



Xbox One Heat Sink and Fan Replacement

Use this guide to replace the heat sink and fan.

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INTRODUCTION

This guide will show you how to replace the heat sink and fan of your Xbox One.

The fan is responsible for keeping the Xbox's processor at a safe operating temperature. Without it the Xbox cannot run and if it is not working properly, the Xbox may malfunction.

Note that this replacement requires you to remove the heat sink and fan from the motherboard. Every time you remove the heat sink you should replace the thermal paste that separates it from the motherboard. **Be sure to have replacement thermal paste on hand before reassembling the device.**

TOOLS:

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

PARTS:

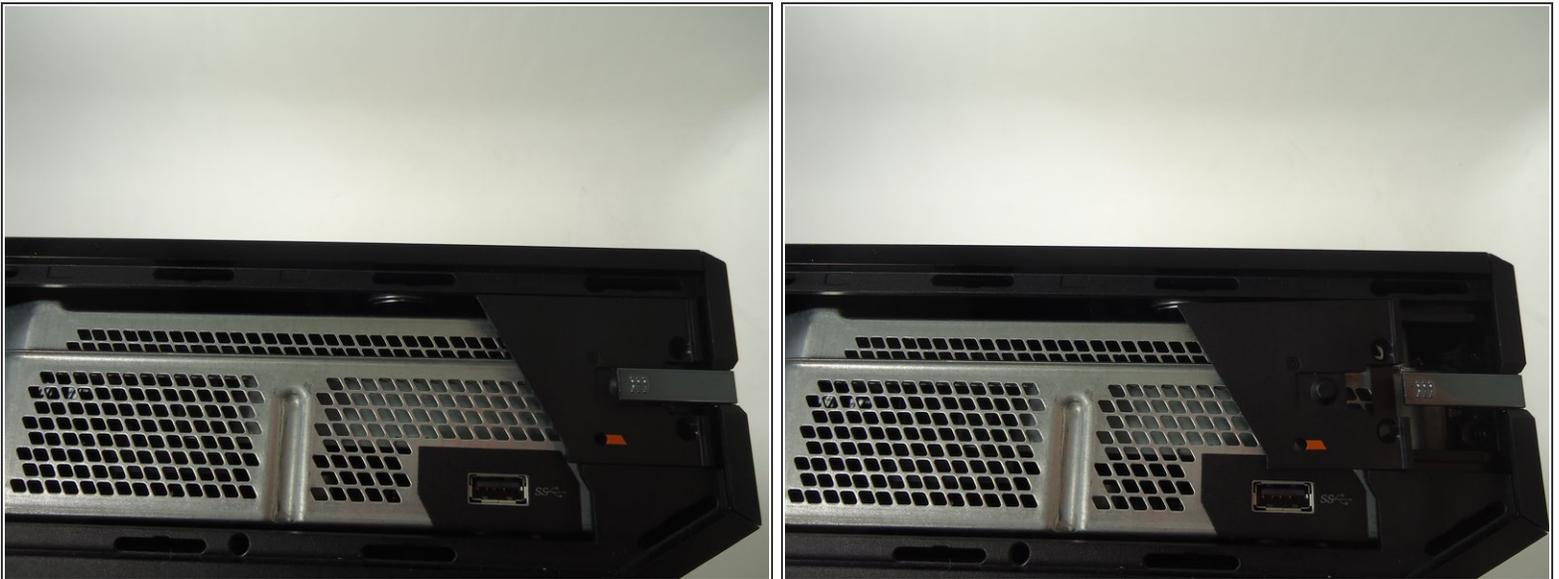
- [Xbox One Heat Sink and Fan Bracket](#) (1)
- [Xbox One Heat Sink and Fan Assembly](#) (1)

Step 1 — Side Vent



- With a plastic opening tool, pry the side vent from the console.
- ⓘ Start from the back edge and work towards the front of the console.

Step 2 — Wi-Fi Board



- Slide the black angled tab behind the silver button toward the back of the console and set it aside.

