
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 or 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. $1/20 = .05$ $1/35 = .02857$ $.05 + .02857 = .07857$ $1/.07857 = 12.7$ uF The 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
