



Microsoft Surface Pro 5 Camera Tie Bar Replacement

How to remove the Microsoft Surface Pro 5 camera tie bar.

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INTRODUCTION

The camera tie bar mounts the front and rear cameras as well as providing additional mounting support for the right and left speakers. It also connects to the motherboard via a small ribbon cable.

TOOLS:

- [Tesa 61395 Tape](#) (1)
 - [Microfiber Cleaning Cloths](#) (1)
 - [Isopropyl Alcohol](#) (1)
 - [iOpener](#) (1)
 - [iFixit Opening Picks set of 6](#) (1)
 - [iFixit Opening Tools](#) (1)
 - [T4 Torx Screwdriver](#) (1)
 - [Spudger](#) (1)
 - [T5 Torx Screwdriver](#) (1)
 - [Tweezers](#) (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



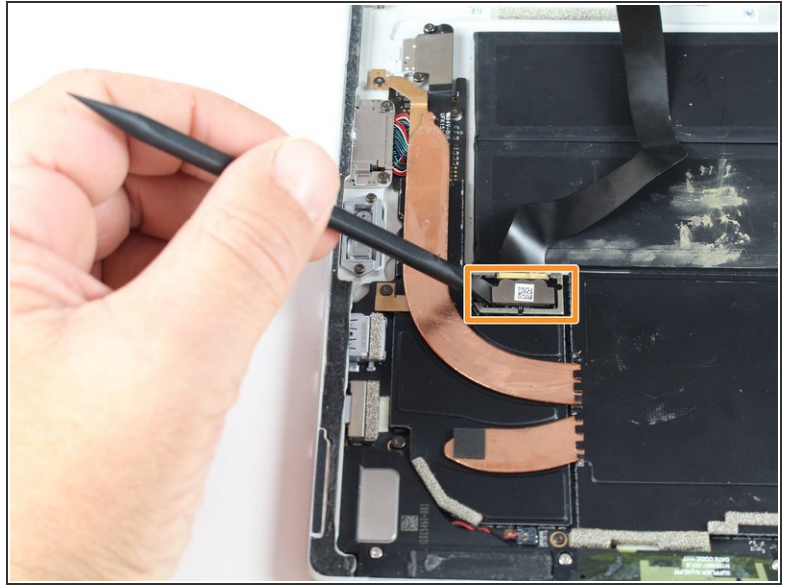
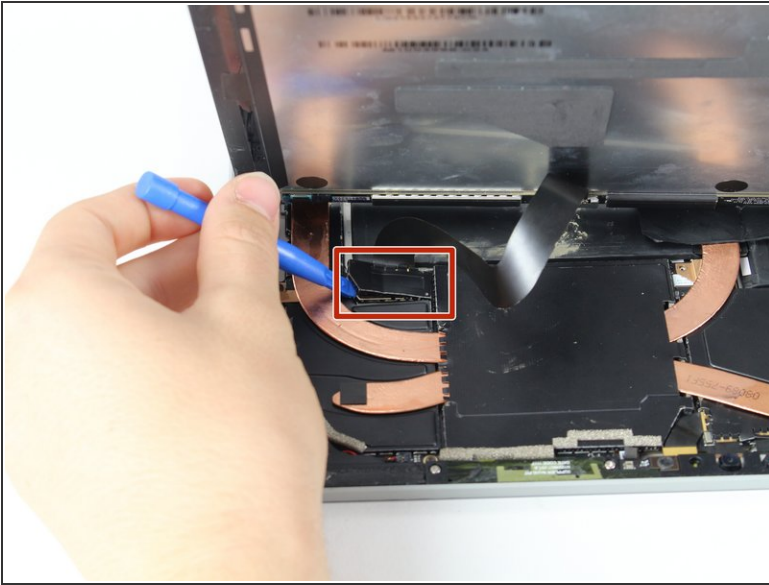
- Use a suction cup or an iSclack to pull up on the glass and create a slight gap between the glass and the metal frame.
 - ⓘ If your display is badly cracked, a suction cup may not adhere. It may help to first cover the display with a layer of packing tape. Alternatively, you can superglue your suction 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



