
Subject: Fired up my Kustom Amp For First time in 20+ Years

Posted by [B-Dubs](#) on Sun, 06 May 2018 01:18:44 GMT

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I've fired up my Kustom Model J595RV Serial 118823 (not sure on the year, but I thought it was an early 70s model). It is a cascade model (head and cab)I, I bought it at a yard sale in the mid 80s, people practically gave it to me, so they would not have to lug back down their cellar. I believe it is a K200, after being in the closet for 20+ years. I get loud hum, no sound on main channel (channel with reverb and Vibrao), do get audio out of 2nd channel. I'm in Boston area, and will probably take to a shop, but I have done a lot of soldering in my day. Just wondering if any tips or things to look at, or worth opening up before I take it in.

Thanks,

Bob W (B-Dubs)

Subject: Re: Fired up my Kustom Amp For First time in 20+ Years

Posted by [steven](#) on Sun, 06 May 2018 10:08:13 GMT

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Hello!

Your amp is what we lovingly call a Frankenstein model due its large front top section.

Your amp is not a 70s model it's a 66 to 67 model.

These amps have vericle circuit boards for the preamp channels and the effects boards ps so they are a tad easier to work on then the later B and for sure A series amps with there stacked circuit boards!

Your issue with the hum and a somewhat or fully dead channel is a common one with these models.

These use a ton of electrolytic type caps in the circuits and with age they go back, and without being used as in powered up they go bad even faster!

Many times they physically show signs of them being bad by having a end of them popped open.

In the 1967 models that I have worked on these caps are white and say Mallory on them.

It's no a hard job to replace them, but I would go thru the amp and even replace the ones on the channel that is working as these are cheap items these days.

Please note that these are polarized with a mark or band for the negative end , and the new ones need to be reinstalled the same way.

You can get non polarized ones if you care to do to not have to deal with that issue.

It pays to use new caps of a higher voltage rating then the originals.

Subject: Re: Fired up my Kustom Amp For First time in 20+ Years

Posted by [chicagobill](#) on Sun, 06 May 2018 18:39:55 GMT

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Welcome to the place Bob.

I agree with Steve that a common failure is old electrolytic caps, but I personally would prefer to find the problems with the amp first and then replace stuff for the sake of replacing them.

Does the amp hum all of the time that it is turned on? Do the controls have any effect on the loudness or timbre of the hum? Do you have access to a volt/ohm meter?

The Frankie heads have a different power amp design than the later A and B series heads. They are great sounding amps, but they do have their quirks. If you decide to fix it yourself, we can help you here. If you send it into a shop we can also help them if they have any problems in dealing with it.

Again, welcome!

Subject: Re: Fired up my Kustom Amp For First time in 20+ Years

Posted by [B-Dubs](#) on Mon, 07 May 2018 16:46:47 GMT

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Thanks SteveM and ChicagoBill for the replies,

I figured bad caps. I was told it was a 70s model when I bought it, but interesting that it is 60s model. Pretty loud hum/feedback (constant), no change when dials turned. Yes, I do have a couple of multi-meters, and a solder station. I'm an IT guy and practically made a living fixing early Apple spaceship shaped Airport wifi bases, replacing 2 caps there were always bad on them. Also, I don't think the Vibrato ever worked on it, since I've owned it, the reverb did work. I tried to post a link to photo of it, but I need to post a few more times to be able too. It is in very good shape, except previous owner etched his social security number on the face of head and cab. Have the original covers, in good shape too.

Bob W (B-Dubs)

Subject: Re: Fired up my Kustom Amp For First time in 20+ Years

Posted by [B-Dubs](#) on Mon, 07 May 2018 16:49:15 GMT

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I'll at least open it up and have a look at it,

Bob W

Subject: Re: Fired up my Kustom Amp For First time in 20+ Years

Posted by [chicagobill](#) on Mon, 07 May 2018 23:04:54 GMT

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The first test I would suggest is to see if there is any dc voltage on the speaker output. Use your meter set to read dc volts and test across the speaker jack or across the speaker cord 1/4 inch plug. Be careful, you do not want to short the output leads together.

There should be less than one half volt dc on the speaker jack in a normal working amp. If there is more than that, do not plug the speaker cabinet back into the head until you get the voltage problem corrected.

On a Frankie head, voltage on the output is usually a sign of a bad output transistor.

Subject: Re: Fired up my Kustom Amp For First time in 20+ Years

Posted by [steven](#) on Tue, 08 May 2018 09:53:41 GMT

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Your amp has reverb, and in that model it hangs off the roof of the amp so you will need to unplug the rca cables feeding it and use a marker to note which side of the pan they get plugged back into.

No harm will come if you plug it back in wrong, but the reverb will not work well.

Also note that on the center of rear wall of the amp are the output transistor and there bias resistor network.

Even if it turns out your hum issue is not from having a bad transistor , these resistors can go way way off in value due to age , and they need to be dead on !

If they are not the amp can loose some 35 watts of its clean output power.

In light of this I would remove the one of the big tall power supply can filters to gain access to the resistors and unsolder one leg of each resistor and compare its reading to the amps schematic that can be found on this site.

And like Bill posted a D.C. Voltage found at the output jack is not good , the problem is that if you have a loud hum then that is a large D.C. Voltage (like over 20 volts) and that can blow a speaker on you!

