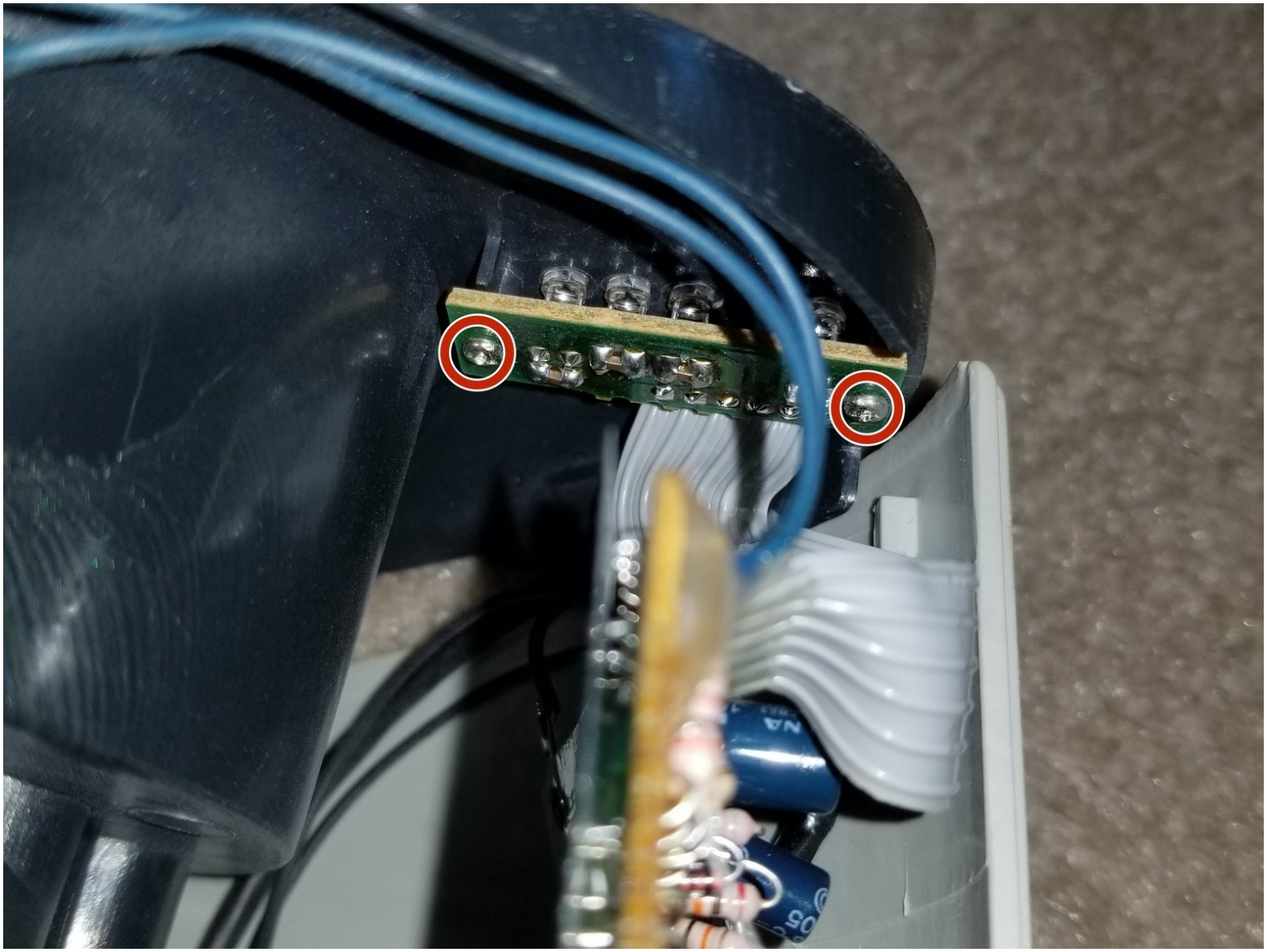
Ionic Breeze LED Replacement

This guide will show you how to replace the LEDs in your Ionic Breeze Air Purifier.

Written By: Navy Vet 2015



INTRODUCTION

I'm replacing the blue OEM LEDs for green LEDs. I have two reasons for doing this but I believe number 2 will be the most compelling reason for a person to do this.

