



Microsoft Surface Pro 5 Heat Sink Replacement

How to remove the Microsoft Surface Pro 5 heat sink.

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INTRODUCTION

This guide will go over how to remove the heat sink on the Microsoft Surface Pro 5. Removal of the heat sink will be necessary to provide ease of access for many of the components within the Surface Pro 5. It is identified by the four prominent copper bars that span the interior of the device, converging over the CPU. The iOpener is used in this guide, but a hair dryer or heat gun could also be used. See instructions for the iOpener [here](#).





TOOLS:

- [Tesa 61395 Tape](#) (1)
 - [Microfiber Cleaning Cloths](#) (1)
 - [Isopropyl Alcohol](#) (1)
 - [iOpener](#) (1)
 - [iFixit Opening Picks set of 6](#) (1)
 - [T5 Torx Screwdriver](#) (1)
 - [T4 Torx Screwdriver](#) (1)
 - [Spudger](#) (1)
 - [iFixit Opening Tools](#) (1)
 - [Suction Handle](#) (1)
 - [Heat Gun](#) (1)
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Step 1 — Screen



 Before you begin, discharge the Surface Pro's battery below 25%. A charged lithium-ion battery can catch fire and/or explode if accidentally damaged during the repair.

 The display is strongly glued to the frame of the device.

- To remove the display, first soften the adhesive by applying heat. You can use a heat pad, heat gun, or iOpener. In a pinch, a hair dryer can also work.

 Be careful when using a heat gun, as too much heat can permanently damage the display and/or battery.

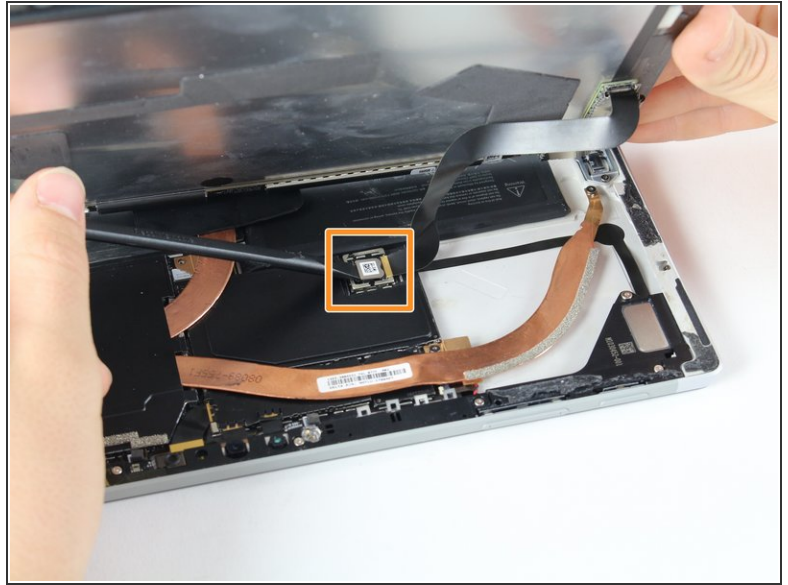
- Steadily and evenly heat the perimeter of the display until it's too hot to touch, and try to maintain that temperature for several minutes.

Step 2



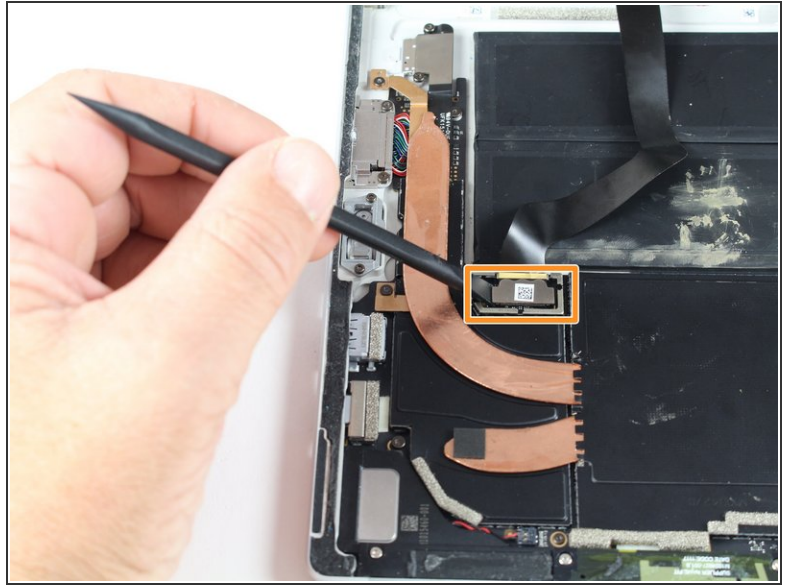
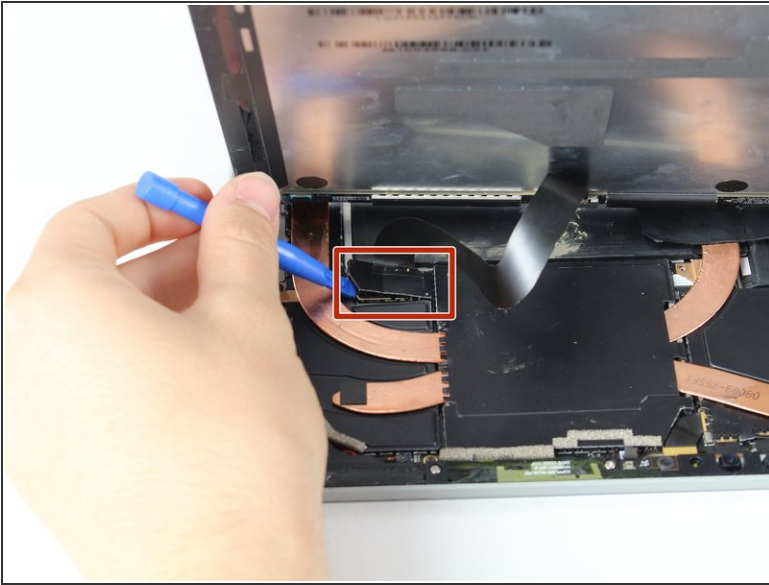
- Use a suction cup or an iSclack to pull up on the glass and create a slight gap between the glass and the metal frame.
 - ⓘ If your display is badly cracked, a suction cup may not adhere. It may help to first cover the display with a layer of packing tape. Alternatively, you can superglue your suction cup to the display.
- Insert an opening pick into the gap.
- Slide the pick around the sides and bottom of the display to cut the adhesive. Apply more heat as needed.
- ⚠ Work carefully—the glass is thin and will crack easily if you try to force it.
- Separate the top edge last. There are antennas on both sides, so be careful not to damage them. Use more heat or a bit of isopropyl alcohol to help weaken the adhesive.

