



Power Supply

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INTRODUCTION

Follow this guide to remove and replace the power supply in your Framework Desktop.



TOOLS:

- [Framework Desktop Screwdriver](#) (1)
-

Step 1 — Power down your Desktop



- Before you begin repairs, shut down your Desktop from the operating system and unplug it.
- Make sure your Framework Desktop Screwdriver has the T5 Torx bit (labeled as T5) facing outwards. If it's not, pull the bit out and flip it.

Step 2 — Remove the Handle



- ❗ If you installed the Handle on your Desktop, follow this step. Otherwise, skip it.
- Rotate the Handle's screw threads counterclockwise on both sides until it comes free.
- Remove the Handle.

Step 3 — Remove the Top Panel screws



- Use your finger to lift up the two D-rings on the Top Panel screws.

Step 4



- Use your fingers to twist the screw counter-clockwise and loosen it.
- Remove the Top Panel screw.

Step 5



- Repeat the same procedure for the other Top Panel screw.

Step 6 — Remove the Top Panel



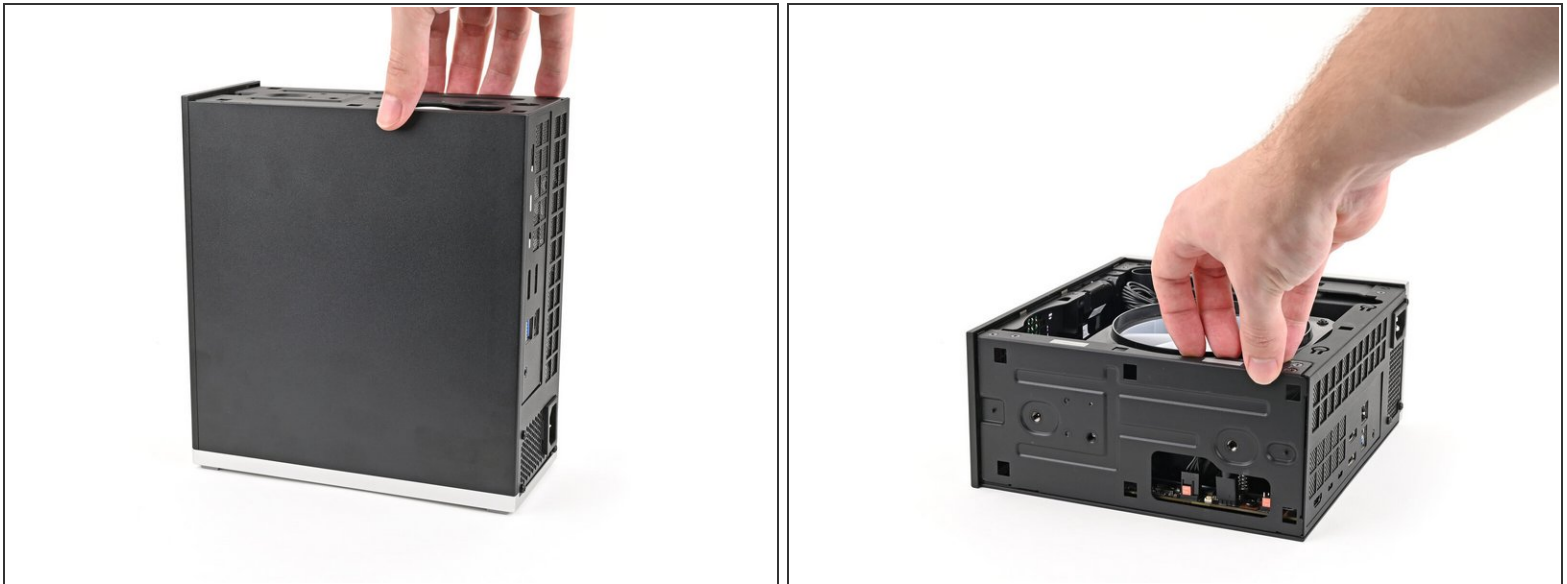
- Slide the Top Panel towards the rear of the computer to release the clips securing it to the chassis.
 - ① If you're having a hard time gripping the Top Panel, use the screw holes to get a better handhold.
- Lift the Top Panel off the chassis and remove it.

Step 7 — Remove the Left Panel



- Use your fingers to grip the top of the Left Panel and slide it upward to release its clips.
- Remove the Left Panel.

Step 8 — Lay down the Desktop



- Lay down the Desktop on its side so the fan is facing upward.

Step 9 — Disconnect the fan



- Use your fingers to lift the APU fan cable connector off its four-pronged socket on the Mainboard.

Step 10



- ① If you aren't using an RGB fan, then skip this step.
- Use your fingers to lift the fan RGB cable connector off its three-pronged socket on the Mainboard.

Step 11 — Remove the CPU fan screws



- Use your Framework Desktop Screwdriver to remove the four 27.3 mm-long Phillips screws securing the CPU fan and fan duct.

Step 12 — Remove the fan duct



- Lift the fan duct off the fan and remove it.

Step 13 — Remove the fan



- Lift the fan out of the chassis, making sure the cables thread through the side of the heatsink.

Step 14 — Disconnect the top Expansion Card cable



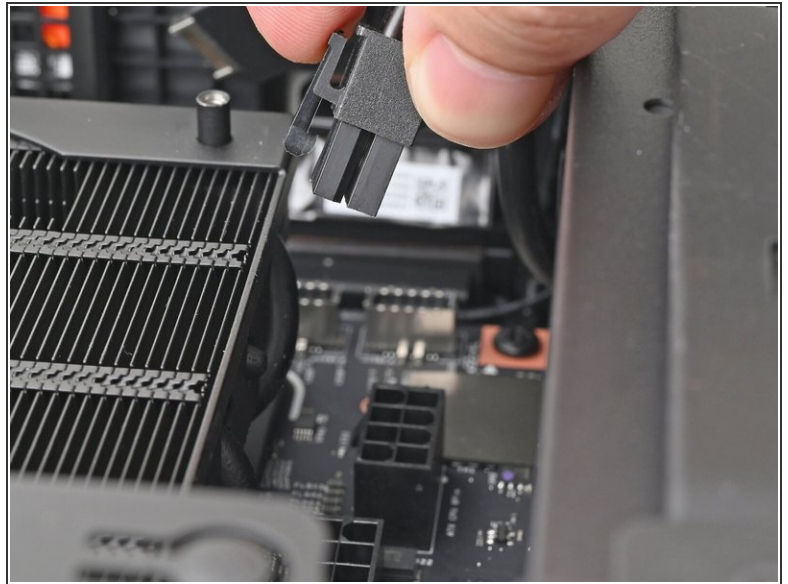
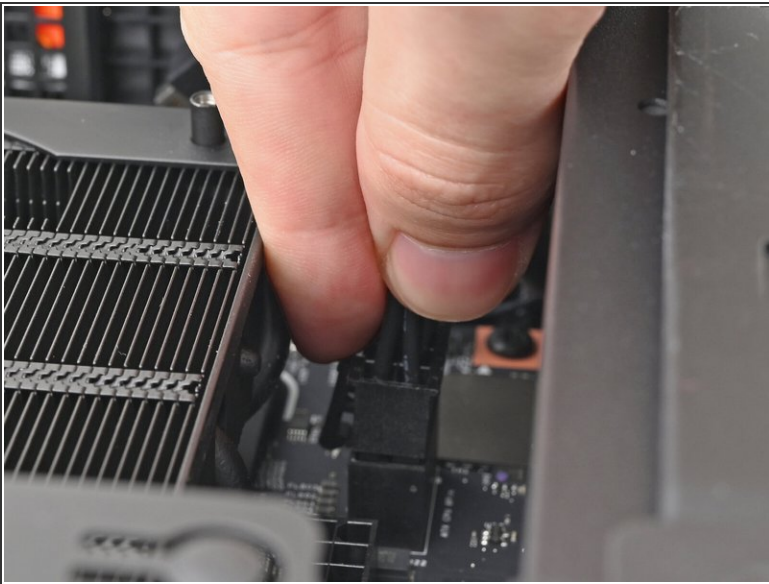
- Pull the top Expansion Card connector straight out of its socket in the Mainboard to disconnect it.

Step 15 — Disconnect the main power cable



- While squeezing [the clip](#) on the main power cable, pull it straight up and out of its socket to disconnect it.

Step 16 — Disconnect the CPU power cable



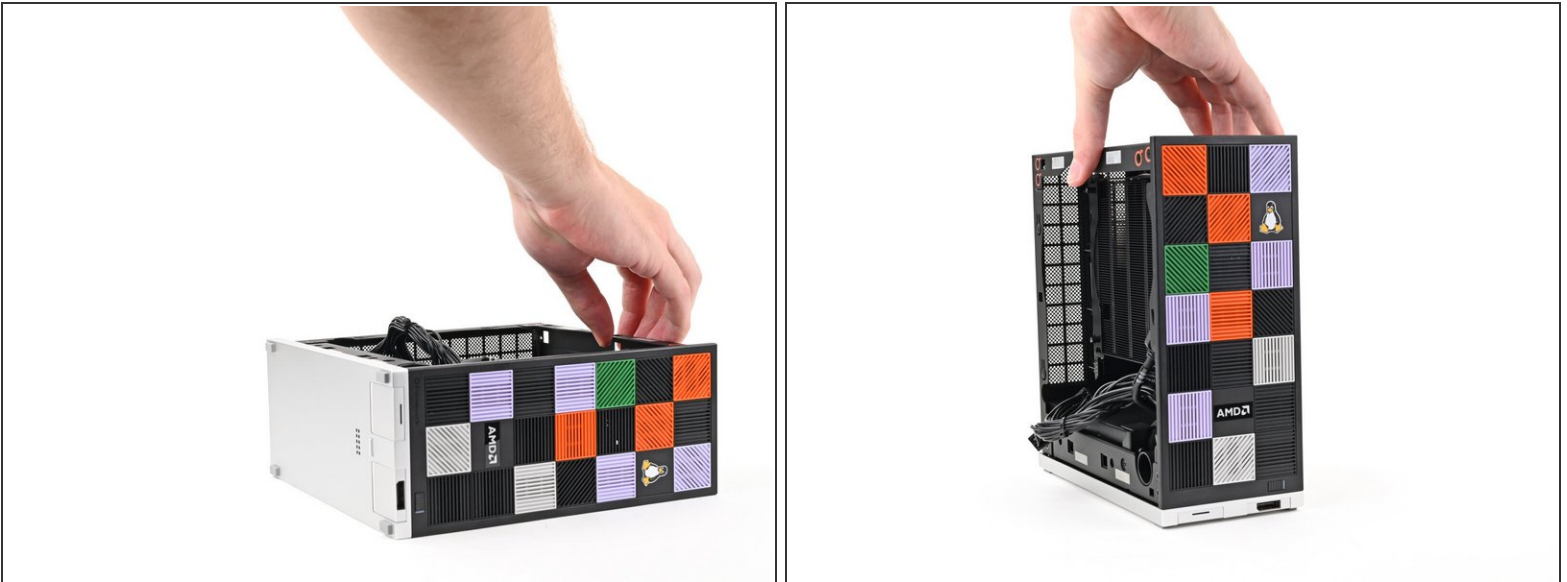
- While squeezing [the clip](#) on the CPU power cable, pull it straight up and out of its socket to disconnect it.

