Subject: new reverb tank too bassy
Posted by vintagefan on Tue, 06 May 2014 16:49:59 GMT
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After installing a new Tubes And More Mod brand reverb tank 4FB3A1B the amp's tone now has 30% more bass and I lose that transister footprint it seems. It sounds more like a Fender now than a Kustom.

My amp is a K100C-8 4x10. Is there another tank that would bring back the higher eq? Per instructions in another part of this forum, I installed the tank with it's input side located on the end of the amp as where it came out so not to get massive 60 hz hum.. I get zero hum and the reverb is nice and rich, just a little too bassier than the old one.....

In my original reverb tank, one spring had an end clip broken giving me a short reverb decay just using one spring. This amp has 10% more hi eq than my other 2 amps just like this one. Could one reverb spring not hooked up be what gives this amp more hi eq?

I reinstalled the old reverb tank and the amp has it 's higher eq back. Then I installed the new tank again, and it still has probably 30% more bass than the old reverb tank.

Is there another reverb tank to get more hi eq? Or a mod for this new reverb tank to get more hi eq?

Thanks.

Subject: Re: new reverb tank too bassy
Posted by chicagobill on Tue, 06 May 2014 21:08:59 GMT
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I'm a little confused here, but that's easy for me. Are you saying that the amp's tone has changed because of the new reverb tank or that the new reverb tank's tone is deeper than the old tank's tone?

I personally find that the new Korean made tanks are fuller sounding than the original ones, but not necessarily in a good way. My old ears are so used to the sound of the old style tanks, that the new ones start sounding too dark and muddy to me.

You could change the value of the cap that the return signal goes through to a smaller value. That would reduce the bass response of the return circuit and brighten up the sound a bit.

Subject: Re: new reverb tank too bassy
Posted by vintagefan on Tue, 06 May 2014 23:15:55 GMT
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With the new reverb tank, the reverb is noticably bassier and the tone of the amp is bassier too.....

After putting the old tank back in, the reverb has more treble and the tone of the amp has more treble.... But the old original reverb tank has one spring unattached due to a broken clip that holds the spring, thus I get a short reverb decay.

Is it possible to repair the original reverb tank broken clip end?.....thanks.

Subject: Re: new reverb tank too bassy
Posted by chicagobill on Wed, 07 May 2014 01:03:14 GMT
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The only way to repair the tank is to replace the broken transducer assembly. I have done it before by taking the good parts from old tanks.

Which end is broken, the input or the output?

Subject: Re: new reverb tank too bassy
Posted by pleat on Wed, 07 May 2014 01:18:46 GMT
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http://www.tubesandmore.com/sites/all/modules/custom/tech_co
rner/files/spring_reverb_tanks_explained_and_compared.pdf

Here is what I found on page 12 of the link. The Korean made Accuronics reverb tanks are Emphasis on lows & mids, Thick, with lots of wet bite and mid attack. Which might explain the added bass compared with the original, but that would hard to compare since the original tank only has one spring left.

I am confused on the model number 4FB3A1B. The last digit is the mounting plane. The B indicates Open side down, All the Kustom reverb tanks in the older plexi face amps, I would consider to be Open side Up or the last digit I would think should be an A.

pleat

Subject: Re: new reverb tank too bassy
Posted by vintagefan on Wed, 07 May 2014 02:14:15 GMT
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The 4FB3A1B fits perfect with the open area on top just like the original tank. Another tech in this forum recommended it over in the Replacement Parts section. I'm not a tech so I don 't know if the broken spring clip feeds an input or output. I'll post a picture soon tho. If this original tank's broken clip can be repaired, that would be great in order to keep the original tone.

Subject: Re: new reverb tank too bassy
Posted by chicagobill on Wed, 07 May 2014 06:07:23 GMT
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Pleat, you are right about the last code letter. All Kustom amps that had the reverb tank mounted in the head cabinet used an open side up tank. My guess would be that Steve recommended that tank because it was available and met the more important parameters of the input and output impedances.

I guess that the new sound is what they were trying to get with these new tanks. I guess that means that the older USA made tanks will become a sought after item to some people.

