

INSTALLATION, OPERATION AND SERVICE INSTRUCTIONS  
FOR

# THORENS

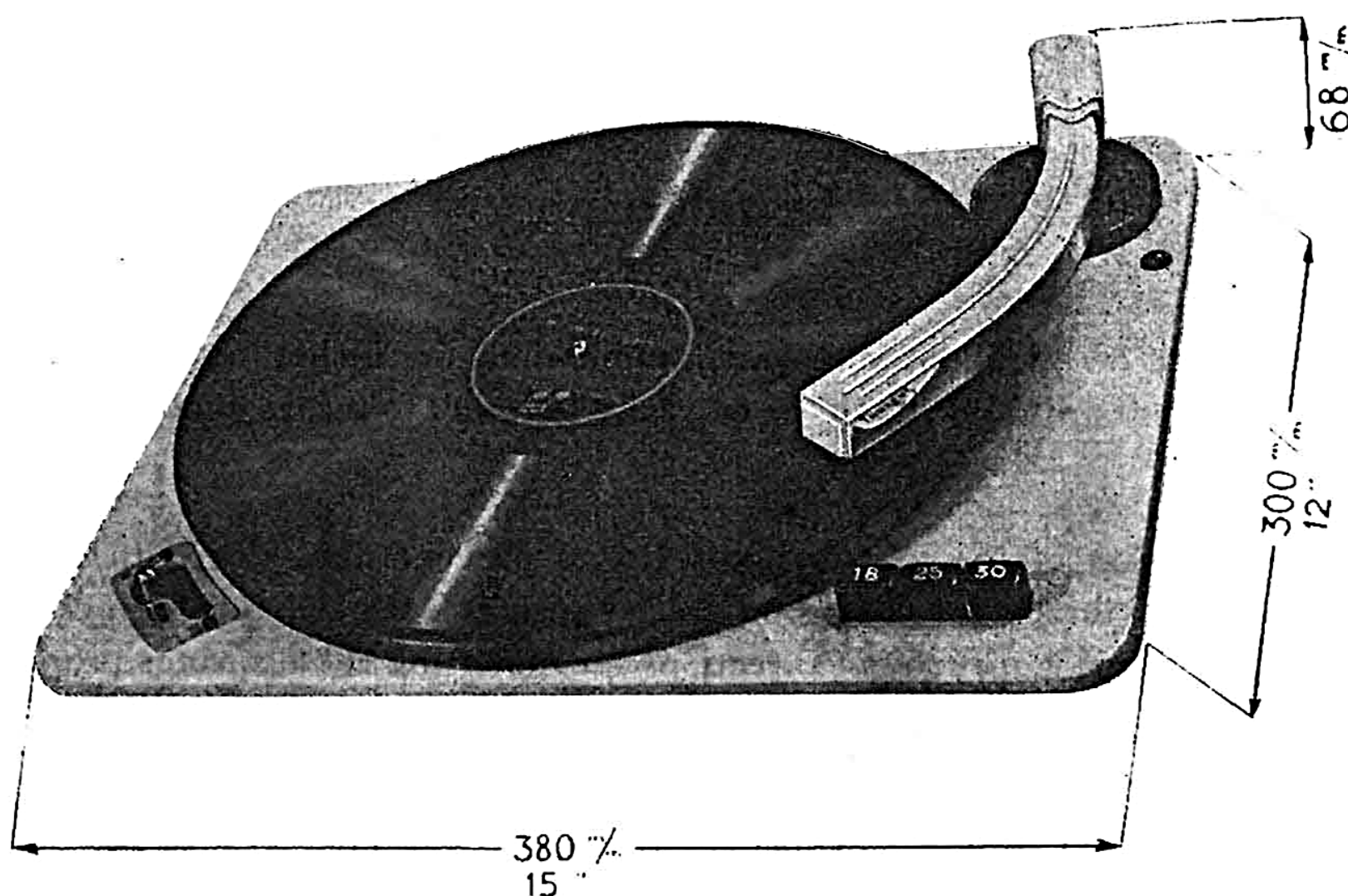
E 53 PA PRECISION TURNTABLE

CB 33 MANUAL RECORD PLAYER

AND

CBA 83

« AUDIOMATIC » AUTOMATIC RECORD PLAYER



## Dimensions for CB 33 and CBA 83 units

The unit plate is 15" (380 mm.) by 12" (300 mm.) wide. It requires a clearance of 3 1/4" above and below the unit plate.

