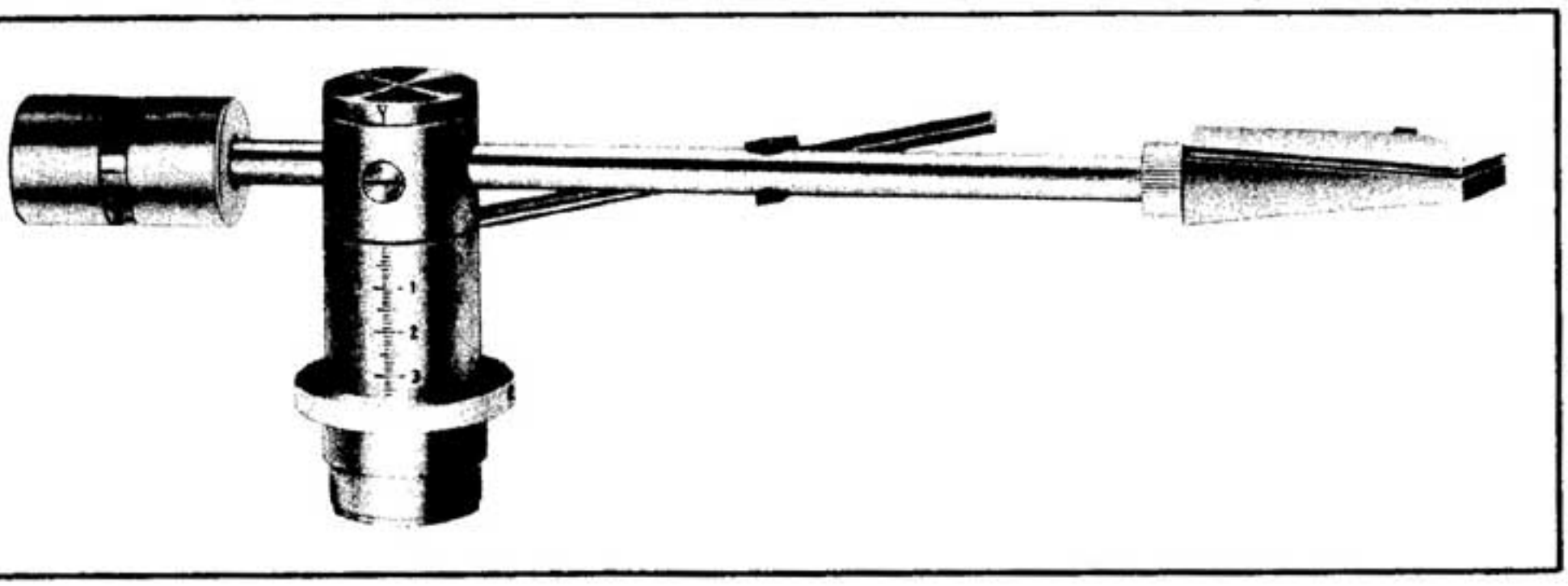
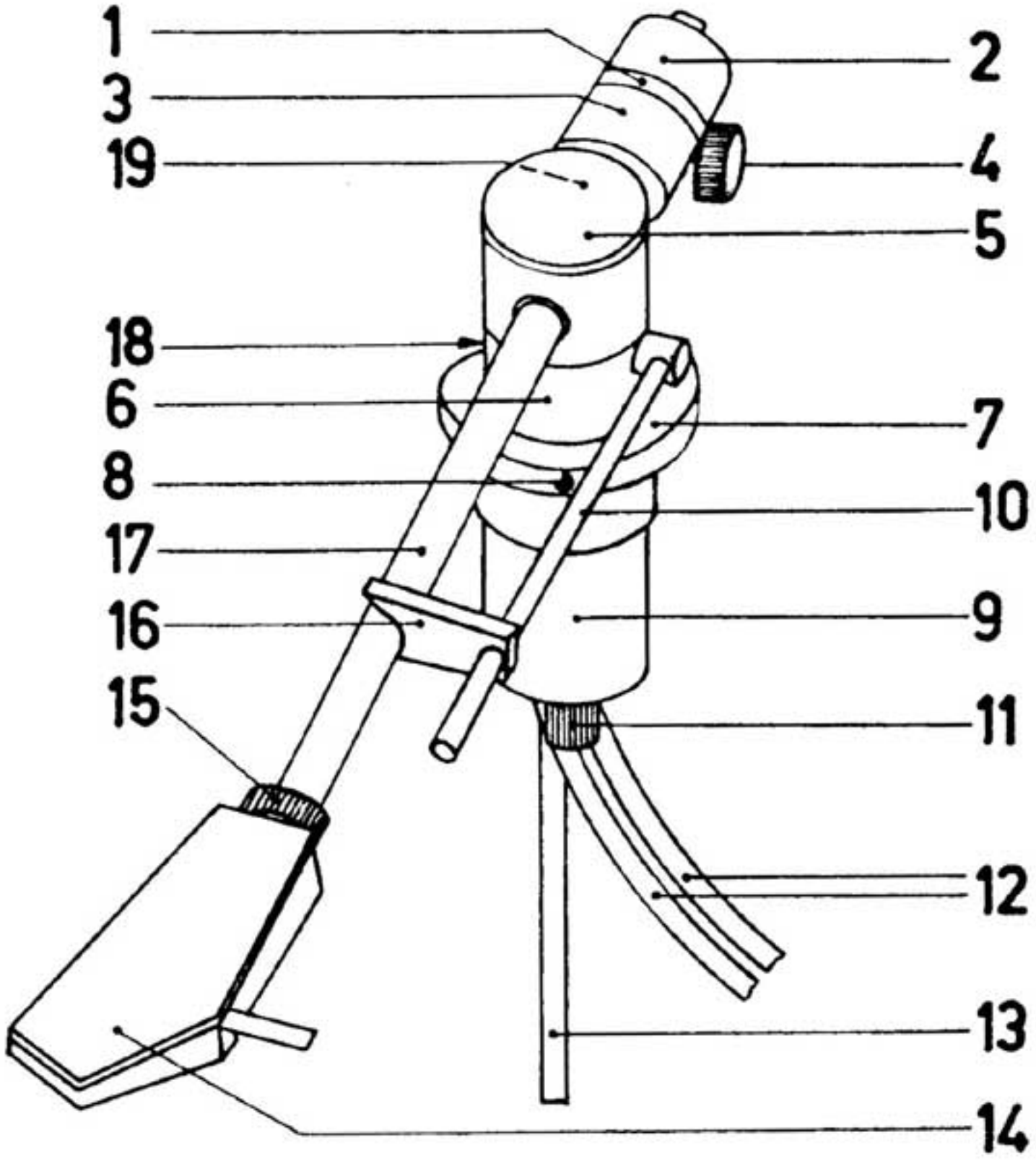
Goldring-Lenco P77

