Apple Keyboard disassembly to clean PCB Membrane

Spilt liquids on keyboards can degrade connections between keys. This guide will show you how to clean and repair a damaged keyboard membrane for the iMac keyboard.

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This document was generated on 2019-09-23 12:13:32 AM (MST).

INTRODUCTION

- Deconstruct the iMac keyboard
- Clean the PCB Membrane
- Repair any faulty connections
- Re-construct the keyboard

TOOLS:

- Conductive Pen (1)
- Phillips #0 Screwdriver (1)

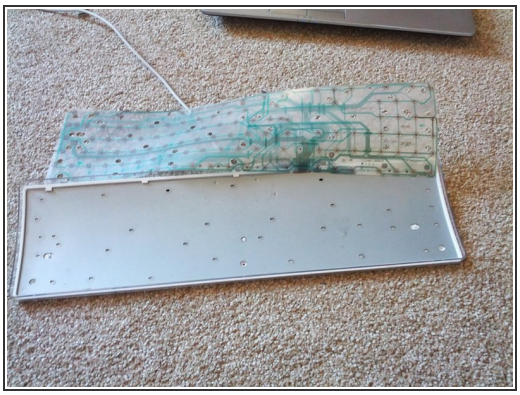
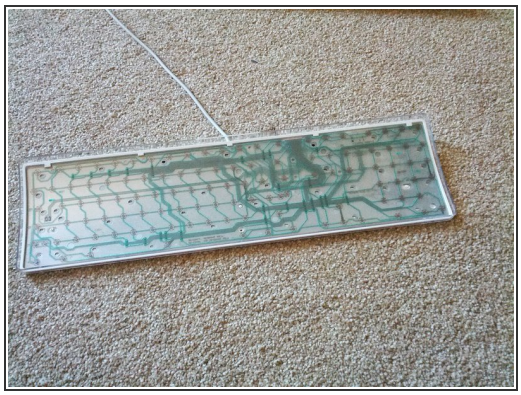
Step 1 — Apple Keyboard disassembly to clean PCB Membrane

- You will need 1 conductive pen and a small crosshead screwdriver

Step 2

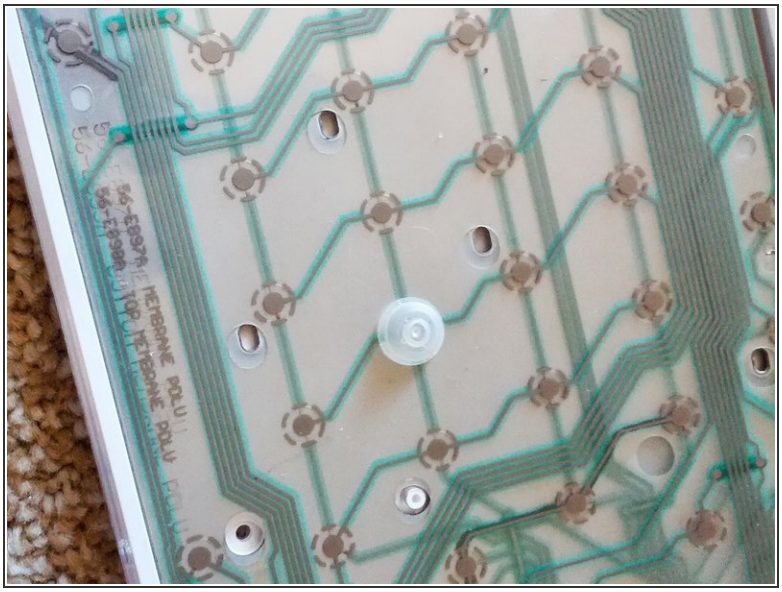
- Turn the keyboard over and remove all the screws from the back.
- Lever open the bottom of the keyboard and carefully remove the screws from the metal holder.

Step 3

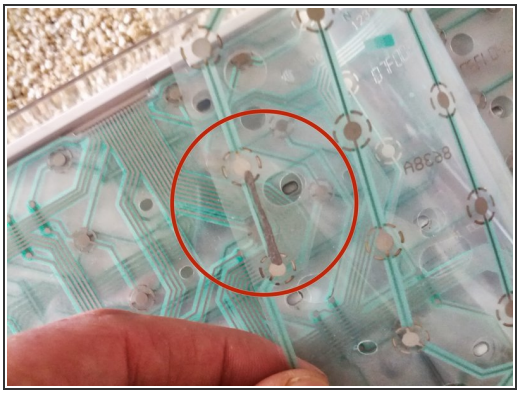
- Once you've removed all the screws from the metal holder, carefully lift and pull all the top elements of the keyboard backwards together, leaving the white key holder on the floor.
- Gently place the white key holder to one side, don't tip it or you could lose some of the key nodules.
- Place the metal holder back into the keyboard retainer as in picture 2. Then gently fold the membrane back into place.
- At this stage if you can see any liquid residue or dirt on the membrane use a very lightly damp cloth to clean, or a some baby wipes.
- Do Not use lighter fluid, turpentine, or nail polish remover. Anything strong like this could destroy the membrane.
- Once you think you've got any dirt or residue you can off the PCB membrane, let it dry and move onto fixing the keys.

Step 4



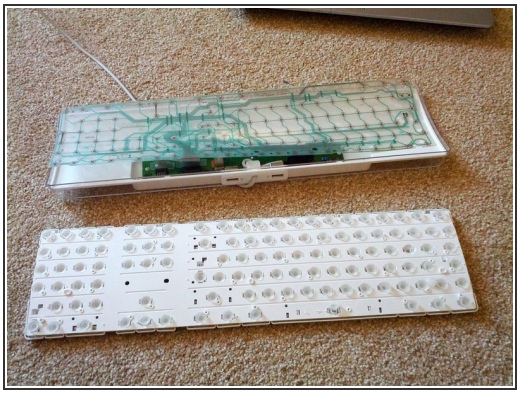
- Collect one of the rubbery nodules from the white keyboard piece we put to one side.
- Plugin the keyboard to a PC/MAC, and using this on the various key points, you can gently press in the emulate a keystroke
- Press every key around any broken keys to figure out where the issue is.

Step 5


- There are 3 plastic membranes, the key presses are created by the top layer points pressing against the bottom points.
- in between the top and bottom layers is a clear piece of plastic membrane.
- The key to repairing any broken keys is to find them, then follow the green line for each broken key back to the next key that works.
- Once you find a key that works on the same green line as your broken one, you can...
- Draw a line with your conductive pen to connect the broken and working key.
- Remember, only on the same green line. If you cross lines your keys will not work correctly.
- You can see the dark lines on my pictures connecting the broken keys. In some cases, i've gently scratched away the green covering to expose the wire underneath, and connected my keys to that instead of drawing a long messy line.
- Often the key doesn't work without drawing lines on the top and bottom PCB membrane. Both sides will use slightly different routes, so remember to follow your green lines carefully.

Step 6


- Once you're confident you've sorted all the broken keys, bring back your white keyholder... Gently, check all the little rubbery nodules are in place in the keys.
- Carefully bring the rest of the keyboard to the top of the white keyholder and fold the membrane over the top of the keys.
- Carefully place the metal holder on top of the membrane. Checking that you haven't dislodged any of the rubber nodules.

Step 7


- Begin screwing all those pesky little screws back into place.
- Don't forget to screw back in the front faceplate for the white keyholder.

