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ARISTON
AUDIO

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INTRODUCTION

1. IMPORTANT INSTRUCTIONS

- 1.1. It is critical that the main bearing housing does not become contaminated by dust or any other foreign matter. Such a condition can be avoided by retaining and replacing the bearing housing sealing plug if at any time the turntable drive hub/platter is removed.
- 1.2. Do not attempt to dismantle the motor/pulley assembly as this unit is tuned during production to provide optimum performance.
- 1.3. Your Ariston turntable can be supplied for service on 220-240 volts 50Hz or 110 volts 60Hz AC mains supply. Before connecting to the mains supply, check both the supply voltage and other information on the rating plate on the rear of the unit. If required at any time, a mains supply conversion kit can be obtained from Ariston Acoustics Limited.

2. GENERAL ASSEMBLY AND OPERATING INSTRUCTIONS

- 2.1. If no arm is supplied, refer to Section 4 in conjunction with the fitting instructions supplied with the tone arm of your choice.
- 2.2. Place the assembly on a flat surface, remove the bearing housing plug and cable retaining bands and if fitted, the suspension clamp screws.
- 2.3. Place the entire contents of the oil vial supplied into the bearing housing.
- 2.4. Fit the drive hub/platter, allowing the shaft to descend gently into the main bearing housing – **DO NOT USE FORCE.**
- 2.5. When fitting the drive belt, refer to Section 5 for RD80, Section 6 for RD110 and Section 7 for RD11 Superieur.
- 2.6. It is recommended that the turntable be run in for a period of 4 hours to allow the bearings to bed in.
- 2.7. The design of the cover and hinges is such that the cover will remain in the open position. It can also be easily lifted clear of the unit to cater for low overhead shelves, etc.
- 2.8. When the arm and cartridge are fitted and properly adjusted, the unit can be connected for operation.
 - (a) Connect the power supply cable to the outlet, if available on the rear of your amplifier, or use a suitable adaptor to connect directly to the mains electricity supply.
- 2.9. Ensure the tone arm is earthed through the amplifier, and if undue hum is detected, disconnect mains earth to the turntable should your supply specify same.
- 2.10. Ensuring that the turntable speed is compatible with the record (see paragraph 2.5.) the deck may be switched on.

3. LEVELLING PLATTER/TONE ARM BOARD — RD80 & RD110

The tone arm board may require levelling. This is achieved by adjusting the three spring tension nuts located below the chassis (fig. 1). Three access holes are located in the bottom cover of the turntable. Using the special box spanner provided, turn clockwise to raise and anti-clockwise to lower. The tone arm board should be flush to the top plate and the hub/platter completely level. For RD11 Superieur please refer to Special Instructions (Section 7).

