

H.M.V.

Model 1451

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

Power Supplies: A.C./D.C. mains, 200-250 volts, 12.5 watts. H.T. 90 volts (B126, 526, L5512, K782); L.T. 7.5 volts (AD38, H1187, L5048, K782).

Wavebands: M.W. 182-557 m.; L.W. 1090-1920 m.

Valves: (V1) DK96; (V2) DF96; (V3) DAF96; (V4) DL96. Voltages on circuit diagram measured with Avo Model 8 (20,000 ohms/volt) testmeter.

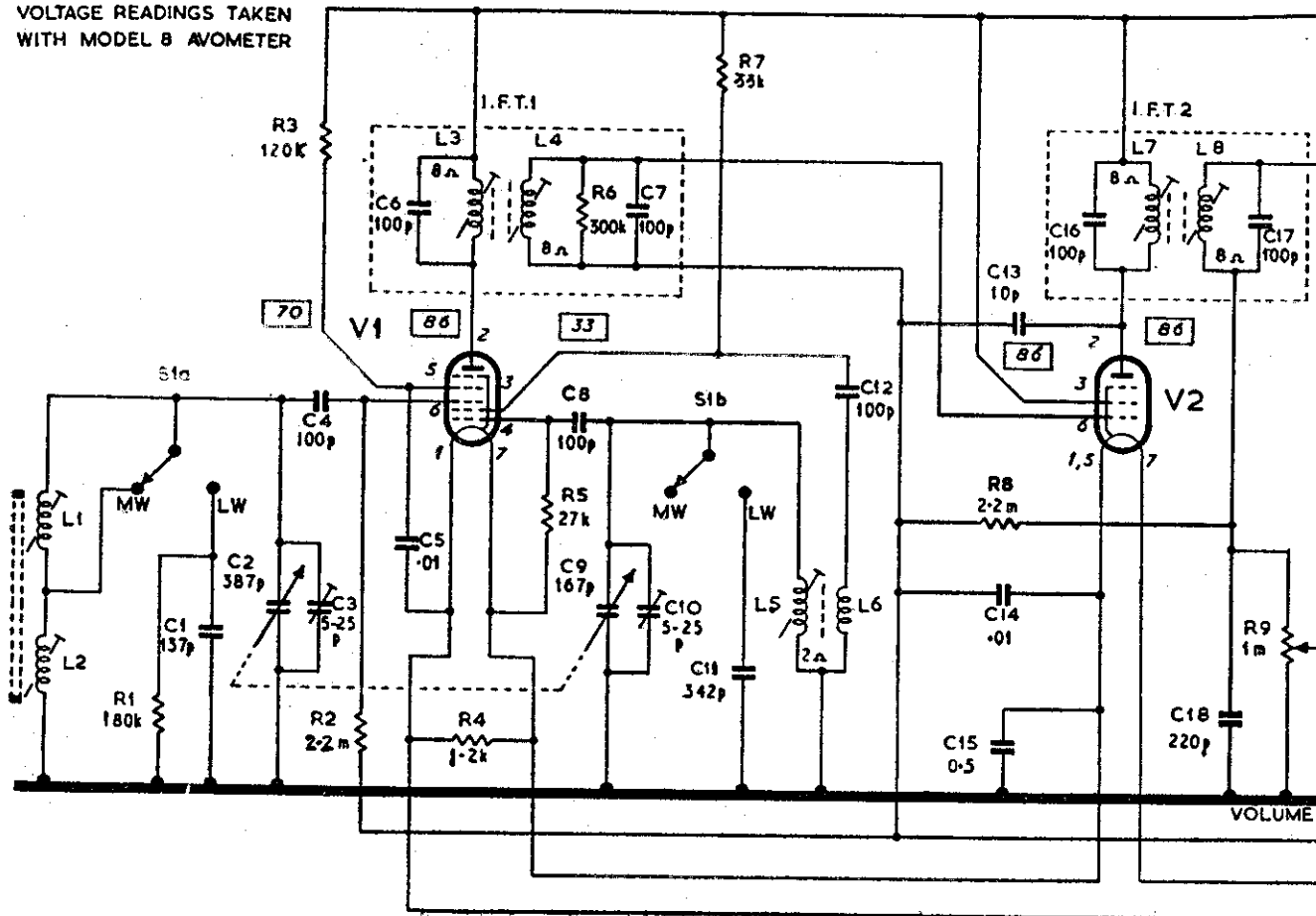
Alignment Procedure: *I.F.:* Switch set to M.W., turn gang to minimum capacitance position, inject a 470-kc/s. signal through a 0.1- μ F. capacitor to control grid of V1 (pin 6). Peak L8, L7, L4 and L3 in that order.

