

G.E.C. 4070

Five-valve, plus rectifier and tuning indicator, three-band superhet with mechanical push-button tuning, suitable for 190-250 v., 40-100 cycles.

Circuit.—Transformer coils, with a single aerial primary, feed V1, a signal amplifier. Further transformer coils lead to V2, a triode-hexode frequency-changer. Band-pass filters link up V3, the I.F. amplifier, and V4 a double-diode triode. Resistance-capacity coupling leads to V5, the output tetrede. V6 is a full-wave rectifier with a separate choke, the speaker being P.M.

V1, V2 and V3 are all A.V. controlled. V2 is not controlled on S.W. V1 standing bias is reduced on S.W. Separate resistance-capacity smoothing for oscillator anode H.T.

Wavebands: 16.5-50, 192-550, 1,000-2,000 metres. Mechanical push-button tuning.

REPLACING POINTER DRIVE WIRE.—Set gang to maximum. Solder an end of new wire to eyelet and attach to hook on drum. Lead wire through slot below, clockwise round drum, through aperture to top small pulley. Set anchor screw on drive pulley to 11 o'clock, run wire anti-clockwise round pulley, loop round anchor screw and continue about half turn.

Then over lower small pulley, one and a half

clockwise round drum, through second slot and solder to tension adjustment.

GANGING

I.F. CIRCUITS.—Adjust at 456 kc. **M.W. BAND.**—Adjust T8, T5 and T2 at 214 metres, and T11 at 500 metres. **L.W. BAND.**—Adjust T9, T6 and T3 at 1,000 metres, and T10 at 1,818 metres. **S.W. BAND.**—Adjust T7, T4 and T1 at 16.7 metres using lowest capacity setting of T7.

BUTTON ADJUSTMENT

After set has been on 10 mins., turn pointer fully anti-clockwise. Slacken locking screw by one turn anti-clockwise. Tune to required station, hold in, and depress station button. Repeat procedure for other buttons. Turn pointer fully clockwise, tighten locking screw.

CONDENSERS

C	Mfds.	C	Mfds.
1	.005	21	.0001
2	.003	22	.05
3	.01	23	.01
4	.05	24	.0003
5	.05	25	.0001
6	.05	26	.02
7	.1	27	.30
8	.005	28	.8
9	.0032	29	.02
10	.000004	30	.001
11	.0003	31	.4
12	.05	32	.0005
13	.05	33	.01
14	.05	34	.0015
15	.0003	35	.30
16	.00395	36	.005
17	.005	37	.05
18	.05	38	.1
19	.00005	39	.24
20	.1	40	.24
		41	.0002

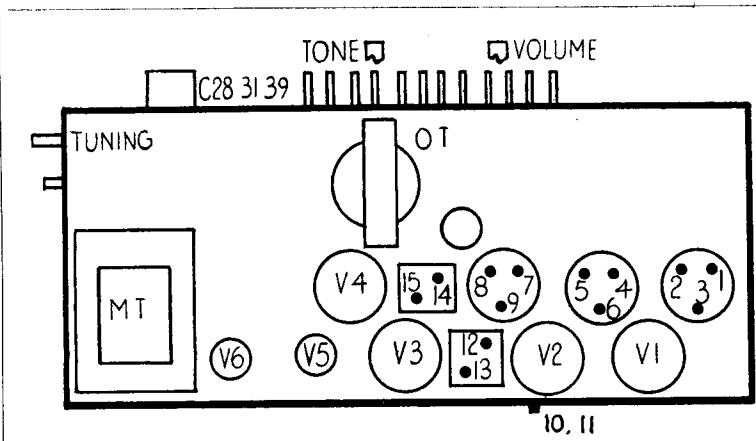
VALVE READINGS

V	Type	Electrode	Volts	Ma.
1	KTW61	Anode	182	4.9
		Screen	69	1.5
2	X85	Anode	252	1.4
		Screen	75	5.1
		Osc. anode	133	4.6
3	KTW61	Anode	252	6.5
		Screen	62	1.9
4	DL63	Anode	110	.9
5	KT61	Anode	224	4.1
		Screen	252	.8
6	U50	Anode	280A.C.	
		Cathode	283 D.C.	83ma.
T1	Y63	Anode	—	.2
		Target	252	.3

Dial lamps: 6.5 v. .3 amp., M.E.S., type S, No. OS75.

RESISTANCES

R	Ohms.	R	Ohms.
1	9,900	23	77,000
2	1 meg.	24	300
3	300	25	55,000
4	22,000	26	330,000
5	300	27	99,000
6	77,000	28	150,000
7	77,000	29	440,000
8	2,200	30	4,400
9	9,900	31	99,000
10	1 meg.	32	3,300
11	1 meg.	33	1 meg.
12	33,000	34	2 meg.
13	33,000	35	44,000
14	22,000	36	44,000
15	99,000	37	220,000
16	200	38	330,000
17	300	39	75
18	150	40	150,000
19	1 meg.	41	90
20	2,200	42	55,000
21	9,900	43	1 meg.
22	2 meg.	44	9,900



WINDINGS

L	Ohms.	L	Ohms.
1	.29	12	2.54
2	.03	13	8.1
3	3.7	14, 15	7
4	.30	16, 17	4
5	3.17	18	450
6	.66	19	.4
7	.03	20	2
8	3.68	21	380
9	.30	22	17.5-21
10	.39	23	400
11	.03	24	.17
		25	.16

The General Electric Co.'s model 4070 is a carefully designed three-band A.C. superhet with a pre-H.F. amplifier and a C.R. tuning indicator. The trimmers are actually accessible from the underside of the chassis.

