

OPERATING INSTRUCTIONS

TWO-SPEED BELT-DRIVE TURNTABLE

SANSUI SR-313



Sansui

SANSUI ELECTRIC CO., LTD.

We are grateful for your choice of the Sansui SR-313 Belt-Drive Turntable. This precision instrument is designed to give you many years of superb hi-fi performance. We suggest that you read through this manual at least once for instructions on correct assembly procedures, connection with other equipment and correct operation procedures.

FUNCTIONAL FEATURES

◆Simplified Operation

The double-function Start/Lift Lever serves also as the power switch; it starts the platter revolving and engages the mechanism that lifts and lowers the tonearm gently to and from the spinning record.

◆Direct Readout Stylus Pressure Dial

Stylus pressure adjustment is made easy by virtue of the quick, fumble-free stylus pressure adjustment dial.

◆Long-Wearing Knife-Edge Support

Thanks to the unique knife-edge system for vertical plane, undue friction is not applied to the arm support, allowing the arm to track the record groove faithfully and smoothly over many years of use.

◆Full-Accessory Tonearm Assures Faithful Tracing

The inside-force canceller and lateral balancer guarantee stable high fidelity reproduction by eliminating unnatural stress on the tip of the stylus.

◆Low-Capacitance Output Cables for Optimum CD-4 Reproduction

The output cables employed in your turntable are of the low-capacitance, shielded type. Thus it can be used to play CD-4 quadraphonic disks when a CD-4 compatible cartridge (or stylus) is installed.

◆Removable Dust Cover

It is recommended to keep the dust cover fitted to the turntable when playing a record. To remove the cover, simply slide it to the right and lift up.

IMPORTANT PRECAUTIONS

Precautions Prior to Operation

To obtain optimum performance from your turntable, observe the following precautions:

*Avoid exposing your turntable to dust, sunlight or high temperatures.

*Place your turntable on a vibration-free surface.

*Avoid placing your turntable on an inclined surface, otherwise tracing and performance characteristics will deteriorate.

*Be sure that the platter surface is horizontal.

*Avoid subjecting the stylus and/or tonearm to unreasonable stress. The tonearm of your turntable is not rigidly fixed like conventional tonearms, but instead adopts a knife-edge fulcrum system in the pivot portion to ensure optimum tracing efficiency. Therefore, the tonearm should be handled with extra-special care.

*Since the surface of the cabinet has been treated by a special process, avoid cleaning with alcohol or thinners. For best cleaning results use a diluted detergent and water solution.

NOTE: If you purchased the SR-313 in the U.S.A. or Canada, your turntable is to operate only at the AC power voltage of 120V (usable between 110V and 130V) and the frequency of 60Hz. Please note that a cartridge is not provided with your turntable.

To Avoid Howling

Howling is a phenomenon where sound pressure and vibration produced by the speakers are accidentally picked up by the cartridge, amplified and reproduced out of the speakers as "feedback" (distorted sound). Howling can be recognized by a loud oscillating noise

heard while a record is being played on the turntable. To prevent the vibrations from reaching the turntable, avoid placing your turntable close to your speaker system; do not use a common base for your turntable and speakers; do not operate your amplifier or receiver at excessively high volume levels.

Keep the Stylus Tip Clean

If dust or other foreign matter is allowed to collect on the stylus tip, the tonal quality of the reproduced sound will deteriorate and both the stylus and the record being played are likely to be permanently damaged.

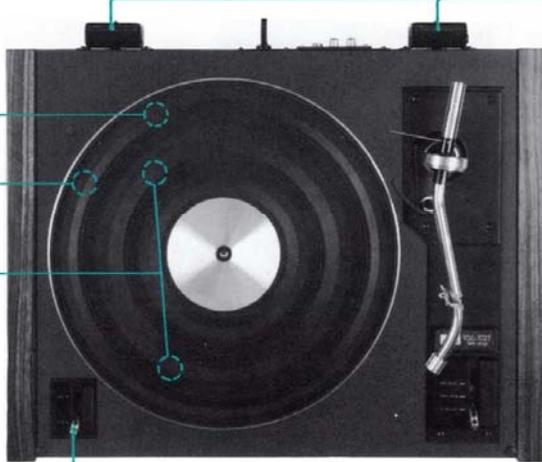
Remove dirt or dust lodged in the record grooves with a record cleaner from a reputable manufacturer; remove dirt, etc., from the stylus tip with a soft-haired brush from time to time. Avoid touching the stylus tip with your finger or subjecting it to any shock; such mistreatment will shorten the life of the stylus or cause damage.

