Subject: Tube question...
Posted by jason on Sun, 22 Oct 2006 00:30:35 GMT
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Hello! I'm new here and had a question I'd like to bounce off some of the gurus around. I have a 1968 Fender Vibrolux Reverb amp that I know is not performing to its full potential. I'm a bit frustrated and with my lack of knowledge and short patience, I'm tempted to begin replacing tubes and speakers and even thinking about selling it. But it's my first amp and I know that it can sound better than it does. I need some help or some suggestions. I know that if I replace the tubes I will need to the bias the amp. I lack the electronic fortitude to do this and I'm also unaware as to how to go about it. But I want to learn! I can't seem to find much help in the way of images or walkthroughs that would help. I also don't know what brand of tubes I should replace my current tubes with to still get the sultry blues tones out of the amp that I used to get. Here's my tube listing from left to right--GZ34-6L6GC-6L6GC-12AT7-12AX7-7025-12AT7-7025I've read recently that in the preamp arrangement that the 7025s and 12AX7s are interchangeable, but I'd like to get the best possible tone I can out of this amp! Recently one of the tubes has been pushing redhot and I burned my finger on it at band practice the other day. This has lead me to believe that I have a biasing issue and that one tube is pushing and the other is not pulling or pushing. I also believe that this is the reason for my decrease in tonal capacity.If you have any suggestions I'd definitely take them to heart. I'm also having trouble finding a decent amp guru to take my stuff to. If anybody knows of or you live in the Fort Collins, CO area or surrounding areas, I'd be more than happy to swing by your shop for some help.Thanks in advance for any advice or suggestions.-Jason

Subject: Re: Tube question...
Posted by Greene on Tue, 24 Oct 2006 14:05:46 GMT
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Hi Jason, i own a V'lux silverface and need to know whats the good tubes too. Freom research I have come to the conclusion that the 6L6EH Electro harmonix are good, The 12AT7s I will use the ECC81 JJ Tesla replacements, and the 12AX7s and 7025 which is the same tube use the Electro harmonix 12AX7EH variety as well. The GZ rectifer tube i would buy a sovtek or EH again. Ive heard this is the golden standard for the older fenders and will give good volume and tone. The red power tube is serious and most likely a bias problem which you should take to your tech to have biased. I would wait and see what the speakers are like after you do that. If you have Jensen C10Q speakers they are the most desirable in the vibrolux. i have those and would never bother with other ones. Im going to take my own advice and will report back on the forum. Cheers Greene

Subject: Re: Tube question...
Posted by jason on Tue, 24 Oct 2006 15:47:10 GMT

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Thanks for the info. The speakers are the originals and I used to have Weber Alnico's in there but they were a little to bright and not enough blues. So the originals are in there now. I don't really know of anybody near me that could bias the amp so I'll have to look into it. All the research I did on the hot tube pointed to bias and it makes sense, the amp doesn't push neearly like it should. I'll look into those tubes and see what can be seen, Thanks for the input. Cheers,Jason

Subject: Re: Tube question...
Posted by Thermionic on Wed, 25 Oct 2006 20:57:32 GMT
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Hi Jason,A single hotplating power tube is more than likely due to a bad coupling capacitor, not a bias problem. The coupling capacitor is leaking some DC to the control grid of the power tube, and reducing the bias of that individual tube. Even if the other coupling caps aren't leaking DC, they're so old their resistance has increased over time, which can dull the sound. If the amplifier has the stock filter and cathode resistor bypass caps, they also need to be replaced. Replacing the coupling capacitors, filter capacitors, and cathode resistor bypass caps will restore the amp to its original performance. You can also replace the plate resistors in the gain stages and the 3.3 megohm reverb/dry mixer resistor with Kiwame resistors, which will lower the "white noise hiss" the amp makes. It's also a very good idea to replace the main power supply and bias supply rectifier diodes with ultrafast/soft recovery types, and to increase the filtration capacitance on the bias supply significantly (from 50uF to about 250uF).It all sounds like a lot of work, but it's a very standard "refresh" job for these amps. Any good guitar tech can accomplish it in a couple of hours. FWIW, my personal favorite power tubes in these amplifiers are Winged C SED 6L6GCs. To my ears, they sound remarkably close to the fat bottle Sylvania STR 386 6L6GC. Electro Harmonix 12AX7s and 12AT7s are fine for the small signal tubes, but the new Mullard and Tung-Sol reissues are real knockouts for just a little more scratch. The Sovtek 12AX7LPS is a mighty fine sounding 12AX7, but it suffers from microphony problems in most combo amps if you play very loud at all. Thermionic

Subject: Re: Tube question...
Posted by jason on Thu, 26 Oct 2006 03:27:15 GMT
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Thermionic,Thanks for the info, really! I think I've found the guy to take a look at it and I'll pass on the info you provided. Very informative. Definitely going to do some research. I'm not even going to attempt to "fumble my way" through this issue. I need to get it to someone who knows what they're doing.Do you have a possible estimate of what it might cost? I'm just looking for a ballpark.Thanks again for the help.-Jason

Subject: Re: Tube question...
Posted by Thermionic on Thu, 26 Oct 2006 04:36:52 GMT
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Hi Jason,Parts cost using decent quality parts should be perhaps $75 maximum before shipping costs (excluding tubes, of course). As far as labor charges, that'll all depend on the tech's hourly bench charge. A Fender rebuild like this generally takes me about two hours bench time from the time I begin removing the chassis until the time the amp is reassembled and ready to go. But, I've been doing this a very long time, and can rip through it pretty quick. Some guys may be slower, and some may be even faster. Get an estimate up front. If they estimate more than around 3 hours bench time, I'd think about looking into another tech.In many of these old Fenders, there's a funky fungus that grows on the eyelet board over time, which makes even the strongest-stomached a bit nauseated and gives those with allergies sneezing and irritated eyes. In such cases, I place the chassis outside with a fan blowing into it for several hours..... the smell is ROUGH! You may want to remove the tubes and pull the chassis yourself. That'll save you some bench time charges, and you can air the board out if it's sporting a funk. Remove the nuts (underneath the chassis) from the 4 screws that go through the chrome straps on top and remove them.Have your tech inspect all the internal wiring, to make sure nothing is burned or frayed. Check for warped or binding bushings in all the front panel pots, and replace any "iffy" ones. Likewise for the front panel bright switches and rear panel power switch. Retension any tube sockets that have excessively loose contacts. In addition to the things I mentioned replacing earlier, also be sure to replace the stock 470 ohm/1 watt screen grid resistors with wirewounds of at least a 3 watt rating. One or both is quite likely a bit toasted. The screen grid resistors in most of these amps at least have the color coding burned off from the heat, and I've even seen them literally turned to ashes. Finally, it's a good idea to run a brass 30 caliber rifle bore brush into each input and speaker jack a few times, to scrub any dirt loose and remove tarnish. Then, use a cotton swab moistened with a SMALL amount of denatured alcohol to remove the residues.You literally won't even recognize the amplifier after "restoration." The highs will sparkle as never before, and it'll take on a whole new tone that'll bring a smile to your face. Another alternative is "blackfacing" the amp back to the pre-1967 AB763 blackface circuit, if you'd like. The additional cost should be minimal while the tech is already into the amp.Thermionic