

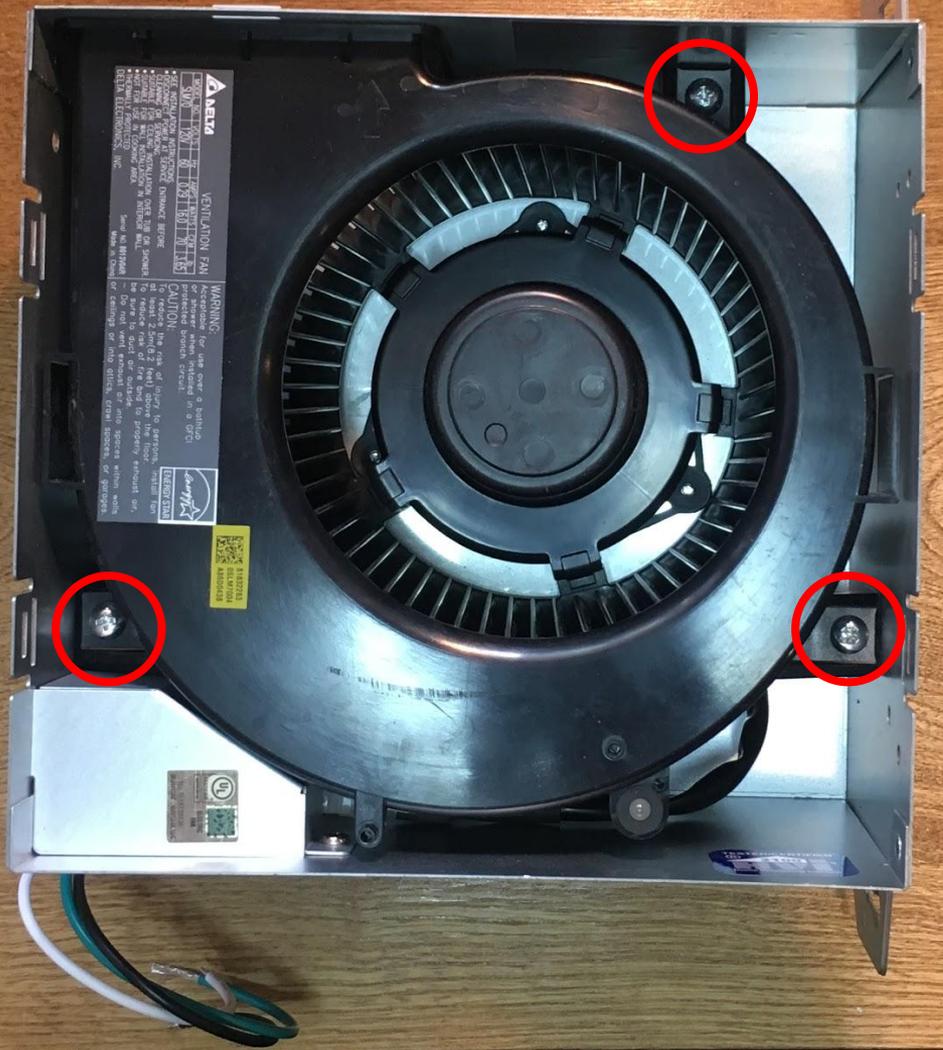
ATX ■ LED

Rewiring the Delta Electronics SLM70 Ventilation Fan

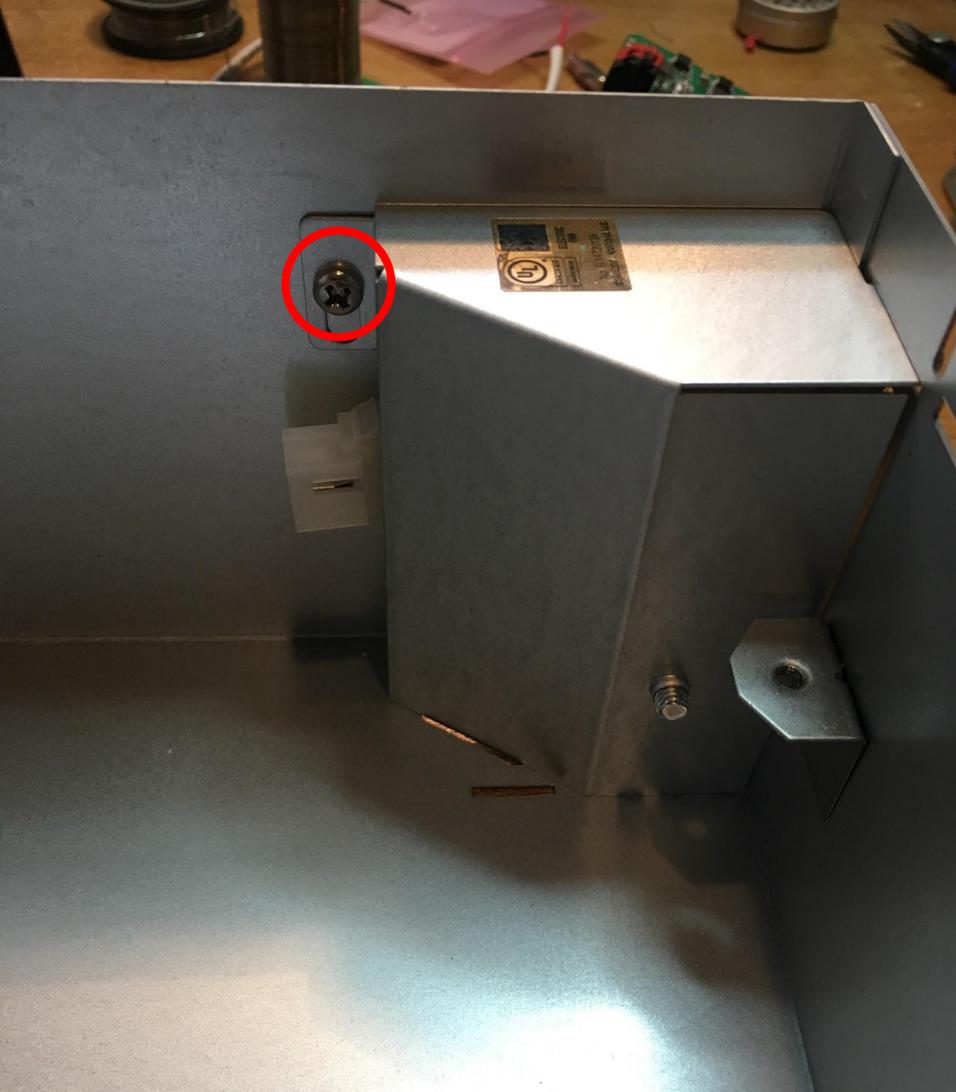
Tools and Supplies

