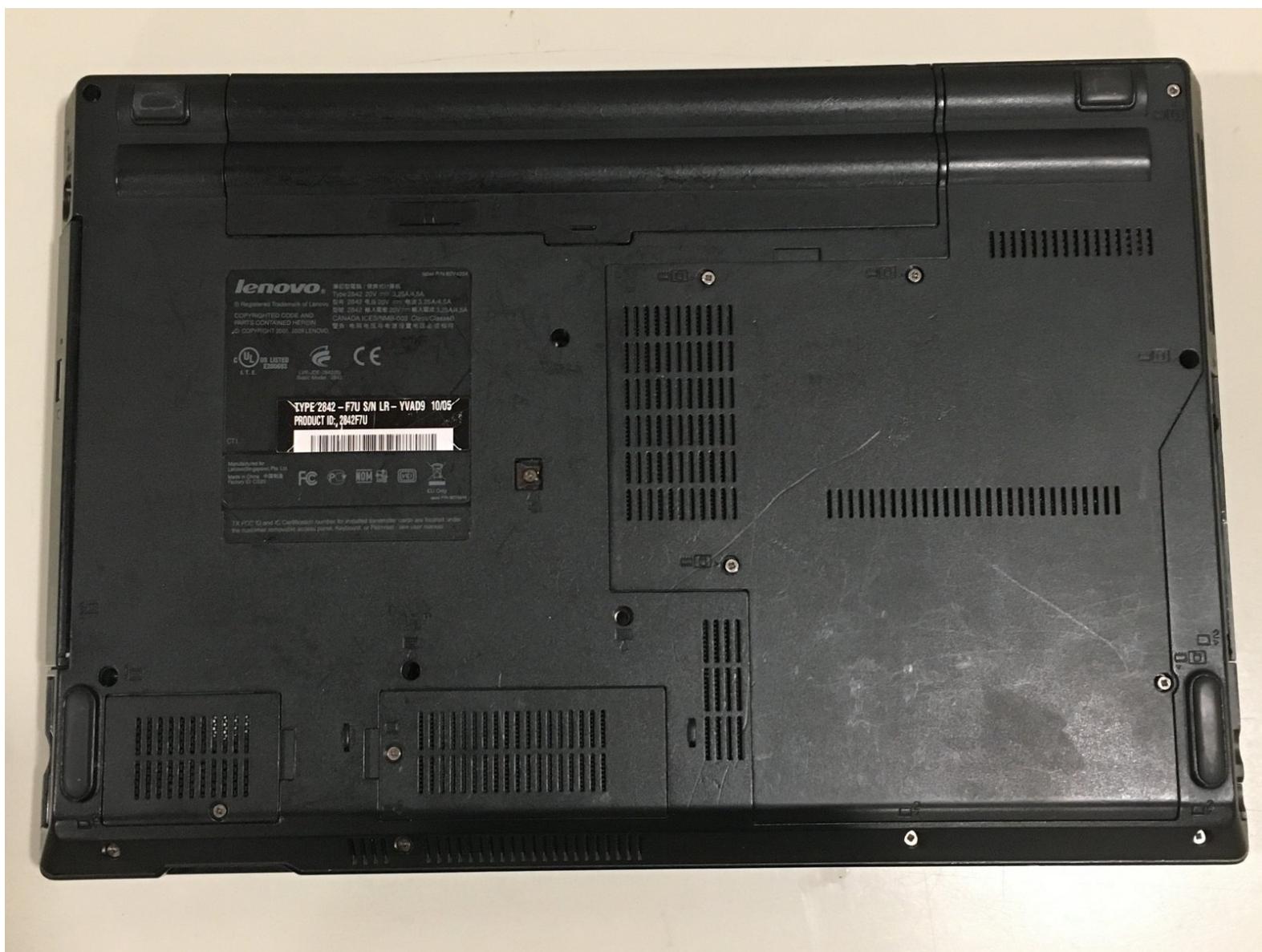




Lenovo ThinkPad SL410 Teardown

Dismantling old ThinkPad SL410

Written By: Keagan Weis



This document was generated on 2019-10-15 10:12:19 PM (MST).

INTRODUCTION

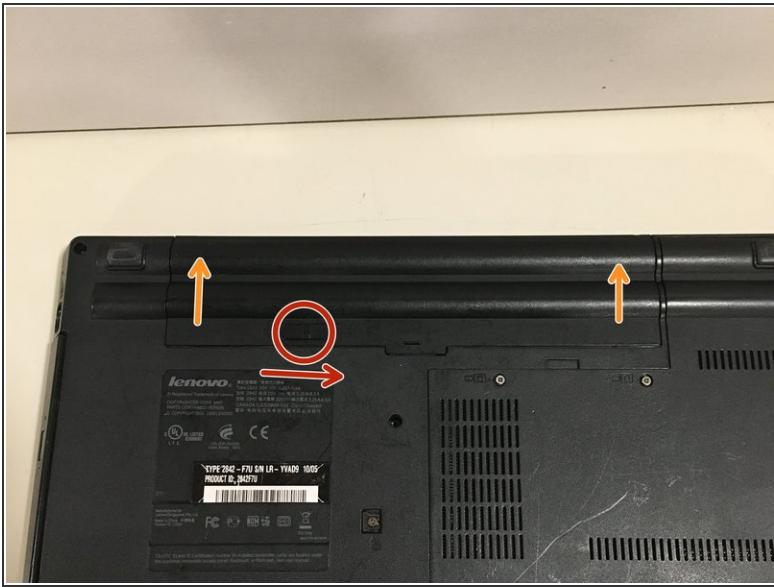
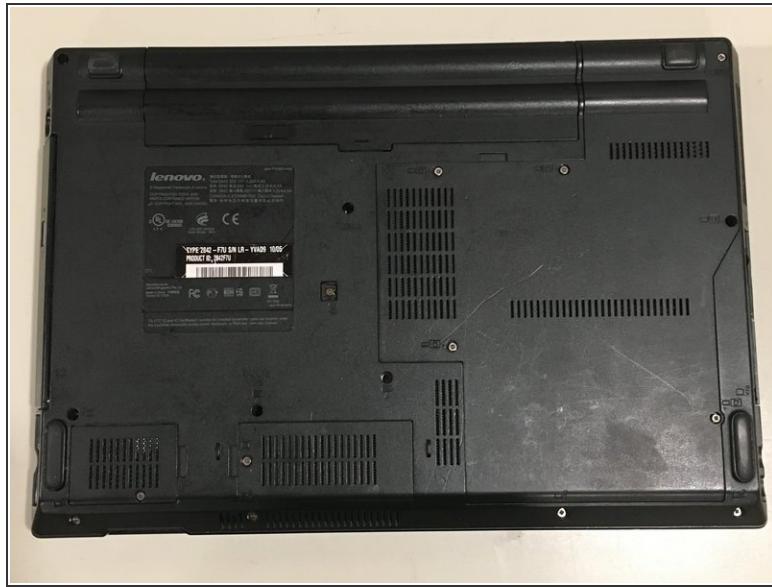
The SL lineup of Lenovo ThinkPad laptops was launched in 2008 as a low-end laptop geared toward small businesses. Its launching price was around 500 Euros, or about 555 USD.

