

The home of the turntable

THE VINYL ENGINE®

For more turntable manuals and setup information
please visit www.vinylengine.com

ORACLE
ORACLE
ORACLE
ORACLE®
ORACLE



Instruction Manual

Thank you for selecting ORACLE.

You're about to discover what a difference the right turntable makes in your system - a difference you'll hear immediately ! Prepare for that discovery by taking a few minutes to read this manual. From this information you'll get a good understanding of ORACLE, and years of trouble-free enjoyment.

After discovering ORACLE's sonic superiority, please take time to return the warranty and product information cards. It's important for us to know about you because we care about our products and about the satisfaction of all ORACLE owners.

A handwritten signature in black ink, reading "Marcel Riendeau". The signature is fluid and cursive, with the first name "Marcel" and last name "Riendeau" clearly distinguishable.

Marcel Riendeau
President, Trans-Audio Corporation Ltd.

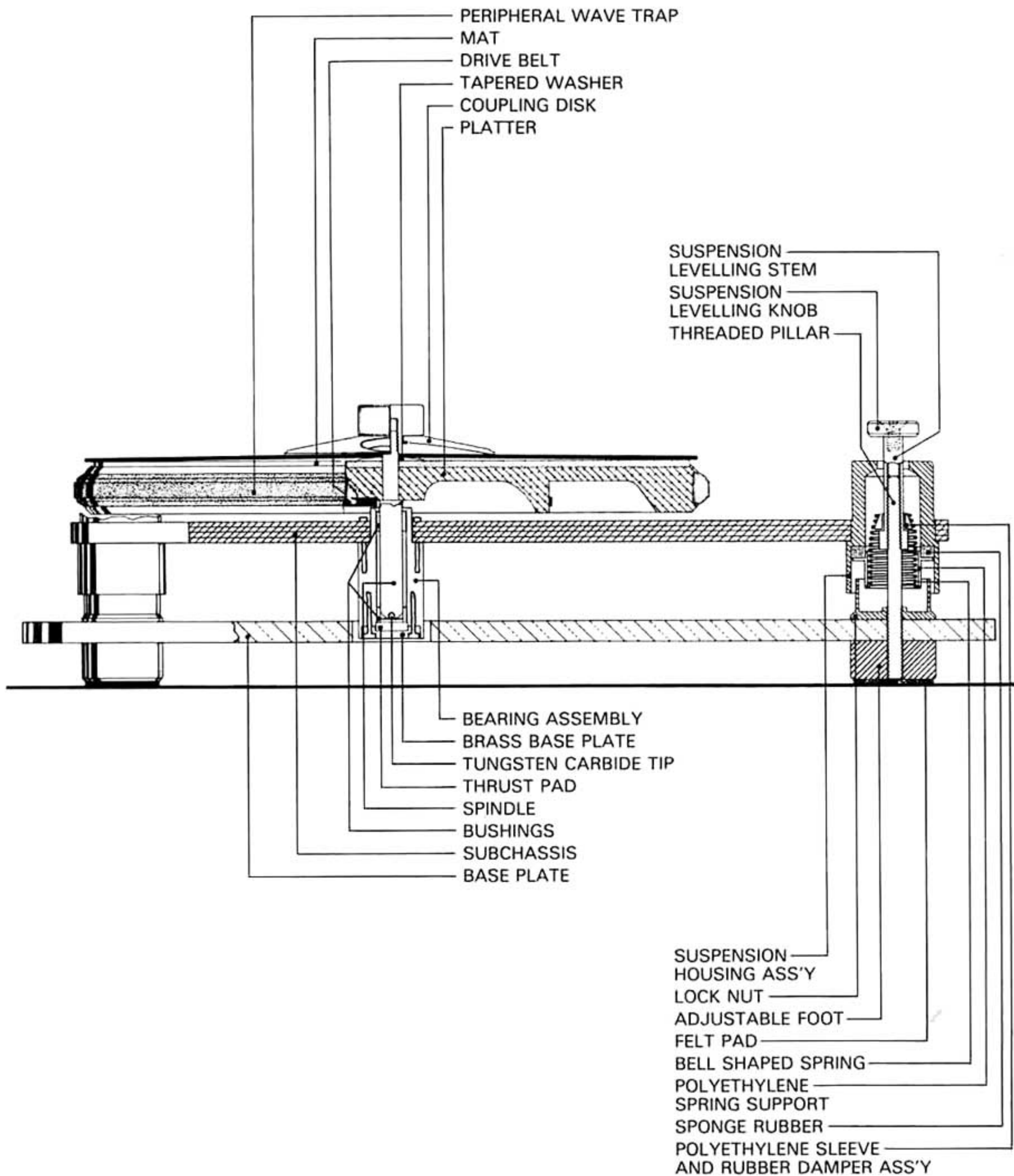
CONTENT

Unpacking	5	Power Connections	11
Oracle Assembly	5	On/Off and Speed Selection	12
Tonearm Setup	6	Speed Adjustment	12
Suspension Adjustment and Tuning	7	Record Setup	12
Tuning Procedure	7	Tips for Optimum Performance	13
Changing the Suspension Springs	8	Maintenance	14
Suspension Fine Tuning	9	Accessories	15
Tonearm Wiring Harness	10	General Description	15
Attaching your Dust Cover	11	Packing list and repacking sequence	16

BEFORE YOU BEGIN . . .

Your ORACLE dealer is a highly qualified audio professional. WE STRONGLY RECOMMEND THAT HE SET UP YOUR TURNTABLE WITH THE TONEARM AND CARTRIDGE YOU SELECT.

