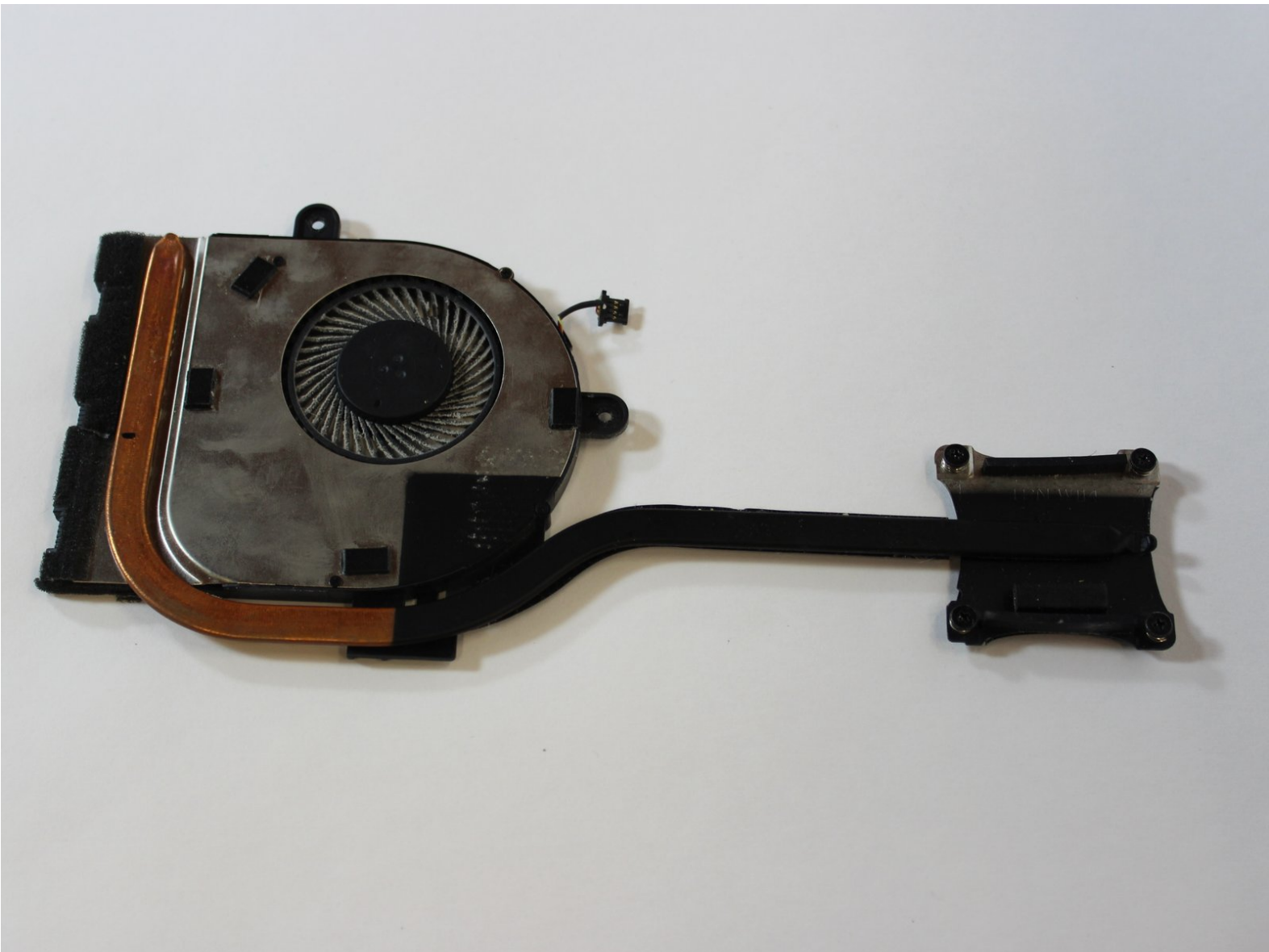




# HP Envy x360 m6-w103dx Fan Replacement

This guide will assist with replacing the fan for the HP Envy x360 m6-w103dx.

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## INTRODUCTION

This replacement guide is for the fan of the HP Envy x360 m6-w103dx. All you need to complete this guide is a plastic opening tool, a #0 Phillips screwdriver, a #00 Phillips screwdriver, and an anti-static wrist strap.

