

## H.M.V.

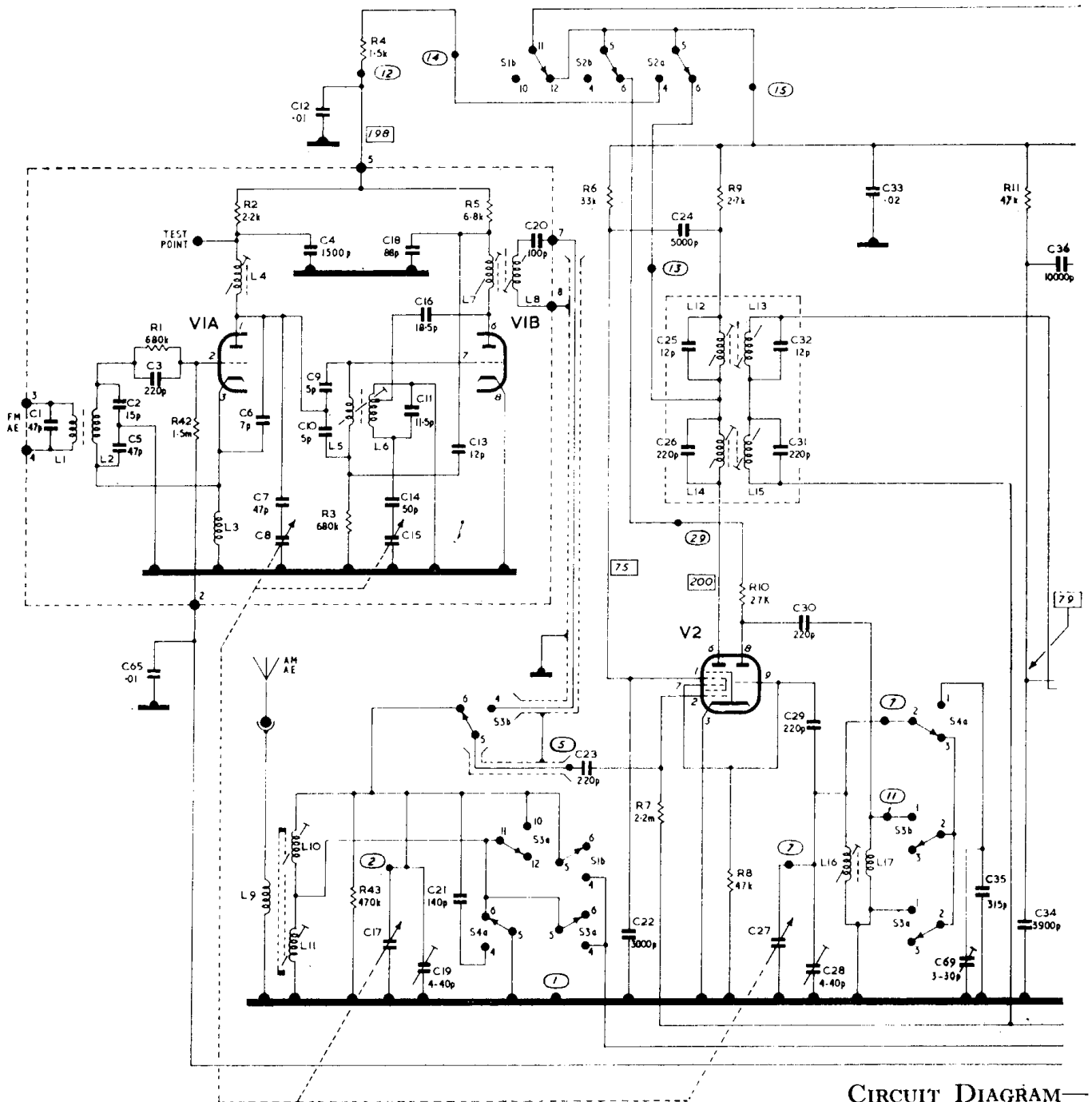
## Models 1639, 1643, 1645

**General Description:** Eight-valve (including tuning indicator), three-waveband, A.M./F.M. stereo auto-radiograms. Similar chassis are fitted to these three models, though different cabinets, loudspeakers and record units are used. Tape-recorder sockets.

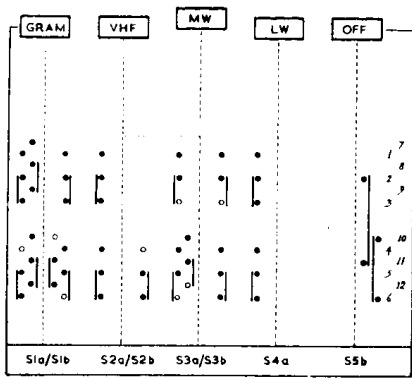
**Power Supply:** A.C. mains, 200-250 volts, 50 c/s. 62 watts (radio).

