

VIDOR - CN426

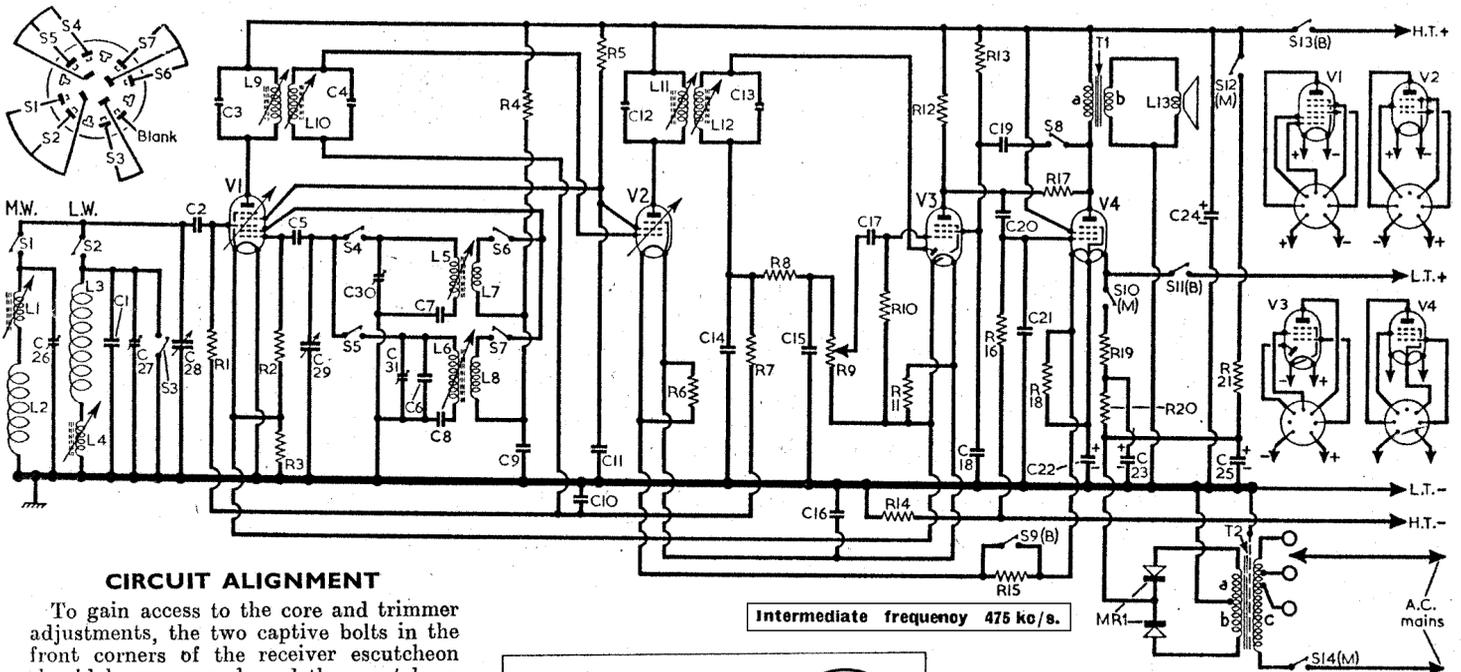
OTHER COMPONENTS		Approx. Values (ohms)	Locations
L1	M.W. loading coil...	4-4	E4
L2	M.W. frame aerial...	1-6	—
L3	L.W. frame aerial...	12-6	—
L4	L.W. loading coil...	6-6	E3
L5	Oscillator tuning coils	3-2	E4
L6		6-6	E4
L7	Oscillator reaction coils	1-3	E4
L8		2-2	E4
L9	1st I.F. trans.	Pri. 20-5	C1
L10		Sec. 20-5	C1
L11	2nd I.F. trans.	Pri. 20-5	B1
L12		Sec. 20-5	B1
L13	Speech coil	2-9	—
T1	O.P. trans.	a	—
		b	—
T2	Mains trans	a	A2
		b	A2
S1-S7	Waveband switches	424-0	E3
S8	Alarm switch	—	—
S9(B)-S14(M)	Mains/Battery sw.	—	H3
MR1*	Mains H.T. rectifier	—	G4

* Westinghouse 15B39.

CAPACITORS		Values	Locations
C1	L.W. aerial trim...	100pF	D1
C2	V1 C.G. ...	100pF	E3
C3	1st I.F. trans. tuning	85pF	C1
C4		85pF	C1
C5	V1 osc. C.G. ...	100pF	F4
C6	L.W. osc. trim. ...	200pF	D2
C7	M.W. osc. tracker...	532pF	E3
C8	L.W. osc. tracker...	280pF	E4
C9	Osc. anode decoup.	0-1μF	E4
C10	A.G.C. decoupling	0-05μF	C1
C11	S.G. decoupling ...	0-1μF	F4
C12	2nd I.F. trans. tuning	65pF	B1
C13		65pF	B1
C14	I.F. by-passes	100pF	G4
C15		100pF	G4
C16	Filament by-pass...	0-05μF	C1
C17	A.F. coupling ...	0-001μF	G4
C18	V3 S.G. decoupling	0-05μF	G3
C19	Alarm coupling ...	0-005μF	G4
C20	A.F. coupling ...	0-01μF	G4
C21	I.F. by-pass ...	200pF	G4
C22*	Filament by-pass...	100μF	B1
C23*	Filament smoothing	25μF	B2
C24*		32μF	H4
C25*	H.T. smoothing	32μF	H4
		32μF	H4
C26†	M.W. aerial trim...	70pF	D1
C27†	L.W. aerial trim...	70pF	D2
C28†	Aerial tuning ...	523pF	D1
C29†	Oscillator tuning...	523pF	D2
C30†	M.W. osc. trim. ...	70pF	D2
C31†	L.W. osc. trim. ...	70pF	D2

* Electrolytic. † Variable. ‡ Pre-set.

