



REGENTONE *Service*

BULLETIN NO. 107

Model P.33 **3 Speed Automatic Record Player**

CIRCUIT DESCRIPTION

The output from the magnetic head is fed via the volume control to the 1st grid of V1 (12AT7). Both sections of V1 are connected in cascade giving a high overall gain. The voltage derived from the second anode of V1 is fed via R.C. Coupling to the grid of V2 (6AQ5) for further amplification, thence to the loudspeaker.

A variable tone control is incorporated in the third stage of the amplifier which varies the treble response.

POWER SUPPLY (AMPLIFIER)

110-120 V. *, 200-250V. A.C. 40-100 c.p.s.

*NOTE. The standard record changer operates on 200-250V. A.C. 50 c.p.s. Models for other voltages or frequencies are available from the makers of the record changer.

POWER CONSUMPTION (AMPLIFIER) 30W.

OUTPUT. 3.3 Watts undistorted.

LOUDSPEAKER:—

8" P.M. Speaker, with 3.0 Ω speech coil impedance.

Some 25 dbs. of negative feedback is obtained across the cathode resistors of V1 and V2.

A full wave rectifier V3 (6X4) provides a D.C. voltage supplying the anode of V2. H.T. smoothing is derived from the usual resistance/capacity filter, supplying the anodes of V1 and the screen of V2.

RECORD CHANGER UNIT

Collaro 3RC 531 for 7", 10" and 12" records—not mixed. Speeds 33, 45 and 78 r.p.m.

TRANSIT SCREW.

This nickel-plated screw at the right of the record changer (Fig. 1 No. 9) prevents its movement during transit.

PICK-UP HEAD

Collaro Crystal Turnover Type "O".

