

# INSTRUCTIONS MODEL 3009 SERIES II IMPROVED



# SME

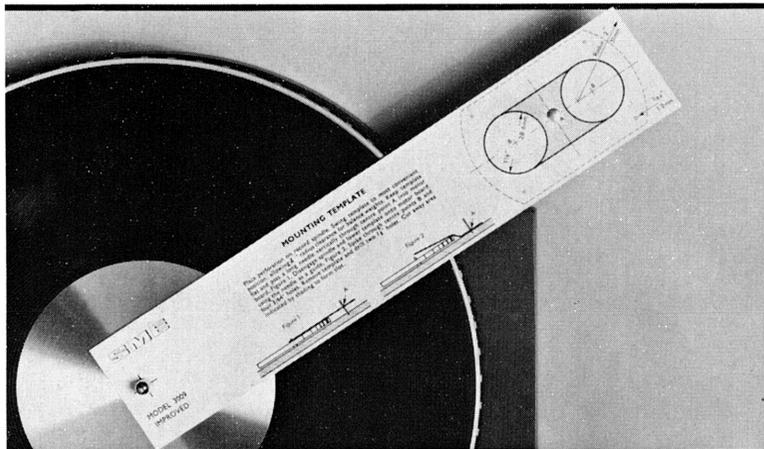
SME Model 3009 Series II Improved precision pick-up arms combine latest design features with the same high quality engineering and finish that made their predecessors famous for more than a decade.

Each arm is meticulously built and tested and will meet its specification reliably through many years of service. Skilful design and choice of materials combine high mechanical strength with low inertia and friction ensuring full suitability for professional as well as domestic application.

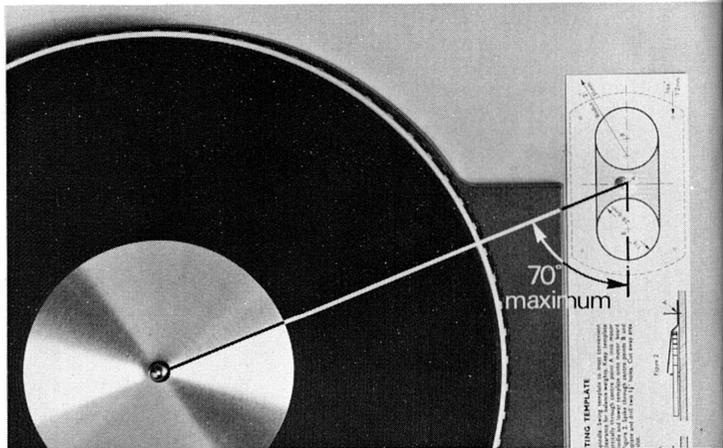
Technically correct and aesthetically satisfying the SME has been called "The best pick-up arm in the world" and we believe you will find this to be true.

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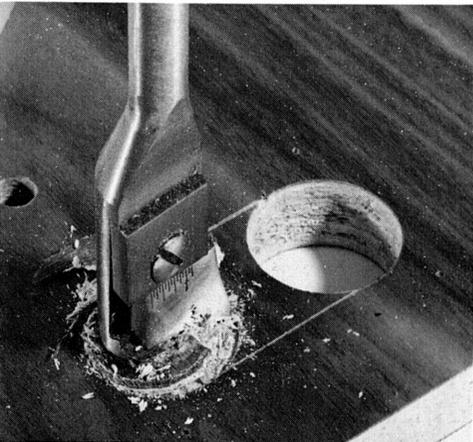


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### Setting out

**101** Establish the position for the bedplate with the mounting template.

**102** Where space is restricted the template may be rotated up to 70° off the radial position.



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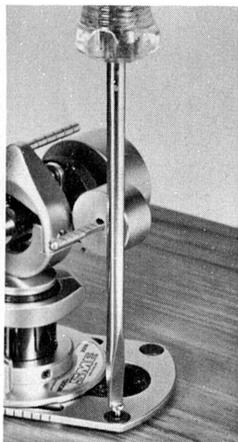
### Fitting the arm

**103** Drill and form the cut-out in accordance with the template. Ensure that it is large enough to clear the screening can completely.

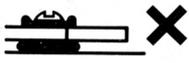
**104** Screw down the bedplate with the four wood-screws.

