

RAYMOND - MINIT

Drive Cord Replacement.—Two feet of twine is sufficient for the drive cord, whose course is shown in our under-chassis view, where the system is seen in the minimum gang position. A special double tag is used to clamp the ends and to hook on to the spring, but it is not essential.

The cursor is a flexible stamping which can be slipped on to the cord after fitting. The scale is a glass strip which is a friction fit in end clamps, and can be released with an upward movement.

RESISTORS		Values (ohms)	Location
R1	Volume control ...	10,000	D1
R2	V2 C.G. resistor ...	6,200,000	B2
R3	V2 S.G. feed ...	2,000,000	H4
R4	V2 anode load ...	500,000	I3
R5	V3 C.G. resistor ...	1,000,000	H4
R6	V3 G.B. ...	180	H4
R7	H.T. smoothing ...	5,000	I3
R8	Heater ballast re-	145	I4
R9†	slators ...	550	J4

† Line cord.

CAPACITORS		Values (μF)	Location
C1	Aerial isolator ...	0.01	D2
C2	V1 cathode by-pass ...	0.01	B4
C3	V2 C.G. capacitor ...	0.01	B2
C4	V2 S.G. decoup. ...	0.05	H4
C5	R.F. by-pass ...	0.0002	H4
C6	A.F. coupling ...	0.01	H4
C7	Tone corrector ...	0.03	B2
C8*	V3 cath. by-pass ...	2.0	A1
C9	Mains R.F. by-pass ...	0.05	I4
C10*	H.T. smoothing ...	24.0	A1
C11*	capacitor ...	16.0	A1
C12†	Aerial M.W. trim. ...	—	C2
C13†	Aerial tuning ...	0.0004	C1
C14†	Det. M.W. trim. ...	—	C2
C15†	Det. tuning ...	0.0004	C1

* Electrolytic. † Variable. ‡ Pre-set.

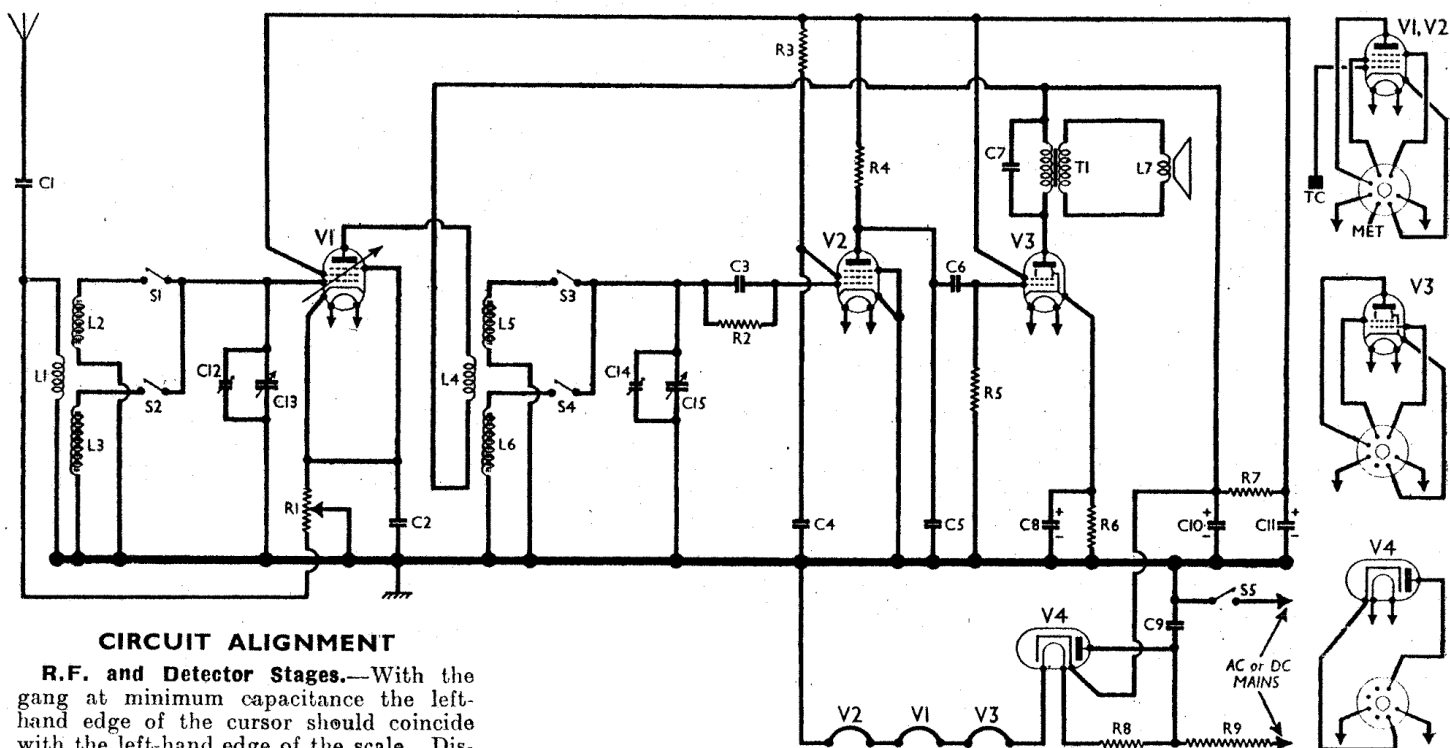
OTHER COMPONENTS		Approx. Values (ohms)	Location
L1	Aerial coupling ...	25.0	C2
L2	Aerial tuning coils {	2.7	C2
L3		30.0	C2
L4	R.F. coupling ...	45.0	H3
L5	Detector tuning coils {	2.7	H3
L6		30.0	H3
L7	Speech coil ...	2.5	B1
T1	Output { Pri. ...	160.0	B1
	trans. { Sec. ...	0.4	B1
S1-S4	W/band switches...	—	F4
S5	Mains switch, ganged R1 ...	—	D1

VALVE ANALYSIS

Valve	Anode Voltage (V)	Anode Current (mA)	Screen Voltage (V)	Screen Current (mA)
V1 12K7GT	100	9.4	75	2.5
V2 12K7GT	12	0.13	—	0.03
V3 35L6GT	96	24.0	75	2.5
V4 35Z4GT†	—	—	—	—

* Negligible reading.

† Cathode to chassis 100 V, D.C.



CIRCUIT ALIGNMENT

R.F. and Detector Stages.—With the gang at minimum capacitance the left-hand edge of the cursor should coincide with the left-hand edge of the scale. Disconnect attached aerial and connect signal generator leads to A tag and, via an 0.1 μF isolating capacitor, to chassis.

M.W.—Switch set to M.W. (clockwise position when viewed from rear of chassis). Tune to 200 m on scale, turn volume control until the receiver is just below the reaction point, and feed in a 200 m (1,500 kc/s) signal. Adjust C14 (location reference C2) for maximum output. Feed in a

230.8 m (1,300 kc/s) signal, tune it in, and adjust C12 (C2) for maximum output. Tune to 500 m on scale, feed in a 500 m (600 kc/s) signal, and check that the point of maximum signal is obtained within 1/8 in from the calibration mark.

L.W.—No adjustments are provided for this band, but sensitivity and calibration should be checked at several points.

Diagram of the waveband switch unit, viewed from the front of an inverted chassis.