If you suspect there are issues with the fan, please refer to the troubleshooting guides [here](#).

Wear the anti-static wrist strap and attach it to a metal surface to avoid damaging sensitive electrical components. Make sure the computer is unplugged and powered off before touching any internal parts.

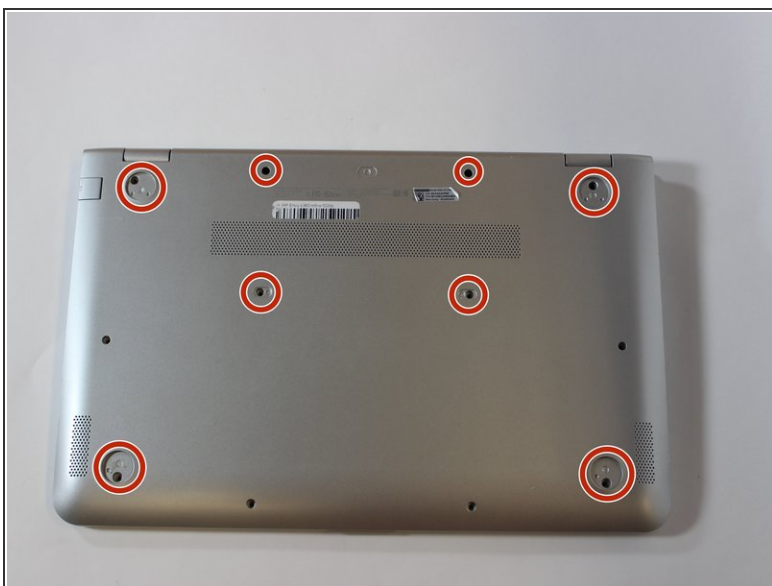
The fan is attached to the motherboard, so it will be necessary to also remove the motherboard. The motherboard isn't a hazardous component to handle, but it is connected to many critical parts of the computer and must be removed with care.



### TOOLS:

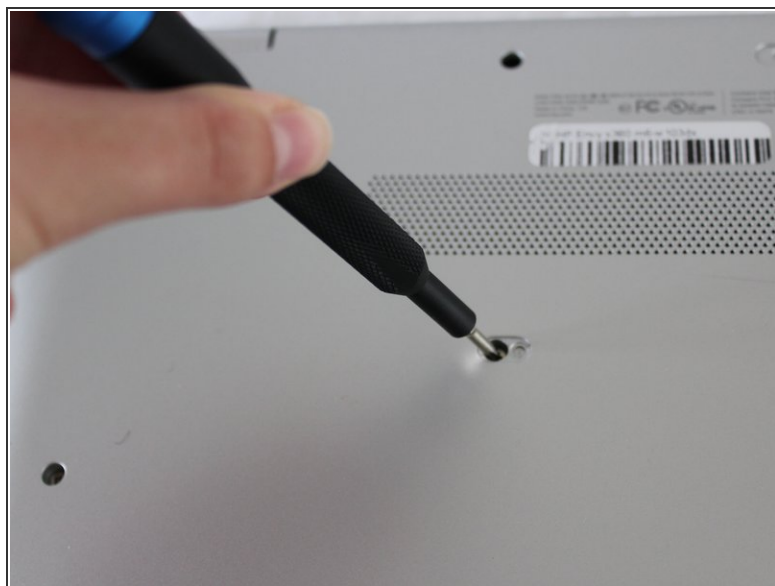
- [Anti-Static Wrist Strap](#) (1)
- [1 x Opening Picks](#) (1)
- [Phillips #0 Screwdriver](#) (1)
- [Phillips #00 Screwdriver](#) (1)

