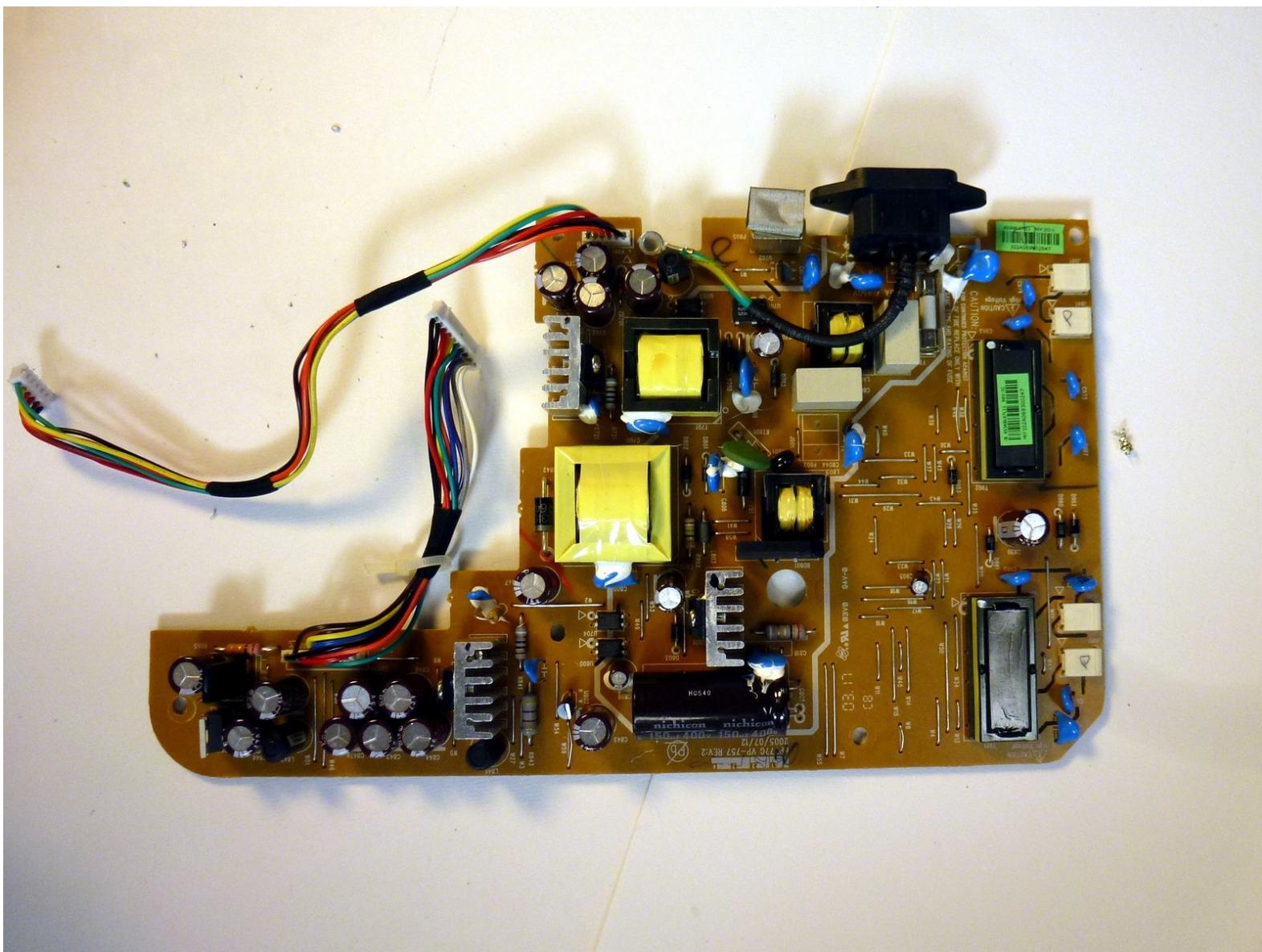




NEC LCD1770NX Capacitor Replacement

Replacement of a capacitor on the power supply circuit board.

Written By: Charlie Mohr



INTRODUCTION

There are many capacitors on the power supply board that control the amount of power delivered to the monitor. If a capacitor is swelling at the top or appears to have burst, it may need to be replaced.

TOOLS:

- Phillips #2 Screwdriver (1)
- Soldering Workstation (1)

Step 1 — Stand



- Place the monitor face down on a clean, flat surface.

Step 2



- Firmly remove the back panel of the stand by pulling it up and away from the monitor.

Step 3



- Unscrew the two 6mm Phillips PH2 screws to detach the stand enclosure from the stand.

Step 4



- Firmly grasp the stand enclosure with your hand and slide it to base of stand.

Step 5



- Unscrew the two 14.5mm Phillips PH2 screws holding the stand to the monitor.

Step 6



- Lift the stand straight up to remove it.

Step 7 — Monitor Enclosure



- Place the monitor screen face up.
- Pull the frame off by placing your fingers on the inside of the frame and pulling out and up, the frame should snap off.
- Continue your way around the screen.

