

STEREO TURNTABLE

# PL-15R

OPERATING INSTRUCTIONS

YPT  
HVT  
NBT



Thank you very much for your purchase of Pioneer model PL-15R. You will get many years of pleasure from this quality stereo turntable. To get the most from this easy-to-use turntable, please read the operating instructions and follow the directions indicated. For the psychological benefit of those who still want to use their optional phono cartridges, no phono cartridge is equipped with this turntable. The first thing you have to do is to attach your option to a head shell referring to "Attaching a phono cartridge" in the instructions.

Before using this turntable, you should lubricate the oil holes while reading "LUBRICATION".  
Because this unit may fall short of oil during the shipments.

## FEATURES

### POPULAR BELT-DRIVE SYSTEM

The Pioneer belt-drive system built into this unit owes its popularity to the superior rotation speed stability and improved signal-to-noise ratio provided by the polyurethane belt. This system is unaffected by changes in temperature and humidity. That is one of the reasons for the outstanding performance of the PL-15R.

### HIGH-QUALITY MOTOR

The 4-pole synchronous motor which drives the PL-15R's precision-formed die-cast aluminum alloy platter assures new levels of smooth, rumble-free performance with no speed variations.

### ANTI-SKATING DEVICE ENSURES PERFECT TRACKING

To keep the stylus tracking perfect along the center of the record groove (in other words, to compensate for the inward thrust of the tonearm), a specially developed spring-activated anti-skating device is provided. Its effect is to guarantee fine channel separation when playing stereo records.

### DIRECTLY READABLE TRACKING FORCE ADJUSTMENT

The tracking force is adjustable over a wide range so that practically any cartridge (with standard EIA plug) can be accommodated.

### S-SHAPED TONEARM

The light-weight and light-tracking tonearm is shaped for almost perfect geometry and minimum tracking error.

### GOOD DESIGN — A JOY TO LOOK AT

The main panel's matted finish lends a soft, subdued touch to the overall design, it is complemented by the smoked dust cover.

The PL-15R is a smart, modern addition to any listening room.

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# TYPICAL STEREO SETUP

The PL-15R is a first-quality stereo turntable and can provide its full performance only when combined with other components of equal quality, so you should select other quality components comparable to this turntable. Set up the system as shown in Fig. 1 or Fig. 2.

## A WORD ABOUT COMPONENTS

Be sure to select the rest of your system with an eye to achieving sufficient performance and response so that you can make the most of your PL-15R.

### The Amplifier

There are many types available: Integrated stereo amplifiers, AM/FM Receiver, Stereo pre-amplifiers and Stereo power amplifiers. You can take your choice of systems, making sure the one you choose will blend well with the speakers you select. Look for high performance and stability in an amplifier.

### The Speakers

Here there are also many possibilities. You have a choice of bass-reflex type of fully-enclosed type cabinets, full-range, 2-way, 3-way, and other type of speaker component combinations, and bookshelf, floor type or omnidirectional, etc. styling. With all these choices, your main guide should be how well the speakers sound with the rest of your system.

### The Phono Cartridge

There are magnetic (moving coil, moving magnet and induced magnet types) cartridge as well as semi-conductor types and optical types.

If you use a moving coil (MC) type cartridge with the PL-15R, make sure your amplifier has the capability of accepting this type of input signal.

**NOTE:**

*This tonearm is compatible with cartridges weighing from 4 ~ 10 grams.*

# INSTALLATION

- The place must be well-ventilated and free from humidity and dust.
- The unit should not be exposed to direct sunlight.
- The unit should not be placed near any source of heat.
- The unit should be placed as far from the speaker system as possible.