Step 17 — Disconnect the bottom Expansion Card cable



- Pull the bottom Expansion Card connector straight out of its socket in the Mainboard to disconnect it.

Step 18 — Reposition the Desktop



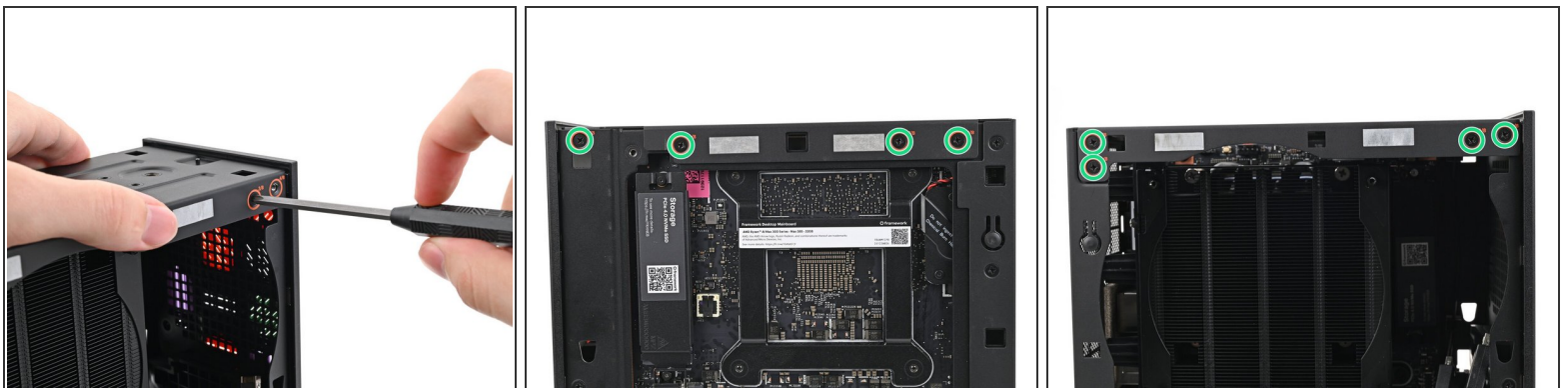
- Lift the Desktop so it stands upright on your work surface.

Step 19 — Remove the Right Panel



- Use your fingers to grip the top of the Right Panel and slide it upward to release its clips.
- Remove the Right Panel.

Step 20 — Remove the top plate screws



- While holding the Desktop steady, use your Framework Desktop Screwdriver to remove the eight 4.0 mm-long Phillips screws securing the top plate.

Step 21 — Remove the top plate



- Lift the top plate off the Desktop and remove it.

Step 22 — Reposition the Desktop



- Lay the left side of the Desktop on your work surface so the underside of the Mainboard is facing upward.

Step 23 — Remove the Wi-Fi Module screw



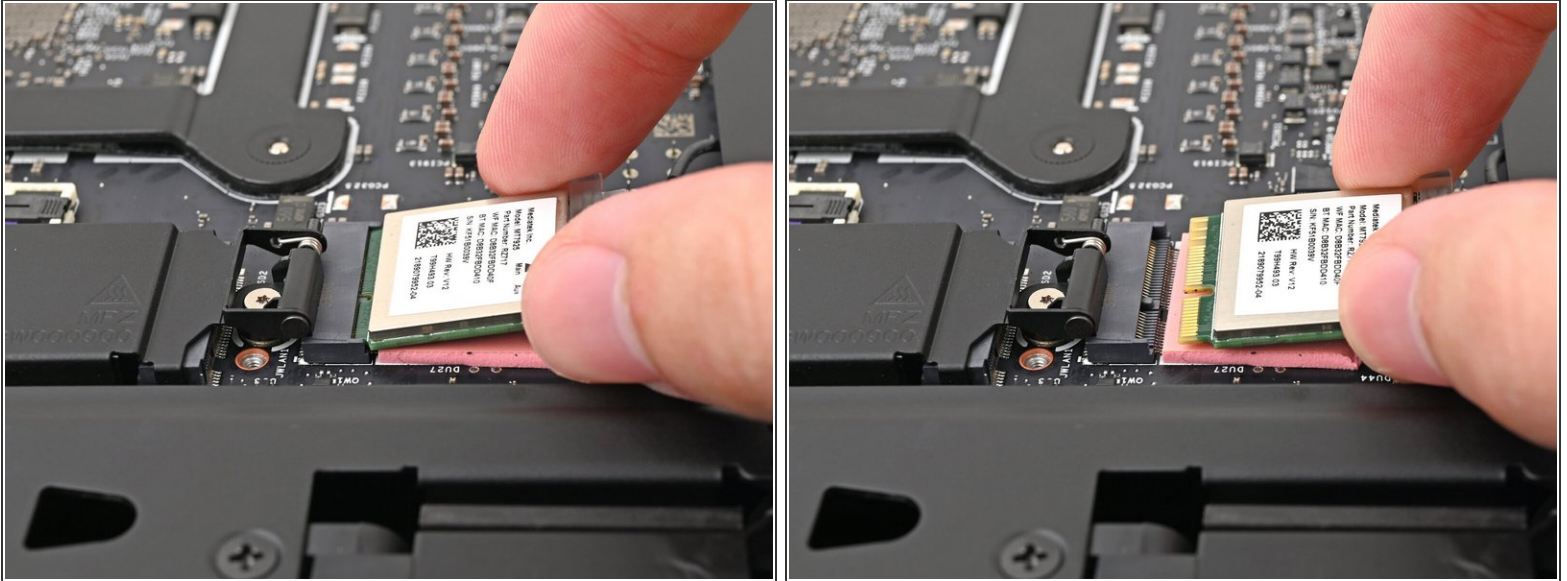
- Use your Framework Desktop Screwdriver to remove the 7.0 mm-long Phillips screw securing the Wi-Fi module.

Step 24 — Remove the Wi-Fi module cover



- Use your fingers to slide the Wi-Fi module cover straight off the bottom of the module.
- Remove the cover.

Step 25 — Remove the Wi-Fi module



- Grip the Wi-Fi module by its edges and pull it straight out of its socket.

Step 26 — Reposition the Wi-Fi module



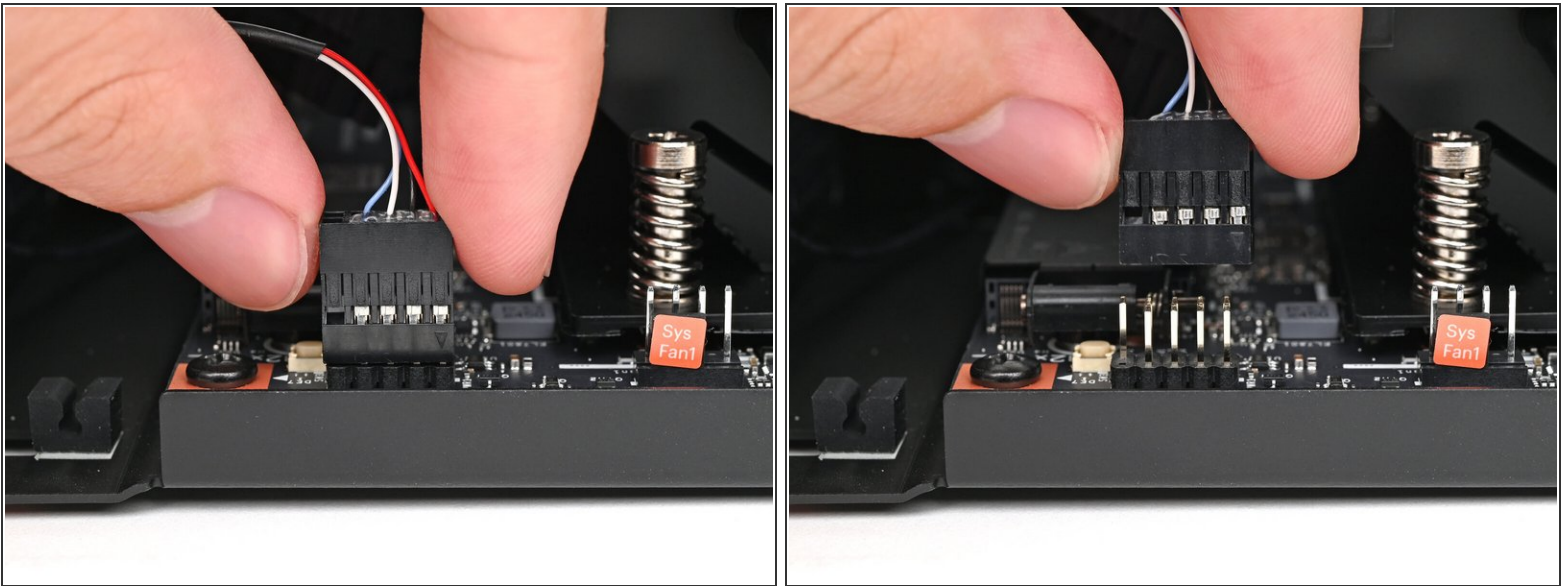
- Move the Wi-Fi module towards the center of the Mainboard to keep it out of the way.