Step 8

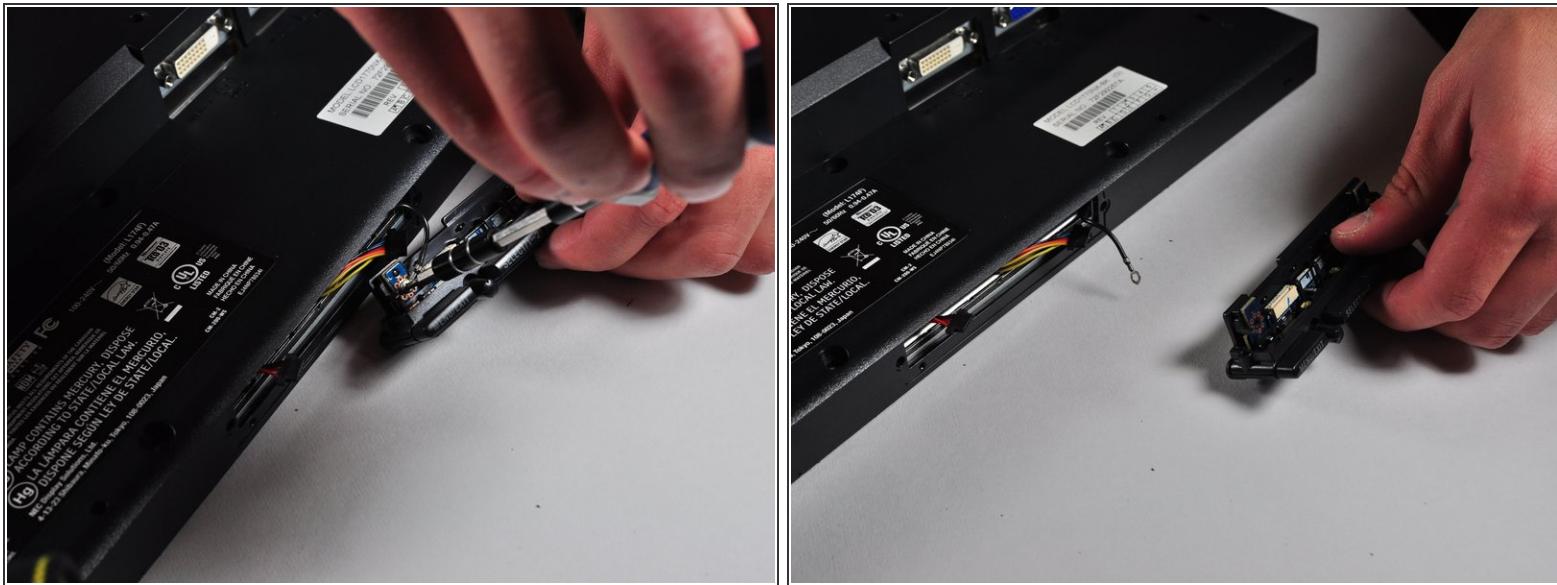


- Unscrew the two 7mm screws from the bottom of the button assembly.

⚠ Do not pull the button assembly out too quickly or with too much force! Damage to the wires can occur.

- Pull the button assembly out a few inches and unplug the colored cables.

Step 9



- Unscrew the gold colored 7mm Phillips PH000 screw holding the button assembly to the monitor.
- Remove the button assembly from the monitor.

