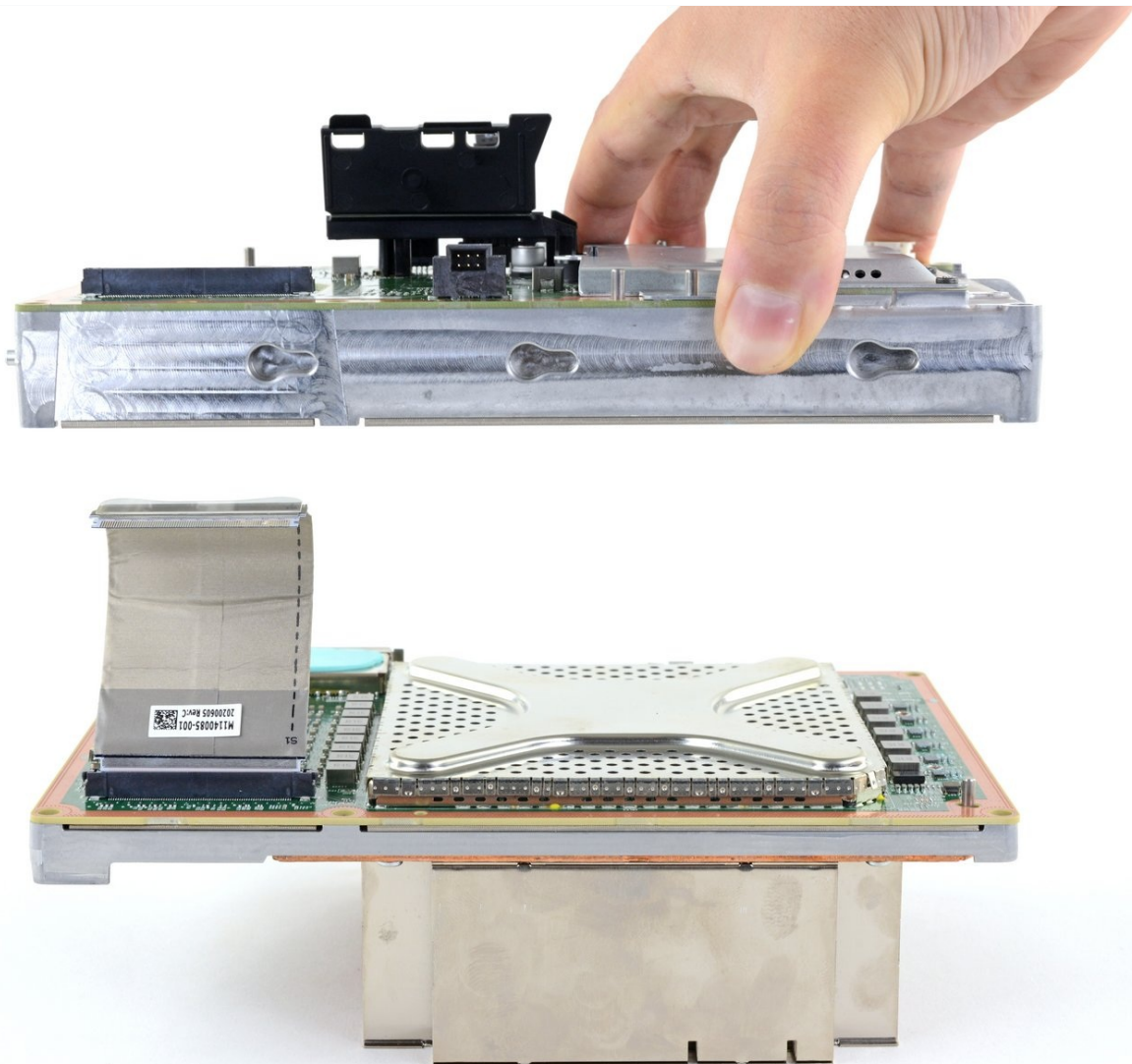




Xbox Series X Motherboard and Heatsink Assembly Replacement

Use this guide to remove the motherboard, SSD,...

Written By: Carsten Frauenheim



INTRODUCTION

Use this guide to remove the motherboard, SSD, and heatsink complete assembly on an Xbox Series X.

Before you begin, completely **power down and unplug all cables** from your console. Remember to follow general electrostatic discharge (ESD) safety procedures while repairing the console.



TOOLS:

TR8 Torx Security Screwdriver (1)
Spudger (1)
ESD Safe Blunt Nose Tweezers (1)
Tweezers (1)



PARTS:

Xbox Series X Dual Motherboards and Paired Optical Drive (1)

Step 1 — Uncover the back panel screws



⚠ Before you begin, completely power down and unplug all cables from your console.

- Use a pair of tweezers to remove the sticker hiding the first screw on the back panel, near the base.

Step 2



- Use a pair of blunt tweezers to peel back the large sticker on the back panel to reveal the second screw.
- ① You only need to peel this sticker to where you can access the hidden screw. You don't need to pull it completely off.
- ① Technically, these are tamper-evident stickers, but don't worry—[Microsoft can't legally void your warranty](#), as long as you don't damage anything. Have fun!

Step 3 — Remove the back panel screws



- Use a T8 Torx driver to remove the two 7.4 mm-long screws securing the back panel.
- ① Throughout this repair, [keep track of each screw](#) and make sure it goes back exactly where it came from to avoid damaging your console.

Step 4 — Unclip the back panel



- Insert the flat end of a spudger into the gap between the back panel and the shell, near the left side of the base.
- Pry up the back panel to release it from the locking clips.

Step 5



- Insert the flat end of a spudger into the gap between the back panel and the shell, near the right side of the base.
- Pry up the back panel to release it from the locking clips.

Step 6 — Remove the back panel



- Grip the back panel at the opening you just created and pull it up and away from the shell to unclip the long edges.

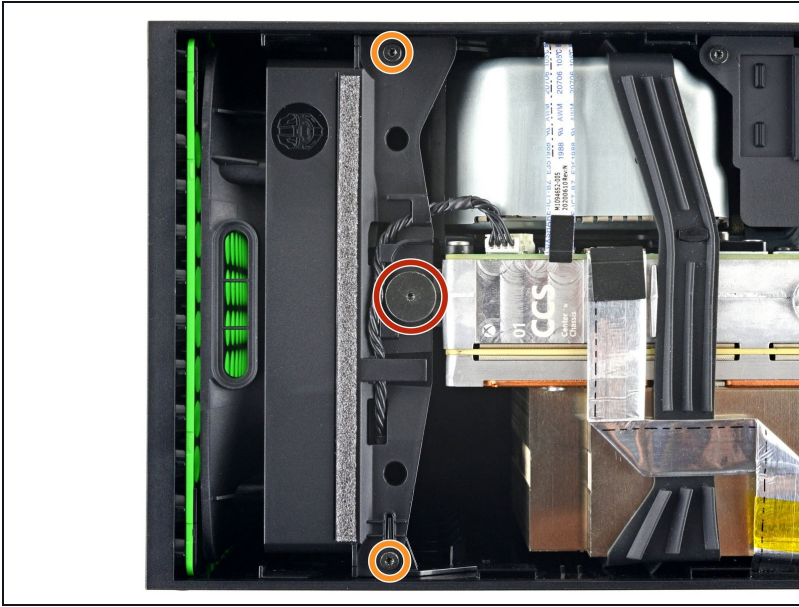
✪ During reassembly, press along the edges of the back panel to snap it into place.

Step 7



- ① The back panel slots into a gap at the top of the shell.
- Tilt the back panel up and pull it away from the top edge of the shell to release it from the gap.
- Remove the back panel.

