

OPERATING MANUAL

ROTEL®

RP-1100

STEREO RECORD PLAYER



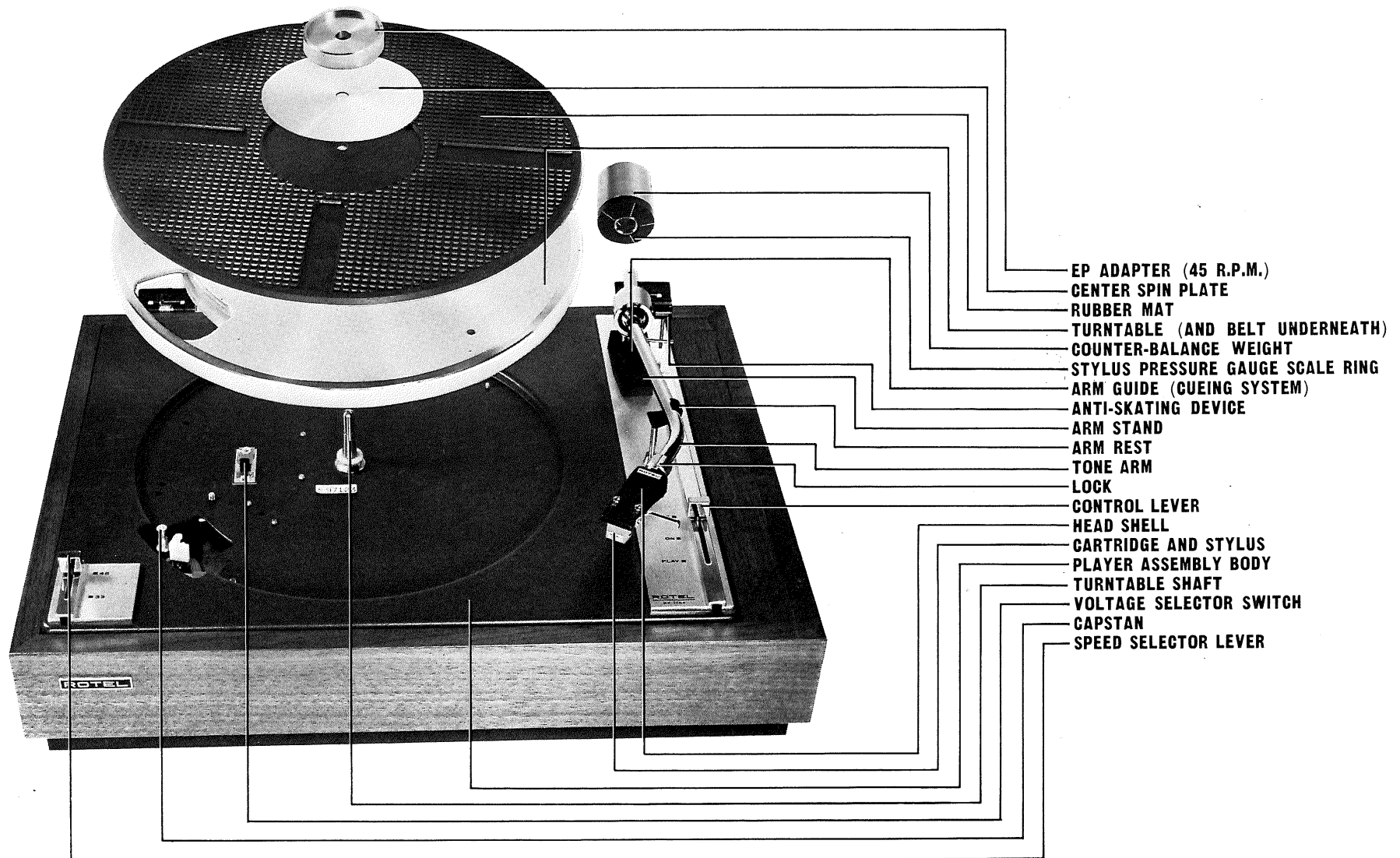


Figure 1. Various parts of the RP-1100 Stereo Record Player

INTRODUCTION

We would like to take this opportunity to thank you for purchasing our Rotel RP-1100 Stereo Player. We believe RP-1100 is a highly competent system aimed for those who truly love the fresh stereophonic sound of records. Being very professional, RP-1100 has to be manually operated in order to let you take a very good care of records for always maximum performance. Although it comes with an exceptionally good magnetic cartridge (with natural long-life diamond stylus), RP-1100 can easily handle better or best magnetic cartridges if you wish to step up your system. At any rate, you will be satisfied every time you listen to your favorite records on RP-1100.

In order to obtain the full use out of your player, please read all of the following pages of this operating manual carefully.

Do not attempt to operate the unit until you have made all adjustments and connections as specified in this manual.

SPECIAL FEATURES

- 1) Massive and perfectly balanced aluminum diecast turntable, coupled with 4-pole hysteresis synchronous motor and precision polyurathan belt driving mechanism assure extremely stable performance without wow, flutter or rumble noises.
- 2) Dynamically balanced S-shaped tublar tone arm which tracks flawlessly at 0.25 gram.
- 3) Revolving type counter-balance weight together with easy-to-set direct reading scale for stylus pressure adjustment insure the precise balance of the tone arm.
- 4) Anti-Skating Device corrects for inward force that distorts the tracking angle of the stylus.
- 5) Oil-dampened Cue Control allows the tone arm to be safely placed on record at any groove, or raised from record at any time with a flick of a finger.
- 6) Automatic On-Off System: placing the tone arm directly over the platter will automatically start the turntable while placing the tone arm over the arm rest will shut off the turntable.
- 7) Plug-in type Head Shell permits simple cartridge installation.
