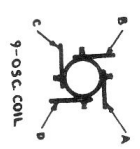


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ALIGNMENT ON SHEET 139

NOTE - ALL VOLTAGES MEASURED FROM TUBE SOCKET TOP - WITH METER OF 1000 OHMS PER VOLT ON HIGHEST READABLE RANGE. POSSIBLE VOLTAGES SHOWN ARE FOR A.C.-D.C. OPERATION. BATTERY OPERATION AC-D.C. OPERATION INPUT - 30 WATT B DRAIN - 11 MA.

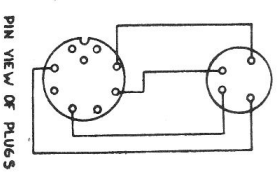
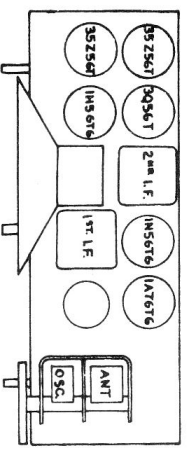


SWITCH POSITIONS
1 - BATTERY
2 - AC-DC
3 - CHARGE

IF = 455 KC.

AC-DC BATTERY PORTABLE MODEL

R 5 7 8



MODEL - R-578

Circuit Designation Value VOLUME CONTROL Mtrs. No.

19A, B, C, D Not given 980708

CAPACITORS AEROVOX
No.

2, 26 110 mfd. mica 9802777 1468
 4, 14, 22 .05 200V pp. 974741 484
 5 Trimmer 119132
 6A, B Tuning Gang 502494
 8, 21, 23 50 mfd. mica 980272
 10 4 mfd. 150V elec. 302829 1468
 15, 27 .1 200V pp. 301402 PRT150
 24 .004 600V pp. 302226 284
 30 .01 400V pp. 56920 684
 32 50 mfd. 25V elec. 980706 PRT25
 33 .002 600V pp. 301413 684
 41 1.0 200V pp. 301402 284
 53 A, B, C 20-20-20 mfd. 980705 PRT150
 54 150V elec. 974767 484
 55 2.0 400V pp. 502411 1468
 57 .025 600V pp. 972478 684
 58 30 mfd. 150V elec. 980859 PRT150

MISCELLANEOUS JENSEN
No.

1 Ant. Loop G-980727
 3 Series Coil G-980735
 9 Osc. Coil G-980740
 12 1st. I.F. Trans. G-980738
 17 2nd. I.F. Trans. G-980739
 34 Output Trans. 980702 2410
 35 Speaker P.M. 5" 980701 P5V
 42 Neon Lamp 500713
 52 Filter Choke 980720

CIRCUIT ON DATA SHEET 138

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AC-DC BATTERY PORTABLE

MODEL R 578

IF = 455 KC.

This six tube superheterodyne receiver can be operated either as a Portable battery set or as an AC/DC set obtaining power from an outlet of 105-125 volts 25/60 cycles. On AC/DC and battery operation a 3q5 tube acts as an output tube.

In order to make the chassis "dead" from a shockproof stand point the circuits are all returned to "B" negative line which is by-passed to the chassis.

A Special circuit employing a 35Z5 in a battery charging circuit is used and a neon bulb indicates battery voltage. When selector switch is turned to "Battery" neon bulb should flash rapidly. If flashes are slow, (when these occur only once per second,) do not operate set from battery until battery has been recharged. Failure to observe this will cause battery voltage to drop below a point where recharging is impossible. Always check condition of battery with selector switch turned to "Battery" position.

A trimmer across the antenna section of gang is placed at the rear of chassis and is readily accessible when back is opened. This trimmer should always be adjusted with battery and chassis installed in cabinet.

For I.F. and oscillator alignment the chassis must be removed from cabinet. To do this disconnect AC cord and battery and remove four knobs from front of set. Then remove 2 plug buttons from bottom of cabinet and, by inserting screwdriver through these holes, remove 2 screws holding chassis to shelf. Disconnect 2 loop leads and pull chassis out of cabinet.

ALIGNMENT: A well shielded oscillator and suitable output meter are required. Connect output meter across voice coil terminals, turn volume control on full and use weakest possible signal from the oscillator which will give readable output. It is preferable to align chassis on AC/DC. Proceed with alignment as follows:

No.	Dummy Ant.	Connection of Signal Generator To Receiver	Signal Generator Frequency	Receiver Dial Setting	Trimmers To Be Adjusted	Description of Adjustments
1.	.1 mfd cond.	1A7 grid cap	455 Kc	gang open	Trimmer on 1st IF.	Peak for maximum.
2.	.1 mfd	1A7 grid cap	455 Kc	gang open	Iron core on 2nd IF.	Peak for max. and repeat operation No. 1
3.	.1 mfd	1A7 grid cap	1610	1610	Trimmer on osc. sect. (front) of gang.	Adjust to bring in signal.
4.	Tune in a weak broadcast station near 1500 Kc.				Trimmer at rear of chassis.	Peak for max. while rocking gang slightly.

NOTE: (1) The last operation should be performed with chassis replaced in cabinet and battery and loop antenna in place. (2) In order to obtain correct calibration the pointer should be exactly vertical, (gang condenser opened or closed fully).

(3) The following batteries only should be used in this receiver.

- (1) Eveready—758
- (2) Burgess—F6A60
- (3) Ray-o-vac—AB-994
- (4) General—60A-6F6-5