

Re: Tek 2235 power supply

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- *From:* Jim Yanik <jyanik@xxxxxxxxxx>
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"bico959 via ElectronicsKB.com" <u37735@uwe> wrote in 7958851db54e4@uwe:>news:7958851db54e4@uwe:

Hi Jim, did you manage to get the download?

Per your last post,I downloaded the PS schematic;I was NOT going to try downloading 70Megs of pdf on a 48K dialup.

Here is my latest findings. I'm not over volting. When I measured on the correct ground point, test point 950, test point 940 never quite reaches 40 volts. This would tell me that there is an over current problem however I have lifted all the jumpers (+/-8.6, +5, +30, +100) and I removed the voltage multiplier completely from the board and there is no change. So is the over current on the primary side then? I went ahead and removed the GP caps and put in hi quality Nichicon low ESR's in their place. I have a good sawtooth wave at pin 5 of U930, oscillation is visible through Q908 and the FET. The SCR doesn't have anything on the gate. I can see the voltage drop at R926 (it measures 150k) when it 'chirps'. There is a short duration 5V pulse from the IC at pin 14 (the ref output) and I can see a small increase in the voltage at pin 16 also timed with the chirp. R907 measures good (.2 ohm). On the other side of the transformer, each rail tries to come up gaining about 3/4ths their normal values and then falling again. My probe hit and killed Q930 and now I have to order a replacement for it. I see 1 volt at pin 12, no chirping and Q930 is resistive now...

Any help is greatly appreciated. I will paypal you a beer! :-)

~RB

have you replaced C925? 100uf/25v,IIRC,Low-ESR.
that is the housekeeping supply cap for the TL594.
it charges thru R926 to about 14-16V,which allows the IC to start,then a

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winding of that inductor takes over supplying power to the IC, thru CR920. Otherwise, the IC quickly draws down the charge on C925, and the IC stops.

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