Step 10



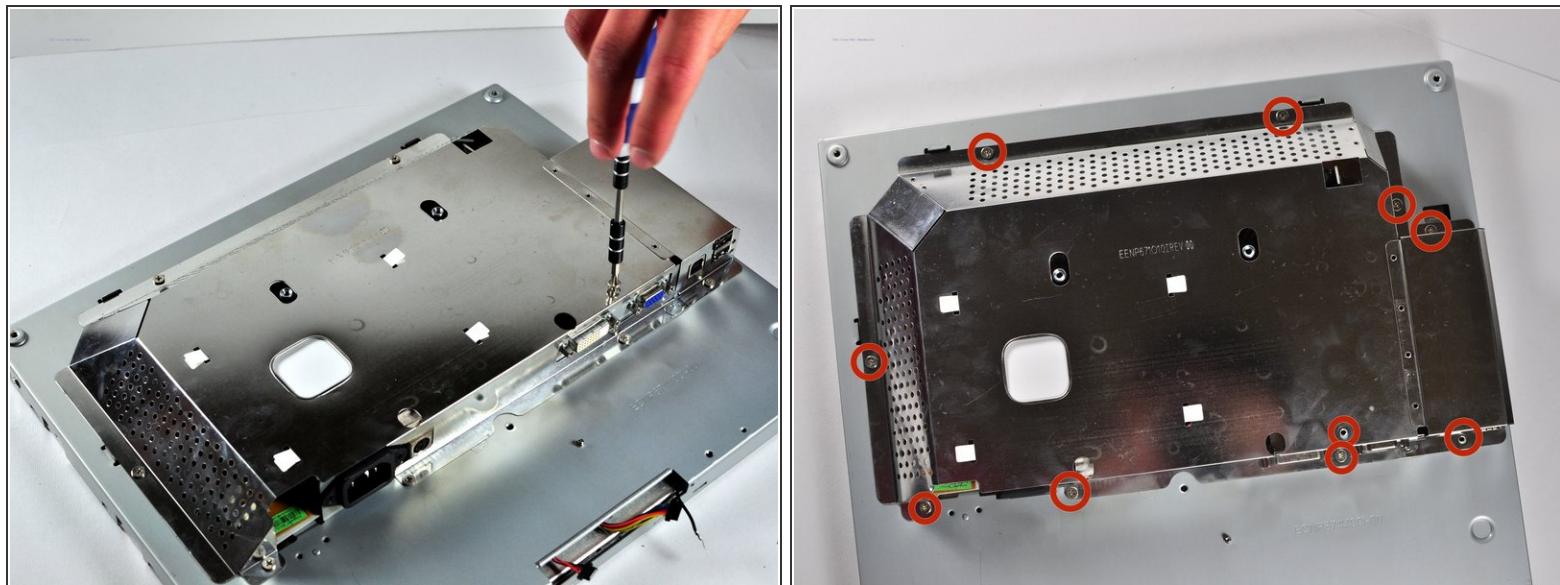
- With the monitor face-down, unscrew the 5 7mm Phillips PH2 screws around the outside of the enclosure.

Step 11



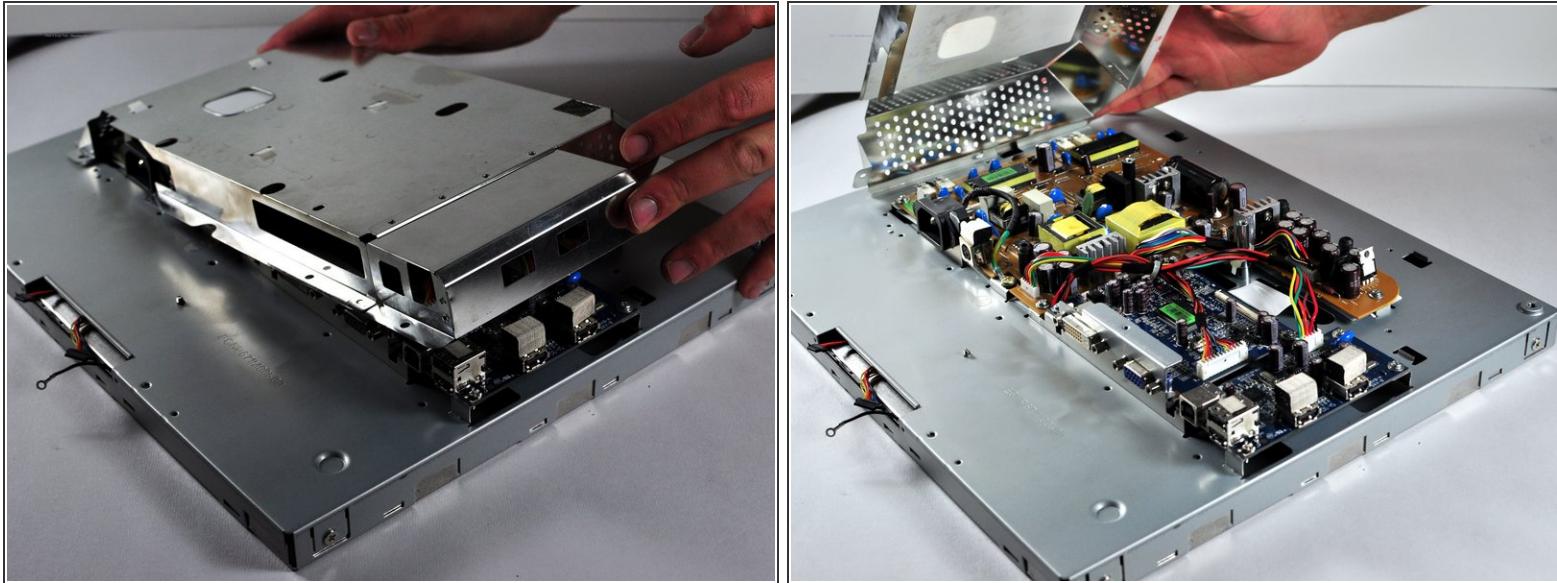
- Unscrew the 2 14.5mm Phillips PH2 screws located on the raised center of the enclosure.
- Carefully pull the enclosure off the monitor.

