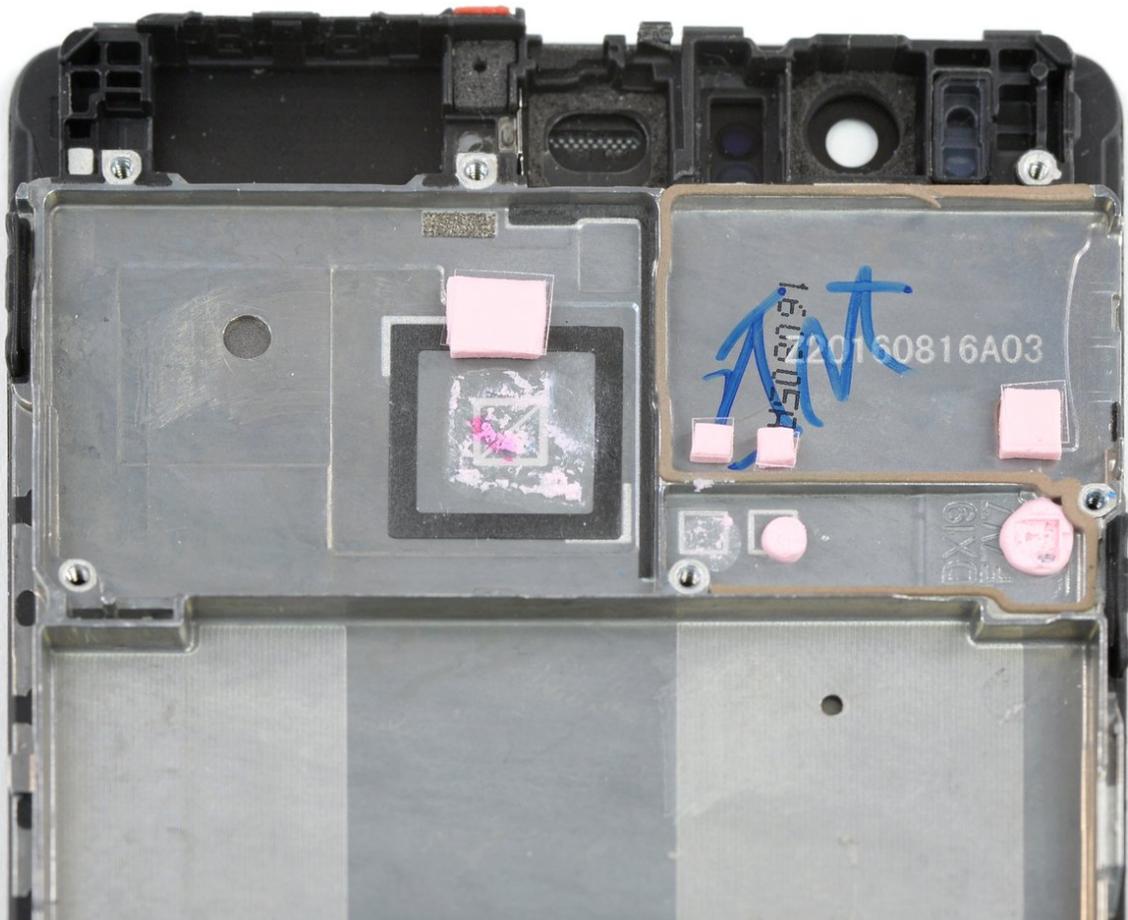




How to renew thermal pads

This guide shows you how to remove thermal pads and apply new ones.

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INTRODUCTION

Use this guide to remove thermal pads from a motherboard or frame and apply new ones.

When replacing a display assembly including the frame or you are doing a repair that needs the removal of the motherboard you might want to also replace the thermal pads.



TOOLS:

- [iFixit Opening Tools](#) (1)
- [Spudger](#) (1)
- [Utility Scissors](#) (1)



PARTS:

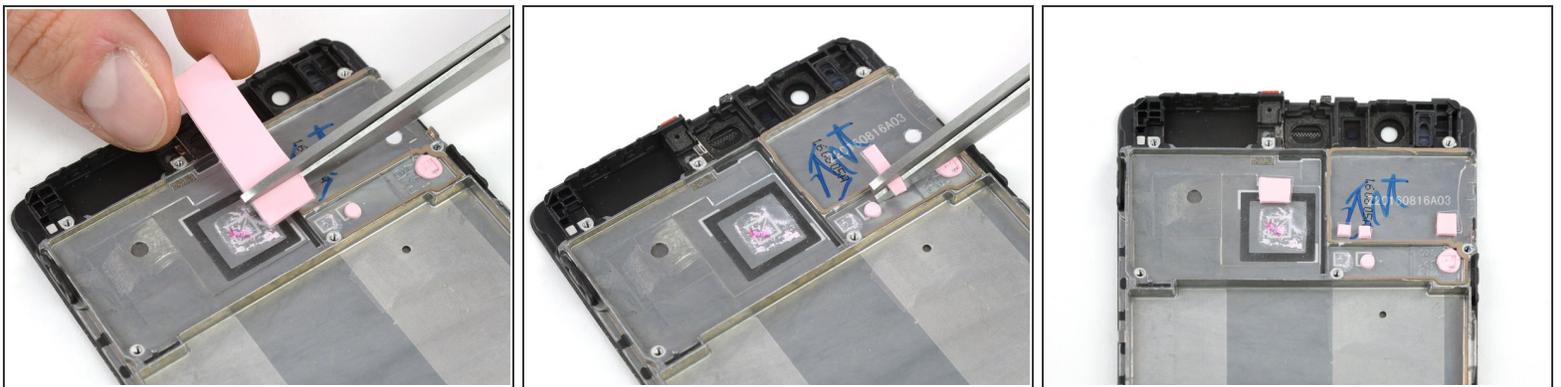
- [Thermal Pad \(2mm thick\)](#) (1)

