

EKCO**Model A147**

General Description : Five-valve (including rectifier), superheterodyne receiver with pre-set tuning for one L.W. and three M.W. stations.

Power Supply : A.C. mains, 200–250 volts, 50–100 c/s. Consumption, with 225 volts input, 165 mA. current through primary of T₁.

Wavebands : Four pre-selected stations within the following bands : (1) 1200–1800 m.; (2) 310–550 m.; (3) 245–435 m.; (4) 188–343 m.

Intermediate Frequency : 470 kc/s.

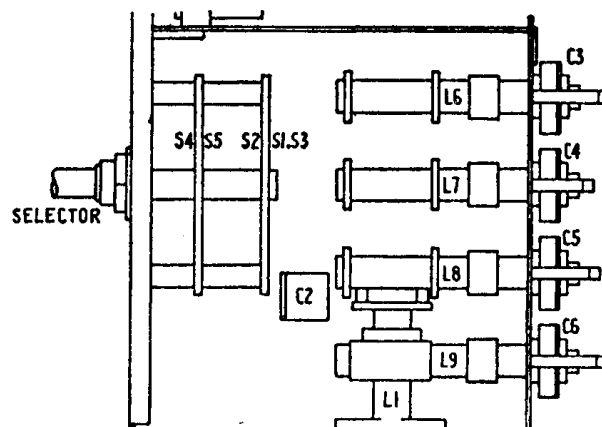
Valve Analysis : Measured with 20,000-ohms/volt meter (A.C. 1000 ohms/volt). Set tuned to 300 m. under no-signal conditions.

