

Valve	Anode Voltage (V)	Anode Current (mA)	Screen Voltage (V)	Screen Current (mA)
V1 220TH	116	0.12	60	0.7
V2 210VPA	77	1.0	53	0.23
V3 210DDT	116	1.2	—	—
V4 220OT	40	0.14	116	0.6

COSSOR - 481B

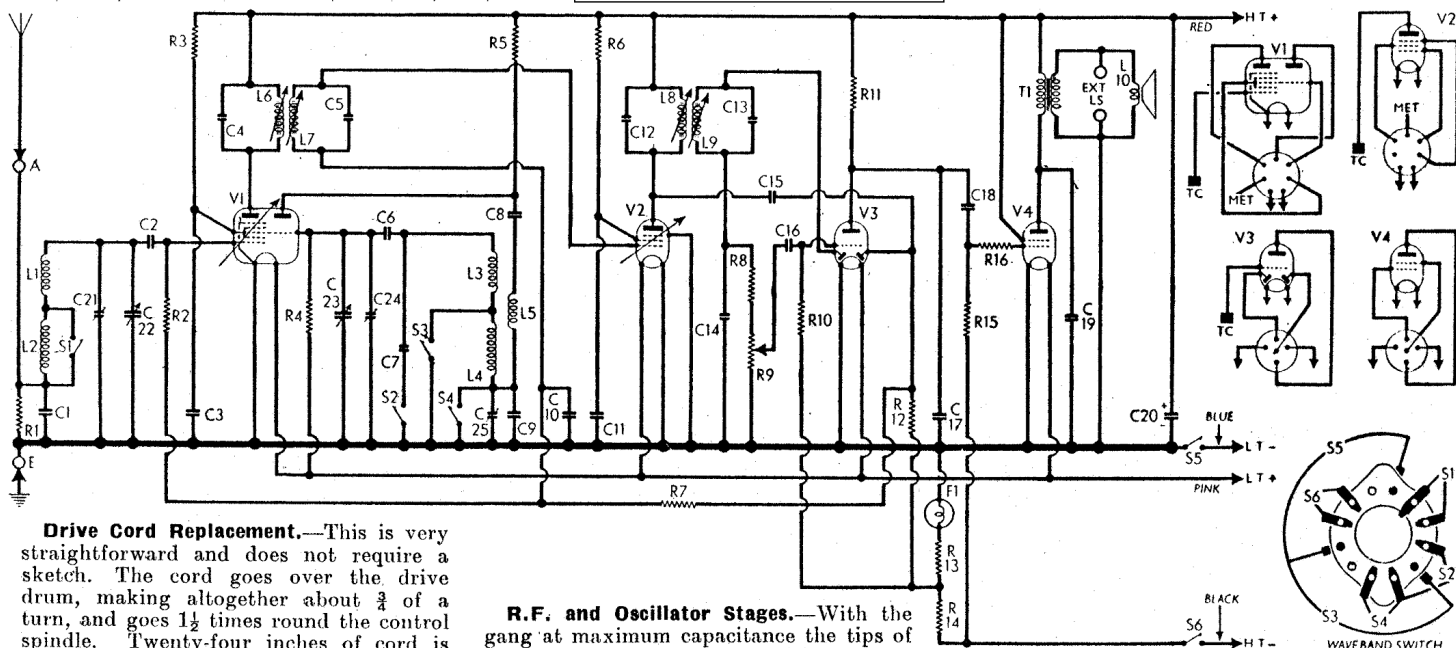
RESISTORS		Values (ohms)	Location
R1	Aerial coupling ...	12,000	I9
R2	V1 hept. C.G. ...	1,000,000	B2
R3	V1 S.G. feed ...	68,000	J8
R4	V1 osc. C.G. ...	47,000	L7
R5	Osc. H.T. feed ...	27,000	K8
R6	V2 S.G. feed ...	120,000	K8
R7	A.V.C. decoupling ...	3,300,000	I8
R8	I.F. stopper ...	47,000	I8
R9	Volume control ...	1,000,000	H6
R10	V3 triode C.G. ...	2,200,000	I8
R11	V3 anode load ...	270,000	H8
R12	A.V.C. diode load ...	2,200,000	I8
R13	Fixed G.B. and ...	150	J8
R14	A.V.C. delay ...	400	J8
R15	V4 C.G. ...	1,000,000	I8
R16	Grid stopper ...	100,000	H8

