Subject: K250- 2 will not turn on
Posted by Artgarthok on Fri, 19 May 2017 22:42:34 GMT
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Hello,

My amp will not turn on. I have continuity on the fuse and between poles on the two large capacitors. I don't see any burned parts or loose wires. I do not know much about electronics, but I can solder and I can fix any electric water heater. Do you have any tips of what I should test?

Some context is that when I bought it, I could power it on but only with a weak and diminishing signal.

Thank you.

Subject: Re: K250- 2 will not turn on
Posted by chicagobill on Fri, 19 May 2017 22:55:34 GMT
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Welcome to the place.
Do you have a dc voltmeter? If you do and you feel safe enough to test the amp while it is plugged in and turned on, you should test the power supply as a first step.

Let us know what you can do and we can help you figure it out.

Subject: Re: K250- 2 will not turn on
Posted by Artgarthok on Fri, 19 May 2017 23:31:30 GMT
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Thank you for the reply. I get 41? volts on each capcitor, and can not find any voltage at the power supply. That seems very strange.

Subject: Re: K250- 2 will not turn on
Posted by Artgarthok on Fri, 19 May 2017 23:38:46 GMT
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In front of the large capacitors I get 24 volts on two brass contacts that seen to be wired to everything else and grounded.

Subject: Re: K250- 2 will not turn on
Posted by Artgarthok on Fri, 19 May 2017 23:53:45 GMT
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I have 122v dc on the power supply. The previous voltages for capacitors and contacts were ac.

Subject: Re: K250- 2 will not turn on
Posted by Artgarthok on Fri, 19 May 2017 23:57:16 GMT
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The power button light does not illuminate.

Subject: Re: K250- 2 will not turn on
Posted by Artgarthok on Sat, 20 May 2017 00:02:06 GMT
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41v a.c. to the positive and negative leads on the back of power switch. No volts on the white wires on the sides of the power switch.

Subject: Re: K250- 2 will not turn on
Posted by Artgarthok on Sat, 20 May 2017 00:05:43 GMT
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I get 85 v a.c. between positive wire of power switch and green wire of polarity switch despite polarity.

Subject: Re: K250- 2 will not turn on
Posted by Artgarthok on Sat, 20 May 2017 00:07:57 GMT
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1v a.c. between positive and either white wire on power switch.

Subject: Re: K250- 2 will not turn on
Posted by Artgarthok on Sat, 20 May 2017 00:50:05 GMT
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There is a quote him when switched on

Subject: Re: K250- 2 will not turn on
Posted by chicagobill on Sat, 20 May 2017 01:54:01 GMT
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If you get 40 volts dc on each of the two main filter caps, then the basic power supply is aok. Set

your meter to read dc volts and connect the black lead to the metal chassis. Mounted to the chassis are 4 large black resistors. Two of these are 400 ohm and two are 200 ohms. The 400 ohm resistors feed the lights in the power switches and the two 200 ohm resistors feed the 15 volt Zener diodes that create the preamp power supply.

Touch the red lead to each end of the two 200 ohm black wirewound power resistors that are mounted to the chassis. On one end you should get 40 volts dc and on the other end 15 volts dc. Because the power supply is bipolar one will read positive 40 and 15 and the other negative 40 and 15.

Touch the red lead to each end of the two 400 ohm black wirewound power resistors that are mounted to the chassis. On one end you should get 40 volts dc and on the other end 30 volts dc. Because the power supply is bipolar one will read positive 40 and 30 and the other negative 40 and 30. The two blue switches on the front panel should light up. If they don't, then the bulb may be burnt out. The correct replacement bulb is a #335 lamp. I would wait and deal with the light problem after you get the amp running again. If the second side of the resistor doesn't read 30 volts, then the bulbs are not drawing any current and are either loose or burned out.

The biggest problem with this series of amps is that the plug on connectors that get dirty, loose and unsoldered, breaking the connections between the boards. With the power off pull each plug off and spray the contacts with a little DeoxIt cleaner if you have it and then plug and unplug the connector a few times to wipe the contacts. Then replace the plug and make sure that it is fully seated on the board.

Let us know what you find out.

Subject: Re: K250- 2 will not turn on
Posted by stevem on Sat, 20 May 2017 10:00:08 GMT
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I have had a few of these in the last 10 years where some of the pins of the connector on the 5065 power amp board where very poorly soldered in at the factory and caused crackling noises and signal cut out.