- Delta Electronics SLM70 Bathroom Fan
- LM2596HVS Step Down Converter

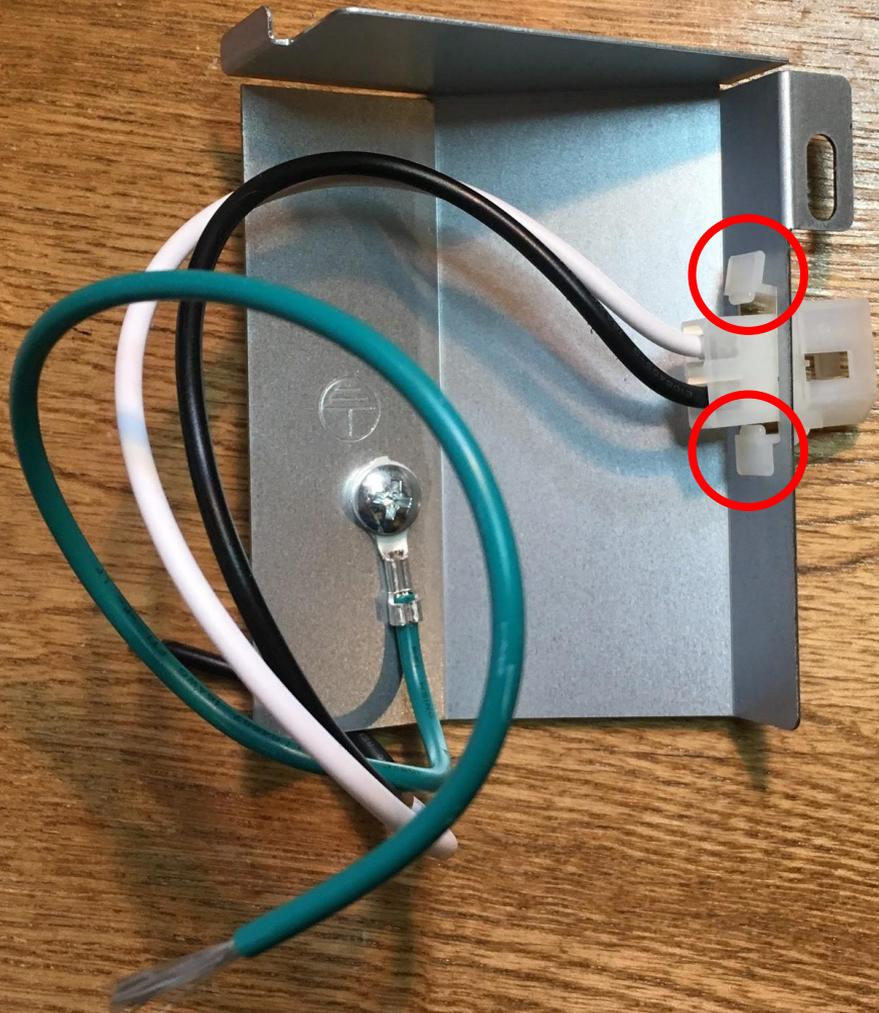
- Soldering Iron and Solder
- 20 AWG wire or larger
- Wire strippers
- Philips Screwdriver
- Small Flathead Screwdriver
- Voltmeter



To remove the fan from the casing, the three circled screws must be removed. The fan assembly then slides out.