# THORENS MODEL E 53 PA, CB 33 AND CBA 83 UNITS

The THORENS unit which you have just purchased was completely designed and manufactured in Switzerland by world famous technicians. This unit, before leaving the factory, was tested with modern electronic equipment and found to be within the critical standard set by the management.

You will find it most beneficial to thoroughly read the instructions in this booklet before unpacking the unit. Should any questions arise concerning this model your dealer will be happy to be of service to you. For technical information or the address of the nearest service station you may contact :

A complete set of spare parts are stocked at the above address for your convenience.

*Note. Always mention the Model Number and Schedule Number when communicating with the company.*

## Installation

**Template.** A detailed template with dimensions in inches and millimeters is furnished with each unit and should be carefully followed to insure maximum listening pleasure.

**Spring suspension** of the unit is necessary to prevent acoustic feedback and to damp extraneous vibrations. The four special springs with the corresponding hardware are enclosed in a paper bag. Directions for mounting these springs properly are pictured on the template.

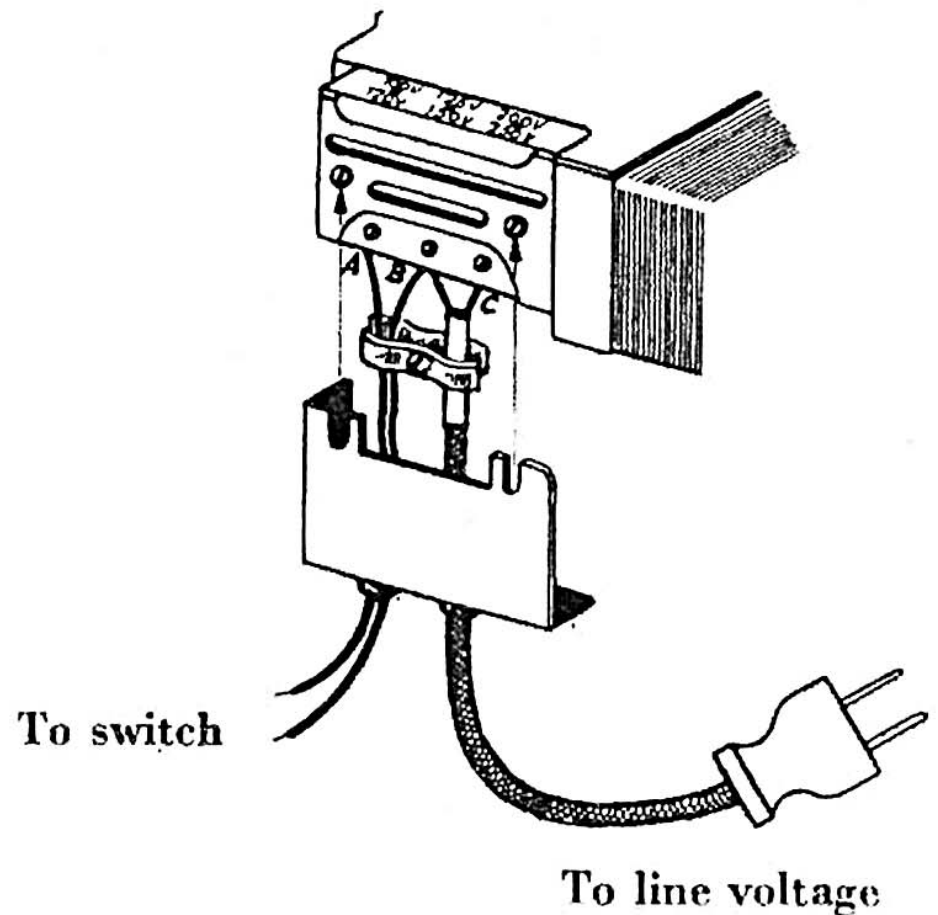
**Leveling.** For very light pickup cartridges an exact leveling of the unit plate is strongly recommended. To do this, place a spirit level on a record on the turntable and adjust with wedges under the mounting board.