Step 8 — Remove the fan screws



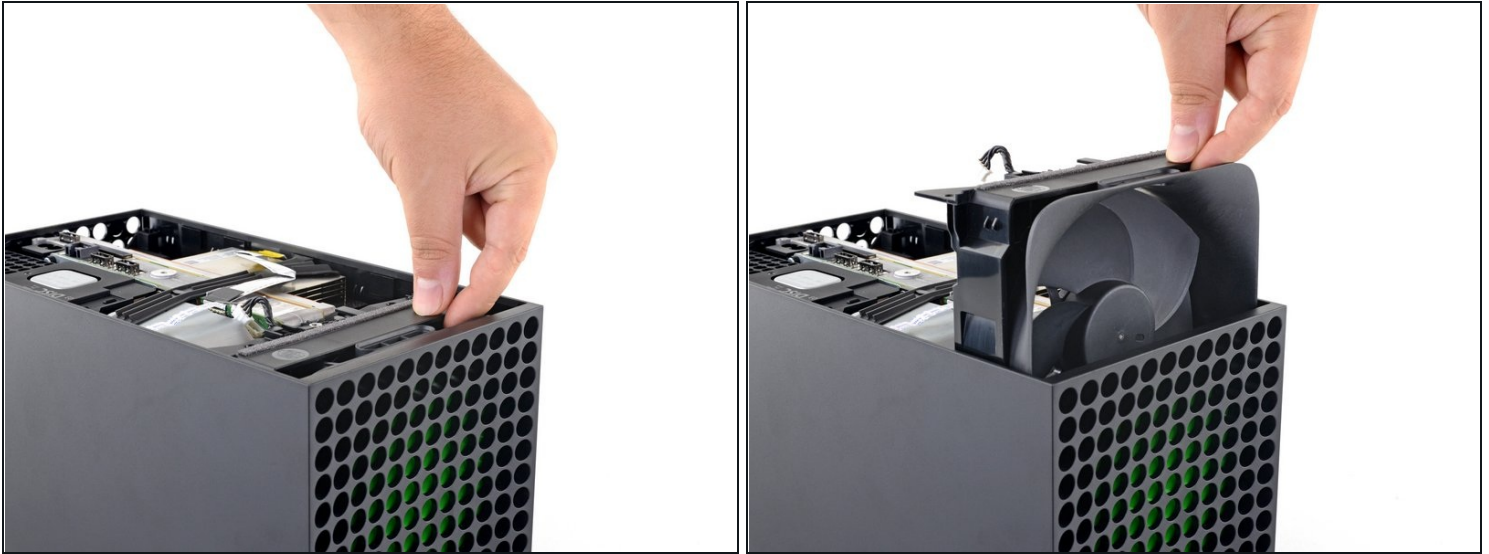
- Use a T8 Torx driver to remove the three screws securing the fan to the center chassis:
 - One 10.5 mm pancake screw
 - Two 8.8 mm screws

Step 9 — Disconnect the fan cable



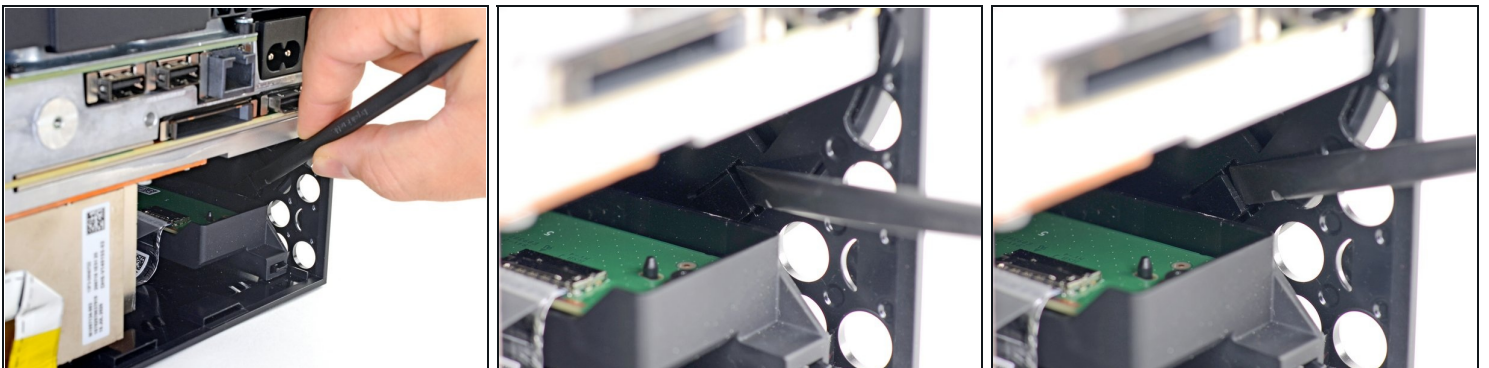
- Use your fingers or a pair of blunt tweezers to grip the edges of the fan cable connector, and pull up to disconnect it from the center chassis.
 - ⚠ Always pull cables by their connectors and not the wires themselves.
- ☑ During reassembly, route the fan cable underneath its small cable guide on the fan housing so it doesn't interfere with the back panel.

Step 10 — Remove the fan



- Slide the fan out of its slot to remove it.
 - ✦ During reinstallation, note that the fan can only be installed one way—make sure [Master Chief](#) is facing you.
 - ⓘ If you are replacing the fan, a new fan will probably not include the plastic installation bracket. The bracket is attached to the fan with four T10 Torx screws. This is not pictured in this guide.

Step 11 — Unlatch the base



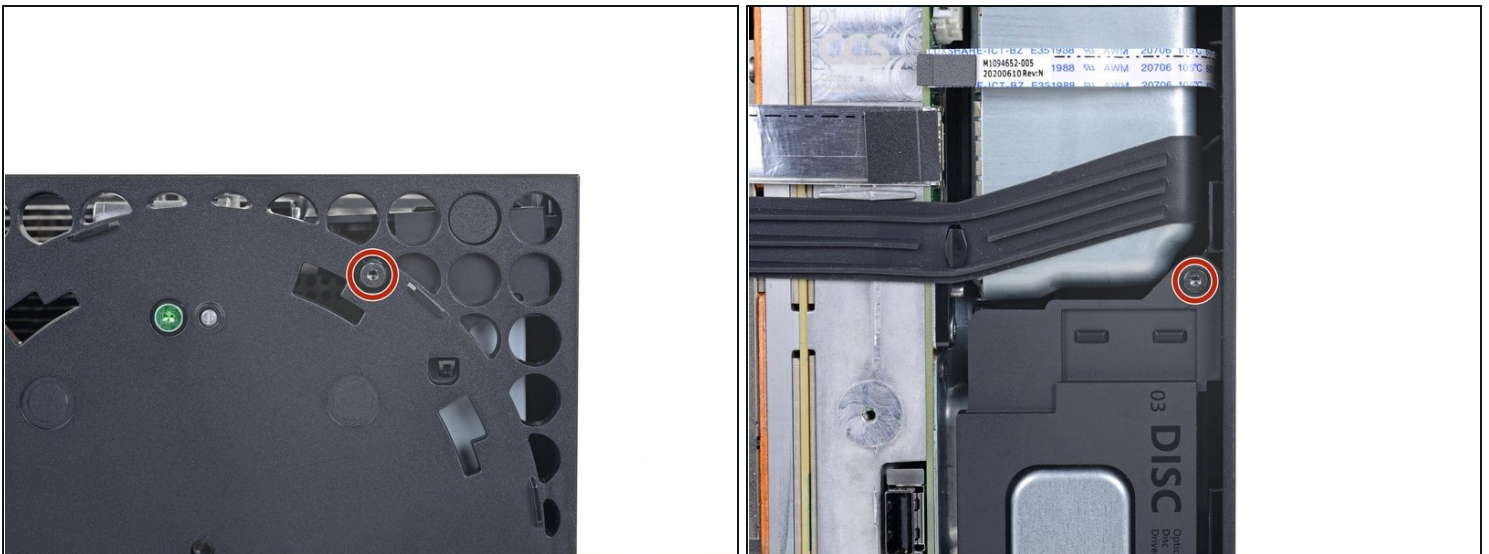
- Use the flat end of a spudger to lift up on the locking tab holding the base to the shell.

Step 12 — Twist and remove the base



- Grip the base and rotate it counterclockwise to unlock it from the shell.
 - ❗ You may need to hold the locking tab open while you get the base started.
- Remove the base.
- ☑ During reassembly, drop the base tabs into their holes on the shell and twist clockwise until the base snaps into the interior locking tab.
 - ❗ When locked in place, the *"Hello from Seattle"* line will be parallel with the device's sides.