This particular laptop, the SL410 is the 14" version.

TOOLS:

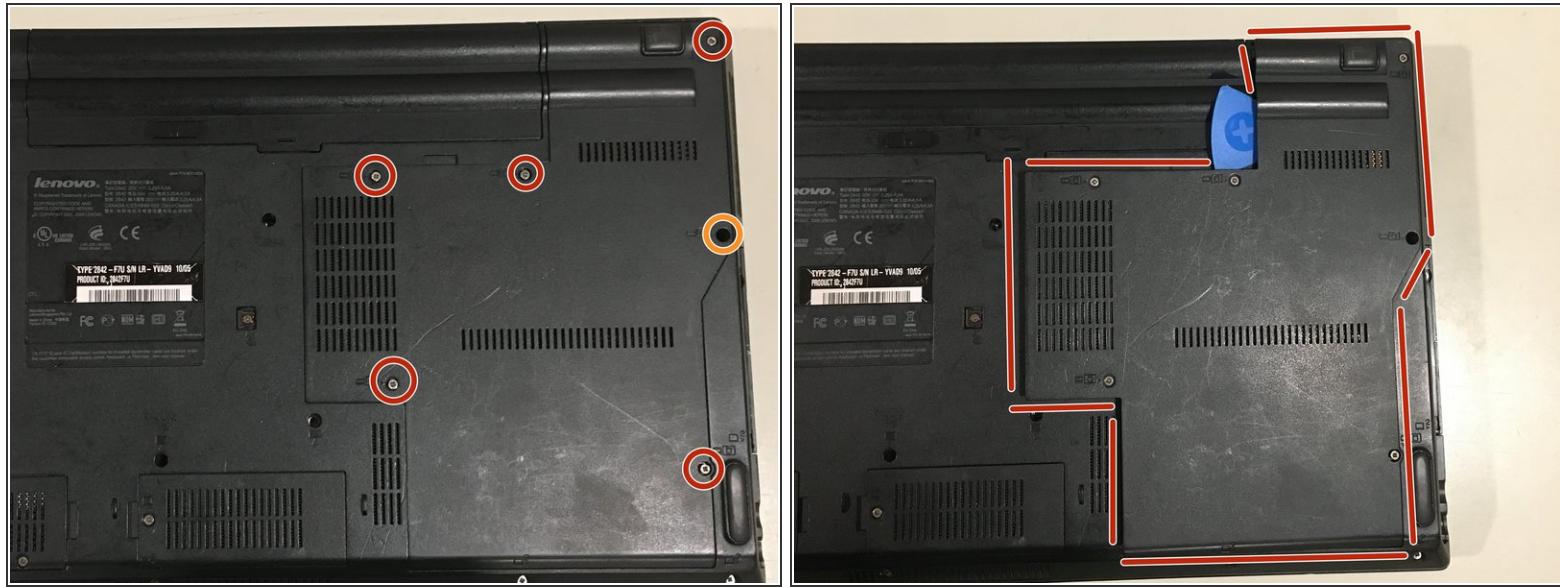
- [Phillips #00 Screwdriver](#) (1)
- [iFixit Opening Tools](#) (1)
- [iFixit Opening Picks set of 6](#) (1)
- [Spudger](#) (1)

Step 1 — Step 1



- First, flip the laptop upside down. Underneath, you will see a few compartments that can be unscrewed.
- Before doing any unscrewing, though, you'll want to remove the battery (just in case)
- First, push the battery lock to the right
- As the battery lock is as far to the right as it can go, pull the battery out, in the direction of the two arrows

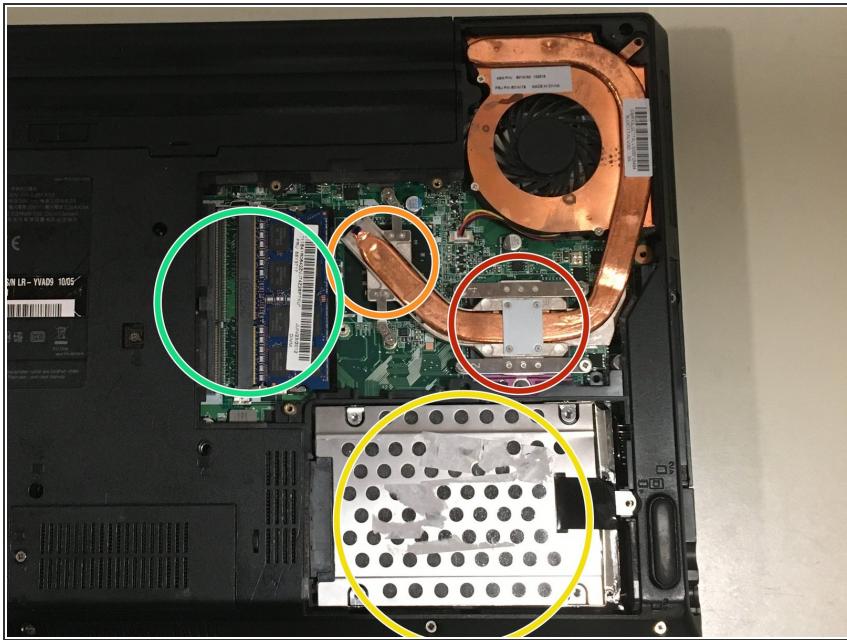
Step 2 — Step 2



- Now that the battery is out, we can start the rest of the teardown.
- First, unscrew the six screws circled. The one circled in orange is just a little lower and harder to see
- Next, take a tool like the Opening Pick and slide it in, then move it around the highlighted area to pop the panel off

