
Subject: Another schematic

Posted by [IowaBoy](#) on Mon, 22 Oct 2018 22:41:57 GMT

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I know this site is for Kustom equipment, but I just got a hold of a PhotoFact Servicer that contains the complete schematic and parts list for a Silvertone model 1465 amp head. Not to worry, there are no copy right issues. I had and now have again one of these vintage heads from the mid 60's and figure there might be one or two of you out there that might have one as well.

\$5.00 if you want a printed copy or send your email address and I'll send you the download.

As more manuals start surfacing, I will let everyone know about them.

Subject: Re: Another schematic

Posted by [zedsalt](#) on Tue, 23 Oct 2018 15:37:38 GMT

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Well, no, it's not a Kustom, but it's an amp Kustom fans appreciate if they're familiar with it...made its debut the same year I did...one of the most powerful (if not THE most powerful) Silvertones of the Danelectro era...probably a lot of similarities to Kustom when it comes to repair/restoration...

Subject: Re: Another schematic

Posted by [stevem](#) on Tue, 23 Oct 2018 16:21:47 GMT

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as far as I can tell it was a near tie between Thomas Vox and Kustom back in 1965 for the first solid state 100 watt RMS guitar amp.

The Vox hits 120 watts due to it being designed to run on a 2 ohm load, but the Kustom has a better power supply.

The silvertone 1465 seems to be more Vox like even though all 3 of them use a transformer to do both the driver and phase splitting function before the output transistors.

Subject: Re: Another schematic

Posted by [IowaBoy](#) on Tue, 23 Oct 2018 22:12:40 GMT

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Funny how out of the three brands, the Kustom's are still out there going strong for the most part. Silvertones, considering how many were sold by Sears, not many around anymore and the one's that are, have issues and the reverb and tremolo never seem to work. Seems to be an issue with all vintage equipment. Then to top it off, like Vox, they're cabinets were made of particle board that was heavy as hell but didn't hold up well. Vintage Vox is rare at best because of the cheap cabinets and their circuitry always was shorting out. I guess there is a company that you can now buy empty Vox cabinets, including the trolleys that are brand new. Wonder if they are still using

the cheap particle board. I know they aren't cheap price wise. Say what you want about Kustom, but they were built like tanks and will probably be around another 45 years.

The 150 head I bought this summer is all intact but of course the reverb and tremolo don't work. The speaker cabinet had the 6 speakers in it but all had been removed. Cabinet was beyond repair so it got scrapped. I'm using a Kustom slanted 2-15's cabinet that I took the speakers out of and put in 4-8 inch speakers and 2-8 inch high frequency waveguides with crossover. Going to recover everything in tolex, maybe snake skin, not sure yet, but it will be one of a kind. It's definitely a power house amp and the sound is definitely that of the 60's that I remember. Brings back a lot of good memories of just starting out and playing Jr. High sock hops. Now if I can find an old solid body Kay guitar and the black round fuzz box that I had, it will be like old times.

Subject: Re: Another schematic
Posted by [steven](#) on Wed, 24 Oct 2018 11:46:00 GMT
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The reverb pan in these amps is a Piezo set up and is why they sound so bad in the first place , and then go bad!
the non working Tremolo is likely just the bulb being out in the opto coupler, a 1.25 dollar item !

Subject: Re: Another schematic
Posted by [IowaBoy](#) on Thu, 25 Oct 2018 01:11:30 GMT
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Stevem.....what would suggest as to replacing the reverb verses repairing it? My original Silvertone amp, the reverb sounded pretty good, in fact, better than any of the Kustoms I have. Could you explain the piezo setup you were talking about?

Subject: Re: Another schematic
Posted by [steven](#) on Thu, 25 Oct 2018 10:01:30 GMT
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Well first off I am assuming that the silvertone model 1465 uses the same type reverb pan as my model 1484 , since they are both housed in the same size cabinet which has no room I don't think for a normal size 14" reverb pan, but since it's a sold state model may be it does have the room?

If your model 1465 indeed does use the type of pan I have just discribed here and you kustoms do not sound better then they have issues also!

I have not tryed to do anything to get my 1484 model silvertone's reverb to sound better or to sub something else in, but the 1465 model being transistor would be a better candidate for doing such !

That all being said ,To get yourself reverb back these days there are tons of great sounding reverb stomp boxes and that would be the way I would go!

Subject: Re: Another schematic

Posted by [IowaBoy](#) on Thu, 25 Oct 2018 13:12:56 GMT

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According to the schematic, this amp does have a reverb tank in it, whether or not it is still there is another question.

I actually have a Marlboro effects head that has tremolo, reverb and vibrato that works pretty good, just can't use all the effects at once. I use it a lot with my Kustom 250 heads and gets some really cool sounds. Actually, I just bought a Peavey VYPR amp that has so many effects its unreal. Lights up like a Christmas tree and I still don't know how to use all the effects yet. Bad thing is the double pedal sells for as much as the amp. Maybe Santa will come thru this Christmas. lol

Subject: Re: Another schematic

Posted by [chicagobill](#) on Thu, 25 Oct 2018 17:31:37 GMT

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Kustom has always used Accutronics tanks for their reverb circuits and I agree with Steve that if a Kustom amp's reverb sounds worse than a Silvertone's, then there is something wrong that needs to be fixed.

Danelectro made Silvertone amps for quite some time and they used the same basic parts and designs. The Danelectro reverb system used ceramic crystal transducers to drive and receive the mechanical vibrations of the spring inside the reverb tank.

These ceramic transducers which are similar to the modern piezo pickups were most commonly used for ceramic phonograph cartridges. In fact early Vox AC-30's had a reverb tank with Sonotone phono cartridges at the end of the spring.

With time, these ceramic devices crystallize and start to breakdown, which causes the reverb to reduce or stop functioning. High impedance piezos can be used as replacements for the receiving end, but do not work as well for the drive side. You really have to increase the input signal to get the piezo to drive the spring.

I have seen the inner tray from short Accutronics tanks fitted into Silvertone heads, but it requires different drive circuitry to make them work.

Subject: Re: Another schematic

Posted by [steven](#) on Fri, 26 Oct 2018 10:14:22 GMT

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Great info , thanks!

Subject: Re: Another schematic

Posted by [rodak](#) on Tue, 13 Nov 2018 13:56:07 GMT

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This problem also comes up with Farfisa combo organs, which apparently used the same ceramic transducers y'all are talking about here. It's possible to find modern replacements for those transducers, but they're not cheap, approx \$30 each if I recall correctly. I believe they're made by Lesa. If anyone wants details, I can dig through the archives in my combo organ group and find exactly which model(s) have been used successfully.

Subject: Re: Another schematic

Posted by [steven](#) on Tue, 13 Nov 2018 14:04:46 GMT

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Yes, please dig up the info if you would!

Thanks in advance!

Subject: Re: Another schematic

Posted by [rodak](#) on Tue, 13 Nov 2018 16:49:37 GMT

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It's the Lesa "W" cartridge, available here:

https://www.pickupnaalden.com/element_detail.asp?M=Lesa_LESA-W_6896_3741

Looks like they've gone up a bit in price. No idea how much shipping would be to the US.

There was some discussion about this one versus an older 3-pin version, as well as one that attaches via "clips". I must say I'm not that well-versed in Farfisa Compact reverb tanks (I guess I should dig one out and have a look at it!), but it sounds like this 4-pin cartridge is electronically correct, and can be made to work with a bit of creative mechanical engineering.