**105** Adjust the screws as shown.

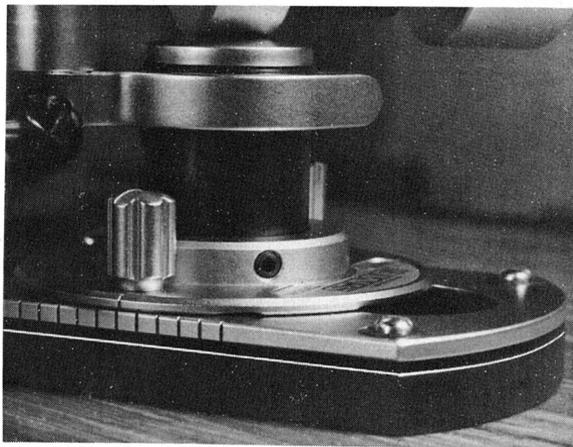
**106** When the surface of the turntable is more than  $1\frac{5}{8}$ " (41 mm.) above that on which the bedplate is mounted a spacer SME Accessory P.1 is required.



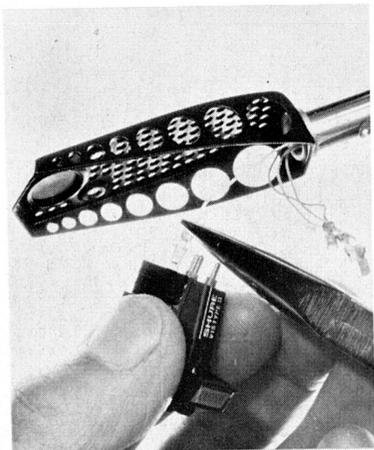
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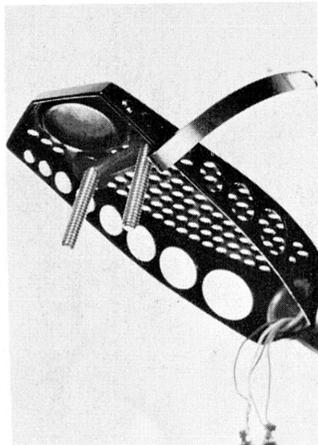
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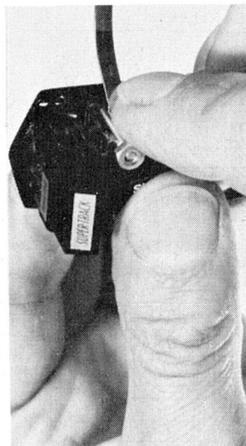
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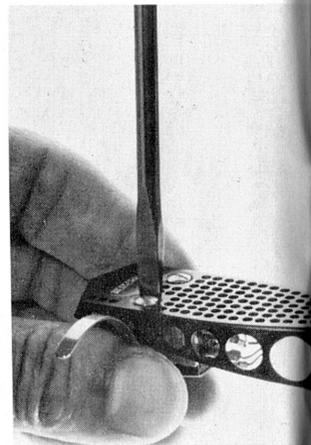
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### Fitting the cartridge

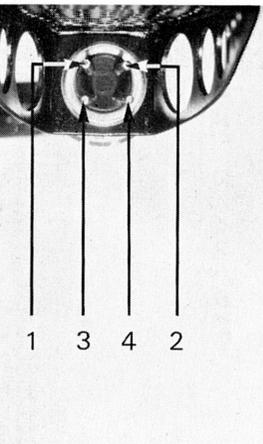
**107** Fit the pin jacks to the cartridge terminals: White to left channel: Red to right channel: Blue to left ground: Green to right ground. Tails must never be soldered direct to the cartridge terminals.

**108** Select screws of appropriate length. The top of the cartridge should lie snugly against the shell or as close to it as possible. The use of the finger lift is optional. Use spacers only if cartridge contours make it essential.

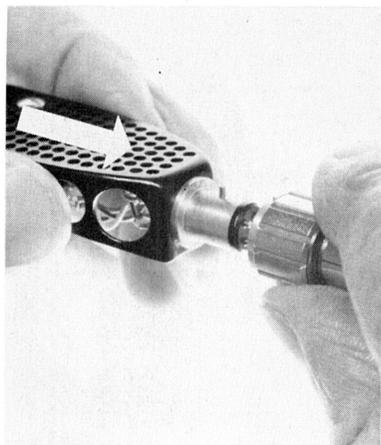
**109** Fit the nuts.