PRECISION
MULTI-PLANE
TRANSCRIPTION
ARM





1 Counterbalance weight.
2 Rear adjustment ring.
3 Front adjustment ring.
4 Knurled adjustment knob.
5 Calibrated stylus pressure adjustment.
6 Pedestal spindle.
7 Pedestal base.
8 Clamping screw.
9 Screening can.
10 Lowering arm.
11 Securing screw for screening can.
12 Pick-up lead.
13 Earth lead.
14 Plug-in shell.
15 Plug-in shell securing nut.
16 Rest clip.
17 Pick-up arm tube.
18 Scale for height adjustment.
19 Stop screw.

TECHNICAL SPECIFICATION

Overall length of pick-up arm 330 mm (13″).
Diameter of pedestal 34 mm (1.34″).
Overall height with screening can 150 mm (5.9″).
Maximum height adjustment 30 mm (1.18″).
Tracking length (turntable spindle to pedestal spindle) 210 mm (8.27″).
Stylus overhang 17.1 mm (0.67″).
Maximum adjustment of Stylus position 10 mm (0.39″).
Offset angle 23° 12′.
Tracking error ± 0.8°.
Length of cable 1.10 m (43″).
Capacity (plug-in shell to amplifier input) 160 pF.
Moment of inertia (without cartridge) 148 grs²/mm.
Low frequency resonance with cartridge of compliance 5 x 10^{-6} cms/dyne = 10 c/s.

The Pick-up arm can be statically balanced out in all planes.
The plug-in shell takes any cartridge on standard 0.5″ centres, and has adjustable cartridge mounting plate to reduce tracking error.
Complete cable screening from cartridge to amplifier.
Hydraulically damped positioning and lowering device.

