Subject: Paper-in-oil capacitors
Posted by Wayne Parham on Thu, 31 Jul 2008 22:36:03 GMT
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I just replaced some paper-in-oil capacitors in my Audio Note amplifier. It had been blowing fuses and even took out a power transformer, so I decided to investigate. What I found was the left side power tube was biased on strongly, developing a large voltage across the cathode resistor. The first thing I checked was the coupling caps, in fact, I simply replaced them instead of lifting them to see if that would change the bias point. Looking at the schematic, I was pretty confident that was the likely canidate, and sure enough, it was.I've grown to expect old capacitors in 1940's tube radios are usually bad, so I replace them right off the bat. But I guess I kind of expected modern paper-in-oil caps would last a little longer. Is that not the case? Do they all tend to dry up and become resistors? That's what happened here, the dielectric began to break down, and the plate-to-plate resistance dropped, allowing more and more DC current to flow. Is this the case with all paper-in-oil caps? Mine only lasted five years.