

**General Description:** Transistor auto-change record player for operation from A.C. mains, 200–250 volts, 50 c/s., 25 watts. Record unit B.S.R. type UA15 “Superslim” with Ronette stereo cartridge type 105S. Stereo output (left-hand channel) socket, microphone input and tape recording sockets.

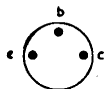
**Semiconductors:** (VT<sub>1</sub>, 2) AC156; (VT<sub>3</sub>) AC165; (VT<sub>4</sub>) AC166; (VT<sub>5</sub>) AC168 (*n-p-n*); (VT<sub>6</sub>, VT<sub>7</sub>) AC167; (W<sub>1</sub>, W<sub>2</sub>) AA120 (bias stabilising); (W<sub>3</sub>) H1 30/9000 (H.T. bridge rectifier). W<sub>1</sub>, W<sub>2</sub>, VT<sub>6</sub>, VT<sub>7</sub> are in heat sink and have coating of silicone grease to assist thermal conductivity. If replaced, it is important to apply similar coating.

**Balance Adjustment:** To adjust R<sub>17</sub> connect oscilloscope to junction C<sub>10</sub>/LS with earth side of 'scope to chassis positive line. Apply 1 kc/s. signal to input (tape socket). Set volume control to maximum and increase signal until clipping of output waveform occurs. Then adjust R<sub>17</sub> until clipping is symmetrical on positive- and negative-going peaks. Alternatively with no-signal input and volume control at minimum, potential at R<sub>22</sub> relative to chassis is adjusted to be approximately 1-volt higher than half of D.C. supply measured across C<sub>11</sub>.

**Stylus Replacement:** 78 type SA250; LP type SA075.

**Dismantling:** *Ventilation Panel:* Release and take out two slotted screws immediately below control panel. Ease out ventilator. *Motor Board:* Secure record changer by transit screws. Take out five countersunk screws around edge of board, lift board at left-hand side and move it slightly to left in order to clear handle fixing screws. Release pick-up lead saddle from underside of motor board. Motor board may now be placed on its rear edge diagonally across floor of cabinet. *Amplifier Chassis:* Secured inside cabinet (left-hand side) by three screws. Before removing, pull off bass, treble and volume control knobs. Take out three mushroom-headed screws, one immediately below control panel, one in centre of right-hand side of metal chassis and one adjacent to side of cabinet. Slide chassis outwards and downwards to obtain access to components. To reach components under socket panel, remove three self-tapping screws fixing sub-chassis to main chassis: carefully ease panel forward to extent of connecting leads.

TRANSISTOR BASE CONNECTIONS



AF AMPLIFIER AC 156

AF AMPLIFIER AC 156

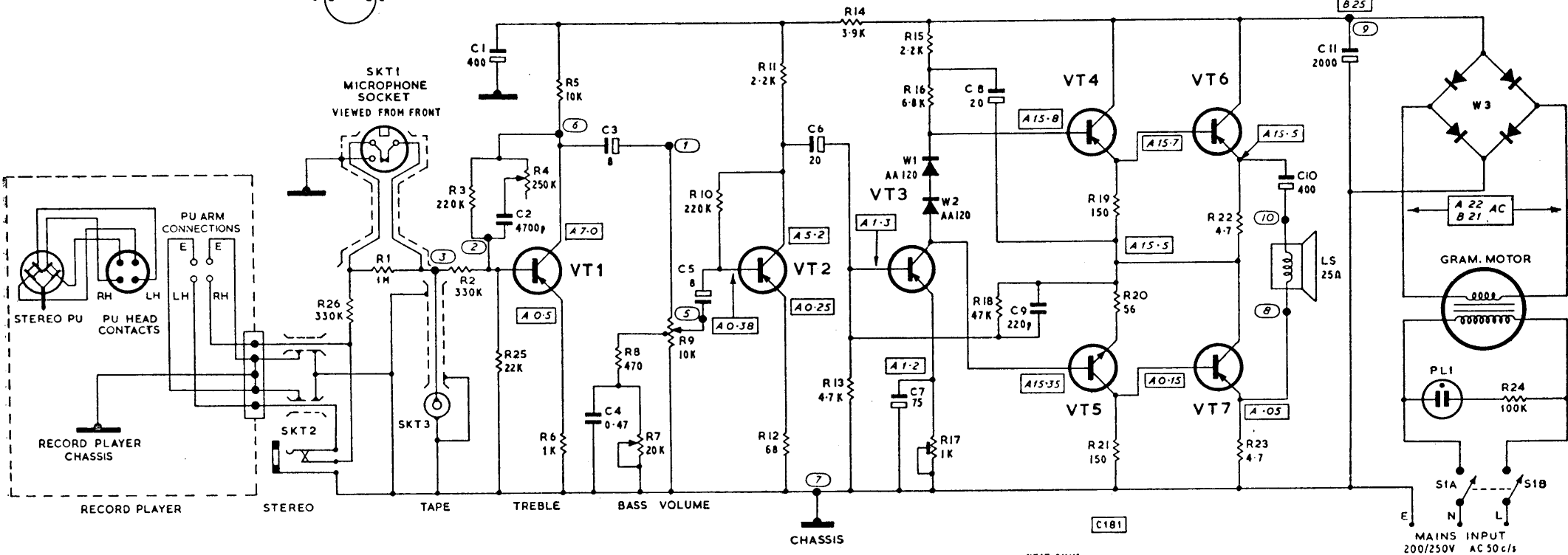
AUDIO DRIVER AC 165

COMPLEMENTARY PUSH-PULL DRIVER STAGE

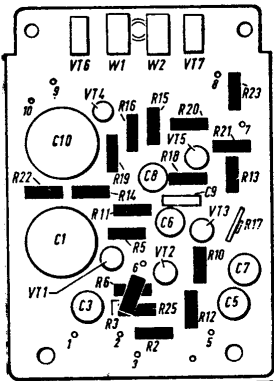
PUSH-PULL POWER OUTPUT STAGE

HT RECTIFIER H1. 30/9000

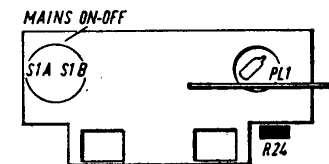
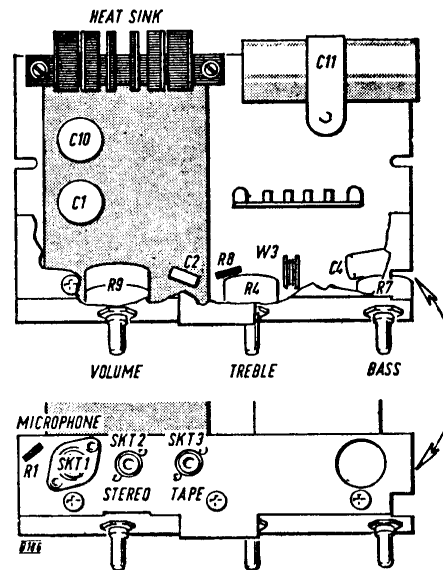
VT4 AC166  
VT5 AC168  
VT6 AC167  
VT7 AC167



**Circuit Diagram.** Figures in rectangles are voltage readings taken with 20,000 ohm/volt meter at 245V mains input: the meter being connected between positive chassis line and point shown except where otherwise indicated. A-Quiescent, B-Signal input (240mV at 1Kc). SKT2 is shown in monophonic position



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