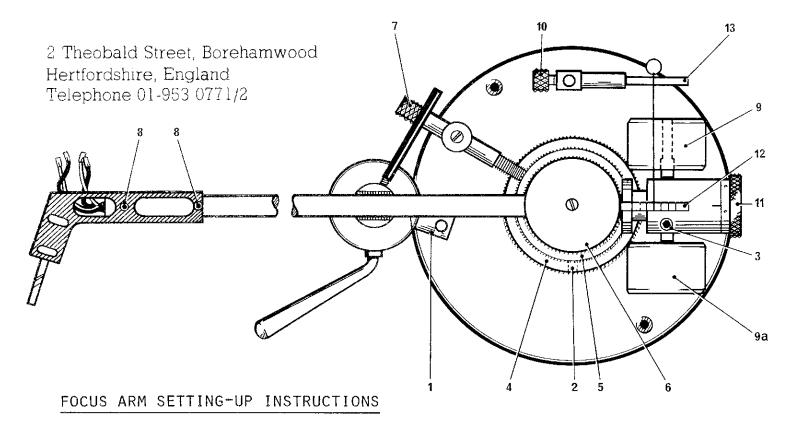
JA Michell Engineering



Both counterweights should be fitted to the threaded pins on the carrier. 1: For cartridges of between 4-7 grammes the side extension weights should be removed from the main weights and only used when cartridges of between 7-11 grammes are to be used.

Screw counterweight (9A) until lightly locked and set counterweight (9) to approximately the same position. Then by moving the counterweight clockwise or anti-clockwise will enable the vertical alignment to be easily obtained.

2: The cartridge can now be fitted with the mounting screws, only finger-tight, by one of two methods. With the key provided, slacken the socket screws (8) and this will allow either the complete removal of the headshell or just simply rotate it on the arm tube until it is in a convenient position. Connect lead tags to cartridge pins: - Right signal

Red White - Left signal

Blue Right ground

Green - Left ground

Before locking headshell, make sure the front clamping ring on the underside of the headshell is flush with the end of the arm tube to maintain the correct effective arm lengths and the correct horizontal setting is parallel to top of helmet.

The arm height can now be approximately set and a nominal tracking weight should be added to enable the arm to lower. Ease of operation will be gained if the socket screw (1) is released and the lowering device allowed to rest at its bottom setting. To adjust the arm height, slacken the socket screw (2) and this will allow the height adjuster (5) to turn up or down.

CAUTION: The socket screw (2) need only be released and not withdrawn from the support tube groove. Do not, at this period, relock the set screw (2).

- 4: To align the cartridge place an old disc on to the turntable platter, then place the right angled gauge provided on to the disc with the scribed line facing the stylus tip. Then place the straight edge of the headshell against the upright side of the right angled gauge, move the cartridge back and forth in the headshell slots until the stylus intersects the scribed line. The cartridge screws can now be fully tightened, making sure the cartridge is square to the front edge of the headshell which is machined to the correct optimum offset angle.
- 5: The correct stylus overhang can now be set by placing the round aluminium disc over the platter spindle and releasing locking ring (4) anti-clockwise. The stylus tip must line up with the outer edge of the disc by using the fine adjuster screw (7). Finally tighten locking ring (4).
- 6: The correct cartridge tracking weight should now be applied and using the knurled counterweight adjuster (11) bring the arm back into a state of balance, and then turn adjuster (11) forward until the stylus barely makes contact with the record. Now add the exact tracking weight, each dot representing \(\frac{1}{10} \) gramme. The one black dot on the adjuster (11) is intended purely as a reference point to assist in the memorising of counting, and as a helpful guide we suggest it be remembered that 5 dots equals \(\frac{1}{2} \) gramme. We would also suggest that maximum rather than minimum tracking pressure recommended by cartridge manufacturers be applied. The lock screw (3) must now be tightened. On some early models it may be necessary to unscrew the counterweight to enable entry of the key.
- 7: Slip nylon loop of bias weight onto grooved rod (12) the groove nearest to the helmet should be used for tracking pressures of approximately $\frac{2}{4}$ gramme and then increasing by $\frac{1}{4}$ gramme increments per groove. Place the bias weight over the Pyrex rod (13) and by loosening screw (10) position the bias adjuster so that the weight hangs clear and the nylong runs freely over the Pyrex portion of the bias adjuster.
- 8: The lift lower device should now be set to a convenient and operational height and angle. When finally positioned the lock screw (1) should be locked with key.
- 9: Remove helmet cap (6) and half-fill the pivot well with the silicone fluid supplied, making sure not to spill any of the fluid, especially between the well and helmet inside well.
- 10: The final setting section of the arm concerns the arm tube height in relation to the record surface, and to this we attach a degree of importance. The long standing theory that the arm tube must run parallel with the record does not make allowances for several governing factors, i.e. not all master discs are cut at the same cutter angles and some users may wish to vary the tracking weights of their cartridge and this will upset the correct stylus playing angle.

We, therefore, strongly recommend that advantage be taken of the unique height adjustment on the arm and that several different heights be tried by the fine height adjustment screw (5). With care it is possible to adjust the arm while the record is playing and so apply an instant subjective listening test. When the final height setting is achieved tighten socket screw (2).

For maximum performance of the Focus Pick-up Arm it is recommended that all the setting instructions be double checked to ensure that the arm will track and operate to its full potential.