
Subject: KUSTOM - Hustler and Commander

Posted by [LeeNails](#) on Sun, 17 Jul 2016 07:07:40 GMT

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I've been needing a good combo for my Clean sound for gigs. I found an As-Is 70's Commander 1-15 on the Music-Go-Round website and am having it shipped in from WI. The store sold it cheap As-Is because it's noisy as all git out when an instrument isn't plugged into it, and the reverb is apparently dead.

After paying for the Commander, I happened upon a 70's Hustler 4x10 in the local Craigslist, which was described as fully functional. Upon inspection, I discovered that it was all good to go. . . except for the crappy, distorted sounding reverb.

Now I've got one iffy Kustom in hand, and another on the way! LOL.

It looks to me like the Commander and the Hustler are exactly the same amp, only with different speaker systems. I'd likely rather gig with the smaller of the two. . . perhaps the Commander.

Anyway, just wondered if any of you experts had info, tips, advice or horror stories to share about these Metal-Face wonders and their reverbs.

Subject: Re: KUSTOM - Hustler and Commander

Posted by [stevem](#) on Sun, 17 Jul 2016 10:50:08 GMT

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The first thing to do with either amp is to unplug and plug back in a few times all of the white Molex connectors that these amps have from board to board.

On the Female pins in these connector you can tighten them up with a needle nose .

On the reverb issue do the same thing to its RCA cable at each end, but also spin them as you take them on and off as the Female's ends on both the pan side and board tarnish up really bad at times.

Be very carefull when plugging the Molex connectors back into place as you should try to support the under side of the board where the connectors are solder into.

See if these 10 minute worth of things helps out!

Subject: Re: KUSTOM - Hustler and Commander

Posted by [chicagobill](#) on Mon, 18 Jul 2016 04:35:05 GMT

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A few years ago I bought two dead Kustom chassis, one was a Hustler. I rebuilt it and it's one of

my favorite sounding Kustom amps. Loud enough to gig with, great reverb and vibrato.

One problem with mine was broken solder connections on the Molex jacks on the boards. The important one is the ground connection from the power amp to the FX board. If that ground connection breaks, the power amp might blow an output transistor.

So as Steve suggested, clean those connectors and check the solder connections on the pc boards.

Subject: Re: KUSTOM - Hustler and Commander

Posted by [LeeNails](#) on Thu, 21 Jul 2016 09:44:06 GMT

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The Sidewinder showed up today, and the problem with the reverb was immediately obvious. . . .
NO PAN!

So, which pan ought I to get for it, maker, model #????

I work in a store, so I might be able to get one from one of our suppliers . . . but just in case, where do You all typically get such things?

Subject: Re: KUSTOM - Hustler and Commander

Posted by [stevem](#) on Thu, 21 Jul 2016 11:23:01 GMT

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You need a 4FB3D1B tank, and if my notes are correct its ground connection on its input RCA needs to be lifted.

Pretty sure AES has them.

Subject: Re: KUSTOM - Hustler and Commander

Posted by [LeeNails](#) on Thu, 21 Jul 2016 12:26:01 GMT

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Sorry, but though I know my way around guitar repairs, I'm a novice with amps. What do you mean by 'lifted'?

Also, who's AES?

Subject: Re: KUSTOM - Hustler and Commander

Posted by [LeeNails](#) on Thu, 21 Jul 2016 12:27:50 GMT

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Is that tank the same as used in the Hustler? The one currently in my Hustler sounds like crap.

Subject: Re: KUSTOM - Hustler and Commander
Posted by [stevem](#) on Thu, 21 Jul 2016 18:00:47 GMT

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All of the metal face amps use the same reverb tank.
When you get a replacement tank, pm me and I will instruct you on lifting the ground.

Subject: Re: KUSTOM - Hustler and Commander
Posted by [pleat](#) on Thu, 21 Jul 2016 19:52:21 GMT

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If the reverb on the Hustler sounds bad, there is no telling if the tank is still original to the amp. A lot of things could have happened over the years even to an original tank.
I'd replace the tank on the sidewinder and then see if it sounds better than the Hustler, since both amps use the same exact circuit boards.
pleat

Subject: Re: KUSTOM - Hustler and Commander
Posted by [LeeNails](#) on Thu, 21 Jul 2016 19:55:51 GMT

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What I thought I might try is ordering the tank and installing it in the Hustler FIRST, and see if it sounds any better than what's in there now.

