

VIDOR MODEL 268 BATTERY THREE

CIRCUIT.—On medium and long waves the aerial is coupled to the first valve, an H.F. pentode amplifier, through a band-pass filter. On the two short wave ranges it is inductively coupled.

The first valve is coupled direct to V2, a triode detector, by a tuned anode coil. Reaction is fed back from the anode in the usual manner.

An L.F. transformer couples V2 to V3, an output pentode. The amplified output of this valve is fed to a permanent magnet moving-coil speaker.

The volume control varies the bias on the grid of the H.F. pentode. The bias for this valve is obtained from the battery. For the output valve, however, it is obtained by the voltage drop across R7, a series bias resistance.

The volume control and the on-off switch are ganged. In the off position the switch isolates both H.T. and L.T. from the set. L.T. is obtained from a Vidor "Tri-

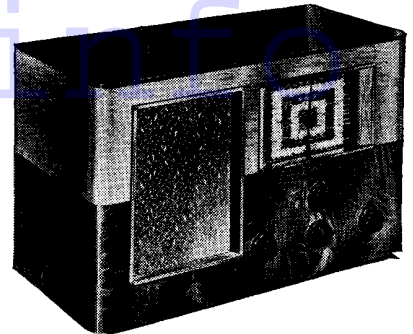
plate" 25 amp. hour accumulator and H.T. from a Vidor H.T. 18580 battery.

Removing Chassis.—The cabinet is provided with a false bottom and for all ordinary repairs it should not be necessary to remove the chassis.

If this is found necessary, however, remove the four knobs from the front of the cabinet, which are held by grub screws. Finally, take out the four screws holding the chassis to the bottom of the cabinet and, if necessary, disconnect the two leads to the speaker.

Remember, on reconnecting, that the black lead connects to the No. 1 tag on the speaker transformer.

Special Notes.—The dial lights are rated at 2.6 volts, 3 amp., and are of the screw-in type. The lamp-holders clip on the brackets on the dial assembly and it is easy to remove them for renewal.



A distinctive feature of the 268 "straight" three battery set made by Vidor, Ltd., is that it covers two short-wave bands.

Circuit Alignment Notes

First note that the pointer travels fully to each end of the scale. Then proceed as follows:—

Medium Waves.—Screw aerial preset control up moderately tight. Inject a 250 metre signal (1,200 ks.) into terminal A.2. Switch to medium waves (range 3). Turn

VALVE READINGS

Volume maximum. No reaction. No signal. New batteries.