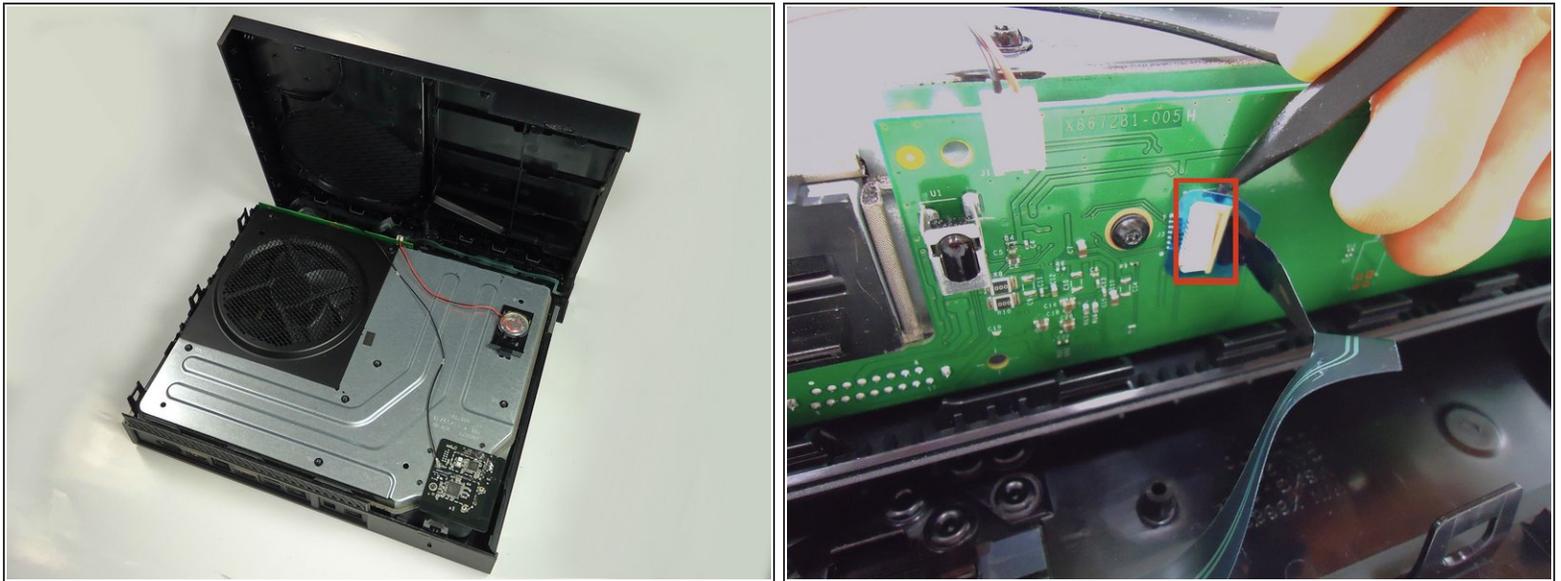
Step 3



⚠ Rotate the Xbox and remove the warranty sticker from the back. Removing this seal and opening the case of the Xbox voids your warranty with Microsoft.

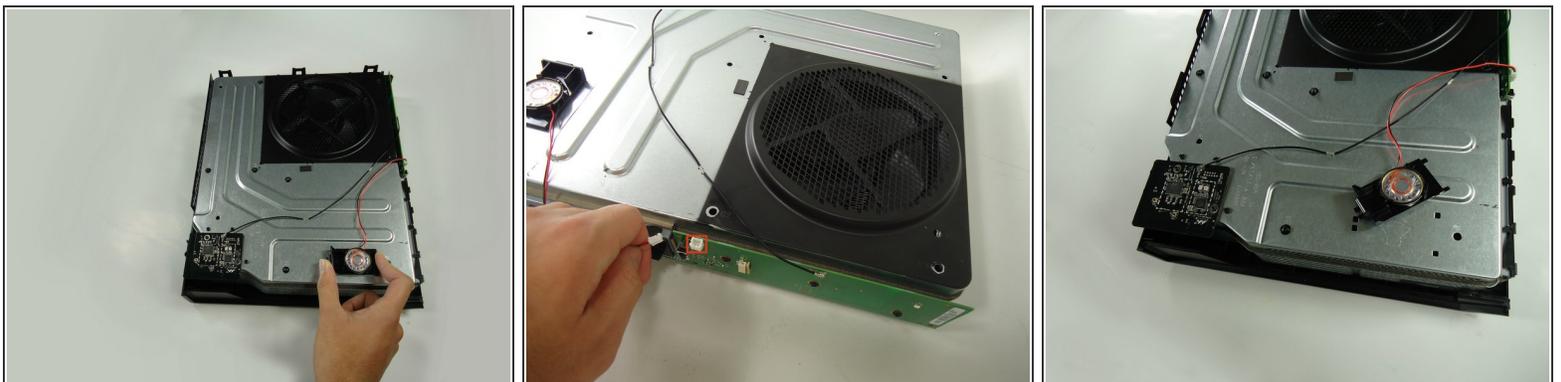
- Use a plastic opening tool on the back to pry the top of the case from the bottom. Use an up and out motion to dislodge the clips. There are multiple clips to release on the back and two on the sides.
- i** This step may take up more time than the others, keep prying with the plastic opening tool and when you release one clip, wedge something underneath it so it doesn't close again.