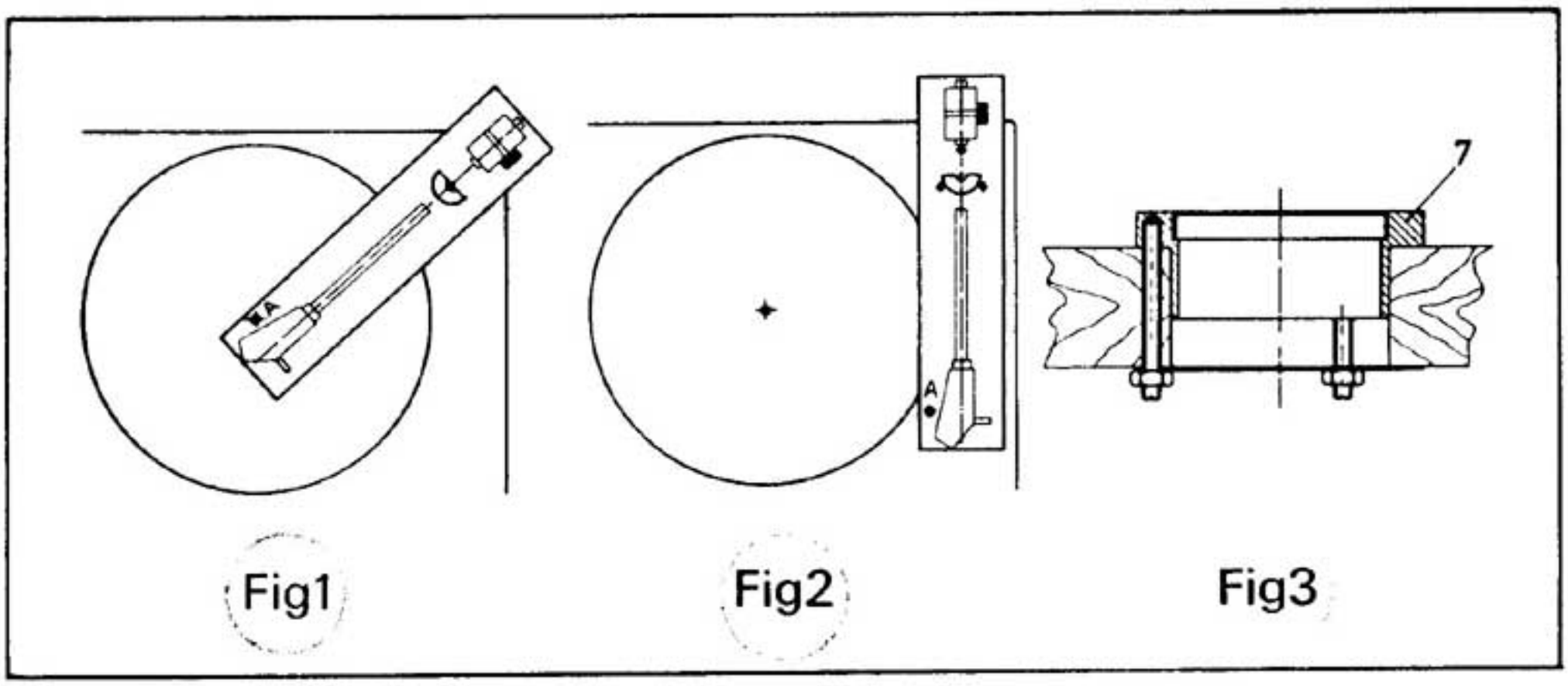


Fig1 Fig2 Fig3

General Description

The Swiss engineers who developed the new P77 have not only achieved a significant technical advance but have paid the genuine connoisseur the compliment of arguing that he does not need to *see* masses of intricate mechanism to convince him that an instrument is good.

The P77 is a beautifully proportioned instrument that can be perfectly balanced in all planes (you can mount the turntable and arm vertically on the wall if you feel so inclined!) Once balanced for any head/cartridge assembly, a note of 'dial combinations' is all that is necessary to interchange heads as often as you like. The cartridge of your choice is attached to a mounting plate which is adjustable in the head-shell to achieve the stylus position giving minimum tracking error. The third calibrated dial, at the top of the pedestal is used to set stylus pressure irrespective of cartridge changes and without using a separate pressure gauge. The lever (incorporating a simple armclip) applies a gentle hydraulic brake so that you can poise the stylus precisely over the record; move it down and the stylus will descend as slowly for 8 grams pressure as for $\frac{1}{2}$ gram.

The P77 transcription arm is a precision instrument and should be handled as such. It is recommended that the following instructions should be read through carefully before beginning to mount the arm.