R.F.: Signals should be injected via a loop loosely coupled to the ferrite-rod aerial. M.W. circuits must be aligned first. Scale has "pad" and "trim" alignment marks on M.W. and calibration check point on L.W.

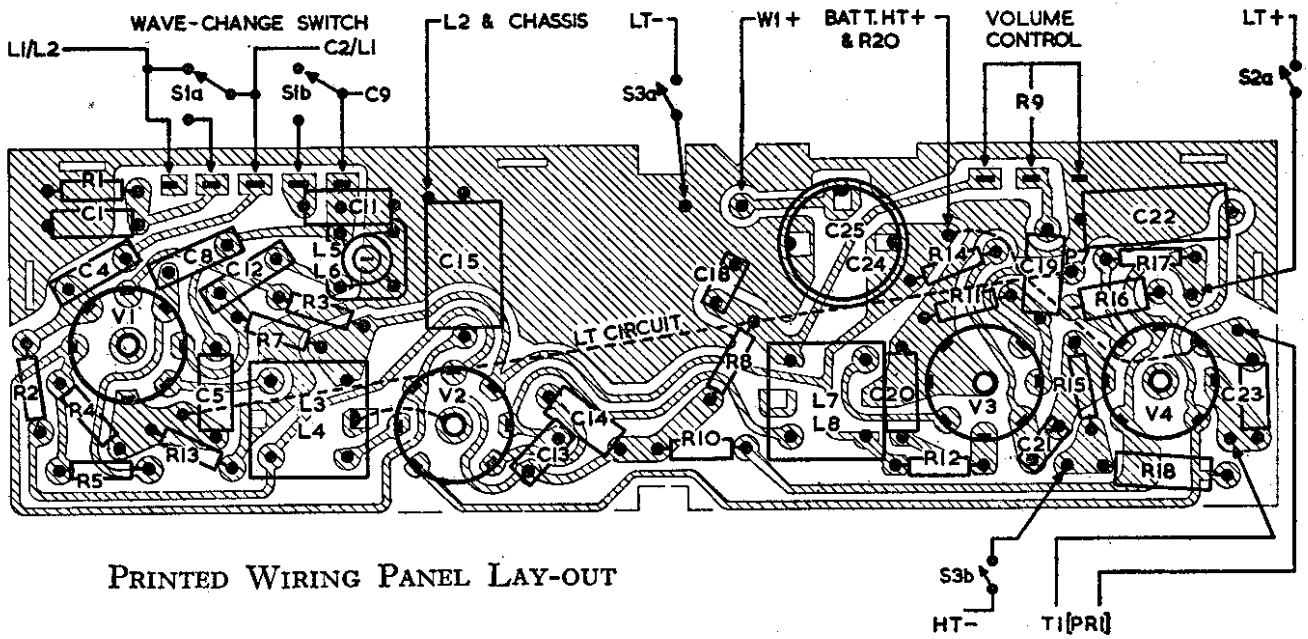
M.W.: Inject a 1300-kc/s. signal, tune to "trim" and adjust C10 and C3. Inject a 600-kc/s. signal, tune to "pad" and adjust L5 and L2 (slide coil "ring" along aerial rod).

L.W.: Inject a 210-kc/s. signal, tune to signal, check calibration and adjust L1 by sliding coil former on rod.

VOLTAGE READINGS TAKEN WITH MODEL 8 AVOMETER



CIRCUIT DIAGRAM—



PRINTED WIRING PANEL LAY-OUT

Chassis Removal: Raise hinged lid and remove two 4 B.A. brass screws from control panel. Lift freed panel and attached main chassis clear of cabinet, then disconnect loud-speaker speech-coil leads from their sockets. The power-pack sub-chassis is secured to top of cabinet partition by two wood screws, and these should be removed. If battery plugs are also freed and mains-input plug disconnected, both chassis sections can be completely withdrawn from cabinet.

Component Ratings: Resistors are 10 per cent types except R6 (omitted in some sets), R7, R11, R21-R25, which are 20 per cent. R18 ($\frac{1}{2}$ W) is 5 per cent and R19, R20 and R26 are 3-watt 2 per cent. types. C22 is 6-volt D.C. and C26 300-volts A.C.