(i) That step may not be needed, as the panel may just pop off

Step 3 — Step 3



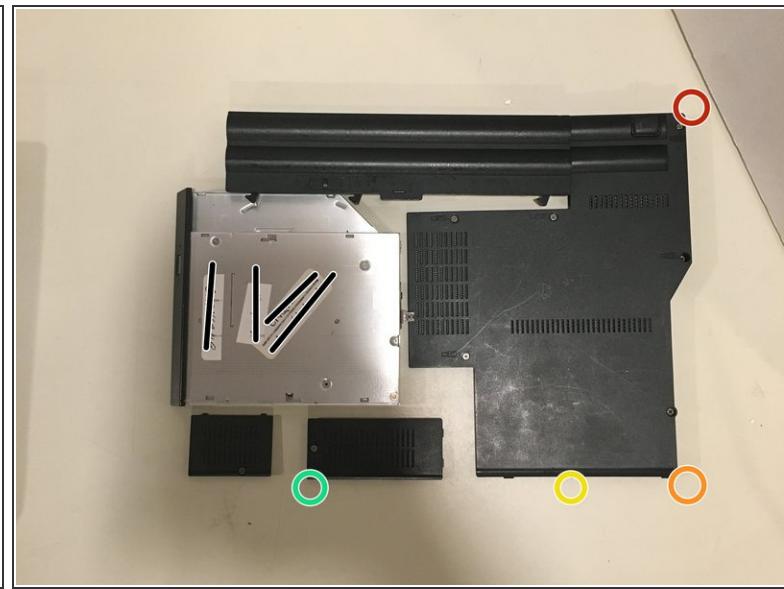
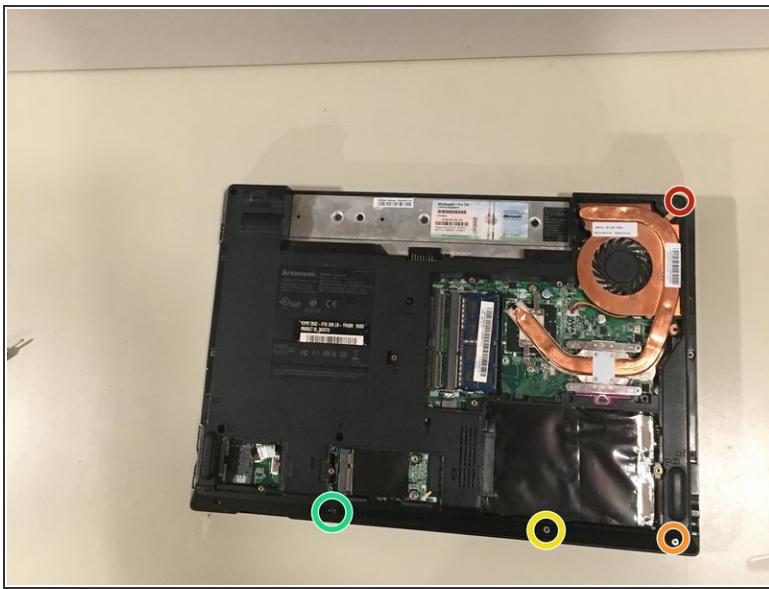
- Removing this panel gives us access to the processor, graphics, RAM, HDD, and fan/heatsink
- Processor: Intel Core 2 Duo T6570
 - (from: <https://ark.intel.com/content/www/us/en/...>)
- Graphics: Intel 82GM45 Graphics and Memory Controller Hub
 - (from: <https://ark.intel.com/content/www/us/en/...>)
- HDD (Hard Drive): *This model can vary, depending on if this part was replaced or not
 - The hard drive in my model has a Seagate Momentus 250GB 5400RPM drive
- RAM: *This model can vary, depending on if this part was replaced or not

Step 4 — Step 4: Removing the Hard Drive



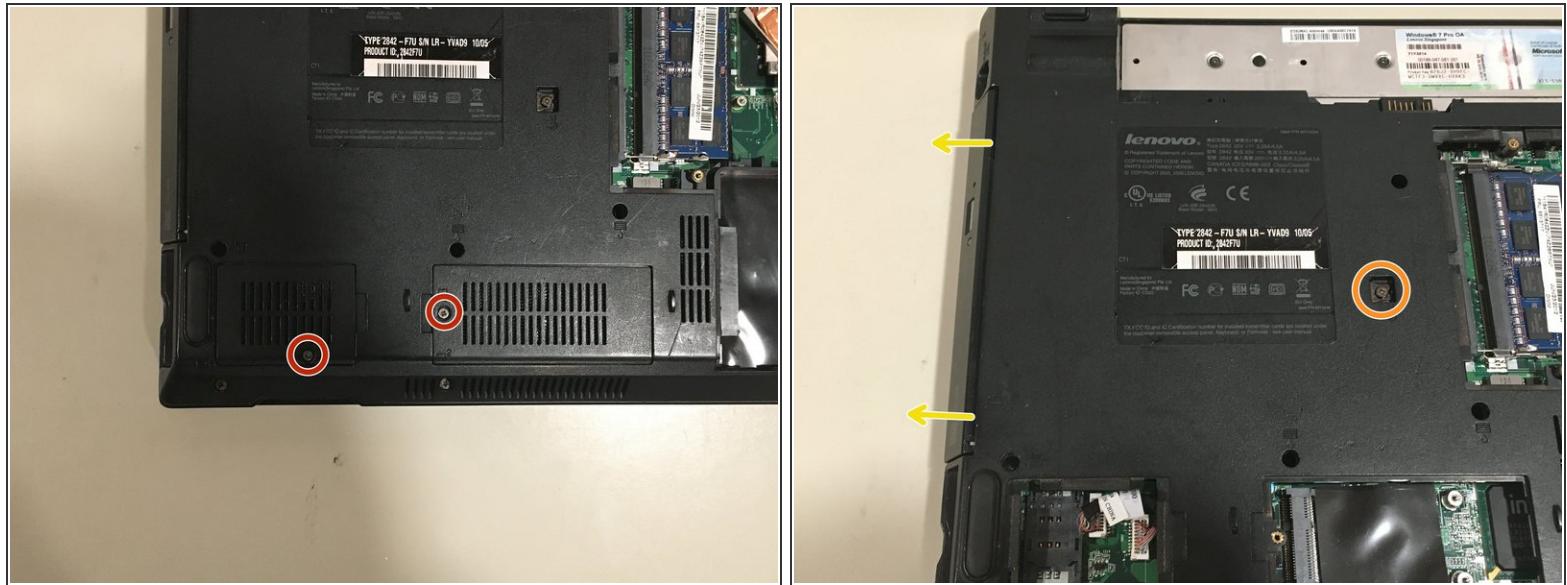
- ⓘ This step is optional for the teardown
- First, grab the small black pull tab
- Pull the tab away from the SATA port (to the right)
- Find the corner of the hard drive and lift up
- ⓘ Additionally, a video is attached showing this process

