



Xbox Series S Motherboard Replacement

Follow this guide to remove and replace the...

Written By: Robert Boyd



INTRODUCTION

Follow this guide to remove and replace the motherboard on a Xbox Series S.

Note: When you remove the heat sink, you'll need to replace the thermal compound between the plate and the heat sink. Since normal thermal paste isn't designed to bridge large gaps, the closest replacement is K5 Pro viscous thermal paste. You will, however, need normal replacement thermal paste for the APU.

There are some photo discontinuities with the exterior Bluetooth, Wifi, and power boards. These discontinuities do not affect the repair procedure.

TOOLS:

Tweezers (1)
TR8 Torx Security Screwdriver (1)
TR10 Torx Security Screwdriver (1)
Spudger (1)
Flathead 1.5 mm Screwdriver (1)
Thermal Paste (1)
K5-PRO Viscous Thermal Paste (1)

PARTS:

Xbox Series S Motherboard (1)
Xbox Series S Heat Sink (1)
Xbox Series S Heat Sink X Clamp (1)

Step 1 — Peel off the sticker coverings



 Before you start this guide, turn off the Xbox and unplug any cables from it.

- Use tweezers to peel off the two white screw covers located on the bottom corners of the back panel.

Step 2 — Remove the back panel screws



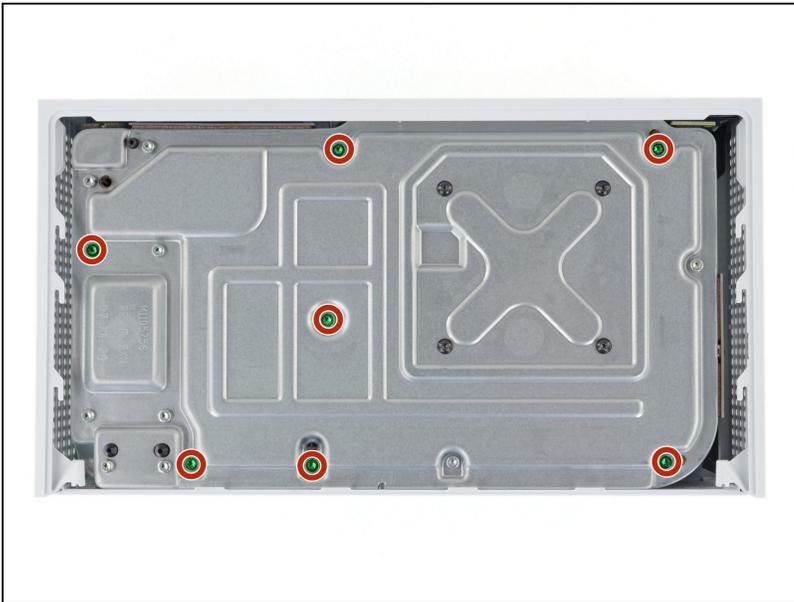
- Use a T8 Torx driver to remove the two 10 mm-long screws securing the back panel to the bottom panel.
- ⓘ Throughout this repair, [keep track of each screw](#) and make sure it goes back exactly where it came from.

Step 3 — Remove the bottom panel



- Slide the bottom panel horizontally toward the back of the console until it comes to a stop.
- ⓘ This slides the clips out of the slots on the plastic case.
- Lift straight up and remove the bottom panel from the plastic case.

Step 4 — Remove the plastic case screws



- Use a T10 Torx driver to remove the seven 51 mm-long screws securing the chassis to the plastic case.

Step 5 — Remove the plastic case



- With the bottom of the Xbox facing you, pull the two bottom-rear corners of the plastic case away from each other.
- As you pull the corners apart, slide the back panel towards the bottom of the device. This releases the back panel from the plastic case.
 - ⓘ The back panel should now settle on top of the clips on the back of the plastic case.
 - ⓘ The back panel is permanently attached to the aluminum chassis.