Step 4



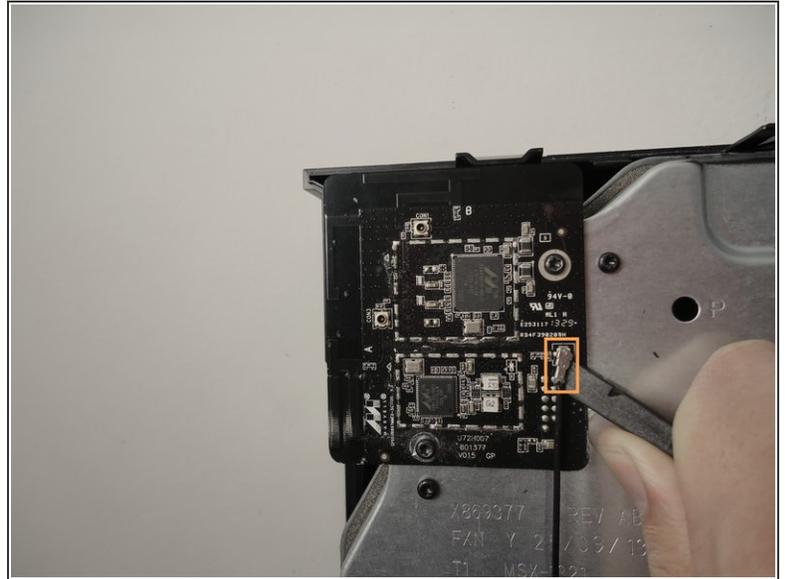
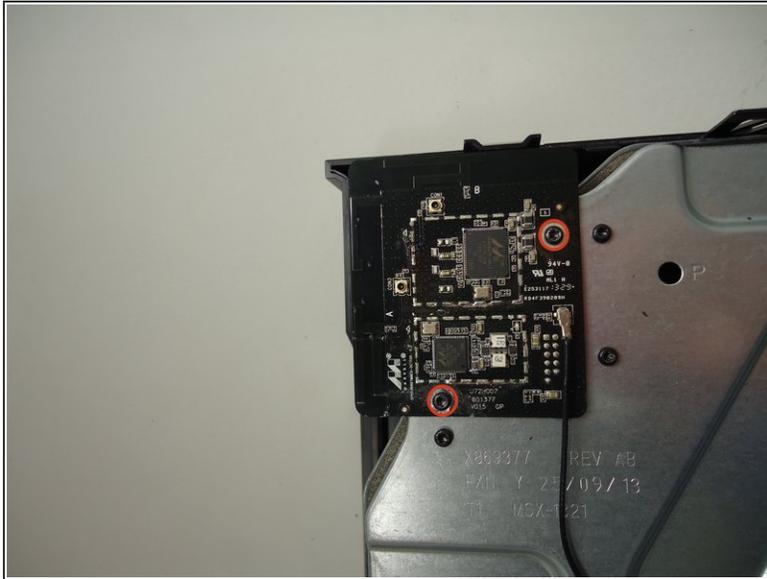
- Carefully lift the top of the case, note that there is a wire connecting the front panel to the motherboard. Take care not to break this.
- Using a spudger, release the ribbon wire from the front panel.
- The top case is now free, set it aside.

