
Subject: K200 B1 popping fuses
Posted by [DocWaxham](#) on Tue, 04 May 2021 12:51:37 GMT
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Just got this and started fixing it up. It was filthy so I cleaned it all. Took power transistors out so they wouldnt get soaked by cleaning. Checked the Pt's and all were good. Found a ballast resistor with broken lead fixed that new three prong. DE ox all boards. Replaced 10k pot. Fired it up and popped the fuse. I did not fire it up before doing all this because of the shape the power cord was in. Kinda scratching my head now. Ant help will be apreciated. Thanks.

Subject: Re: K200 B1 popping fuses
Posted by [stevem](#) on Tue, 04 May 2021 15:42:15 GMT
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I can't see why you pulled out the 4 output Transistors just to spray things clean, but I bet that when you reinstall them that was the cause of your popping fuses issue, assuming that you put the slip on connectors back on right.

One easy test is to remove the slip on connectors and ohm test the red wire and the both the Emitter and Base lead to ground, you should not see any low resistance reading.

A low reading on the red wire means that the case of the Transistor is shorted to the chassis.

Are the leads to the bias tracking diode in the clip between the output Transistors?
The leads break easily and if that circuit goes open the amp will pop fuses also.

To save you power transformer from harm until you get this issue cleared I would only do test with a 1.5 amp fast blow fuse in the amp.

Subject: Re: K200 B1 popping fuses
Posted by [DocWaxham](#) on Tue, 04 May 2021 17:02:59 GMT
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It was that filthy. This stuff needed some scrubbing. As far as I can see they look correct. The chassis is drilled to place them correctly isn't it. Thanks o will check again. Thanks

Subject: Re: K200 B1 popping fuses
Posted by [DocWaxham](#) on Tue, 04 May 2021 18:53:23 GMT
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I have looked it over and searched on line for pictures that show the wiring. The pictures I have found it both ways yellow blue or blue yellow. It doesn't seem that the way the wires were trained fits this. I also had taken pictures after I had taken them out and wires at rest would show the blue yellow placement.

Subject: Re: K200 B1 popping fuses
Posted by [stevem](#) on Wed, 05 May 2021 09:43:22 GMT
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Did you also happen to take out the two filter cans when you where cleaning?

Also are the mica insulators back on all 4 output. Transistors faces, and are they in good condition

Subject: Re: K200 B1 popping fuses
Posted by [DocWaxham](#) on Wed, 05 May 2021 14:56:38 GMT
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Yes and yes on both questions. Everything was logged by camera. Insulators were in good condition. All were put back with heat sink compound.

Subject: Re: K200 B1 popping fuses
Posted by [stevem](#) on Wed, 05 May 2021 15:58:48 GMT
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You said you worked on the dropping resistor (ballast resistor) that feeds the pilot lamp, are you sure that's not shorting to something?

I would first do a ohm check to ground from the red wire and the green wire on the power supply filters, as a reading of less then 1000 ohms would indicate a short on that power supply rail, and then we need to dig deeper!

Subject: Re: K200 B1 popping fuses
Posted by [DocWaxham](#) on Wed, 05 May 2021 16:13:00 GMT
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It was one of the ballast resistors on the power amp board for the heat sinked transistors.

Subject: Re: K200 B1 popping fuses
Posted by [DocWaxham](#) on Wed, 05 May 2021 16:32:45 GMT
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Are you leaving the wires connected to the cans? I also checked the two caps they are both ok. With wires connected the meter is way wacky.

Subject: Re: K200 B1 popping fuses
Posted by [stevem](#) on Wed, 05 May 2021 19:47:40 GMT
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Now I see!

The resistor you speak of is not a balist resistor , it's a Emitter resistor and if the lead wire failed due to heat then you have At least one bad output transistor and maybe a bad driver transistor that feeds that output transistor also, and this is what's popping your fuse.

Subject: Re: K200 B1 popping fuses
Posted by [DocWaxham](#) on Wed, 05 May 2021 22:14:48 GMT
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I had all of the transistors out and tested them they were all good. I will take them back out again and test them. I will take the power board out and start with the drivers. I think I will change out those resistors as well.

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Subject: Re: K200 B1 popping fuses
Posted by [stevem](#) on Thu, 06 May 2021 09:49:31 GMT
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If your going to play the amp loud or at gigs then. It would not hurt to uprate those low resistance value 5 watt resistors to 7 watts.

Subject: Re: K200 B1 popping fuses
Posted by [DocWaxham](#) on Sat, 08 May 2021 14:42:13 GMT
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I've tested all the drivers and found two that are bad. Have some on order from NTE. Also found heat sinks for all as well just waiting on parts now.

Subject: Re: K200 B1 popping fuses
Posted by [stevem](#) on Sat, 08 May 2021 21:16:09 GMT
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Good news to hear!
Are you also getting some 1.5 amp fuses to start up the amp on?

Subject: Re: K200 B1 popping fuses
Posted by [DocWaxham](#) on Sat, 08 May 2021 22:23:34 GMT
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I have a variac. Its probably going to slow down till I get all my parts. On another subject I have another K200 that I am working on. Someone did a botch job on a 3 prong install. Anyway went to fire this up this p.m. thru my variac. And nothing. I re did the 3 prong install. When I was writing it up there was a jumper between center prong on the top of switch to the bottom prong of the switch. I unsoldered it and went along. Fast forward. Hooked up every thing started to bring up voltage. No pilot light. Checked all again. Nothing. Then I thought that jumper was getting power thru that. Checked voltage. Sure enough that is it. I am guessing the switch is bad. That's all some people.

Subject: Re: K200 B1 popping fuses
Posted by [stevem](#) on Sun, 09 May 2021 14:45:55 GMT
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A Veriac does not limit parts killing current even when run at lower the normal wall voltage settings!

Does yours have a current meter as part of it?

Subject: Re: K200 B1 popping fuses
Posted by [DocWaxham](#) on Sun, 09 May 2021 18:56:31 GMT
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Yes it does. Not a digital meter but a meter. Won't have the parts till this week so just waiting now.

Subject: Re: K200 B1 popping fuses
Posted by [stevem](#) on Fri, 04 Jun 2021 09:58:31 GMT
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First off as long as the amp is unplugged from the wall outlet you do not have to drain out the filters as there's only 40 volts sitting on them and that amount will not harm you unless you put

your tongue across the terminals!

Also draining any power supply filter out by just shorting them to ground can damage them as they need to be drained out through a resistor slowly.

These amps are not easy to work on since most everything is on that one main board that hangs off of the face of the amp, so things have to be taken apart enough to get that board out and well clear of the amp.

If you're ok with digging into the amp that far then we can continue, if not then take the amp to a repair tech, and preferably one that does audio repair and is good with SS amps and not just a half-assed tube amp guy!
