

REFERENCE DOT

ANTENNA COIL
502499

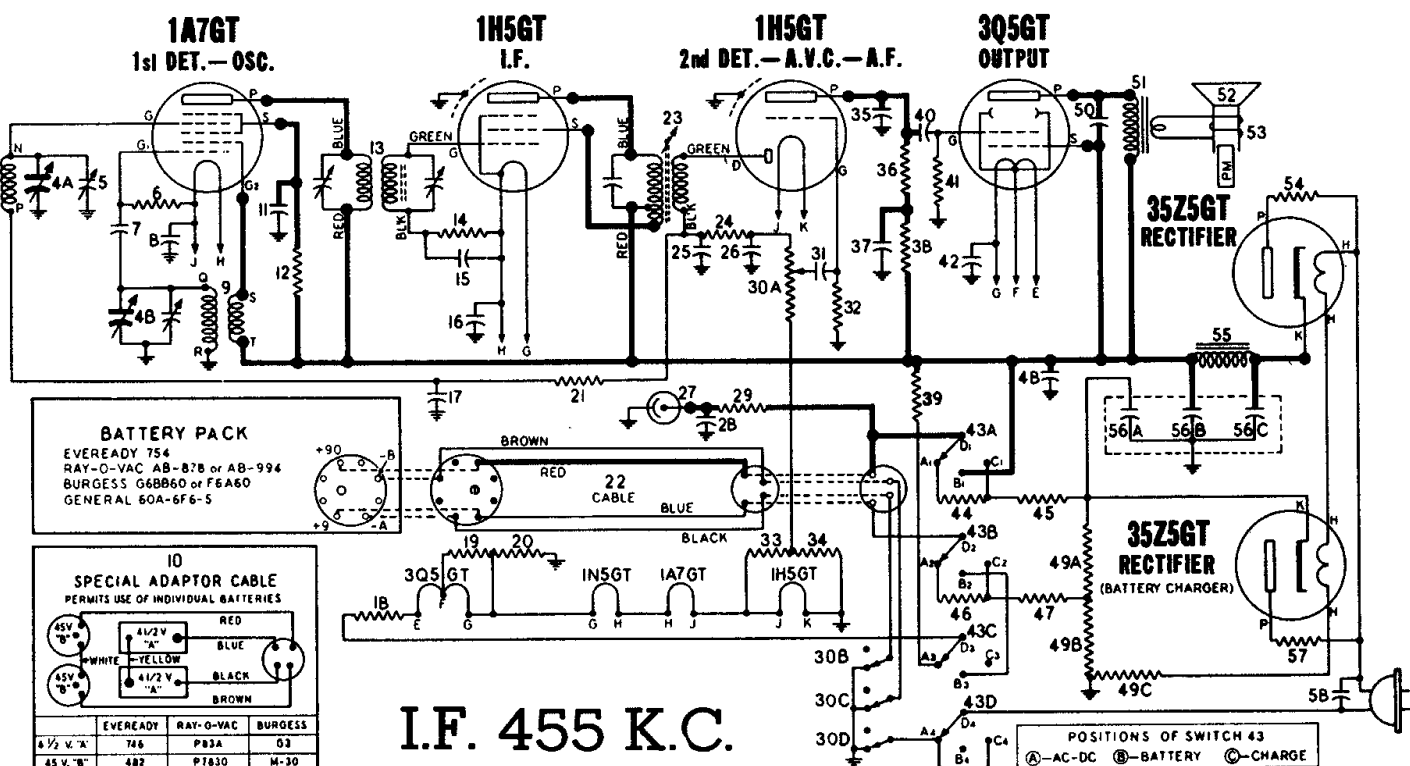
Lettered terminals in illustrations correspond to similarly lettered terminals on the circuit diagram.



NOTE THAT LUG IS OPPOSITE TERMINAL A4

AC-DC-BAT.-CHARGE SWITCH
502526

OSC. C
50249



I.F. 455 K.C.

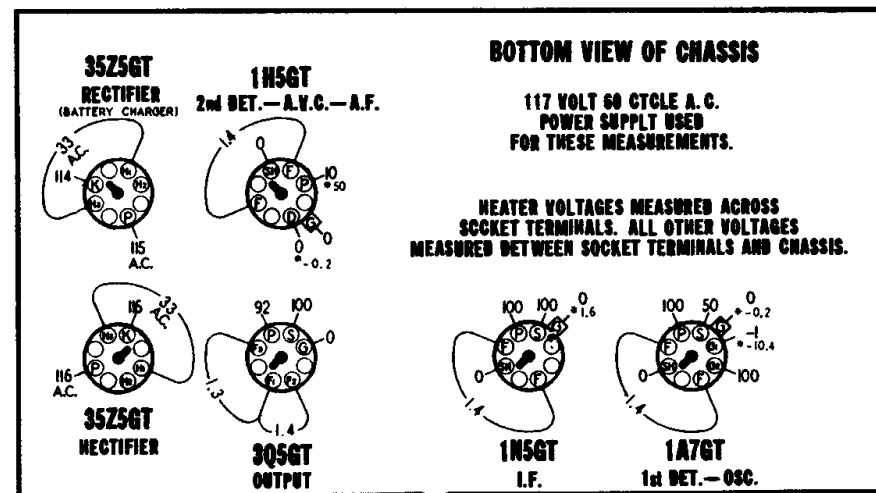
SOCKET VOLTAGES

Measured with voltmeter having sensitivity of 1000 ohms per volt except where indicated by (*).