Step 27 — Reposition the Desktop



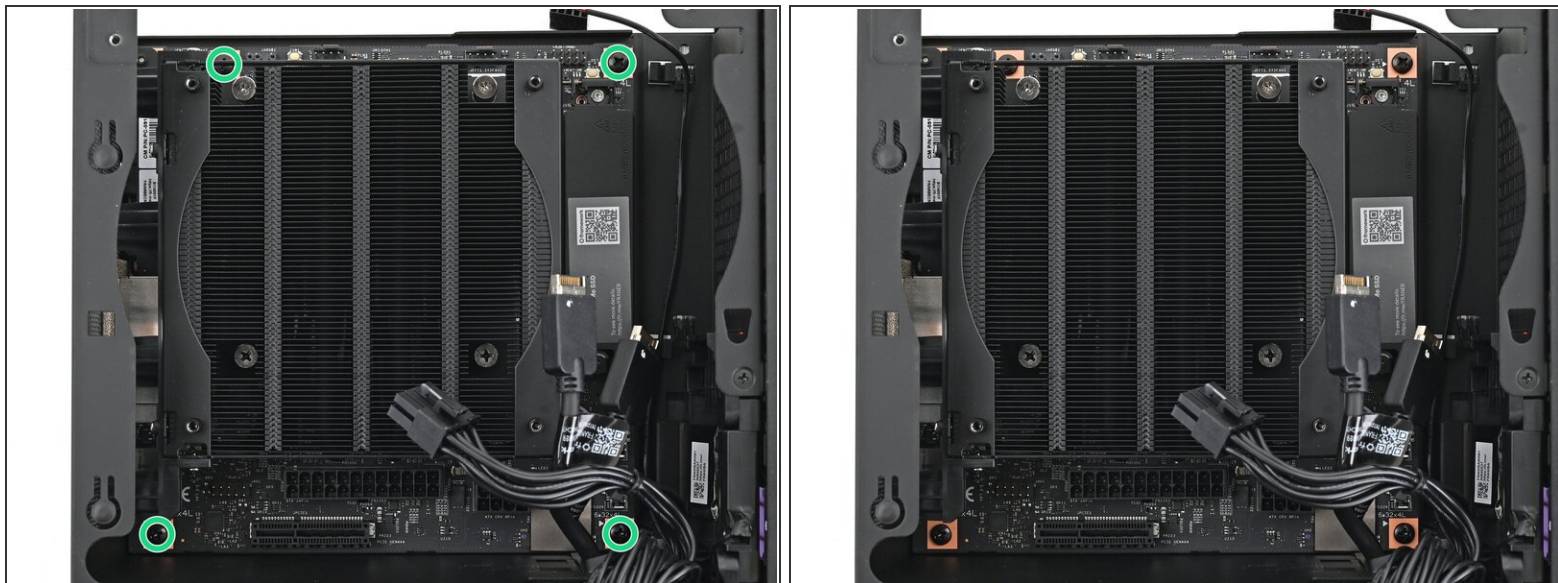
- Rotate the Desktop onto its right side so the Mainboard is facing upward.

Step 28 — Disconnect the power button



- Use your fingers to lift the power button cable connector off its nine-pronged socket on the Mainboard.

Step 29 — Remove the Mainboard screws



- Use your Framework Desktop Screwdriver to remove the four 8.2 mm-long Phillips screws securing the Mainboard.

Step 30 — Remove the Mainboard



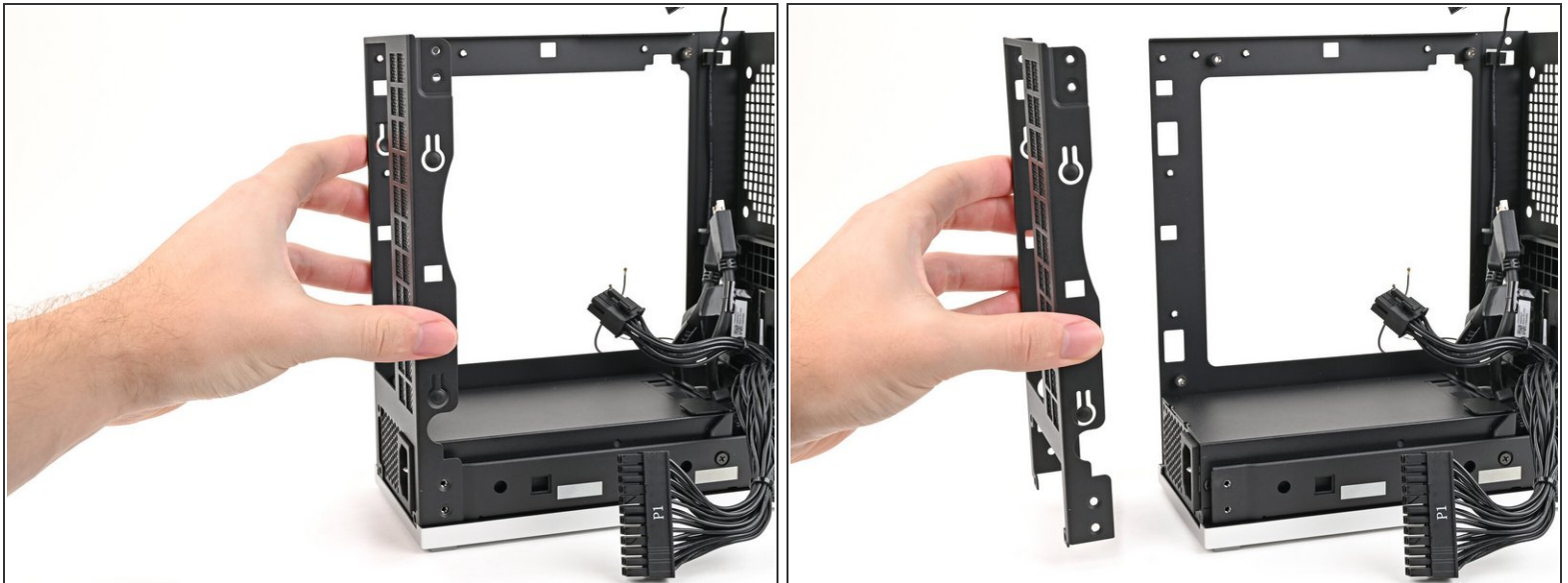
- Grab the Mainboard by its heatsink and pull it towards the front of the Desktop to slide it out of the rear port cutout.
 - ⚠ When handling the Heatsink, grab from the left and right sides (*sides facing Front Panel & Back IO*) as shown in the image to prevent bent fins and possible damage to the Heatsink.
- Slide the Mainboard towards the top of the Desktop to remove it from the chassis.

Step 31 — Remove the rear plate screws



- Use your Framework Desktop Screwdriver to remove the three 5.9 mm-long Phillips screws securing the power supply.
- Optionally, you can remove the six 4.0 mm-long screws securing the rear plate to make removing the power supply easier.
 - ❗ If you don't remove the rear plate screws, skip the next step.

Step 32 — Remove the rear plate



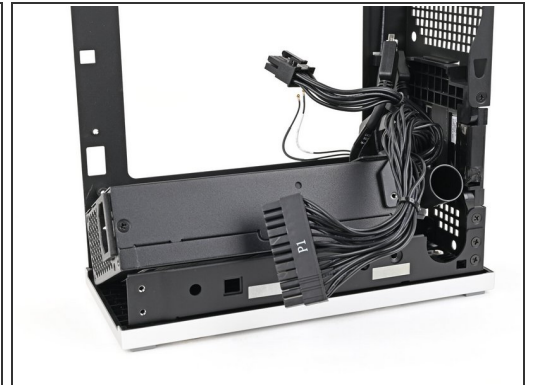
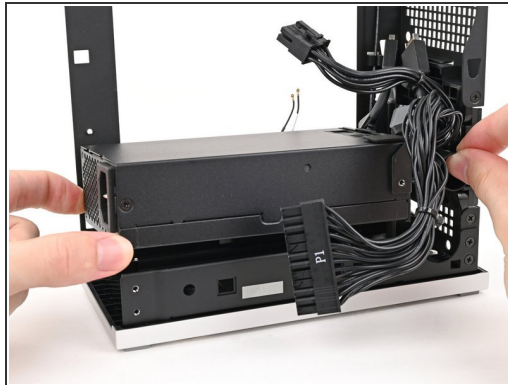
- Pull the rear plate off the back of the Desktop and remove it.

Step 33 — Remove the power supply screw



- Use your Framework Desktop Screwdriver to remove the 4.0 mm-long Phillips screw securing the power supply.

Step 34 — Reposition the power supply



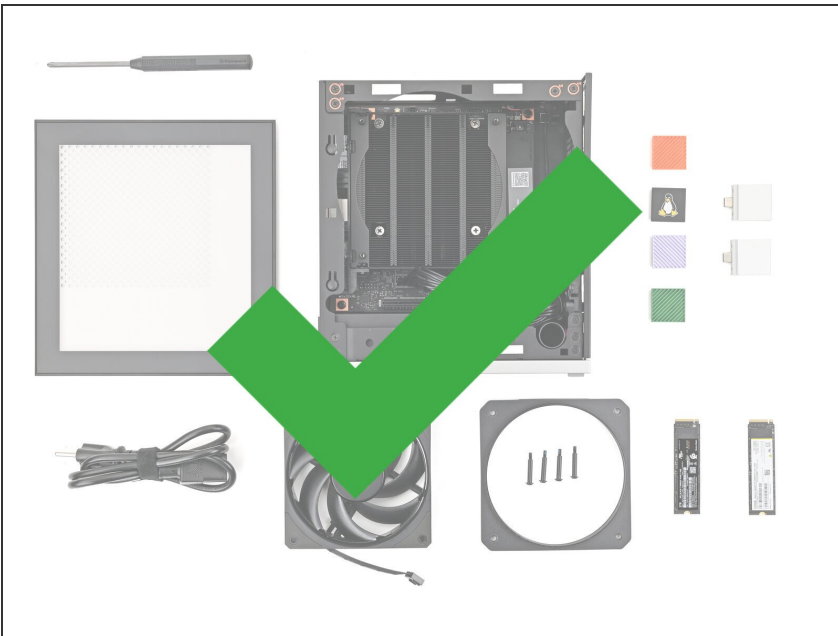
- Lift the power supply out of its slot and let it rest on the left side of the Desktop.