Subject: Re: KUSTOM - Hustler and Commander
Posted by [chicagobill](#) on Thu, 21 Jul 2016 22:17:49 GMT

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I'm not sure that these use the same tank as the 150-250 metalfronts use. These have the tank mounted in the speaker section, don't they?

Subject: Re: KUSTOM - Hustler and Commander
Posted by [LeeNails](#) on Thu, 21 Jul 2016 22:29:50 GMT

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Yes, they ARE mounted in the speaker section, down at the bottom of the cab. Is there a schematic around somewhere that indicates what tank was originally used?

Subject: Re: KUSTOM - Hustler and Commander
Posted by [stevem](#) on Fri, 22 Jul 2016 10:14:36 GMT

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The only difference is the tension setting of the inner pan support springs between both tanks for the different mounting positions , and this is easily changed with a needle nose plier.

Subject: Re: KUSTOM - Hustler and Commander
Posted by [chicagobill](#) on Fri, 22 Jul 2016 21:50:18 GMT

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I dug through my notes and I have the metal front tank for the 150-250 amps as being a 4BB2C1D. So as best as I can tell, you need need a 4BB2C1B for your amps.

The only difference is the last letter that represents how the tank is meant to be mounted. D is for vertical mounting and the B is for horizontal.

Before anything else, you should check the tank that you have and see if it is the original tank or if it has been replaced. If it has been replaced, it may not be the right one and it may be the cause of your bad reverb sound.

Look at the tank and see if there is a code number rubber stamped on the case. If not we can tell you if the tank is original or not by the physical and electrical characteristics. Do you have an ohm meter?

Subject: Re: KUSTOM - Hustler and Commander
Posted by [LeeNails](#) on Sat, 23 Jul 2016 04:24:05 GMT

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I took the tank out of the Hustler and the number rubber stamped on it is: 031-0047-00
There is also the number: 1122 stamped into the metal of the tank, which is an Accutronics tank.

I removed the Hustler's tank and transplanted it into the Sidewinder, and it sounded just as crappy in THAT. It sounds like there's a distant, crappy distortion box along with the reverb or something. Yuck!

When I was testing the Hustler earlier, and was cranking the volume up and down, I noticed some evil sounding noises intermittently erupting from the amp. Sounded like some old components were complaining or something. Other than that, it sounded pretty cool. In contrast, I didn't find the sound of the Sidewinder as pleasing, and it didn't seem to have as much high end sparkle as the Hustler. . . . maybe because of its' single 15 speaker.

I'm seriously considering having both amps re-capped or something by a pro. . . .unless there's a good YouTube video showing how to do it.

I live in the East Bay here in California. . . anybody know any good local techs who like Kustoms???

Subject: Re: KUSTOM - Hustler and Commander
Posted by [LeeNails](#) on Sat, 23 Jul 2016 04:26:56 GMT
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. . . oh and yeah, I DID unplug and re-plug the reverb RCA connections at the amp and at the tank several times, and also carefully unplugged and re-plugged the Molex connectors too.

Subject: Re: KUSTOM - Hustler and Commander
Posted by [LeeNails](#) on Sun, 24 Jul 2016 03:33:49 GMT
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In the CE Distribution 2016 catalog (page 77) under Accutronics Reverb Tanks there is listed under the sub-heading 'Type 4 (Long, 2 Spring)
P-RK-4BB2C1B, which has specs listed as: Input=150 ohms Output=2,250 ohms
Decay=medium Used in=Crate(? . . LOL)

Is THIS the tank I need for the Hustler and Sidewinder?

Subject: Re: KUSTOM - Hustler and Commander
Posted by [chicagobill](#) on Sun, 24 Jul 2016 05:23:09 GMT
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Yes, that tank should work fine.

I looked up the number that you posted and 031-0047-01 is the Kustom part number for the tank used in the 150-250 metal fronts. I haven't pulled out the schematics for the hustler or sidewinder yet, but it probably is the same part number.

Subject: Re: KUSTOM - Hustler and Commander
Posted by [LeeNails](#) on Sun, 24 Jul 2016 05:54:18 GMT
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When I pulled the tank from the Hustler it didn't look like it had ever been removed. . . very much like it was the original part. However, it is mystifying that BOTH the Hustler AND the Sidewinder exhibited the Same sort of funky distortion sound with that tank installed. Although my testing would tend to point to the Wrong reverb unit being the culprit . . how Could it be if it's the original part??? Unless the tank is defective or damaged in such a way as to render it capable of causing those crappy sounds. The tank is a pretty simple unit from what I can see. . . so, it seems kinda unlikely to me that it could be damaged to that degree and not Look damaged at all. The unit looks totally sound and whole. Could there possibly be something up with it that would miss visual inspection???