Step 5 — Sidenote



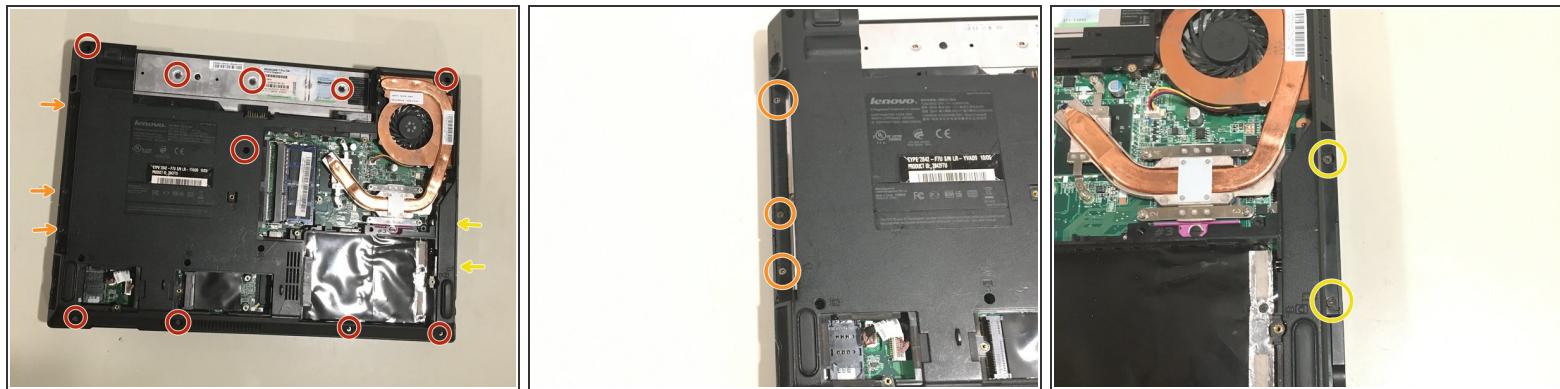
- If you intend to be putting this device back together after this teardown, I suggest laying out the screws that must be removed in sort of "tiers" (as this device has multiple layers to it), like in this picture.
- So, if these circles represented screws (image 1), the second image would depict where they would rest on the table.
- At the end of a "layer", I will post what it looks like for me.

Step 6 — Step 5: Remaining Bottom Panels and Disk Drive



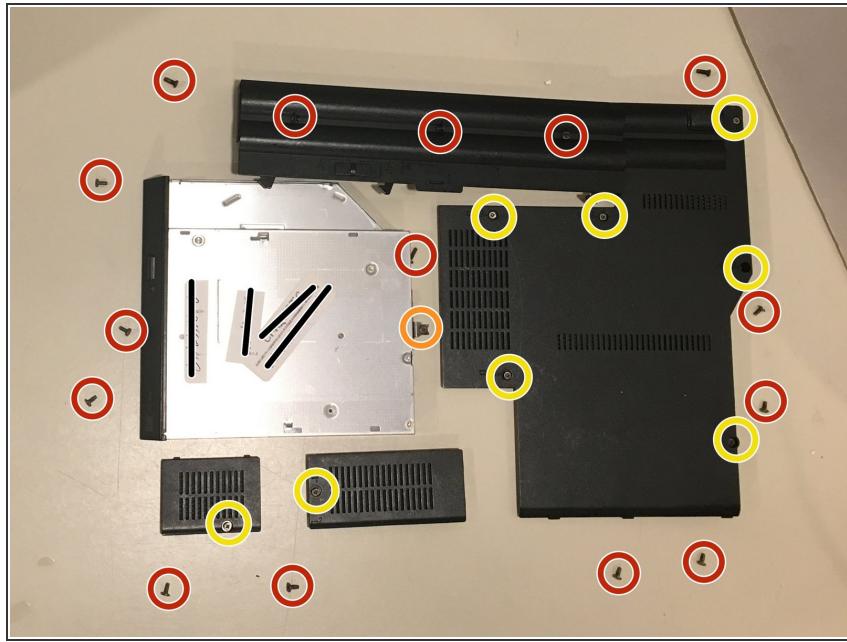
- These steps are optional too, but I will remove these parts solely because this is a complete teardown.
- The remaining two panels both have one screw that needs to be unscrewed before the panels can be lifted up. (These screws also stick in the panel, so no need to worry about them falling out!)
- Unscrew this screw with your screwdriver - but be careful! This screw DOES come out all the way, so if you are not careful, it may roll away.
- Once the screw is out, the disk drive can be pulled out.

Step 7 — Step 6: Bottom Case Screws



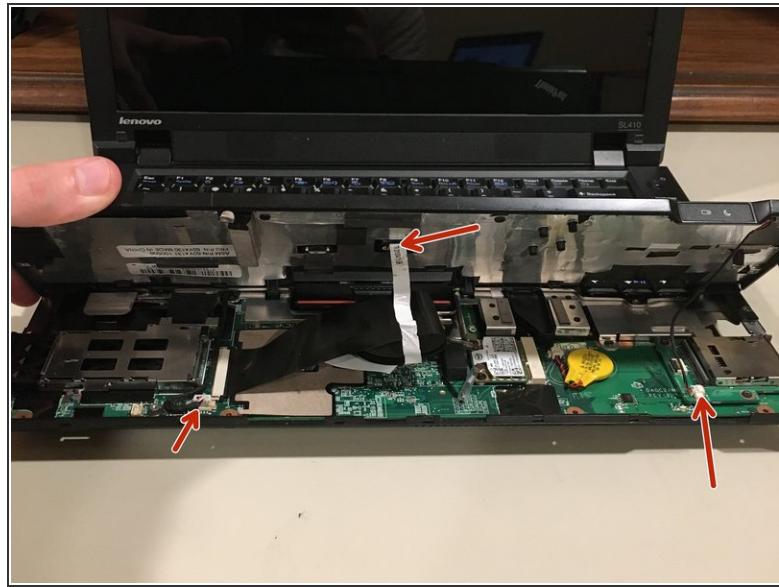
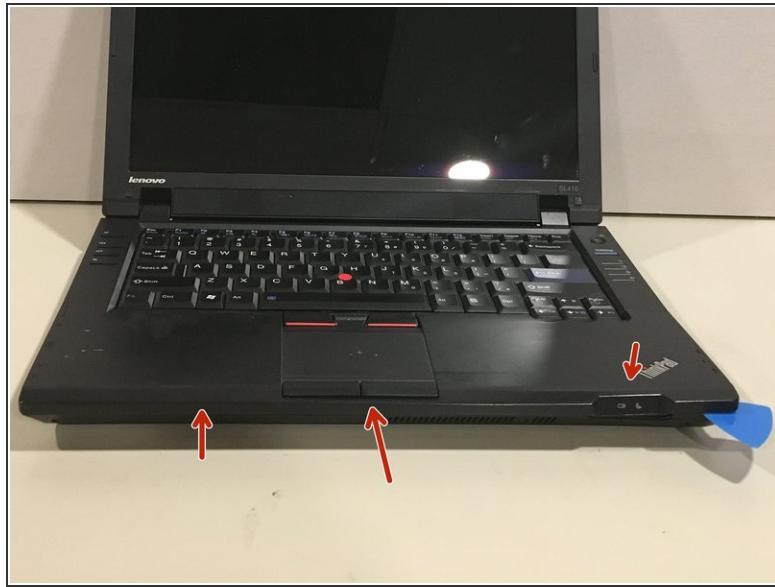
- There are a total of 15 screws on the bottom (if I counted correctly)
 - Arrows indicate that I will have another picture attached to show where the indicated screws are.