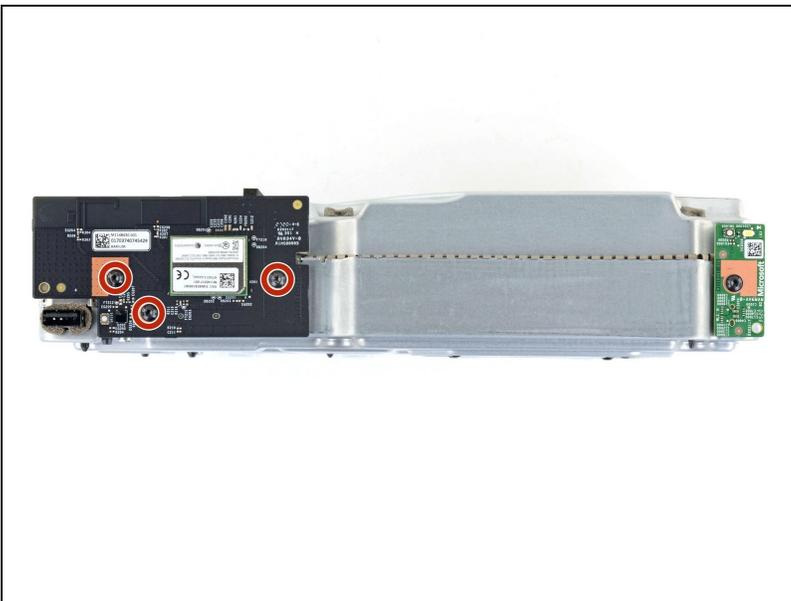
⚠ Do not attempt to fully remove the chassis from the plastic case with this technique. You may risk breaking your case.

Step 6



- Pull the bottom-left corner away from the chassis while swinging the chassis away from the plastic case.
 - ① You may need to lift the chassis to free it from the clips on the bottom-front of the plastic case during this process.
- Remove the plastic case from the chassis.

Step 7 — Remove the Bluetooth board



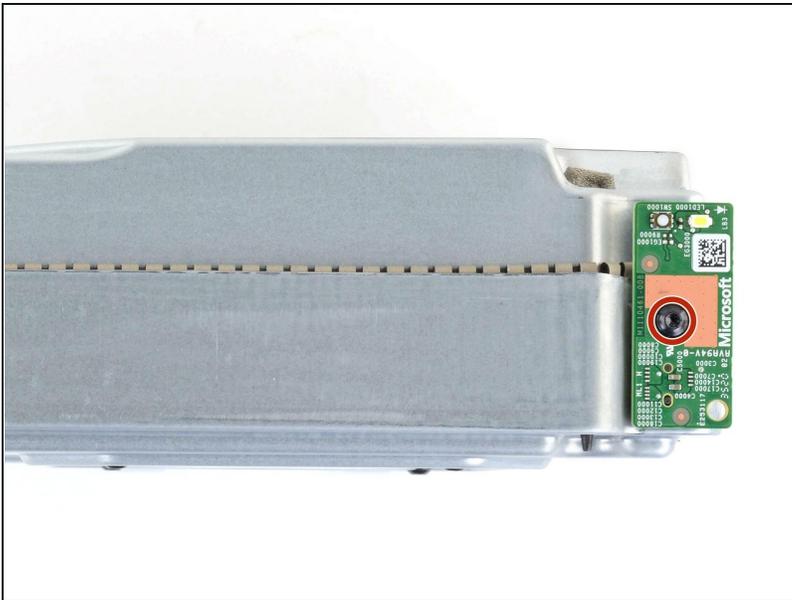
- Use a T8 Torx driver to remove the three 9.5 mm-long screws securing the Bluetooth board to the long edge of the chassis.

Step 8



- Use a spudger to pry and loosen the Bluetooth board.
⚠ Do not pry from the bottom or sides of the Bluetooth board as it may bend the connector.
- Pull the Bluetooth board straight out to disconnect it from the chassis.

Step 9 — Remove the power button board



- Use a T8 Torx driver to remove the 9.5 mm-long screw securing the power button board to the chassis.

Step 10



- Use a spudger to pry and loosen the power button board.
⚠ Do not pry from the bottom of the power button board as it may bend the connector.
- Pull the power button board straight out to disconnect it from the chassis.