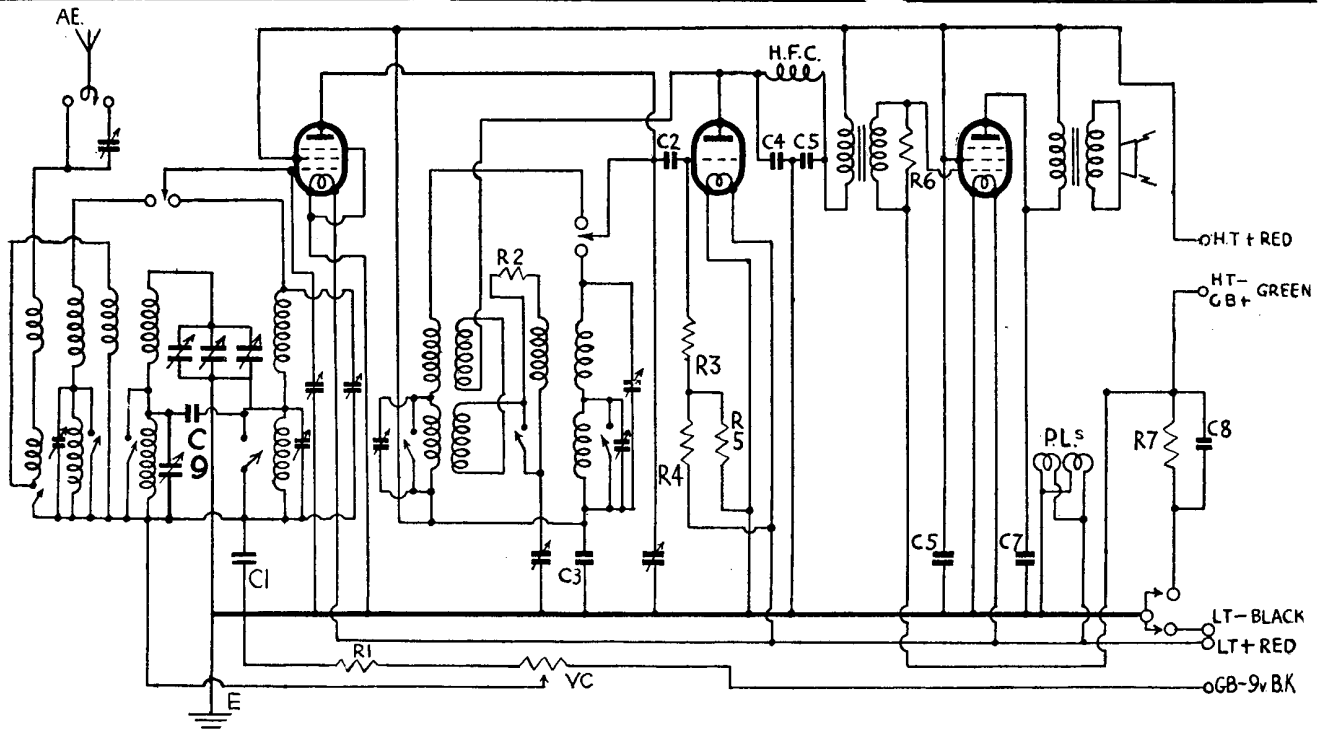
V.	Type.	Electrode.	Volts.	Ma.
1	Mullard VP2 met. (7).	Anode ..	100	1.9
2	Mazda HL2 met. (5).	Screen ..	103	.5
2	Mazda HL2 met. (5).	Anode ..	100	2.9
3	Mullard Pen. 22D (5).	Anode ..	103	4.8
		Screen ..	103	.6

RESISTANCES

R.	Purpose.	Ohms.
1	V1 bias potentiometer (part)	500
2	Reaction modifier	300
3	V2 grid leak	1 meg.
4	V2 grid leak potentiometer (part)	200
5	V2 grid leak potentiometer (part)	200
6	Secondary shunt	150,000
7	Series bias	150
VC1	Volume control	

CONDENSERS

C.	Purpose.	Mfd.
1	V1 bias decoupling1
2	V2 grid condenser0001
3	H.T. shunt25
4	H.F. filter00005
5	H.F. filter0002
6	V3 screen decoupling	8
7	Pentode compensator005
8	V3 series bias shunt	50
9	Top band pass coupling00009



An orthodox circuit is used in the 268, although there are one or two refinements such as those in the detector circuit. These are important in ensuring easy handling on the short waves.

For more information remember
www.savoy-hill.co.uk

the pointer to 250 metres on the scale and with reaction advanced and volume turned full on adjust main anode trimmer until signal is tuned in at maximum strength. Then adjust the main grid trimmer similarly.

These two trimmers are placed under the chassis in the front of the receiver, and access to them is obtainable through holes in the top of the chassis near the tuning scale ends.

Next adjust the aerial trimmer on the gang condenser. In all probability this will be screwed up tightly. If this is so adjust the additional aerial trimmer under the chassis.

During this process, reaction should be kept as far advanced as possible without oscillation taking place.

Inject various signals from 250-500 metres to check calibration.

Long Waves.—Switch the set to range 4 (long waves) and inject 1,000 metre signal (300 kc.). Tune the set to 1,000 metres, and adjust long-wave anode trimmer and grid trimmer, and finally long-wave aerial trimmer, keeping reaction advanced as before. The positions of these trimmers are shown in the under chassis diagram.

Check the calibration at various points on the long-wave band.

Short Waves.—Switch the set to range 2 and inject a 75-metre signal (4 megacycles). Set the pointer to the 75 metres calibration mark and adjust the short wave 2 anode and grid trimmers with reaction well advanced.

Check calibration as before.