1) Blue light is bad for your eyes. I won't go into specifics on why. Do your own research. My device is in a bedroom and at night the blue light can be an annoyance.

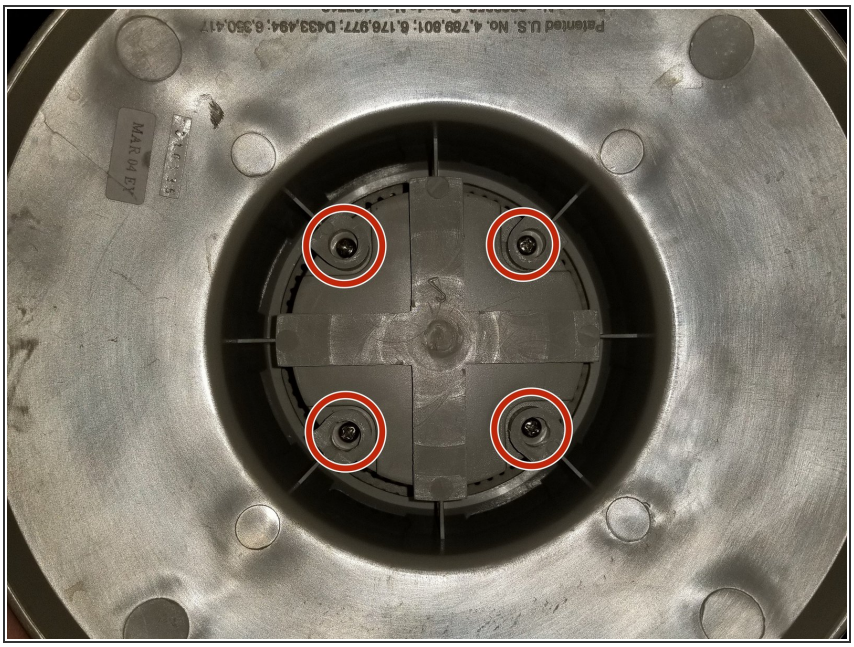
2) Blue light attracts bugs which makes the device prone to attracting mosquitoes and other annoying insects.

THIS GUIDE PICKS UP FROM STEP 3 OF THE DISASSEMBLY GUIDE.

TOOLS:

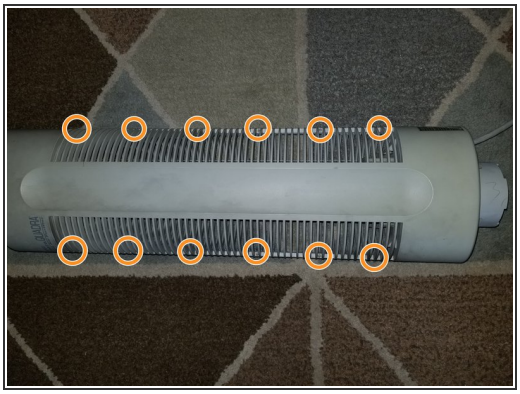
- Phillips #1 Screwdriver (1)
- Soldering Iron (1)
- Plastic wrap (1)
- Electrical Tape in 6 Assorted Colors (1)

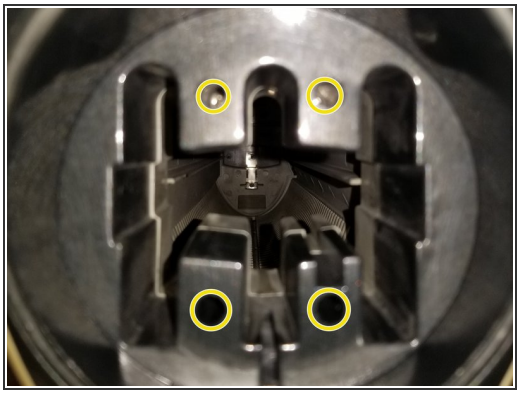
Step 1 — Remove Base



- Start by turning off the device, unplugging it and remove the Ionic Breeze "filter". It's more of a tri-blade object rather than a filter but you get the idea.
- Next, lay the device flat and remove the 4 screws holding the Ionic Breeze to its base and pull it away from the device.