Step 11 — Remove the Wi-Fi board



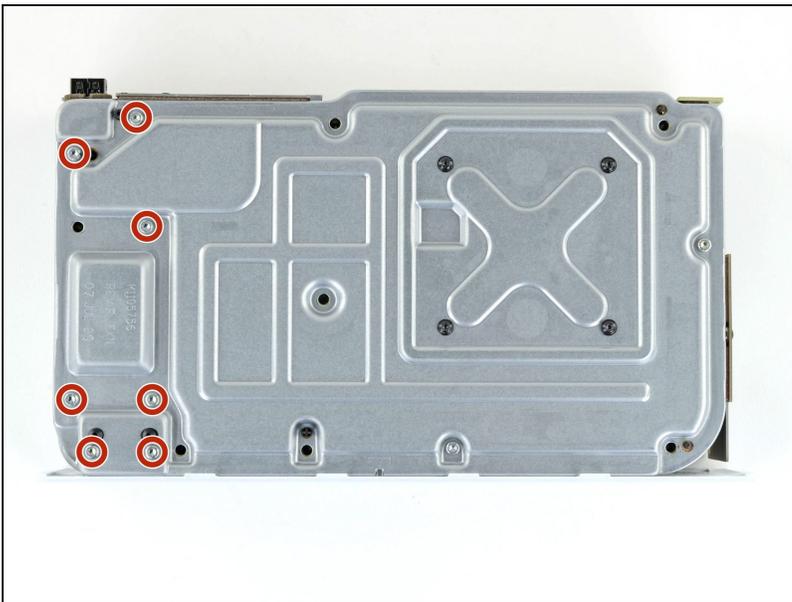
- Use a T8 Torx driver to remove the three 9.5 mm-long screws securing the Wi-Fi board to the short edge of the chassis.

Step 12



- Use a spudger to pry and loosen the Wi-Fi board.
⚠ Do not pry from the bottom or sides of the Wi-Fi board as it may bend the connector.
- Pull the Wi-Fi board straight out to disconnect it from the chassis.

Step 13 — Remove the power supply screws



- Use a T10 Torx driver to remove the seven 11.3 mm-long screws securing the power supply to the chassis.

Step 14 — Remove the upper chassis



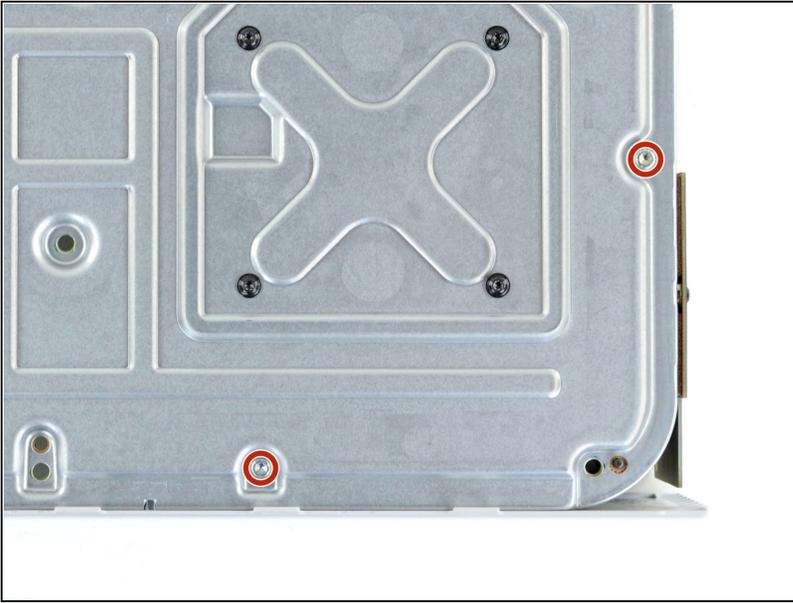
- Flip the device over.
- Lift the upper chassis straight up to remove it.

Step 15 — Remove the power supply



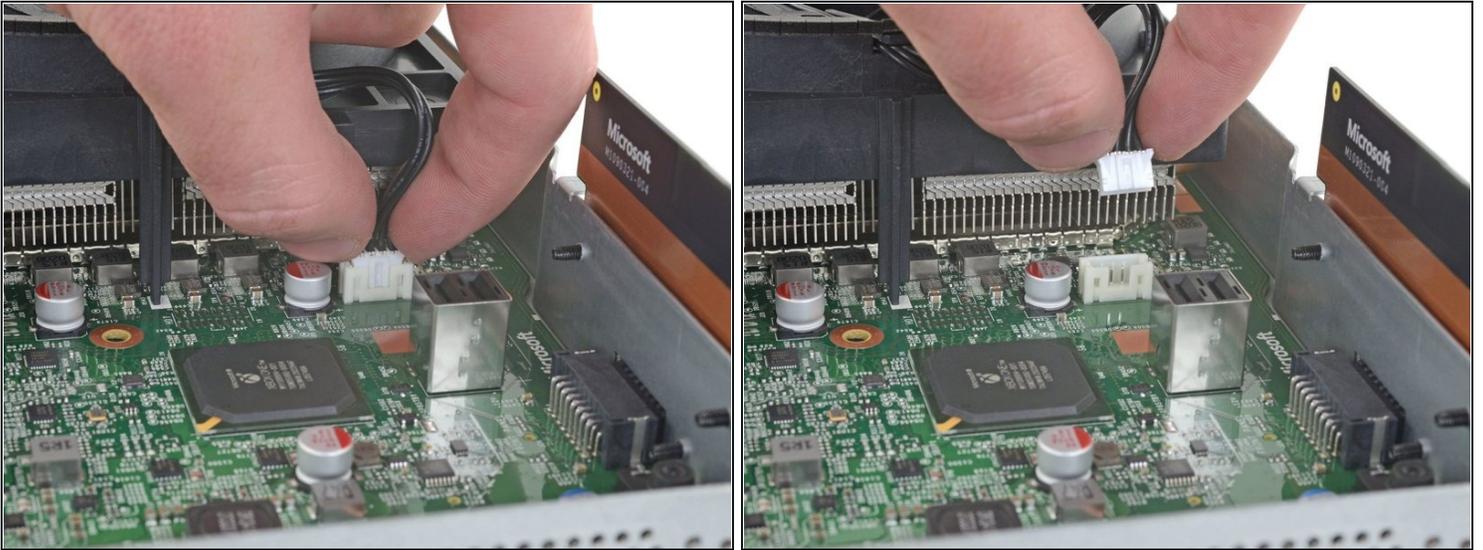
- Lift the power supply straight up to disconnect it from the motherboard.
- Remove the power supply.

