EVER READY
5203, 5380, 5381

Four valve, plus rectifier, three waveband superhet in table (5203), *and radiogram* (5380, 5381) *forms. Suitable for* 200–250 *v., 40–100 cycle, A.C. mains. Made by Ever Ready Radio, Ltd., Eley's Estate, Edmonton, London, N.*18.

Circuit.—The aerial circuit includes band-pass input on M. and L.W., and H.F. transformer on S.W. A.V.C. is applied direct to the grid of V1, the frequency-changer, C10 preventing the grid coils from acting as a "short." The oscillator section is straightforward with anode reaction coils.

Trimmer-tuned I.F. transformers couple up V2, the I.F. amplifier, and V3, the double-diode triode. The A.V.C. diode is energised via C28, the control voltage being developed across R25.

R15, R16 comprise the signal diode load, the demodulated output passing via R17, an I.F. filter, and C34 to the volume control R18.

The anode of the triode section is connected through R24 to the anode of V4, this providing negative feed-back. A tone control is associated with this arrangement (C37, R23). V4 is an output pentode, fed through C38, and with R26 to prevent parasitic oscillation.

H.T. is obtained through a conventional rectifier and smoothing arrangement, the valve, V5, having anode stabilising resistances and noise-suppression condensers.

GANGING

I.F. CIRCUITS.—Inject 452 kc. and adjust I.F. trimmers for maximum.

The makers recommend that the osc. section of the gang be shorted and the signal generator be connected via .1 mfd. to the middle gang section.

L.W. BAND.—See that the pointer registers with the 180° line on the scale with the gang at maximum.

Set T4 two-thirds in. Tune to 1,000 m., inject 1,000 m. to aerial and adjust T1, T2, T3.

Tune to and inject 1,700 m. and adjust T4.

Readjust T1, T2 and T3 and finally check T4.

M.W. BAND.—Set T8 three-quarters in. Tune to, and inject, 214 m. Adjust T5, T6, T7.

Tune to, and inject 500 m. and adjust T8. Readjust T5, T6, T7, and finally, T8.

S.W. BAND.—Tune to and inject 15 mc. Set T9 to the first peak heard from minimum capacity. Then adjust T10.

Tune to and inject 6 mc. and adjust top turn of S.W. osc. grid coil, and rock gang simultaneously for maximum.

Readjust T9 and T10.

RESISTANCES

R		Ohms.	R		Ohms.
1	..	1.1 meg.	16	..	260,000
2	..	25,000	17	..	110,000
3	..	30,000	18	..	500,000
4	..	200	19	..	1,600
5	..	30,000	20	..	3,100
6	..	51,000	21	..	11,000
7	..	150	22	..	50,000
8	..	1,500	23	..	2 meg.
9	..	5,100	24	..	250,000
10	..	260,000	25	..	1.1 meg.
11	..	260,000	26	..	51,000
12	..	2,100	27	..	510,000
13	..	80,000	28	..	50
14	..	250	29	..	75
15	..	260,000	39	..	75
			Choke	..	250

VALVE READINGS

V	Type	Electrode	Volts	Ma.
1	ECH3	Anode	239	2.2
		Screen	92	3
		Osc. anode	102	4.2
		Cathode	1.9	9.4