In the unlikely event that it is impractical for you to have the dealer do this, please read and follow the unpacking and assembly instructions **carefully**. Call your dealer whenever you have questions - he'll help you get the best performance from your ORACLE.



UNPACKING YOUR ORACLE

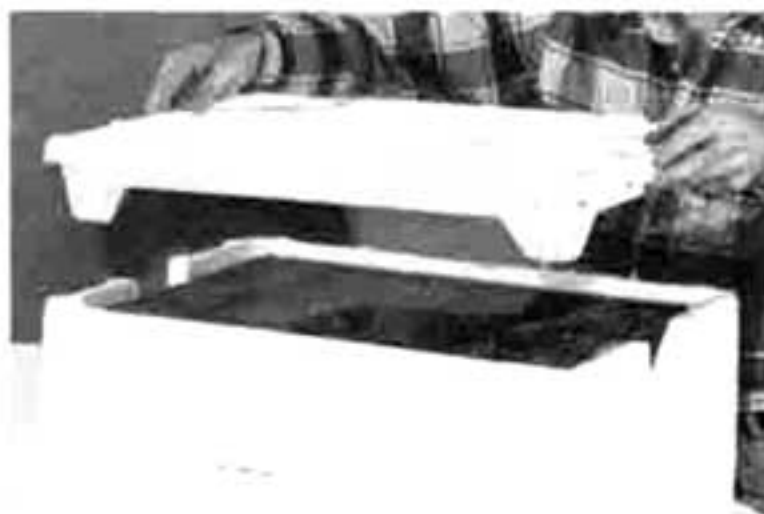
1) Remove the inner box by lifting it straight up and out. Open the flaps on both ends of the inner box and slide out the styrofoam packaging assembly.



2) Remove the straps binding the packaging assembly together.

3) Select a clean, flat work surface, like a table or countertop, for setting up the turntable. Make sure there's plenty of light.

4) Remove the styrofoam cap piece, being sure to lift straight up at the corners.



(This will avoid the possibility of breaking the corner reinforcements which protect the dust cover.) Lift out the dust cover and set it aside; it will be attached later.



Remove the second layer of packaging.



5) Remove the acrylic baseplate / subchassis assembly, being careful of the platter and bearing spindle underneath as you lift the unit out. Place the assembly on your work surface.



NOTE: Your ORACLE's packaging has been designed to protect it from the abusive handling normally encountered during shipping. Please save all packaging materials for use in any future shipping.

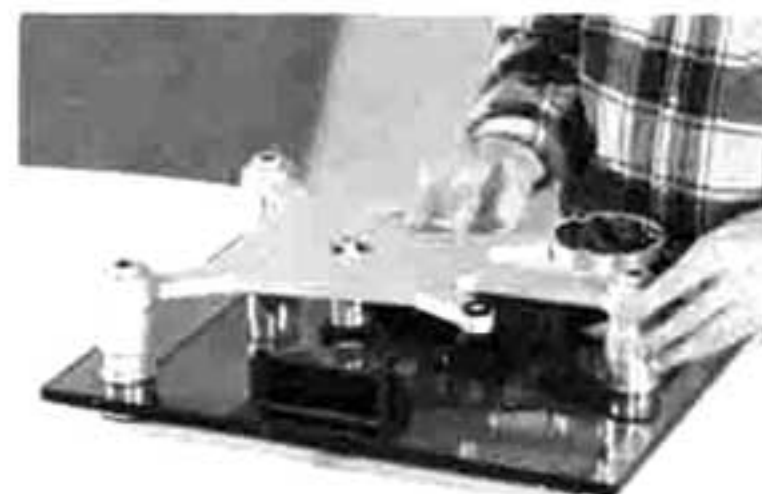
ORACLE ASSEMBLY

1) The laminated subchassis is shipped mounted upside down. Remove it from the three suspension towers by lifting it straight up; set it aside. You should never have to force the subchassis on or off the suspension towers. If there is any tendency to stick, simply rotate the suspension tower shroud(s) back and forth while lifting the subchassis.



NOTE: The bearing assembly is covered by a protective cap which keeps out dust and dirt. Be sure to leave this in place until you are ready to insert the platter.

2) Remove the styrofoam support blocks from the suspension towers. Next remove the protective plastic from the acrylic base. Now is a good time to clean the acrylic if there is any residue left by the plastic sheeting. (Routine care with a high quality acrylic polish and a soft, lint-free cloth will keep your base and dust cover shining like new.) Replace the subchassis on the suspension right side up, tonearm circle to the rear.



3) Level the base by adjusting the height of the feet, which are mounted on threaded shafts.



Only rough levelling is required now; precise levelling occurs after the turntable is moved to its final position. You can use a carpenter's spirit level to do this job.



Or, adjust the lower edge of all 3 suspension tower shrouds to exactly the same height (between 1" and 1.5") and use the bubble level in the subchassis. (See the section on suspension tuning for instructions on tower height adjustment.)

4) Remove the plastic caps which protect the bearing assembly in the subchassis and the spindle shaft on the platter. Place the drive belt around the inner rim of the platter, making sure there are no twists.



Carefully lower the platter straight down into the bearing assembly while maintaining tension on the drive belt to keep it in place (the coupling disk can be used here as a handle to facilitate the vertical alignment of the spindle in the bearing housing).



When you feel the spindle tip touch bottom (the thrust pad), position the drive belt around the motor pulley.



Slowly rotate the platter 1 or 2 times by hand to seat the drive belt properly. Adjust the suspension height so that the top edge of the belt rides approximately in the middle of the platter's inner rim.



5) Place the mat on the platter. (Do not use the tapered washer at this time.)