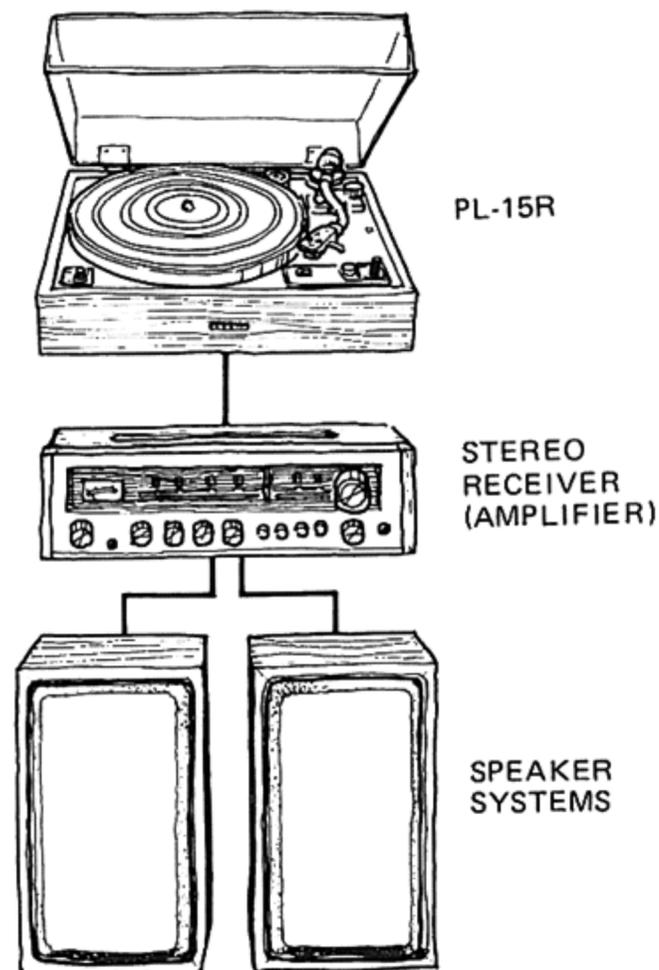


Fig. 1

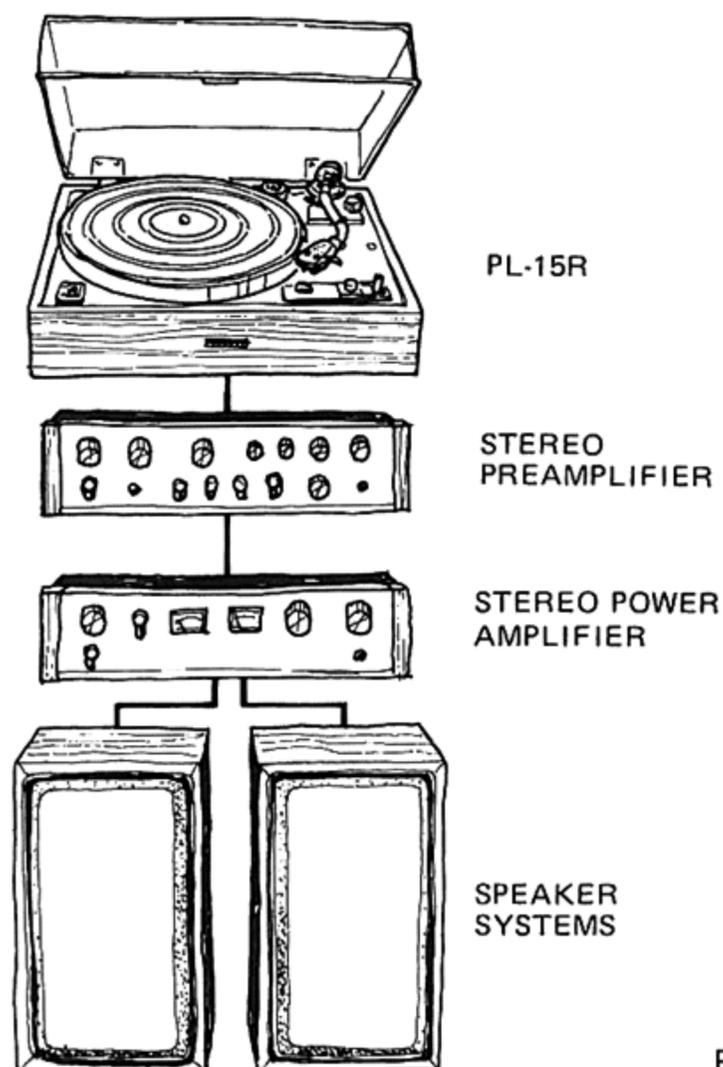
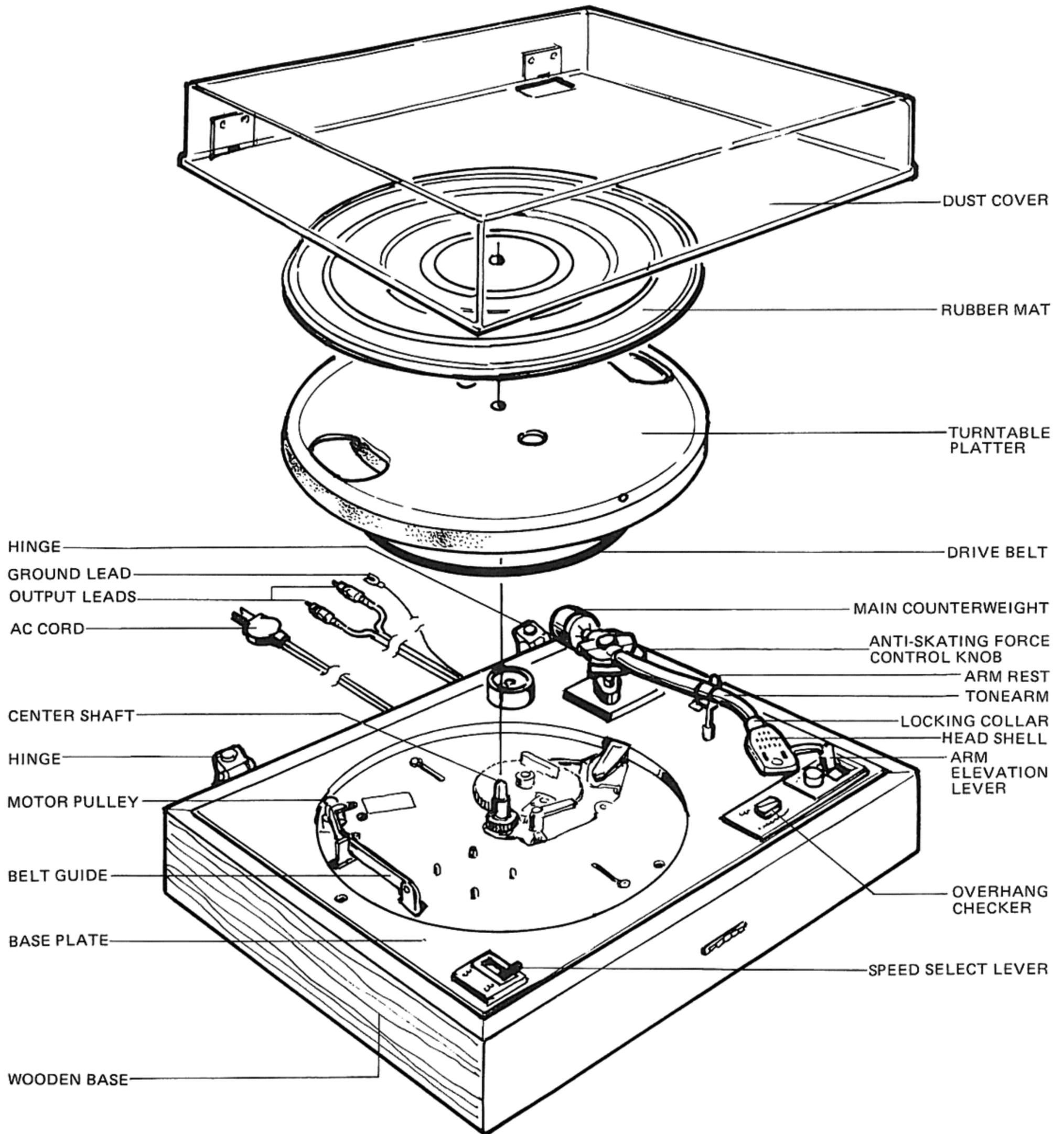


Fig. 2

# PARTS IDENTIFICATION



# ASSEMBLY

To prevent possible damage in transit, precision parts and the turntable platter are packed separately from the wooden base in the same packing case. After unpacking all parts carefully, assemble them into one unit by referring to the following steps helped with each illustration.