For transit purpose, the unit plate should be secured with cardboard props introduced between base plate and mounting board, the turntable being removed from the motor shaft and packed separately.

**Connecting the motor to power supply:** As THORENS units are sold throughout the world, it is not possible to supply a universal line card which can readily be plugged into all wall sockets. Standard electric cards of optional length should be inserted in point B and C (located on underside of motor). The two leads of the switch are inserted into points A and B. To access to plugs A, B and C, first remove the safety cover (when furnished) by sliding it after slightly loosening its two fixation screws. Do not take these screws out.

**Caution:** Do not plug to power supply before tightening the screws of plugs A, B and C fixing again the safety cover to the motor. The standard electric card should be fastened inside of this cover as illustrated.

**Voltage commutator:** The commutator screw on the motor has been set at the factory in the position for best results on 110 volts 60 cycles. Adjustment is necessary only for certain 50 cycles power supplies.

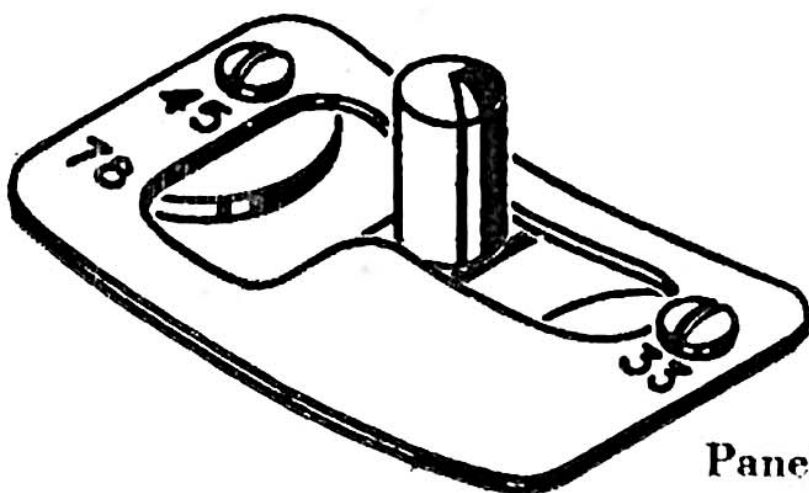


## Operation

**Speed selector:** Each motor, before leaving Switzerland, has been tested and adjusted for 110 volts, 60 cycles A.C. and normally does not require any home adjustment.