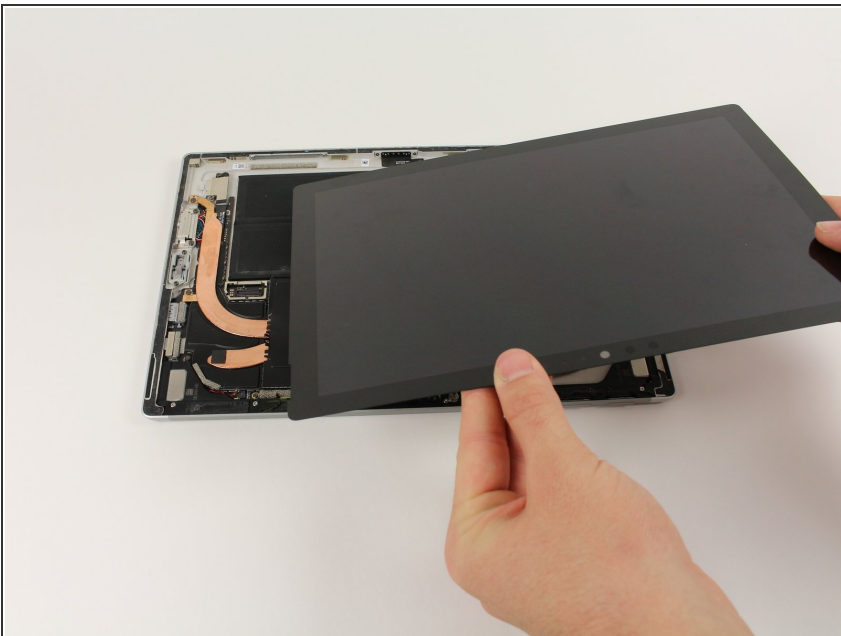
- Pry up the metal shield covering the smaller ribbon cable port using the plastic opening tool.
- Disconnect the smaller ribbon cable by prying up with the nylon spudger.

Step 4



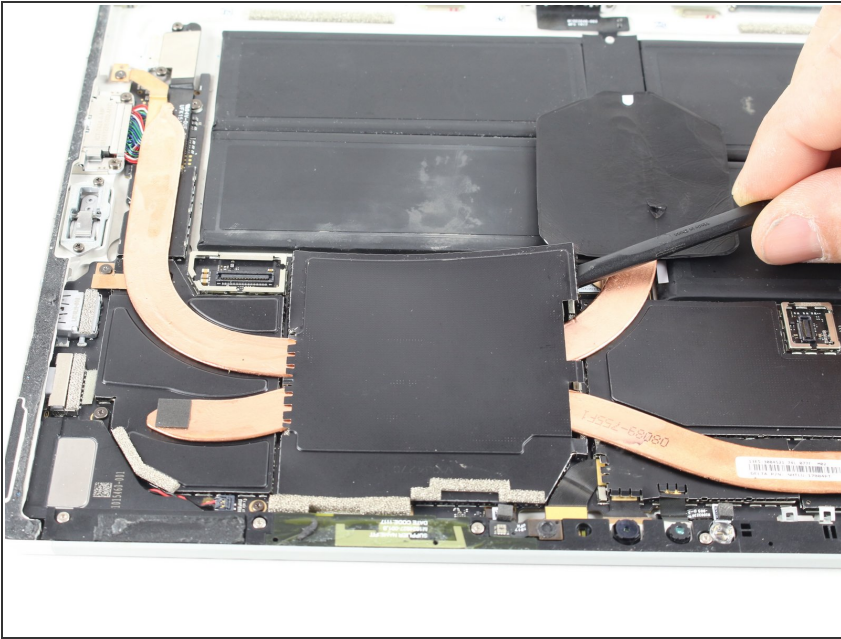
- Pry up the metal shield covering the larger ribbon cable port using the plastic opening tool and remove.
- Disconnect the larger ribbon cable by prying up with the nylon spudger.