Step 12



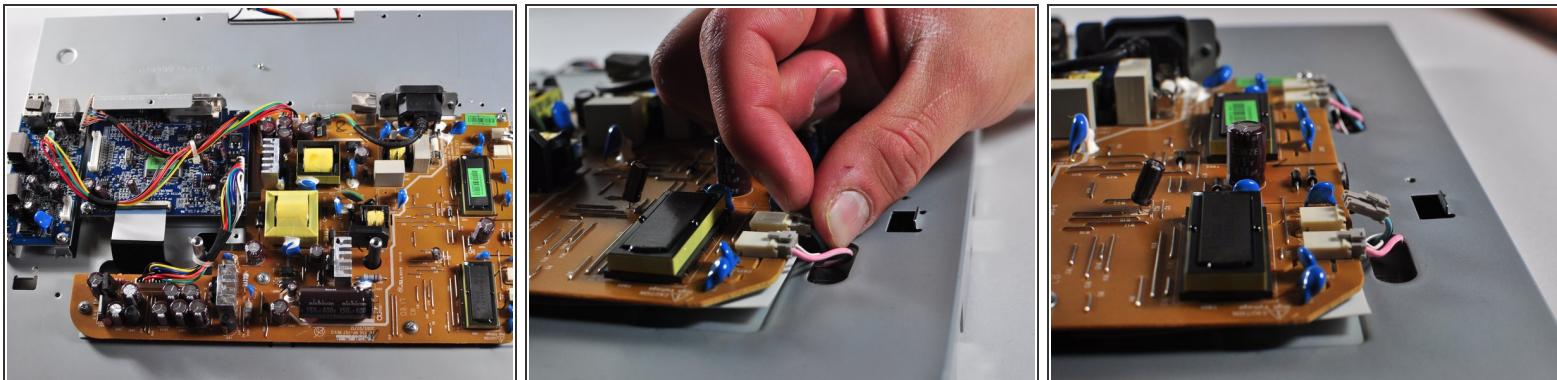
- Unscrew the 10 5mm Philips PH2 screws holding the metal casing to the monitor.

Step 13



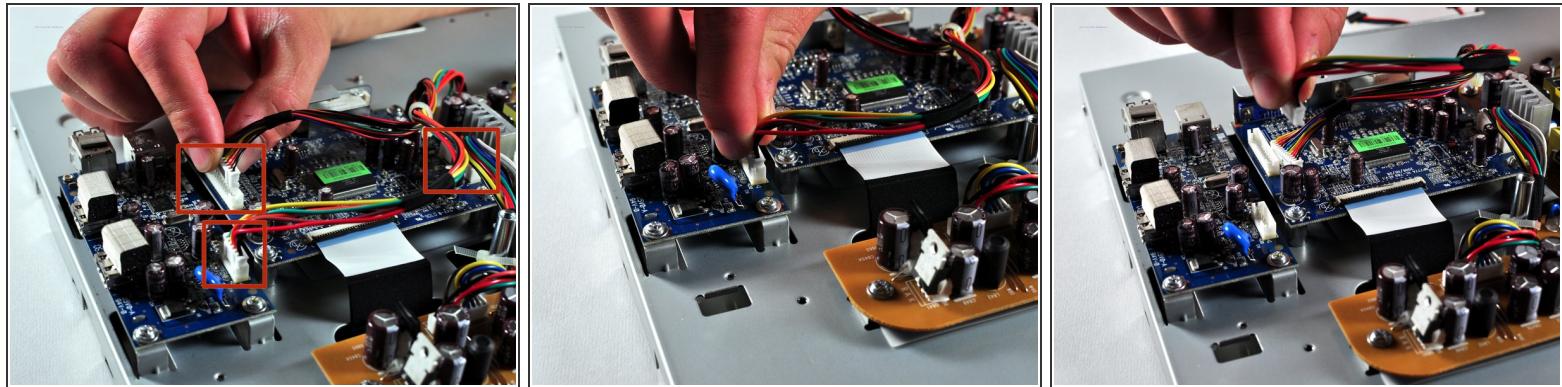
- Pull the the metal casing off of the monitor to reveal the motherboards.

Step 14 — Power Circuit Board



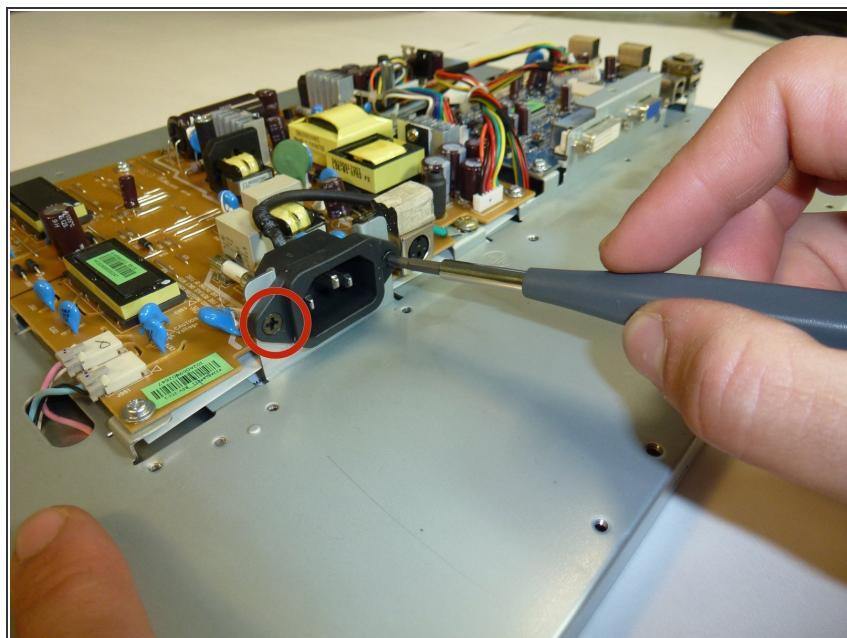
- Make a note or use a pen to mark which plugs correspond to which colors. (Pink or Blue)
- Remove the four plugs on the brown circuit board by pulling up on the tabs and wiggling them out. You could also use a spudger to help you lift little clips holding them in.