Step 13 — Remove the optical drive screws



- Use a T8 Torx driver to remove the two 8.8 mm screws securing the optical drive's vibration isolator to the shell: one on the base and one on the top of the isolator.

Step 14 — Remove the vibration isolator



- Lift up the optical drive's vibration isolator to remove it.
 - ⓘ The vibration isolator grips the sides of the optical drive with silicone pads, so you may need to "walk" the isolator off of the drive to slip it off each side.
- ★ During reassembly, ensure the vibration isolator is pushed down and around both edges of the optical drive, so it sits flush with the rest of the center chassis.

Step 15 — Disconnect the power and data cables



- Use a pair of blunt tweezers to grip the edges of the optical drive power connector and pull up to disconnect it from the optical drive.
 - ⚠ Always pull cables by their connectors and not the wires themselves.
- Use your fingers to pull up and disconnect the data cable from the optical drive.

Step 16 — Remove the optical drive



- Grip the top edge of the optical drive and pull it out of its slot in the shell to remove it.
- ✦ During reassembly, align the pegs on the bottom edge of the optical drive with the guide holes on the bottom of the shell.
- ⓘ If the drive is misaligned, the top vibration isolator will not be able to be installed correctly, and the disc reader will be misaligned with the front of the console.

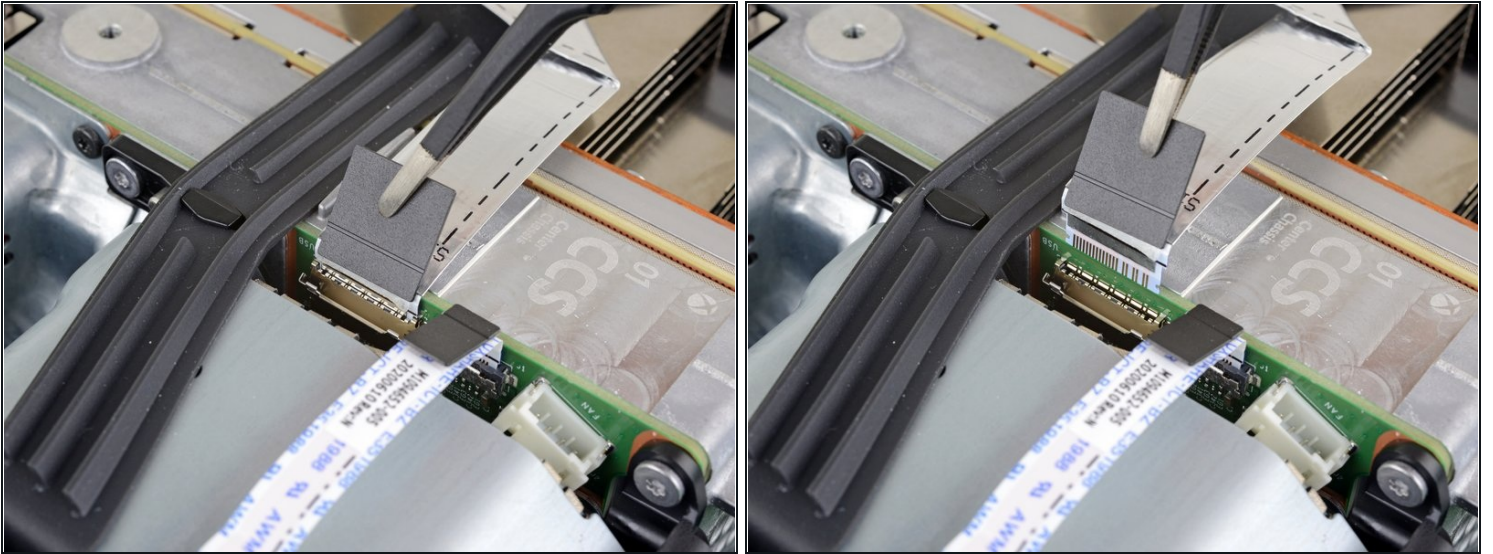
Step 17 — Disconnect the USB port cable



⚠ The ribbon cables and their connectors are extremely fragile, so always open locking tabs gently and pull cables slowly.

- Use the flat end of a spudger to flip open the metal locking tab on the USB port ribbon cable.
- ☑ During reassembly, gently snap the metal locking tab back into place once the cable has been inserted.

Step 18



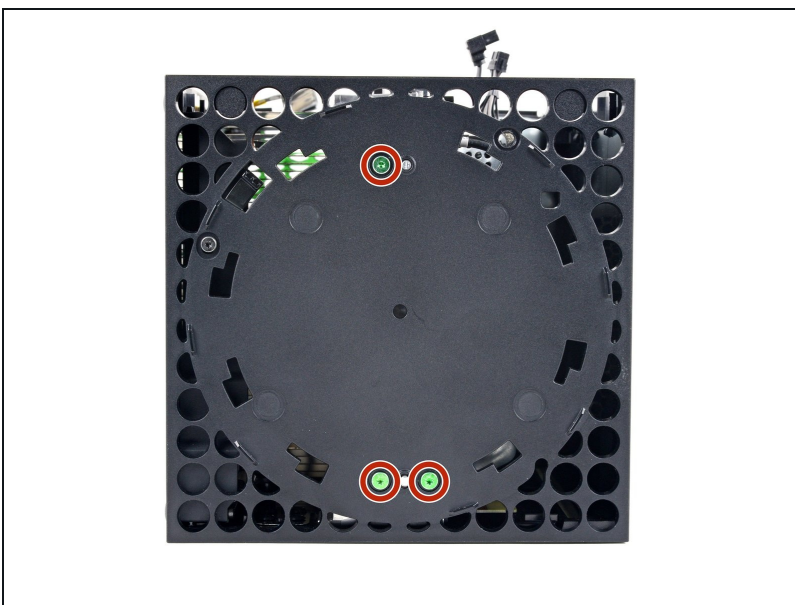
- Use a pair of tweezers to pull up on the black plastic pull tab to disconnect the USB port cable.
⚠ Pull only on the pull tab, not the cable itself.
- ① If the USB port cable feels adhered to the metal chassis, [apply an iOpener](#) or carefully heat it with a hair dryer to soften the adhesive.

Step 19 — Disconnect the power button cable



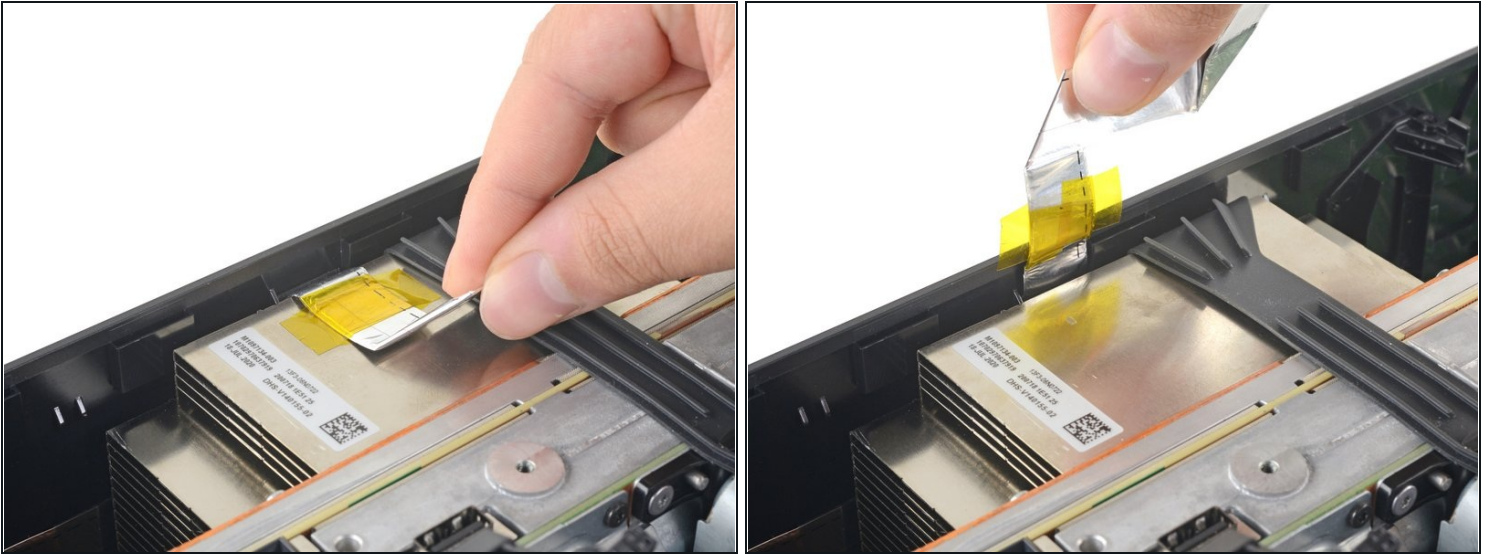
- Use the pointed end of a spudger to depress the metal tab on the side of the power button cable's board connector.
- With the metal tab depressed, use a pair of tweezers to pull up on the pull tab to disconnect the power button cable from the center chassis.
 - ⚠ Pull only on the pull tab, not the cable itself.
 - ⚠ Don't pull on the cable without depressing the metal tab, otherwise you risk damaging either the cable or the connector.
- ☑ During reassembly, the cable should lightly "snap" into place when inserted.