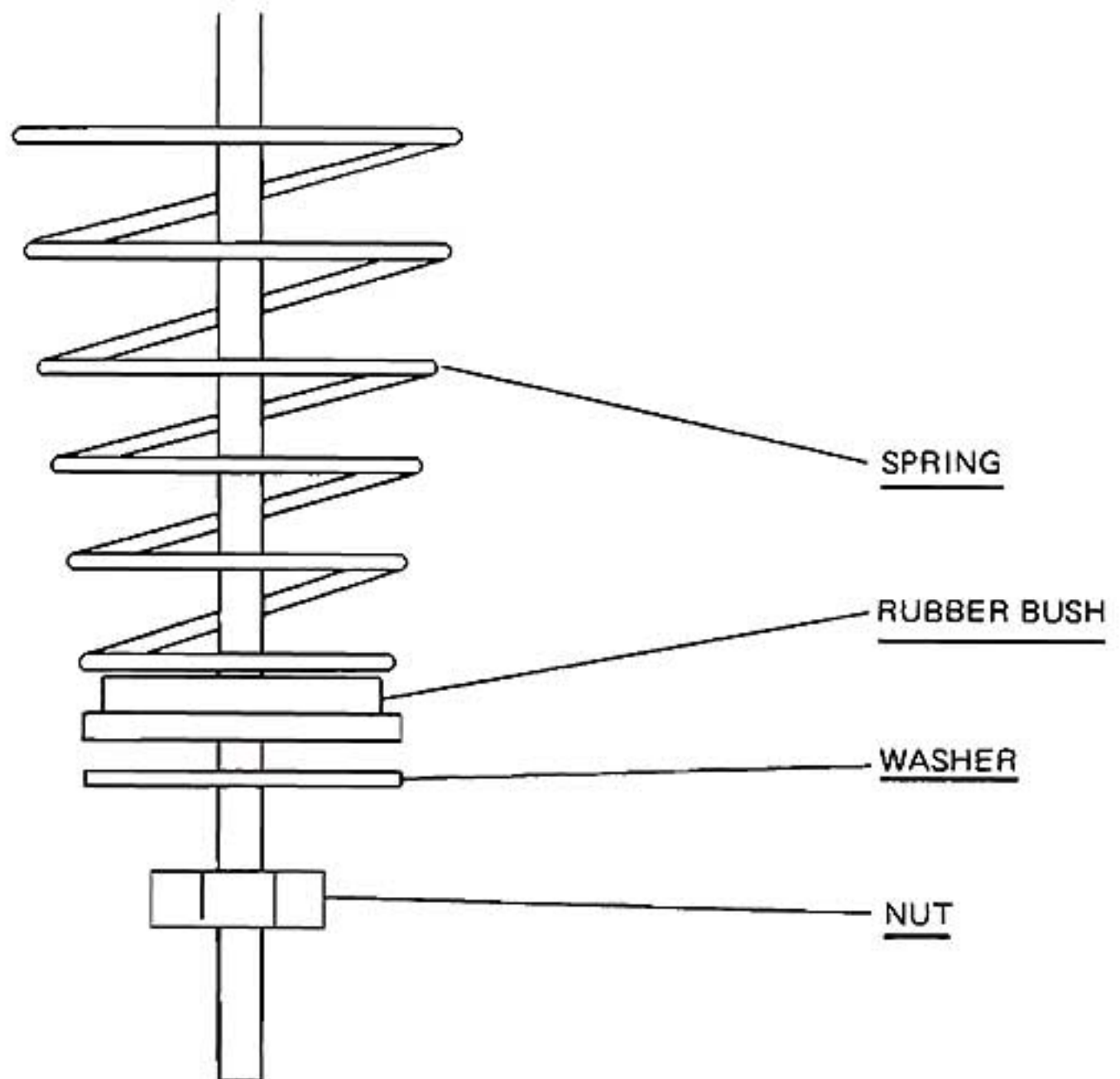
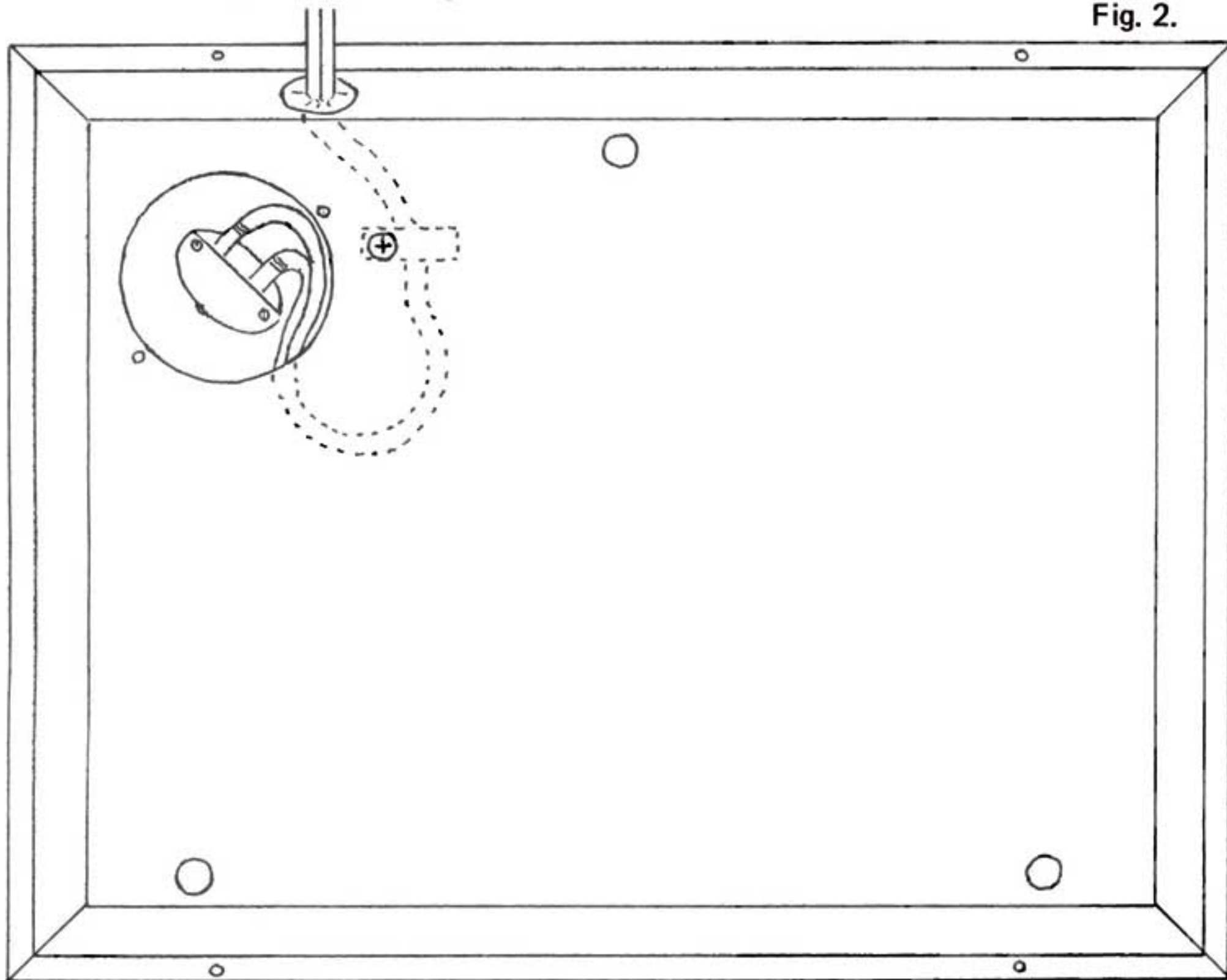


Fig. 1.

4. FITTING THE TONE ARM

- 4.1. Please refer to the relevant manufacturers instructions in all cases.
- 4.2. The tone arm board is removed for cutting and/or fitting of the arm by withdrawing the retaining screws using the socket wrench supplied in the accessory pack.
- 4.3. The plinth base is removed by withdrawing the four screws, to allow entry of the cable to the tone arm through the plastic retaining entry in the metal base. When carrying out any levelling adjustments as detailed in Section 3, always ensure that the cables for the tone arm are firmly held with the nylon clip provided for the purpose, allowing sufficient compliance in that part of the cable between the clip and the tone arm to allow the suspension to move unhindered (fig. 2). Alternatively, this can be done through the access plate located below the tone arm, without removing the base.
- 4.4. An arm earth point is provided on the sub chassis.
- 4.5. When the tone arm is correctly fitted, refer to Section 2 paragraphs 2.3 to 2.5. The turntable may require levelling again, refer to Section 3.
- 4.6. When fitting the cartridge, always adhere to the instructions provided by the manufacturer.
- 4.7. On completion of the above instructions refer to Section 2 – General Assembly and Operating Instructions.