Induced Hum

The high-performance cartridge on your turntable is susceptible to the influence of magnetic fields, such as may be produced by a large power transformer or a nearby electric sewing machine, fan or other motor-equipped appliance. If such conditions are present, a loud hum noise may be heard. Hum can usually be eliminated simply by moving the appliance in question away from the vicinity of the turntable. To avoid the influence of stray magnetic flux from the power supply transformer of your amplifier or receiver, it is advisable to install the turntable on the side of the amplifier opposite to where its transformer is located.

SETTING UP TURNTABLE

This turntable is a precision instrument consisting of several precision parts and important components. To protect these delicate parts and components from jarring and shock during shipment, some of the parts have been secured in place by shipping screws while others are packaged separately. Remove and assemble these parts in the following sequence:

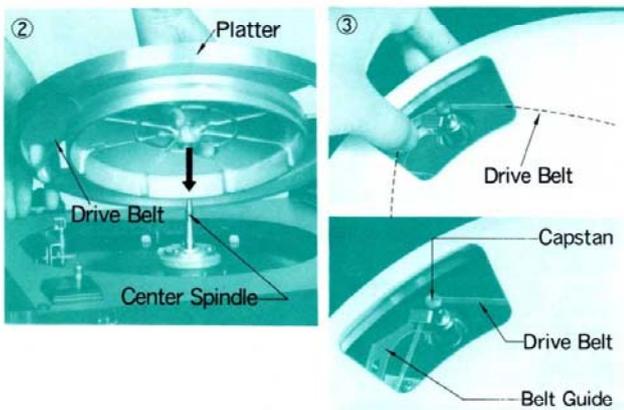


Speed Select Lever

Removing Shipping Screws

With a cross-headed (Philips) or minus screwdriver, remove the two shipping screws (marked with red-colored identification paper) that secure the motor, and the two screws that secure the power transformer. In the units purchased in the U.S.A. and Canada, however, there are no screws securing the power transformer.

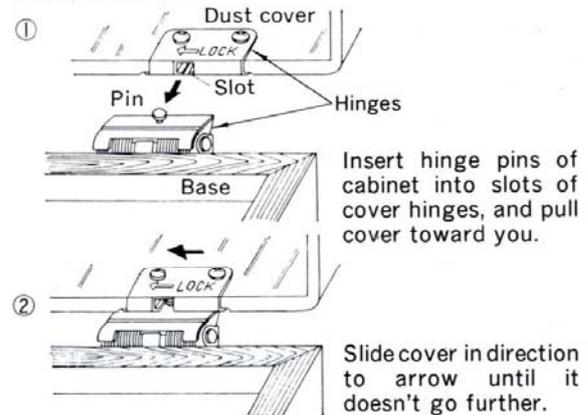
- ① Set the Speed Selector Lever to the 33 position.
- ② Mount the platter on the center spindle, holding the drive belt around the inner rim of the platter with your thumb, as illustrated.
- ③ Pass the drive belt between the two arms of the belt drive and hook it around the upper step of the capstan, as illustrated.



- ④ Place the rubber mat on the platter.
 - When handling the drive belt, be careful not to let it come into contact with oil or other foreign matter. If oil and so forth, adheres to the drive belt, wipe it clean with a cloth dipped in alcohol.

