Subject: trem-vib distortion on my k150-8 and k100-8 Posted by ampfab on Sun, 10 Aug 2014 14:42:58 GMT

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i have both a k150-8 and a k100-8 vintage kustom amps. i had the k150 for a while and recently bought the k100. on both amps, when i have the trem-vib on, the tremolo and vibrato work, but when i move the trem-vib control counter clock-wise to the "vibrato" side, the signal gets a bit distorted and and the tone gets less bright. if i turn the trem-vib control clock-wise to the "tremolo" side, the distortion decreases and the tone gets brighter. Both of my amps work the same way, is this normal?? both amps are pretty much completely original. thanks andy

Subject: Re: trem-vib distortion on my k150-8 and k100-8 Posted by chicagobill on Sun, 10 Aug 2014 18:20:47 GMT

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Welcome to the place. I've never owned either of those models, but it does not sound like that is normal operation. The circuitry is common to other models, and the vibrato shouldn't add distortion.

Maybe Pleat will have a opinion here.

Subject: Re: trem-vib distortion on my k150-8 and k100-8 Posted by ampfab on Mon, 11 Aug 2014 02:10:44 GMT View Forum Message <> Reply to Message

Thanks for your response. I wouldn't think it was normal either, but it's strange that they both have the same problem. Otherwise, they both work and sound great. Considering that both my k100-8 and my k150-8 have the same problem, I was hoping that is a common concern with a known fix. Both amps use the pc1500 preamp board. Both amps have the Plexi faceplate. Any help would be appreciated.

Thanks Andv

Subject: Re: trem-vib distortion on my k150-8 and k100-8 Posted by chicagobill on Mon, 11 Aug 2014 16:40:07 GMT

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I guess that the first thing that I would look at was capacitor C1511 a 0.0047uF cap.

The vibrato works by mixing in-phase and out-of-phase signals coming from Q1503 together. Due to the phase cancellation, I can imagine that there could be some loss of high frequencies.

The trem/vib control adds the out-of-phase signal to the mix so this signal has to come through C1511. If it gets leaky it could send dc voltage to the modulator circuit and cause problems.

Subject: Re: trem-vib distortion on my k150-8 and k100-8 Posted by ampfab on Mon, 11 Aug 2014 16:42:37 GMT

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Thanks for that explanation. I'll check that capacitor. Thanks

Subject: Re: trem-vib distortion on my k150-8 and k100-8 Posted by pleat on Tue, 12 Aug 2014 02:30:52 GMT

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I have both the K100C-8 and a K150C-8 and I'll have to check my amps out to see if I get the same issue. The thing I'm confused, you said both amps have the PC1500 boards. My schematics show the K100C-8 uses the PC1500 and the K150C-8 uses PC1000 boards for the reverb/vibrato channel.

Pleat

Subject: Re: trem-vib distortion on my k150-8 and k100-8 Posted by ampfab on Tue, 12 Aug 2014 04:52:58 GMT

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i also noticed that the schematics on this site do not show the pc1500 in a k150-8. i figured it was some kind of mid-year change or they had a few pc1500s laying around when they put this amp together. That kind of stuff seems to happen a lot in vintage amps.

i rechecked the boards to be sure. the k150-8 indeed has the pc1500. the k150-8 also has the pc1400 and pc5032 boards. this k150-8 chassis came out of a 4-10 combo, it appears to from about 1971 from the dates on the pots. it's serial number is 75829.

at a quick glance, the pc1500 and pc1000 look quite similar. the pc1500 and pc1000 both use the same power supplies, inputs and outputs.

The front panels of my k100-8 and k150-8 look exactly the same except for the "150" and "100" on the face plates, they both have the exact controls.

I don't know if it matters, but i noticed that you are referring to your amps as "k100c-8" and "k150c-8". my amps are stamped "k150-8" and "k100-8", with no "c". thanks

i'm looking forward to find out how your amps sound. andy

Subject: Re: trem-vib distortion on my k150-8 and k100-8 Posted by stevem on Tue, 12 Aug 2014 10:55:34 GMT

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The k150 and the k100 have different power supply's, as the k150 models have choke transformer after the supply diodes and before the two main rail filters!

Subject: Re: trem-vib distortion on my k150-8 and k100-8 Posted by ampfab on Tue, 12 Aug 2014 12:34:31 GMT

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Yes, they definitely have different power supplies. The one 150 has a much larger power trans, a choke, and uses the pc5032. The 100 uses the pc900 power supply board.

Subject: Re: trem-vib distortion on my k150-8 and k100-8 Posted by ampfab on Wed, 13 Aug 2014 03:15:47 GMT

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For anyone willing to compare to their kustom. A little more info. I found that the distortion is at its worst with the intensity at minimum setting and the trem-vib knob turned fully counterclockwise. Totally clean with the trem-vib turned off.

Thanks Amdy

Subject: Re: trem-vib distortion on my k150-8 and k100-8 Posted by stevem on Wed, 13 Aug 2014 11:27:26 GMT

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I can check mine for you, but I will not be able to report back till Friday morning!

Subject: Re: trem-vib distortion on my k150-8 and k100-8 Posted by ampfab on Wed, 13 Aug 2014 11:35:41 GMT

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Thanks

Subject: Re: trem-vib distortion on my k150-8 and k100-8 Posted by stevem on Sat, 16 Aug 2014 13:04:04 GMT

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Sorry, I forgot that my k100-8 is at my storage unit so it my not be till next weekend that I will be

Subject: Re: trem-vib distortion on my k150-8 and k100-8 Posted by ampfab on Tue, 19 Aug 2014 13:35:54 GMT

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Thanks, I would appreciate it if you would compare yours to mine! Thanks again Andy