Step 2 — Remove the screws holding the body together



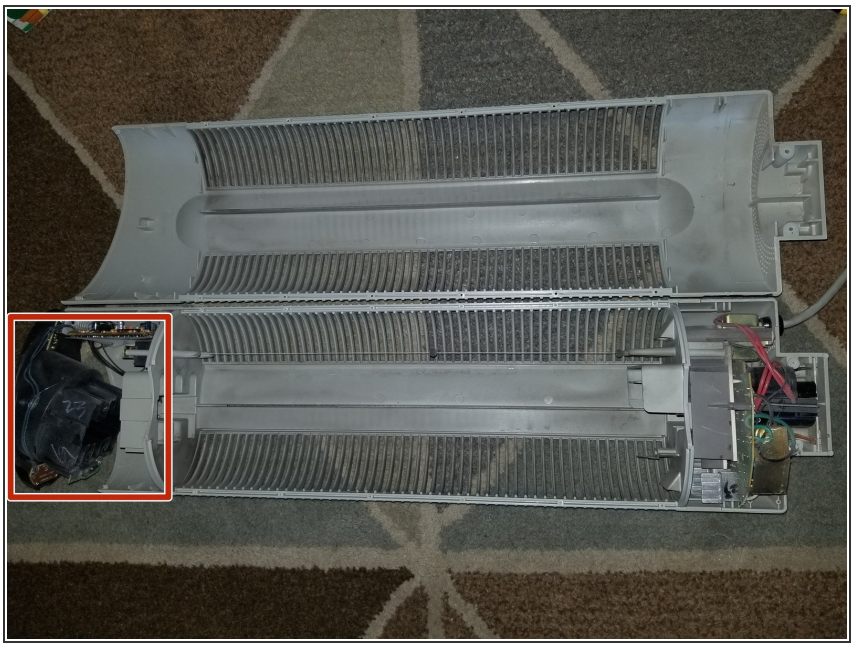


- Remove the 2 hidden screws found beneath the base with your #1 screwdriver.
- Remove the 12 smaller screws with your #1 hobby screwdriver.

ⓘ You can only see 4 of the smaller screws in the photo but I've highlighted their estimated location.

- Remove the 4 screws attaching the top of the device to the body with your #1 screwdriver.

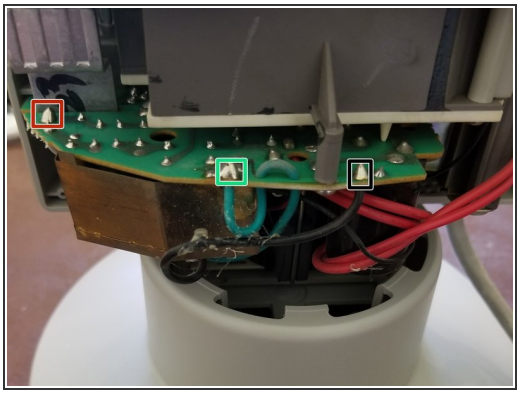
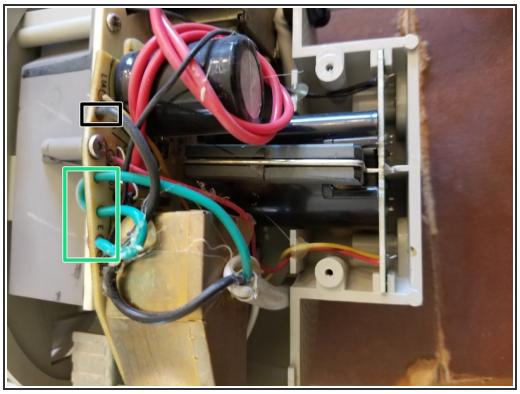
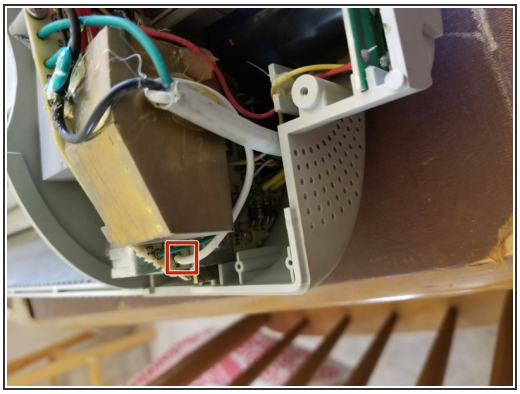
Step 3 — Disassemble Body



- Separate the two halves of the body.
- Although I have separated the top from the main body in this picture you do not need to worry about this now. We will do this in a later step.

