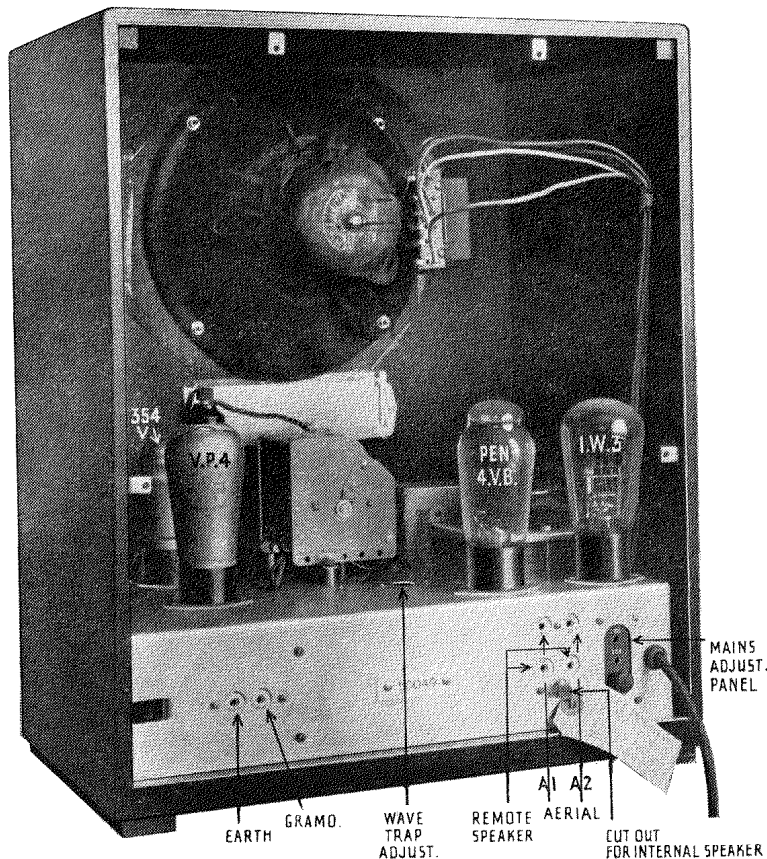


BUSH RADIO

GAUMONT-BRITISH PRODUCTS

A.C. MAINS RECEIVER

TYPE A.C.23

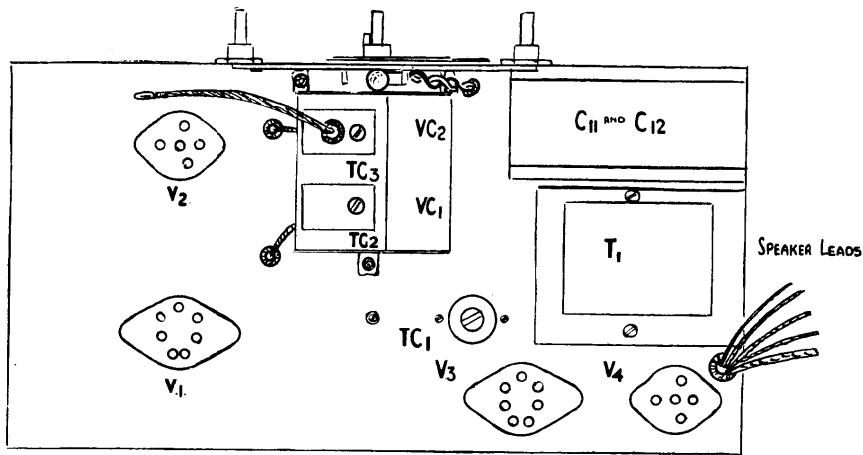


Position of Valves in Receiver

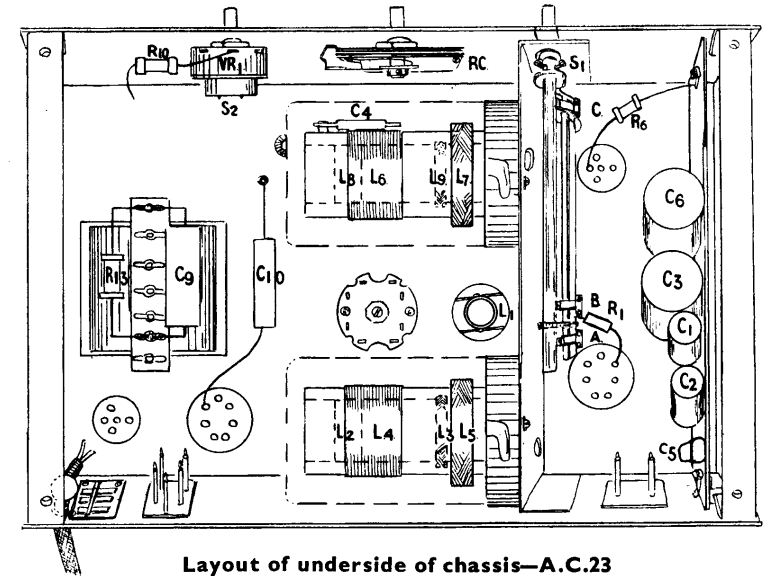
CURRENT AND VOLTAGE MEASUREMENTS

	V.P.4 (V.1)	354 v. (V.2)	Pen.4V.B. (V.3)
Anode/frame Volts	135 v.	55 v.	240 v.
Screening Grid/frame Volts	70 v.		260 v.
Cathode/frame Volts	1.3 v.		
Anode Current M.A.	3.7 m.a.	1.4 m.a.	36 m.a.
Screening Grid Current M.A.	1.7 m.a.		4 m.a.
Components to be checked if abnormal readings are obtained	I.W.3 and associated components R2, R4, C1, C2, C3 R3, L6, L7, V.C.2 T.C.3	I.W.3 and associated components R7, R8, R9, C5, C6, C7, L8, L9, R.C. R.6	I.W.3 and associated components T2, R13, C9 C10, R11, R12 C8