Step 20 — Remove the chassis screws



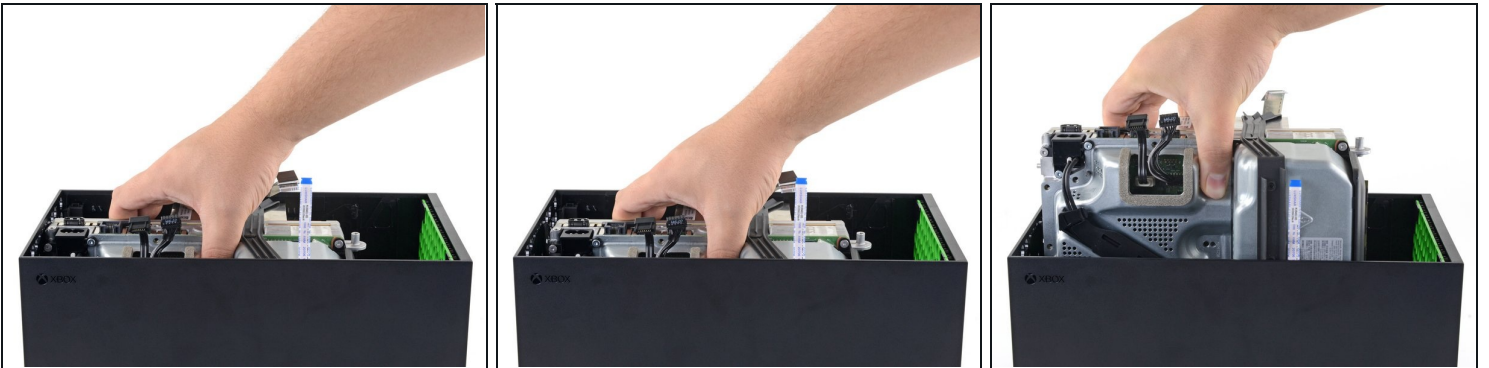
- Use a T8 Torx driver to remove the three 7.4 mm screws securing the center chassis assembly to the shell.

Step 21 — Peel up the USB port cable



- Gently peel the taped USB port ribbon cable off of the heatsink.

Step 22 — Remove the center chassis assembly



- ① The center chassis is aligned to the shell with guide pegs. These pegs will need to slide out of their slots to allow the chassis to be lifted out.
- Grip the center chassis and pull it towards the green fan grille at the top of the shell, uncoupling the guide pegs from the shell.
- Lift out the center chassis assembly to remove it from the shell.
 - ☑ During reassembly, make sure neither of the ribbon cables get pinched as you lower the center chassis into the shell.

Step 23 — Unlatch the chassis strap



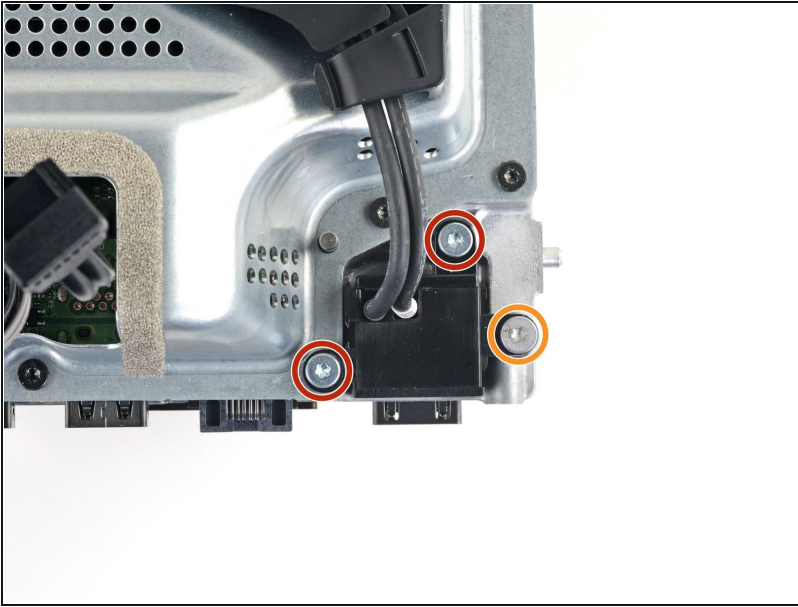
- Unlatch the chassis strap from the right side of the power supply.

Step 24



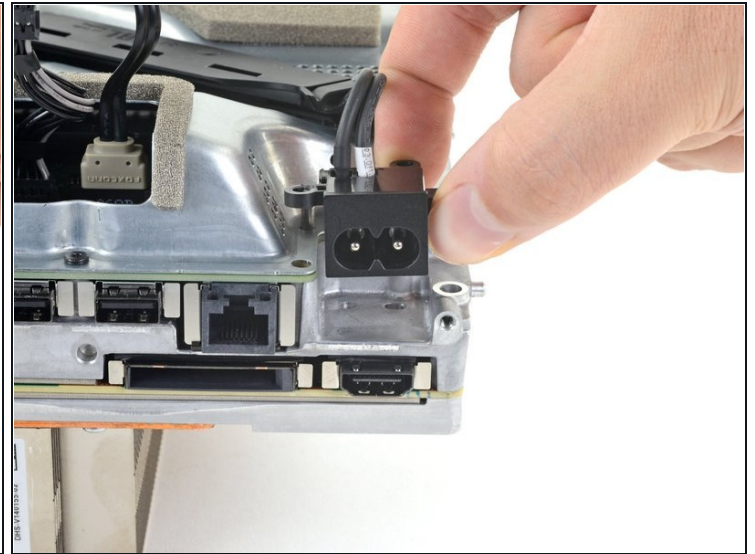
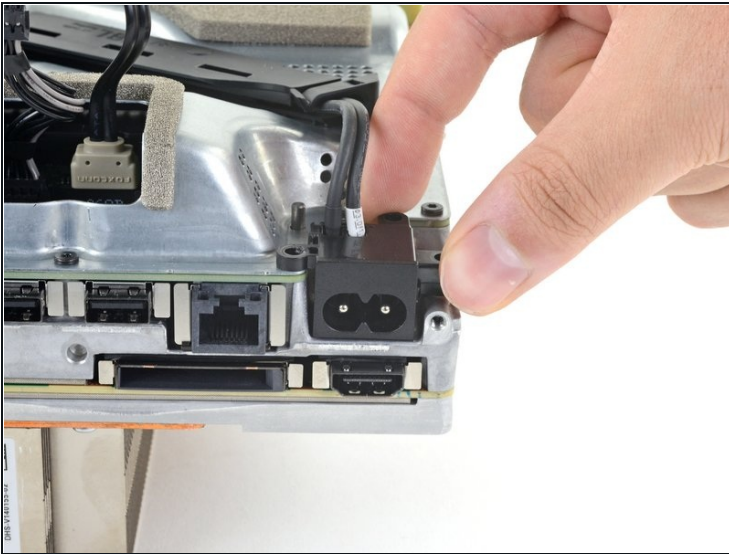
- Pull the chassis strap over and off of the power supply.
- Once the strap is off of the power supply, set the loose section to the side.