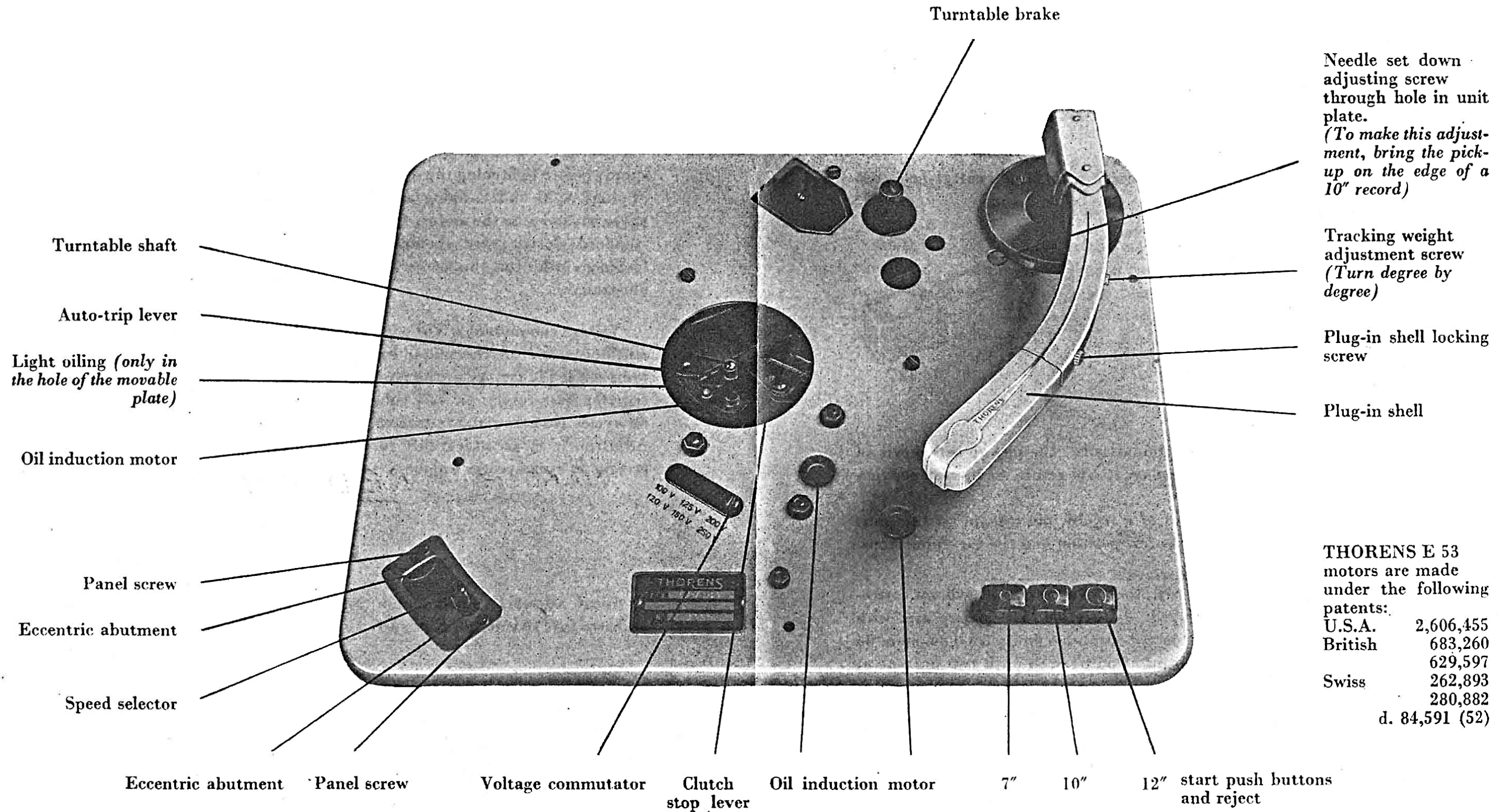
Because of the difference in voltage in some areas, the occasion might arise where a slight adjustment is necessary. This can quickly be done by loosening one or both screws on the speed-control panel and moving the eccentric abutment so as to change the stop position of the selector arm.