Should this be the case with yours when you go to move the board be very carefull with the little steel cased diode that is loaded into a clip in the middle of the output transistor mounting bar.

This diodes leads are very fragile, they seem to be made of more Bronze then Copper!

If you remove it from the clip to work on the board be sure the when you load it back in that the clip grabs it tight and it's leads do not short out on the clip.

Subject: Re: K250- 2 will not turn on
Posted by Artgarthok on Sun, 21 May 2017 18:29:19 GMT
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chicagobill wrote on Fri, 19 May 2017 21:54

Touch the red lead to each end of the two 200 ohm black wirewound power resistors that are mounted to the chassis. On one end you should get 40 volts dc and on the other end 15 volts dc. Because the power supply is bipolar one will read positive 40 and 15 and the other negative 40 and 15.

Touch the red lead to each end of the two 400 ohm black wirewound power resistors that are mounted to the chassis. On one end you should get 40 volts dc and on the other end 30 volts dc. Because the power supply is bipolar one will read positive 40 and 30 and the other negative 40 and 30. The two blue switches on the front panel should light up. If they don't, then the bulb may be burnt out. The correct replacement bulb is a #335 lamp. I would wait and deal with the light problem after you get the amp running again. If the second side of the resistor doesn't read 30 volts, then the bulbs are not drawing any current and are either loose or burned out.

NO Dc volts on the 200 ohm resistors. I do not see the 400 ohm ones. The pieces that I tested both say HLM10- 102 200 ohm 5% 10W. The first one says 7138 at the end and the other 7135.

Subject: Re: K250- 2 will not turn on
Posted by Artgarthok on Sun, 21 May 2017 18:43:41 GMT
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I'm on my way to get deoxlt cleaner now.

More context: When I turn it on, the speakers do make a slight pop but the guitar makes no sound. The guitar, cab, and cables are good.

Thank you. For the replies. I will your shoot with the other info after I clean the quick connect pieces.

Subject: Re: K250- 2 will not turn on
Posted by Artgarthok on Sun, 21 May 2017 19:13:15 GMT
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stevem wrote on Sat, 20 May 2017 06:00I have had a few of these in the last 10 years where some of the pins of the connector on the 5065 power amp board where very poorly soldered in at the factory and caused crackling noises and signal cut out.

Should this be the case with yours when you go to move the board be very carefull with the little steel cased diode that is loaded into a clip in the middle of the output transistor mounting bar.

This diodes leads are very fragile, they seem to be made of more Bronze then Copper!

If you remove it from the clip to work on the board be sure the when you load it back in that the clip grabs it tight and it's leads do not short out on the clip.

I wish I could post a picture. I don't know what the power board looks like.

Subject: Re: K250- 2 will not turn on
Posted by Artgarthok on Sun, 21 May 2017 21:21:41 GMT
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I cleaned the quick connect pieces and now can't find voltage anywhere. I guess I will save up some cash to get an amp tech to work on it.

Subject: Re: K250- 2 will not turn on
Posted by chicagobill on Mon, 22 May 2017 00:32:05 GMT
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The power amp board is the one mounted to the bottom of the chassis that is connected to the power transistors that mount to the chassis. It has 4 rectangular metal heat sinked transistors on it.

The 400 ohm resistors are mounted below the 200 ohm ones, in a stack.

Make sure that you have connected the connectors to the right spots and that they are fully pressed on. If there is still no voltage, check to see that the fuse is still ok and that the wires to the thermal cutoff are fully seated. These wires are connected to the ac line, so unplug the amp before you check these connections. The thermal cutoff is mounted to the heatsink and will have two twisted wires going to it.

Is there still dc voltages across the two main filter caps?

Subject: Resolved
Posted by Artgarthok on Tue, 23 May 2017 02:10:19 GMT
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Fixed, mostly. Stevem patiently walked me through testing and solving it. I made a bridge wire from the power amp to the effects board. So We know "the 5068 effects board is the issue".

Right now, I'm really happy to be playing on it. Since it is an isolated issue, I will probably get around to doing the necessary research to learn to fix that board, if possible. Right now, I'm not concerned with it.

Thank you everyone for your help.
