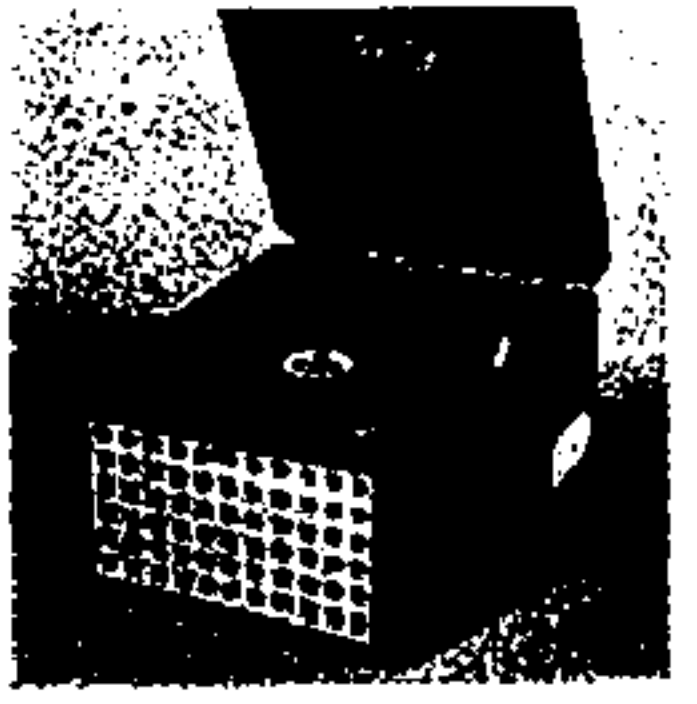
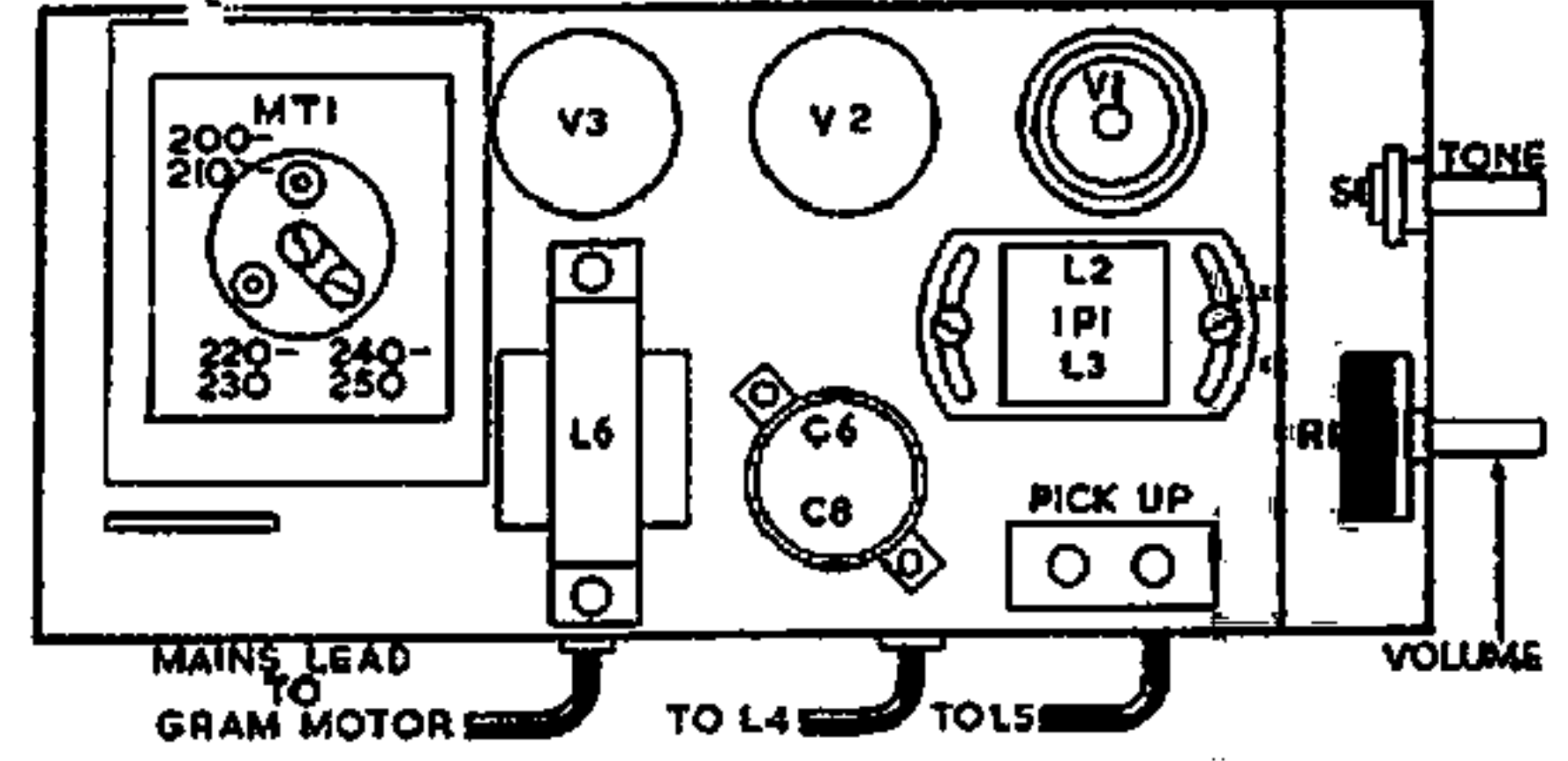