Also, is the Accutronic part I described from the catalog the proper unit? If I bought the new tank and plugged it in, and either or Both amps worked as normal, then I guess that would mean the

original tank was to blame.

If Both amps really do have (as they now appear to) identical component failures in the reverb circuit. . . I'd assume this is a common problem with this series. Is it?

Subject: Re: KUSTOM - Hustler and Commander
Posted by [LeeNails](#) on Sun, 24 Jul 2016 05:58:42 GMT
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by the way. . . . I should belatedly clarify the initial mistake in my original posting . . it should have read KUSTOM - Hustler and Sidewinder, as it's the Sidewinder I just bought. . . I once owned a Commander back in the 90's. . . I got confused, sorry. Also, how different (if at All) are the circuits of the Hustler and Sidewinder? Mine sound quite different, the Hustler sounding much more crisp and sparkly.

Subject: Re: KUSTOM - Hustler and Commander
Posted by [chicagobill](#) on Sun, 24 Jul 2016 17:56:31 GMT
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I haven't had a chance to look up the Hustler/Sidewinder schematic to see if there is a Kustom part number listed yet, so I could only assume that the tank that you have is correct.

My Hustler's reverb sounds very typical of any Kustom reverb, no distortion, etc. I love the tone control that lets you get a bright or dark reverb.

There could be something wrong with your tank or there could be something wrong with both of your amps, I don't know. If you order a new tank and try it with both amps, you will have your answer. But logic would tend to support the theory that there is something wrong with the tank and not both amps.

The metal front circuit drives the reverb tank with an op amp ic. The tank's input transducer is part of the op amp's feedback loop, so neither end of the coil should be grounded. Therefore the tank's input jack should be isolated from the chassis. Check the tank and see if the RCA jack that is marked INPUT is the insulated type.

Have you checked to see that the tank is plugged in correctly?

Subject: Re: KUSTOM - Hustler and Commander
Posted by [LeeNails](#) on Sun, 24 Jul 2016 21:20:56 GMT
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The Hustler's reverb tank seems to be original equipment, but I have no idea if it was plugged in correctly. The input and output are clearly marked on the tank, but the RCA input jacks on the back of the chassis are NOT marked. I carefully marked the top plug and installed the cords

exactly as they were on the Hustler when I tried it in the Sidewinder. I will reverse those cords and see if it results in any change in function.

Subject: Re: KUSTOM - Hustler and Commander
Posted by [LeeNails](#) on Sun, 24 Jul 2016 21:31:58 GMT
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The reversal of the RCA plugs into the inputs on the chassis of the Sidewinder was successful. The weird distortion sound has vanished!!! YEAAH! I guess I should assume that the problem with the Hustler was the same thing, so I'll most likely put this tank back in the Hustler, plugged in correctly and use the Hustler with the band . . since I prefer its' tone to the Sidewinder.

Now I just need to get the proper replacement tank for the Sidewinder and make sure it is properly installed.

Subject: Re: KUSTOM - Hustler and Commander
Posted by [chicagobill](#) on Mon, 25 Jul 2016 16:00:30 GMT
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Glad to hear you got it figured out. My fading memory makes me think that the two reverb wires were different colors like grey and black and that the jacks on the amp were marked for colors.

Subject: Re: KUSTOM - Hustler and Commander
Posted by [BobW](#) on Sat, 14 Dec 2019 05:22:31 GMT
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LeeNails,

I repaired a reverb circuit in a Hustler I recently acquired. I also had a distorted sound in the reverb, then it died. I found the problem to be the 10uF/20V tantalum cap C15 located by Q1. Tantalums don't like voltages above their rating, and measured a brief turnon surge above 20 volt using a scope. After swapping out the cap with a 10uf/50V I had laying around the shop, the reverb now sounds great! I also assumed the tank and swapped it out during testing, but it had no effect. My amp had the schematic glued to the top chassis cover. If you trace the reverb output to the return jack on the effects board to the first transistor you've traced to, that is Q1. You should see 7.5V on the Collector. If not, then the cap most likely is bad. Just swap it out with a typical AL electrolytic. No need for a tantalum cap here.

Good Luck.

Subject: Re: KUSTOM - Hustler and Commander

Posted by [stevem](#) on Sat, 14 Dec 2019 11:11:43 GMT

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Thanks for the info on that fix!

Yes, Tantalums where the new rag way back then due to there small size and what I do as a matter of course when working on any Amp is just replace them all since I am in there anyway!