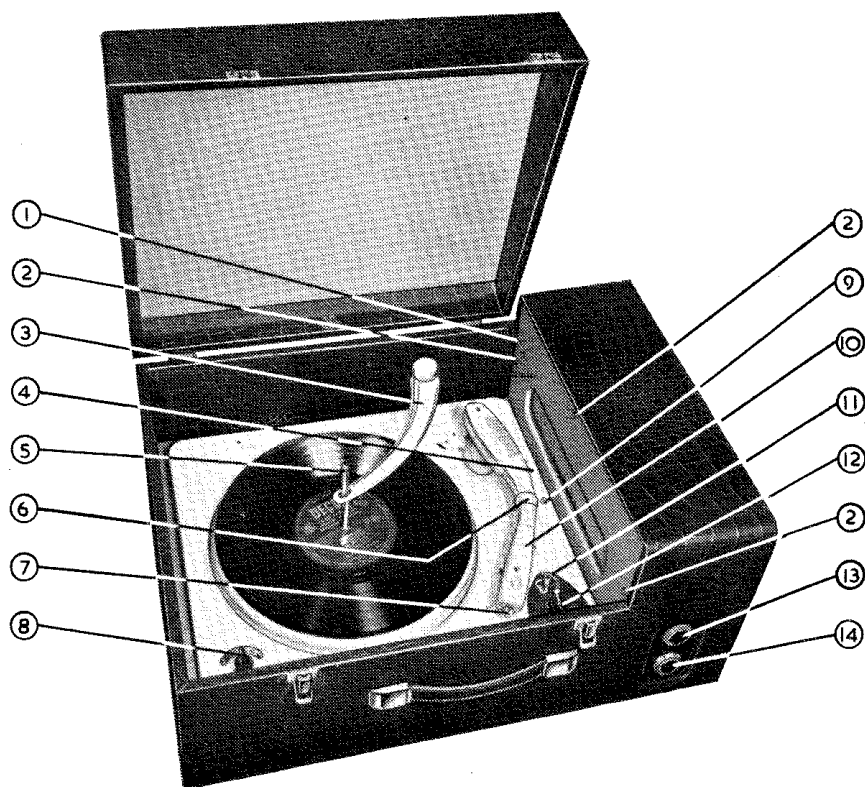
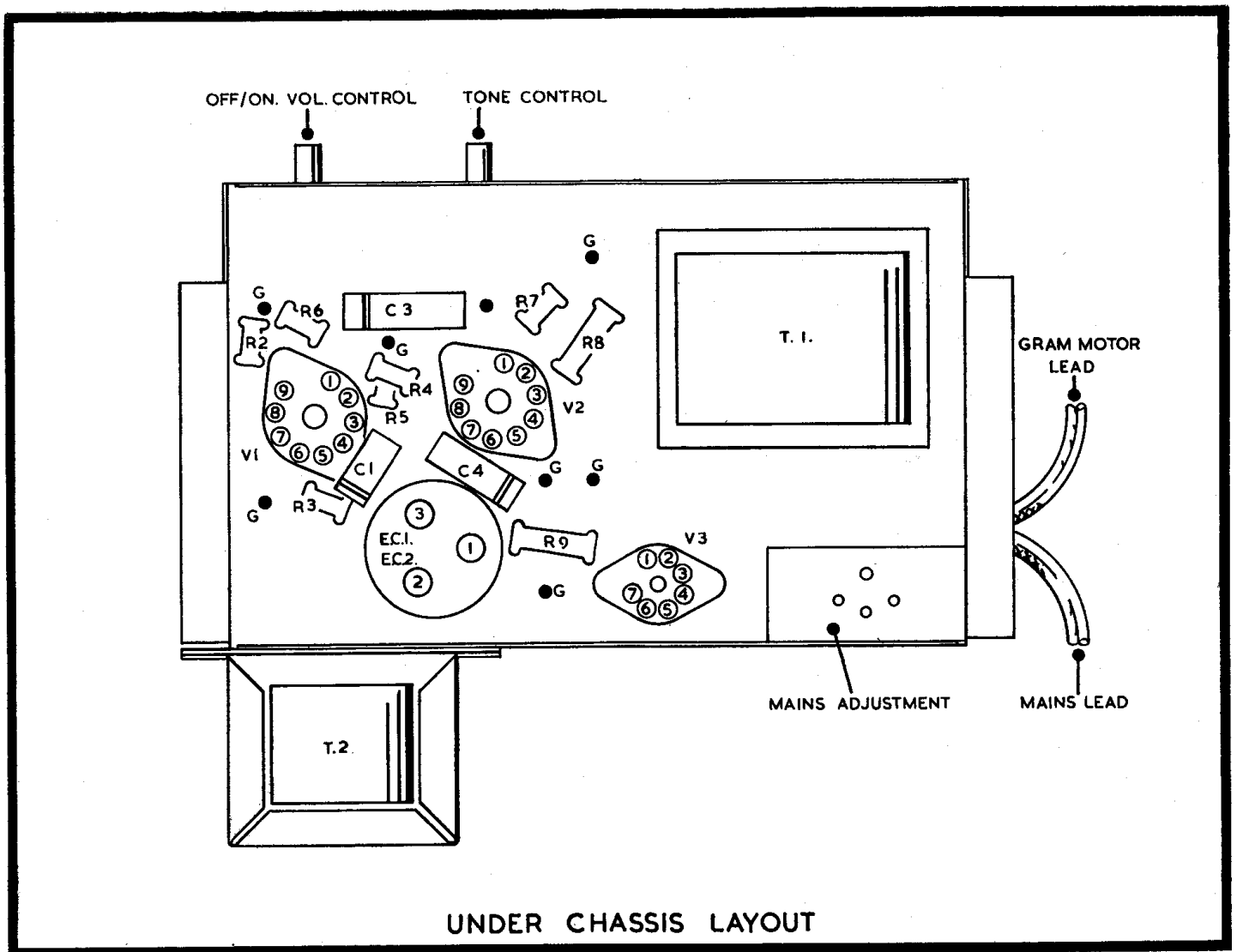


FIG. 1

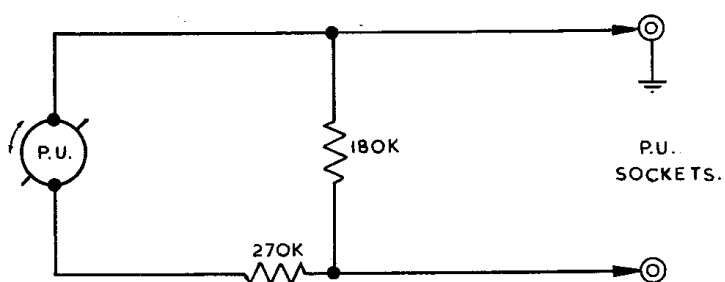
1. Mains Lead Entry
2. Inspection Panel Screws (3)
3. Balancing Arm
4. Pick-up weight compensation lever
5. Centre Spindle
6. Pick-up Arm Transit Clip
7. Stylus Change Lever
8. Speed Change Knob
9. Transit Screw
10. Plug in P.U. Head
11. Record Size Control Knob
12. Start, Stop and Reject Knob
13. Tone Control
14. Volume Control, On/Off Switch



UNDER CHASSIS LAYOUT

INSTRUCTIONS FOR REMOVING CHASSIS.

