MOTOR.

The motor is mounted by three screws and spacers.

The motor bearings are held by two screws each. After the removal of one of the bearings, the rotor may be withdrawn.

When reassembling the motor it is necessary that the rotor be centred in the stator. The bottom bearing contains a steel ball on which the rotor spindle rests, and care should be exercised to see that this is not misplaced.

SPEED ADJUSTMENT.

If it is necessary to make adjustments to the speed of the turntable, first check:—

(a) That the motor plate and unit plate are parallel.

(b) The spindles for the two intermediate wheels, the running wheel, the turntable and the speed changing bracket spindle, are all parallel.

The check on spindle parallelism is made easier if extensions are fitted to the spindles.

Speed adjustments should be made with the use of a stroboscopic disc for 33⅓ and 78 r.p.m. and 50 c/s. The turntable should be in position whilst checks are being made.

The first adjustment is made on the 78 r.p.m. intermediate wheel. The adjusting screw and locking nut should be adjusted so that there is about 2 m.m. clearance between the wheel and speed changing bracket. Adjustments to the screws and nuts should not be made with the intermediate wheels on their spindles. The wheels can be lifted clear of their spindles.

With the speed changing arm in the "N" position, adjust the main driving roller to give a turntable speed of 78 r.p.m. The driving roller is tapered and it is clamped to the split rotor spindle in the desired position by the tapered set screw.

When the 78 r.p.m. adjustment has been made, the 33⅓ r.p.m. adjustment is carried out on the 33⅓ r.p.m. intermediate wheel with the speed changing arm in the "L" position. The position of this wheel in relation to the driving roller is varied by means of its adjusting screw and locking nut.

STROKE OF THE PICK-UP ARM.

The stroke of the pick-up arm should be such that with the switch adjusting knob in its full forward position it should be possible to place the pick-up arm on its rest without switching on the unit. In the event of replacement of the mains switch, it may be found that the arm does not have sufficient stroke. This may be corrected by carefully bending the leaf of the switch tumbler arm.

TURNTABLE ADJUSTMENT.

The efficiency of the drive between the driving band and the turntable can be checked by stopping the turntable by hand after the motor has had time to run up to full speed in either speed position. The mechanism should continue to run with the driving band slipping along the rim of the turntable and running in the middle of the face of the wheels without jumping up and down. Either intermediate wheel should not slip on the driving collar. To make adjustments for driving band pressure on the turntable, the turntable spindle is provided with a slotted mounting hole. The adjustment should be such that with a 12" record on the turntable a speed of 78 r.p.m. is reached within 4 seconds.

LUBRICATION.

The spindles of the three driving wheels and the turntable should be lubricated with light grease or petroleum jelly. Other parts are lubricated with sewing machine oil. It is essential that lubricants be used sparingly and all excess should be wiped off. No lubricant should be permitted to get on to the driving band, the turntable rim, the driving wheel faces or the main driving roller.

TRANSPORT.

If it is necessary to transport the unit any distance, either individually or mounted in a radio receiver or cabinet, it is essential to fix the speed changing arm in a position between the two speed positions such that either of the intermediate wheels do not bear against the main driving roller.

It is also advisable to use some packing between the motor plate and the unit plate to prevent damage to the spring suspension.

The turntable should be either packed separately or covered with cardboard and tied to the unit plate.