
Step 63 - Preparing the FS - right 94
Step 64 - Mounting the FS - right 95
Step 65 - Connecting the PTFE tube - right 95
Step 66 - Attaching the PTFE tubes - right 96

Step 67 - Inserting the PTFE tubes (position 8,7) 96
Step 68 - Inserting the PTFE tubes (position 5,6) 97
Step 69 - Connecting the filament sensor cable 97
Step 70 - Haribo time! 98
Step 71 - Done 98
5. Spoolholders & Tool dock assembly 99
Step 1 - Tools necessary for this chapter 100
Step 2 - Removing the side cover - right 101
Step 3 - Side handle: parts preparation 101
Step 4 - Installing the side handle 102
Step 5 - Nozzle cleaner: parts preparation I. 102
Step 6 - Nozzle cleaner: parts preparation II. 103
Step 7 - Assembling the Wiper-lock 103
Step 8 - Securing the Wiper-lock 104
Step 9 - Installing the Wiper-adjuster 104
Step 10 - Inserting the wiper blocks 105
Step 11 - Mounting the wiper assembly 105
Step 12 - Dock fan cable: parts preparation 106
Step 13 - Attaching the dock fan cable 106
Step 14 - Leading the dock fan cable I. 107
Step 15 - Leading the Dock fan cable 107
Step 16 - Securing the zip ties 108
Step 17 - Securing the zip ties II. 108
Step 18 - Electronics covers: parts preparation 109
Step 19 - Securing the cables 109
Step 20 - Wiring check 110
Step 21 - Covering the xBuddy box 110
Step 22 - Installing the rear cover 111
Step 23 - Mounting the side panel: Parts preparation 111
Step 24 - Mounting the right side panel 112
Step 25 - Bottom puck holders: parts preparation 113
Step 26 - Assembling the bottom puck holders 113
Step 27 - Removing the screws - left 114
Step 28 - Mounting the bottom puck holders - left 114
Step 29 - Securing the front puck holder bottom - left I. 115
Step 30 - Securing the front puck-holder bottom - left II. 115
Step 31 - Securing the rear puck holder bottom - left I. 116
Step 32 - Securing the rear puck holder bottom - left II. 117
Step 33 - Top puck holders: parts preparation 117
Step 34 - Assembling the puck holder top 118
Step 35 - Removing the top nylon rivets - left 118
Step 36 - Mounting the front puck holder top - left 119
Step 37 - Securing the front puck holder top - left 120
Step 38 - Mounting the rear puck holder top - left 121
Step 39 - Securing the rear puck holder top - left 122
Step 40 - Removing the screws - right 122
Step 41 - Mounting the bottom puck holders - right 123
Step 42 - Securing the front Puck-holder bottom - right I. 123
Step 43 - Securing the front Puck-holder bottom - right II. 124
Step 44 - Securing the rear Puck-holder bottom - right I. 124
Step 45 - Securing the rear Puck-holder bottom - right II. 125
Step 46 - Tilting the printer 125
Step 47 - Finishing the rear puck holder bottom - left I. 126
Step 48 - Finishing the rear puck holder bottom - left II. 126

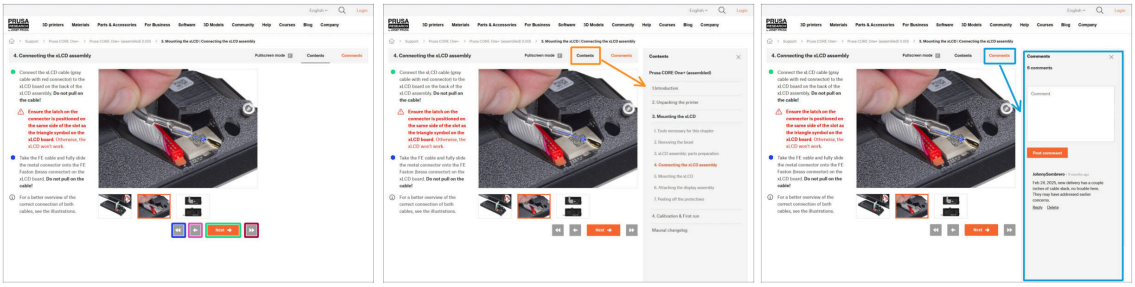
Step 49 - Finishing the front puck holder bottom - left I. 127
Step 50 - Finishing the front puck holder bottom - left II. 127
Step 51 - Finishing the rear puck holder bottom - right I. 128
Step 52 - Finishing the rear puck holder bottom - right II. 128
Step 53 - Finishing the front puck holder bottom - right I. 129
Step 54 - Finishing the front puck holder bottom - right II. 129
Step 55 - Mounting the front puck holder top - right 130
Step 56 - Securing the front puck holder top - right 131
Step 57 - Mounting the rear puck holder top - right 131
Step 58 - Securing the rear puck holder top - right 132
Step 59 - Dock fan: parts preparation 132
Step 60 - Assembling the dock fan 133
Step 61 - Attaching the Dock fan splitter board 133
Step 62 - Attaching the dock fan 134
Step 63 - Securing the dock fan 134
Step 64 - Haribo time! 135
Step 65 - Tooldock: parts preparation 135
Step 66 - Assembling the tool holder 136
Step 67 - Installing the tool holders 136
Step 68 - Nozzle seal holder: parts preparation 137
Step 69 - Assembling the nozzle seal 137
Step 70 - Assembling the Nozzle-seal-holder 138
Step 71 - Installing the nozzle parking plates 138
Step 72 - Ventilation lever: parts preparation 139
Step 73 - Assembling the ventilation lever 139
Step 74 - Top cover: parts preparation I. 140
Step 75 - Top cover: parts preparation II. 140
Step 76 - Attaching the hinge covers 141
Step 77 - Attaching the grill 141
Step 78 - Attaching the left cover lock 142
Step 79 - Attaching the right cover lock 142
Step 80 - Top cover back: parts preparation 143
Step 81 - Attaching the top cover back 143
Step 82 - Attaching the hinge base - left 144
Step 83 - Attaching the hinge base - right 144
Step 84 - Attaching the top cover I. 145
Step 85 - Attaching the top cover II. 145
Step 86 - INDX Nozzle tool: parts preparation 146
Step 87 - Attaching the tooldock 146
Step 88 - Securing the tooldock 147
Step 89 - Attaching the LED panel 147
Step 90 - Optional: Installing the Buddy3D Camera 148
Step 91 - Connecting the INDX Nozzle tools (positions 1–4) 148
Step 92 - Docking the tools (positions 1–4) 149
Step 93 - Connecting the INDX Nozzle tools (positions 5–8) 149
Step 94 - Docking the tools (positions 5–8) 150
Step 95 - Checking the tubes 150
Step 96 - Offset sensor cover: parts preparation 151
Step 97 - Covering the offset sensor 151
Step 98 - Door panel: parts preparation 152
Step 99 - Mounting the door panel 152
Step 100 - Attaching the stickers: Parts preparation 153
Step 101 - Attaching the upgrade sticker 153
Step 102 - Attaching the SN sticker 154
Step 103 - Haribo time ! 154

Step 104 - That's it 155
6. Preflight check 156
Step 1 - Installing the spoolholder: Parts preparation 157
Step 2 - Locking the spoolholders 157
Step 3 - Telescopic spoolholders 158
Step 4 - Attaching the print sheet 158
Step 5 - Firmware update 159
Step 6 - Turning on the printer 159
Step 7 - Setting up the printer: Intro 160
Step 8 - Setting up the printer: Network setup 160
Step 9 - Wizard: Intro 161
Step 10 - Wizard: Door sensor calibration 161
Step 11 - Wizard: Belt tensioning 162
Step 12 - Wizard: Dock calibration I. 162
Step 13 - Wizard: Dock calibration II. 163
Step 14 - Wizard: Dock calibration III. 163
Step 15 - Wizard: Loadcell Test 164
Step 16 - Wizard: Fan test 164
Step 17 - Wizard: Tool offsets calibration 165
Step 18 - Wizard: Nozzle cleaner calibration 165
Step 19 - Wizard: Nozzle cleaner calibration Z/X-axis 166
Step 20 - Wizard: Nozzle cleaner calibration Y-axis 167
Step 21 - Wizard: Filament sensors calibration 168
Step 22 - Wizard complete 168
Step 23 - Haribo time! 169
Step 24 - Prusa knowledge base 169
Step 25 - Give us feedback 170
Step 26 - Join Printables! 170

1. Introduction

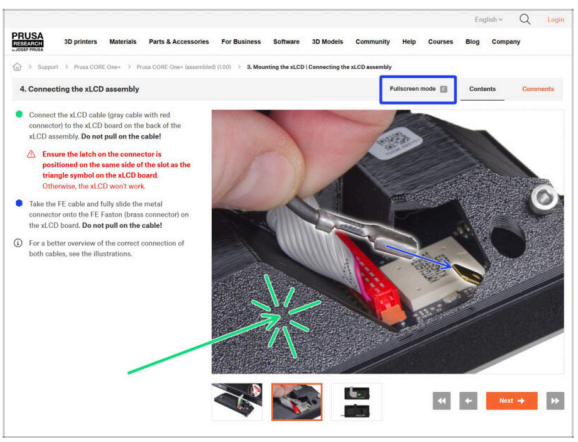


STEP 1 How to navigate through the manual



- Use the graphical navigation buttons in the bottom right corner or the arrow keys on your keyboard:
  - **Play backward button / Up arrow key** - Moves to the previous 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.
  - **Next button / Right arrow key** - Moves to the next image, or to the next step if it's the last image in the 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 2 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 3 Before you begin



If you plan on installing the **Prusa CORE One+ Gen 2 upgrade** along with the Prusa INDX conversion, follow the instructions here: **Conversion of the PRUSA INDX Core One to Gen 2**

The **INDX Conversion kit is compatible with the Prusa CORE One and CORE One+.** This guide uses the CORE One+; some disassembly steps may vary between models.

- The required steps depend on your printer's current state:
  - **If your CORE One+ is brand new** and still unboxed, first follow the **CORE One+ Unpacking & First run guide** before installing the INDX conversion.
  - **If you already use the CORE One+** and have purchased the INDX Conversion kit without the Gen 2 upgrade, you can continue with this guide.

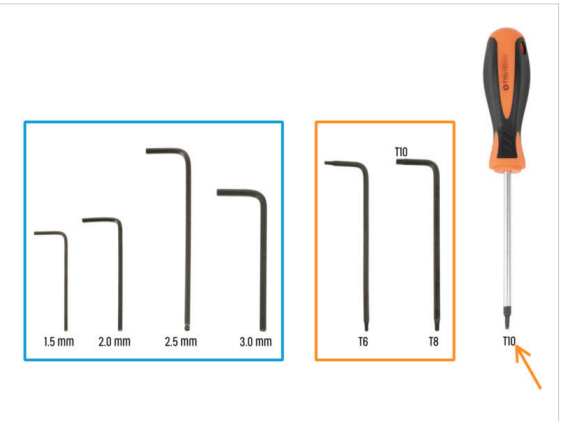
Do not discard any removed parts or fasteners until instructed. Some parts will be reused later in the upgrade.

This guide is for both the 4-tool and the 8-tool PRUSA Core One/+ INDX conversion kit.

- Some photos may show the 8-tool version. This does not affect the conversion process for the 4-tool version.

STEP 4 All the required tools are included





- **Tools required for this upgrade:**

Use the tools originally included with your CORE One+ / CORE One printer.

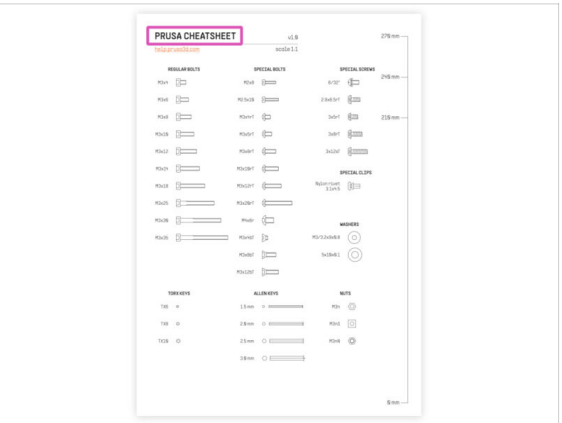
- Needle-nose pliers (1x)
- Philips (PH2) screwdriver (1x)
- Universal wrench (1x)
- Allen key set
- Torx key set

The **T10 screwdriver is included only with kit versions** and may not be available with fully assembled printers.
It is not required, but may be more convenient in some steps.

- We also recommend printing out the community-made **Snap-rivet-remover**

STEP 5 Labels guide





- All the boxes and bags including parts for the build are labeled.
- The labels include the list of contents and part count.
- You can download a **Cheatsheet** with 1:1 fastener drawings from our site prusa.io/C1-INDX-cheatsheet. Print it at 100 % on A4 paper, don't rescale it, otherwise, it won't work.

For PRUSA veterans: Fasteners are divided into individual bags according to its type. Not into packages for individual chapters, as it was with previous printers.

The instructions will specify the package for each part, with the exception of fasteners, which are always located in the Fasteners package.

STEP 6 Spare bag



- Spare fasteners are included in each bag of fasteners. The amount of spare is always included in the total number shown on the bag.
- Similarly, some parts may include one extra piece in the same bag.

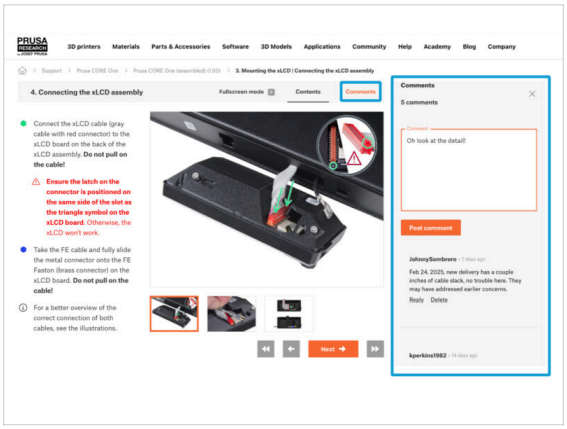
STEP 7 Printed parts - versioning

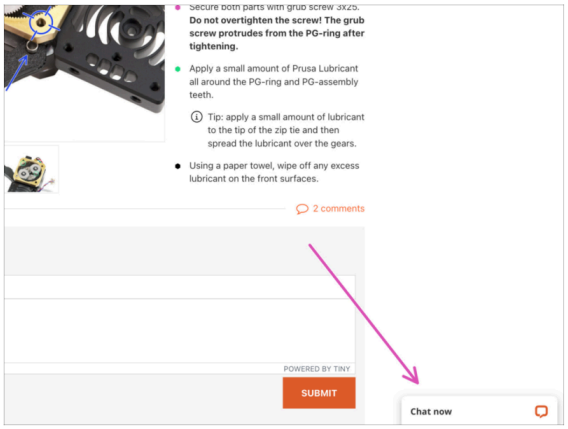


- Most of the 3D printed parts are marked with their version.
  - **E, F and Gx series** (e.g. E1) - those parts are printed on Prusa Research farm and are distributed with the kit.
  - **R, S and Tx series** (e.g. R1) - those parts are available for download at https://www.printables.com/model/1758233-core-one-indx-printed-parts. They are identical to the factory ones.
- The numbers indicate minor revisions that usually involve small design tweaks. A different label in the manual (e.g., a different version shown in photos) does not affect the assembly – all versions are fully compatible.

ⓘ if you have issues while assembling the printer with a specific printed part, find the label and share it with our support team.

STEP 8 We are here for you!





- Lost in the instructions, missing screw or cracked printed part? **Let us know!**
- You can contact us using the following channels:
  - Using comments under each step.
  - Using our 24/7 live chat here at help.prusa3d.com
  - Writing an email to info@prusa3d.com

STEP 9 Pro tip: inserting the nuts

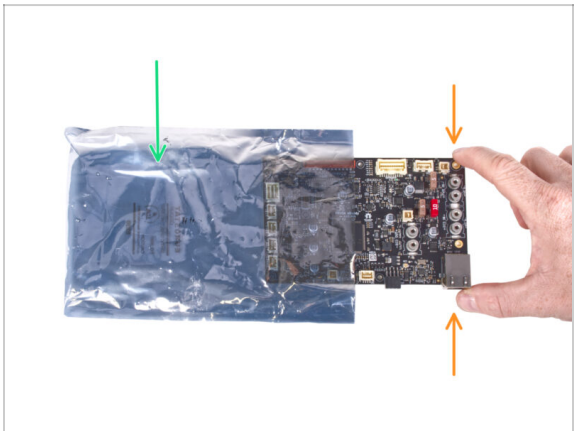




- 3D printed parts are very precise, however, there still might be a tolerance in the printed part and the same goes for the size of the nut.
- Therefore it might happen, that the nut won't fit easily in or might be falling out. Let's see, how to fix it:
  - **Nut won't fit in**: use a screw with a thread along its entire length (typically: M3x10, M3x18) and screw it from the opposite side of the opening. While tightening the screw, the nut will be pulled in. Remove the screw afterwards.
  - **Nut keeps falling out**: Use a piece of tape to fix the nut temporarily in place, as soon as you insert the screw in, you can remove the tape. *Using glue isn't recommended as it can partly reach into the thread and you won't be able to tighten the screw properly.*
- Every time we recommend using the "screw pulling technique", you will be reminded with Joe's avatar ;)

ⓘ Parts in the pictures are used as an example.

STEP 10 Electronics protection (ESD)



⚠ **WARNING**: Make sure to **protect the electronics against electrostatic discharge (ESD)**. Always unpack the electronics right before you need them!

- Here are some **tips to prevent damage to the electronics:**
  - **Keep the electronics inside the ESD bag** right until you are asked to install them.
  - **Always touch the sides of the board only** while handling it. Avoid touching the components on the surface.
  - **Before you touch the electronics** use any conductive (metal) structure nearby to neutralize the possible static charge from your hands.
  - Be extra cautious **in rooms with carpets**, which are often a source of electrostatic energy.
  - Clothes made of wool or certain synthetic fabrics can easily gather static electricity too. It is safer to wear cotton clothing for the assembly.

STEP 11 Optional CORE One+ Gen 2 upgrade



The **Prusa INDX Conversion Kit for CORE One+** includes parts for the optional **CORE One+ Gen 2 upgrade**.

- **The Gen 2 upgrade is not required** for the Prusa INDX upgrade.
- If you want to install the Gen 2 parts, use the companion article below. It tells you when to switch between this guide and the CORE One+ Gen 2 Upgrade guide.
  - **Conversion of the PRUSA INDX Core one to Gen 2**
- **We recommend keeping the companion article open throughout the assembly.**

STEP 12 Removing the MMU3



If your printer is equipped with the MMU3, it **must be removed before continuing**.

This step applies to both the MMU3 **Lite** (left) and the MMU3 **Enclosed** (right).

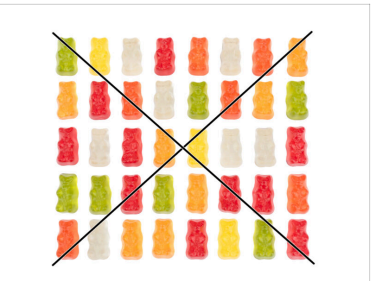
Turn off the printer and disconnect it from the power.

- To remove the MMU3, follow the MMU3 assembly guide in reverse order. The guide is available on the MMU3 product page prusa.io/mmu3.
- Once the MMU3 has been removed, return to this guide and continue with the next step.

STEP 13 Reward yourself







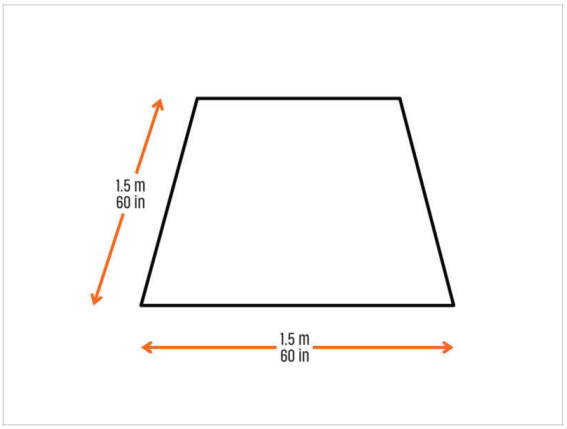
- Converting your CORE One+ to the INDX CORE One+ is a rewarding experience. After finishing each chapter, reward yourself. **There is a bag of Haribo bears in the box just for that!**
- Do not eat all the bears before you start or at once! Not following instructions will have serious consequences. We are currently assembling the Prusa Haribo tactical squad for this matter.
- After years of scientific research, we came up with a solution. **Throughout the guide, we will tell you exactly how many bears to consume.**
- Eating an incorrect amount than prescribed in the manual might lead to a sudden boost of energy. Please consult a professional in the closest candy store.

⚠ **Cut open** the bag of the Prusa Haribo carefully so the gummy bears don't spill onto the table. This step is very important!

⚠ **Hide the Haribo for now!** From our experience, an unattended bag with sweets might suddenly disappear. This phenomenon is confirmed by multiple cases all around the world.

STEP 14 Prepare your desk





- **Clear your workspace.** Make sure you have enough room. A nice clear flat workbench will get you the results you are aiming for.
- **Let there be light!** Make sure you are in a well-lit environment. Another lamp or even an extra flashlight will probably come in handy.
- Prepare something to contain the plastic bags and the removed packing materials so you can recycle them afterwards. Make sure there are no important parts being discarded.
- A minimum working space of 1.5 × 1.5 meters (60 × 60 inches) is recommended.

⚠ **We highly recommend placing a soft pad on your workbench**. Some sheet metal parts have sharp edges that could scratch the surface.

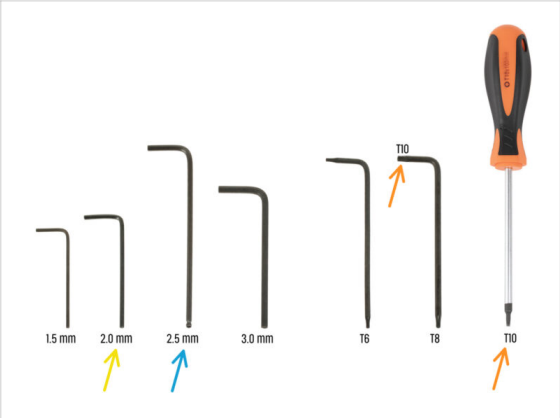
ⓘ You can use a piece of cardboard as a protective pad.

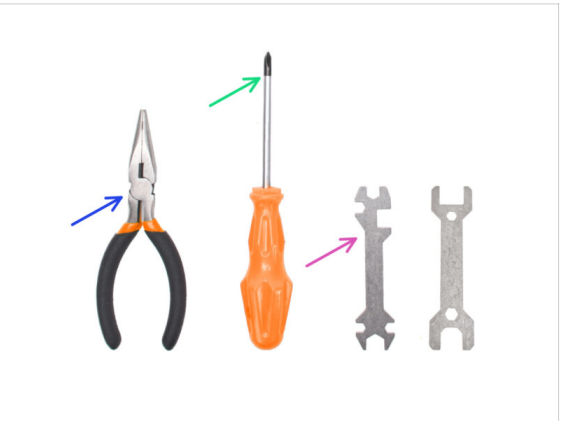
- Let's start with chapter **2. Printer preparation & dissasembly**.

2. Printer preparation & disassembly



STEP 1 Tools necessary for this chapter



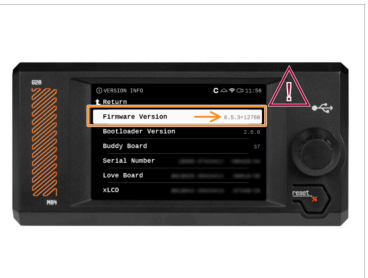


- **For this chapter, please prepare:**
- 2.0mm Allen key
- 2.5mm Allen key
- T10 key / screwdriver
- Needle-nose pliers *or flush cutters for cutting zip ties*
- PH2 screwdriver
- Universal wrench

STEP 2 Important: Update the firmware







⚠ **Complete this step before disassembling the printer.**

Before you begin, make sure your printer is running **firmware version 6.5.3** or newer.

- On the printer display, go to ***Info*** -> ***Version Info*** -> ***Firmware Version*** to check your current version.
  - If your printer is already running **firmware 6.5.3 or newer**, continue to the next step.

⚠ If your **firmware is older**, update it before starting the upgrade.

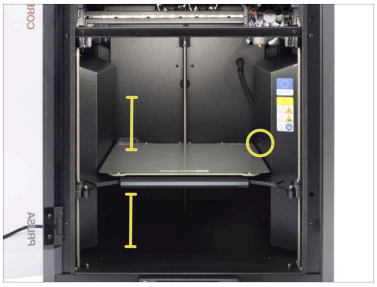
  - Follow our dedicated firmware update guide for detailed instructions **How to update firmware**.

- Once the firmware update is complete, return to this guide and continue.

STEP 3 Moving the Z-axis







ⓘ Before you begin, move the heatbed to an accessible position.

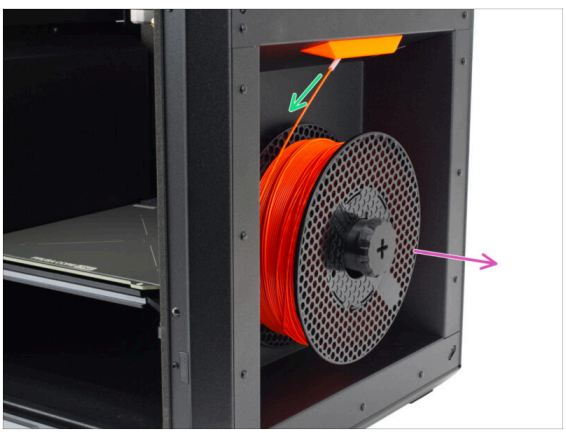
⚠ During this step, **keep the printer door closed** and do not reach inside.

- In the printer menu, go to ***Control -> Auto Home***.
- After Auto Home, move the heatbed down via ***Control -> Move Axis -> Move Z*** until the highlighted screws and the underside of the heatbed are accessible (minimum **200 mm**).

  ⓘ This ensures both areas will be comfortably accessible during the procedure, as they will need to be handled later in the manual.

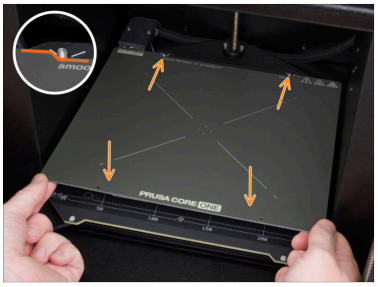
STEP 4 Unloading filament





- **Make sure no filament is loaded in the printer.**
- Unload the filament. Visit the menu **Filament** and select **Unload filament**.
- Unload the filament from the printer.
- **Remove the filament spool** from the printer.

STEP 5 Powering off & protecting the printer


⚠ Before you begin, make sure the **printer has cooled down** to ambient temperature.

- Turn the printer off using the switch on the back.
- Disconnect the printer from power.
- Remove the steel sheet.
- Place an empty cardboard box (e.g., a Prusament box) on the heatbed to protect it in case any parts fall.
- **Remove the USB drive** to prevent damage while handling the printer.

STEP 6 Disconnect the Buddy3D camera



- If your printer is equipped with a Buddy3D camera, remove it before starting this procedure.

ⓘ The Buddy3D camera is magnetically attached.

  - Disconnect the cable.
  - Remove the camera.

- Place the camera in a safe location during the procedure. We recommend covering the lens with a protective cap that was included with the camera.

STEP 7 Do not discard removed parts



⚠ **Do not discard any printer parts** during this procedure.

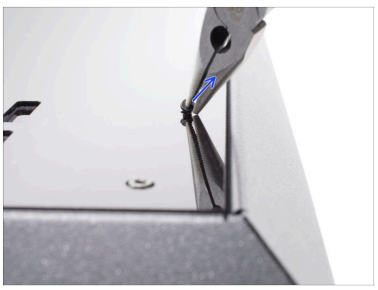
- **Some of the removed printer parts will be reused later** and are listed at the end of this chapter in the Parts recap steps.
- Regarding the fasteners, **we recommend keeping all removed screws.**

  ⓘ Some of the removed screws will be reused during the conversion. We recommend labeling these as you set them aside.

STEP 8 Removing the top nylon rivets







- There are four nylon rivets on the top panel that secure it. Remove these nylon rivets as follows:
- Using needle-nose pliers, carefully grasp the rivet head with the tip of the pliers and pull it out.

  ⓘ You can also use the previously mentioned **Core-one-snap-rivet-remover**

⚠ Be careful not to damage the top panel.

- If the lower part of a rivet remains in the panel, grasp it with pliers and remove it as well.

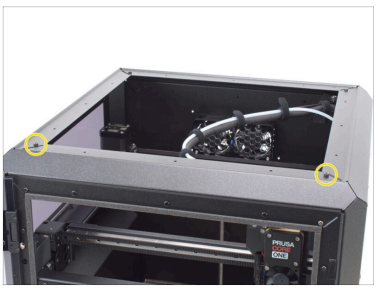
STEP 9 Removing the top panel



- Remove the top panel from the printer.

  You will not need the top panel for this upgrade.

STEP 10 Removing the top profile

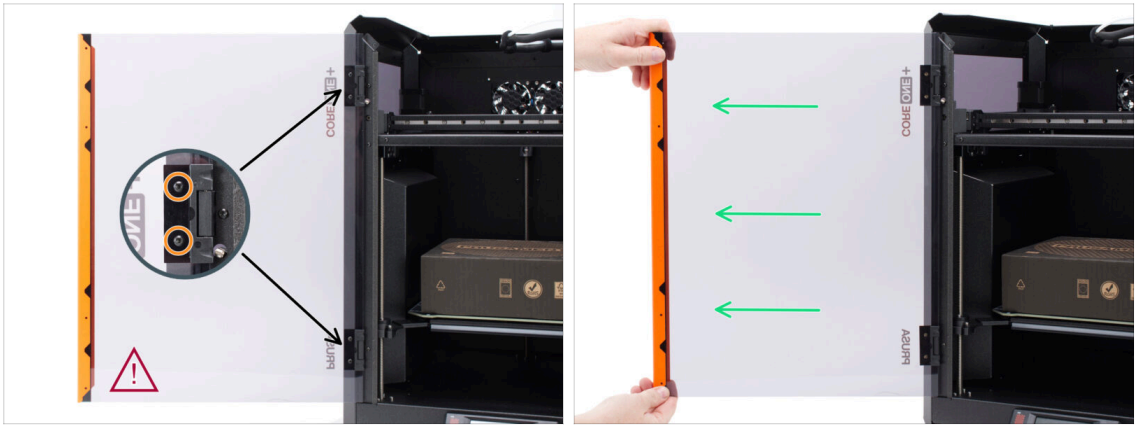






- Using the 2.5mm Allen key, remove the two M3x4 screws from the top front panel.
- From the front, use a T10 key to remove the two M3x4rT screws.
- Carefully remove the top profile from the printer.

STEP 11 Removing the door



We highly recommend that you remove the door. This will make moving and turning the printer a lot easier and safer during the INDX conversion.

- Loosen and remove two M3x5rT screws securing the door panel in both hinges.

It is essential to **hold the door panel securely** while loosening the screws to prevent it from falling.

Start removing the screws from the lowest.

- Carefully slide the door panel out of the hinges.
- Place the door panel and the four screws in a **clean and safe area** to avoid any damage.

Ensure that the shaft that is inside the hinge does not fall out. If the shaft falls out, insert it back in, or set it aside along with the hinge part. We will mount these back on at the end of the assembly.

STEP 12 Accessing the electronics

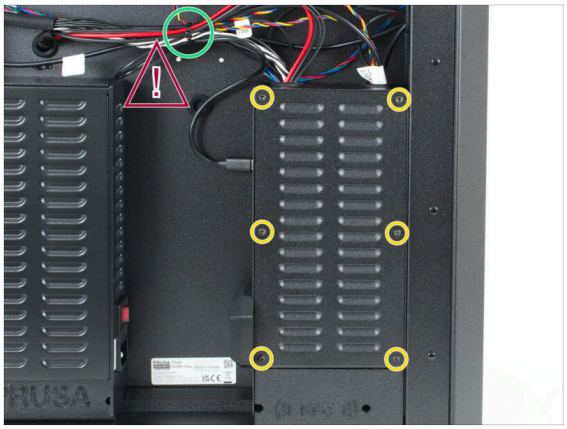


- On the inside of the printer, remove the two M3x4rT screws holding the back cover.
- On the back of the printer, slide the center cover downwards.

If it's difficult to move, use a screwdriver as a lever through the opening to assist.

- Ensure the four hooks on top of the cover have disengaged from the metal chassis.
- Remove the cover from the printer.

STEP 13 Accessing the buddy board





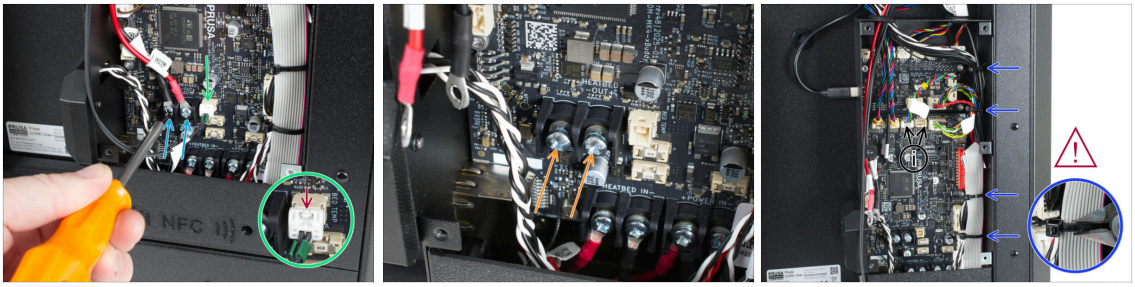
- Use the needle-nose pliers to squeeze the head of the zip tie to safely remove it.

  If available, use the flush cutters to cut the zip tie securing the cable harness.

⚠ Avoid cutting the cables.

- Unscrew all six M3x4rT screws securing the electronics sheet (xBuddy box cover).
- Slide the xBuddy box cover out of the electronics box and remove it from the printer.

STEP 14 Unplugging the cable I.



- Using a PH2 screwdriver, unscrew the two 6 32 screws and disconnect the heatbed power cables from the xBuddy.-32 screws and disconnect the heatbed power cables from the xBuddy.
  - Pro tip: After disconnecting the cables, loosely thread both screws back in by at least three turns so they are not lost.
- Disconnect the heatbed thermistor cable from the xBuddy board.

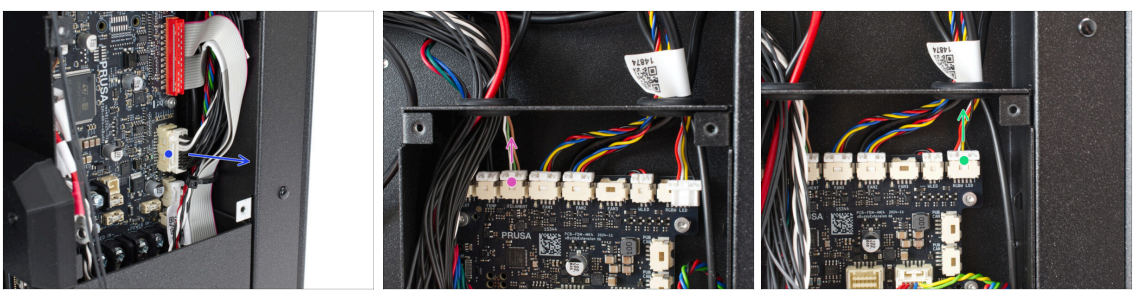
  ⚠ The cable connector has a safety latch. It is necessary to **press the latch before disconnecting** the cable.
- Carefully cut the zip ties along the right side of the xBuddy box.

  ⚠ **Avoid cutting any cables!** To be sure, you can cut through the head of the zip tie.

  Cable ties can be cut using flush cutters, if available.

ⓘ Note the possible difference between our photo and your printer. The Z-motor cable can be plugged into either of the connectors.

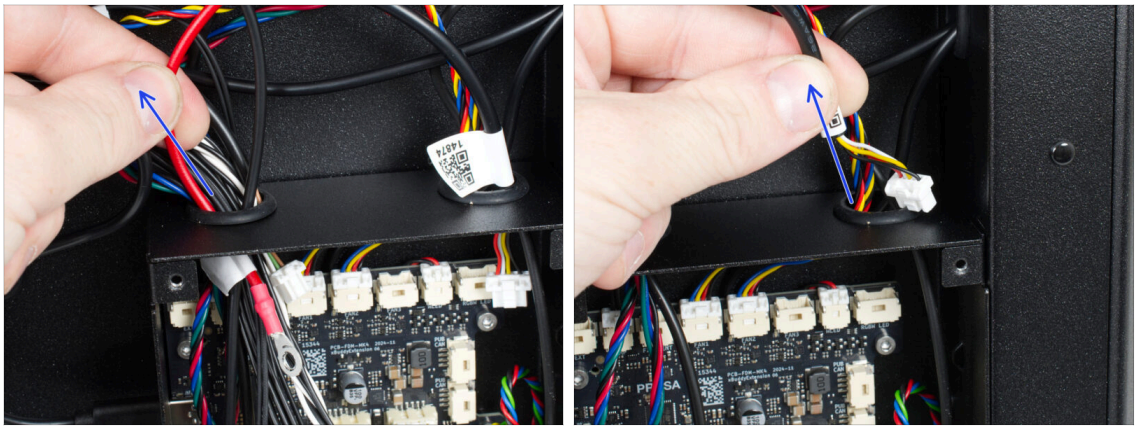
STEP 15 Unplugging the cables II.



⚠ The cable connector has a safety latch. It is necessary to **press the latch before disconnecting** the cable.

- Disconnect the Nextruder main cable from the xBuddy board.
- Disconnect the side filament sensor from the xBuddy extension board.
- Disconnect the RGB LED cable from the xBuddy extension board.

STEP 16 Removing the cables



- Route the disconnected cables out of the xBuddy box through the corresponding openings at the top.

  ⚠ **Do not pull on the cables** if you feel any resistance.

  ⓘ The Nextruder main cable may pass through either the right or left opening, depending on when the printer was assembled.

  - Be careful not to remove the grommets - but don't worry, they can be easily reinserted.

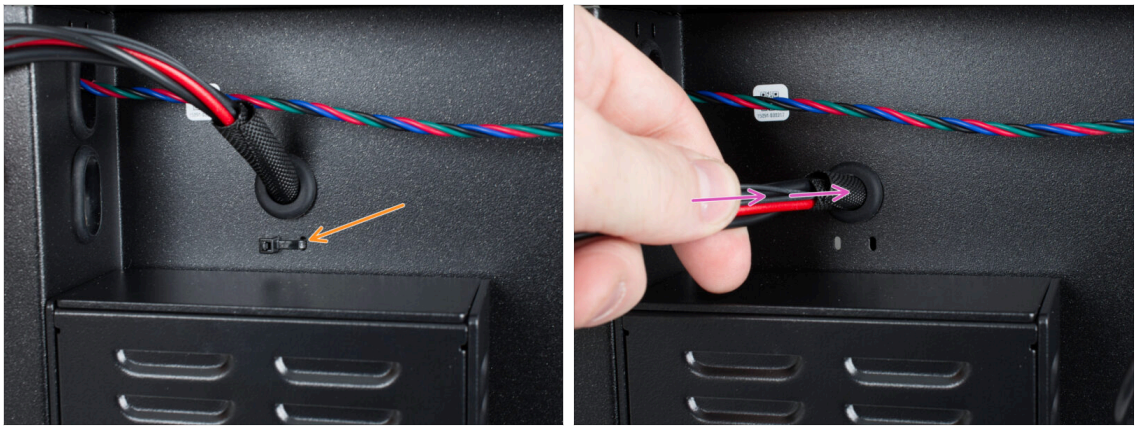
STEP 17 Pushing the cables in



- Slide the upper grommet slightly out of the opening to prevent it from falling into the printer while routing the cables.
- Route the Nextruder main cable through the upper oval opening completely into the printer.
- Reinsert the grommet into the oval opening.
- Route the side filament sensor cable through the lower oval opening into the printer.

