G.E.C. - BC3630, BC3631

VALVE ANALYSIS

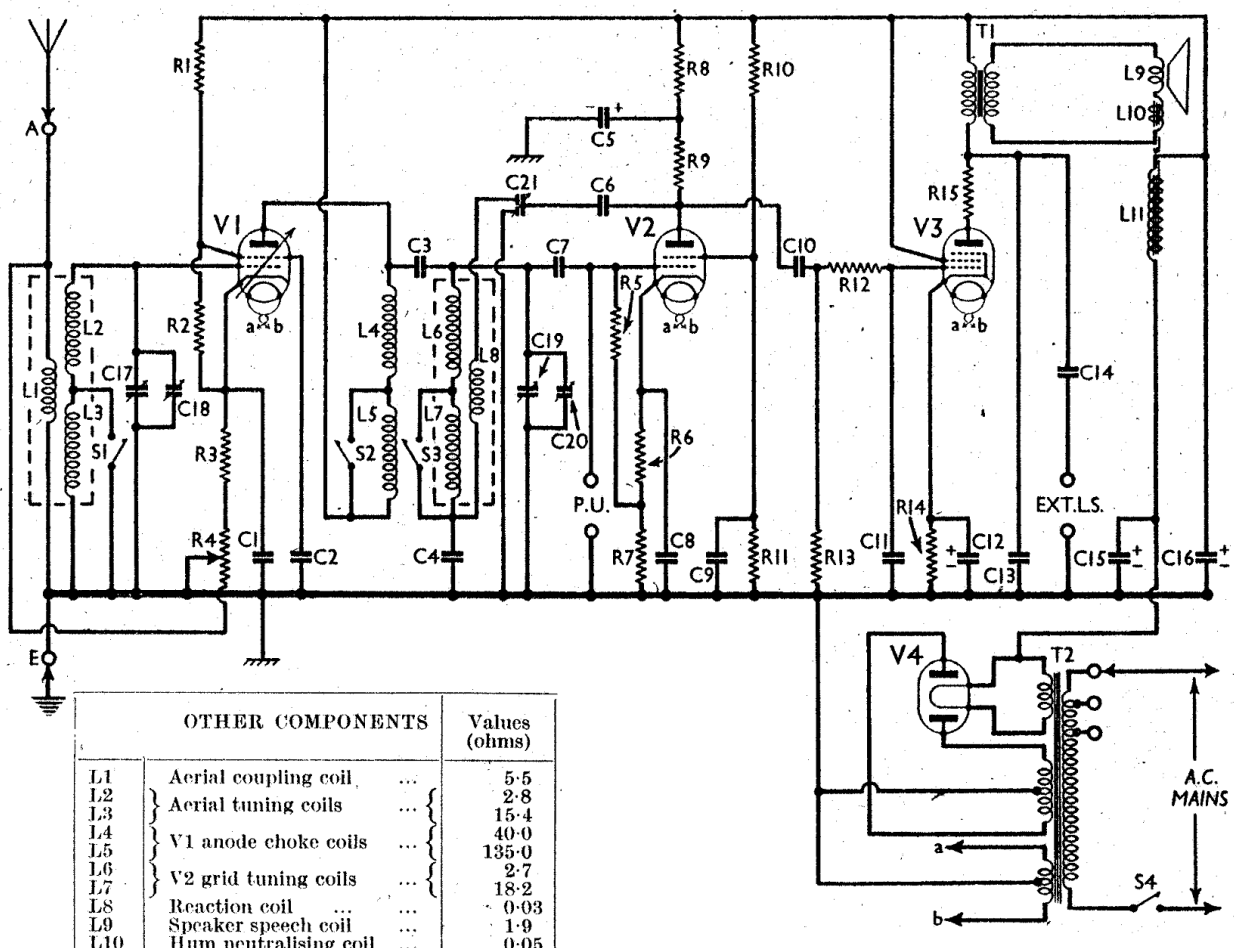
Valve	Anode Voltage (V)	Anode Current (mA)	Screen Voltage (V)	Screen Current (mA)
V1 VMS4	250	14·5	90	1·0
V2 MS4B	120	2·4	55	0·4
V3 N41	230	32·0	250	7·1
V4 U12	275†	—	—	—

† Each anode, A.C.

CONDENSERS		Values (μF)
C1	V1 cathode by-pass * ...	0·25
C2	V1 SG decoupling ...	0·1
C3	RF coupling	0·000011
C4	Blocking condenser ...	0·05
C5*	V2 anode decoupling ...	3·0
C6	Reaction coupling ...	0·005
C7	V2 CG condenser... ...	0·0005
C8	V2 cathode by-pass ...	0·5
C9	V2 SG decoupling ...	0·5
C10	AF coupling to V3 ...	0·02
C11	V3 grid RF by-pass ...	0·0003
C12*	V3 cathode by-pass ...	50·0
C13	Tone corrector	0·005
C14	Ext. LS coupling... ...	0·25
C15*	HT smoothing condensers	7·0
C16*	HT smoothing condensers	7·0
C17†	Aerial circuit tuning ...	—
C18‡	Aerial circ. MW trimmer	—
C19†	RF trans. tuning... ...	—
C20‡	RF trans. MW trimmer ...	—
C21†	Differential reaction condenser	—

* Electrolytic ‡ Variable † Pre-set

RESISTORS		Values (ohms)
R1	V1 SG pot. divider ...	50,000
R2	V1 SG pot. divider ...	22,000
R3	V1 fixed GB resistor ...	200
R4	V1 gain control	7,000
R5	V2 grid leak	1,000,000
R6	V2 GB resistors... ...	200
R7	V2 GB resistors... ...	200
R8	V2 anode decoupling ...	15,000
R9	V2 anode load	30,000
R10	V2 SG pot. divider ...	70,000
R11	V2 SG pot. divider ...	30,000
R12	V3 grid RF stopper ...	55,000
R13	V3 CG resistor	220,000
R14	V3 GB resistor	100
R15	V3 anode stabiliser ...	100



OTHER COMPONENTS		Values (ohms)
L1	Aerial coupling coil ...	5·5
L2	Aerial tuning coils ...	2·8
L3	Aerial tuning coils ...	15·4
L4	V1 anode choke coils ...	40·0
L5	V1 anode choke coils ...	135·0
L6	V2 grid tuning coils ...	2·7
L7	V2 grid tuning coils ...	18·2
L8	Reaction coil	0·03
L9	Speaker speech coil ...	1·9
L10	Hum neutralising coil ...	0·05
L11	Speaker field coil... ...	1,400·0
T1	Speaker input trans. Pri. ...	400·0
T1	Speaker input trans. Sec. ...	0·8
T2	Mains trans. Pri. total ...	41·0
T2	Mains trans. Heater sec. ...	0·08
T2	Mains trans. Rect. fil. sec. ...	0·12
T2	Mains trans. H.T. sec., total	540·0
S1-S3	Waveband switches ...	—
S4	Mains switch, ganged R4	—

CIRCUIT ALIGNMENT

With the gang at maximum, the pointer should coincide with the 550 m calibration mark on the scale. If necessary, the pointer should be adjusted by sliding its clip bodily round its spindle. Connect signal generator leads to **A** and **E** sockets, via a 0.0002 μF condenser.

MW.—Switch set to MW, tune to 225 m on scale, feed in a 225 m (1,333 kc/s) signal, and, with the volume control at maximum, adjust **C18** and **C20** for maximum output, manipulating the reaction control as required. Check calibration at 300 m (1,000 kc/s) and 500 m (600 kc/s).

LW.—There are no separate adjustments for the LW. band, but calibration and sensitivity should be checked at several points.