## Step 1 — Keyboard



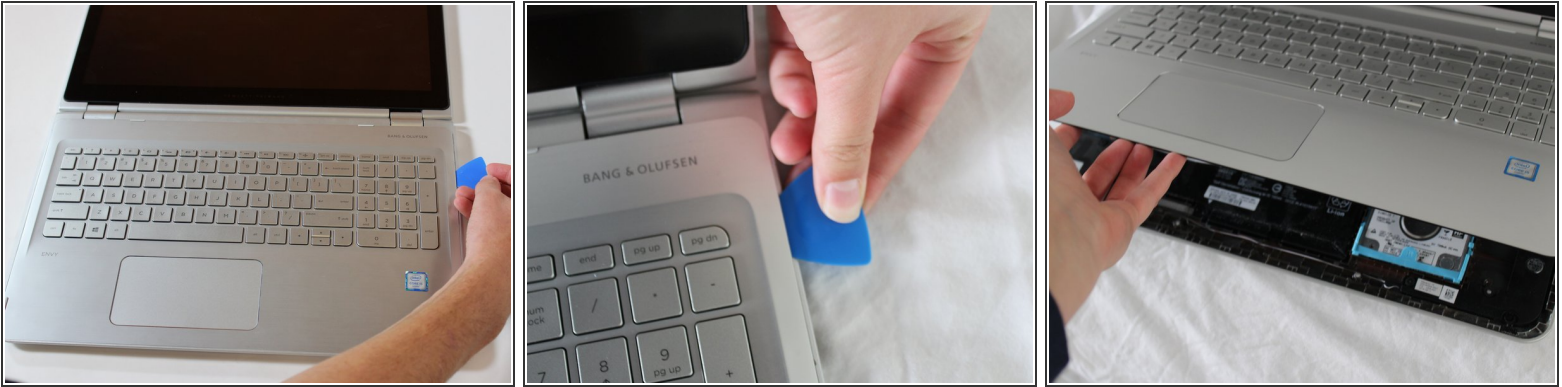
- Using an opening pick, remove the 4 rubber feet and 4 screw covers.

## Step 2




- Unscrew the twelve 6 mm screws from the bottom of the laptop using a Phillips #0 screwdriver.

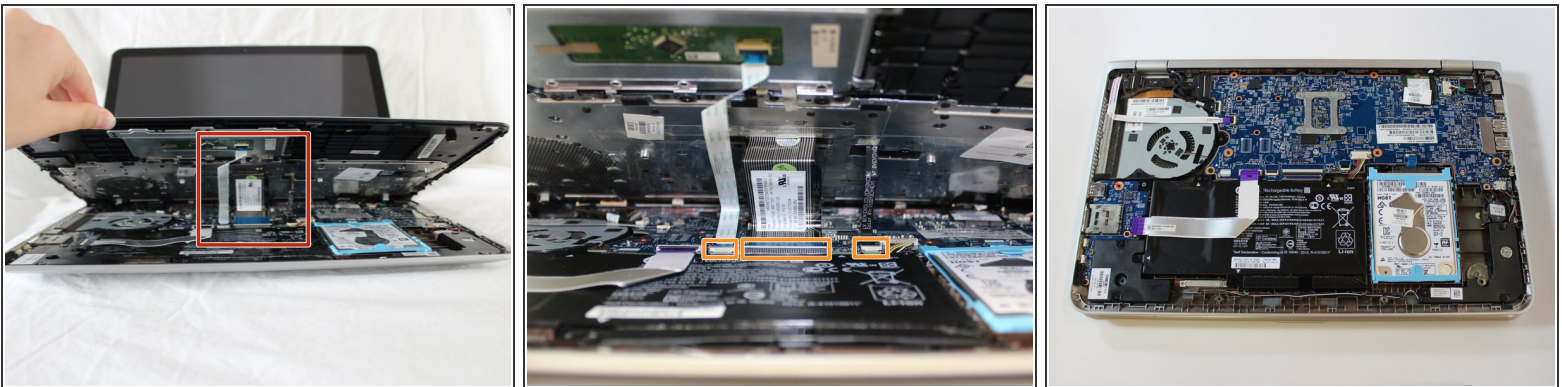
## Step 3



- Open the laptop carefully, with the keyboard face up.
- Pry around the outside of the keyboard with the plastic opening tool until the keyboard can be lifted slightly.

 When lifting the keyboard do not pull too hard. There are cables that must be disconnected before the keyboard can be removed.