TONARM SETUP

Your ORACLE has a blank tonearm mounting board, unless otherwise specified. Precut arm boards for most modern tonearms are available from your ORACLE dealer. (Check with your dealer for specific recommendations since there are a few arms that the ORACLE will not accommodate.)

1) Locate the 3 clamp screws and mount the arm board loosely in the subchassis.



Refer to the instructions supplied with your tonearm to locate the correct distance from the spindle to the drilling center, and the size of the hole to be drilled. Check to see that you have adequate clearance behind the tonearm to clear the dust cover when it is closed. Rotate the tonearm board to obtain the most convenient positioning of the arm relative to the arm board screws. Using a sharp tool, mark the arm board for drilling.



You may wish to scribe a reference mark across the outer edge of the arm board and inner edge of the subchassis to facilitate realignment after drilling.

2) Remove the arm board and cut the hole(s). A drill press is highly recommended for this critical job. The acrylic board should be clamped securely in place and cut at low speed with a very sharp tool. Hand-held drills are not recommended, especially if the arm board cannot be clamped securely.

3) Reinstall the drilled board in the subchassis and mount your tonearm according to the manufacturer's instructions.



We suggest that you do not *completely* tighten either the arm board or the tonearm at this time. Tighten partially, allowing for whatever fine adjustments may be necessary. Rotating the arm board in either direction will help you fine-tune this tonearm / cartridge lateral tracking geometry. When you are satisfied that the tonearm is adjusted properly, **TIGHTEN ALL CLAMP SCREWS AND ARM HARDWARE SECURELY!**

NOTE 1: We recommend you do NOT use any rubber (decoupling) washers (not even those supplied by some tonearm manufacturers) when fitting the tonearm to the acrylic mounting board.

NOTE 2: Avoid the use of "mass stabilizers" and large heavy bases or nuts supplied as accessories with some tonearms. The important factor in attaching your arm is tight coupling to the arm board and subchassis; additional mass is not required.

4) Do not install the tonearm leads at this time; suspension tuning is more convenient without them.

SUSPENSION ADJUSTMENT AND TUNING

ORACLE's suspension towers are designed to make height and levelling adjustments, and spring changes, simple and easy. Make height and levelling adjustments by rotating the knob on top of each suspension tower - turn counter-clockwise to raise and clockwise to lower the subchassis. These adjustments do not affect suspension tuning.

Proper tuning of the suspension system is of fundamental importance to the performance of the ORACLE. When tuned correctly, the suspension filters out unwanted mechanical energy (vibration) above approximately 3.5 Hz. Without this filtering action, the sound from *any* turntable is noticeably blurred or smeared, and bass impact is lost.

Two goals must be achieved as you adjust ORACLE's suspension:

a) an even, or equal, *spring rate* at all three points, so that the entire floating assembly moves straight up and down as a single unit, without rotational resonant modes;

b) the proper resonant frequency of approximately 3.5 Hz, so that when it is pushed from above and released, the floating assembly moves up and down about 3 or 4 times each second.

Suspension tuning depends on 3 things: (1) the **tension**, or strength, of the springs, (2) the **amount** of mass (weight) involved in the floating system, and (3) the **distribution** of that mass. At the factory, your ORACLE was set up for tonearms in the "low" and "medium" mass range, approximately 1 lb. Your tonearm may differ substantially, however. This will affect suspension tuning because you are changing the **amount** and **distribution** of mass in the floating system.

To facilitate proper suspension tuning with a wide range of tonearms, your turntable comes with a set of weights complete with carrier rod and clamp. (A total of 7 color coded springs are also available.) Three of these springs will bring the spring rate and resonant frequency of the floating assembly close to the correct values for your tonearm; the weight assembly then trims the floating action exactly.

TUNING PROCEDURE

The 7 springs are color-coded, from weakest to strongest:

Gray, White, Yellow, Red, Green, Blue, Black.

A paint spot located on the bottom (larger end) of the spring, at the end of the winding, identifies the spring's strength. Your turntable leaves the factory with White, Yellow, and Green springs mounted in the suspension towers. This arrangement accommodates low and medium mass tonearms.

Locate each spring by viewing the turntable from above, while facing the switch assembly, and reading the suspension points in a clockwise manner:

- 1) left front = White (weak);
- 2) left rear = Yellow (medium);
- 3) right center = Green (strong).

No matter what tonearm is used, the relative positioning of 1) weak, 2) medium, and 3) strong is maintained. In other words, the spring nearest the tonearm (position 3) carries the most weight and must therefore be the strongest of the three springs. The left front suspension tower (position 1) is furthest from the tonearm and carries the least weight, and the left rear tower (position 2) supports an intermediate load. The springs actually used will vary from one tonearm to the next, but the **relationship** of weak - medium - strong will not.

For example, compare the springs required for the SME III and the Fidelity Research FR-64 (with B-60 stabilizer) tonearms. The SME is a medium mass arm (about 1 lb.) and so works quite well with the factory-supplied spring arrangement: 1 = White, 2 = Yellow, 3 = Green. The FR-64 with the B-60 stabilizer is much heavier (over 2.5 lbs.) and requires a more substantial spring base: 1 = Gray, 2 = Green, 3 = Black. (Ask your ORACLE dealer for tonearm / cartridge recommendations. No endorsement is intended for products used here as examples.)

Experiment with various combinations of springs until you are satisfied that you have achieved a fairly even spring rate and a reasonably low resonant frequency. Final suspension adjustment is made later with the weight assembly.