Vintagefan, the input and output sides of the tank should be stamped into the metal case near each RCA jack.

Subject: Re: new reverb tank too bassy
Posted by vintagefan on Wed, 07 May 2014 09:01:10 GMT
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The end clip that is broken on the original reverb tank is on the input spring nearest the plexiglass.

This bassier sounding new reverb tank also has a shorter decay than the original tank. It sounds more like a medium decay. I have 3 of these K100C-8 4x10's. The other two amps have noticably more hi eq and more reverb decay. I installed this new reverb tank into the other two K100's, and then those two amp's sound changed to less shimmering hi eq and lesser decay. I also took one of the other K100's original reverb tanks and put it in the K100 that had the broken reverb tank. Then the amp had the shimmering hi eq and longer reverb decay.

Tech support from Tubes And More just emailed me a spec page which is beyond my understanding. They don't know what tank for me to buy.. If anybody has any other suggestions on other tanks to buy to try, I'd like to try them. They're not expensive.

Or does anybody have an original tank to sell? Or perhaps can anyone repair this original tank?

This new reverb tank does indeed fit perfectly and work well. Except it causes the amp to lose it's shimmering hi, has a lesser decay, and makes the amp sound more like a Fender.....thanks everyone.

Subject: Re: new reverb tank too bassy
Posted by stevem on Wed, 07 May 2014 10:39:02 GMT
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If the fine wire hook that comes out of, for lack of a better word(torpedo) where the end of the spring clips to is busted, there is no fixing that.
look hard with glasses on if you ware them at the end of a good spring set up and you will see what that deal is.

This is a very hard tempered wire and with enough vibration over the years they snap.
This is why on the metal face/Baldwin series of amps Kustom put in reverb pan locks.
The mouting position listed for the tanks is all a function of what holes the 4 small springs are mounted to that support the center main spring inner pan.
Any tank that had 4 good small springs can be switched to work in any mounting position.
If you call up tubes and more maybe they can set you up with a pan from one of the other brands they carry that are not of the Mod line of pans?

Subject: Re: new reverb tank too bassy
Posted by vintagefan on Wed, 07 May 2014 15:40:18 GMT
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I called Antique/Tubes And More and they don't have any other brand reverb tank that would match the Mod 4FB3A1B.....And they don't have any source listing a match in another brand.

Next thought: If I try to find another Kustom amp or head, what units or amps will have reverb pans that will work in this K100C-8 4x10?

Here's a picture showing the clip that the spring attaches to which is missing. And here's a picture showing the other tank end which still has the spring clip attached.

http://s1299.photobucket.com/user/stevethedjthedj/media/Mobile%20Uploads/image_zps797aaef4.jpg.html?filters%5Buser%5D=136208023&filters%5Brecent%5D=1&sort=1&o=1

http://s1299.photobucket.com/user/stevethedjthedj/media/Mobile%20Uploads/image_zpsd58caeec.jpg.html?filters%5Buser%5D=136208023&filters%5Brecent%5D=1&sort=1&o=0

thanks.....

Subject: Re: new reverb tank too bassy
Posted by chicagobill on Wed, 07 May 2014 18:31:04 GMT
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Back in the prehistoric era, I was always repairing these reverb tanks. They pretty much are the weakest link in any guitar amp. Either the small wires that connect the transducer coil to the RCA jack would break or the spring mounting wires would break off, or the springs would come unhooked from the mounting wires, or the transducer coil would go open, etc.

Fender used to sell the transducer assembly so that if one end died all you had to was to drill out the rivet that holds down the assembly replace it with the new one, hook up the springs, solder on the wires and you were good to go.

Later on when labor costs became an issue, nobody repaired a tank anymore, they just swapped in a whole new one. I still check them to see if the hookup wires are connected, but it is rare that I will or need to repair a tank, as replacements are so cheap now. I guess that if the sound is changing enough to become an issue, I will have to rethink the repair concept, well at least for the players that can hear a difference and prefer the old sound.