Mounting the Pick-up Arm

Place the template over the turntable with the centre spindle protruding through hole 'A'. Swing the template round until the most suitable place for the pick-up arm pedestal is found. Mark the centre of the large hole (see Fig 1). Remove the template from the turntable and place it parallel to the edge of the turntable, mounting plate or baseboard, and mark the centres of the three small holes (see Fig 2). Mount the pedestal base (7) so that the clamping screw (8) is easily reached. If the pick-up is being mounted on wood, then screw the three bolts into the pedestal base (7) and secure these beneath

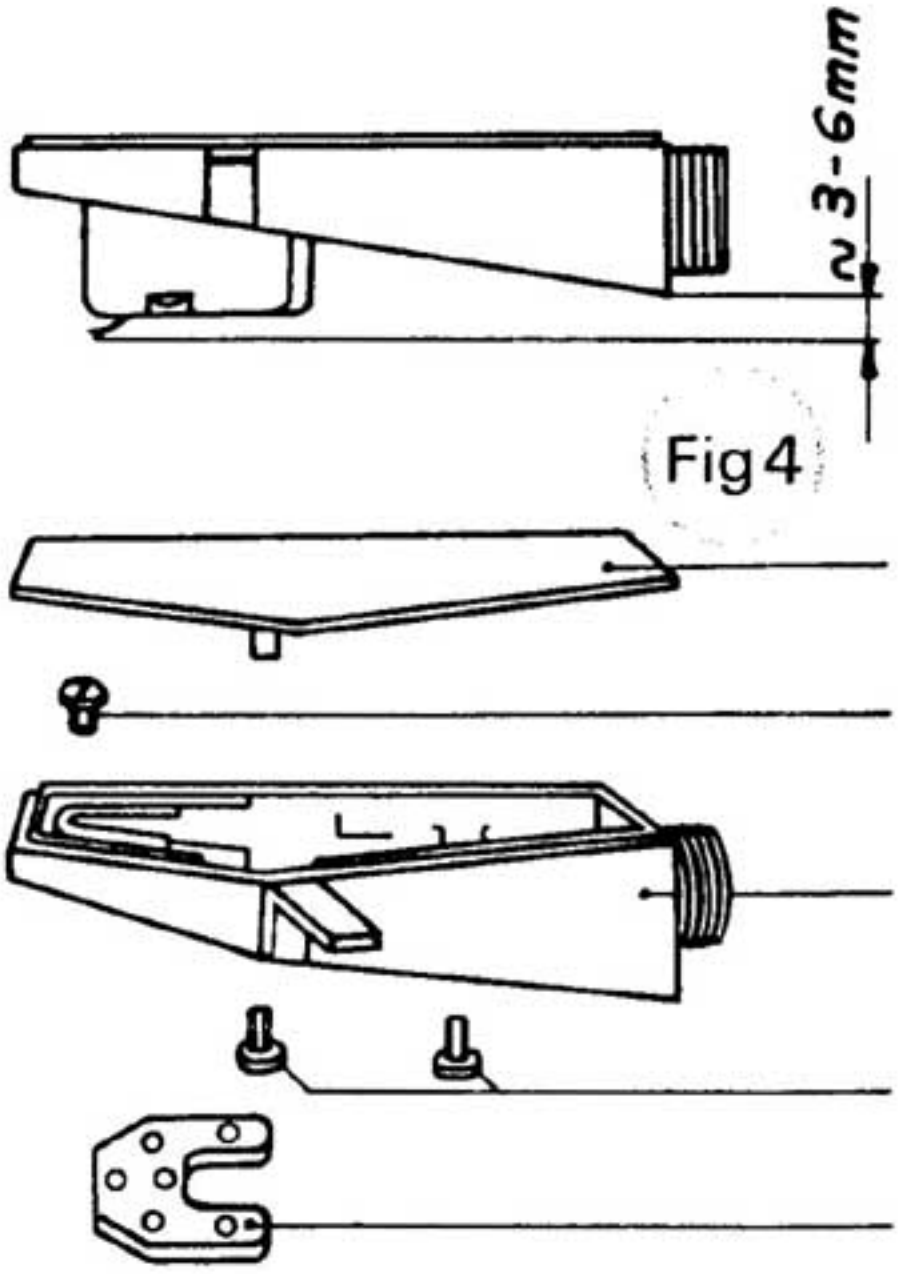


Fig 4

Mounting material

2 x 3 mm screws (0.12″)
2 x 8 mm screws (0.32″)
2 x 12 mm screws (0.47″)
2 x Stand-off pillars 3.5 mm long (0.13″)
2 x Stand-off pillars 5.5 mm long (0.22″)

Fig 4

1 Cover.

2 Mounting Plate securing screws.

3 Connector for pick-up arm, with 4 silvered contacts.

4 Cover securing screws.

5 Adjustable mounting plate.

the base board with the ring and nuts (see Fig 3). Pass the pick-up spindle through the pedestal base from above and at the estimated correct height fasten the clamping screw with a screwdriver.