Voltage drop across T2 primary ... ..	...	20 volts.	
" " " Speaker field ... ..	...	95 "	

Measured with no signal input to set, i.e., with the aerial disconnected and with a voltmeter having a resistance of 1,000 ohms per volt.



Layout of top of chassis—A.C.23



Layout of underside of chassis—A.C.23

RESISTANCE COLOUR CODE

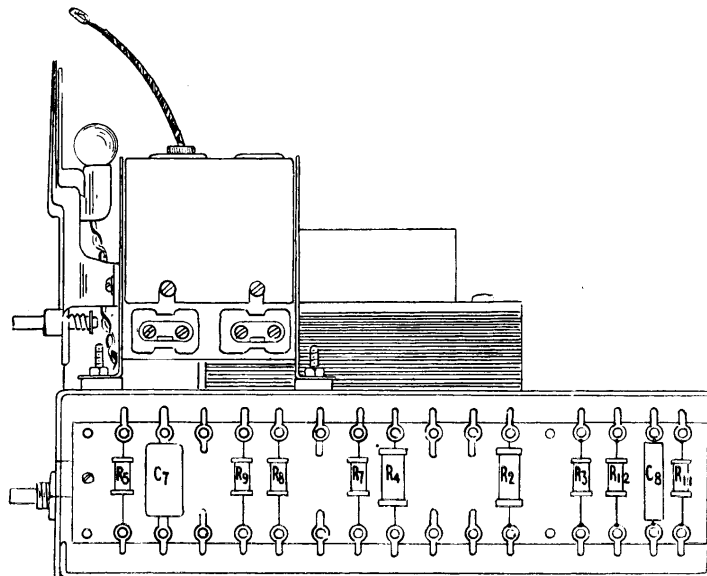
Body and End.

Colours.
1st and 2nd figures.

- 0 Black.
- 1 Brown.
- 2 Red.
- 3 Orange.
- 4 Yellow.
- 5 Green.
- 6 Blue.
- 7 Violet.
- 8 Grey.
- 9 White.

SPOT Colours.
(additional 0's).

- .0 Black.
- 0. Brown.
- 00. Red.
- 000. Orange.
- 0000. Yellow.
- 00000. Green.