OTHER COMPONENTS		Approx. Values (ohms)	Location
L1	Aerial tuning coils {	2.8	B2
L2		32.0	B2
L3	Osc. tuning coils {	2.0	K6
L4		11.0	K6
L5	Reaction coil ...	6.5	K6
L6	1st I.F. { Pri. ...	8.0	A4
L7	trans. { Sec. ...	13.0	A4
L8	2nd I.F. { Pri. ...	18.0	D4
L9	trans. { Sec. ...	16.0	D4
L10	Speech coil ...	2.75	—
T1	Output trans. { Pri. ...	625.0	E2
	trans. { Sec. ...	0.4	E2
S1-S4	W/band switches ...	—	K6
S5, S6	Battery switches ...	—	K6
F1	150 mA fuse bulb ...	—	D5

CAPACITORS		Values (μF)	Location
C1	Aerial coupling ...	0.0027	J9
C2	V1 hept. C.G. ...	0.00056	B2
C3	V1 S.G. decoup. ...	0.1	L8
C4	1st I.F. trans. {	0.000053	A4
C5		0.000058	A4
C6	M.W. tracker ...	0.000535	K7
C7	L.W. trimmer ...	0.000027	K6
C8	Reaction coupling ...	0.0001	K7
C9	L.W. tracker ...	0.00022	J7
C10	A.V.C. decoup. ...	0.05	I8
C11	V2 S.G. decoup. ...	0.1	I9
C12	2nd I.F. trans. {	0.00005	D4
C13		0.00007	D4
C14	I.F. by-pass ...	0.000047	J8
C15	A.V.C. coupling ...	0.00012	I8
C16	A.F. coupling ...	0.05	J8
C17	I.F. by-pass ...	0.00022	G9
C18	A.F. coupling ...	0.01	H8
C19	Tone corrector ...	0.001	G8
C20*	H.T. reservoir ...	8.0	H6
C21†	Aerial M.W. trim. ...	—	A1
C22†	Aerial tuning ...	—	C3
C23†	Osc. tuning ...	—	C2
C24†	Osc. M.W. trim. ...	—	A2
C25†	L.W. tracker ...	—	A2

* Electrolytic. † Variable. ‡ Pre-set.

Intermediate frequency 465 kc/s.



Drive Cord Replacement.—This is very straightforward and does not require a sketch. The cord goes over the drive drum, making altogether about $\frac{3}{4}$ of a turn, and goes $1\frac{1}{2}$ times round the control spindle. Twenty-four inches of cord is ample, and leaves plenty to spare for knotting.

CIRCUIT ALIGNMENT

I.F. Stages.—Connect signal generator leads to control grid (top cap) of V1 and chassis, leaving existing connector in position. Switch set to M.W. and turn gang and volume control to maximum. Feed in a 465 kc/s (645.16 m) signal, and adjust the cores of L9, L8, L7 and L6 (location references D5 and A5), in that order, for maximum output. Repeat these adjustments.

R.F. and Oscillator Stages.—With the gang at maximum capacitance the tips of the pointer should coincide with the horizontal line dividing the two-colour scale. Transfer signal generator leads to A and E sockets, via a suitable dummy aerial.

M.W.—Switch set to M.W., tune to radial line on scale adjacent to "West Regional" calibration dot, feed in a 214.3 m (1,400 kc/s) signal, and adjust C24 (A2), then C21 (A1), for maximum output. Feed in a 519 m (577 kc/s) signal, tune it in, and check that pointer coincides with radial line on scale above "B.B.C. Third" calibration dot at high wavelength end of the scale.

L.W.—Switch set to L.W., tune to radial line on scale below "Moscow" calibration dot, feed in a 1,875 m (160 kc/s) signal, and adjust C25 (A2) for maximum output. Feed in a 1,154 m (260 kc/s) signal, tune it in, and check that pointer coincides with "Oslo" calibration dot on scale.