Step 25 — Remove the power cable port



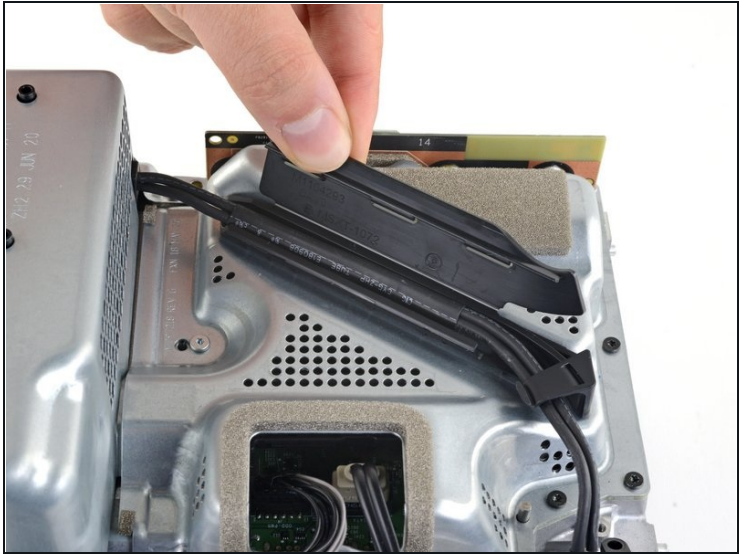
- Use a T8 Torx driver to remove the three screws securing the power cable port to the chassis:
 - Two 13.1 mm screws
 - One 35 mm screw

Step 26



- Lift the power connector out of its recess in the chassis.

Step 27 — De-route the power cables



- Unlatch and open the lid on the power cable's plastic guide.

Step 28



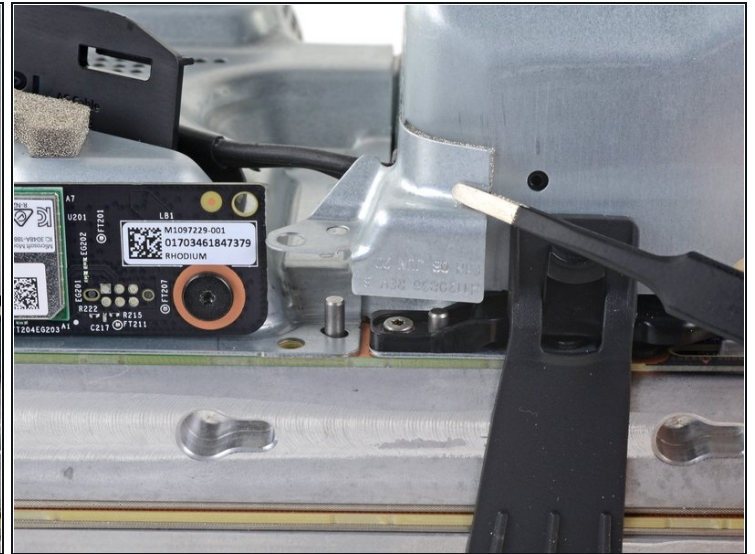
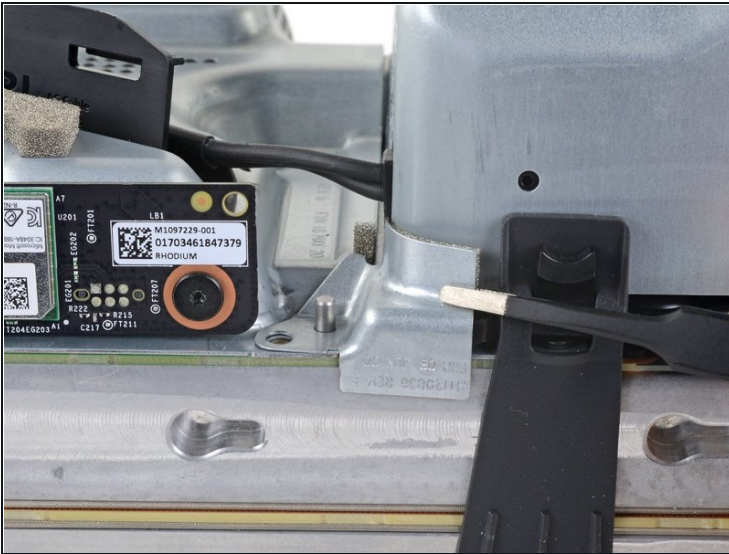
- Lift the power cable out from underneath the extra section of the cable guide.

Step 29 — Remove the corner cover



- Use a T8 Torx driver to remove the 8.8 mm screw securing the power supply corner cover.

Step 30



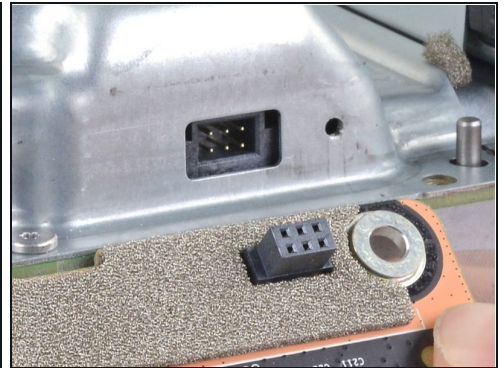
- Use your fingers or a pair of tweezers to lift and remove the power supply corner cover.

Step 31 — Remove the accessory antenna board



- Use a T8 Torx driver to remove the three 9.6 mm screws securing the accessory antenna board to the center chassis.

Step 32



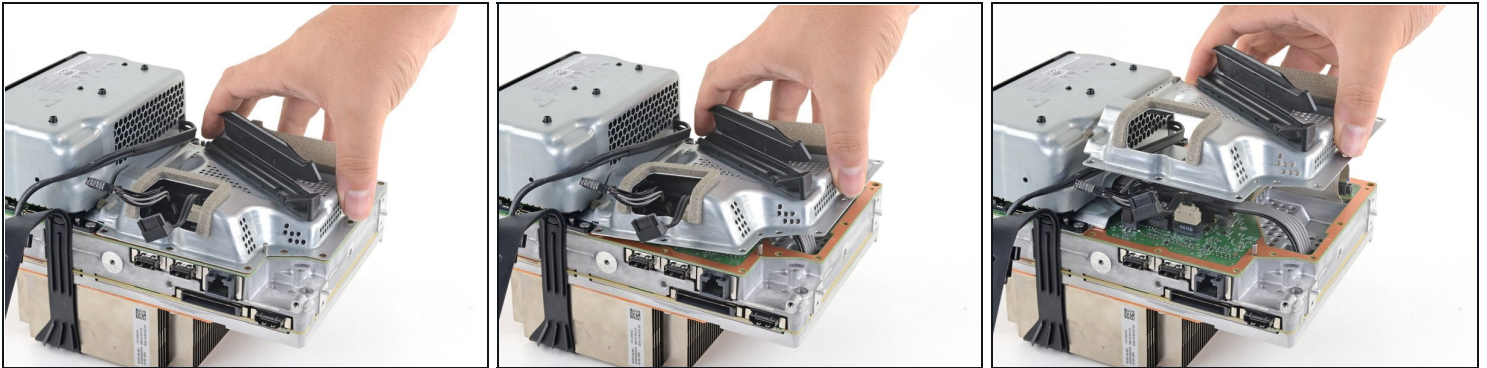
- Grip the antenna board and pull it directly away from the center chassis to disconnect it.
- ☒ During reassembly, align the board's connector with the port on the center chassis and press to reconnect.