Step 15



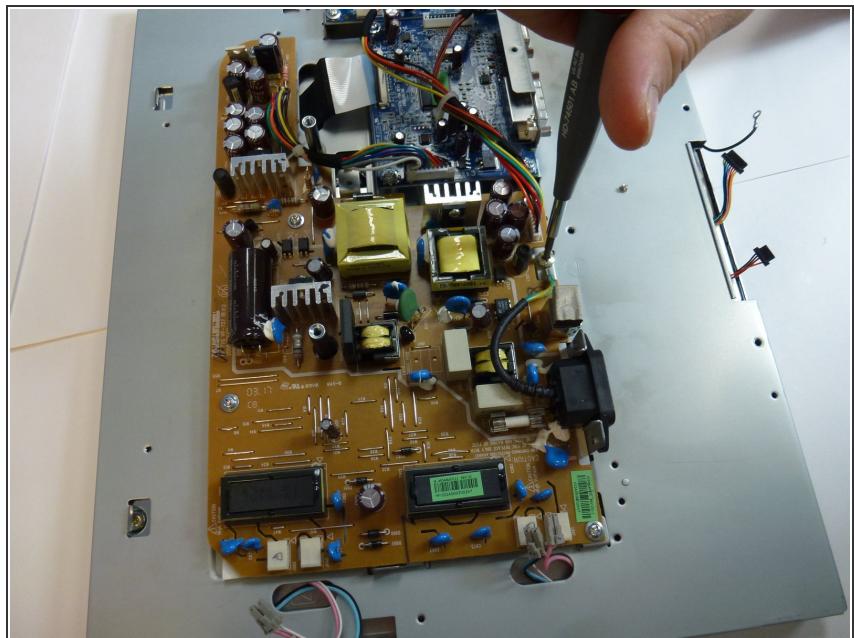
- Locate the several multi-wire connectors on the board.
- *(i)* These connect several parts of each board together and consist of several different colors of wires. There is also a zip-tie holding the two sets of wires together that you can cut if it is getting in your way.
- Disconnect the three plastic connectors from the blue colored boards by pulling them up while wiggling them.
- *(i)* Some force is necessary, it may also help to use the [Large Needle Nose Pliers](#).

Step 16



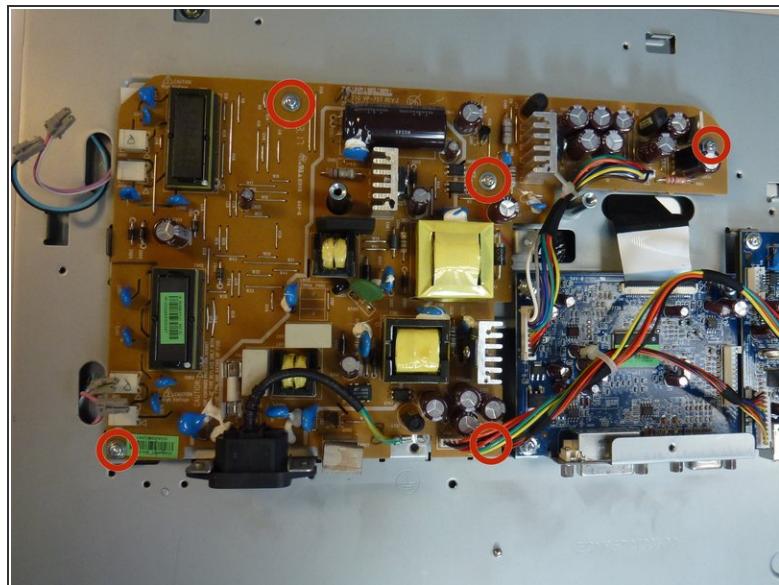
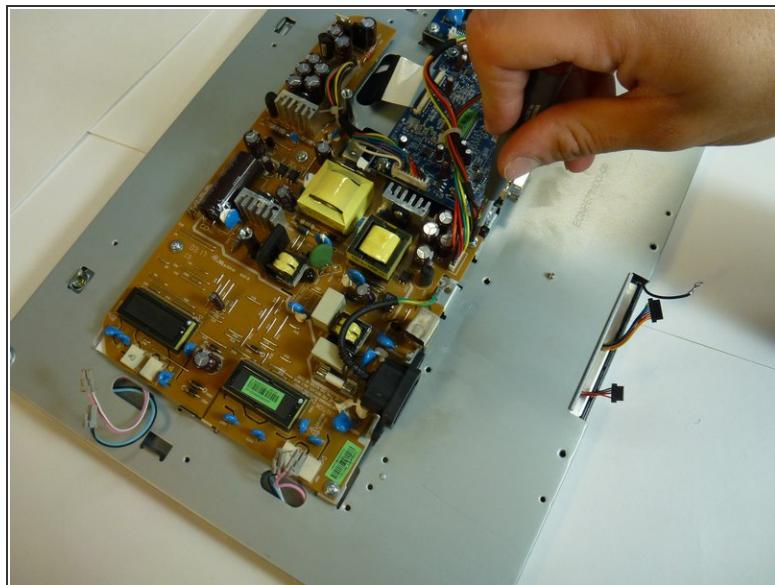
- Locate the large black power plug.
- Using a [Phillips #1 Screwdriver](#), unscrew the two 8mm bolts holding the black tabs to the metal frame.