**Wavebands:** M.W. 187-550 m.; L.W. 1130-1935 m.; V.H.F. 87-101 Mc/s.

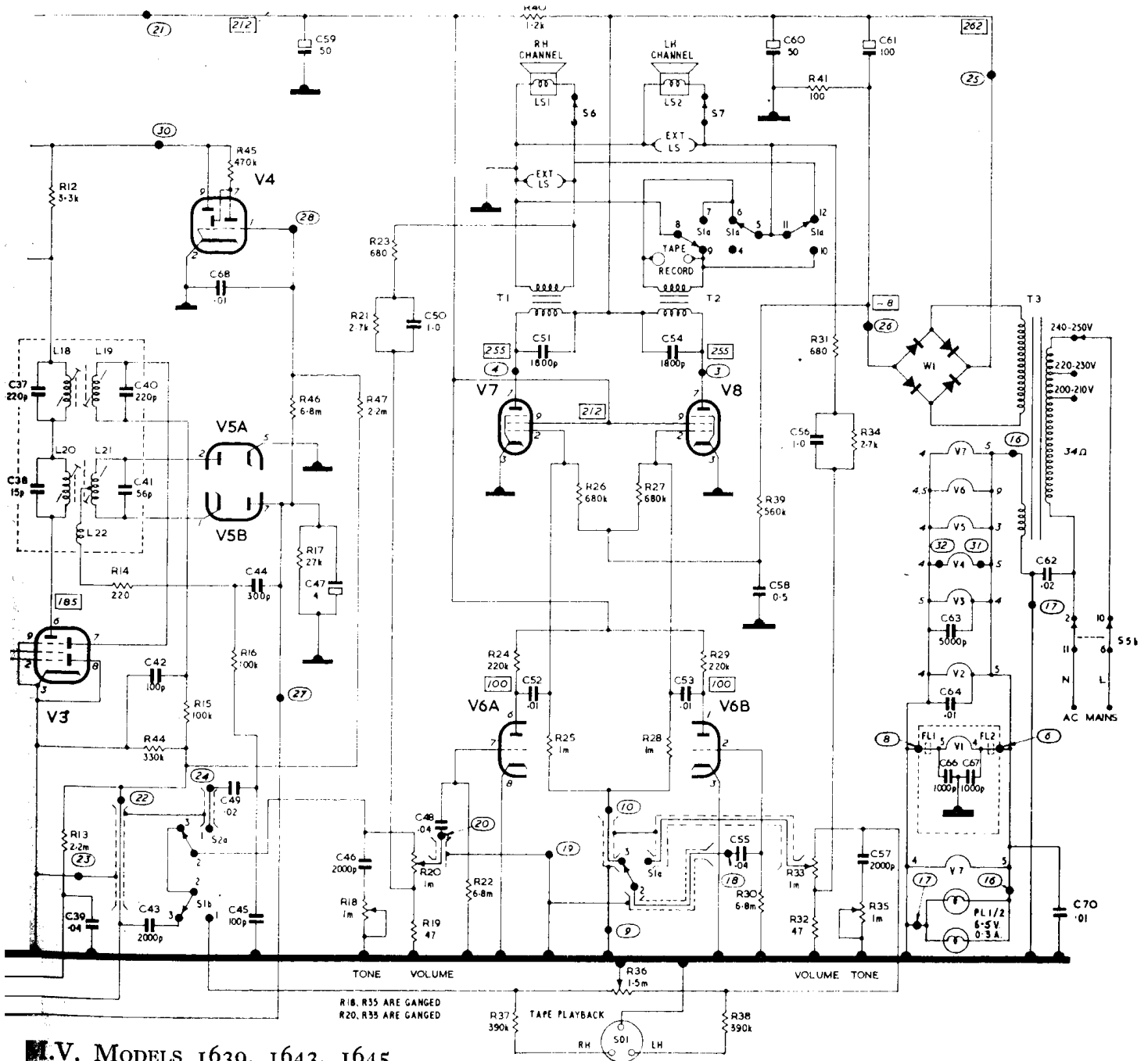
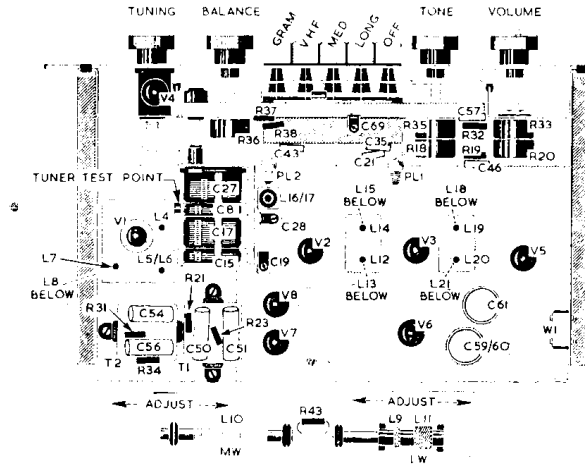
**Valves:** (V1) ECC85; (V2) ECH81; (V3) EBF89; (V4) EM81; (V5) EB91; (V6) ECC83; (V7) EL84; (V8) EL84. Typical voltages, measured with 20,000-ohms/volt meter, are shown on circuit diagram.



