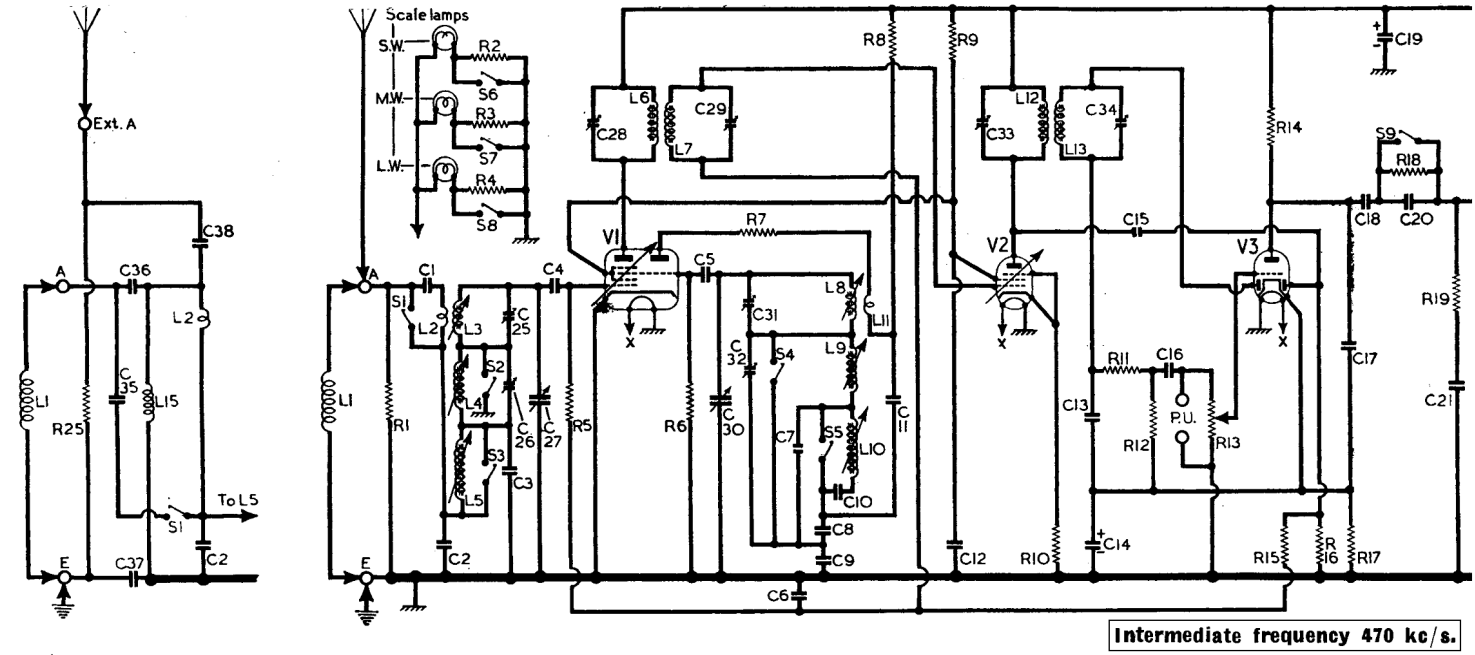


Intermediate frequency 470 kc/s.

A.C. Model

Valves	Anode		Screen		Cath.
	V	mA	V	mA	V
V1 X61M	188	0·7	33	1·5	—
	Oscillator				
	90	3·0			
V2 W61	188	4·7	33	1·5	0·6
V3 DH63	113	0·7	—	—	1·4
V4 KT61	285	30·0	188	5·0	3·3
V5 U50	267†	—	—	—	302·0

† A.C.

A.C./D.C. Model

Valves	Anode		Screen		Cath.
	V	mA	V	mA	V
V1 X61M	148	1·0	40	2·7	—
	Oscillator				
	130	5·0			
V2 W61	148	6·0	40	1·8	0·7
V3 DH63	80	0·5	—	—	1·1
V4 KT33C	193	58·0	148	9·0	8·0
V5 U31	223†	—	—	—	205·0

† A.C.

