

REGENTONE - P21

OTHER COMPONENTS		Approx. Values (ohms)	Locations
L1	Mod. hum choke ...	13.0	G3
L2	S.W. aerial coup. ...	—	A1
L3	Aerial tuning coils	—	A1
L4		2.6	A1
L5		33.0	A1
L6	Oscillator tuning coils	—	G4
L7		5.0	G4
L8		14.5	F4
L9	Oscillator reaction coils ...	—	G4
L10		1.4	G4
L11		3.3	F4
L12	1st I.F. trans. {Pri. ...	6.5	B1
L13		6.5	B1
L14	2nd I.F. trans. {Pri. ...	7.3	C1
L15		5.3	C1
L16	Speech coil ...	2.6	—
T1	O.P. trans. {Pri. ...	400.0	D3
S1-S9	Waveband switches {Sec. ...	—	A2
S10	Mains sw., g'd R10	—	C1
S11		—	C1

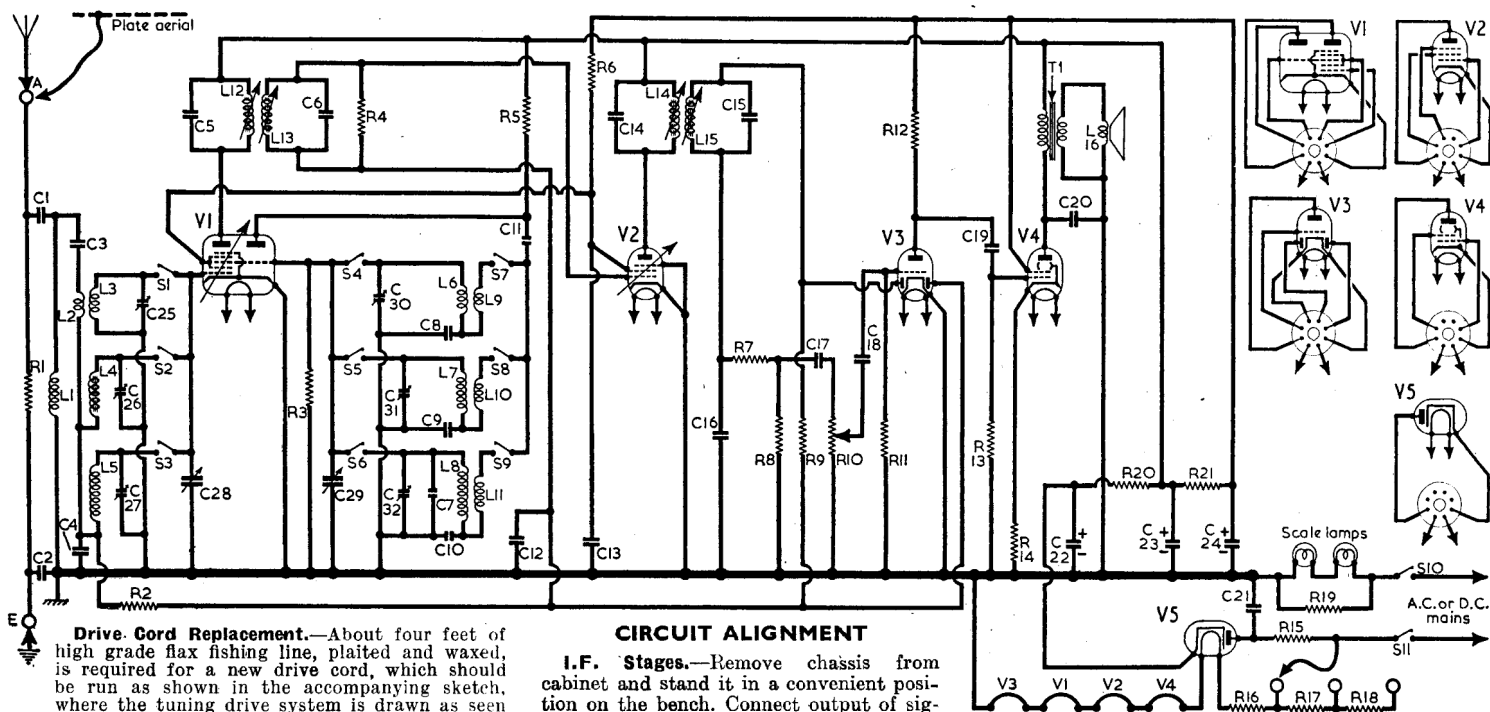
CAPACITORS		Values	Locations
C1	Aerial and earth isolators ...	0.01 μ F	G3
C2		0.01 μ F	G3
C3		0.01 μ F	G3
C4	Aerial coupling ...	3,750 pF	A1
C5	1st I.F. trans. tuning ...	100 pF	B1
C6		100 pF	B1
C7	L.W. osc. trim. ...	50 pF	F4
C8	S.W. osc. tracker ...	2,700 pF	G4
C9	M.W. osc. tracker ...	415 pF	G4
C10	L.W. osc. tracker ...	98 pF	F4
C11	Osc. reaction coup. ...	50 pF	F4
C12	A.G.C. decoupling ...	0.1 μ F	F3
C13	H.T. decoupling ...	0.1 μ F	E4
C14	2nd I.F. trans. tuning ...	100 pF	C1
C15		180 pF	C1
C16	I.F. by-pass ...	500 pF	D3
C17	A.F. couplers ...	0.01 μ F	D3
C18		0.01 μ F	E3
C19		0.02 μ F	D4
C20	Tone corrector ...	0.01 μ F	D3
C21	Mains R.F. by-pass ...	0.01 μ F	F3
C22*	H.T. smoothing ...	16 μ F	B2
C23*		32 μ F	B2
C24*		8 μ F	B2
C25†	S.W. aerial trim. ...	—	A1
C26†	M.W. aerial trim. ...	—	A1
C27†	L.W. aerial trim. ...	—	A1
C28†	Aerial tuning ...	—	G3
C29†	Oscillator tuning ...	—	G3
C30†	S.W. osc. trim. ...	—	A2
C31†	M.W. osc. trim. ...	—	A2
C32†	L.W. osc. trim. ...	—	A2

