Subject: Turntable worries
Posted by new to vinyl on Fri, 11 Jun 2004 11:41:07 GMT
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I've got an old technics sl-b210 automatic basic turntable andI've just replaced the stylus. How do I know when it needs a new cartridge? It also says that the tracking force is set for the best results by the factory, but over time, and being knocked about a bit, could the tracking force have altered and be dammaging my records?

Subject: Tracking weight and anti-skating force
Posted by Wayne Parham on Fri, 11 Jun 2004 14:24:01 GMT
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I like to set the tracking weight for the lightest setting that will track and stay in the groove. This saves wear on both the needle and the record, and that's why I do it. On the other hand, too light a setting will sometimes result in poor contact and therefore can cause poor tracking and groove damage even if the needle doesn't skip. This can cause some audible artifacts, so you may have to increase tracking weight slightly above that which will retain the needle in the groove. In fact, most manufacturers actually recommend setting the tracking weight towards the heavy end of the range, and not the lightest setting.Anti-skating should be set where you get no lateral force on the needle. You can actually see the needle flex one direction when there's too much anti-skating force and to the other direction when there is too little. You will want to set anti-skating where it is at the center of scale. When set properly, the record will not skip and if the needle is placed on a record with a damaged groove, it will still tend to track properly rather than climbing out of the groove and skipping.
Cartridge Setup

Subject: Re: Tracking weight and anti-skating force
Posted by Manualblock on Fri, 11 Jun 2004 15:15:55 GMT
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Wayne, The damage caused by setting tracking force too lightly is exponentially greater than setting it at the top of the range. Even if you can't hear audible mis-tracking it may still occur and you can't tell without a scope. So I try to err on the heavy side. Studies I have read claim that the extra force really has very little effect compared to the horrific damage done by mis-tracking. You can hear this sometimes on used records that have been tracked to lightly, it destroys vocals. I track my Denon and Empire at 2.5 grams and after many playings cannot hear differences between my records and different copies of the same recording played on other systems. The Shure people did a study on this years ago using high powered microscopes to visualise grooves before and after repeated playings at different force levels. Even though they build carts. that are

renowned for using low tracking force they still suggest you set at the highest level of their recommendations. I know you are aware of this but some may not be and consequently set their tracking force too lightly. The electron microsope photos show the needle clattering in the groove and actually peeling sections of high frequency modulations right off the groove, even without audible mis-tracking.

Subject: Re: Tracking weight and anti-skating force
Posted by Wayne Parham on Sat, 12 Jun 2004 05:10:27 GMT
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You know, John, you're exactly right. If the needle leaves the surface, it will have a sharp impact when it lands. An impact load is always more damaging than a steady consistent force. So your point is well taken. It's obviously correct.Mistracking removes part of the waveform and causes distortion. One of the best seat-of-the-pants tests for me was to listen to "Dear Diary" from the Moody Blues. The vocals on that song seem to really chatter an underloaded cartridge. I can always hear it when the tone arm was too light for the needle on that song. So if I'm somewhere that I don't have a test record and a scope handy for a first-time setup, I could always count on that for a reasonably good indicator of needle chatter. Another good one is Yes - Fragile, where practically all of the tracks containing piano will show the problem if it's there.

Subject: Re: Tracking weight and anti-skating force
Posted by Manualblock on Sat, 12 Jun 2004 12:00:10 GMT
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Good idea; except there goes your copy of Dear Diary!

Subject: Re: Tracking weight and anti-skating force
Posted by Wayne Parham on Sat, 12 Jun 2004 13:10:42 GMT
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That's true. But not so long ago, you could get as many copies as you wanted pretty easily.

Subject: Cheers Guys
Posted by new to vinyl on Sat, 12 Jun 2004 17:52:48 GMT
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Thanks for the helpfull info, I may have the force set too lightly, as I thought that the least weight was the best policy.Cheers!

Subject: SL-B210 Amplified Speakers
Posted by Lee Norman on Sun, 05 Dec 2004 03:15:37 GMT
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Greetings:Would you know what & where I might obtain the speakers meant for the Technics SL-B210 Turntable? Are they amplified speakers or does the turntable require a preamp? We have had the turntable for many moons and am now trying to make use of it.

Subject: Re: Technics SL-B210 Turntable
Posted by Wayne Parham on Sun, 05 Dec 2004 08:13:16 GMT
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This turntable is like most others, in that it is intended for use with a magnetic cartridge. You'll need an amplifier with a phono stage to use it. What kind of stereo system do you have? Does it have phono inputs? If not, you'll need to get a phono preamp for magnetic cartridges.
