

HOW TO INSTALL THE LOCI TONEARM

Decide where to place the pillar. The center of the pillar should be 24.5 cm ($9\frac{5}{8}$ inches) away from the spindle at the center of the record. It should also be 2.5 cm (1 inch) to the right (as you face the turntable) of where you want the pivot point of the tonearm to be.

Install the pillar. Drill a hole 2.5 cm (1 inch) in diameter for the pillar. Push the phono plugs through the top washer, the armboard, the bottom washer, the nut, and the bottom or back of the turntable. Push the pillar through the top washer, the armboard, and the bottom washer. Then thread the nut onto the pillar and tighten it hard, making sure that the top wire comes out of the pillar facing the back of the turntable.

Mount the cartridge. Push the mounting screws of the cartridge through both of the small black aluminum plates and then through the mounting holes on the cartridge. Put the nuts on, but leave them very loose. Attach the pins to the cartridge according to the standard code:

WHITE = LEFT HOT	RED = RIGHT HOT
BLUE = LEFT GROUND	GREEN = RIGHT GROUND

Then slide the cartridge onto the four black aluminum rods so that the rods fit between the two black plates. Make the screws snug but not tight.

Set dynamic balance. With the small counterweight attached to the upper tube of the front portion of the tonearm, attach the large counterweight to the very rear of the tonearm. Adjust it back and forth until the arm approximately balances when it is tilted in any direction. (Note: Some turntables may require this weight to be placed further forward than this for it to fit under the dust cover. In that case, place it as far back as it will go and still fit under the dust cover.)

Place tonearm on pillar. Slide the tonearm onto the pillar and tighten the large allen screw just enough so that the tonearm does not slide around. Then insert the male LEMO connector from the pillar into the female LEMO connector in the arm. Move the tonearm up or down on the pillar so that the front tubes are level when the stylus is at the level of a record. Then use the LOCI TONEARM ALIGNMENT GUIDE or the Dennison Sound-Tractor or any other method to minimize lateral tracking error by setting the cartridge squarely in the groove when it is 121 mm and when it is 66 mm away from the center of the record. This

can be done by rotating the tonearm on the pillar and by adjusting the position of the cartridge on the four black rods.

Set tracking force. Adjust the small counterweight on the upper front tube by sliding it forward or backward so that the vertical tracking force is optimum for the cartridge employed. This should be done with a good scale, so no markings are provided. The small allen screw should only be tight enough so that counterweight does not move.

Set antiskating. The anti-skating weight hangs on a thread just in front of the pillar. Make sure the thread hangs in the groove cut for it in the assembly which holds the tonearm in the rest position. Slide the small piece which holds the thread onto the top tube of the tonearm forward or backward so that the stylus shows no deflection sideways when it is lowered onto a moving record. With some cartridges which have very low compliance, it may be necessary to adjust this by ear, listening for optimum left-right balance on a familiar record. Then tighten the small allen screw on the piece to hold it in place. (The varying frictional coefficients of different manufacturer's stylus shapes makes any general rule of thumb wrong most of the time. This is the easiest way to get anti-skating right most of the time.)

Set vertical tracking angle. This is a tough one. Rotate the black plastic cylinder just behind the numbered wheel so that the cartridge front is higher than the back. Find a familiar recording with *lots* of spatial information (such as Philips, BIS, Proprius, *et cetera*) and listen to a short passage near the center of the record again and again turning the black cylinder between each repetition so that the numbered wheel advances one number each time. The sound should become progressively more and more spacious and real and then less so. If one position sounds noticeably best, then set the black cylinder to that position. If two positions sound equally good, then set the black cylinder between the two positions. Set the numbered wheel without moving the black cylinder so that this position has the number indicated for this record label on the enclosed list. If the selections all sound the same, set the cartridge level and set the numbered wheel at number five (5). If the first setting sounds best, turn the black cylinder downward one full turn and progress up the numbers one at a time. This task is much easier with a good tape deck because one can just record all the positions sequentially and hear the differences much more quickly.

Do the final tweaking. The height of the tonearm should be readjusted so that the front tubes are level when the black cylinder is rotated to position number

five (5). Also, the tonearm should be rechecked for lateral tracking error using the LOCI TONEARM ALIGNMENT GUIDE or whatever other method was employed earlier. If the cartridge is tipped sideways in the groove (azimuth error), then loosen the two small allen screws in the pivot block that holds the two rear tubes in place and rotate the plastic block where all four tubes meet to straighten the cartridge. Please, only loosen the small allen screws enough to move the tubes and make sure they are very tight when the job is finished. Finally,, make sure the large allen screw is somewhat tight and that the cartridge screws are very tight.

HOW TO USE THE LOCI TONEARM

Once the dealer has set up and installed the LOCI Tonearm, nothing should need adjustment except for the vertical tracking angle. With most good cartridges, the sonic benefit of adjust VTA is significant. Adjusting the black cylinder (being careful *not* to touch the numbered wheel) to the correct number for the label of the record being played on the provided list can become as automatic as cleaning a record before playing it. These numbers are not from heaven, they come from listening to a lot of records with several different cartridges. So the list may be incomplete or even have mistakes. If you encounter a good recording on a label that is not on the list, just set the black cylinder to optimize the accuracy of reproduction and please do not hesitate to tell us about it.

When travelling short distances with the tonearm, it is a good idea to fasten the tonearm to its holder with a wire "twistee" and on longer (rougher) trips, it might be wise to learn how to use the **LOCI TONEARM ALIGNMENT GUIDE** and remove the tonearm from the pillar for the duration of its travel.