When Accutronics was sold to Belton, the old Morley plant in Cary, Illinois retained a lot of NOS parts. I know that for a while they were selling repair services for vintage Hammond/Accutronic tanks on eBay. I did a quick search and didn't find any listings for repairs, but there was a listing for a dead tank that had the following posting:

Quote:UPDATE : I spoke with an a tech at Morley pedals who is associated with Accutronics. These reverb units can indeed be fixed! please contact : Scott Flesher at (800) 284 - 5172 x 15 if interested. You can find his email address at Morley pedals web page. He charges $35 plus ship. This unit will weight 2.5 pounds when boxed. Note if you want you can save on ship by having me send it to him first.

I don't know if this is still true or not, but it is worth an email or a phone call if you are serious about getting the old tank repaired.

Subject: Re: new reverb tank too bassy
Posted by vintagefan on Wed, 07 May 2014 19:36:27 GMT
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Thank you for taking time to research tank repair and the info. I will call him.
Yes, I want to either repair the tank, or buy an original from 1969-ish.

My amp is a 1969 Kustom K100C-8 4x10. Does anyone know what other 1969-ish Kustom products have a reverb tank that will work? If so, I'll look for some that are being parted out.

A word about the tone change with the new Mod tank.....I only play clean tele stuff, late 60's Gatton/Buchannon/Nichols sounds. The new tank is muddy bassy sounding.... maybe 30% more bass than the original tank.... the decay is more like medium, not long..... to me, Kustoms have a difinitive transister higher eq shimmering hi eq sound, especially with the bright switch pulled out. With the new Mod tank, the sound is like a dull Fender amp. I like the higher eq shimmering sound because in my home's den music room I can get good tone at volume 3 or 4 without rattling the windows or disturbing others in the house. And the four 10's give very good sustain. All other Fender, Line 6, and Crate amps I've had or heard don't have good tone until they are cranked up too loud for my den. I went the pedal route also. Although pedals can give as much eq as can be had, the Kustom tone is lost and the sound becomes too thin and the Kustom fuller sustain tone is lost.

But for someone not in a small studio listening for the Kustom higher eq shimmering sound and playing a small venue cranking the volume at 8, the Mod tank is probably ok to them....

I have a 1963 Gates Diplomat germanium transister broadcast mixing board which also has that

germanium sparkly higher end eq footprint sound which I like.

I think Bud Ross had an ear for that transister sound which is unique if dialed in a certain way with his Kustoms.

Subject: Re: new reverb tank too bassy
Posted by stevem on Thu, 08 May 2014 10:24:47 GMT
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All Kustom K200-A model heads, all K200B models and all K100 and K150 non metal face amps use the same reverb tank.
I can understand the EQ change in the reverb signal with the new pan, but not the change in brightness in the clean non effect sound of the amp.
Has the number 1 non effect channel in the amp gone darker sounding too?
Just for kicks if you have a ohm meter I would check the resistance of the new pan and report back on it because it sounds like the clean tonal change is due to the pan loading down the input or output circuit of the amp.
If this is the case it may be due to you having a pan that is labeled wrong and is not the part number I told you to get.

Subject: Re: new reverb tank too bassy
Posted by vintagefan on Fri, 09 May 2014 04:43:21 GMT
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Thanks for the advice.....I'm not a tech, so I hope you can bear with me with my attempt at tech talk....I have only used an ohm meter to measure my tele pickups...I have found the lower the reading the more hi's the pickup has....and the lower the reading the less volume output the pickup has.

When using the new reverb tank, the left side(effects side)of the amp does exhibit a little more treble hi end shrill than the right side(no effects). To arrive at this conclusion here's how I set the amp:
left side:
volume 4
treble 10
bass 0
speed & intensity 0
trem-vib 0
reverb 0

right side:
volume 4 (or 5 to match left side's volume amount)
bass 0
treble 10

Also when I turn the reverb up, the left side is still even more bassier than the right side, and more bassy the higher I turn the reverb up.