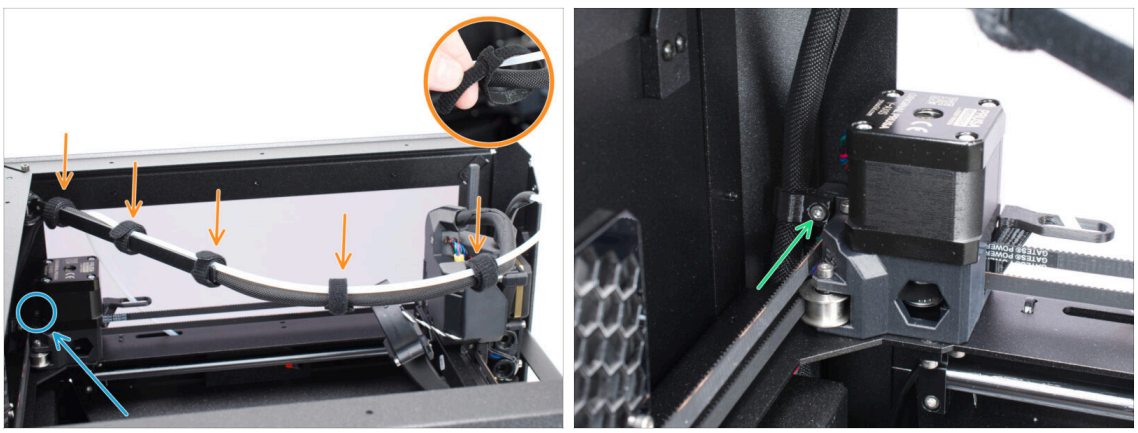
  ⓘ Some of our printers do not have the grommet on the lower opening. This does not affect the process.

STEP 18 Guiding the heatbed cables in



- Cut and remove the zip tie securing the heatbed cable bundle.
- Guide the heatbed cable bundle into the printer.
- Leave all loosened cables freely inside the printer. You will return to them later.

STEP 19 Releasing the main cable



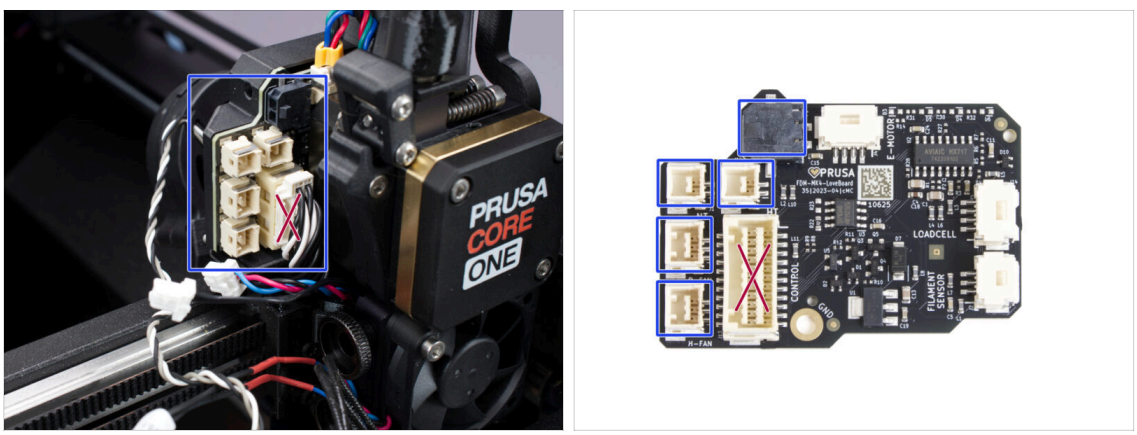
- Turn the printer so that its left side faces you (the side without the spool holder).
- Release the five cable straps.
- Focus on the area behind the Y-axis motor.
- Using a 2.5 mm Allen key, loosen the M3 screw securing the cable clip.
  - No need to remove the screws from the part. Let the Nextruder main cable hang freely together with the cable clip.

STEP 20 Removing the LoveBoard cover



- 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.
- Unlock the Idler-swivel.
- Open the idler assembly fully.

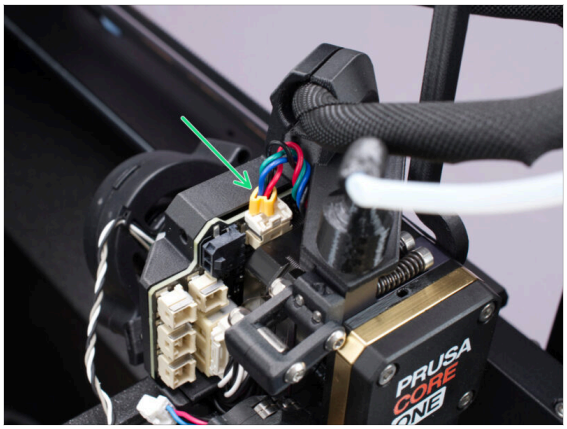
STEP 21 Disconnecting the Nextruder cables - left

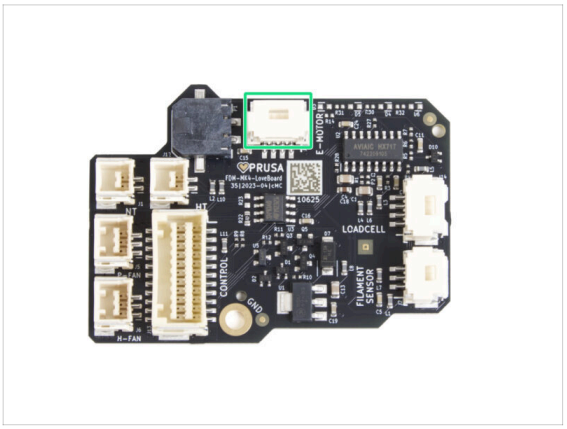


⚠ Each connector has a safety latch. **It is necessary to press the latch before disconnecting.** Otherwise, the connector may get damaged.

- Disconnect all cables on the left side of the LoveBoard.
- Do not disconnect the Nextruder main cable connector.

STEP 22 Disconnecting the Nextruder cables - top

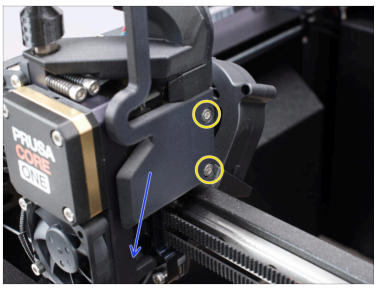


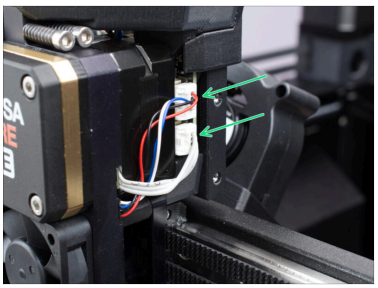


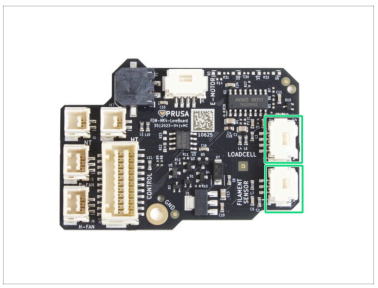
⚠ Each connector has a safety latch. It is necessary to **press the latch before disconnecting**. Otherwise, the connector may get damaged.

- Disconnect the extruder motor cable.

STEP 23 Disconnecting the Nextruder cables - right





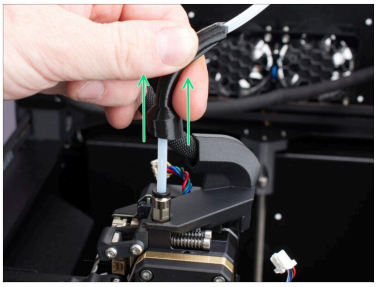


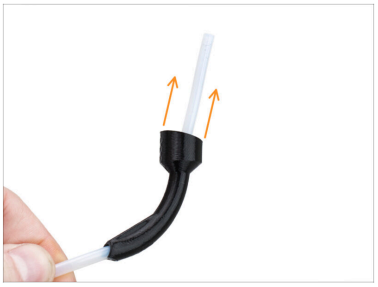
- Using the Allen key, remove two M3x6 screws securing the right cover on the Nextruder.
- Remove the cover.

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

- Disconnect both cables from the right side of the LoveBoard.

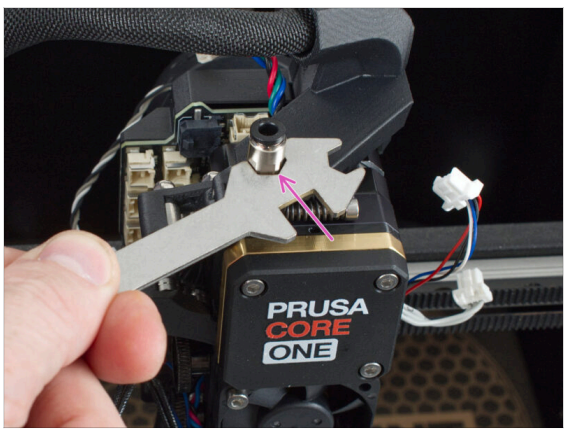
STEP 24 Disconnecting the PTFE tube

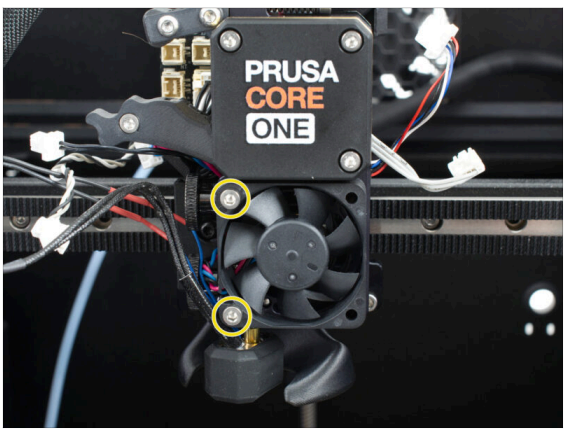




- Slide the bowden-bend over the fitting in the Nextruder.
- Press the black collet in the fitting down, preferably using two fingers.
- Pull the PTFE tube out of the fitting.
- Remove the bowden-bend from the PTFE tube.

STEP 25 Removing the Nextruder fitting

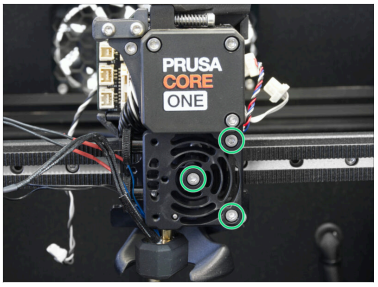


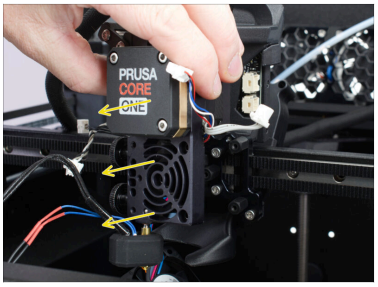


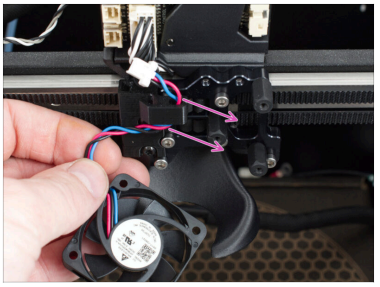
- Using the 8mm cutout on the Universal wrench, remove the M5-4 fitting.
- Using the Allen key, remove two M3x18 screws securing the heatsink fan.

After being released, the heatsink fan will likely hang on the cable. Leave it as it is for now.

STEP 26 Removing the Nextruder





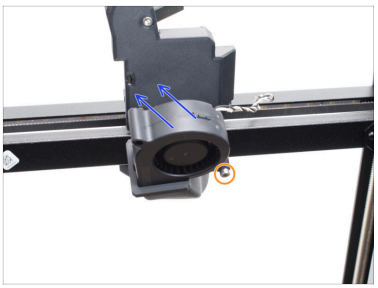
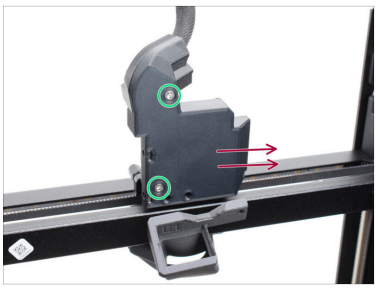
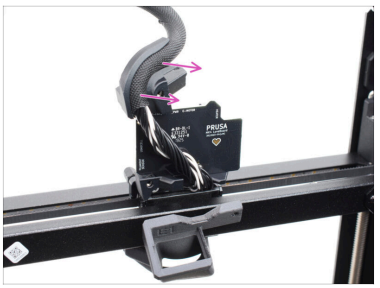


- Remove three M3x10 screws securing the Nextruder assembly to the X-axis.

  CAUTION: While loosening the last screw, **hold the Nextruder to prevent it from falling** and damaging the printer.

- Remove the Nextruder assembly from the printer.
- Unhook the heatsink fan cable from the cable hook and remove the fan from the printer.

STEP 27 Removing the print fan

- Focus on the rear X-axis assembly.
- On the back of the print head, remove the M3x25 screw holding the print fan.
- Remove the print fan by lifting it up.

  Set the print fan aside. It will be needed later for the new toolhead.

- Remove the two M3x10 screws holding the cover on the back of the print head.
- Remove the cover.
- Dislodge the extruder main cable from the dedicated groove.

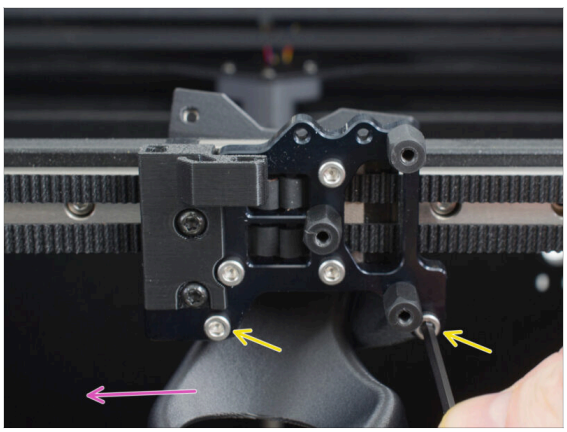
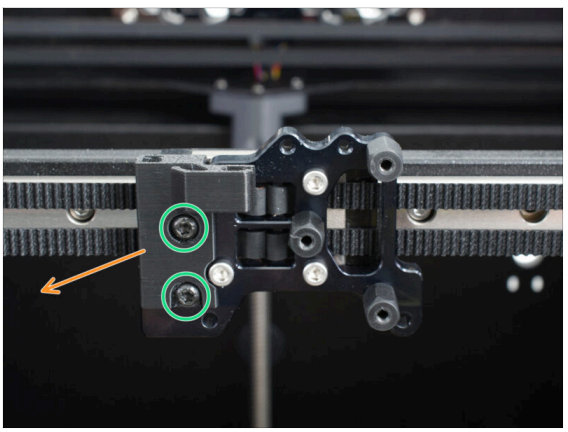
STEP 28 Removing the LoveBoard





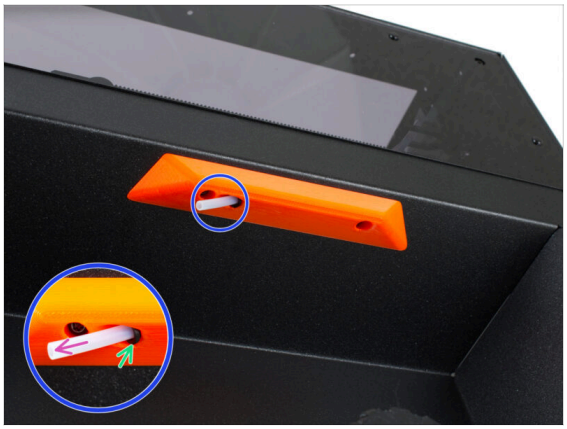
- Release and remove the M3x8rT screw securing the LoveBoard.
- Remove the LoveBoard with the Nextruder main cable completely from the printer.
- Loosen two M3x10 screws in the Loveboard-holder.
- Remove the Loveboard-holder from the printer.

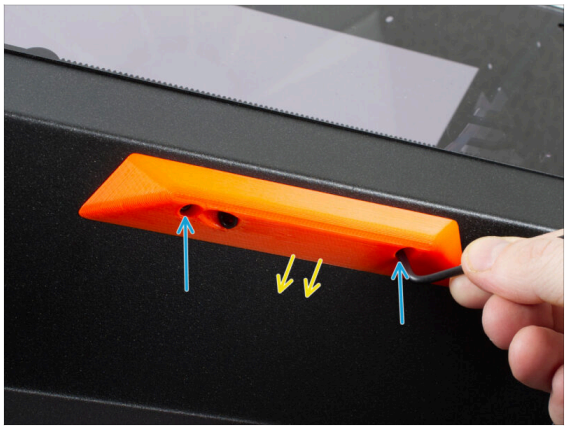
STEP 29 Removing the fan shroud

- Release and remove two M3x10 screws securing the Fan-shroud to the Nextruder holder.
- Remove the Fan-shroud from the printer.
- Using the T10 key, remove two M3x4rT screws mounting the Cable-clip.
- Remove the Cable-clip from the printer.

STEP 30 Removing the side handle





- Take a close look at the input PTFE tube in the handle on the right side panel.
- Push in the collet in the handle.
- Pull out the PTFE tube.
- Using the T10 screwdriver release two M3x8rT screws securing the handle and the filament sensor.
- Remove the handle from the printer.

STEP 31 Removing the side filament sensor





- Shift your focus back inside the printer.
- Carefully cut and remove the zip tie near the PTFE tube.
  - This releases the side filament sensor cable from the underside of the CoreXY frame.
- Grasp the released side filament sensor on the inner side of the right side panel and remove it from the printer.

STEP 32 Removing the spoolholder



- Using the T10 screwdriver, remove the four M3x8rT screws inside the printer securing the spoolholder.

  ⚠ Be careful **not to scratch the heatbed.**

- **While loosening the last screw**, hold the spool holder in your hand and remove it from the printer.

⚠ Place the protective cardboard box **back onto the heatbed.**

STEP 33 Parts recap I.







⚠ **Keep the following parts** for the next steps.

ⓘ Any parts not listed can be set aside.

- Sheet metal back cover (1x)
- xBuddy box cover (1x)
- Print fan (1x)
- Print sheet (1x)
- Cable tie (2x)

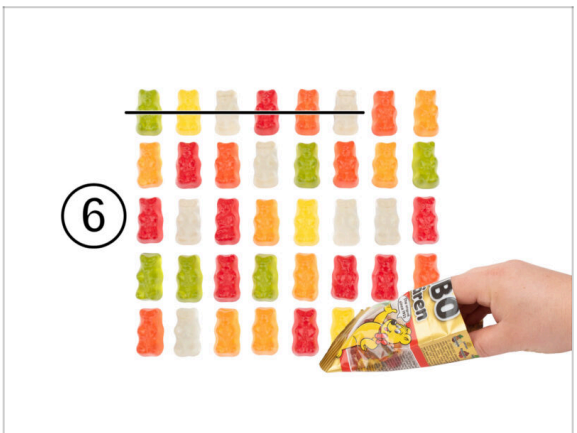
- From the fasteners, we recommend **keeping all removed screws.**

STEP 34 Parts recap II.



- Door panel assembly (1x)

STEP 35 Haribo time!



⚠ Check the number in the circle carefully. It shows exactly how many gummy bears to eat in this step. **Do not eat more.**

- Eat six gummy bears.

STEP 36 Final step

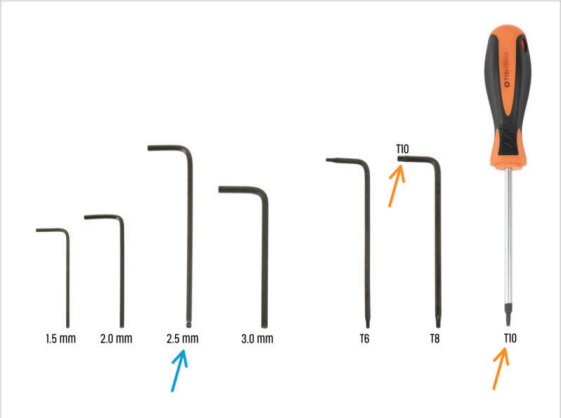


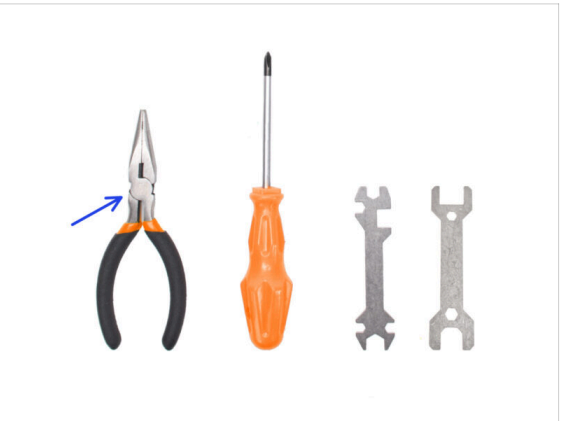
- The printer is now ready for the INDX upgrade.
- Proceed to the next chapter: **3. Z-axis upgrade**.

3. Z-axis upgrade



STEP 1 Tools necessary for this chapter

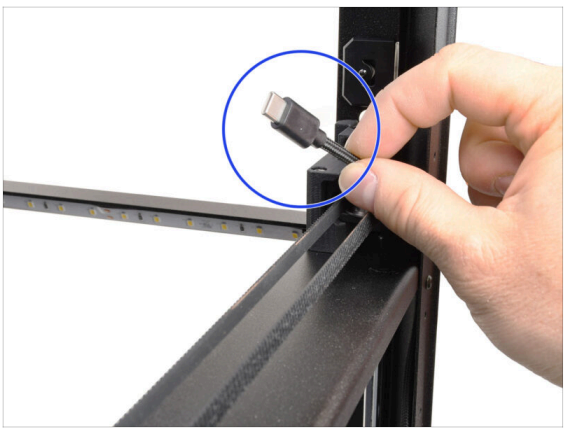




- **For this chapter, please prepare:**
- 2.5 mm Allen key
- T10 key / screwdriver
- Needle-nose pliers *or flush cutters for cutting zip ties*

STEP 2 Optional: Installing the Buddy3D Camera USB-C cable



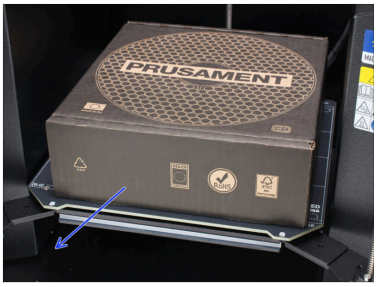


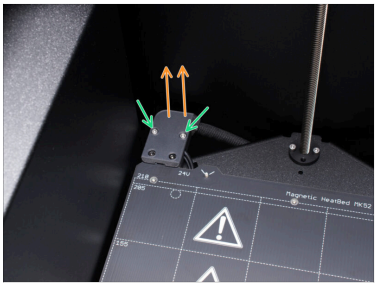
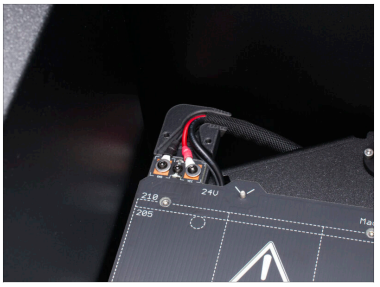
This step applies only if you **purchased the Buddy3D Camera** and plan to install it.

- Now is the right time to install the USB-C cable included with the Buddy3D Camera.
  - To install the cable, follow the dedicated **Buddy3D Camera for CORE One Installation** guide.

Do not connect or mount the camera itself at this stage. This will be done at the end of the assembly.

STEP 3 Removing the heatbed cable cover

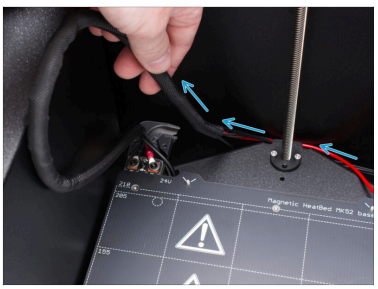
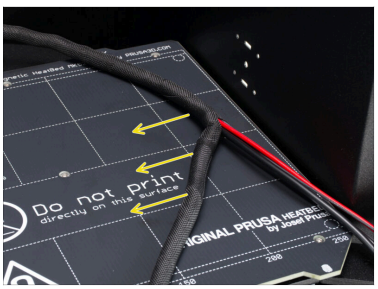


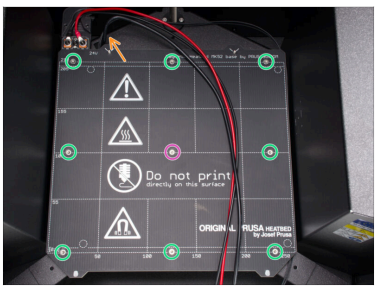



- Temporarily remove the protective cardboard box from the heatbed.
- Focus on the heatbed cable area at the rear left.
- Unscrew two M3x10 screws securing the CORE-One-bed-cable-cover-top.
- Remove the CORE-One-bed-cable-cover-top.

  ⓘ You will no longer need the CORE-One-bed-cable-cover-top. We recommend removing it to avoid confusion with the new part.

STEP 4 Releasing the heatbed

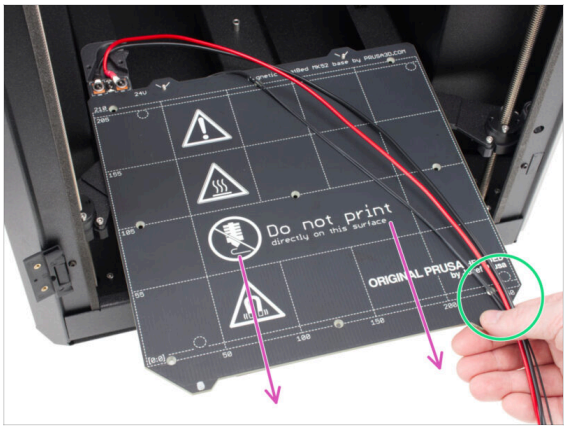


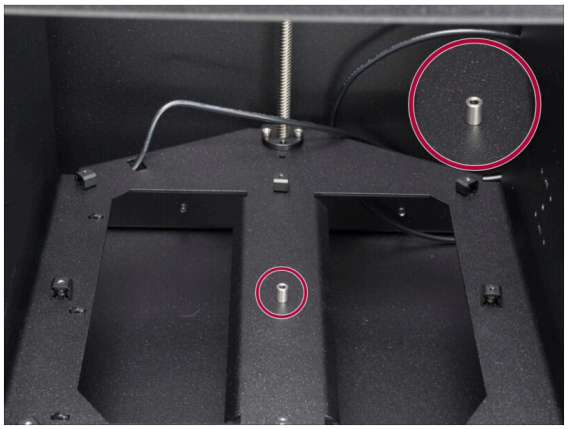
- Pull the heatbed cable bundle out from underneath the heatbed.

  ⚠ Be careful **not to snag the cables**. If you feel resistance, **stop pulling immediately**.
- Remove the textile sleeve from the entire length of the cable bundle.

  ⓘ Set the sleeve aside, you will need this part again later.
- Ensure that the LED cable is removed from the CORE-One-bed-cable-cover-bottom before proceeding.
- Release and remove eight M3x4bT screws securing the heatbed.
- Release and remove the M3x12bT screw in the middle.

STEP 5 Removing the heatbed





- Carefully remove the heatbed out of the printer.
  - Remove it together with the cables **leading from the heatbed**.
  - **Set the heatbed aside in a safe place**, it will be needed again later.

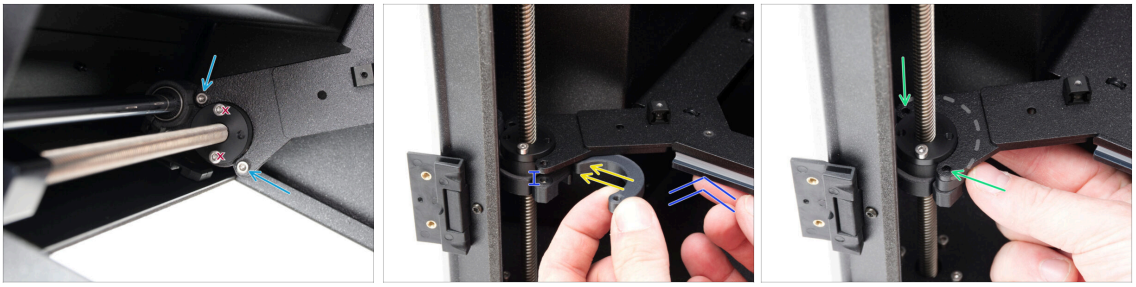
⚠ After removing the heatbed, a **spacer remains loose** on the Z-carriage. **Keep it in a safe place for later use.**

STEP 6 Heatbed spacers: parts preparation



- **For the following steps, prepare:**
- INDX-C1-bed-spacer-rear (1x) *found in the Heatbed bag located in the INDX 4/8T box*
- INDX-C1-bed-spacer-front (2x) *found in the Heatbed bag located in the INDX 4/8T box*
- M3nN nut (2x) *found in the Fasteners 1/2 bag*
- M3x18 screw (4x) *found in the Fasteners 1/2 bag*

STEP 7 Inserting the spacer - left



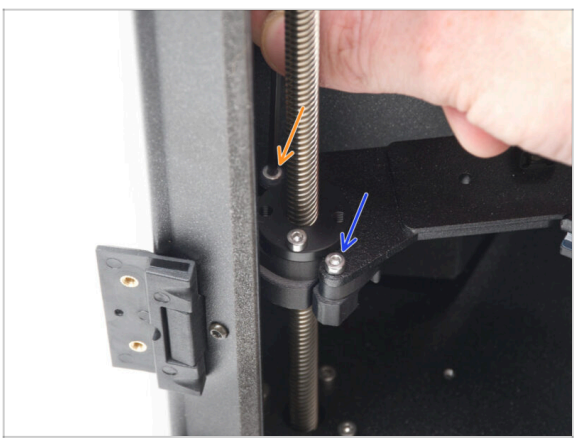
- Focus on the front left Z-axis.
- Remove the two M3x10 screws securing the Z-carriage to the Bed-mount.

  Do not remove the screws from the trapezoidal nut.

There are two M3nN nuts inserted from below in the Bed-mount. **These are not the ones mentioned in the Parts preparation.**

- Gently lift the Z-carriage so that a gap of approximately 8 mm (0.3 inches) is created between it and the bed mount. mm (0.3 inches) is created between it and the bed mount.
- Insert the Bed-spacer-front into the gap.
- Position the part so it fits around the bed mount, then align the holes.

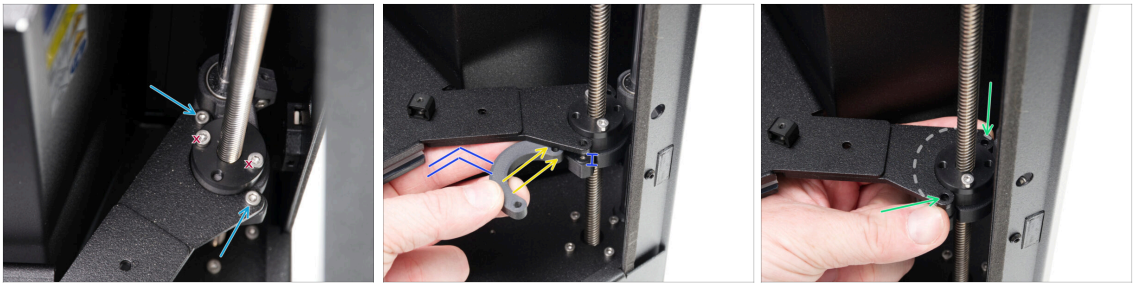
STEP 8 Securing the bed spacer - left



Ensure that the two M3nN nuts already inserted into the Bed-mount from below do not fall out.

- Secure the spacer with two M3x18 screws.
  - Tighten the inner screw first.
  - Then tighten the outer screw.

STEP 9 Inserting the spacer - right



- Focus on the front right Z-axis.
- Remove the two M3x10 screws securing the Z-carriage to the Bed-mount.

  Do not remove the screws from the trapezoidal nut.

  There are two M3nN nuts inserted from below in the Bed-mount. These are not the ones mentioned in the Parts preparation.
- Gently lift the Z-carriage so that a gap of approximately 8 mm (0.3 inches) is created between it and the bed mount. mm (0.3 inches) is created between it and the bed mount.
- Insert the Bed-spacer-front into the gap.
- Position the part so it fits around the bed mount, then align the holes.

STEP 10 Securing the bed spacer - right

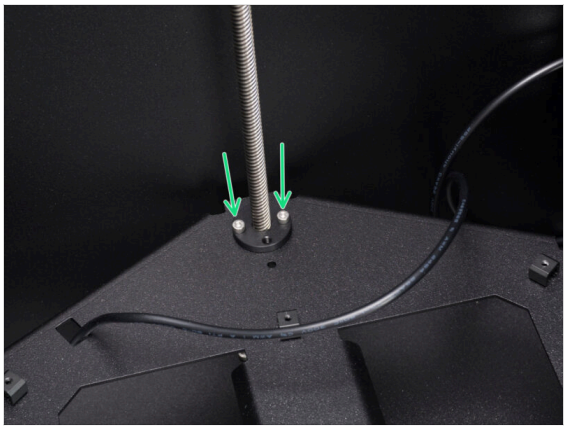


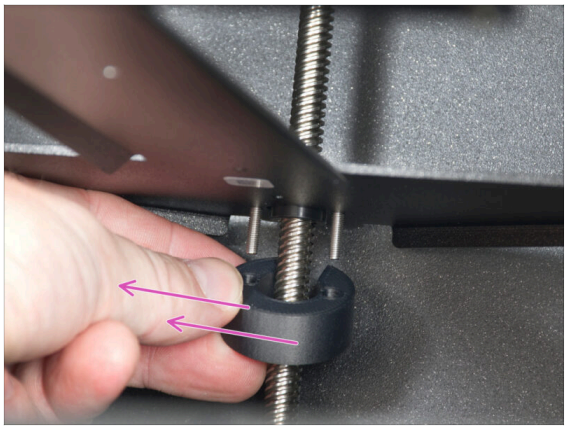
Ensure that the two M3nN nuts already inserted into the Bed-mount from below do not fall out.

- Secure the spacer with two M3x18 screws.
  - Tighten the inner screw first.
  - Then tighten the outer screw.

If you plan on installing the **Prusa CORE One+ Gen 2** upgrade along with the Prusa INDX conversion, follow the instructions in this article: **Assemblling the Prusa INDX Core One with the Gen 2 upgrade**.

STEP 11 Removing the rear bed spacer





- Loosen two M3x18 screw securing the trapezoidal nut and the CORE-One-bed-spacer-rear (on the underside).
  - While loosening the screws, hold the CORE-One-bed-spacer-rear in place and remove it once they are loose.

Leave the screws in the trapezoidal nut.

Discard the CORE-One-bed-spacer-rear to avoid confusion with the new part. You will no longer need this part.

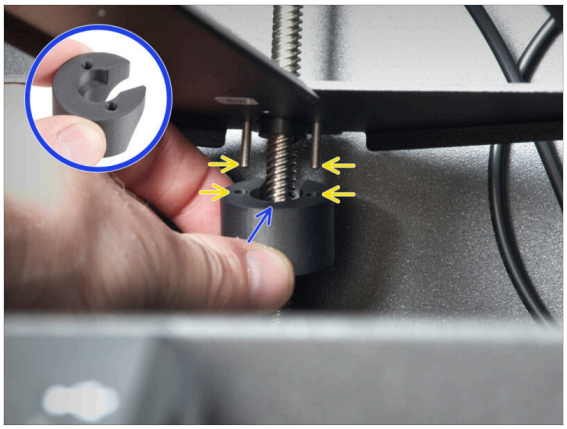
STEP 12 Assembling the INDX-bed-spacer-rear

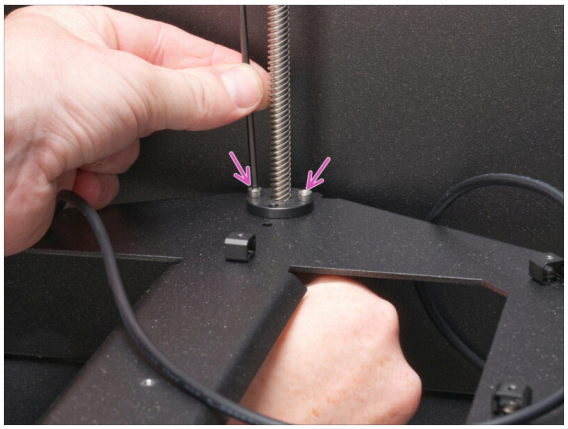


- Insert two M3nN nuts into the Bed-spacer-rear and **push them in as far as possible**.
  - Insert the nuts with the nylon insert (blue plastic ring) **facing up**.

Pro tip: Use the screw-pulling technique. OR push the nuts in with the 2.5 mm Allen key.

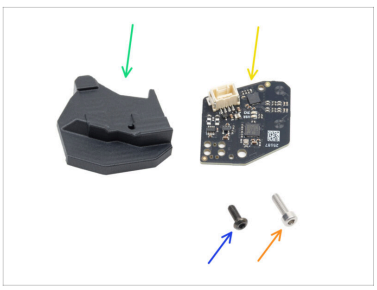
STEP 13 Mounting the INDX-bed-spacer-rear



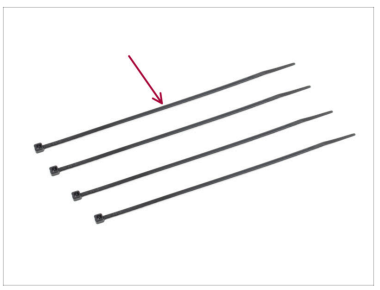


- Focus on the rear underside of the heatbed, where you removed the original Bed-spacer-rear.
- Hold the Bed-spacer-rear **in the same orientation as shown** and fit it **around** the rear Z-axis threaded rod.
- Align the holes in the bed spacer with the M3x18 screws that you kept in the trapezoidal nut.
- Secure the part by tightening the two M3x18 screws.

