

# VIDOR

# RADIO ATTACHE

## Models CN.381A, CN.381B

**General Description :** Four-valve, two-waveband "attaché-case" all-dry battery superheterodyne receiver. Released 1949.

**Power Supplies :** Vidor battery, type L5512 (90 volts); Vidor battery, type L5040 (1.5 volts).

**Wavebands :** M.W. 200–550 m.; L.W. 1000–2000 m.

**Intermediate Frequency :** 456 kc/s. 475 kc/s. on later models.

**Valves :** (V1) DK91 (1R5); (V2) DF91 (1T4); (V3) DAF91 (1S5); (V4) DL94 (3V4).

**Circuit Variations :** In Model CN381B, the medium wave aerial trimmer (C3) is omitted.

**Alignment Procedure :** The I.F. transformer cores are sealed during manufacture, and normally need no further adjustment. However, if necessary, the cores may be released by melting the wax.

Connect signal generator to grid (pin 6) of V1 via 100-pF. capacitor. Short-circuit front (osc.) section of gang capacitor. Adjust cores of I.F. transformers for maximum output at 456 kc/s., reducing signal as sensitivity increases. Seal cores with soft wax.

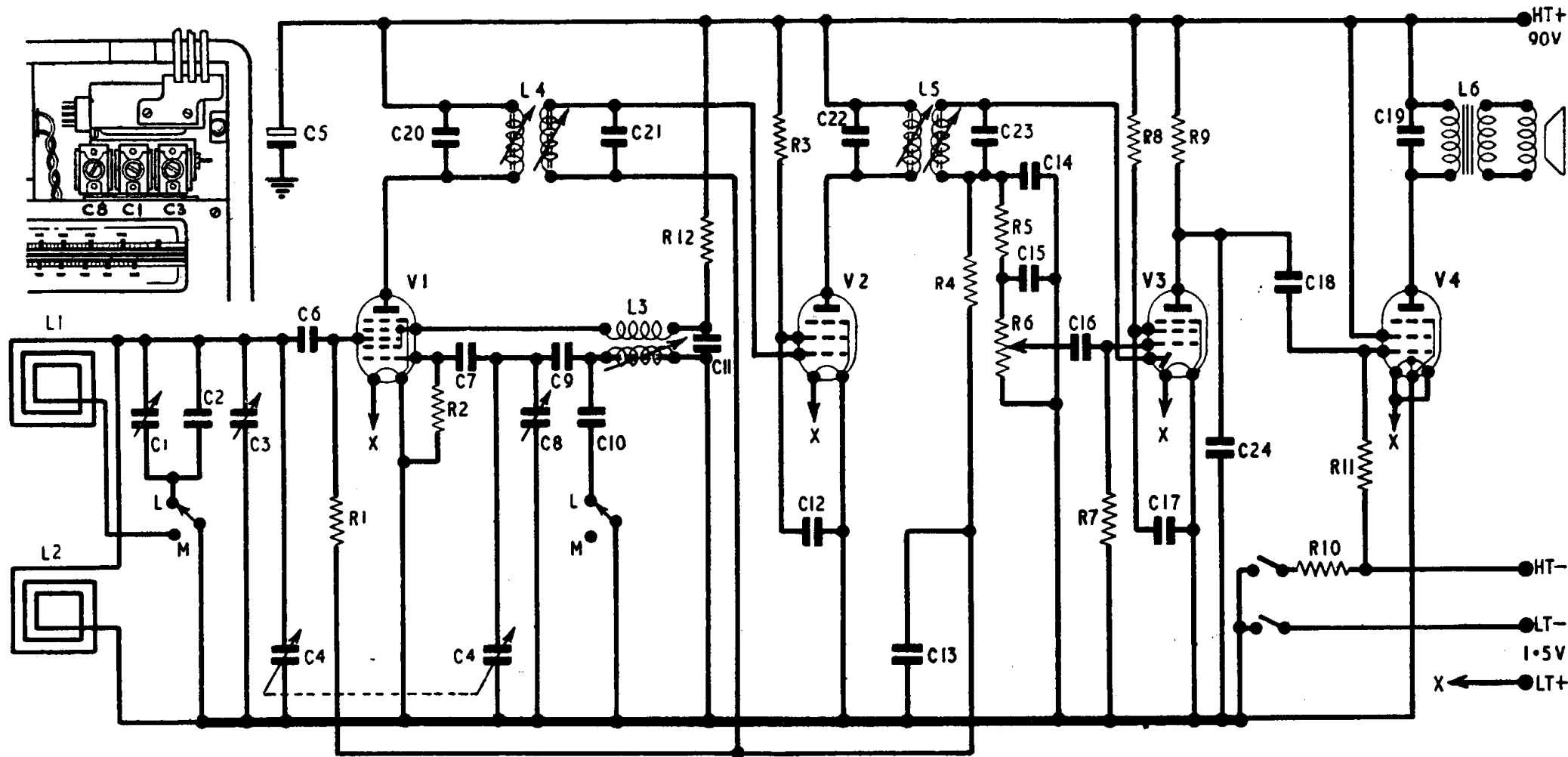
**R.F. :** Check that with gang fully meshed, the left-hand edge of the pointer (not pointer itself) is directly under, and in line with, the left-hand edge of the 550-m. block on the scale.