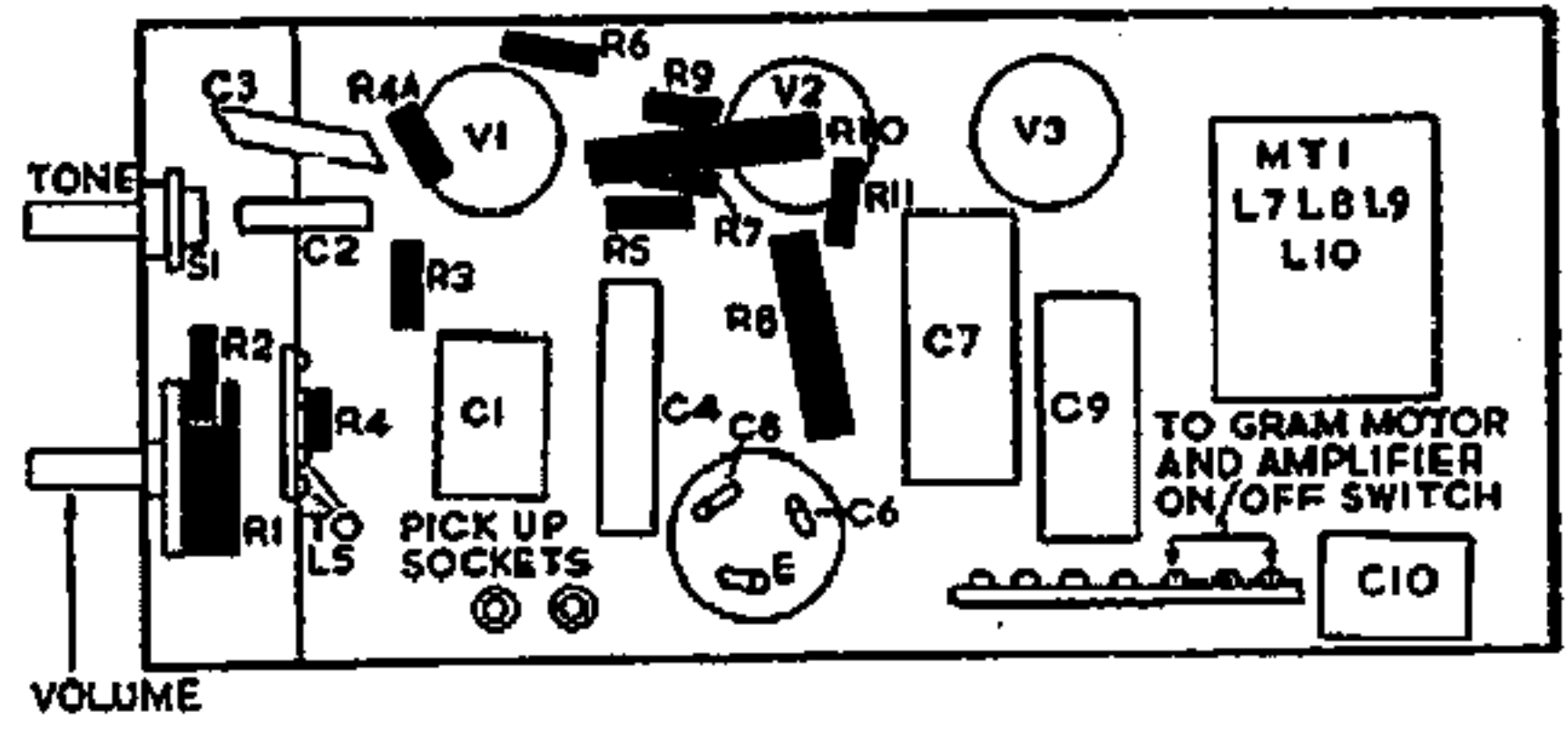


