K-B Model EG35

General Description : Six-valve (including rectifier and tuning indicator), three-waveband superheterodyne radiogramophone. Released September 1949.

Power Supply : A.C./D.C. mains, 200–250 volts (A.C. 25–60 c/s.). Consumption : radio, 57 watts; gramophone, 72 watts.

Wavebands : L.W. 732–2110 m. (410–142 kc/s.); M.W. 187–585 m. (1610–510 kc/s.); S.W. 16·3–51·4 m. (18·4–5·8 Mc/s.).

Output : 2 watts to 10-in. permanent-magnet loudspeaker.

Intermediate Frequency : 470 kc/s.

Valves : Brimar (V1) 12K8GT; (V2) 12U5G (or 1629); (V3) 14R7; (V4) 12SL7GT (two-stage amplifier); (V5) 50L6GT; (V6) 35Z4GT.

Inductor Colour Coding : As for Model FR15 (page 470).

Alignment Procedure : Operations must be carried out in the order indicated. The tuning pointer should be set to the datum mark with the gang fully enmeshed.

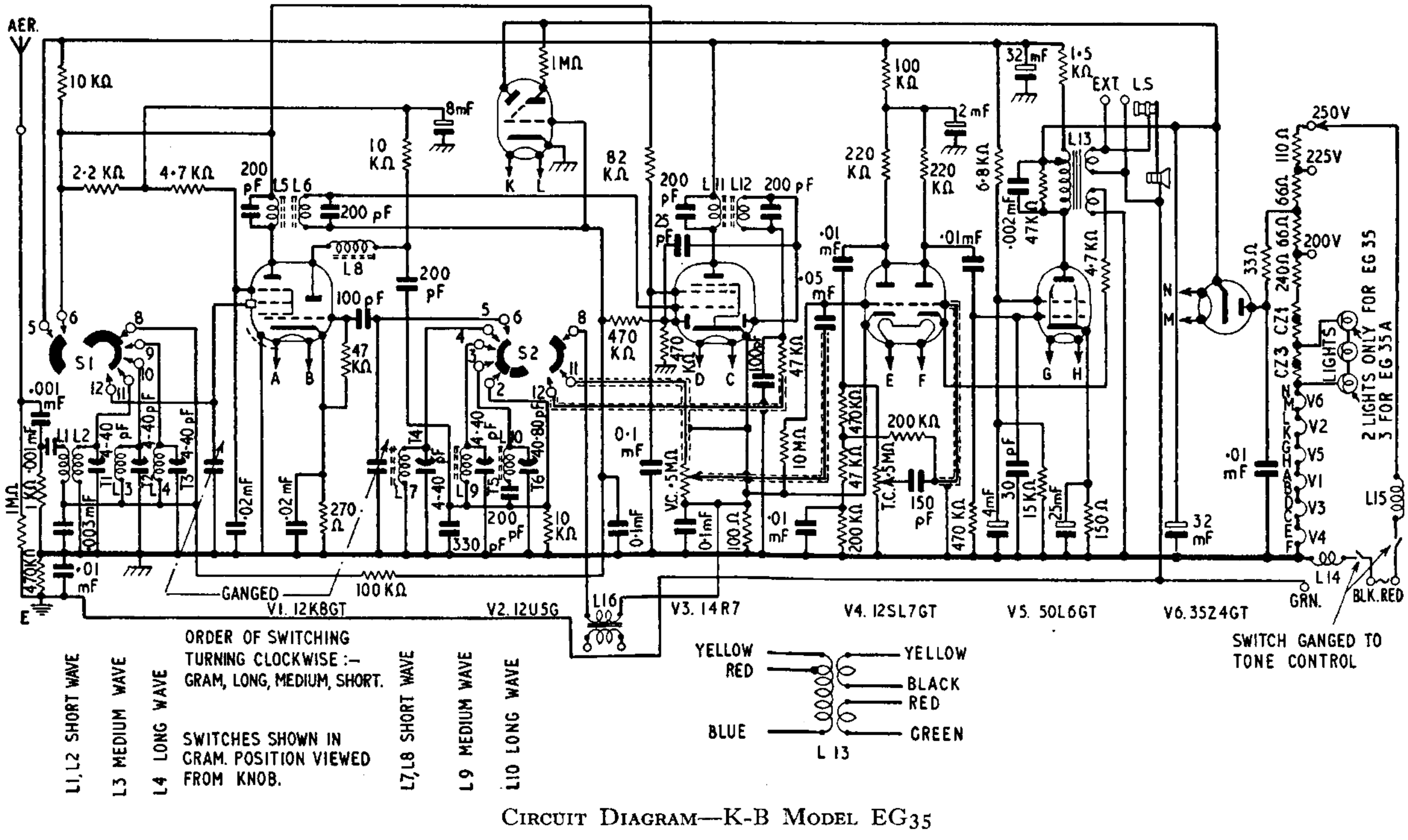
Operation	*Circuits*	*Signal Generator Connection*	*Input Signal*	*Tuning Pointer*	*Adjust for Maximum Response*
1	I.F.	Grid of V1 via 0·1-μF. capacitor	465 kc/s.	M.W. datum	L12, L11, L6 and L5
2	M.W.	Aerial socket via dummy aerial	600 kc/s.	500-m. line	Core L9
3	—	—	1400 kc/s.	214-m. line	T2 and T5
4	L.W.	—	175 kc/s.	1714-m. line	Core L10
5	—	—	350 kc/s.	860-m. line	T3 and T6
6	S.W.	—	6 Mc/s.	50-m. line	Core L7
7	—	—	15 Mc/s.	20-m. line	T1 and T4

Notes : The operations on each band should be successively repeated until maximum sensitivity and scale accuracy have been attained. The oscillator operates at a higher frequency than the input signal on all bands, and T1 should therefore be adjusted to the lesser capacitative position in operation No. 7. The tuning gang should be rocked slightly for maximum gain whilst finally adjusting the aerial trimmers.

Voltage Chart : Mains voltage 225 volts. Voltage drop across smoothing resistor, R37, is 43 volts. Total H.T. current 76 mA., total mains current 230 mA.*

Valve	*Volts Measured between Socket and Chassis*							
	Pin 1	2	3	4	5	6	7	8
V1	0	37·8 *	166	107	—	97	25·2 *	3·5
V2	0	87·8 *	18	210	—	—	100·4 *	0
V3	25·2 *	166	—	—	70	—	0·4	12·6 *
V4	—	38	0·65	—	43	0·4	12·6 *	0
V5	0	87·8 *	194	103	—	—	37·8 *	6·9
V6	—	135·4 *	—	—	202 *	—	100·4 *	210

* A.C. measurement.



KOLSTER-BRANDES

CIRCUIT DIAGRAM—K-B MODEL EG35