

1F. = 455 KC.

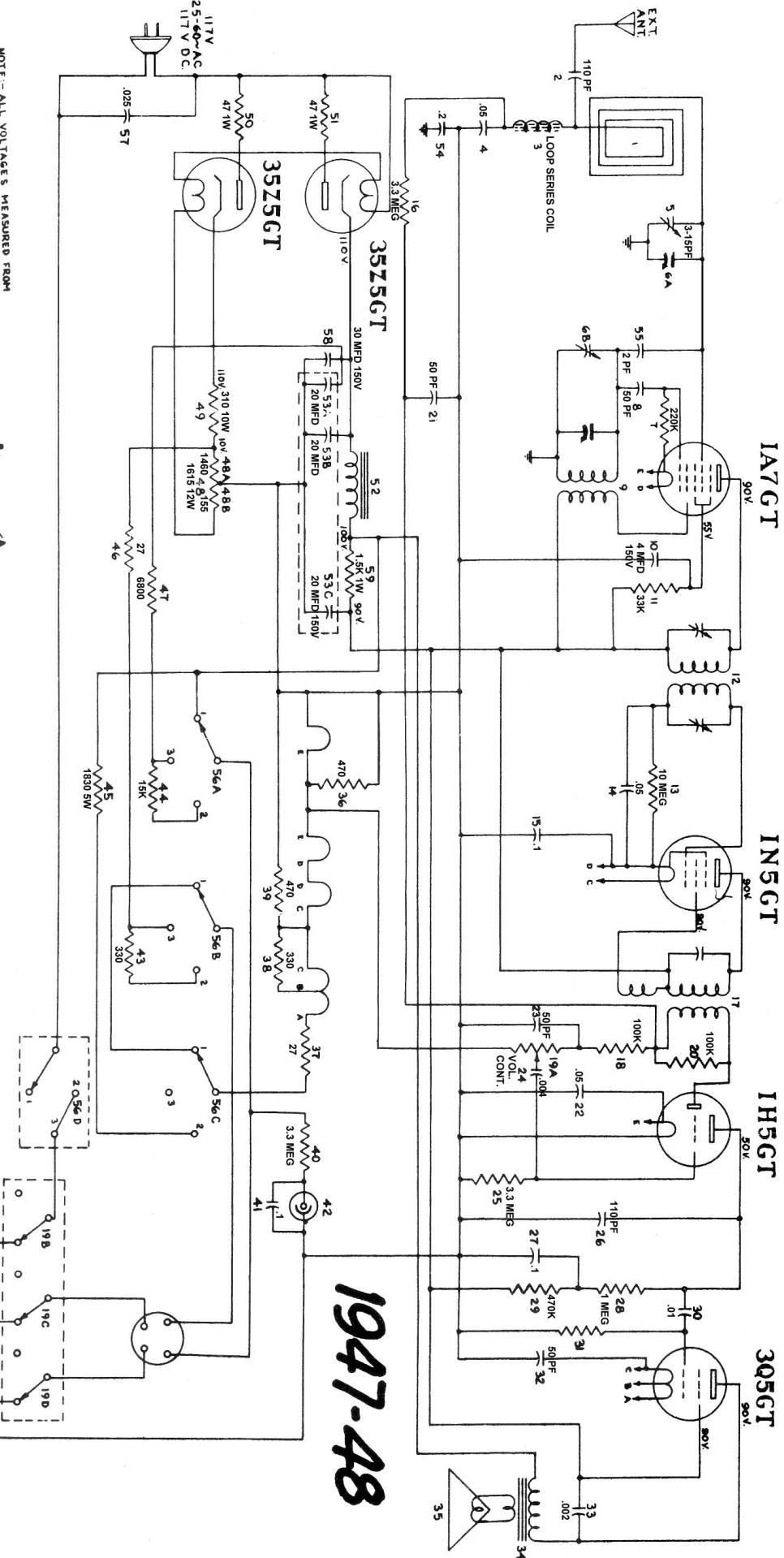
AC-DC BATTERY PORTABLE MODEL

NOTE - ALL VOLTAGES MEASURED FROM
TUBE SOCKET TO B. WITH METER OF 1000 OHMS.
VOLTAGES ON TUBES WHICH ARE FOR AC-DC OPERATION
BATTERY OPERATION AC-DC OPERATION
B. DRAIN 200 MA. INPUT .50 WATT
B. DRAIN 11 MA.

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

ALIGNMENT ON SHEET 139

1947-48



STEWART-WARNER DATA SHEET 138

<u>Circuit</u>		<u>VOLUME CONTROL</u>	
<u>Designation</u>	<u>Value</u>	<u>Mfrs.</u>	<u>No.</u>
19A, B, C, D	Not given	980708	
<u>CAPACITORS</u>			
2, 26	110 mmfd. mica	980277	1468
4, 14, 22	.05 200V pp.	974741	484
5	Trimmer	119132	
6A, B	Tuning Gang	502494	
8, 21, 23	50 mmfd. mica	980278	1463
10	4 mfd. 150V elec.	302829	PRT150
15, 27	.1 200V pp.	301402	284
24	.004 600V pp.	302226	684
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	20-20 20 mfd.		
	150V elec.	980705	PRT150
54	2.0 400V pp.	974767	494
55	2 mmfd. mica	502411	1468
57	.025 600V pp.	972478	684
58	30 mfd. 150V elec.	980859	PRT150
<u>MISCELLANEOUS</u>			
<u>JENSEN</u>			
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	

This six tube superhetrodyne 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 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. 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 preformed 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.

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**CIRCUIT ON DATA
SHEET 138**

$f = 455 \text{ kc.}$

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-DC BATTERY PORTABLE
MODEL R 578

139