Subject: Kustom K100 2 - Just Hum/Buzz - No Other sound
Posted by jgiebler on Tue, 23 Jun 2015 17:53:55 GMT
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I was asked to look at this amp for a friend. I work quite a bit with small circuitry but amplifiers are outside of my normal field. The circuits on this amp look pretty basic so I was hoping to visually inspect and see a bad cap/resistor. However that is not the case.

This amp just turns on and buzzes/hums. the buzz doesn't change no matter what knobs are turned. What should I replace first? Someone has been in the amp before. The reverb unit was disconnected and the black cover has been peeled mostly off of it. Also mud dobbers had a nest in it that I cleaned out well before testing.

Thanks so much,
Jameson

Subject: Re: Kustom K100 2 - Just Hum/Buzz - No Other sound
Posted by chicagobill on Tue, 23 Jun 2015 19:18:20 GMT
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Jameson, welcome to the place.

Assuming that you have the basic skill set to know that working on a live amp can kill you, start by thinking what is wrong with the amp, rather than what can I replace.

If there is a constant hum that is not affected by any of the controls, then you should look at the power supply. Take your voltmeter and begin tests by reading the voltage across the speaker jack (no speaker plugged in). Read dc and ac voltages. The closer to zero in both readings is best. What do you get?

If there is any more than a volt do not plug a speaker back into the amp until you have resolved this problem as it could do damage to the speaker and could do additional harm to the amp.

Next step is to test the +&- power supplies. If you go to the technical section of this site, you can look up the schematic for this amp. The two main power supplies are about +&- 40 volts dc. On the pc board there are two large filter caps. I think that they are rated 2500uF @ 50 volts. Read the ac and dc voltage directly across each cap. What voltage readings do you get?

Check to be certain that these caps are solidly soldered in. Report back what you find out in your testing.

Edit: I just checked the schematic, the main filter caps are not mounted on the pc board, but the tests remain the same. Also be sure that the connection screws are clean and tight.

Subject: Re: Kustom K100 2 - Just Hum/Buzz - No Other sound

Posted by jgiebler on Tue, 23 Jun 2015 19:32:01 GMT
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@chicagobill thanks so much for the suggestions. I will start running down the list of suggestions. This amp has 2 large blue Capacitors with screw terminals. I'm assuming thees are the 2500uf Filter caps you are referring to. Is that correct?

Thanks so much,
Jameson

Subject: Re: Kustom K100 2 - Just Hum/Buzz - No Other sound
Posted by chicagobill on Tue, 23 Jun 2015 19:41:29 GMT
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Yes, the two blue caps are the main filter caps.

I was editing my post when you were typing your response.