- 8) Specially designed stereo magnetic cartridge with natural diamond stylus provides excellent tracking performance and rich tonal reproduction.
- 9) Lever-type Speed Selector permits instantaneous selection of 33 1/3 or 45 r.p.m.
- 10) Oiled walnut cabinet and smoked grey plastic cover are magnificent in appearance.

CHECKING AND LEARNING

a. CHECKING CARTON CONTENTS

Lift the Player Assembly-Base from the Dust Cover. You will find the following items inside the Dust Cover:

1. Center Spin Plate
2. Rubber Mat
3. Turntable and Belt
4. Head Shell with Cartridge
5. Counter-Balance Weight with Stylus-Scale Ring
6. Spare Capstan (or Pulley), 50 Hz or 60 Hz
7. 45 r.p.m. EP Adapter
8. Lubricating Oil
9. Small Screwdriver

Check these items before starting to assemble the player.

b. LEARNING PARTS NOMENCLATURE

It is much easier to assemble and use the player if you know the nomenclature of the various parts. Take few minutes to learn it by looking at Figure 1 and then the actual parts.

c. IMPORTANT: CHECKING POWER SELECTOR

With the use of the 4-pole hysteresis synchronous motor, RP-1100 maintains constancy of speed, unaffected by fluctuations in load or in line voltage. RP-1100 is wired for both 100 volts (usable 100 to 120 volts) and 220 volts (usable 200 to

240 volts). Although the voltage has been set to your area in our factory prior to shipment, make sure of it by checking the position on the Power Voltage Selector Switch (on the Player Assembly Body). If the voltage setting somehow differs from your local power source, simply switch to the proper position by using the philips-type screwdriver (refer to Figure 2).

NOTE: If the player is set for 110 volts, 220 volts load will burn the motor; if the player is set for 220 volts, 110 volts load will be insufficient for proper motor operation.

ASSEMBLING

a. TURNTABLE AND BELT

1. Find the Belt around the Drive Rim of the Turntable (Drive Rim is on the backside of Turntable). Wipe clean any dust and oil from the Belt. Also, make sure there is no dust in the center hole of the Turntable platter and on the surface of the Turntable to avoid inclined setting of the platter.