## REMOVE THE TONEARM PACKING

Check and remove the accessories stored in the polystyrol packing on the tonearm (Fig. 3). Then remove the packing. Accessories stored there (Fig. 4).

## CLAMP SCREWS

Remove the 4 clamping screws, as shown in Fig. 5. After removing the screw 2, fit the supplied rubber bush into the hole ( Fig. 5 ).

## TURNTABLE PLATTER

The turntable platter is packed separately. Take it out and put it on the center shaft. (Fig. 6). Place the rubber mat on the platter after the drive belt has been set on the motor pulley.

## DRIVE BELT

Set the SPEED SELECT LEVER to 33 rpm position. Put the drive belt through the belt guide by pulling the ribbon attached to the belt. Then set the belt on the smaller portion (the upper portion) of the motor pulley, using the ribbon. Then remove the ribbon (Fig. 7).

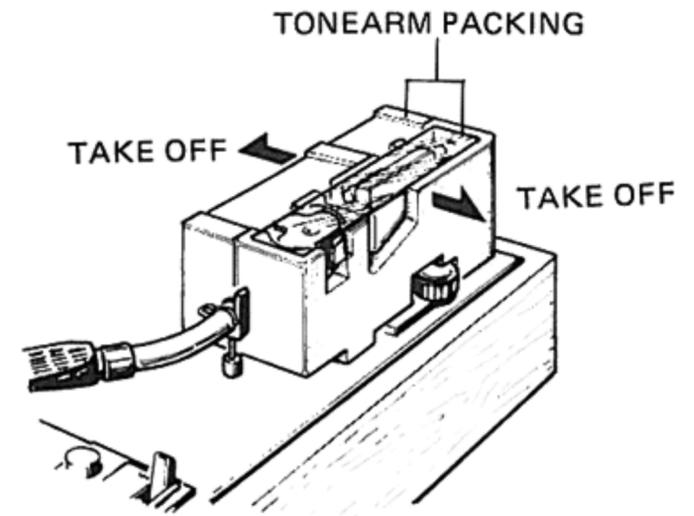


Fig. 3

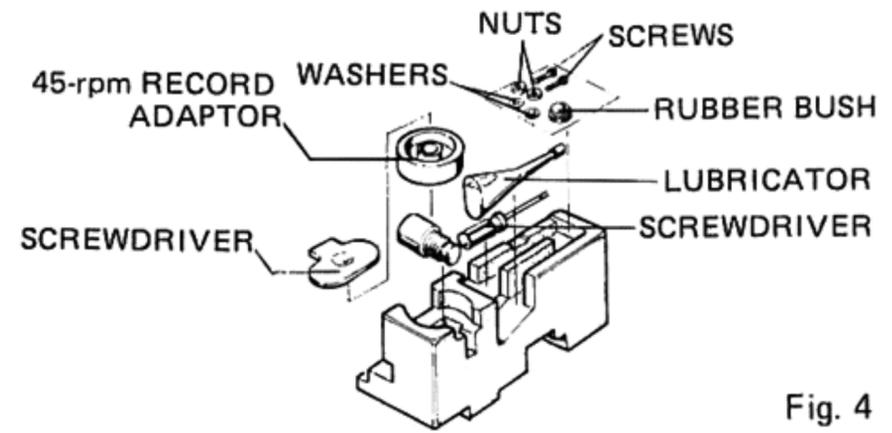


Fig. 4

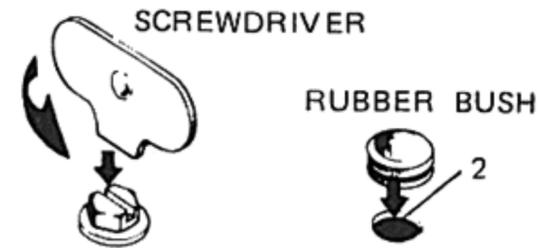
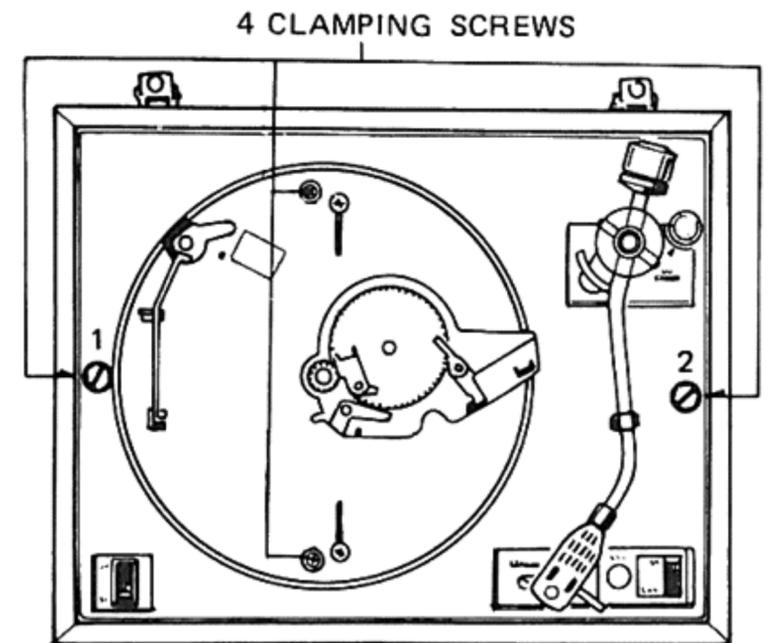
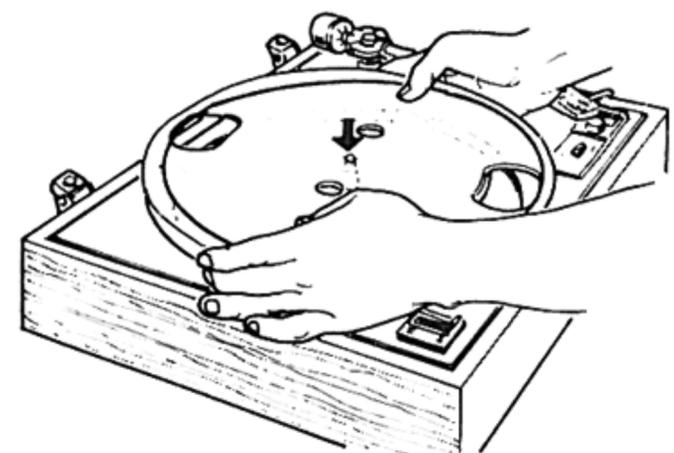
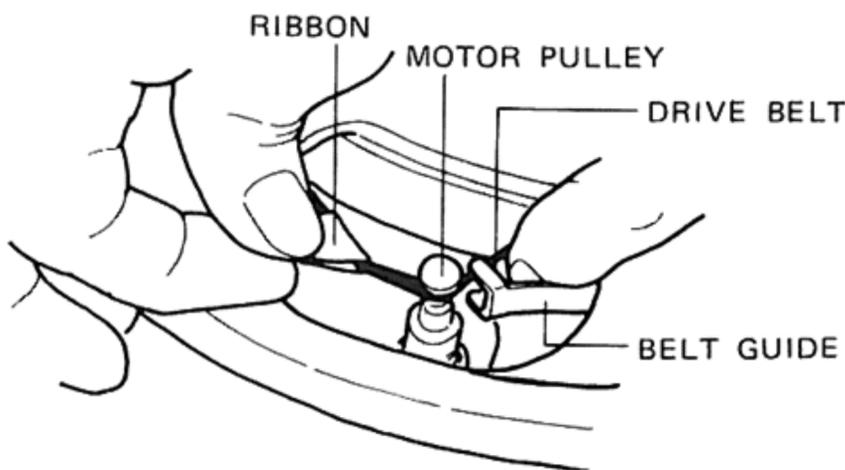