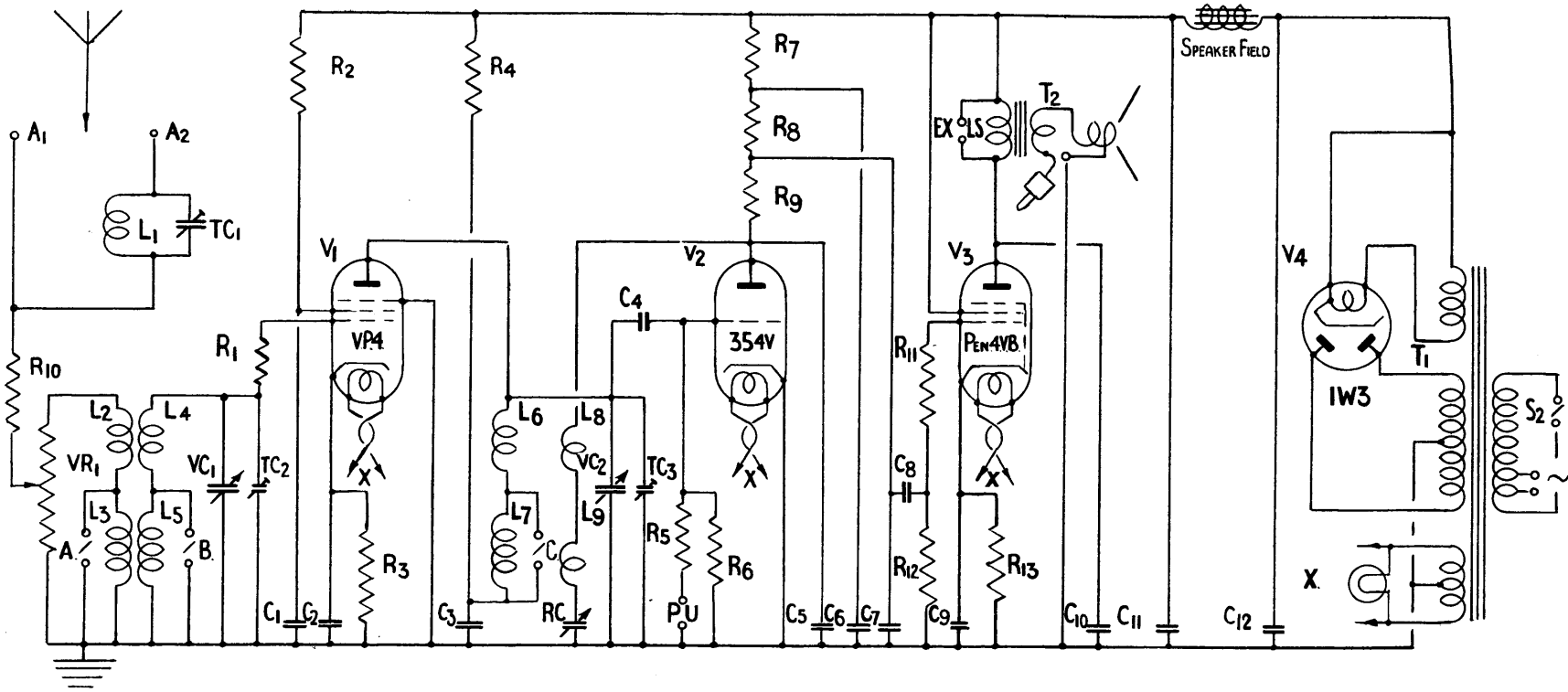


Elevation showing Resistance Panel

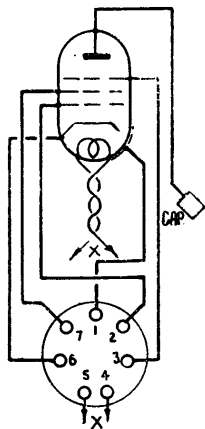
WIRING COLOUR CODE

H.T.	...	...	...	Red.
Anodes—not direct H.T.	...	...	...	Yellow.
Screening Grids	...	...	...	Red/Yellow.
Grid Circuits	...	...	...	Green.
Earth	...	...	...	Black.
Heaters	...	...	...	Brown.
Mid-Coil positions	...	...	...	Green/Yellow.
Aerial	...	...	...	Maroon.
Cathodes	...	...	...	Yellow/Black.

CIRCUIT DIAGRAM

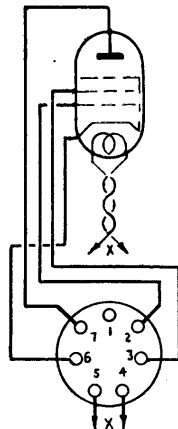


VALVE WIRING DIAGRAMS (As seen from underside of chassis)



CONNECTIONS FOR V.P.4.