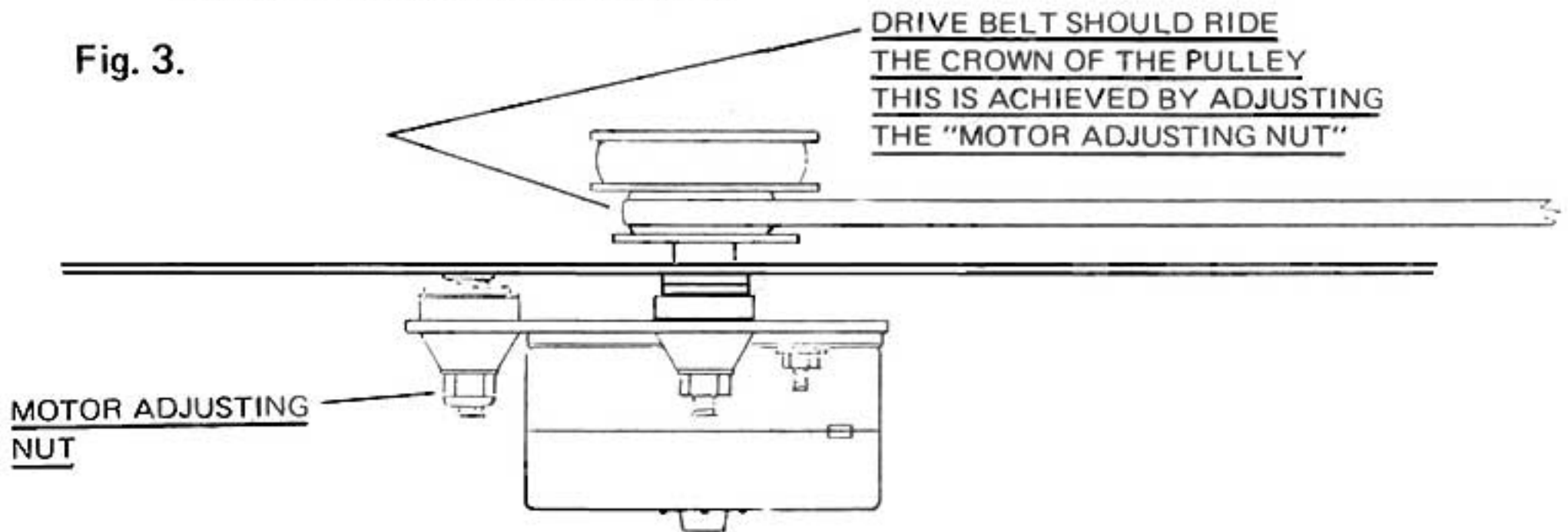
Fig. 2.



5. SPECIAL INSTRUCTIONS — RD80

- 5.1. Using the chalk supplied, treat the neoprene belt with a liberal coating and fit the drive belt on the motor pulley and drive hub.
Small pulley for $33\frac{1}{3}$ r.p.m. Large pulley for 45 r.p.m.
- 5.2. Place the record platter on the drive hub, upside down, with the Ariston acoustimat on top and switch on the turntable, in this attitude the belt may be viewed, check the belt runs on the crown of the pulley. Adjustment to the level of the pulley may be effected by turning the loc nut/spring assembly on the motor sub chassis see fig. 3.

Fig. 3.



6. SPECIAL INSTRUCTIONS — RD110

- 6.1. Remove the packing piece from under the motor pulley and fit the drive belt on the motor pulley and drive hub.
Small pulley for $33\frac{1}{3}$ r.p.m. Large pulley for 45 r.p.m.
- 6.2. Motor/Clutch Assembly.
The clutch assembly should be lubricated once every three months by placing a small drop of light machine oil between the pulley top and the clutch spring retaining washer (fig. 4).

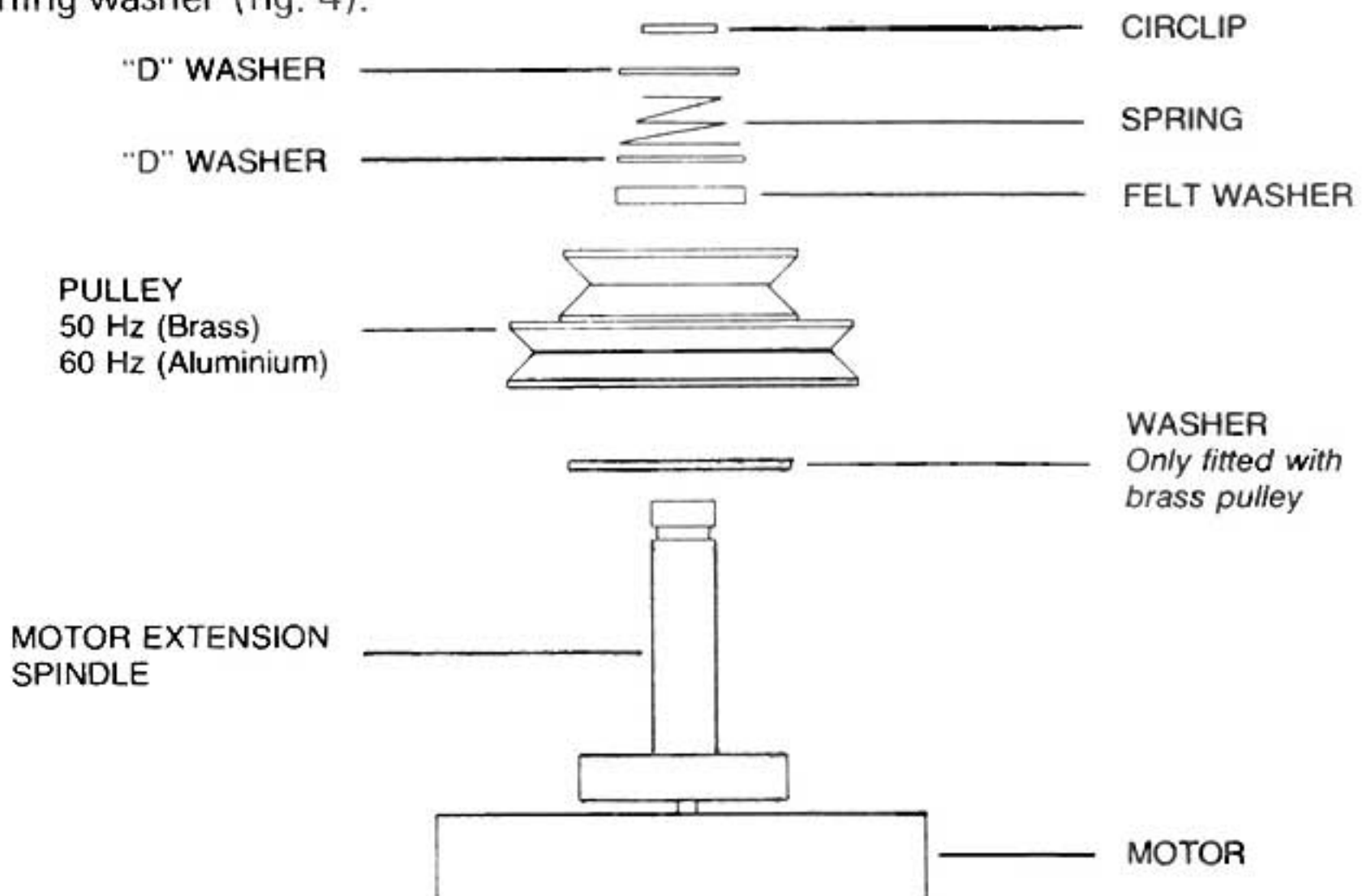


Fig. 4.