STEP 14 Offset sensor: parts preparation

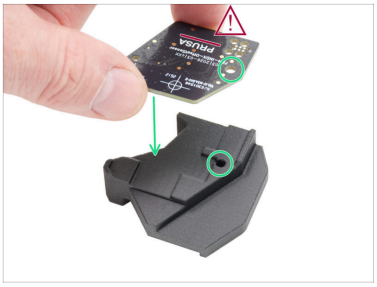
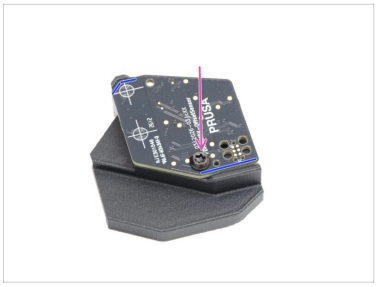






- **For following steps, prepare:**
- INDX-C1-offset-sensor-holder (1x) *found in the Heatbed bag*
- INDX offset sensor (1x) *found in the Filament Sensors box*
- M3x8rT screw (1x) *found in the Fasteners 2/2 bag*
- M3x10 screw (1x) *you removed earlier*
- Offset sensor cable (1x) *found in the Cables bag*
- Zip tie (4x)

STEP 15 Mounting the INDX offset sensor

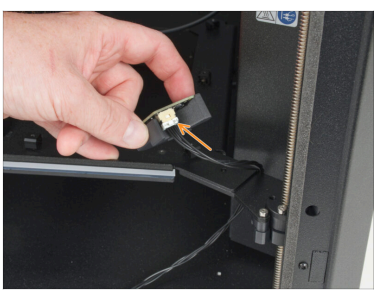
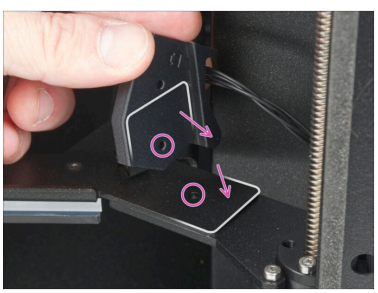
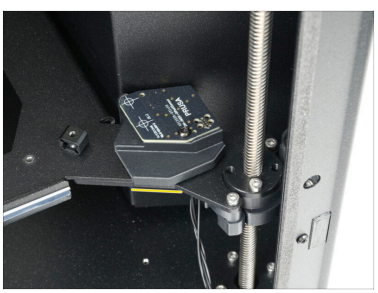




ⓘ The printed parts shown may differ slightly from the parts included in your package.

- Mount the offset sensor onto the Offset-sensor-holder.
  - Align the screw holes with each other.
  - ⚠ Make sure the **PRUSA logo is facing up**.
  - Ensure that the offset sensor is correctly positioned.
- Secure the offset sensor in place with the M3x8rT screw.

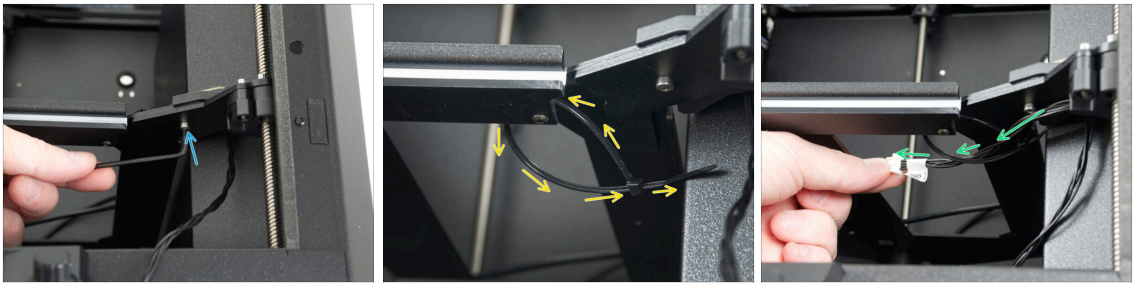
  Do not overtighten the screw to avoid damaging the electronics.
- Lead the offset sensor cable between the Z-carriage and the right side panel of the printer.
  - Take the end of the cable **without a label**.

STEP 16 Connecting the offset sensor cable

- Plug the offset sensor cable into the offset sensor board connector.
- On the underside of the Offset-sensor-holder, locate the pocket shaped for the Z-carriage.
  - Place the Offset-sensor-holder onto the Z-carriage so the shapes fit together and the screw holes align.
- Check the correct alignment. It must match the photo.

STEP 17 Securing the offset sensor assembly

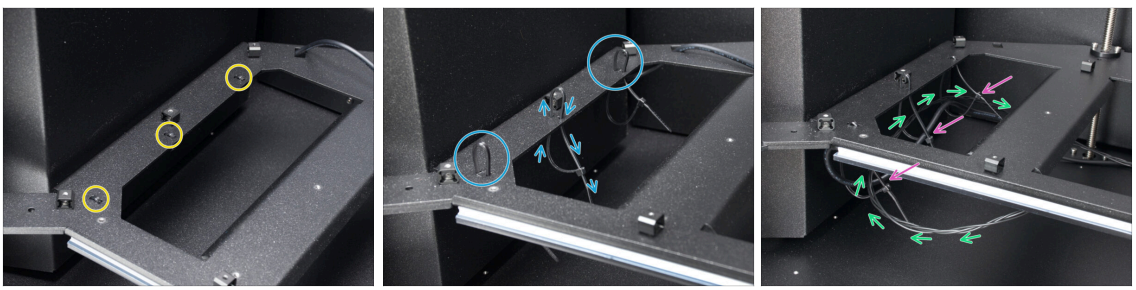


- Secure the offset sensor assembly to the Z-carriage from the underside using the M3x10 screw. The screw forms its own thread in the plastic. **Do not overtighten.**

  ⓘ If you are installing the **GEN 2 upgrade** along with the INDX conversion, insert the M3x10 screw and tighten it with only **a few turns.**

  - We will let you know later on when to properly secure the offset sensor assembly to the printer.
- Loop a zip tie around the screw in the LED panel assembly and secure it, **but do not tighten it yet**.
- Lead the offset sensor cable through the zip tie. Tighten the zip tie and cut off the excess.

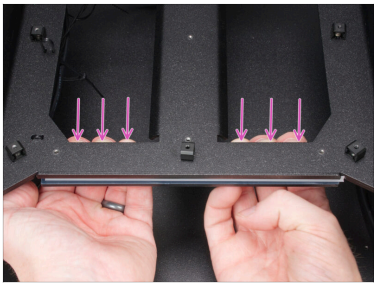
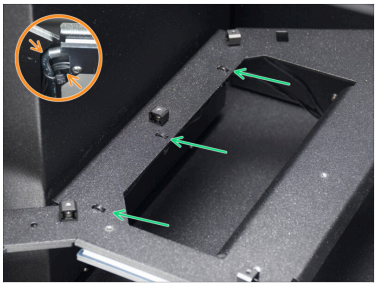
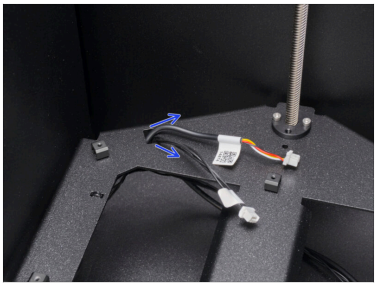
STEP 18 Guiding the offset sensor cable



- On the left side of the Z-carriage, use side cutters to remove the three highlighted zip ties.

  ⓘ Cutting the cable ties will release the RGB LED cable, which is secured by them.
- Thread three cable ties through the Z-carriage and connect their heads on the underside. Do not tighten them yet.
- Guide the offset sensor cable through the three zip ties.
- Guide the RGB LED cable through the three zip ties.

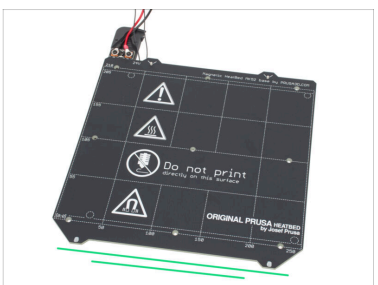
STEP 19 Securing the offset sensor cable

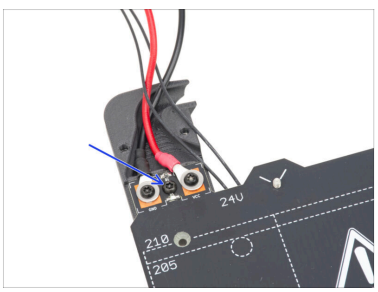




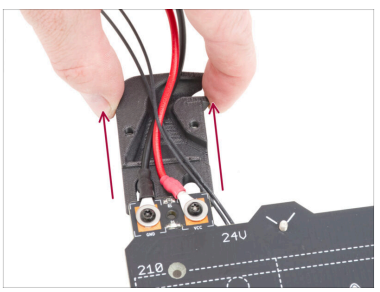
- Tuck the offset sensor cable in between the Z-carriage and the LED panel.
- Tighten all three cable ties and cut off the excess ends.
  - The cables before the first cable tie **must not be sharply bent**; leave a slight slack.
  - Make sure the cables are properly tensioned and **not sagging** along their entire length.
- Route the offset sensor and RGB LED cables upward through the rectangular cutout in the Z-carriage.

If you are installing the GEN 2 upgrade along with the Prusa INDX conversion, **Assemblling the Prusa INDX Core One with the Gen 2 upgrade**.

STEP 20 Removing the Bed-cable-cover-bottom

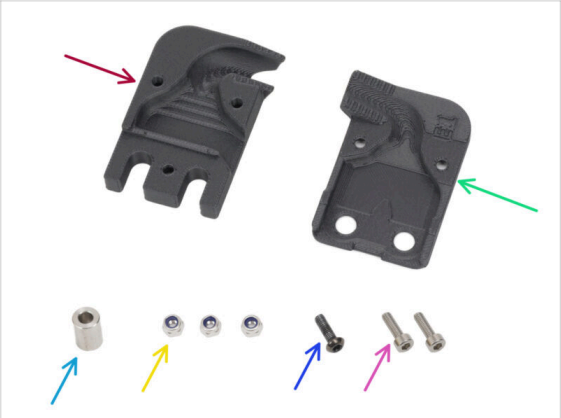


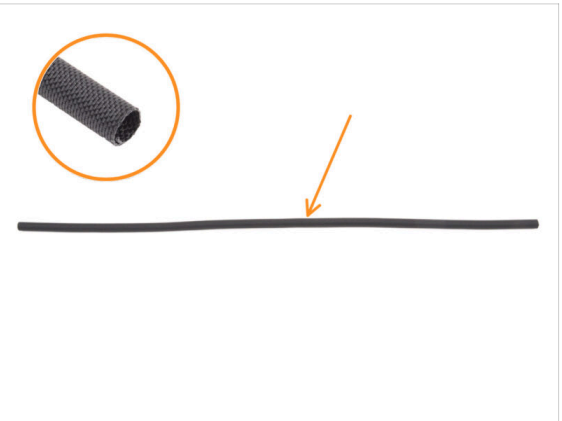




- Prepare the heatbed assembly.
- Using the Torx key, remove the M3x10rT screw that keeps the Bed-cable-cover-bottom attached.
- Remove the Bed-cable-cover-bottom.

STEP 21 Heatbed cable covers: parts preparation

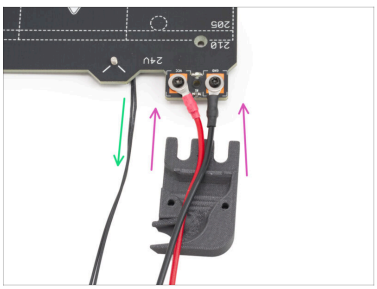


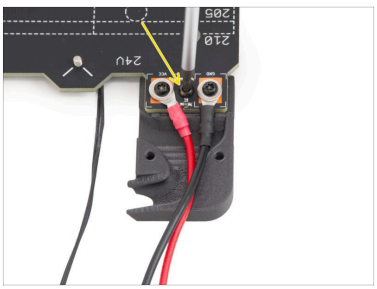


- **For the following steps, prepare:**
- INDX-C1-bed-cable-cover-bottom (1x) *found in the Heatbed bag*
- INDX-C1-bed-cable-cover-top (1x) *found in the Heatbed bag*
- Heatbed spacer 6x3.1x8 mm (1x) *removed earlier*
- M3nN nut (3x) *found in the Fasteners 1/2 bag*
- M3x10rT (1x) *removed earlier*
- M3x10 screw (2x) *removed earlier*
- Textile sleeve 520 x 8 mm (1x) *removed earlier*

STEP 22 Assembling the Bed-cable-cover-bottom



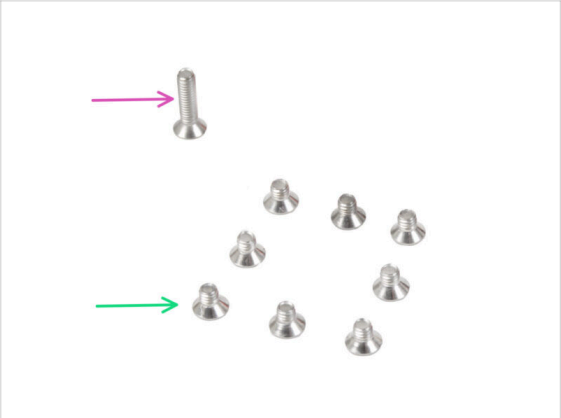




- Insert the M3nN nut into the bottom hole in the Bed-cable-cover-bottom.
- Route the heatbed thermistor cable outside the cover.
- Insert the Bed-cable-cover-bottom under the heatbed power cables and slide the cover beneath the heatbed.

  ⓘ The M3nN nut may fall out during installation. You can hold it in place from the bottom with your finger.
- Secure the Bed-cable-cover-bottom in place with the previously removed M3x10rT screw.

STEP 23 Securing the heatbed: parts preparation

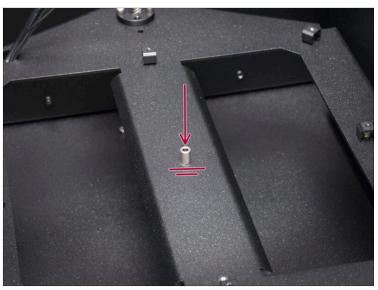


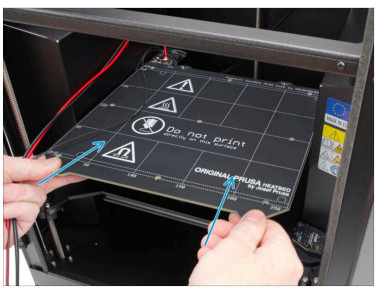


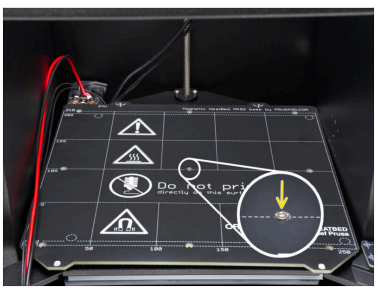
- M3x12bT screw (1x) *removed earlier*
- M3x4bT screw (8x) *removed earlier*
- Zip tie (1x)

If you are installing the **Gen 2 upgrade** during the INDX conversion, **you will need the new M3x14bT screw** (1x) found in the Gen 2 upgrade kit.

STEP 24 Inserting the heatbed



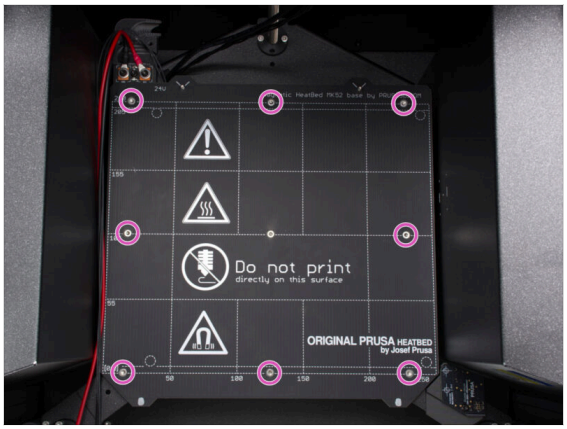


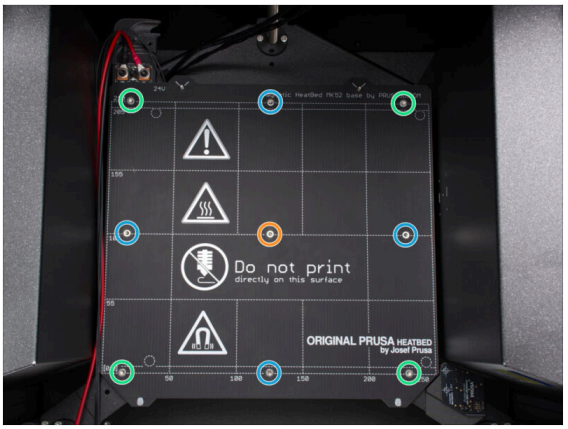


- Place the heatbed spacer directly over the threaded hole in the center of the Z-carriage.
- Carefully insert the heatbed assembly back into the printer.
  - Ensure that the spacer in the middle stays in place.
- Secure the heatbed in place with the M3x12bT screw that you set aside when initially removing the heatbed. **Do not fully tighten the screw yet.**

  If you are installing the CORE One Gen 2 upgrade, then use the M3x14bT screw as mentioned in the previous step.

STEP 25 Securing the heatbed





- Insert the eight M3x4bT screws into the remaining holes in the heatbed. **Do not fully tighten the screws yet.**

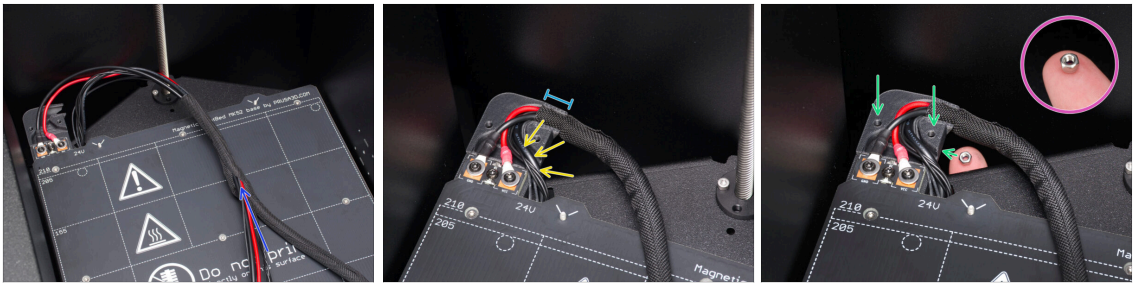
  If you are installing the Gen 2 update along with the INDX conversion, tighten the M3x4bT screws by two turns only! We will fully tighten them later. Skip to the next step now.

IMPORTANT: The heatbed must be tightened in a specific order. Repeat the sequence multiple times, ensuring the final tightening after at least two rounds.

- **After all screws are in place, tighten them in the following sequence:**
  - Center screw
  - First four screws (edges)
  - Last four screws (corners)

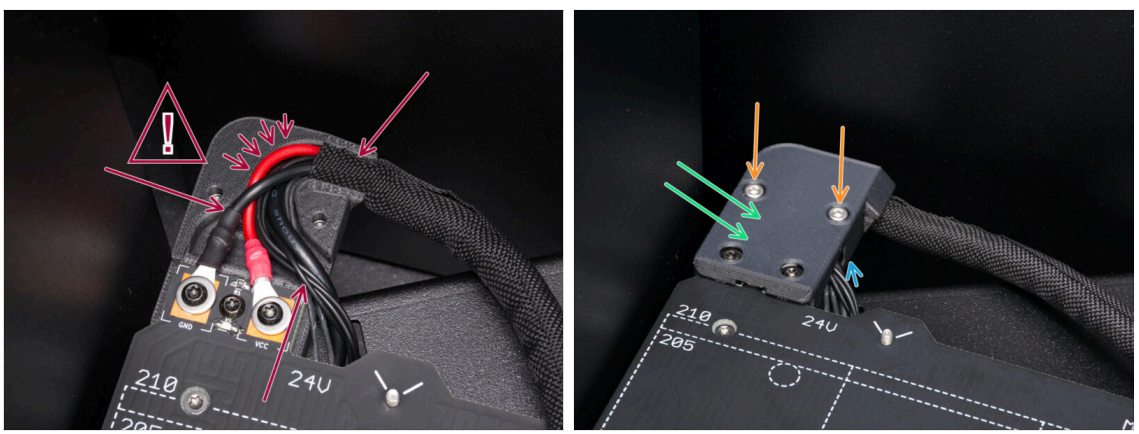
Tighten the screws gently, but firmly.

STEP 26 Wrapping the heatbed cables



- Wrap the textile sleeve around the heatbed, RGB LED, and offset sensor cables.
- Route the RGB LED and offset sensor cables into the Heatbed-cable-cover-bottom **through the side channel**.
- Slide the textile sleeve at least 1 cm (0.39 in) into the cable channel.
- Place the M3nN nut on your finger with the nylon insert (blue plastic ring) facing down.
- **From below**, align it with the screw holes shown in the picture.
  - Then **press the nut into the Bed-cable-cover-bottom** from underneath until it is fully seated.

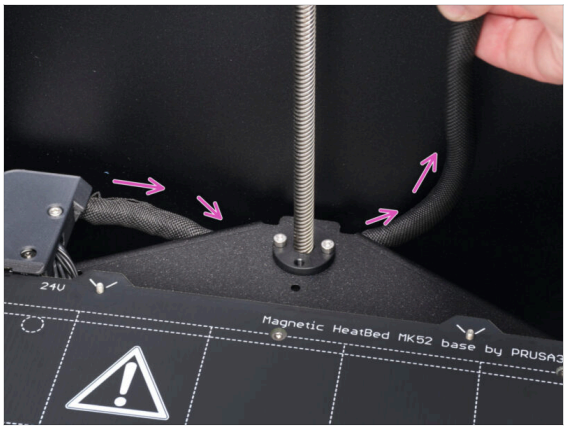
STEP 27 Covering the heatbed cables

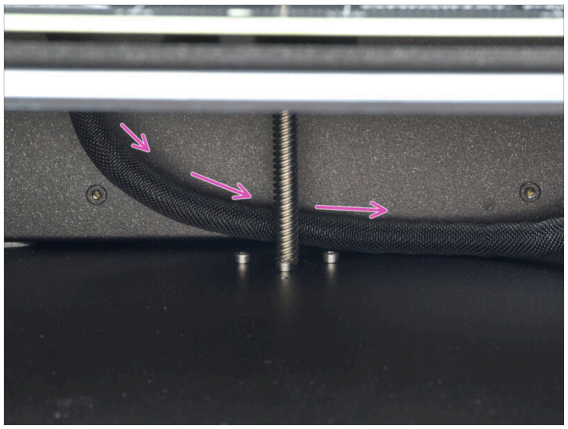


⚠ Before closing the cover, make sure **no wires are sticking out** to **prevent them from being pinched** by the top cover.

- Place the Bed-cable-cover-top over the heatbed cables and align it.
- Secure the Bed-cable-cover-top in place with the M3x10 screw.
  - While tightening, **hold the M3nN nuts** in the lower part to prevent them from falling out.

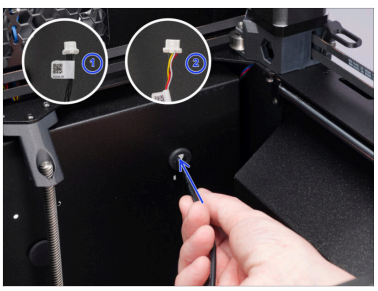
STEP 28 Guiding the heatbed cable bundle I.



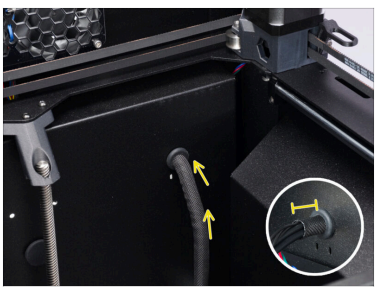


- Lead the heatbed cables under the heatbed and **behind the Z-axis threaded rod.**

STEP 29 Guiding the heatbed cable bundle II.

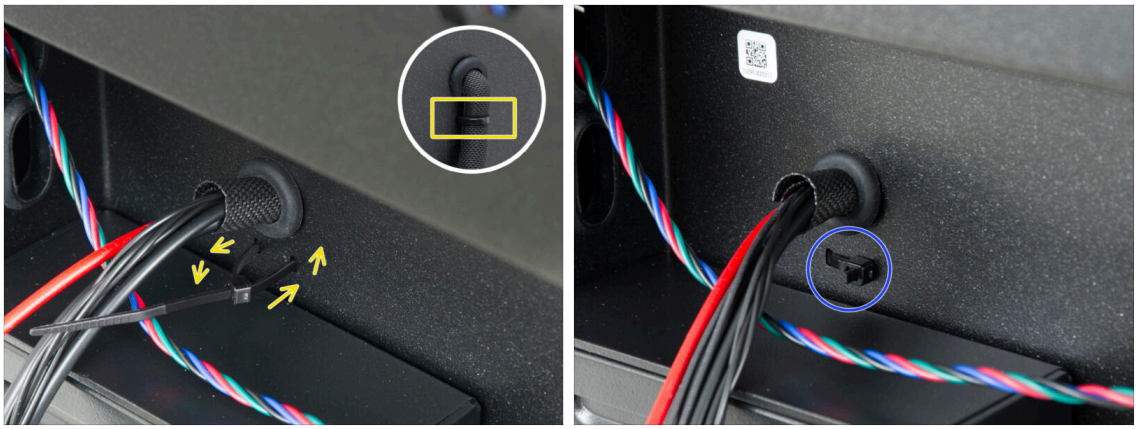






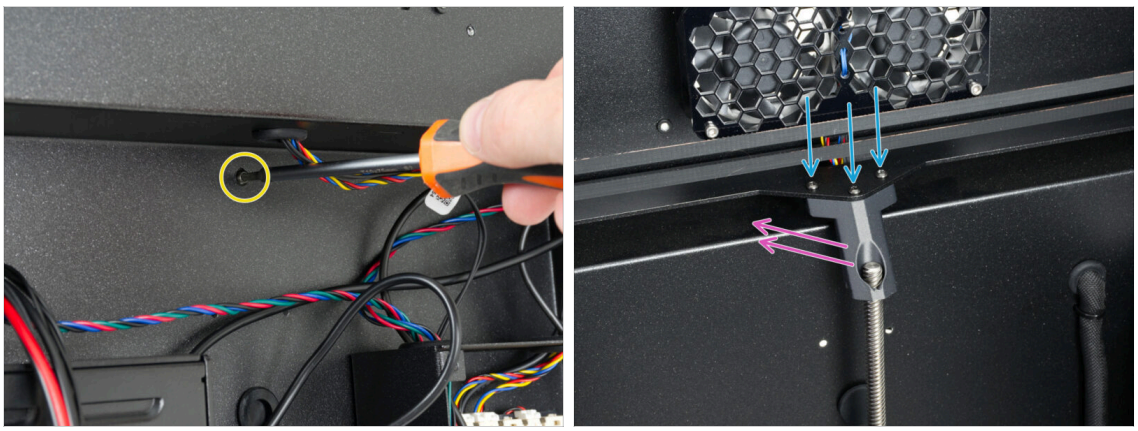
- Route the cables through the rear panel one by one in the following order:
  - 1. Offset sensor cable
  - 2. LED RGB cable
  - 3. Heatbed thermistor cable
  - Finally, route the heatbed power cables (black and red).
- Push the heatbed cables and the textile sleeve through the grommet hole.
  - No more than 1 cm (0.39 in) of the textile sleeve should protrude from the back side.

STEP 30 Securing the textile sleeve



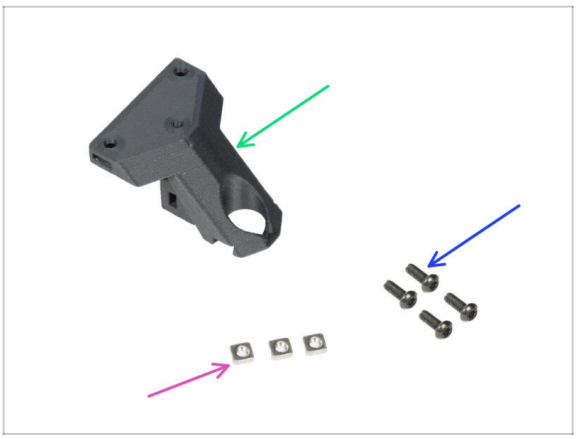
- Guide the zip tie through the two holes under the heatbed cables and make a loop around the heatbed cable bundle (textile sleeve) on the inside.
- Tighten the zip tie firmly and cut off the excess.

STEP 31 Removing the Bed-stop-rear



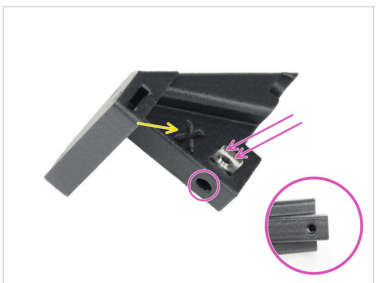
- Use a Torx key to remove the M3x8rT screw on the rear side of the printer.
- Remove the three M3x8rT screws.
- Remove the Bed-stop-rear.

STEP 32 INDX-C1-Bed-stop-rear: parts preparation



- **For the following steps, prepare:**
- INDX-C1-bed-stop-rear (1x) *found in the Heatbed bag*
- M3x8rT screw (4x) *removed earlier*
- M3nS nut (3x) *found in the fasteners 2/2 bag*

STEP 33 Assembling the Bed-stop-rear

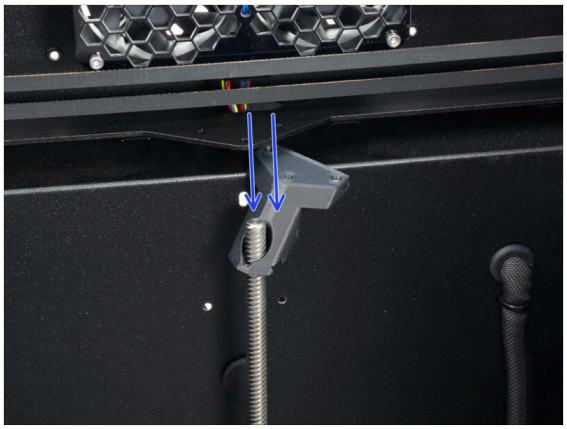


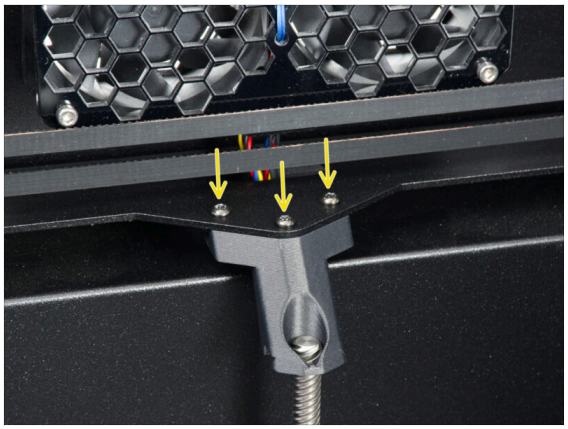




- The new Bed-stop-rear is labeled with an X.
- Insert the M3nS nut into the Bed-stop-rear and push it fully down.
  - Always check through the screw hole that the nut is properly aligned.
- From the same side, insert the second M3nS nut all the way into the part.
- From the opposite side, insert the third M3nS nut into the part.

STEP 34 Installing the new Bed-stop-rear

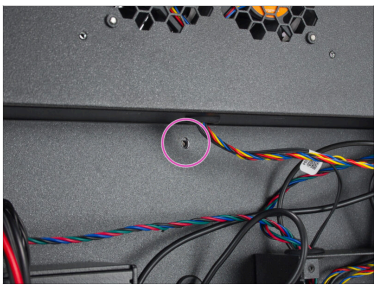


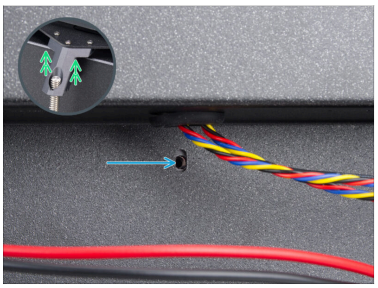


- Place the Bed-stop-rear onto the rear Z motor threaded rod and rest it against the edge of the rear panel.
- Mount the Bed-stop-rear onto the Z-Axis threaded rod and secure it in place with three M3x8rT screws.

  ⓘ The middle screw threads into the plastic, not into a nut. Expect slight resistance while tightening.

STEP 35 Securing the Bed-stop-rear

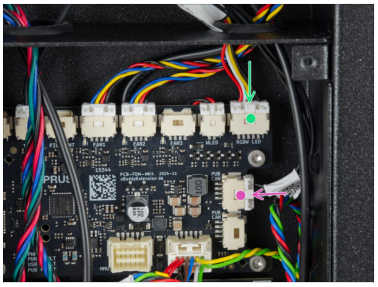
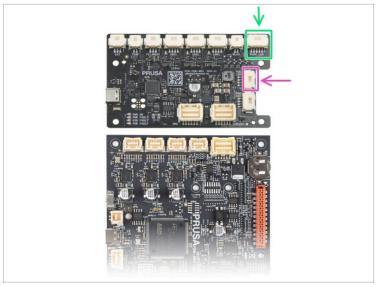






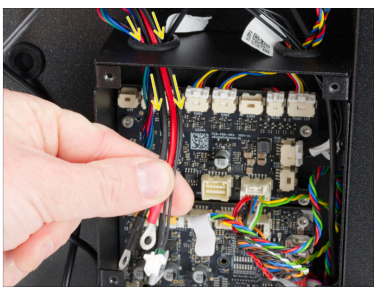
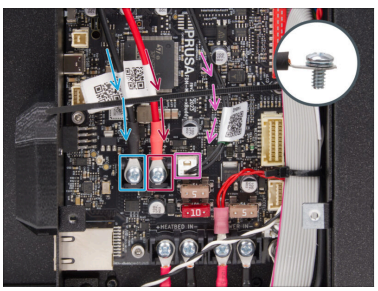
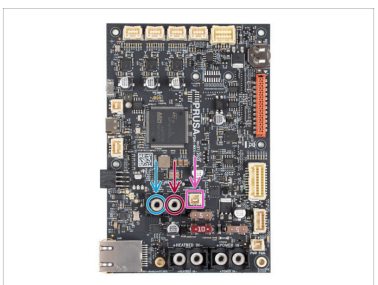
- Move to the back of the printer.
- Locate the oval screw hole under the cooling fans.
- The oval hole must be flush with the hole in the Bed-stop part on the opposite side.
  - To compensate, slightly raise the rear of the CoreXY assembly - just a few millimeters.
- After aligning the holes, secure them with the M3x8rT screw.

STEP 36 Connecting the RGB LED + offset sensor cables

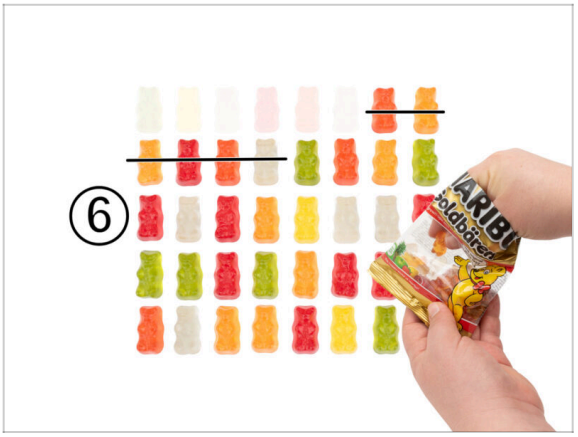
- Route the RGB LED cable and the offset sensor cable through the upper right opening in the xBuddy box.
  - Plug the **RGB LED connector** into the **rightmost RGBW LED slot** on the xBuddy Extension board.
  - Plug the **offset sensor cable** into the **upper right PUB CAN slot** on the xBuddy Extension board.

STEP 37 Connecting the heatbed cables

- Route the heatbed power cables and the heatbed thermistor cable through the **left opening** at the top of the xBuddy box.
- Using the 6-32 terminal screw connect the **black** power cable to the **left** terminal slot on the xBuddy board. Tighten firmly.
- Using the 6-32 terminal screw to connect the **red** power cable to the **right** terminal slot. Tighten firmly.
- Plug the heatbed thermistor connector to the slot next to the power terminals.

STEP 38 Haribo time



Now is the time for a well-deserved boost.

- Eat six gummy bears.

STEP 39 Done



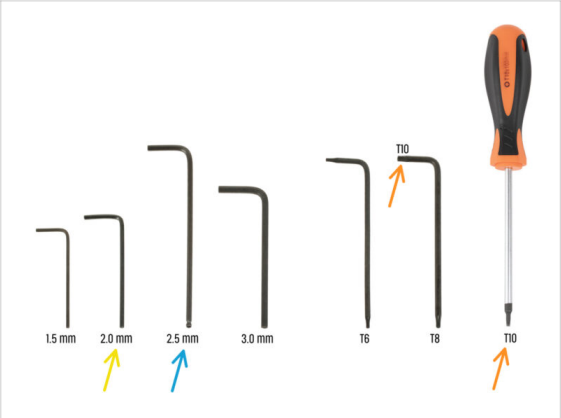


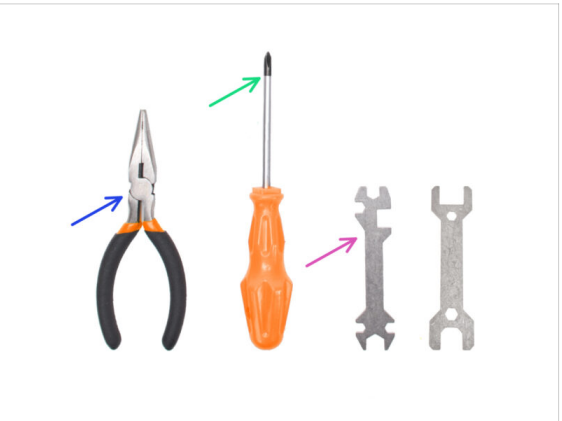
- Congratulations! You have just upgraded the Z-axis.
- Let's go to the next chapter.

4. INDX Toolhead & Side filament sensors



STEP 1 Tools necessary for this chapter

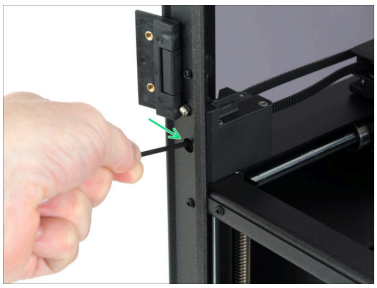


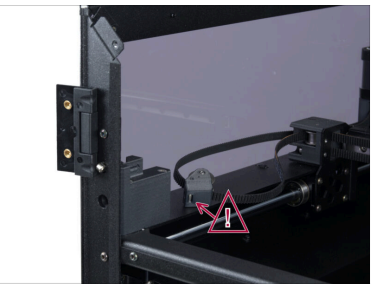


- **For this chapter, please prepare:**
- 2.0mm Allen key
- 2.5mm Allen key
- T10 key / screwdriver
- Needle-nose pliers *or flush cutters for cutting zip ties*
- PH2 screwdriver
- Universal wrench

STEP 2 Loosening the belts







In these steps, we will loosen the belts to make installing the Head-mounting-plate easier. We also need to lubricate the belt tensioner screw to prevent any issues in the future.

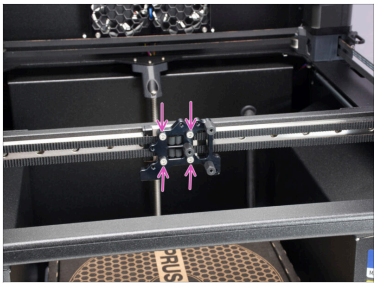
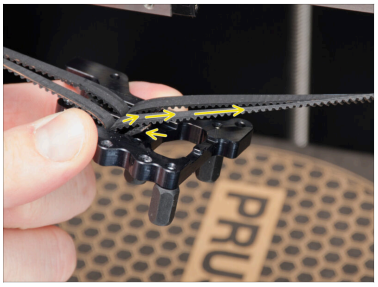
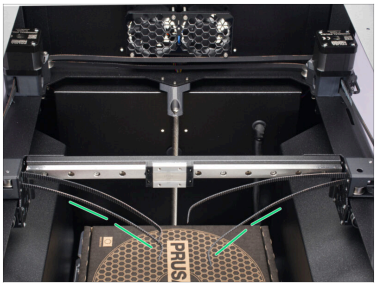
- Place the protective cardboard/box back onto the heatbed.
- The belt tensioning screws are located in the front profile under the upper hinge on both sides of the printer.
- Using a 2.5 mm Allen key, loosen the left tensioning mechanism until the M3x30 tensioning screw no longer holds the idler. Remove the screw.