I took some pictures of the readings on the two tanks. I'm not sure what readings you need or what they mean, but here they are:

old tank input and output together reads 349
http://i1299.photobucket.com/albums/ag64/stevethedjthedj/oldtank349_zpse65d5c76.jpg?t=1399608349

old tank input reads 188
http://i1299.photobucket.com/albums/ag64/stevethedjthedj/oldtankinput188_zps3bcc34f2.jpg?t=1399608170

old tank output reads 182
http://i1299.photobucket.com/albums/ag64/stevethedjthedj/oldtankoutput182_zps1df618c0.jpg?t=1399608199

new tank label says: Model P-RMOD-4FB3A1B
http://i1299.photobucket.com/albums/ag64/stevethedjthedj/MODP-RMOD-4FB3A1Blabel_zps612a8513.jpg?t=1399608290

new tank input reads 196
http://i1299.photobucket.com/albums/ag64/stevethedjthedj/newtankinput196_zps3c60ec2f.jpg?t=1399608259

new tank output reads 220
http://i1299.photobucket.com/albums/ag64/stevethedjthedj/newtankoutput220_zps36373976.jpg?t=1399608236

new tank input and output together reads 408
http://i1299.photobucket.com/albums/ag64/stevethedjthedj/newtank408_zpsa01f8479.jpg?t=1399608319

Tubes and More's specs says the input on this new reverb tank MOD 4FB3A1B is 1475. But it's actually reading 1960. I'm not sure how accurate my Excel ohm meter is, but is the difference enough that I should get another tank from Tubes and More that reads 1475? Here's Tubes and More 's tank I bought which shows the specs.
http://www.tubesandmore.com/products/P-RMOD-4FB3A1B

Per Chicago Bill's info, I will contact Scott Fisher to see about repairing my original reverb tank.

Thanks again.....

Subject: Re: new reverb tank too bassy
Posted by chicagobill on Fri, 09 May 2014 06:20:07 GMT
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The resistance readings on the new tank are fine. The 1475 number is the impedance and not the dc resistance. Your meter can only read dc resistance.

My guess is that the new tank is constructed to sound deeper and fuller and is just not bright like the old one is.

You can talk to the guys at Sound Enhancements to see if they can rebuild your old one to match the old specs, or you could try adding a bass limiting cap to the output of the new tank to try and tailor the sound to your liking.

Subject: Re: new reverb tank too bassy
Posted by vintagefan on Fri, 09 May 2014 07:07:58 GMT
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I found another reverb tank with the same input ohms and output ohms as the 4FB3A1B tank I bought.....Only this 2nd tank I found says ""designed to sound like vintage tanks," in the description.

Here's the 2nd tank I found, 4FB3D1B with specs saying 1475 ohms input and 2250 ohms output.....This tank's description says "designed to sound like vintage tanks," wheras the MOD 4FB3A1B I bought does not say this.
http://www.tubesandmore.com/products/P-RMOD-4FB3D1B

Here's the tank I bought, MOD 4FB3A1B with specs saying 1475 ohms input and 2250 ohms output
http://www.tubesandmore.com/products/P-RMOD-4FB3A1B

Do you think this 2nd tank(4FB3D1B) will work? If so, do you think it might afford more treble and a little longer decay to more closely match my original reverb tank? If it might, I'll try it.

Even tho I'm going to contact Scott Fisher about repairing my original reverb tank, I'd still like to find a new same sounding tank(or used) in case for some reason the original tank goes dead in the repair process. And to have as a spare for future needs.

thanks.....

Subject: Re: new reverb tank too bassy
Posted by stevem on Fri, 09 May 2014 10:29:27 GMT
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I think that other tank should be the fix!

Subject: Re: new reverb tank too bassy
Posted by vintagefan on Fri, 09 May 2014 10:54:52 GMT
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Thanks.... I'll try the 2nd tank, the 4FB3D1B.....I plan on sending my tank to Scott(per the advice above), but I still want to find a new tank to have in case mine can't be repaired or if it should die in the repair, and to have a replacement when needed down the line.

Subject: Re: new reverb tank too bassy
Posted by stevem on Fri, 09 May 2014 14:51:03 GMT
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I have swapped out tank parts before and the biggest pain in the Butt is the rivets to drill out!

Subject: Re: new reverb tank too bassy
Posted by vintagefan on Fri, 09 May 2014 15:24:18 GMT
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I don't mind having to drill any holes needed or fabricating if needed. Thanks.

