Subject: Need help finding schematics for K150-7 Posted by cassent5150 on Thu, 21 Oct 2010 20:35:11 GMT

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Anyone out there have a clear copy of the schematics for a K150-7. I'm the proud owner of one that was setting in a junk heap somewhere and I intend on restoring this thing to life. Please e-mail me a copy at cassent5150@hotmail.com! I've gutted it, cleaned and shined the chassis, installed the transformers, rectifier bridge, power switch, output transistors and driver board (PC-5032), but there is a transistor missing on the driver board that I need to install. I need the PC-5032 schematic to find out what transistor to put in there so I can fire this puppy up and see if it will "BARK" Thanks in advance STEVE C

Subject: Re: Need help finding schematics for K150-7 Posted by chicagobill on Thu, 21 Oct 2010 20:51:07 GMT

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Check your e-mail. I'm still looking for the PC-1000.

Bill

Subject: Re: Need help finding schematics for K150-7 Posted by cassent5150 on Thu, 21 Oct 2010 22:33:18 GMT

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I got the PC-1000 a minuit ago and still looking for the PC-5032 and 1100. Thanks Steve C

Subject: Re: Need help finding schematics for K150-7 Posted by chicagobill on Fri, 22 Oct 2010 15:59:28 GMT

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I'll try sending them one at a time.

Subject: Re: Need help finding schematics for K150-7 Posted by cassent5150 on Fri, 22 Oct 2010 19:50:27 GMT

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fantastic, I got all of them Thank You soooooo much C-bill and all you guys that sent them to me. I'll reply back to this message with my progress as a rookie teck. If anyone out there knows or has experiance with beefing up a K-100-7 by replacing the tranny, rectifier, caps and driver with that from a K200-1 I'm intrested to know how it worked. I got a friend that has a K100C-8 that, for reasons I'll never know, is bugging me to do it for him. I've been tossing the idea around and don't see why it wouldn't work with the voltages between the 703 and 900 driver boards being equal.

Subject: Re: Need help finding schematics for K150-7 Posted by cassent5150 on Sun, 24 Oct 2010 00:49:25 GMT

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Fantastic copy of schematic PC-5032, many thanks!!!!! This copy has a transistor daigram on it, what a difference that makes for locating transistors, specially the ones in the signal path. I pull the board out for ease of bench testing, all the caps checked out, all the diodes were good so I went to checking transistors and bingo. The second one in the signal path was open on the collector side so I replaced Q-2 reinstalled board and WOOF WOOF this baby sounds all growed up again. With that said, I went on to test the rest of the amp and it seems channel one with effects has a problem. When I turn off the trem/vib by the intensity knob it cuts the signal. Do you have any ideas on that?

Steve C

Subject: Re: Need help finding schematics for K150-7 Posted by pleat on Sun, 24 Oct 2010 01:19:47 GMT

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I'm not a tech, but I'd try using a footswitch to turn off the trem/vibrato circuit with the footswitch while the intensity control is turn up a bit. If the amp still works with the switch in the off position, then you may have a bad intensity pot. Maybe resoldering the control might help. Other than that, I'll let the experts troubleshoot your issue. pleat

Subject: Re: Need help finding schematics for K150-7 Posted by cassent5150 on Sun, 24 Oct 2010 02:52:49 GMT

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Thanks I'll try that. As it sets everything works fine until you turn off the trem/vib switch. I'll see if I got a pedal to operate this thing, any 2 button switch with a 3 conductor 1/4 inch stereo plug should work. Thanks Steve C

Subject: Re: Need help finding schematics for K150-7 Posted by stevem on Mon, 25 Oct 2010 11:43:56 GMT

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I do not have my schematic with me at work here today to help you out with the Trem/Vib problem you have, but I will bring them in tomorrow,

In regards to up rating your K150 you could install two larger value 10,000MFD caps to replace the original 4500s.

They can be any volatge above 50 volts, and be sure to use can type caps like the orignals. Diode wise you can install a new rectifier bridge made up from four 3 amp fast recovery diodes (FREDS as they are called at times) You will have to use terminal strips, or tag boards as used in tube amps to mount these, or get a section of circuit type perf board to do the same.