If your goal is to replace the LEDs then go ahead and separate the top electronics from the body and continue on with the LED Replacement Guide.

Step 4 — Desolder Power Cable

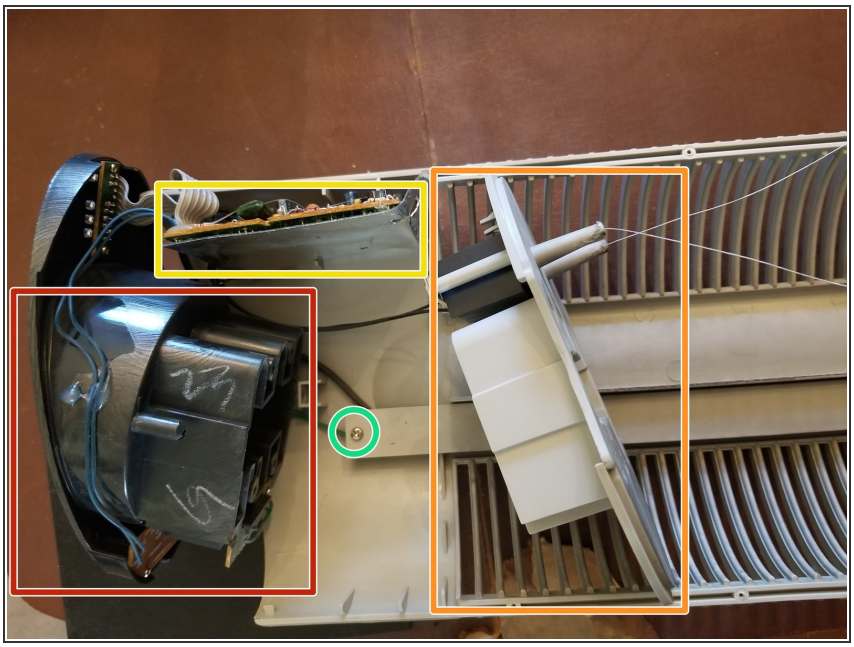
- Photos depict where to desolder the power cables connection points. Remove any hot glue that may be holding down the cables. These devices are a little seasoned so the glue should not be hard to remove by hand.

I found it easiest to use the base to prop up the body, the half of the housing that the electronics typically reside in, in order to get a good angle at removing the solder. I'm sure it can be done on its side but lets work smarter, not harder here.

- Remember to pull the ground cable completely through the PCB. We will re-thread it back through during the reassembly process.

Remember, the base is not attached at this point. Don't knock the Ionic Breeze over while it's in an upright position with it's internal components exposed.

Step 5 — Remove Upper Electronics



- Gently lift up on the top in order to separate it from the half that it is attached to.

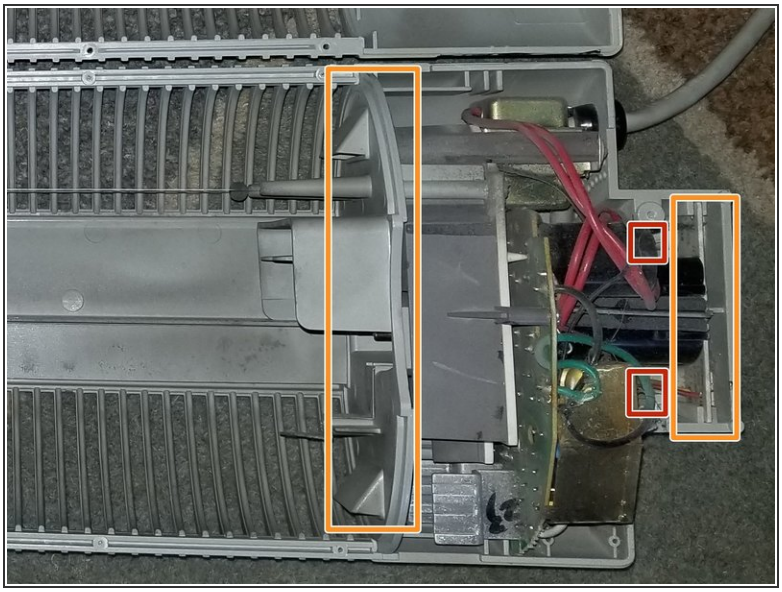
⚠ Be gentle when lifting the top as there are cables soldered into place that run down the length of the device. Don't jerk it out, NO PUN INTENDED, as you may damage these wires or their solder points.