Fig. 5



PLACE THE TURNTABLE PLATTER

Fig. 6



HOW TO SET THE DRIVE BELT

Fig. 7

# ATTACHING A PHONO CARTRIDGE

Before attaching a phono cartridge, you should untighten the locking collar, and remove the head shell.

The color-coded pin connectors in the head shell conform to the international EIA standard. Attach the cartridge according to drawing (Fig. 8). After connection of pin connectors, plug the head shell into the tonearm and tighten firmly locking collar. When attaching the cartridge to the head shell, we recommend the Pioneer head shells PP-304, PP-305 to be used.

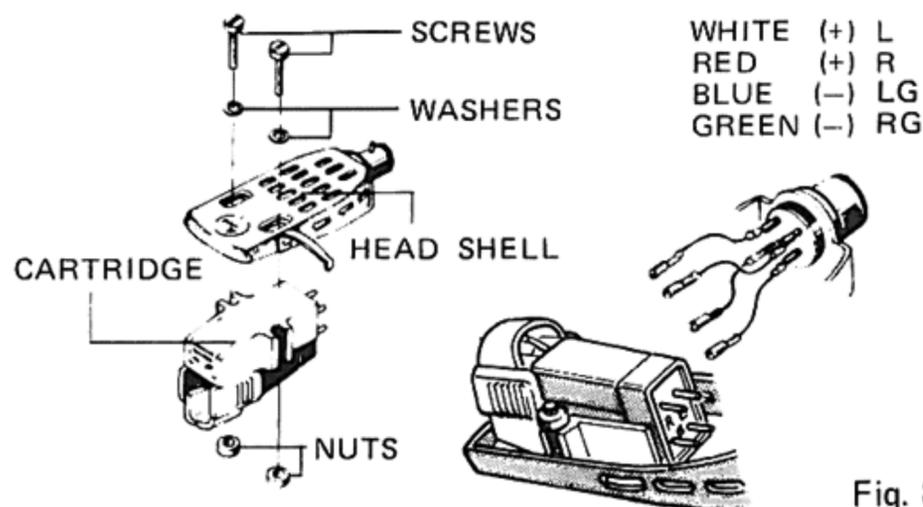


Fig. 8

## OVERHANG ADJUSTMENT

After mounting cartridge, you must adjust overhang length.

First, tighten the screws only lightly, then move the head shell over the overhang checker and slide the cartridge until the stylus is directly over the groove. To make checking easier, the checker post pulls up to meet the stylus. After the adjustment is complete, fully tighten the screws (Fig. 9).

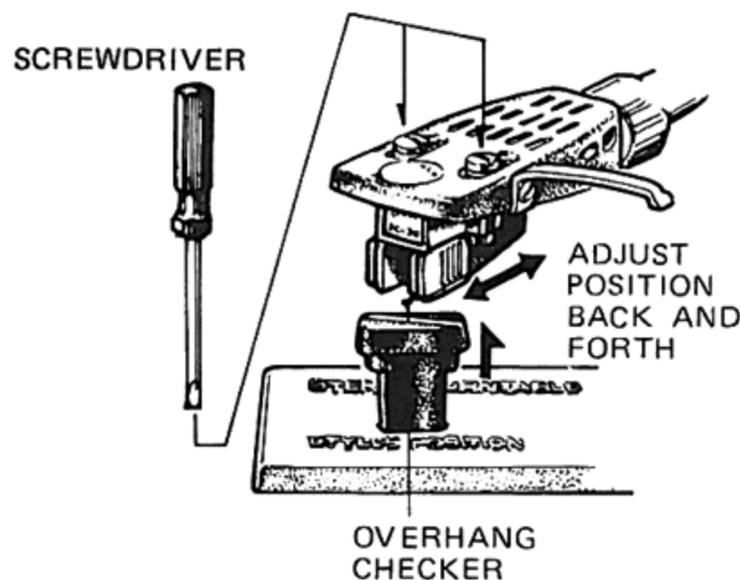


Fig. 9

## TO NEARM ADJUSTMENT

### HORIZONTAL BALANCE

1. Set the anti-skating force control knob to "0" (Fig. 13).
2. Remove the stylus protection cover from the cartridge.
3. Free the tonearm clasper, then remove the tonearm from the arm rest.
4. Move the main counterweight slightly to make horizontal balance.

Then, make sure to keep the balance horizontal without tilting in either direction.

5. After confirming perfect adjustment in step 4, with care taken not to move the main counterweight, turn the tracking force dial ring until the "0" reading aligns with the white index line engraved on the tonearm (Fig. 10).
6. Clamp the tonearm with the tonearm clasper of the arm rest.