Step 35 — Remove the power supply



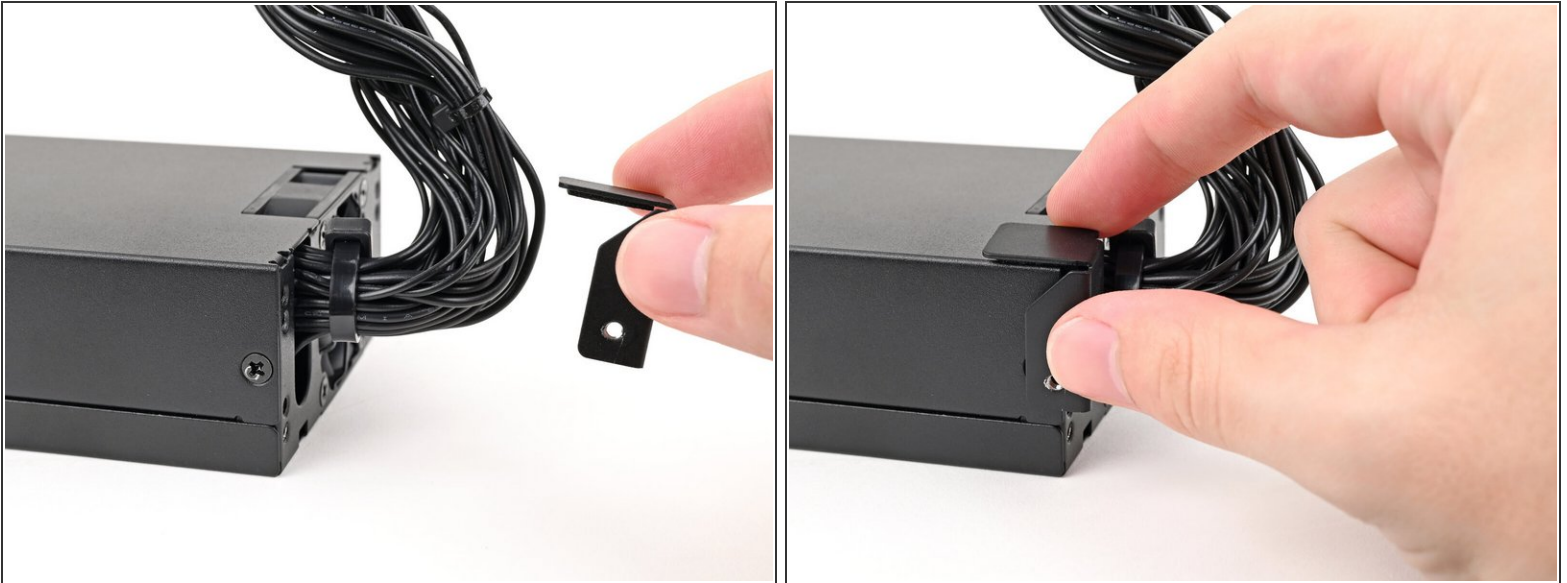
- Push the right Expansion Card cable through the gap between the power supply and its duct.
 - ⓘ The gap is very small and might require some force to thread the cable through.
- Remove the power supply.

Step 36 — Disassembly complete



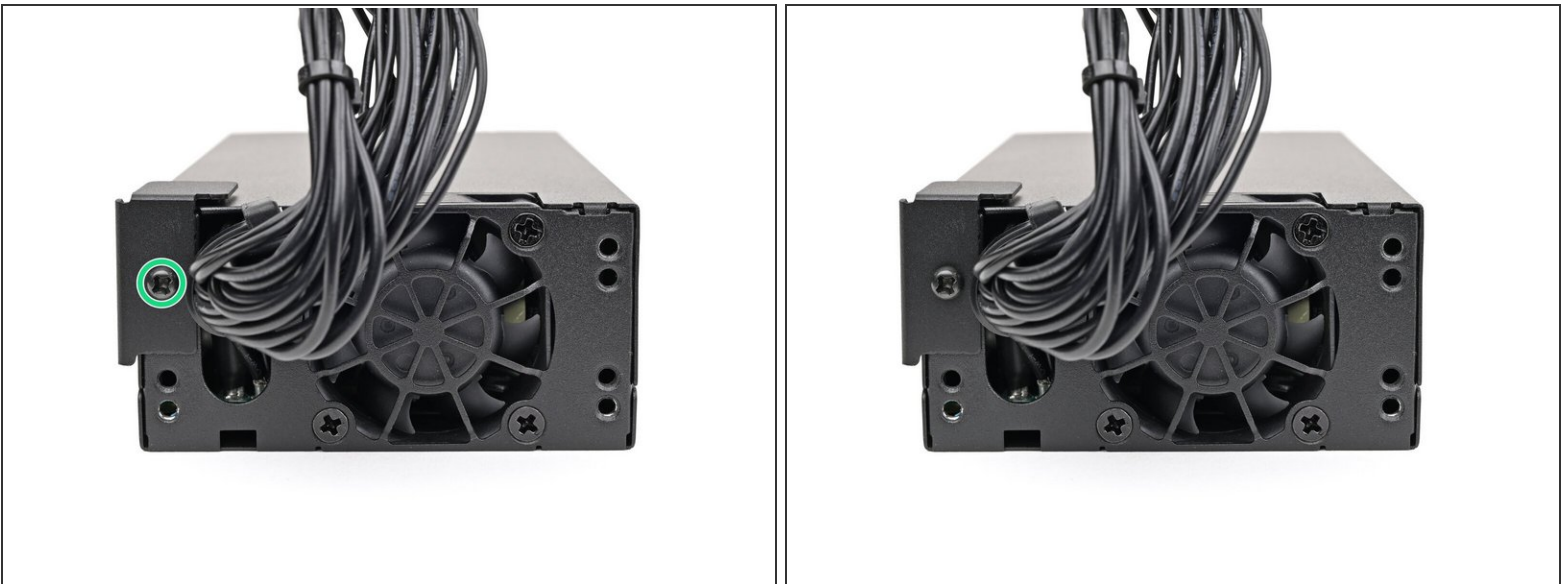
- Congratulations on completing disassembly! **The remaining steps will show how to reassemble your Framework Desktop.**

Step 37 — Place the mounting bracket



- ❗ If your power supply doesn't come with its mounting bracket and Power Supply Duct pre-installed, follow the next four steps. Otherwise, skip ahead four steps.
- Place the mounting bracket on the corner of the power supply closest to the wire bundle.

Step 38 — Install the mounting bracket screw



- Use your Framework Desktop Screwdriver to Install the 5.8 mm-long Phillips screw securing the mounting bracket.

Step 39 — Place the Power Supply Duct



- Place the Power Supply Duct on the power supply and align its screw holes.

Step 40 — Install the Power Supply Duct screws



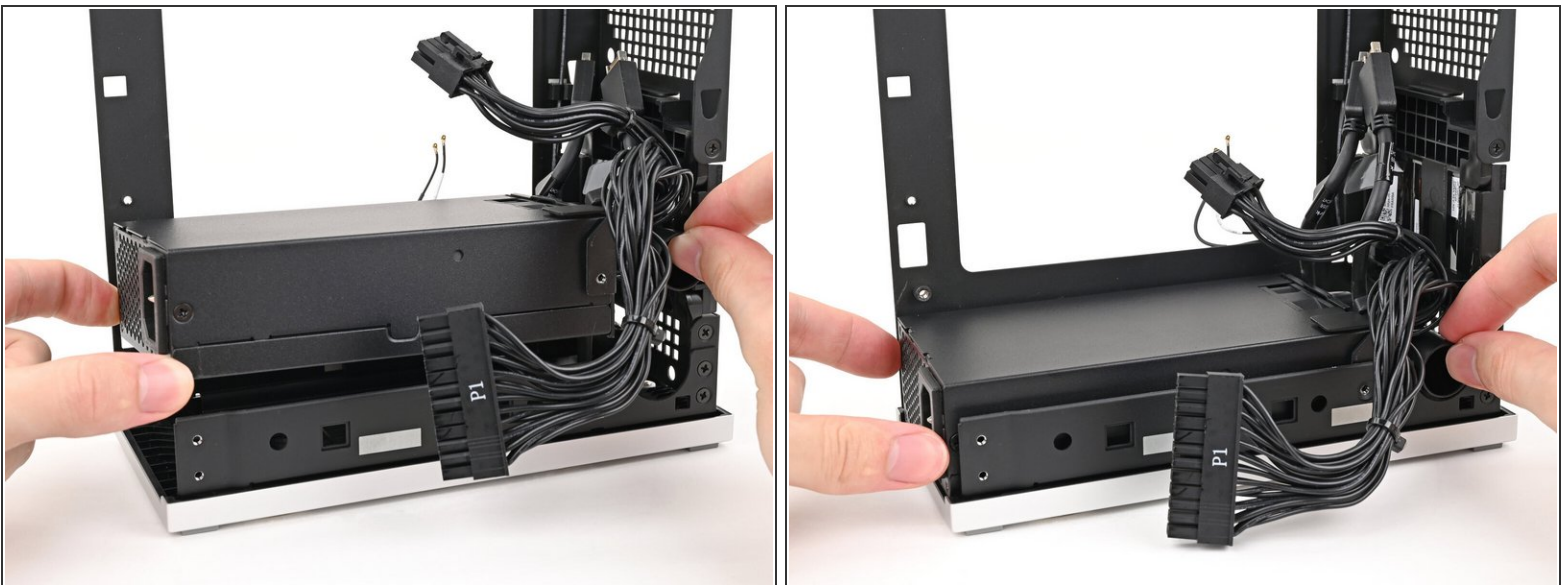
- Use your Framework Desktop Screwdriver to Install the three 5.8 mm-long Phillips screws securing the Power Supply Duct.

Step 41 — Insert the Expansion card cable



- Thread the right Expansion card cable through the gap between the power supply and its duct.