CIRCUIT DIAGRAM—



SWITCH AND LAY-OUT DIAGRAMS



R18, R35 ARE GANGED  
R20, R35 ARE GANGED

**Modifications:** In Schedule A, L.W. oscillator trimmer not fitted and C<sub>35</sub> was 346 pF. C<sub>51</sub> and C<sub>54</sub> were 0.002  $\mu$ F. (400 volts A.C.). Schedule B (early production) C<sub>51</sub> and C<sub>54</sub> were 0.002  $\mu$ F. (400 volts A.C.).

**Switches:** Note that piano-key switch diagram shown in M.W. position as viewed from rear of upright chassis. V.H.F. key operates S<sub>2a/b</sub> and S<sub>3a/b</sub>. The M.W. key merely resets S<sub>1</sub>, S<sub>2</sub>, S<sub>3</sub> and S<sub>4</sub> to neutral.

**Record Changers:** *Model 1639:* Garrard RC<sub>121</sub> Mk. II with Acos 73/1B stereo cartridge. Replacement stylus SS73. *Model 1643:* Garrard Type RC<sub>209</sub> with Acos 73/1B and stylus SS73. *Model 1645:* BSR Type UA<sub>14</sub> with stereo cartridge TC8S. Replacement styli Types TC8RS (LP) and TC8G (78).

**Dismantling:** Remove F.M. aerial plug and external aerial and earth connections. Remove cabinet back. From underside of chassis unscrew four chassis-fixing bolts (nuts are riveted to chassis and cannot be removed). Unscrew two mains-transformer retaining nuts and free transformer. Disconnect leads to internal speaker, and F.M. aerial panel (two self-tapping screws). Release ferrite-rod aerial, remove tape playback-record panel (two self-tapping screws). Free mains terminal block (one Phillips self-tapping screw) and release mains lead from block to record changer. Unsolder pick-up leads on record changer. Chassis is now free.

**Component Notes:** C<sub>1</sub>, C<sub>2</sub>, C<sub>5</sub>, C<sub>7</sub>, C<sub>14</sub>, C<sub>25</sub>, C<sub>32</sub>, C<sub>38</sub>, C<sub>41</sub>, C<sub>44</sub>, R<sub>41</sub> are 5 per cent. C<sub>11</sub>, C<sub>13</sub>, C<sub>18</sub> are 2½ per cent. C<sub>21</sub>, C<sub>26</sub>, C<sub>31</sub>, C<sub>37</sub>, C<sub>40</sub> are 2 per cent. C<sub>35</sub> 1 per cent. C<sub>6</sub>, C<sub>9</sub>, C<sub>10</sub>, C<sub>16</sub>  $\pm$ ½ pF. C<sub>51</sub>, C<sub>54</sub> 350-volt A.C. (on some models 0.002  $\mu$ F.). R<sub>40</sub> 3 watts. R<sub>41</sub> 1 watt. PL<sub>1/2</sub> 6.5 volts, 0.3 amp.

**Model 1377:** The chassis fitted in this V.H.F./F.M.-only table receiver for A.C./D.C. mains closely resembles that of Model 1375 covered in the 1960-61 volume. Differences include the use of a single 22-volt, 0.1-amp. dial lamp in place of two 12.6-volt lamps, and an additional 0.0025- $\mu$ F. capacitor, from the junction of the V<sub>1</sub>/V<sub>2</sub> heater chain to chassis, for V<sub>1</sub> heater decoupling.

**Models 1379, 1381:** The chassis fitted in these A.M./F.M. table models are similar in a number of respects to that of Model 1376 covered in the 1960-61 volume but with the following main differences: addition of a UM80 tuning indicator and associated components; a negative feedback type tone control (1M potentiometer connected between anodes of A.F. amplifier and output stage with adjustable shunting by 500-pF. capacitor); an E250 C85 metal rectifier in place of the UY85; additional heater decoupling of V<sub>1</sub> (1000 pF.); provision for the use of external aerial and earth (inductive coupling to rod aerial with mains isolating and static discharge components); and use of twin loudspeakers. The lay-out of the printed panel also differs.

**Models 1640, 1642:** These stereo radiograms use a chassis which basically resembles that of the 1639-series, but with rotary instead of piano-key wave-change switching. Model 1640 has a B.S.R. UA8 record unit and Model 1642 a UA14. No tuning indicator on these models.