

**WARNING:**—To avoid damaging the cartridge always remove sockets before attempting to re-solder leads.

- (e) A stylus pressure adjustment is provided in the pick-up arm and is marked "G" in Fig. 4. To increase pressure turn screw in an anti-clockwise direction. When using any of the "Studio" range of cartridges the pressure should not be increased beyond 8 grammes otherwise damage to the stylus and/or records may occur.

## **XV. PICK-UP HEIGHT ADJUSTMENT**

During the change cycle the pick-up arm is lifted clear of the records on the turntable and swung out over its rest, during this movement the top of the pick-up head should clear the underside of the next record on the stack by about  $\frac{1}{8}$ ".

To alter this setting, turn screw No. 2063, Fig. 3, clockwise to increase the height to which the pick-up rises and vice-versa to lower.

A final fine adjustment is provided through an access hole in the top of the pick-up arm "D", Fig. 4. (Counter balanced arms only.) When adjusting by the latter method make sure that the pick-up has not lost its depth of drop and will not play a single record.

## **XVI. TO REMOVE PICK-UP**

- (a) Unsolder leads from muting contacts or tag plate.
- (b) Release leads from clip adjacent to Balancing Arm Spindle. Fig. 3.
- (c) Raise pick-up arm to its fullest extent and slacken two 4.B.A. screws in bracket.
- (d) Lift complete pick-up clear.

## **XVII. REFITTING PICK-UP**

- (a) Thread pick-up lead through hole in base, at the same time place swivel bracket over hexagon headed swivel.
- (b) Tighten two screws in swivel bracket whilst holding bracket right down on hexagon head.
- (c) Check that pick-up will sit on rest and yet travel to within 1" of record dropping spindle. To adjust this position, slacken off two hexagon headed set screws No. 5335, Fig. 5, pull pick-up arm outwards until its outer edge sets down in the rest recess, tighten hexagon set screws.
- (d) Fix pick-up lead under clip and re-solder to muting contacts on tag plate.
- (e) Check pick-up height and adjust if necessary as explained in Section XV.

## **XVIII. RECORD DROPPING CHECK**

Adjustment of the mechanism should not normally be necessary unless the machine has been dismantled to make replacements. To check adjustment operate "start" control and turn cam gear in direction of arrow (see Fig. 1) until large diameter post on the cam gear pushes the record dropping bar (No. 5172) to its extreme position. The record selector pawl (No. 4491) should now rise nearly to the top of the slot above the step on the spindle and the pushing portion of the pawl should protrude slightly beyond the outer edge of the shelf.

**NOTE:**—The front of the pawl (except the pushing point) must not protrude beyond the diameter of the record spindle.

**WARNING:**—Damage will occur if cam gear is turned in wrong direction.

## **XIX. RECORD DROPPING ADJUSTMENT**

- (a) Set plate (5098 Fig. 3) half way up its slot and lightly tighten two screws (1979, Fig. 3). By means of the cam make sure that dropping slide is pushed forward to its fullest extent, then adjust the pawl upwards by means of the self-locking nut (No. 1276) until a clearance of .015" is obtained between the pushing position of the pawl and the slot above the step in the spindle. Finally adjust plate (No. 5098) until it can be pushed forward no further. Adjust stop 5594 (Fig. 3) to give .015" clearance between the selector pawl stop and the bottom end of the pawl, tighten lock nut.

**NOTE:**—Damage will occur if cam gear is turned in wrong direction.

- (b) To fit a new record spindle and turntable spigot assembly (No. 5261 Fig. 1) four socket head screws (No. 5255 Fig. 1 & 2) must be removed, when the assembly may be lifted clear of the dropping pawl. Place the new assembly over the pawl, replace screws and tighten down. Re-adjust as described in XIX (a).
- (c) To fit a new record dropping pawl assembly (Part No. 4491) unclip the spring (2840 Fig. 3) from end of pawl, remove retaining split pin from pawl, carry out operation XIX (b) and lift pawl assembly clear. Reverse procedure to re-fit and re-adjust as described in XIX (a).

## **XX. SWITCHING ON FAILURE**

This operation must only be carried out with the electric mains disconnected. Failure to start may be caused by bent or damaged switch spring contacts. To examine, remove cover (No. 158). To increase contact pressure bend both contacts towards each other.

## **XXI. AUTOMATIC TRIP**

This machine is provided with an extremely light velocity type trip, failure may be due to the following causes.

- (a) Tightness or dirt at pivot "E".
- (b) Grease or oil on pins "F".
- (c) Striker feed lever resting on sub plate.

To cure proceed as follows.

- (a) Remove circlips from pivots "E" and lift levers 5117 and 5183, Fig. 2. Clean levers and pivots, replace levers, refit circlips and make sure that levers will move their full extent when sub plate is tilted to 45°.
- (b) Clean pins marked "F", Fig. 2.
- (c) Proceed as described in Section XIV (c).

**NOTE:**—The chief enemies of the automatic trip are oil, grease and dirt.