CHANGING THE SUSPENSION SPRINGS

NOTE: Be sure to slip the drive belt off the motor pulley before removing either the platter or the subchassis assembly from the turntable base. Check to see that the tonearm wiring harness is disconnected also.

1) Remove the subchassis from the suspension by lifting it straight up. You may leave the platter and tonearm in place. Simply exercise reasonable caution when you set aside the subchassis-platter-tonearm assembly so it doesn't tip over.

2) Remove the suspension housing assembly by turning the suspension levelling knob counterclockwise.



3) Locate the appropriate hex key and remove the top screw which holds the levelling knob in place. (This is the large black screw directly on top of the suspension tower assembly.)



Set aside the top screw and levelling knob. Lift off the suspension housing; the spring is now easily accessible.



The spring has been press-fitted into a polyethylene support which holds it in place. To remove the spring, simply push it out through the bottom of the support.



Set the replacement spring on a flat surface with its throat (small end) pointing up, and press the polyethylene support down over it.



Make sure the support flange also is up, toward the throat of the spring. Check to be sure the new spring is seated firmly and centered in its support. Locate the polyethylene sleeve and rubber damper ass'y. Slide the polyethylene sleeve, narrow end up, onto the suspension levelling stem.



Position the sponge rubber ring around the top of the polyethylene spring support ring.



Slide this new spring assembly (spring, support and sponge rubber ring) into the suspension housing.



Slide the suspension levelling stem through the bottom end of the spring until it seats on the upper spring sleeve.



Reinstall the levelling knob and top screw.



Replace the suspension housing on its threaded pillar.

4) After performing this operation on the appropriate suspension towers, replace the subchassis-platter-tonearm assembly and check the action of the suspension. When you are satisfied that you are close to the goals of an even spring rate and an overall suspension tuning frequency of 4 to 5 Hz, proceed

to the final tuning step using the optional weight assembly. (The addition of the weight assembly's mass will bring the suspension tuning frequency down to the desired 3.5 Hz range.)

SUSPENSION FINE TUNING

The subchassis weight assembly allows you to make fine adjustments in the *amount* and *distribution* of mass in ORACLE's floating system. These adjustments are necessary to achieve the even spring rate and suspension frequency of 3 to 3.5 Hz mentioned above.

In general, with a given set of springs, the position of the weight affects the evenness of the spring rate, and the amount of weight changes the suspension frequency (i.e. more weight equals lower resonant frequency). Also remember that moving a given amount of weight further out on the carrier rod (further away from the center of mass) increases its effectiveness in adjusting the spring rate.

The weight assembly consists of 4 pieces: a collar, a carrier rod, and 2 weights of different sizes.



The small one weights approximately 4 oz., the larger one approximately 8 oz. Once the correct amount of weight and its position has been determined, it will be placed on the carrier rod and the entire assembly clamped into place on the bearing housing underneath the subchassis.

1) Thinking of the turntable platter as the face of an imaginary clock, select the larger of the 2 weights and place it

at 12 o'clock, midway between the center spindle and platter rim. Level the subchassis (it must remain level during this procedure), then push down gently on the spindle and release; this will set the floating assembly in motion. Check to see if the assembly moves up and down evenly, or exhibits any tendency to rock or sway.

NOTE: You may wish to use the bubble level to help you check the action of the floating assembly. When all 3 suspension points are moving at the same rate, the bubble will remain centered as the subchassis floats up and down.

Now move the weight to the 3 o'clock position and try the same procedure there. Next, check the 6 and 9 o'clock positions. You will notice that at one of these 4 locations the floating assembly tends to move straight up and down, while at the other points there will be some rocking or swaying.

2) Return the weight to the position which gave the best result and experiment further by moving the weight in either direction in smaller increments. Also experiment with the positioning of the weight between the center spindle and the platter rim.

3) When you have found which weight orientation permits the smoothest operation of the suspension system, try the smaller of the two weights, making sure to relevel the subchassis accordingly. (You may need to reposition the larger weight slightly to obtain the same straight up-and-down floating action.) Check to see which of the 2 weights provides the best overall suspension action and comes closest to the goal of about 3 to 4 oscillations per second. You may use both weights together if necessary.



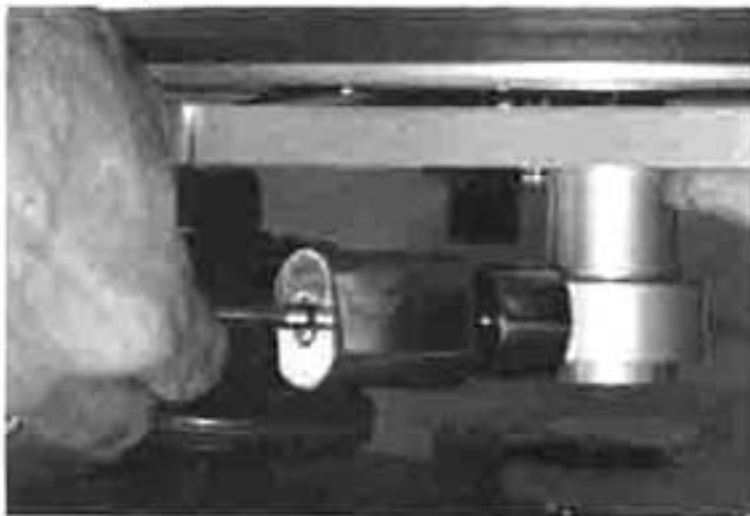
4) When you are satisfied that you have found the best weight arrangement for your turntable, make a note of the exact position you have chosen (i.e., the large weight placed at 7 o'clock with the inside edge 1.5" from the center spindle. Locate the carrier rod and slide the weight(s) you have chosen into the rod over the threaded end.



