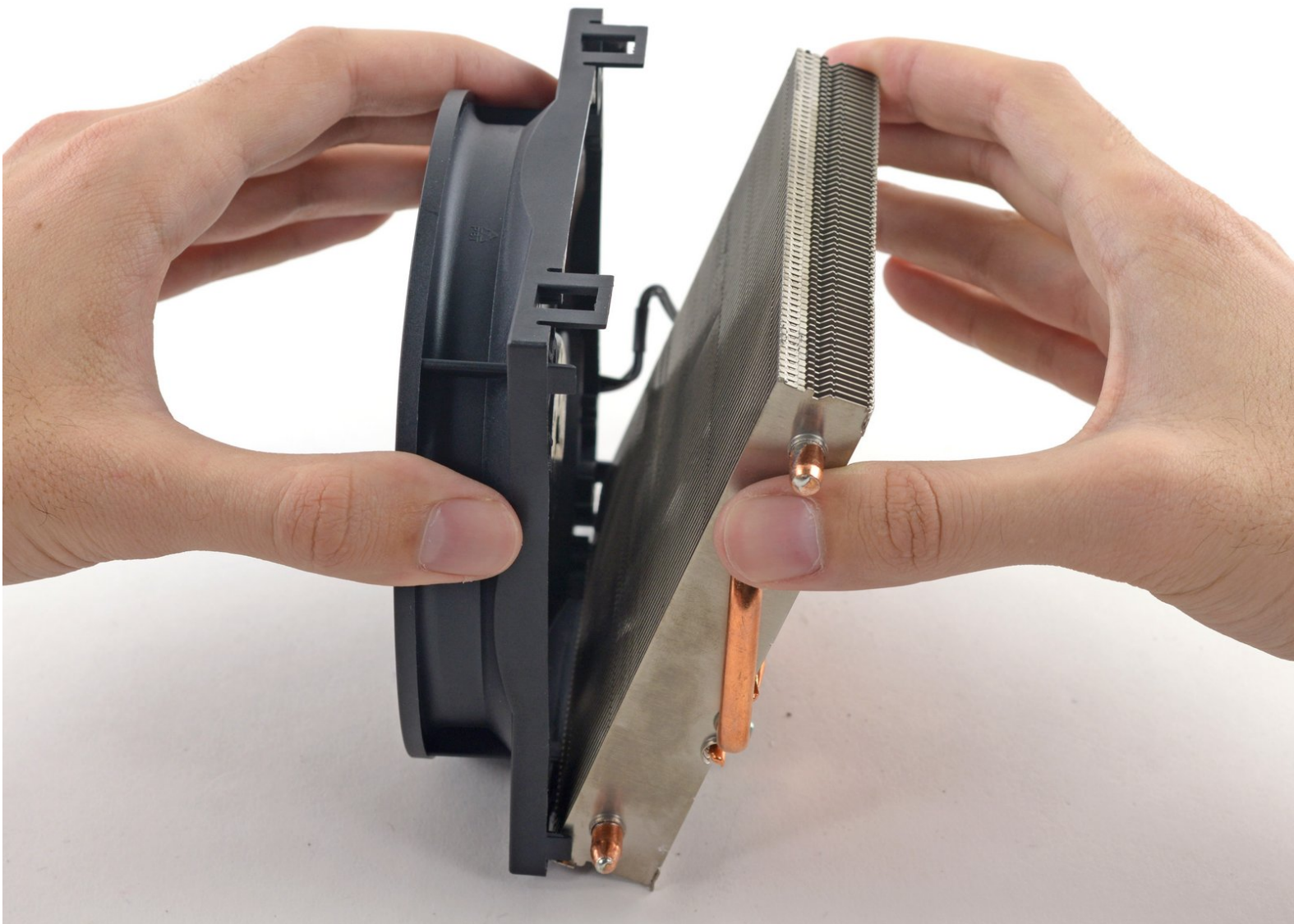




Xbox One Heat Sink Replacement

Use this guide to replace the heat sink in your Xbox One.

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INTRODUCTION

Need to upgrade to some serious cooling? Or replace a busted heat sink? Follow this guide to replace the heat sink in your Xbox One.

Note that separating the heat sink from the CPU compromises the original thermal compound. You'll need to clean off and replace the thermal paste with a new application. See [this guide for directions on how to do this](#).



TOOLS:

- [Spudger](#) (1)
- [iFixit Opening Tools](#) (1)
- [T10 Torx Screwdriver](#) (1)
- [T9 Torx Screwdriver](#) (1)
- [Arctic Silver ArctiClean](#) (1)
- [Arctic Silver Thermal Paste](#) (1)



PARTS:

- [Xbox One Heat Sink and Fan Assembly](#) (1)
- [Xbox One Heat Sink and Fan Bracket](#) (1)

Step 1 — Upper Case



- To open your Xbox, you're going to have to cut or peel up this tamper-evident tape. But don't worry — [Microsoft can't legally void your warranty](#), as long as you don't damage anything. Have fun!

Step 2



- Use a plastic opening tool to pry up and remove the plastic vent that surrounds the side USB port.
- The vent is fairly flexible, and held in place with weak plastic clips—start prying from the back and peel it out.

Step 3



- ⓘ There is a small plastic tab that reinforces the front corner of the Xbox.
- Slide the tab straight back and remove it.

Step 4



- Insert the flat end of a spudger between the upper and lower case where they meet at the rear of the side vent opening.
- ⓘ There is a strong plastic clip connecting the two case halves (the first of many), so you'll need to use quite a bit of force.
- ⓘ Leave the spudger in place until you open the case completely. The clips are very springy and may cause the case to snap shut while you're working.

Step 5



- ⓘ The interface between the upper and lower cases is secured by several clips along the rear and remaining side of the Xbox.
- Insert a plastic opening tool between the upper and lower case to separate the clip over the rear vent.

Step 6



- Keep moving along the rear of the Xbox, prying up clips.
- ⓘ Make sure the spudger stays in its blocking position—even if the case opens up enough for the spudger to fall out, the remaining clips are springy and may pull the case completely shut. Keep the spudger in the gap to protect your progress.