7. SPECIAL INSTRUCTIONS — RD11 SUPERIEUR

- 7.1. Fit the platter complete with the drive belt, allowing the shaft to descend gently into the main bearing — **DO NOT USE FORCE.**
- 7.2. With your index finger through one of the access holes in the platter hold the drive belt in position ready to pass around the pulley. (See fig. 5a and 5b).
- 7.3. Connect the power pack into the turntable via the socket located below the left hand hinge receptacle.
- 7.4. Ensuring that the turntable speed is compatible with the record-disc, the deck may now be switched on by operating the ON/OFF/SPEED SELECTOR switch. (See fig. 6).
- 7.5. **LEVELLING PLATTER/TONE ARM BOARD.**
The platter and tone arm board may require levelling. This is achieved by adjusting the three suspension adjusting screws located on the top-plate under the platter (see fig. 7). To carry out this operation the platter and mat are fitted in position. The screws are adjusted through the access holes in the platter, using a No. 2 point Pozzi-drive screwdriver. Flex the rubber mat up just far enough to gain access through the respective hole.
- 7.6. **SUSPENSION ADJUSTMENT.**
Adjust the suspension with the drive belt fitted. Whilst adjusting the three springs, bounce the platter gently in the area above the appropriate spring to ensure the suspension is entirely free. Any misalignment may be corrected by rotating the spring (see fig. 8).
- 7.7. **BELT SHEDDING.**
If the turntable consistently sheds the belt, in all probability the platter is set too high, or it is not parallel to the plinth. Please ensure that the felt pad on the underside of the platter is clear of the top plate.

ILLUSTRATIONS

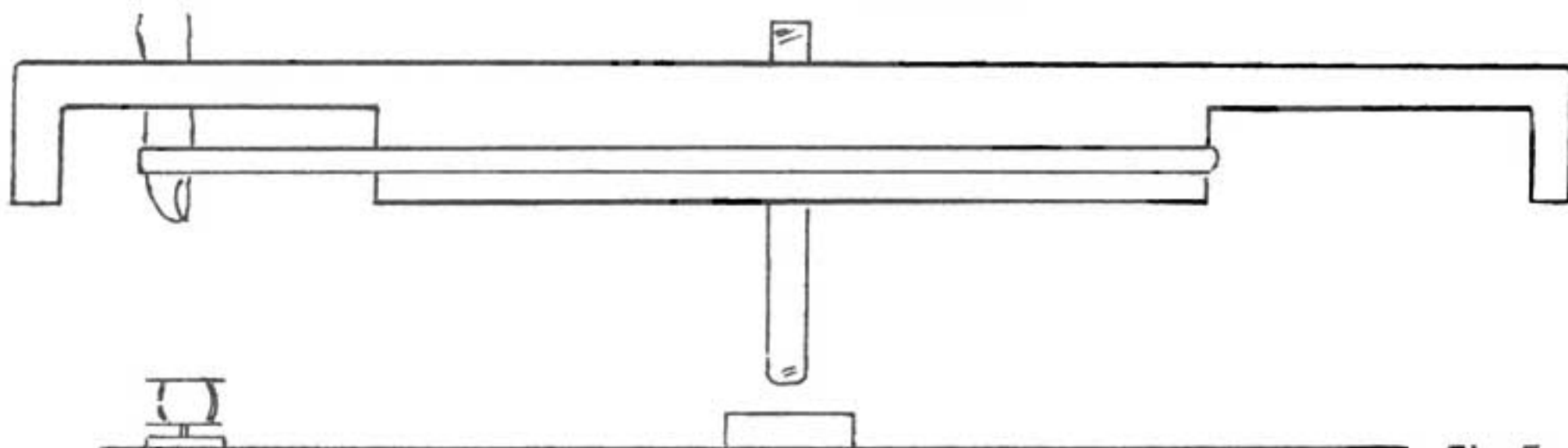


Fig. 5a.

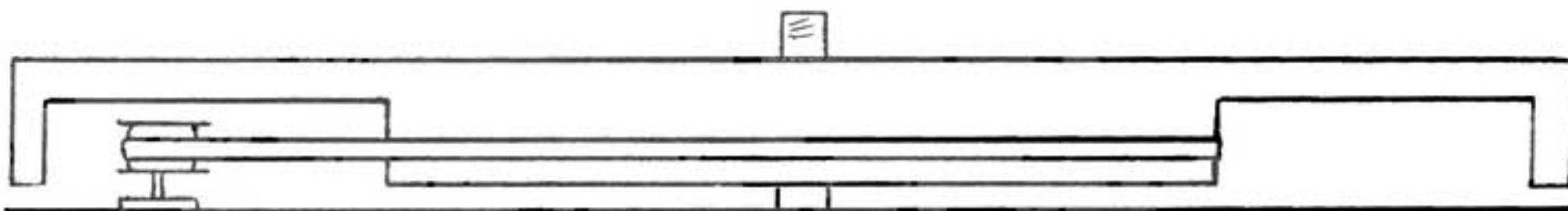


Fig. 5b.

Ensure the belt is running in the centre of the pulley and is not twisted.

Fig. 6.