Subject: Success! new reverb tank matches original tank's sound
Posted by vintagefan on Thu, 15 May 2014 01:21:20 GMT
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The new P-RMOD-4FB3D1B reverb tank from Antique Electronic Supply/tubesandmore.com matches the original reverb tank's sound in my K100C-8 4x10. It actually adds a little more treble and makes my tele sound more like a tele; a little more twang.
http://www.tubesandmore.com/products/P-RMOD-4FB3D1B

The new MOD 4FB3A1B reverb tank sounded noticebly more bassy than the original tank.

Subject: Re: new reverb tank too bassy
Posted by stevem on Thu, 15 May 2014 10:16:46 GMT
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That's great, I just wish they would have noted that tonal difference of the Mod pan in my 3 year old AES catalog and. I could have saved you a pain in the Butt!

Subject: Re: new reverb tank too bassy
Posted by vintagefan on Thu, 15 May 2014 16:10:15 GMT
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No problem at all. Just part of the fun of the hobby. I'm sending my original tank with the broken spring clip to Scott Fisher for repair.
The original reverb tank has a little more shimmering lasting sound in the reverb decay. Scott says it's due to the original spring's age, perhaps looser from use over the years. He'll use the original springs. So it'll be interesting how it sounds when it comes back.

I found a long time tech here in Dallas with experience repairing Kustoms back in the day. One of my other Kustom K100C-8 4x10 amps has a loud bassy static pulsating sound. He said something about a "filter" when I took it to him. Will be interesting what he finds.

I appreciate everyone's input & advice..... thanks!

Subject: Re: new reverb tank too bassy
Posted by chicagobill on Thu, 15 May 2014 18:48:04 GMT
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Thank you for keep us informed about the new tank. Let us know how the old one turns out after it has been rebuilt.

Subject: Re: new reverb tank too bassy
Posted by vintagefan on Thu, 15 May 2014 20:51:35 GMT
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Wow.... the more I play my tele thru this new reverb tank, the more the sound is becoming

shimmering bell like, like fine crystal ringing out.... very pretty sparkly hi end especially on the e, b, & g strings.....the reverb decay seems to be lasting longer.... maybe the springs are loosening up a bit? I'm quite surprised at this tone and reverb.

Subject: rebuilt tank is a success
Posted by vintagefan on Mon, 02 Jun 2014 09:04:19 GMT
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Success with the rebuilt reverb tank from Scott Flesher. He rebuilt my original tank and it has the same tone and eq as before.

Also, the new P-RMOD-4FB3D1B reverb tank from Antique Electronic Supply/tubesandmore.com has a close sound to the original tank but with a bit more mids..... It is a good replacement.

Thanks for everyone's advice.

Subject: Re: new reverb tank too bassy
Posted by stevem on Mon, 02 Jun 2014 10:24:18 GMT
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Thanks for keeping us informed on the tank repair and it's sound threre,

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Subject: Re: new reverb tank too bassy
Posted by carlc on Mon, 02 Jun 2014 11:11:52 GMT
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So...can you tell us how much the rebuild cost and where this guy is?

Subject: Re: new reverb tank too bassy
Posted by vintagefan on Mon, 02 Jun 2014 13:12:49 GMT
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The tech is Scott Fletcher in Cary, IL. Cost was $35.....scott@sepigroup.com

If you scroll up you will find more info about him from when he was recommended to me. I believe he's also associated with Morley Pedals and Accutronics, but the return label on the shipping box said Sound Enhancements.

Subject: Re: new reverb tank too bassy
Posted by chicagobill on Mon, 02 Jun 2014 15:38:13 GMT

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Sound Enhancements is the company that owned Accutronics and Morley. A few years back, they sold the Accutronics reverb business, so they only make the Morley pedals now.

Because they have a stock of new parts left from the old days, they repair old tanks with the correct parts.

Subject: Re: new reverb tank too bassy
Posted by vintagefan on Mon, 02 Jun 2014 18:44:32 GMT
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Scott did an excellent job..... The rebuilt reverb pan retained the higher eq, which is why I like Kustoms.

Here's what Scott said he did:
I had to rebuild the output transducer but I found I had one from that same time period so I just had to disassemble the replacement transducer and your broken transducer then reassemble the transducer .