

# VIDOR - 396

OTHER COMPONENTS		Approx. Values (ohms)	Locations
L1	L.W. frame aerial...	15-0	—
L2	M.W. frame aerial	2-0	—
L3	Osc. tuning coil ...	1-5	E4
L4	Osc. reaction ...	1-3	E4
L5	1st I.F. trans. {	20-0	B2
L6		20-0	B2
L7	2nd I.F. trans. {	20-0	C2
L8		20-0	C2
L9	Speech coil ...	3-2	G5
T1	O.P. trans. {	580-0	G4
	Primary, total {	Very low	
	H.T. sec. total ...	150-0	H6
T2	heater sec. ...	0-8	
S1-S6	W'band and power switches ...	—	D4
S7	Alarm switch ...	—	—

CAPACITORS		Values	Locations
C1	L.W. trimmer ...	130pF	D3
C2*	H.T. decoupling ...	2μF	C2
C3	V1 C.G. ...	100pF	D3
C4	A.G.C. decoup. ...	0-05μF	E3
C5	1st I.F. trans. tun- ing	65pF	B2
C6		65pF	B2
C7	Filament by-pass ...	0-1μF	E3
C8	V1 osc. C.G. ...	100pF	D3
C9	Tracker ...	635pF	E4
C10	L.W. trimmer ...	540pF	E4
C11	Osc. anode decoup. ...	0-1μF	B1
C12	V2 G.B. decoup. ...	0-01μF	E3
C13	V2 S.G. decoup. ...	0-1μF	B1
C14	2nd I.F. trans. tun- ing	65pF	C2
C15		65pF	C2
C16	I.F. by-passes ...	100pF	F3
C17	I.F. by-passes ...	100pF	D5
C18		100pF	D5
C19	A.F. coupling ...	0-001μF	G4
C20	V3 S.G. decoup. ...	0-05μF	G3
C21	I.F. by-pass ...	65pF	G3
C22	A.F. coupling ...	0-01μF	G3
C23	Tone corrector ...	0-001μF	G4
C24	Alarm coupling ...	0-02μF	G4
C25*	L.T. smoothing ...	200μF	B2
C26*		25μF	H6
C27*	H.T. smoothing ...	40μF	H6
C28*		40μF	H6
C29†	L.W. aerial trim...	5523pF	A1
C30†	Aerial tuning ...	5523pF	A1
C31†	Osc. tuning ...	5523pF	A1
C32†	M.W. osc. trimmer	50pF	A1

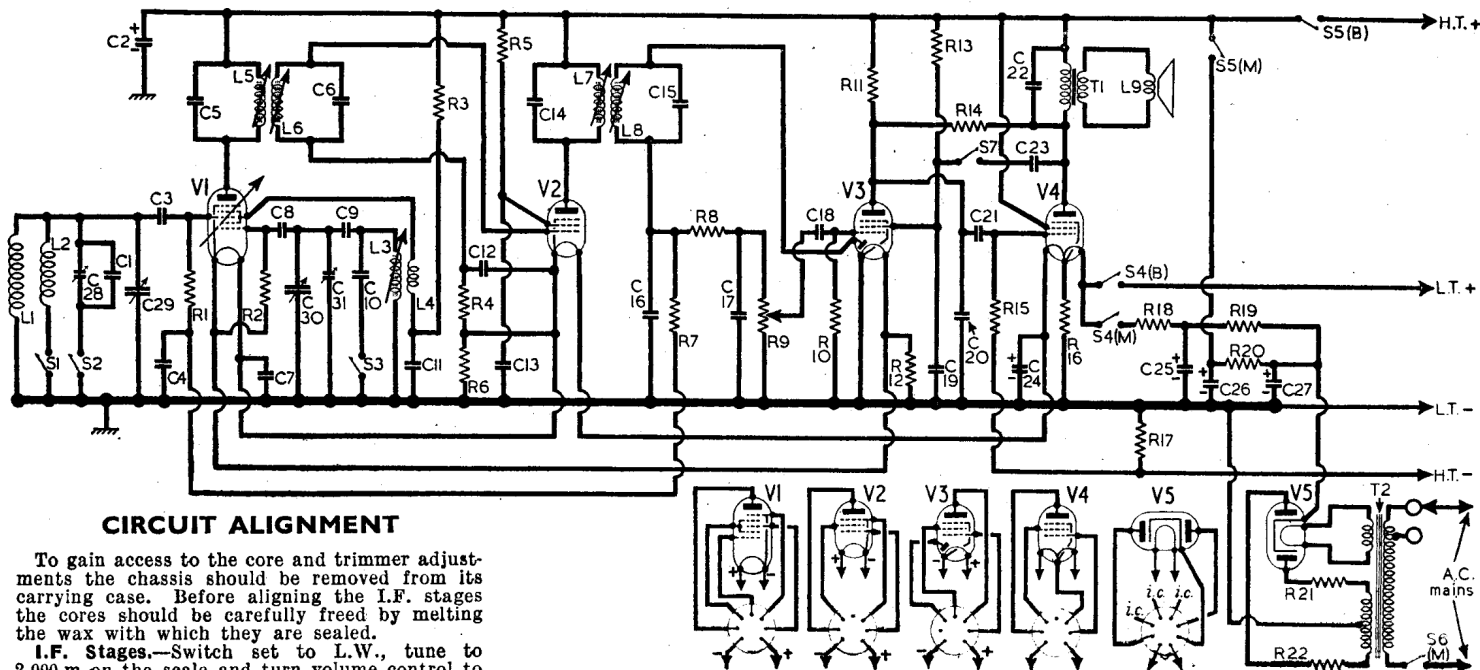
Valves	Anode		Screen		Cath.
	V	mA	V	mA	
V1 DK91 ...	83	0-21	41	1-4	—
V2 DF91... ..	83	1-0	32	0-34	—
V3 DAF91 ...	11	0-18	14	0-5	—
V4 DL94... ..	81	4-4	83	0-78	—
V5 EZ41 ...	122*	—	—	—	108