Step 42 — Place the power supply



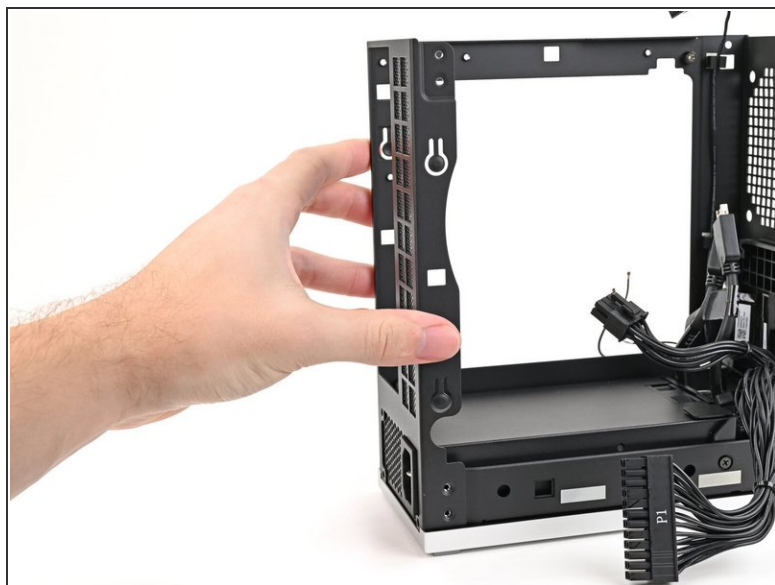
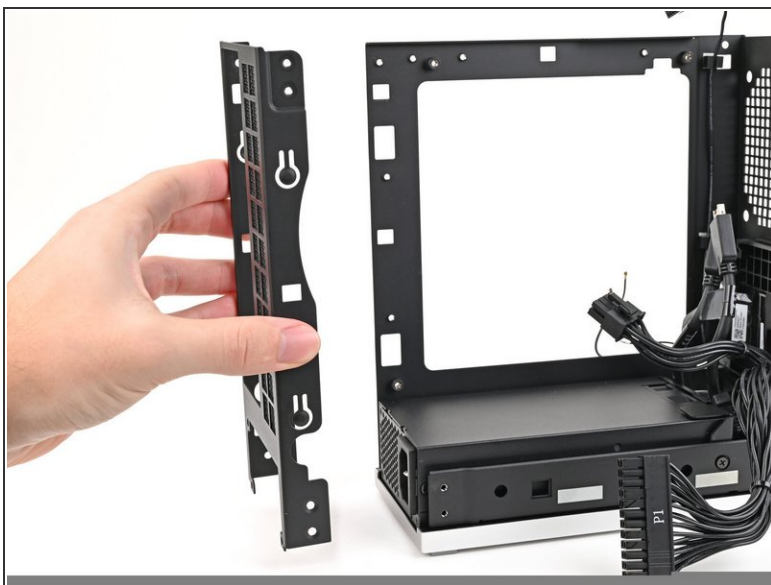
- Place the power supply into its slot in the bottom of the Desktop.

Step 43 — Install the power supply screw



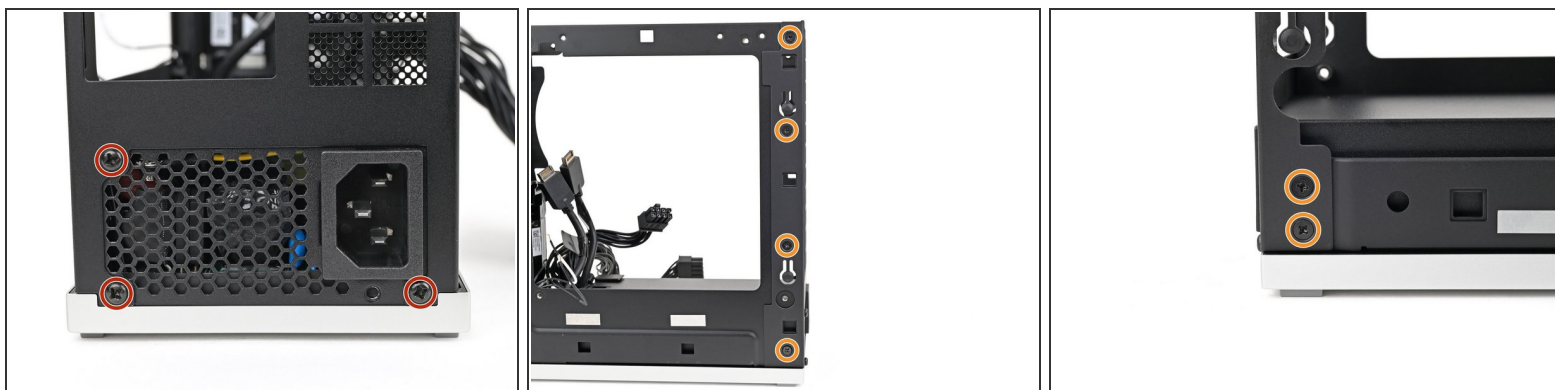
- Use your Framework Desktop Screwdriver to install the 4.0 mm-long Phillips screw securing the power supply.

Step 44 — Place the rear plate



- Place the rear plate onto the back of the Desktop.

Step 45 — Install the rear plate screws



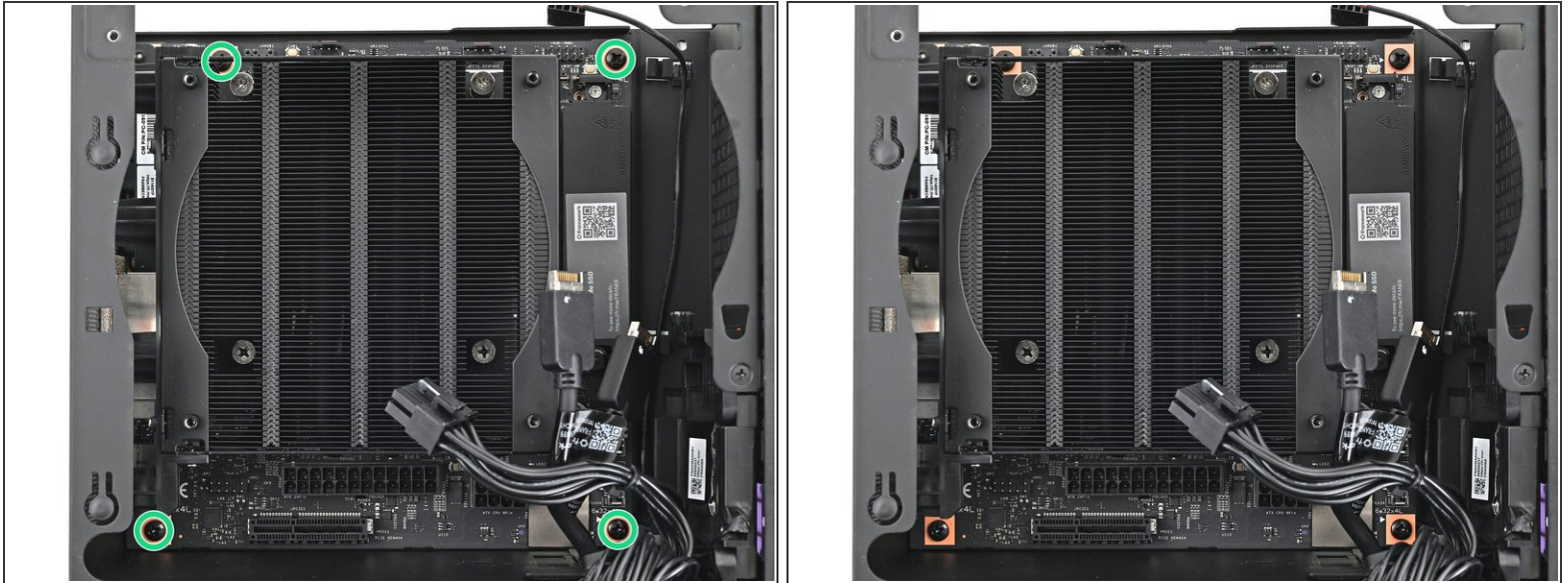
- Use your Framework Desktop Screwdriver to install the three 5.9 mm-long Phillips screws securing the power supply.
- If you removed the rear plate, install the six 4.0 mm-long screws securing the rear plate.

Step 46 — Place the Mainboard



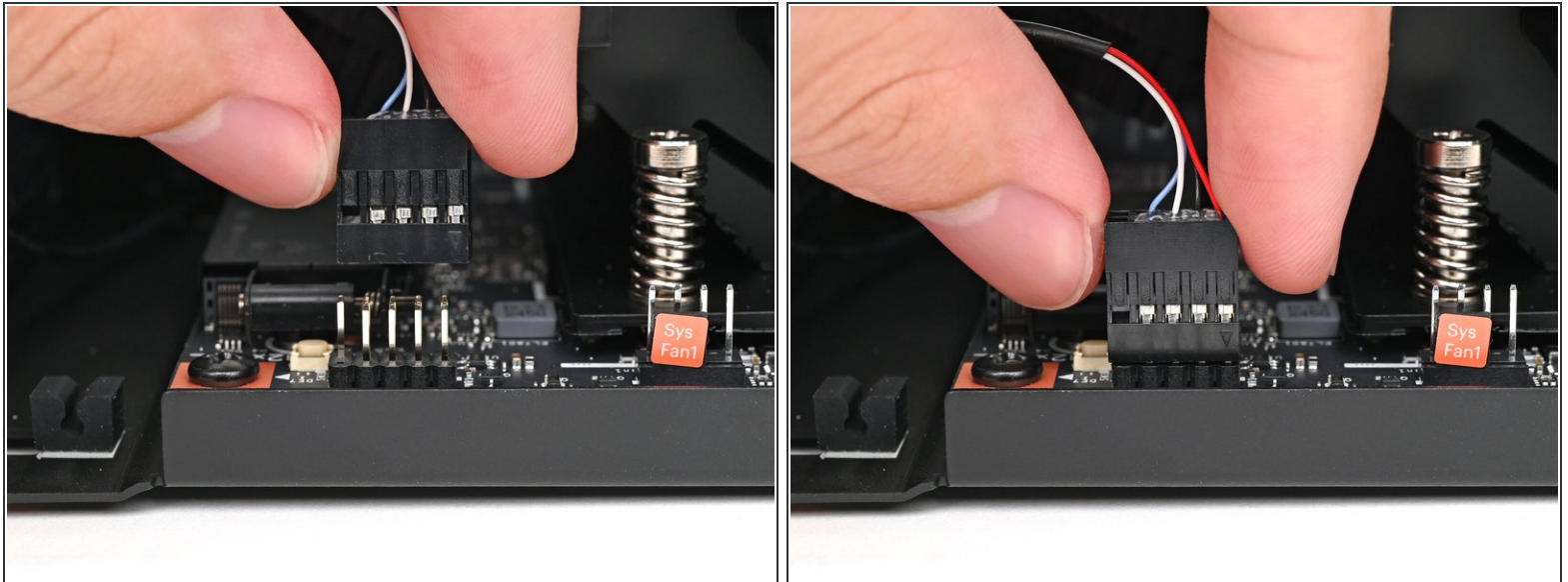
- Grab the Mainboard by its heatsink and slide it into the chassis.
 - ⚠ When handling the Heatsink, grab from the left and right sides (*sides facing Front Panel & Back IO*) as shown in the image to prevent bent fins and possible damage to the Heatsink.
- Align the rear ports with its cutout and the screw posts with the screw holes on the Mainboard.
 - 📎 You'll feel the Mainboard rest onto the screw posts when it's aligned properly.
- Make sure no cables are trapped underneath the Mainboard before continuing.