Step 7



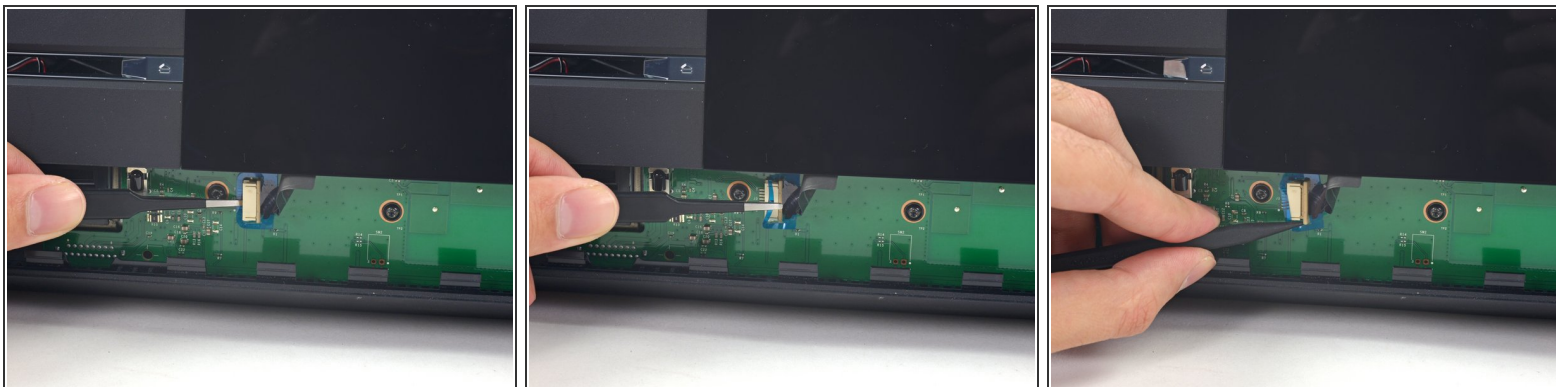
- Keep popping clips. It may help to slide the plastic opening tool across the clips.
- ⓘ By the time you get to the far edge of the rear case, the top case should be ready to come off. If not, run your plastic opening tool around the corner and pop the clips along the side without the USB port.


Step 8



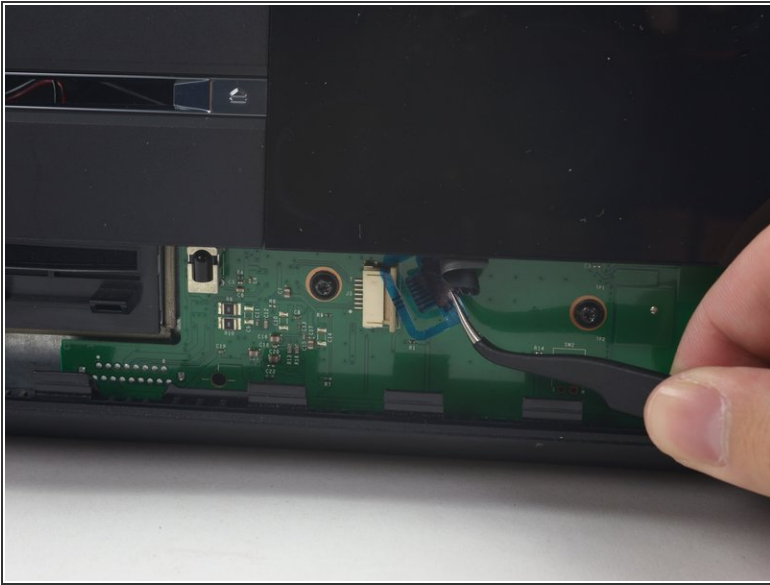
- Starting with the spudger you left in the crack, pry the upper case up to free the last few clips.
-  Use a plastic opening tool to pop any straggler clips that weren't freed.
-  Do not try to remove the upper case yet, as it is still connected by the front panel button cable.
- Lift the upper case slightly and shift it to give access to the front panel board.

Step 9



-  The front button cable has a unique ZIF connector—pay attention to the next few steps to safely disconnect it.
- Use tweezers to lift the plastic retaining loop over the connector on the board.
- Use the tip of a spudger to push the connector's locking tab toward the cable to unlatch it.

Step 10



- Use tweezers to pull the cable straight out of the connector on the board.
- Remove the upper case.

Step 11 — Reassembly Instructions



 **The next 4 steps are directions for reassembly. Skip them to continue with disassembly.**

- Use the flat end of a spudger to free the clips securing the front panel to the upper case.
- Remove the front panel from the rest of the upper case.

Step 12



- Replace the top part of the upper case.
- Line up the clips and press firmly to re-seat them around the perimeter.

Step 13



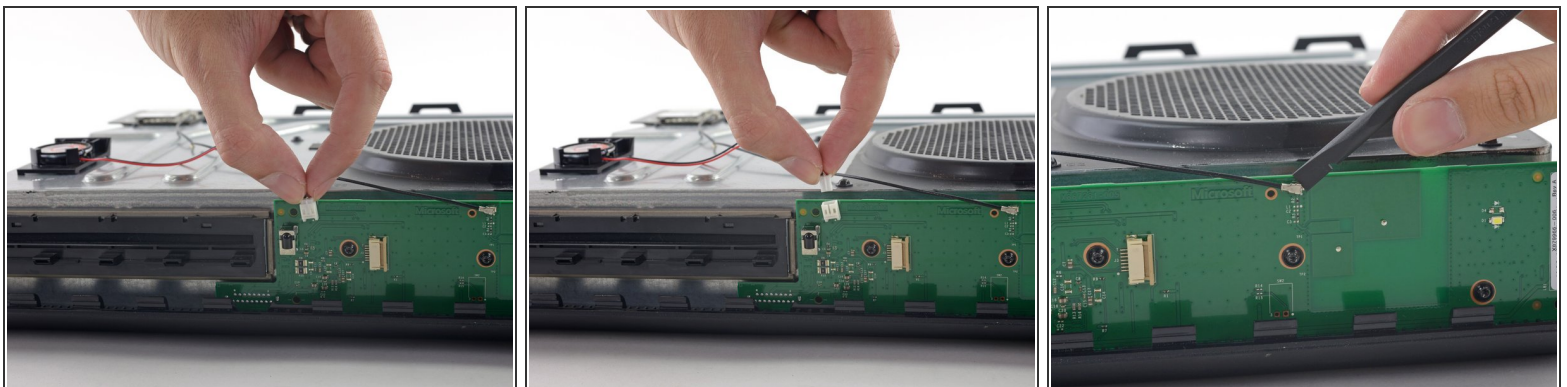
- Support the front panel near the front of the Xbox.
- Use tweezers to replace the front button cable in its ZIF socket.
- Use the flat end of a spudger to push the ZIF lock to the left to secure the cable.

