Subject: Actual bias vs set bias/antiskate
Posted by Russellc on Sat, 04 Dec 2004 17:20:12 GMT
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Just wondering, haveing recently purchased the HIFI test record I've played around with the tracks for helping set bias and so forth. In short, there are 3or4 tracks which are at higher and higher amplitudes, and mistracking can be heard as distortion, from which ever speaker is associated with the channel that is mistracking. Hardly anything can track the final track. Anyway, while tuning using the 3rd track my right speaker kept having the buzz sound until I had set the bias to almost 2.5 grams, and a slightly higher vertical tracking, alittle over 1.5 grams. 1.5 is the recommended setting for this ortofon om 30 MM cartridge. Is this test telling me my cartridge maybe needs realigned, or is it telling me that bias settings on the arm are that far off? Anyone familiar with this test record and perhaps more refined ways of measuring actual bias settings?
Russellc

Subject: Re: Actual bias vs set bias/antiskate
Posted by Manualblock on Sat, 04 Dec 2004 21:35:25 GMT
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What arm do you have? Many of the dial-in spring loaded anti-skate schemes are not so accurate. Try setting the tracking force to zero until the arm floats over the album, then set the bias as high as you are able until the arm is pulled out to the rim of the record. Then back off to half of that and try again. That should put you in the ballpark. Are you sure the tracking force is accurate? Do you have a gauge? Sometimes the arm gauge is not perfect either.How old is the cartridge? What did you use to align it? Is the stylus rake angle good? I would check all these things and then re-set the bias. I assume you have the HI FI News and Record Review Test Record. That is pretty accurate.

Subject: Re: Actual bias vs set bias/antiskate
Posted by Russellc on Sun, 05 Dec 2004 00:05:44 GMT
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The Arm is the arm that came on the table, an AR "The AR turntable",basically the same as a ES-1, but there are some differences. Its a straight affair, black and says AR on it. I have anthony scillia making me an armboard to fit my infinity black widow to it. Back to the arm, it has a fresh ortofon OM 30 cartridge. to align it, I use the DB system dbp-10 phono alignment protracter, as well as 2 of the three tools included with the HiFi news test record. I have no scale to set vertical tracking weight, just use the dial on the arm, Then test the torture tracks on the test LP. I saw a review of the test album on the tnt site, and apparently my findings aren't so unusual. I have not attempted the forth and final track, but track all the others fine after using the protracter

and setting bias to where the distortion is gone. This test record is really nice, if the bias is off, the channel that isn't contacting the stylus as well as the other begins making a buzzing distortion noise. You just adjust the bias (and maybe a little tracking weight) until it is gone, or at least equally balanced between the channels. The reviewer had to get his vtf up over 2 grams to past the 3rd test, mine passes at a hair over 1.5, at least according to the scale on the arm's dial. Lord knows what it actually is. I wonder if the little shure scale is useful, or if I should seek out something a little fancier. As to rake angle, I lowered the arm slightly to get the arm level with the platter, and as to strike a balance between to stark and to slow and dull. I think its about optimal for this set up. I guess these scales for vertical force and antiskate provided with some arms leave something to be desired in terms of accuracy. Regards, Russellc

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Subject: Re: Actual bias vs set bias/antiskate
Posted by Manualblock on Sun, 05 Dec 2004 12:27:42 GMT
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Sounds like you really don't have a problem. That arm is a most likely the old Premier that came with many of the better decks back then. The results you got are pretty much standard for that arm. The Black Widow should be an improvement. I use the HFNRR test record myself and think it does a great job. The Shure gauge is very accurate and should be quite adequate.I am wondering; the Black Widow is a very low mass arm; what cartridge would you use? I have an Ittok on my table but you know; bearing technology has improved dramatically these last ten years and I am beggining to think that for not a lot of money there are arms out there that are worlds better than our older ones. Even a Rega for 300$ is much better than most Vintage arms. I think I may make the move myself soon.

Subject: Re: Actual bias vs set bias/antiskate
Posted by Russellc on Sun, 05 Dec 2004 13:57:12 GMT
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My current cartridge is an ortofon OM 30. Found it on the internet for only 159.00. When I [purchased it, it was for the AR arm, which was a great match. Hopefully, it will be ok for the black widow. The black widows instruction sheet shows it with a denon cart, I believe the 103.It looks kind of big, but I guess the compliance is correct or something. If the OM 30 doesn't work well, I have a few on my list, but really have no idea if they will work with the black widow. The current shure v15, Goldring 1042, and even more doubtfull about it & the black widow arm, AT Oc9. I just got an email that the arm board is ready and will be sent out on monday. Hopefully I will know soon! Now that I have learned that this gentlemen is remaking most of the merrill mods, I may be using this table in my main system lomger than I had planned. I may go for another arm at some point, like you considering a rega. I stumbled on this arm (black widow) in mint shape in original box etc for 50.00 bucks, so I can't resist trying it. Regards,
Russellc

Subject: Re: Actual bias vs set bias/antiskate
Posted by Manualblock on Sun, 05 Dec 2004 17:00:37 GMT
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Sounds like a plan. The Shure Type 5 I personally would think would be a perfect match with the Black widow should you desire to change. BTW can you provide the link to the Merrill guy? Thanks, I still have a couple AR XA's that maybe could use some playing time. J.R.