Step 33 — Remove the board shield



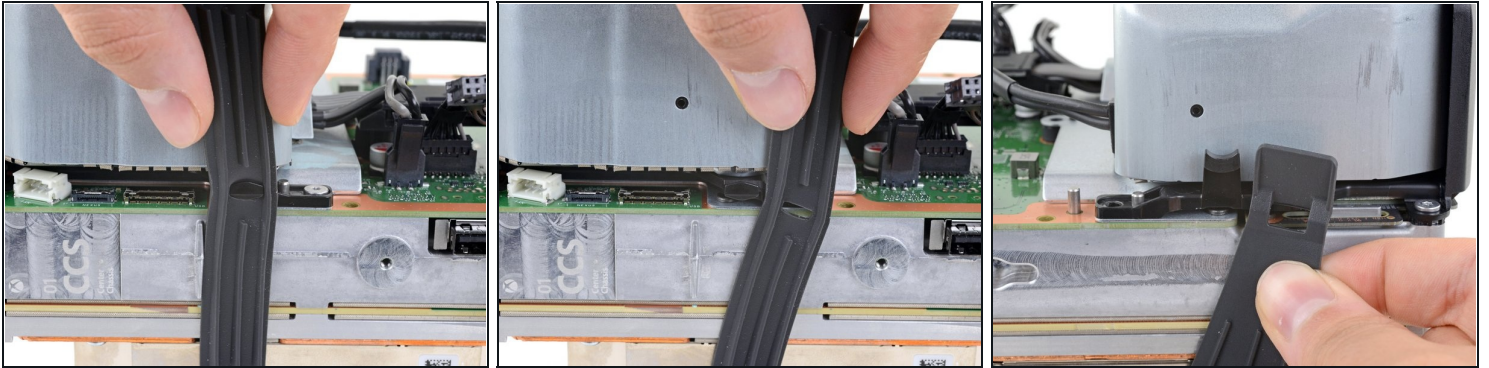
- Use a T8 Torx driver to remove the nine screws securing the board shield:
 - Six 8.8 mm black screws
 - Two 35 mm silver screws
 - One 13.1 mm silver screw

Step 34



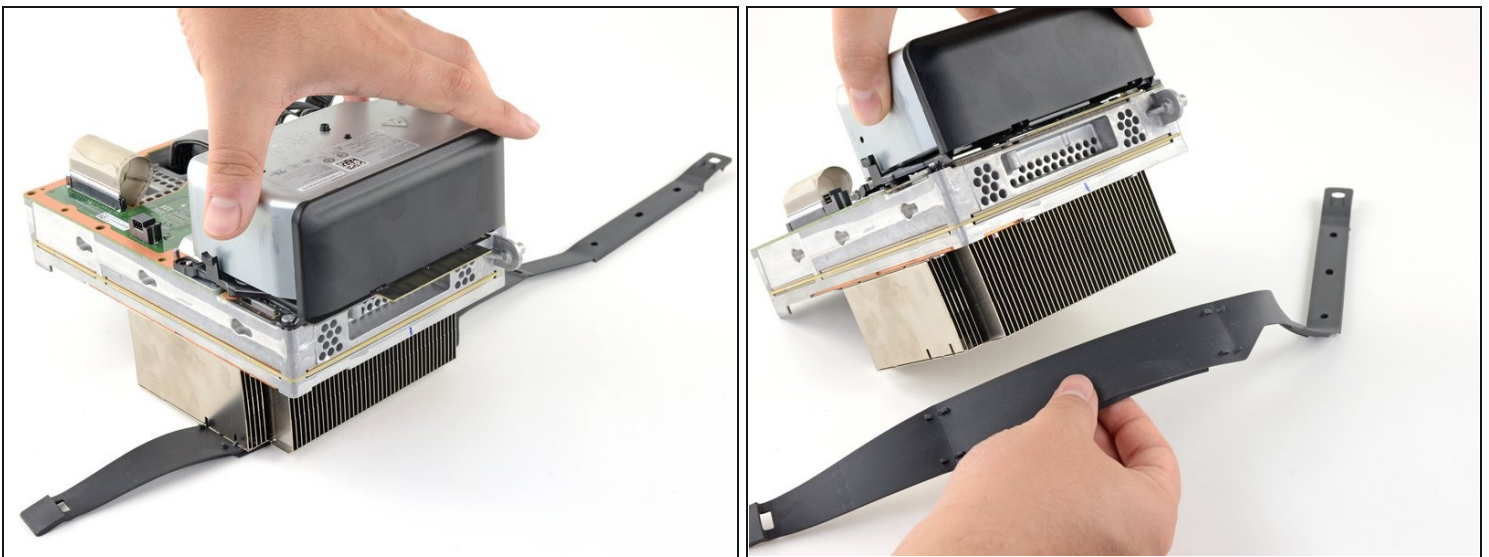
- Lift up the board shield to remove it from the center chassis.

Step 35 — Remove the chassis strap



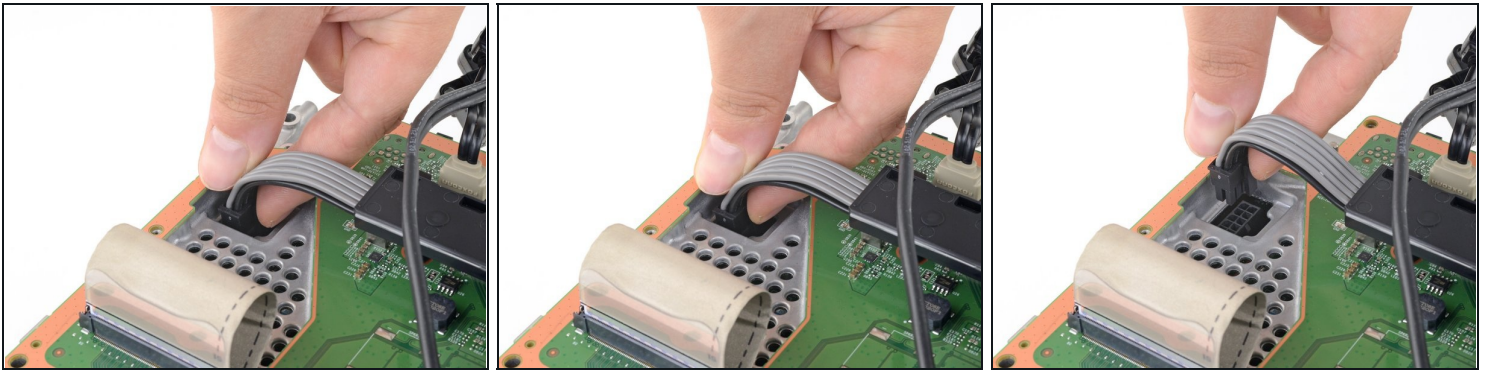
- Disconnect the chassis strap from the locking tabs on either side of the power supply.

Step 36



- Remove the chassis strap.

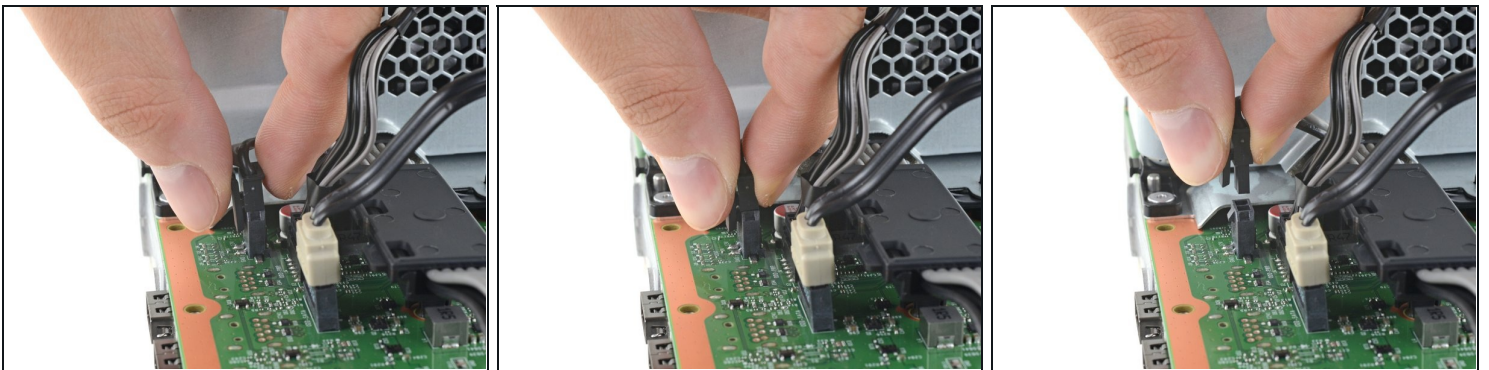
Step 37 — Remove the 10-pin power cable



- Grip and compress the locking tab on the 10-pin power connector.
- While compressing the locking tab, lift the connector straight up to disconnect it from the board.

