Subject: Reverb fix for early K100-2

Posted by Jerrybass1955 on Fri, 17 Oct 2014 16:31:26 GMT

View Forum Message <> Reply to Message

Just wanted to pass along a fix I figured out for the reverb on my K100-2. It is an early model without Q131, so I don't know how this might apply to other models, but I'll pass the info along.

The initial problems I had when I got this head were that the reverb was quite overly sensitive and would not turn completely off without the foot switch. Still lots of reverb when you turn it all the way down. To fix the overpowering reverb, I replaced the tank with a MOD 4FB3D1B from Amplified Parts (hint - shipping is less if you order through Amazon). If you use this tank, you may have to rig a jumper to get the right grounding at input and output like I did. I think the old reverb coils were just stretched out a bit and too willing to flop around.

Fixing the turn-off problem took tiny amount of re-engineering. Recall that I don't have a Q131, and the circuitry is different in this area. In my amp, the reverb and dry signals are sort of mixed together at the input of Q108 best I could decipher the circuit. The reverb path comes off Q107 and then goes back to the Q108 from the reverb recovery circuit. Q131 is a buffer that apparently buffers the dry signal before it goes to Q108.

There is an additional 4.7K resistor Rx between the side of the pot farthest from Q116 and a 10uF cap that leads to a 33K resistor then the collector of Q118 then a 33K resistor from there to the base of Q108 (through another 10uF cap)whew!

I am attaching a partial schematic and pre-repair photo that I think is correct for my amp - no guarantees! If the picture doesn't attach properly or gets removed, here is the Photobucket link. http://i1380.photobucket.com/albums/ah199/jerrybass1955/K100 -2/K100-2reverbmixnoQ131_zps2025b6e0.jpg

The 4.7K resistor Rx is not present in the Rev. 4 schematic (or Rev. 3). I reasoned that if it was bypassed, the end of the pot would be at a lower impedance when the pot was turned all the way down and prevent the reverb signal from passing. So, I experimented with some cap values and found that putting a 1uF cap (Cx)across the 4.7K resistor Rx, the reverb turns completely off. Lower values didn't work as well (or at all) and I didn't try larger values. But with this cap in place, the reverb works as it should and the reverb is completely off when the reverb control is turned all the way down.

After buttoning up the amp and drawing up this partial schematic, it occurred to me that probably just jumpering the 4.7K ohm resistor would also work (note that there is no 4.7K resistor in the Rev. 4 schematic). When I was trying it out, I didn't have the complete schematic drawn up neatly and it wasn't clear whether changing that resistor to a short would be a bad idea. But it looks like that might be an even better fix. That is something I'll try next time I open it up, but for now it is working like a champ ... no pun intended.

Hope someone finds this useful.

Subject: Re: Reverb fix for early K100-2

Posted by stevem on Sat, 18 Oct 2014 10:39:52 GMT

View Forum Message <> Reply to Message

Thanks for posting this Jerry!

You know I wonder if some off the boards have a minor defect where they are somewhat conductive in between traces?

Subject: Re: Reverb fix for early K100-2

Posted by lochry on Sun, 10 Jul 2016 20:32:59 GMT

View Forum Message <> Reply to Message

Just tried the Jumper mod. Quick fix to a long time problem. Brilliant.

Subject: Re: Reverb fix for early K100-2

Posted by chicagobill on Mon, 11 Jul 2016 16:39:00 GMT

View Forum Message <> Reply to Message

Based on a factory mod sheet, the 4.7K resistor mentioned in this post should be jumpered with a wire, removing it from the circuit. No need for the 1uF cap.