1. Remove the Inspection Panel by unscrewing the three bronze plated screws. Fig. 1, No. 2.
2. Remove the motor board, complete with autochanger, by unscrewing the four screws securing it to the case. It is necessary to disconnect the mains lead at the terminals on the motor, and also to withdraw the pick-up lead plugs from the chassis before the autochanger can be lifted out completely.
3. Remove the two control knobs by pulling them outwards.
4. The amplifier chassis, together with the baffle board containing the speaker, may now be removed by unscrewing the four bronze-plated screws, the heads of which show externally at the corners of the speaker grille.

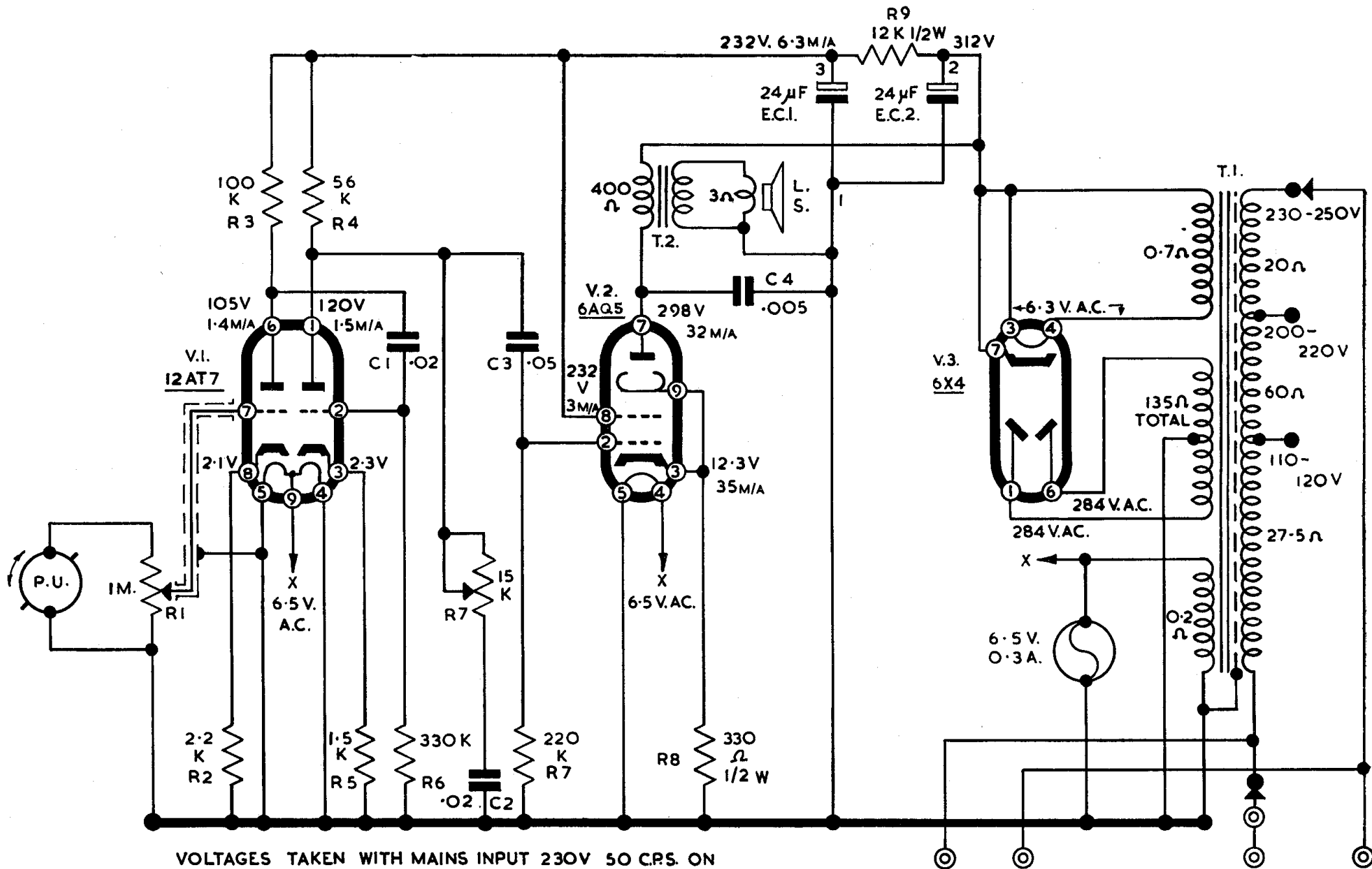


DETAILS OF PICK-UP SHUNT

COMPONENTS LIST.

The following list is limited to the principal components used in this instrument and replacements are normally available from stock. Other components not listed can be obtained from trade suppliers, but in cases of difficulty, Regentone Service will assist. When ordering replacements, the following must be quoted:—

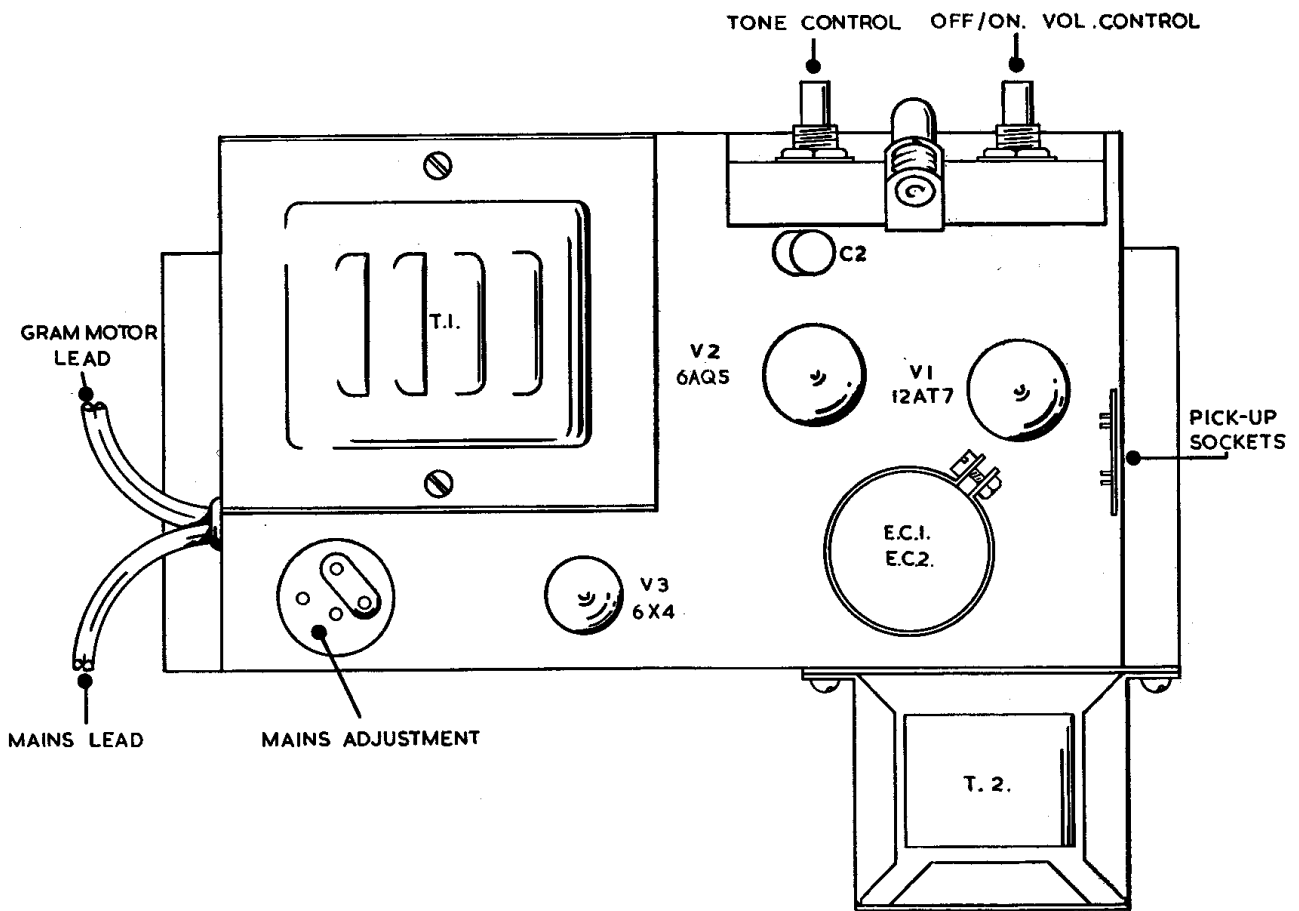
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| | Model No. of Instrument. |