Step 3



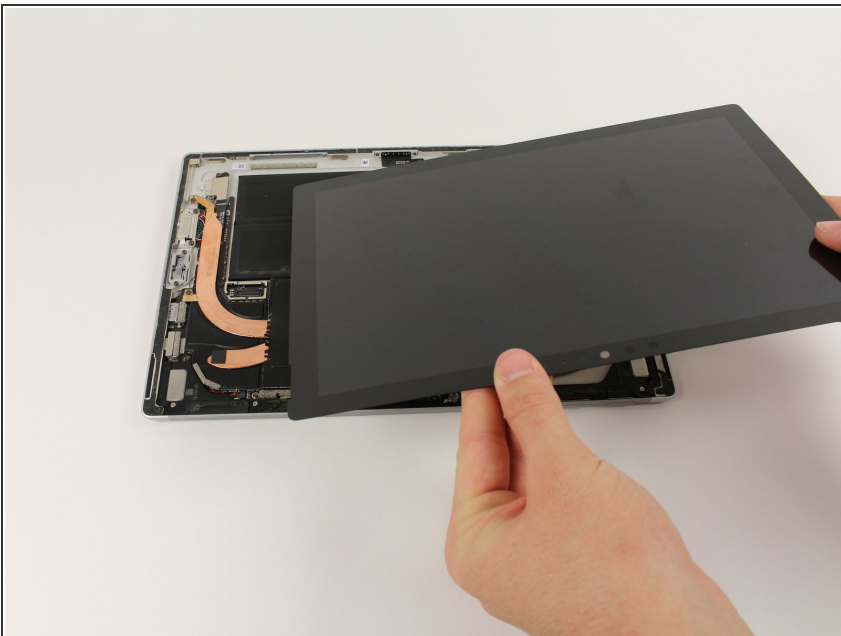
- Pry up the metal shield covering the smaller ribbon cable port using the plastic opening tool.
- Disconnect the smaller ribbon cable by prying up with the nylon spudger.

Step 4



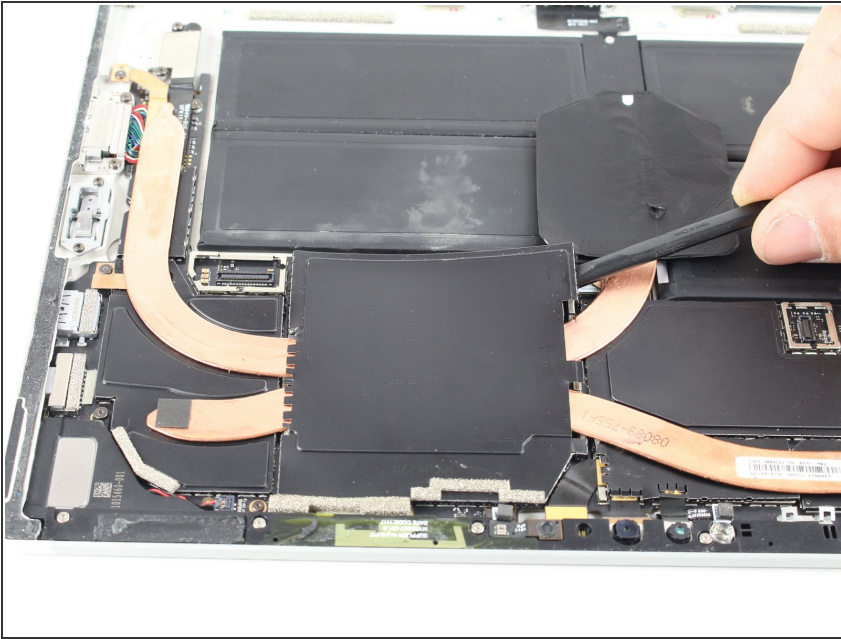
- Pry up the metal shield covering the larger ribbon cable port using the plastic opening tool and remove.
- Disconnect the larger ribbon cable by prying up with the nylon spudger.