Step 17



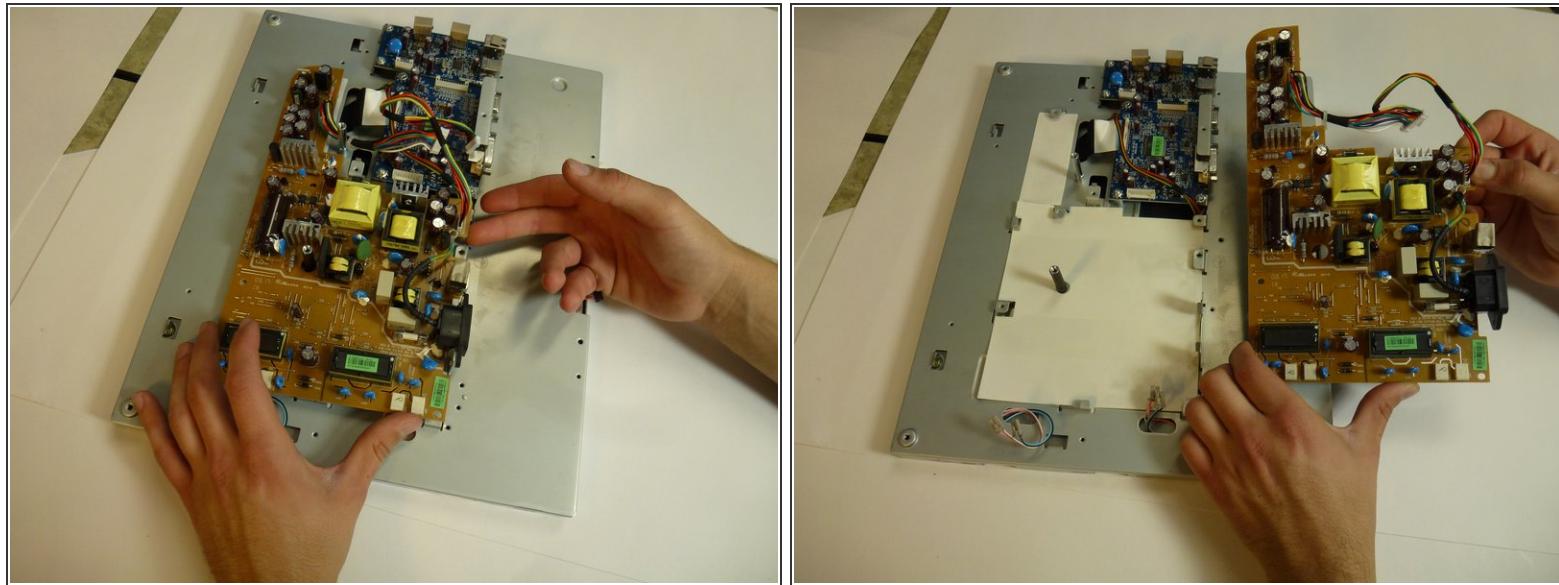
- Locate and remove the gold colored 10mm Philips screw located near the black power plug. It holds in a wire that connects to the power plug.