Step 47 — Install the Mainboard screws



- Use your Framework Desktop Screwdriver to install the four 8.2 mm-long Phillips screws securing the Mainboard.

Step 48 — Connect the power button



- Slide the power button cable over the nine-pronged connector on the Mainboard.

Step 49 — Reposition the Desktop



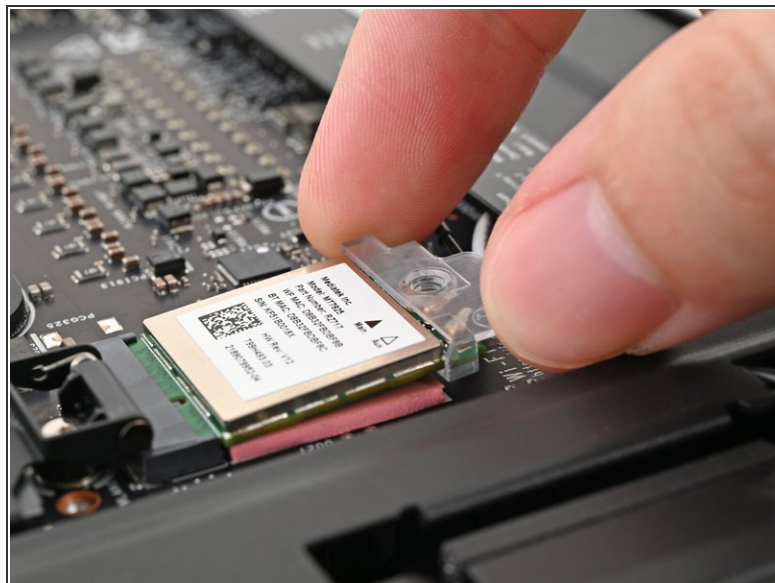
- Rotate the Desktop onto its left side so the underside of the Mainboard is facing upward.

Step 50 — Install the Wi-Fi module



- ⚠ Hold the Wi-Fi module by its edges. Don't touch the gold contacts with your fingers. If you do, wipe the contacts with a clean, lint-free cloth to remove any finger oils.
- Align the Wi-Fi module's gold contacts and notch with the socket on the Mainboard.
- Insert the Wi-Fi module into the socket at a shallow angle. The gold contacts should mostly be covered by the socket.
- ℹ The Wi-Fi module fits into the socket in one orientation. If it doesn't fit, try flipping the module.

Step 51 — Remove the Wi-Fi module cover



- Use your fingers to slide the Wi-Fi module cover straight on the bottom of the module.
- Install the cover.

Step 52 — Install the Wi-Fi module screw



- Use your Framework Desktop Screwdriver to install the 7.0 mm-long Phillips screw securing the Wi-Fi module.

Step 53 — Reposition the Desktop



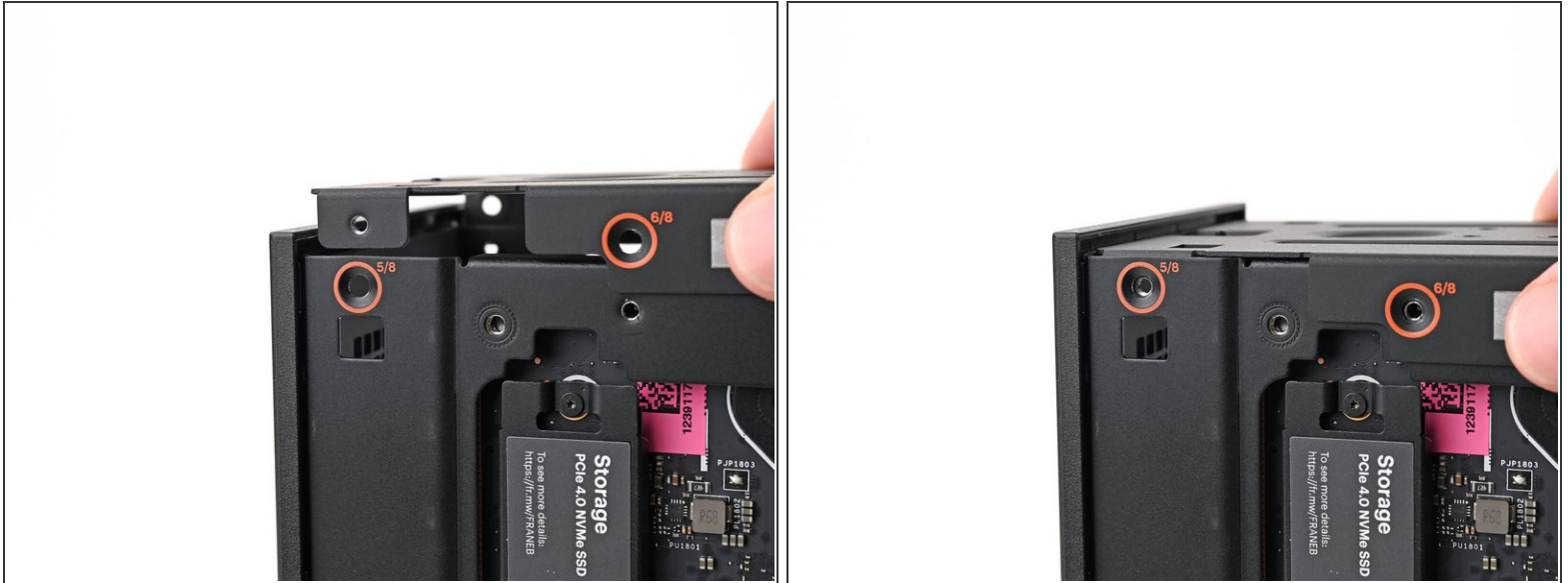
- Rotate the Desktop so it sits upright on your work surface.

Step 54 — Place the top plate



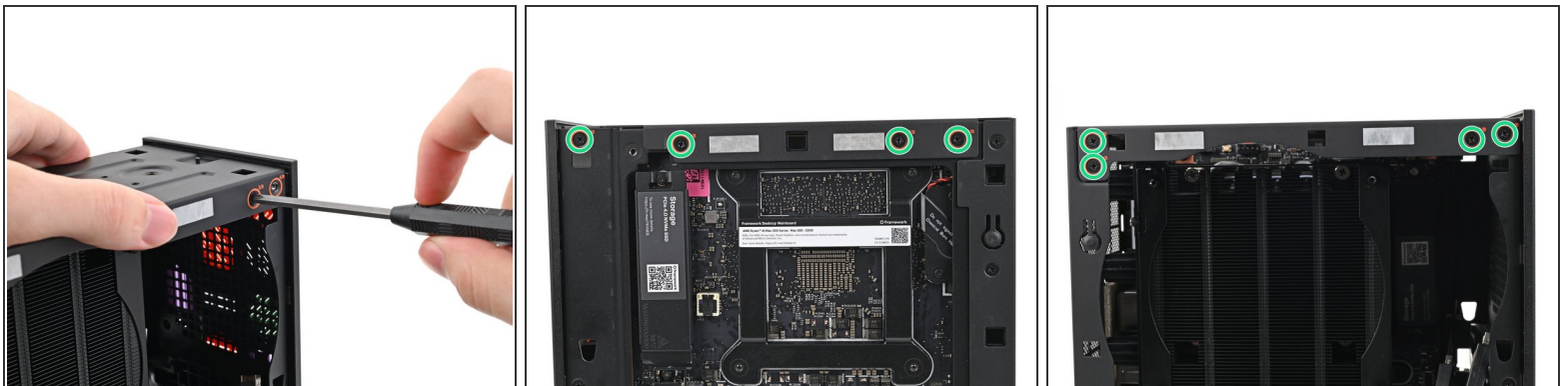
- Place the top plate on top of the Desktop, making sure it slots into the chassis so the orange circles are visible.

Step 55



- Make sure the matching screw hole on the top plate labeled " 5/8" is slotted on the inside of the Chassis so that the orange circle is visible.

Step 56 — Install the top plate screws



- While holding the Desktop steady, use your Framework Desktop Screwdriver to install the eight 4.0 mm-long Phillips screws securing the top plate.