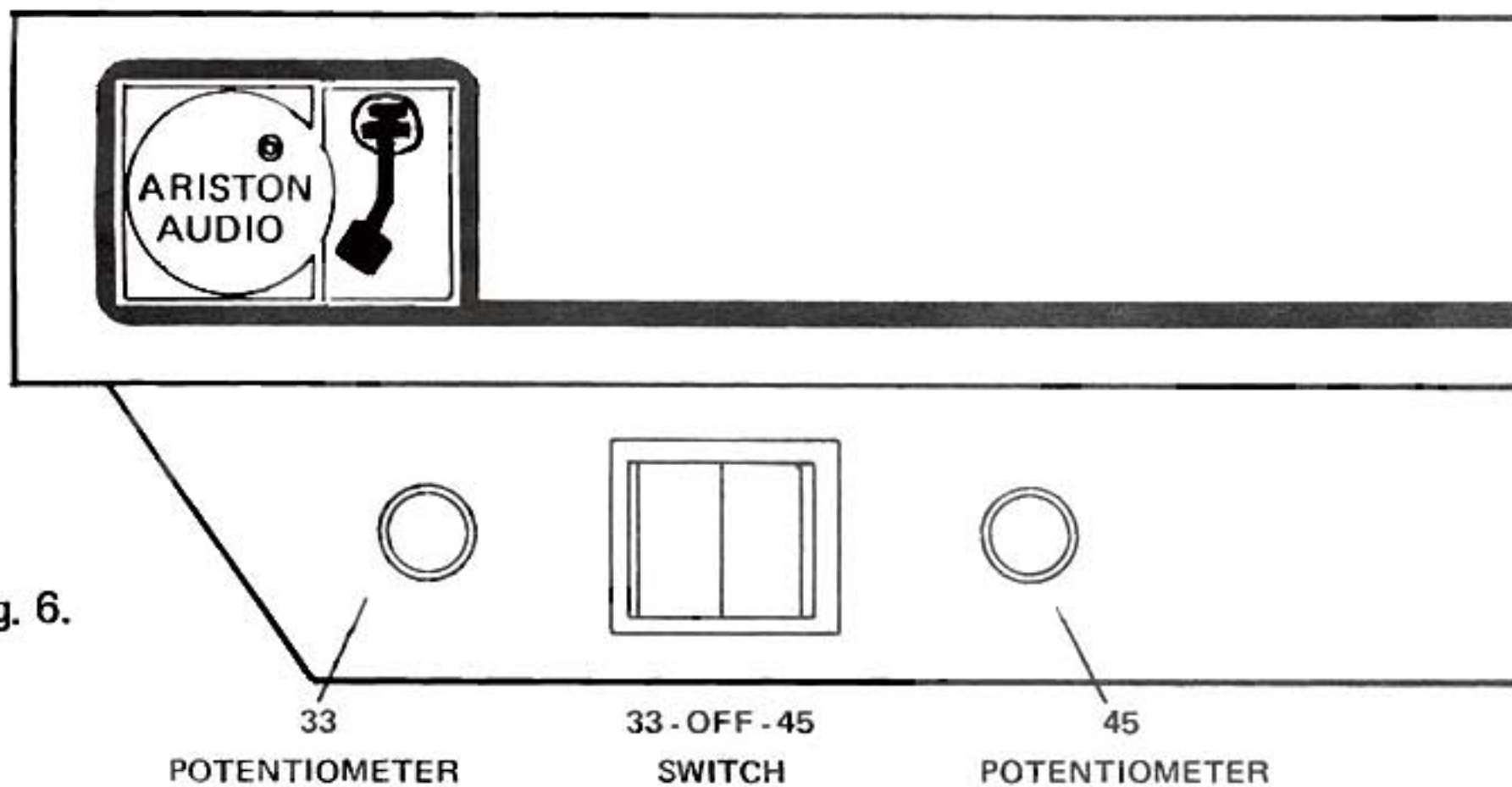
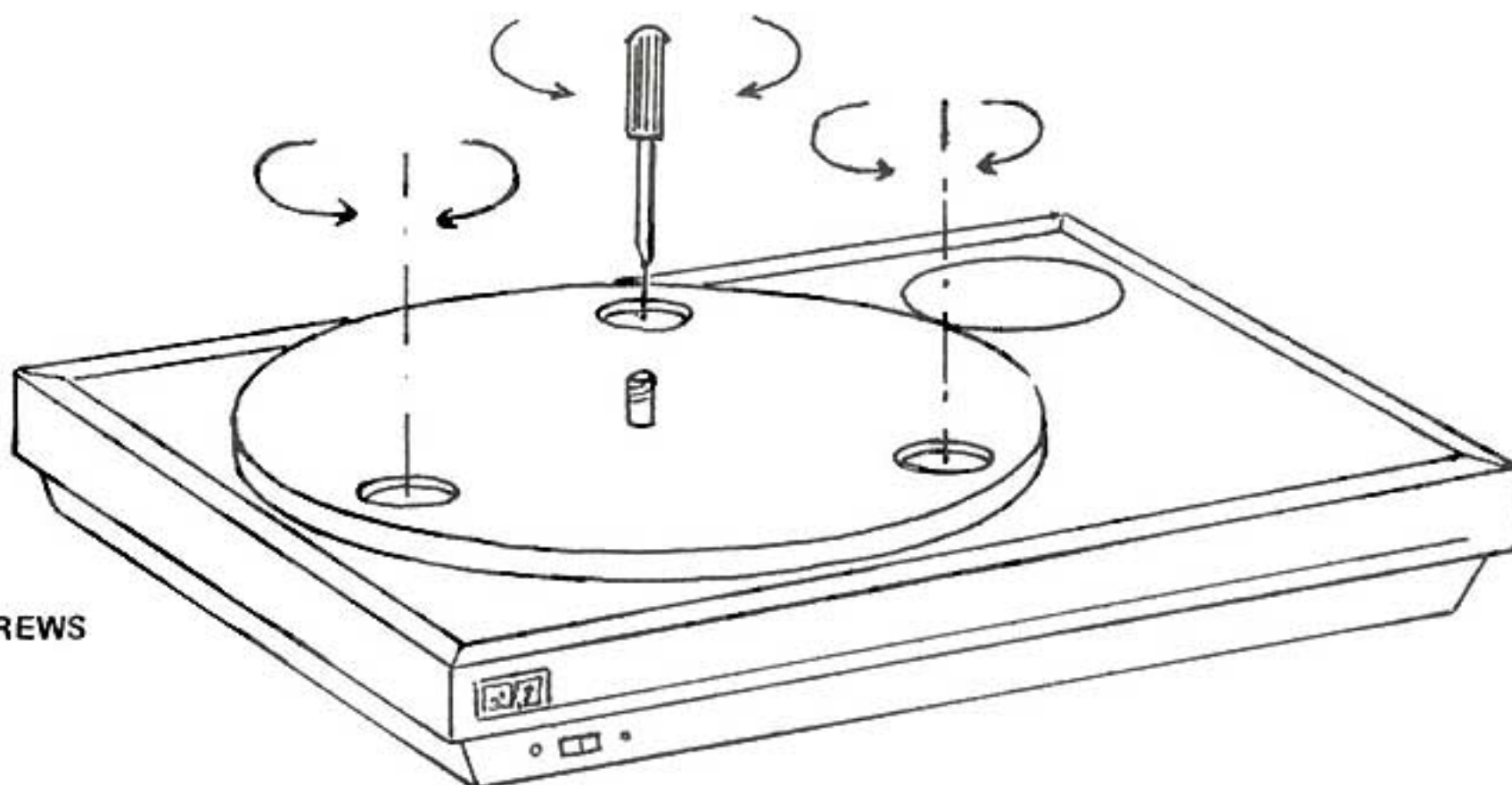


Fig. 7.