Panel screw and abutment



Panel screw and abutment

TOP VIEW OF CBA 83 AUTOMATIC RECORD PLAYER WITH TURNTABLE REMOVED



Needle set down adjusting screw through hole in unit plate.  
(To make this adjustment, bring the pick-up on the edge of a 10" record)

Tracking weight adjustment screw (Turn degree by degree)

Plug-in shell locking screw

Plug-in shell

THORENS E 53 motors are made under the following patents:

U.S.A.	2,606,455
British	683,260
	629,597
Swiss	262,893
	280,882
	d. 84,591 (52)

Eccentric abutment Panel screw Voltage commutator Clutch stop lever Oil induction motor 7" 10" 12" start push buttons and reject

Maintenance instructions

Audiomatic CBA 83

CB 33 and E 53 PA units

Motor and record player mechanism

Motor and mechanism only need lubricating from time to time, generally after 500 hours use. To do this remove the turntable and introduce a few drops of good quality thin oil (SAE 20) into the lubricating holes (coloured red). Do not use consistent oil which might block the motor. After a few years use it would be advisable to replace the hardened grease of the cams, gears and other rubbing surfaces by fresh and clean grease.

To oil too much and too often or to oil other parts than those indicated above is highly prejudicial to the functioning of the record player.

The motor only needs lubricating from time to time, generally after 500 hours use. To do this remove the turntable and introduce a few drops of good quality thin oil (SAE 20) into the three lubricating holes (coloured red). Do not use consistent oil which might block the motor.

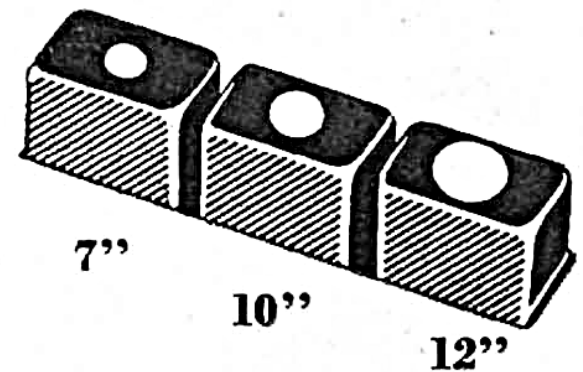
A discreet periodical gear noise is thoroughly normal when the motor is running, particularly at 78 rpm. The level of this noise is totally insignificant as compared to the normal playing level of the turntable.

# Operating instructions for AUDIOMATIC CBA 83

The CBA 83 unit provides for automatic playing of single 7", 10" or 12" records at 78, 45 and  $33\frac{1}{3}$  r.p.m.

To operate, proceed in the following manner :

1. Place one record on the turntable. For 7" records with large central hole, use special adapter as furnished with each unit.
2. Place the knob of the speed selector on the suitable speed (see p. 3) and verify that the proper needle is used for the type of record to be played.
3. Push completely the push button corresponding to the diameter of the record to be played, according to opposite illustration, and hold it down for one or two seconds.



From this moment, the player functions automatically : the pickup sets down on the edge of the record and, at the end of the play, it will return to its rest position whilst the motor stops.

To discontinue the audition before the end of a record, push again on the same button : the pickup raises silently, returns to its rest position and the turntable stops.

**Caution.** If a false button has been depressed, the pickup set down will not correspond to the diameter of the record to be played. Gently hold the pickup arm with one hand to avoid the scraping of the needle on the turntable and push once more on the same button to action the reject mechanism. Don't try to push two buttons at a time.

If by the effect of a false manipulation, the turntable remains stuck, push on the 7" button until a normal stop is obtained.

