Neptune Apex EB832 12v Repair

Do not attempt if not familiar with electrical components and basic appropriate safety precautions. I am not responsible for any outcome of using this guide- this is just a summary of how I performed my repair.

This repair guide is for Neptune Apex EB832's with Step Down 500ma DC Modules and ALL the following symptoms:

- Outlets do not output 120v power to devices.
- Neptune Logo is solid orange when USB is connected to apex (Or flashing when disconnected)
- LED outlet indicators function and change correctly when plugged into Apex.
- There are no audible "Clicks" when EB832 is plugged in, or outlet changed in Fusion.
- Apex Displays 0v, 0w, in Fusion.

This Guide is NOT for:

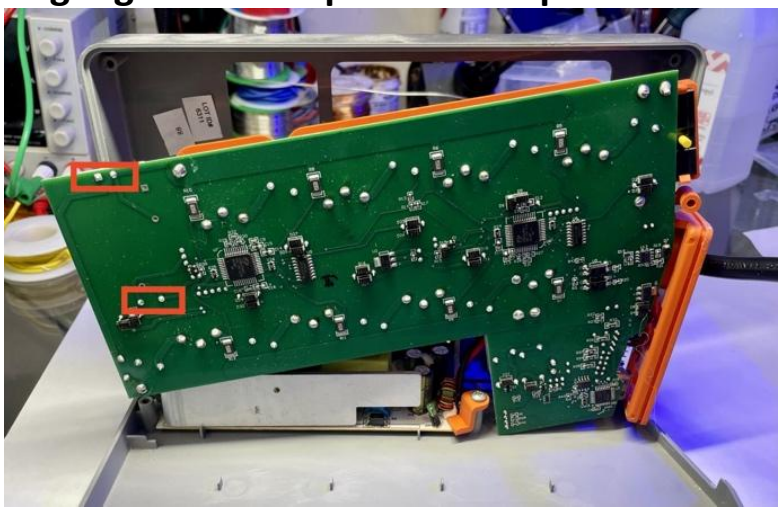
- Newer EB832 design with black Meanwell PSU.
- EB832s with rapidly flickering Neptune Logo.
  EB832s with specific (not all) outlets failing to output power.
- EB832s with other symptoms not mentioned here.

The cause is a defective 12v Power Supply. A replacement can be purchased on amazon for $7.99 with prime delivery. See:

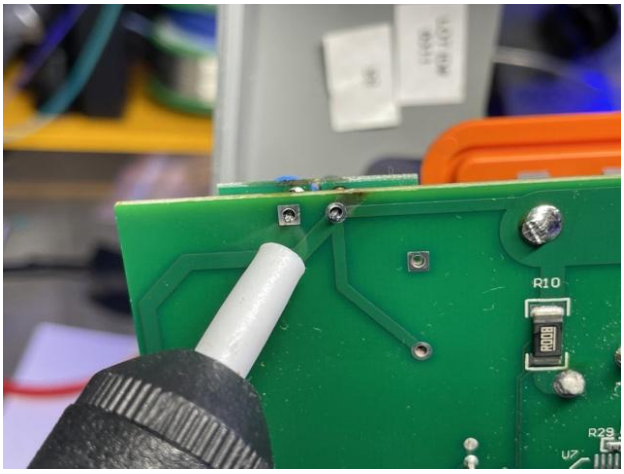
https://www.amazon.com/gp/product/B07FNJZ1PR/ref=ppx_yo_dt_b_search_asin_title?ie=UTF8&psc=1

1. Remove 3 phillips screws from the back of EB832, then flip over and fold open EB832 as shown. Be careful to not damage the LED indicator ribbon cable. OPTIONAL: unclip and unplug the LED ribbon cable to prevent damaging it.

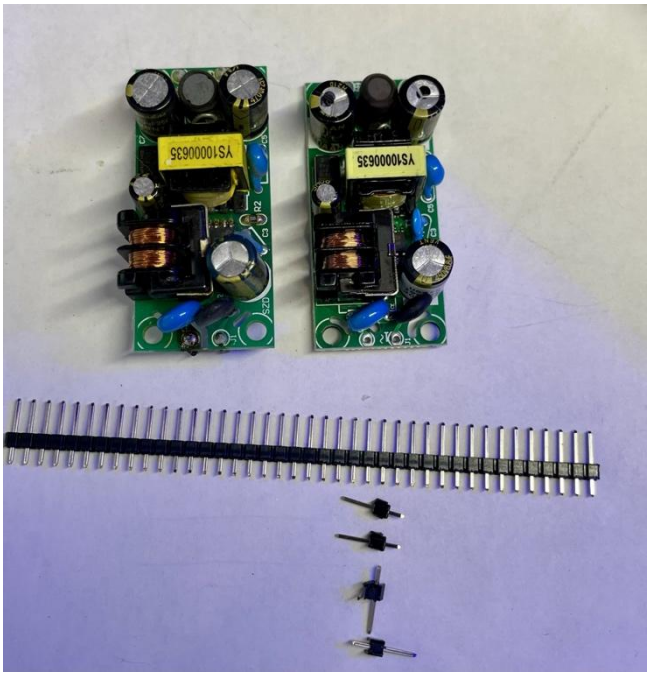
2. Fold up the main PCB to access the back, while being careful to not damage the LED indicator ribbon cable . There are two orange PCB hold-downs that may require loosening and rotating to release the PCB. Highlighted are 4 pins that require desoldering.



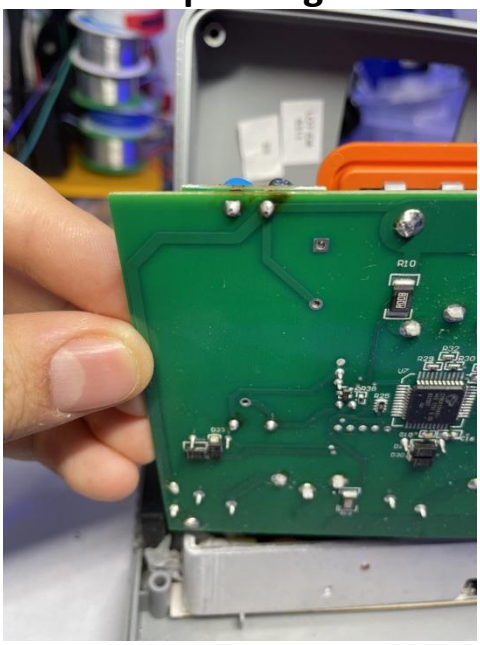
3. Desolder the 4 pins, and then pull off 12v power supply. If a pin is sticking, heat it up to soften solder while removing PSU. Below image is after using solder sucker tool, which makes the job easier.



4. Prepare new 12v PSU (Right) by soldering on the 4 pin headers. You can remove and reuse the old pin headers, or replace them.



5. Put replacement 12v PSU in place (three capacitors face inward) , solder the pins, and trim excess pin length.



6. Put the PCB back in place, close the top cover, and replace 3 rear screws. Once plugged in you should audible hear clicks as the outlets turn on. (Assuming you had any outlet fallback states to “on” position).

7. Once repair is confirmed, order another spare 12v supply to prepare for the next EB832 failure in 2-3 years.

Here is what the 12v indicator looked like before and after the repair. Before, it was hardly visible. After, it is bright and easy to see. (CAUTION: exposed 120v inside!)