Step 16 — Remove the fan screws



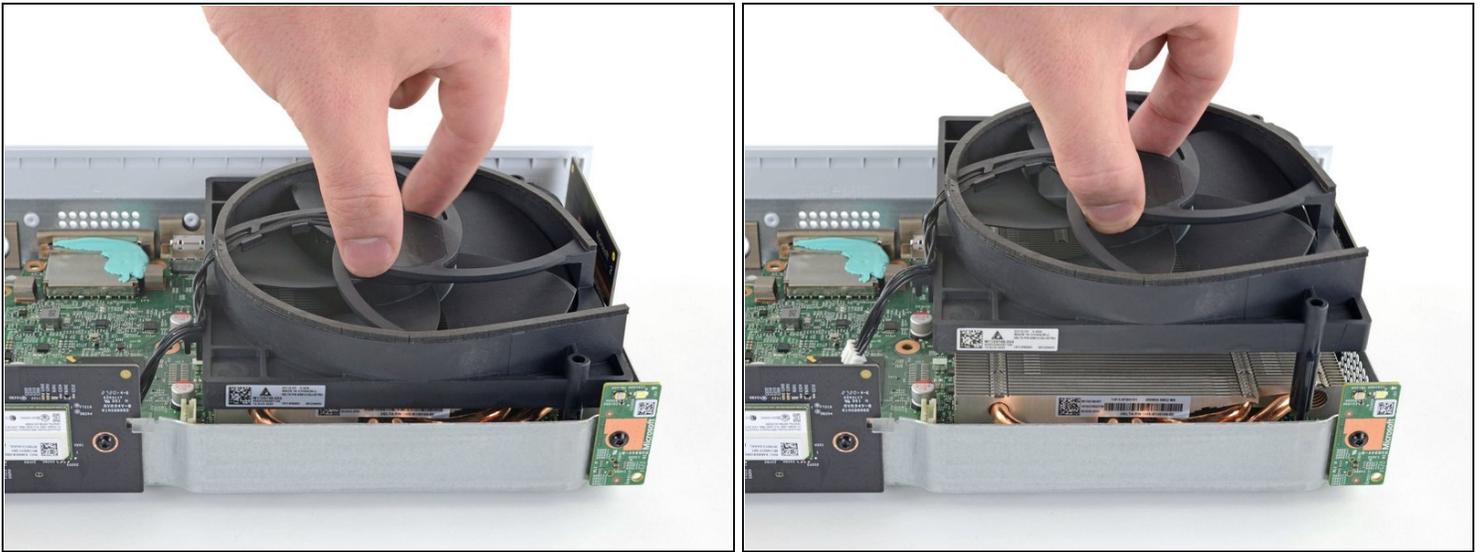
- Use a T10 Torx driver to remove the two 11.3 mm-long screws securing the fan to the chassis.

