

Xerox 7300 “Reset Toner Cartridge” Error - Modification

This modification comes at the suggestion of a former Xerox R&D engineer, and it's relatively easy to accomplish. My feeling is that there is not one single cause for this issue and so there's no guarantee, in my opinion, that this modification will solve the problem in every case. Nonetheless, it can only help by removing one possible cause, and in some instances it will no doubt provide a total cure. I have two machines, one has this modification, the other not. I will need more time to make an assessment of the results. The modification removes a acetate insulation sheet which protects connections on the Flag Sensor pcb, and replaces it with some insulating tape. It seems this acetate, which is not fixed in position, can sometimes move where it interferes with the movement of the flags.

Step 1

Remove the lid of the printer. This is held in place with 10 screws - or 9 if you're lucky and the lid has been off before! The one nearest the back hinge can only be accessed by removing the back of the printer, but I always leave this screw out to avoid that problem. If you need help on this, take a look at the video clip (link above). As you remove the lid, lift the front first and disconnect the cable to the display panel - it simply pulls out. Then you can lift off the entire lid.

All you require is:

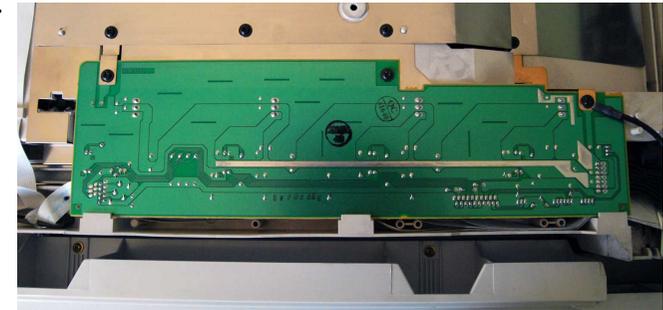
cross-head screwdriver
(preferably magnetized to avoid screws falling into the printer)

scissors

insulating tape

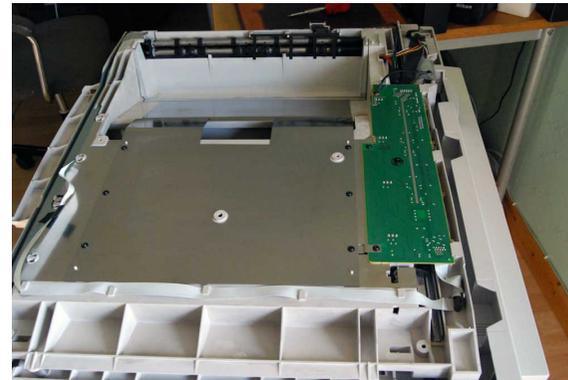
Step 4

The pcb is held in with three black screws and three plastic lugs. Remove the screws, and gently lift the earthing straps aside so that the board can be lifted up.



Step 2

Once the lid is removed, the green flag sensor pcb is seen, as on the right in the picture. This pcb will need to be lifted out of position to carry out the modification. First though, you need to disconnect the LED head wires which are attached to the other side of the pcb.



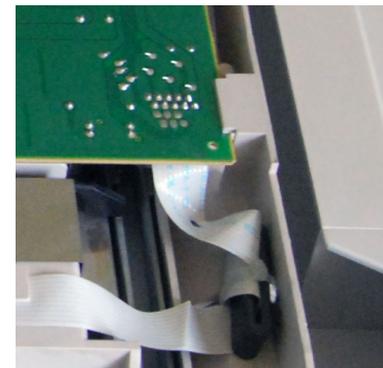
Step 3

Lift the cover of the printer and locate the four LED connectors. They need to be squeezed to release the catch, and then gently pulled off. You can just leave them hanging where they are. Close the cover again.



Step 5

Remove the connectors at each end of the pcb. They both simply pull out. Make a note of which way round the are, for later re-assembly.