Step 5



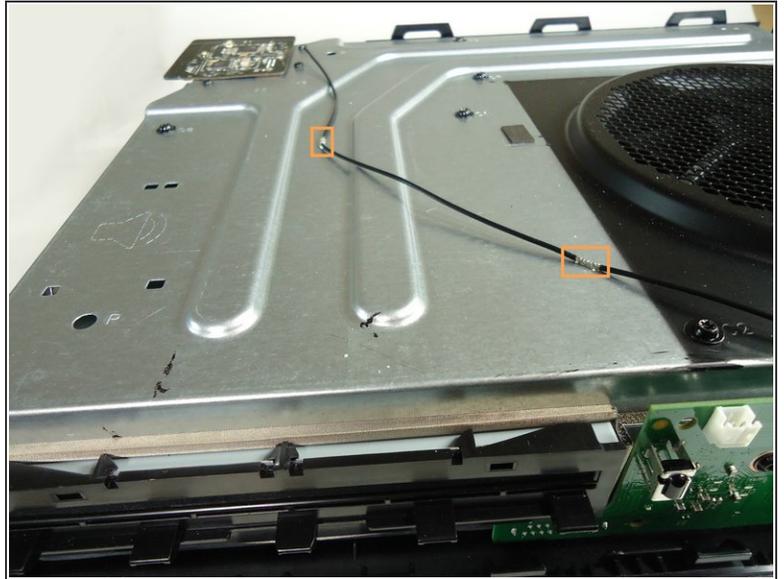
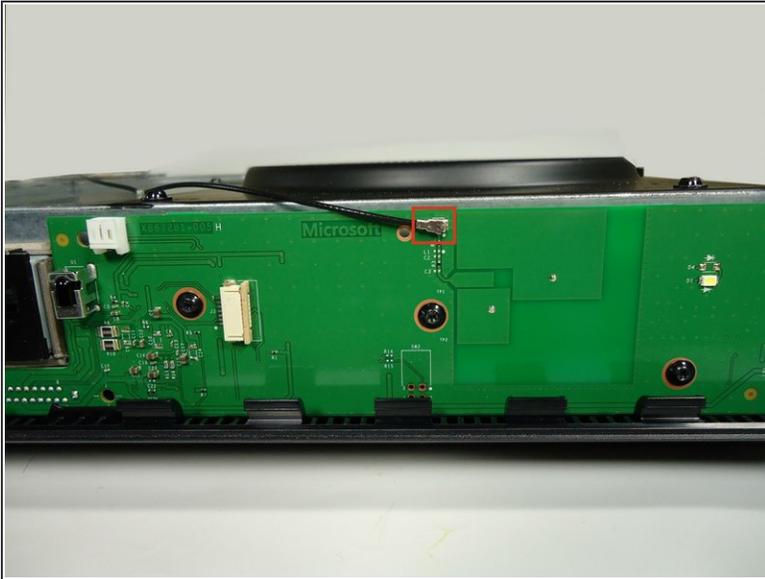
- Remove the speaker by squeezing the the tab on the black plastic mounting piece and lifting it up.
- Carefully unplug the connector from the green front panel board.
- The speaker is now free, set it aside.

Step 6



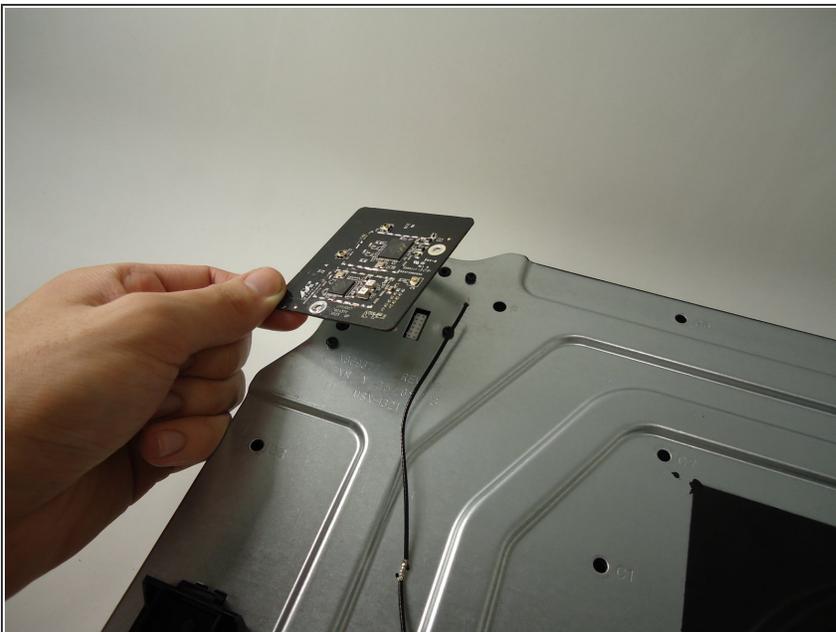
- Unscrew the two 8.2mm T-9 screws securing the Wi-Fi board to the chassis.
- Using the spudger, gently lift the antenna connector from the Wi-Fi board.

Step 7



- Using a spudger and a motion similar to the previous step, gently lift the antenna connector from the green board on the front.
- Carefully pull out the clips securing the antenna wire to the chassis, releasing the wire.