**M.W. :** Loosely couple signal generator to receiver. Set pointer to 200 m., inject 1500-kc/s. signal and adjust C8 and C3 for maximum output. Set pointer to 550 m., inject 545.5-kc/s. signal and adjust core L3 for maximum output, rocking gang slightly after each adjustment. Repeat at 200 m. and 550 m. With model CN381B, C3 is omitted, and alignment should be carried out at 190 m. (1579 kc/s.) and 550 m. (545.5 kc/s.).

**L.W. :** Set pointer to 1200 m., inject 250/kc/s. signal, and adjust C1 for maximum output. No L.W. oscillator trimmer is provided, and if L.W. calibration is incorrect, C10 should be checked. This capacitor must be 533 pF. ( $\frac{1}{2}$  per cent) for CN381A, and 540 pF. ( $\frac{1}{2}$  per cent) for CN381B.

**Voltage Check Points :** Measurements taken on Avo Model 7 (1000-volt range). Total H.T. consumption 8.75 mA.

V1	Anode (pin 2)	85 v.	Osc. anode (pin 3)	45 v.	—
V2	Anode (pin 2)	85 v.	Screen (pin 3)	35 v.	—
V3	Anode (pin 2)	6 v.	Screen (pin 4)	5 v.	—
V4	Anode (pin 2)	80 v.	Screen (pin 3)	82 v.	Bias 7.25 v.



CIRCUIT DIAGRAM AND TRIMMER LAY-OUT—VIDOR MODEL CN.381A

*Capacitors.*

- C1 3.5-50 pF
- C2 150 pF.
- C3 1.5-15 pF.
- C4 523 pF. Swing
- C5 2 (200 v.)
- C6 100 pF.
- C7 100 pF.
- C8 3.5-50 pF.
- C9 635 pF.

- C10 533 pF. (CN381B.  
540 pF.)
- C11 0.1
- C12 0.1
- C13 0.05
- C14 100 pF.
- C15 100 pF.
- C16 0.001

*Resistors.*

- C17 0.05
- C18 0.01
- C19 0.005
- C20 65 pF.
- C21 65 pF.
- C22 65 pF.
- C23 65 pF.
- C24 65 pF.

- R1 470k 20%
- R2 100k 20%
- R3 100k 20%
- R4 2.2M 20%
- R5 100k 20%
- R6 1M Pot.
- R7 4.7M 20%

- R8 1M 20%
  - R9 270k 20%
  - R10 820 10%
  - R11 2.2M 20%
  - R12 22k 20%
- All 1/4 W.