Note that with the perf board you will have to drill out the holes for the 3 amp diodes leads as they are a bigger diameter than the boards come made up with.

In regards to up improving a K100 you can do the the same things

and if you have a power transformer from a K200B serise amp you can mount that in to the amp. I think the amps regulator circuit will handle the higher idle voltage OK.

Although both amps use the same 39.5 volt rated power transformer the high amperage available from the 200s PT will make the regulator have to deal with the higher idle voltage. this is due to the lesser idle load on the 200s PT.

I will guess that with this mod that even a fully effect loaded K100 will output somewhat more than 60 watts RMS.

If you can dig up a choke from a defunked K150 Plexi face or metal face amp that would help out nice enough that you drop the idea of installing the PT from a K200.

A nice up grade to any Kustom would be to install a Toroidal type power transformer. I always tell myself that one day I will do that to atleast one of my amps, bur as for yet I have not so I can not give any recomendations as to what to use.

Subject: Re: Need help finding schematics for K150-7 Posted by chicagobill on Mon, 25 Oct 2010 17:46:55 GMT View Forum Message <> Reply to Message

Turning the intensity control full off with the switch is the same thing as using a foot switch, so I don't think that there will be any difference there.

How much of a signal loss is there? If it is dramatically lower, then there may be a problem with the fet bypass switch transistor Q1002 or capacitor C1009.

Subject: Re: Need help finding schematics for K150-7 Posted by cassent5150 on Tue, 26 Oct 2010 01:31:54 GMT View Forum Message <> Reply to Message

Your right, with effect on I have good signal with no problems what so ever. Switch off effects and no, none, zip,notta, not a sound is audible. I was checking all the transistors for any possible short or I should say open curcuit, most of which still soldered in the board, and Q1002 was open on one leg. I have what I thought to be a replacement for the 2N5033, "I somehow crossed it to a 2N3994 but it has four legs instead of three "is that incorrect?". Seems to test backwards on the

2n3994 "using Drain as common (negitive) I get readings on both sourse and gate as positives. Not so on the 2n5033's in Q1003 and Q1004 positions. They test with readings "using Drain as common or positive and both source and gate as negitives. I believe I will just search for some exact 2N5033's and put that back in there. STEVE C

PS: Thanks for the help so far!!!!

Subject: Re: Need help finding schematics for K150-7 Posted by cassent5150 on Tue, 26 Oct 2010 12:12:32 GMT

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I was thinking more on the lines of swapping everything from a K200 chassis to the guys K100C chassis "less the pre amp section of course". I'm going to save the info though just incase I get a wild hair to experiment later. Thanks Steve C

Subject: Re: Need help finding schematics for K150-7 Posted by pleat on Tue, 26 Oct 2010 12:26:39 GMT

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Wow that's a lot of work to stuff a K200 into the K100-8. It would be easier to connect a K200 head to the speakers of the K100-8 and see if the results would warrant doing the transformation. Might save a lot work.

pleat

Subject: Re: Need help finding schematics for K150-7 Posted by cassent5150 on Tue, 26 Oct 2010 13:16:42 GMT View Forum Message <> Reply to Message

I wouldn't try driving them stock CTS's with a K200 head, but I'm sure with the right 10" speakers to handle that power it will still sound sweet. This is the thing. I sold this K100-8 to a friend of mine cause I had 2 of them and he loved how they sound. He heard the K200 a couple times and thought it has that same sweet sound and a whole lot more punch. He has a thing about power or something and has been on me ever since to do the swap. Yea, its a lot of work and yea, he'll have a real sleeper amp "as he calls it", but I was just cureous if anyone has done it and how it turned out, "MY GOD the little K100C is already plenty loud enough, but I guess thats just me". Steve C

Subject: Re: Need help finding schematics for K150-7 Posted by stevem on Tue, 26 Oct 2010 14:14:53 GMT

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The problem is that the K200 wants to see a 4 ohm load to ourput its full 100 watts of RMS power. The cabinet for the K100 is a 8 ohm load, so in the end the K200 will out put only some 72 watts which will not be that great a SPL improvement as you might think.