Find the weight assembly collar and begin to thread the carrier rod into the hole. Do not thread the rod in all the way.



5) Locate the bearing assembly underneath the subchassis. (This is the 1.25" diameter cylinder coming straight down from the center of the sub-chassis). Lift the subchassis slightly and slip the collar of the weight assembly up over the bearing housing. Thread the carrier rod in until it makes contact with the bearing housing and tighten slightly, using only finger pressure.



6) Refer to your notes on the positioning of the weight(s). Loosen the carrier rod and rotate the weight to the same relative position it was in when on the platter. Set the correct distance from the spindle by sliding the weight(s) forward or backward on the carrier rod. Complete your suspension tuning by sliding the entire assembly as high up on the bearing housing as you can conveniently, then tighten the carrier rod. It is alright for the weight(s) to touch the underside of the subchassis.

TONEARM WIRING HARNESS

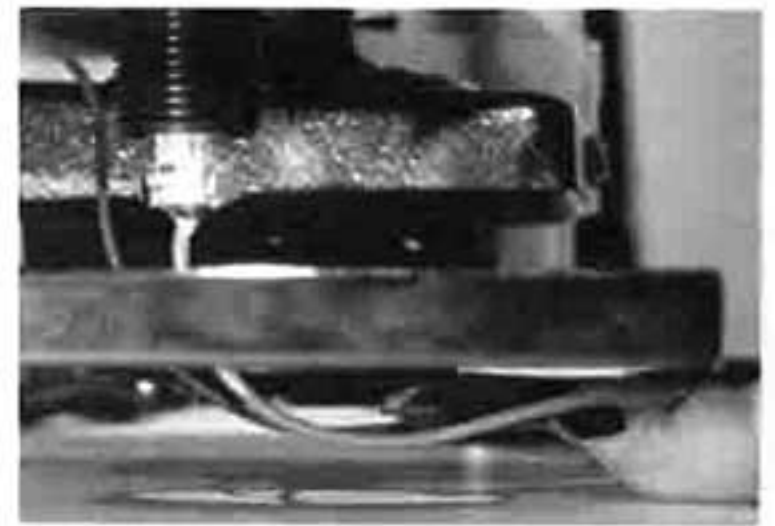
NOTE: This is a critical procedure! Unless the wiring harness is installed with correct strain-relief adjustments, it can cause feedback and interfere with proper operation of the suspension system.

1) Route the tonearm wiring harness under the acrylic base at the right rear corner. Bring it up through the hole provided and plug it into the tonearm.

2) Locate the strain-relief clip. Do not remove the protective backing from the foam tape. With the tape side facing up, attach the clip to the wiring harness under the rear edge of the acrylic base.

3) Position the strain-relief clip and the wiring harness so that the tonearm wire comes out of the back, or side, at a convenient angle. The wire should not be kinked or twisted. Form the wire into a gentle curve as it bends under the acrylic base and reaches the strain-relief clip.

Between the tonearm and the strain-relief clip, THE WIRING HARNESS MUST NOT TOUCH ANYTHING! The tonearm wires should touch the baseplate at only 1 point: the strain-relief clip. In addition, the wire should be curved, or looped if necessary, between the tonearm and clip so it does not interfere with the free vertical movement of the suspension system.



Also, check to see that the wire does not touch the surface beneath the turntable as the suspension moves. If you need more room beneath the baseplate, raise the entire turntable by adjusting the feet.

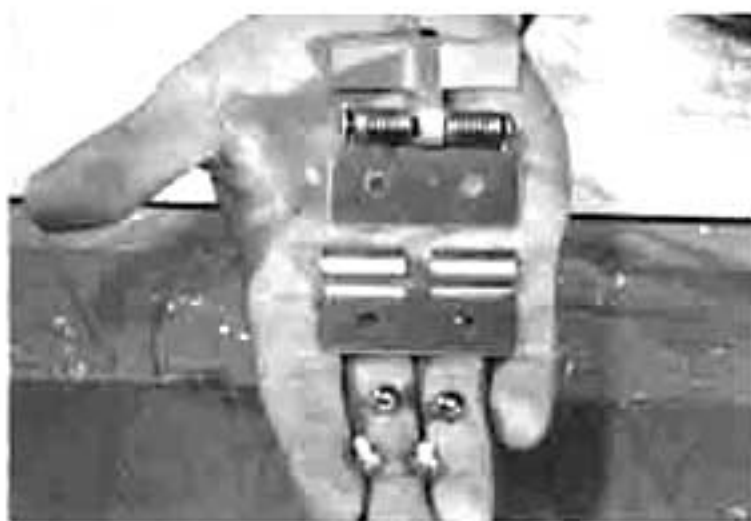
4) When you are satisfied that you have found the correct position for the wiring harness and strain-relief clip, remove the backing paper from the foam tape and press the clip in place. Be careful! Once the tape has made contact with the acrylic it cannot be moved easily. Also be sure the strain-relief clip location and the tonearm wires do not block the holes where the dust cover hinges are attached.

ATTACHING YOUR DUST COVER

1) Locate the acrylic dust cover and the hinge assemblies.

2) Place the dust cover upside down on your work surface with the back (the long side with 2 sets of 2 holes in it) toward you. Peel back enough of the protective plastic to expose the 4 holes.

3) Locate the appropriate hex key and remove the screws and cap nuts from the hinge assemblies. The short round-head screws and cap nuts clamp the hinges to the dust cover; the longer flat-head screws attach the hinges to the turntable's baseplate. One of each hinge's metal plates is now loose; it will be reattached to the cover later.