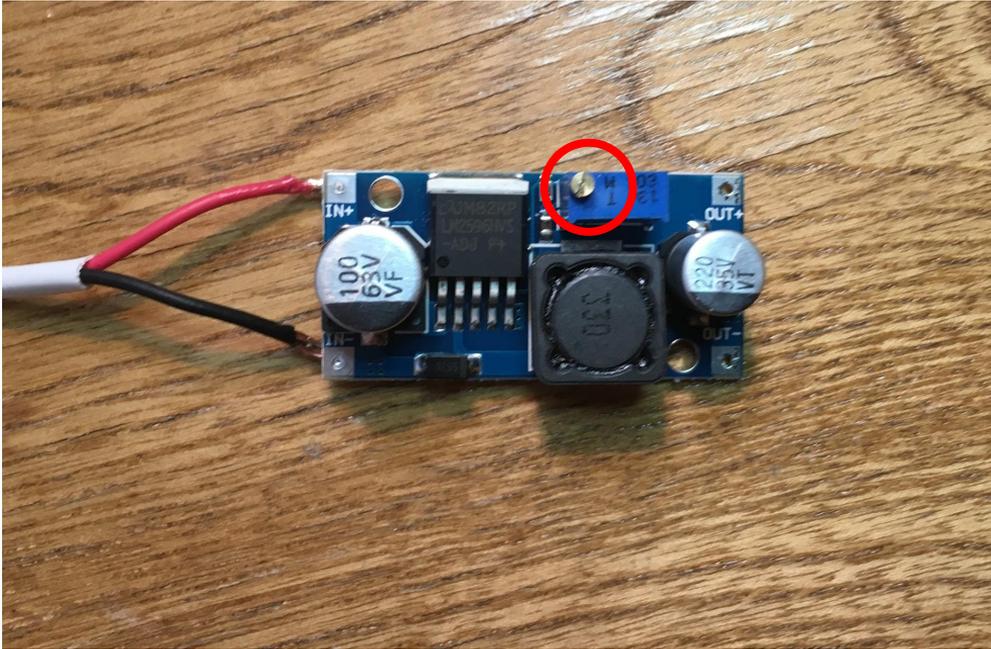


To provide easier access to the wires, remove the screw on the left and take off the protective plate.

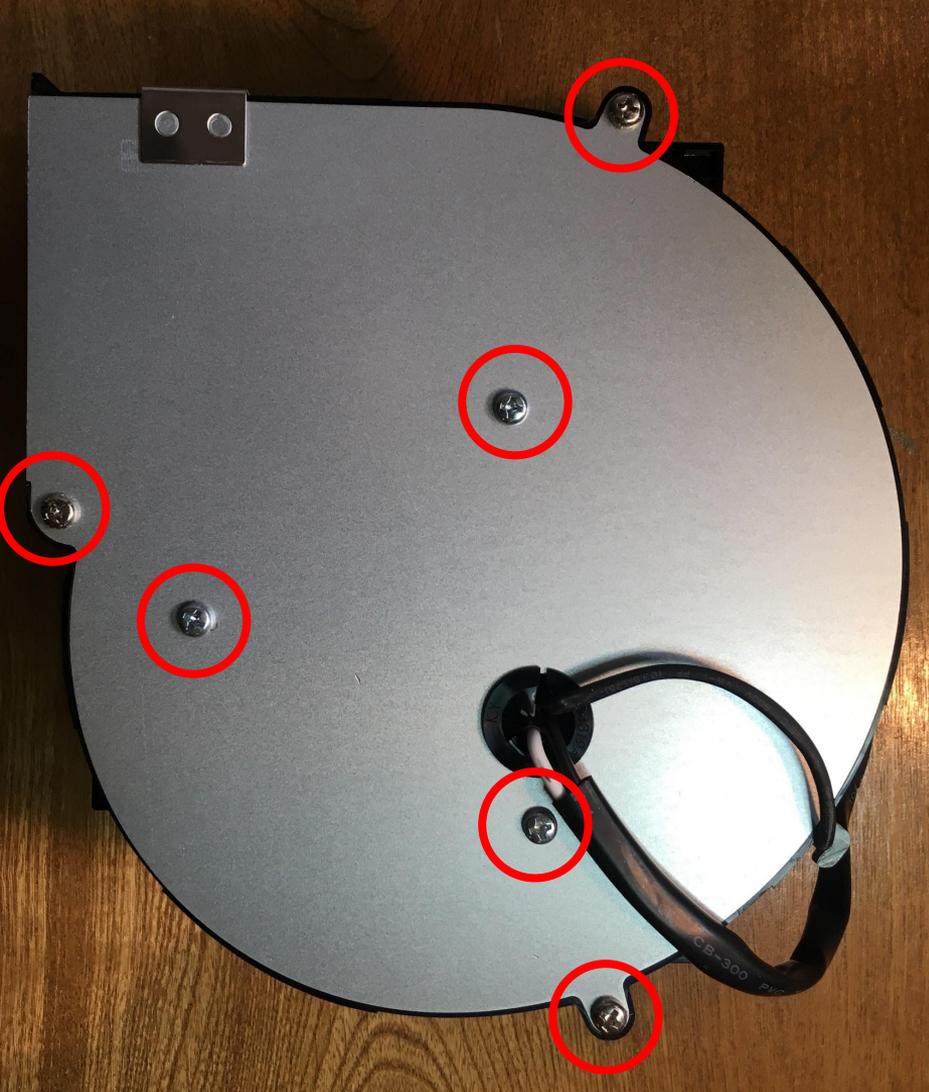


Once the plate is removed, The 120V wiring can be easily taken out by squeezing the plastic insert and pulling it from the enclosure. The ground wire can be unscrewed and the protective plate can be reinstalled.