**110** Check that the cartridge lies symmetrically in the shell. This is important.

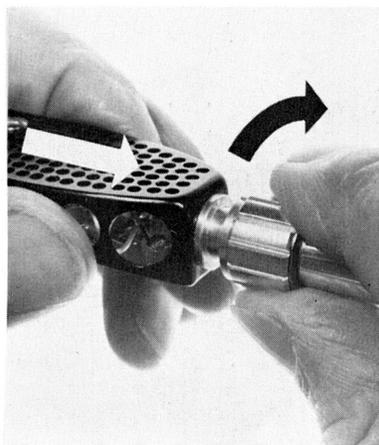
**111** Tighten the screws taking care to preserve (110)



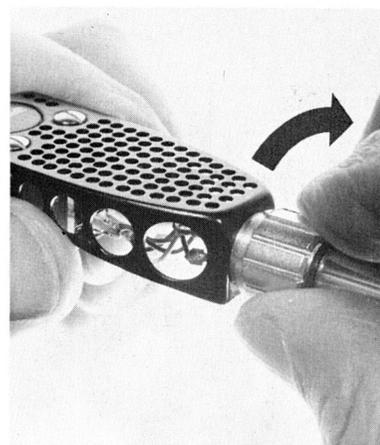
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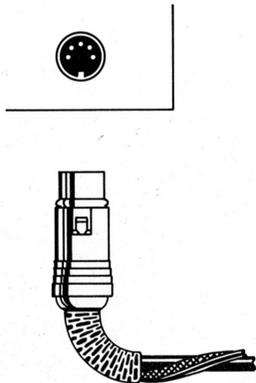
**Model 3009/S2 Improved  
(detachable shell)**

**112** Fit the tails to the shell terminals:  
White (1) to left channel: Red (2) to  
right channel: Blue (3) to left ground:  
Green (4) to right ground. Fit the  
cartridge as detailed on Page 6.

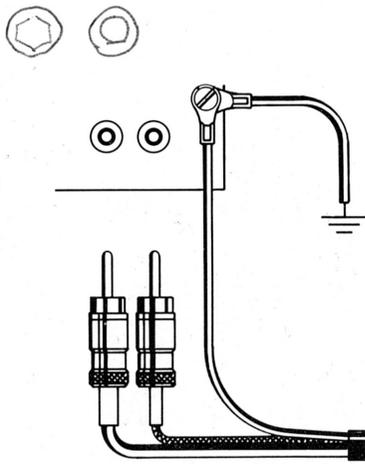
**113** Insert the shell in the arm socket.

**114** Press in to contact the thread.

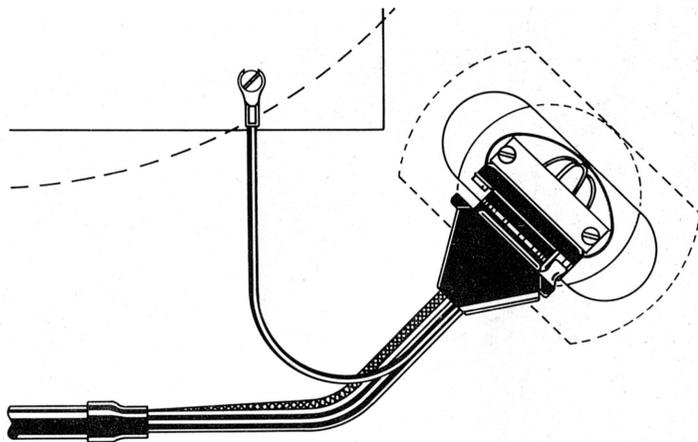
**115** Maintaining pressure, rotate the  
socket nut to draw the shell firmly  
home. Do not over-tighten.



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#### Audio Lead

**116** Leads with 5-pole DIN plug make ground connection automatically.

**117** Leads with phono plugs are coded White (L) for left channel and Red (R) for right channel. The ground wire should be connected to a terminal or screw on the amplifier chassis.

**118** Insert the output plug into the output socket beneath the arm. Connect the ground wire to a suitable terminal or screw on the turntable chassis.