## **Turntable brake**

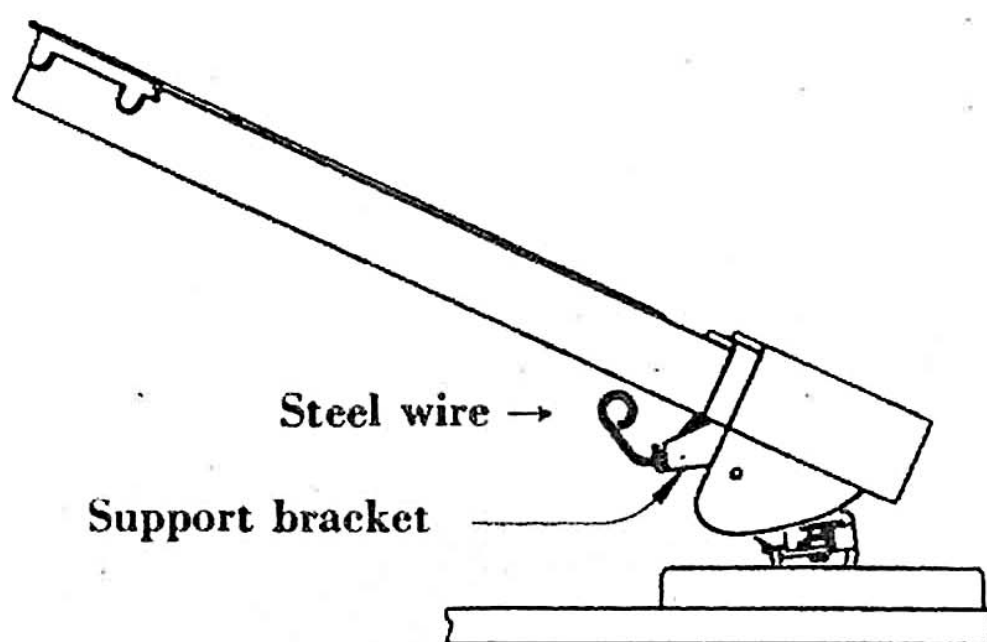
The turntable brake is actioned by the stop. If the brake does not work with sufficient efficiency on the turntable, the mechanism will overrun the regular stop position and the motor will not start at the beginning of a new record. This can be corrected by slightly turning the leather pad to present a new surface to the turntable.

# Pickup

Each unit is supplied with two "plug-in" shells and mounting hardware for the most popular cartridges. Note that the supplied screws must be used and not those furnished with the cartridge (metric threads are used throughout THORENS units).

## Adjustment

**Height of pickup:** After the cartridge has been properly mounted into the shell, check to see if the pickup height is correct. The proper adjustment is realised when the needle tip arrives level with the turntable felt. If adjustment is necessary, carefully bend the support bracket of the steel wire which is exposed at base of arm when arm is in raised position.

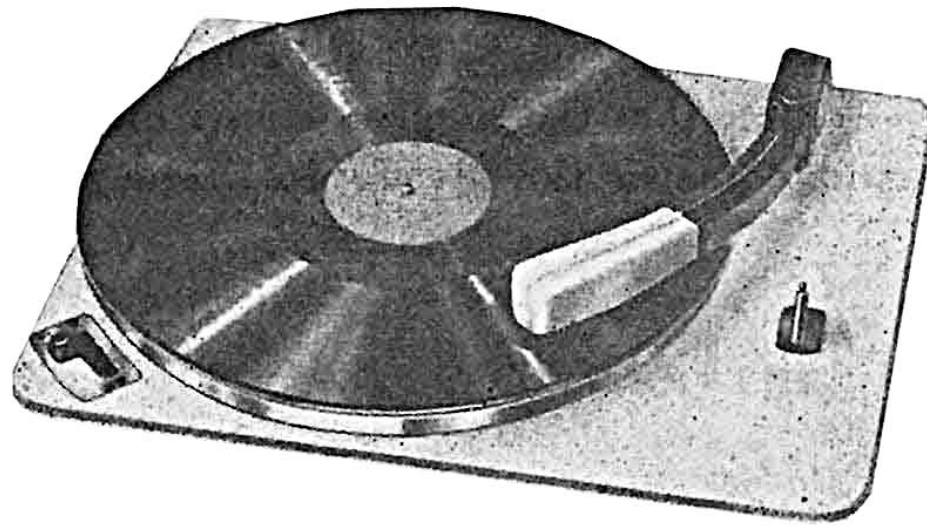


**Important:** a too low adjustment of pickup height may provoke a scratching of the record by the needle when the pickup is moving outside at the end of a record.