Ensure the M3nS nut in the Belt-tensioner-pulley does not fall out!

- Repeat the process on the right side of the printer.

Keep the tensioning screws at hand; we will need them later.

STEP 3 Releasing the belts

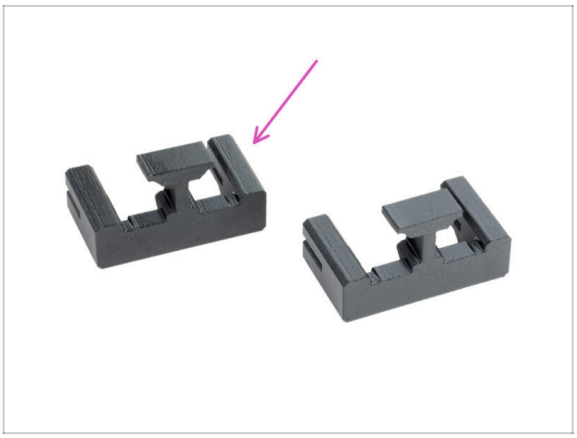
- Using the 2.5mm Allen key, remove four M3x10 screws securing the Nextruder holder.
- Disengage all four belt ends from the Nextruder holder slots.
- Remove the Nextruder holder.

  This part will no longer be needed.
- Let the loosened belts hang freely.

CAUTION: Do not pull on the belts, as they **could slip out of the motor pulleys** and require full disassembly for reinstallation.

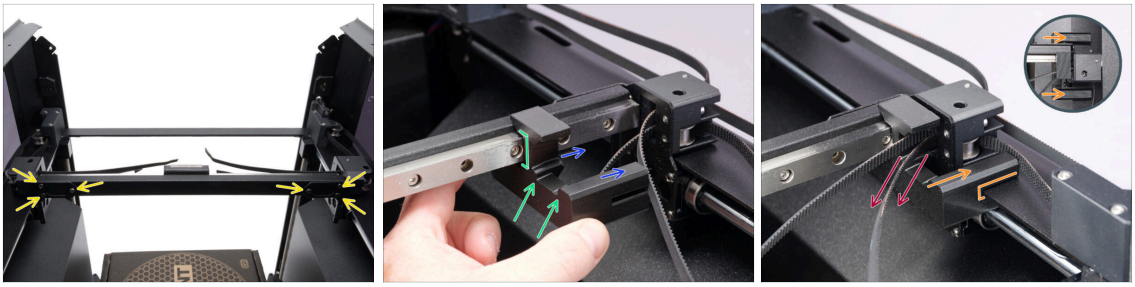
If you are installing the GEN 2 upgrade along with the Prusa INDX conversion, **return to the Prusa INDX GEN 2 article now**.

STEP 4 Gantry aligner tool: parts preparation



- **For the following steps, prepare:**
- INDX-Gantry-aligner-tool (2x) *found in the Position tools bag*

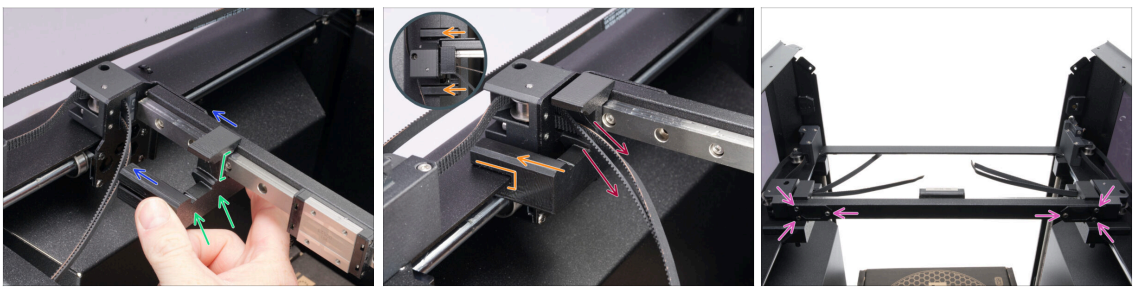
STEP 5 Installing the Gantry-aligner-tool - right



- Start by slightly loosening three screws on the back of the gantry on each side.
- Place one of the Gantry-aligner-tool on the **front right side** of the X-axis, aligning the **linear rail with the matching cutout**.

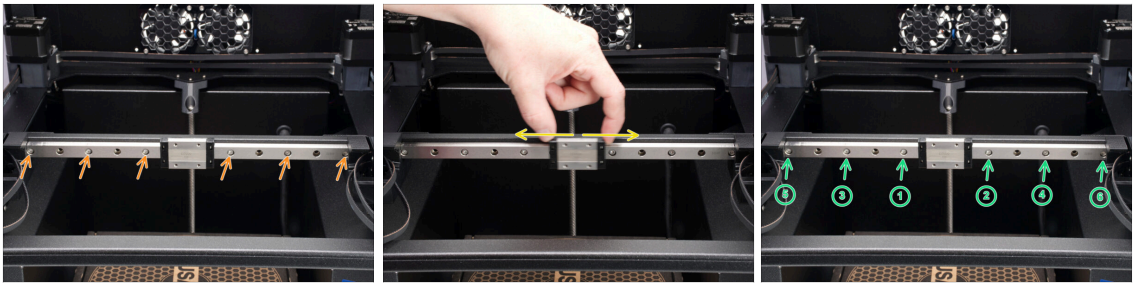
  ⓘ Both Gantry-aligner-tools are identical.
- The fork must face the pulleys.
- Slide the Gantry-aligner-tool fully onto the gantry frame profile, ensuring the cutouts engage.
- Route both free belt ends through the open space above the tool.

STEP 6 Installing the Gantry-aligner-tool - left



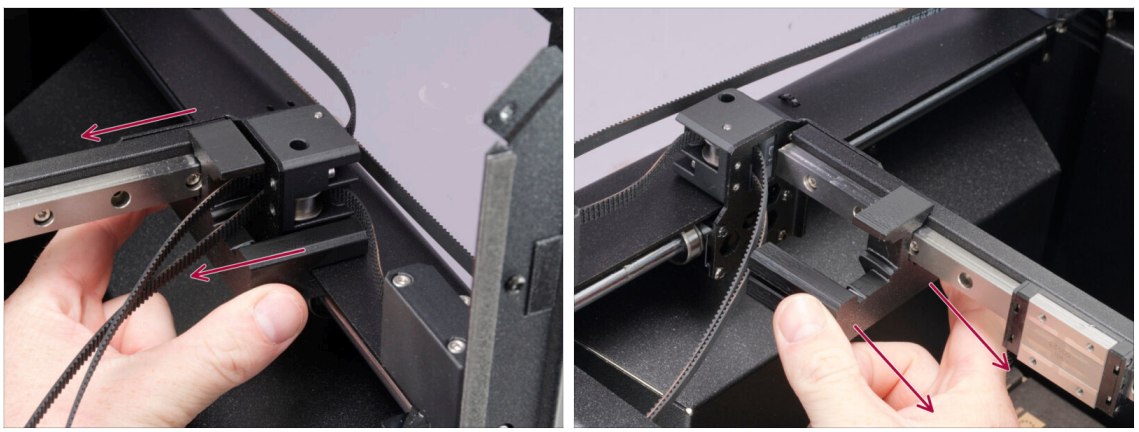
- Place the Gantry-aligner-tool on the **front left side** of the X-axis, aligning the **linear rail with the matching cutout**.
- The fork must face the pulleys.
- Slide the Gantry-aligner-tool fully onto the gantry frame profile, engaging the cutouts.
- Route both free belt ends through the open space above the tool.
- With each Gantry-aligner-tool in place, tighten the three screws on each side of the back of the gantry.

STEP 7 Aligning the linear rail



- Using a 2.5 mm Allen key, loosen all six screws securing the linear rail.
  - **Do not fully loosen the screw.** 2–3 turns are sufficient.
- Move the linear bearing back and forth along the full length of the axis.
- **Firmly tighten** all six screws one by one in the **specified order.**

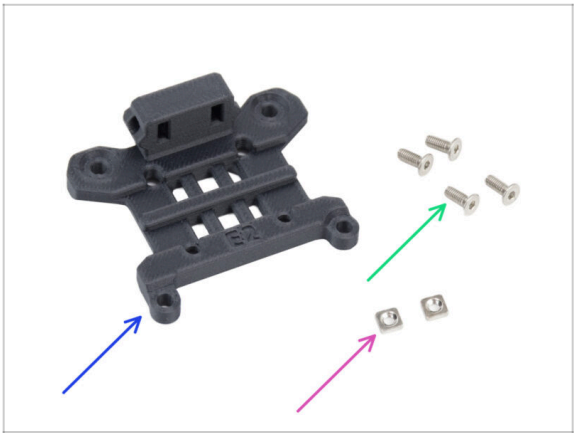
STEP 8 Removing the Gantry-aligner-tool



- **Remove both Gantry-aligner-tools** from the printer.

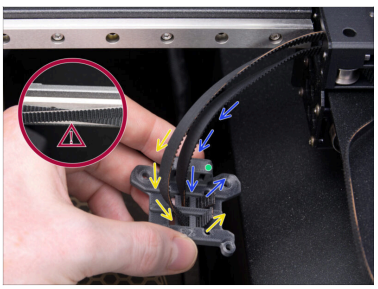
ⓘ This part will no longer be needed.

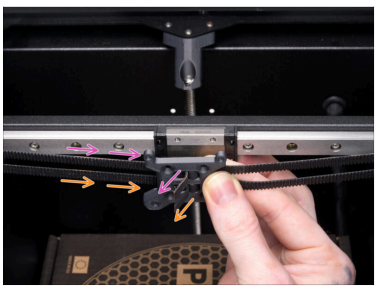
STEP 9 Toolhead mount: parts preparation

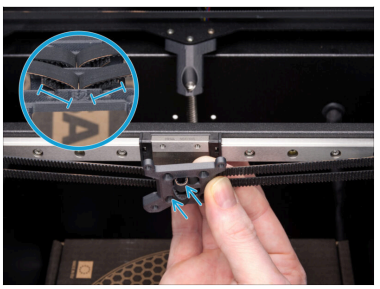


- **For the following steps, prepare:**
- Head-mounting-plate (1x) *found in the Toolhead bag*
- M3x8b screw (4x) *found in the Fasteners 1/2 bag*
- M3nS nut (2x) *found in the Fasteners 2/2 bag*

STEP 10 Securing the belts



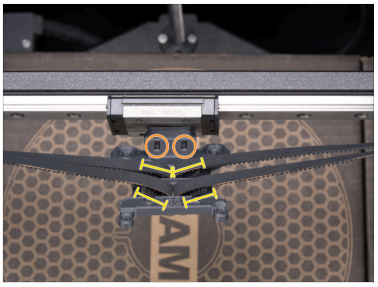
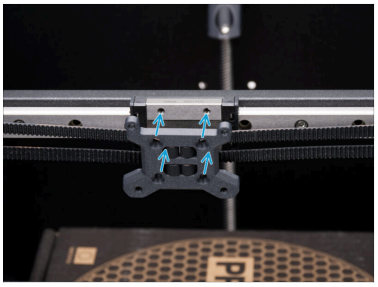
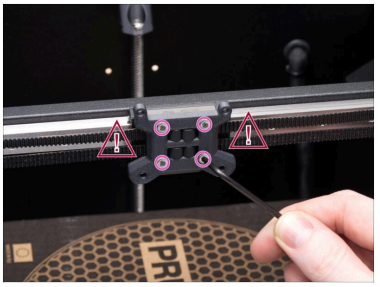




- Hold the Head-mounting-plate in the correct orientation, using the protrusion as a guide.
- From the right side, route the **lower belt** through the **rear center opening** in the Head-mounting-plate, around the post, and back out. It must extend **4–5 teeth (6-7 teeth with the Gen 2 belts).**
- Route the **upper belt** through the **front center opening** in the Head-mounting-plate, around the post, and back out. It must extend 4–5 teeth (6-7 teeth with the Gen 2 belts).

  ⚠ Make sure the **belts are not crossed.**
- **Hold the right belts in place with your thumb to prevent them from slipping out.**
- Route the **upper belt** through the **front center opening** out (down) of the Head-mounting-plate. It must extend 4–5 teeth (6-7 teeth with the Gen 2 belts).
- From the left side, route the **lower belt** through the **rear center opening** out (down) of the Head-mounting-plate. It must extend 4–5 teeth (6-7 teeth with the Gen 2 belts).
- Insert the **belt ends from the left side** into the **left opening** and press them in. Leave 4–5 teeth (6-7 teeth with the Gen 2 belts) protruding from the rear side of the Head-mounting-plate.

STEP 11 Installing the Head-mounting-plate

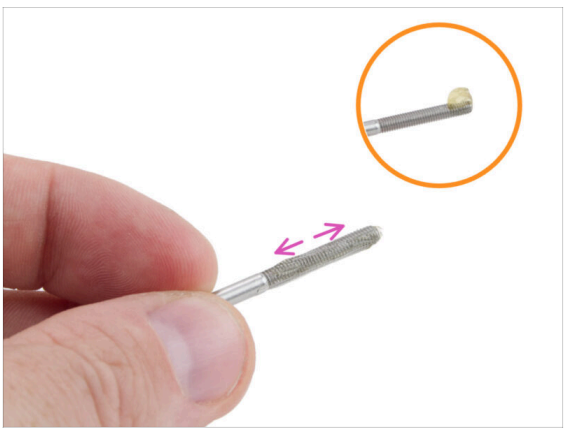




- Double-check that **all four belt ends protrude 4–5 teeth (6-7 teeth with the Gen 2 belts)** inward.
- Insert two M3nS nuts into the protrusion of the Head-mounting-plate.
- Place the Head-mounting-plate against the linear bearing and align it with the holes.
- Using a 2.0 mm Allen key, secure the part with four M3x8b screws. Tighten the screws **firmly, but gently**.

⚠ Check on both sides that the **belts are correctly routed through their channels** and are **not pinched** anywhere.

STEP 12 Lubricating the belt tensioner screw





- If your printer is a **Prusa CORE One**, we will need to lubricate the belt tensioner screws.

  ⓘ This step does not apply if you have the Prusa CORE One+ version.
- Prepare the Prusa lubricant (1x) *found in the Fasteners 2/2 bag.*
- Apply a small amount of Prusa lubricant to the tip of both left and right M3x30 tensioning screws you removed earlier.
- Spread the lubricant evenly around the entire thread.

  Tip: Use the tip of a zip tie to spread the lubricant.

STEP 13 Adjusting the belts



- Insert the lubricated tensioning screws in the front left and front right profiles.
- Using a 2.5 mm Allen key, connect the Belt-tensioner-pulley to the Belt-tensioner.
- Using the same process, connect the Belt-tensioner-pulley on the right side as well.
- Tension the belts so that both tensioning mechanisms are in approximately the same position as shown in the picture - about 8 mm (0.31 in) from the edge of the tensioner.

ⓘ Typically, this requires 8–10 turns.

Final fine-tuning will be done in the final chapter.

STEP 14 INDX Toolhead assembly: Parts preparation



- **For the next step, prepare:**
- INDX Toolhead (1x) *found in the INDX Toolhead box*
- Head cable cover front (1x) *found in the Fasteners 1/2 bag*
- M3x18 screw (1x) *found in the Fasteners 1/2 bag*

STEP 15 Attaching the head cable cover front





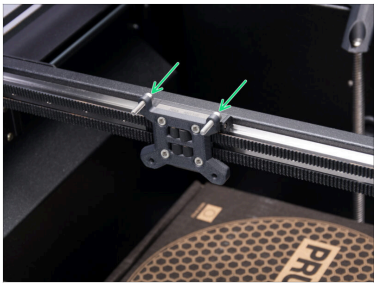
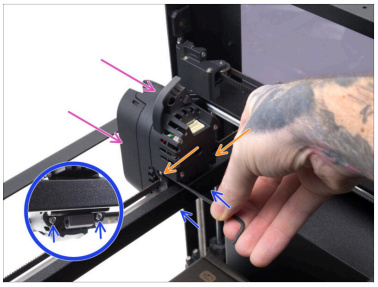
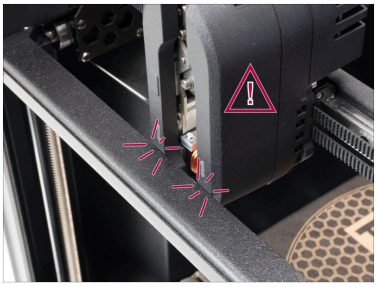
- Use the T10 key/screwdriver to remove two M3x6T screws.
- Remove the INDX Toolhead cover.
- Attach the head cable cover front to the INDX Toolhead.
- Secure the head cable cover front with the M3x18 screw.
- Carefully attach the INDX Toolhead cover. **Ensure that no cables are pinched.**
- Secure the cover in place with the two M3x6T screws you removed earlier.
- Ensure that the four highlighted holes are empty. If there are any screws, remove them before mounting the INDX Toolhead later on.

STEP 16 INDX Toolhead: parts preparation



- **For the following steps, prepare:**
- INDX Toolhead (1x) *that you assembled earlier*
- M3x14 screw (4x) *found in the Fasteners 1/2 bag*

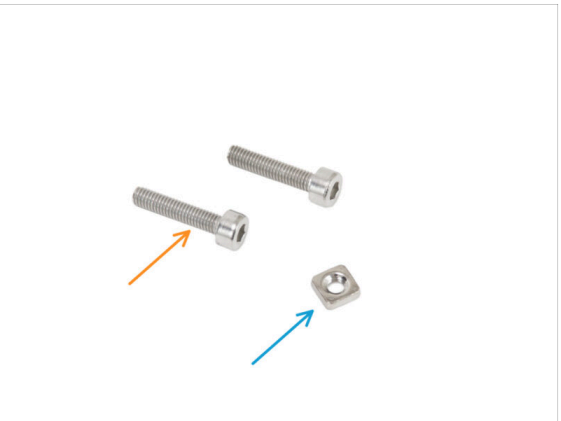
STEP 17 Mounting the INDX Toolhead

- From the rear side of the Head-mounting-plate, insert two M3x14 screws into the holes.
- From the front side, place the INDX Toolhead onto the Head-mounting-plate as shown in the picture.
- Secure it using the upper M3x14 screws and fully tighten them firmly.
- Secure the INDX Toolhead by inserting two M3x14 screws into the lower holes and tightening them firmly.

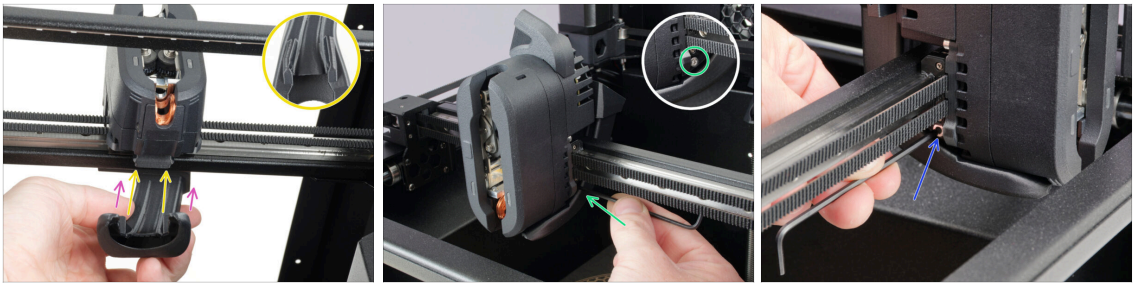
⚠ **WARNING:** Avoid contact with the front metal LED holder to prevent damage or scratches to the INDX Toolhead.

STEP 18 Fan shroud: parts preparation

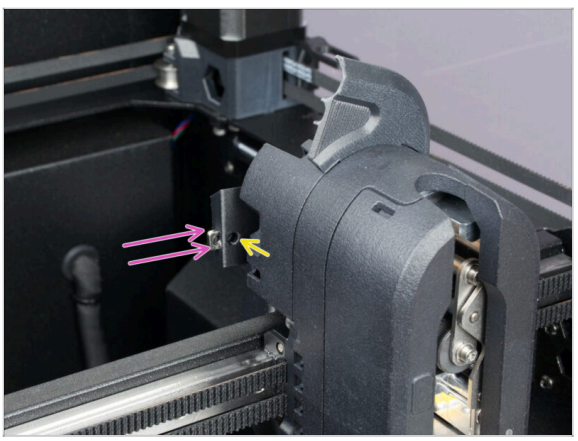
- **For the following steps, please prepare:**
- INDX-C1-Fan-shroud (1x) *found in the Toolhead bag*
- M3x14 screw (2x) *found in the Fasteners 1/2 bag*
- M3nS nut (1x) *found in the Fasteners 2/2 bag*

STEP 19 Attaching the Fan-shroud



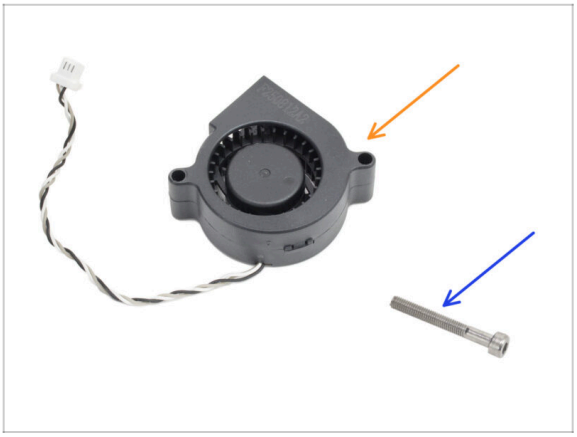
- Attach the Fan-shroud to the INDX toolhead from below.
- Note the ridge in the Fan-shroud. This ridge will slide onto the bottom part of the Head-mounting-plate.
- Secure the Fan-shroud using the M3x14 screw from the right side.
- Secure it from the left side using an M3x14 screw as well.

STEP 20 Inserting the nut



- Insert an M3nS nut into the protrusion on the left side of the INDX Toolhead.
- From the front, check through the screw hole that the nut is properly seated.

STEP 21 Print fan: parts preparation



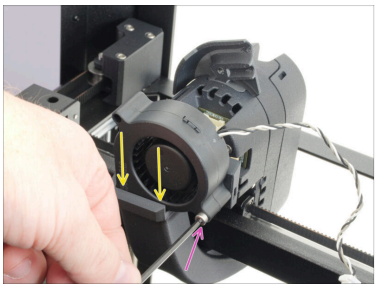
- **For the following steps, prepare:**
- Print fan (1x) *removed earlier*
- M3x25 screw (1x) *found in the Fasteners 1/2 bag*

ⓘ In case you **converted your CORE One from the MK4/S printer**, the cable on your print fan is much longer. Use the supplied Print fan blower (1x) *found in the Electronics box* here instead.

- The print fan you removed from your converted printer will be used in substitution for the Dock fan later on.

STEP 22 Installing the print fan





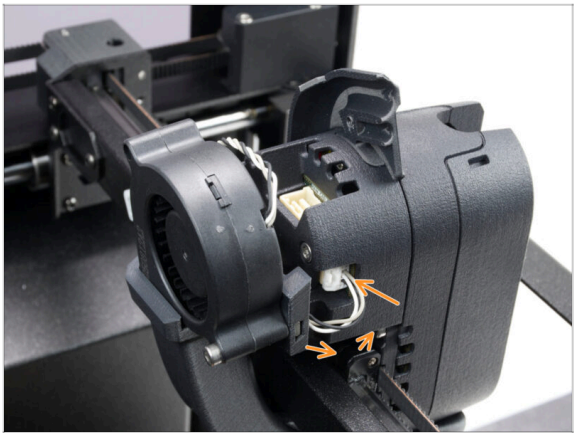


- Look at the INDX Toolhead from the rear side.
- Take the print fan as shown and align it with the Fan-shroud opening.
- Insert the print fan into the Fan-shroud opening.
- Secure it with one M3x25 screw.

⚠ Do not overtighten the screw to avoid cracking the fan housing.

- Guide the print fan cable under the cable hook on the Fan-shroud.

STEP 23 Connecting the print fan



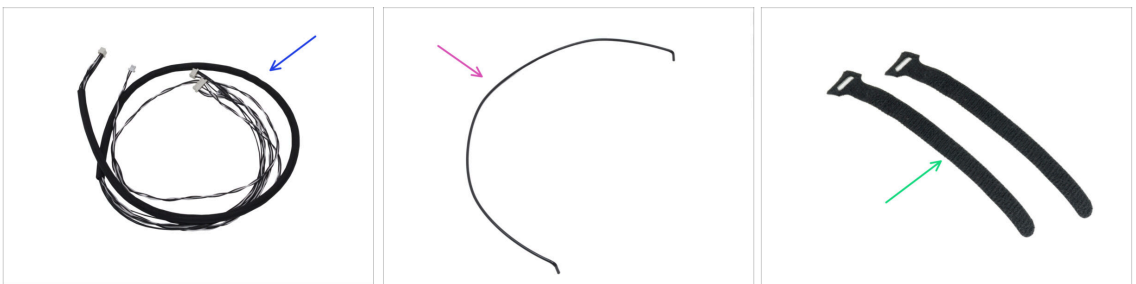
- Plug the print fan cable into the connector in the INDX Toolhead.
  - Keep the cable from **protruding too far to the side**.

STEP 24 INDX head cable: parts preparation I.



- **For the following steps, prepare:**
- Head-cable-clip (1x) *found in the Toolhead bag*
- Swingarm-clip *found in the Toolhead bag*
- Head cable cover back (1x) *found in the Fasteners 1/2 bag*
- M3x10 screw (1x) *you removed earlier*
- M3x8rT screw (1x) *found in the Fasteners 2/2 bag*
- 3x8sT black screw (1x) *found in the Fasteners 1/2 bag*

STEP 25 INDX head cable: parts preparation II.



- INDX head cable (1x) *found in the Cables bag*
- Nylon string 4 x 2.5 x 450 (1x) *found in the INDX Fasteners and Plastic parts box*
- Cable tie (2x) *you removed earlier*

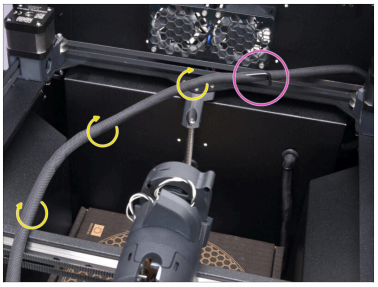
STEP 26 Guiding the head cable



- Now move to the rear side of the printer.
- Pass the head cable connector through the lower oval opening on the left side of the rear panel.
  - Some of our printers do not have the grommet on the lower opening. This does not affect the process.
  - Insert most of the braided cable into the printer.The exact length will be adjusted later.
  - Make sure the **grommet does not slide into the printer**. If needed, you can pull it outward for easier handling; it will be reinstalled later.
- Inside the printer, route the head cable upward through the corner behind the gantry assembly.

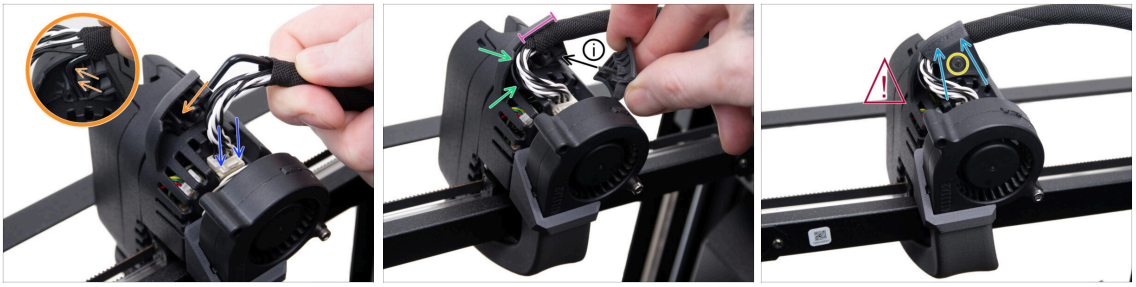
STEP 27 Inserting the nylon string





- In this step, we will insert the nylon into the cable sleeve.
- Insert the nylon string into the cable sleeve near the head cable connector.
- ⚠ Ensure that the nylon string is inserted as shown, with **the end of the nylon pointing down**.
  - Ensure that the nylon string is completely wrapped inside the sleeve, along with the head cable.
- Continue inserting the nylon string into the cable sleeve along the whole length.
- Leave the end of the nylon string sticking out from the cable sleeve as shown, with **the end of the nylon pointing down.**
- Tighten the cable sleeve around the head cable and the nylon string by gently twisting the sleeve.

STEP 28 Connecting the head cable

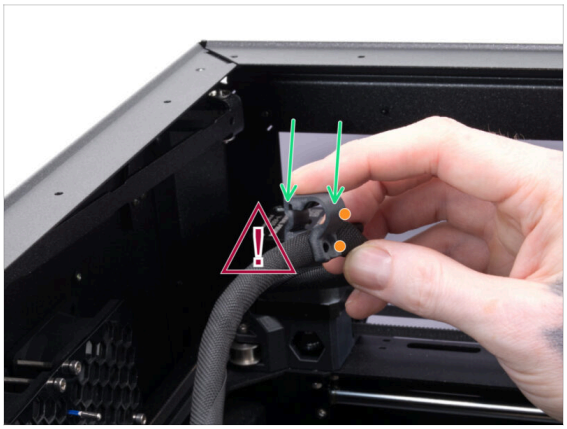


- Plug the head cable into the INDX Toolhead. Ensure that the safety latch clicks in place.
- Insert the nylon string into the slot in the head cable cover front. Ensure that the nylon is inserted all the way in.
- Insert the cables into the channel. Ensure that no cables are sticking out.
- Adjust the textile sleeve so that 1.5 cm (0.59 in) is inside the channel.
- Note the protruding bit on the head cable cover back. It will fit into the slot in the INDX Toolhead.
- Attach the head cable cover back.

⚠ When attaching the Head-cable-cover, ensure you **do not pinch or damage any cables.**

- Use the 3x8sT self-tapping black screw to secure the Head-cable-cover in place.

STEP 29 Attaching the head cable



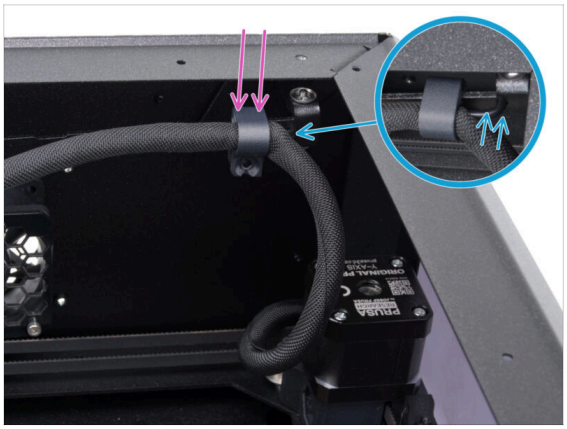


- **Gently open up the Swing-arm-clip** and attach it to the head cable with the nylon inside of the cable sleeve.

  ⚠ Proceed carefully. **Do not break the Swing-arm-clip** when attaching it to the head cable.

  - Pay attention to the correct orientation; the protruding side of the clip and the side with the cut-out for the screw must face the front of the printer.
- Once the Swing-arm-clip is on the head cable, adjust it so the distance between the clip and the bend in the nylon is 1.4 cm / 0.55 inch
- Locate the rightmost narrowing on the swing arm. We will mount the Swing-arm-clip there in the next step.
- Note the hole in the swing arm. This is where we will insert the nylon end in the next step.

STEP 30 Securing the swing arm clip





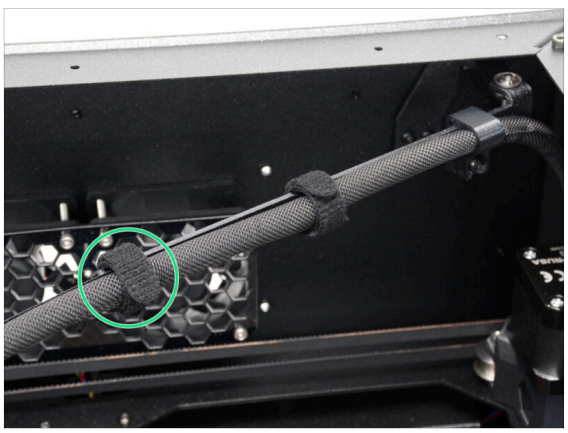
- Attach the Swing-arm-clip to the swing arm from the top. Ensure that the **clip is placed on the rightmost narrowing** on the swing arm.
- Insert the end of the nylon into the hole in the swingarm.

Ensure that the cable sleeve is not pinched where the nylon is sticking out.

- With the Swing-arm-clip and the nylon in the correct positions, secure the clip in place with the M3x8rT screw.

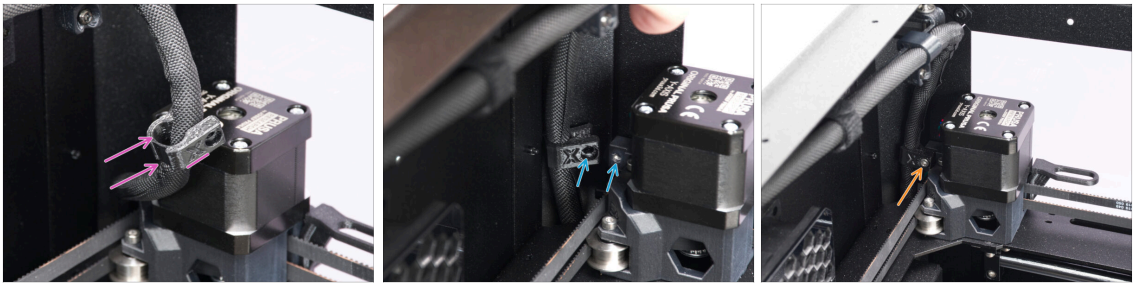
STEP 31 Securing the head cable





- Wrap the cable tie around the head cable and the middle narrowing of the swing arm.
- Tighten the cable tie and wrap the excess strap around it.
- Secure the head cable with the cable tie around the leftmost narrowing on the Swing arm.

STEP 32 Installing the Head cable clip



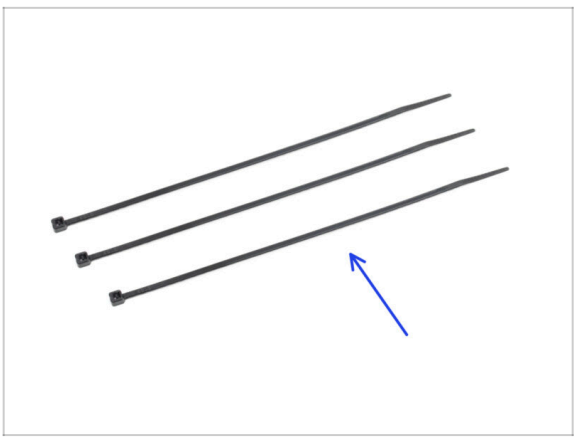
- Make sure that the cable sleeve is tightly wrapped around the cables. Twist the cable sleeve slightly to tighten it.
- Carefully open the Head-cable-clip and attach it to the head cable.

  Pay attention to the correct orientation, using the "X" symbol and the cutout for the screw head as a guide.

  Pro tip: Pre-thread the M3x10 screw into the part after snapping it onto the cable.
- Align the Head-cable-clip with the hole on the Y motor mount protrusion.
- Secure the part using an M3x10 screw.

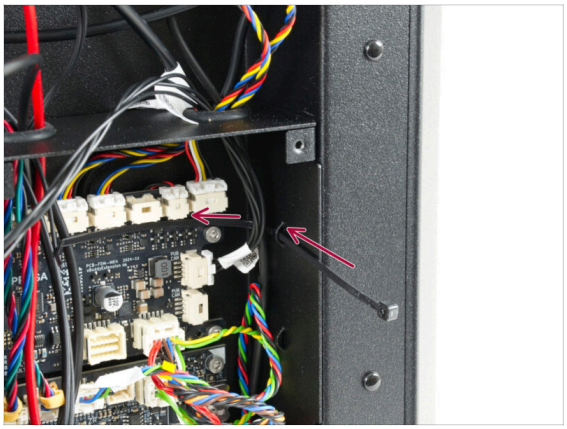
This step is tricky. If you are struggling and have a spare M3x12 screw, try inserting it instead.

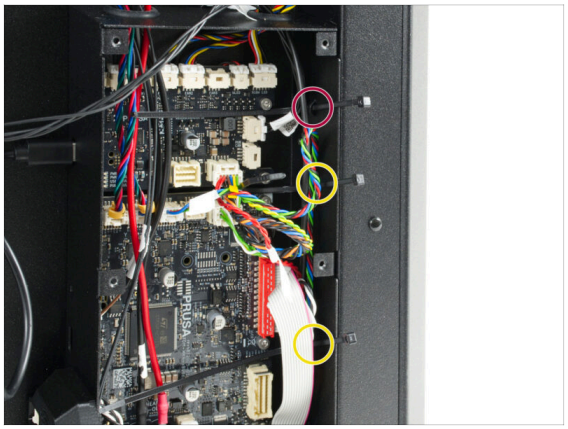
STEP 33 Connecting the head cable: parts preparation



- **For the following steps, prepare:**
- Zip tie (3x)

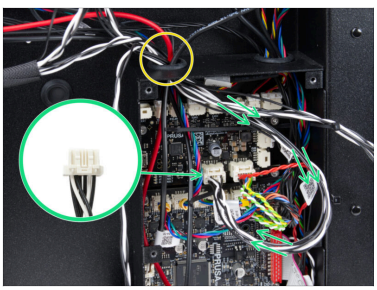
STEP 34 Inserting the zip ties

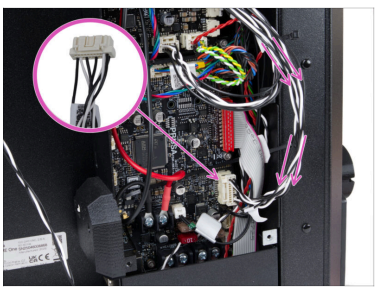


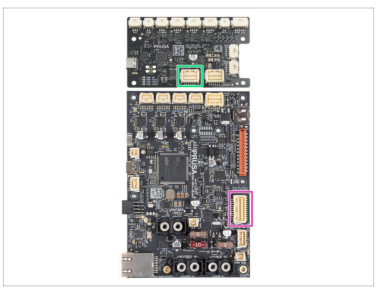


- Pass the zip tie through the upper perforation in the xBuddy box. The zip tie must run underneath all cables.
- Do the same for the other two perforations.

STEP 35 Connecting the head cable

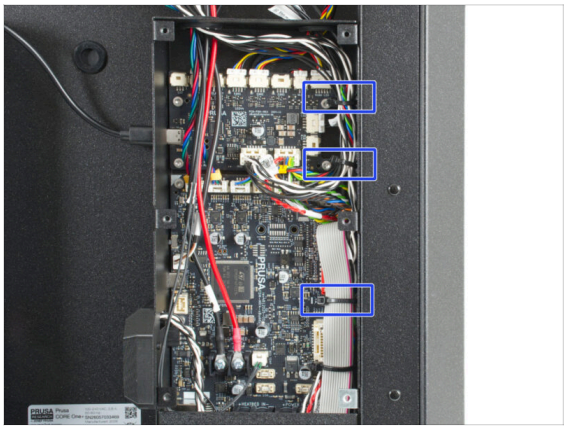






- Guide the head cable through the left opening in the xBuddy box.
- Plug the branched head cable connector as follows:
  - **Narrow connector:** plug it into the **MMU**-labeled slot on the **xBuddy Extension** board.
  - **Wide connector:** plug it into the **Nextruder**-labeled slot on the **xBuddy board**.

