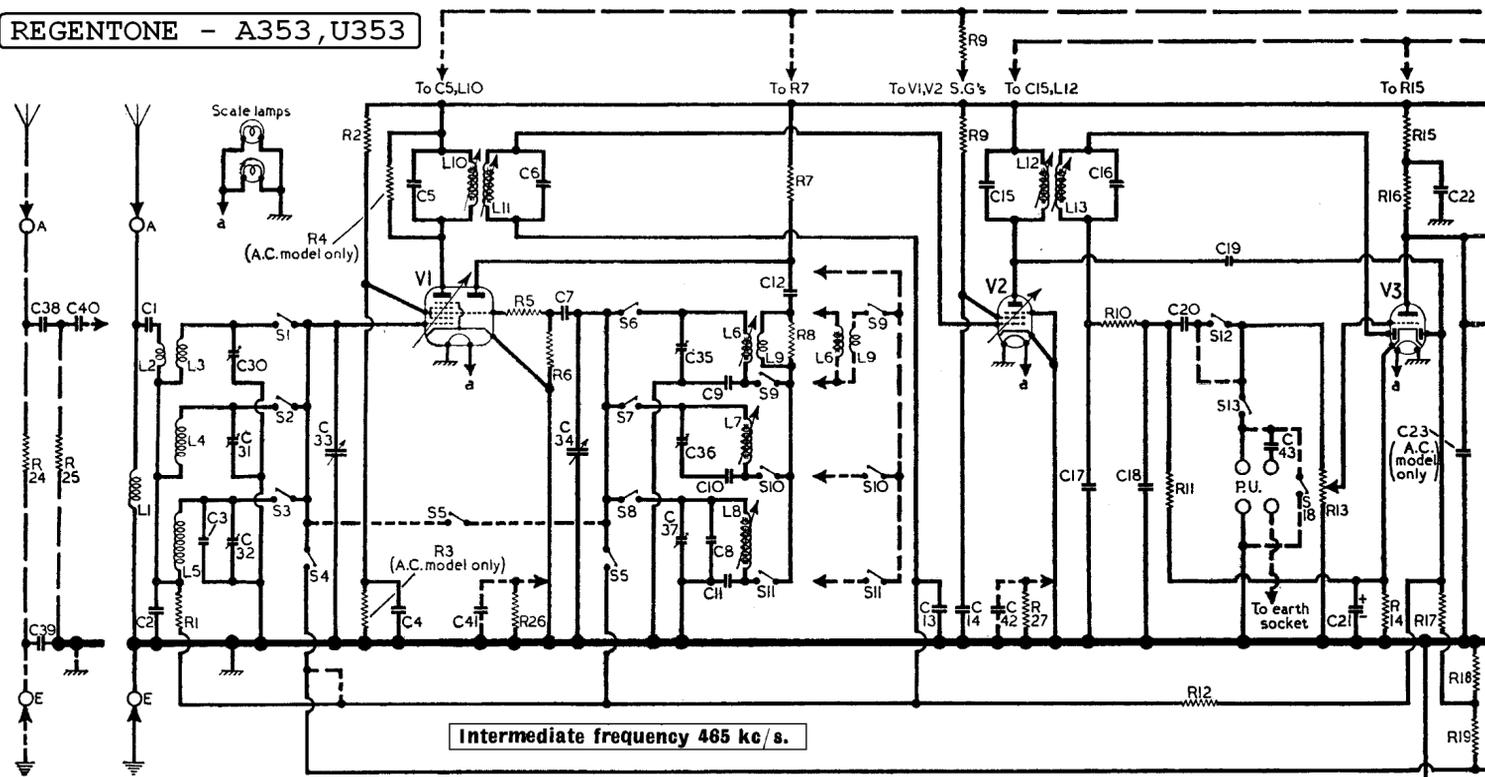


REGENTONE - A353, U353



A.C. Model

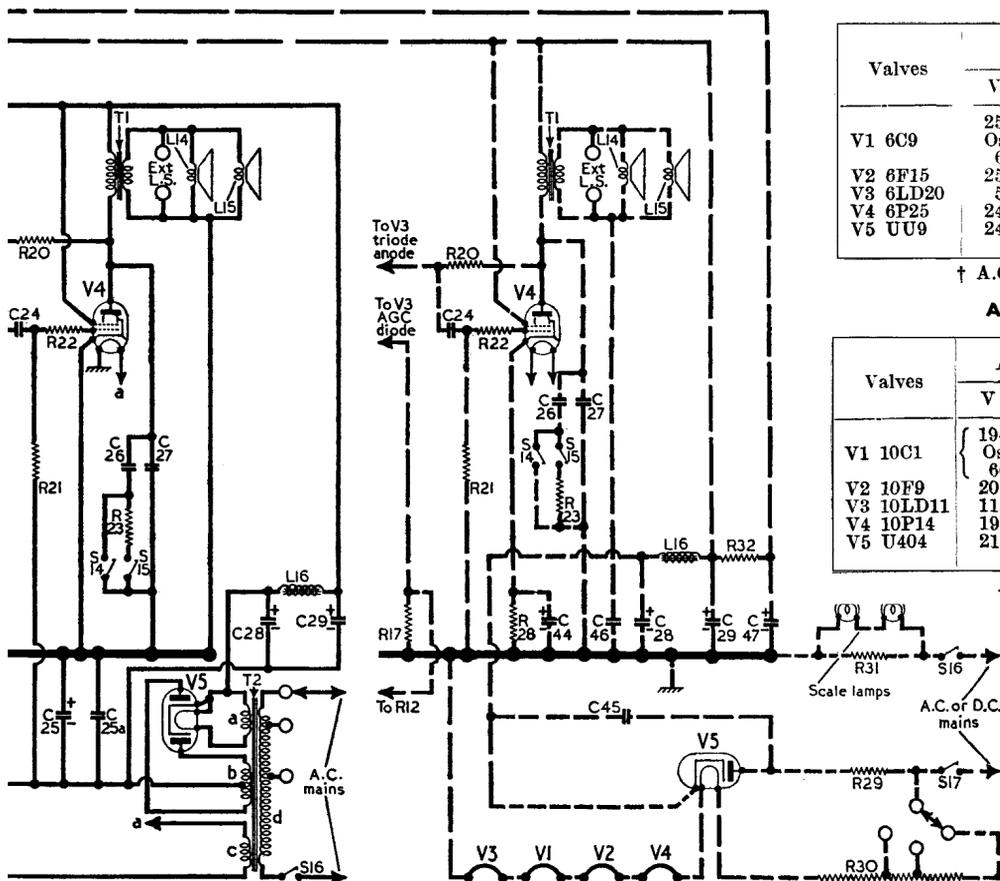
Valves	Anode		Screen		Cath.
	V	mA	V	mA	
V1 6C9	250	1.3	84	4.0	—
Oscillator	60	3.6			
V2 6F15	250	6.0	94	1.5	—
V3 6LD20	56	0.5	—	—	2.4
V4 6P25	240	33.0	250	5.8	—
V5 UU9	240†	—	—	—	270.0

† A.C. volts, each anode.

A.C./D.C. Model

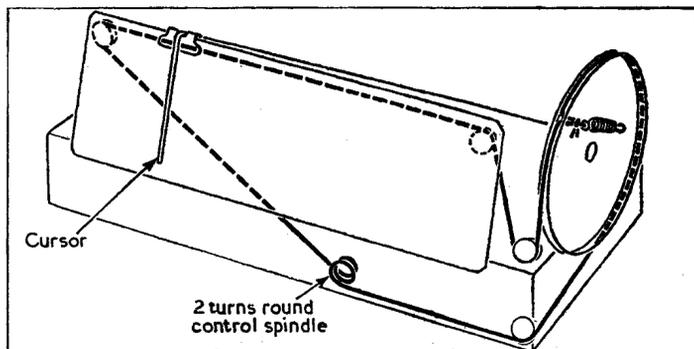
Valves	Anode		Screen		Cath.
	V	mA	V	mA	
V1 10C1	194	1.3	94.0	4.5	2.5
Oscillator	66	4.0			
V2 10F9	206	7.2	94.0	2.2	2.2
V3 10LD11	115	1.4	—	—	3.3
V4 10P14	197	44.0	206.0	10.0	10.0
V5 U404	218†	—	—	—	230.0

† A.C. volts.



DRIVE CORD REPLACEMENT

Sketch of the drive cord system, drawn as seen from the front right-hand corner of the chassis with the gang at minimum capacitance.



Six feet of high-grade flax fishing line, plaited and waxed, is sufficient for a new tuning drive cord, and this leaves ample for tying off. The sketch below shows the complete system as seen from the front right-hand corner of the chassis when the gang is at minimum capacitance. If one end of the cord is tied to the spring and anchored, the cord can be run conveniently as shown in our sketch, pulling at the minimum gang stop. The cursor, whose carriage slides along the upper edge of the scale backing plate, can be slipped on afterwards and adjusted as explained under "Circuit Alignment."