**Set down position:** The pickup arm has been finely adjusted so that the needle comes on to the 10" record on a 9 9/16" (245 mm.) diameter circle, and on a 12" record on 11 9/16" (295 mm.) diameter circle. However, an adjustment may become necessary for some cartridges or non standard records ; regulate them by means of the special screw near the base of the pickup arm (see p. 5). The pickup should never on any account be forced into position.

**Muting switch:** the pickup leads are short circuited by a muting switch except when the changer is in playing position. So no sound will be obtained from the pickup when in the rest position. If the first grooves of a record are not heard, first check height, then landing position of pickup as above.

## CB 33 Manual Record Player



To start the motor, move tone-arm to the right.

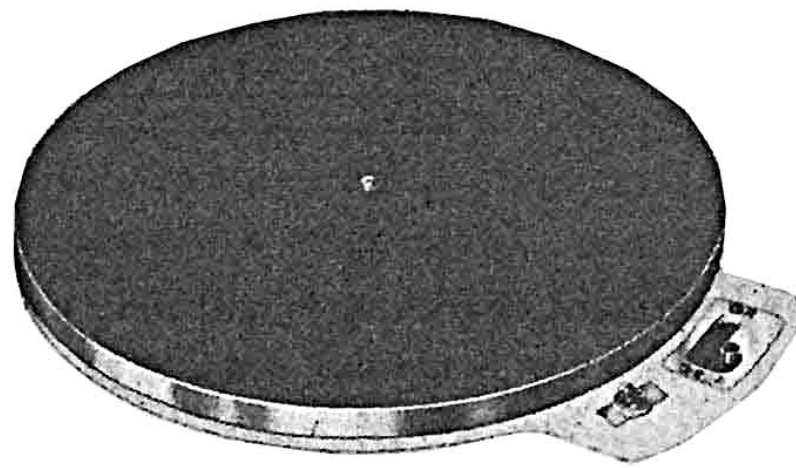
To stop, move tone-arm towards turntable shaft.