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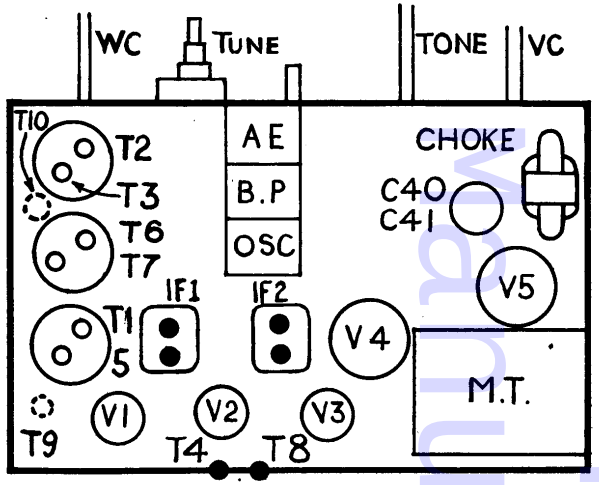
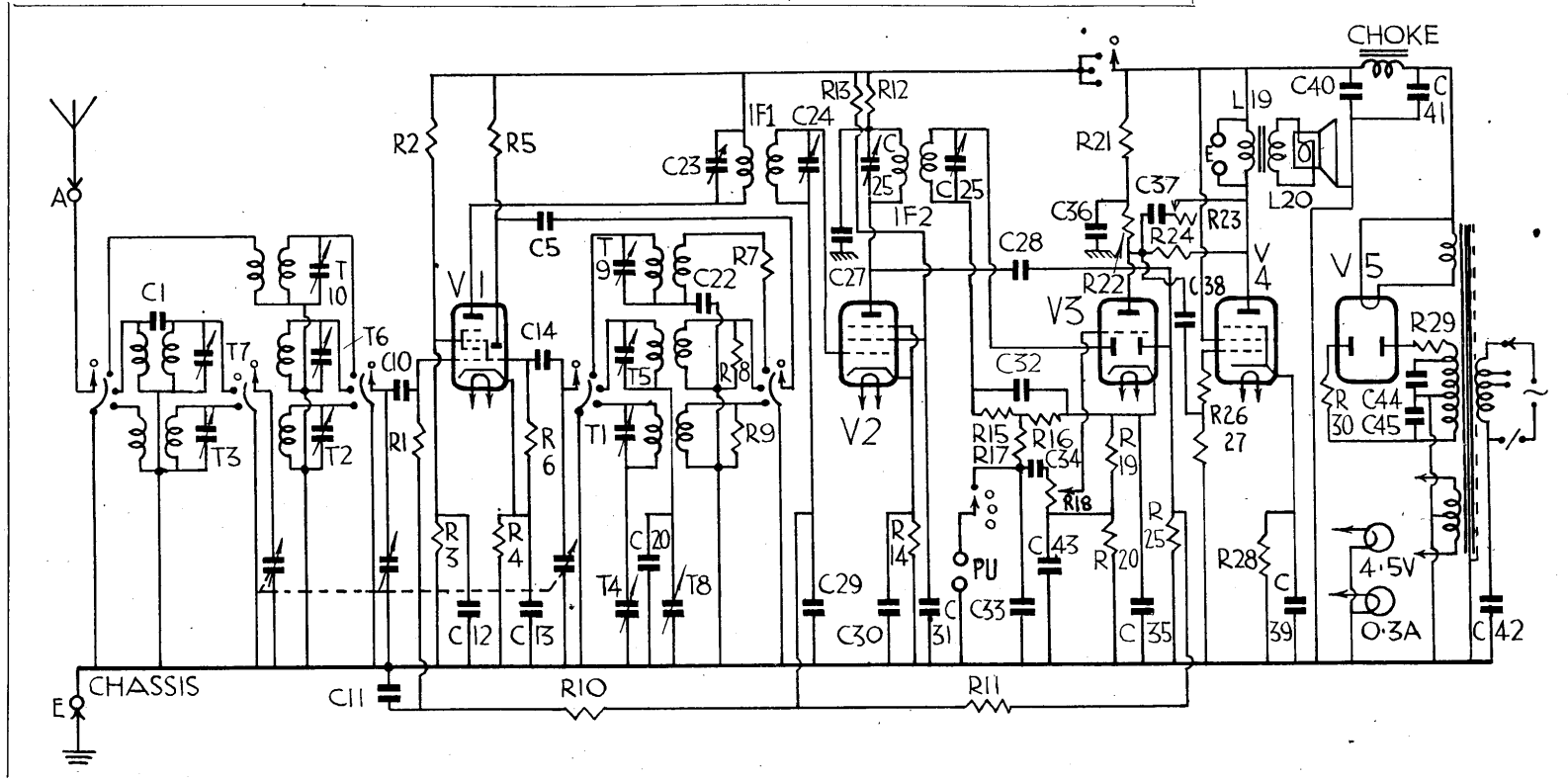


Two trimmers are below the chassis and two at the rear. The rest are accessible from above.

Band-pass input, three wavebands and provision of a pick-up connection are features of this Ever Ready receiver.



VALVE READINGS—*Continued*

V	Type	Electrode	Volts	Ma.
2	EF9	Anode	222	6.2
		Screen	88	1.8
		Cathode	2	8
3	EBC3	Anode	133	1.9
		Cathode	5.8	1.9
4	EL3	Anode	215	31.9
		Screen	239	4.8
		Cathode	5.4	36.7
5	A71	Anodes (A.C.)	225	—
		Cathode (D.C.)	255	58.7

Pilot lamps, 4.5 v., .3 amp.

CONDENSERS

C		Mfds.	C		Mfds.
1	..	5 mmfds.	31	..	.1
10	..	500 mmfds.	32	..	50 mmfds.
11	..	.05	33	..	50 mmfds.
12	..	.1	34	..	.05
13	..	.1	35	..	50
14	..	100 mmfds.	36	..	2
15	..	300 mmfds.	37	..	500 mmfds.
20	..	300 mmfds.	38	..	.05
22	..	.0057	39	..	50
23–26	..	100 mmfds.	40	..	24
27	..	.1	41	..	16
28	..	10 mmfds.	42	..	.01
29	..	.1	43	..	50
30	..	.1	44	..	.005
			45	..	.005

When Lamps Burn Out

CERTAIN recent H.M.V. models give some trouble through burning out the 6.5-volt pilot lamps.

Sometimes a bulb of larger rating will effect a cure. When one of this type is not available try wiring an extra 6.5-volt lamp in series with the existing ones.

Where, as in some models, only one 6.5-volt dial lamp is used, an extra holder can be wired in series, and 4-volt bulbs used in both positions. This precaution usually gives a satisfactory life to the lamps.—F. D.-L.