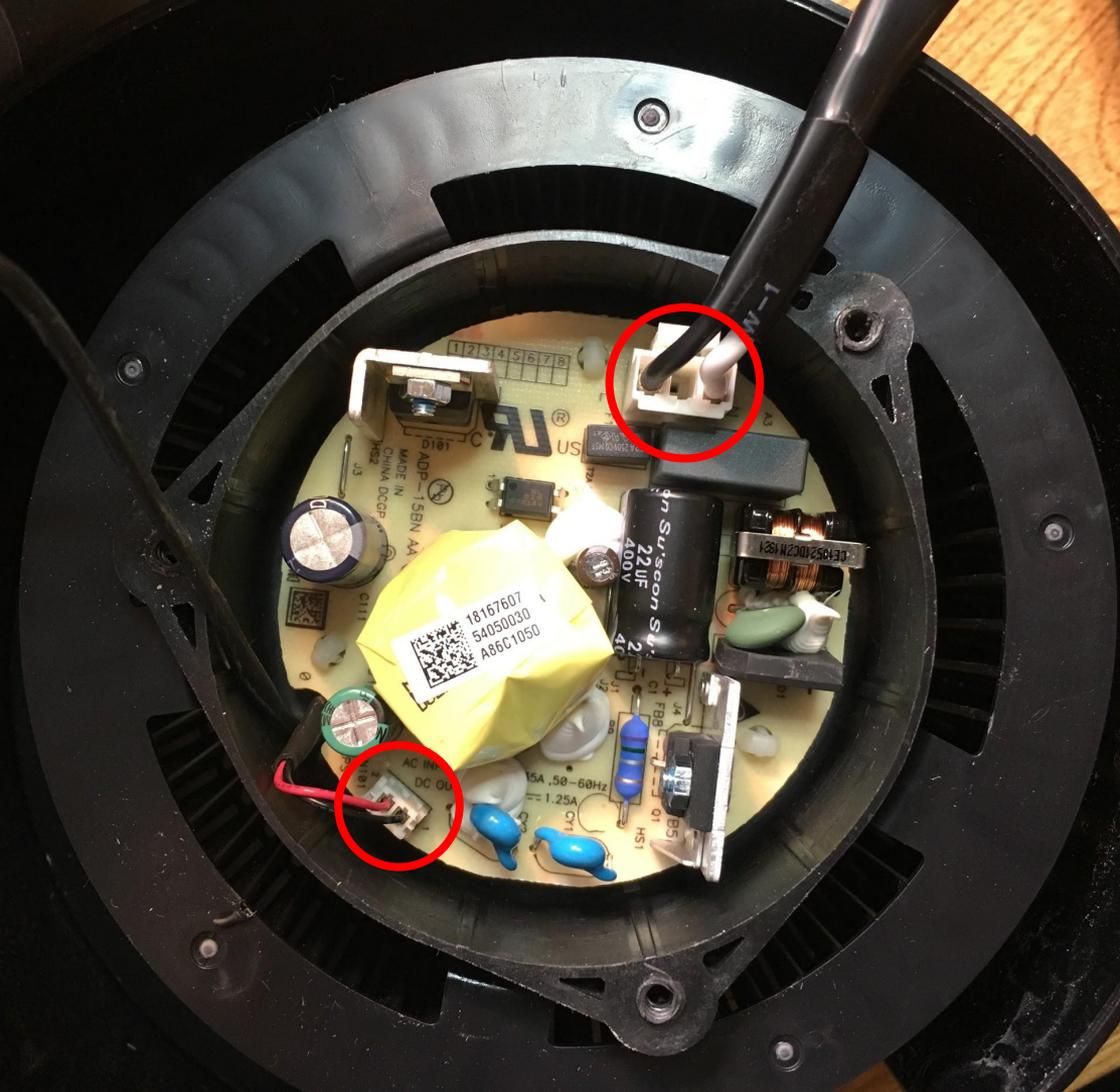
On the step down converter, solder approximately 10" of wire onto the input. This is where the 48v source will eventually be connected.



