

PHILIPS

Model 141U

General Description : Five-valve (including rectifier), two-waveband transportable table receiver with internal frame aerial and provision for external aerial and earth connections.

Power Supply : A.C./D.C. mains, 200–250 volts, A.C. 50–100 c/s. (two adjustment positions). Consumption on 245 volts A.C. (50 c/s.) applied to the 220–250-volt tapping is approximately 230 mA.

Wavebands : M.W. 1622–517 kc/s.; L.W. 261–150 kc/s.

Intermediate Frequency : 470 kc/s.

Valves : (V1) UCH42; (V2) UF41; (V3) UBC41; (V4) UL41; (V5) UY41. Type 8097D-00 pilot lamp, 19 volts, 0.09 amp.

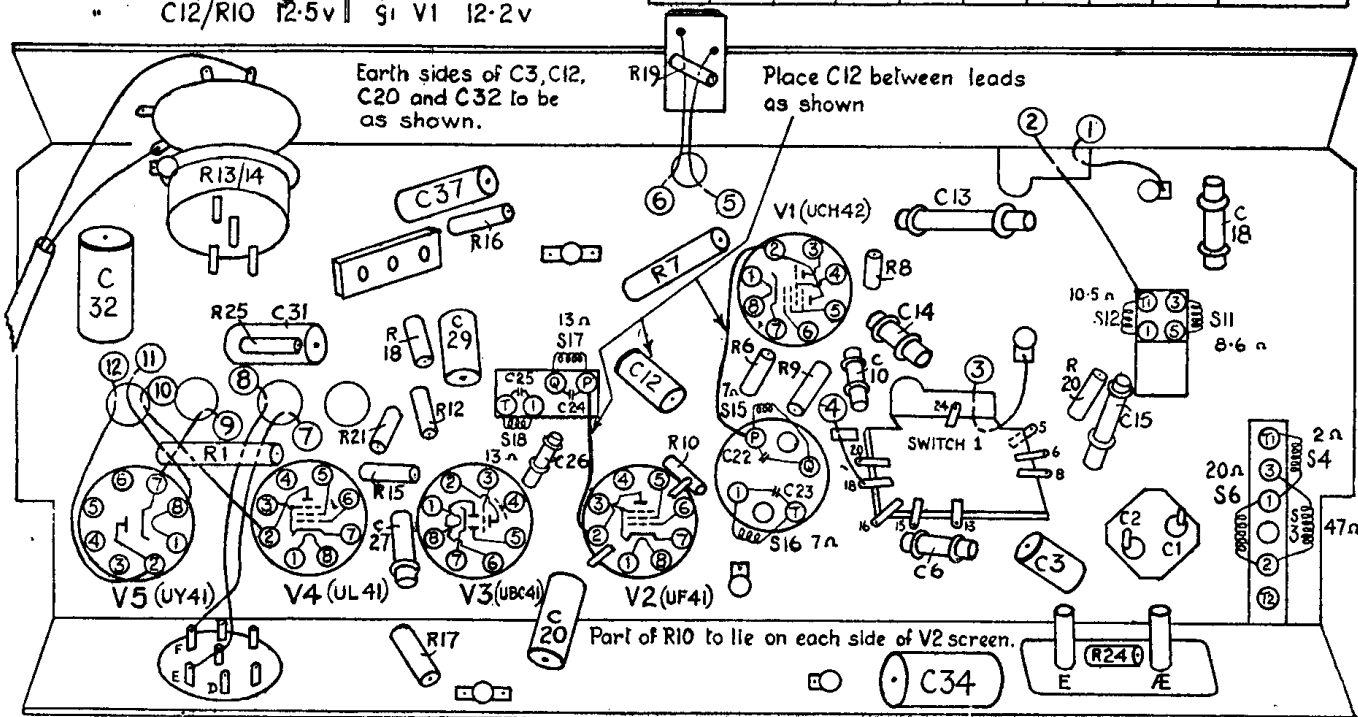
Alignment Procedure : This is similar to that given for Model BG131U, except that there is no I.F. filter circuit on this model.

A.V.C Voltages

With a signal of 150 mV at 1 Mc/s applied to the aerial socket, the voltages are approximately as follows (measured on a valve voltmeter.)

Junction S18/C26 13 v | S1 V2 12.4 v
" C12/R10 12.5 v | S1 V1 12.2 v

Valve No	Voltages (20,000 Ω/V. Meter)				Currents (mA.)				Vc1 = 210 v Vc2 = 182 v
	Va	Va osc	Vg2	Vk	Ia	Ia osc	Ig2	Ik	
V1	182	92	78	—	3.7	3.5	3.9	—	
V2	182	—	78	—	5.5	—	1.6	—	
V3	70	—	—	—	0.5	—	—	—	
V4	196	—	182	8.2	48	—	8.5	—	
V5	—	—	—	—	—	—	—	72	



UNDER VIEW OF CHASSIS

(Note : On the switch, contacts 13 and 15 are on the side opposite to that shown.)