2. Put the Turntable on the Player Assembly Body. Loop the Belt around the Capstan and the Drive Rim, making sure that the Belt passes through the center of the belt guide. Make sure the Belt will be on the narrowest part of the Capstan when the Speed Selector Switch is on $33\frac{1}{3}$ r.p.m., and on the wide part when 45 r.p.m. In addition, check the cyclic rating of the Capstan, 50 Hz or 60 Hz. If the rating does not confirm with your local area by any chance, look up "Changing Capstan" in Adjusting Section of this manual. See Figure 3 for looping the Belt.

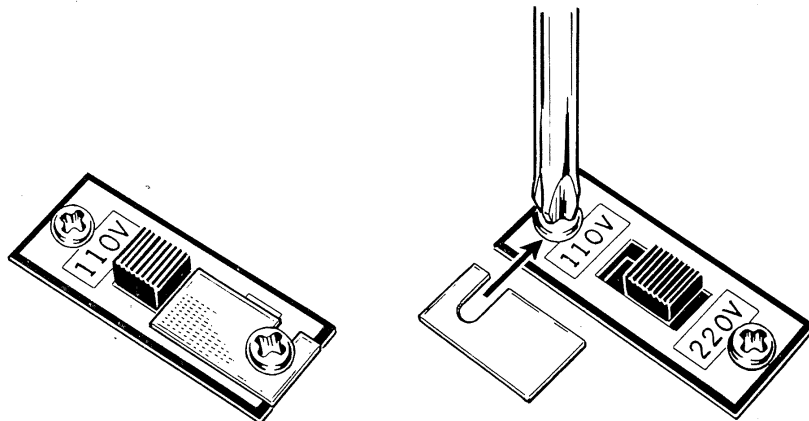


Figure 2. Changing the setting of the Power Voltage Selector Switch

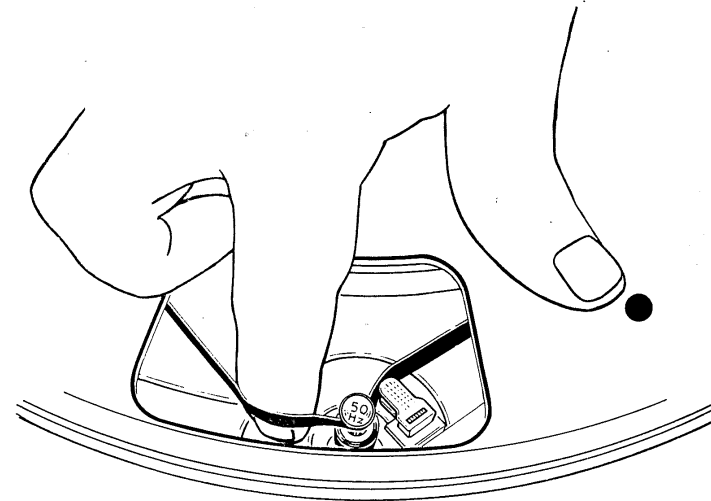


Figure 3. Looping the Belt

3. Place the Rubber Mat with the smooth surface down on the Turntable platter.

4. Place the Center Spin Plate on the Rubber Mat.

b. TONE ARM

1. Plug the Head Shell (with its pre-equipped cartridge) into the front end of the Tone Arm, and secure it by turning the Lock clockwise (wipe clean all dust from the connecting points of the Head Shell and leave the Stylus Cover on when handling). See Figure 4.

2. Insert the Circular Counter-Balance Weight about $\frac{3}{4}$ " into the end portion of the Tone Arm. The weight moves forward to clockwise revolutions and backward to counter-clockwise revolutions. See Figure 4.