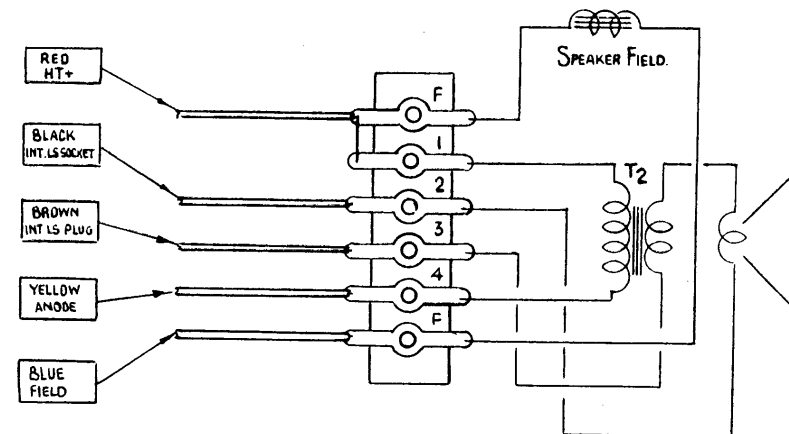
- Pin No.
- 1 Metallising.
 - 2 Control Grid.
 - 3 Earth Grid.
 - 4 } Heater.
 - 5 }
 - 6 Cathode.
 - 7 Screening Grid.
- Cap Anode.



CONNECTIONS FOR PEN.4 V.B.

- Pin No.
- 1 Not connected.
 - 2 Control Grid.
 - 3 Screening Grid.
 - 4 } Heater.
 - 5 }
 - 6 Cathode.
 - 7 Anode.

SPEAKER CIRCUIT DIAGRAM



LIST OF COMPONENT PARTS—A.C.23

COILS

Ref. No.	Description	Resistance
L.1	Wave Trap...	15 ohms
L.2	M.W. Ae. Coupling Coil	1.5 "
L.3	L.W. " " " "	6.4 "
L.4	M.W. " Coil	3.5 "
L.5	L.W. " " " "	14.5 "
L.6	M.W. Anode Coil	3.5 "
L.7	L.W. " " " "	14.5 "
L.8	M.W. Reaction Coil	2.7 "
L.9	L.W. " " " "	

VARIABLE CONDENSERS

V.C.1	} Ganged Condenser.
V.C.2	
R.C.	Reaction Condenser. 0.0003 mfd.

SWITCHES

S.1	Wavechange Switch, Contacts A, B, C ganged.
S.2	Mains Switch ganged to V.R.1.

FIXED CONDENSERS

Ref. No.	Description
C.1	0.1 mfd.
C.2	0.1 "
C.3	0.5 "
C.4	0.0001 "
C.5	0.0003 "
C.6	0.5 "
C.7	0.002 "
C.8	0.01 "
C.9	Electrolytic ... 25.0 "
C.10	0.005 "
C.11	Electrolytic ... 8.0 "
C.12	" ... 8.0 "

FIXED RESISTANCES

R.1	250 ohms
R.2	100,000 "
R.3	250 "
R.4	30,000 "
R.5	1,000,000 "
R.6	1,000,000 "
R.7	50,000 "
R.8	50,000 "
R.9	20,000 "
R.10	5,000 "
R.11	100,000 "
R.12	500,000 "
R.13	180 "

VARIABLE RESISTANCE

V.R.1	75,000 ohms
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TRIMMING CONDENSERS

Ref. No.	Description
T.C.1	Wave Trap Trimmer ... 0.0003 mfd.
T.C.2	} Attached to Gang Condenser
T.C.3	

OTHER COMPONENTS

	Resistance
Mains Transformer T.1.	
Primary Winding	25. ohms
Rectifier Filament Winding	0.1 "
Heater Winding	0.05 "
H.T. Winding	600. "

SPEAKER AND T.2

Grampian Type N.E.4/8/1	{ Primary Winding 500. ohms
	{ Field Winding ... 2000. "
Pilot Lamp	6.2 v. 3 amp.