

VIDOR MODEL 254 ALL-WAVE A.C.-D.C. THREE

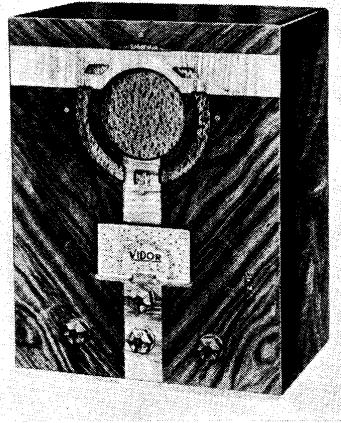
CIRCUIT.—A three-valve straight receiver for operation on either A.C. or D.C. mains and working on the medium, long and two short wavebands.

The aerial input to V1, an H.F. pentode, is through a small variable condenser, which may be shorted if not required, and a small aerial isolating condenser to a band-pass filter on medium and long waves. On short waves a single coupling coil only is used.

Coupling to V2, another H.F. pentode, used for detection, is through an inductively coupled H.F. coil. Reaction on all wavebands is employed in the orthodox manner.

The L.F. output of V2 is passed to V3, an output pentode, through a resistance and capacity stage, and after amplification to the energised moving-coil speaker.

Mains equipment consists of voltage dropper, half-wave rectifier, electrolytic



Two short wavebands as well as the medium and long ranges are covered by the Vidor 254 receiver. It uses a three-valve "straight" circuit suitable for A.C. or D.C. operation.

condensers and the speaker field. Two choke coils are included in the mains input leads to prevent interference reaching the set from the mains.

Special Notes.—The dial lights are rated at 6.2 volts .3 amp. The holders are fitted to the dial assembly by spring clips and are readily removed; they are both in series with the main heater leads to the valves, so that failure of one of them will result in the receiver failing to operate.

C14 and C15 are mounted on the side of the cabinet to the left of the speaker.

Exposing Chassis.—To get at the underside of the chassis it is only necessary to remove the false bottom of the cabinet. This is secured by wood screws.

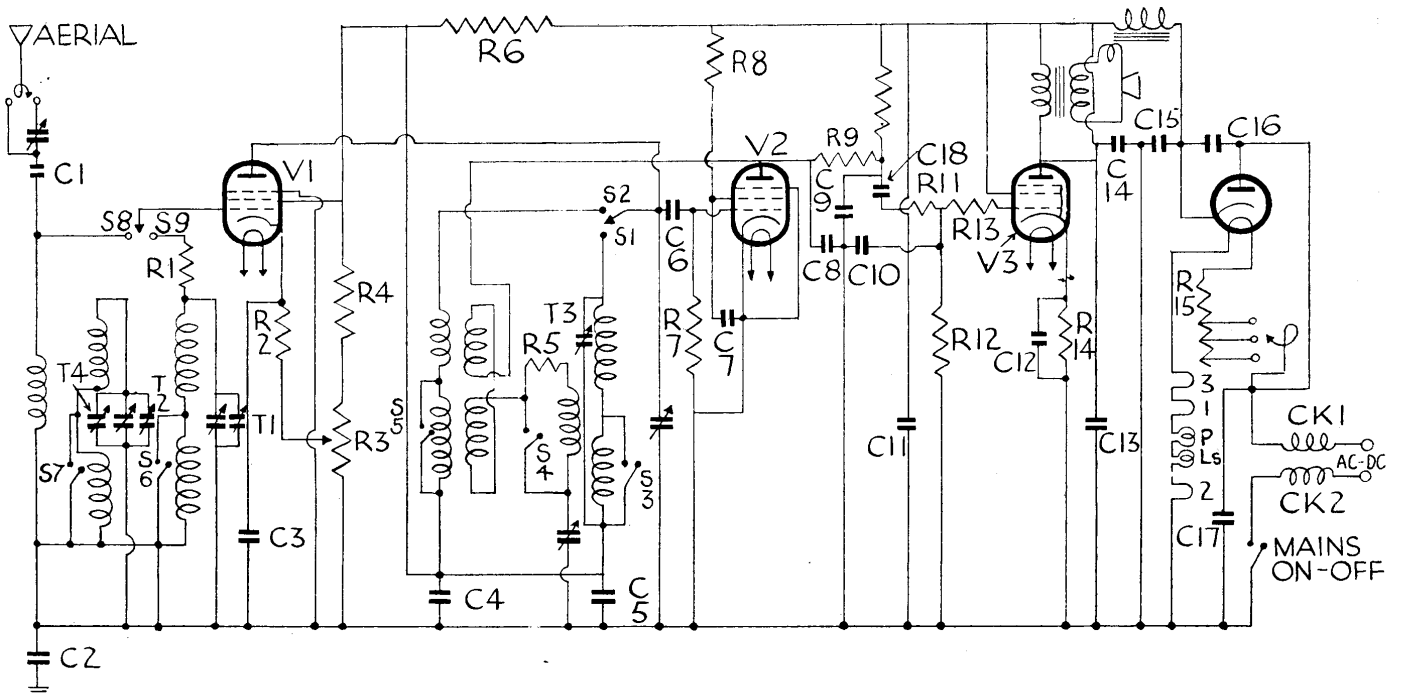
If, however, it is desired to completely remove the chassis, the procedure is as