RESISTORS		Values	Locations
R1	V1 C.G. ...	4-7MΩ	F3
R2	V1 osc. C.G. ...	27kΩ	F4
R3	V1 filament shunt	120Ω	F4
R4	Osc. anode feed ...	33kΩ	E4
R5	S.G. H.T. feed ...	39kΩ	F4
R6	V2 filament shunt	150Ω	F4
R7	A.G.C. decoupling	2-2MΩ	F3
R8	I.F. stopper ...	47kΩ	G4
R9	Volume control ...	1MΩ	A1
R10	V3 C.G. ...	4-7MΩ	G4
R11	V3 filament shunt	120Ω	F4
R12	V3 anode load ...	1MΩ	G4
R13	V3 S.G. feed ...	4-7MΩ	G4
R14	V4 G.B. ...	220Ω	G4
R15		10Ω	H3
R16	V4 C.G. ...	2-2MΩ	G4
R17	Neg. feed-back ...	8-2MΩ	G4
R18	V4 filament shunt	330Ω	G3
R19	Filament ballast	700Ω	H4
R20		1-4kΩ	F4
R21	H.T. smoothing ...	1-2kΩ	H4



CIRCUIT ALIGNMENT

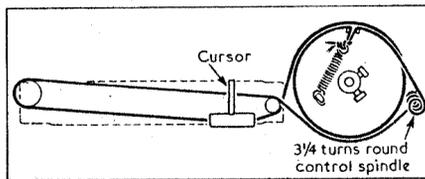
To gain access to the core and trimmer adjustments, the two captive bolts in the front corners of the receiver escutcheon should be unscrewed, and the escutcheon lifted up into a vertical position.

I.F. Stages.—Switch receiver to M.W. and turn gang to minimum capacitance. Connect output of signal generator across C28 (location reference D1), feed in a 475 k/cs (631.6m) signal and adjust the cores of L12 (B1), L11 (G4), L10 (C1) and L9 (F4) for maximum output.

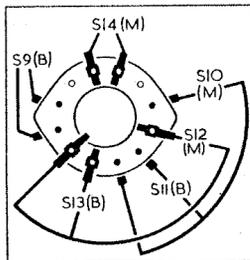
R.F. and Oscillator Stages.—Check that with the gang at maximum capacitance the cursor coincides with the 2,000m mark at the extreme right-hand end of the tuning scale. Transfer signal generator leads to frame aerials, placing them in close proximity to the windings in the lid of the carrying case. The batteries should be in their normal positions for the following adjustments, and the receiver escutcheon should be raised only sufficiently to give access to the cores and trimmers.

M.W.—With receiver still on M.W., tune to 500m, feed in a 500m (600 kc/s) signal and adjust the cores of L5 (E4) and L1 (E4) for maximum output. Tune receiver to 200m, feed in a 200m (1,500 kc/s) signal and adjust C30 (D2) and C26 (D1) for maximum output. Repeat these adjustments until no further improvement results.

L.W.—Switch receiver to L.W., tune to 1,900m, feed in a 1,900m (158 k/cs) signal and adjust the cores of L6 (E4) and L4 (E3) for maximum output. Tune receiver to 1,100m, feed in a 1,100m (273 k/cs) signal and adjust C31 (D2) and C27 (D2) for maximum output.



Above: Sketch of the tuning drive system as seen from front.



Left: Diagram of the mains/battery switch unit.

Tuning Drive Replacement.—About 30 inches of high-grade fishing line (the manufacturers specify Python Flax, Braided No. 20) is required for a new drive cord, which should be run as shown in the sketch in column 2, where the tuning drive system is drawn as seen from the front of the chassis, with the gang at maximum capacitance. The cursor can be fitted afterwards, and adjusted as explained under "Circuit Alignment."

Switches.—S1-S7 are the waveband switches, ganged in a single rotary unit beneath the chassis. The unit is indicated in our under-chassis illustration, and shown in detail in the diagram inset in the top left-hand corner of the circuit diagram overleaf.

S8 is the alarm switch, located in the carrying case and operated by the lid stay.

S9(B)—S14(M) are the mains/battery /off switches, ganged in a single rotary unit beneath the chassis. This unit is shown in detail in column 2, where it is drawn as seen from the rear of an inverted chassis. For mains operation switches S10(M), S12(M) and S14(M) close as indicated by the suffix (M). For battery operation S9(B), S11(B) and S13(B) close.

Valve	Anode		Screen	
	V	mA	V	mA
V1 DK92 ...	88	6-0	44	0-15
V2 DF91 ...	25	1-6	44	0-5
V3 DAF91 ...	88	1-2	*	0-015
V4 DL94 ...	86	4-8	88	1-1

* Very low reading.