Step 8



- Carefully pull the Wi-Fi board straight up to release it from the chassis. The Wi-Fi board is now free.

Step 9 — Optical/Disc Drive



- Remove all eight of the 64.0 mm, T-9 screws labeled C1 through C8 securing the chassis top to the motherboard.

Step 10



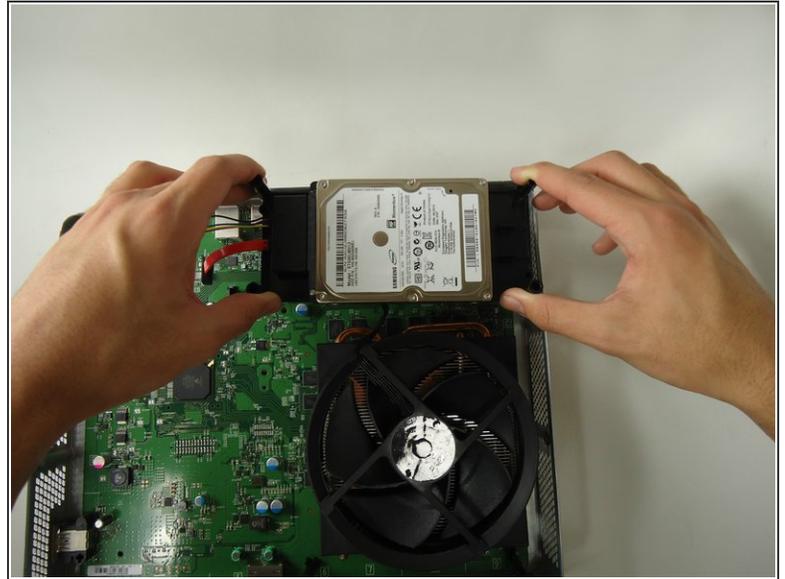
- Lift the chassis top, being careful not to break the wire connecting the chassis top to the motherboard.
- Unplug the connector labeled 3 on the motherboard by gently pulling up.
- The chassis top is now free, set it aside.

Step 11



- Lift the bottom half of the chassis (motherboard and all) from the bottom half of the black case.
- Unplug the red wire connecting the optical drive to the motherboard from its connector on the motherboard.
- Unplug the yellow wire connecting the optical drive to the motherboard from its connector on the motherboard.
- The optical drive is now free, lift it from the chassis and set it aside.

Step 12 — Hard Drive



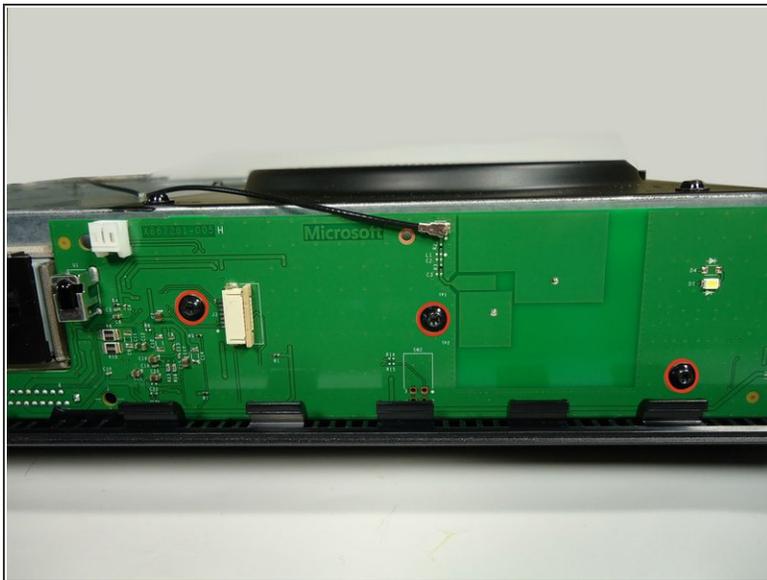
- Unplug the red wire connecting the hard drive to the motherboard from its connector on the motherboard.
- Unplug the multi-colored wire connecting the hard drive to the motherboard from its connector on the motherboard.
- The hard drive is now free, remove it from the chassis by lifting straight up. Set it aside.