Step 6

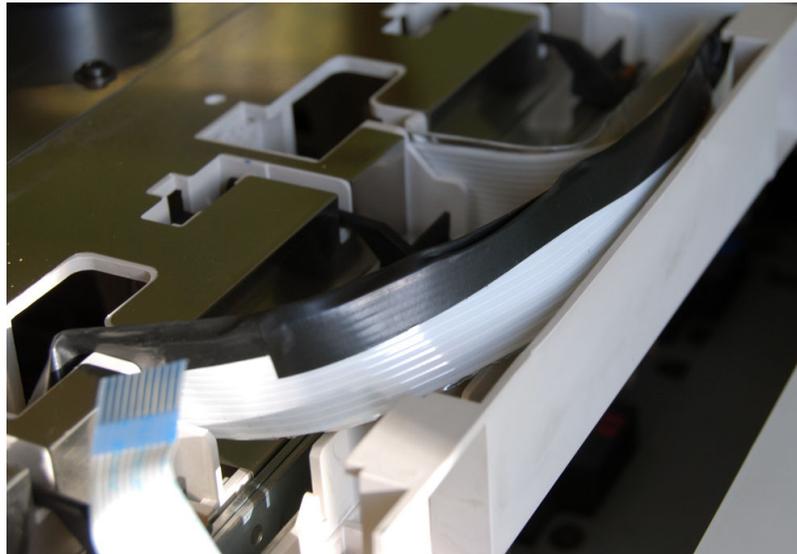
Gently lift up the pcb to reveal the acetate insulating strip. This is designed to prevent the top edges of the ribbon cables from touching or shorting the components on the pcb.



Using scissors, make some cuts in the acetate to enable its easy removal. There is no need to remove anything else from the pcb.

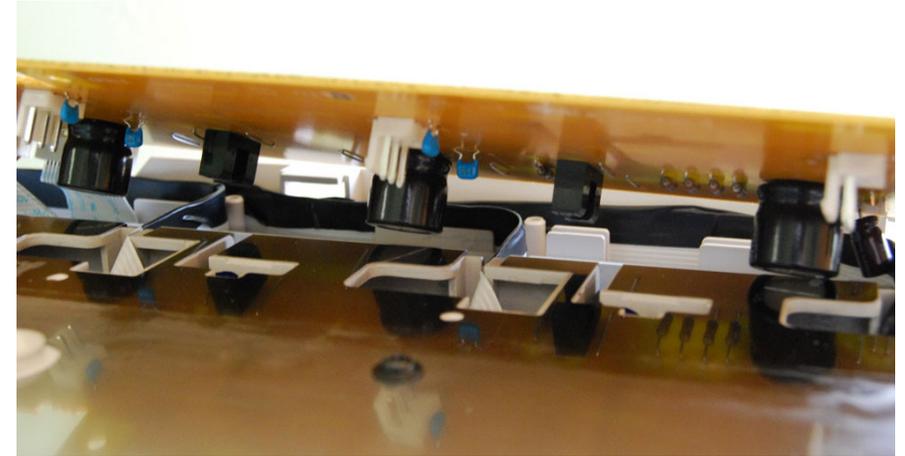
Step 7

To do the job of the acetate, cut some strips of insulating tape which need to be folded lengthwise along the top of the ribbon cables underneath the pcb. In order to stick them on, you will need to remove the ribbon cables from their guides, and then carefully relocate them afterwards. Getting them back in place so that the pcb can sit unimpeded back in its position is essential. Take time and care over this.



Step 8

Once all the ribbon cables are insulated, carefully check that the pcb can sit back in place without any obstructions. If you're happy that all's clear, locate the pcb under the plastic lugs, then lower the back and replace the screws. Take care to reconnect the earth wire and anti-static braces.



Step 9

Open the cover of the printer and replace the LED wires - they simply push back on. They will only fit one way.

Step 10

Re-fit the lid of the printer, not forgetting to connect the ribbon cable to the control / display panel before replacing the screws. If you had 10 screws in the lid, I would recommend only replacing 9, so that there's no need to remove the back cover in future.

Step 11

If you had to remove the back cover to take off the lid, then its replacement is the final step.