Mounting the Counterbalance Weight

Push the counterbalance weight (1) on to the guideway from behind and press forward lightly. Turn the knurled knob, (4) to move the counterbalance weight forwards and backwards.

Mounting the Cartridge into the Plug-in Shell

Loosen the cover securing screws and remove the cover (see Fig 4 illustrations).
Using stand-off pillars if necessary, mount the cartridge on the mounting plate and fix the mounting plate with the cartridge on it into the plug-in shell with the securing screws.
Attach the plug-in shell to the pick-up arm and secure with the knurled collar. Adjust the height of the pick-up arm so that the arm tube is horizontal when the Stylus is on the record. Note the height indicated on the scale (18).
When the pick-up arm has been mounted, cut the template along the dotted line and use it as a guide for adjusting the Stylus position. The semi-circular cut-out in the template is placed against the pedestal of the pick-up arm and the hole 'A' over the centre spindle of the turntable. Remove the pick-up arm from the clip (16) and swing towards the centre of the turntable. Lower the lifting lever (10) and place the pick-up arm on the template. Adjust the mounting plate with the cartridge on it until the Stylus point coincides exactly with the black mark, then tighten the mounting plate securing screws, raise the lifting arm and secure pick-up in the clip (16).
Remove the plug-in shell and attach the cable contacts to the cartridge.

Red	R	Right-hand channel
White	GR	Earth (right-hand channel).
Green	L	Left-hand channel
Blue	GL	Earth (left-hand channel).

Secure cover to plug-in shell.