Step 5



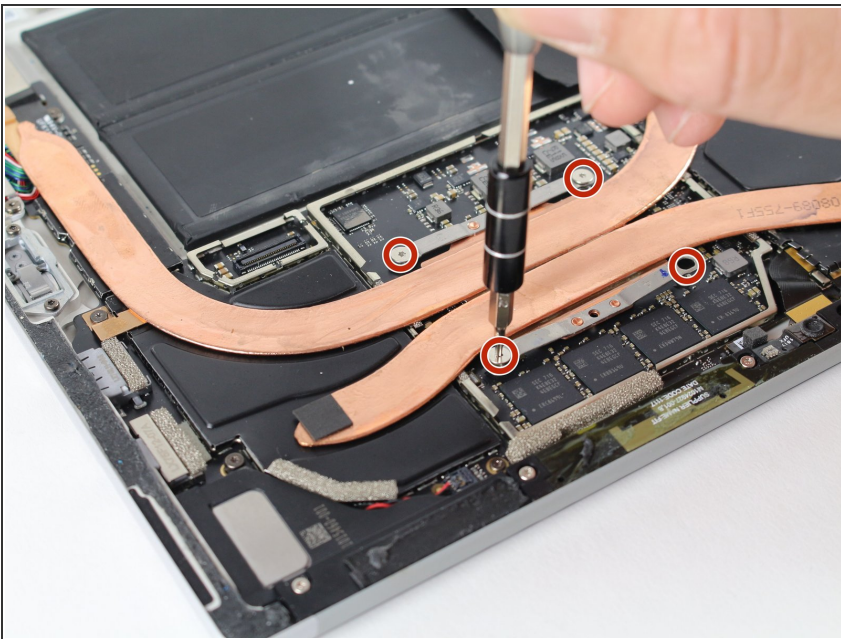
- Remove the screen from the rest of the device .
- ★ To replace the adhesive securing the screen, carefully remove any old adhesive from both the device and the back of the display. Clean and prep the surface with isopropyl alcohol and a lint-free cloth, swiping the cloth in one direction (not back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

Step 6 — Heat Sink



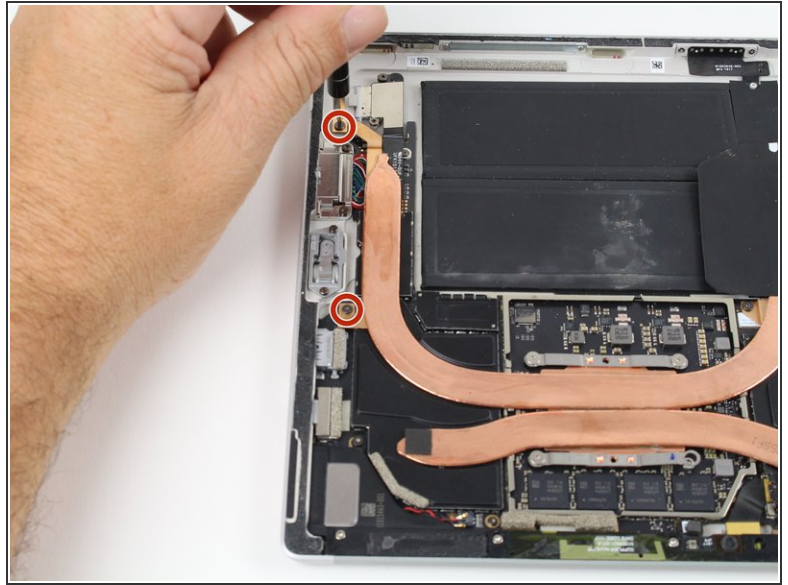
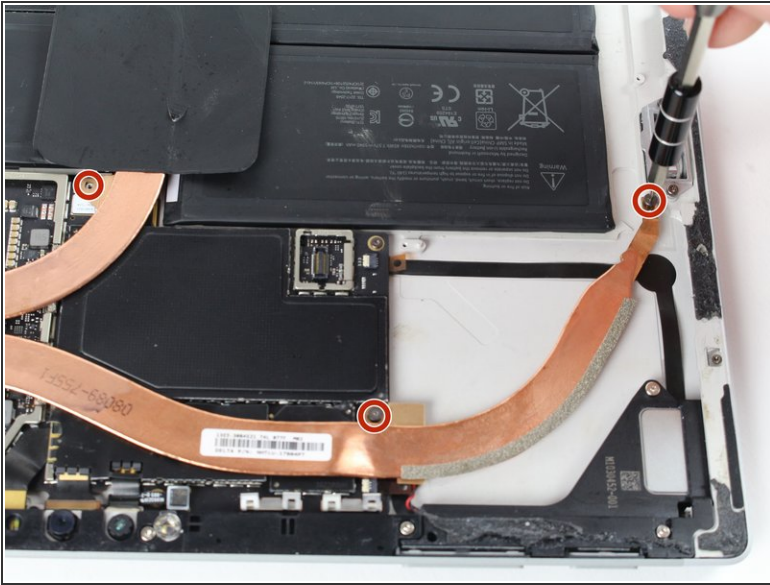
- Pry off the protective metal shield covering the main processor using either the nylon spudger or the plastic opening tool.