Step 18



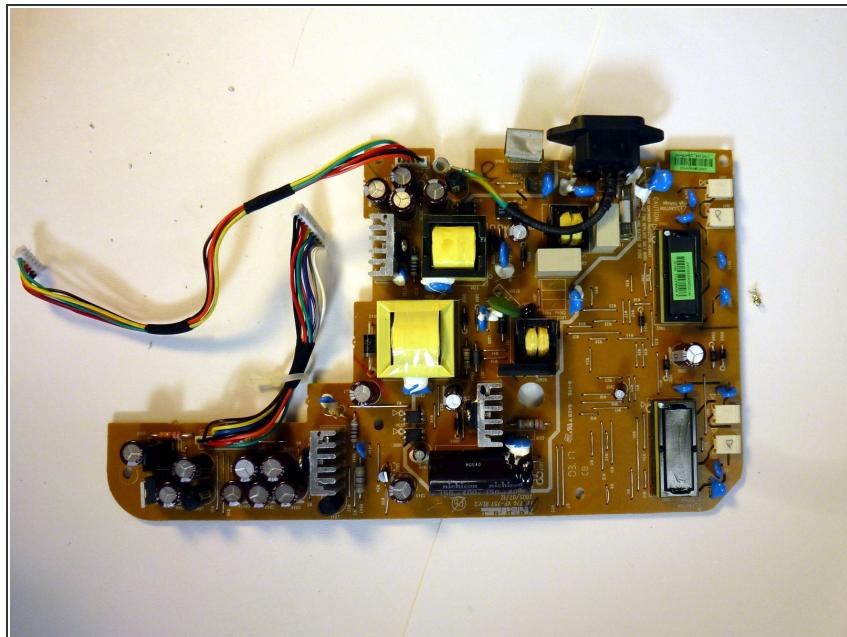
- Remove 5 8mm Phillip1 screws, with a Philips 1 screwdriver, located in various places on the board.

Step 19



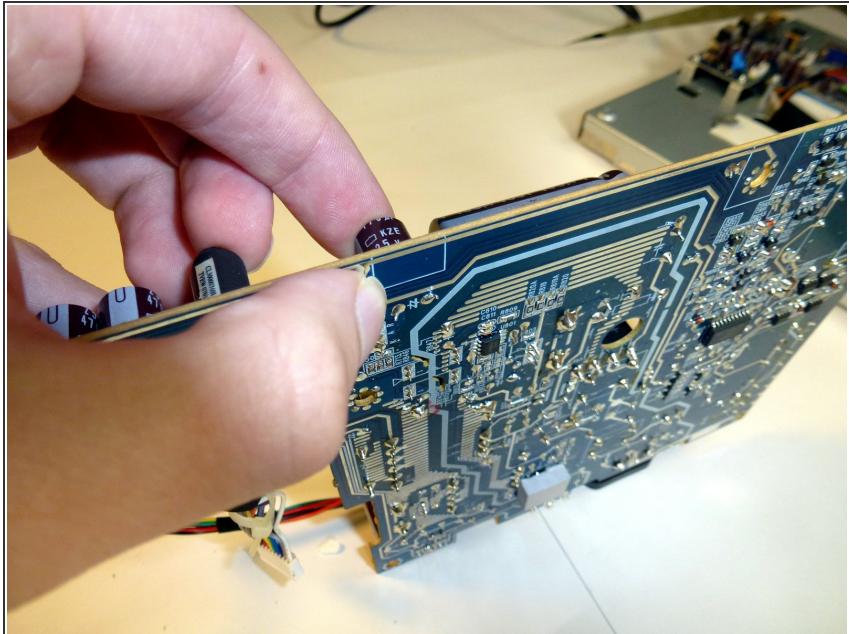
- Lift the brown power supply board off of the frame and set it aside.

Step 20 — Capacitor



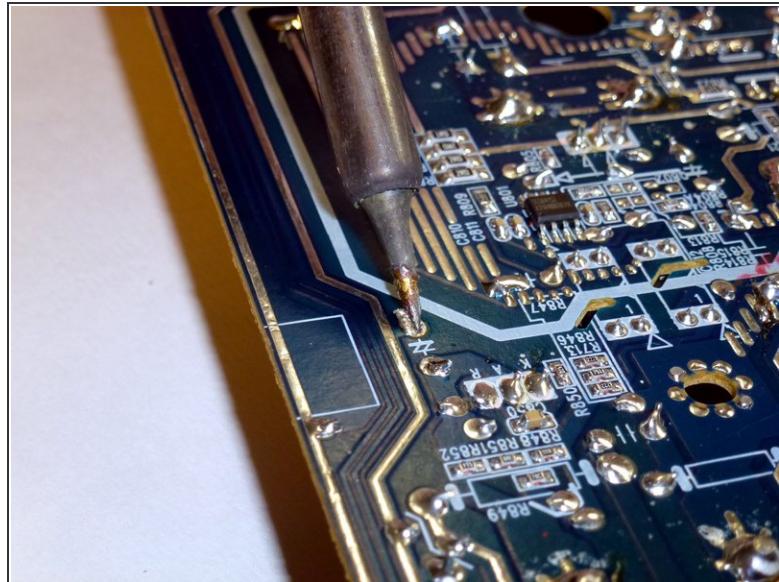
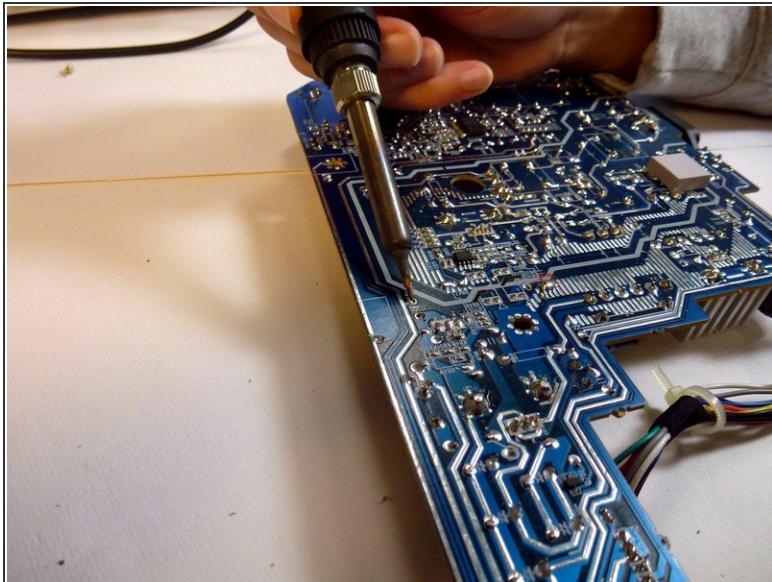
- Find the faulty capacitor on the board.
- Bad capacitors can be identified by swelling or bursting at the top.