Step 14



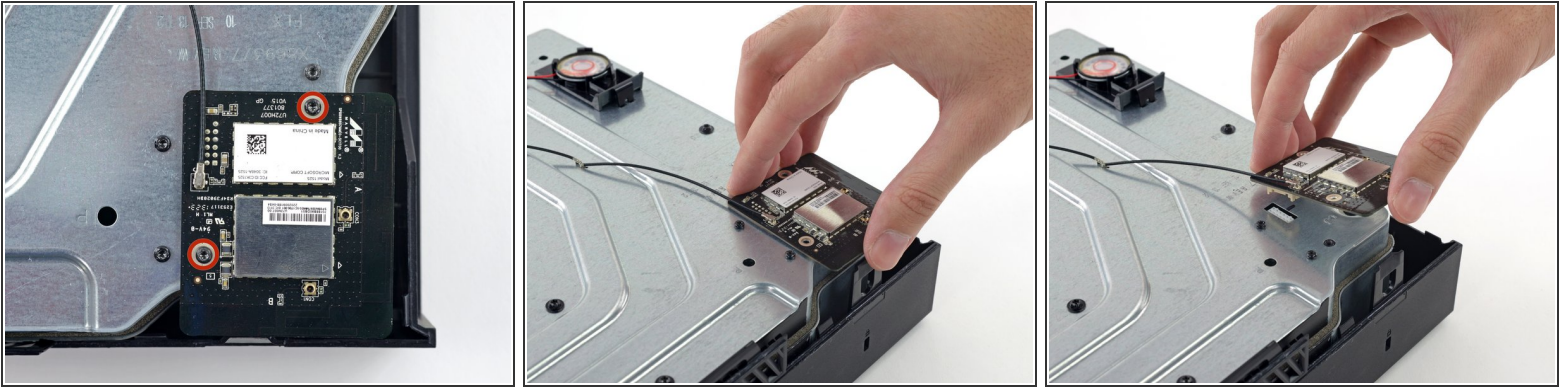
- i** The lower edge of the front panel has plastic hooks that interlock with plastic hooks on the front edge of the lower case.
- With the front panel at a 45 degree angle, interlock its plastic hooks with those in the lower case.
 - Push the top of the front panel into the Xbox, like closing a mailbox. Press firmly so that the clips securing the front panel to the upper case lock securely.

Step 15 — Upper Metal Case



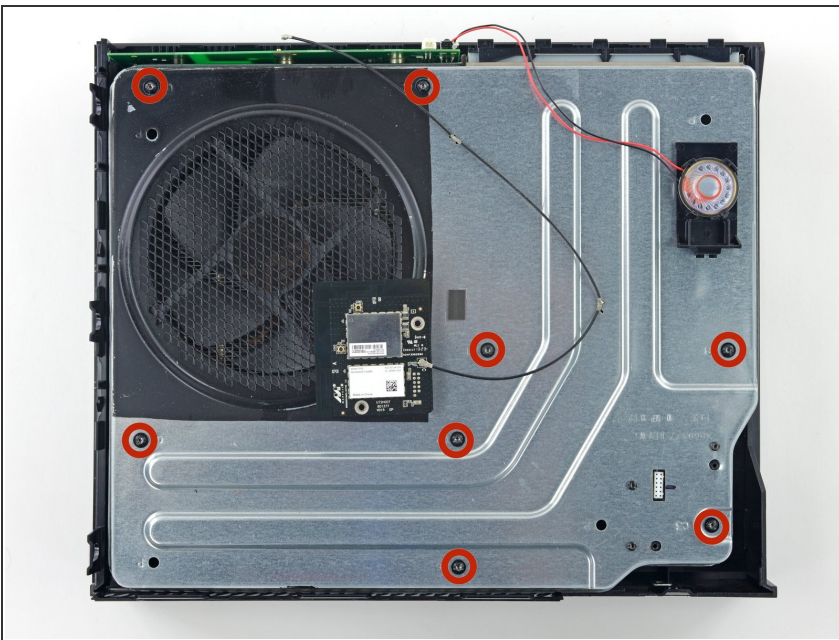
- Gently pull up on the speaker cable connector to disconnect it from the front panel board.
- !** Be careful to pull up on the cable's connector and not the connector on the board. It's pretty flimsy and you might accidentally pull it off the board entirely.
- Use the flat end of a spudger to disconnect the antenna cable from the front panel board.

Step 16



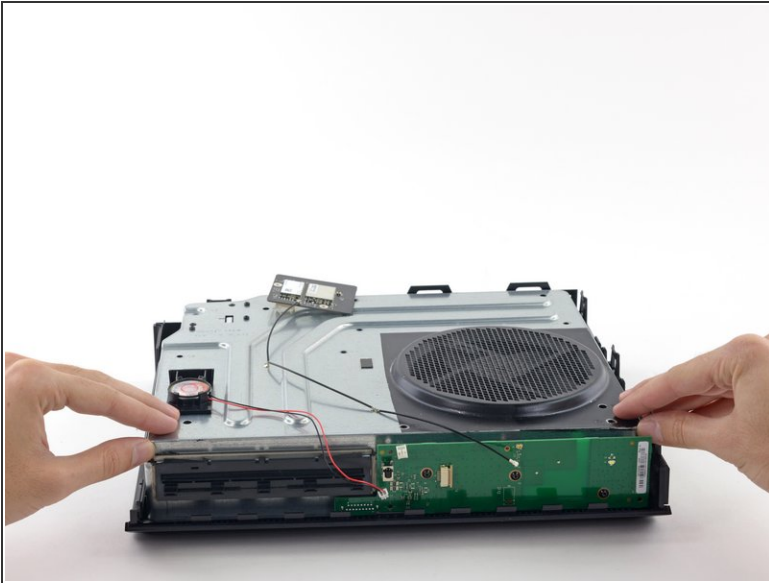
- Remove the two 9.5 mm T9 Torx screws from the Wi-Fi board.
- Lift the Wi-Fi board straight up from its socket in the upper metal case.
- Leaving the Wi-Fi board antenna cable in place, move the Wi-Fi board aside, exposing the screw labeled "C3" that was beneath it.