Subject: Re: Actual bias vs set bias/antiskate
Posted by Russellc on Sun, 05 Dec 2004 18:29:58 GMT
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Yes, his name is Anthony Scillia and you can see some of his work as well as contact info at: www.theanalogdept.com/anthony_scillia.htmYou can see a little more of his work in the AR gallery on the vinyle nirvana site. Anthony has told me that as soon as the Merrill Audio site is revamped, he will have info there as well. So far I plan on using his delrin armboard and stud kit that allows the use of linn springs and lower grommets, and improved lock nuts of some sort. His merrill redo of the acrylic outer platter is supposed to be ready shortly, and that will be combined with the delrin inner platter , along with a much improved stainless shaft which is available with or without threads for screww on clamp, which he also makes. The outer platter is also to be used with the merrill lead mat, which is also being redone. He has future plans to make the motor available like merrill used to sell, and I think I remember him saying that the delrin pully is also available. I hope that he redoes the sub chassis, said it was being explored, but no commitment yet. He did tell me that the merril perifery clamp was not in the plans, but I see VPI offers one, and since albums are the same size, I assume it would fit? Regards, Russellc

Subject: Re: Actual bias vs set bias/antiskate
Posted by Manualblock on Mon, 06 Dec 2004 16:22:25 GMT
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The periphery clamp makes me nervous. What if it slps or something? I have done lots of mods on AR tables and I think the most effective is the damped inner platter and delrin bearing with a new shaft. Using hot glue to fill the suspension dampens it pretty good and that sticky dampening sheet they use on autos seems to work on the platter. Another thing I tried is the leaded tape used for taping golf club heads placed around the interface between the inner and outer platters. I have always thought rightly or wrongly that making the platter really heavy is bad for the bearing.Nice to know that these things are still avialable, a fully modded AR sounds nice.

Subject: Re: Actual bias vs set bias/antiskate
Posted by Russellc on Mon, 06 Dec 2004 16:39:54 GMT
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The "perifery" (or however its spelled) isn't all that heavy, and what ever you would have to do to make it move would probably be disasterous with or without the clamp! I never used any dampening on the platter out of balance concerns, that will damage the bearing. what exactly do you mean by "filling the suspension with hot glue"?. russellc

Subject: Re: Actual bias vs set bias/antiskate
Posted by Manualblock on Mon, 06 Dec 2004 19:05:22 GMT
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The indentations that occur across the t-bar sections of the suspension, fill them with hot glue to damp them down. You have a point there, about the "periferie" clamp. As far as balancing the platter I just used a weighted amount for each pie-shaped section and then checked with a bubble level. Not so sophisticated and I probably would not do that on my Linn but It seemed o'kay so far; time will tell.Ortofon makes nice sounding carts. Wish I had the means for a nice SPU with the Tonearm and their step-up. 5k$ sounds fair for a phono needle; eh?

Subject: Re: Actual bias vs set bias/antiskate
Posted by Russellc on Mon, 06 Dec 2004 20:18:47 GMT
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Now I understand, you're dampening the T shaped subchassis, not the actual suspension springs. $5K for a cartridge, it just isn't worth it.The point of diminishing returns has been reached. No one will convince me otherwise. a really good 300 dollar cart is 90% of a 1000 dollar cart. The 1000 dollar cart is no doubt 90% of the 5000 dollar one and so on. On top of that, you'll need a fortune in associated equipment to hear the difference, and many times the difference is a lateral change rather than a big jump forward. once you have the first 90%, the remaining 10% is REALLY expensive. And then you break it! For the sort of money some of these rigs cost, you could add on a new listening room. if you have money to throw away, one should get what you want i guess, but I'm happy with the 1st 90%! Russellc

Subject: Re: Actual bias vs set bias/antiskate
Posted by Manualblock on Mon, 06 Dec 2004 22:23:52 GMT
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No; thats for the Ortofon SPU and the Tonearm and the Step-up. I may be crazy but I ain't stupid. That cart arm transformer combo is the best there is. Still out of my league. I think 250$ is the tops for a cart.

Subject: Re: Actual bias vs set bias/antiskate
Posted by Russellc on Tue, 07 Dec 2004 10:58:37 GMT
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agreed. 250 properly spent on cart, another 300 for a rega 300 and you probably have 90% of the 5000.00 ortofon rig, with over 4000. left over.Perhaps not quite the same, but close enough for a lot less. Russellc

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Subject: Re: Actual bias vs set bias/antiskate
Posted by Manualblock on Tue, 07 Dec 2004 11:57:27 GMT
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Spot on; it's all relative. The room is more than half the battle anyway. Know anything about the Origin Live mods for Regas and the motor drive unit by any chance?

Subject: Re: Actual bias vs set bias/antiskate
Posted by Russellc on Tue, 07 Dec 2004 13:13:23 GMT
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Only what I've read. Odd thing, many modders seem to prefer beginning with the 250 rather than the 300, but I'm not sure why.I need to find out if both the 300 and the 250 have the same mounting plate or arm board pattern. If so, I think I'll order another arm board cut for it from Mr Scillia. I'm sure at some point I'll go rega. Regards, Russellc

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Subject: Re: Actual bias vs set bias/antiskate
Posted by Manualblock on Tue, 07 Dec 2004 14:29:16 GMT
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I can tell you now it is the same. The rap was that the difference is they cull the best bearings for

the 300, but I am not positive that is the reason. The reason given for starting out with the 250 is that the arms are the same essentially so why not use the less expensive unit. Brit audio in Pennasylvania seems to have pretty good prices.

Subject: Re: Actual bias vs set bias/antiskate
Posted by Russellc on Wed, 08 Dec 2004 00:13:28 GMT
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Yes I stumbled on his ebay store, cheapest I've seen, from stock to several upgrades available.
Russellc