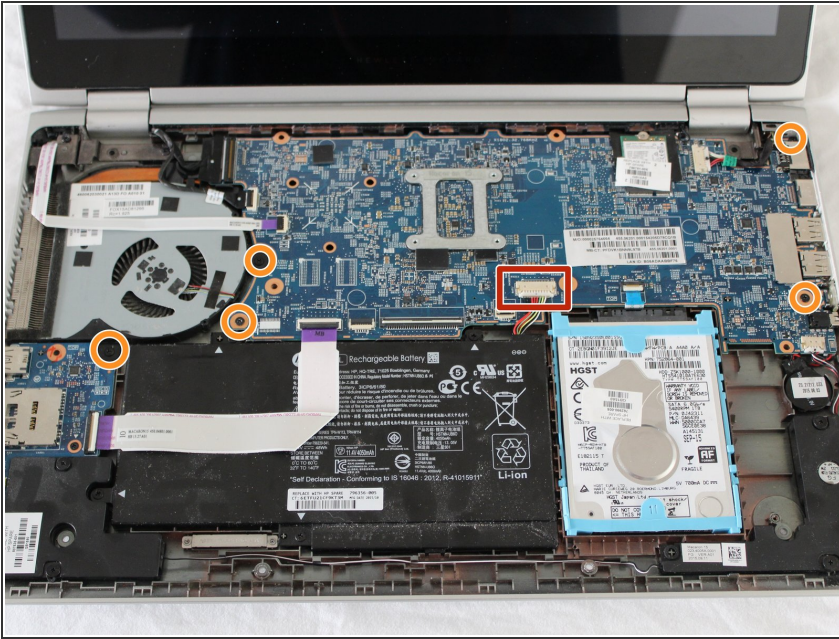
## Step 4



- Lift the keyboard until you can see the cables connected to the motherboard.
- Gently lift the tab on each [ZIF connector](#) that connects each cable to the motherboard using a spudger. Once each tab is flipped up, the corresponding ribbon cable will come out easily.
- Detach the keyboard.

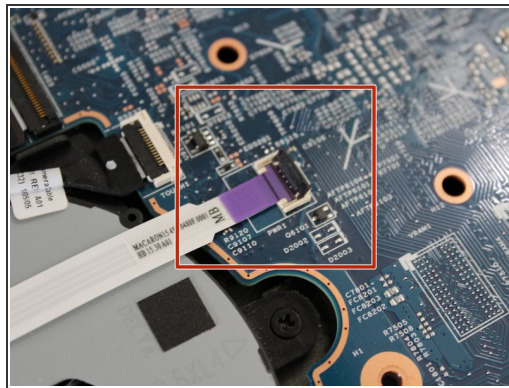
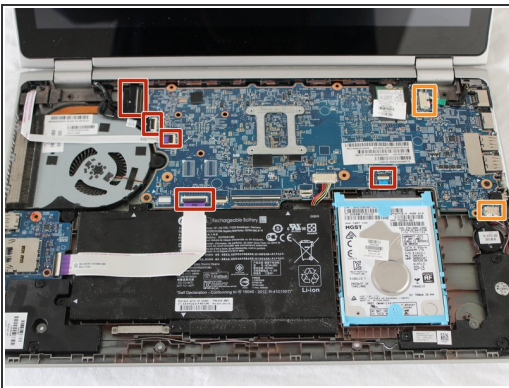


## Step 5 — Motherboard



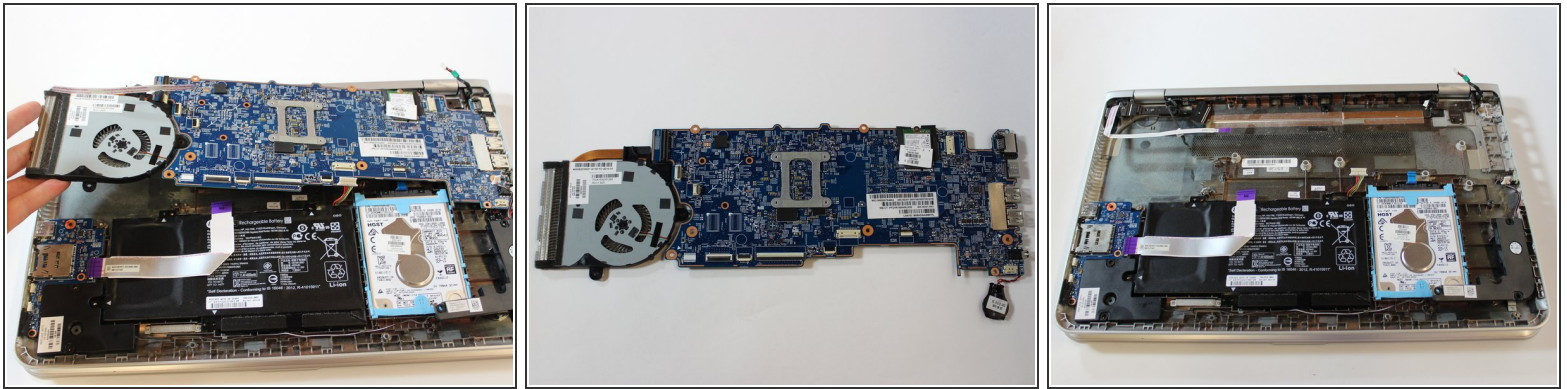
- Disconnect the pin head battery connection to remove power from the motherboard.
- Unscrew the five 4mm screws holding the motherboard in place using a #0 Phillips screwdriver.
- ⓘ It's possible the positions of the screws will be different on your board. If the motherboard resists lifting, double-check that all screws have been removed.