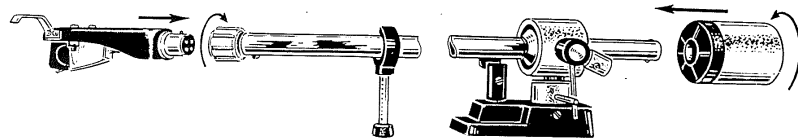


Figure 4. Equipping the Tone Arm

ADJUSTING

a. ADJUSTING STYLUS PRESSURE

1. Remove the Stylus Cover.

2. Lift the Tone Arm off the Arm Rest and move it to an unsupported position for balancing. Release Anti-Skating Device by flipping the Anti-Skating Device's rod to the other side. Move the Counter-Balance Weight forward or backward by revolving or sliding it, until the Tone Arm is perfectly balanced horizontally at the Arm Stand. At this position, the stylus pressure is zero.

3. Hold the Counter-Balance Weight in this adjusted position and set the red scale of the Stylus Pressure Gauge Ring exactly to the red indicator mark on the Tone Arm. Do not turn the Counter-Balance Weight while revolving the Stylus Pressure Gauge Ring. This completes the horizontal balance adjustment and zero setting of the Arm. See Figure 5.

4. The standard stylus pressure for RP-1100 is 3 to 4 grams, so choose a force within this range to suit your taste. Since the scale of the Stylus Pressure Gauge Ring is graduated into 1-gram step, you can obtain 5 grams by one clockwise revolution of the Counter-Balance Weight (in this case, do not turn the Gauge Ring itself, but turn the Weight which will also move the Ring). Line up the reading to your desired setting. Finally, flip the Anti-Skating Device's rod back to its position.

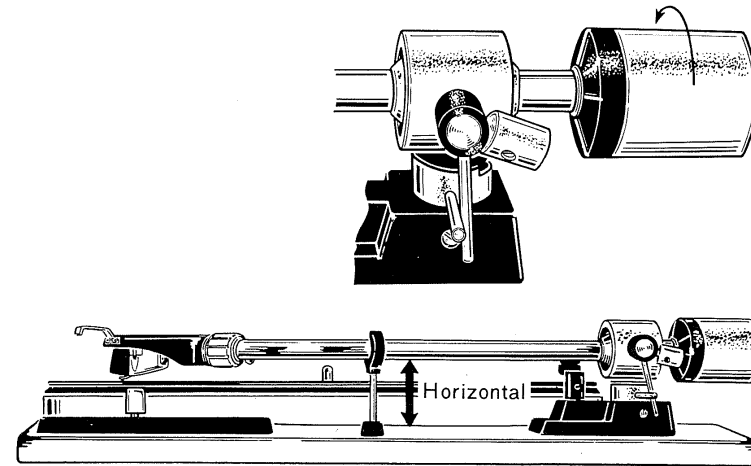


Figure 5. Adjusting the Tone Arm

b. CHANGING THE CAPSTAN

RP-1100's power frequency has been properly set for your area in our factory prior to shipment. Should you move to another area where a different power frequency is used, an adjustment in the cyclic setting (50 to 60 Hz or vice versa) must be made. This is easily accomplished by changing the Capstan with the one provided for with RP-1100. See Figure 6:

1. Remove the Belt from the Capstan and take off the Turntable platter. Loosen the set screw of the Capstan and gently pull the Capstan out.

2. Insert in its place the other Capstan. Properly adjust the Capstan so that the Belt is always at the center of the belt guide. Belt should move easily around the Capstan when the Speed Selector Lever is slid.

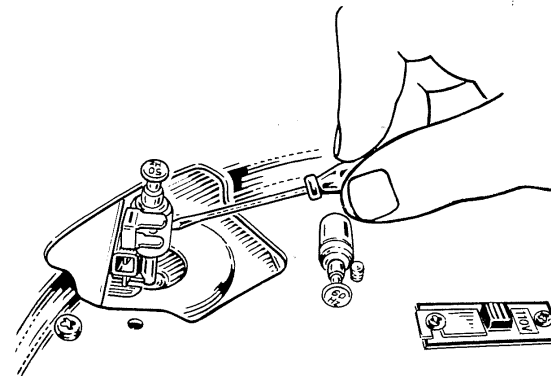


Figure 6. Changing the Capstan

OPERATING

a. CONNECTING TO A STEREOPHONIC AMPLIFIER

1. Connect the output plugs of RP-1100 to the input jacks of your amplifier marked PHONO or MAG (if marked otherwise, make sure they are magnetic phono inputs). See Figure 7.