Mounting Dust Cover

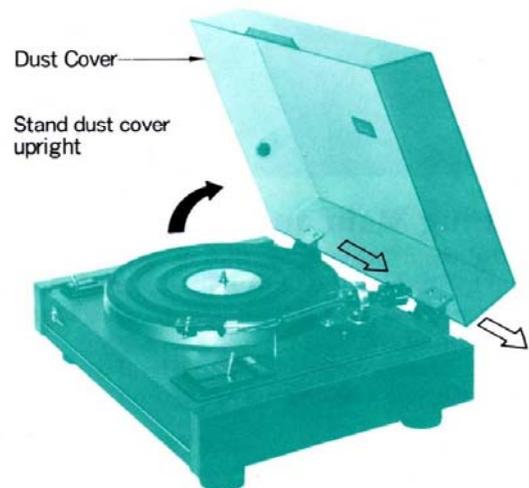
Insert the hinge pins of the turntable cabinet into the slots of the dust cover hinges, slide the dust cover in the direction of the arrow until it locks into place, as illustrated below.



Insert hinge pins of cabinet into slots of cover hinges, and pull cover toward you.

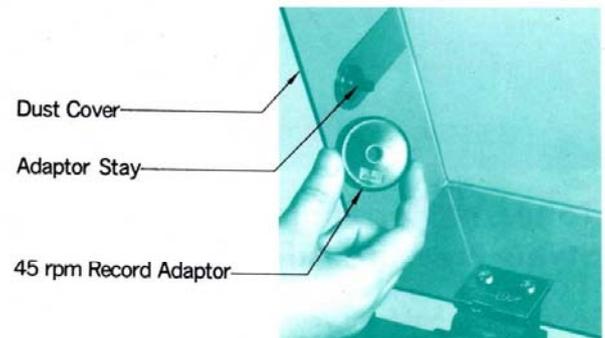
Slide cover in direction to arrow until it doesn't go further.

◆ To un hinge the dust cover, stand it upright, then pull it sideways to the right and lift it out of the hinge slots, as illustrated.



45rpm Record Adaptor Storage

Keep the 45rpm record adaptor on the adaptor stay on the left hand side of the dust cover when not in use.



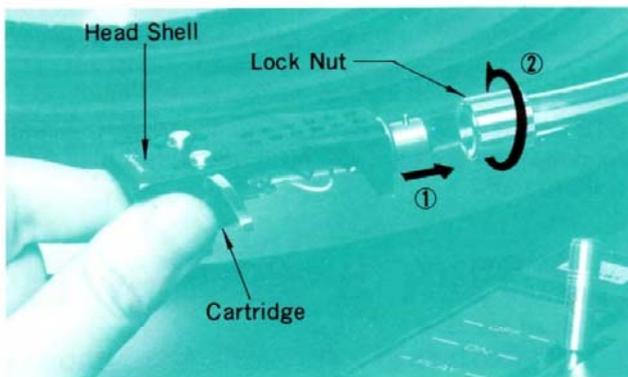
SETTING UP TONEARM/CONNECTIONS

Mounting Head Shell

Insert the cartridge-equipped head shell into the lock nut at the end of the tonearm. Then pushing it lightly in the direction of arrow ①, tighten the lock nut by turning it in the direction of arrow ② as shown in the photograph at the left.

● When desiring to fit a cartridge or head shell different to those supplied, refer to "Cartridge Replacement" (opposite page) before continuing.

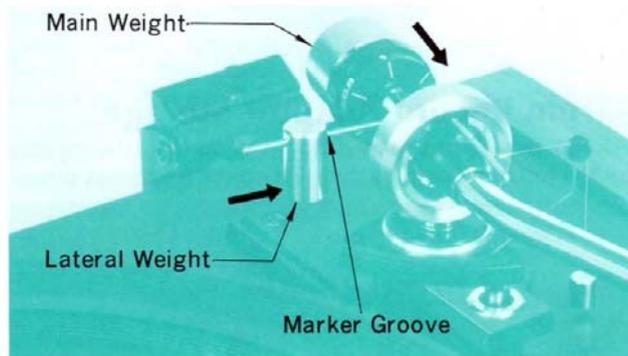
Since the units sold in the U.S.A. and Canada are not equipped with a cartridge, the owners of such units should also refer to "Cartridge Replacement" (opposite page) before continuing. In either case, connection of a cartridge to the head shell and overhang adjustments should be carried out, in addition to the items explained in the last two paragraphs on this page.



Mounting Main and Lateral Weights

① Fit the main weight to the weight shaft of the tonearm by pushing the little white-colored protrusion on the rear of the shaft and turning the weight gently in the direction of the arrow.

