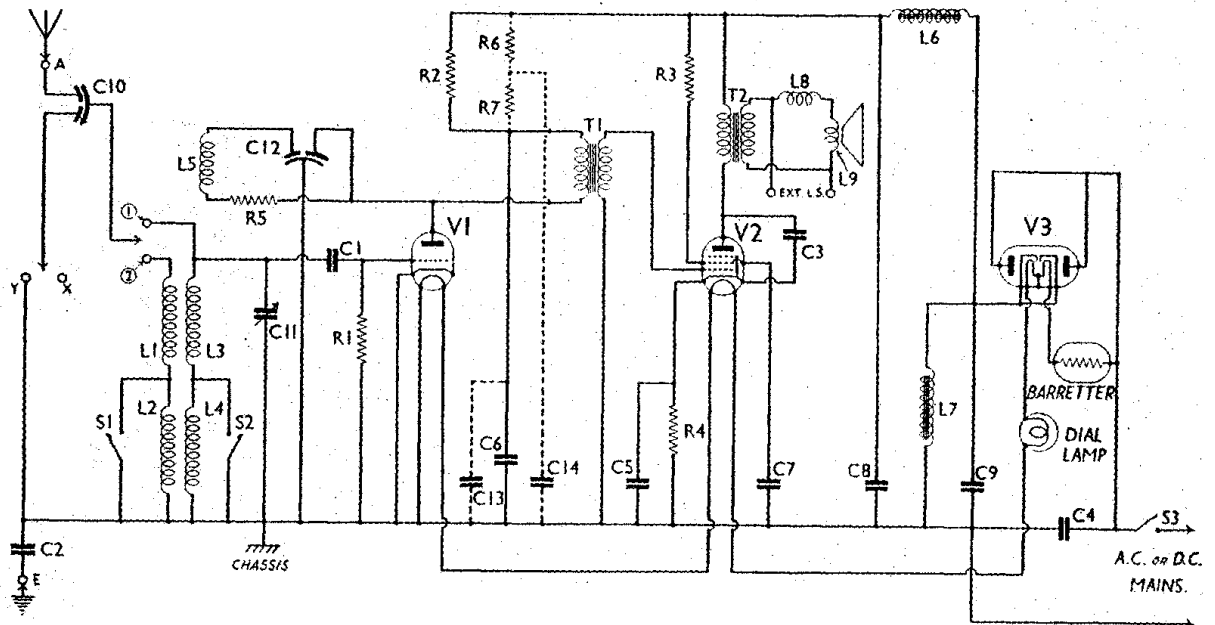


G.E.C. - AC/DC 3

The circuit of the G.E.C. "A.C./D.C. Three." C10 and C12 are variable differential condensers. The sockets X and Y are shown in the plan view of the chassis. Sockets 1 and 2 are at the rear of the chassis. R6 and R7 replace R2 in the 25 cycle model. C13 and C14 are only fitted in the 25 cycle model.

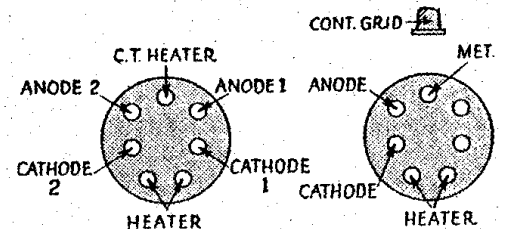


COMPONENTS AND VALUES

Condensers		Values (μ F)
C1	V1 grid condenser	0.0002
C2	Earth blocking condenser	0.1
C3	V2 anode tone compensator	0.0075
C4	Mains H.F. by-pass	0.04
C5	V2 cathode by-pass, electrolytic	20.0
C6	V1 anode decoupling	1.0
C7	V2 aux. grid by-pass	1.0
C8	H.T. smoothing, electrolytics	6.0
C9		6.0
C10	Aerial series condenser, differential	—
C11	Aerial tuning condenser	—
C12	Reaction condenser, differential	—
C13*	Additional V1 anode decoupling	6.0
C14*	Additional V1 H.T. smoothing	6.0

* In 25 c.p.s. model only.

Other Components		Values (ohms)
L1	Aerial coupling coils	1.7
L2		22.0
L3	Aerial tuning coils	4.7
L4		17.0
L5	Reaction coil	2.3
L6	H.T. smoothing choke	400
L7	Speaker field	6,750
L8	Speaker hum coil	total 3.1
L9	Speaker speech coil	
T1	Intervalve trans.	Pri. 1,150 Sec. 7,500
T2	Speaker input trans.	Pri. 400 Sec. 0.8
S1-S2	Waveband switches	---
S3	Mains switch	---



Connections of the rectifier V3 (left) and the triode V1 (right), looking at the underside of the valve bases. In the case of V3, the centre-tap of the heater is not used in this receiver.

VALVE ANALYSIS

The voltages and currents given in the table below are approximate only and were obtained from a representative receiver working with the mains supplies indicated. No aerial or earth was connected, and the reaction control was at minimum. All voltages were measured with a high-resistance voltmeter, cathode in each case being negative.

The values do not necessarily apply to the 25 c.p.s. receiver.

Resistances	Values (ohms)
R1	V1 grid leak ... 2,000,000
R2†	V1 anode decoupling ... 77,000
R3	V2 aux. grid H.T. feed ... 5,500
R4	V2 G.B. resistance ... 250
R5	Reaction circuit stabiliser ... 300
R6*	V1 H.T. smoothing ... 33,000
R7*	V1 anode decoupling ... 33,000

† Omitted in 25 c.p.s. model. * In 25 c.p.s. model only

Valve	Mains Input Volts	Anode Volts	Anode Curr. (mA)	Screen Volts	Screen Curr. (mA)
V1 H30	200 D.C.	74	1.4	—	—
V2 N30	200 D.C.	160	24.0	140	5.0
V1 H30	250 D.C.	82	1.8	—	—
V2 N30	250 D.C.	200	32.0	180	6.5
V1 H30	200 A.C.	78	1.5	—	—
V2 N30	200 A.C.	170	25.0	150	5.0
V1 H30	250 A.C.	85	2.0	—	—
V2 N30	250 A.C.	215	33.0	190	7.0