

**AMBASSADOR****Model U3645**

**General Description :** Six-valve (including rectifier) three-waveband superheterodyne receiver with R.F. stage. Released September 1945.

**Power Supply :** A.C./D.C. mains, 230–250 volts.

**Intermediate Frequency :** 465 kc/s.

**Valves :** (V<sub>1</sub>) EF39; (V<sub>2</sub>) CCH35; (V<sub>3</sub>) EF39; (V<sub>4</sub>) EBC33; (V<sub>5</sub>) CL33; (V<sub>6</sub>) UR3C; plus 230-volt 60-watt lamp.

**General Notes :** This chassis uses the A.C./D.C. technique employed in the Model 3541, *i.e.*, a lamp is employed for ballasting the valve heaters. This is a 60-watt 230-volt lamp, which maintains the heater current within the tolerance limits specified by the manufacturer.

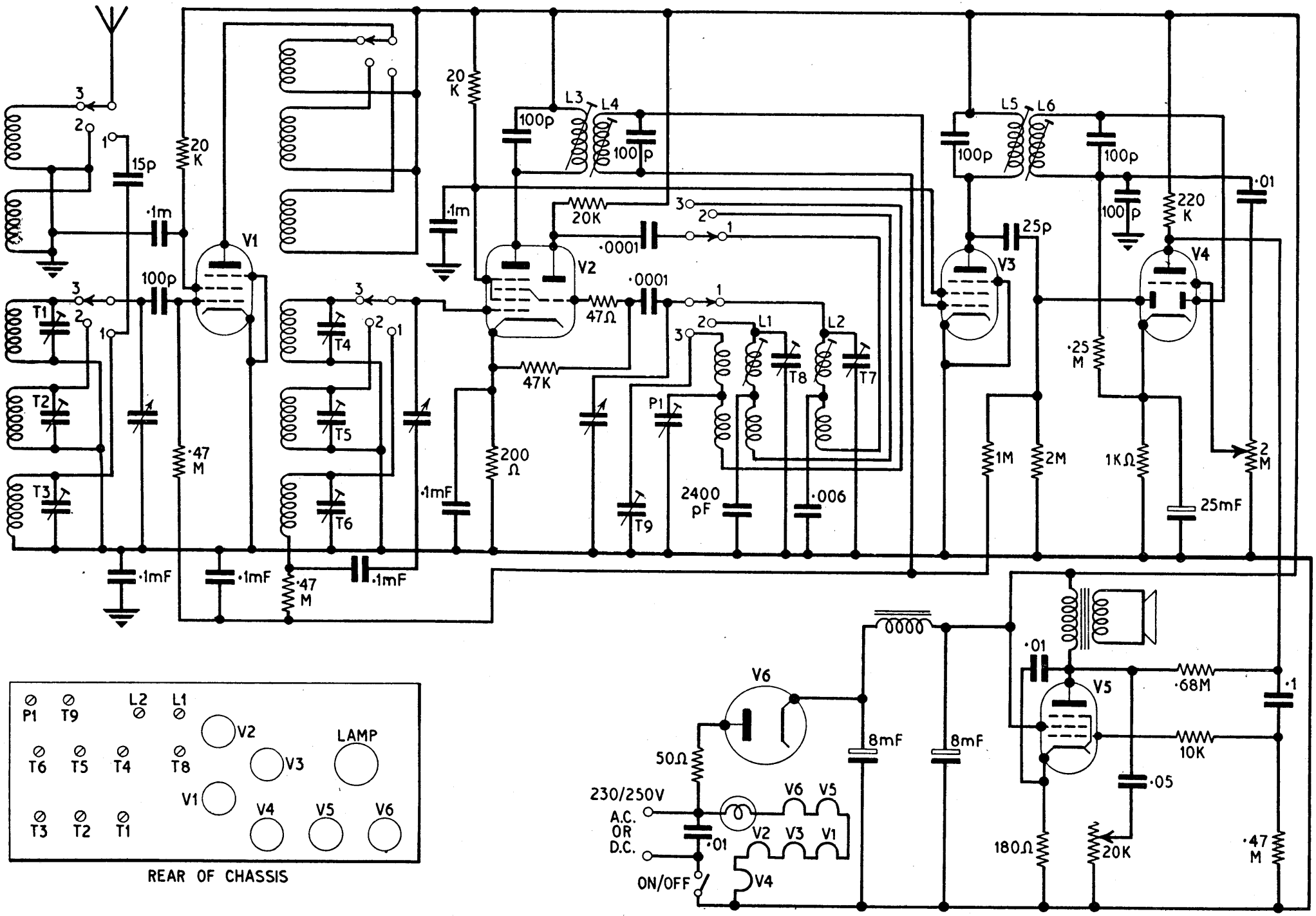
No long waves are provided, the three bands being medium waves, short waves from 50 to 180 metres and short waves from 16 to 50 metres.

Iron-cored coils are employed in the oscillator stage on S.W. so that full calibration adjustment is possible at both ends of each band.

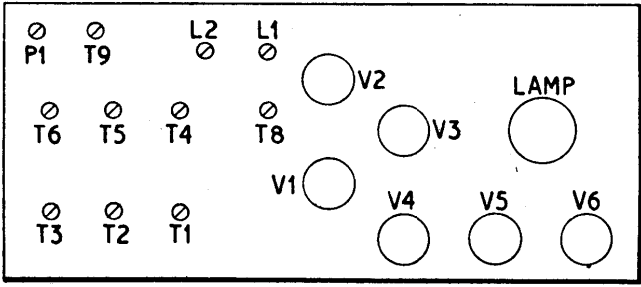
Negative feedback is employed from the anode of the output valve to the anode of the A.F. valve via a 0.68-M $\Omega$  resistor. The tone control is of the straightforward type, employing a 10-k $\Omega$  pot., which carries the ON/OFF switch. The volume control of 1 M $\Omega$  is rather high, but lower values should not be used. If A.F. instability is experienced, one side of the loudspeaker winding should be earthed.

**Alignment Procedure :**

<i>Inject Signal via</i>	<i>Frequency</i>	<i>Tune Receiver to</i>	<i>Adjust in Order Stated</i>
V <sub>2</sub> Grid	465 kc/s.	—	L6, L5, L4, L3
Aerial socket	600 kc/s.	500 m.	P <sub>1</sub>
” ”	1500 kc/s.	200 m.	T <sub>9</sub> , T <sub>6</sub> , T <sub>3</sub>
” ”	1667 kc/s.	180 m. Band II	L <sub>1</sub>
” ”	6 Mc/s.	50 m. Band II	T <sub>8</sub> , T <sub>5</sub> , T <sub>2</sub>
” ”	6 Mc/s.	50 m. Band III	L <sub>2</sub>
” ”	15 Mc/s.	20 m. Band III	T <sub>1</sub> , T <sub>4</sub>



CIRCUIT AND TRIMMER LAY-OUT DIAGRAMS—AMBASSADOR MODEL U3645



REAR OF CHASSIS