*Note: There must be no other ground connections and the system must be connected to main ground by one path only, usually from the amplifier to the third pin of the mains. Additional paths to ground will increase hum.*

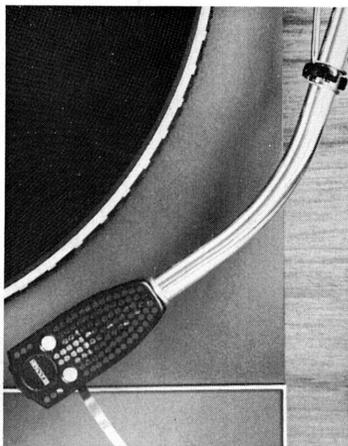


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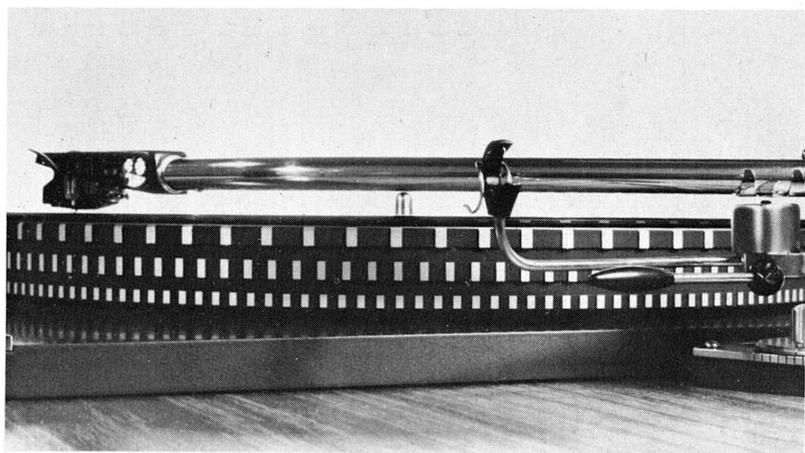
### Pillar adjustment

**119** Release the set screw in the base, to unlock the pillar.

**120** Rotate the pillar to position the arm rest. The inner edge of the shell should be not more than 3" (76mm.) and not less than  $\frac{1}{2}$ " (13mm.) from the edge of the turntable.

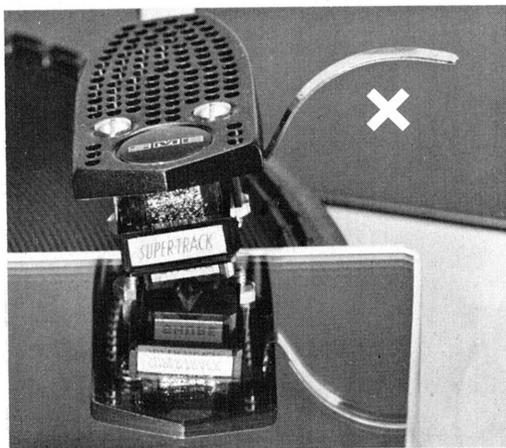


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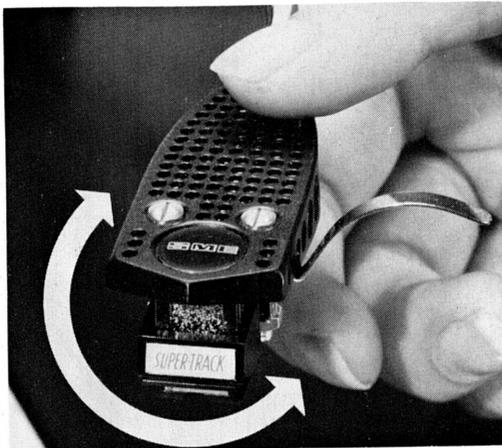


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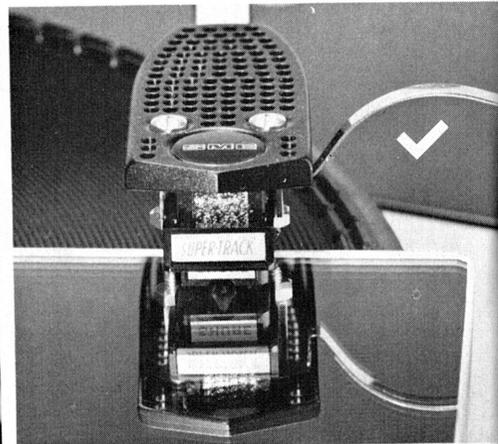
**121** Set the pillar height so that the arm is parallel with the record surface when playing. Check that there is clearance between the track and the rubber mushroom of the lowering and raising control when the lever is in the down position. To increase clearance lower the pillar. Relock the base set screw.