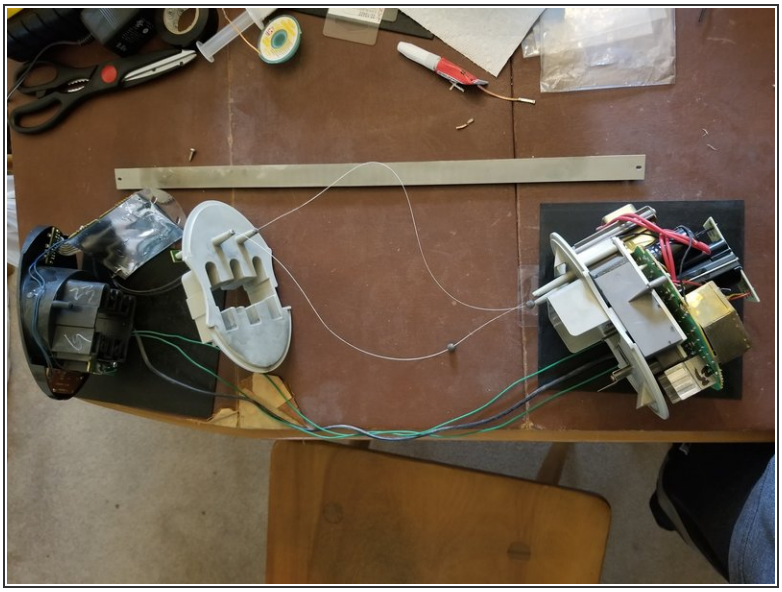
- Pull the plastic piece out from its retaining slot.
- At this point, the PCB may make a slight popping sound. It didn't break! It simply popped out of it's retaining slot as well as you removed the plastic piece.

⚠ Remember, be gentle with the grey plastic piece. It's still attached to the bottom electronics via the 2 static cords. DO NOT over stretch these cords.

- Remove the single screw that's hidden underneath the top/power button unit.

Step 6 — Remove Lower Electronics





- If you look at the smaller bottom PCB you will notice 2 wires on both sides of it. Slightly above that there should be some hot glue holding these wires to the plastic housing. You cannot see it in the picture but its estimated location is highlighted in red. Remove this and any hot glue that's holding the main power cable in place.
- When the glue is removed gently lift the lower plastic piece and the bottom PCB at the same time. It will come out as one whole piece.
- Place the electronics off to the side.

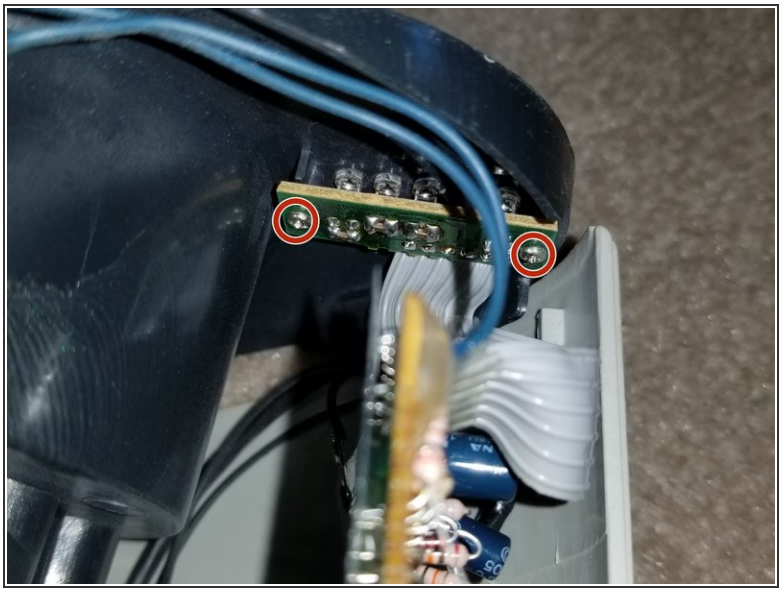
Step 7 — Waterproof Power Cord (Optional)

