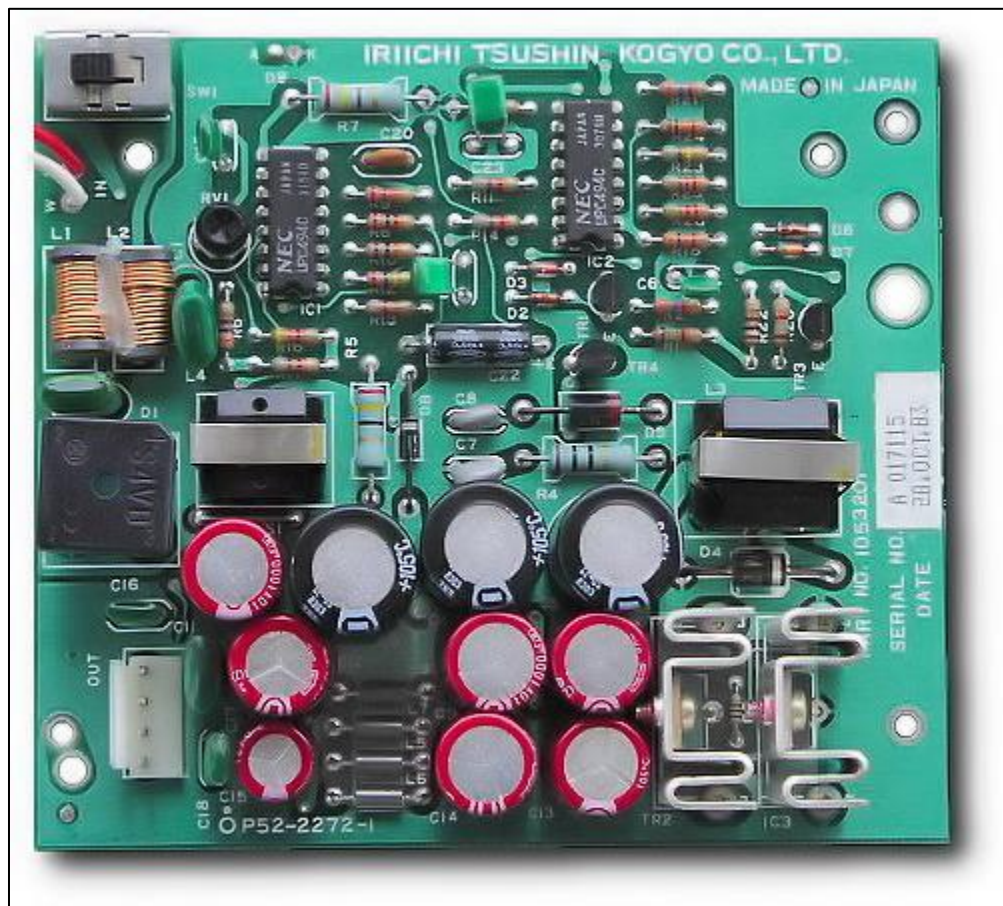


October 7, 2021

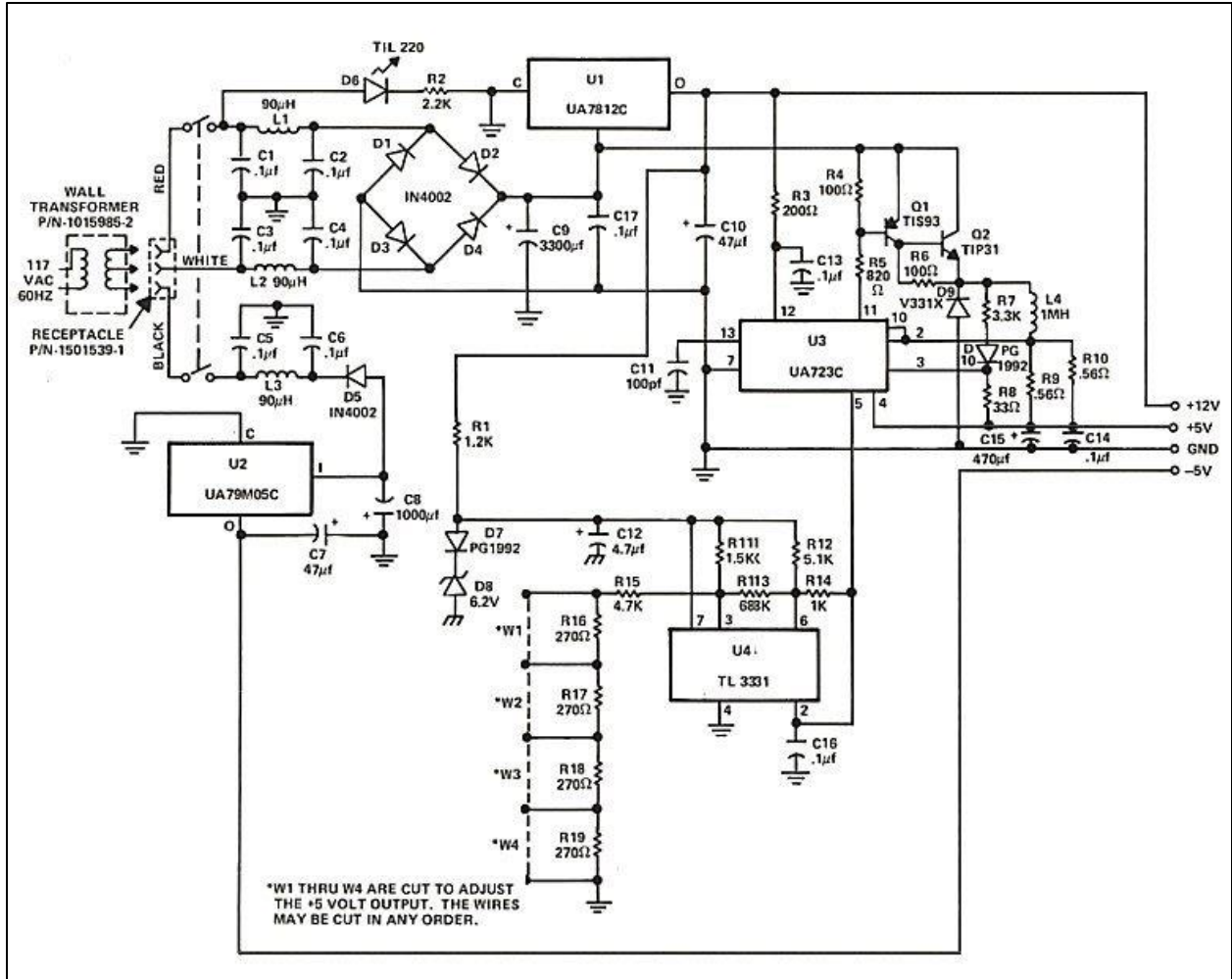
After writing some fairly-sloppy BASIC programs on the emulator (Classic99) to generate both MF and DTMF tones, I was attempting to transfer that code to the real hardware in preparation for interfacing the TI 99/4A to the switchboard. Naturally, that's when the power supply (the board INSIDE the console) designed to let out some of the magic blue smoke.

A cursory examination of the circuit board reveals a few **\*\*obvious\*\*** problems, but troubleshooting and board-level repair are not something I'm very good at.

Here's an image of the circuit board in question, stolen off the World Wide Web:



This specimen is taken from one of the beige QI models, and it appears slightly different than the one on my desk. I'm told that Texas Instruments had out-sourced much of their production towards the end of the "classic" microcomputer era, so I'm not surprised. The same website offers a schematic of the earlier power supply, which appears much closer to the one in my possession.



Surprisingly, most of the capacitors appear to be intact. The sole exceptions are C5 and C6 which apparently blew up at some point. On the other leg of the circuit, the full-wave bridge rectifier doesn't look good, and a quick examination of the output shows no voltage on the DC side of the bridge. The 56 ohm resistor located at R9 doesn't look very healthy either. Troubleshooting this power supply will have to wait while I order some parts. In the mean-time, since I only need +12, +5, and -5 volts, an old switching power supply from a PC will suffice. A kludge, yes, but an expedient one!

--Paleoferrosaurus