Step 17 — Disconnect the fan



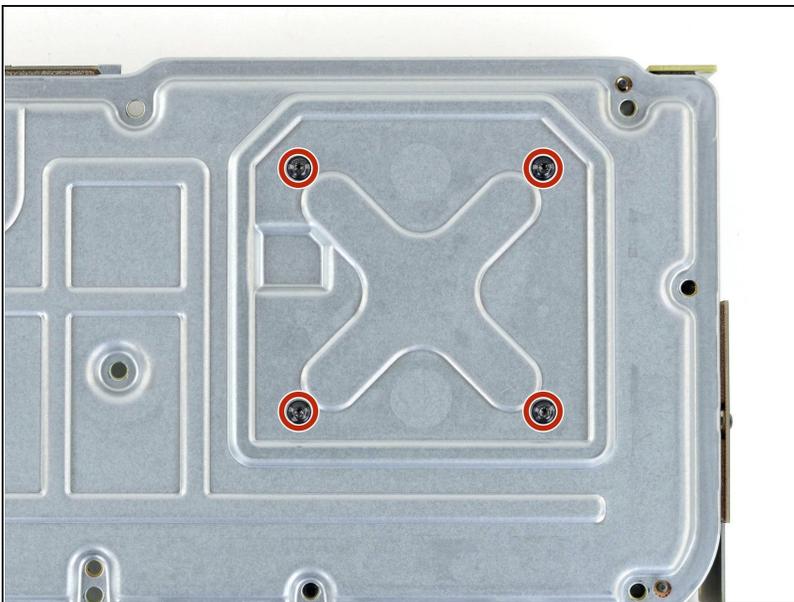
- Flip the device over.
 - ⚠ Take care when flipping the chassis over because the fan is now loose.
- Use your fingers to pull and disconnect the fan connector from its motherboard socket.
 - ⚠ Take care not to pull on the wires when disconnecting the fan to prevent breaking the connector.
 - ⓘ This connector may be difficult to remove. A good method to remove it is to shimmy the connector up and out of its socket with a spudger.
 - ⓘ You may be able to remove this connector without removing the power supply with a pair of needle-nose pliers.

Step 18 — Remove the fan



- Lift the fan straight up to remove it from the motherboard.

Step 19 — Remove the motherboard screws



- Use a T8 Torx driver to remove the four 9.4 mm-long screws securing the motherboard to the chassis.

Step 20 — Remove the locking clip



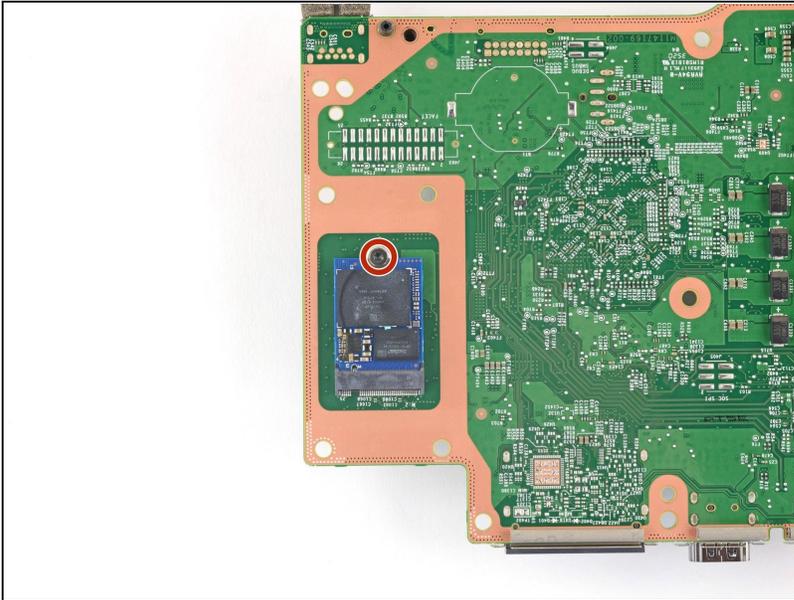
- Flip the device over.
- Insert a spudger into the locking clip located on the front-left corner of the chassis.
 - ⓘ This will open up the clip to make it easier to remove.
- Lift straight up to remove the clip.

