

HOW TO CORRECT TURNTABLE "BOUNCE"

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PLAGUED BY TURNTABLE BOUNCE? Does your cartridge skip a groove, or repeat one, every time someone walks past your record changer? Here's an easy way to return the spring to your step, by adding four of them to your changer.

The main reason a turntable bounces when someone walks near the cabinet is that the built-in suspension is too stiff. It was designed to prevent motor or loudspeaker vibrations, which are relatively high in frequency, from reaching the cartridge. However, it offers little or no protection against low-frequency seismic disturbances, such as those caused by footsteps.

We tried all the usual remedies to stop the bouncing of our changer, including foam-rubber and horsehair pads, but none of them worked. The solution was to suspend the changer inside the cabinet with four soft springs, as shown in the photograph. The ones we used measure 5 inches long and $\frac{3}{16}$ -inch diameter unloaded, and stretch about 2 inches under load.

To select your springs, put your record changer, along with three or four records and whatever mount-

ing hardware you plan to use, on a set of scales—baby scales work fine—and weigh them. Then divide the result by four and head for your local hardware store. Check the springs you intend to purchase by actually measuring how far each one stretches when loaded. You should be able to borrow some accurate weights and a ruler at the store.

For example, if your changer and accompanying hardware weighed 16 pounds, load the spring with four pounds and check that it stretches about $\frac{1}{3}$ its length. This will ensure a very low resonant frequency for the system.

Now take your springs home and fasten them to a plywood platform on which the changer will rest, as shown in the photo. Level the turntable by adjusting the position of the changer on the platform.

This technique will work for any record changer which is mounted inside a cabinet, whether the cabinet opens on top or in front. For changers sitting out in the open, use your imagination to find a suitable frame to support the springs. In either case, the results are well worth the effort. Æ