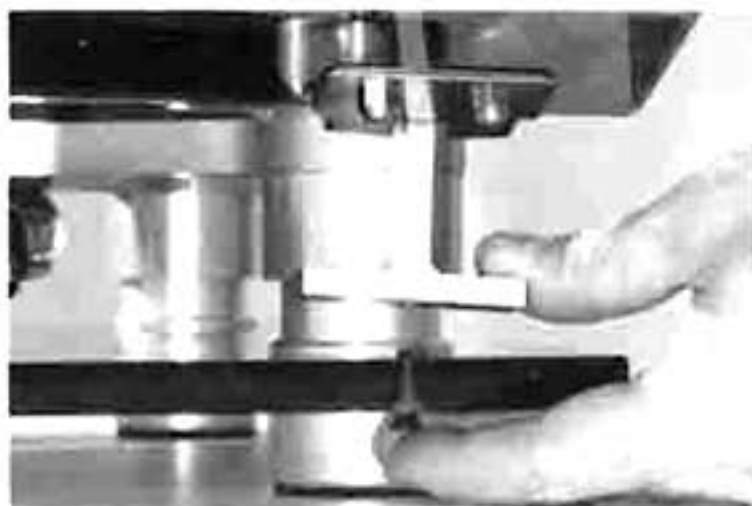


4) Take the hinges 1 at a time and place them against the outside of the dust cover with the T-shaped part of the hinge facing away from the cover. Position the loose metal plate on the inside of the cover and align the holes so that the screws may be inserted. Push the screws through from the inside of the cover and hand tighten the cap nuts.



5) Set the turntable so that the rear edge of the acrylic baseplate hangs out over the edge of your work surface, providing easy access to the hinge screw holes.

Line up the holes in the bottom of the hinge assemblies with the 2 holes at the rear edge of the turntable baseplate.



Push the long hinge screws up from underneath and start them by hand. Loosely tighten them with the hex key. Now check to see that the dust cover functions properly and that all hinge parts are aligned correctly. Readjust if necessary, then tighten all parts securely.

NOTE: Your dust cover may not close entirely for the first few days of use. This is normal while the hinge springs are breaking in.

6) Your ORACLE turntable can now be moved to its proper location and final levelling adjustments completed. When these steps are done, it is ready to be connected.

POWER CONNECTIONS

1) Plug the transformer / power supply into an AC outlet and route the power cord from the transformer to the rear of the turntable motor. To make the power connection, simply push the plug on the end of the cord straight into the receptacle in the middle of the back of the motor. To remove the power connection, pull the plug straight out.



2) Keep the transformer / power supply away from any signal-carrying wires and as far away from the turntable as conveniently possible in order to avoid hum pickup.

3) You may plug the transformer / power supply into one of the switched outlets on your preamplifier. We recommend, however, that you use an extension cord to place it well away from any signal-carrying wires.

NOTE: The transformer / power supply will become warm during normal use. Ventilation is not critical, but we recommend some air circulation while in operation.

ON / OFF AND SPEED SELECTION

1) Press the button in the center of the switch assembly to start the turntable. This will light the ORACLE logo. Press the same button again to turn the unit off.



2) Press the button just to the right of the On / Off button to select 33 or 45 rpm. The speed you have selected is indicated by 1 of 2 LED's at the right side of the switch assembly.

SPEED ADJUSTMENT

NOTE: A strobe disc must be used to make speed adjustments. Remove the coupling disc and tapered washer, place the strobe disc on the platter, and turn on the ORACLE.

1) Adjust both 33 and 45 rpm by rotating the speed control located at the right rear corner of the motor housing. Turning the control clockwise will increase platter speed, counterclockwise will slow it down.



2) Independent fine trim adjustments for 33 and 45 rpm are located at the left rear corner of the motor housing. These have been preset at the factory and should rarely, if ever, need adjustment. If you find it necessary to change these settings, use a "D" size jeweler's screwdriver (.080" blade), or its equivalent.

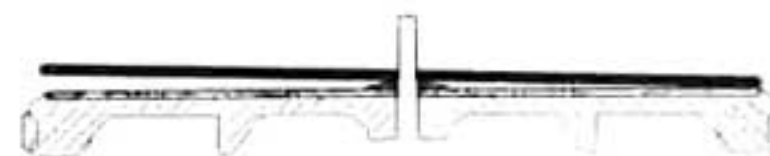


RECORD SETUP

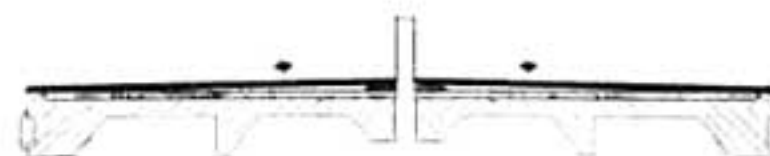
1) Remove the mat from the platter. Locate the tapered metal washer and place it over the spindle, tapered side up. Replace the mat.



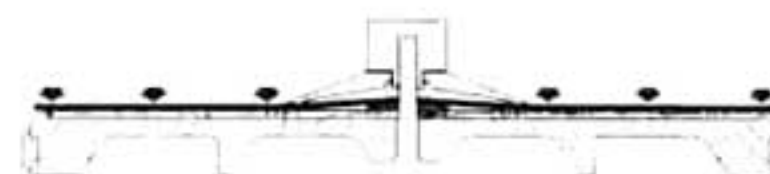
2) Put a record on the platter. You will notice that the record tips to one side. This is normal because the tapered washer lifts the center of the record slightly.