Step 21 — Remove the motherboard



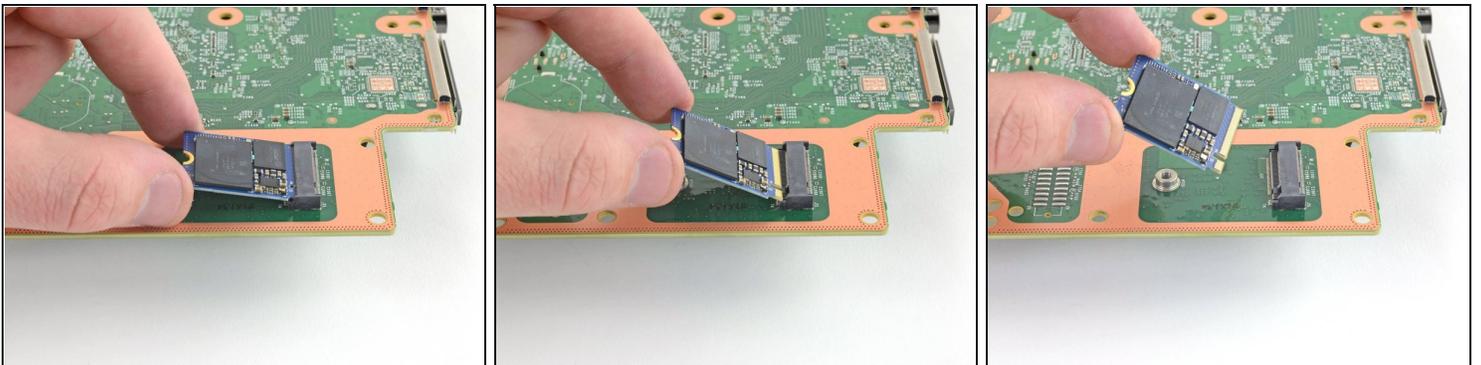
- Grasp the heat sink with your fingers and lift up the front of the motherboard up above the edge of the chassis.
- Pull the motherboard towards the front of the chassis to remove it.

Step 22 — Remove the SSD card



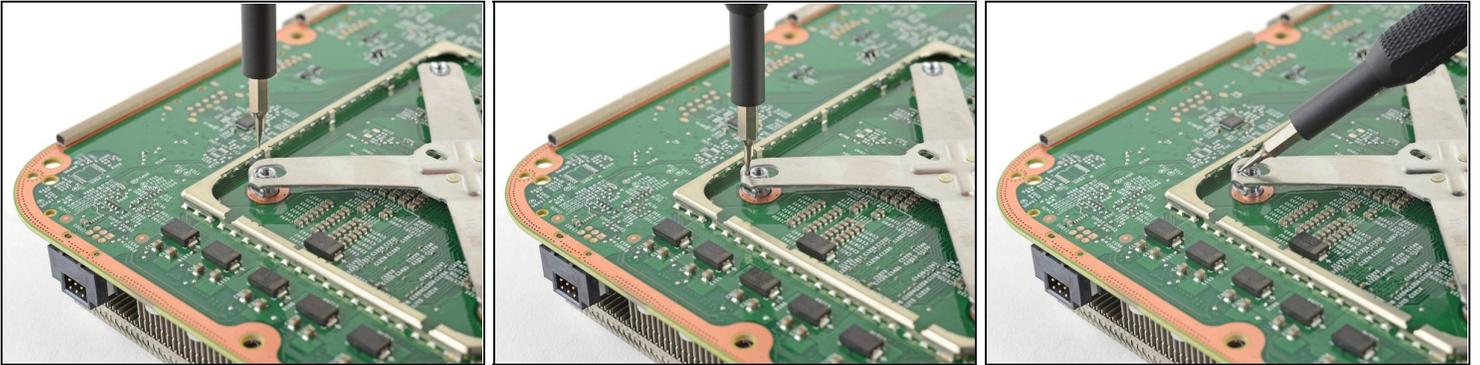
- Use a T8 Torx driver to remove the 5.1 mm-long screw securing the SSD card to the motherboard.

Step 23



- Pull the SSD card straight out and remove it from the motherboard.

Step 24 — Remove the x-clamp



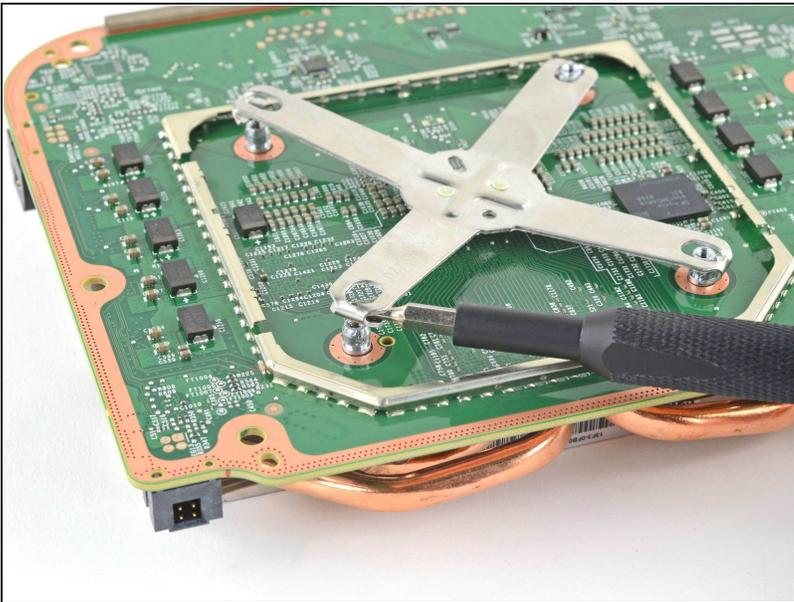
- Insert a [1.5 mm flathead](#) screwdriver from the top between the heat sink pin and the x-clamp.
- Pry the x-clamp out and away from the heat sink pin to loosen the x-clamp.
⚠ Do not attempt to completely release the x-clamp with this technique.