Step 8 — Screw/part layout 1



- Here is what my layout of my screws and panels looks like so far

Step 9 — Step 7: Top

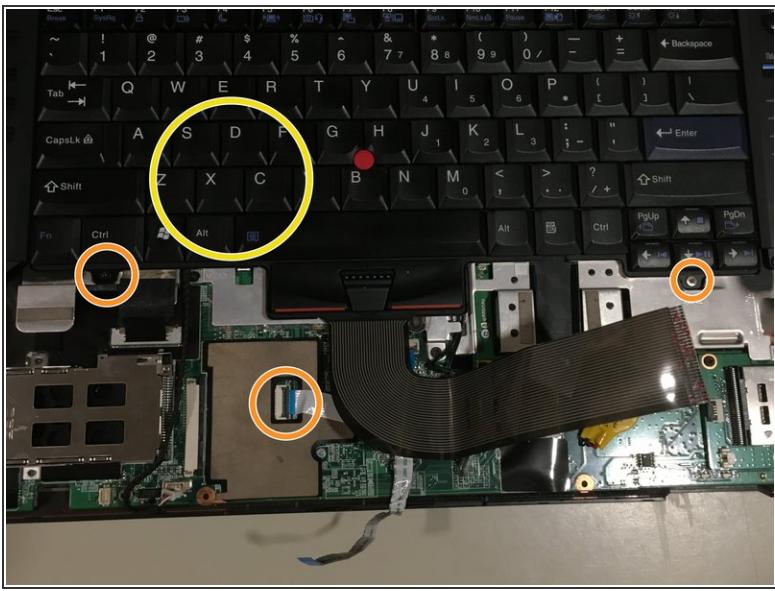
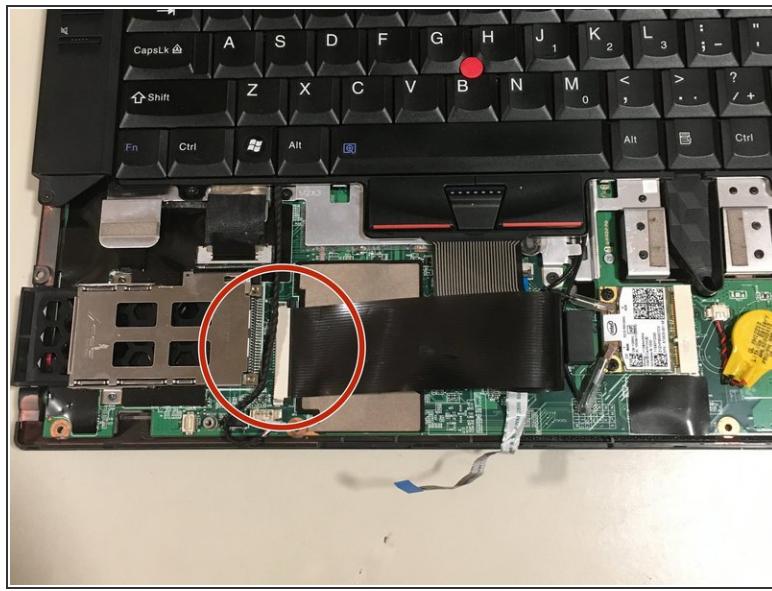


- And now we get to flip it over again!
- First up is the trackpad assembly area. This is just being held down by plastic clips, so taking an Opener Pick in the crevice should do the job to get it off.

⚠ Be careful, as there are cables near the edge of the frame near the highlighted areas. As long as you do not push the tool being used too far in, damaging these cables should not be a problem.

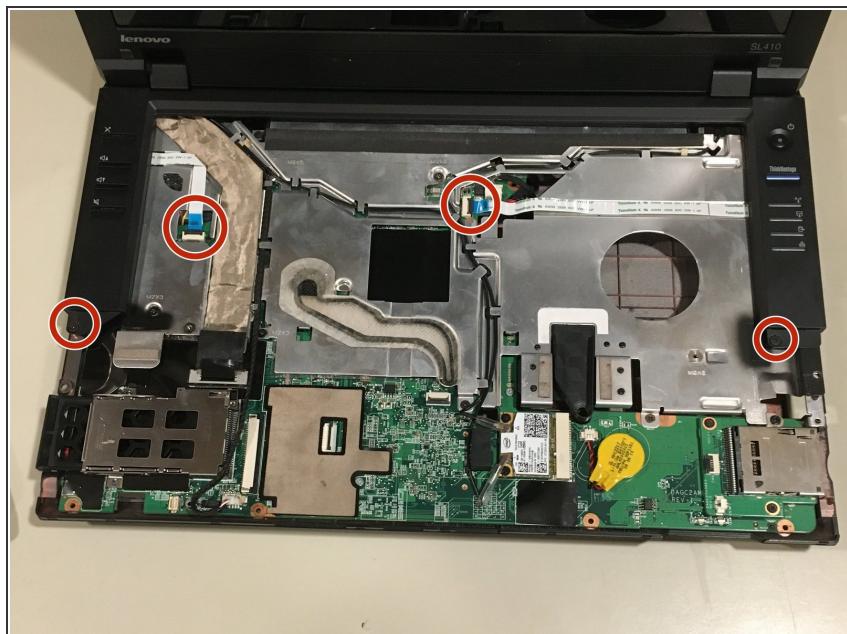
- You will also want to disconnect these cables