Step 1 — locate the thermal pads



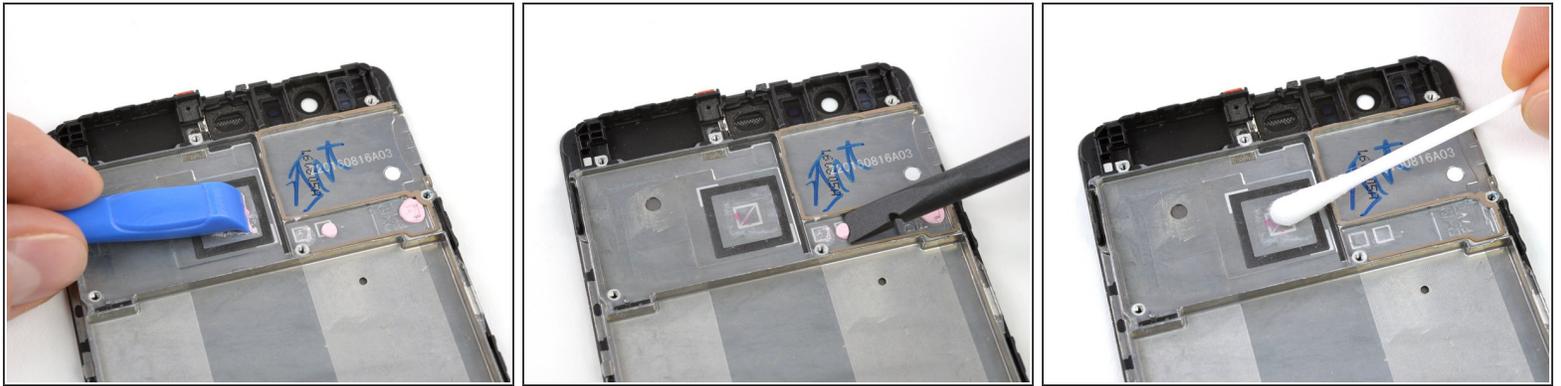
- First you want to see how many thermal pads there are and locate their position.
- The pads may either stick to the frame, the motherboard or broke in two.
 - ⓘ Remember, you just need to place new pads on either the motherboard **or** the frame.
- On some frames there may be markings giving you also an idea of the size and position for the new pads.

Step 2 — cutting the new pads



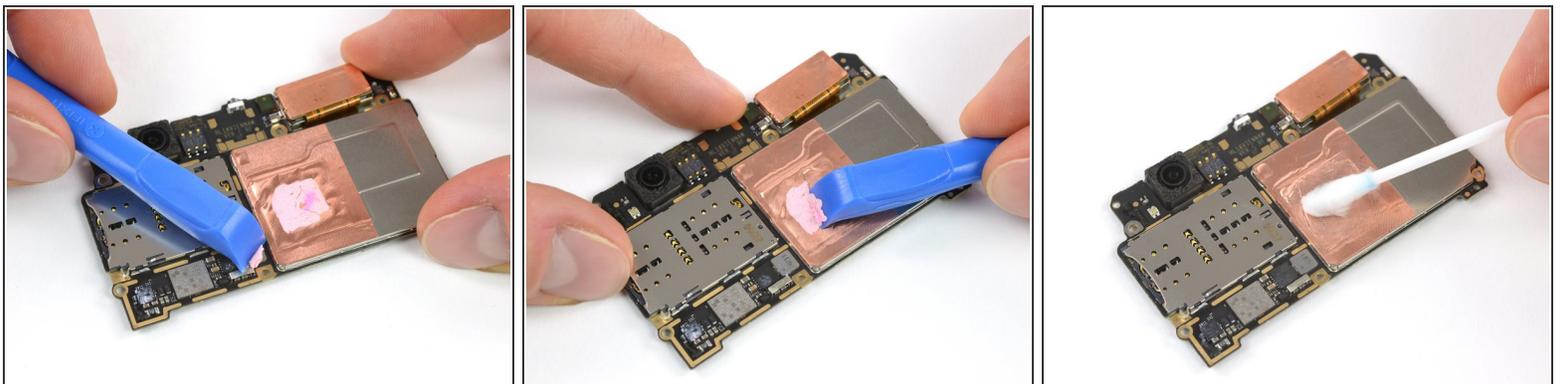
- Grab your new piece of thermal pad and cut it to the sizes you need using a pair of scissors.
 - ⓘ Some residue might cover a larger area than the marking which is due to the fact that the thermal pad will be squished down flat. In this case stick to the size of the marking for the new pad **not** the size of the residue.