122



123



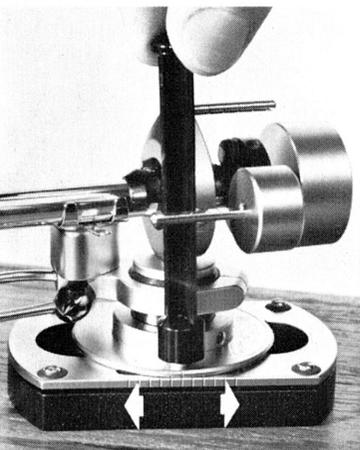
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### Shell Adjustment

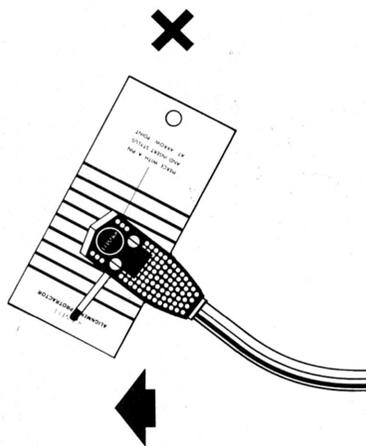
**122** Place a small flat mirror on the turntable and rest the stylus on it.

**123** If necessary hold the shell firmly close to the tone-arm and twist in the required direction with one hand whilst holding the arm firmly with the other. *The stylus must be clear of the mirror whilst this is done.* Movement of the socket in the end of the tone-arm is limited by a detent screw.

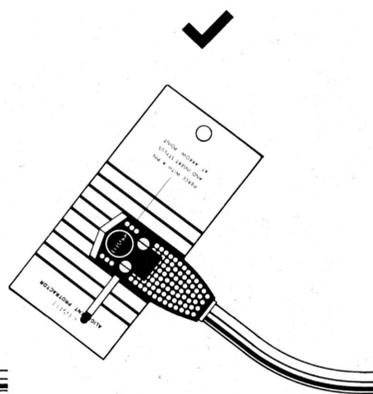
**124** Recheck with the mirror.



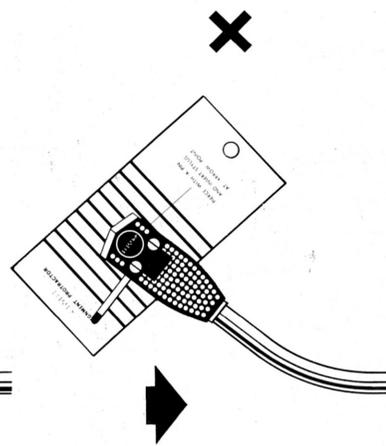
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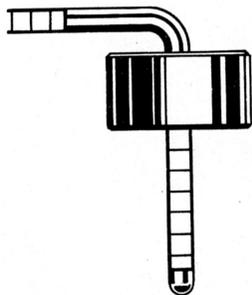


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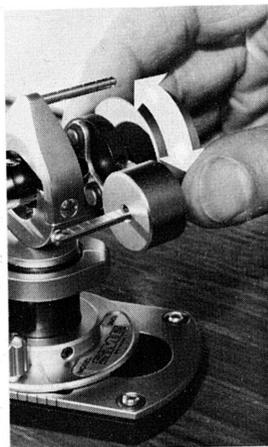
### Tracking adjustment

**125** Release the base clamp nuts with the plastic box spanner.

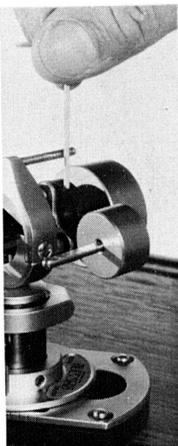
**126** Place a record on the turntable  
**127** with the alignment protractor on  
**128** top of it. The large hole engages the record spindle with the stylus in the small one. Move the base on the bedplate until the cartridge and shell appear symmetrical with the protractor. Relock the base clamp nuts.