Step 13 — Motherboard



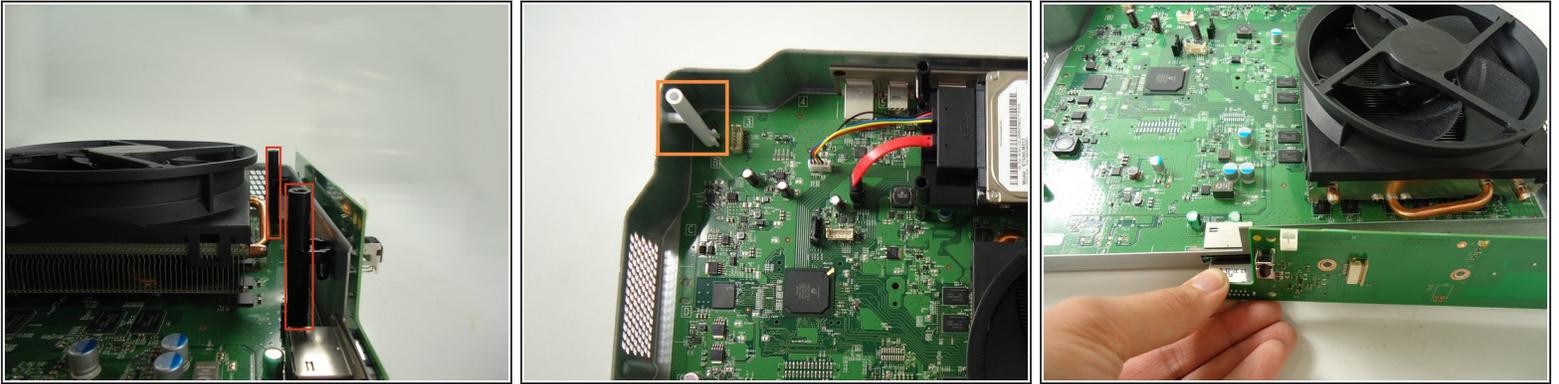
- Turn the chassis upside down.
- Remove the four black 9.5mm T-9 screws labeled A1, A2, A3, and A4.
- Remove the four grey 11.0mm T-9 screws labeled B1, B2, B3, and B4.

Step 14



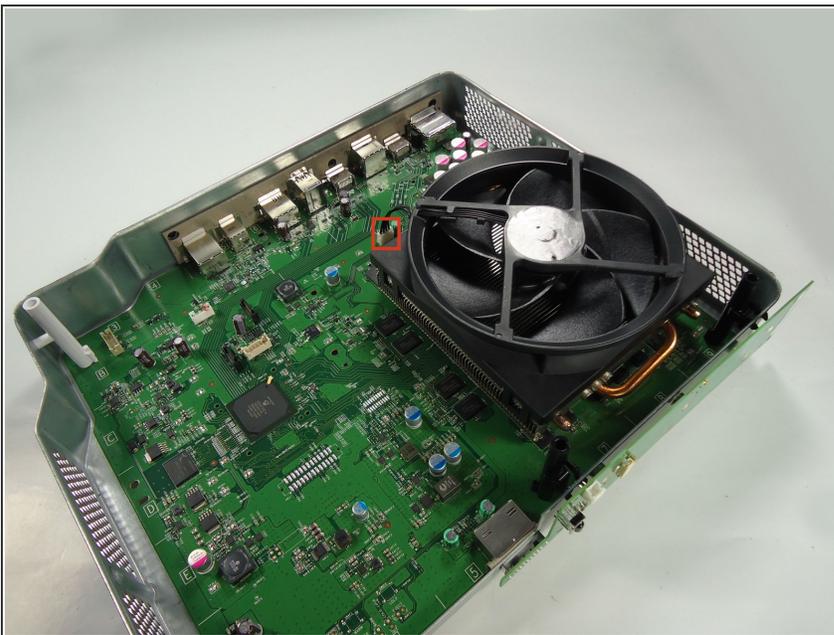
- Remove the three 9.5mm T-9 screws holding the front board onto the metal chassis.
- Remove the single 8.2mm T-9 screw holding the white standoff to the metal chassis.