STEP 36 Securing the cables





- Adjust the cable management according to the picture. Route all cables along the edges.
- Tighten the zip ties on the right side and trim the excess.
- ⚠ **Do not overtighten** to avoid damaging the cables.
- **Leave the last connector of the head cable unplugged.** This will be done later on when we connect the dock fan.
  - We recommend hanging the cable on the other cables so it does not get damaged when turning the printer.

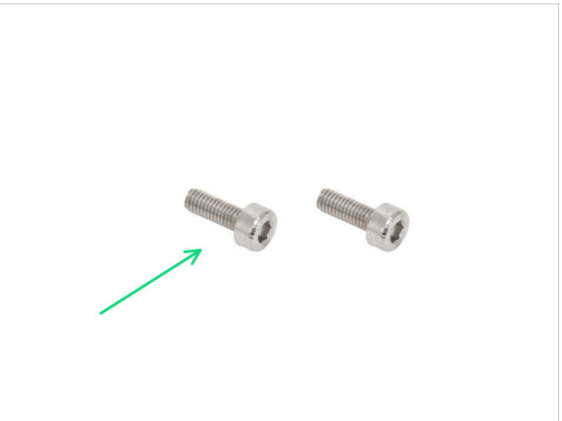
STEP 37 Haribo time!



- Time for a little yummy gummy break.
- Take a small reward break: eat five gummy bears.

STEP 38 INDX PTFE holders: parts preparation

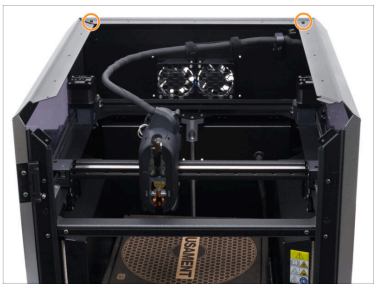




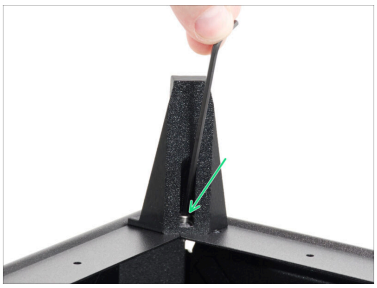
Listed are the parts needed for the 8-tool version of the printer. For the 4-tool version, you will only need the left PTFE holder and one screw.

- **For the following steps, prepare:**
- INDX-PTFE-holder-left (1x) *marked "L" found in the Filament Sensor Holder Left bag*
- INDX-PTFE-holder-right (1x) *marked "R" found in the Filament Sensor Holder Right bag*
- M3x10 screw (2x) *you removed earlier*

STEP 39 Installing the PTFE-holder-left

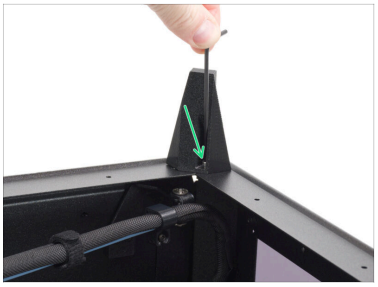
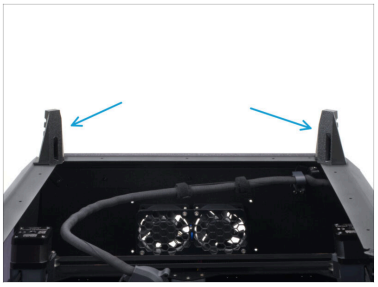






- Using the 2.5mm Allen key release and remove two M3x4 screws securing the top rear profile.
- Take the PTFE-holder-**left** and insert one M3x10 screw.
- Align the PTFE-holder-left with the **left** hole on the top rear profile.
- Join both parts by fully tightening the M3x10 screw.

STEP 40 Installing the PTFE-holder-right

ⓘ **Skip this step if you have the 4-tool version** of the Prusa CORE One/+ INDX.

- Take the PTFE-holder-**right** and insert one M3x10 screw.
- Align the PTFE-holder-right with the **right** hole on the rear profile.
- Join both parts by fully tightening the M3x10 screw.
- Visually compare both PTFE holders with the picture.

STEP 41 Side filament sensors: parts preparation



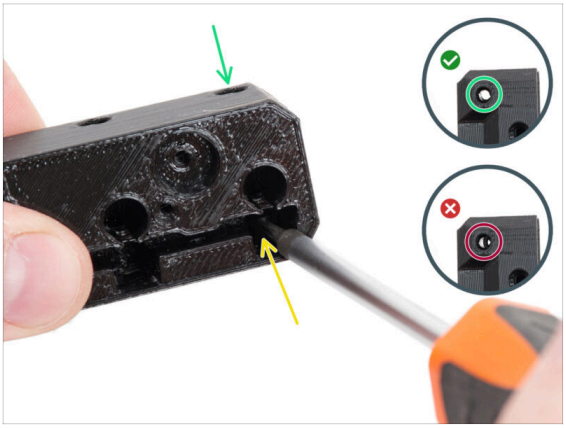



ⓘ Listed are the parts needed for the 8-tool version of the printer. For the 4-tool version, you will need half of the parts.

- **For the following steps, prepare:**
- INDX-C1-FS-top (1x) *found in the Filament holder L bag*
- INDX-C1-FS-top (1x) *found in the Filament holder R bag*
  - ⓘ Note that each part has a different position numbering.
- Sleeve 2x5 (8x) *found in the Fasteners Tools INDX bag*
- Collet (8x) *found in the Fasteners Tools INDX bag*
- M3x12cT screw (4x) found in the Fasteners 2/2 bag
- Magnet 3.2 x 5 (4x) *found in the Fasteners Tools INDX bag*
  - The magnets are quite strong. Keep them apart at a sufficient distance, as they can break each other if they slam together.

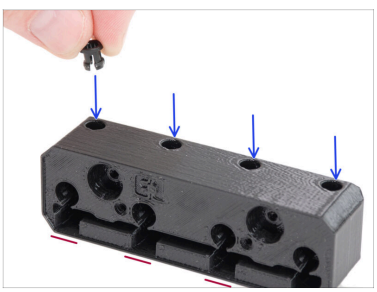
STEP 42 Inserting the sleeves





- Insert the 2x5 sleeves into the indicated positions in the square opening of the FS-top.
- Push each sleeve **fully into place** using a non-sharp tool. It will click when correctly seated.
- **Check from the side that each sleeve is in the correct position:**
  - The sleeve is in the correct position.
  - The sleeve needs to be pushed further.
- Repeat this procedure for all the sleeves on both FS-top parts.

STEP 43 Inserting the collets







- Position the FS-top with the square openings facing down.
- Insert the collets into the top openings.
- Use this procedure for both FS-top parts.

STEP 44 Installing the magnets





- Insert the 5x2 magnet into the FS-top with the cut-out facing up.
- Secure the magnet with the M3x12cT screw.
  - ⓘ The magnet may stick to the T10 key during tightening; hold it in place by hand.
- Repeat the same process to install the remaining magnets on both FS-top parts.

STEP 45 Assembling the FS: parts preparation I

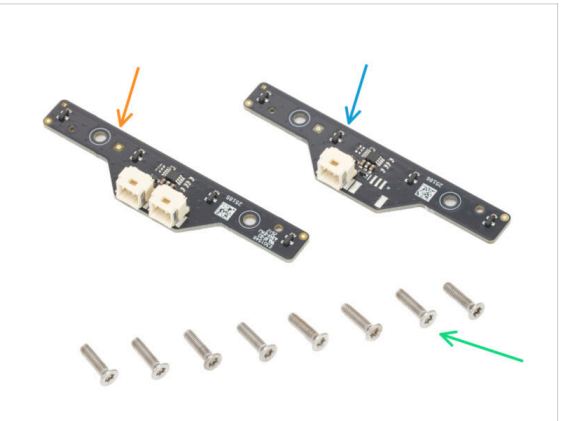


ⓘ Listed are the parts needed for the 8-tool version of the printer. For the 4-tool version, you will need half of the parts.

- **For the following steps, please prepare:**
- Magnet 7x8 (8x) *found in the Fasteners Tools INDX bag*
  - The magnets are quite strong. Keep them apart at a sufficient distance, as they can break each other if they slam together.
- Steelball 7mm (8x) *found in the Fasteners Tools INDX bag.*

STEP 46 Assembling the FS: parts preparation II





- **For the following steps, please prepare:**
- INDX-C1-FS-holder (1x) *found in the Filament Sensor Holder Left bag*
- INDX-C1-FS-holder (1x) *found in the Filament Sensor Holder Right bag*
- Filament sensor board Left (1x) *found in the electronics box*
- Filament sensor board Right (1x) *found in the electronics box*
- M3x12cT screw (8x) *found in the Fasteners 2/2 bag*

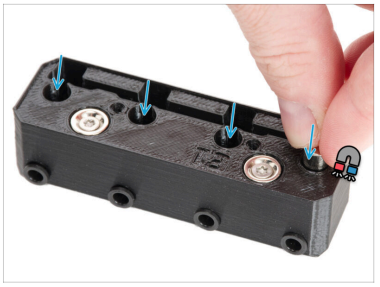
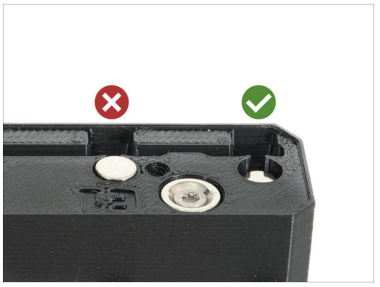
ⓘ Both INDX-C1-FS-holders are identical. If you have the 4-tool version, you only received the left Filament sensor board with two connectors.

STEP 47 Inserting the steel balls



- Insert one steelball 7mm into each round hole.
- Repeat the process with the second FS-top part.

STEP 48 Attaching the magnets

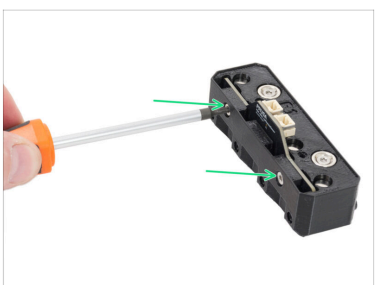




The magnets are quite strong. Make sure that you keep both parts far from each other.

- Place one of the 7x8 magnets onto the 5x2 magnet. Note which side **attracts the magnet**.
- Insert the magnet in the same hole as you placed the steelball 7mm.
  - Make sure that you insert the magnet with the **attracting side going first**.
- **Check that you have the correct position of the magnets:**
  - **NOT OK:** When the **magnet is poking out**, it needs to be flipped and inserted again correctly.
  - **OK:** The **magnet is seated** in the hole.
- Insert the three remaining magnets the same way.

STEP 49 Assembling the FS-top left





- Prepare the FS-top assembly (**positions 4–1**).
- Insert the filament sensor board **LEFT** (with two connectors) into the ridge in the filament sensor holder top.
  - Make sure the connectors are correctly oriented relative to the printed part.
  - Insert the part fully down.
- Secure the part using two M3x12cT countersunk screws.

STEP 50 Covering the FS - left

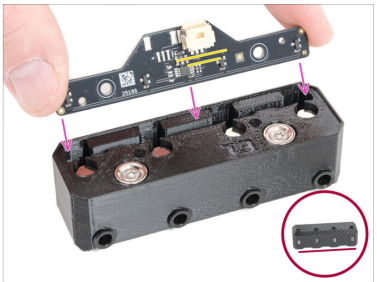
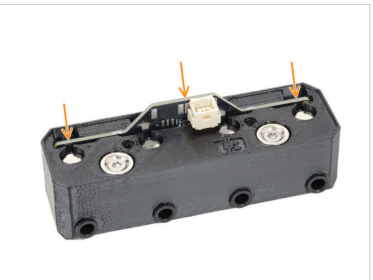




- Place the FS-holder onto the filament sensor assembly, ensuring the **connectors pass through the rectangular opening**.
- Use the two M3x12cT screws to secure the board in place. Tighten them firmly.

ⓘ **If you have the 4-tool version** of the Prusa CORE One/+ INDX, skip to this step: **PTFE tubes - left side: parts preparation**

STEP 51 Assembling the FS-top right


- Prepare the FS-top assembly with the (**positions 8–5**).
- Insert the filament sensor board **RIGHT** (with one connector) into the ridge in the filament sensor holder top.
  - Make sure the connector are correctly oriented relative to the printed part.
  - Insert the filament sensor board into the FS-top assembly until fully seated.
- Secure the part using two M3x12cT countersunk screws.

STEP 52 Covering the FS - right



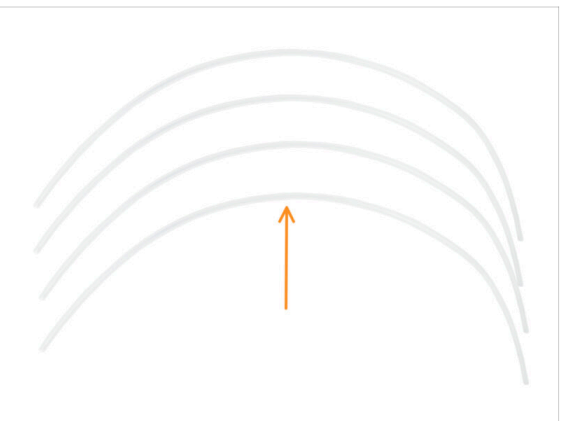


- Prepare the filament sensor assembly right (positions 8-5).
- Place the FS-holder onto the filament sensor assembly, ensuring the **connector passes through the rectangular opening**.
- Use the two M3x12cT screws to secure the board in place. Tighten them firmly.

If you are installing the GEN 2 upgrade along with the Prusa INDX conversion, **return to the Prusa INDX GEN 2 article now**.

STEP 53 PTFE tubes - left side: parts preparation





Listed are the parts needed for the 8-tool version of the printer. For the 4-tool version, you only need one cable.

- **For the following steps, please prepare:**
- Filament sensor cable (2x) *found in the Cables bag*
- 3x12sT screw (1x) *found in the Fasteners 2/2 bag*
- PTFE tube 4 x 2.5 x 880 (4x) *found in the main box*

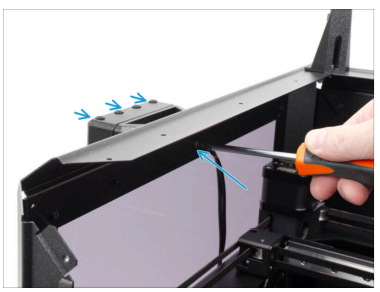
STEP 54 Preparing the FS - left





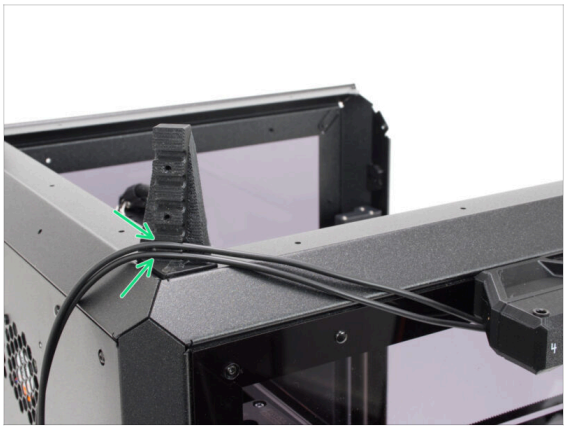
- Remove the upper center nylon rivet from the left transparent side panel.
- Insert a 3x12sT screw from the inside into the rivet hole.
- Take the filament sensor assembly with the two connectors (positions 4–1) and connect the two filament sensor cables to it.
  - ⓘ **The 4-tool version** of the Prusa CORE One/+ INDX has **one filament sensor cable**. Plug it into any of the connectors.
  - ⓘ Both ends of the filament sensor cable are identical and can be connected interchangeably.
- Guide the cables out through the cable channels on the left side.

STEP 55 Mounting the FS - left


- Align the left filament sensor assembly with the protruding 3x12sT screw.
  - Ensure correct orientation - the collets must face upward.
- Fully tighten the screw to secure the assembly. **Make sure that:**
  - The tab along the top edge is seated in the gap above the transparent side panel.

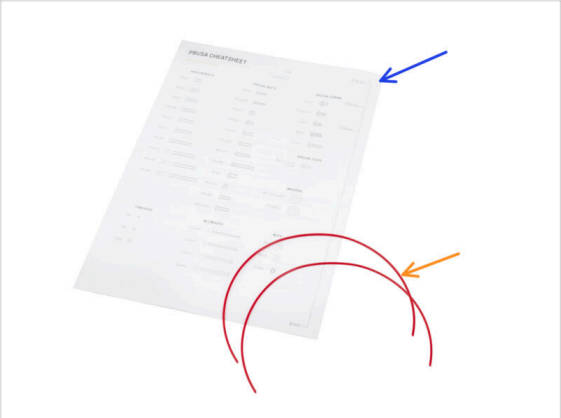
STEP 56 Connecting the PTFE tube - left





- Insert both filament sensor cables into the lower cable channels in the PTFE-holder.
  - ⓘ **The 4-tool version** of the Prusa CORE One/+ INDX has one filament sensor cable. Lead it through the bottom channel.
  - The cables should neither sag nor be under tension along the route.
- Insert four PTFE tubes into the collets in the filament sensor.
  - Once inserted, try to gently pull the tube out of the collet to verify it is locked in.

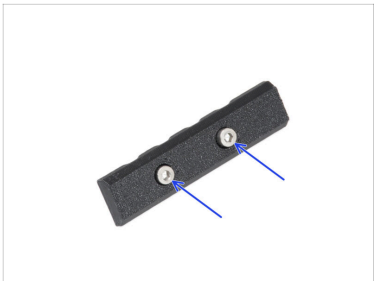
STEP 57 PTFE measurement: parts preparation





- **For the following parts, please prepare:**
- Prusa Cheatsheet (1x)
  - It is on the reverse side of the welcome letter you received at the beginning of the package.
- Filament 300 mm (2x)
  - If you have the **4-tool version** of the Prusa CORE One/+ INDX, you only need **ONE piece of filament**, not two.
  - Cut the filament to at least 300 mm long. We recommend using PETG, but it is not required.
  - If you have a 300 mm gauge, you can use it as an alternative.
- INDX-PTFE-holder-cover (1x) *found in the Filament Sensor Holder Left bag*
- M3x10 screw (2x) *you removed earlier*

STEP 58 Attaching the PTFE tubes - left





- Insert two M3x10 screws through the INDX-PTFE-holder-cover and keep the part nearby.
- Guide all four PTFE tubes through the channels in the PTFE-holder. Hold them in place by hand to prevent them from falling out.

  ⚠ Make sure the filament sensor cables are routed in the lower channels.
- Place the PTFE-holder-cover over the PTFE tubes and the cables. The part is not symmetrical, install it with the longer side facing down.
  - **Do not fully tighten it**; the PTFE tubes must be able to move back and forth.

STEP 59 Measurement info



In the following steps, you will measure the correct PTFE tube length between the PTFE-holder and the filament sensor.

- You can either use a measuring tape or the filament method described below:
- Along the side of the **Prusa Cheatsheet** you received with your Prusa CORE One/+ INDX, note the scale in millimeters - these indicate the required PTFE tube lengths.
- The initial length is 300 mm. **Do not shorten it yet**.

ⓘ In the following steps, you will be instructed to shorten the filament to the required length.

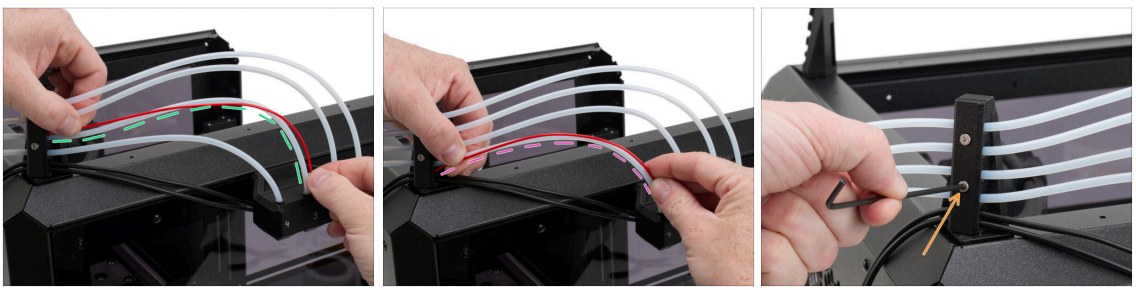
- **If you have the 8-tool version** of the Prusa CORE One/+ INDX, keep the second piece of filament for the right side.

STEP 60 Inserting the PTFE tubes (position 1,2)



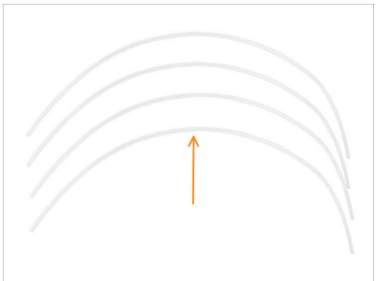
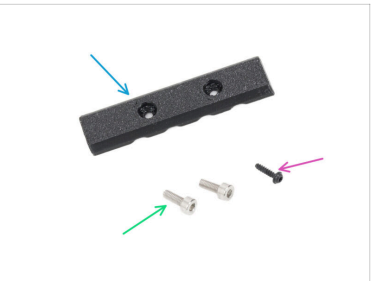
- Place one end of the filament at the filament sensor against the PTFE tube at **position 1**.
- Place the other end against the same PTFE tube at the PTFE-holder.
  - Slide the filament in the PTFE-holder to match the PTFE tube length.
- Cut the filament to **270 mm**.
  - Adjust the PTFE tube to **position 2** according to the shortened filament.
- Fully tighten the upper screw.
  - This will lock the first PTFE tubes in place and prevent movement.

STEP 61 Inserting the PTFE tubes (position 3,4)



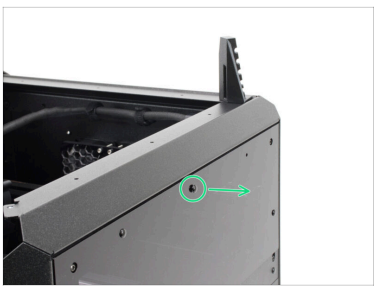
- Cut the filament to **240 mm**.
  - Adjust the PTFE tube to **position 3** according to the shortened filament.
- Cut the filament to **210 mm**.
  - Adjust the PTFE tube to **position 4** according to the shortened filament.
- Do not throw the 210 mm piece of filament away. We can use it during filament sensor calibration later.
- Fully tighten the lower screw.
- **If you have the 4-tool version** of the Prusa CORE One/+ INDX, skip to this step: **Connecting the filament sensor cable**

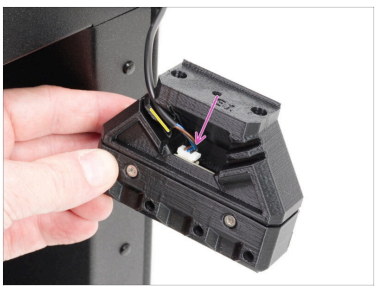
STEP 62 PTFE tubes - right side: parts preparation


- **For the following steps, please prepare:**
- PTFE tube 4 x 2.5 x 880 (4x) *found in the main box*
- INDX-PTFE-holder-cover (1x) *found in the Filament Sensor Holder Right bag*
- 3x12sT screw (1x) *found in the Fasteners 1/2 bag*
- M3x10 screw (2x) *you removed earlier*
- Right side filament sensor (1x) *scale 8-5*

STEP 63 Preparing the FS - right



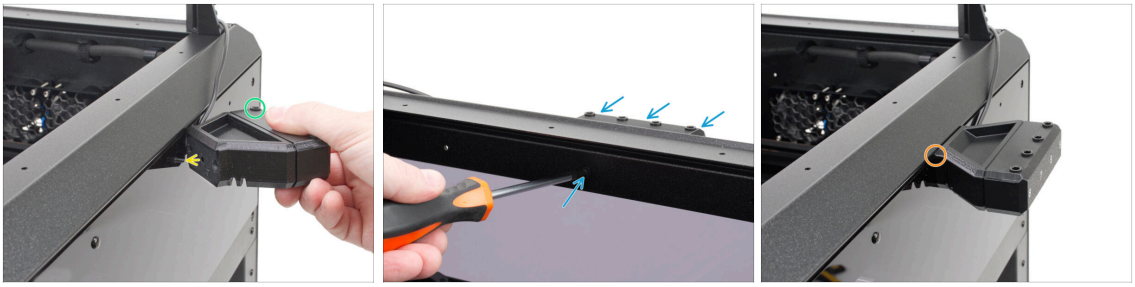


- Remove the upper center nylon rivet from the right transparent side panel.
- Insert a 3x12sT screw from the inside into the rivet hole.
- Take the filament sensor assembly with the one connector (positions 8–5) and connect the filament sensor cable to it.

  The filament sensor cable we are connecting is one of the two cables plugged into the left filament sensor assembly.

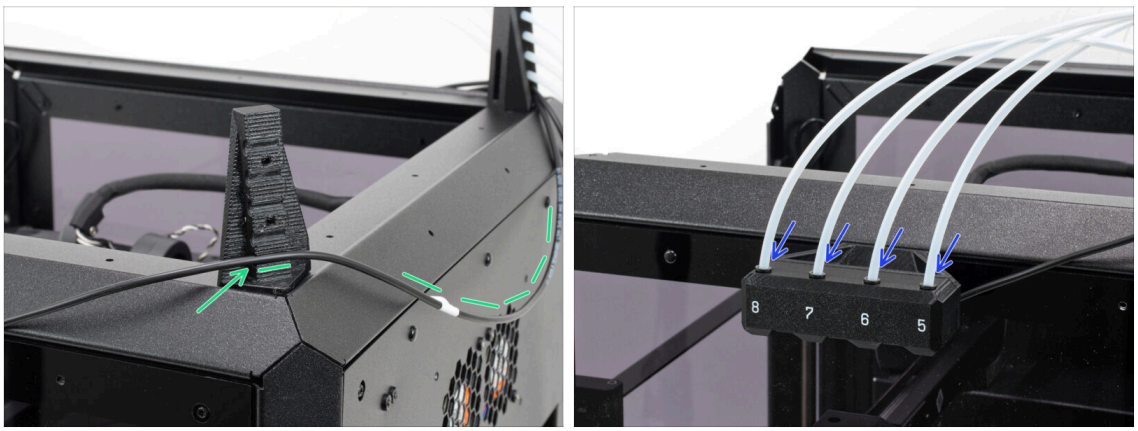
  It does not matter which of the two filament sensor cables you choose to plug into the right filament sensor assembly.
- Guide the filament sensor cable through any of the cable channels on the left side.

STEP 64 Mounting the FS - right



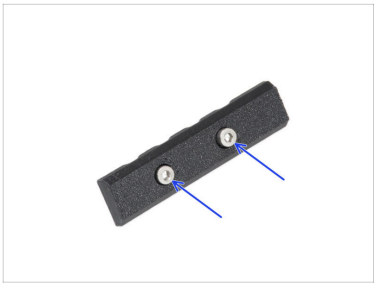
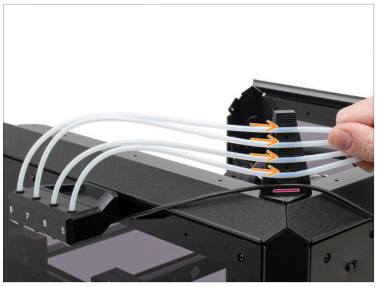
- Align the right filament sensor assembly with the protruding 3x12sT screw.
  - Ensure correct orientation - the collets must face upward.
- Fully tighten the screw to secure the assembly. **Make sure that:**
  - The tab along the top edge is seated in the gap above the transparent side panel.

STEP 65 Connecting the PTFE tube - right



- Insert the filament sensor cable into the lower cable channel in the PTFE-holder.
  - Let the excess cable hang freely at the back of the printer.
- Insert four PTFE tubes into the collets in the filament sensor.
  - Gently pull the tube to verify it is locked in the collet.

STEP 66 Attaching the PTFE tubes - right


- Insert two M3x10 screws through the INDX-PTFE-holder-cover and keep the part nearby.
- Guide all four PTFE tubes through the channels in the PTFE-holder. Hold them in place by hand to prevent them from falling out.

  ⚠ Make sure the filament sensor cable is routed in the lower channel.
- Place the PTFE-holder-cover over the PTFE tubes and the cables. The part is not symmetrical, install it with the longer side facing down.
  - **Do not tighten fully**; the PTFE tubes must be able to move back and forth.

STEP 67 Inserting the PTFE tubes (position 8,7)





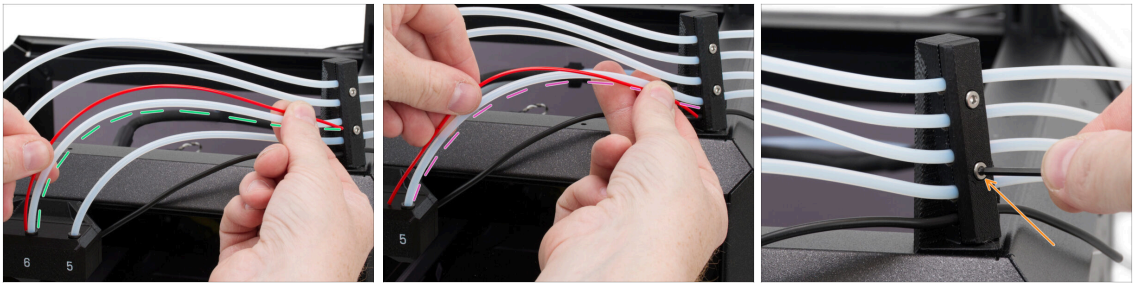
- Prepare the Prusa Cheatsheet and the second 300-mm filament.
- Place one end of the filament at the filament sensor against the PTFE tube at **position 8**.
- Place the other end against the same PTFE tube at the PTFE-holder.
  - Slide the filament in the PTFE-holder to match the PTFE tube length.

Cut the filament to **270 mm**.

  - Adjust the PTFE tube to **position 7** according to the shortened filament.
- Fully tighten the upper screw.

  ⓘ This will lock the first PTFE tubes in place and prevent movement.

STEP 68 Inserting the PTFE tubes (position 5,6)



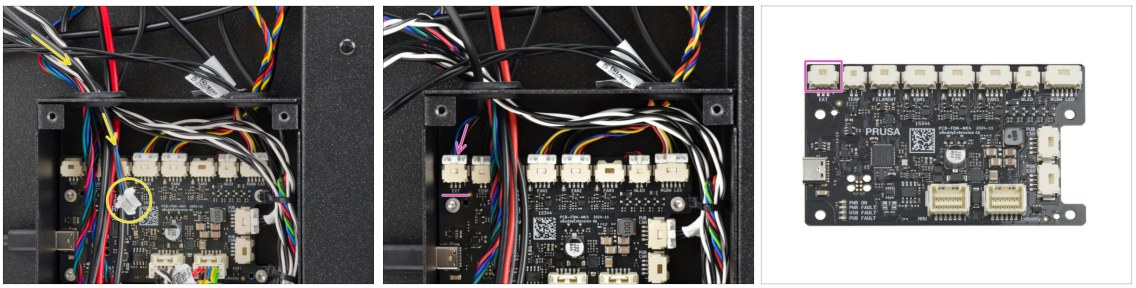
Cut the filament to **240 mm**.

- Adjust the PTFE tube to **position 6** according to the shortened filament.

Cut the filament to **210 mm**.

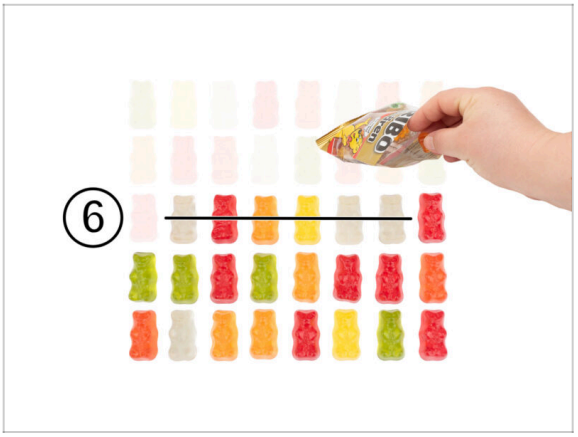
- Adjust the PTFE tube to **position 5** according to the shortened filament.
- Fully tighten the lower screw.

STEP 69 Connecting the filament sensor cable



- Route the left filament sensor cable through the left opening in the xBuddy box.
- Plug the filament sensor cable into the first slot labeled **EXT** on the xBuddy Extension board.

STEP 70 Haribo time!



- Great job so far! Another dose of sugar is required.
- Eat six gummy bears.

STEP 71 Done



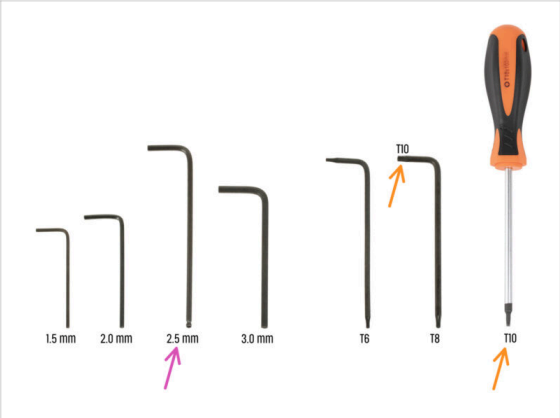


- **Congratulations!** You have just assembled the INDX Toolhead and the side filament sensors.
- Let's go to the next chapter.

5. Spoolholders & Tool dock assembly



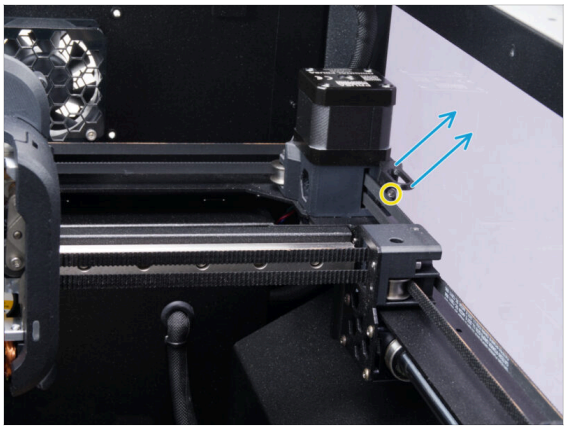
STEP 1 Tools necessary for this chapter

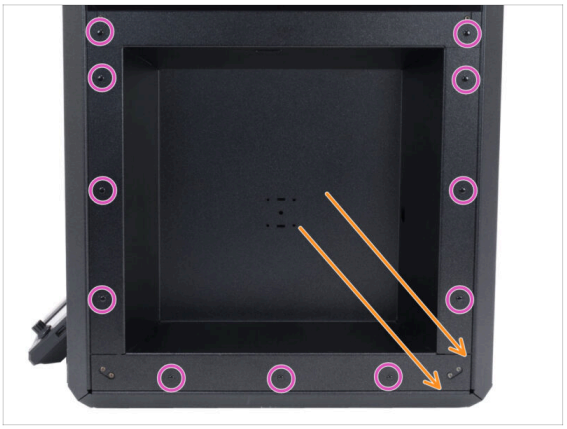




- **For this chapter, please prepare:**
- 2.5mm Allen key
- T10 key / screwdriver
- Flush cutters - an optional tool, recommended to use for cutting the zip ties. It can be purchased from our e-shop prusa3d.com.
- For this chapter, we also recommend printing out the community-made Snap-rivet-remover

STEP 2 Removing the side cover - right

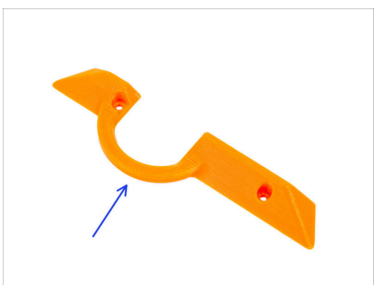




ⓘ We recommend removing the Bowden-guide to make the zip tie insertion easier in the next step.

- Remove the M3x10 screw that secures the Bowden-guide part in the right rear corner of the printer.
- Remove the Bowden-guide. We will not need it anymore.
- Remove the eleven nylon rivets that keep the right side cover attached to the printer.
  - You can use the core-one-snap-rivet-remover mentioned in the previous step.
- Carefully remove the side cover and set it aside for now.

STEP 3 Side handle: parts preparation

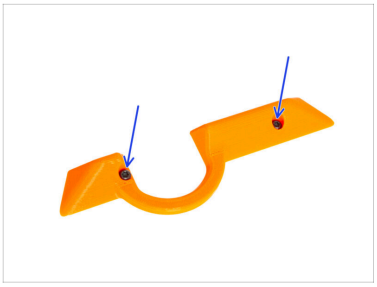






- **For the following steps, prepare:**
- Side-handle-right (1x) *found in the Wiper bag*
- M3nN nut (2x) *found in the Fasteners 1/2 bag*
- M3x8rT screw (2x) *you removed earlier*
- Right side cover (1x) *you removed earlier*

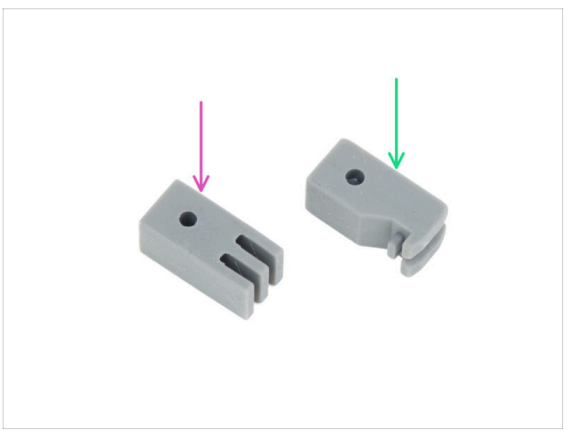
STEP 4 Installing the side handle





- Insert two M3x8rT screw into the Side-handle-right.
- Align the Side-handle-right with the holes in the right side panel and place it in position.
- Place M3nN nuts onto the screws and hold them with the universal tool.
- Firmly tighten the screws from the other side.

STEP 5 Nozzle cleaner: parts preparation I.

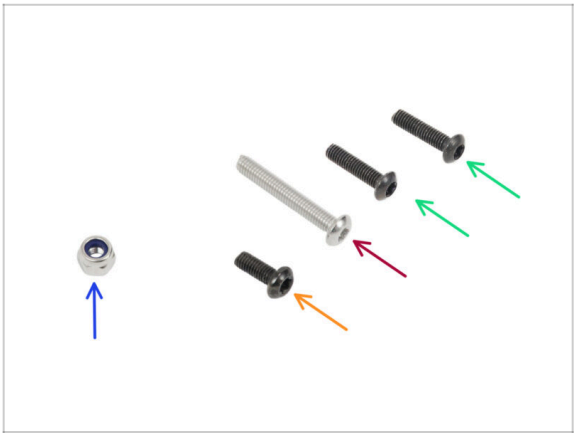
- **For the following steps, prepare:**
- Wiper-base (1x) *found in the Wiper bag*

  ⓘ Note that the Wiper-base in the photos may differ slightly from the delivered part. This does not affect the assembly or functionality.
- Wiper-lock (1x) *found in the Wiper bag*
- Wiper-adjuster (1x) *found in the Wiper bag*
- Silicone wiper (1x) *found in the Fasteners 2/2 bag*
- Silicone priming block (1x) *found in the Fasteners 2/2 bag*

Nozzle cleaner is the name for the whole assembly.