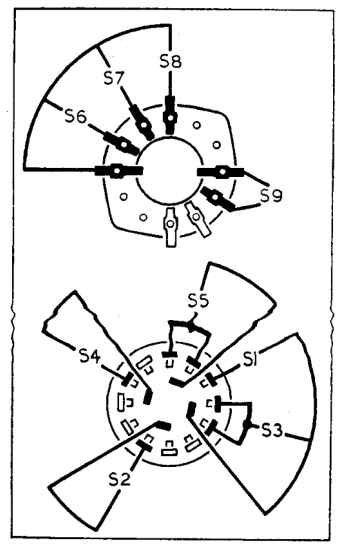
Drive Cord Replacement.—The drive cord for the tuning system consists of two sections, one part being a length of stranded steel wire, and one of stout twine, and it is convenient to make up the two sections and tie them together before fitting them. Suitable materials for the cord may be obtained from the G.E.C. Service Depot, Greycoat Street, Westminster, London, S.W.1.

Make up the wire with a loop of about $\frac{1}{8}$ inch diameter at each end so that it measures 34 inches overall. Take about 30 inches of the twine and tie one end of it with a non-slip knot to one end of the wire. The wire joints can easily be sealed by a touch of solder, and it is advisable to apply a dab of cellulose or some sealing compound to the twine knot.

Turn the gang to maximum, when the drum should take up the position shown in our sketch above. Hook the free end of the wire to the anchor tag shown and run the wire across to the upper slot and then clockwise round the drum for half a turn, taking it off to the cursor carriage as shown in the sketch.

Continuing with twine, make two turns clockwise round the control spindle, starting from the outer end of the spindle (so that the turns travel inwards when the spindle is turned) and so on round to the gang drum. There tie on the twine fairly short to one end of the tension spring, hooking the other end of the spring in the appropriate hole to give the required tension.

Solder the wire to the cursor carriage at either end of the substitute tuning scale and check that the zero line on the scale coincides with the calibration mark.



Diagrams of the scale lamp switch unit (top) and waveband switch unit (bottom). They are viewed in the direction of the arrows in the underchassis view. The associated switch table appears below.