Step 15



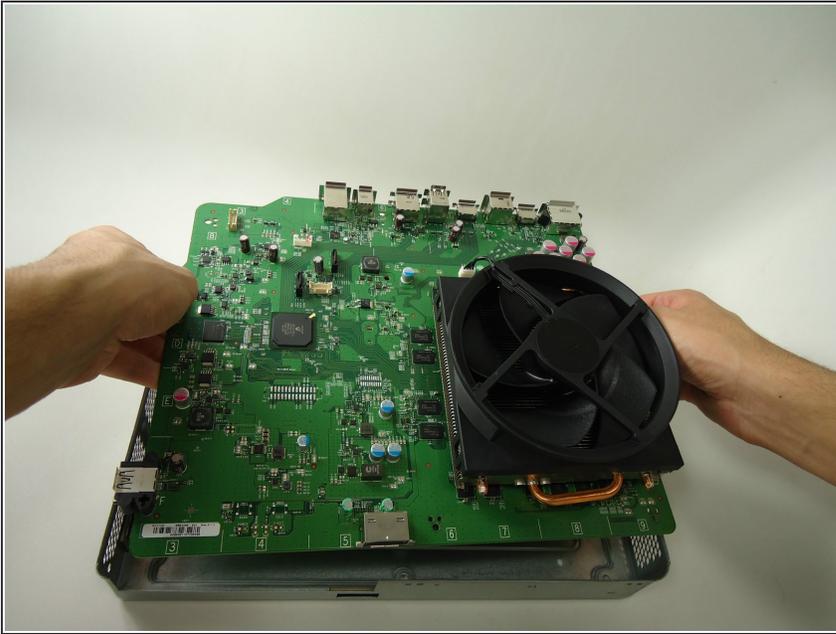
- Remove the two black standoffs by squeezing the clips securing them to the metal chassis and lifting up.
- Remove the white standoff.
- Unplug the front panel board from the chassis. The board is now free, set it aside.

Step 16



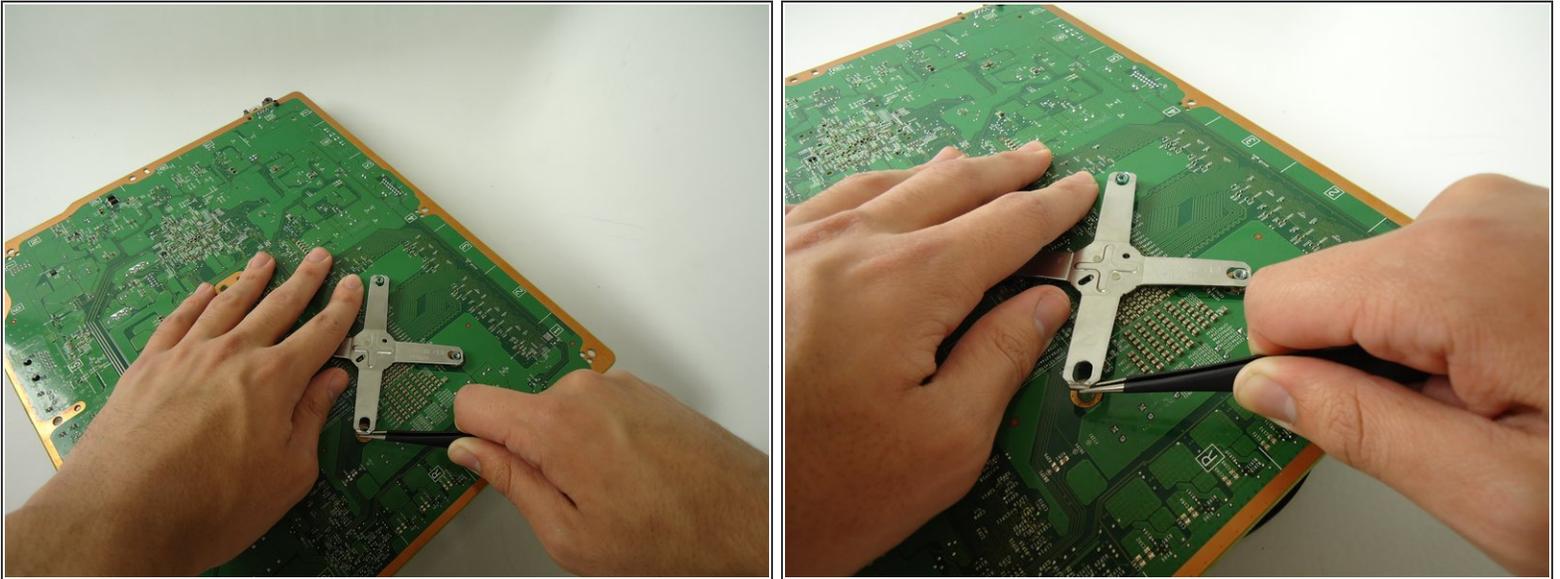
- Unplug the wire that connects the fan to the motherboard by gently pulling it up.

Step 17



- Carefully turn the chassis back over. Grasp the motherboard or the fan and lift the assembly free with the fan and heat sink attached. Set the bottom of the chassis aside.