ⓘ If you are installing the larger purge bin at the same time, check this **article**

STEP 6 Nozzle cleaner: parts preparation II.



- M3nN nut (1x) *found in the Fasteners 1/2 bag*
- M3x8rT screw (1x) *found in the Fasteners 2/2 bag*
- M3x20rT screw (1x) *found in the Fasteners 2/2 bag*
- M3x12rT screw (2x) *found in the Fasteners 2/2 bag*

STEP 7 Assembling the Wiper-lock







- Push the M3x20rT screw through the Wiper-lock.
- Insert the Wiper-lock with the screw into the Wiper-base.

STEP 8 Securing the Wiper-lock

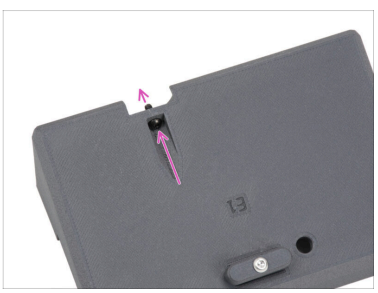




- From the opposite side, place the M3nN nut onto the screw and tighten it using the universal wrench.
- Loosen it by a quarter to half a turn so the Wiper-lock can move.
- Set the Wiper-lock **according to the markings** on the Wiper-base.

ⓘ If the Wiper-lock moves on its own, slightly tighten the screw.

STEP 9 Installing the Wiper-adjuster





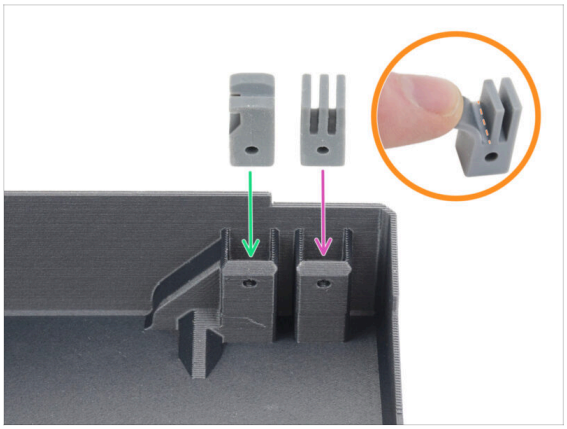


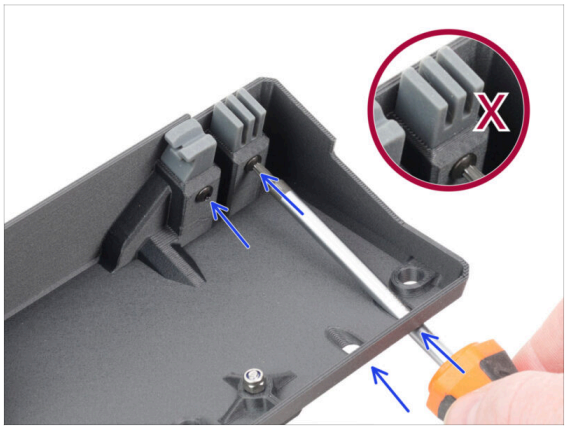
- Insert the M3x8rT screw through the channel in the Wiper-base.
- Align the hole in the Wiper-adjuster with the screw.
- Secure the Wiper-adjuster in the slots using the universal wrench and tighten the M3x8rT screw with a T10 screwdriver.

ⓘ Do not fully tighten so the Wiper-adjuster can be turned.

- Note the irregular shape of the Wiper-adjuster. Use the universal wrench to position it so that its **flattened side faces downward**.

STEP 10 Inserting the wiper blocks





- Insert the silicone priming block into the front slot (left in the photo). Ensure the part is oriented correctly.
- Insert the silicone wiper into the rear slot (right in the photo).
- Check the correct position of the silicone wiper. The wiper is sloped; make sure that the sloped side points inside the Wiper-base.

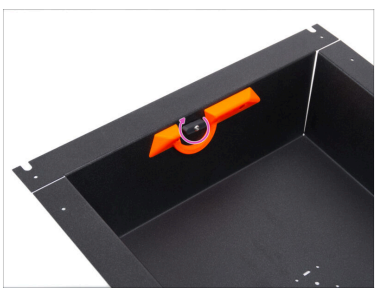
Pro tip: Lightly wipe the wiper blocks with IPA (Isopropyl alcohol) before inserting and securing them in the wiper base. This will make the insertion a lot easier.

- Secure the silicone wiper and priming block with two M3x12rT screws.
  - Guide the T10 key or screwdriver through the dedicated openings in the Wiper-base for better access.

Double-check that the wiper is inserted correctly, with the sloped side pointing inside the Wiper-base.

STEP 11 Mounting the wiper assembly

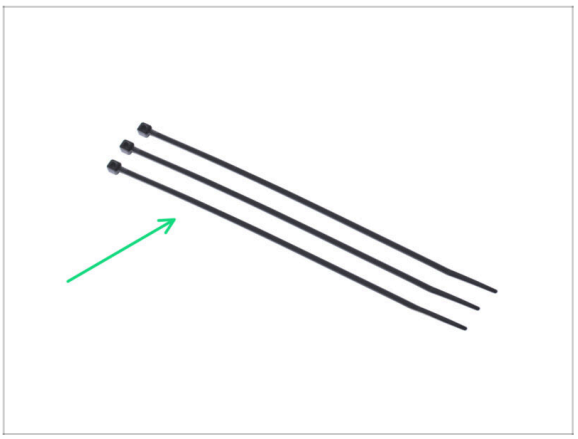






- Insert the wiper assembly into the hole in the side cover-right.
- Turn the lock to keep the wiper assembly attached to the cover.
- Set the side cover with the attached wiper assembly aside for now; we will mount it onto the printer soon.

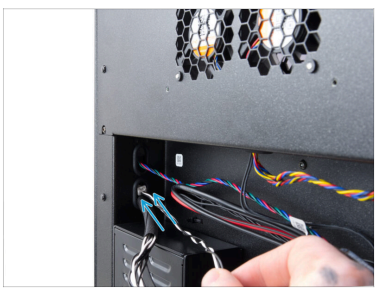
STEP 12 Dock fan cable: parts preparation



- **For the following steps, prepare:**
- Zip tie (3x)

STEP 13 Attaching the dock fan cable



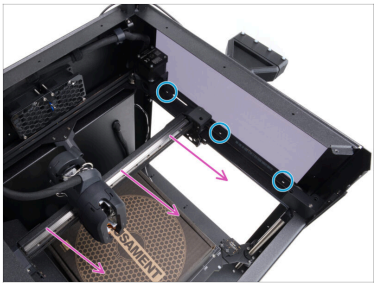
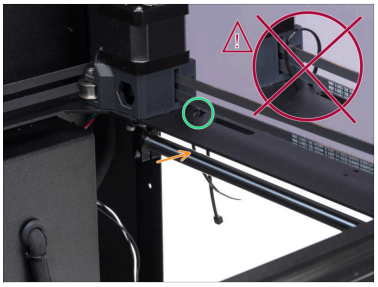
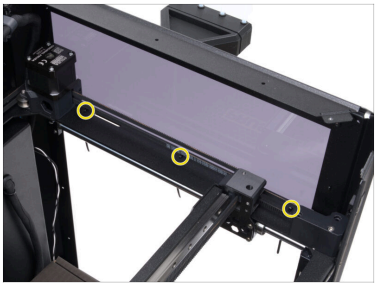




- The dock fan cable connector is the remaining part of the head cable.
- Insert the Dock fan cable connector through the lower oval opening on the left side of the rear panel.
- Push the cable inside.
- Inside the printer, gently pull the dock fan cable as shown in the photo.

ⓘ Some of our printers do not have the grommet on the lower opening. This does not affect the process.

STEP 14 Leading the dock fan cable I.

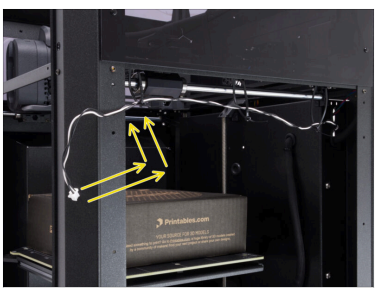
- Note the three pairs of holes on the right side of the printer.
- Move the INDX Toolhead to the front, between the front and the middle holes on the right side.
- Insert one zip tie into the rear hole as shown in the photo.

  ⚠ **Make sure that the zip tie is NOT looped around the belts!**
- Ensure that the zip tie is led as shown in the photo and that it is not looped around the smooth rod.
- Attach the other two zip ties in the same way.

ⓘ Check again that the cable is led correctly behind the rod holder and above the smooth rod.

STEP 15 Leading the Dock fan cable

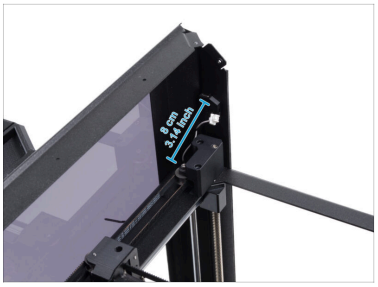




- Connect all three zip ties as shown in the photo. Do not tighten them yet.
- Lead the dock fan cable through all three connected zip ties.
- Move the end of the Dock fan cable inside the printer. Do not loop it around the front right profile.

STEP 16 Securing the zip ties

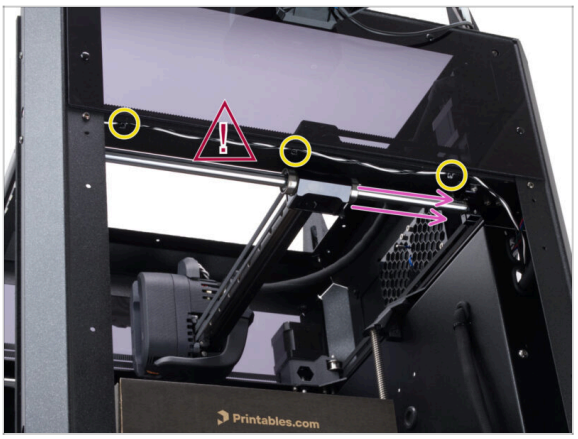






- Lead the dock fan cable through the opening between the core XY and the printer's frame.
- Before tightening the zipties, ensure that the dock fan cable is in position and protruding 8 cm/3.14 inches.
- Ensure that the cable is not slack between the zip ties.
- Tighten the zip ties.

STEP 17 Securing the zip ties II.

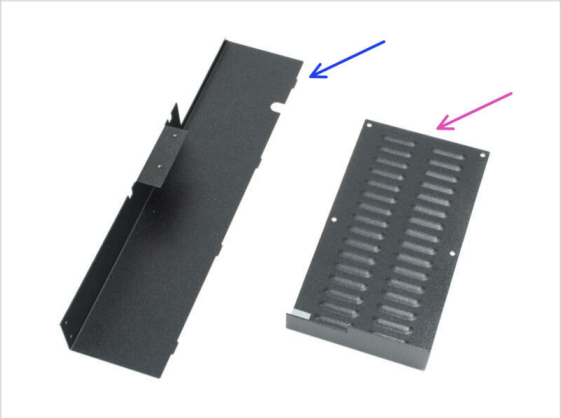


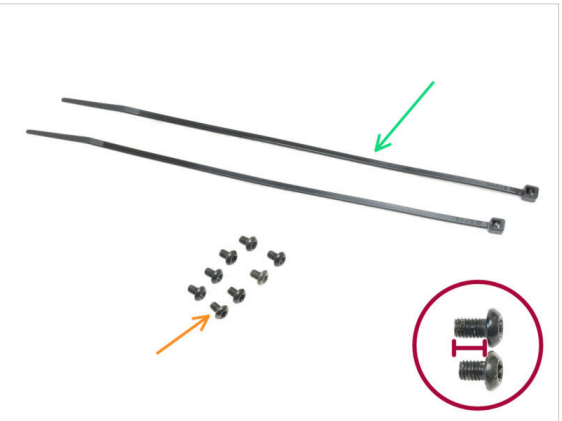
- Move the INDX Tollhead all the way to the back of the printer.
- Cut the excess zip tie.

⚠ While moving the Printhead, ensure that the **cable does not obstruct the movement of the XY axis.**

If you are installing the GEN 2 upgrade along with the Prusa INDX conversion, **return to the Prusa INDX GEN 2 article now**.

STEP 18 Electronics covers: parts preparation

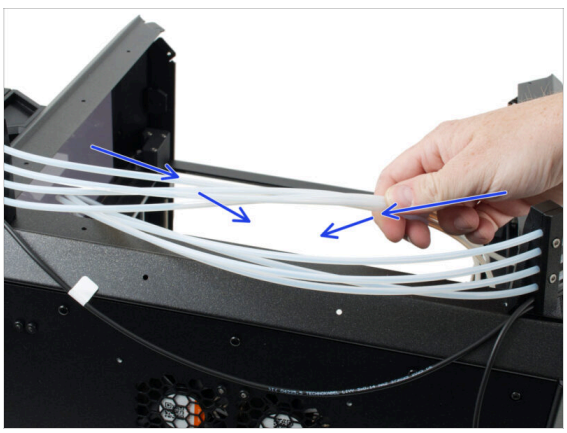


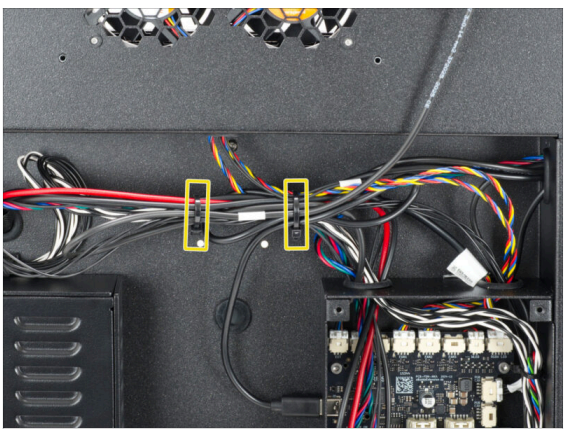


- **For the following steps, prepare:**
- Sheet metal back cover (1x)
- xBuddy cover (1x)
- Zip tie (2x)
- M3x4rT screw (8x) *you removed earlier*

⚠ Be careful **not to mix up the M3x4rT and M3x5rT screws**, which you will need later for the door assembly.

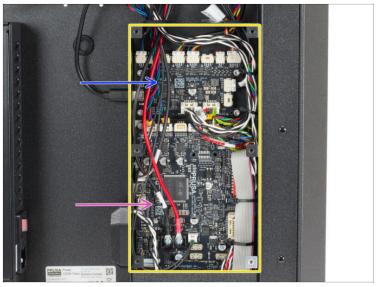
STEP 19 Securing the cables

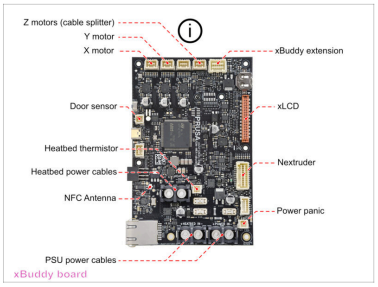


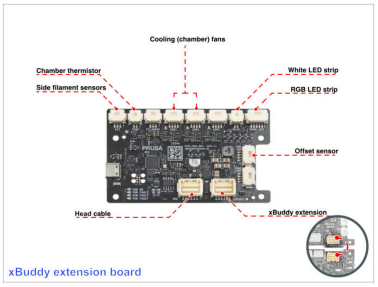


- Insert all loose ends of the PTFE tubes inside the printer.
- Bundle the cables together and secure them with two zip ties. **Do not overtighten the zip ties.**

STEP 20 Wiring check

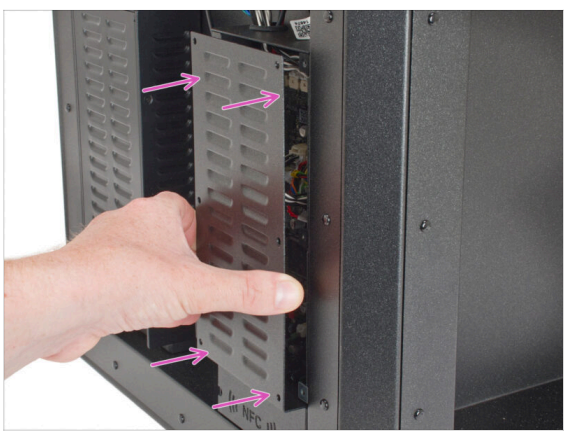






- Before closing the electronics cover, check that everything is correctly connected.
- Use the pictures as a reference to verify your electronics connections.
- ⓘ The Z-motors cable can be plugged into either the ZL or the ZR connector.
- **The electronics compartment is divided into two boards:**
  - xBuddy board
  - xBuddy extension board

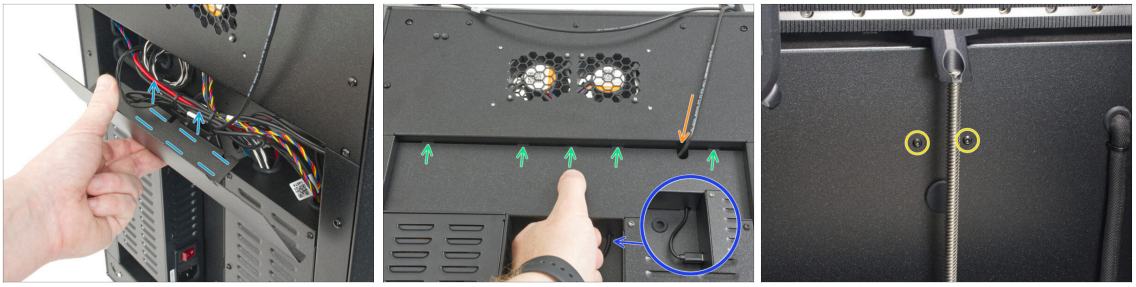
STEP 21 Covering the xBuddy box





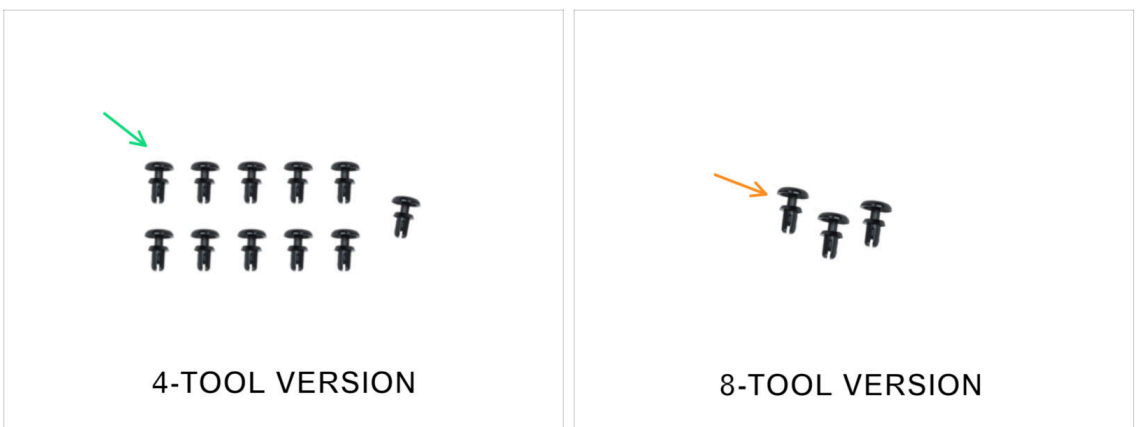
- Carefully cover the xBuddy box by first sliding the bent part of the cover into the box.
- ⚠ **Avoid pinching the cables** and make sure to insert the cover parallel to the xBuddyboard.
- Secure the xBuddy box cover using the six M3x4rT screws you removed earlier.

STEP 22 Installing the rear cover



- Align the rear sheet metal cover so that the cables can run through the "tray".
- Place the rear sheet metal cover into the recess. Push it toward the printer, then move it upward to engage it.
  - There are four tabs that should engage into the printer's chassis.
- Insert the filament sensor cable to the cutout.
- If you have a USB-C cable for the Buddy3D camera installed, route it through the lower cutout.
- From the inside of the printer, secure the rear cover in place using two M3x4rT screws you removed earlier.

STEP 23 Mounting the side panel: Parts preparation



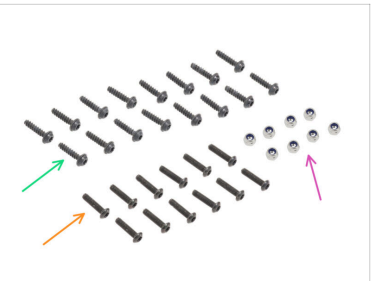
- **For the following steps, prepare:**
- **4-Tool version:**
  - Nylon rivet (11x) *found in the Fasteners 1/2 bag*
- **8-Tool version:**
  - Nylon rivet (3x) found in the Fasteners 1/2 bag

STEP 24 Mounting the right side panel



- **4-Tool version:**
  - Mount the side cover onto the printer.
  - Make sure that the INDX Toolhead is in the back of the printer, so the wiper assembly does not hit it.
  - Secure the right side cover with **11 nylon rivets** as shown.
- **8-Tool version:**
  - Mount the side cover onto the printer.
  - Make sure that the INDX Toolhead is in the back of the printer, so the wiper assembly does not hit it.
  - Secure the right side cover with **3 nylon rivets** as shown.

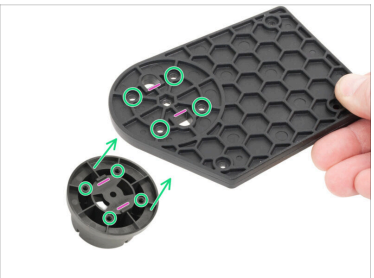
STEP 25 Bottom puck holders: parts preparation


ⓘ Listed are the parts needed for the 8-tool version of the printer. **For the 4-tool version, you will need half of the parts.**

- **For the following steps, prepare:**
- Universal puck (4x) *each found in the Telescopic Spoolholder Set bag*
- Puck holder bottom (4x) *found in the Puck Holders bag*
- 3x12sT screw (16x) *found in the Telescopic Spoolholder Set bags by a set of four*
- M3x12rT screw (12x) *found in the Fasteners 2/2 bag*
- M3nN nut (8x) *found in the Fasteners 1/2 bag*
- Spoolholder-assembly-tool (1x) *found in the Position Tools INDX bag*

STEP 26 Assembling the bottom puck holders





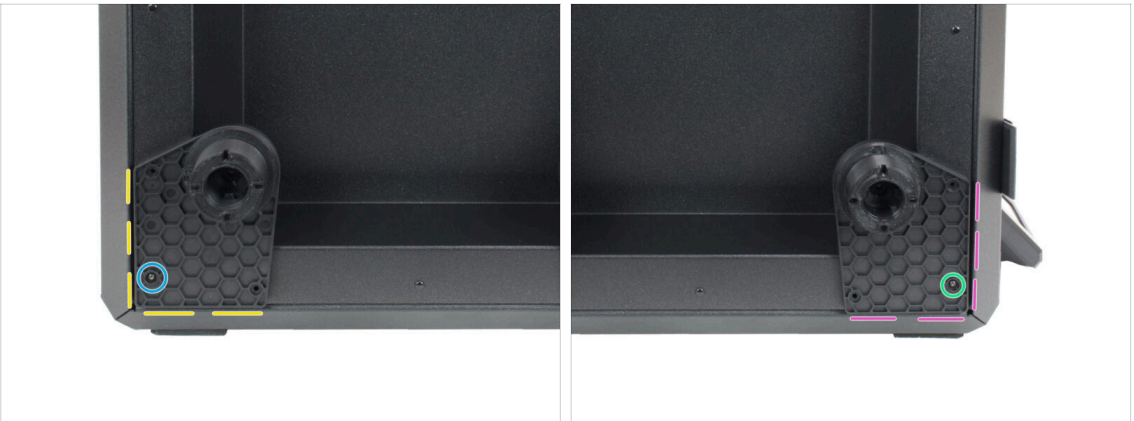
- Note the two protrusions on the puck universal. These have to be inserted into the openings in the puck holder top.
- Align the Puck holder top with the holes in the Puck-universal part and press the parts together.
- Join the parts using four 3x12sT screws.
- Install another Puck holder bottom onto the next Puck-universal part, but in a **mirrored orientation**.
- **If you have the 8-tool version** of Prusa CORE One/+ INDX, assemble the **second pair** of the Puck holder bottom parts using the same process.

STEP 27 Removing the screws - left



- On the left side of the printer, remove the two marked nylon rivets from each lower corner.
- Remove the **upper** M3x4rT screw from the front corner of the side panel.
- Remove the **upper** M3x4rT screw from the back corner of the side panel.

STEP 28 Mounting the bottom puck holders - left

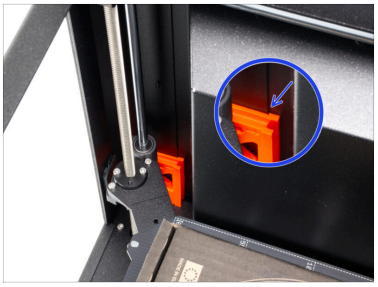


ⓘ **The design of the Universal pucks in the photos might differ** from the ones you received. This does not affect the assembly process.

- Place one Puck holder bottom in the rear corner on the left side. Ensure that the orientation is correct.
- Secure it with the M3x12rT screw.
- Place one Puck holder bottom in the front corner on the left side. Ensure that the orientation is correct.
- Secure it with the M3x12rT screw.

STEP 29 Securing the front puck holder bottom - left I.





ⓘ We use an orange Spoolholder-assembly-tool in this guide for clarity. Your Spoolholder-assembly-tool is black.

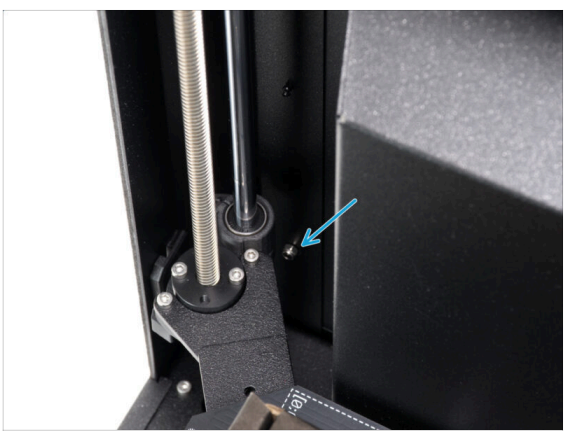
- Insert one M3nN nut into the Spoolholder-assembly-tool as shown in the photo.
  - **Make sure that the nut is pushed all the way in**, or you can damage the Spoolholder-assembly-tool!
  - ⓘ **The side of the nut without the rubber must point outward from the Spoolholder-assembly-tool.**
  - Double-check that the nut is inserted in the same hole closer to the top edge, with the **arrow pointing UP next to it.**
- Insert the Spoolholder-assembly-tool **in the front left corner of the printer**, with the M3nN nut facing the side cover.

⚠ Note the orientation of the Spoolholder-assembly-tool in the photo.

- "Hook" the ridge in the assembly tool onto the side of the metal profile.

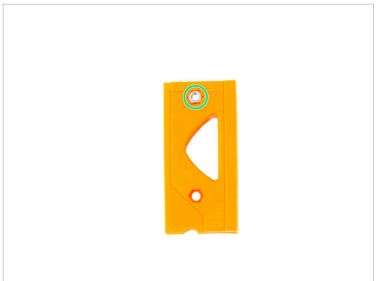
ⓘ The M3nN nut is now in the right position and height for the puck holder bottom to be attached to the printer with the M3x12rT screw.

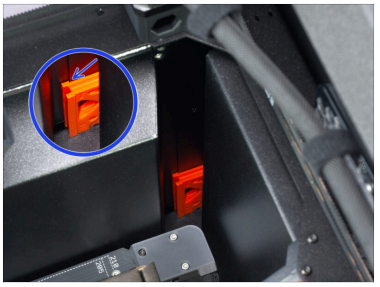
STEP 30 Securing the front puck-holder bottom - left II.

- Hold the Spoolholder-assembly-tool in position with your hand on the inside of the printer.
- Use the Torx key to tighten the M3x12rT screw.
- The front left puck holder is now attached to the printer.

STEP 31 Securing the rear puck holder bottom - left I.





- Insert one M3nN nut into the Spoolholder-assembly-tool as shown in the photo.
  - **Make sure that the nut is pushed all the way in**, or you can damage the Spoolholder-assembly-tool!
  - **The side of the nut without the rubber must point outward from the Spoolholder-assembly-tool.**
  - Double-check that the nut is inserted in the same hole closer to the top edge, with the **arrow pointing RIGHT next to it.**
- Insert the Spoolholder-assembly-tool **into the printer**, with the M3nN nut facing the side cover.

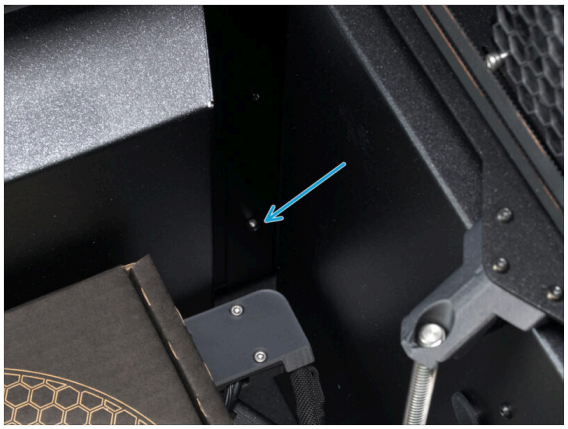
Note the orientation of the Spoolholder-assembly-tool in the photo, where it is inserted into the printer.

- "Hook" the ridge in the assembly tool onto the side of the metal profile.

The M3nN nut is now in the right position and height for the puck holder bottom to be attached to the printer with the M3x12rT screw.

STEP 32 Securing the rear puck holder bottom - left II.

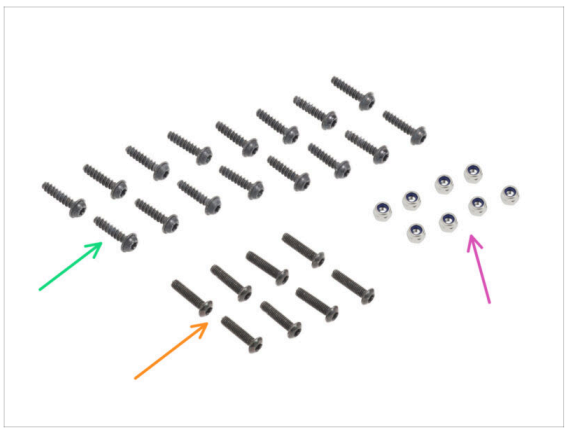




- Hold the Spoolholder-assembly-tool in position with your hand on the inside of the printer.
- Use the Torx key to tighten the M3x12rT screw.
- The rear left puck holder is now attached to the printer.
- **If you have the 8-tool version** of the printer, set the remaining puck holders aside; we will mount them later.

STEP 33 Top puck holders: parts preparation



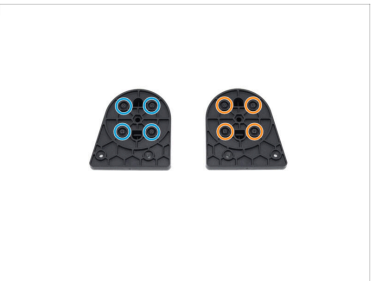


ⓘ Listed are the parts needed for the 8-tool version of the printer. **For the 4-tool version, you will need half of the listed parts.**

- **For the following steps, prepare:**
- Puck holder top (4x) *found in the Puck Holders bag*
- Puck-universal (4x) *found in the Pucks bag*
- 3x12sT screw (16x) *found in the Telescopic Spoolholder Set bags by a set of four*
- M3x12rT screw (8x) *found in the Fasteners 2/2 bag*
- M3nN nut (8x) *found in the Fasteners 1/2 bag*

STEP 34 Assembling the puck holder top







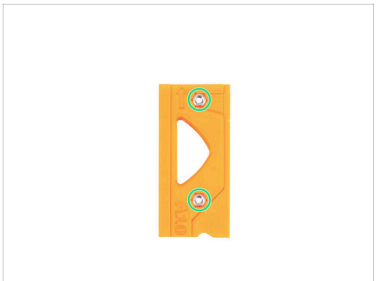
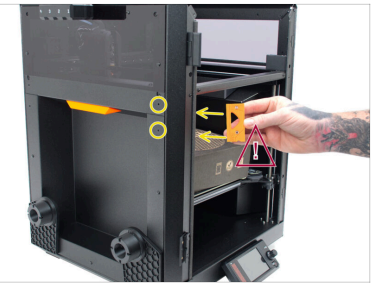
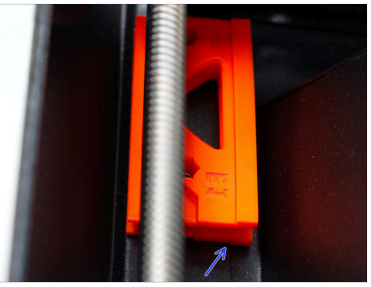
- Note the two notches on the Puck universal. These have to be inserted into the openings in the Puck holder top.
- Align the Puck holder top with the holes in the Puck-universal part and press the parts together.
- Join the parts using four 3x12sT screws.
- Install another Puck holder top onto the next Puck-universal part, but **in a mirrored orientation**.
- **If you have the 8 tool version**, assemble the **second pair** of the Puck holder top parts using the same process.

STEP 35 Removing the top nylon rivets - left



- On the left side of the printer, remove the two marked nylon rivets from each top corner.

STEP 36 Mounting the front puck holder top - left

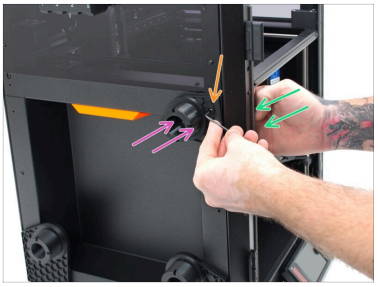
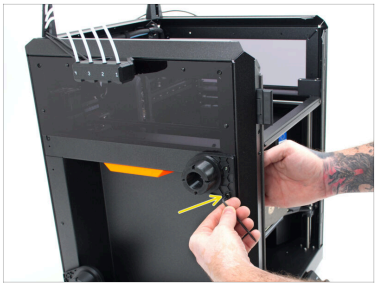
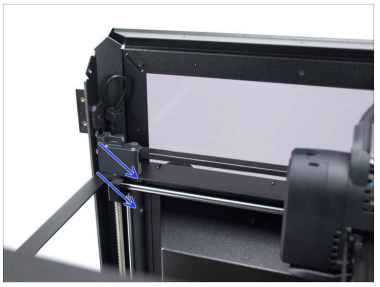
- Insert two M3nN nuts into the Spoolholder-assembly-tool as shown in the photo.
  - **Make sure that the nut is pushed all the way in**, or you can damage the Spoolholder-assembly-tool!
  - **The side of the nut without the rubber must point outward from the Spoolholder-assembly-tool.**
  - Double-check that the nuts are inserted as shown in the photo.
- Insert the Spoolholder-assembly-tool **into the printer**, with the M3nN nuts facing the side cover.

Note the orientation of the Spoolholder-assembly-tool in the photo, where it is inserted into the printer.

- "Hook" the ridge in the assembly tool onto the side of the metal profile and gently push the tool upwards.

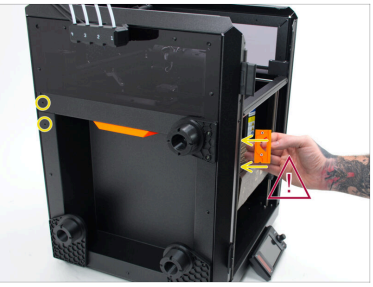
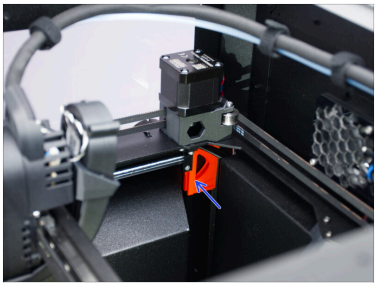
The M3nN nuts are now in the right position and height for the puck holder top to be attached to the printer with two M3x12rT screws.

STEP 37 Securing the front puck holder top - left

- Hold the Spoolholder-assembly-tool in position with your hand on the inside of the printer.
- Place the front puck holder top on the printer. Note the correct position in the photo.
- Insert the M3x12rT screw into the front puck holder top before attaching it to make it easier to connect the screw with the nut. Using only one hand is a bit fiddly, but manageable.
- Use the Torx key to tighten the top M3x12rT screw.
- Use the Torx key to tighten the lower M3x12rT screw.
- The front left puck holder is now attached to the printer.

STEP 38 Mounting the rear puck holder top - left

- Insert two M3nN nuts into the Spoolholder-assembly-tool as shown in the photo.
  - **Make sure that the nut is pushed all the way in**, or you can damage the Spoolholder-assembly-tool!
  - ⓘ **The side of the nut without the rubber must point outward from the Spoolholder-assembly-tool.**
  - Double-check that the nuts are inserted as shown.
- Insert the Spoolholder-assembly-tool **into the printer**, with the M3nN nuts facing the side cover.

⚠ Note the orientation of the Spoolholder-assembly-tool in the photo, where it is inserted into the printer.

- "Hook" the ridge in the assembly tool onto the side of the metal profile and gently push the tool upwards.

ⓘ The M3nN nuts are now in the right position and height for the puck holder top to be attached to the printer with two M3x12rT screws.

STEP 39 Securing the rear puck holder top - left



- Hold the Spoolholder-assembly-tool in position with your hand on the inside of the printer.
- Place the rear puck holder top on the printer. Note the correct position in the photo.
- Insert the M3x12rT screw into the front puck holder top before attaching it to make it easier to connect the screw to the nut. Using only one hand is a bit fiddly, but manageable.
- Use the Torx key to tighten the top M3x12rT screw.
- Use the Torx key to tighten the lower M3x12rT screw.
- The rear left puck holder is now attached to the printer.
- If you have the **4-tool version of the Prusa CORE One/+ INDX**, skip to this step: **Tilting the printer**

STEP 40 Removing the screws - right



- On the right side of the printer, remove the **upper** M3x4rT screw from the front corner of the side panel.
- Remove the **upper** M3x4rT screw from the back corner of the side panel.

STEP 41 Mounting the bottom puck holders - right



- Place one Puck holder bottom in the front corner on the right side. Ensure that the orientation is correct.
- Secure it with the M3x12rT screw.
- Place one Puck holder bottom in the back corner on the right side. Ensure that the orientation is correct.
- Secure it with the M3x12rT screw.

STEP 42 Securing the front Puck-holder bottom - right I.



- Insert one M3nN nut into the Spoolholder-assembly-tool as shown in the photo.
  - **Make sure that the nut is pushed all the way in**, or you can damage the Spoolholder-assembly-tool!
  - **The side of the nut without the rubber must point outward from the Spoolholder-assembly-tool.**
  - Double-check that the nut is inserted in the same hole closer to the top edge, with the **arrow pointing RIGHT next to it.**
- Insert the Spoolholder-assembly-tool inside the front corner of the printer, with the M3nN nut facing the side cover.
- Note the orientation of the Spoolholder-assembly-tool in the photo.
- "Hook" the ridge in the assembly tool onto the side of the metal profile.
- The M3nN nut is now in the right position and height for the puck holder bottom to be attached to the printer with the M3x12rT screw.

