Subject: tell me about reverb tank tones
Posted by vintagefan on Fri, 17 Jun 2016 05:31:06 GMT
View Forum Message <> Reply to Message

Hey there everybody.....

Tell me about reverb tanks and tones....One of my K100C-8 Kustoms developed feedback when I'd run the feedback above 50% level. It's been an ongoing problem that I have cured a few times by putting a rubber cover over the opening above the springs and taping off the areas where the rubber touches the reverb pan to make a good seal...But after several months the reverb feedback starts creeping back up.

In the past I put in a couple new reverb tanks, but to my ear, they seem to take away a little of the sparkly hi end treble I like. But this time I put in a reverb tank out of a K150 head I bought for parts. Now there is zero feedback even with the reverb maxxed out. The K150 reverb tank and the original K100 reverb tank have the same numbers on them. But also, the K150 reverb tank has added noticably more high end sparkly treble which I like. This amount of treble is equal to another K100C-8's tone that I have. And my 3rd K100C-8 has noticably more bass.

So my question is this. What is it about different reverb tanks that are identical and the newer correct replacement reverb tanks that causes the amp's tone to change from tank to tank? The tone change is definately noticably different, but not drastic.

Subject: Re: tell me about reverb tank tones
Posted by chicagobill on Fri, 17 Jun 2016 07:03:18 GMT
View Forum Message <> Reply to Message

Even though two vintage tanks are the same number, they may have led completely different lives. The springs are a mechanical device. If one tank was bounced a lot like in a touring band's van and the other tank sat in one place for most of its' life, the springs may have stretched on one tank while they remain in almost original condition in the other tank.

There are foam pads at the ends of the springs that can be a problem again, depending upon how the tank was stored. If one tank sat in a cool basement and the other tank was stored in a hot attic the foam ends would deteriorate at different rates, causing one tank to feedback easier than the other.

I agree that the new tanks are voiced differently than the old ones were. My old ears prefer the sound of the old tanks, because that is what I know. A lot of younger guys like the deeper, fuller sound of the new tanks because they didn't grow up listening to the sound of the original tanks. If I was looking to build a reverb unit that was to be used for a recording studio or a stereo system, I'd like the fuller sound better too. I just like the brighter, simpler sound of the old tanks for guitar amps.

There was a fella here that had an old tank rebuilt by the guy at the old Accutronics factory, using NOS parts. I seem to recall that he was pleased with the results. Maybe you can search the board and find the thread that we discussed this stuff in.

Subject: Re: tell me about reverb tank tones
Posted by vintagefan on Fri, 17 Jun 2016 09:25:59 GMT
View Forum Message <> Reply to Message

I'm the one who had the old reverb tank rebuilt with NOS stuff. It's in one of my other K100C's....

The reverb tank that had feedback came out of a well cared for and well stored extremely clean inside and out mint K100C-8.....I suspect it was stored in someone's closet with it's cover on it. Inside the amp head and outside there is not a spec of dust or wear. Like new clean. It looks like it is new. The reverb tank that I put into the K100C which sounds so good is out of K150C head I bought for parts which is filthy inside and out and very aged looking as if it was in a cabinet that was left out in a bar or some dirty environment. I bought the K100C-8 out of Clearwater, Florida...I bought the K150C head out of somewhere in Wisconsin(I forget what city), if those climates make any difference.

Subject: Re: tell me about reverb tank tones
Posted by stevem on Fri, 17 Jun 2016 10:39:41 GMT
View Forum Message <> Reply to Message

I have found 3 things that make up the tone of the , 2 of which you can have a effect on, the third is electronic in nature and you can do nothing about.

The first thing that effects how nuch high end responce a tank passes / outputs is how tight the transducers are on there iron plate core.
These are the nylon coils that the wires go in on each end of the spring mounts.
All too many times even on new tanks these rock around and if they do they can not vibrate the springs like they should on the send end of the tank , nor pick up the vibrations on the output side of the tank.
If you have such loose transducers take a Coffee stick and cut it down into small slivers that you can jam inbetween the transducers and the iron core to tighten it up and then audition the sound of the tank.
If I then like the sound I then remove the sliver and I use my medium gel super glue to fill the gap and then hit it with a shot of super glue accelllerator to lock it up fast.

The second thing like Bill posted is the tension of the springs themselves , if they have taken a pounding and are stretched out there is nothing you can do but get another tank , or install newer springs, which if the latter you had better know what you are doing.

On all of the tanks in my personal amps (other than metal face Kustoms with locks) I have taken the time to make foam rubber shims that I glue into the tank near each springs center, both under And over them.
I set up the clearance of the foam so to restrict the movement of the springs enough when the amp travels , but not effect the sound.
The main reason these springs snap off at each end at times it due to accumulated travel vibration, and this mod greatly reduces that maylay.
For those of you who have vintage tanks with this broken spring syndrome please note that I can fix them should you want such.

I am assuming that in your tank swap from the 150 into the 100 , that the donor tank came from a plexi face k150 as the reverb tanks in the metal face 150s and 250 models use a different impeadance tank ?

Subject: Re: tell me about reverb tank tones
Posted by chicagobill on Fri, 17 Jun 2016 16:20:08 GMT
View Forum Message <> Reply to Message

Sorry that I forgot that you were the guy that had a tank rebuilt at Accutonics. Are you still happy with the sound of that tank?

I would think that what you said about the two amps' histories is pretty much what I was trying to say. The two amps have had different lives and the two tanks work differently. Filth is not a sign of road use and mechanical stress.

I bought an early Frankie head and cab from a guy that played bass in a lounge band for something like 30 years. It sat pretty much unmoved for most of that time in a smokey, smelly club. It was filthy, but it rarely was moved anywhere.

I would guess that the heat and humidity of Florida could be a cause of the deterioration of the foam dampners.

Subject: Re: tell me about reverb tank tones
Posted by vintagefan on Sat, 18 Jun 2016 04:16:10 GMT
View Forum Message <> Reply to Message

Yes, both amps were plexi...they look identical and the numbers and tags on both reverb tanks match.

Subject: Re: tell me about reverb tank tones
Posted by vintagefan on Sat, 18 Jun 2016 05:17:24 GMT
View Forum Message <> Reply to Message

Hey Chicago Bill....The original reverb tank I had rebuilt a couple years ago came back to life sounding crisp and bright with no feedback. Still sounding good. I like the sound better than new tanks I've tried.

I have three K100C-8's, so I have tried various tanks to get various sounds, quitened down some tank feedback, etc....Here are the new reverb tanks I tried....

This tank gives good treble, but lacks that shimmering higher eq like the original tanks I have. I like it but prefer the originals which have a little more sparkely
hi's..,..http://www.tubesandmore.com/products/P-RMOD-4FB3D1B

This tank has too much bass for my liking, but for today's players, they'll probably prefer it's fuller sound.....http://www.tubesandmore.com/products/P-RMOD-4FB3A 1B