(Continued on next page.)

RESISTANCES		
R.	Purpose.	Ohms.
1	V1 series grid	500
2	V1 cathode bias	150
3	Volume control	10,000
4	V1 screen decoupling potr. ..	50,000
5	Reaction modifier	500
6	V1 anode decoupling and screen potr.	5,000
7	V2 grid leak	1 meg.
8	V2 screen decoupling .. .. .	.75 meg.
9	H.F. filter	50,000
10	V2 anode load .. .. .	.25 meg.
11	V3 series grid	50,000
12	V3 grid leak .. .. .	.25 meg.
13	V3 series grid	1 meg.
14	V3 cathode bias	150
15	Voltage dropper (total)	690

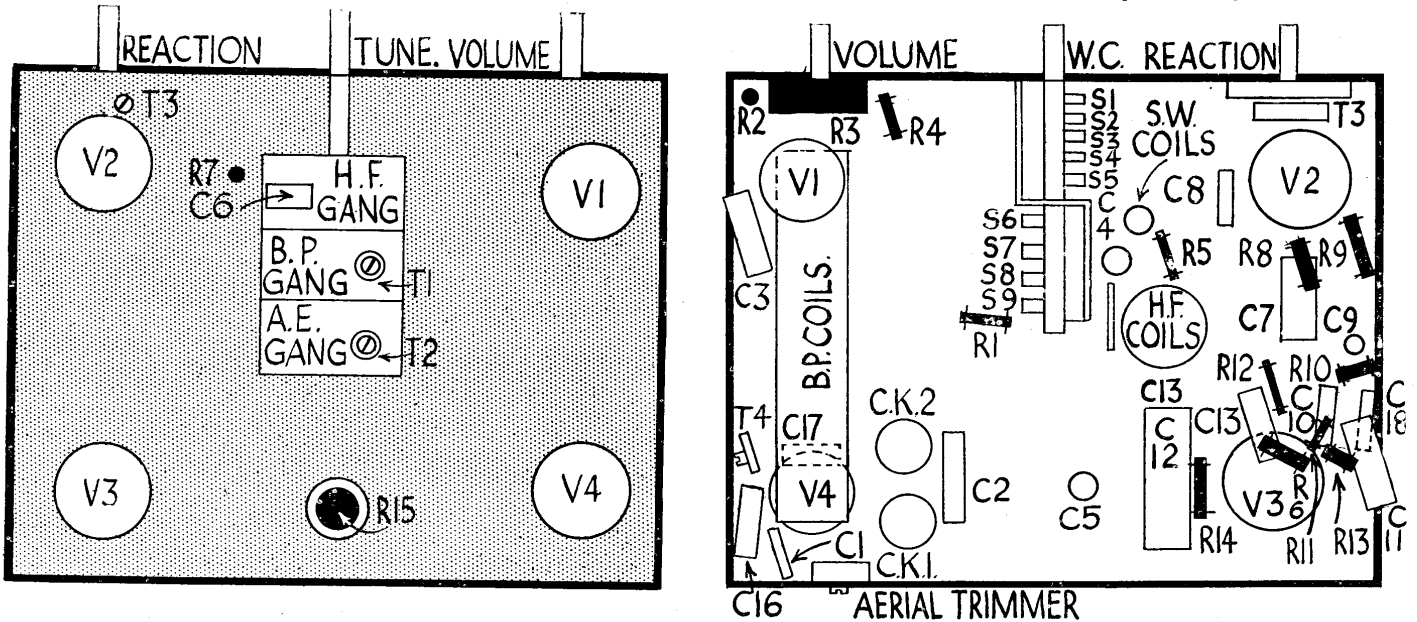
VALVE READINGS				
No signal. No reaction. 200 volts A.C. mains.				
V.	Type.	Electrode.	Volts.	M/a.
1	VP1321 (7) Met. (Mazda)	Anode ..	140	7
		Screen ..	140	4.3
2	SP13C (7) Met. (Mullard)	Anode ..	35	.5
		Screen ..	25	.25
3	Pen.36C. (7) (Mullard)	Anode ..	160	42
		Screen ..	200	6.3
4	L.D.5 (Brimar) ..	Cathode	220	—

