Subject: re-capping vintage amps
Posted by jim denton on Mon, 13 Dec 2004 19:14:46 GMT
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Gentlemen, I am learning (or trying too!) to re-cap some old amps---but if I can not find the exact same values which do I change to replace the old cap?---example: 40 uF 150v-- I can get 47 uf and 150v or 40uF and 200v's----the hard ones so far are the 600v caps---almost the highest voltage is 500v's---- Jim

Subject: Re: re-capping vintage amps
Posted by John Chleapas on Tue, 14 Dec 2004 00:55:28 GMT
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Jim, Sure the 47uf will work fine. See Angela at the link below. They have a good selection of capacitors at 600 volt and up to 1000 volts. Have fun and be careful when working on your amps. Also for more exotic caps Ron Welborne is having a sale. But if I am right these caps are quite big. I have no connection to Ron W' except that I own 2 pairs of his DRD amps. The angela caps should work fine for you. I have used the Sequa paper in oil caps in my Dynaco ST-70 amplifier with very good results. John C.
Angela

Subject: Re: re-capping vintage amps
Posted by jim denton on Tue, 14 Dec 2004 14:02:51 GMT
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John, thanks for the info and the link!---Oh and the mental headach too!---there is no end to the learning curve! aluminium or tin or copper ???? Black Cat or Orange Drop? But the web site had a lot to read up on so it's back to the books! Nevertheless, I think this is what makes this "hobby" so very addicting! I thought I was obcessing a bit but then I read your comment---not one pair but 2? What? a back up just incase? Earthquakes, natural disasters?--How many moonpies ya got in that icebox bud? Me, I only have 9 amps---and I justify them that it's the only way I can tune my ears ! thanks more questions later Jim

Subject: Re: re-capping vintage amps
Posted by Gary Kaufman on Wed, 15 Dec 2004 15:22:18 GMT
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Jim -Why not give us a specific example of an amp you are trying to recap? I'm sure we can give you a better idea of possible part selections.Remember that most electrolytics are -30%/+70% at best. There is really no difference between a 40uf and 47uf cap. Also voltage ratings are minimum - it's fine to go higher.If you find yourself recapping vintage gear often, consider getting one of the older cap checkers. My favorite is the Heathkit IT-11/IT-28, but the Eico 950B or Sprague's are also very nice. They let you measure leakage at up to 600vdc - and are perfect for reforming older electrolytic types. - Gary
http://www.the-planet.org

Subject: Re: re-capping vintage amps
Posted by Manualblock on Wed, 15 Dec 2004 22:34:25 GMT
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Hey Gary; glad you found us. I have the crossover board and as soon as I finish some other stuff I will be building it into a pair of Pi 4's. Very nice work I may add.

Subject: Re: re-capping vintage amps
Posted by Wayne Parham on Thu, 16 Dec 2004 02:35:57 GMT
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I made a Spice model of the Bench crossover your PCB is based on.6DJ8 Tube CrossoverI put a few more components in the circuit model to provide horn compensation, but the Spice model is easy to modify for whatever crossover points and what-not. The OrCad schematic that the model uses is nice too. I don't know if you're interested, but if so, feel free to link it on your website.

Subject: Re: re-capping vintage amps
Posted by Thermionic on Thu, 16 Dec 2004 06:37:36 GMT
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Jim, a tip here on high voltage caps: If you can't find say, a 20uF/600V cap, then two 40uF/450V caps in series will give you 20uF at about 650 0r so volts maximum rating. Remember that series caps always add in reciprocals. C = 1/(1/C1)+(1/C2). For example, you have a 20uF and a 35uF cap in series. 1/20 = .051/35 = .02857.05 + .02857 = .078571/.07857 = 12.7uFThe series capacitance will always be smaller than the lesser of the two caps' values. The voltage rating is exponentially increased as well. For series caps with the same voltage rating, I personally wouldn't exceed around 75% of the combined voltage rating in use. If the series caps have the same capacitance, then dividing the common value of the caps by 2 is easier than using the formula. For example, two 20uF caps in series equals 10uF. If you have the room in the chassis

for the big guys, Solen FastCaps have a 630V rating and performance wise will eat aluminum electrolytics for lunch. Hope this is of some use to you.Thermionic

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Subject: Re: re-capping vintage amps
Posted by Russellc on Thu, 16 Dec 2004 13:29:38 GMT
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I also have the boards, I was going to build 4 Pis, but now have the drivers to build the three way 7 Pi with the mid horn, so i don't guess I'll use them for that. But it looks like a handy device to have around. Russellc

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Subject: Re: re-capping vintage amps
Posted by jim denton on Thu, 16 Dec 2004 20:02:18 GMT
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Thermionic---So much info in so little space! But I do thank you for your post---really is a lot easier to find the same sizes---especially for intergrate or recievers---too much stuff under there!!---now I am learning that not all caps have to been connected red /black---or hot/cold----but have to be careflul as there are several that have very small arrows telling the direction of the install---and I gave up golf for a relaxing hobby??? Now I know I can justify more than one system! JD

Subject: Re: re-capping vintage amps
Posted by Manualblock on Fri, 17 Dec 2004 00:59:37 GMT
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Did you stuff them yet?

Subject: Re: re-capping vintage amps
Posted by Russellc on Fri, 24 Dec 2004 16:58:39 GMT
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Sorry, missed you reply, no I haven,t stuffed them yet, but hope to get that project started soon, but next up is boxes for the 7 pis. Regards, Russellc

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