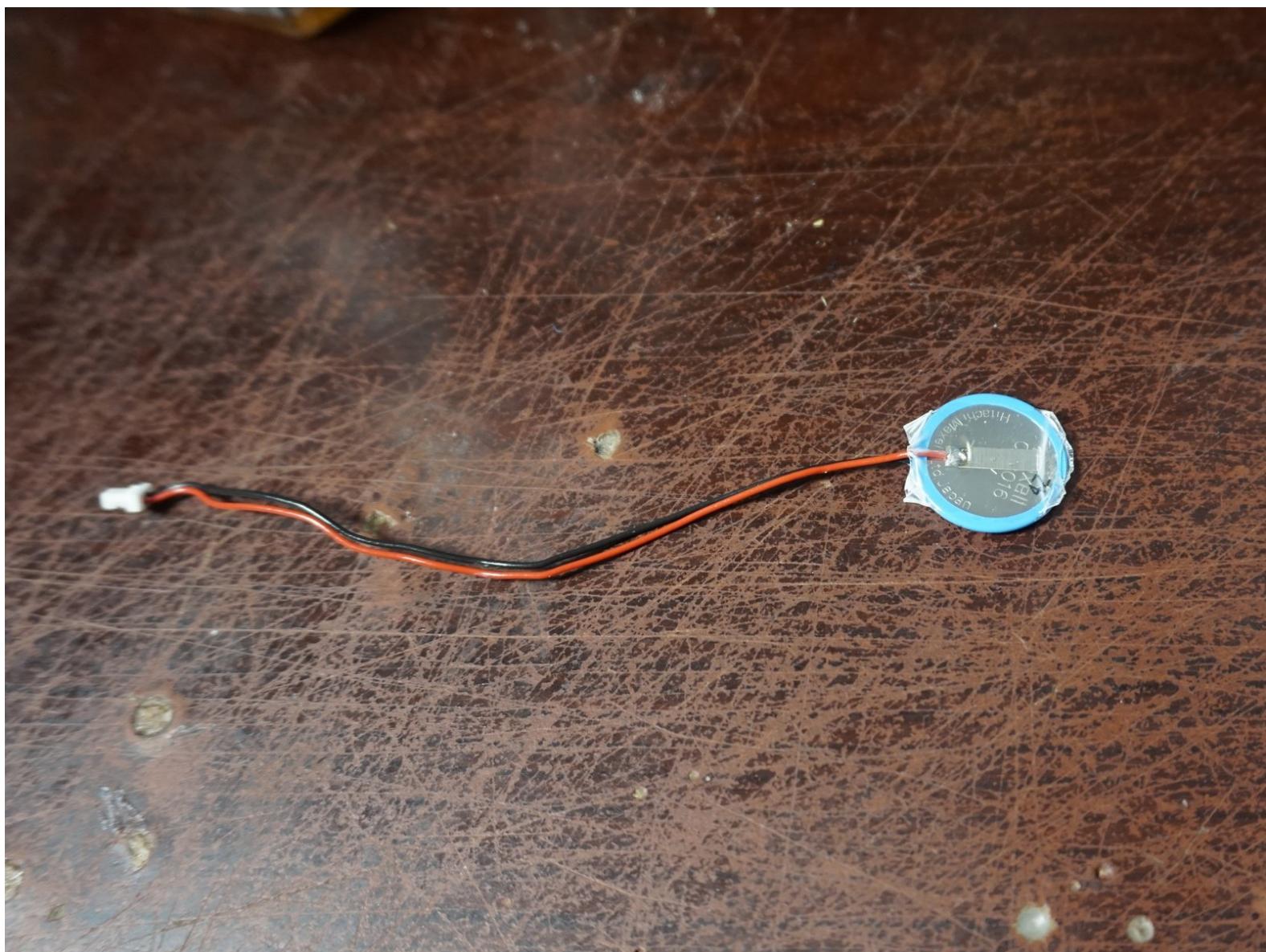




# How to rebuild a laptop CMOS battery

If your CMOS battery is dead and pre-assembled batteries are not readily available, this guide will show you how to build a replacement.

Written By: Nick



## INTRODUCTION

If your laptop has a dead CMOS battery and the OEM no longer sells new CMOS batteries (and aftermarket ones are hard to find), it is possible to take the dead battery apart and replace the cell so your laptop holds the CMOS contents again.