② Fit the lateral weight to the lateral weight shaft until it is aligned with the marker groove on the shaft.

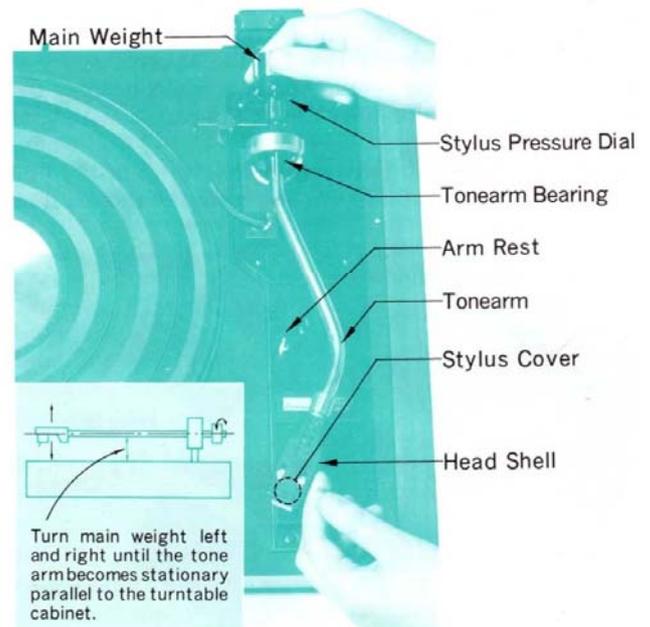


Tonearm Horizontal Balance and Stylus Pressure Adjustments

Adjust the main weight so that the tonearm remains level without aid from your hand. When so balanced, the tonearm is exerting a stylus pressure of 0g. Then, readjust the main weight so that the stylus pressure appropriate for the cartridge in use is applied. To do

so, follow the procedure given below:

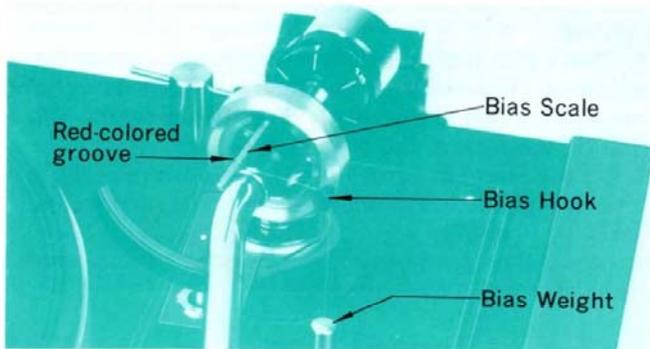
- ① Remove the stylus cover protecting the stylus.
- ② Untie the ribbon securing the tonearm to its rest.
- ③ Remove the tonearm from its rest and move it to the right of its rest (as viewed from the front of the turntable).
- ④ Balance the tonearm assembly, main weight and cartridge-equipped head shell, by turning the main weight as follows:
 - (a) If, when you remove your hand from the tonearm, the head shell rises and pivots about the tonearm bearing, turn the main weight clockwise, when seen from behind.
 - (b) If the head shell lowers, turn the main weight counterclockwise. Repeat these operations, turning the main weight slowly until the tonearm is balanced. This adjustment should be carried out patiently, removing your hand from time to time to check the balance.
- ⑤ When the tonearm is perfectly balanced, return it to the tonearm rest.
- ⑥ Holding the main weight so that it does not move, set the "0" graduation of the stylus pressure dial to the index line on the weight shaft, turning only the stylus pressure dial.
- ⑦ Once the stylus pressure dial is aligned with the index line, turn the main weight to the appropriate stylus pressure of the cartridge in use, referring to the numerals on the stylus pressure dial. The numerals indicate the stylus pressure applied. Optimum stylus pressure for the cartridge supplied with your turntable is between 1.5g and 2g.



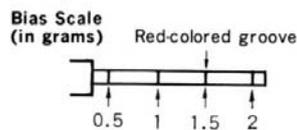
● Once horizontal balance has been achieved, be careful not to subject the stylus to any undue shock or stress.