Ultra Short Waves.—The ultra short wave range (range 1) has no separate trimmers, and calibration should be correct. By slightly altering the positions of the leads to the grid and anode, relative to the rest of the wiring under the chassis, slight adjustments may be made.

Service Replacement Condensers

TWO exact service replacement condensers for the Vidor 268 are available from A. H. Hunt, Ltd., of Garratt Lane, Wandsworth, London, S.W.18.

These are: for C6, the 8-mfd. decoupling condenser, for which there is replacement number 2014 at 2s. 3d., and for C8, the bias shunt, for which there is type 2915 at 1s. 9d.

Vidor 268 on Test

MODEL 268.—Standard model for battery operation. Price £8 2s. 6d.

DESCRIPTION.—Four waveband, table model "straight" three.

FEATURES.—Controls for tuning, volume, reaction and wave selection. Full vision 360 deg. scale calibrated in wavelengths and names.

LOADING.—L.T., 1.13 amp. H.T., 10 ma.

Sensitivity and Selectivity

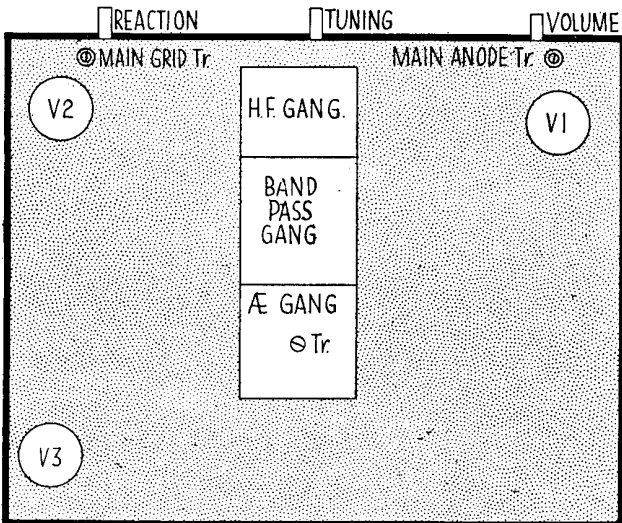
SHORT WAVES (13.8-49 and 75-210 metres).—On the two short wavebands the tuning control is not too rapid and easy tuning is possible. Reaction is free from overlap, and there is no difficulty in holding the stations. Sensitivity and selectivity are up to standard.

MEDIUM WAVES (200-550 metres).—Good gain and useful selectivity with careful handling of reaction and volume controls. The gain is reasonably well maintained and reception of all the usual stations is obtainable without difficulty.

LONG WAVES (900-2,200 metres).—Sensitivity very good, and selectivity well up to standard. No difficulty was experienced in separating all the usual stations. Deutschlandsender was received with careful handling.

Acoustic Output

Sufficient for an average room with well-balanced quality for a battery set. Speech is free from any bad colouration and general tone is pleasing.



As the drawing on the left shows, the top "deck" of the 268 chassis is the essence of simplicity. The most notable feature is the provision on this side of two trimmers

FAULTY A.V.C.

FAILURE of A.V.C. circuits is usually obvious because of non-uniformity of signal output with blasting on strong stations. A less likely symptom is weak signal output due to the application of too great a control voltage.

In the case of the first characteristics, there are a number of possible causes. First, the A.V.C. valve should be substituted.

The condenser feeding the A.V.C. diode may be open or a decoupling condenser in the A.V.C. line shorting.

The A.V.C. diode load resistor may be faulty or shorting to chassis and the same applies to the decoupling resistors.

When these components have been checked tests must be carried wider afield. All condensers, H.F. chokes and resistors associated with the A.V.C. valve must be tested and the operating conditions of the valve itself checked.

In delayed A.V.C. the cathode voltage of the A.V.C. valve can be measured. With this exception, A.V.C. voltages cannot, as a rule, be measured because, owing to the high resistances used in these circuits, the meter itself has appreciable effect.

As regards weak signals caused by excessive A.V.C., the general causes are faulty resistors associated with the fixed potentials.

Unscreened coils are arranged below the 268 chassis and the wave change switch occupies a central position. There are no trimmers for the ultra-short waves.