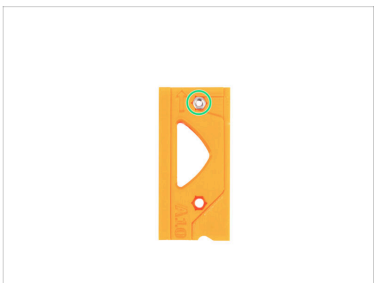
STEP 43 Securing the front Puck-holder bottom - right II.



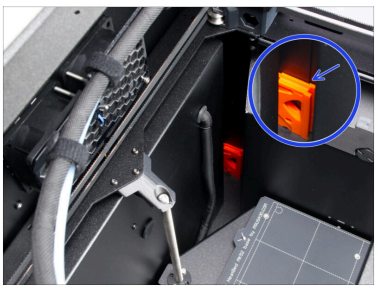


- Hold the Spoolholder-assembly-tool in position with your hand on the inside of the printer.
- Use the Torx key to tighten the M3x12rT screw.
- The front right puck holder is now attached to the printer.

STEP 44 Securing the rear Puck-holder bottom - right I.







- Insert one M3nN nut into the Spoolholder-assembly-tool as shown in the photo.
  - **Make sure that the nut is pushed all the way in**, or you can damage the Spoolholder-assembly-tool!
  - ⓘ **The side of the nut without the rubber must point outward from the Spoolholder-assembly-tool.**
  - Double-check that the nut is inserted in the same hole closer to the top edge, with the **arrow pointing UP next to it.**
- Insert the Spoolholder-assembly-tool **into the back of the printer**, with the M3nN nut facing the side cover.

⚠ Note the orientation of the Spoolholder-assembly-tool in the photo, where it is inserted into the printer.

- "Hook" the ridge in the assembly tool onto the side of the metal profile.

ⓘ The M3nN nut is now in the right position and height for the puck holder bottom to be attached to the printer with the M3x12rT screw.

STEP 45 Securing the rear Puck-holder bottom - right II.





- Hold the Spoolholder-assembly-tool in position with your hand on the inside of the printer.
- Use the Torx key to tighten the M3x12rT screw.
- The rear right puck holder is now attached to the printer.

STEP 46 Tilting the printer







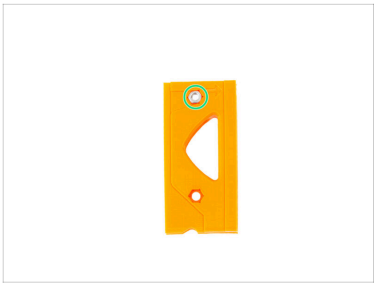
ⓘ Pictured is the 8-tool version of the Prusa CORE One/+ INDX with bottom-right puck holders and the right filament sensors included.

- Remove the Prusament box from the heatbed and place it behind the printer.
- Move the toolhead to the back of the printer.
- Place all the PTFE tubes inside the printer.
- Place the box behind the printer and slowly and carefully lay the printer down so it can lean on the box.

⚠ **Ensure that the printer is stable and that it can not slide or fall when tilted.** We recommend asking someone to hold the printer while it rests on the box to ensure your safety.

- Ensure that the filament sensor cables are not pinched.

STEP 47 Finishing the rear puck holder bottom - left I.

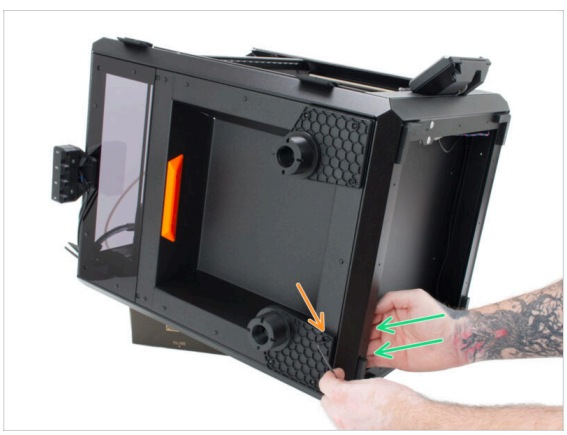




- Insert one M3nN nut into the Spoolholder-assembly-tool as shown in the photo.
  - **Make sure that the nut is pushed all the way in**, or you can damage the Spoolholder-assembly-tool!
  - ⓘ **The side of the nut without the rubber must point outward from the Spoolholder-assembly-tool.**
  - Double-check that the nut is inserted in the same hole closer to the top edge, with the **arrow pointing RIGHT** next to it.
- Use the highlighted ridge in the Spoolholder-assembly-tool to position the tool correctly against the printer profile.
- Insert the Spoolholder-assembly-tool with the M3nN nut inside the bottom of the printer, with **the nut facing the side cover**.
- Check that the Spoolholder-assembly-tool is placed correctly. The bottom profile of the printer has to align with the ridge in the tool.

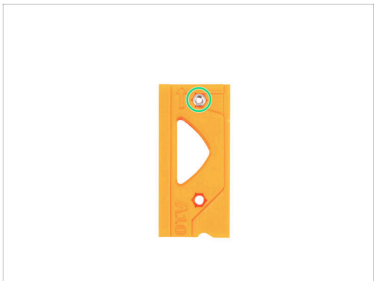
ⓘ The M3nN nut is now in the right position and height for the puck holder bottom to be attached to the printer with the M3x12rT screw.

STEP 48 Finishing the rear puck holder bottom - left II.




- Hold the Spoolholder-assembly-tool in position with your hand on the inside of the printer.
- Use the Torx key to tighten the M3x12rT screw.
- The rear left puck holder is now completely attached to the printer.

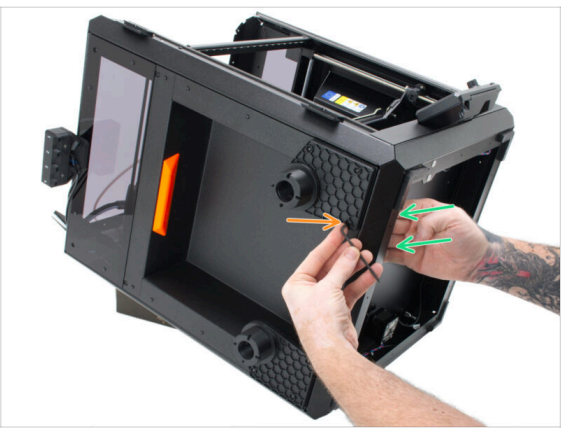
STEP 49 Finishing the front puck holder bottom - left I.





- Insert one M3nN nut into the Spoolholder-assembly-tool as shown in the photo.
  - **Make sure that the nut is pushed all the way in**, or you can damage the Spoolholder-assembly-tool!
  - **The side of the nut without the rubber must point outward from the Spoolholder-assembly-tool.**
  - Double-check that the nut is inserted in the same hole closer to the top edge, with **the arrow pointing UP next to it.**
- Insert the Spoolholder-assembly-tool under the front of the printer, with the M3nN nut facing the side cover.
- "Hook" the ridge in the assembly tool onto the side of the metal profile as you did with the rear puck holder. Gently push the tool upwards.

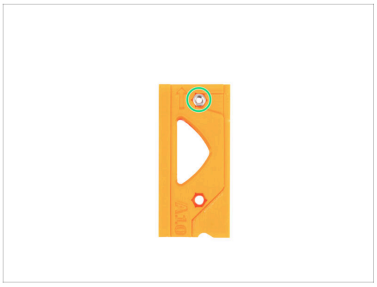
STEP 50 Finishing the front puck holder bottom - left II.




- Hold the Spoolholder-assembly-tool in position with your hand on the inside of the bottom of the printer.
- Use the Torx key to tighten the M3x12rT screw.
- The front left puck holder is now completely attached to the printer.

If you have the 4-tool version of the Prusa CORE One/+ INDX, skip to this step: **Dock fan: parts preparation**

STEP 51 Finishing the rear puck holder bottom - right I.

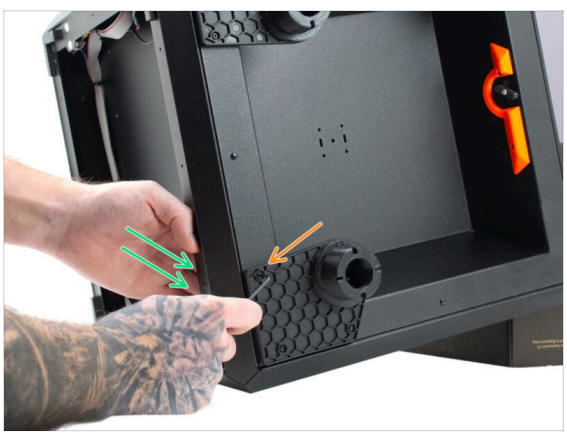




- Insert one M3nN nut into the Spoolholder-assembly-tool as shown in the photo.
  - **Make sure that the nut is pushed all the way in**, or you can damage the Spoolholder-assembly-tool!
  - ⓘ **The side of the nut without the rubber must point outward from the Spoolholder-assembly-tool.**
  - Double-check that the nut is inserted in the same hole closer to the top edge, with the **arrow pointing UP next to it**.
- Insert the Spoolholder-assembly-tool under the front of the printer, with the M3nN nut facing the side cover.
- "Hook" the ridge in the assembly tool onto the side of the metal profile and gently push the tool upwards.

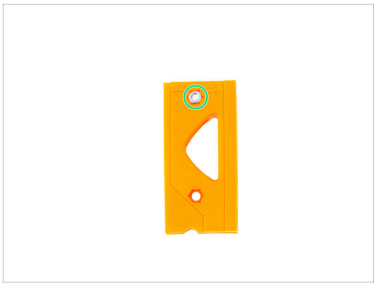
ⓘ The M3nN nuts are now in the right position and height for the puck holder top to be attached to the printer with two M3x12rT screws.

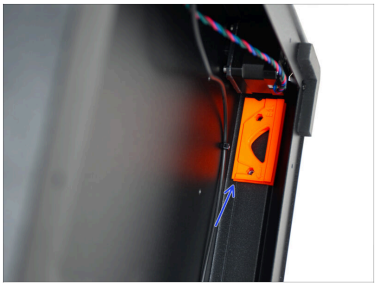
STEP 52 Finishing the rear puck holder bottom - right II.




- Hold the Spoolholder-assembly-tool in position with your hand on the inside of the bottom of the printer.
- Use the Torx key to tighten the M3x12rT screw.
- The rear right puck holder is now completely attached to the printer.

STEP 53 Finishing the front puck holder bottom - right I.





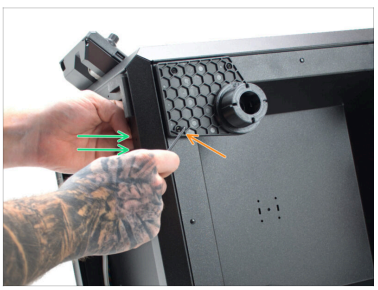
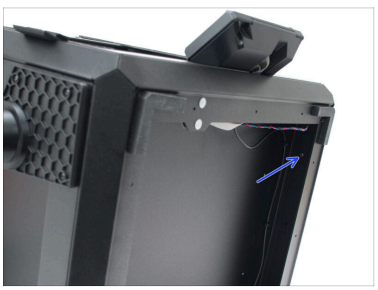
- Insert one M3nN nut into the Spoolholder-assembly-tool as shown in the photo.
  - **Make sure that the nut is pushed all the way in**, or you can damage the Spoolholder-assembly-tool!
  - **The side of the nut without the rubber must point outward from the Spoolholder-assembly-tool.**
  - Double-check that the nut is inserted in the same hole closer to the top edge, with the **arrow pointing RIGHT next to it**.
- Insert the Spoolholder-assembly-tool under the front of the printer, with the M3nN nut facing the side cover.

Note the orientation of the Spoolholder-assembly-tool in the photo, where it is inserted into the printer.

- "Hook" the ridge in the assembly tool onto the side of the metal profile and gently push the tool upwards.

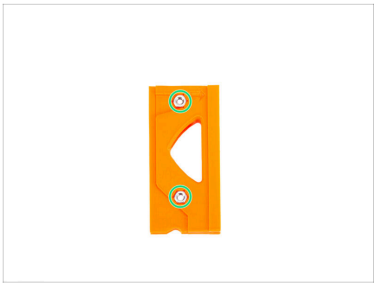
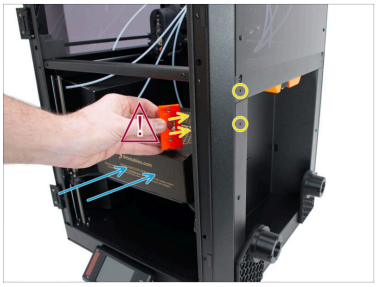
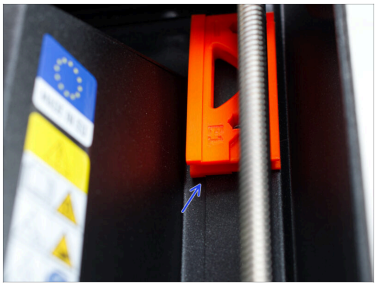
The M3nN nuts are now in the right position and height for the puck holder top to be attached to the printer with two M3x12rT screws.

STEP 54 Finishing the front puck holder bottom - right II.


- Hold the Spoolholder-assembly-tool in position with your hand on the inside of the bottom of the printer.
- Use the Torx key to tighten the M3x12rT screw.
- The front right puck holder is now completely attached to the printer.
- Carefully tilt the printer back on its feet.

STEP 55 Mounting the front puck holder top - right

- Insert two M3nN nuts into the Spoolholder-assembly-tool as shown in the photo.
- Place the filament box back onto the heatbed.

  ⓘ **The side of the nuts without the rubber must point outward from the Spoolholder-assembly-tool.**

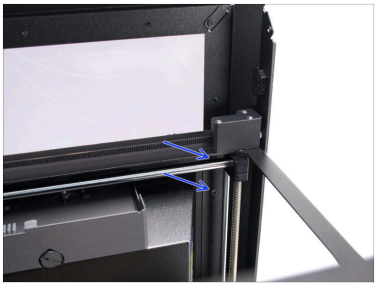
  ⓘ **The side of the nut without the rubber must point outward from the Spoolholder-assembly-tool.**

  ⚠ Double-check that the nuts are inserted on the correct side of the tool. Note the hole closer to the top edge, with the **arrow pointing RIGHT next to it**.
- Insert the Spoolholder-assembly-tool into the printer, with the M3nN nuts facing the side cover.
- "Hook" the ridge in the assembly tool onto the side of the metal profile and gently push the tool upwards.

ⓘ The M3nN nuts are now in the right position and height for the puck holder top to be attached to the printer with two M3x12rT screws.

STEP 56 Securing the front puck holder top - right



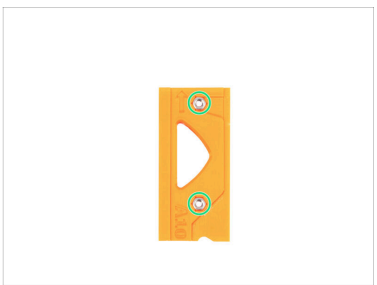
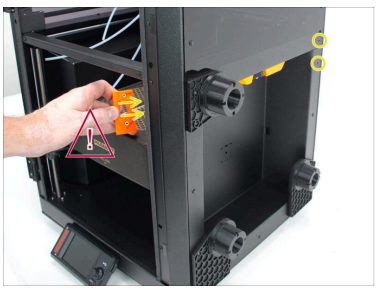
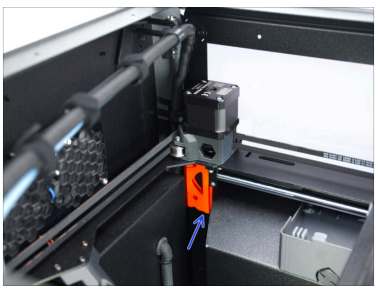


- Hold the Spoolholder-assembly-tool in position with your hand on the inside of the printer.
- Place the front puck holder top (assembled earlier) on the printer. Note the correct position in the photo.

ⓘ Insert the M3x12rT screw into the front puck holder top before attaching it to make it easier to connect the screw with the nut. Using only one hand is a bit fiddly, but manageable.

- Use the Torx key to tighten the top M3x12rT screw.
- Use the Torx key to tighten the lower M3x12rT screw.
- The front right puck holder is now attached to the printer.

STEP 57 Mounting the rear puck holder top - right

- Insert two M3nN nuts into the Spoolholder-assembly-tool as shown in the photo.

  ⓘ **The side of the nut without the rubber must point outward from the Spoolholder-assembly-tool.**

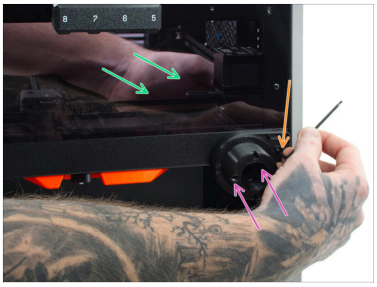
  - Double-check that the nuts are inserted on the correct side of the tool. Note the hole closer to the top edge, with the **arrow pointing UP next to it**.
- Insert the Spoolholder-assembly-tool **into the printer**, with the M3nN nut facing the side cover.

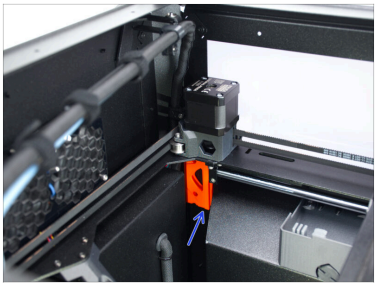
⚠ Note the orientation of the Spoolholder-assembly-tool in the photo, where it is inserted into the printer.

- "Hook" the ridge in the assembly tool onto the side of the metal profile and gently push the tool upwards.

ⓘ The M3nN nuts are now in the right position and height for the puck holder top to be attached to the printer with two M3x12rT screws.

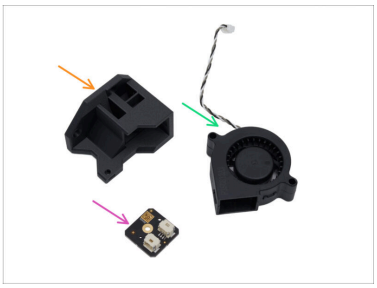
STEP 58 Securing the rear puck holder top - right

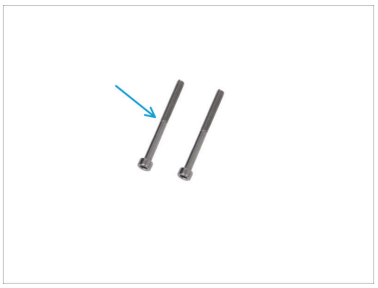




- Hold the Spoolholder-assembly-tool in position with your hand on the inside of the printer.
- Place the rear puck holder top (assembled earlier) on the printer. Note the correct position in the photos.
- Insert the M3x12rT screw into the front puck holder top before attaching it. This will make it easier to connect the screw with the nut. Using only one hand is a bit fiddly, but manageable.
- Use the Torx key to tighten the top M3x12rT screw.
- Use the Torx key to tighten the lower M3x12rT screw.
- The rear left puck holder is now attached to the printer.

STEP 59 Dock fan: parts preparation





- **For the following steps, prepare:**
- Dock-fan-holder (1x) *found in the Toolhead bag*
- Print fan blower (1x) *found in the Electronics box*
- Dock fan splitter board (1x) *found in the Electronics box*
- M3x25 screw (1x) *found in the Fasteners 1/2 bag*
- M3nS nut (1x) *found in the Fasteners 2/2 bag*
- M3x8rT screw (1x) *found in the Fasteners 2/2 bag*
- M3x35 screw (2x) *found in the Fasteners 2/2 bag*

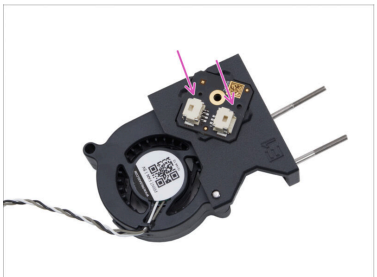
STEP 60 Assembling the dock fan





- Insert the M3nS nut into the Dock-fan-holder.
- Insert the two M3x35 screws into the Dock-fan-holder. Do this **before attaching the dock fan.**
- Insert the print fan. Ensure that the orientation of the fan is as shown in the photo.
- The highlighted holes have to align once the fan is inserted.
- Secure the fan in the Dock-fan-holder with the M3x25 screw.

STEP 61 Attaching the Dock fan splitter board


- Flip the dock fan assembly so that the sticker on the dock fan is visible.
- Note the highlighted area.
- Place the Dock fan splitter board into the ridge in the Dock-fan-holder. Ensure that the hole in the board aligns with the hole in the holder.

  ⓘ Before you touch the electronics, touch any conductive (metal) surface to neutralize the static charge from your hands.

  - Always touch the sides of the board only while handling it. Avoid touching the components on the surface.
- Secure the Dock fan splitter board in place with the M3x8rT screw.
- Plug the dock fan cable into the slot that is closer to the fan. Ensure that the safety latch clicks in place.

STEP 62 Attaching the dock fan



- Plug the dock fan cable connector into the remaining slot on the FunFan board. Make sure that the safety latch clicks in place.

ⓘ Be careful not to scratch or damage the printer with the two screws protruding from the dock fan assembly.

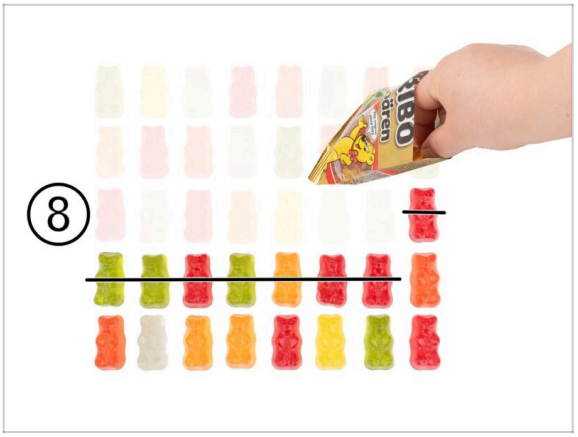
- With the dock fan cable plugged in, carefully turn the dock fan assembly.
- Gently lower the dock fan assembly to insert both M3x35 screws into the Belt-tensioner as shown.
- With the dock fan in place, use the 2.5mm Allen key to tighten the two M3x35 screws. Use the shorter side of the Allen key to tighten the screw in the front which is hard to reach.

STEP 63 Securing the dock fan



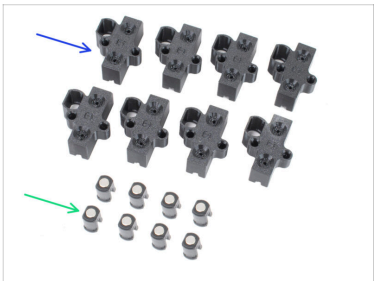
- With the dock fan cable plugged in, carefully turn the dock fan assembly.
- Gently lower the dock fan assembly to insert both M3x35 screws into the Belt-tensioner as shown.
- With the dock fan in place, use the 2.5mm Allen key to tighten the two M3x35 screws.

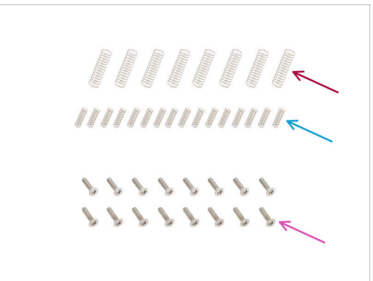
STEP 64 Haribo time!



- That was a big one. Reward yourself properly and refill your energy.
- Eat 8 gummy bears.

STEP 65 Tooldock: parts preparation







Listed are the parts needed for the 8-tool version of the printer. For the 4-tool version, you will need half of the parts.

- **For the following steps, prepare:**
- INDX-Tool-holder (8x) *found in the Tools bag*
- Thimble (8x) *found in Tools bag*
- Spring 0.5 x 8.5 x 30 x 15 (8x) *found in the Fasteners Tools INDX bag*
- Spring 0.63 x 5 x 15 x 11 (16x) *found in the Fasteners Tools INDX bag*
- M3x12cT countersunk screw (16x) *found in the Fasteners 2/2 bag*
- INDX C1 Front profile (1x) *found in the main box*

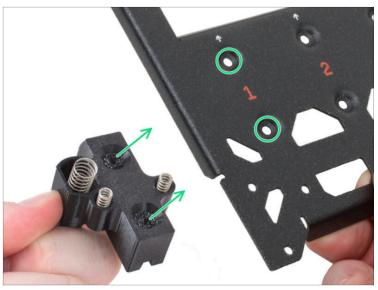
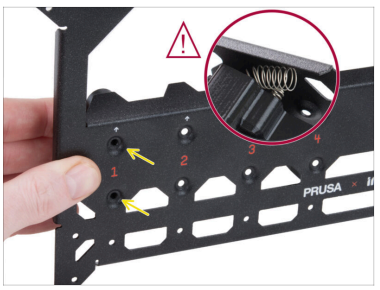
STEP 66 Assembling the tool holder





- Fully thread the M3x12cT screw into both holes of the Tool-holder, then remove the screw.
  - ⓘ This creates a thread in the part, making the Tool-holder easier to install on the front profile later.
- Position the Tool-holder with the countersunk holes facing up.
- Insert each Thimble into the oval hole in part Tool-holder.
- Insert a **large spring** (0.5 x 8.5 x 30 x 15) into each Thimble.
- Insert **two small springs** (0.63 x 5 x 15 x 11) into the side holes of part Tool-holder.
- Repeat the same procedure for all remaining Tool-holder parts.

STEP 67 Installing the tool holders

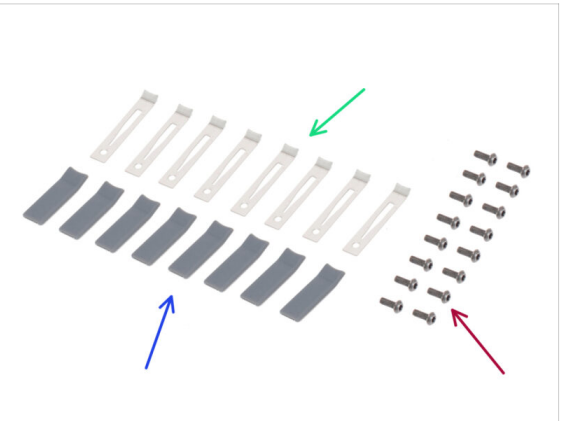




- **In the correct orientation**, place the Tool-holder against **position 1** on the underside of the front profile.
- Align the holes in both parts.
  - ⚠ **CAUTION:** When placing the Tool-holder, make sure **no spring is pinched** against the front profile.
- Secure the Tool-holder using two M3x12cT screws.
  - ⓘ The screw forms its own thread in the plastic. Slight resistance is expected.
- Grasp the Tool-holder and gently wiggle it. It **must not be rigid** - a slight, barely perceptible looseness is required.

📌 **Repeat the procedure for the remaining Tool-holder assemblies** on the front profile, ideally in order 1–4, then 8–5 for easier handling.

STEP 68 Nozzle seal holder: parts preparation

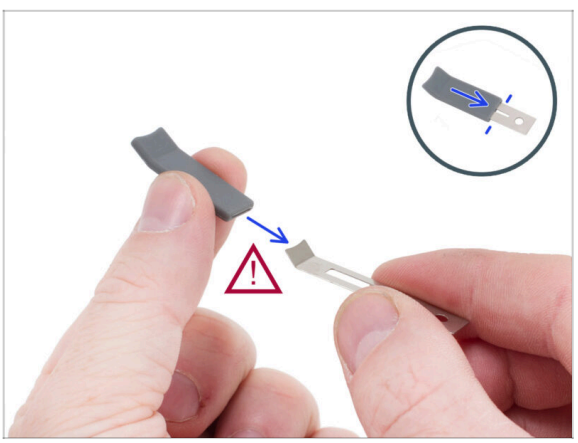




Listed are the parts needed for the 8-tool version of the printer. For the 4-tool version, you will need half of the parts.

- **For the following steps, prepare:**
- Nozzle-seal-holder (4x) *found in the Tools bag*
- Nozzle parking plate (8x) *found in the Fasteners Tools INDX*
- Nozzle seal (8x) *found in the Fasteners Tools INDX*
- M3x8rT screw (16x) *found in the Fasteners 2/2 bag*

STEP 69 Assembling the nozzle seal



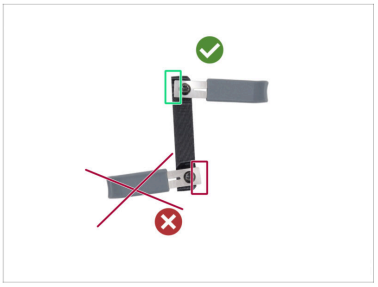
Hold the nozzle parking plate flat between your fingers to avoid cutting yourself. The photo is only illustrative.

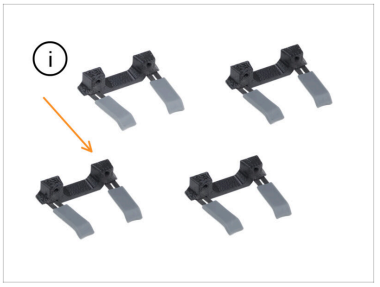
- Slide a nozzle seal (silicone sleeve) onto each nozzle parking plate.

CAUTION: Handle with care! The edges of the nozzle parking plate are **sharp** and may cause injury.

Gently spray the nozzle parking plate with IPA to make nozzle parking plate insertion easier.

STEP 70 Assembling the Nozzle-seal-holder





⚠ Note the **correct placement** of the nozzle seal before attaching it to the Nozzle-seal-holder.

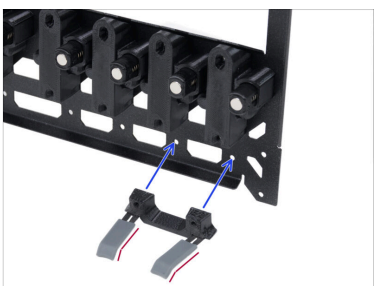
- In the correct position, the holes align while the nozzle seal on the opposite side **does not extend** beyond the Nozzle-seal-holder.

- Place the nozzle seal assembly onto the Nozzle-seal-holder so that the bent part of the Nozzle seal faces upward.
- Attach the nozzle seal assembly to the Nozzle-seal-holder using an M3x8rT screw.

ⓘ Turn all the Nozzle-seal-holders upside down; this is how we will install them in the next step. **The bent part of the nozzle seal is now facing downward.**

- Install two nozzle seals on each Nozzle-seal-holder using the same method.

STEP 71 Installing the nozzle parking plates





ⓘ With the 4-toohlead version, start installing the nozzle holders from the same side as in the photo. Check the other side of the tooldock to ensure that you start from number 1.

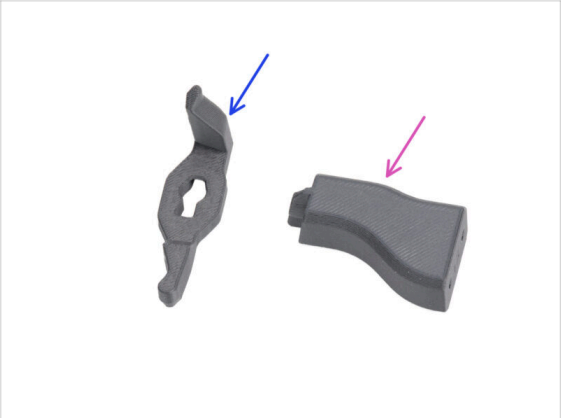
- Align the nozzle holder assembly with the holes at positions 1–2 on the front profile.
  - Ensure the nozzle seals are **correctly oriented** by matching the bent ends to the illustration.
- From the other side, secure the nozzle seal holder assembly with two M3x8rT screws and tighten firmly.

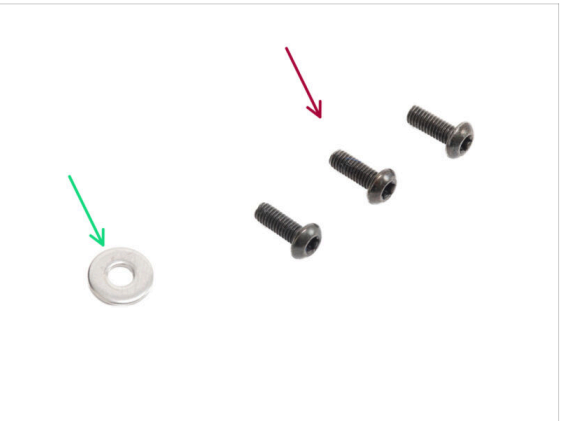
ⓘ The screw forms its own thread in the plastic. Slight resistance is expected.

⚠ **Ensure that none of the nozzle parking plates are bent or damaged during the assembly.**

- Continue installing the remaining nozzle holder assemblies using the same method.

STEP 72 Ventilation lever: parts preparation



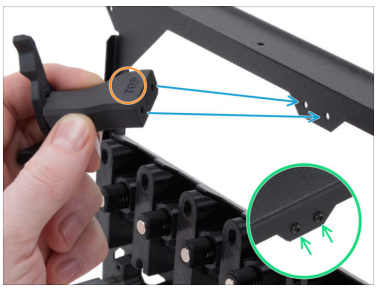


- **For the following steps, prepare:**
- INDX-C1-Vent-lever (1x) *found in the Toolhead bag*
- INDX-C1-Vent-lever-holder (1x) *found in the Toolhead bag*
- M3w washer (1x) *found in the Fasteners 2/2 bag*
- M3x8rT screw (3x) *found in the Fasteners 2/2 bag*

STEP 73 Assembling the ventilation lever



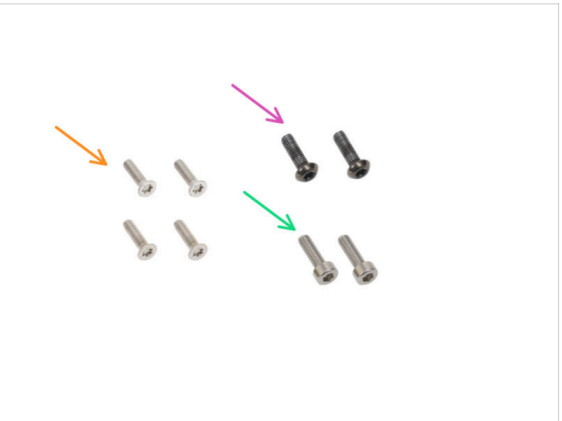




- Place the Vent-idler onto the Vent-lever-holder **in the same orientation**.
- Secure it with an M3x8rT screw.
  - **Place an M3 washer under the screw.**
- From the inner side of the front profile, align the part with the two holes.
  - Note the "**TOP**" marking on the Vent-lever-holder. It **must face upward toward** the bent section of the front profile.
- From the opposite side (front) secure it with two M3x8rT screws.

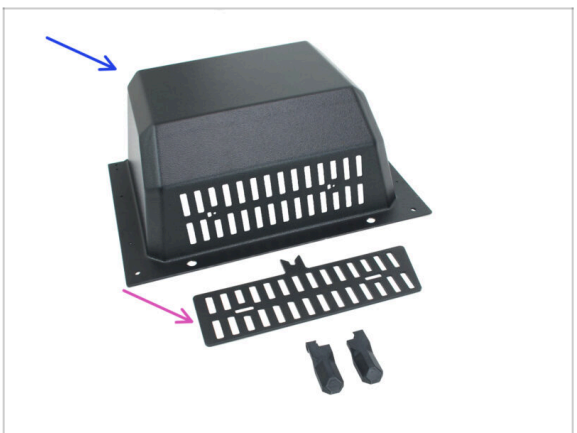
STEP 74 Top cover: parts preparation I.





- **For the following steps, prepare:**
  - INDX-C1-grill-flexi (2x) *found in the Top Cover Parts bag*
  - INDX-C1-cover-latch (2x) *found in the Top Cover Parts bag*
  - INDX-C1-cover-knob (2x) *found in the Top Cover Parts bag*
  - Do not put the Top Cover Parts bag away; we will need more parts from it in the next step.
  - M3x12cT screw (4x) *found in the Fasteners 2/2 bag*
  - M3x8rT screw (2x) *found in the Fasteners 2/2 bag*
  - M3x10 screw (2x) *removed earlier*

STEP 75 Top cover: parts preparation II.



- Top cover (1x) *found in the main box*
- Grille (1x) *found in the main box*
- INDX-C1-hinge-cover-left (1x) *found in the Top Cover Parts bag*
- INDX-C1-hinge-cover-right (1x) *found in the Top Cover Parts bag*

STEP 76 Attaching the hinge covers

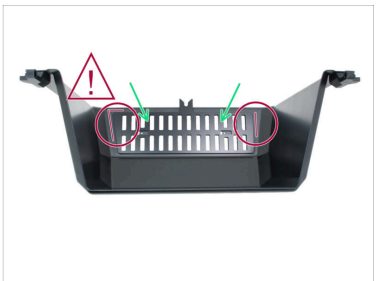




- Turn the top cover upside down and attach the Hinge-covers from the bottom.
- Note the correct orientation of the Hinge-covers.
- Secure each Hinge-cover with two M3x12cT screws.

⚠ Make sure that you do not overtighten the screws.

STEP 77 Attaching the grill







- Place the grill onto the top cover.

⚠ **Note the correct position of the grill.** The left side is prolonged! Ensure that it looks exactly as shown in the photo.

  - Before inserting the Grill-flexi parts, ensure that the grill is mounted correctly, with the prolonged side on the left.

- Insert the Grill-flexi and hold them in position.
- Secure the Grill-flexi in place with two M3x8rT screws.

STEP 78 Attaching the left cover lock



- Insert the Cover-latch into the top cover from the bottom. Note the orientation of the cover latch.
- Attach the Cover-knob. Ensure that the knobs on the cover latch align with the holes in the cover knob. Press both parts together.
- Secure the cover lock in place with the M3x10 screw.

Do not overtighten the screw. The lock must be able to turn.

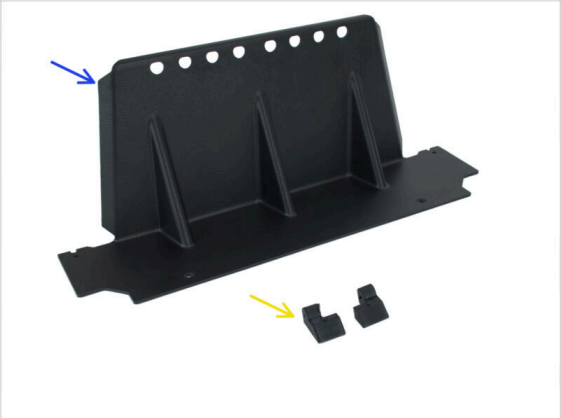
STEP 79 Attaching the right cover lock



- Insert the Cover-latch into the top cover from the bottom. Note the orientation of the cover latch.
- Insert the Cover-latch into the top cover from the bottom. Note the orientation of the cover latch.
- Secure the cover lock in place with the M3x10 screw.

Do not overtighten the screw. The lock must be able to turn.