Step 17



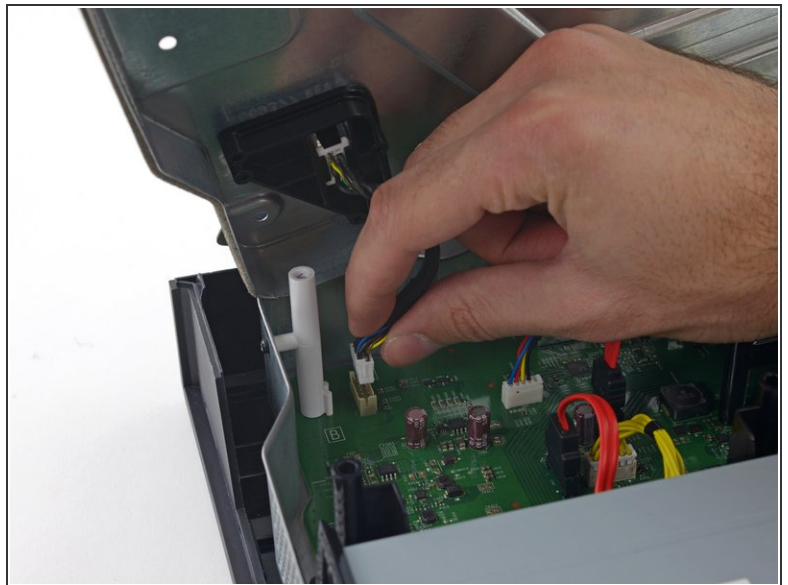
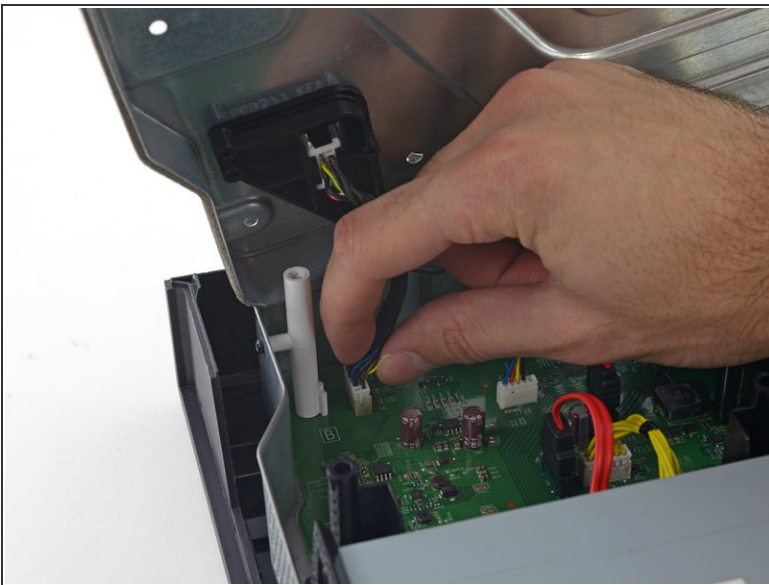
- Remove the eight 65 mm Torx T10 screws from the top of the upper metal case.

Step 18



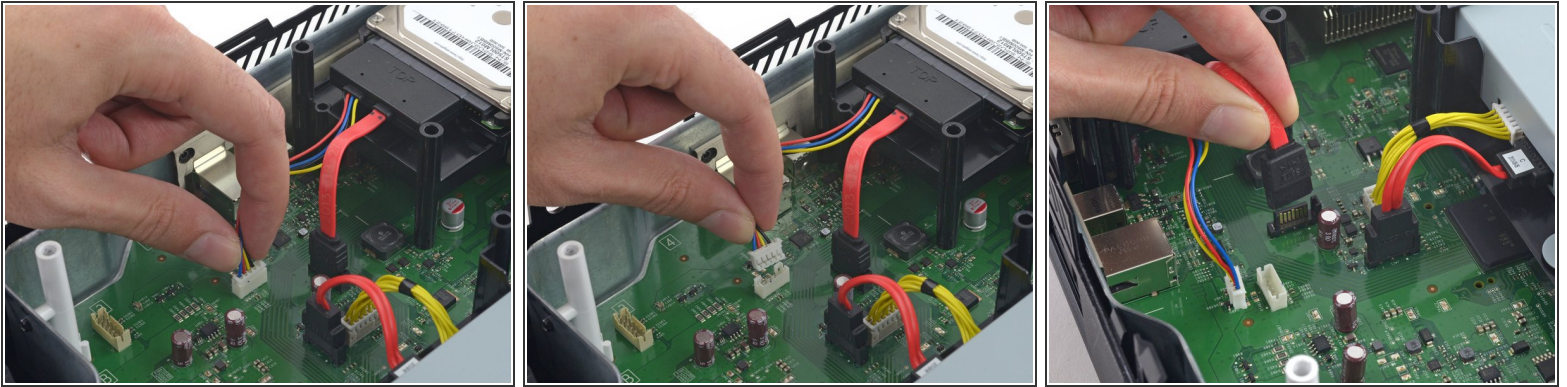
- Lift—but do not remove—the upper metal case.
- ⓘ The Wi-Fi board interconnect cable connects the upper metal case to the motherboard.

Step 19



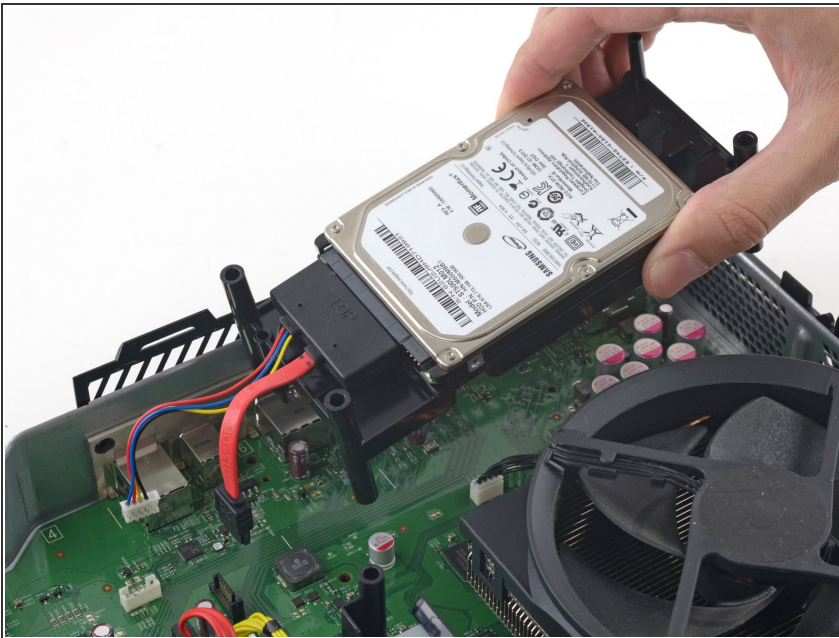
- Disconnect the Wi-Fi board interconnect cable from the motherboard.
- ⓘ Remove the upper metal case.

