

# NAD

# 5120

## TURNTABLE QUICK SET-UP GUIDE

These abbreviated instructions are for purchasers who have had previous experience in setting up manual turntables. If you encounter any difficulty, and especially if this is your first high-quality turntable, please study the full-length instruction manual *before proceeding*.

Numbers in square brackets identify the parts of the turntable, as shown in the illustrations in the instruction booklet.

### UNPACKING

Remove the turntable system from the carton and unpack it from the styrofoam blocks. Identify the following parts: (1) the dust cover; (2) the three-part platter assembly; (3) the tonearm; (4) the small accessories bag; and (5) the main turntable assembly.

Do not discard the packing materials until after you have completed setting up the turntable and all parts are accounted for.

### ASSEMBLY

Place the turntable on a level surface. Check the routing of the rubber drive belt [7], comparing it with the large expanded diagram of the turntable assembly in the instruction booklet. The belt runs from the motor pulley [8] around the rim of the sub-platter [9] and must not be twisted.

Reach under the center of the turntable and unscrew the large knurled nut on the transit screw [1], turning it all the way to the lower end of its travel.

Check to see that the rim of the metal platter disc [10] is fitted into the groove on the lower surface of the rubber mat [11], and install both on the sub-platter. Then install the center-hole adapter [12], with its flat side up. You may have to adjust the centering of the rubber mat in order to press the adapter fully down into its recess in the center of the mat, so that records will rest on the mat rather than on the adapter.

Mount the dust cover by pressing its rear lip (the section that makes a 90-degree bend) into the two spring-loaded hinges that are installed in slots at the rear of the turntable.

### OPTIONAL FINGER LIFT

The finger lift provided in the accessories package may be clamped in place between the cartridge body

and the underside of the tonearm during the mounting of the cartridge.

### PHONO CARTRIDGE MOUNTING

**CAUTION:** Before turning the tonearm over, be sure that the DVA damping rod [18] (the small screw located in the center of the tracking-force knob) is protruding at least 2 mm above the latter's surface, so as to seal the oil chamber and prevent leakage.

Use the mounting hardware supplied with the turntable, or that provided with the cartridge, to mount the pickup. Select screws with wide heads, or install flat washers beneath the screw heads, in order to provide a large bearing surface that will securely grip the tonearm surface. Tighten the screws just enough to hold the cartridge in place while still allowing its position to be adjusted.

Connect the tonearm wires to the cartridge terminals in accordance with the standard color code.

### DVA ADJUSTMENTS

These adjustments set the resonance frequency (Fr) and the damping (Q) of the Dynamic Vibration Absorber (DVA). Suggested settings for many phono pickups are listed in the enclosed leaflet. If your cartridge is not listed, set the DVA frequency to 10 Hz and the Q to 2.

The frequency is set by the white screw [25] at the rear of the counterweight, protruding through a slot at the back of the tonearm. Turn the white screw until its lower end is aligned with the desired resonance frequency on the scale [28] printed on the rear of the counterweight.

The damping is set by the small threaded rod [18] in the center of the tracking-force knob [22]. A small screwdriver shaft is included in the accessories bag. Screw the damping rod down into the oil chamber [19] until the lower end of the rod is aligned with the desired damping ratio (Q) on the scale printed on the front of the counterweight.

### ONEARM INSTALLATION

The tonearm plugs into a socket [17] within the pivot assembly [16]. Press the pivot assembly down with one hand in order to brace it securely, hold the tonearm in the other hand, align its pins with the socket, and press the tonearm fully down into the socket.

The fifth pin, midway along the length of the tonearm,

fits into a slot on the top of the rest post to secure the arm. If necessary, turn the upper part of the rest post slightly so that the arm's securing pin makes a smooth friction fit as it slides in and out of the slot.

## TONEARM ADJUSTMENTS

**Balance.** Disengage the arm from the rest post. Turn the control knob [13] to PLAY and wait for the cueing post [31] to descend, so that the tonearm is free to move up and down. Turn the tracking force wheel [22] until the arm is precisely balanced, floating in a level position.

If the cartridge is exceptionally heavy (close to 8 grams), the DVA frequency-setting screw may hit the rear end of the slot in the tonearm and prevent you from moving the counterweight back far enough to balance the arm. If this occurs, replace the DVA frequency screw with one of the shorter, white screws in the small accessories package. Select a screw whose upper end will be approximately flush with the top surface of the counterweight while its lower tip is aligned with the desired resonance frequency.

If the phono cartridge is a low-mass model weighing less than 4 grams, the entire counterweight assembly may be rotated to place the weight closer to the arm pivot. See the full-length instruction manual for details.

**Tracking force.** After balancing the arm, grasp the rim of the tracking force wheel [22] so that it cannot turn. Using the tip of a screwdriver or ball-point pen, turn the tracking force dial [23] to align the zero (0) with the white index mark in the middle of the arm.

After thus calibrating the dial to indicate 0 when the arm is balanced and level, set the tracking force by turning the entire tracking force wheel clockwise.

**Anti-skating.** The anti-skating control is a knurled shaft [32] surrounding the lower half of the tonearm rest post [29]. An index line, or pointer, is molded into the turntable base at the front of the control dial. Set the skating bias to equal the tracking force.

## CARTRIDGE ALIGNMENT

Move the cartridge forward or backward until its mounting screws are aligned with the white dots at the midpoint of each slot.

Install the alignment protractor on the platter, with the

spindle passing through the hole in the protractor, and unplug the AC power cord so that the tonearm can be lowered without causing the platter to rotate. Turn the STOP/PLAY knob [13] to PLAY in order to cue the arm down, and place the stylus precisely on one of the protractor's alignment points, marked by a cross within a circle.

Rotate (twist) the cartridge body until it is exactly parallel to the protractor's rectangular grid lines, and tighten its mounting screws. Do not be confused by the edge of the tonearm, which should NOT be parallel to the grid; what matters is the outline of the cartridge body.

Next, place the stylus tip on the protractor's second alignment point. If the cartridge body is accurately parallel to the grid lines at both alignment points, no further adjustment is required. If not, refer to the alignment procedure in the instruction manual.

## CONNECTIONS

Plug the AC power cord into a household AC mains outlet.

**Note to U.K. Users:** When installing a power plug, connect the Brown wire to the Live (Red) terminal, and the Blue wire to the Neutral (Black) terminal.

Connect the audio signal cables to the phono inputs of your amplifier (red plug = right channel), and fasten the ground wire to the amplifier's Ground terminal.

## PLAYING RECORDS

Set the speed control [6] to 33 or 45 rpm, as appropriate. To play 45 rpm records having a large center hole, invert the center-hole adapter [12].

With the STOP/PLAY control [13] in the STOP position and the tonearm secured on its rest post, place a record on the platter. Push the tonearm to the left, placing the stylus above the lead-in groove, and lower the dust cover.

Turn the STOP/PLAY knob to PLAY. The pilot light will illuminate, the motor will turn the platter, and the cueing lift will gently lower the stylus into the groove.

At the end of the record the control will automatically re-set itself from PLAY to STOP, the cueing lift will raise the arm, and the platter will stop rotating. Move the tonearm to its rest post before removing the record.

**NAD** INTERNATIONAL  
LONDON/BOSTON