SERVICE DATA

MULLARD RECORD CHANGER

TYPE 2508

(Read in conjunction with 2974 sheet)

The 2508 is a three-speed record changer having speeds of 33⅓, 45 and 78 revolutions per minute, and capable of playing up to ten 10" or 12" records stacked in any order. It is also possible to play 7" records in consecutive order.

It is fitted with a dual sapphire stylus pick-up head which allows of reproduction from both normal and micro-groove records. The crystal cartridge used is type AG3005.

The action of the 2508 is the same as the type 2974 record changer and reference should be made to that sheet for a description of the basic operation of the changer. Descriptions of additional actions introduced due to the multi-speed provision for micro-groove and 7" diameter records are given on this sheet.

SPEED ADJUSTMENT CONTROL.

The desired speed is obtained by adjustment of the speed selection control. This movement is transmitted by lever action to the rubber shod driving wheel and moves it along the motor spindle. This spindle is stepped and has three sections of different diameters each proportioned to give uniform and smooth transmission at the required speed.

RECORD DIAMETER SELECTION CONTROL.

The purpose of this control is to have the pick-up head lowered on to a 7" diameter record. There are two positions of the control, one for 10" and 12" records and the other for 7" records. In the 10" and 12" position, no change is made to the functioning of the changer as outlined in the service sheet for the 2974 unit.

When the control is put into the 7" position it brings into action a second and smaller control hook. This second hook is contacted by the cam 13 on the main control wheel ahead of the time the normal control hook would be engaged. As it turns on its pivot, the smaller control hook engages a pin on the larger hook and the pick-up is moved toward the record. It travels further than it does normally due to the action of the smaller hook against the pin of the larger hook.

DOUBLE STYLUS PICK-UP HEAD.

For playing normal groove records, the head is turned to the letter "N." For micro-groove records the head should be turned to the letter "M."

REMOVAL OF TURNTABLE.

The turntable is removed by first removing the locking ring on the centre spindle.

ADJUSTMENTS AND REPAIRS

The notes given under this heading in the 2974 sheet also apply to this unit. The following notes are additional to those in the 2974 sheet.

TONE ARM SETTING FOR 7 IN. RECORDS.

This is controlled by the setting of the spring on the tip of the small steering hook plate. If the pick-up comes down too far on to the record, bend the end of the spring toward the hook, if the pick-up misses the record, bend the tip away from the hook.

MESHING OF TRIP LEVER ASSEMBLY WITH SMALL GEAR WHEEL.

Insufficient meshing between the trip lever assembly and the small gear wheel can give rise to difficult starting and failure to commence the changing cycle at the completion of playing of a record.

With the changer driving wheel in the rest position, put the fibre disc on the trip lever against one of the cams of the small gear wheel. Rotate the turntable until the second cam comes in front of the point of the trip lever. The distance between the lever and cam should be 2 m.m. maximum and 1 m.m. minimum. To correct the spacing, slacken the two near placed screws of the three which hold item 6 to item 8 of Fig. 4 and move the driving wheel with a rotary movement. Tighten the screws.

PICK-UP FAILS TO RISE HIGH ENOUGH TO CLEAR TENTH RECORD.

Refer to Fig. 4. The space between the lifting slide 8 and the pick-up raising bracket should be 0.3 m.m. To adjust this, put the changer driving wheel in the rest position and the pick-up on the switch. Detach spring 7, loosen the three screws holding item 6 to item 8, push lifting slide 8 back (away from the changer driving wheel 4) and press plate 6 against stud 5. There should then be about 0.3 m.m. between the rounded corner of the lifting slide 8 and the bevelled edge of the pick-up raising bracket. Tighten the lone screw of the three and check the meshing of the trip lever assembly with the small gear wheel as outlined in "Meshing of Trip Lever Assembly with Small Gear Wheel." Re-position spring 7.

If the running of the changer is too heavy, try shortening the distance between the lifting slide and the pick-up raising bracket.

APPARATUS DOES NOT STOP AFTER PUTTING CONTROL LEVER TO "STOP."

This may be due to the leaf spring which operates against the stop slide being too weak and thus not carrying the catch high enough to grip the hook of the arm 14, Fig. 6.

APPARATUS DOES NOT STOP AFTER PICK-UP COMES TO REST ON THE SWITCH.

The bracket which carries the roller on the switch lever may be set too low.

FAILURE OR INTERMITTENT OPERATION OF "REPEAT" MECHANISM.

Refer to Fig. 8. With the changer driving wheel in the rest position, loosen the two screws of the plate which mounts lever 22, and with the repeat knob in the "repeat" position place the hook of lever 22 against the locking hook of plate 20. Tighten the screws.

IRREGULAR TURNTABLE SPEED.

The friction wheel may not be perpendicular to the rotor spindle and the turntable. This can be corrected by bending the mounting arm of the wheel.

Poor starting or noisy running of the motor may be due to misaligned bearings. This can be corrected by tapping the motor frame, whilst the motor is running, with the handle of a screwdriver. The bearing of the motor should not be knocked.