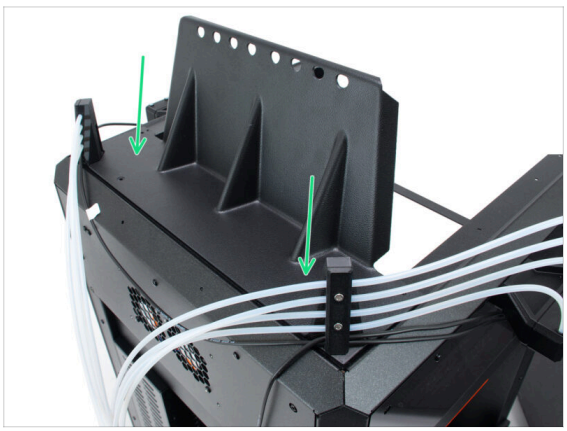
STEP 80 Top cover back: parts preparation

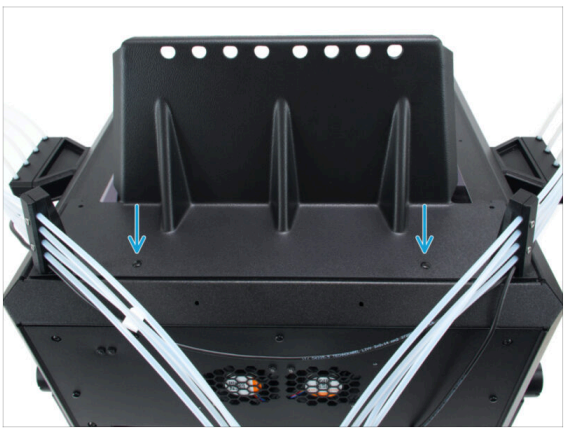




- **For the following steps, prepare:**
  - Top cover back (1x) *found in the main box*
  - INDX-C1-Hinge-base (2x) *found in the Top Cover Parts bag*
  - 3x12sT screw (2x) *found in the Fasteners 2/2 bag*
  - M3x25 screw (2x) *found in the Fasteners 1/2 bag*
  - Nylon rivet (2x) *found in the Fasteners 1/2 bag*
  - Spring 15x5 (2x) *found in the Fasteners 1/2 bag*

STEP 81 Attaching the top cover back





- Place the top cover back on the printer.
- Secure the top cover back in place with two nylon rivets.

STEP 82 Attaching the hinge base - left



We recommend pre-cutting the Hinge-base with the screw before you install it. Insert the screw, tighten it, and then remove it from the printed part.

- Place the Hinge-base near the front left hole in the top cover back.
- Note that each Hinge-base part indicates which side it goes to. Ensure that the part is marked with an L (left).
- Insert the 3x12sT screw from inside the printer and hold it in position.
- Align the hole in the Hinge-base with the 3x12sT screw and connect the Hinge-base to the printer.

The Hinge-base is standing upright in the photos and needs to be tipped forward.

- Tighten the 3x12sT screw while holding the Hinge-base in place.

STEP 83 Attaching the hinge base - right



Pictured is the 8-tool version. If you have the 4-tool version, the right PTFE-holder is not installed, and you can skip this step.

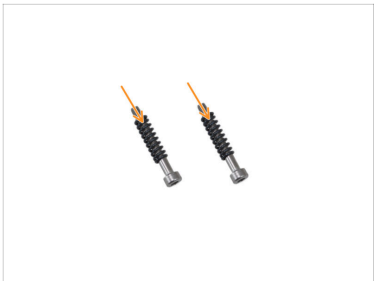
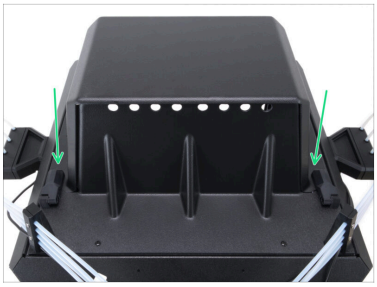
We recommend pre-cutting the Hinge-base with the screw before you install it. Insert the screw, tighten it, and then remove it from the printed part.

- Place the Hinge-base near the front right hole in the top cover back.
- Note that each Hinge-base part indicates which side it goes to. Ensure that the part is marked with an R (right).
- Insert the 3x12sT screw from inside the printer and hold it in position.
- Align the hole in the Hinge-base with the 3x12sT screw and connect the Hinge-base to the printer.

The Hinge-base is standing upright in the photos and needs to be tipped forward.

- Tighten the 3x12sT screw while holding the Hinge-base in place.

STEP 84 Attaching the top cover I.


- Attach one Spring 15x5 to each of the M3x25 screws.
- Place the top cover on the printer. Make sure that both hinges are positioned correctly.
- Insert one M3x25 screw with the spring into each hinge from the inner side.

Do not tighten the screws yet!

STEP 85 Attaching the top cover II.



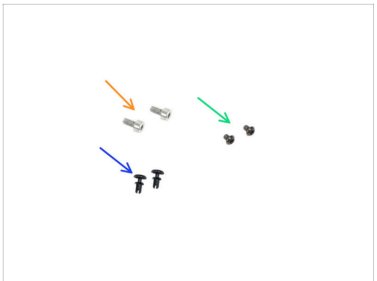


- Use an Allen key to tighten the M3x25 screw on the left hinge. Do not tighten it completely.
- Use an Allen key to tighten the M3x25 screw on the right hinge. Do not tighten it completely.

  The springs in the photo are quite tight. The photos are illustrative, do not tighten the screw as much.
- Slowly open the top cover all the way.
- Make sure that the spring is able to retract and expand when opening the lid. This will hold the top cover open.

If the top cover does not stay open, check the tightness of the two M3x25 screws in the hinges and make sure the spring is in place.

STEP 86 INDX Nozzle tool: parts preparation



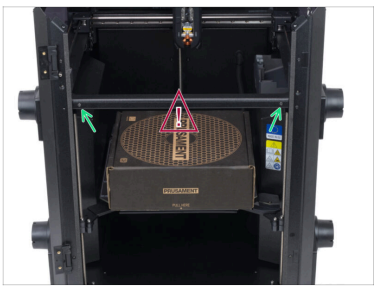


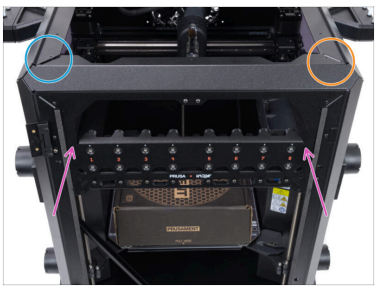
- **For the following steps, prepare:**
  - M3x4 screw (2x) *that were removed earlier*

    The M3x4 screws were removed from the top front panel. Note that these two screws are black on some printer versions.
  - Nylon rivets (2x) *found in the Fasteners 1/2 bag*
  - M3x4rT screw (2x) *that were removed earlier*
  - INDX Nozzle tool (8x) *found in the INDX Nozzle tool box*

⚠ **Warning: Avoid touching or damaging the rectangular sensing area** on the INDX Nozzle tool. Fingerprints, grease, or any damage can affect temperature readings and cause print issues.

STEP 87 Attaching the tooldock



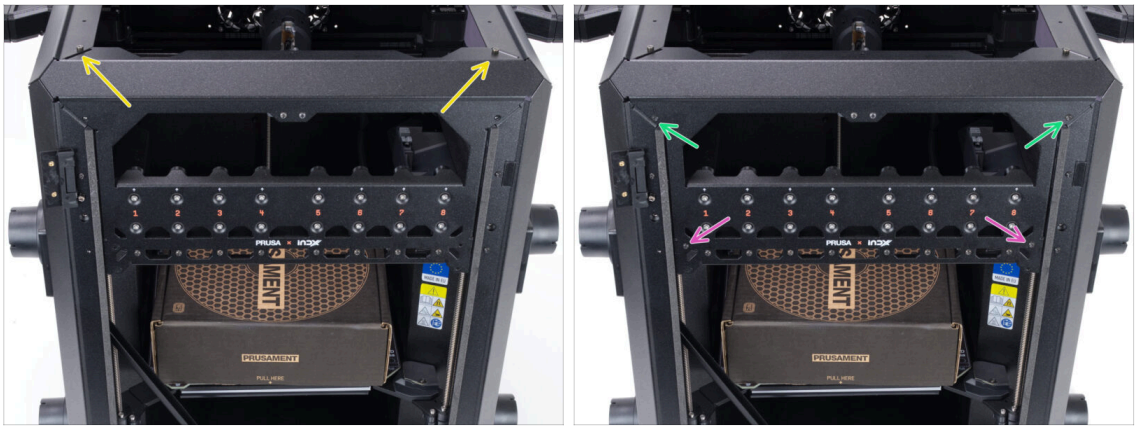


- Remove the two M3x4rT screws that hold the LED panel in place. Set the two screws aside; we will need them in the next step.

⚠ Support the LED panel with your hand when removing the screws, so it does not fall. **Do not touch the LEDs and resistors on the LED strip!**

- Gently lean the LED panel on the left side of the printer.
- Make sure that the LED cable is not damaged or pulled too hard during these steps.
- Mount the assembled tooldock.
- The **left side** of the tooldock has to be placed **under** the top profile.
- The **right side** of the tooldock has to be placed **above** the top profile.

STEP 88 Securing the tooldock



- Secure the tooldock to the top profiles with one M3x4 screw on each side.
- Secure the tooldock to the front of the printer with two M3x4rT screws (in the top holes).
- Use the two M3x4rT screws you removed in the previous step to secure the lower part of the tooldock.

STEP 89 Attaching the LED panel



- Mount the LED panel onto the inner side of the tooldock. Do not touch the LEDs and resistors on the LED strip!

ⓘ The LED cable should reach the new position of the LED panel. If the cable is too short, **gently and slowly** pull on it to make it the correct length.

- Use two nylon rivets to secure the LED panel in place.
- Close the top cover.

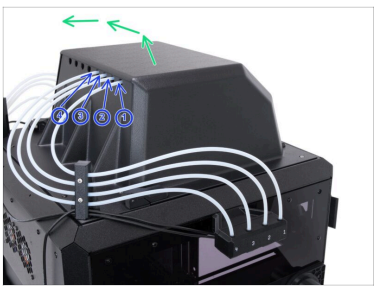
STEP 90 Optional: Installing the Buddy3D Camera



ⓘ This step is only required if you have a Buddy3D Camera.

- Now is the right time to mount the camera in the front-left corner of the printer.
  - Use the dedicated installation guide: Buddy3D Camera for CORE One Installation
  - ⓘ The guide shows installation on the CORE One, but the procedure is the same. The camera attaches magnetically to the upper profiles of the printer.

STEP 91 Connecting the INDX Nozzle tools (positions 1-4)

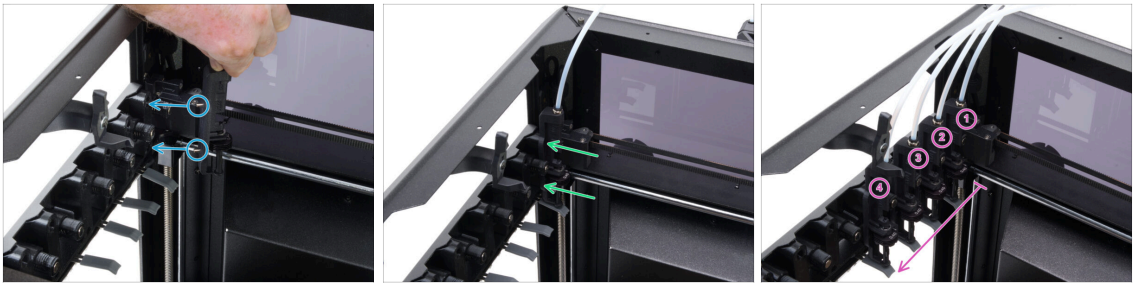






- Insert the PTFE tubes through the openings on the back of the lid, **keeping the correct order**.
  - Insert the PTFE tube from position 1 into the first opening from the right.
  - Repeat the same process for the remaining positions. **Always make sure each PTFE tube is routed through the matching opening** in the lid.
- Open the top lid.
- From the inside, fully insert the **PTFE tube from the first opening** into the INDX Nozzle Tool at **position 1**.
  - ⓘ Try gently pulling the tube out of the collet to verify that it is locked in.
- Repeat the same procedure for all tools in positions 1–4.

STEP 92 Docking the tools (positions 1-4)



- Place the INDX Nozzle tool **on the first PTFE tube** onto tool dock **position 1** and align the magnetic pins on the tool with the openings in the tool dock.
- Snap the INDX Nozzle tool into tool dock **position 1**.

  ⚠ Make sure both pins snap in fully and the tool sits perfectly flush.
- Repeat the same procedure for the remaining tools up to position 4.

Double-check that the **nozzle parking plates are in the correct position** to seal the INDX Nozzle tool.

ⓘ If you have the **4-tool version**, skip to this step: **Checking the tubes**

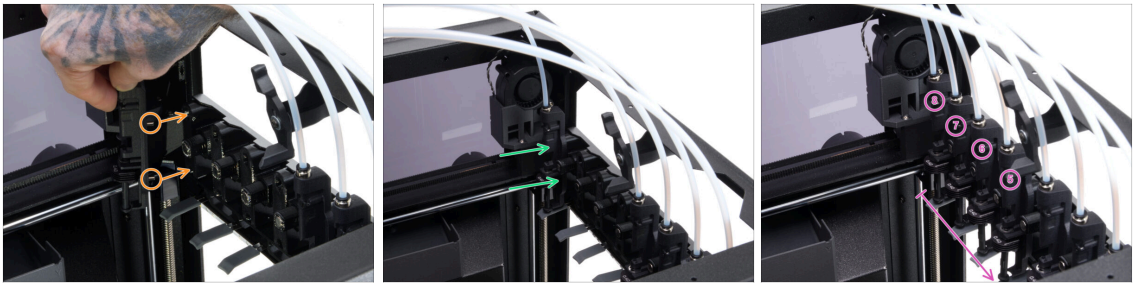
STEP 93 Connecting the INDX Nozzle tools (positions 5-8)



- Close the top lid. Insert the PTFE tubes through the openings on the back of the lid, **keeping the correct order**.
  - Insert the PTFE tube from **position 8** into the **first opening from the left**.
  - Repeat the same process for the remaining positions. **Always make sure each PTFE tube is routed through the matching opening** in the lid.
- Open the top lid.
- Insert the **PTFE tube from the rightmost opening** into the INDX Nozzle Tool at **position 8**.

  ⓘ Try to gently pull the tube out to verify it is locked in the collet.
- Repeat the same procedure for all tools in positions 8–5.

STEP 94 Docking the tools (positions 5-8)



- Place the INDX Nozzle tool **on the last PTFE tube** onto tool dock **position 8** and align the magnetic pins on the tool with the openings in the tool dock.
- Snap the INDX Nozzle tool into tool dock **position 8**.

  ⚠ Make sure both pins snap in fully and the tool sits perfectly flush.
- Repeat the same procedure for the remaining tools up to position 5.

ⓘ Double-check that the **nozzle parking plates are in the correct position** to seal the INDX Nozzle tool.

STEP 95 Checking the tubes



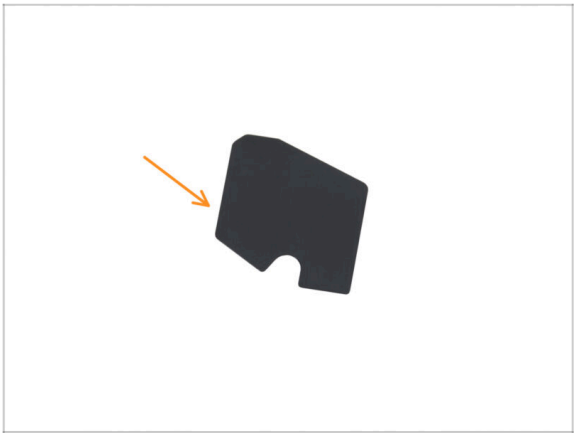
ⓘ Pictured is the 8-toolhead version.

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

- You can now close the lid and secure it by rotating the locks by 90°.

  ⓘ **This is optional at this stage,** as the lid will need to be opened again later during calibration.
- Remove the empty cardboard box from the printer, as it will no longer be needed.

STEP 96 Offset sensor cover: parts preparation

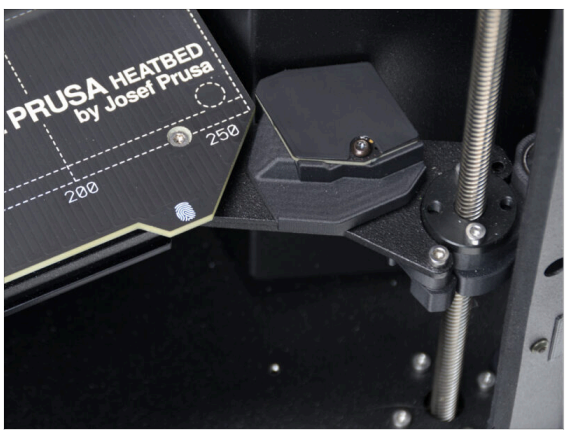


- **For the following steps, prepare:**
- Offset sensor sticker (1x) *found in the Tool Dock Fan bag*

  The color of the offset sensor sticker might differ, but it does not affect the functionality.

STEP 97 Covering the offset sensor

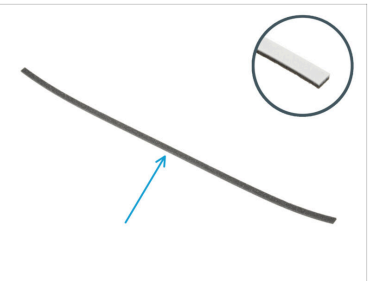




- Peel the protective layer off the offset sensor sticker and gently place the sticker onto the offset sensor.
- Ensure that the sticker covers the whole sensor.

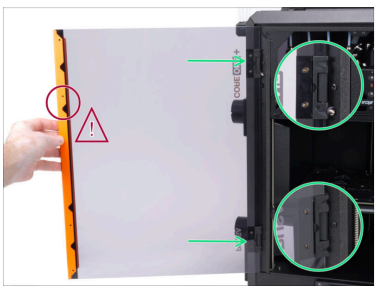
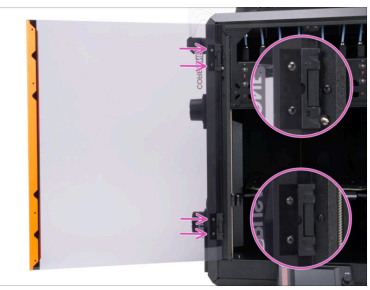
STEP 98 Door panel: parts preparation





- **For the following steps, prepare:**
- Door panel assembly (1x) *you removed earlier*
- M3x5rT screw (4x) *you removed earlier*
- Top door seal (1x) *found in the Top Door Seal bag*

STEP 99 Mounting the door panel

- Peel away the bottom backing layer of the gasket to expose the adhesive surface.
- Align the gasket on the front profile with the adhesive side facing the surface, then press it down to adhere.

If you had any issues with the shaft falling out of the hinge, assemble the hinge now, before mounting the door panel.

- Insert the door panel fully into the hinges.

⚠ Ensure the door panel is oriented correctly, with the handle facing outward. Use the V-shaped cutouts on the inner side of the door handle as a guide.

- Insert two M3x5rT screws into each Door-hinge to secure the door panel.
  - **Secure the screws gently** to avoid over-tightening or damaging the door panel.

STEP 100 Attaching the stickers: Parts preparation

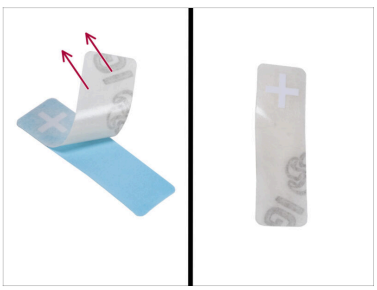




- **For the following step, prepare:**
- CORE One+ sticker (1x) *found in the INDX Update Stickers bag*
- INDX SN label (1x) *found in the INDX Update Stickers bag*

If you are installing the GEN 2 upgrade for the CORE One+ along with the INDX conversion, note that the "+" sticker is orange, not white.

STEP 101 Attaching the upgrade sticker



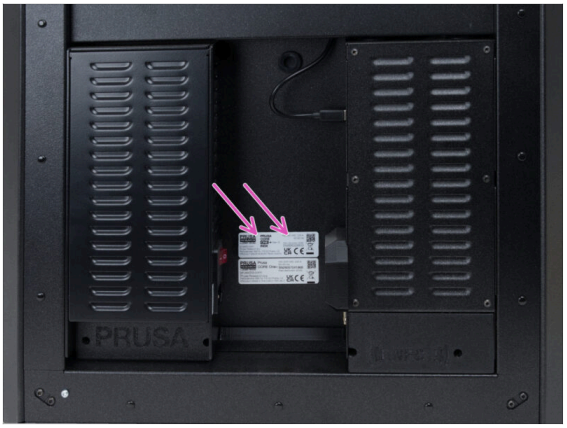




- Remove the sticker from the blue base.
- On the door panel, align the sticker with the **ONE** and gently but firmly apply pressure to the sticker.
- Carefully peel off the transparent layer and make sure that **+** is not peeling off.

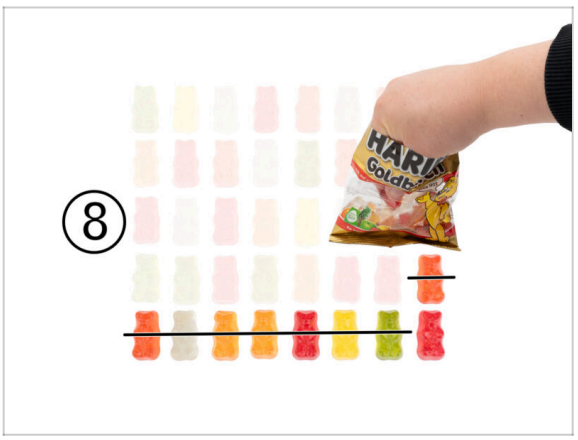
STEP 102 Attaching the SN sticker





- Peel the Prusa INDX SN sticker off the base.
- Place it on the back of the printer above the current CORE One/+ SN sticker.

STEP 103 Haribo time !



- You're almost there. Take a break and get ready for the final chapter.
- Eat eight gummy bears.

ⓘ Now you have only one gummy bear left. Maybe more, depending on the factory filling. But we have one more reward coming, so keep the rest aside!

STEP 104 That's it





- **Congratulations!** You have successfully upgraded your printer to the Prusa INDX edition!

ⓘ Next, you only need to run the self-test and basic calibration.

- **Proceed to the next chapter.**

6. Preflight check



STEP 1 Installing the spoolholder: Parts preparation



Listed are the parts needed for the 8-tool version of the printer. For the 4-tool version, you will need half of the parts.

- For the next step, prepare:
  - Telescopic spoolholder (8x) *found in the Telescopic Spoolholder Set bag*
  - O-ring (8x) *found in the Telescopic Spoolholder Set bag*

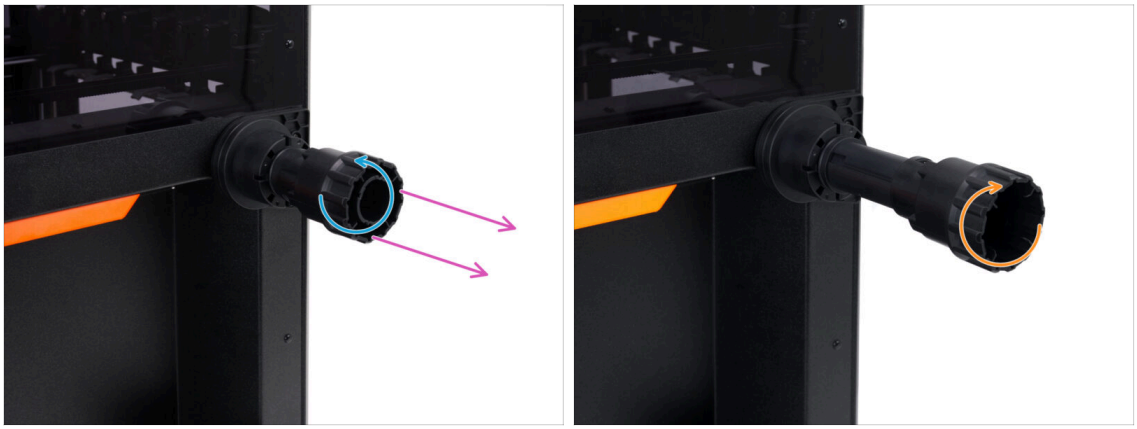
STEP 2 Locking the spoolholders



- Put the O-ring onto the telescopic spoolholder.
- Ensure that the O-ring is placed correctly.
- Push the telescopic spoolholder into the Puck-universal dock.
- Lock the telescopic spoolholder by turning it **clockwise**.

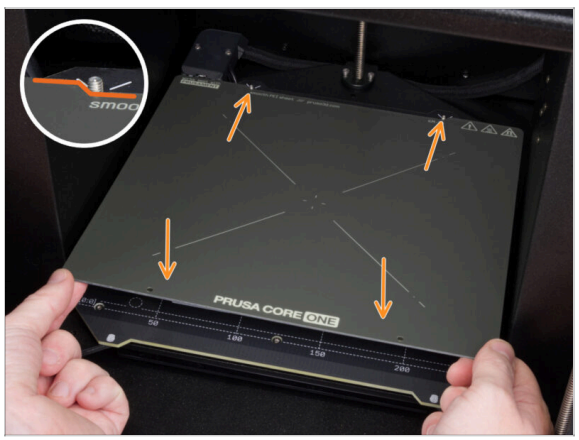
Repeat the same procedure for the remaining spoolholders.

STEP 3 Telescopic spoolholders



- To extend the telescopic spoolholder, gently turn it counter-clockwise until you hear the locking mechanism snap.
  - Do not use excessive force to unlock the spoolholder, or you risk disengaging it from the puck holder!
- Pull the spoolholder to extend it.
- Lock the extended spoolholder by turning it clockwise until the lock snaps in place.

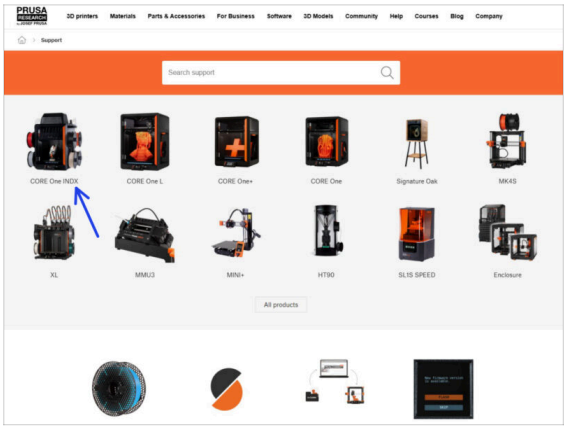
STEP 4 Attaching the print sheet

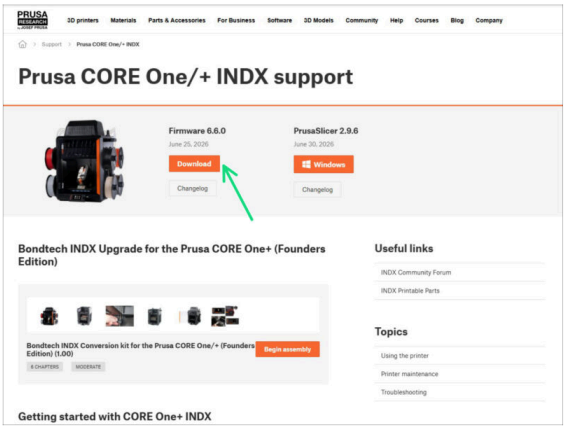


⚠ **Make sure there is nothing on the heatbed.** The heatbed must be clean. Any dirt can damage the surface of both the heatbed and the print sheet.

- **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 5 Firmware update





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

STEP 6 Turning on the printer

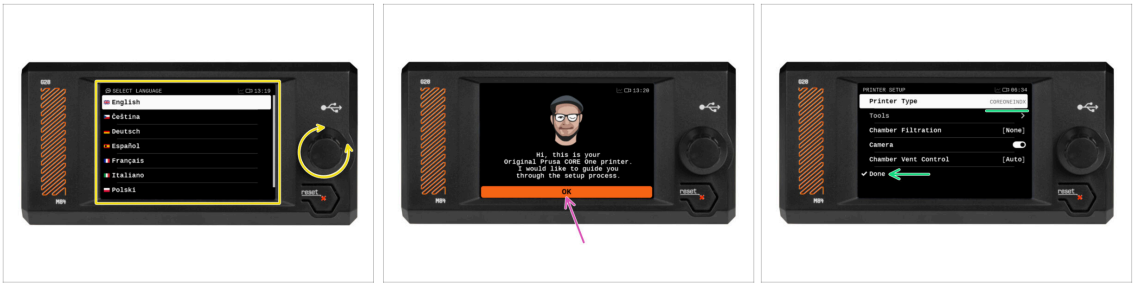






- Insert the USB drive into your printer.
- Connect the power cable and plug the printer into a wall outlet.
- Turn the printer on using the switch on the back.
- ⓘ The printer will now detect if a new firmware file is available on the USB drive.
- If the "New firmware available" screen appears, hit **FLASH** by pressing the rotary knob to upgrade to the latest firmware.

STEP 7 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 COREONEINDX. Hit **Done** to continue.

STEP 8 Setting up the printer: Network setup



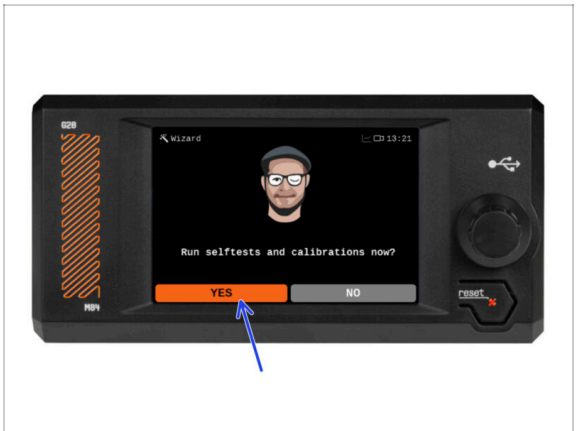
- The Network Setup screen will ask you to connect to a Wi-Fi network using our official Prusa mobile app.

  ⓘ 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 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

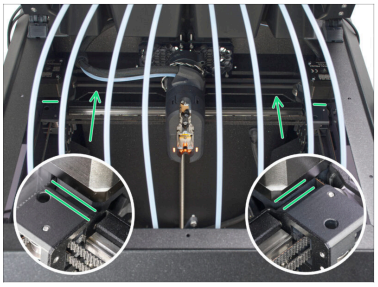


ⓘ **This step can be skipped**. The door sensor is only calibrated during assembly and has a dedicated calibration section at the end of its own guide.

- 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.



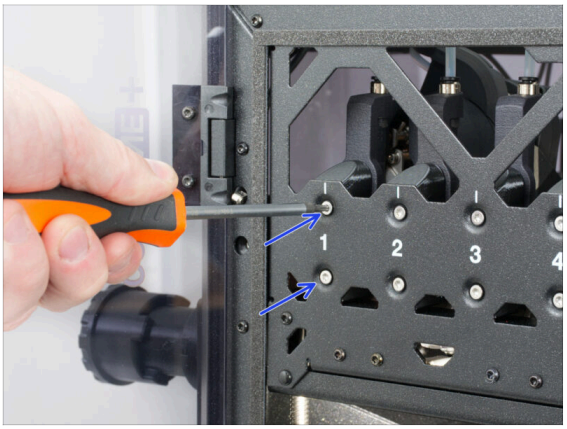




- Once the automatic homing calibration is complete, calibrate the docks. Hit **Continue** and follow the on-screen instructions.
- The printer will ask you to enter the number of docks on your printer.
  - It means how many tool dock positions are installed on the front profile (nozzle holders). This 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.



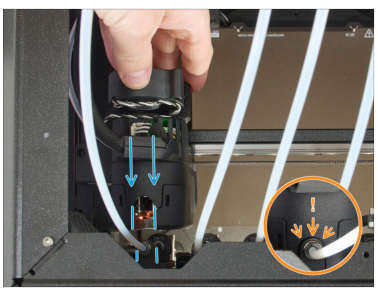


- The screen will now prompt you to tighten the silver screws securing each dock to the front profile.
  - Use a T10 key/screwdriver to tighten the silver screws **in all positions**.
  - **Do not overtighten them**, as they will be loosened again later.
  - Hit **Continue**.

ⓘ 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.





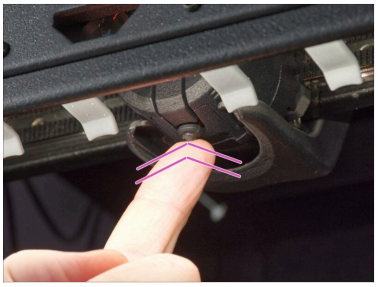


Keep the top lid open.

- 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







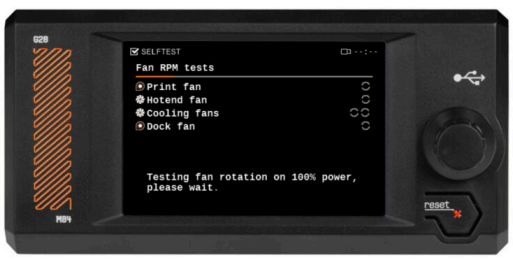
- The next step of the wizard will prompt you to touch the nozzle to test and calibrate the Loadcell. During this procedure, the **parts of the printer are not heated up,** so you can touch them. Press **Continue**.

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.

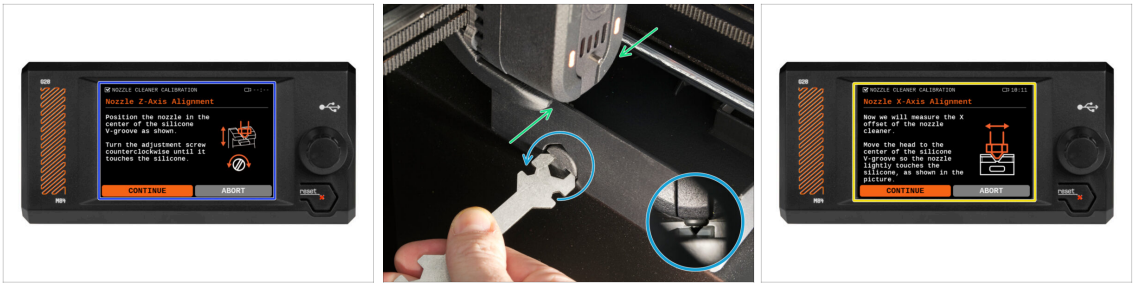
Only use the 0.4 mm nozzle for this calibration. Other nozzle sizes have different tip shapes and are not suitable.

- 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.

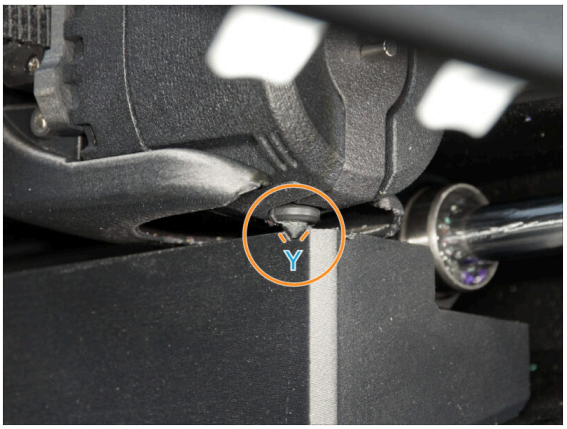
- The printer will **lock the motors** and warn you to **remove your hands from the printer** before proceeding with the calibration.
- Use the universal wrench to **precisely adjust** the Wiper-adjuster until the nozzle **fully fills the V-shaped cutout**, touching both angled sides and the bottom.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





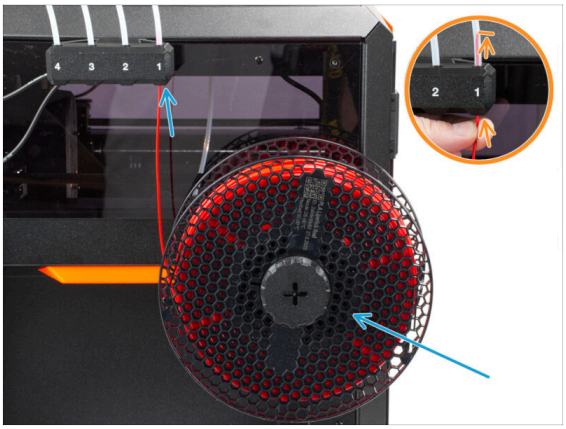
- Now, the printer screen prompts you to align the nozzle on the Y-axis.
- Manually move the INDX Tool head into the V-shaped cutout on the left side of the nozzle cleaner bin and **precisely align it**. The nozzle must not touch the walls.

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**.

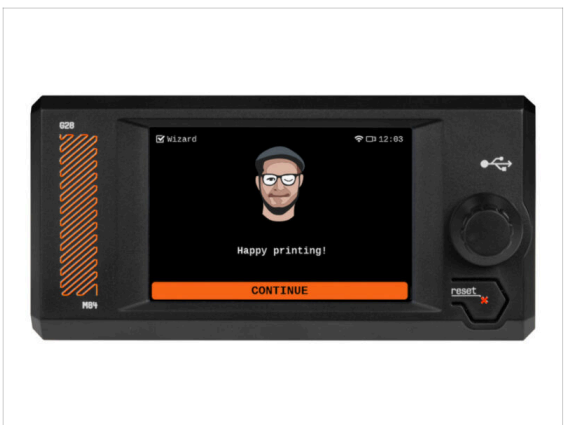
ⓘ There should be **no filament** inside the extruder before the calibration process starts.

- 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





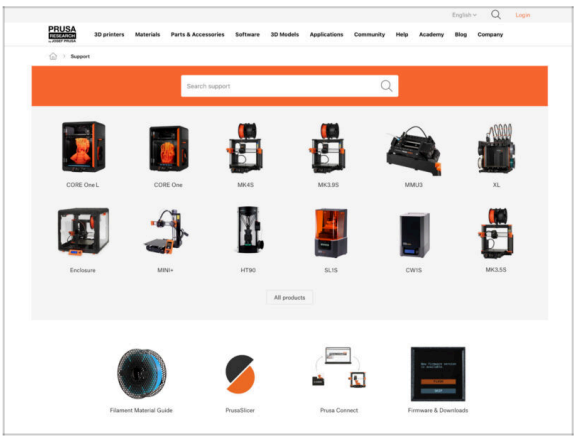
- Congratulations! The Wizard is complete. Now let's test some prints.

STEP 23 Haribo time!



- All your hard work has paid off, and it's time for the final reward. Finish all the gummy bears now.

STEP 24 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 25 Give us feedback

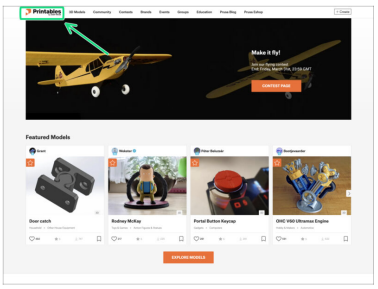


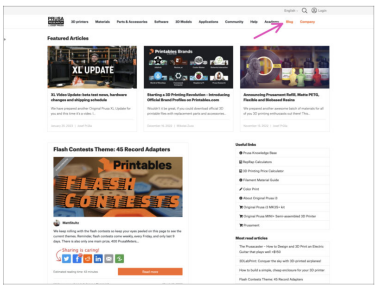
- We know you're eager to start printing, but we'd really appreciate it if you could take 3–4 minutes to **share your thoughts** on this manual: how clear it was, how easy it was to follow, and any ideas to improve it.

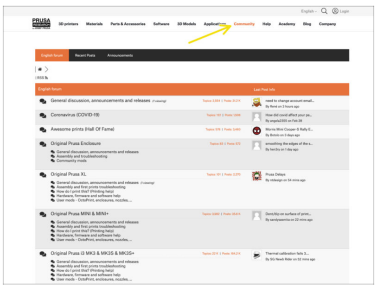
  ⓘ This feedback is a little different from the usual comments you might leave on individual steps.

- **Share your feedback here.**
- Thank you for helping us make our manuals even better!

STEP 26 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:

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