DECCA DECCALIAN



An electric record reproducer for operation from AC mains supplies 200-250V, 50 cycles. Consists of a two-stage amplifier, with negative feedback, feeding into a 6½-inch permanent magnet loudspeaker. The pick-up is a Decca lightweight needle armature type, fitted with replaceable sapphire stylus. The turntable and motor fitted is a Garrard type AC7C. Made by Decca Radio and Television, Ltd., 1-3, Brixton Road, London, SW9.

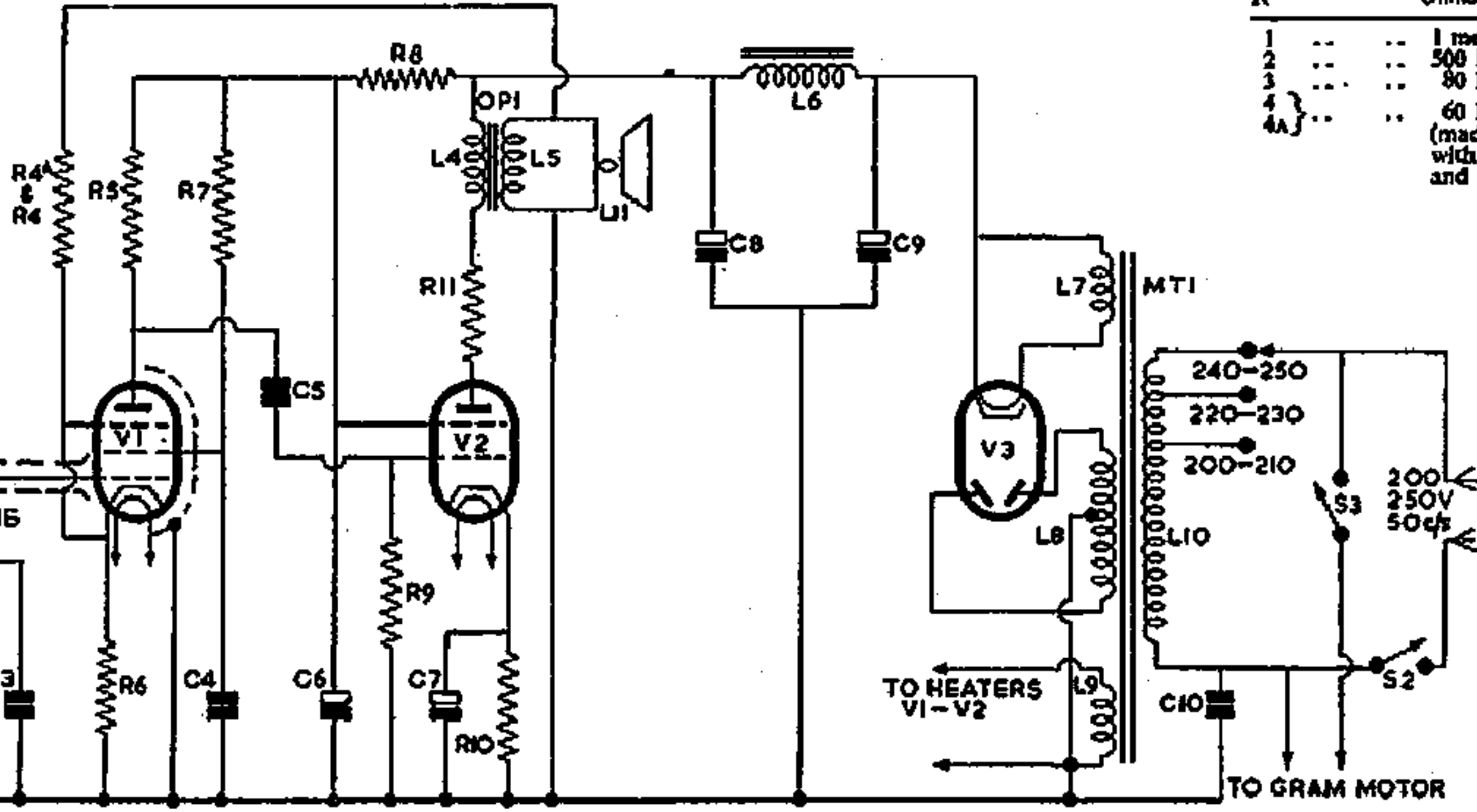
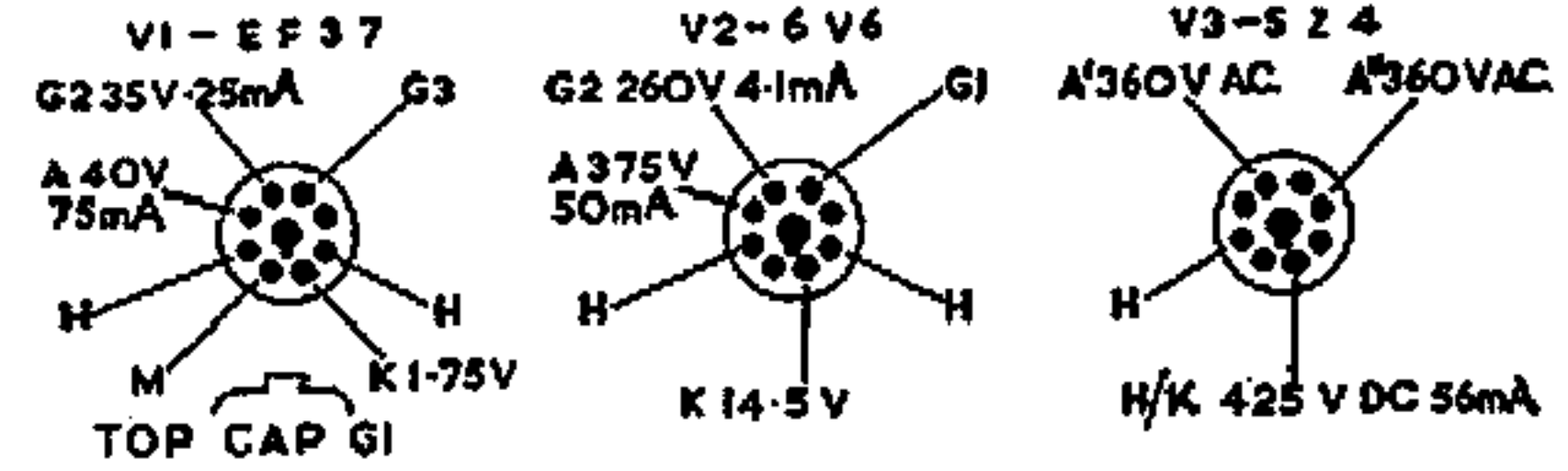
Amplifier consists of an anti-microphonic HF pentode V1 resistance-capacity coupled to a beam tetrode output valve V2. Output from V2 is fed into a 6½-in. permanent-magnet loudspeaker. Negative feedback from the secondary of the output transformer is fed to the cathode of V1. A three-step tone control and a bass compensation network are connected in the grid circuit of V1. HT is provided by a full-wave indirectly-heated rectifier V3. **Circuit.** The special Decca lightweight needle-armature pickup is connected to primary L2 of screened input transformer IP1. The secondary L3 feeds the signal to volume control R1 and thence,