CONDENSERS		
C.	Purpose.	Mfd.
1	Aerial isolating .. .. .	.0005
2	Chassis isolating .. .. .	.02
3	V1 cathode bias shunt .. .. .	.1
4	V1 screen anode decoupling ..	.25
5	V1 screen decoupling	8
6	V2 grid .. .. .	.0001
7	V2 screen decoupling .. .. .	.1
8	H.F. filter .. .. .	.00005
9	H.F. filter .. .. .	.0005
10	H.F. filter .. .. .	.0002
11	V3 screen shunt .. .. .	.5
12	V3 cathode bias shunt	25
15	Pentode compensating .. .. .	.005
14	H.T. smoothing	24
15	H.T. smoothing	16
16	Mains filter .. .. .	.02
17	Mains filter .. .. .	.01
18	L.F. coupling .. .. .	.01



Three pentodes are employed in the Vidor receiver. The first is an H.F. amplifier, the second a reactive detector and the third an output type.

VIDOR 254 A.C.-D.C. ALL-WAVE THREE (Cont.)



The switch contacts shown in the underside diagram (right) are numbered to correspond with the circuit diagram.

follows. Remove four knobs from the front of the cabinet (grub screws) and four bolts from underneath. Unsolder the leads to the speaker from the transformer, making a careful note of their positions for reconnection. The chassis will then be quite free and may be removed.

Alignment Notes.—All adjustments on this receiver are made on the medium

waveband. A signal of 200 metres should be injected at the aerial and earth terminals, an output meter with a large series condenser, about 4 mfd., being connected across the speaker output transformer.

Then adjust T1, T2, T3 and T4 for maximum reading on the output meter.

QUICK TESTS

Quick tests are available on this receiver on the terminal strip of the speaker transformer. Volts measured between this and the chassis should be:—

Red lead, 220 volts, Unsmoothed H.T.
Black lead, 200 volts, Smoothed H.T.

The WESTON SUPER-OSCILLATOR —



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- Attenuator with marked dial reduces output from approx. 0.3 volt to below 1 microvolt.
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- Plug-in range coils eliminate switch contacts, shorten internal connections and prevent intercoil interference.
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