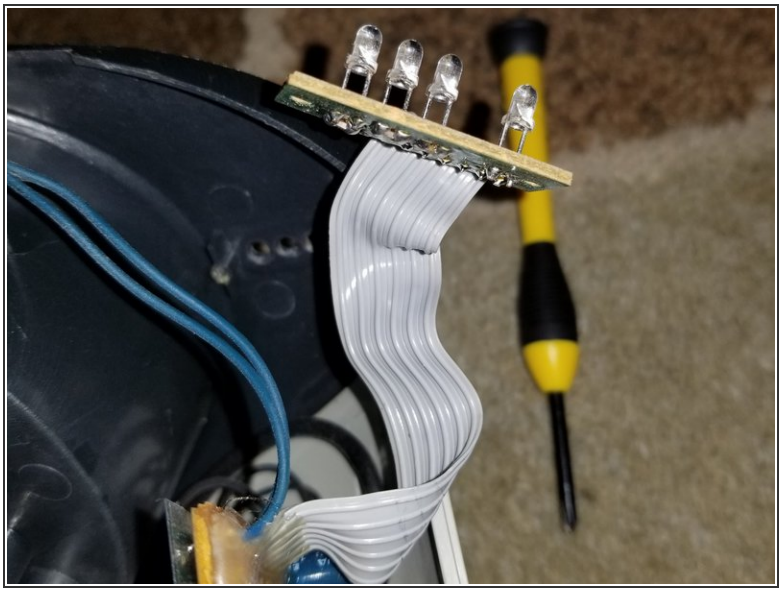
You only need to do this if you intend to clean the housing with soap/water. Years of use will have the inside of your Ionic Breeze absolutely filthy, which of course is it's intended purpose. Cleaning it won't hurt the housing. I simply scrub by hand with some dish soap to remove the filth. You may want to wear gloves depending on how dirty it is.

- Wrap both ends of the power cable real tight with plastic wrap and wrap the entire thing in electrical tape.

My photo only depicts wrapping the top and bottom but I suggest wrapping the whole things in electrical tape if you have enough to spare. Better safe than sorry.