Step 25



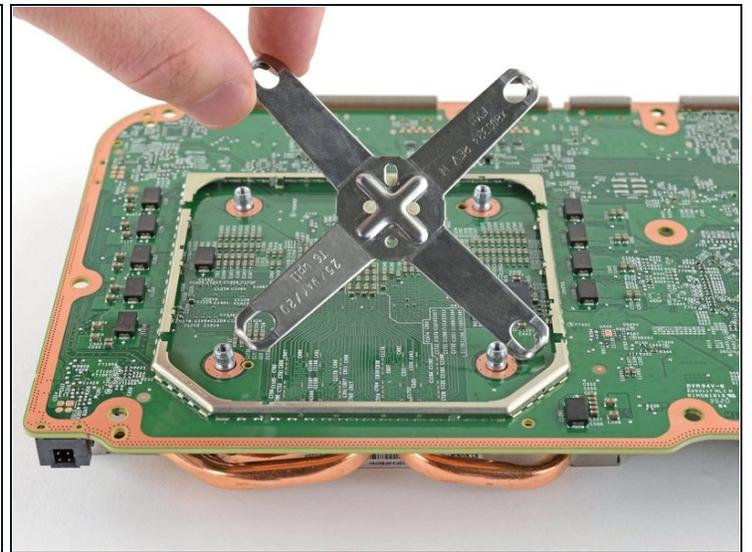
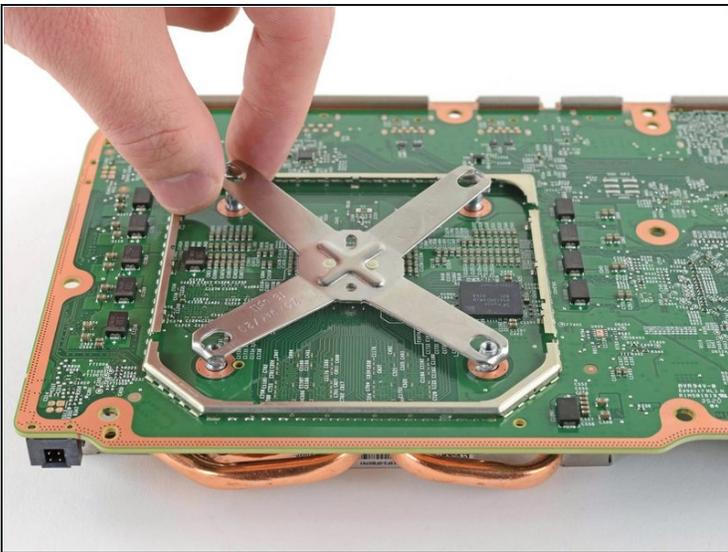
- With the head parallel to the motherboard, insert a flathead screwdriver from the side between the heat sink pin and the x-clamp hook.
- Twist the flathead screwdriver clockwise to pry the bottom edge of the x-clamp out of the groove in the heat sink pin.
 - ⓘ If you have trouble, try using a larger flathead screwdriver.
 - ⓘ As you twist, the x-clamp should pop off the heat sink pin. If not, try repeating the previous step before attempting this one again.