SUSPENSION
ADJUSTING SCREWS



SUSPENSION ADJUSTING
SCREW

SUSPENSION
ADJUSTER

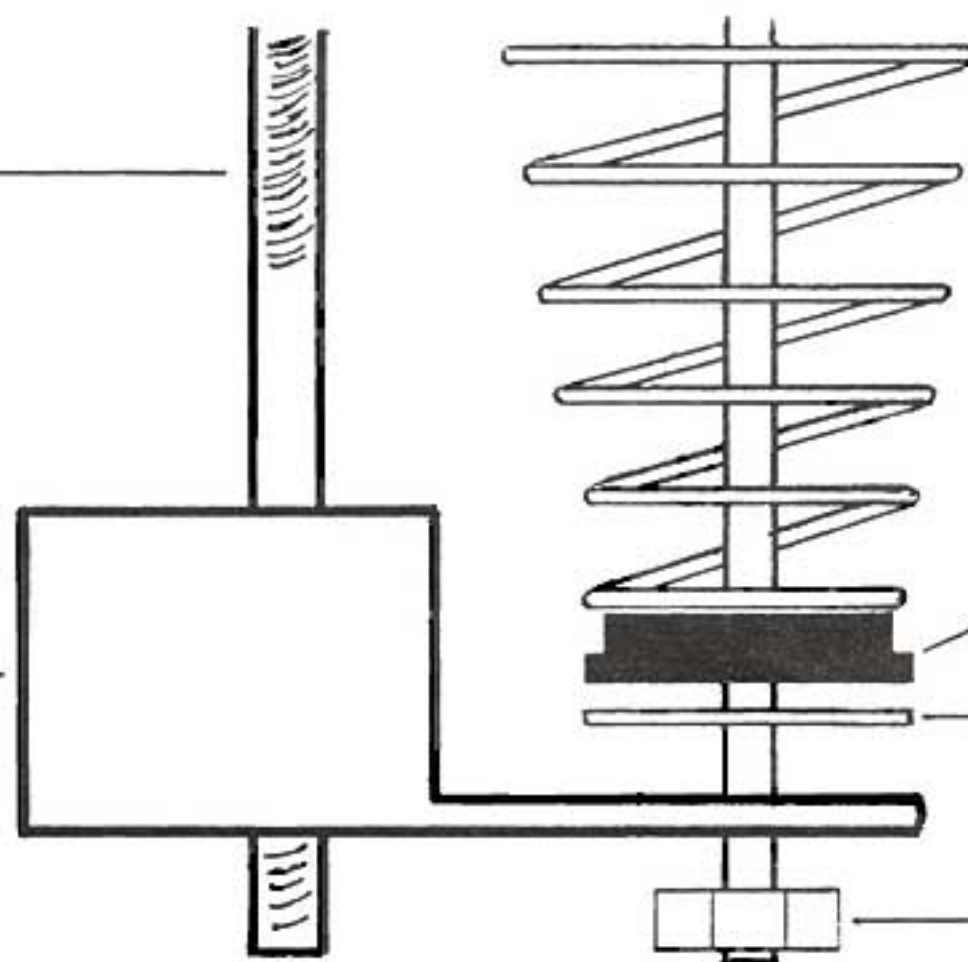
SPRING

RUBBER BUSH

WASHER

LOC - NUT

Fig. 8.



8. MAINTENANCE

8.1. Main Bearing.

To maintain optimum acoustic performance, regularly clean the bearing housing and top up with Ariston bearing oil as necessary.

8.2. Drive System.

The periphery of the drive pulley and the belt should be kept free from any traces of grease. Should they become contaminated, clean them with a lint free cloth dampened with lighter fuel, or methylated or similar type spirit.

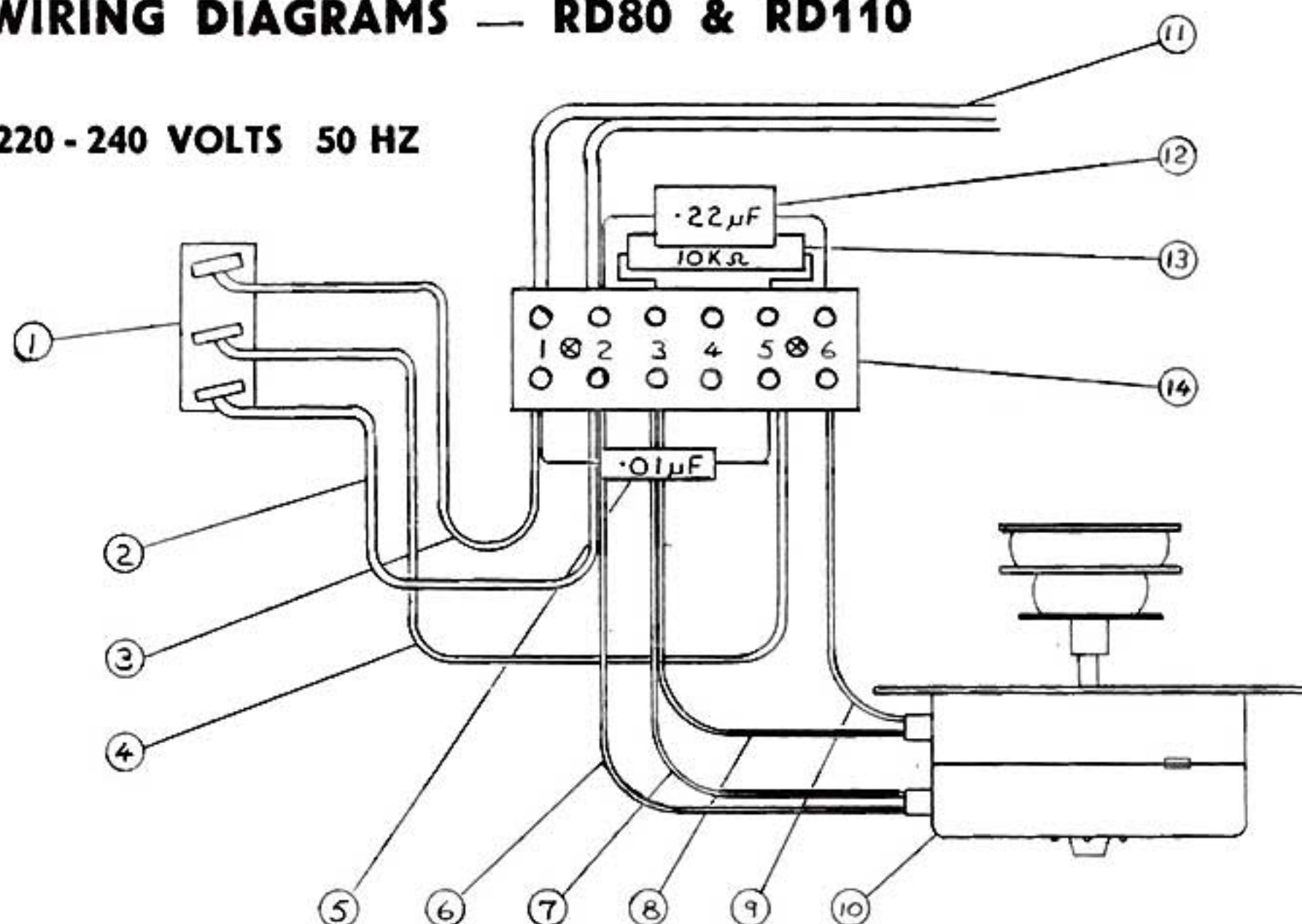
8.3. Exterior Finish.