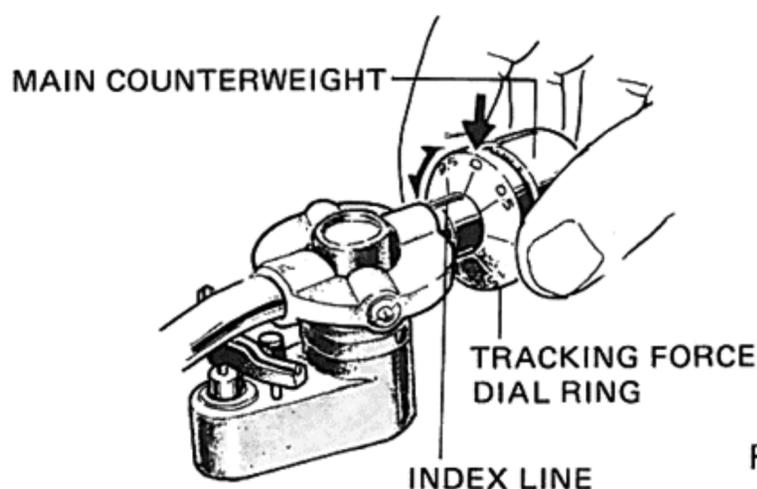


Fig. 10

### TRACKING FORCE ADJUSTMENT

After the horizontal balance adjustment (the tracking force: aligned with the 0 reading), turn the main counterweight together with tracking force dial ring (which is direct reading up to 4 grams in 0.5 increments). Set the proper tracking force to the index line on the tonearm (Fig. 11).

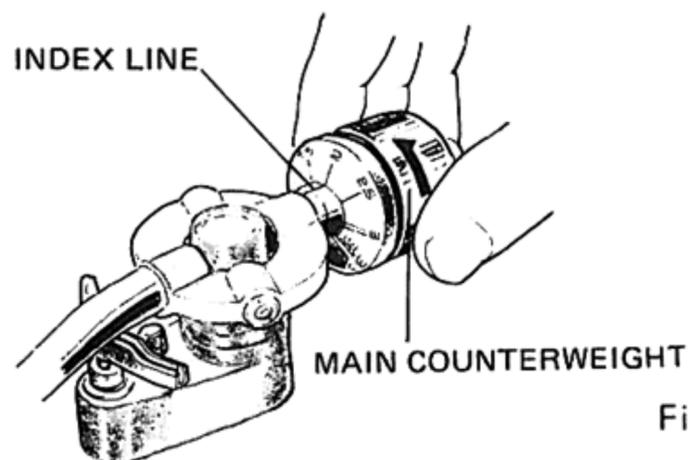


Fig. 11

## IN CASE OF USING SUB WEIGHT

If your optional phono cartridge is too heavy to keep balance horizontal, add the supplied sub weight to the rear end of the tonearm (Fig. 12), then adjust horizontal balance and tracking force adjustment.

## ANTI-SKATING ADJUSTMENT

The anti-skating force control knob should be adjusted to the same setting as that required for the tracking force (Fig. 13).

For example, if the tracking force of the cartridge is 2 grams, set the anti-skating knob to 2.

### What is "Anti-skating"?

As the record groove moves in relation to the stylus it exerts a force on the stylus which pushes it toward the center of the record. This is called "skating force" and will actually cause the stylus to jump out of the groove and "skate" if it is too strong. Even when this does not occur, the force distorts the sound response. The anti-skating device is designed to cancel this force.

## ATTACH THE DUST COVER

1. Hold dust cover vertically (Fig. 14-A).
2. Slip cut-outs in cover hinges over pegs on base hinges.
3. Push dust cover about 5mm to the left (as seen from the front) to secure hinges ( Fig. 14-B ).

## CONNECTION TO STEREO AMPLIFIER

The phono inputs on the amplifier to which the turntable should be connected must be chosen in accordance with type of phono cartridge to be used.

- With moving magnet or induced magnet type cartridge:  
Connect to the PHONO MAG inputs on amplifier (Fig. 15).
- With low-output moving coil type cartridge:  
Connect to the PHONO MC inputs. If these are not provided on your amplifier, a step-up transformer will be required.

In either case, connect the red output plug from the turntable to the amplifier's right channel input, the white plug to the left channel input. The third black wire (the ground wire) with the split lug on its end can be connected to the GROUND or GND terminal of your amplifier. Do not forget to make this connection, because it is vital for avoiding hum and noise (Fig. 15).