Step 5



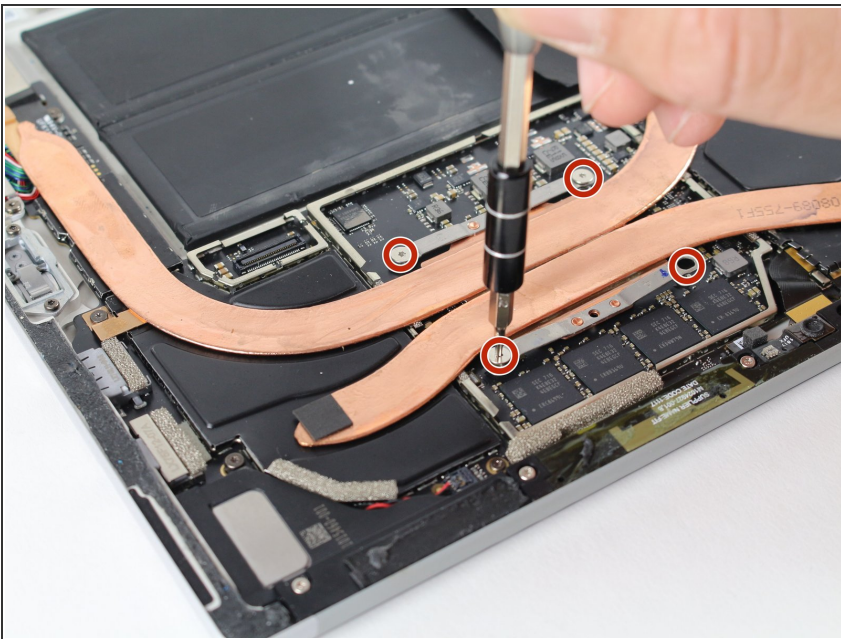
- Remove the screen from the rest of the device .
- ★ To replace the adhesive securing the screen, carefully remove any old adhesive from both the device and the back of the display. Clean and prep the surface with isopropyl alcohol and a lint-free cloth, swiping the cloth in one direction (not back and forth). Apply a strong double-sided tape, such as 2 mm [Tesa 61395](#).

Step 6 — Heat Sink



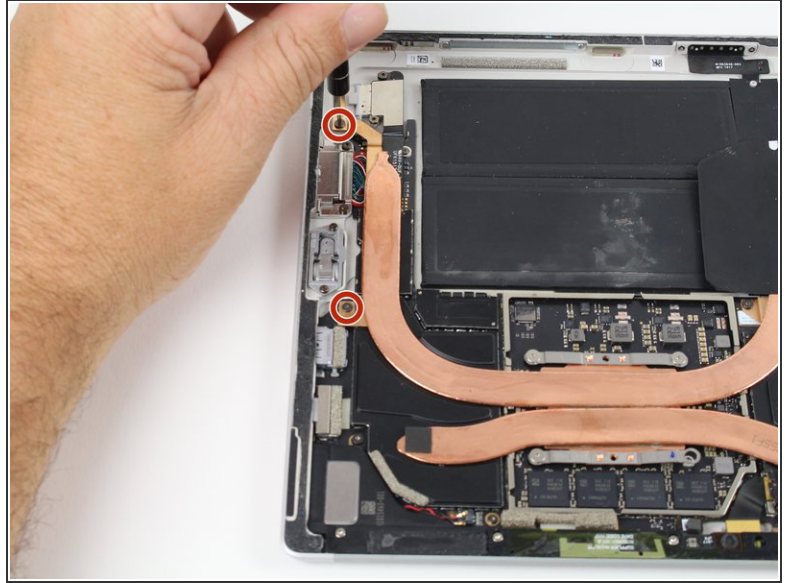
- Pry off the protective metal shield covering the main processor using either the nylon spudger or the plastic opening tool.

Step 7



- Remove the four silver Torx T5 x 3mm screws holding the heat sink onto the main processor.

Step 8



- Remove the remaining five black Torx T4 x 3mm screws holding down the heat sink assembly.

Step 9



- Remove the heat sink from the device by grabbing one of the copper bars with your fingers and lifting straight up.
- ⚠ Avoid touching the thermal paste that is on the back of the heat sink and on the front of the CPU. If you get thermal paste on your hands, wash it off with mild soap and water.

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