RESISTORS	A.C. MODEL		A.C./D.C. MODEL	
	Values	Locations	Values	Locations
R1	100kΩ	G4	470kΩ	L6
R2	27kΩ	F4	—	—
R3	47kΩ	F4	—	—
R4	270kΩ	F4	—	—
R5	100Ω	G4	100Ω	L6
R6	33kΩ	G4	33kΩ	L6
R7	47kΩ	F4	27kΩ	K6
R8	3.3kΩ	F3	—	—
R9	100kΩ	F4	15kΩ	K6
R10	47kΩ	B2	47kΩ	B2
R11	220kΩ	E4	270kΩ	J6
R12	1.2MΩ	E4	1.2MΩ	J6
R13	250kΩ	E3	250kΩ	J5
R14	3.3kΩ	E4	2.2kΩ	J5
R15	100kΩ	E4	27kΩ	J6
R16	270kΩ	E4	47kΩ	J6
R17	1.2MΩ	E4	1.2MΩ	J6
R18	47Ω	F3	—	—
R19	100Ω	F3	—	—
R20	1.2MΩ	E4	1.2MΩ	J6
R21	470kΩ	D4	270kΩ	J6
R22	10kΩ	E4	10kΩ	J6
R23	4.7kΩ	D3	4.7kΩ	H5
R24	—	—	1.2MΩ	L6
R25	—	—	4.7kΩ	L6
R26	—	—	220Ω	K6
R27	—	—	330Ω	K6
R28	—	—	180Ω	H6
R29	—	—	47Ω	H6
R30	—	—	1,100Ω†	C1
R31	—	—	75Ω	C1
R32	—	—	1kΩ	K5

† Tapped at 700Ω + 200Ω + 200Ω + from V5.

OTHER COMPONENTS		Approx. Values (ohms)	Locations
A.C. Model			
L1	R.F. choke	11.0	G4
L2	S.W. coupling coil	0.3	G4
L3	Aerial tuning coils	Very low	G4
L4		2.6	G3
L5		30.0	G3
L6	Oscillator tuning coils	Very low	F3
L7		2.5	F3
L8		12.5	F3
L9	S.W. reaction coil	0.7	F3
L10	1st I.F. {Pri. ...	7.5	B2
L11	trans. {Sec. ...	7.5	B2
L12	2nd I.F. {Pri. ...	7.5	B2
L13	trans. {Sec. ...	7.5	B2
L14	Speech coil	2.8	—
L15	Speech coil	2.8	—
L16	Smoothing choke	250.0	B1
T1	Primary	450.0	E3
	Secondary	0.3	E3
T2	Mains {a, total	Very low	C1
	b, total	330.0	C1
	Trans. {c, total	Very low	C1
	d, total	24.0	C1
S1-S13	Waveband switches	—	G3
S14	Tone switches	—	D3
S15	Mains sw., g'd R13	—	E3
A.C./D.C. Model			
L2	S.W. coupling coil	0.3	L6
L3	Aerial tuning coils	Very low	L6
L4		2.6	L5
L5		30.0	L5
L6	Oscillator tuning coils	Very low	K5
L7		2.5	K5
L8		12.5	K5
L9	S.W. reaction coil	0.7	K5
L10	1st I.F. {Pri. ...	7.5	B2
L11	trans. {Sec. ...	7.5	B2
L12	2nd I.F. {Pri. ...	7.5	B2
L13	trans. {Sec. ...	7.5	B2
L14	Speech coil	2.8	—
L15	Speech coil	2.8	—
L16	Smoothing choke	250.0	B1
T1	Primary	400.0	J5
	Secondary	0.2	J5
S1-S13	Waveband switches	—	L5
S18	P.U. muting	—	L5
S14	Tone Switches	—	H5
S15		—	H5
S16		—	H5
S17	Mains sw., g'd R13	—	J5