3) Place the coupling disc over the spindle and screw it down until it just touches the record label. This brings the record into contact with the mat only at the edge, or not at all.



4) Rotate the coupling disc knob until it is firm, but not too tight, and the entire playing surface of the record (the groove area) has been forced into intimate contact with the mat.



This normally requires only 1 to 2 turns beyond the point where the coupling disc first touches the record label. **Be careful not to overtighten the coupling disc and cause the outer edge of the record to lift away from the mat.**



The action of the coupling disc and the tapered washer creates a vacuum under the record for better coupling of the playing surface to the turntable. You will notice that it also flattens out most warps.

5) To remove the record, simply unscrew the coupling disc, break the vacuum seal by lifting the record's edge, then lift off the record.

TIPS FOR OPTIMUM PERFORMANCE

1) Your ORACLE is equipped with a superb suspension system capable of filtering out virtually all unwanted mechanical energy. Like all turntables, though, it performs best when located on a flat **solid** platform well away from your loudspeakers. The more you reduce the acoustic and mechanical energy arriving at the turntable, the better your records sound.

2) MAKE CERTAIN YOUR TURN-TABLE IS LEVEL! ORACLE's design allows you to level the baseplate and subchassis independently. Do these jobs carefully.

3) Tonearm and cartridge obviously play an important role in the performance of your system, and we recommend that you acquire the best your budget allows. We cannot stress too strongly, however, that these critical components must be installed and adjusted properly before accurate reproduction of sound can be achieved by your system.

For the best possible performance, please pay close attention to these points:

- a) tight coupling of the cartridge to the tonearm, and of the tonearm to the turntable;
- b) accurate alignment of tonearm / cartridge geometry, according to the Baerwald method for most tonearms;
- c) final adjustment of vertical tracking force, vertical tracking angle, and cartridge azimuth angle **by ear**;
- d) careful strain relief adjustment of the tonearm wiring harness, as described earlier in this manual;
- e) appropriate RC compensation (loading) for your cartridge. This one may be tricky. Consult your dealer.

4) The ORACLE mat controls vinyl resonance better than any other mat available. The position of the mat on the platter has an audible effect on the smoothness, definition, clarity and focus of your music. This means that

you can "tune" your mat for best performance in much the same way you would adjust the vertical tracking angle (VTA) of your cartridge. Simply make reference marks on the platter (with a pencil for now) and on the mat (with white typewriter correcting fluid). Then rotate the mat in small (about 1" to 2") increments as you listen to a familiar record. You will find one spot where the sonic "picture" is best overall. Mark that position permanently for future reference.

5) Clean your mat occasionally to remove any accumulation of dust. Use lukewarm water and a few drops of a mild detergent for this job. Let the mat air dry, or use a hairdryer, before replacing it on the platter.

6) The tapered washer may be used either above or below the mat. It usually is placed underneath, but you may find that certain types of record warps are flattened more readily with the washer on top. You could remove the tapered washer and record coupling disc entirely and not use them, but this is NOT recommended as it would defeat one of ORACLE's major strengths: controlling vinyl resonance.

7) Make sure the peripheral wave band (the foam rubber band around the platter) is firmly and evenly seated around the circumference of the platter.

8) If your system can generate high sound pressure levels (SPL) at 20 Hz and below, try using the ORACLE without its dust cover attached. This makes it easier for the suspension to filter properly in the presence of such low frequency energy.

MAINTENANCE

1) Both the main platter bearing and the motor bearing are permanently-lubricated systems. No maintenance is normally required. The tolerances used in the main platter bearing, however, are very close. Exercise caution when you remove the platter so that nothing mars the mirror finish of the spindle and be sure no dust or dirt falls into the bearing housing. Use the protective covers on both spindle and bearing housing when you remove the platter for any length of time and when you repack the ORACLE for shipment. If you accidentally touch the spindle, or get anything on it, wipe it clean using a few drops of denatured alcohol on a soft, lint-free cloth.

2) All metal parts, with the exceptions of the bearing and the spindle, are machined from an aerospace-grade magnesium-aluminum alloy and treated with a durable, satin finish. Periodic cleaning with a warm water and mild detergent solution will maintain the finish for many years.

3) All acrylic parts should be cleaned occasionally with a special antistatic cleaner formulated specifically for plastics.

4) Every 4 to 6 months, remove the drive belt. Clean it, the motor pulley and the inner rim of the platter with a few drops of denatured alcohol and a clean, lint-free cloth. Check the belt for signs of deterioration, such as cracking or hardening. The drive belt is produced from high quality material and is maintained under low tension when in place. Its normal lifespan is between 3 and 5 years.

5) ORACLE is one of the few turntable designs giving you easy access to the main bearing system and the thrust pad (the hard surface which the spindle tip rests on as it turns). This is a useful feature because all thrust pads wear out eventually. Deterioration takes place over several years and results in a gradual increase in bearing noise and rumble.



6) To change the thrust pad or to clean the bearing assembly, follow these simple steps:

a) remove the 3 long screws (N° 8-32x3/4) that hold the bearing assembly against the subchassis (located on top of the subchassis around the throat of the bearing);



b) remove the bearing assembly from the subchassis and, while holding it firmly, turn the assembly upside down and remove the 3 short screws (N° 8-32x3/8) that hold the brass baseplate in position;

c) remove the brass baseplate, being careful not to lose the thrust pad.

You may now clean the bearing assembly, if necessary.

We recommend using compressed air to blow it clean, but if you do not have compressed air, or if there is something caught on the bushings which will not blow free, carefully run a clean, lint-free cloth through the bearing.