Step 26



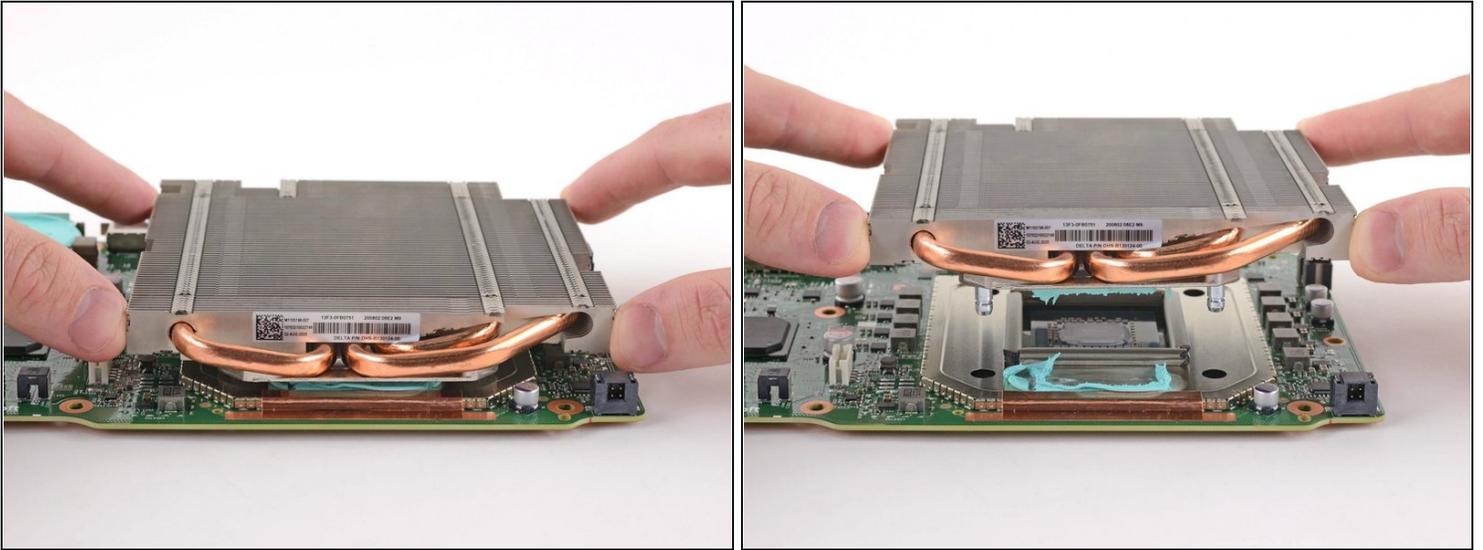
- Continue to use the same technique described in the previous two steps on all of the heat sink pins until the x-clamp is disconnected.

Step 27



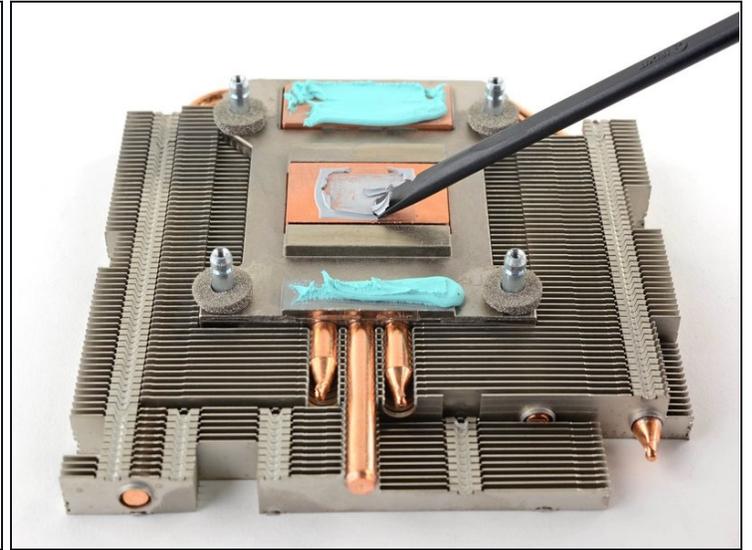
- Remove the x-clamp.
- When reattaching the x-clamp, you should be able to attach two to three sides just by pressing down the x-clamp hooks onto the heat sink pins. Then use the flathead screwdriver to pry the x-clamp hooks over the heat sink pins.

Step 28 — Remove the heat sink



- Flip the motherboard over.
 - ⚠ Take care when flipping the motherboard over because the heat sink may fall out.
- Lift the heat sink straight up to remove it from the motherboard.
 - ⓘ One of the most common symptoms of consoles overheating is a clogged heat sink. Take time to remove the dust and debris between the heat sink fins.

Step 29



- Only the motherboard remains.
- Follow this guide for more specifics on [how to reapply thermal paste](#) to the processor and shield plate.
 - ☑ Since normal thermal paste isn't designed to bridge the large gaps between the shield plate and heat sink, use K5 Pro viscous thermal paste to replace the thicker, teal putty. You will, however, need normal replacement thermal paste for the APU.

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 [Answers community](#) for help.