

X-123

Power supply Y-1a2a completely lacked a 12VDC supply voltage; installing a wire between the DC high voltage bus and the power input pin of the +5VSB daughter board restored the 12V supply. This bypassed an apparent-open via that is the only intermediate connection found between the two points (the connecting trace is located on an internal layer of the board). Fuse F1, MOSFET Q11, and driver IC U301 were replaced, but still did not restore functionality.

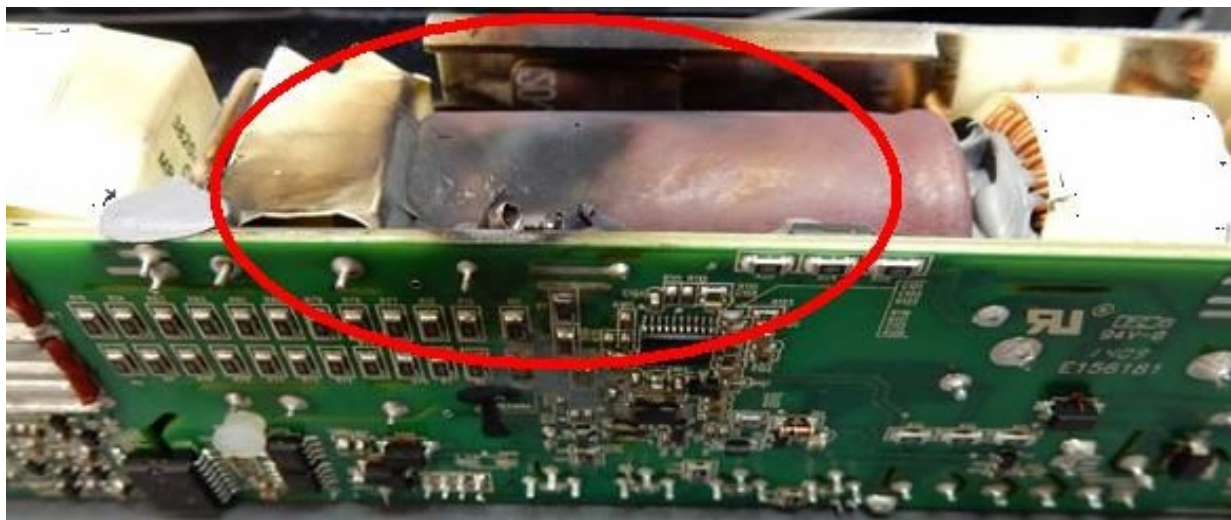


Figure 5: Exploded F1 and resultant debris of power supply X-123. Note encircled smoke damage.

X-234

Fuse F1 was replaced in power supply X-234, which restored this power supply's functionality.

X-345

The +5 standby voltage of this power supply was restored with an external jumper wire, as was done for Y-1a2a. The fuse F1 was open and diode D1 was found to be shorted and both were replaced. This power supply remained non-functional.

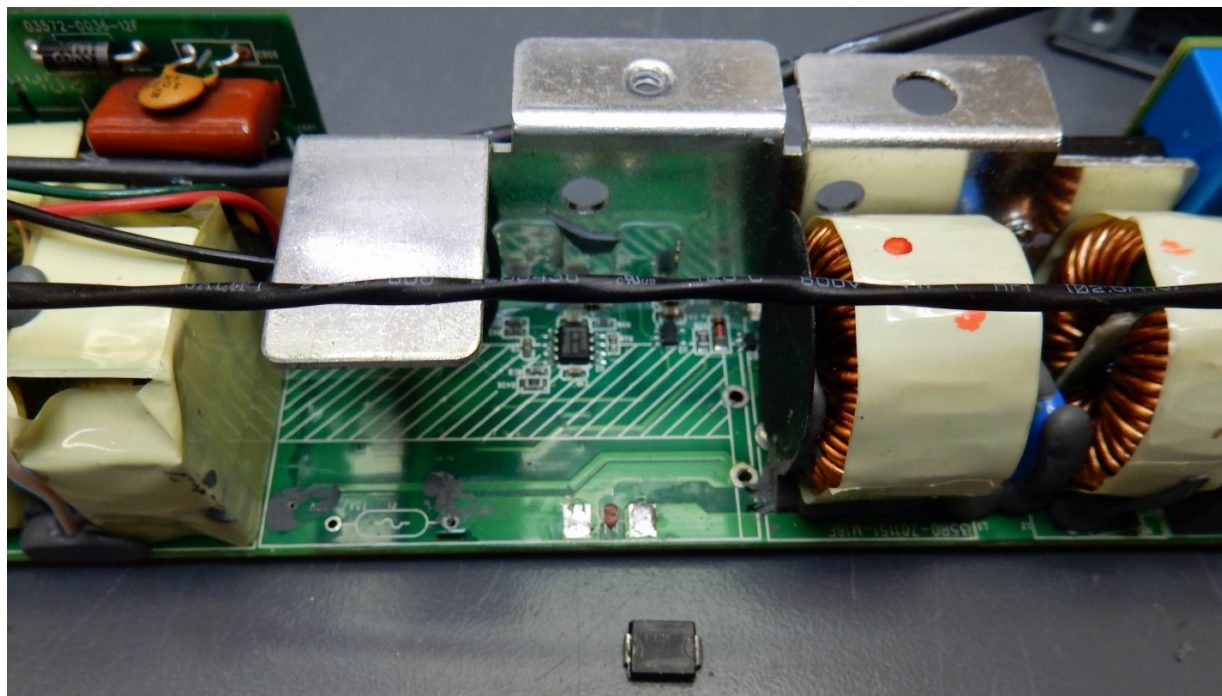


Figure 6: Heatsinks, MOSFETs and bulk capacitor of X-345 have been removed to gain access to D1.