



Dell Latitude E5500 Thermal Compound Replacement

Replacement guide for the thermal compound in a Dell Latitude E5500.

Written By: Richard Harrison



INTRODUCTION

If the user would like to reapply faulty or low quality thermal compound, this guide will give step by step information on how to achieve this.

TOOLS:

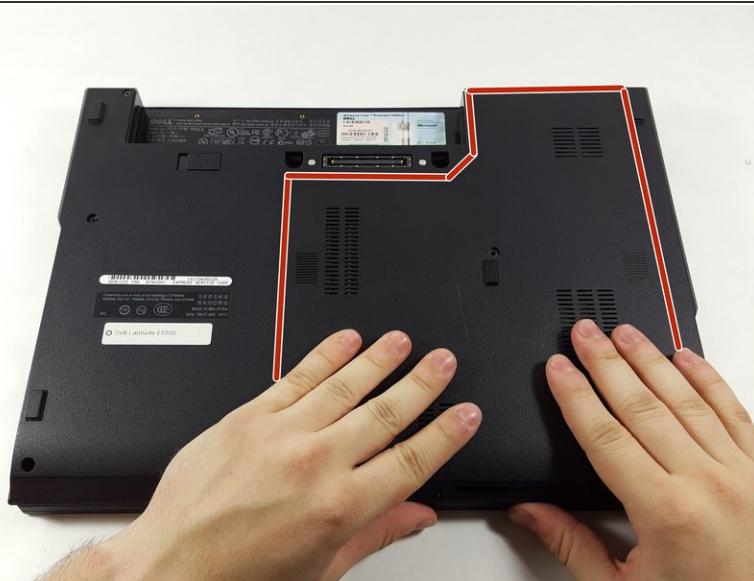
- [Phillips #1 Screwdriver](#) (1)
- [Thermal Grease](#) (1)
- [High Content Rubbing Alcohol](#) (1)
- [Cotton Swabs](#) (2)
- [Cotton Ball](#) (2)

Step 1 — Cooling Fan



- Unscrew the single 3.5mm Phillips #1 screw that holds on the bottom plate of the device.

Step 2



- Place your hands on the plate and pull it toward yourself.
- The plate will pop out of place and may then be removed.

Step 3



- The cooling fan is located near the edge of the device, on the side with the vent, and is contained within a plastic shroud.

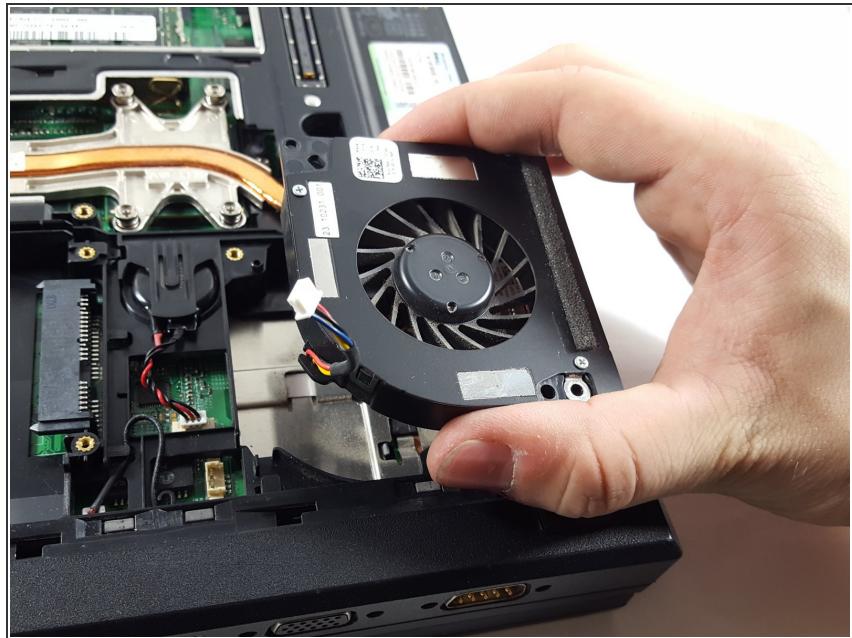
Step 4



- Unscrew the two 9mm Phillips #1 screws that secure the fan in place.
- Disconnect the fan header from the motherboard of the laptop.

