
Subject: need to test K250-1

Posted by [coatikid](#) on Fri, 05 Nov 2021 08:42:32 GMT

[View Forum Message](#) <> [Reply to Message](#)

I picked up a K250-1 on auction and brought it home. It's bare metal, no tuck and roll, etc. Are there kits or replacements? The plastic sleeve on the power switch had broken off. Thanks to the community member who suggested on someone else's post that you can use zip ties to secure the switch to the mounting bracket. Works! My question is, without a suitable cab to test out this unit, how can I test this K250-1? Thanks

Subject: Re: need to test K250-1

Posted by [stevem](#) on Fri, 05 Nov 2021 10:09:09 GMT

[View Forum Message](#) <> [Reply to Message](#)

Hello and welcome!

First off since you fixed the switch (that's my cable tie repair tip by the way) have you had the amp powered on which will be indicated by one or both of the lights in the two front switches coming on.

You do not need the amp plugged into a speaker to power it up, but You can test the amp into any 4,8 or 16 ohm speaker if you have one.

I good thing to do though when you turn it on for the first time would be to hook up a volt meter to the end of a speaker cable plugged into the amp.

The meter should be set for D.C. Volts.

On power the meter will read well over 1 volt if the output stage of the amp is bad, and this will be a constant DC volt reading.

If you do not have a voltmeter to do this check then you can just plug a speaker in to see if the amp is ok, but if it does have a output stage problem then you will get a loud hum out of the speaker.

This D.C. Voltage can blow a speaker if it's not rated for 75 watts or more.

Perhaps the best thing to do is to first check if the fuse is blown mounted on the rear wall of the amp.

If it is then the output stage has at least one blown output Transistor and one blown driver Transistor.

Please report back on how things go.

Ps. These amps want a 4 ohm load to outout there full amount of wattage that they can.

A 8 ohm load will provide about 75 watts of clean power output and a 16 ohm load will be half of that.

Subject: Re: need to test K250-1
Posted by [coatikid](#) on Sat, 06 Nov 2021 19:38:50 GMT
[View Forum Message](#) <> [Reply to Message](#)

Thank you for the reply. Here is an update.

The fuse appears to be intact/not blown. Interesting to note the fuse is soldered in directly not clipped into a fuseholder.

The amp powers up. The polarity button lamp lights up, but not the power button lamp. There is a barely audible hum which appears to be coming from the transformer.

I plugged in a 1/4" plug with hard wire leads into the 3 Ohm to 4 Ohm output. Set my Klein Tools multimeter to DC Voltage, connected the leads and got a reading of 40.8 volts.

I connected the amp output to a Roland cab with a Sunn speaker rated at 150 watts. Powered up the amp and got a loud hum from the speaker.

Kinda looks like the output stage of the amp is indeed bad.

It would be great to get this vintage piece back on its feet, although my technical skills are limited and the learning curve would be considerable for me. I'm in Tucson and there are only 1 or 2 people in town I am aware of that do this kind of work and they are usually swamped. Will keep looking.

Any suggestions or insights will be greatly appreciated. Thank you.

Subject: Re: need to test K250-1
Posted by [stevem](#) on Sat, 06 Nov 2021 21:59:57 GMT
[View Forum Message](#) <> [Reply to Message](#)

Ok, so the amp has a problem in the side of the output stage that runs on the positive voltage side of the power supply rail, not the negative side.

At most if you want to go at it yourself with our guidance here you're looking at 25 bucks in parts before shipping.

Yes, the fuse is soldered in!

Subject: Re: need to test K250-1
Posted by [coatikid](#) on Fri, 19 Nov 2021 06:31:46 GMT
[View Forum Message](#) <> [Reply to Message](#)

Hey thanks for the insight into the issue at hand here. I appreciate your insight and clarity in the diagnosis. Sounds like you've seen this before! :)

As it happened, when I first removed the case/cover and looked inside, lo and behold the original schematic was rolled up and tucked inside.

With your guidance, I'm willing to apply myself to the task.

What would be the next steps you suggest? I'm excited about bringing this unit back to full functioning.

Cheers!

Subject: Re: need to test K250-1
Posted by [stevem](#) on Sat, 20 Nov 2021 11:15:48 GMT
[View Forum Message](#) <> [Reply to Message](#)

Ok, the first thing your going to need is to get a hand held tube type solder sucker since your going to need such to get some Transistors and maybe resistors off of the output driver board (PC 5065) on the floor of the amp.

Since you have a meter, set it to ohms .

On the driver board you will see 4 big 5 watt box type ciramic resistors next to each of the 4 output driver Transistors in there heat sinks.

These are very low ohms and should not check open, and many times when the output section has a problem like your amp one or more of these resistors (called emitter resistors) will over heat and go open.

On the schematic you found in your amp these four are resistors r 23, r25, r33 and r35.

Please report back on your findings and we will move on.

Subject: Re: need to test K250-1
Posted by [stevem](#) on Sat, 20 Nov 2021 11:25:06 GMT
[View Forum Message](#) <> [Reply to Message](#)

Note!

Do not get one of the big over 1" diameter type solder suckers as they are really hard to use inside the amp, you want the type who's tube diameter is less then 1".

Subject: Re: need to test K250-1
Posted by [stevem](#) on Sat, 20 Nov 2021 11:28:10 GMT
[View Forum Message](#) <> [Reply to Message](#)

Note!

Do not get one of the big over 1" diameter type solder suckers as they are really hard to use inside the amp, you want the type who's tube diameter is less then 1".

You want one like a Mouser electronics 119-17537.

Subject: Re: need to test K250-1
Posted by [coatikid](#) on Tue, 23 Nov 2021 01:17:27 GMT
[View Forum Message](#) <> [Reply to Message](#)

Allright, first steps! Ordering the Mouser solder sucker and will check the resistors and get back back to you. Thank you.

Subject: Re: need to test K250-1
Posted by [steven](#) on Wed, 24 Nov 2021 17:31:56 GMT
[View Forum Message](#) <> [Reply to Message](#)

While you are waiting on the sucker you should go on line and learn how to test out transistors with your voltmeter .