\* Each anode, A.C.

RESISTORS		Values	Locations
R1	V1 C.G. ...	4-7MΩ	E3
R2	V1 osc. C.G. ...	100kΩ	E3
R3	Osc. anode feed ...	22kΩ	F4
R4	V2 C.G. ...	4-7MΩ	E3
R5	V2 S.G. feed ...	100kΩ	F3
R6	Fil. shunt ...	1kΩ	E3
R7	A.G.C. decoup. ...	2-2MΩ	F3
R8	I.F. stopper ...	100kΩ	F9
R9	Volume control ...	1MΩ	D5
R10	V3 C.G. ...	4-7MΩ	G4
R11	V3 anode load ...	270kΩ	G4
R12	Fil. shunt ...	270Ω	G4
R13	V3 S.G. feed ...	1MΩ	G3
R14	Neg. f-b ...	6-8MΩ	G3
R15	V4 C.G. ...	2-2MΩ	G3
R16	Fil. shunt ...	1-8kΩ	G3
R17	V4 G.B. ...	150Ω	F3
R18	L.T. Smoothing ...	700Ω	J6
R19		1-5kΩ	J6
R20	H.T. smoothing ...	2-7kΩ	J6
R21		100Ω	H6
R22	Surge limiters ...	100Ω	J6

Intermediate frequency 456 kc/s.

\* Electrolytic. † Variable. ‡ Pre-set.  
§ "Swing" value, min. to max.



## CIRCUIT ALIGNMENT

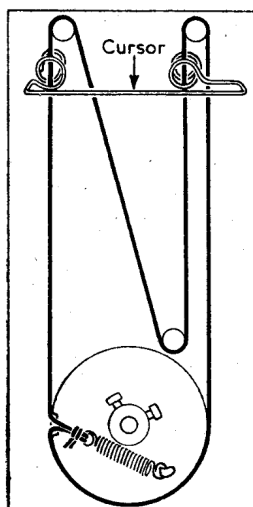
To gain access to the core and trimmer adjustments the chassis should be removed from its carrying case. Before aligning the I.F. stages the cores should be carefully freed by melting the wax with which they are sealed.

**I.F. Stages.**—Switch set to L.W., tune to 2,000 m on the scale and turn volume control to maximum. Connect the "live" side of C30 to chassis, and the signal generator, via a 100pF capacitor in the "live" lead, to V1 control grid (pin 6) and chassis. Feed in a 456 kc/s (657.8 m) signal and adjust the cores of L3 (location reference C2), L7 (F3), L6 (B1) and L5 (F3) for maximum output, reducing the input as the circuits come into line to avoid A.G.C. action. Re-seal the cores with soft wax.

**R.F. and Oscillator Stages.**—Check that with the gang at maximum capacitance, the cursor coincides with the 550 m mark on the M.W. scale.

**M.W.**—Switch set to M.W., remove the short-circuit from C30 and transfer the signal generator leads to frame aerial, placing them in close proximity to the windings in the lid of the carrying case. Tune to 200 m (1,500 kc/s) on scale, feed in a 200 m (1,500 kc/s) signal and adjust C31 (A1) for maximum output. Tune set to 550 m, feed in a 550 m (545.45 kc/s) signal and adjust the core of L3 (B1) for maximum output, "rocking" the gang slightly after each adjustment. Repeat these adjustments.

**L.W.**—Switch set to L.W., tune to 1,200 m, feed in a 1,200 m (250 kc/s) signal and adjust C28 (A1) for maximum output.



Left: The cursor cord drive system, as seen from the front after removing the chassis unit.

**Cursor Drive Cord Replacement.**—About 30 inches of high-grade plaited and waxed flax fishing line is needed for a new cord, and it is run as shown in the sketch inset beside the plan chassis view above, which is drawn as seen from the front with the gang at maximum.

To gain access to the drive it is necessary to dismount the chassis from the metal panel on which it is mounted. It is held only by three 4BA nuts and two control knobs, but it is advisable to disconnect several leads going to other units in order to obtain freedom of movement.