⚠ The fan header has many small wires sleeved together. To avoid ripping the wires out of the connector, wiggle the connector out of place instead of pulling straight up on it.

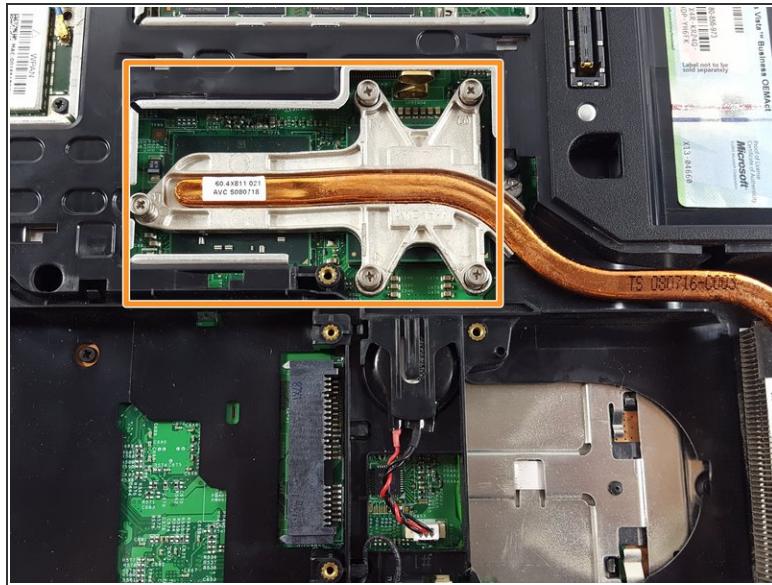
Step 5



- Remove the fan from its housing.

(i) The fan may be difficult to get out of the housing, as it is surrounded on three sides by the housing itself and the heatsink. It is not glued or taped in, however, so you can gently pull the cord you just disconnected up to remove the fan from the housing without risk of damaging the cord.

Step 6 — Thermal Compound



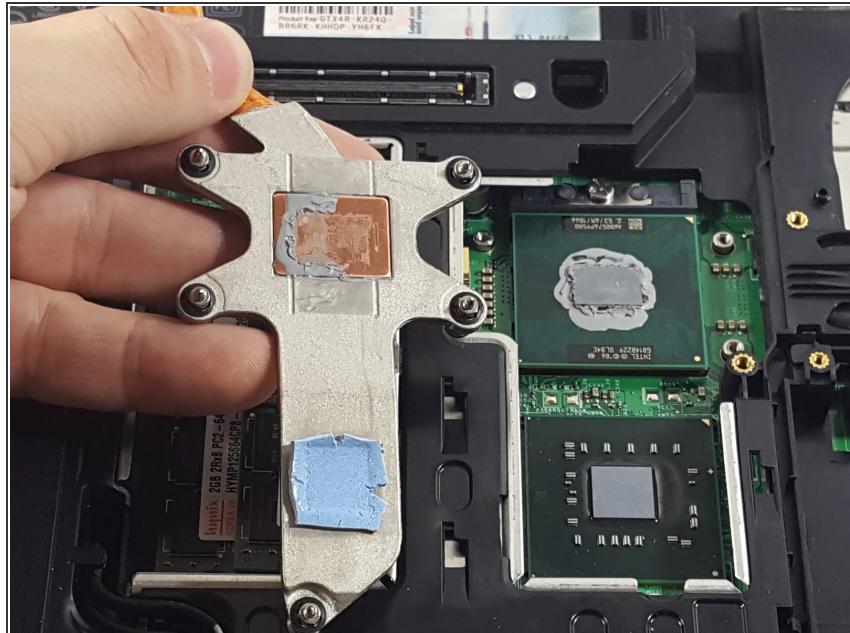
- The system's heatsink is the copper pipe and large metal assembly held down by five screws.
- Remove the five Phillips #1 screws in the order numbered on the metal assembly.