The plinth and cover may be cleaned by the use of any proprietary household wax-type polish.

8.4. Do not use anything other than a clean dry cloth on the polished and lacquered surface of the record platter.

9. WIRING DIAGRAMS — RD80 & RD110

220 - 240 VOLTS 50 HZ

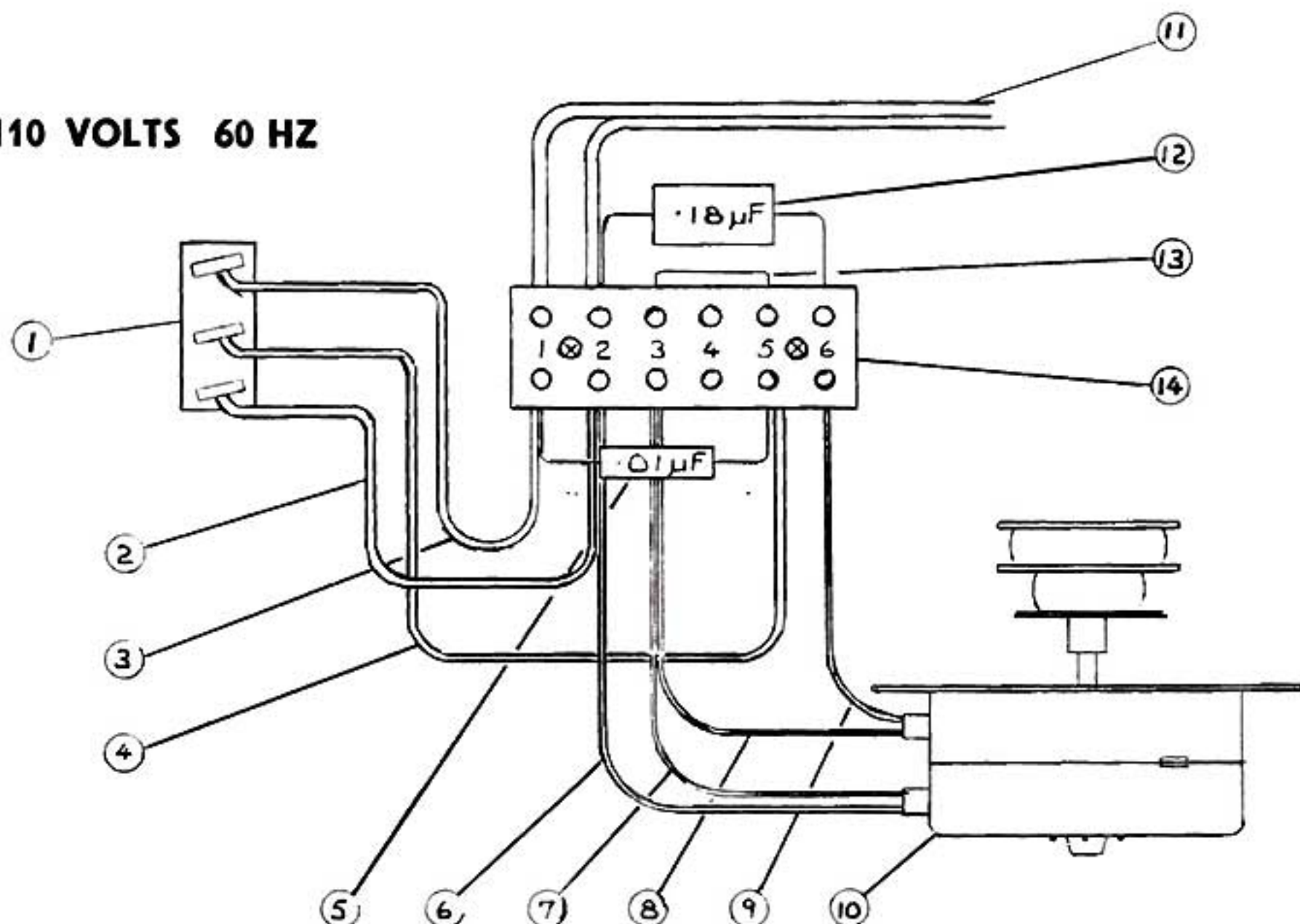


1. Switch.
2. Switch Wire Yellow.
3. Switch Wire Blue.
4. Switch Wire Red.
5. Switch Suppression Capacitor.

6. Motor Wire Red.
7. Motor Wire Grey.
8. Motor Wire Grey.
9. Motor Wire Blue.
10. Motor.

11. Mains Cable.
12. Motor Start Capacitor.
13. Resistor.
14. Terminal Block.

110 VOLTS 60 HZ



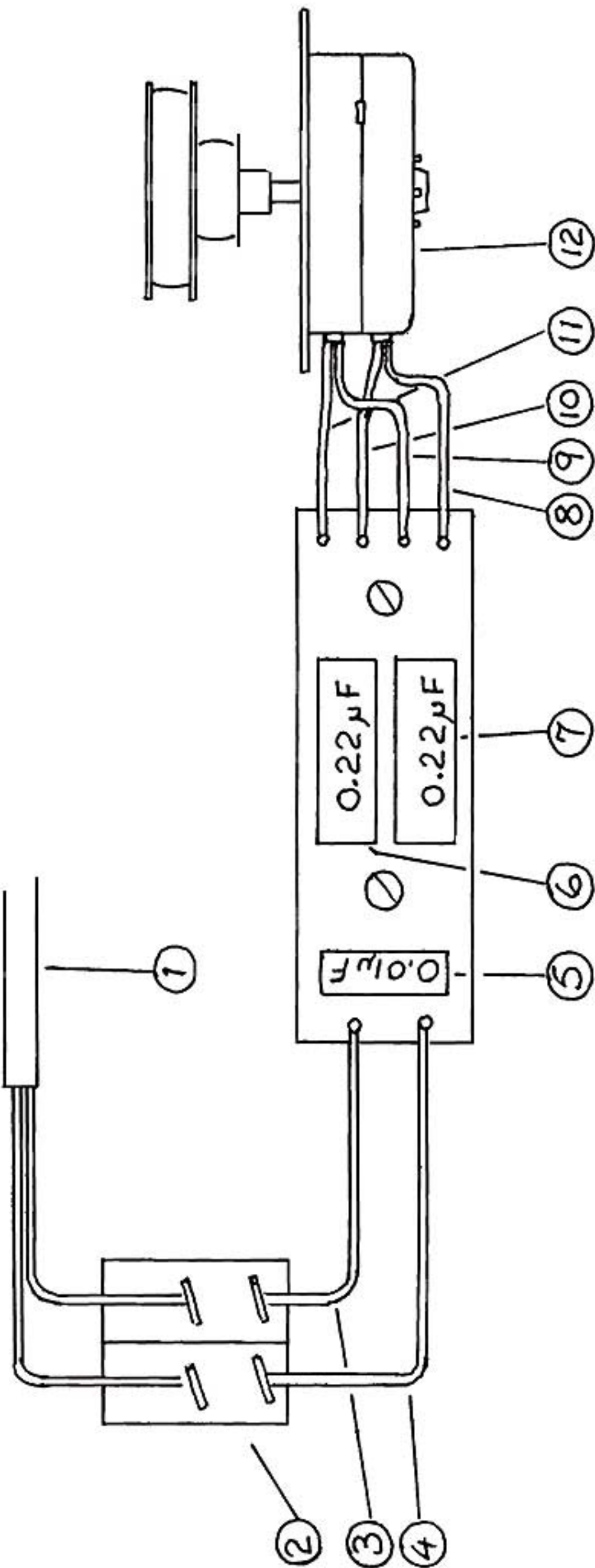
1. Switch.
2. Switch Wire Yellow.
3. Switch Wire Blue.
4. Switch Wire Red.
5. Switch Suppression Capacitor.

6. Motor Wire Red.
7. Motor Wire Grey.
8. Motor Wire Grey.
9. Motor Wire Blue.
10. Motor.

11. Power Cord.
12. Motor Start Capacitor.
13. Link Wire.
14. Terminal Block.

220 - 240 VOLTS 50 HZ

9. ALTERNATIVE LAYOUT FOR RD80 & RD110



1. POWER CORD

2. SWITCH

3. SWITCH WIRE BROWN

4. SWITCH WIRE BLUE

5. SWITCH SUPPRESSION CAPACITOR

6. VOLTAGE DROPPER CAPACITOR

7. START CAPACITOR

8. MOTOR WIRE BLUE

9. MOTOR WIRE RED

10. MOTOR WIRE GREY

11. MOTOR WIRE GREY

12. MOTOR

HINTS ON TUNING

Acoustic Feedback.

Acoustic Feedback occurs when the isolation of the pick up from the loudspeakers is inadequate. Vibrations from the latter are received by the pick up, turned into an electrical signal and returned via the amplifiers to the loudspeakers. The process is rapidly repeated and unless the equipment is switched off or the volume control retarded the resulting signal level may cause overload damage to the amplifiers and loudspeakers.

If feedback is suspected, carry out a simple check as follows:

Switch off the turntable and place the stylus on a stationary record, slowly advance the column control up to and a little beyond the normal maximum listening level.

If and when feedback occurs it will be heard as a howl of rapidly rising intensity, so be ready to retard the volume control quickly.

If the test shows that feedback occurs within or close to normal listening levels, attention should be given to the foregoing points.