Step 18



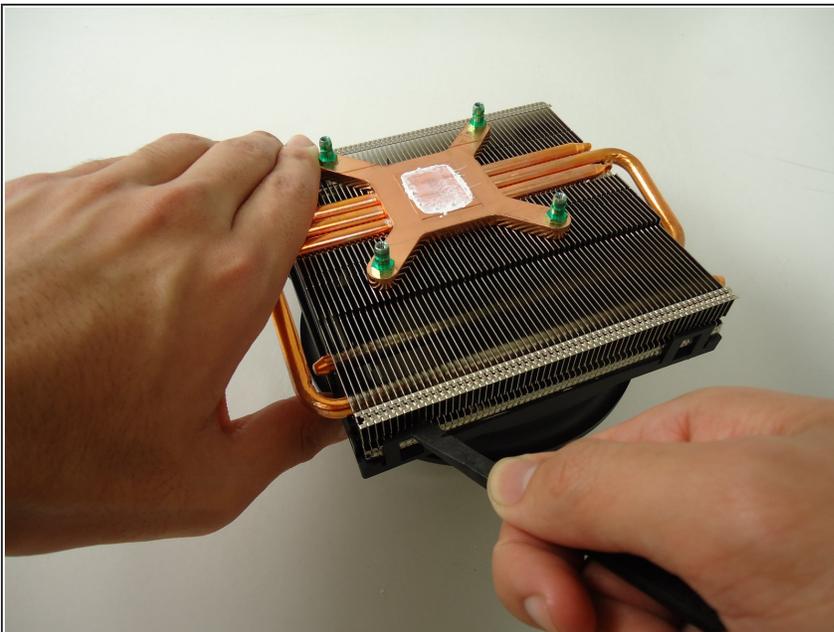
- Carefully turn the motherboard and fan over so that the fan is facedown.
- Firmly wedge the tweezers or a small flathead screwdriver under the edge of the X-shaped spring and lift to release the spring.
- ⓘ The X-shaped spring may be stiff and require considerable force to release. Probe around, some arms may be easier than others.
- Lift the spring free of the pegs and set aside.

Step 19



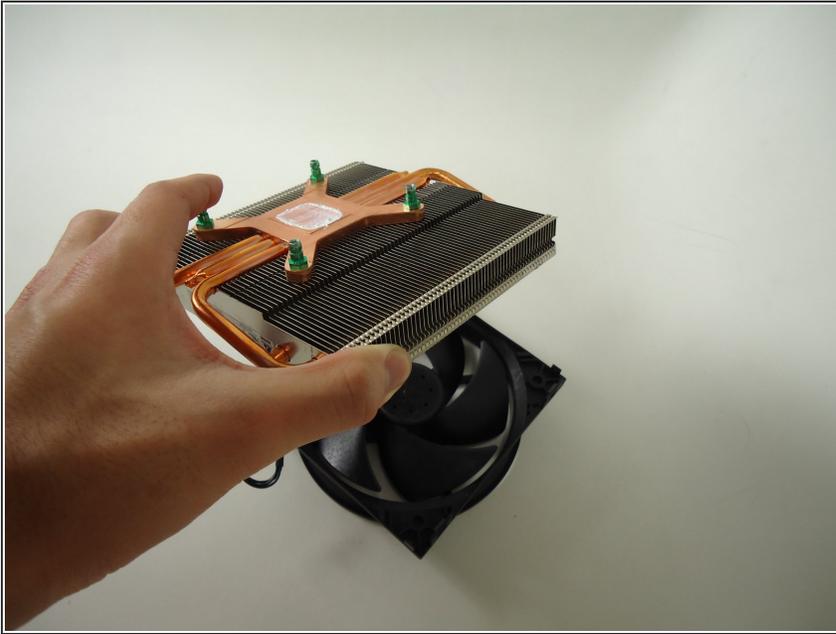
- Lift the motherboard free of the fan and heat sink and set aside.
- Clean off and replace the white heat paste with the help of this [guide](#).
- ☑ Remember to orient the heat sink and fan so they are flush with the right side of the motherboard.

Step 20 — Heat Sink and Fan



- Use the flat end of the spudger to release the clips holding the fan onto the heat sink.
- ⓘ Start on one side and pry at the black clips, alternating from clip to clip until the assembly is free.

Step 21



- Lift the heat sink off of the fan and set aside to free the fan for replacement.
- ★ Take note of the orientation of the fan on the heatsink. If the fan is off by 180 degrees, it will fit, but will cause problems during reassembly.

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