Step 57 — Install the Right Panel



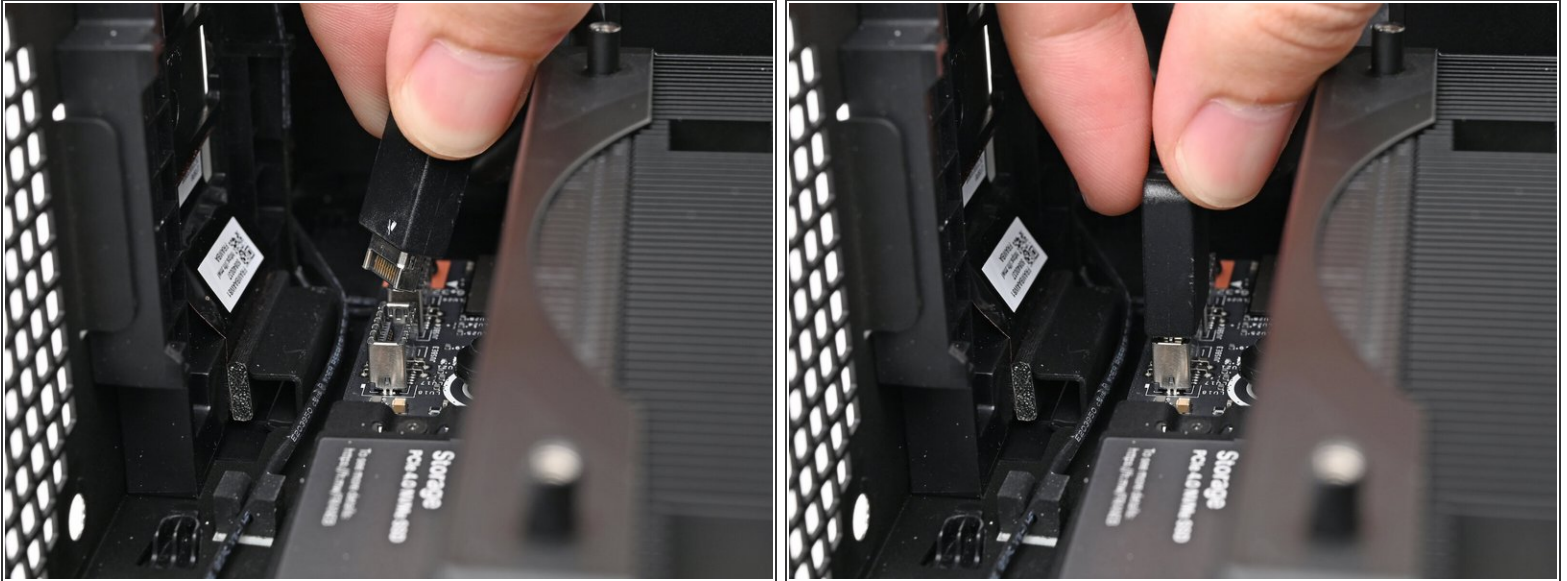
- Slide the Right Panel onto the right edge of the chassis, from top to bottom, and press it flat to ensure its clips are slotted into place.
 - ❗ There should be a [small gap](#) between the bottom of the Right Panel and the silver base.
- Push the Right Panel towards the base of the computer to engage the clips.

Step 58 — Reposition the Mainboard



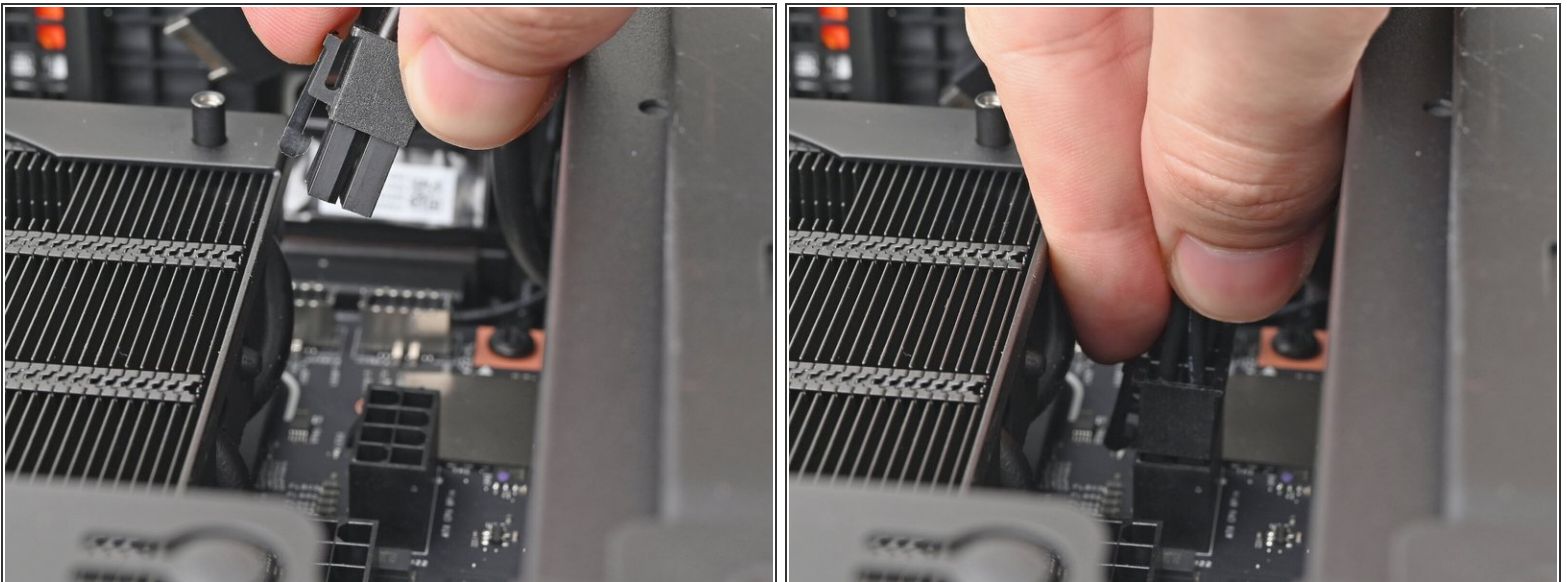
- Lay the right side of the Desktop on your work surface so the Mainboard is facing upward.

Step 59 — Connect the bottom Expansion Card cable



- Slide the bottom Expansion Card cable into its socket on the Mainboard.

Step 60 — Connect the CPU power cable



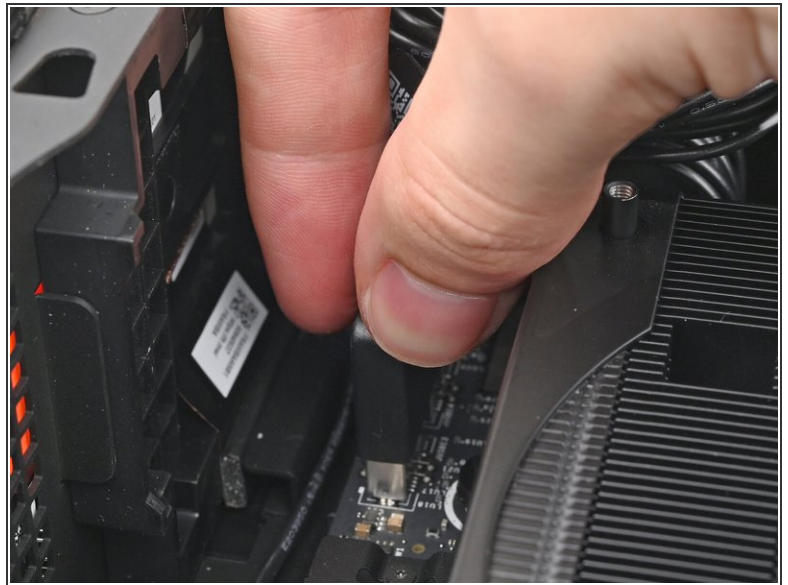
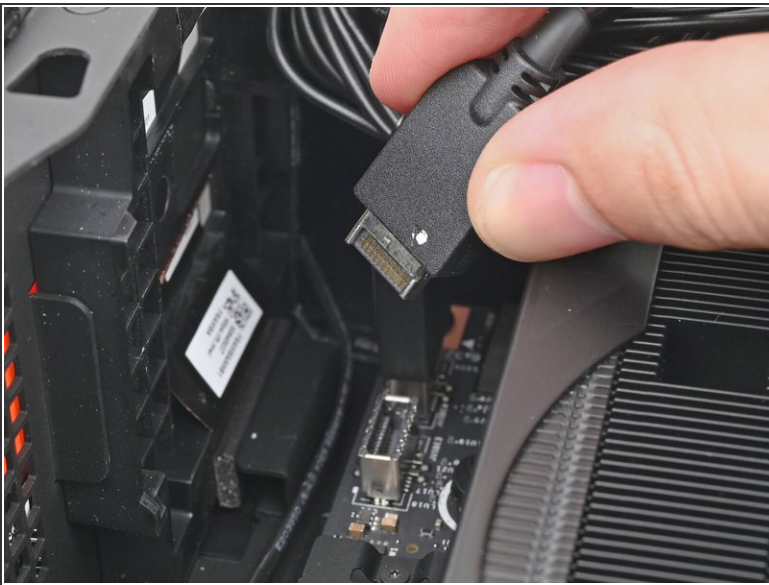
- Orient the CPU power supply cable so its clip is facing the heatsink.
- Slide the cable into its socket on the Mainboard until you feel it click into place.

Step 61 — Connect the main power cable



- Orient the main power supply cable so its clip is facing away from the heatsink.
- Slide the cable into its socket on the Mainboard until you feel it click into place.

Step 62 — Connect the top Expansion Card cable



- Slide the top Expansion Card cable into its socket on the Mainboard.

Step 63 — Insert the CPU fan



- Orient the fan so its label is facing downward and the cable(s) is pointing towards the top of the computer.
 - ① If your fan has an arrow indicating airflow direction, make sure it's pointed towards the heatsink.
 - ① If you're using a different fan, orient it such that the fan is blowing towards the heatsink, not away.
- Lay the fan on top of the heatsink, making sure the cables are routed so they poke out of [the hole on the top of the computer](#).

Step 64



- If the cables aren't routed properly, lift the fan up slightly and use your fingers to reposition the cables over the side of the heatsink.
- ❗ If you're installing an RGB fan, make sure the "male" end of the RGB cable is covered and set aside in the corner of the chassis.

Step 65 — Insert the fan duct



- Lay the fan duct on top of the fan with the lip facing upward.
- Align the screw holes on the fan duct with the ones on the fan.