Step 20 — Hard Drive Assembly



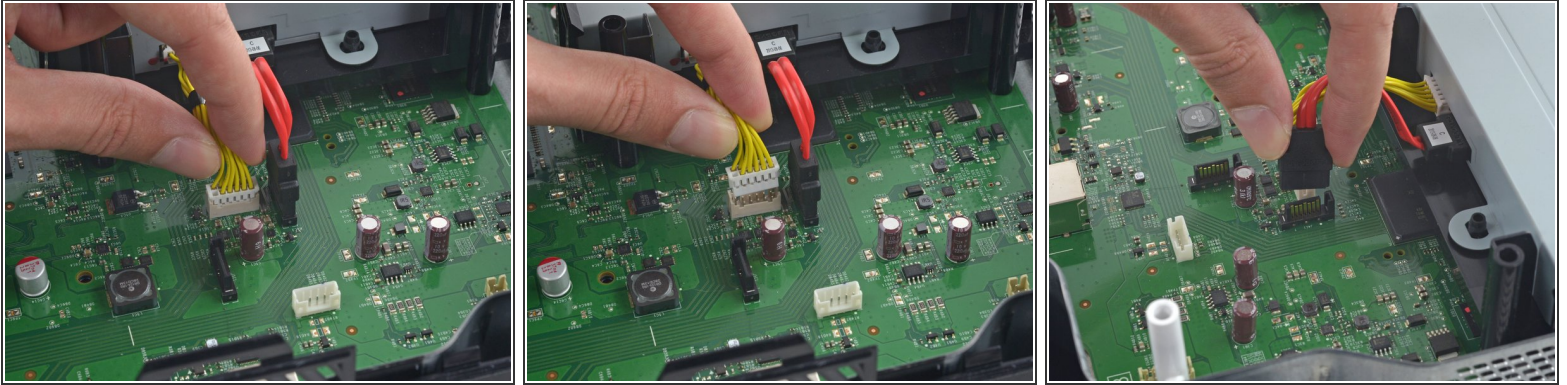
- Disconnect the hard drive SATA power and data cables from the motherboard.

Step 21



- Lift and remove the hard drive tray from the Xbox.

Step 22 — Optical Drive Assembly



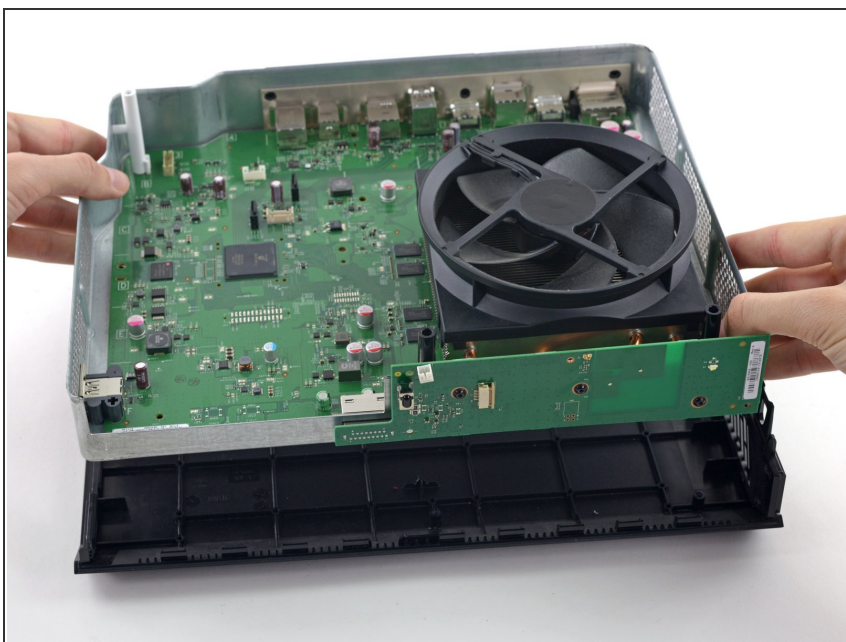
- Disconnect the optical drive power and SATA data cables from the motherboard.

Step 23



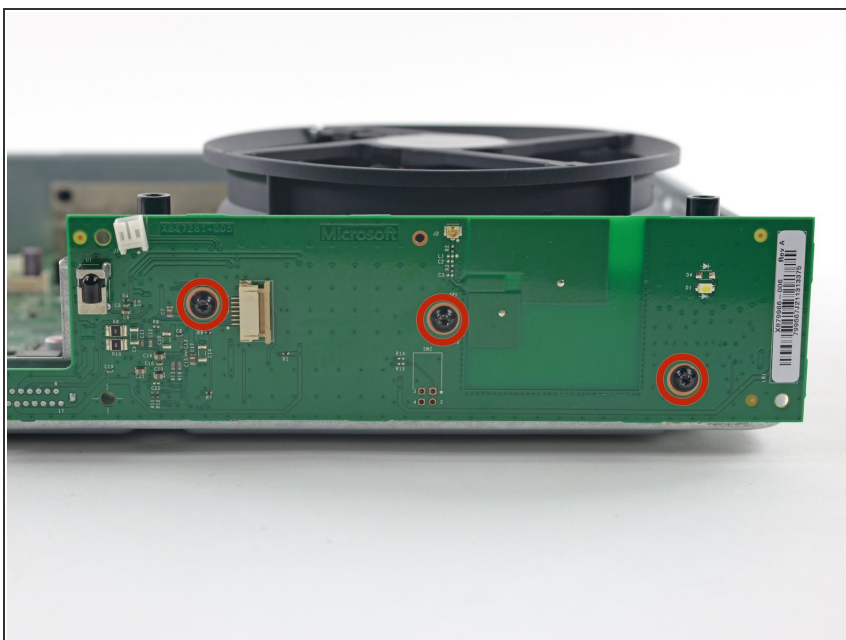
- Remove the optical drive assembly from the Xbox.