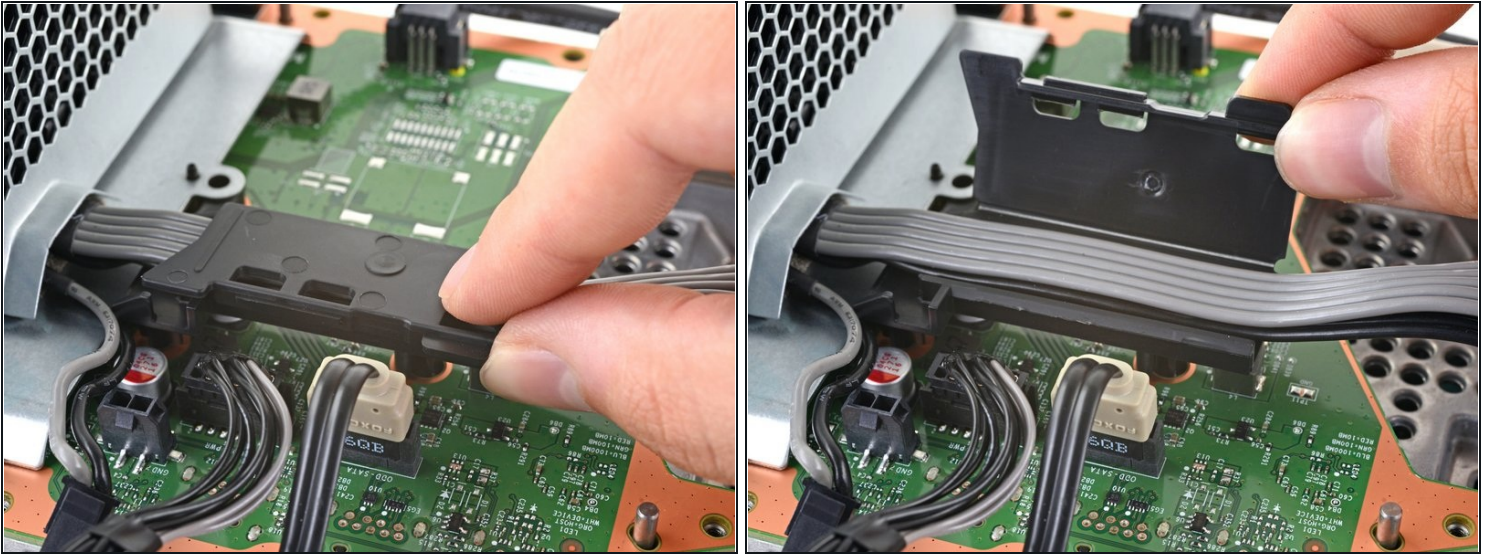
⚠ Always pull cables by their connectors and not the wires themselves.

Step 38 — Remove the 2-pin power cable



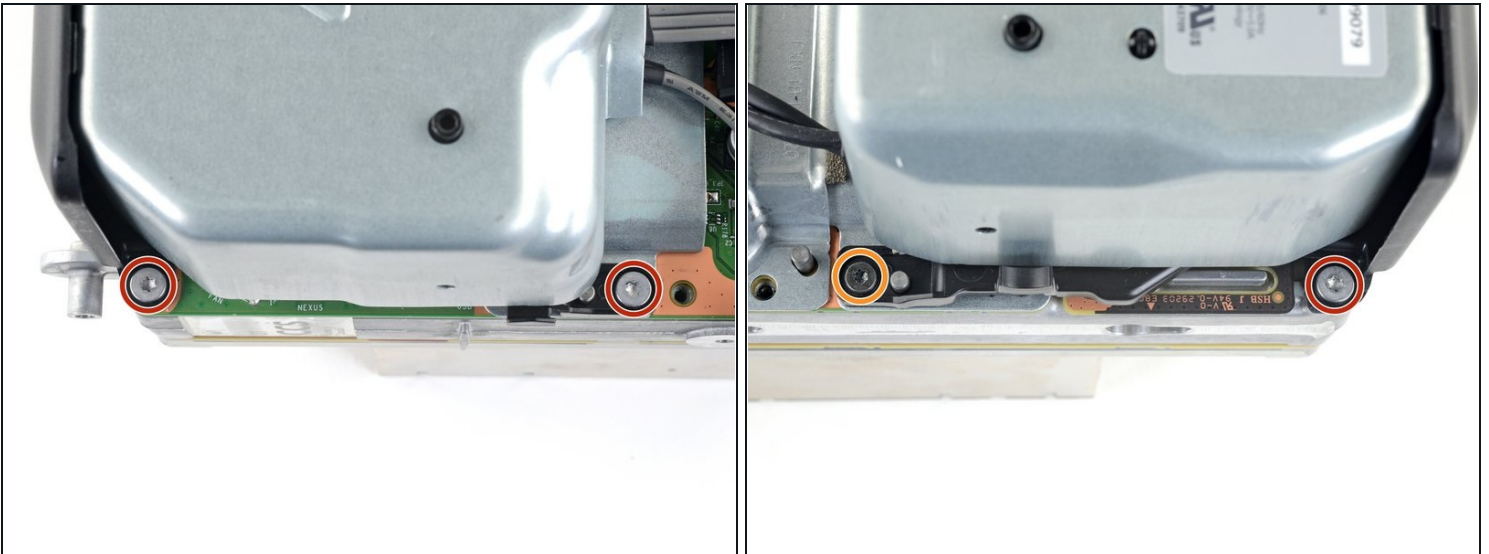
- Grip and compress the locking tab on the 2-pin power connector.
- While compressing the locking tab, lift the connector straight up to disconnect it from the board.

Step 39 — Open the cable guide



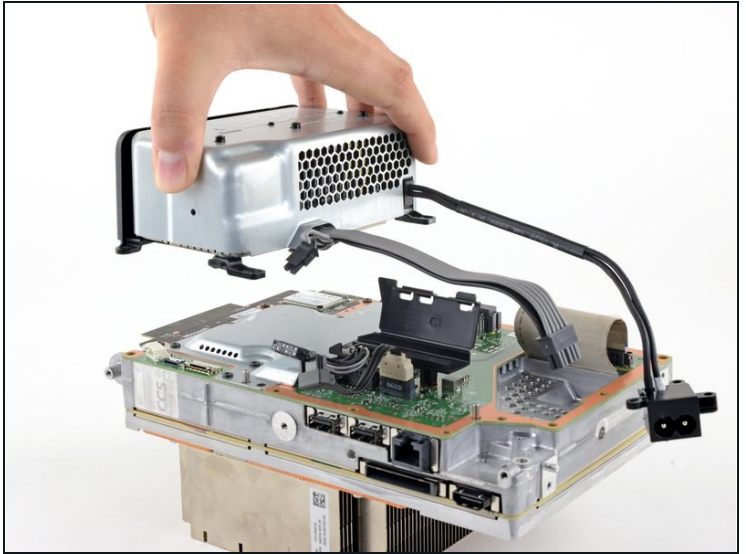
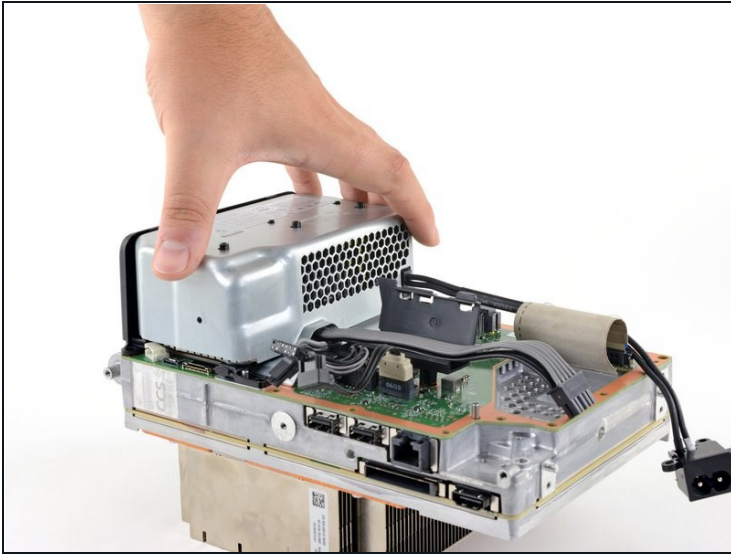
- Open the lid on the power supply's plastic cable guide.