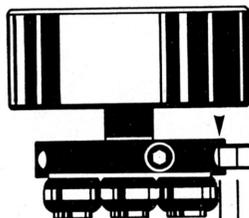
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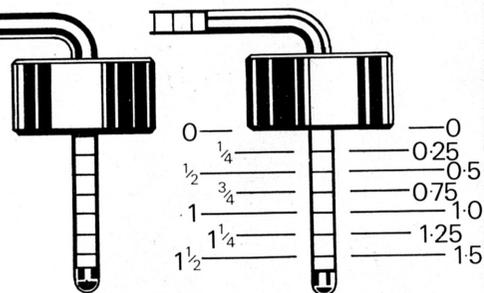
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### Balance adjustment

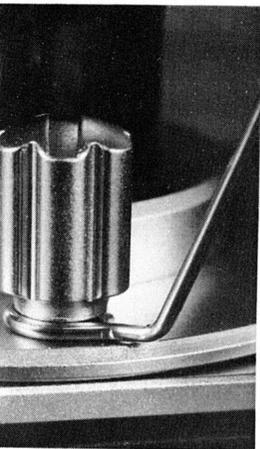
**129** Position the rider weight so that its front coincides with the first division of the wayrod.

**130** Place the arm in a state of equilibrium by rotating the balance weight in the required direction.

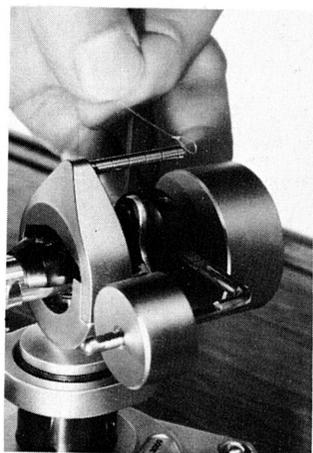
**131** Release the set screw in the wayrod housing.

**132** Divisions correspond to cartridge weights in grams. Adjust as required for your cartridge. The setting shown is for 8 grams. Relock the set screw.

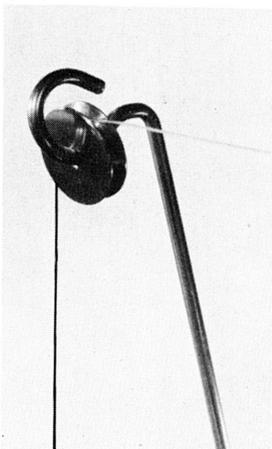
**133** Apply tracking force by advancing the rider weight along the wayrod. Each division travelled applies  $\frac{1}{4}$  (.25) gram tracking force at the stylus.



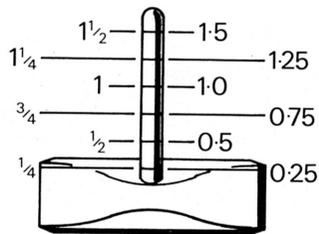
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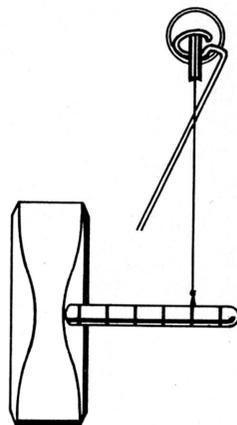
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### Bias adjustment

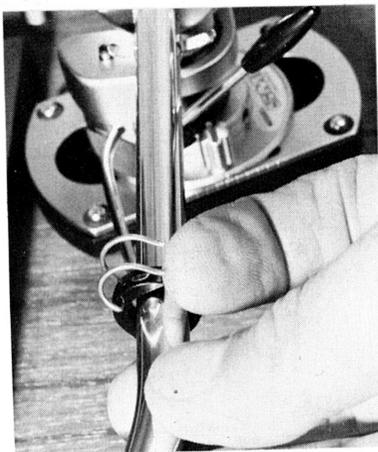
**134** Fit the cranked end of the bias guide under the base clamp nut nearest to the turntable.

**135** Place the nylon loop on the bias lever.

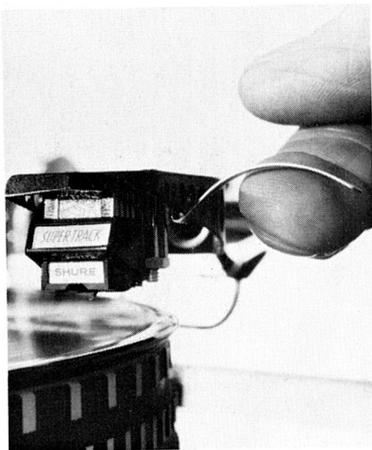
**136** Place the nylon thread in the groove of the guide pulley.

**137** Place the nylon loop in the groove corresponding to the tracking force being used.

**138** Position the bias guide so that the thread is at approximately 90° to the bias lever when the stylus is over the outer groove of a 12" record.