Step 24 — Front Panel Board



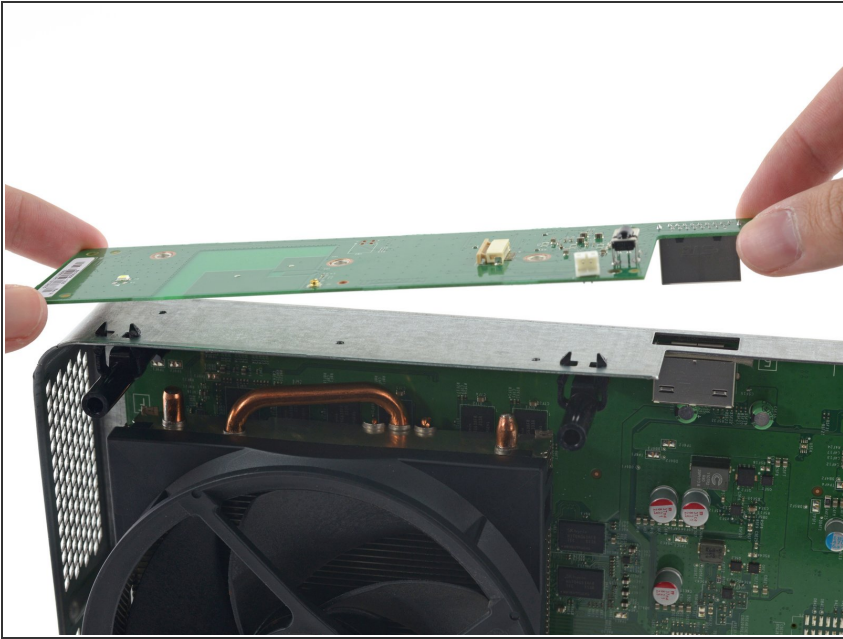
- Lift the motherboard assembly out of the lower case.

Step 25



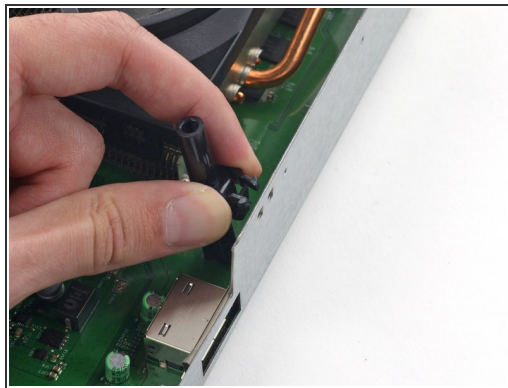
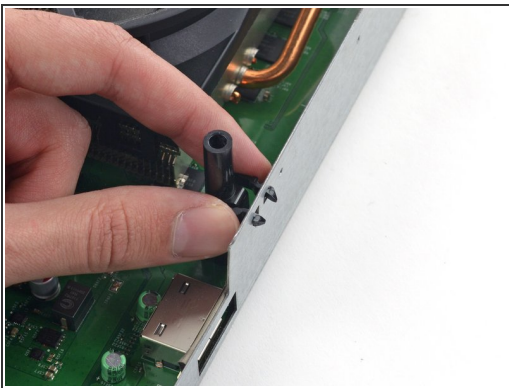
- Remove the three 9.5 mm T9 Torx screws securing the front panel board.

Step 26



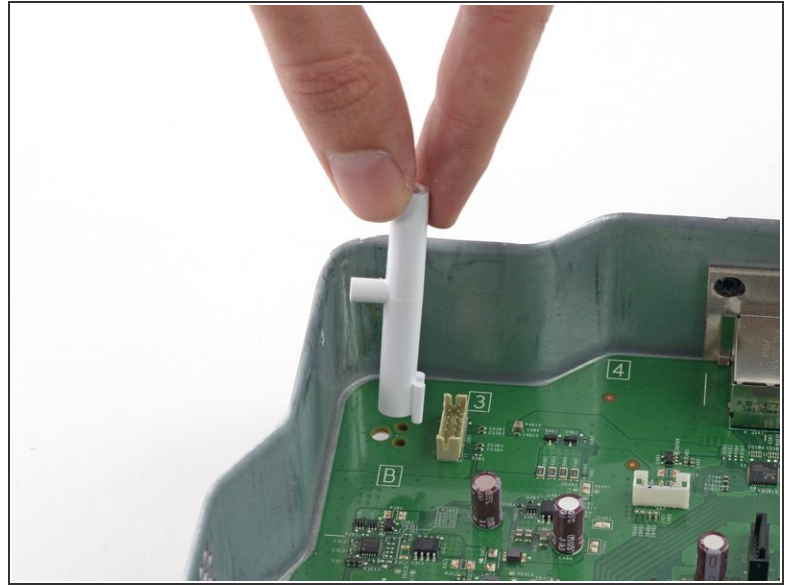
- Disconnect the front panel board from its socket in the front of the motherboard.

Step 27 — Motherboard



- i** Two black plastic screw posts are attached to the frame with springy plastic barbs.
- Pinch the arms together and pull the barbs out through the frame to remove the posts.

Step 28



- Remove the 8.3 mm T9 Torx screw securing the white plastic screw post to the lower metal frame.
- Remove the white plastic screw post from the frame.

Step 29



- ⓘ Flip the lower metal frame and motherboard assembly over, to rest on the fan.
- Remove the following screws from the bottom of the lower frame:
 - Four 11.2 mm T10 Torx screws
 - Four 9.5 mm T9 Torx screws

Step 30



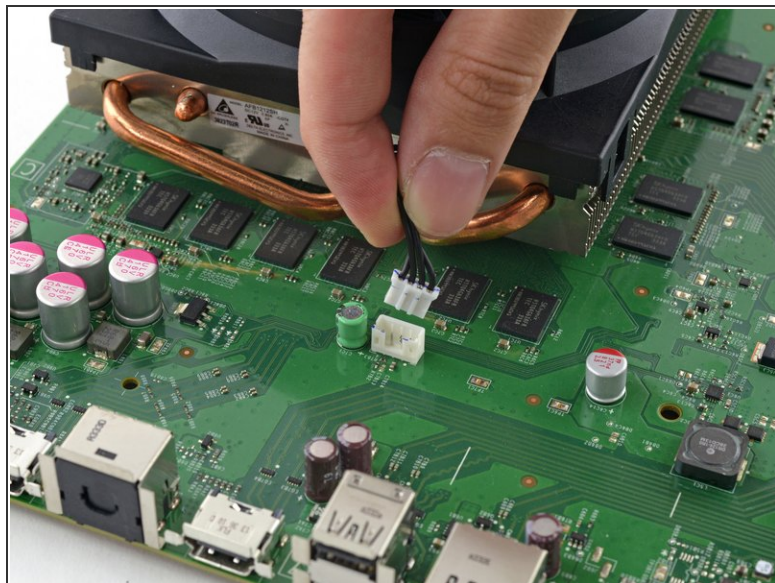
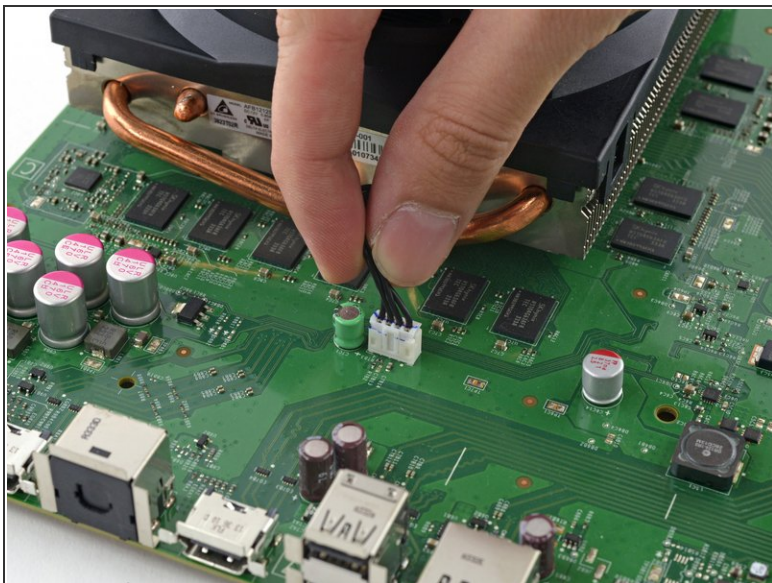
- i** Two small plastic plugs protrude through the rear metal case—one beneath the side USB port, and another beneath the AC in port. These plugs get caught on the lower metal case and make it hard to remove the motherboard.
- Push the two plugs through the lower metal case.