Step 10 — Step 8: Keyboard



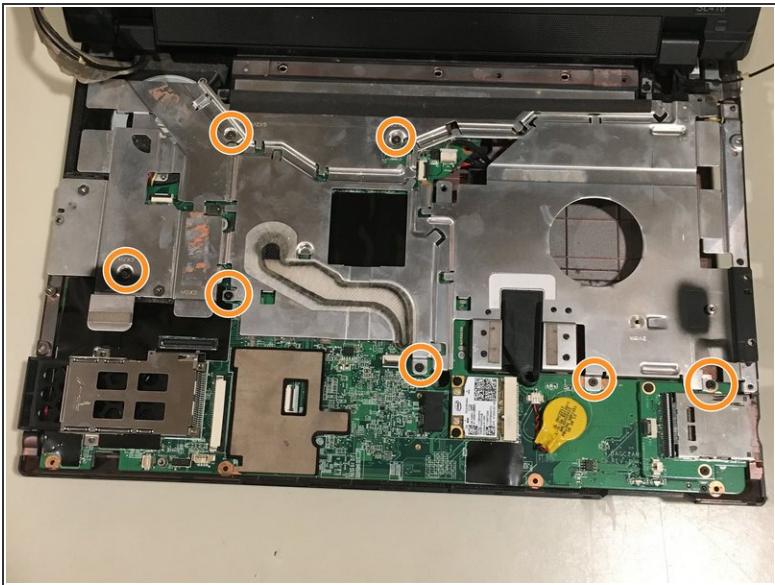
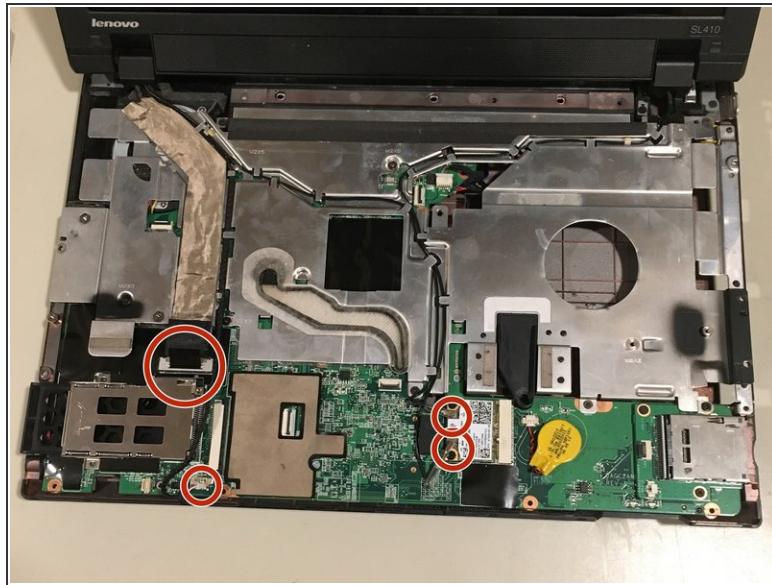
- First, you'll want to disconnect the ribbon cable for the keyboard/trackpad keys
- After that, you will want to take off the two screws holding down the keyboard. There is also a ribbon cable hooked up to it that must be disconnected.
- There is some adhesive under the area marked, so it may take a little more force than usual to lift.

Step 11 — Step 9: Shortcut buttons



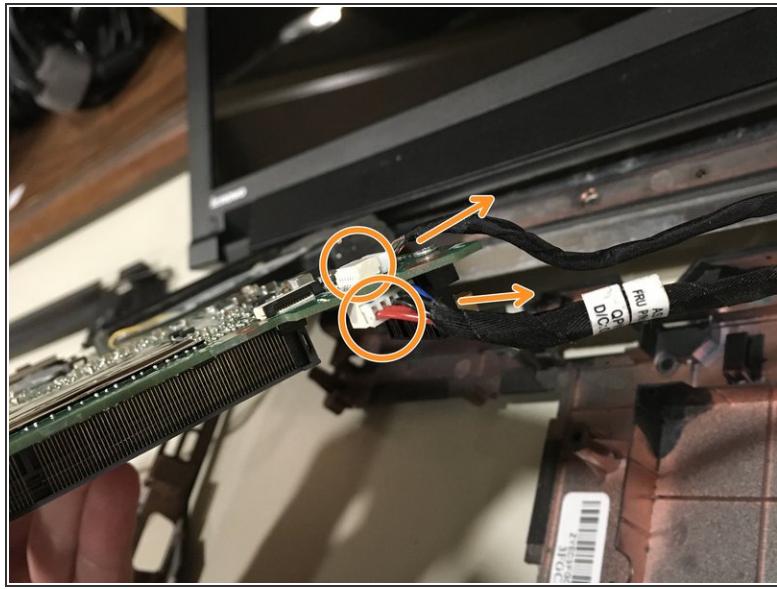
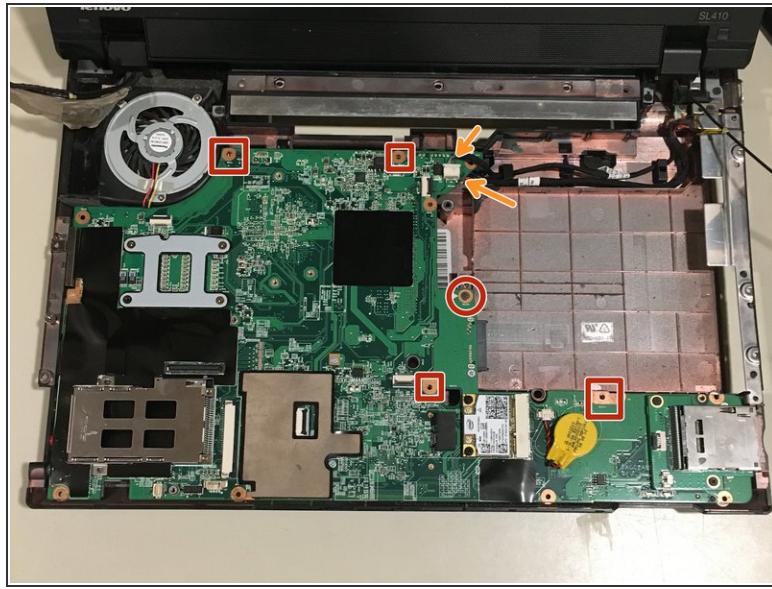
- There are two screws holding the shortcut buttons in place, as well as two ribbon cables
- *(i)* The display may need to be tilted back to get the plastic frame out

Step 12 — Step 10: Metal plate



- First, disconnect the highlighted cables
- Next, take them out of their metal clips
- *(i)* the display cable (one furthest to the left) does have some adhesive under it
- *(i)* It also helps to move the cables as far to the right or left as you can to make removing the metal plate easier.
- Next, there are 7 screws holding the metal plate in place
- After that, the metal plate can be lifted right up and out (just be careful to not lose any of the screws when setting it down)
- *(i)* At this point, it may be easier to remove the display before continuing (see slide 15 [step 11] for how to do that, and then continue)

Step 13 — Step 11: motherboard



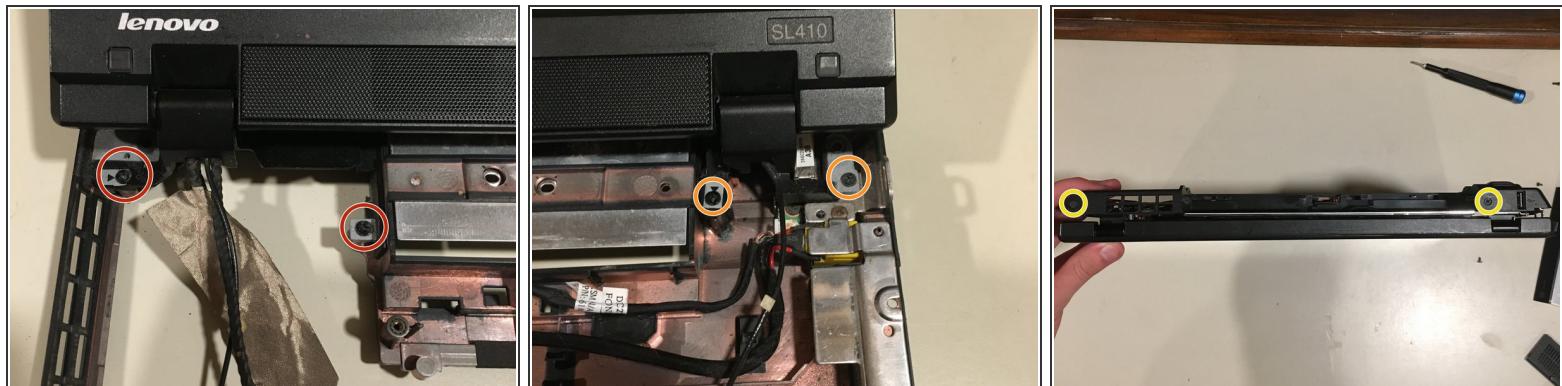
- When I got to this step, I only found one screw holding the motherboard, which I found to be extremely odd...
- I did find threaded holes at the places indicated with a box, so there may be some here.
- There are also two cables connected here. The one on top of the motherboard being the connector to the rear USB port. The one underneath is the cable that connects to the charging port.

