Subject: Kustom 250-4
Posted by johnnysynth on Thu, 09 Jan 2020 17:23:08 GMT
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I'm rebuilding a Kustom 250-4 amp. It works but is noisey and distorts in the high end frequencies with my Wurlitzer Electric Piano. Right now rebuilding the (2) preamp sections starting with the 14pin dual op-amps XR4739/nte725 uA739
This part is not listed in Mouser or Digikey
Any clues on this or any other -hard to find- devices
in the pre-amp section?
I replaced the two 'big can' electrolytics already
in the pwr. supply and that brought the
idyl noise down considerable
That's as far as I've gotten
Jake Welsh
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Saint Augustine, FL
1/9/20

Subject: Re: Kustom 250-4
Posted by thetragichero on Fri, 10 Jan 2020 21:46:10 GMT
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https://www.electronicspoint.com/forums/threads/rc4739-equiv alent.15725/
has some info on other equivalents

have you searched ebay? for this kind of thing I'll only trust us sellers (I've had good luck purchasing driver transistors for the k200 off eBay)

also what's up, I'm further down the coast in Melbourne

i have a pair of 1969 cascade 2x15s with the jensen drivers in them if you're interested

Subject: Re: Kustom 250-4
Posted by stevem on Sat, 11 Jan 2020 11:27:50 GMT
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Yes, NTE has discontinued the 725 chip, but I do not think that's where your high frequency distortion is stemming from as channel one and two get mixed together in that chip and then mergered they get sent to the driver board, and more then likely your channel one would be having that same issue.
What I would do next is unplug, clean and then replug in all the interboard connectors a few times to is if first that fixes it.
Be careful with the plug on the power amp driver board as I have had a few amps who's pins on

that board where barely soldered in on the bottom side.

Check to see if you can rock them at all.

If the connector removing and cleaning does not fix the issue then I would look at replacing all the small Tantalum electrolytic caps on that board as one of them is likely partitaly shiorted and dropping down the needed +12 or -12 volts that powers that board.

I would therefore replace C6 and C7 on that preamp board (100uf 15 volt) with non polarized filter caps with a 25 volt or better rating, in fact if it where me then while I was in there I would replace all of these type caps on all the boards since they are all the same age and don't last forever!

Just be sure to work on one board at a time so that if you make a mistake you will have not screwed yourself as bad!

Also be darn sure to not turn the amp on without the connector on the driver board plugged in as that will damage the output stage.
Let us know how things go.

Subject: Re: Kustom 250-4
Posted by johnnysynth on Sun, 12 Jan 2020 12:10:27 GMT
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Hi Steve:
I'll replace all those caps and check the board connections as you suggested and report in. Is there a source for the IC's?
Yeah, the high frequency distotion I'm hearing sounds like intermodulation distortion not clipping. Anyway, it ain't -pretty-
whatever is causing it. It's not as evident with my Strat but it's a lot more pronounced with the signal from my
Wurlitzer Electric Piano.
I'm really impressed with the -build- quality of this amp compared to Fenders of that era.

Thanks for you help
Jake Welsh

Subject: Re: Kustom 250-4
Posted by thetragichero on Sun, 12 Jan 2020 17:43:04 GMT
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just a thought, but what sort of vintage output are you getting from the organ? of it's more than a couple hundred mv maybe it's just too hot of a signal for a guitar amp? have you tried plugging into the low input instead of the high input (if the preamp has em)?

Subject: Re: Kustom 250-4
Posted by stevem on Mon, 13 Jan 2020 12:43:05 GMT
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You might want to confirm that the amps driver and output stage are ok by pulling signal off of the module jack and feeding it into another amp.
If need be you can replace the 14 pin chip with two LM1458 chips on separate 8 pin sockets.

Note that these amps made after 1972 had tons of gain so as posted above you may just be clipping the input FET.
These amps bo not even need 90 milvolts of signal to be driven to full output.

Subject: Re: Kustom 250-4
Posted by stevem on Thu, 16 Jan 2020 14:05:03 GMT
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4 start electronics shows 1 ECG725 in stock which is that 14 pin stock.
You need to call for a price quote.
877 240 8595.