***Note: This procedure is only recommended for older notebooks. If a replacement with leads is available, it's better to buy a pre-assembled battery. This approach is somewhat error-prone.***

### Guide notes:

- The cell does not need to be 100% covered. However, every visible area of the cell must be protected. ***Liquid electrical tape is used to do this since it can be removed if something goes wrong.***
- Laptop disassembly is not covered. ***Every laptop is different, so research the disassembly procedure specific to yours.***
- ***This guide ONLY applies to coin cell rebuilds. Do not use this guide for other style batteries.***
- ***When adding tape to the cell, do not create a direct short.*** To avoid this, place the tabs slightly higher than the factory and cut the tape shorter than you need.

## TOOLS:

- [Aluminum tape \(1\)](#)

*Used to hold the cell leads.*

- [Utility Knife \(1\)](#)

*Used to cut the wrapping. Substitute with scissors if needed.*

- [Liquid electrical tape \(1\)](#)

*Used for cell protection.*



## PARTS:

- [CR2032 Lithium Battery \(1\)](#)

*Most common cell used.*

- [CR2025 coin cell \(1\)](#)

- [CR 2016 3V Lithium Batteries \(1\)](#)

*Less common than the CR2032, but still frequently used.*

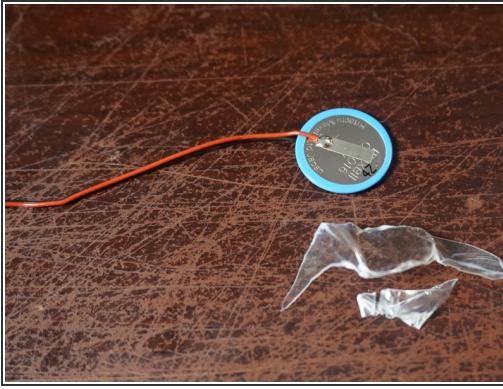
## Step 1 — Determine what battery you need



**(i)** Most laptops use a CR2016/2032 cell.

- Take the battery apart and check out what cell you need. This may be difficult depending on the wrap used.

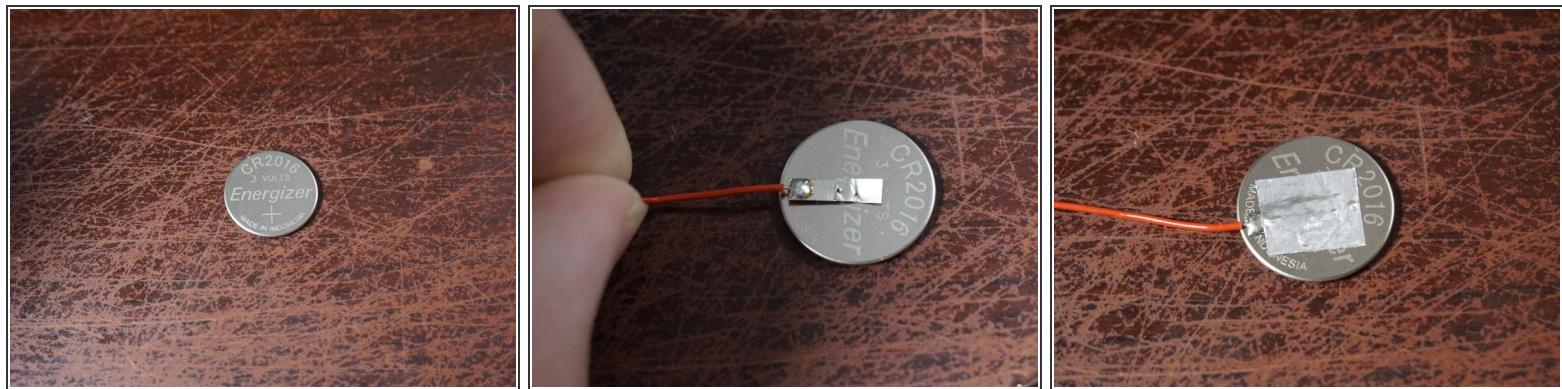
## Step 2 — Disassemble the dead battery



**⚠ If you break the leads, a new battery will need to be purchased.**

- After purchasing a battery, disassemble the CMOS battery. **Use caution not to bend the tabs a lot. Too much damage may make them unusable.**
- Break the tabs off of the old battery. Discard or recycle the old battery depending on your local laws.