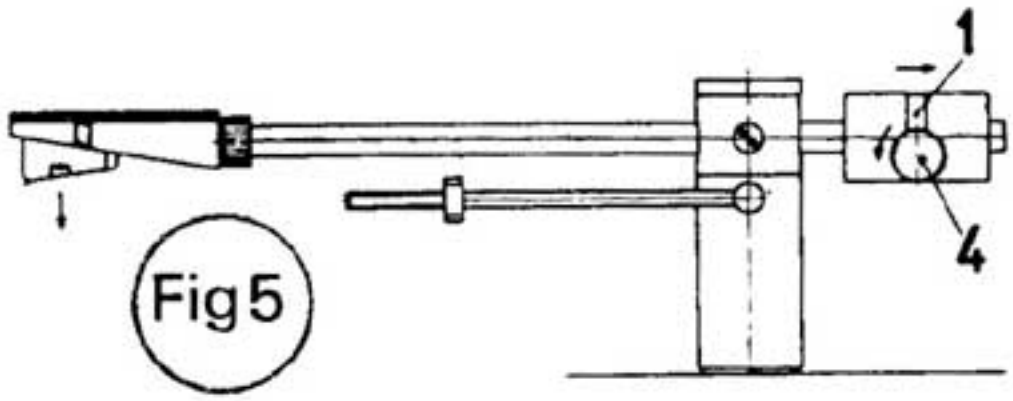


Fig 5

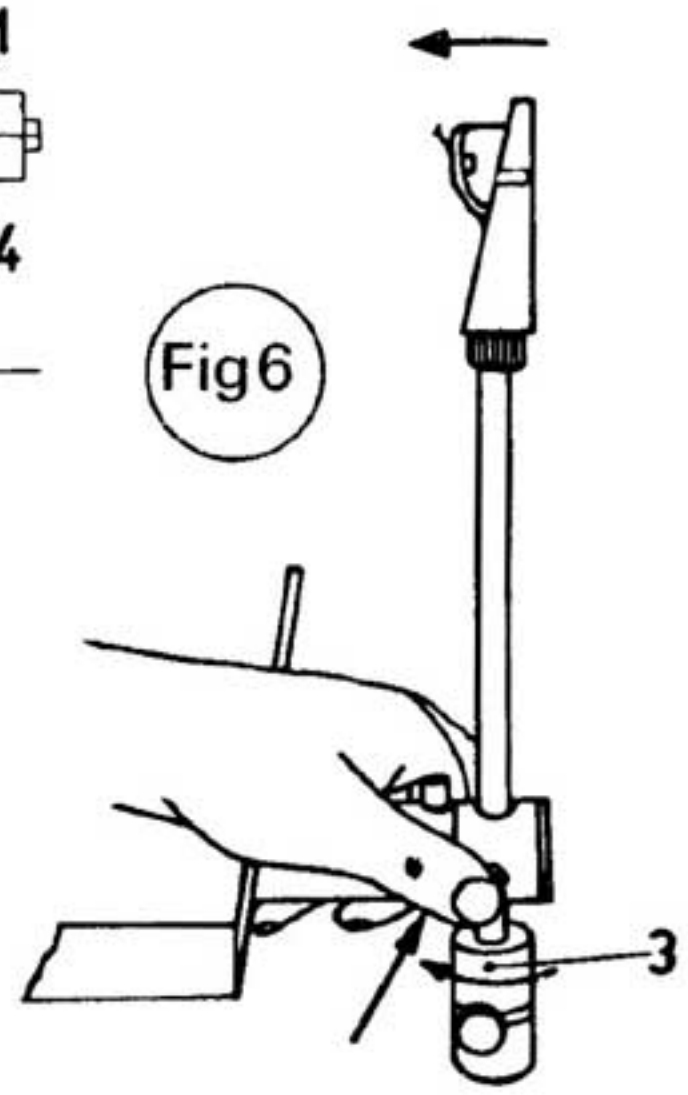


Fig 6

Balancing

1 Place the pick-up arm on a table (see Fig 5) adjust the knurled wheel on the counter-balance weight until the pick-up arm remains horizontal.
2 Place the pick-up spindle against the edge of the table (see Fig 6) turn the front adjustment ring (3) until the pick-up arm remains stationary in the vertical position, as shown in Fig 6. Hold the pick-arm spindle securely so that it does not move.
3 Place the pick-up spindle against the edge of a table in the position shown in Fig. 7 and turn the rear adjustment ring until the pick-up arm remains stationary in the position illustrated (2).

