Subject: Polarity Switch for K-250

Posted by slk854 on Wed, 30 Mar 2016 19:43:40 GMT

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I know this has been addressed here before, but need to confirm a few things. I just picked up another K-250-4 and a new power cord was installed, but the guy who did it un-soldered all of the connections to the switch, so it does not light up at all. So I am assuming if I get all of the wires back in place like they were I will be OK?????! will snap a shot of what he did and post if that makes it easier to tell me.

Steve

Subject: Re: Polarity Switch for K-250

Posted by chicagobill on Wed, 30 Mar 2016 20:03:29 GMT

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Are you trying to make the polarity switch work again or just light up?

Normally there are 4 wires that go to the switch:

1-AC Hot

2-AC Neutral

3-Pilot lamp hot

4-Pilot lamp ground

The ground cap also connects to the switch and connects to the chassis at the front panel.

Subject: Re: Polarity Switch for K-250

Posted by slk854 on Wed, 30 Mar 2016 20:17:50 GMT

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This is what was done and how it looks now. All I want it to do is light up, unless it is useful to have it function with a grounded cord??

Steve

Subject: Re: Polarity Switch for K-250

Posted by chicagobill on Wed, 30 Mar 2016 21:20:18 GMT

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I see that the polarity switch is broken like they typically are. You might want to add a couple of cable ties to hold the switch to the mounting bracket, to keep it from being damaged any further.

The bulb connects to the two terminals on the back of the switch. The black ground wire is still there and the other terminal should connect with a green wire to the 400 ohm power resistor that is screwed to the chassis that connects to the negative power supply line.

If you look at the power switch, it has a red wire that goes to the 400 ohm resistor that is connected to the positive power supply line. Follow it back and hopefully you will find that the resistor is still there and you will just need to run a new green wire to the back of the polarity switch.

And no, with a grounded cord there should be no need to have a working polarity switch.

Subject: Re: Polarity Switch for K-250

Posted by slk854 on Wed, 30 Mar 2016 21:53:27 GMT

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I have another 250 amp that I can use as a visual aid. I don't like the new power cord the guy put on it so I am going to replace it as well, but if I put it all back except for those two wires that go to the little round piece on the bottom in the middle with the push on spade connectors. Would that work? Is that the death capacitor. If I understand right all I need to do is put that green wire back on the back of the polarity switch where it cam from???? On the power cord they did not connect the black wire back to one side of the fuse like it was. They soldered it below. When I re-do the cord should I connect it back to one side of the fuse???

Steve

Subject: Re: Polarity Switch for K-250

Posted by chicagobill on Thu, 31 Mar 2016 00:54:05 GMT

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The round black thing with the two terminals is the thermal cut off switch. It is there to shut down the amp if it overheats. I don't know why it was disconnected, maybe it's bad.

The death cap is the blue cap that is connected to the polarity switch and connects to the front panel.

The wiring was changed when the heat sensor was disconnected. The cord that was installed is color coded for Europe, not the US. It may have been a computer IEC cord that has the IEC end

cut off.

The photo that shows the red and green wires looks like the green wire was just disconnected from the back of the polarity switch. If you follow it back it should connect to the 400 ohm resistor. If it still does, then just reconnect it to the polarity switch.

Subject: Re: Polarity Switch for K-250

Posted by slk854 on Thu, 31 Mar 2016 02:39:02 GMT

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Thanks Bill... Should I try to wire things back like they should be, meaning wiring the thermal cut of switch back in, or just leave it be as is? I would not be using this amp for any gigging or anything like that.

Steve

Subject: Re: Polarity Switch for K-250

Posted by chicagobill on Thu, 31 Mar 2016 06:27:21 GMT

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If it is working correctly, I would rewire the thermal cutoff back in. I don't have any good reason for not having it in circuit.

To test the cutoff, see if it has continuity across the two terminals. If it does have continuity then, remove it from the heatsink and test to see if it opens when it is heated up. I think that the temp rating is something like 180 degrees, so you will need a heat gun or hair dryer.

Or if it does have continuity across the terminals, you could just assume that it is working and wire it back in without heat testing.

Subject: Re: Polarity Switch for K-250

Posted by stevem on Thu, 31 Mar 2016 10:30:23 GMT

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The date codes on the two switches are interesting as the busted one is the original 1972 and the other one is out of a 1976 amp!

Subject: Re: Polarity Switch for K-250

Posted by slk854 on Fri, 01 Apr 2016 20:44:18 GMT

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I have everything rewired back to like it should be. Now do I just cut out the death cap and remove

Steve

Subject: Re: Polarity Switch for K-250

Posted by chicagobill on Fri, 01 Apr 2016 21:39:37 GMT

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Did you reconnect the ac line (hot and neutral) to the polarity switch? If you did, then remove the death cap. If there is no ac running to the polarity switch, then it doesn't matter if the switch stays or goes.