2. Plug the grey output pin of RP-1100's pick-up cord into the jack of the Left Channel PHONO inputs of the amplifier.

3. Similarly, plug the red output pin into the jack of the Right Channel PHONO inputs of the amplifier. You do not have to "ground" the Player, as the Ground lead is already wired to the cord of the red output pin-plug of the Player.

4. Insert RP-1100's power source plug into an AC outlet (usually plug into the AC outlet supplied in the back of the amplifier).

b. OPERATING THE RECORD PLAYER

1. Set the Speed Selector Lever to the r.p.m. speed of the record to be played.

2. For donut-type record which has a large center hole, place the 45 r.p.m. EP Adapter over the Center Shaft.

3. Put the record to be played on the Turntable.

4. Slide the Control Lever to ON position to switch in AC power. (The Turntable will not revolve unless the Tone Arm is moved to a certain position.)

5. Grasp the Finger Hook and swing the Arm to a position where the Stylus is directly over the starting groove of the record.

6. Now move the Control Lever to PLAY position. The Arm Guide (cueing system) will descend slowly, lowering the Stylus gently on the revolving record. This will start the transcription.

7. When the transcription is over (The motor will not stop when the Stylus runs over the final musical groove of the record.) or whenever you wish to terminate it, just move the Control Lever to ON position. The Arm Guide will then rise slowly, lifing the Stylus from the record. Return the Tone Arm back to the Arm Rest by using the Finger Hook. The motor will shut off automatically when the Arm is swung back to the Arm Rest.

IMPORTANT: Always use the Control Lever in the above-mentioned manner to raise or lower the Stylus automatically. Never operate manually, as this will probably result in scratching your records.

8. When you have finished playing RP-1100, be certain to slide the Control Lever to OFF position. Although the motor stops running when the Arm is on the Arm Rest regardless of the positions of the Control Lever, this will not completely cut off the electrical current coming into the Player. You should always check this.

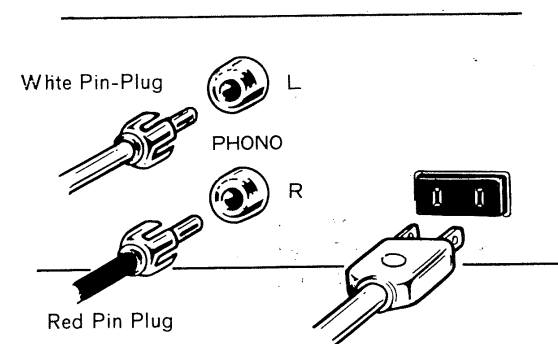


Figure 7. Connecting to an Amplifier

MAINTAINING THE PLAYER

a. POSITIONING OF THE PLAYER

1. To Avoid Howling

If placed too closely to the speakers, the sensitive Cartridge may pick up speaker vibrations. This is often the cause of abnormal howling heard during the playing of records. To insure best performance, do not place RP-1100 too closely to the speakers.

2. To Avoid Induced Humming

The magnetic Cartridge is usually susceptible to the influences of the nearby electromagnetic field — if too strong, such field will induce humming. Hence, avoid placing RP-1100 too near appliances that utilize electric motors or large

power transformers. When connecting RP-1100 to your amplifier, it is preferable to position the player in such a way that the power transformer in the amplifier will be farthest from the Cartridge.