Mounting Inside-Force Canceller

The operation of the inside-force canceller is closely related to stylus pressure. When stylus pressure has been adjusted to 1.5g, fit the bias weight cord into the red-colored groove of the bias scale. This weight is suspended from its cord passing through the bias hook.



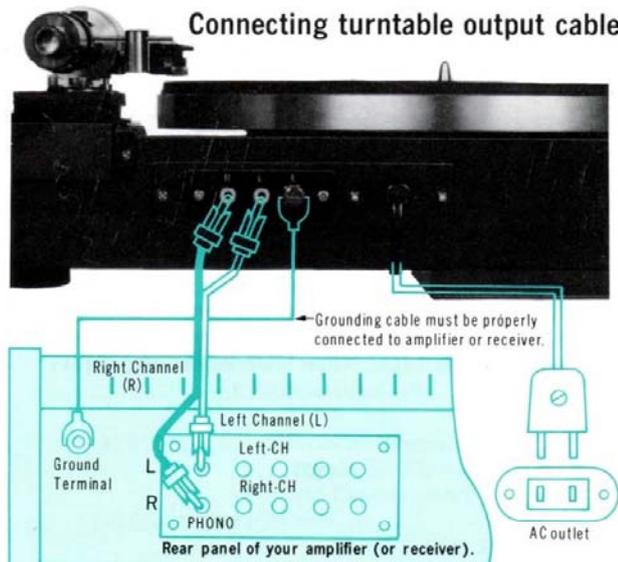
The relationship between the stylus pressure and bias scale is shown in the illustration below. Determine the groove into which the bias weight is to be fitted in accordance with the adjusted stylus pressure. Should the position at which the bias weight has to be suspended from lie between two grooves, select the one nearest to the bias weight cord.



◆ Inside force (anti-skating force) is the natural force which, caused by rotations of the platter, pulls the stylus (tonearm) toward the center spindle. The inside-force canceller is the mechanism which functions to cancel this force by applying equal pressure to both sides of the record groove. It reduces wear on stylus and record, and assures optimum performance when properly adjusted.

CONNECTIONS

Connecting turntable output cables



Cartridge Replacement

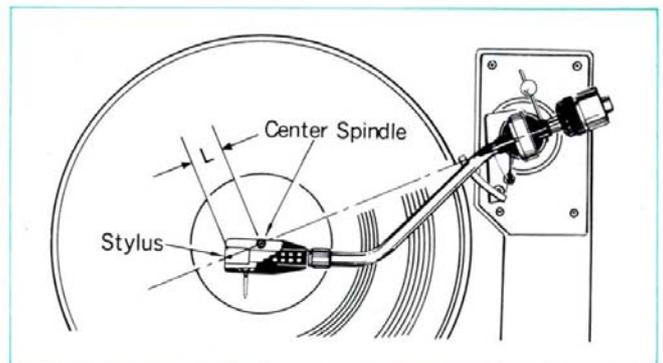
When fitting a cartridge or head shell different than that supplied with your turntable read the following instructions and those explained at left. Also, refer to the instruction booklet supplied with the cartridge or head shell to be fitted.

1. Connection of Cartridge to Head Shell

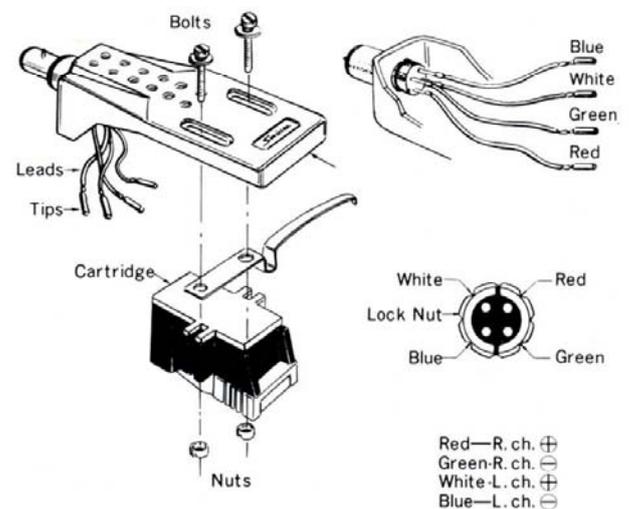
For connections refer to "Cartridge Connections" below.

