

VIDOR

CN442

General Description: Four-valve, two-waveband, battery portable receiver with ferrite-rod aerial and printed-circuit panel.

Power Supplies: H.T. 90 volts (Vidor L5515); L.T. 1.5 volts (Vidor L5041). Total H.T. current 10 mA., total L.T. current 130 mA.

Wavebands: M.W. 187–571 m.; L.W. 1100–2000 m.

Valve Analysis: The following values were taken using an Avo Model 8 on the 100-volt range, voltages with respect to chassis, with set tuned to M.W. and no signal input.

Valve	Anode, volts	Anode, mA.	Screen, volts	Screen, mA.	Miscellaneous
V ₁ DK96 . .	84	1.09	63	0.18	Osc. (g ₂) 35 volts 1.6 mA
V ₂ DF96 . .	84	1.27	68	0.44	
V ₃ DAF96 . .	20	55 μ A	27	18 μ A	Bias (g ₁) -5.3 volts
V ₄ DL96 . .	81	4.4	84	0.76	

Alignment Procedure: *I.F.:* With set tuned to M.W. and volume maximum, short circuit tag 1 on oscillator coil to chassis. Inject a 470-kc/s. signal between front section of gang capacitor and chassis and adjust L₇, L₆, L₄ and L₃ for maximum. Repeat as necessary. Check alignment of tuning-scale pointer and tuning knob with zero.

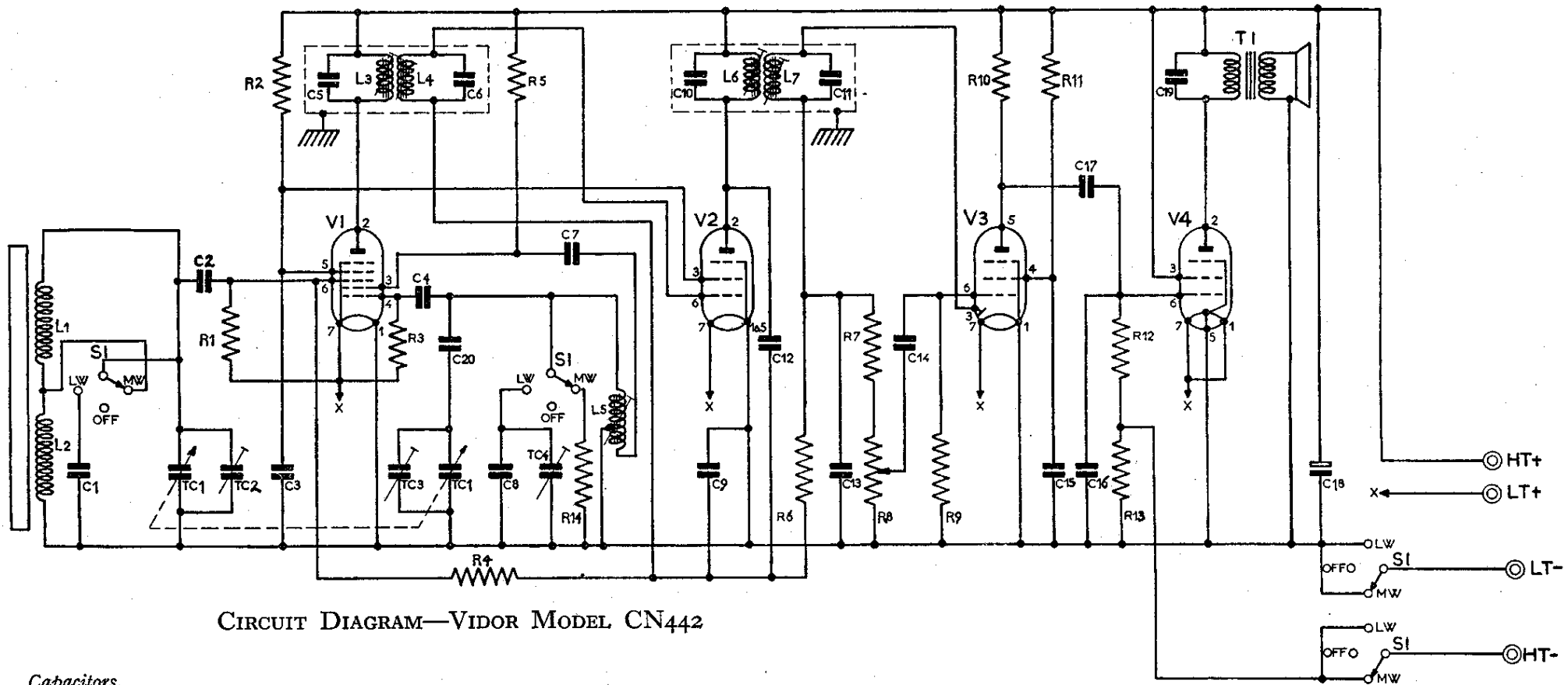
R.F.: Inductively couple signal from generator to ferrite aerial.

M.W.: Tune to 500 m., inject a 600-kc/s. signal and adjust L₅, L₂. Tune to 200 m., inject a 1500-kc/s. signal and adjust TC₃, TC₁. Repeat for optimum result.

L.W.: Tune to 1200 m., inject a 250-kc/s. signal and adjust TC₄. Tune to 1900 m., inject a 158-kc/s. signal and adjust L₁, while rocking gang slightly.

Dismantling: Practically all servicing can be carried out after removal of receiver and baffle from cabinet. Simply remove four 4 B.A. screws and lift out receiver and speaker. To remove chassis, remove knobs and pointer (pull-off types), unsolder leads from speaker and remove four 4 B.A. chassis nuts. To remove printed wiring panel, unsolder leads between chassis and printed wiring panel and then remove the five self-tapping hexagon-head screws.

Notes: Always connect L.T. battery before connecting H.T. battery and disconnect H.T. battery before L.T. battery. The usual precautions must be taken to avoid damage to the printed-circuit panel. When soldering to the printed-circuit panel, care should be taken to ensure that bridging of adjacent conductors does not occur. If any of the conducting paths of the printed circuit should become open-circuit or damaged a repair can be effected by soldering a piece of 22 S.W.G. tinned copper wire across the defective part.



CIRCUIT DIAGRAM—VIDOR MODEL CN442

- Capacitors.
- C1 165 pF. (2%)
 - C2 100 pF.
 - C3 0.04
 - C4 100 pF.
 - C5 65 pF. (3%)
 - C6 65 pF. (3%)
 - C7 470 pF.
 - C8 400 pF. (2%)
 - C9 0.01
 - C10 65 pF. (3%)
 - C11 65 pF. (3%)
 - C12 5.6 pF.
 - C13 100 pF.
 - C14 470 pF.

- C15 0.01
- C16 220 pF.
- C17 0.01
- C18 6 (El. 100 v.)
- C19 0.005
- C20 460 pF. (2%)
- TC1 452 pF. (swing)
- TC2 30 pF.
- TC3 30 pF.
- TC4 30 pF.

- Resistors.
- R1 5.6M
 - R2 33k (10%)

- R3 27k
- R4 4.7M
- R5 33k
- R6 1.8M
- R7 100k
- R8 1M (log)
- R9 10M
- R10 1M
- R11 2.7M
- R12 1.8M
- R13 560 (10%)
- R14 100k

SIDE CHASSIS—VIDOR MODEL CN442