Experiment with the positioning of the turntable should reveal marked differences in the level of feedback. Ensure the sub chassis is not shortcircuited and is quite free to move both vertically and horizontally.

The spring suspension should be adjusted to as low a pitch as possible. The higher the platter sits on the turntable the greater the acoustic feedback likelihood.

Mechanical Noise.

There are various areas which may contribute to mechanical noise, the likeliest of these are the bearings which may require oil, the suspension which may be short-circuited or the motor. Check the electrics and all connections, ensure the wiring is correct for the electrical current and frequency (see Figs. 4 and 5).

Wow.

The mostly likely source of wow is the drive belt, which may have become contaminated with oil. Remove the belt and clean it with lighter fuel, subsequently dusting it with chalk. Clean the belt faces on both the pulley and the hub with lighter fuel.

Rumble.

As the word implies, this term describes the intermittent low frequency sounds heard through the loudspeakers and can be caused by foreign matter or imperfections in the moving parts of the turntable. The importance of mechanical excellence in these areas cannot be overstated since the pick up cannot discriminate between the information on the record and unwanted vibrations within the turntable. Always ensure the bearing is topped up with light machine oil. Ensure the sub chassis is decoupled and the motor rubber grommets are correctly fitted, and the motor cables are not tight causing the motor to lean at an angle. The motor should always float in a compliant manner to allow the belt to move with the suspension. Ample clearance should be allowed round the screening of all electrical cables.

The "P" clip which holds the audio output lead should always be as tight as possible to contain vibrations in the lead in the area between the "P" clip and the tone arm. This part of the lead should also have sufficient play to allow the sub chassis to move without hinderance.

Suspension Adjustment.

Adjust the suspension with the drive belt fitted. Whilst adjusting the three springs, bounce the platter gently in the area above the appropriate spring to ensure the suspension is entirely free.

ARISTON ACOUSTICS LIMITED

Unit 176, Brieryside, Prestwick Airport,
Prestwick, Ayrshire KA9 2RB, Scotland