Step 14 — Screw/part layout 2



- At this point, the only new layout is the shortcut controls, keyboard, and trackpad/wristrest.

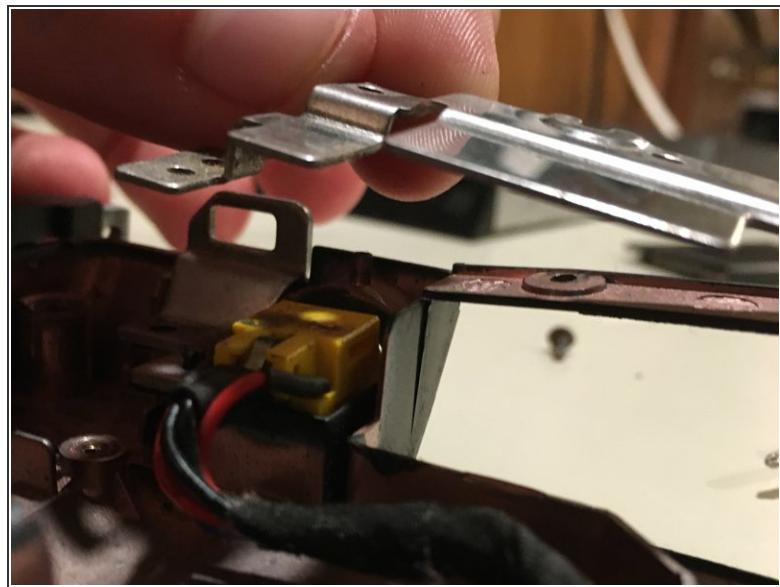
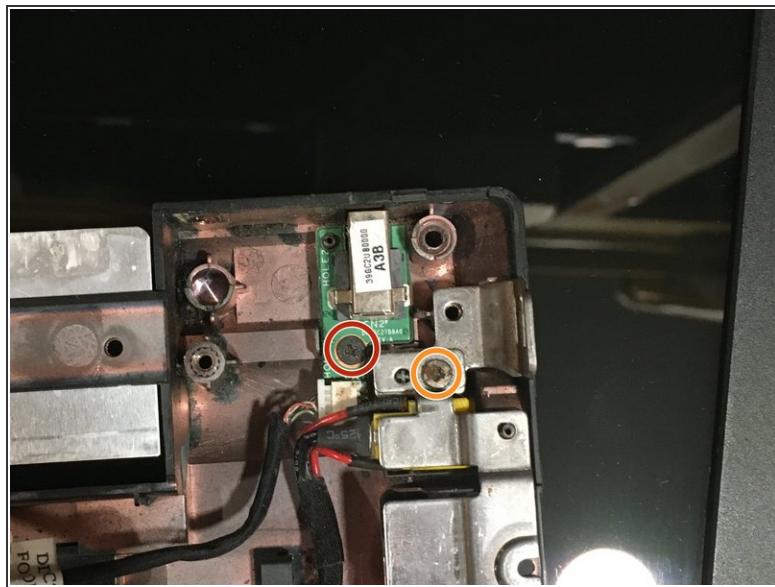
Step 15 — Step 11: Display



! During this step, be careful that the display does not fall backwards, which could potentially cause damage.

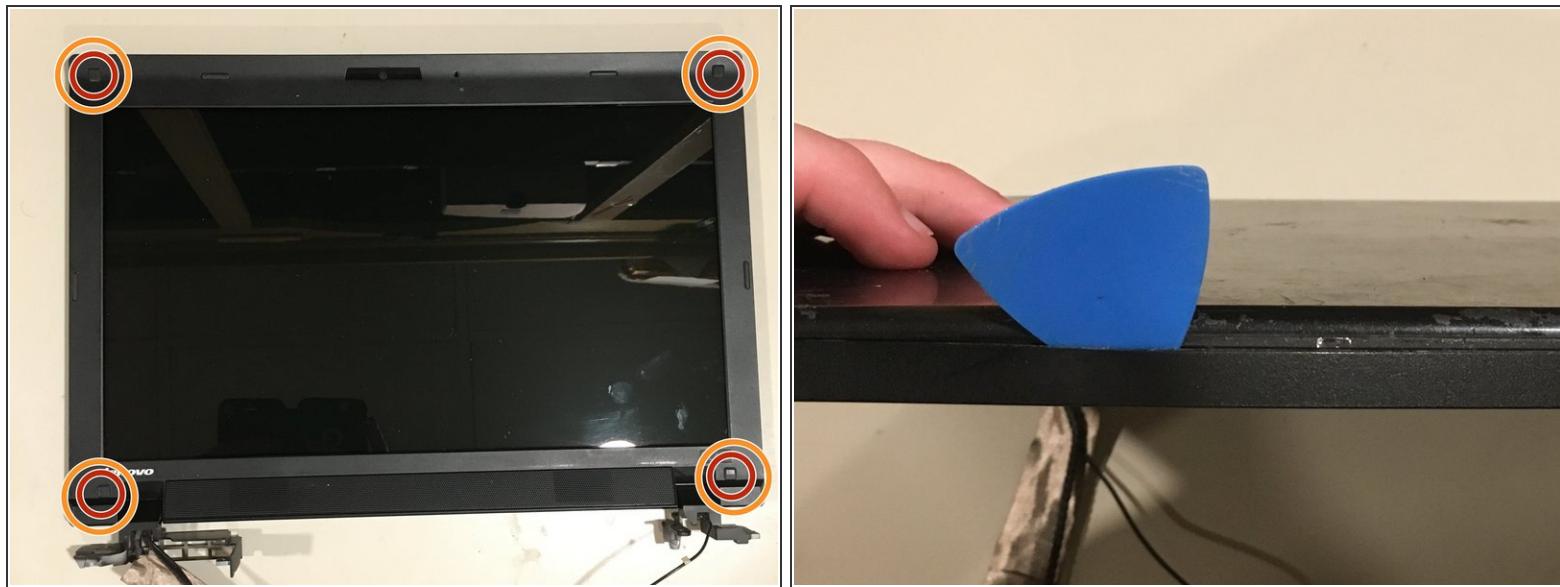
- On the left side of the display, there are two screws holding in the left hinge.
- On the right side, there are also two screws holding in the right hinge
- Aaaand behind the laptop there are two screws, one on the right and left side.
- At this point, the display can be lifted up out of the chassis.