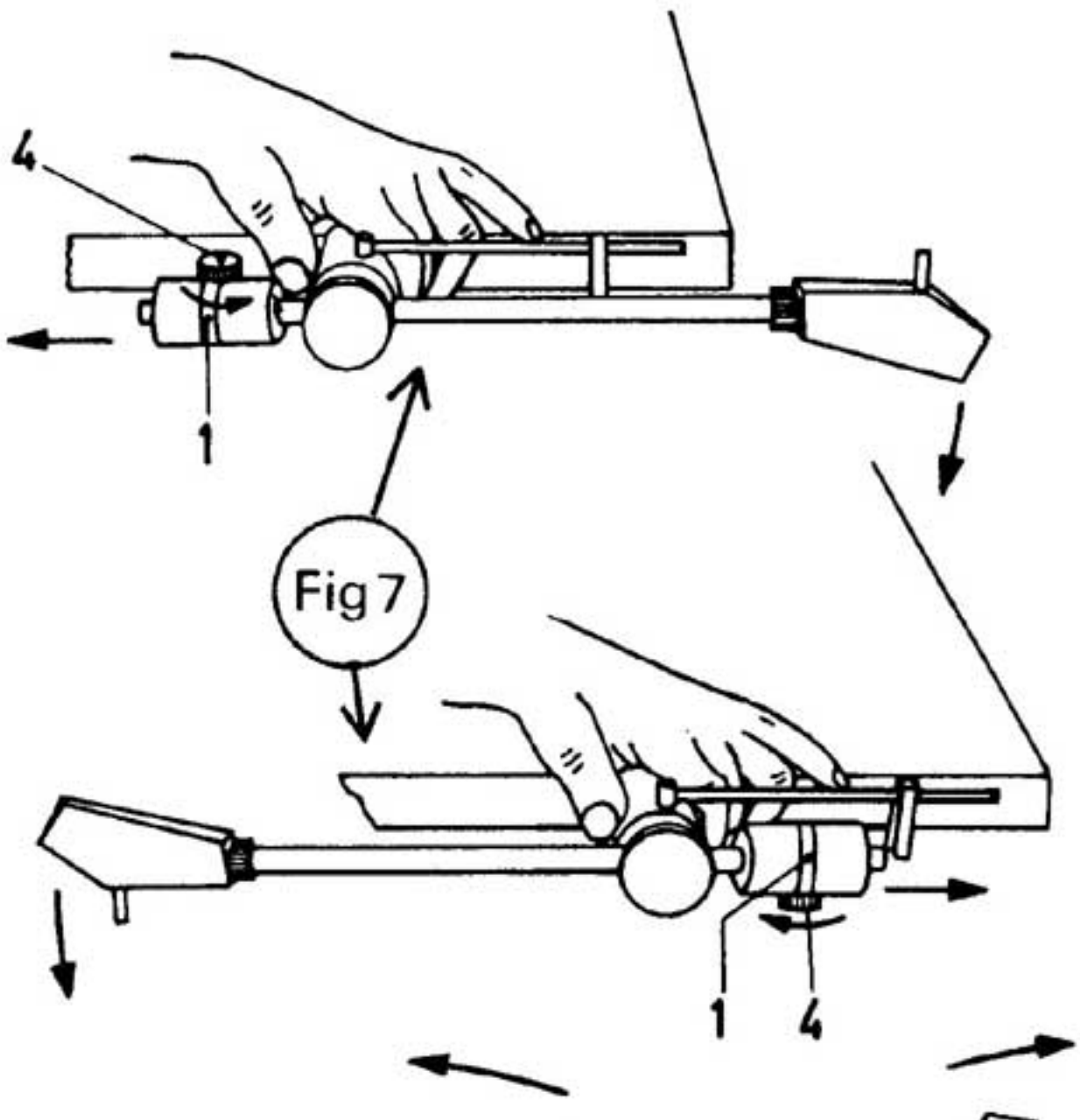
BALANCING OUT OF THE PICK-UP ARM

Preparation: Loosen clamping screw (8) and remove pick-up arm from pedestal base (7). Remove arm from clip, (16) press lowering lever down After a few seconds the pick-up arm can be turned through 360°. Set adjustment rings (2) and (3) to 0.
IMPORTANT. If the lowering lever is in the upper position, then the arm must be secured in the clip and must not be turned any more. If, when the lowering lever is in the upper position, there is any obstruction to the movement of the pick-up arm, the lowering lever should be pressed down and after a few seconds the pick-up arm will then move freely again.

Stylus protectors should be removed from the cartridge. Stylus pressure adjustment dial (5) is now set to the triangular mark. The balancing out of the pick-up arm must be achieved by alternately altering the three variables as described above. The pick-up arm is balanced when it remains stationary in any position. The indicated movements of the head' shell can be corrected by the adjustments to the counterbalance weight shown in figures 5, 6, 7, 8 and 9.
If you possess more than one plug-in shell the settings of the two adjustment rings should be noted, eg — 1.8 + 2.3. You can then set the two rings to the required positions when the plug-in shells are changed.

To Play

Now fix the screening can (9) with the plug to the pedestal spindle (6) so that the markings are exactly one above the other. Then pass the cables (12 & 13) and the pedestal spindle and screening can through the pedestal base (7) and adjust the height of the pick-up arm to the correct position with the aid of the scale (18).
The lowering arm (10) should be parallel to the edge of the turntable unit.
The Stylus pressure can now be set accurately from 0.5 to 8 grams by means of the Stylus pressure adjustment dial (5).
By pressing the lowering arm (10) downwards, a hydraulically damped lowering device gently eases the pick-up onto the record.