CAPACITORS	A.C. MODEL		A.C./D.C. MODEL	
	Values	Locations	Values	Locations
C1	0.01μF	G4	—	—
C2	0.00375μF	G4	0.00375μF	L5
C3	50pF	G3	50pF	L5
C4	0.1μF	G4	0.1μF	L6
C5	100pF	B2	100pF	B2
C6	100pF	B2	100pF	B2
C7	100pF	G3	100pF	L5
C8	50pF	F3	30pF	K5
C9	0.0027μF	F3	0.0027μF	K5
C10	400pF	F3	410pF	K5
C11	130pF	F4	130pF	K5
C12	100pF	F3	100pF	K5
C13	0.1μF	F4	0.1μF	J6
C14	0.1μF	F4	0.1μF	K6
C15	100pF	B2	100pF	B2
C16	100pF	B2	100pF	B2
C17	100pF	B2	100pF	B2
C18	100pF	B2	100pF	B2
C19	50pF	E4	50pF	J6
C20	0.01μF	E3	0.005μF	J5
C21*	25μF	E4	50μF	J5
C22	0.1μF	E4	8μF	J5
C23	100pF	E4	—	—
C24	0.01μF	F3	0.01μF	J6
C25*	25μF§	F3	—	—
C26	0.05μF	E3	0.05μF	H6
C27	0.01μF	D4	0.01μF	H6
C28*	16μF	B1	16μF	B1
C29*	32μF	B1	16μF	B1
C30†	—	G4	—	L6
C31†	—	G4	—	L6
C32†	—	G3	—	L5
C33†	—	A1	—	A1
C34†	—	A1	—	A1
C35†	—	F3	—	K5
C36†	—	F3	—	K5
C37†	—	F3	—	K5
C38	—	—	0.01μF	L6
C39	—	—	0.01μF	L6
C40	—	—	0.01μF	L6
C41	—	—	0.1μF	L6
C42	—	—	0.1μF	K6
C43	—	—	0.02μF	K6
C44*	—	—	25μF	H5
C45	—	—	0.01μF	H6
C46	—	—	0.01μF	J6
C47*	—	—	16μF	B1

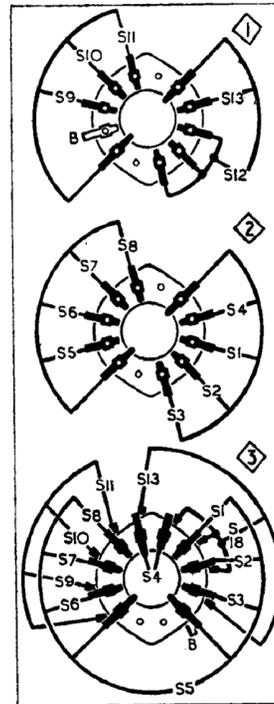
* Electrolytic. † Variable. ‡ Pre-set. § Shunted by 0.001μF capacitor C25a.

CIRCUIT ALIGNMENT

I.F. Stages.—Switch set to M.W., turn gang capacitor and volume control to maximum, short-circuit **C34** (location reference A1), and connect signal generator, via an 0.1μF capacitor in the "live" lead, to control grid (pin 6) of **V1**, and the **E** socket. Feed in a 465 kc/s (645.16 m) signal, and adjust the cores of **L13**, **L12**, **L11** and **L10** (B2) for maximum output.

R.F. and Oscillator Stages.—With the gang at minimum capacitance the cursor should be coincident with the zero mark on the 0-100 tuning scale. It may be adjusted in position by rotating the drive drum on its spindle, after slackening the fixing screws. Transfer "live" signal generator lead to **A** socket, via suitable dummy aerial.

L.W.—Switch set to L.W., tune to 1,000 m on scale, feed in a 1,000 m (300 kc/s) signal, and adjust **C37** (F3) and **C32** (G3) for maximum output. Tune to 1,875 m on scale, feed in a 1,875 m (160



Diagrams of the two waveband switch units in the A.C. version (above) and the single one in the A.C./D.C. version (below). Underneath is the associated table

Switches	L.W.	M.W.	S.W.	Gram
S1	—	—	C	—
S2	—	C	—	—
S3	C	—	—	—
S4	—	—	—	C
S5	—	—	—	C
S6	—	—	C	—
S7	—	C	—	—
S8	C	—	—	—
S9	—	—	C	—
S10	—	C	—	—
S11	C	—	—	—
S12	C	C	—	—
S13	C	—	C	—
S18	C	C	C	—

kc/s) signal, and adjust the core of **L8** (A1) for maximum output, while rocking the gang. Repeat these operations until no improvement results.

M.W.—Switch set to M.W., tune to 214.3 m on scale, feed in a 214.3 m (1,400 kc/s) signal, and adjust **C36** (F3) and **C31** (G4) for maximum output. Tune to 521.7 m on scale, feed in a 521.7 m (575 kc/s) signal, and adjust the core of **L7** (A1), while rocking the gang, for maximum output. Repeat these operations until no improvement results.

S.W.—Switch set to S.W., tune to 15Mc/s on scale, feed in a 15 Mc/s (20 m) signal, and adjust **C35** (F3) and **C30** (G4) for maximum output, choosing the peak for **C35**, which involves the lesser trimmer capacitance. Tune to 40 m on scale, feed in a 40 m (7.5 Mc/s) signal, and adjust the core of **L6** (A1), while rocking the gang, for maximum output. Repeat these operations until no improvement results.