Step 7



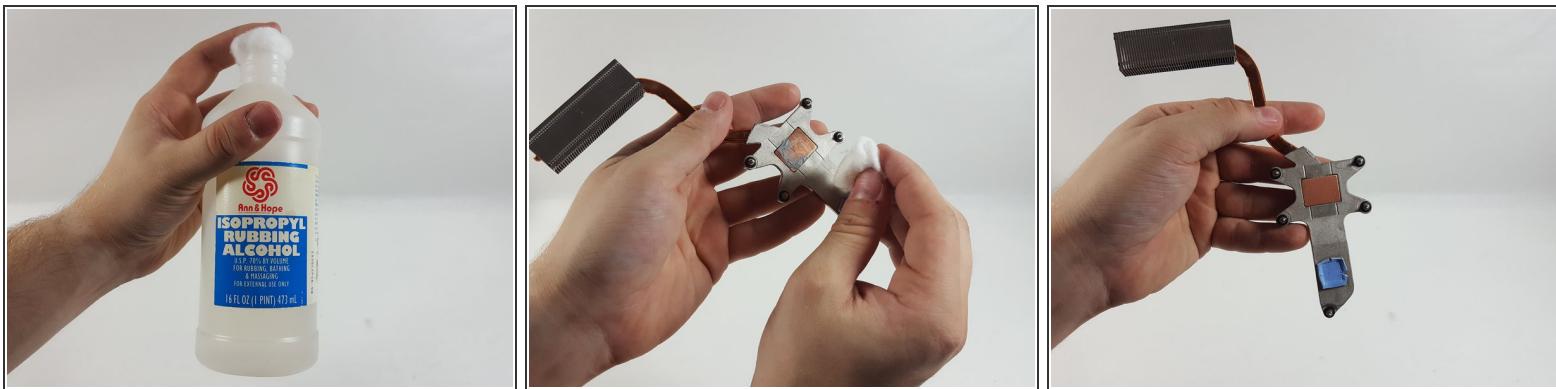
- The screws are self-retaining, meaning they will stay connected to the heatsink and will not fall out from the assembly.
- After all screws have been unscrewed, the heatsink can be removed.

Step 8



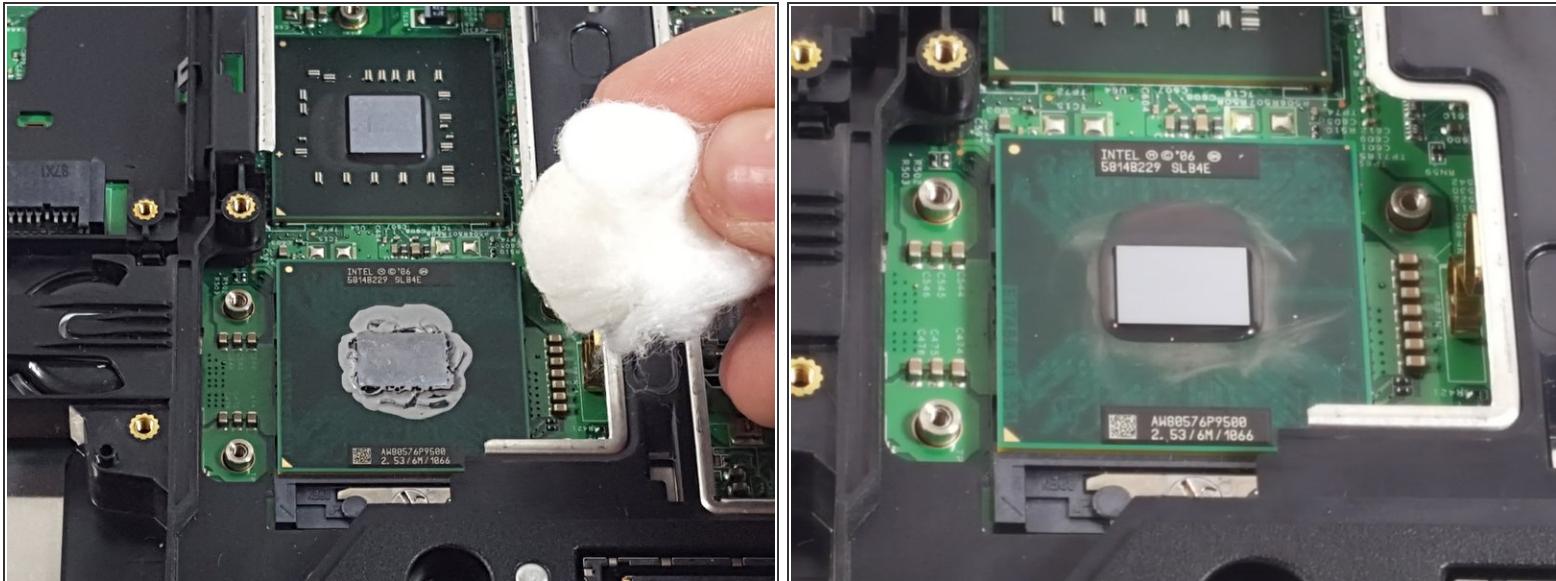
- The thermal compound is the gray material that sits on the heatsink and CPU surfaces. In order to apply new compound, the old compound must be removed
- *i* If the thermal compound is hard or crusty, the compound is either very old or is low quality.