2. Overhang Adjustments

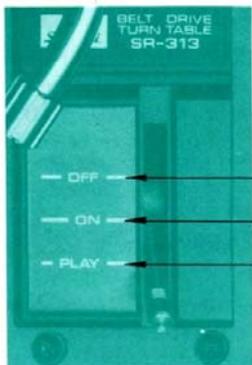
Overhang is the distance from the center spindle to the stylus when the tonearm is closest to the center spindle, and is indicated by L in the illustration below. The overhang of the tonearm of your turntable should be 17.5mm. Loosen the screws holding the cartridge to the head shell and slide the cartridge backwards or forwards for optimum overhang adjustments. Once the overhang is set, retighten the cartridge securing screws.



Cartridge Connections

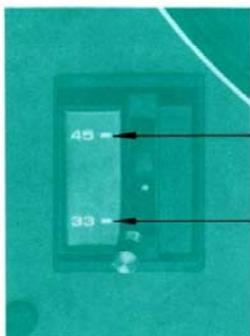


OPERATING PROCEDURES



Start/Lift Lever

- OFF — Cuts off the power supply.
- ON — Lets the platter start rotating.
- PLAY — Lowers tonearm for record play.



Speed Select Lever

- 45 — Set to play 45rpm records.
- 33 — Set to play 33- $\frac{1}{3}$ rpm records.

Playing a Record

1. Place the record of your choice on the platter.
2. Set the Start/Lift Lever to the ON position.
3. Set the Speed Selector Lever to the speed (33 or 45 rpm) appropriate to the record you are about to play.
In order to safeguard the drive belt, it is imperative that speed selection be done while the platter is revolving.
4. Check that the stylus cover protecting the stylus is removed. Then remove the tonearm from its rest and move it so that the stylus is directly above the selection on the record you wish to hear.
5. Set the Start/Lift Lever to the PLAY position. The arm lifter will gently lower the tonearm to the record surface and play begins.
6. Adjust the appropriate controls on your amplifier or receiver.

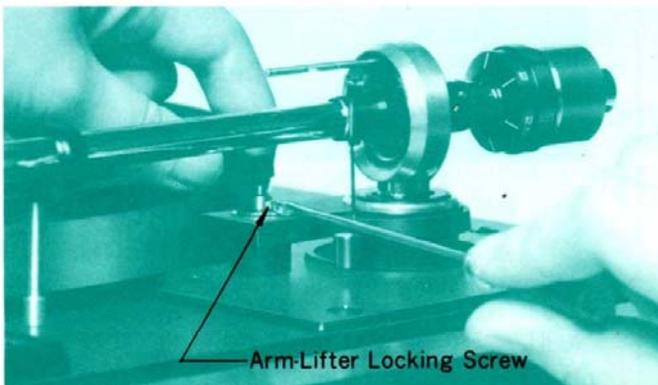
Stopping Record Play

1. When the tonearm reaches the lead-out groove of the record, set the Start/Lift Lever to the OFF position. The power supply to the turntable motor is cut off at the same time the tonearm is lifted from the record and the platter comes to rest.
● It is important to let the platter come to rest of its own accord. Forcibly stopping the revolving platter may damage the drive belt and shorten the operating life of your turntable.
2. Return the tonearm to its rest.

Interrupting Record Play

When desiring to temporarily stop play during the performance of a record, set the Start/Lift Lever to the ON position. This will raise the tonearm from the record surface without stopping the platter. The tonearm then can be repositioned as you wish. To start play again, set the Start/Lift Lever to the PLAY position.

Arm-Lifter Height Adjustment



When the arm-lifter is raised to its maximum height, the stylus tip should be about 1cm away from the surface of the record. If this condition is not met, loosen the screw locking the movable portion of the arm-lifter, adjust the lifter to the proper height, and retighten the screw. After the arm-lifter height adjustment, confirm that the tone arm is not in contact with the arm-lifter, when lowered for record play.



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