## Step 6



- Remove the five flat ribbon cables by gently lifting the head of the cable up and back.
- Remove the two remaining multicolored ribbon cables by pulling the white plastic head backwards.
- ⚠ Do not pull directly on the wires.
- ⓘ If the head of the multicolored ribbon cable doesn't come out, try gently wiggling it side to side as you pull.

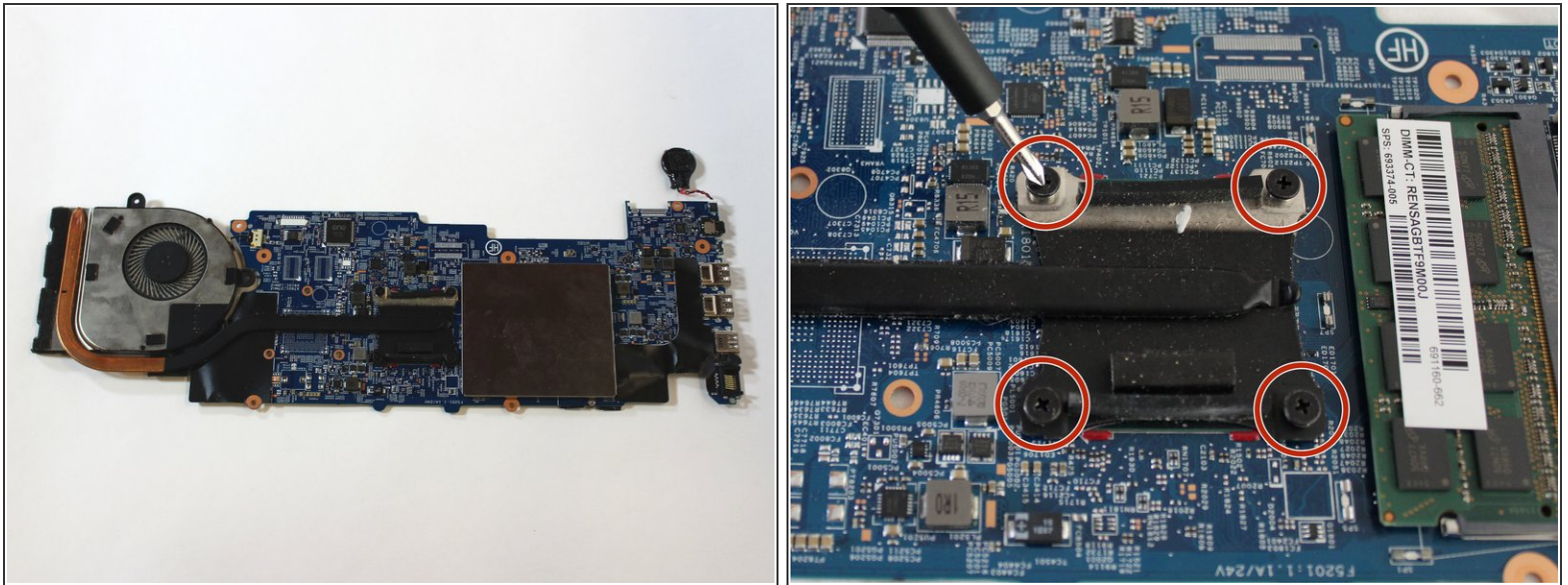
## Step 7



- Lift the motherboard up from the left side at a shallow angle.
  - Gently pull the motherboard to the left and gently wiggle it side to side until the ports on the right side of the board detach from the case.
- ⚠ Ensure the laptop is well supported, as the motherboard is a heavy component and removing it may make the laptop off-balance.