Step 21



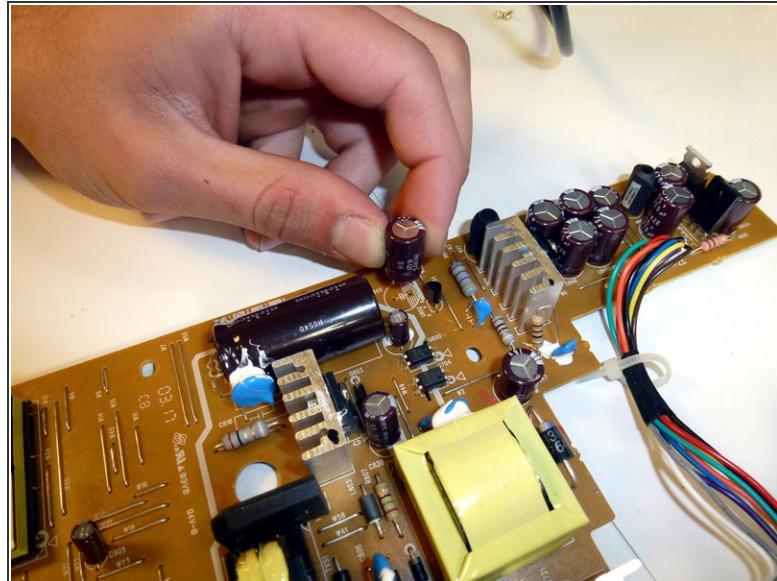
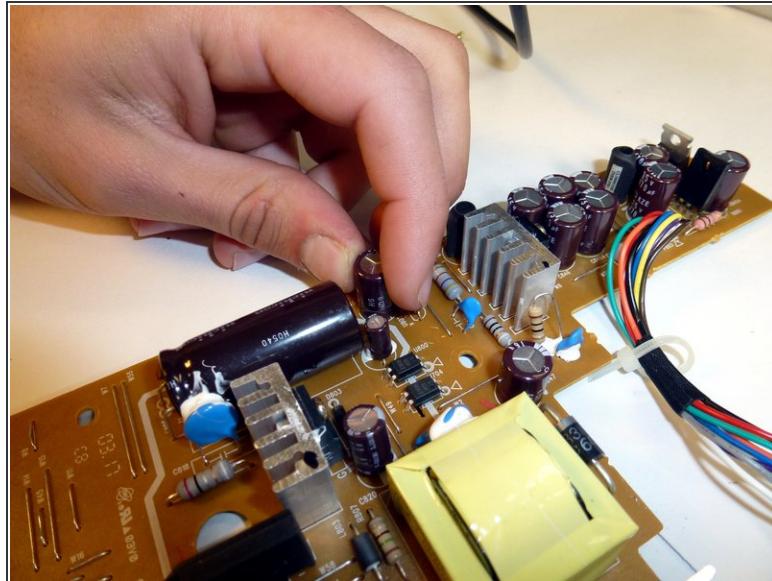
- Flip the board over and find the corresponding solder joints. Capacitors have two joints on the opposite side of the circuit board.
- *i* Make sure you identify the correct solder joints! We wouldn't want you to desolder the wrong component!
- *g* Remember which direction the white stripe on the capacitor is facing! Orientation is important for a capacitor! The markings on the board should also remind which way to face the capacitor.

Step 22



- Use a [Soldering Station](#) and [Desoldering Braid](#) to remove the solder from the two joints.

Step 23



- Remove the capacitor from the board, you may need to straighten out the leads before you can take it out easily.

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