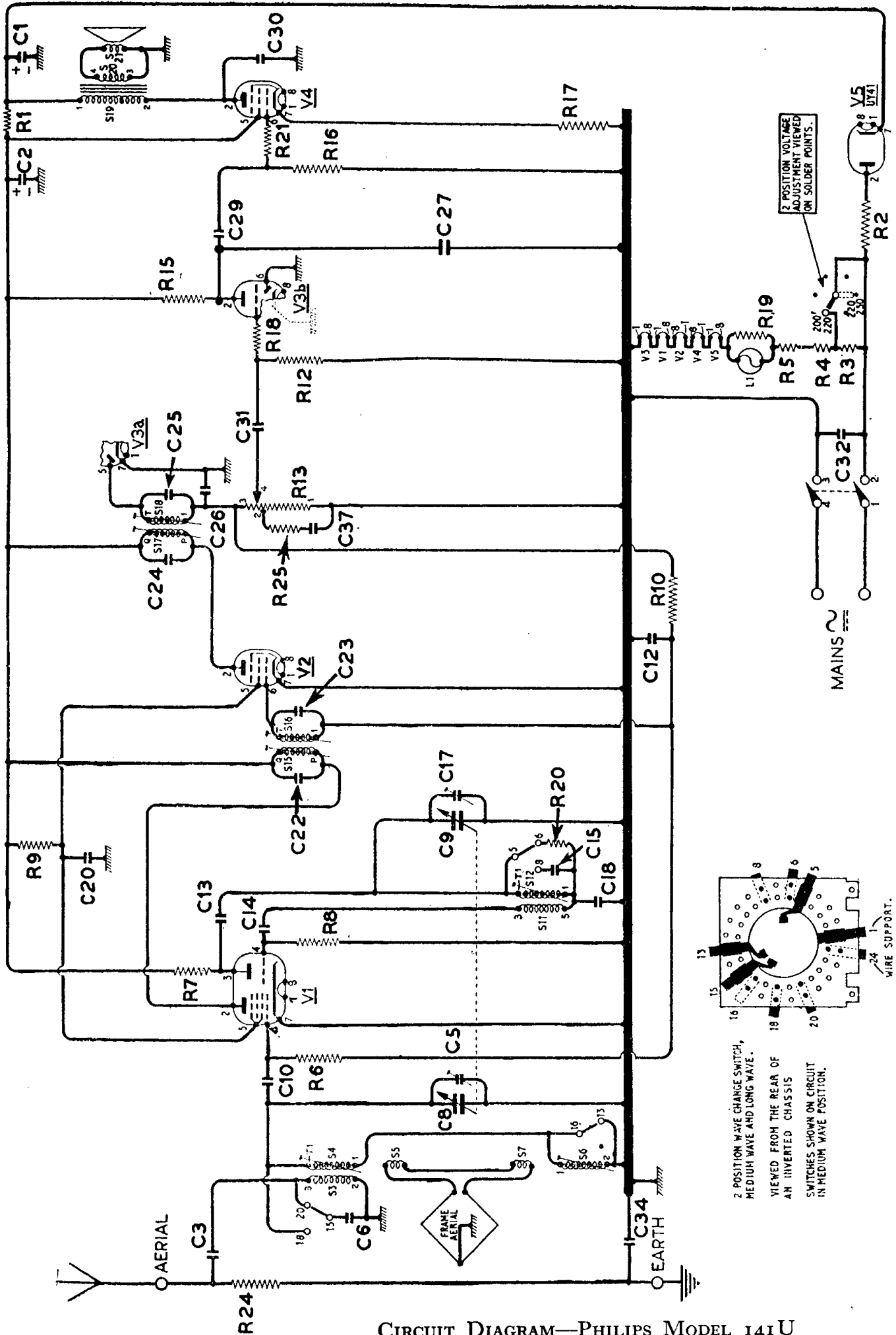
Capacitors.

C1	50 (El. 250 v.)
C2	50 (El. 250 v.)
C3	1,000 pF. (800 v.)
C5	3–30 pF.
C6	111 pF. (1%)
C8	11–500 pF.
C9	11–500 pF.
C10	100 pF.
C12	47,000 pF.
C13	470 pF.
C14	47 pF.
C15	419 pF. (1%)
C17	3–30 pF.
C18	460 pF. (1%)

C20	0.1 (400 v.)
C22	115 pF.
C23	115 pF.
C24	110 pF.
C25	110 pF.
C26	100 pF.
C27	390 pF.
C29	10,000 pF. (400 v.)
C30	22,000 pF. (800 v.)
C31	2,200 pF. (400 v.)
C32	33,000 pF. (600 v.)
C34	4,700 pF. (800 v.)
C37	15,000 pF. (125 v.)

Resistors.

R1	1000 (1 W.)
R2	240 (5 W., 5%)
R3	250 (2.5 W.)
R4	538 (5.4 W.)
R5	Thermistor, cold 2,000–3,500 Hot 220
R6	0.68M
R7	22k (1 W.)
R8	22k
R9	18k (1 W.)
R10	1.5M
R12	4.7M
R13	50k (log)
R14	450k (log)
R15	0.22M
R16	0.68M
R17	150 (1 W.)
R18	0.1M
R19	Thermistor : Cold 8000–15,000 Hot 200–280
R20	10k
R21	1k
R24	1M
R25	15k



CIRCUIT DIAGRAM—PHILIPS MODEL 141U