
Subject: K100-2 Reverb Issue

Posted by [Lovguitar](#) on Fri, 17 Aug 2018 05:02:13 GMT

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I have become somewhat obsessed with Kustom Amps and picked up a "supposedly" properly working amp on ebay. Turns out that the volume is fine, noise floor is fine, trem works really well but reverb is broken. When you turn up the reverb control all you get is loud hum. If you bang the tank you hear it through the amp pretty loudly, so we know that the return side works. Previous owner replaced the tank with a much smaller tank which may or may not be proper. When I substituted in a good known tank it hummed just like the replacement. I should have sent it back but now I'm hooked on wanting to fix them!!!!!!

The pc104 board does not have female rca jacks mounted on it for the reverb. It has coaxial wire with one side directly soldered to the board and the other side terminating in a male rca jack. The "send" jack is hooked up oddly and it makes no sense to me. The "hot" wire is soldered to the board and the shield contacts the hot wire, so both the hot side of the male plug and the "shield" side of the plug are connected together.

I've looked carefully at the schematic and can't make head nor hair of the reverb. There's a rectangle marked reverb with arrows pointed away from the tank on both sides.

I'd appreciate some help with this please. I'd love to get this working right -- for the principle of the thing and to have a spare working k100-2.

Thanks in advance!!

Paul

Subject: Re: K100-2 Reverb Issue

Posted by [Lovguitar](#) on Sat, 18 Aug 2018 00:16:39 GMT

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Subject: Re: K100-2 Reverb Issue

Posted by [Lovguitar](#) on Sat, 18 Aug 2018 03:55:16 GMT

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Eureka -- I've gotten to the bottom of the mystery!! The coaxial cable that was soldered in by the previous owner was soldered in wrong. Just the hot wire should have been connected. The shield is in place -- but only connected on one side -just to shunt off hum. When I re-soldered the wire and put in a good known vintage Kustom reverb tank, the hum is gone and the reverb works properly.

NOW, all I have to do is buy a new reverb tank that is appropriate for this amp. Any suggestions?

I've found a number of threads about this but nothing seems definitive. What modern reverb tank will fit the bill for a Kustom K100-2?

Thanks in advance.

Paul

Subject: Re: K100-2 Reverb Issue
Posted by [chicagobill](#) on Sat, 18 Aug 2018 04:31:12 GMT
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The original tank has both input and output jacks grounded. The wires from the board are shielded but in order to eliminate a ground loop, only one of the shields is grounded at the pc board.

The tank that I recommend is the Accutronics 4FB2A1A. If you can't find one a 4EB2A1A will also work. If you can't find either one, then you may have to adapt a different one to work. If the mounting or input grounding is wrong, you can always change it to work. Just try and find one with the correct input coil.

If you have a tank that works, see if there is a code number on it. If you measure the dc resistance of the input coil, you can figure out whether the tank is an F or an E.

The current Accutronics tanks are all manufactured in Korea. They do not sound the same as the old tanks. The reverb is much fuller and more lush than the old ones. They sound too hifi for my ears. I always preferred the bright, tinny, surf sound of the old tanks. You may have a different opinion, but that's just my 2 cents worth.

Subject: Re: K100-2 Reverb Issue
Posted by [steven](#) on Sat, 18 Aug 2018 10:04:58 GMT
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What's wrong with the tank now that you have it working?
Is it a 14" long tank, if so how does its input and output side test resistance wise, and how does it sound?

Subject: Re: K100-2 Reverb Issue
Posted by [Lovguitar](#) on Sat, 18 Aug 2018 12:05:42 GMT
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Subject: Re: K100-2 Reverb Issue

Posted by [Lovguitar](#) on Sat, 18 Aug 2018 13:32:00 GMT

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Thanks for your response -- much appreciated. The replacement tank doesn't provide much reverb and when I turn the reverb up it feeds back badly. The tank is a "short" tank that would be appropriate for a Fender Blues Junior or similar amp. The input jack wasn't grounded, so I had to ground it to make it work. I didn't measure the resistance with my ohm meter -- I think I'll just keep it as a spare for my modern Fender amps.

Paul

Subject: Re: K100-2 Reverb Issue

Posted by [Lovguitar](#) on Sat, 18 Aug 2018 13:38:29 GMT

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Thanks so much for your response! The known good tank has no markings on it other than input and output, unfortunately. The resistance was around 180 ohms for both input and output. Thank you for your suggestions on replacement tanks. I've read elsewhere that the new tanks sound different. I've seen a number of "working" used Gibbs and Accutronics tanks on ebay. I wonder if that might be an option if I can find one with appropriate impedances.

I contacted the original seller and asked if he has the original tank. I would look into getting that one repaired if he has it.

I am impressed with the sounds I'm getting with these amps. I've been running it into a 4 ohm load because I don't have the bottom here in Brooklyn. I think it's looking for 8 ohms. Will I cause a problem long term running it into 4 ohms, do you think?

Subject: Re: K100-2 Reverb Issue

Posted by [chicagobill](#) on Sat, 18 Aug 2018 15:42:33 GMT

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The 180 ohm resistance would make the tank a 4FBxxxx version. I'd try to find one like that if you can. Sometimes they will come up on eBay, out of an oddball organ.

As for the output load, the amp may get a little warmer with the 4 ohm load but it shouldn't do any long term damage. Well as long as you are playing at moderate volumes. If you were playing out with the amp constantly full up it might be a problem.