Step 9



- Use a cotton ball or swab and apply rubbing alcohol until it is moist but not dripping.
- Scrub the heatsink surface with the cotton ball until all thermal compound is removed.
- *(i)* If the thermal compound is hard or crusty, a cotton swab will work better at removing it than a cotton ball.

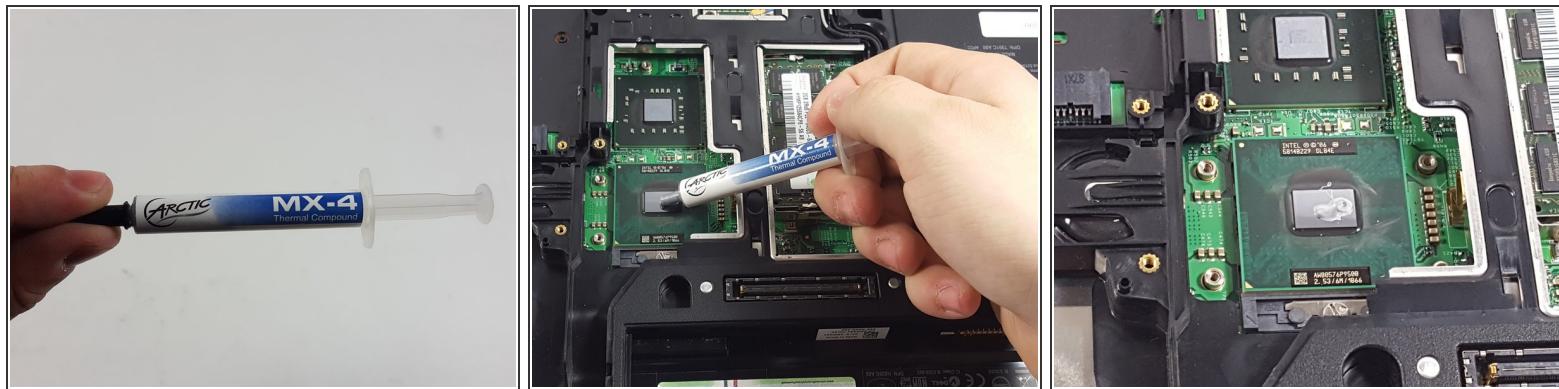
Step 10



- Reapply alcohol to a new cotton ball or cotton swab and repeat Step 9 for the CPU surface.

⚠ If you spill the alcohol onto the CPU or the rest of the motherboard, wait for it to evaporate fully before turning the system on.

Step 11



- Apply the new thermal compound onto the surface of the CPU.

(i) For this application, use a blob about the size of a grain of rice.

! Using too much compound will not adversely affect cooling, but will be wasteful and spill over to the surface of the CPU and can damage the computer. However, using too little will result in poor contact between the heatsink and CPU and result in poor cooling performance.

To reassemble your device, follow steps 1-7 in reverse order.