Step 3 — cleaning the frame



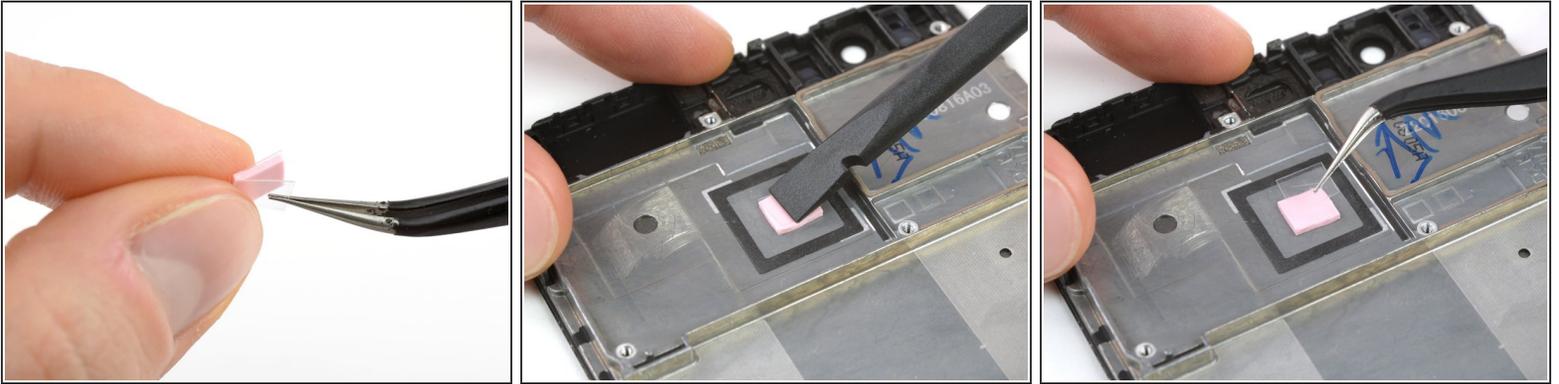
- ⓘ If you are replacing the frame (e.g. in a display assembly with frame guide) you can skip this step since your new part should be clean.
- Scrape off the old thermal pads with an opening tool or a spudger.
- If you want to go the extra mile you can clean the rest with a Q-tip and some isopropyl alcohol (>97%).

Step 4 — cleaning the motherboard



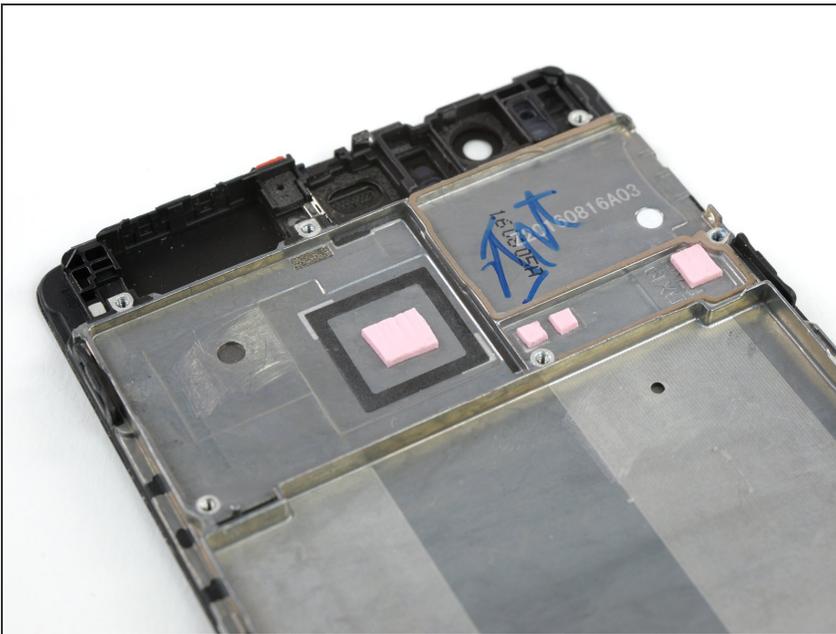
- Carefully scrape off the thermal pads and the remains with an opening tool or a spudger.
- ⚠ Apply only little pressure to not damage any components on the motherboard in case you might slip with the tool. Also make sure you do not press the thermal pads in between small components as it is very cumbersome to get them out afterwards.
- You might want to clean any remaining residue with a Q-tip and some isopropyl alcohol (>97%).
- ⓘ Be sure to only dab on the small components so the fibers of the Q-tip won't get caught.

Step 5 — apply new thermal pads



- Repeat for every thermal pad:
 - Remove the film from one side of the thermal pad.
 - Place the thermal pad on the frame and press it down a little to make sure it sticks.
 - Remove the remaining film from the thermal pad.

Step 6



- When you have placed every thermal pad and removed the top film you can reassemble your device.

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