via bass compensating network R2, R3, C1, and tone control consisting of three-position switch S1 and capacitors C2, C3, to grid of V1. R6 provides cathode bias to V1. No decoupling capacity is provided, as negative feedback voltages are applied to the cathode. The suppressor grid of V1 is strapped to its cathode. Screen voltage is obtained from R7 decoupled by C4, and R5 is the anode load resistor. C5 is coupling capacitor between anode of V1

and grid of output valve V2, and R9 is grid resistor. Cathode bias is provided by R10 and decoupled by C7. Screen voltage is obtained from dropping resistor R8. C8 provides decoupling for the screen and for the HT supply to V1. L4, the primary of the output matching transformer OPI, is in the anode circuit of V2. R11 is anode stopper resistor. L5, the secondary of OPI, feeds into the speech coil of the PM speaker. Negative feedback voltages are taken from the

secondary of OPI and applied to the cathode of V1 through R4 and R4A. High tension is obtained from an indirectly heated full-wave rectifier V3. L7 supplies its heater voltage, and L8 its anode voltages. L6, C8, C9 provide choke-capacity smoothing of the HT supply. L9 supplies heater voltages of V1 and V2. L10, the primary of the mains input transformer, MT1, is tapped for 200-250 volt, 50-cycle mains supplies. S2 is the amplifier on-off switch; it also breaks the supply to the turntable motor which is fitted with its own on-off switch S3. C10 is fitted to eliminate modulation hum. Replacement of Sapphire. The head of the pickup is fixed to the tone arm by means of a push-on bayonet catch fitting. By pressing the head in,



RESISTORS

R	Ohms	Watts	R	Ohms	Watts
1	5	..	..
2	6	..	..
3	7	..	..
4	8	..	..
4A	9	..	..
			10	..	..
			11	..	..

INDUCTORS

L	Ohms
1	..
2	..
3	..
4	..
5	..
6	..
7	..
8	..
9	..
10	..
11	..

CAPACITORS

C	Value	Type
1
2
3
4
5
6
7
8
9
10

DECCALIAN—Continued

and giving an eighth turn anti-clockwise the head can be removed. Unfasten the two screws on the top side of the head. The lower hinged plate of the assembly containing bar magnets, coil and specially designed rubber-suspended armature with sapphire attached, can now be opened out.

Remove rubber moulding and sapphire and insert new one. (Red spot to rear of recess.) Care should be taken when fitting new sapphire assembly to see that point of needle passes through the original hole in the plastic seal on the underneath side of head.

Removal of Motorboard. Before attempting to dismantle the equipment it is advisable to remove the bayonet catch plug in pickup head, and to secure the tone arm to its rest by means of a piece of wire or string.

Unscrew the two bolts at the ends of the sloping panel nearest to the hinges of the lid, and remove the panel.

Unscrew and remove the four wood screws holding the motor board to supporting runners at sides of cabinet. Grip back edge of motor board firmly and lift and slide it about an inch backwards. The motor board can now be tilted backwards so that the turntable side is resting against the inside of the lid.

Remove amplifier on-off switch from baseboard

and unfasten mains lead to motor from terminals under bakelite cover plate on side of motor. Unplug pick-up leads from sockets on amplifier chassis.

The motorboard can now be removed from cabinet.

Removal of Chassis. Remove volume control and tone control knobs. Unsolder lead from chassis earthing tag (on tag strip just in front of mains transformer). Unsolder leads to primary and secondary of speaker output transformer.

Remove mains input lead connections from socket at rear of cabinet. The chassis is fastened to two brackets (one at each end of the chassis) by four bolts which pass through rubber grommets on the chassis. Remove the four bolts. The chassis is now free to be lifted out.

It is necessary to raise the left-hand side of chassis first in order that the spindles of volume and tone controls are clear of escutcheon when the chassis is withdrawn.

Removal of Cellular Escutcheon in Front of Loudspeaker. Remove the four wood screws holding sloping panel on inside of front of cabinet and lift off panel.

Unfasten four bolts positioned towards outer edges of front, inside of cabinet. The cellular grille can now be removed. Removal of the loudspeaker escutcheon exposes the heads of bolts holding output transformer on to front panel of cabinet.