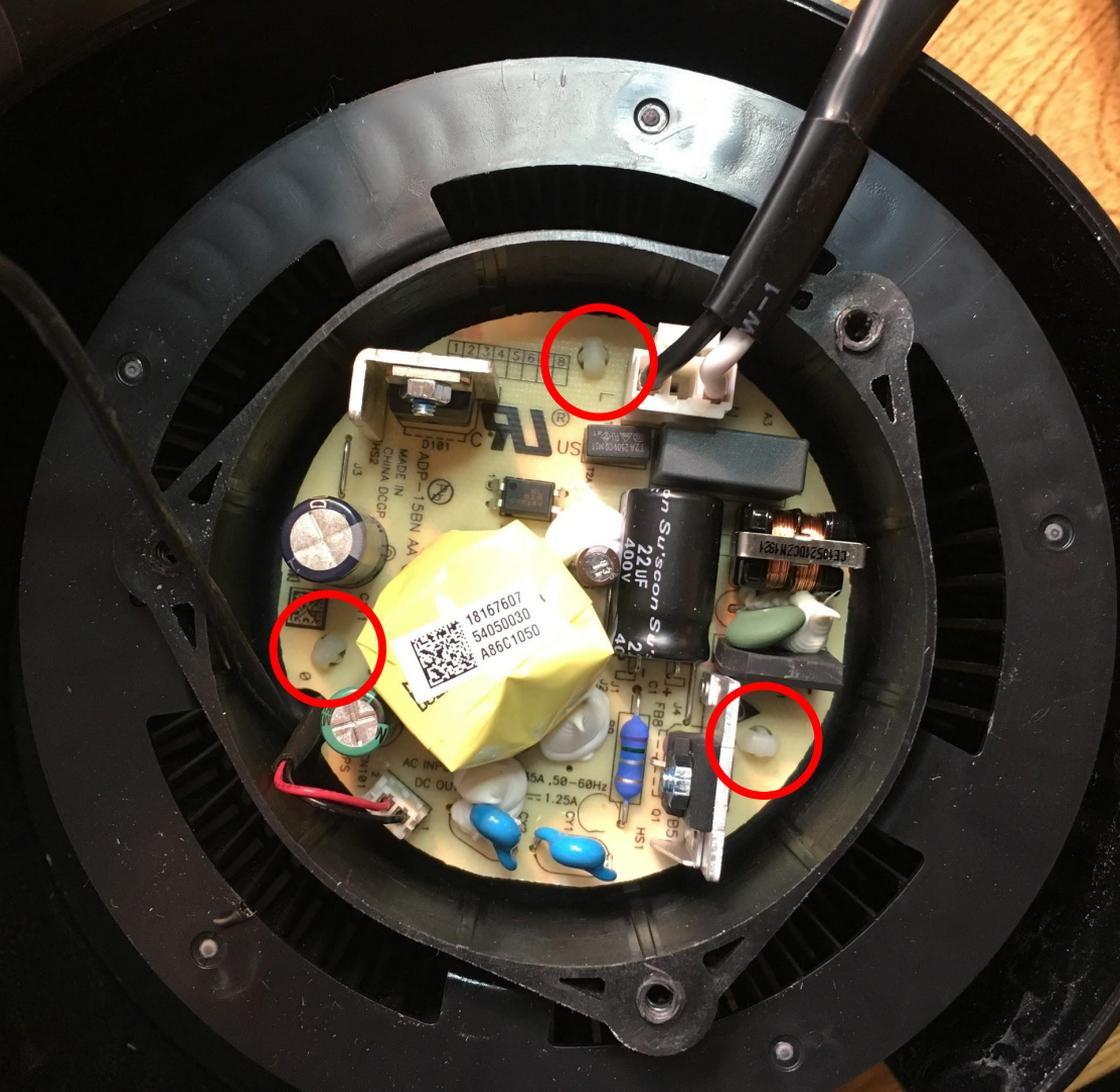
With 48v connected to the input, set the output voltage to 12v by tuning the potentiometer and measuring the output voltage. Clockwise will increase the voltage and counter clockwise will decrease the voltage.