* Electrolytic. † Variable. ‡ Pre-set.

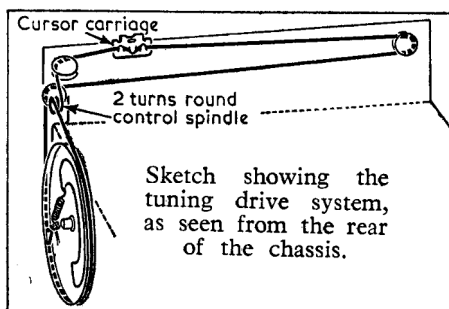
Valve	Anode		Screen		Cath.
	V	mA	V	mA	V
V1 1487 ...	{181 Oscillator	{2.2	87	3.3	—
V2 7B7 ...	106	3.1	—	—	—
V3 7C6 ...	181	7.3	87	1.8	—
V4 35A5 ...	44	0.16	—	—	8.7
V5 35Z3 ...	167	34.0	107	1.4	226.0
	220†	—	—	—	—

† A.C. reading.

RESISTORS		Values	Locations
R1	Anti-static leak ...	1.2M Ω	G3
R2	A.G.C. decoupling ...	100k Ω	F3
R3	V1 osc. C.G. ...	47k Ω	F3
R4	V2 C.G. shunt ...	1.2M Ω	E3
R5	Osc. anode feed ...	22k Ω	F4
R6	H.T. feed ...	4.7k Ω	E3
R7	I.F. stopper ...	47k Ω	D3
R8	Signal diode load ...	270k Ω	E3
R9	A.G.C. decoupling ...	2.2M Ω	E3
R10	Volume control ...	250k Ω	C1
R11	V3 C.G. ...	10M Ω	E3
R12	V3 anode load ...	270k Ω	E4
R13	V4 C.G. ...	680k Ω	D4
R14	V4 G.B. ...	270 Ω	D3
R15	V5 surge limiter ...	100 Ω	E4
R16	Heater ballast ...	120 Ω	D4
R17		786 Ω	D4
R18	Scale lamp shunt...	200 Ω	E4
R19		60 Ω	D4
R20	H.T. smoothing ...	1k Ω	F4
R21		10k Ω	E3



Drive Cord Replacement.—About four feet of high grade flax fishing line, plaited and waxed, is required for a new drive cord, which should be run as shown in the accompanying sketch, where the tuning drive system is drawn as seen when viewed from above the rear left-hand corner of the chassis when the gang is at maximum capacitance. The cursor can be slipped on afterwards.



Intermediate frequency 470 kc/s.

CIRCUIT ALIGNMENT

I.F. Stages.—Remove chassis from cabinet and stand it in a convenient position on the bench. Connect output of signal generator, via an 0.05 μ F capacitor in the "live" lead, to control grid (pin 6) of V1 and chassis. Switch receiver to M.W. and turn gang to maximum capacitance. Feed in a 470 kc/s (638.3 m) signal and adjust the cores of L15, L14, L13 and L12 (location references C1, E3, B1) for maximum output, reducing the input as the circuits come into line to avoid A.G.C. action.

R.F. and Oscillator Stages.—As the tuning scale is fixed to the cabinet, the chassis should be replaced in the cabinet before commencing the following alignment. Check that with the gang at maximum capacitance the cursor coincides with the right-hand ends of the clear tuning scales. Connect signal generator output via a suitable dummy aerial to A and E sockets.

L.W.—Switch receiver to L.W., tune to 1,000 m, feed in a 1,000 m (300 kc/s) signal and adjust C32 (A2) and C27 (A1) for maximum output.

M.W.—Switch receiver to M.W., tune to 200 m, feed in a 200 m (1,500 kc/s) signal and adjust C31 (A2) and C26 (A1) for maximum output.

S.W.—Switch receiver to S.W., tune to 15 Mc/s, feed in a 15 Mc/s (20 m) signal and adjust C30 (A2) to the second peak obtained from the maximum capacitance

setting. Adjust C25 (A1) for maximum output while rocking the gang for optimum results.

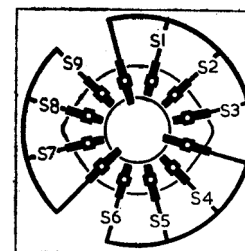


Diagram of the waveband switch unit with the associated table (below)

Switch	L.W.	M.W.	S.W.
S1 ...	—	—	C
S2 ...	—	C	—
S3 ...	C	—	—
S4 ...	—	—	C
S5 ...	—	C	—
S6 ...	C	—	—
S7 ...	—	—	C
S8 ...	—	C	—
S9 ...	C	—	—