Replacing polarizer of 100/200LX

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The picture on the right shows the dreaded "melted" screen that happens to a number of 100/200LX screens in Singapore.

The surface bubbles, and within the bubble, is some kind of liquid. The screen gives off a foul smelling, acetic acid, vinegar-like, fumes.

No one knows the exact reason why this happens but it happened to a couple of my spare 100/200LXes L

It even happened to my Omnibook 530 and Omnibook 600C as well.

Tools required

To remove the damaged polarizer film on the 200LX, prepare the following tools and about 1 hour of your time:

. paper cutter
. tweezers
. pliers
. Ronson lighter fluid
. Tissues
. Gloves
. Goggles
. Plastic ruler (for scraping)

Removing the damaged polarizer

On the 200LX, remove the plastic bezel around the screen carefully. Be sure to not get anything onto the sticky portions as these would be re-used. The bezel would hold the polarizer in place.

Use the paper cutter to lift off the edge of the polarizer. Once the edge comes off, use tweezers to pull it off further, then pliers to give you a better grip of the material.

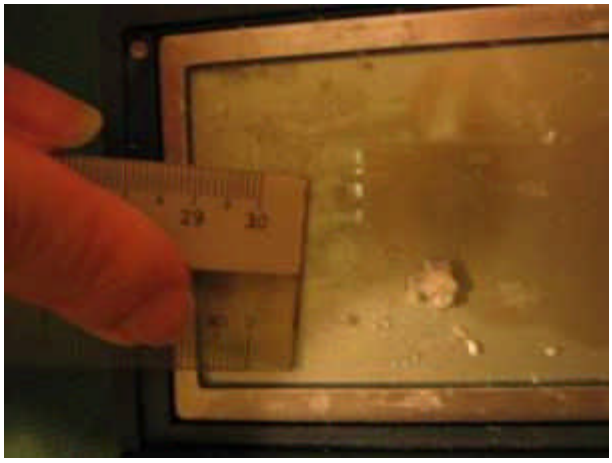
Most likely a grey-plastic like film will come off. If you look at the screen, there seems to be some kind of clear film that is still stuck on to the screen that's hazy.

This is the one that's very tough to remove. If the damage hasn't "eaten" into this film, there is not need to remove this to save your time.

Wear your goggles and gloves. I'm not sure if the material is plastic or thin glass so just to be safe. Be sure to do this part in a well ventilated room and do not light a cigerette!

Put a few drops of Ronson lighter fluid on the plastic ruler, let it flow to the scraping end and use the plastic ruler to start scraping the film off. Don't worry about the glass below being scratched. The plastic ruler is softer than glass. Be careful that not too much of the lighter fluid goes to the edge and do not remove the sticky bits around the bezel area. Lots of white powder like shavings would be formed but the lighter fluid will hold it all together.

Remove these shavings with tissues from time to time. When almost all of the film and glue stains have been removed, polish the glass with a pad of tissue soaked in lighter fluid. That would remove the rest of the residue on the screen.



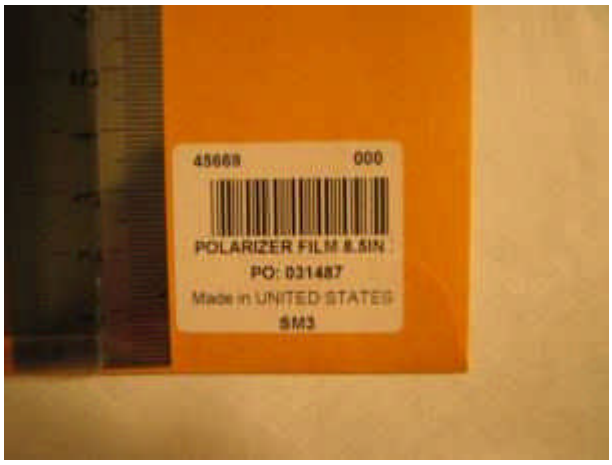
This unit on the left is how it would look like when all the scraping is done.

Try putting batteries into the unit. You will hear the palmtop starting up but there is nothing on the screen.

Now wear a pair of polarized sun glasses and be amazed!

Replacement Polarizer

I bought a polarizer sheet from from a branch of Edmund Optics in Singapore.
http://www.edmundoptics.com/onlinecatalog/displayproduct.cfm?productID=1912
The price I paid is higher than that in the online catalog about S$40 with taxes etc. It'll come to about the same if I were to add shipping into it.



This product NT45-669 could potentially yield 4 polarizers, if one doesn't make mistakes. 2 easily.

Cutting the polarizer material to size was pretty difficult with a paper-cutter as the material is very tough. The engineer in Edmund Optics told me that I could use a pair of scissors but I found that it causes one of the pieces to curl badly.

Cut out a rectangle 2" x 5" from the sheet. ie: As the orientation is important, with the long size placed horizontally, make a vertical cut. Use a pair of scissors, to snip of 1mm from the longest side. To the longest side would thus be 5"-1mm so that it would fit within the metal frame of the screen.

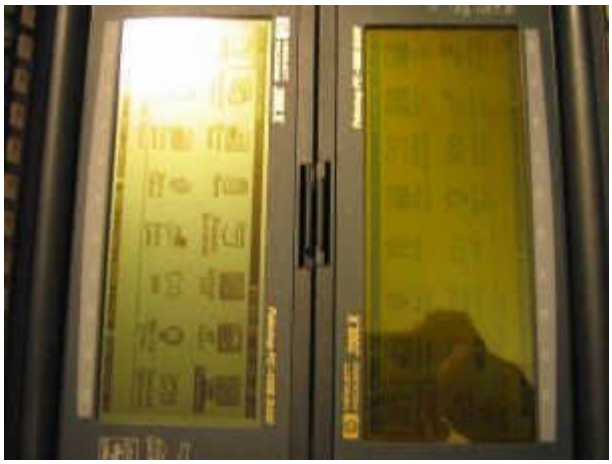
This is how it would look when the new polarizer is placed in front of the “polarizer-less” palmtop.

Remove the plastic protection from the new polarizer. Put the polarizer within the metal frame of the screen. The polarizer is probably curved slightly so position the polarizer such that it lays flat on the left and right edges. The bulge is in the centre.

Now place the plastic bezel back to its original position and press down gently. The bezel would hold the polarizer in place.

Your 200LX is now usable again J

It is slightly darker than the original screen. It's also highly glossy unlike the original matt screen.



If a polarizer that has greater transmittence than 38% can be found, the clarity would be better. I read in the Edmund Optics catalog that they resell polarizers made by 3M. Maybe someone who knows 3M products can find something better at a better price, or even one that has a matt finish! Now sticking film onto glass without getting any dust/hair/bubbles in it is a different story altogether ... I had a lot of problems putting on a screen protector on my wife's Treo 600, and it was half the size of the 200LX!

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