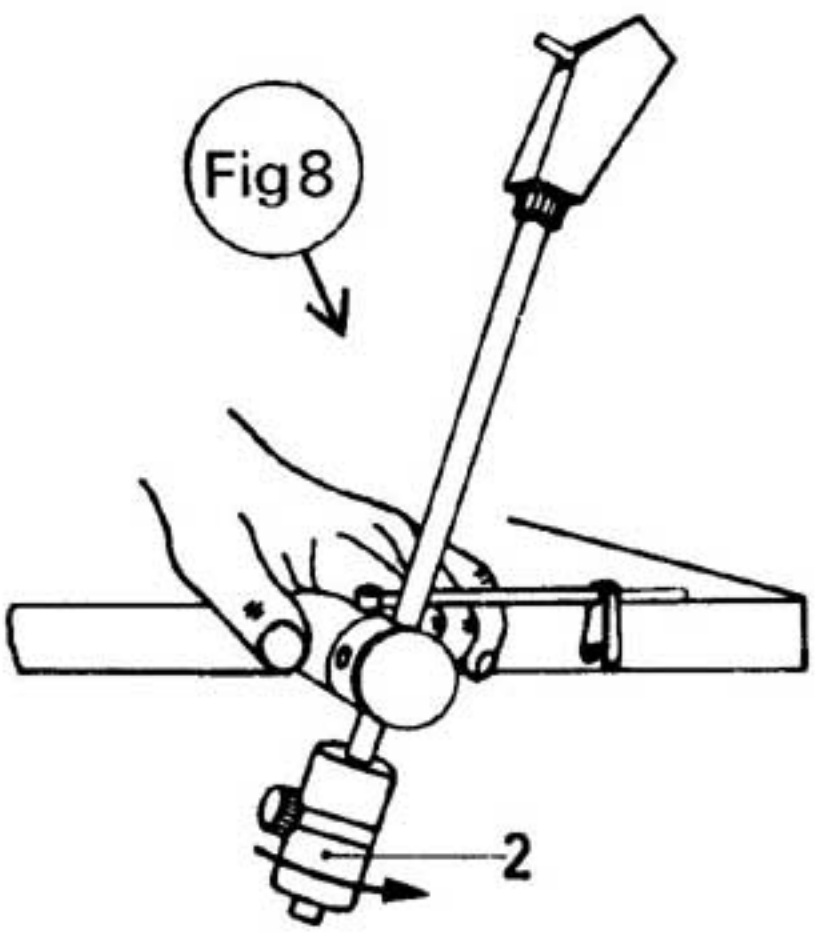


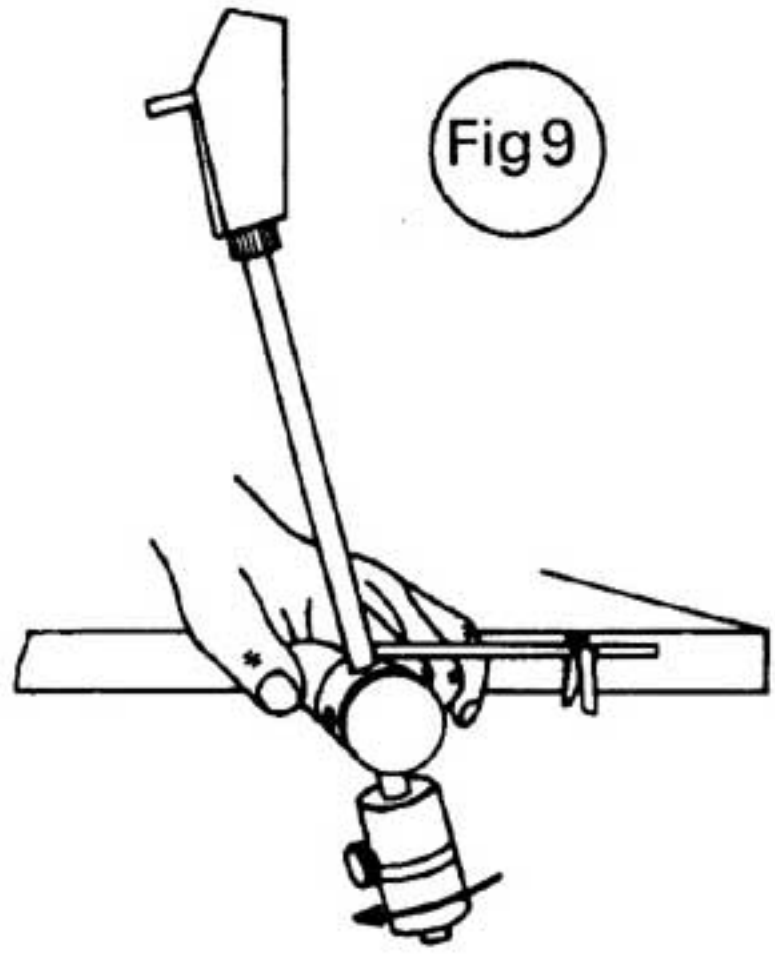
Balancing (Cont.)

4 Place the pick-up spindle against the edge of a table as shown in Fig 8 and the pick-up arm should remain stationary in either plane. If any correction is necessary, it must be made by a very slight movement of the counterbalance weight (1) by means of the knurled knob (4).

5 If an adjustment was necessary, then procedure 2 (opposite) should be repeated.

6 Place the pick-up arm against the edge of a table and balance out as shown in Figs 7 and 9 until the pick-up arm remains stationary in every position. If this is not possible, then a further slight adjustment as in procedure 4 (above) must be made and procedures 2 to 6 repeated.





GOLDRING MANUFACTURING CO.(GB)LTD.
486-488 HIGH ROAD, LEYTONSTONE, LONDON, E.11. TELEPHONE: LEY 8343