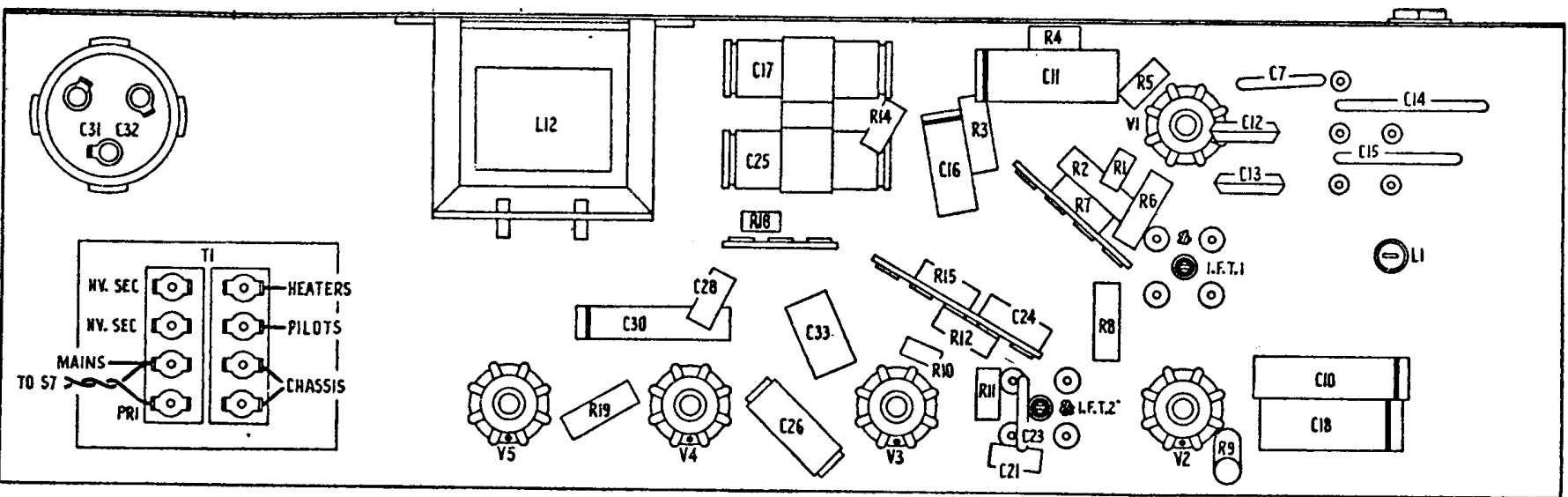
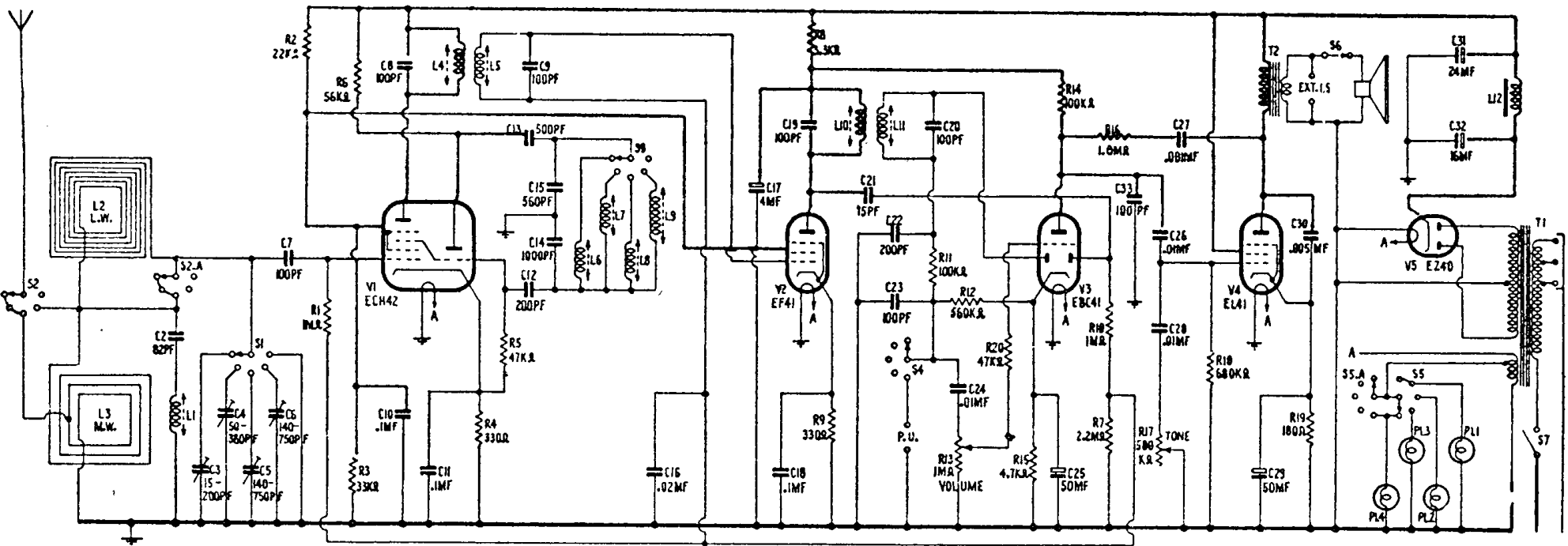
		<i>V_a</i>	<i>I_a</i>	<i>V_{g2}</i>	<i>I_{g2}</i>	<i>V_k</i>	<i>I_k</i>
V ₁	ECH ₄₂	245	1.84	95	2.55	2.3	7.14
V ₁	(osc.)	90	2.75	—	—	—	—
V ₂	EF ₄₁	227	4.55	95	1.2	2.2	6.75
V ₃	EBC ₄₁	178	0.5	—	—	2.4	0.5
V ₄	EL ₄₁	220	33.0	245	5.05	6.75	38.05
V ₅	EZ ₄₀	255 A.C.	36.0	—	—	266	—

Notes : As all heaters are wired in parallel, only indirectly heated rectifier valves with good heater/cathode insulation should be used. Pilot-lamp rating 6.2 volts, 0.3 amp. M.E.S. fitting. Loudspeaker impedance 3 ohms at 400 c/s.

Alignment Procedure : Align I.F. transformers in conventional manner, with selector turned to range 2, adjusting cores in following order : 2nd I.F.T. upper and lower, 1st I.F.T. upper and lower. Inject signal at I.F. to aerial socket and adjust core of L₁ for minimum output. To adjust pre-set controls, set selector to required position, tune in the signal by adjusting the appropriate oscillator coil and then resonate aerial circuit with adjacent trimmer.

D.C. Resistance of Components : L₁, 16 ohms; L₂, 5.5 ohms; L₃, 1.0 ohm; L₄, 15 ohms; L₅, 15 ohms; L₆, 15 ohms; L₇, 1.8 ohms; L₈, 2.0 ohms; L₉, 2.3 ohms; L₁₀, 15 ohms; L₁₁, 15 ohms; L₁₂, 360 ohms; T₁ (primary), 42 + 5 + 5 ohms; T₁ (secondary), 330 + 345 ohms; T₂ (primary), 700 ohms; T₂ (secondary), 0.34 ohms.





CIRCUIT DIAGRAM AND UNDER-CHASSIS VIEW—EKCO MODEL A147