| | Serial No. on Chassis. |
| | Part No. of the required component. |
| M.590022. | Cleat Fibre (Mains lead tie). |
| R.142523. | Clip Cable. |
| R.142506. | Clip Electrolytic. |
| R.142562. | Clip, Knob retaining. |
| R.131599. | Condenser Electrolytic 24-24 μ F 450V. D.C. Wkg. |
| M.25014. | Eyelet. Florentine Bronze (Mains lead exit). |
| R.157522. | Holder Pilot Lamp. |
| R.121518. | Holder B7G Valve. |
| R.121519. | Holder B9A Valve. |
| R.169521. | Knob Control. |
| M.15009. | Nut Tee 4BA (Baffle). |
| M.15008. | Nut Tee 2BA (Motor Board). |
| R.138500. | Panel Voltage selector. |
| R.138501. | Plug Voltage selector. |
| R.158612. | Potentiometer 15K LIN (Tone). |
| R.158611. | Potentiometer 1M. LOG. DP.S.T. Vol./On/Off. |
| R.156512. | Screw. Special Gram Unit Transit. |
| R.122507. | Spring, Lower half transit screw. |
| R.122506. | Spring, Upper half transit screw. |
| R.190530. | Speaker 8" P.M. 9,000 lines. |
| R.510000. | Shroud, Mains Transformer. |
| M.27012. | Tag long (Leads tie down). |
| R.159611. | Transformer Mains. |
| R.159569. | Transformer Output. |
| M.71009. | Washer Cup. |
| M.70031. | Washer Fibre (Gram Transit screw). |