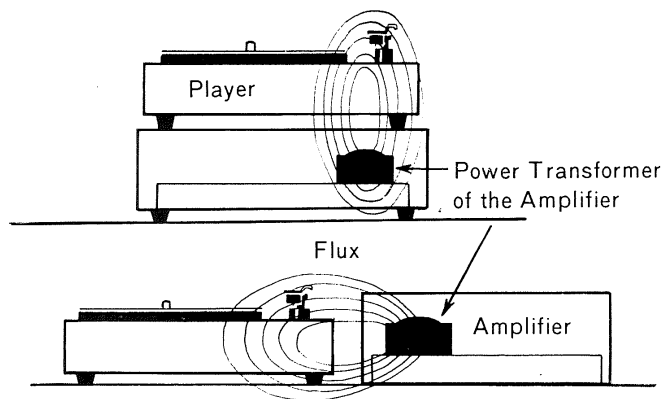


Figure 8. Induced Humming

b. REPLACING STYLUS

Diamond stylus is usually good for about 200 to 500 hours of continuous playing (approximately 500 to 1,000 LP records), but the life expectancy of the Stylus varies greatly depending on how it is used. A worn stylus will cause treble tones to be distorted and harsh, so the stylus must be replaced.

RP-1100 uses MV-2100/6 type stylus assembly. You can obtain the replacement from the dealer from whom you purchased this Record Player. New stylus assembly can be readily inserted into the Cartridge, after you have removed the old one carefully out of the Cartridge.

If you wish to replace the whole Cartridge (with the Stylus) or another kind of cartridge, just unscrew the Cartridge from the Head Shell and insert the replace-

ment. Note you must change the Stylus Pressure Gauge according to the specification, if you use the type of cartridge other than the original cartridge. Be sure you obtain the correct stylus pressure when cartridges different from Rotel's are used.

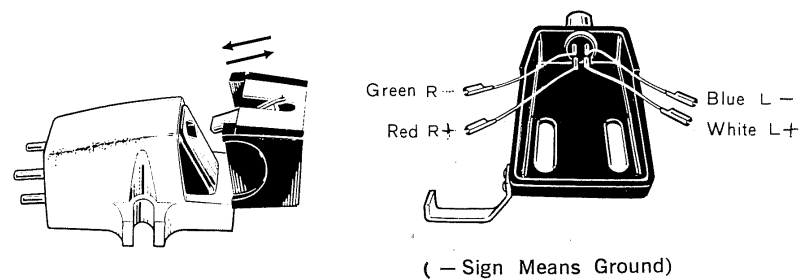


Figure 9. Replacing Stylus and Cartridge

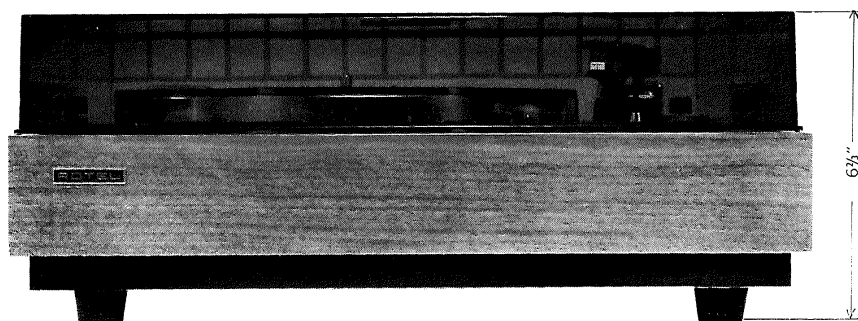
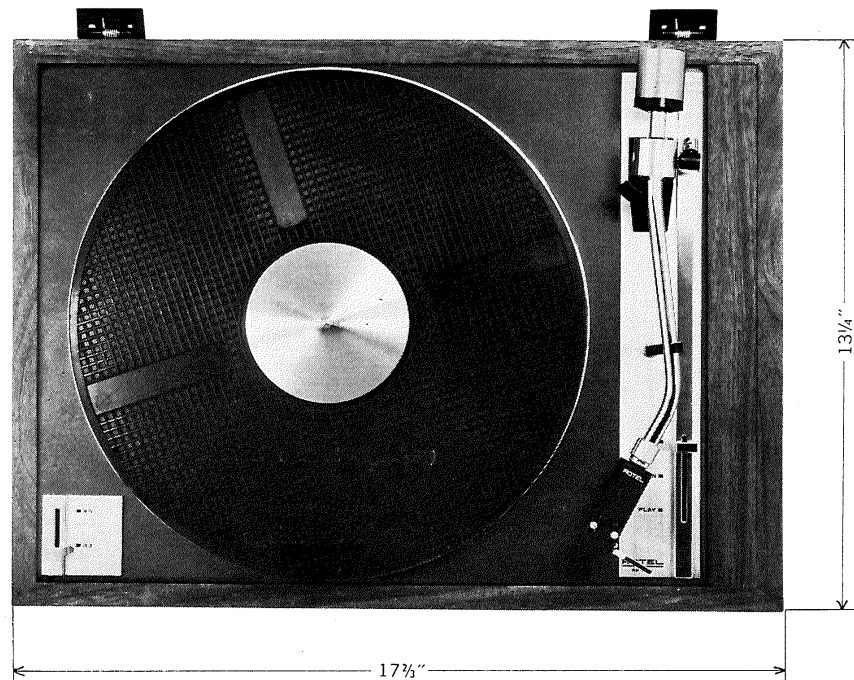
c. OILING THE MOTOR