Step 40 — Remove the power supply screws



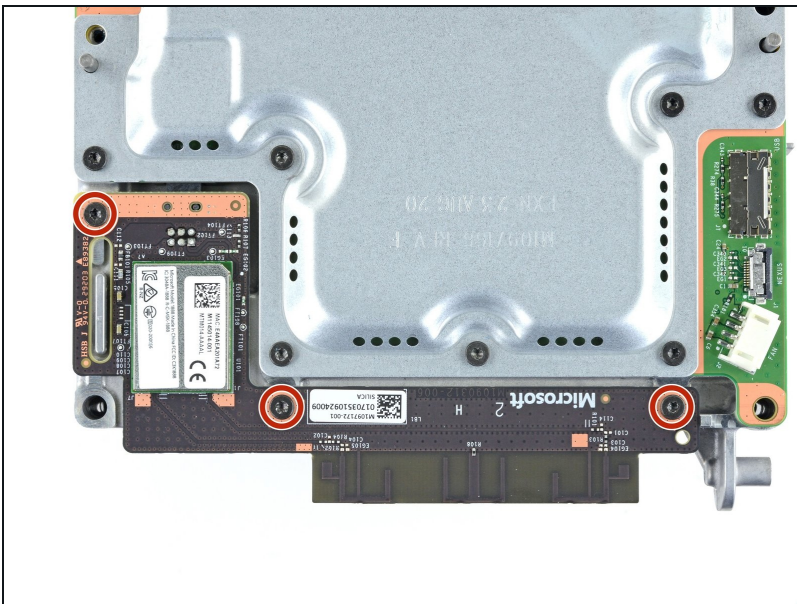
- Use a T8 Torx driver to remove the four screws securing the power supply around its perimeter:
 - Three 35 mm silver screws
 - One 8.8 mm black screw

Step 41 — Remove the power supply



- Remove the power supply.

Step 42 — Remove the Wi-Fi board



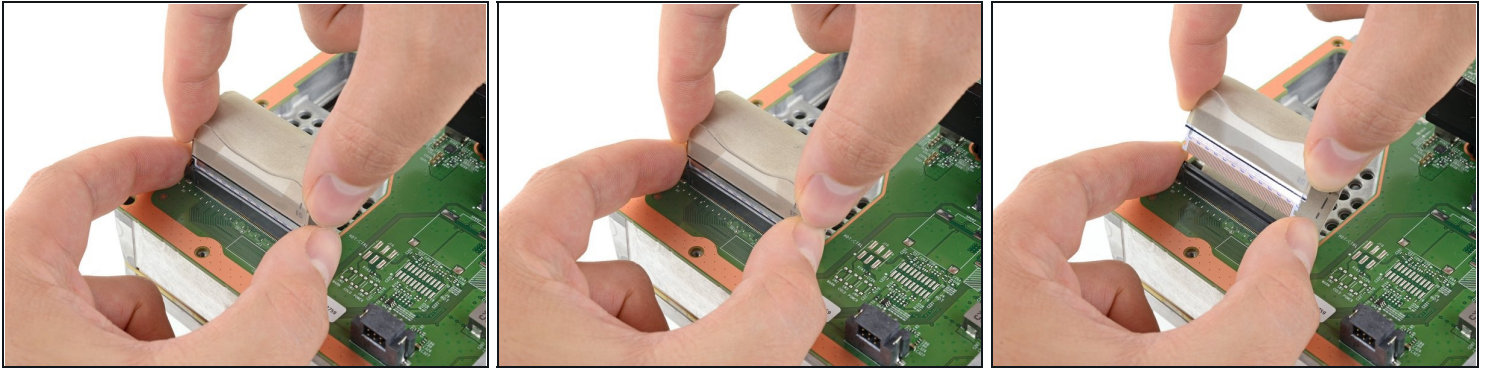
- Use a T8 Torx driver to remove the three 8.8 mm screws securing the Wi-Fi antenna board.

Step 43



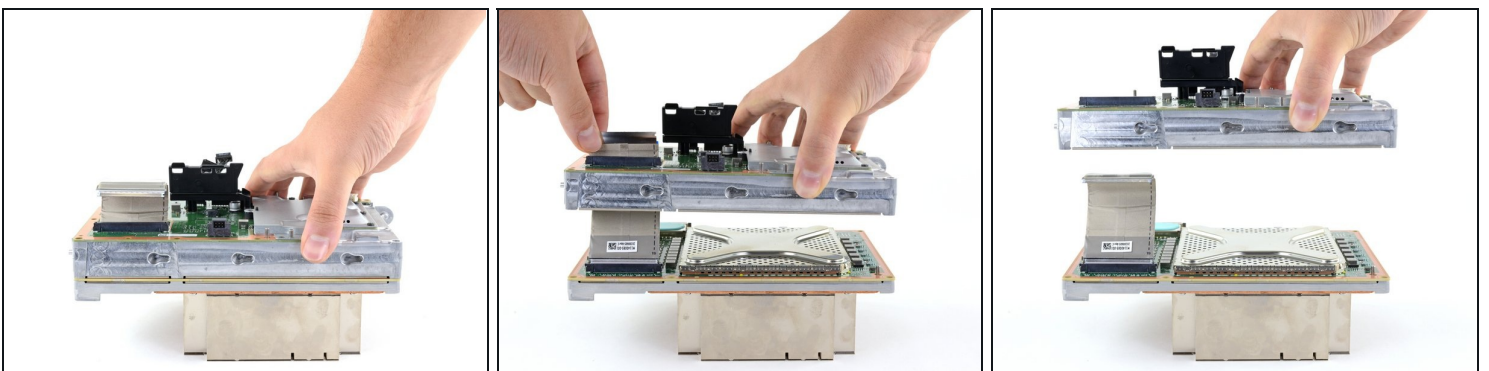
- Grip the antenna board and pull it directly away from the center chassis to disconnect it.
⚠ Don't pull the antenna board **up until it is completely disconnected.**
- Remove the antenna board.
- ☑ During reassembly, align the board's connector with the port on the center chassis and press to reconnect.

Step 44 — Disconnect the interconnect cable



- Grip the base of the interconnect cable connector with your fingers.
 - Depress each side of the connector to unlock the cable locking tabs.
 - With the locking tabs depressed, grip the edges of the interconnect cable and pull it straight out of the connector to disconnect it.
 - ❗ With the locking tabs depressed correctly, the interconnect cable will slide out with very little force.
- ★ During reassembly, the interconnect cable should "snap" into place when fully inserted.

Step 45 — Remove the center chassis



- Lift the center chassis off of the motherboard and heatsink assembly.
- Route the interconnect cable through the cutout on the center chassis as you remove it.

To reassemble your device, follow these instructions in reverse order.

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

Repair didn't go as planned? Try some [basic troubleshooting](#), or ask our [Xbox Series X Answers community](#) for help.