Step 31



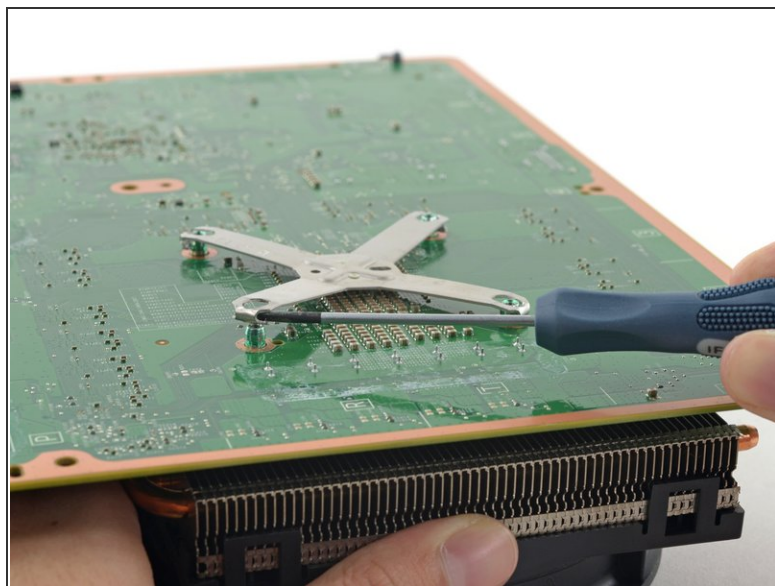
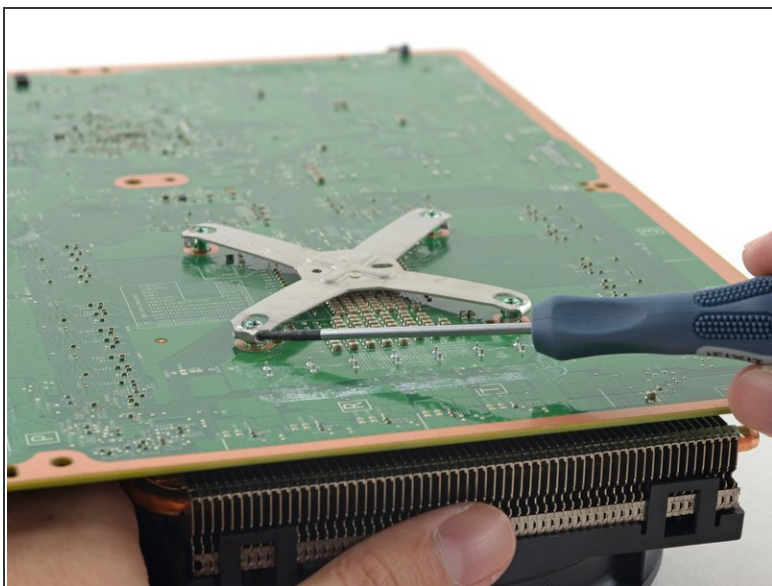
- Lift the motherboard and heat sink/fan assembly out of the lower metal case.

Step 32



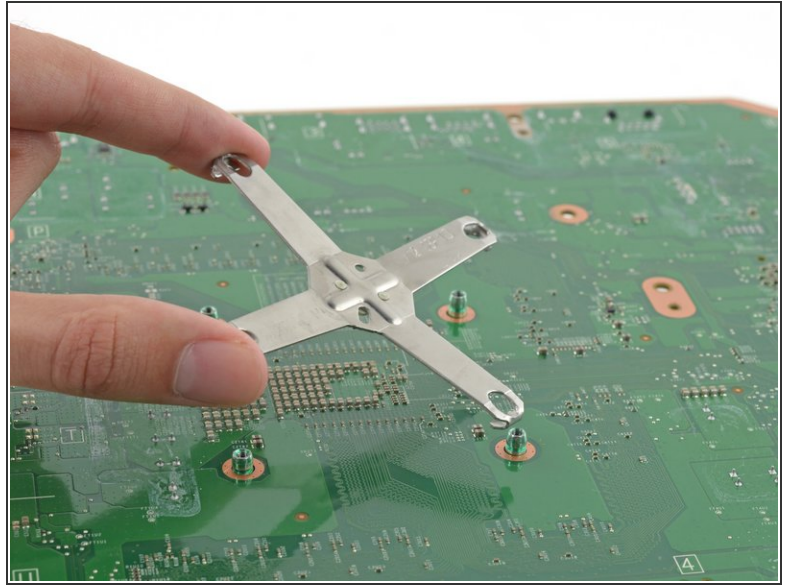
- Disconnect the fan cable from the motherboard.

