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Dell Latitude D820 Shuts Down For Unknown Cause.

In this guide we will be showing you how to...

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INTRODUCTION

In this guide we will be showing you how to identify potential devices or components which may be overheating causing shutdowns.

PLEASE READ: This is a temporary repair, and does not permanently correct the issue with these laptops -- the GPU itself has failed and needs replacement or a new motherboard! This will get it going short-term, but the laptop will always have problems and fail at more frequent rates until it is no longer reflowable!

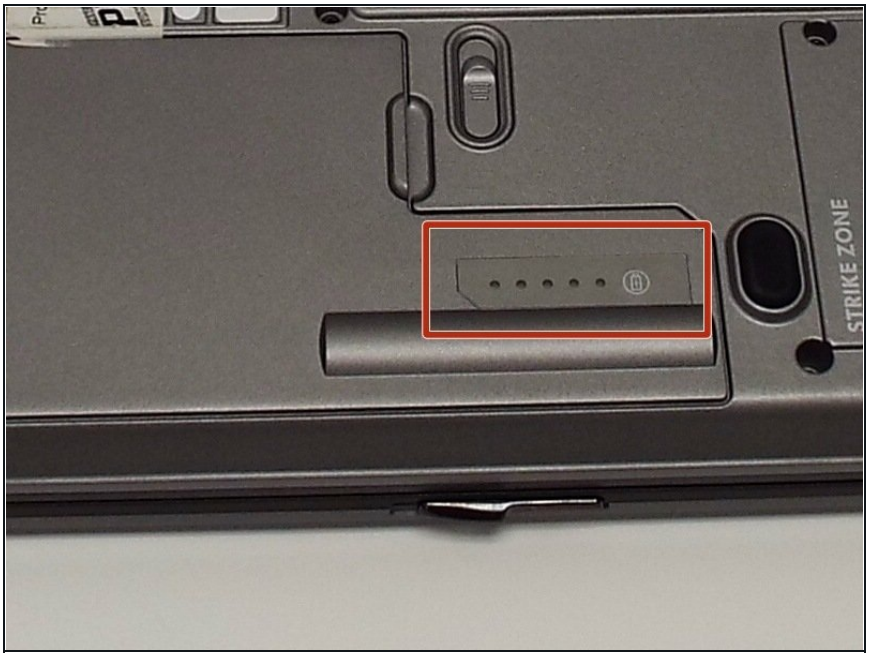
TOOLS:

Compressed Air (1)

Step 1 — Dust, Battery, Fan, Thermal Paste, GPU

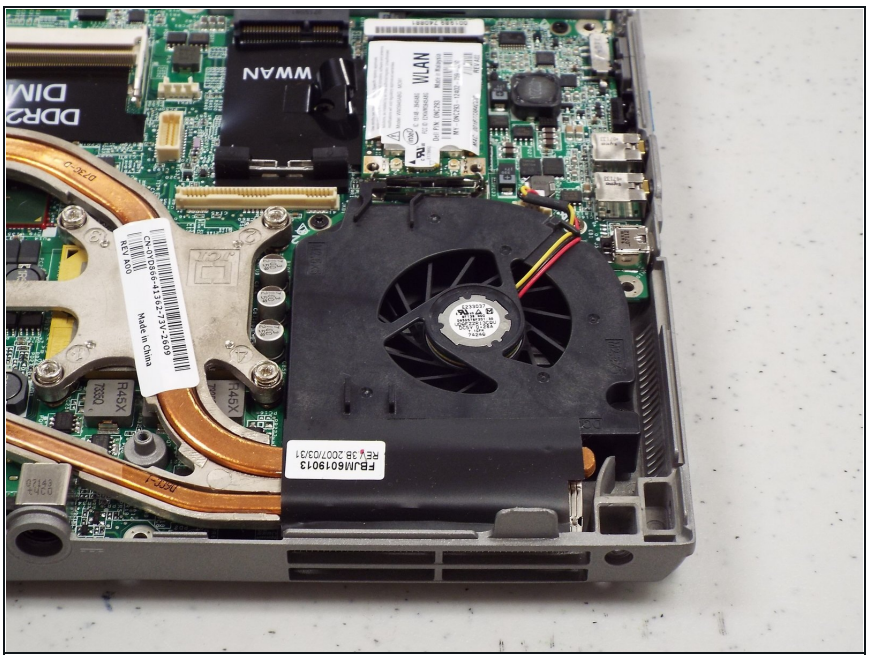
- Dust acts like an insulator and contains moisture which can affect computer components if left over time.
- Turn off computer and unplug AC adapter.
- Use a can of compressed air to remove dust from vents, fan and power supply fan.
- Removing dust should be considered routine maintenance and done on a regular basis.