**Installation:** see pages 2 and 3 of present leaflet.

**Speed regulation:** see page 3.

**Maintenance:** see pages 4 and 5.

## E 53 PA Precision Turntable



**Installation:** see pages 2 and 3 of present leaflet.

**Speed regulation:** see page 3.

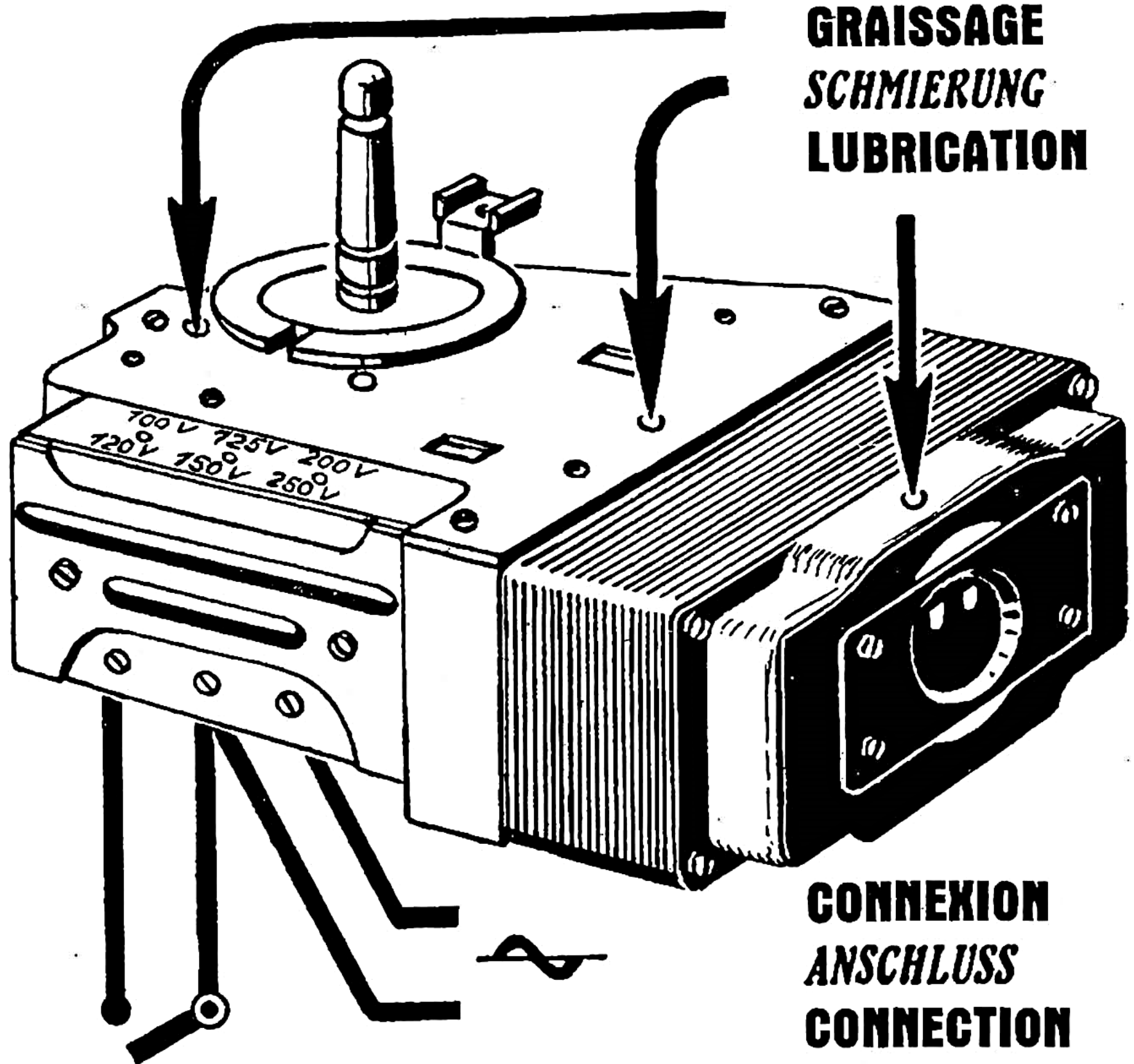
**Maintenance:** see pages 4 and 5.

**Important:** minimum hum pickup and lowest noise level will be obtained when following the detailed indications printed on the enclosed mounting template.

**THORENS** products are individually built and tested by the best Swiss craftsmen for finest performance.

Moteurs à induction - *Induktionsmotoren* - Induction Motors

# THORENS E.51/53



**GRAISSAGE  
SCHMIERUNG  
LUBRICATION**

**CONNEXION  
ANSCHLUSS  
CONNECTION**

Ce moteur est garanti contre tout défaut de fabrication et ne doit pas être démonté.

*Dieser Motor ist gegen jeden Fabrikationsfehler garantiert und darf nicht demontiert werden*

This motor is guaranteed against any manufacturing defect and must not be dismantled.



**Caution!** Do not lift the changer by the pick-up arm but use the loops prepared for this purpose.

**Accessories are inside this cardboard box**

**Attention!** Ne jamais soulever l'appareil par le bras du pick-up. Utiliser les poignées prévues à cet effet.

**Les accessoires sont à l'intérieur de ce carton**

**Achtung!** Den Apparat auf keinen Fall am Tonabnehmerarm ergreifen, um ihn herauszunehmen. - Man benutze hierzu die hierfür vorgesehenen Griffe.

**Die Zubehörteile befinden sich in diesem Kartonteil**

**Caution!** When forwarding it is indispensable to remove the turntable from the centre shaft and pack separately.

**Attention!** Pour le transport, il est indispensable que le plateau soit retiré de l'axe et emballé séparément.

**Achtung!** Es ist unerlässlich, dass der Plattenteller während der Beförderung von der Achse abgenommen und getrennt verpackt werde.