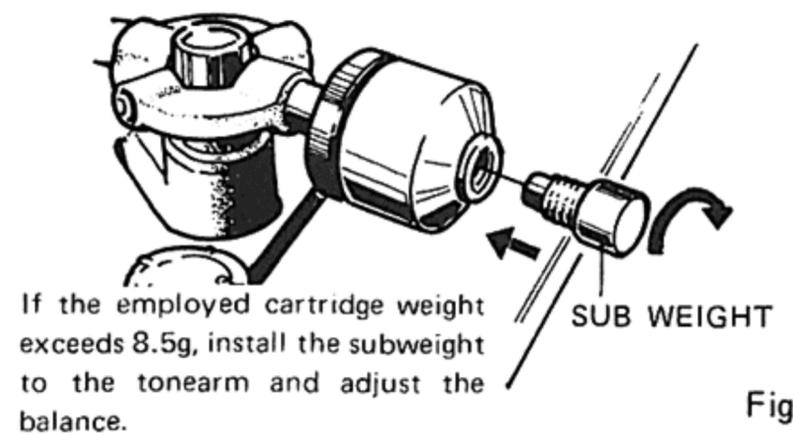


Fig. 12

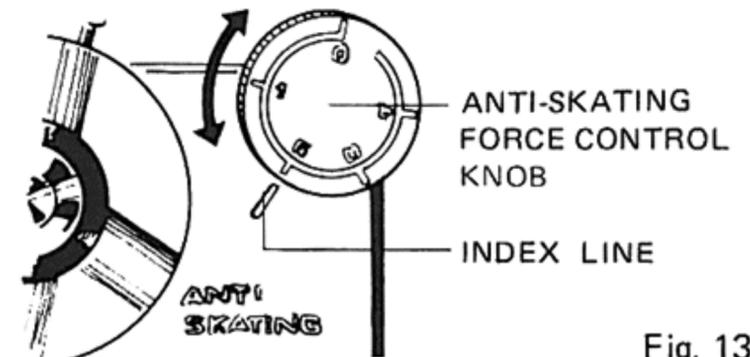


Fig. 13

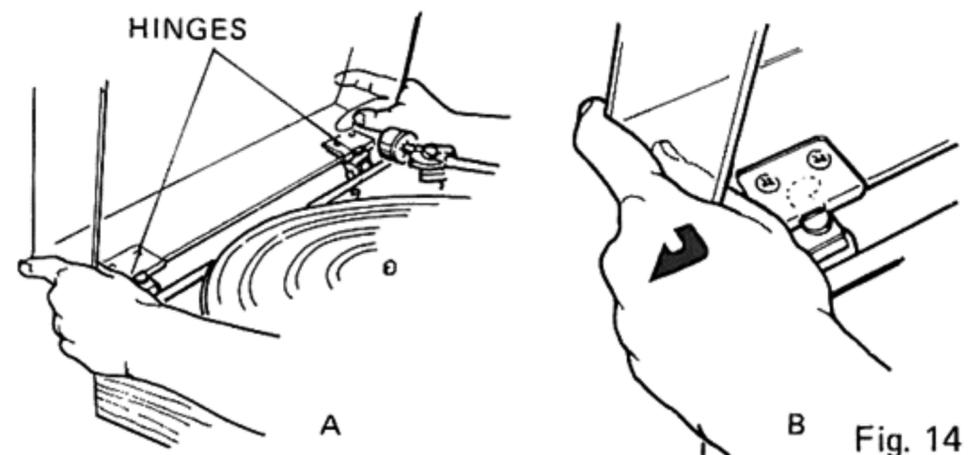


Fig. 14

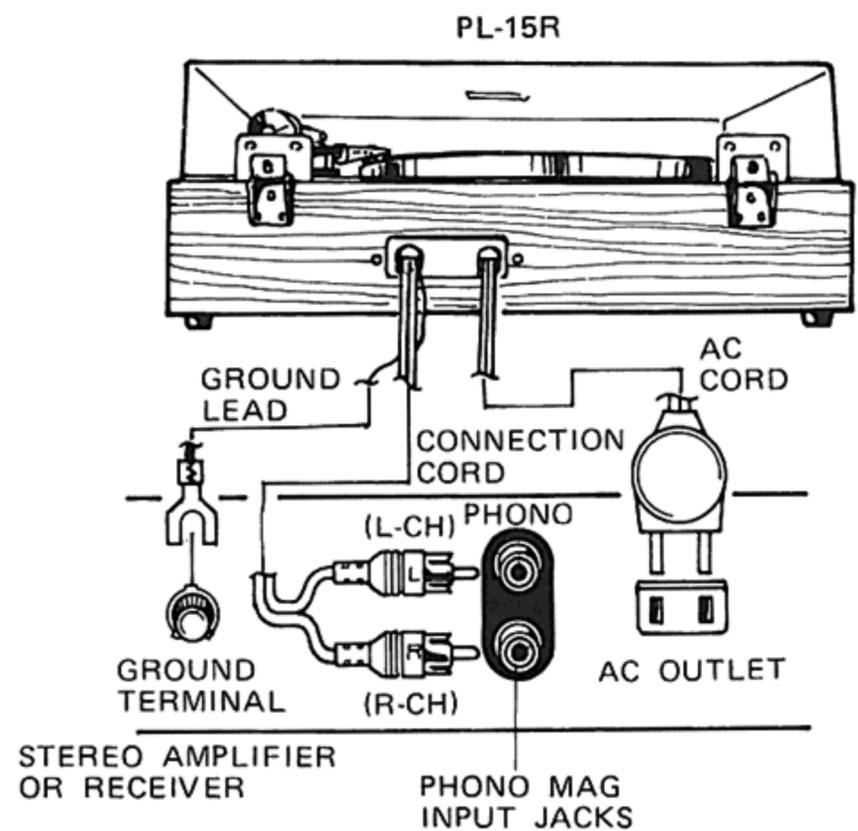
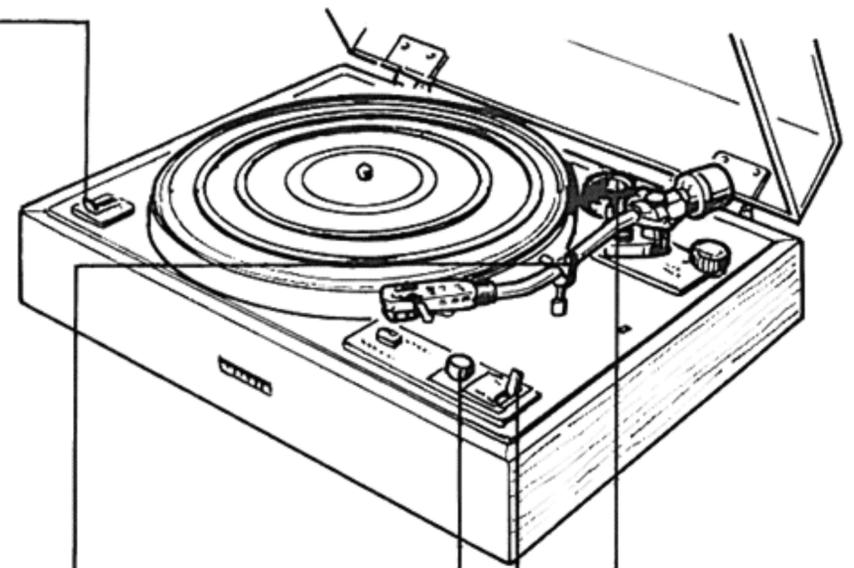
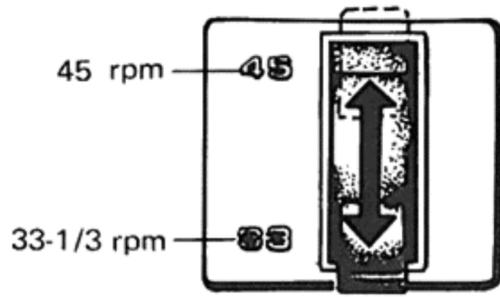