Visually inspect the bushings before reinstalling the bearing to see that they are completely clean and unmarred. Reposition the thrust pad in the baseplate cup. Install the brass baseplate in the bearing housing, making sure that the 3 screws are firmly in place. Return the bearing assembly to the subchassis. Install and tighten the 3 long screws. Since this system is self-aligning, no adjustment is necessary.

ACCESSORIES

1) Precut Tonearm Boards are available for virtually all commonly used tonearms. Consult your ORACLE dealer.

2) Suspension springs (various tensions).

3) Replacement Drive Belts are available through your dealer, or from the factory.

4) Transformer / Power Supplies are available in two versions:

a) 100-130 VAC (50-60 Hz).

b) 200-240 VAC (50-60 Hz).

NOTE: Turntables are normally shipped with the transformer appropriate for the market where they will be sold. Transformer / power supplies may be ordered through your ORACLE dealer.

GENERAL DESCRIPTION

SPEEDS: 33 1/3 and 45 R.P.M.
(Adjustable)

DRIVE SYSTEM:

Precision injection molded belt.

MOTOR:

24 VDC (Hall effect), 2 phase, brushless.

SUSPENSION:

Floating isolated subchassis.

SUSPENSION FREQUENCY:

3.5 Hz (tuneable).

TONEARM COMPATIBILITY:

Will accomodate any tonearm up to 240 mm lenght (Pivot to spindle).

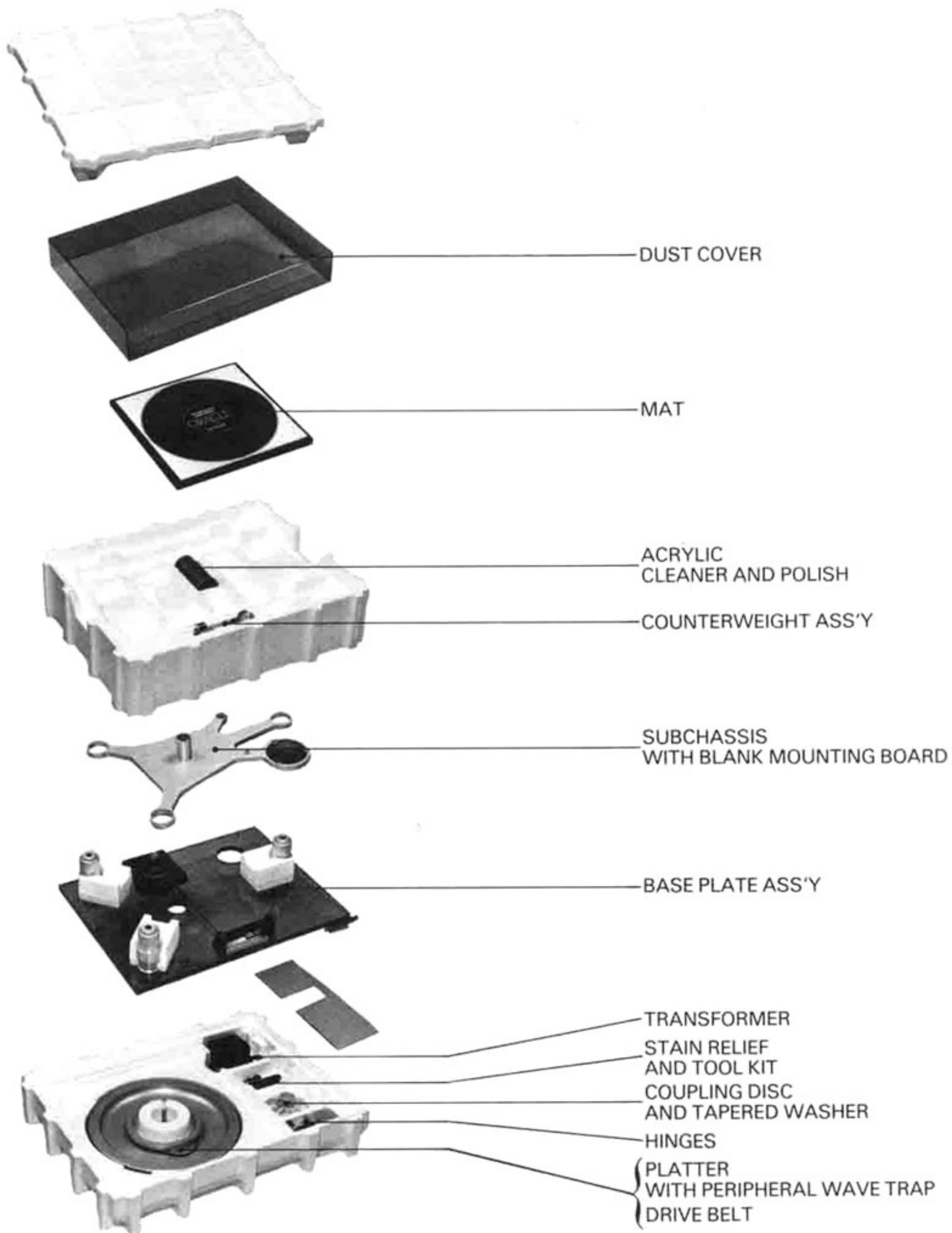
DIMENSIONS:

482 mm x 368 mm x 158 mm.

WEIGHT:

10 kilograms.

PACKING LIST AND REPACKING SEQUENCE



TRANS-AUDIO INDUSTRIES

DIVISION OF TRANS-AUDIO CORPORATION LTD.
505 BOUCHERVILLE STREET
INDUSTRIAL PARK
SHERBROOKE, QUÉ., CANADA
J1L 1X7