Please report back with your findings..

Subject: Re: Fired up my Kustom Amp For First time in 20+ Years

Posted by [B-Dubs](#) on Tue, 08 May 2018 12:32:03 GMT

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Thanks guys, I haven't had a chance to open it up yet. I should have some time tonight. Will keep you posted.

Bob W

Subject: Re: Fired up my Kustom Amp For First time in 20+ Years

Posted by [B-Dubs](#) on Wed, 09 May 2018 02:22:32 GMT

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Hi Gang,

I opened up the amp head tonight just to have a look. I put my father-in-laws old Simpson 260 multi-meter on the output cable and I think I am getting 3 volts. I set the meter on DC+, 10v, and it is giving me 3 if I'm reading the correct scale I took a look inside, didn't see any thing obvious, like swelled popped caps, looks like a large cap has been replaced on the effects board, and it looks like there are 2 legs sticking out of same board that aren't attached to anything, but seems they should be (one has a blob of solder on end), maybe why the vibrato never worked. I took some photos, but I can't post them yet. I don't think that I am going to be able to do much with it myself, but have someone that I can take to, and will pass on tips from you guys to him, and the schematics.

Thanks,

Bob W

Subject: Re: Fired up my Kustom Amp For First time in 20+ Years

Posted by [B-Dubs](#) on Wed, 09 May 2018 02:29:16 GMT

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There were a couple of numbers etched into the chasis edge, if anyone is interested, or knows what they mean. Vertically stacked 68 23 M and 29 over an M. They looked like they were colored in with blue. Again will post photo when it lets me.

Bob W

Subject: Re: Fired up my Kustom Amp For First time in 20+ Years

Posted by [chicagobill](#) on Wed, 09 May 2018 04:10:03 GMT

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The three volts on the speaker would cause the hum that you are hearing. Your tech should check all 4 output transistors and the four biasing resistors that are connected to them, 820 ohms 1 watt and 8.2 ohms 1/2 watt.

The effects board should have a light bulb and a cds photocell to make the vibrato work. They are enclosed in a heat shrink tube. If either is missing, the vibrato will not work.

While you have the meter out, you should read the voltage across the two main filter caps. You should get plus and minus 40 volts dc or so. The last voltage test would be the preamp power supply voltage which should be around plus 25 volts dc. It is generated on the driver pc board on the rear panel. If you look at the bottom edge of the driver board, there are two or three wires that connect the driver board to the effects and preamp board. I think that the red ones will be the 25 volt lines.

The ink pen numbers on the edge of the chassis are the factory codes when the chassis was built. One fellow here figured out what they all meant and could date the chassis by reading them. He hasn't been around here recently, but if you list the serial number, somebody will be able to give you an estimate as to when it was built.

Subject: Re: Fired up my Kustom Amp For First time in 20+ Years

Posted by [B-Dubs](#) on Wed, 09 May 2018 12:11:02 GMT

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Thanks ChicagoBill,

There is one of the CDS cells in the heat shrink (didn't know what it was), and the 2 legs sticking up with nothing attached are right next to it, so probably the missing one.

The Serial is 118823.

Bob W

Subject: Re: Fired up my Kustom Amp For First time in 20+ Years

Posted by [B-Dubs](#) on Wed, 09 May 2018 12:13:39 GMT

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I'll do a little more testing tonight, before I put it back together, until I can get it looked, by someone that has the skills to do.

Bob W

Subject: Re: Fired up my Kustom Amp For First time in 20+ Years

Posted by [B-Dubs](#) on Thu, 31 May 2018 01:01:18 GMT

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Whoops, Just realized that I posted an extra 8 in my serial #. Should be Kustom Model J595RV Serial 11823, which would make it a July 67-April 68 model. (from the serial # PDF I found on this web board) It does have 68 over a 23 on the chassis, which I would assume would make it a 68 between (January and April).

Subject: Re: Fired up my Kustom Amp For First time in 20+ Years

Posted by [steven](#) on Thu, 31 May 2018 10:19:56 GMT

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The date code on parts in tamp date its birth to 67.

Subject: Re: Fired up my Kustom Amp For First time in 20+ Years

Posted by [B-Dubs](#) on Thu, 31 May 2018 19:02:49 GMT

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Thanks Steve, this is my 10th post, so I will post photo of the amp.

BW

Subject: Re: Fired up my Kustom Amp For First time in 20+ Years

Posted by [B-Dubs](#) on Thu, 31 May 2018 19:04:15 GMT

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Here is a photo of my amp.

<https://www.dropbox.com/s/el1h3xwsqulul8q9/bob-kustom1w.jpg?dl=0>

Subject: Re: Fired up my Kustom Amp For First time in 20+ Years

Posted by [chicagobill](#) on Thu, 31 May 2018 19:45:46 GMT

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That's a real beauty!

I assume that the social security number is from the original owner, if not I'd remove it from the photo before someone tries to steal it.

Subject: Re: Fired up my Kustom Amp For First time in 20+ Years

Posted by [B-Dubs](#) on Thu, 31 May 2018 20:16:07 GMT

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Yes Bill,

The previous owner put it on the head and cab logo, when that was a thing to do, I guess.

B