Fig. 15

# OPERATION

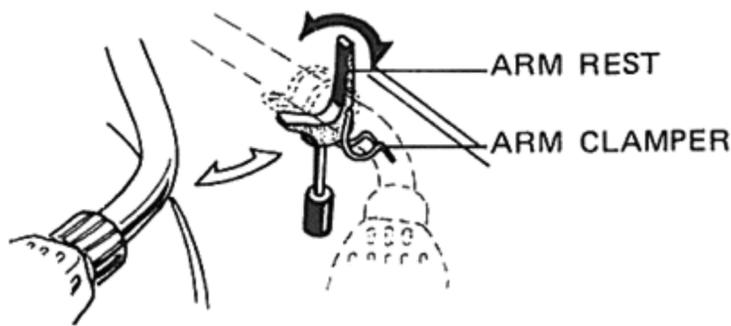
## Speed Select Lever

The PL-15R is a two-speed model: 33-1/3 rpm and 45 rpm. Setting the lever to either speed position will automatically set the turntable for operation at that speed.



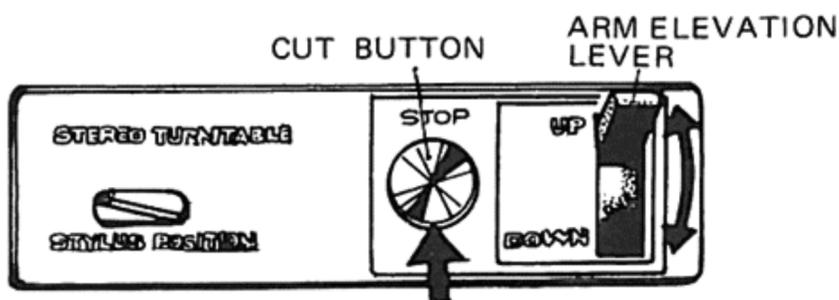
## Arm Rest

The arm rest supports the tonearm usually fastened with the arm clasper. When using the tonearm, do not fail to free the tonearm from the clasper.



## "Cut" Button

With the button pressed to stop record playing temporarily, the tonearm returns onto the arm rest automatically, and then the power is cut off.



## Arm Elevation Lever

This is a lever for controlling the movement of the tonearm. Setting the lever to "DOWN" will quietly put the tonearm down on the record, and setting it to "UP" will raise the tonearm from the record. This is a convenient device for cueing in any portion of the record without fear of scratching the record surface.

## 45 rpm Adaptor

A 45 rpm record adaptor is supplied in the accessory group, which permits 45 rpm EP records with large center holes to be played.



# HOW TO OPERATE THE TURNTABLE

The operation is hardly anything difficult about playing records on the PL-15R once you are accustomed to the operation. Simply follow these steps:

1. Put the record to be played on the turntable platter.
2. Remove the stylus protection cover from the cartridge and free the tonearm from the rest clamp.
3. Bring the tonearm by hand above the cueing position on the record. This operation will simultaneously cause the turntable platter to rotate.
4. Set the SPEED SELECT LEVER at the correct position: 33 or 45 rpm.
5. Move the ARM ELEVATION LEVER to "DOWN." The tonearm will quietly float down onto the record and play will start
6. When record playing is over, the tonearm returns onto the arm rest automatically, and then the power is cut off.
7. Change "DOWN" position of ARM ELEVATION LEVER into "UP" position.

## NOTE:

*Care should be taken to avoid the following point when a record is played again: The tonearm will keep lowering if the ARM ELEVATION LEVER does not be changed into "UP" position.*

- If you wish to stop play in the middle, simply push the Cut Button (STOP). (Then the tonearm will return onto the arm rest, and then the power is cut off).

## HOW TO USE THE ARM ELEVATION LEVER BEST

The ARM ELEVATION LEVER is particularly convenient when you wish to choose your favorite music or songs only from among the several songs recorded on the same side of an LP record.

- If you move the tonearm with the ARM ELEVATION LEVER set to "DOWN", be sure not to harm the stylus point.

# IMPORTANT: OBSERVE CAREFULLY

1. Never touch the SPEED SELECT LEVER unless the turntable is rotating.  
The speed can be changed only while the turntable is rotating.
2. Never obstruct the turntable by hand while it is rotating.  
This may cause damage.
3. Always keep the stylus clean. Remove dust with a soft brush.
4. Always keep your records scrupulously clean, too. Clean them with a commercially available record cleaner or cloth.
5. Never touch the stylus with your finger. Hands off.

# LUBRICATION

Before applying oil to the turntable, remove the turntable platter by using the following procedure:

1. Return the tonearm onto the arm rest with the tonearm clamper, by which the tonearm is fastened, then protect the stylus tip with the stylus protection cover.
2. Remove the drive belt with fingers from the motor pulley.
3. Pull the turntable platter straight up with two fingers inserted into the turntable platter's two openings (Fig. 16).

If the turntable platter should not be removed easily, pull it up with stronger force, with care taken not to damage any part of the turntable.

## WHEN LUBRICATION IS REQUIRED . . .

Mechanical noises and wow and flutter usually result from the lack of lubricant in rotating parts. Lubricate the specified spots at least once every two months if your turntable is used for home entertainment, and two to three if used very frequently.

Apply one or two drops to the base of the center shaft (Fig. 17). When lubricating, be careful not to let oil adhere to parts such as the motor pulley, belt, or inner rim. If oil should adhere to these parts, wipe it off with a cloth moistened with pure alcohol.

## WHEN LUBRICATION IS OVER . . .

Replace the turntable platter on the center shaft, then re-set the drive belt around the motor pulley.