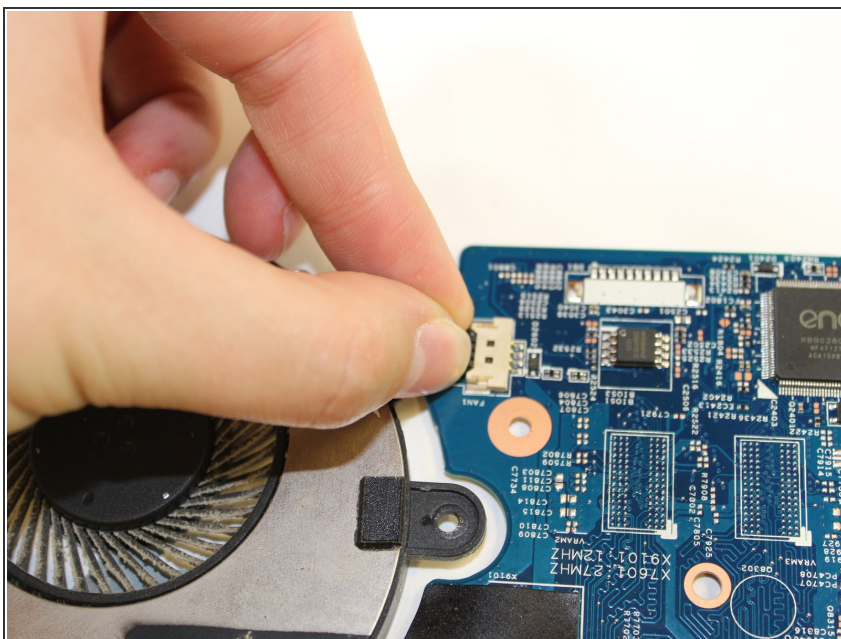


## Step 8 — Fan



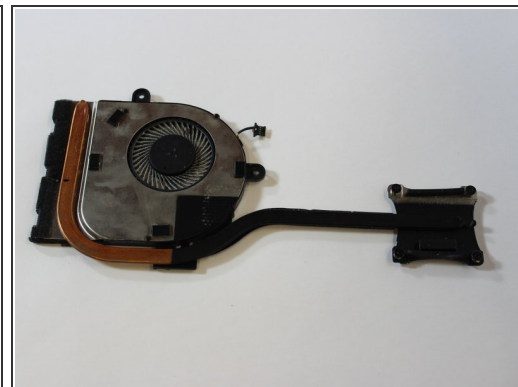
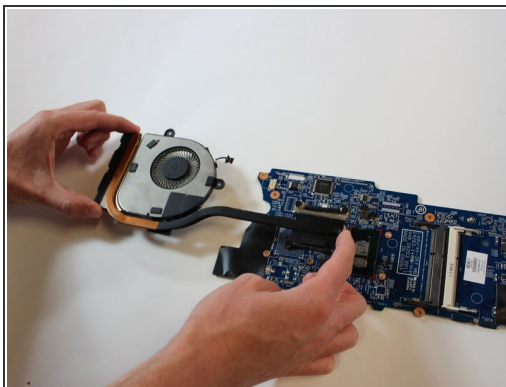
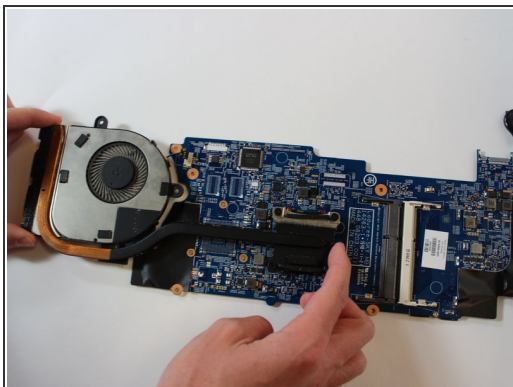
- Carefully lay the motherboard on a flat surface with the metal plate facing up.
- Unscrew the four 6.0 mm screws from the heatsink using a #00 Phillips screwdriver.
- ⓘ The screws do not detach from the component, just the motherboard.

## Step 9



- Disconnect the fan pin-head connector.

## Step 10



- Carefully lift the fan assembly and pull away from the motherboard.
- ☑ When reassembling, be sure to clean the old thermal paste from the heatsink and CPU contact points. Then, reapply new thermal paste with our [How to Apply Thermal Paste guide](#).

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