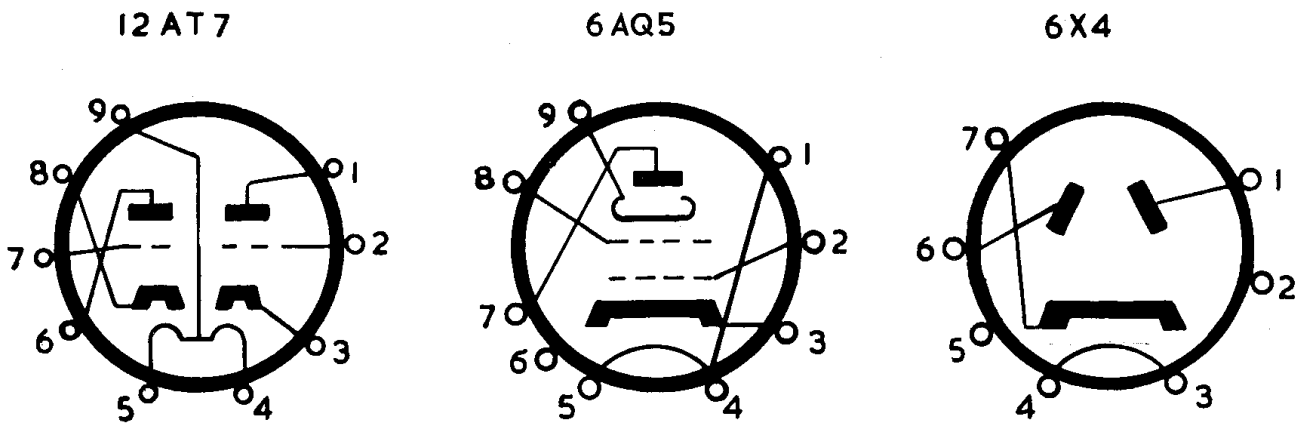
VOLTAGES TAKEN WITH MAINS INPUT 230V 50 C.R.S. ON
 230-250V TAP. CHASSIS TAKEN AS NEGATIVE
 METER USED :- AVO MODEL 7 400V & 10V RANGES
 MAINS CURRENT :- 0.13 AMP

GRAM MOTOR.

AC. MAINS.



TOP CHASSIS LAYOUT



VALVE BASES