Step 66 — Install the fan screws



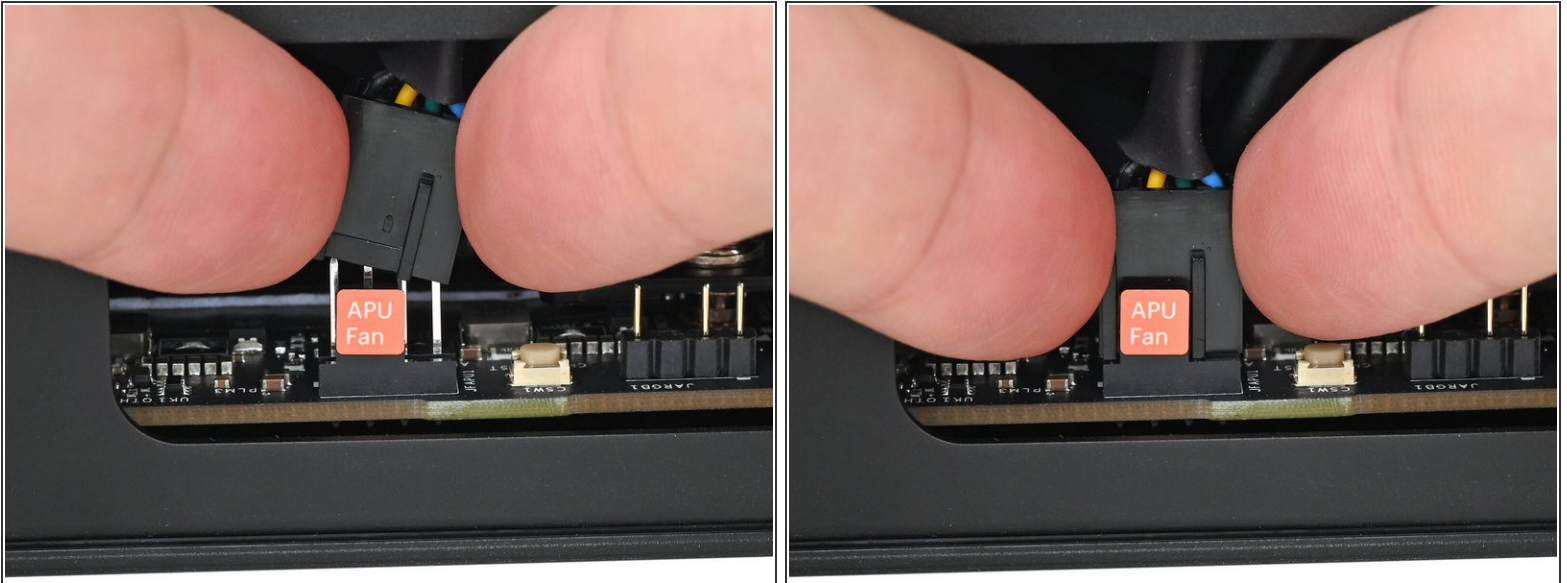
- (if new) Remove the fan screws from their packaging and make sure there are **four screws** total.

Step 67



- Use your Framework Desktop Screwdriver to install the four 27.3 mm-long Phillips screws securing the CPU fan and fan duct.

Step 68 — Connect the fan



- Orient the main fan cable so its two vertical lines are facing you.
- Slide the main fan cable over the four-pronged connector labeled "APU Fan," making sure the orange label slots between the vertical lines.

Step 69 — Connect the RGB cable



- ❗ If you aren't using an RGB fan, then skip this step.
- Orient the RGB cable so the arrow is facing you.
- Use your fingers to slide the RGB cable over the three pronged connector located to the right of the "APU Fan" connector.

Step 70 — Install the Left Panel



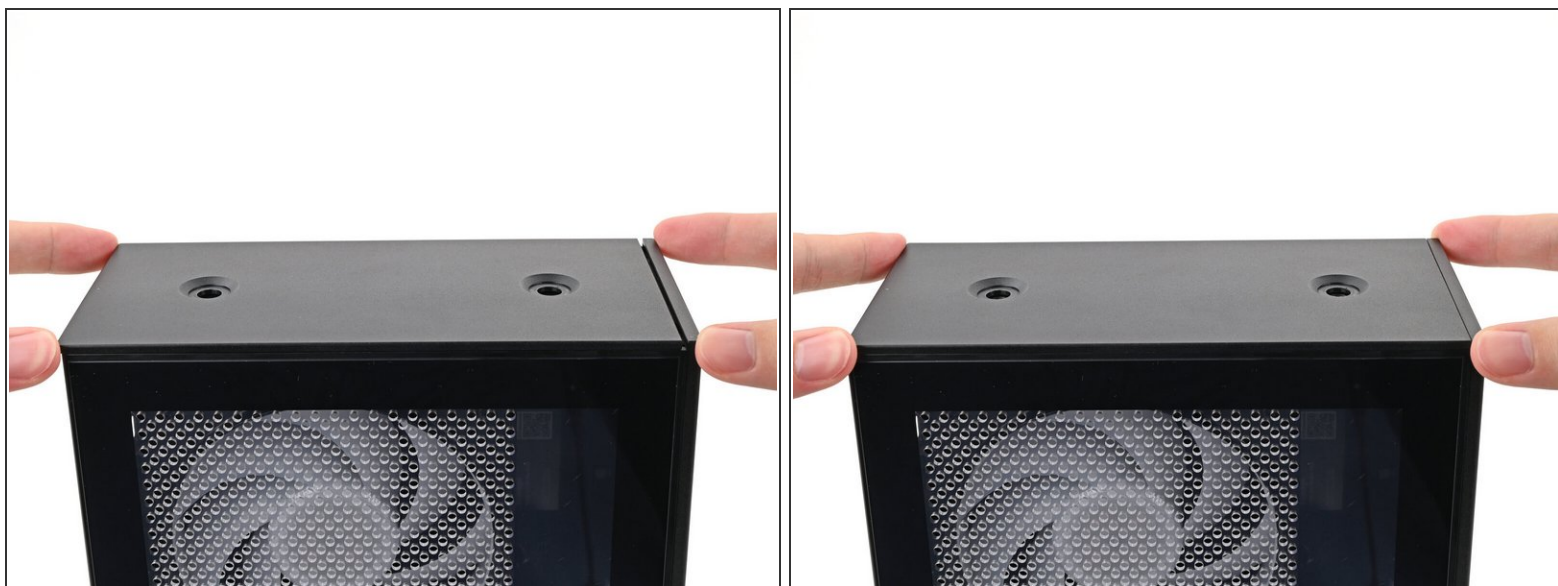
- Slide the Left Panel onto the left edge of the chassis and press it flat to ensure its clips are slotted into place.
 - ❗ There should be a [small gap](#) between the bottom of the Left Panel and the silver base.
- Push the Left Panel towards the base of the computer to close the gap and engage the clips.

Step 71 — Install the Top Panel



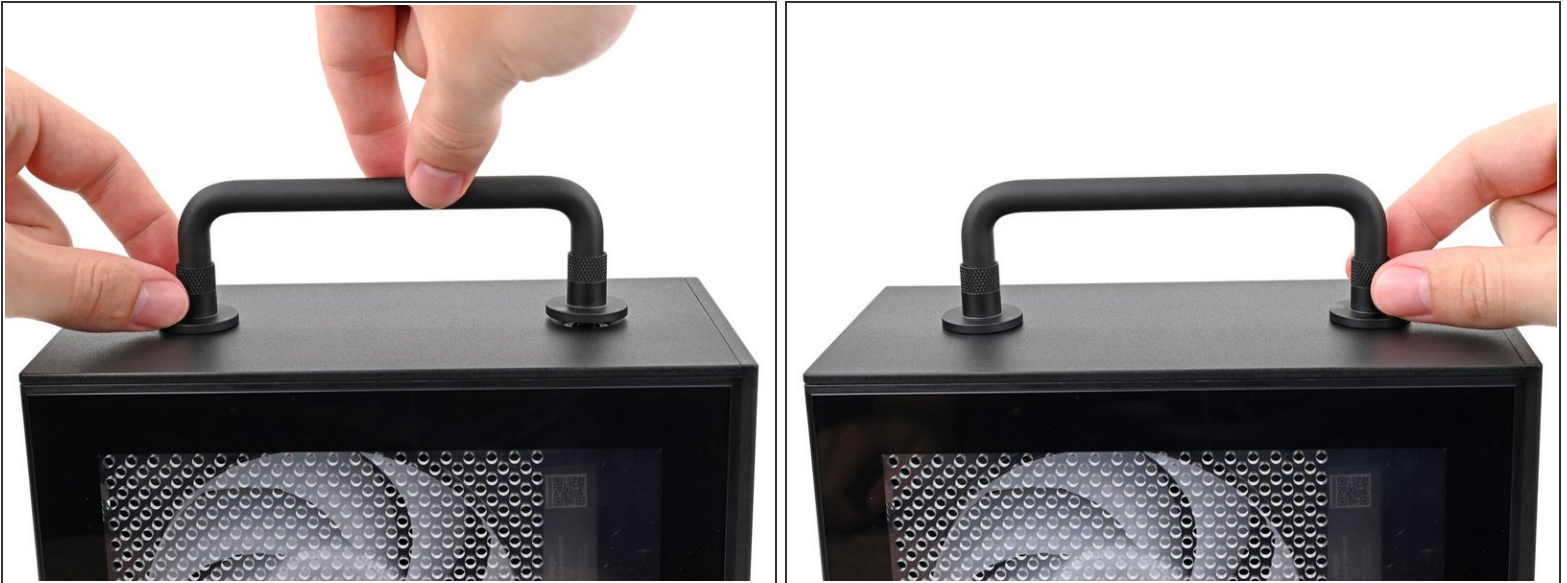
- Orient the Top Panel so its arrow is pointing towards the rear of the computer.
- While holding the Top Panel at a slight downward angle, slide it across the top of the chassis (from rear to front) until you feel its clips catch.
 - ❗ There should be a [small gap](#) between the Top Panel and the front of the Desktop.
- Lay the Top Panel flat on the chassis to align the remaining clips.

Step 72



- While securing the computer with one hand, use the other hand to slide the Top Panel towards the front of the computer to close the gap and engage the clips.

Step 73 — Install the Handle



- ❗ If you're installing the Handle on your Desktop, follow this step. Otherwise, skip it.
- Place the Handle over the Top Panel screw holes.
 - While holding the Handle in place, twist the screw threads on both sides clockwise until they're snug on the Top Panel.

Step 74 — Install the top panel screws



- Insert the top panel screw into its hole and twist clockwise until it feels snug.

Step 75



- Repeat the same procedure for the other top panel screw.

Step 76



- Use your finger to close the two D-rings on the top panel screws.

You finished fixing your Framework Desktop!

Take your e-waste to an [R2 or e-Stewards certified recycler](#).

If you need help, [contact Framework support](#).