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.

Step 10 — Camera Tie Bar



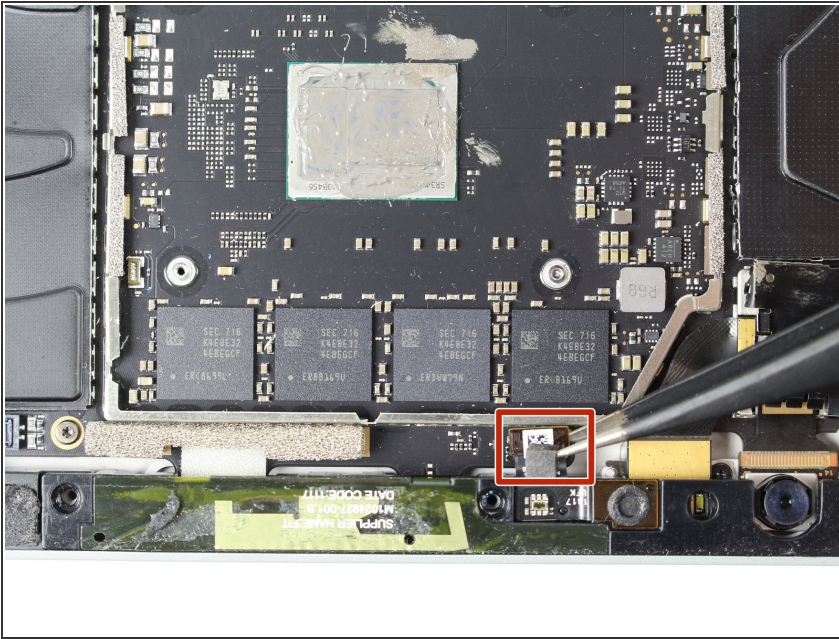
- Remove the Torx T5 x 6mm screw connecting the black tie bar to the power button/volume control/speaker assembly.

Step 11



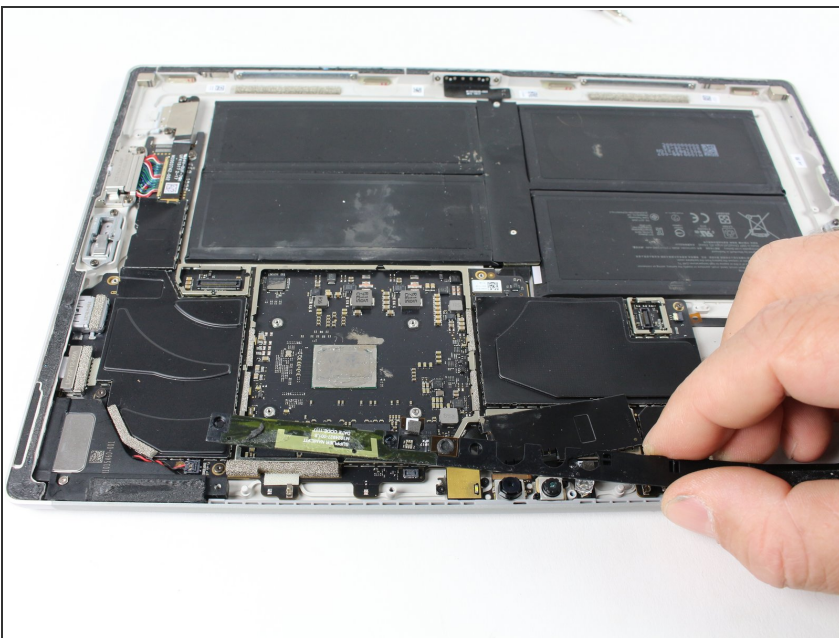
- Remove the remaining three Torx T5 x 4.5mm screws holding down the camera tie bar.

Step 12



- Disconnect the small ribbon cable connecting the camera tie bar to the motherboard by pulling up with tweezers.

Step 13



- Lift the camera tie bar off of the device.

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