Step 8 — Remove 2 Screws

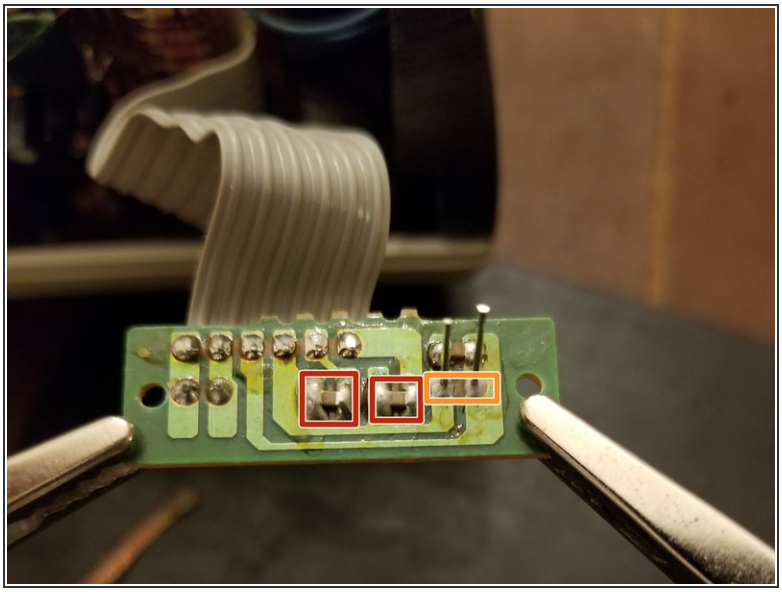


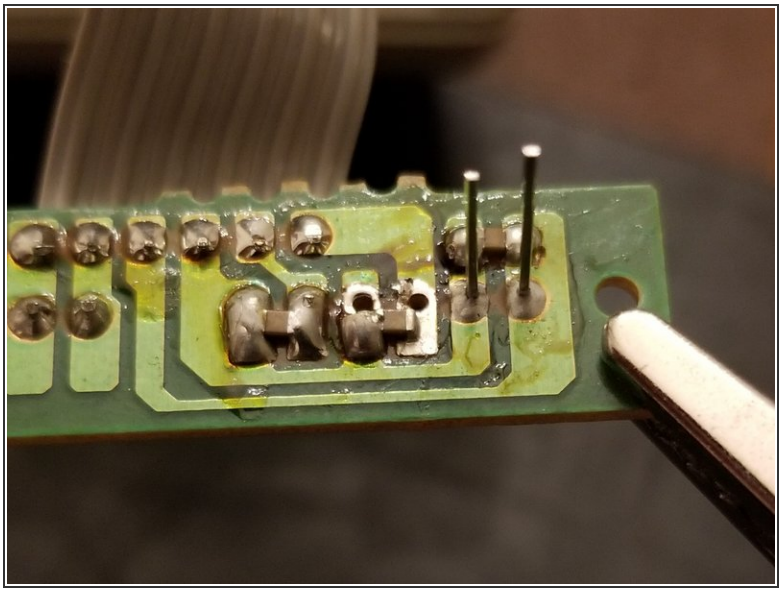


- Unscrew the 2 screws holding the LED light PCB in place.

This guide picks up from Step 3 of the Disassembly guide.

Step 9 — Desolder/Resolder LEDs





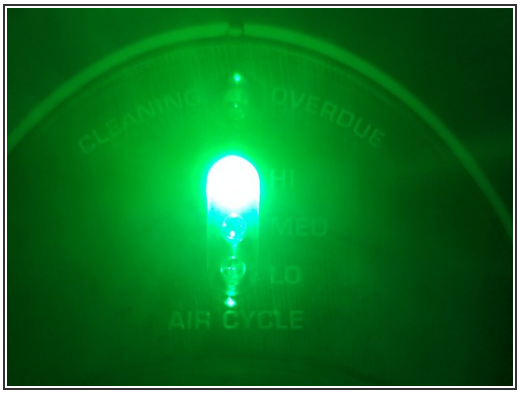
When desoldering and removing the OEM LEDs, make sure to leave one soldered in place to use as a height reference.

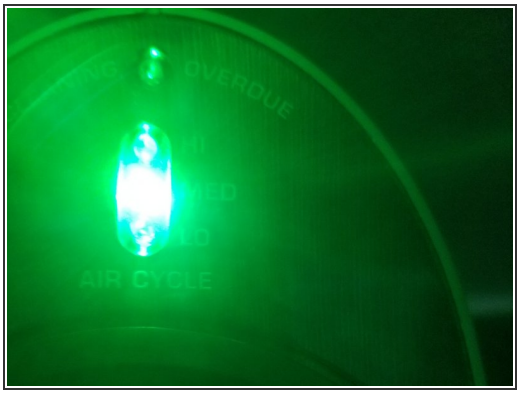
- I replaced the "Low" LED first. It's the only one on the PCB that doesn't have a surface mount capacitor.

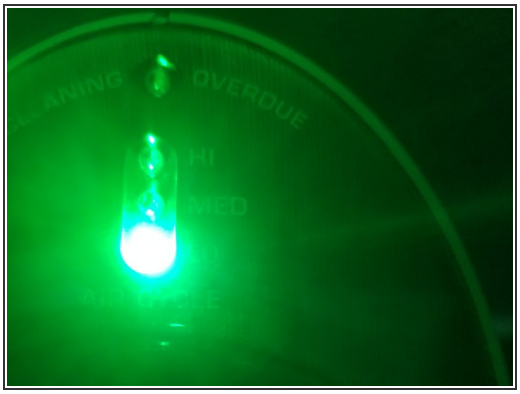
When removing the "High" and "Medium" LEDs be careful not to loose the capacitor. These are highlighted in red. It is possible to do this without removing it from the PCB as shown in Photo 2. Just reapply solder if needed.

- Repeat until all 3, or the desired number, of LEDs are replaced.

Step 10







I left the "Cleaning Overdue" light the original OEM red but replaced all others to green.

- I've replaced the original OEM blue with: 3mm Green LED x3 Current: 20mA Forward Voltage: 3.0-3.4v

To reassemble your device, follow these instructions in reverse order.