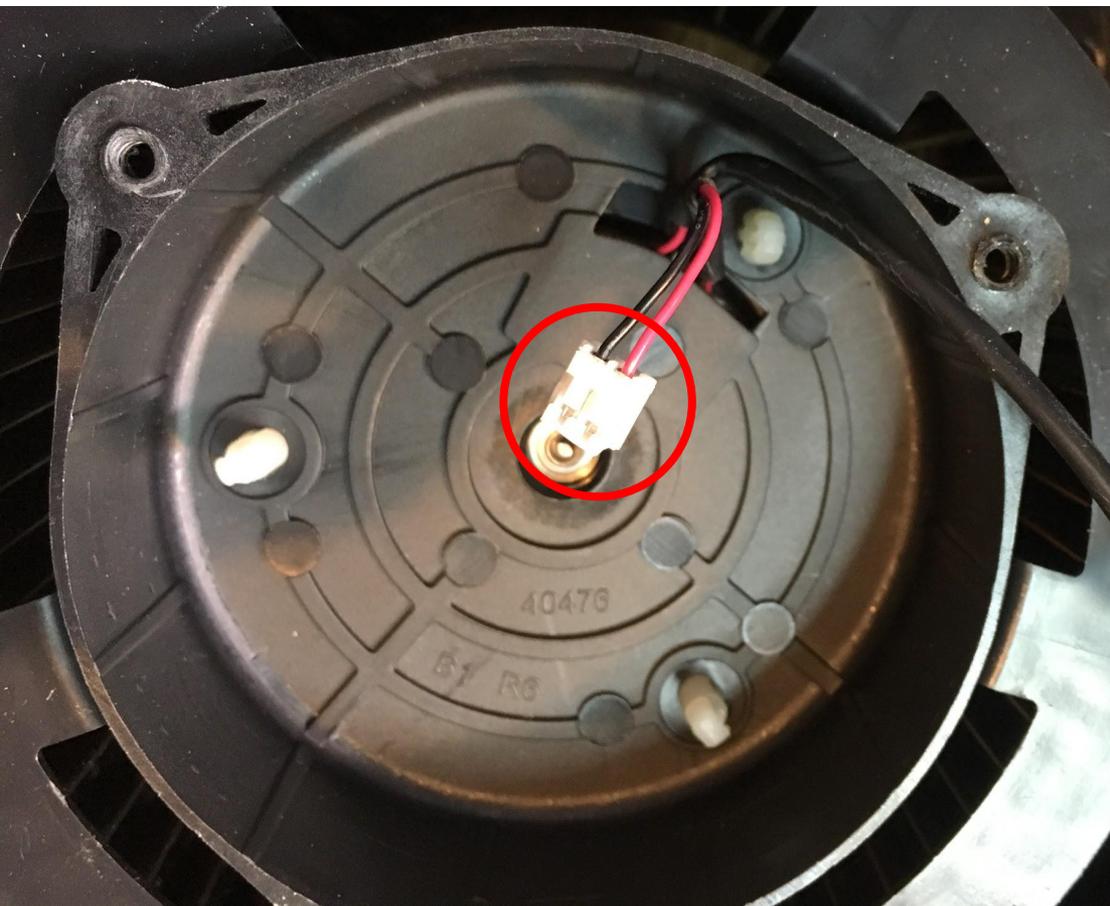
To access the AC-DC converter, the back plate of the fan must be removed. The outside screws disconnect the outer plastic and the inner screws will disconnect the motor housing.



