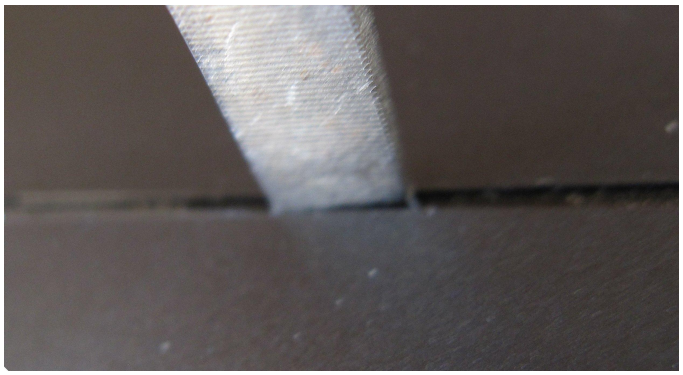
REPAIR OF SAMSUNG SyncMaster 204T MONITOR FLICKER PROBLEM

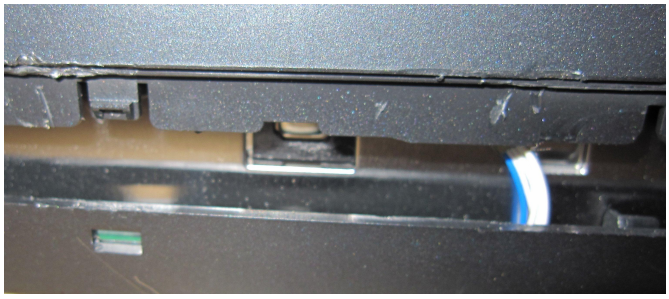
By: Doug Johnson
Credit to: http://www.fixya.com/support/t763268-samsung_syncmaster_204b

STEP 1: Remove Plastic Housing

Start right underneath THE controls for brightness, contrast, menu etc. There's a small 2mm by 5mm square hole [green in the picture, but case color when you start]. Push in to release the tab [just above in the picture.



Then using a twisting and prying motion about every 1 inch separate the plastic monitor cover.



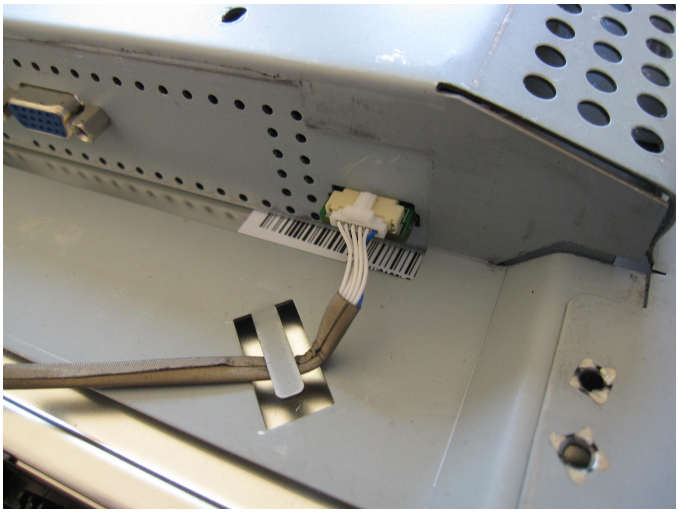
Work the bottom edge first, then right and left sides. Once bottom & right & left are free, put the monitor on a hard surface face down.
Do not separate more than 1 cm else you'll pull the connector off controls assembly

With the monitor face down as shown, carefully lift the back half of the plastic case off of the monitor away exposing the rear metal shield.

Step 2: Remove Rear Metal Shield

2A] Remove two screws on top

2B] Remove controls connector



3] Remove 4 screws on sides

Pull the metal cover up and off.

Step 3: Remove Printed Circuit Board

Inside are two PCB's

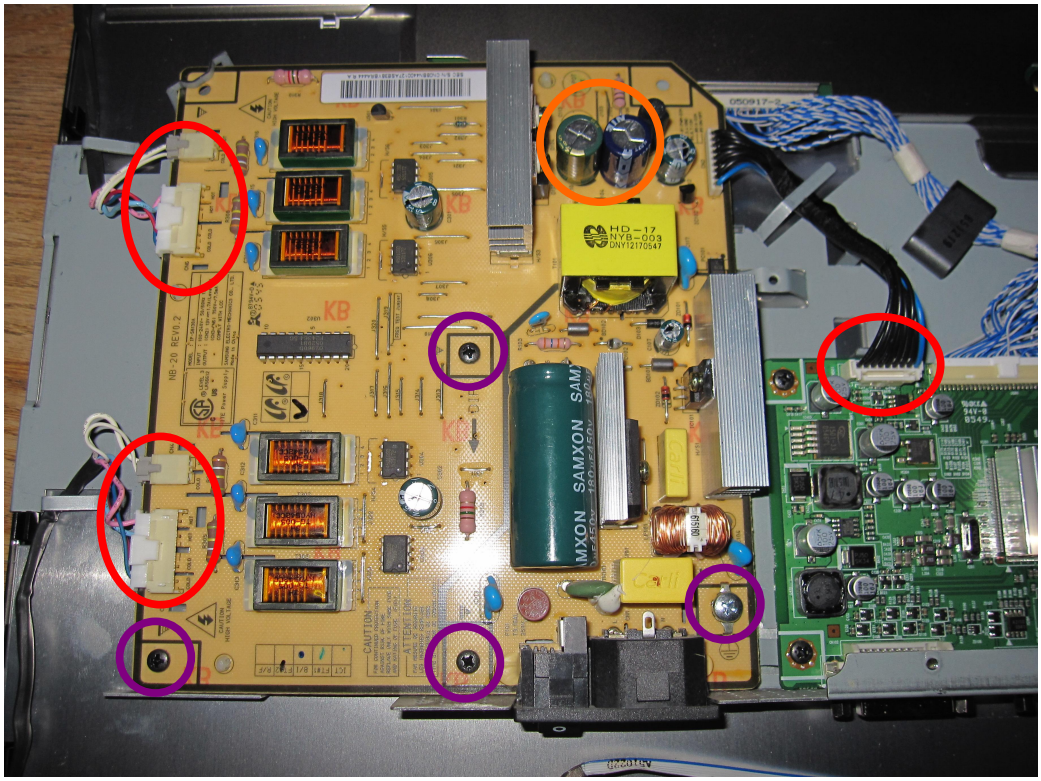
On right – Green in color -- is the video board. While it can cause flicker, it's not likely the problem.

On left -- Yellow in color -- is inverter board, which powers the backlighting for the monitor.

Remove yellow / left / inverter PCB

-- 4 screws [purple circles]

-- 5 connectors [red circles]



The problem capacitors – C110 & C111 -- are in upper left corner [orange circle]

Closeup view.

STEP 4: Make the Repair

Unsolder and replace C110 and C111.
Be mindful of polarity.

Note: My local parts house did not have the requisite 820uF @ 25V electrolytics. So after some thought I simply purchased 1 each 680 uF and 1000 uF components. The two are wired in parallel [one can easily see the PCB trace], so the resulting 1680uF will have approximately the same impedance and joule storage as the original 1640uF

Note: On two occasions of making this repair, the original equipment 820uF capacitors had obvious signs of stress as indicated by swelling at the top and bottom of the cans.

STEP 5: Reassemble

About Doug Johnson
BSEE, 1971 – Specialty in Analog Design
High School and College Work History – TV and Two Way Radio Repairman
Subsequently numerous small-scale hobby electronic projects.