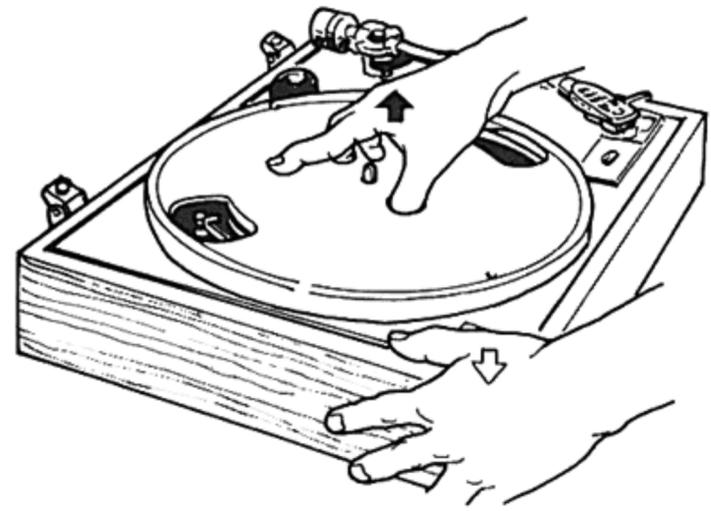


Fig. 16

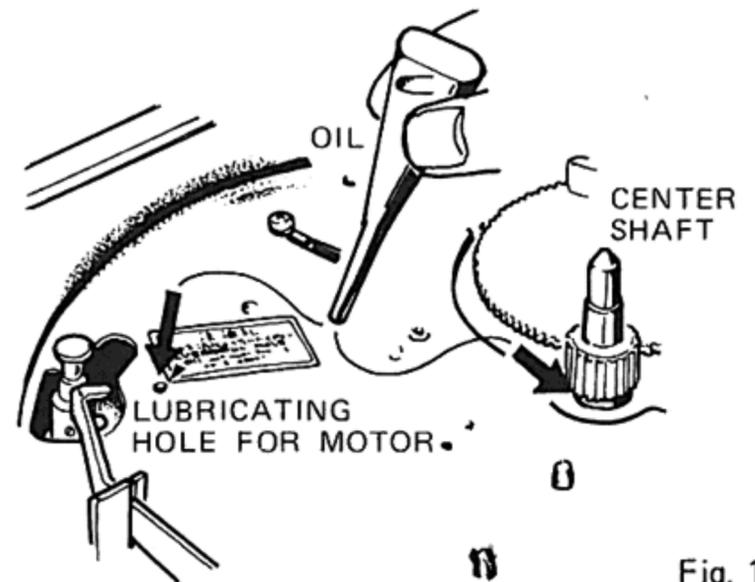


Fig. 17

# TROUBLESHOOTING

## WOW AND FLUTTER

Wow and flutter usually result from oil on the motor pulley or inner turntable rim. Check the surfaces of the motor pulley and belt, and wipe them clean with a soft cloth dampened with alcohol.

Caution: Never use other solvents.

## HOWLING

"Howling," high-pitched audio tone, is acoustical feedback from speakers to the turntable unit. Increasing the distance between the speakers and the turntable, or even better, laying a soft cushion beneath the turntable will probably eliminate howling.

## HUM

"Hum" is a low-pitched droning noise, often 60Hz or 50Hz, resulting from a loose connection of the ground lead. If hum occurs:

- Check the connection of the PL-15R ground lead (the black lead with a split lug) to your amplifier. If it is loose, connect it firmly.
- Check if the output lead of the PL-15R is running near the power transformer of your amplifier. Changing the position of the PL-15R in relation to the amplifier will often eliminate hum.
- Reversing of the AC cord may occasionally eliminate hum.

# SPECIFICATIONS

## Motor and Turntable

Motor:	4-pole synchronous motor
Turntable Drive:	Belt-driven
Speed:	Two speeds: 33-1/3 rpm, 45 rpm
Wow and Flutter:	0.08 % (WRMS) or less
S/N:	48 dB or more (in case of using Pioneer cartridge model PC-30)
Turntable Platter:	30 cm diam. Aluminum-diecast alloy

## Tonearm

Tonearm type:	Static balance, S-shaped pipe arm
Effective Arm Length:	221 mm
Usable Cartridge Weight:	4.0g (MIN) to 10g (MAX)
Overhang:	15.5 mm

## Subfunctions

Anti-skating Force Control  
Head Shell Plug-in type  
Viscous-damped arm elevation  
Automatic Return Tonearm System  
Wooden Base with Anti-acoustic Feedback Suspension  
Overhang Checker

## Accessories

Lubricator	1
45 rpm record adaptor	1
Screwdrivers	2
Rubber bush	1
Sub weight	1
Cartridge mounting screws	2
Cartridge mounting nuts	2
Cartridge mounting washers	2
Operating instructions	2

## Miscellaneous

Power requirements:	AC 220 ~ 240V 50Hz
Power consumption:	11W.
Dimensions:	430(W) x 355(D) x 166(H) mm
Weight:	7.5kg

Please note:

*Models employ 3-conductor mains leads. Please read the WARNING, IMPORTANT notice below and operate correctly.*

**WARNING: THIS APPARATUS MUST BE EARTHED.**

## IMPORTANT

The wires in this mains lead are coloured in accordance with the following code:

Green-and-yellow:	Earth
Blue:	Neutral
Brown:	Live

*As the colours of the wires in the mains lead of this apparatus may not correspond with the coloured markings identifying the terminals in your plug proceed as follows.*

*The wire which is coloured green-and-yellow must be connected to the terminal in the plug which is marked by the letter E or by the safety earth symbol  or coloured green or green-and-yellow.*

*The wire which is coloured blue must be connected to the terminal which is marked with the letter N or coloured blue or black.*

*The wire which is coloured brown must be connected to the terminal which is marked with the letter L or coloured brown or red.*

## NOTE:

*Specifications and the design subject to possible modification without notice due to improvements.*

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**PIONEER ELECTRONIC CORPORATION**

4-1, Meguro 1-Chome, Meguro-ku, Tokyo 153, Japan

**U.S. PIONEER ELECTRONICS CORPORATION**

75 Oxford Drive, Moonachie, New Jersey 07074, U.S.A.

**PIONEER ELECTRONIC (EUROPE) N.V.**

Luthagensteenweg no.9, 2030 Antwerp, Belgium

**PIONEER ELECTRONICS AUSTRALIA PTY. LTD.**

178-184 Boundary Road, Braeside, Victoria 3195, Australia

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