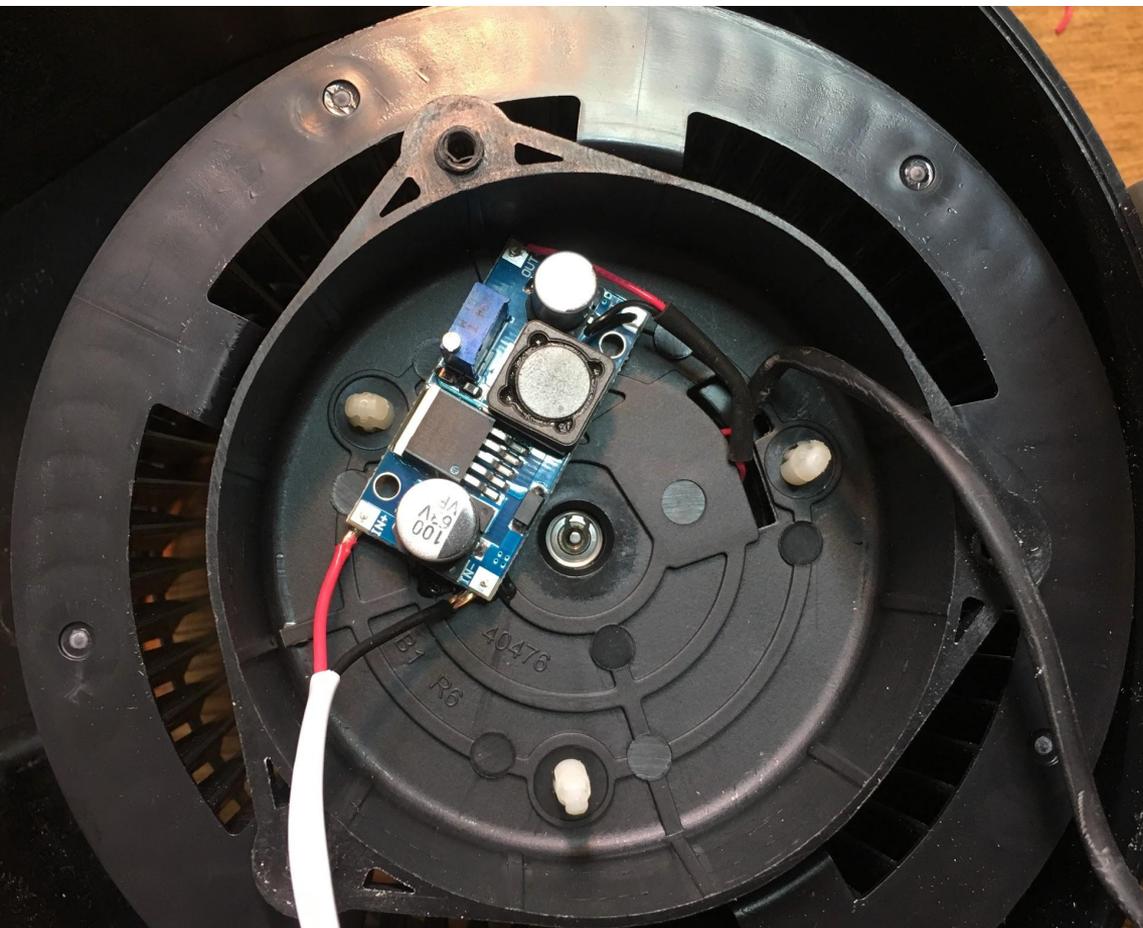
Before removing the old power board, remove the high and low voltage connections.



There are three plastic plug connectors holding the AC-DC board in. These should be either removed or can be pressed together and the board should slide over them.



To connect the new step down converter you'll need to solder the 12v input of the fan to the output of the LM2596HVS.



Once the leads are soldered on, the board can be affixed to the housing using an adhesive. Then follow the steps in reverse order to put the fan back together. A 48v supply will then turn on the motor.