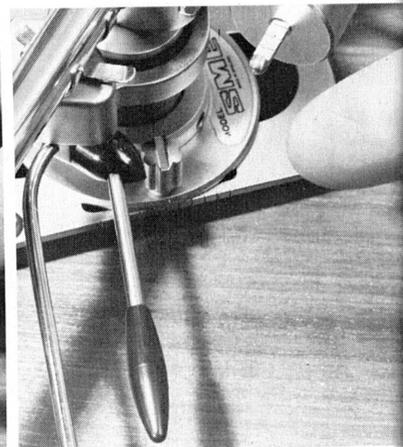
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142

### Operation

**139** With the control lever raised release the tone-arm from its rest.

**140** Place the stylus over selected band on the record.

**141** Move the control lever forward

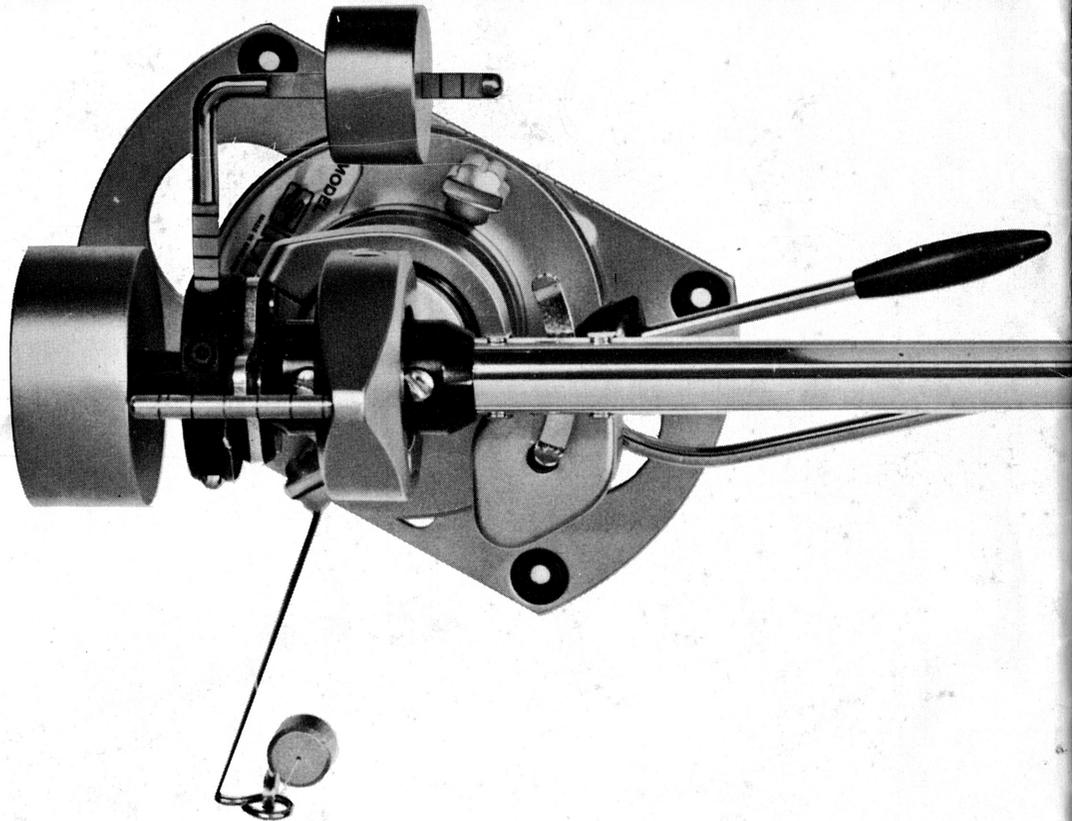
**142** allowing it to fall freely.

After playing, raise the control lever to lift the stylus from the record. Return the arm to its rest.

We hope these instructions have made the installation of your SME precision pick-up arm simple and straightforward. Care for it much as you would a camera. Do not attempt to take it to pieces. Do not apply oil or other lubricant to any part of it. If you have a problem concerning its operation or repair write to the address overleaf. We provide quick and efficient service direct from the factory to any part of the world. In the first instance please write, do not send us the arm unless requested to do so.

SME

PRECISION GRAMOPHONE EQUIPMENT



Manufactured in England by **SME LIMITED - STEYNING - SUSSEX - BN4 3GY**