The motor bearings of the RP-1100 should be lubricated at least once a year (or after about 1000 hours of playing). Use the oil bottle supplied with RP-1100. Remove the Turntable platter and apply few drops of oil into the Oil Orifice (marked with the label "LUBRICATION").

Do not stain the Belt or the Capstan. Should this happen, immediately clean the stained portion thoroughly with a soft cloth moistened with alcohol (or benzene or carbon tetrachloride solution).

d. WORDS ON THE DUST COVER

The beautiful Dust Cover is made of tough Acryl. Please use a soft cloth to wipe clean its surface, although it is quite resistant to scratches. The Dust Cover can be easily attached and removed from the Player Assembly Body without screws.



SPECIFICATIONS

TURNTABLE SECTION:

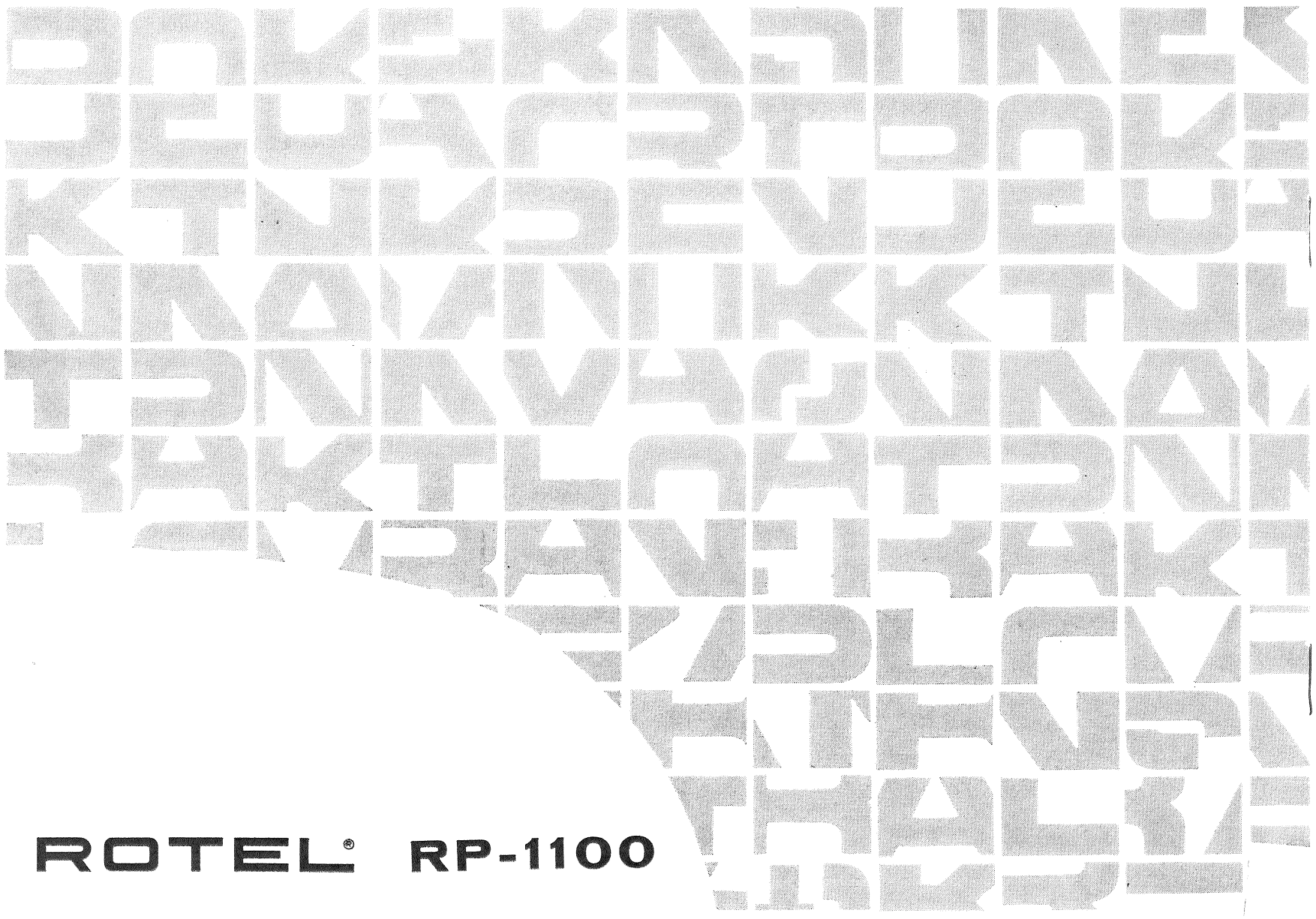
TURNTABLE PLATTER:	double rim platter of diecast aluminum alloy, 12" outer diameter, 2 lbs. weight
DRIVING MOTOR:	4-pole hysteresis synchronous motor