Step 16 — Step 12: Remaining Electronics in the chassis



- The USB board is easiest to remove first. Take out the screw and lift right up.
- One screw holds the charging port in. The tricky part is the metal holding it in.
- After removing the screw, you have to kind of lift the metal up to pull the charging port out.

Step 17 — Step 13: Removing the bezel



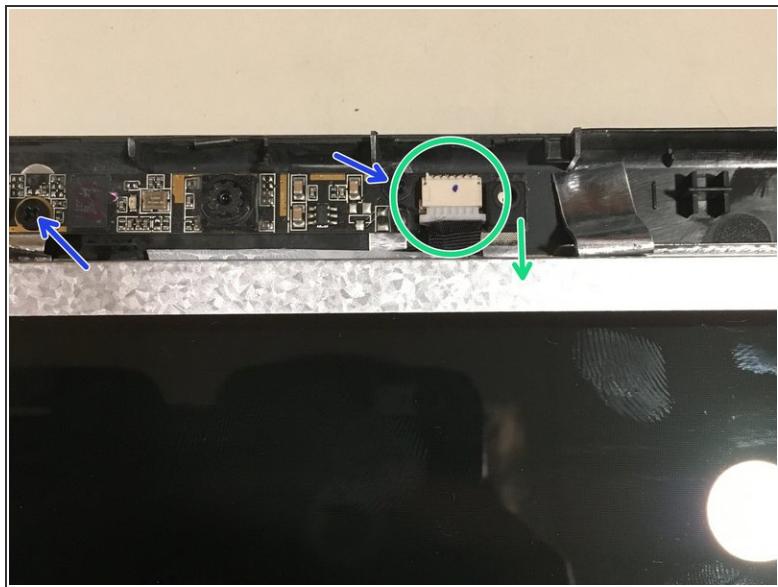
- There are three rubber pieces that are stuck on with adhesive that need to be removed. They can be removed with anything small and thin enough to get under them.
- Under the rubber, there are screws that need to be unscrewed.
- After that, take a opening pick and insert it at an angle shown in the second picture.
 - *i* It may be beneficial to use more than one to hold your place (to make sure places you already separated don't snap back in again)
- Repeat the last two steps (three if this one is included) as many times as needed until the bezel is removed.

Step 18 — Step 14: Removing components in assembly



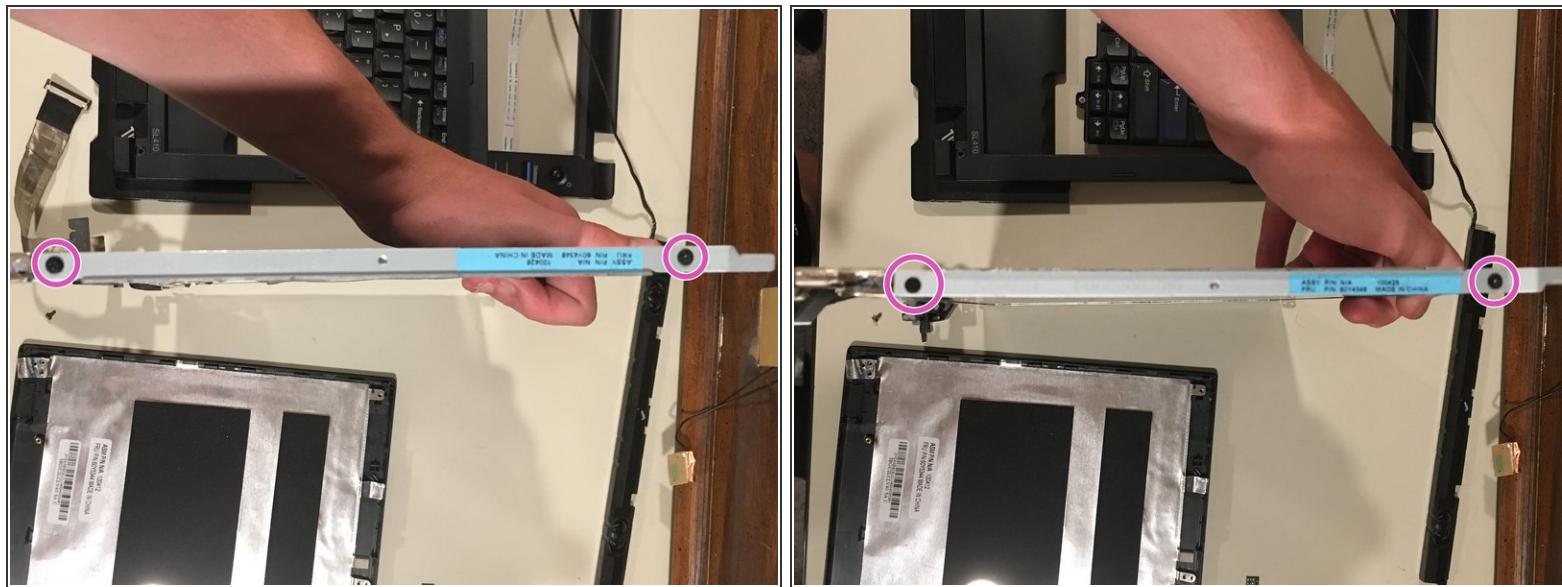
- First thing to remove are the speakers. There are two screws holding them in place.
- *(i)* The speaker cable is threaded through an opening in the hinge, so it may be a little tricky to remove. Just be patient, take your time, and look around at the other cables in the hinge to find a way to safely wiggle it out.
- Next, I found it easiest to remove the network (wifi) cables. They are easily removed; they just have to be lifted carefully along the lines indicated.
- *(i)* The green antenna at the top is held down, so it may be helpful to use a standard screwdriver or something else small and thin to slip under it and lift it up.

Step 19 — Step 15: Display removal



- The hinges are connected to a frame that the display is screwed into, so they must be taken out (the display, frame, and hinges will come out in one part). There are two screws (one on each hinge) holding them in
- Before lifting the display out, the webcam must be disconnected. Find the connector and pull the cable out in the direction shown.
 - There are also two screws holding the webcam assembly in place
- At this point, the display can be lifted right out.

Step 20 — Step 16: Removing the display from the frame



(i) This step is optional

- There are two screws on each side of the display panel that connect it to the frame. Unscrew these, and the display will be free.

Step 21



- That's it!
- Enjoy the laptop you have that is now in pieces!
- If you feel that you need to reassemble this brick, follow these steps in reverse.
- Thank you for taking time to read my guide, and have a great day!