Step 33



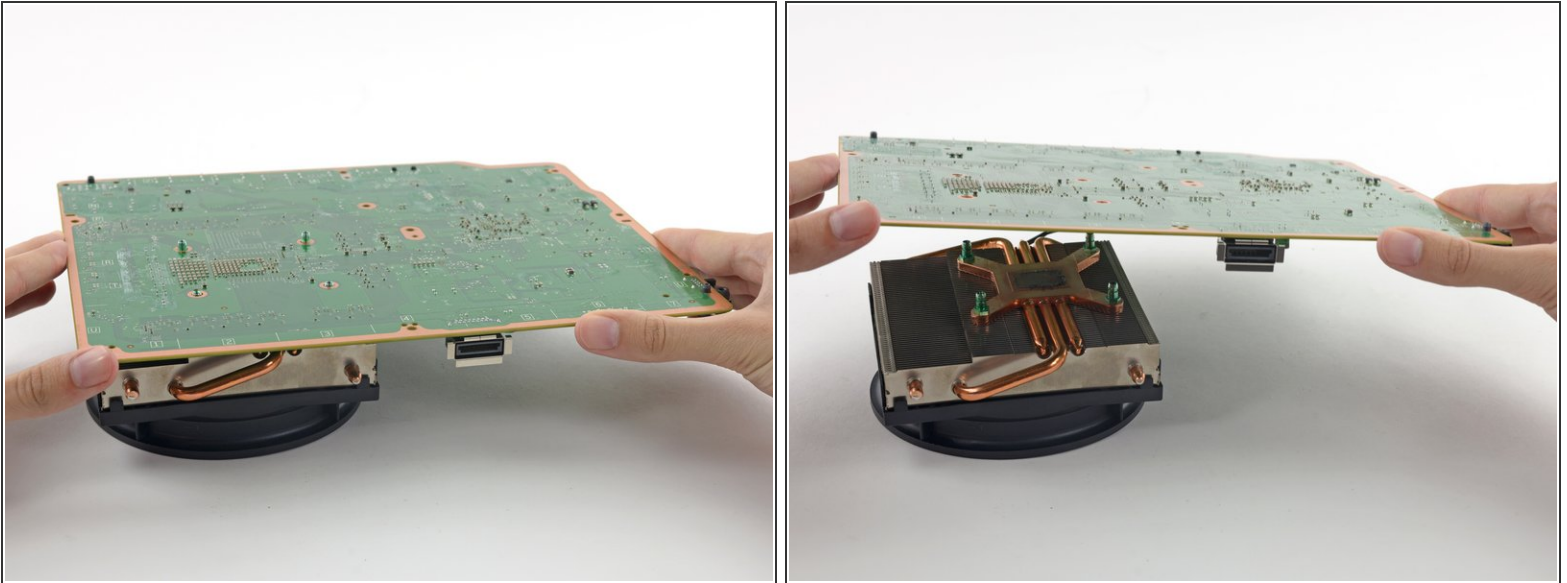
- Insert the tip of a small flathead screwdriver between the post and the outer edge of one arm of the X-clamp.
- Gently rotate the screwdriver, lifting the arm of the X-clamp up and off of the post.

Step 34



- Use the same rotating technique to free one more arm of the X-clamp from its post.
- Remove the X-clamp.

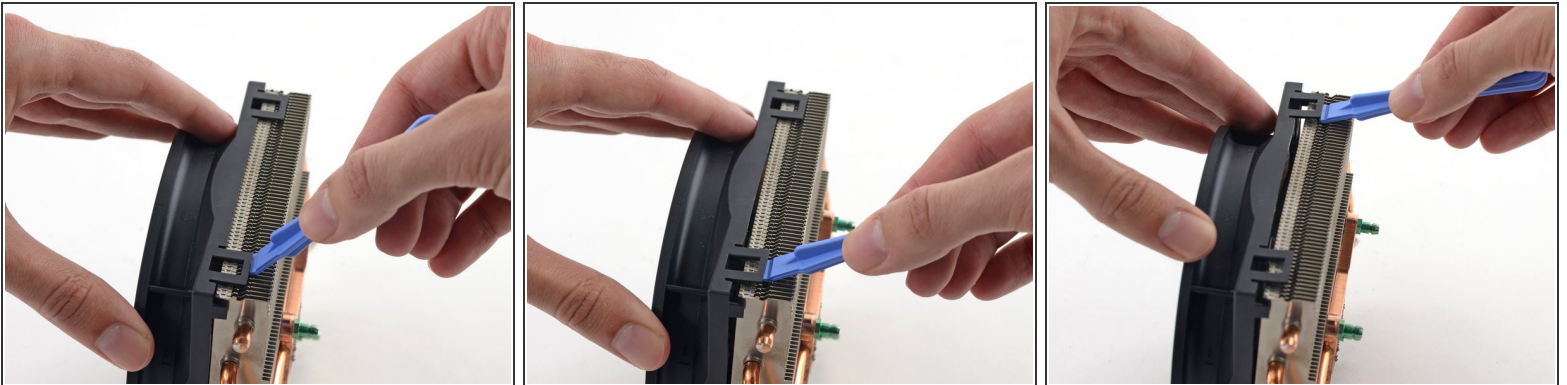
Step 35



- Lift the motherboard off of the fan/heat sink assembly.

✦ When you're reassembling your Xbox, follow our [Applying Thermal Paste](#) guide at this point to apply a new layer of thermal paste to the CPU.

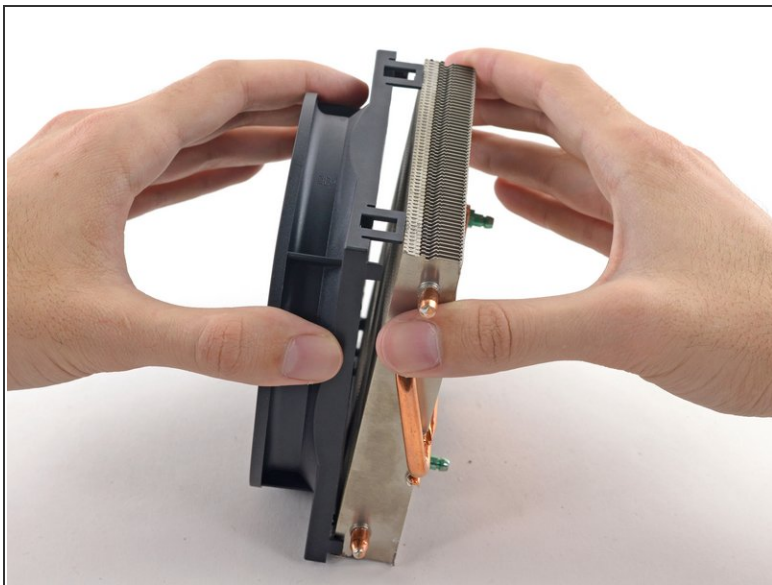
Step 36 — Heat Sink



i The fan is held onto the heat sink with four sturdy plastic clips.

- Use a plastic opening tool to pry the two clips on one side out of the channel in the side of the heat sink.

Step 37



- Separate the heat sink from the fan.

To reassemble your device, follow these instructions in reverse order. Don't forget to apply a new layer of thermal paste to your CPU. Follow [this guide](#) to learn how.