In the end you will have about a 35% increase in clean head room over the K100, but not even a 1/3rd increase in percived volume.

Also you will have to open up the output transistor mounting slot in the K100 chassie to make it the lenght of the slot in the 200, and then un-rivit the mounting channel from the 200 and reinstall it into the 100.

You would be better off in the long run to install a jack on the rear of the amp to tap off the input signal to the driver board and just feed that to a external rack mount type power amp to drive the K100s cabinet.

Subject: Re: Need help finding schematics for K150-7 Posted by chicagobill on Tue, 26 Oct 2010 16:13:10 GMT

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This thread is getting sidetracked all over the place.

To test the fet's, use the gate as the common connection, like the base on a bipolar transistor. You should get readings similar to a regular transistor, maybe .6 volts between the gate and the source and drain. The main difference is that there will be a low reading from source to drain. Fet's are always "on" instead of always "off" like a bipolar transistor.

Is the 2N3994 in a metal case? If it is, often the case is connected to one of the 4 leads as a shield.

Subject: Re: Need help finding schematics for K150-7 Posted by cassent5150 on Wed, 27 Oct 2010 01:40:25 GMT

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I think we are thinking along the same lines "Like, why go through all that trouble its bad to the bone just the way it is and if you like the K200 than go get one and be done, end of story", but here's the catch. I'm going to first assume your thinking this is already a head and cabinet combination so why bother, but its not. This is that little K100C-8 2X10 Combo "SC Series". Its shorter than that little K50 and just a little longer to fit those two tens and he wants more power without having to carry anything more than this little combo around. I totaly agree with you "What for, just carry a darn mike and cord in you back pocket and let the pa do the rest and leave well enough alone" Thanks Steve C

PS: Topic Has Two Threads and this is a reply to BEEFING UP A K100C-8. Sorry if it seems to jump around.

Subject: Re: Need help finding schematics for K150-7 Posted by cassent5150 on Wed, 27 Oct 2010 01:54:38 GMT

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Well, I have real problems now. I installed the NTE 336 which is suppose to be the same thing and, wham, I got some static sound at first then HUMMMMM and the power lite went to a glow. This was with the intensity switch turned off. Looks like I'm back to the begining and don't even know where to begin, so I'm done for tonight. Thanks ya'll and goodnight. Steve C

PS: Thanks C-bill for the great info, it will help out alot cause there's a few of these in here to check now.

Subject: Re: Need help finding schematics for K150-7 Posted by stevem on Wed, 27 Oct 2010 11:31:10 GMT

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The NTE336 not the right part, its not a P channel FET, its just a NPN type.

You need a NTE326 which is the cross for the 2N5033.

Your friend needs to understand that there is no substitute for more or bigger speakers in a quest for more volume and coverage area.

Two more 10" drivers will pretty much double that amps precived volume where as wattage wise you would have to go to 10 times that amps current power to get the same results. It will be dam hard to find two 10" guitar drivers that can stand up to 500 watts RMS!

He needs the -8 type cabinet that house's 4 10" drivers. The amp will weigh in at a mere 10 pounds more and then give him what he is looking for.

Subject: Re: Need help finding schematics for K150-7 Posted by stevem on Wed, 27 Oct 2010 14:04:07 GMT

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Another solution to your friends volume problem/needs would be to replace his 10" drivers with Eminence Copperhead drivers which are far louder than his Orignal drivers and sound better to boot!

Subject: Re: Need help finding schematics for K150-7 Posted by cassent5150 on Wed, 27 Oct 2010 15:28:09 GMT

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Thats pretty much how I look at it, thats why I haven't done it for him. I just put matched transistors and and fresh reconed speakers, "broke in of course", in that thing before I sold it to him and it

sounded sweet. I restored it piece by piece as I found the parts and was so proud to see how nice it turned out. I hate to see it get butchered cause of his power trip so I'll share that copperhead speaker info with him. Question is, "what ohm, aren't the CTS speakers in there 16 ohm?", I dont recall.

Steve C

Subject: Re: Need help finding schematics for K150-7 Posted by stevem on Wed, 27 Oct 2010 16:17:40 GMT

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Yup, I guess there Legin model is the one to go for to the 16 ohms.