POWER VOLTAGE:	dual voltage, changeable with voltage selector located under the platter, 110 volts (usable 100 to 120 volts) or 220 volts (usable 200 to 240 volts) 24VA
SPEED:	2 speeds, 33 $\frac{1}{3}$ and 45 r.p.m.
WOW AND FLUTTER:	less than 0.1%
SIGNAL TO NOISE RATIO:	better than 45 db

STONE ARM SECTION:

ARM:	static balance type S-shaped tubular tone arm, anti-skating device, arm guide with cueing system, circular counter-balance weight with stylus pressure ring for direct reading
LENGTH:	8.74"
OVERHANG:	0.6"
OFF-SET ANGLE:	23 degrees
TRACKING ERROR:	less than ± 1 degree
CARTRIDGE WEIGHT LIMIT:	4 to 8 grams
STYLUS PRESSURE GAUGE:	0 to 5 grams
HEAD SHELL:	plug-in type, light pressed aluminum alloy

CARTRIDGE:

CARTRIDGE TYPE:	M-2100/6 super micro trace cartridge
FREQUENCY RESPONSE:	10 to 28,000 Hz
CHANNEL SEPARATION:	better than 30 db at 1 kHz
OUTPUT BALANCE:	less than 1 db
OUTPUT VOLTAGE:	6 mV at 1 kHz, 3.54 cm/sec
COMPLIANCE:	2.3 X 10 ⁻⁵ cm/dyne at 100 Hz
TRACKING FORCE:	1 to 5 grams
SUITABLE LOAD RESISTANCE:	50 to 100 kohms
STYLUS:	0.6 mil round diamond
CARTRIDGE WEIGHT:	4.5 grams



ROTEL® RP-1100