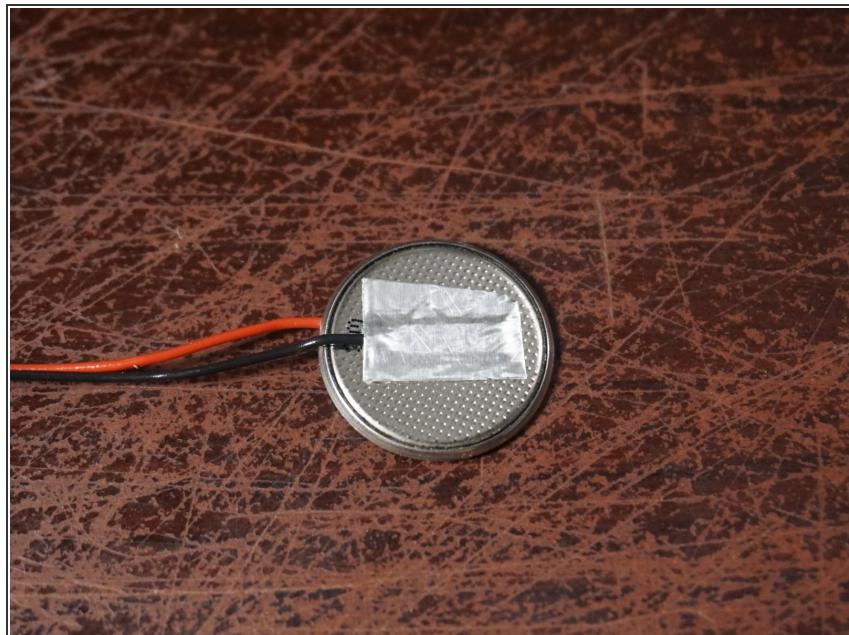
### Step 3 — Match the polarity and tape the leads onto the new cell



**⚠ Do not use too much tape. This may create a short (and explosion!)**

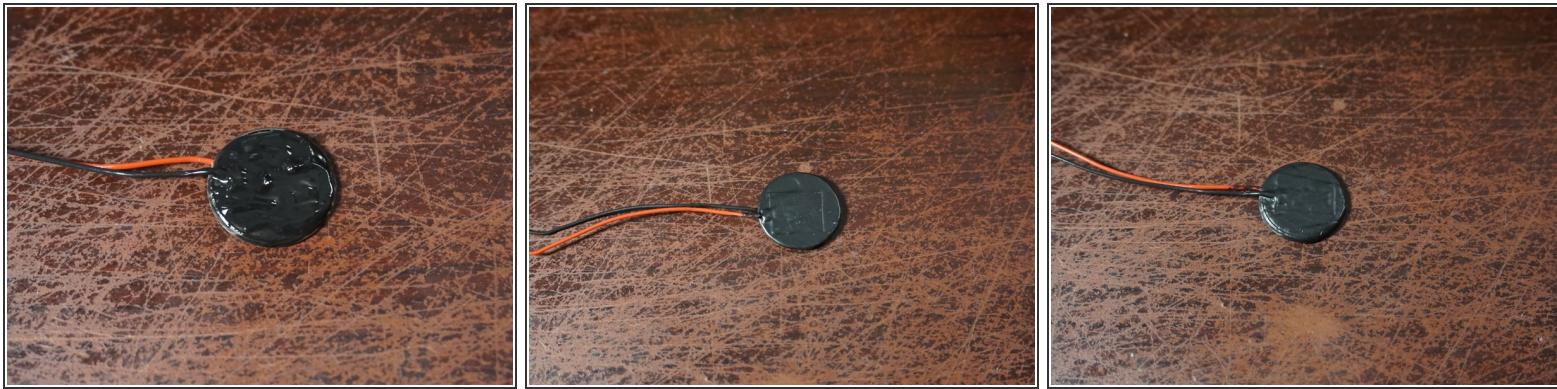
- After the polarity has been matched, tape the leads to the new cell. Do this for both sides. **Start on the + side and cut the tape to fit comfortably. Doing this side first reduces the risk of error.**

### Step 4 — Tape guidance (Negative)



**⚠ To place the negative tab safely, try and keep it as close as possible to this example image.**

## Step 5 — Apply liquid electrical tape



*(i) Perfect coverage is not required. Focus on covering the major parts of the battery.*

- After verifying both leads are securely held onto the new cell, apply liquid electrical tape to the battery. **2 thin coats are recommended. If applied thick, only use one.**

After building the replacement cell, install it in the notebook. Verify the battery works by setting the BIOS, powering it off and then removing the battery/AC adapter. **If the CMOS memory is retained, your battery works.**