Step 2



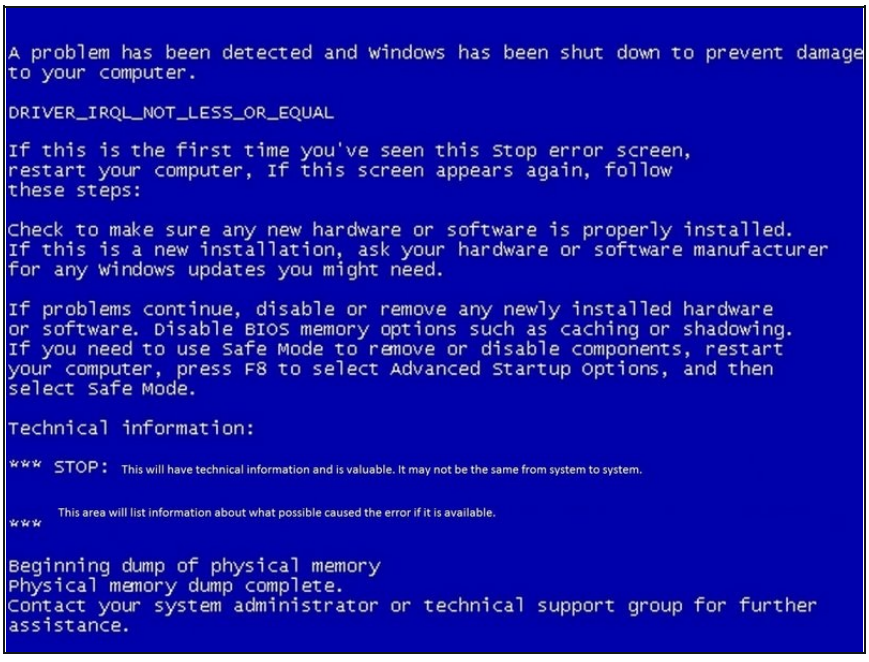
- Although a dead battery won't cause the laptop to overheat, it will cause it to shutdown unexpectedly.
- Make sure battery connection is secure.
- Make sure the Adapter is properly plugged into the wall and laptop.
- Dell batteries come with a battery life indicator located on the bottom of the laptop. Press and release the test button. Each lights represent a 20% charge. If no lights are present, replacing the battery may be necessary.
- Dell Latitude D820 Battery Replacement

Step 3



- If the fan is not working properly the laptop will overheat and shutdown.
- Look to see if fan is spinning and dust free.
- Go into Control Panel/ System/Device Manager/System Devices/and look for the fan. Right click on properties to see if the device is working properly.
- Replace fan if necessary.

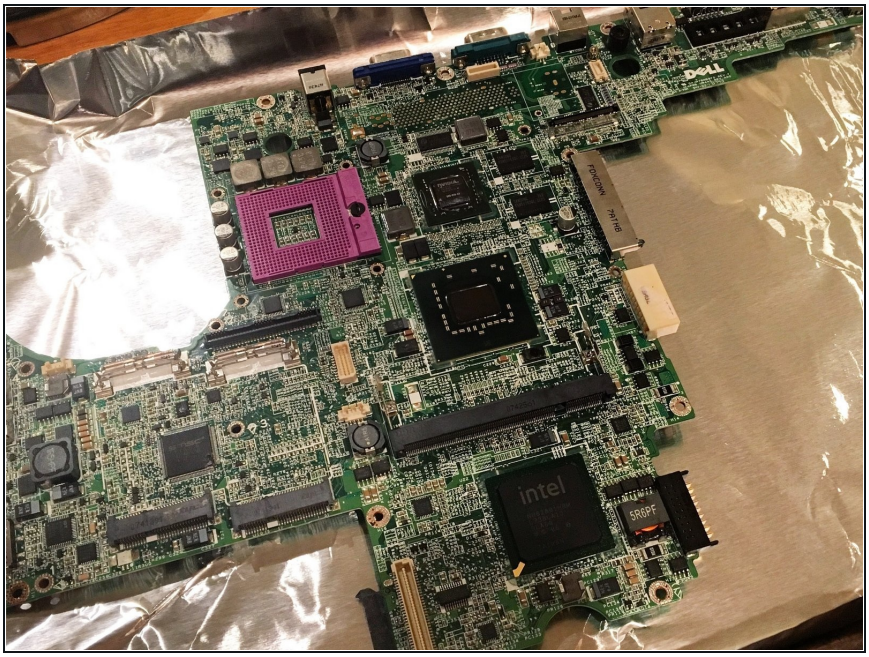
Step 4



- Blue Screen of Death (BSOD)
- BIOS - out of date temperature table can cause heat issues.
- Check the Dell website and download the latest BIOS. http://www.dell.com/support/home/us/en/1...

ⓘ This photo has been modified to express generalized message on BSOD. The two lines *** are the ones that have been modified.

Step 5 — GPU Reflow



- If you've gotten here, you most likely have an issue with your GPU due to this recall: Dell Blog Post about NVIDIA GPU Recall
- To fix this, you can try to "re-flow" the soldier on the motherboard, which should give you a little more life out of the laptop.
- Follow this guide to remove your motherboard: D820 Motherboard Removal
- Once you have remove the motherboard, clean off all of the thermal paste from the two remaining chips, one NVIDIA GPU, and another Intel.
- Also remove all stickers, foam, and plastic from the motherboard, as they will melt or catch fire in the next step
- Pre-heat your oven to 395 degrees Farenheight.
- Place the motherboard on a sheet of foil, on a baking sheet. Place into the oven for 10 minutes. Then remove and let cool

- Re-assemble laptop following motherboard steps in reverse.

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