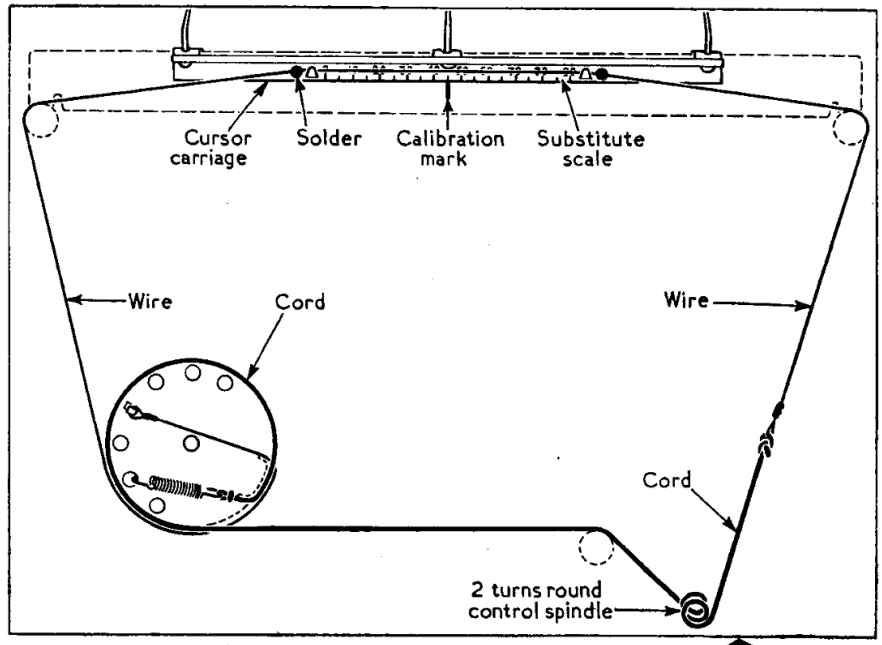
G.E.C. - BC5639

CAPACITORS	A.C. Model		A.C./D.C. Model
	Values	Locations	Values
C1	0·0011μF	D4	—
C2	0·008μF	E3	0·008μF
C3	47pF	E3	47pF
C4	100pF	D4	100pF
C5	100pF	D4	100pF
C6	0·05μF	D4	0·05μF
C7	82pF	D3	82pF
C8	470pF	D3	470pF
C9	0·006μF	D3	0·006μF
C10	270pF	D3	270pF
C11	0·005μF	D4	0·005μF
C12	0·05μF	E4	0·05μF
C13	300pF	E4	300pF
C14*	25μF	F3	25μF
C15	22pF	E4	22pF
C16	0·02μF	E4	0·02μF
C17	500pF	F4	500pF
C18	0·02μF	F4	0·02μF
C19*	32μF	B1	32μF
C20	200pF	D3	200pF
C21	0·0015μF	F4	0·0015μF
C22	0·05μF	F3	0·1μF
C23	0·005μF	F4	0·01μF
C24*	16μF	B1	32μF
C25‡	—	D4	—
C26‡	—	D3	—
C27†	—	C1	—
C28‡	—	C2	—
C29‡	—	C2	—
C30†	—	C1	—
C31‡	—	D4	—
C32‡	—	D3	—
C33‡	—	B2	—
C34‡	—	B2	—
C35	—	—	0·02μF
C36	—	—	0·001μF
C37	—	—	0·02μF
C38	—	—	0·001μF
C39	—	—	0·01μF
C40	—	—	0·01μF
C41*	—	—	4μF
C42	—	—	0·01μF
C43	—	—	0·01μF
C44*	—	—	100μF

* Electrolytic. † Variable. ‡ Pre-set.

RESISTORS	A.C. Model		A.C./D.C. Model
	Values	Locations	Values
R1	10kΩ	D4	—
R2	7·5Ω	C1	—
R3	7·5Ω	C1	—
R4	7·5Ω	C1	—
R5	1MΩ	D4	1MΩ
R6	100kΩ	D4	68kΩ
R7	390Ω	D4	390Ω
R8	33kΩ	D4	2·7kΩ
R9	47kΩ	E4	27kΩ
R10	90Ω	E4	90Ω
R11	56kΩ	E4	56kΩ
R12	470kΩ	E4	470kΩ
R13	1MΩ	E3	1MΩ
R14	100kΩ	F4	100kΩ
R15	1MΩ	F4	1MΩ
R16	470kΩ	F4	470kΩ
R17	2·2kΩ	F4	2·2kΩ
R18	680kΩ	D3	680kΩ
R19	150kΩ	F4	150kΩ
R20	330kΩ	F4	330kΩ
R21	10kΩ	F3	100kΩ
R22	6·8kΩ	F3	2·2kΩ
R23	55kΩ	F3	55kΩ
R24	100Ω	F4	120Ω
R25	—	—	1MΩ
R26	—	—	19·5Ω*
R27	—	—	100Ω
R28	—	—	19·5Ω*
R29	—	—	100Ω
R30	—	—	18kΩ
R31	—	—	100Ω
R32	—	—	27Ω
R33	—	—	12Ω

* Two 39Ω resistors in parallel.



Sketch of the tuning drive system, showing the substitute tuning scale and calibration mark referred to in the circuit alignment. It is drawn as seen when viewed from the front of the chassis with the gang at maximum.

	OTHER COMPONENTS	Approx. Values (ohms)	Locations
L1	Frame aerial coil ...	0·4	—
L2	S.W. aerial coup. ...	0·2	E4
L3	Aerial tuning coils	—	E4
L4		2·0	E3
L5		18·0	E3
L6	1st I.F. trans. Pri.	6·5	C2
L7	1st I.F. trans. Sec.	6·5	C2
L8	Oscillator tuning coils	—	D4
L9		3·2	D3
L10		6·5	D3
L11	S.W. reaction coil...	0·3	D4
L12	2nd I.F. trans. Pri.	3·5	B2
L13	2nd I.F. trans. Sec.	3·5	B2
L14	Speech coil ...	3·0	—
T1	O.P. trans. d-b ...	20·0	—
	O.P. trans. b-c ...	580·0	E3
	O.P. trans. a-e ...	0·5	
T2	Primary, total ...	30·0	A2
	H.T. sec., total ...	300·0	
	Rec. heater ...	0·2	
—	Valve heater ...	0·2	
S1-S9	Waveband switches	—	D3
S10, S11	Mains sw., g'd R13	—	E3

Modifications.—In some models the I.F. transformers may be adjusted by means of pre-set dust-iron cores in the coils instead of pre-set trimmers, the trimmers being replaced by 120pF fixed capacitors.

In earlier models **C1** and **S1** were omitted and the aerial input went direct to **L2.**

A rubber retaining ring is fitted to **V2** and holds it, and the screening can, firmly in position.

In some models **V2** may be an Osram KTW61 and as this has a larger circumference than the W61, the rubber retaining ring is not fitted. **R10** is also omitted