VOLUME ON FULL WITH NO SIGNAL

DIAL TUNED TO 540 KC.

"AC-DC-BAT.-CHARGE" SWITCH IN "AC-DC" POSITION



REAR OF CHASSIS

*—Measured with vacuum tube voltmeter.

58	502153	Condenser—.05 Mfd. 200 volt.
56 A, B, C	500714	Condenser—electrolytic
48	502453	Condenser—.02 Mfd. 400 volt.
40	502527	Condenser—electrolytic 50 Mfd. 25 volt
42	502155	Condenser—.1 Mfd. 200 volt.
37	502155	Condenser—.01 Mfd. 400 volt.
35	502155	Condenser—.01 Mfd. 400 volt.
31	502155	Condenser—.01 Mfd. 400 volt.
28	502155	Condenser—.01 Mfd. 400 volt.
25	502155	Condenser—.01 Mfd. 400 volt.
22	502155	Condenser—.01 Mfd. 400 volt.
17	502153	Condenser—.05 Mfd. 200 volt.
16	502153	Condenser—.05 Mfd. 200 volt.
15	502153	Condenser—.05 Mfd. 200 volt.
11	502547	Condenser—electrolytic 4 Mfd. 150 volt
8	502153	Condenser—.05 Mfd. 200 volt.
7	502153	Condenser—.05 Mfd. 200 volt.
5	502494	Condenser—variable gang.
4 A, B	502494	Condenser—variable gang.
2	502150	Condenser—.04 Mfd. 600 volt.

CONDENSERS

54	502454	Resistor—wire wound 47 ohms 1 watt
57	502454	Resistor—wire wound 47 ohms 1 watt
49 A, B, C	500715	Resistor—wire wound
46	502457	Resistor—carbon 330 ohms 1/4 watt
45	502457	Resistor—carbon 330 ohms 1/4 watt
44	502266	Resistor—carbon 15,000 ohms 1/4 watt
41	502135	Resistor—carbon 2.2 Meg. 1/4 watt
39	502135	Resistor—carbon 2.2 Meg. 1/4 watt
38	502135	Resistor—carbon 2.2 Meg. 1/4 watt
36	502135	Resistor—carbon 2.2 Meg. 1/4 watt
35	502135	Resistor—carbon 2.2 Meg. 1/4 watt
34	502135	Resistor—carbon 2.2 Meg. 1/4 watt
33	502135	Resistor—carbon 2.2 Meg. 1/4 watt
32	502135	Resistor—carbon 2.2 Meg. 1/4 watt
30 A, B, C, D	502525	Volume control (with switch) 1 Meg.
29	502269	Resistor—carbon 3.3 Meg. 1/4 watt
28	502269	Resistor—carbon 3.3 Meg. 1/4 watt
27	502269	Resistor—carbon 3.3 Meg. 1/4 watt
26	502269	Resistor—carbon 3.3 Meg. 1/4 watt
25	502269	Resistor—carbon 3.3 Meg. 1/4 watt
24	502269	Resistor—carbon 3.3 Meg. 1/4 watt
23	502269	Resistor—carbon 3.3 Meg. 1/4 watt
22	502269	Resistor—carbon 3.3 Meg. 1/4 watt
21	502269	Resistor—carbon 3.3 Meg. 1/4 watt
20	502457	Resistor—carbon 330 ohms 1/4 watt
19	502457	Resistor—carbon 330 ohms 1/4 watt
18	502457	Resistor—carbon 330 ohms 1/4 watt
17	502457	Resistor—carbon 330 ohms 1/4 watt
16	502457	Resistor—carbon 330 ohms 1/4 watt
15	502457	Resistor—carbon 330 ohms 1/4 watt
14	502457	Resistor—carbon 330 ohms 1/4 watt
13	502457	Resistor—carbon 330 ohms 1/4 watt
12	502457	Resistor—carbon 330 ohms 1/4 watt
11	502457	Resistor—carbon 330 ohms 1/4 watt
10	502457	Resistor—carbon 330 ohms 1/4 watt
9	502457	Resistor—carbon 330 ohms 1/4 watt
8	502457	Resistor—carbon 330 ohms 1/4 watt
7	502457	Resistor—carbon 330 ohms 1/4 watt
6	502457	Resistor—carbon 330 ohms 1/4 watt

RESISTORS

STEWART-WARNER MODELS 9007-A,F,G.

ALIGNMENT PROCEDURE

Slide chassis partially out of cabinet by removing staples at each side of wood shelf and pulling entire shelf back about 2 inches. Do not disturb connections to loop antenna.

Connect an output meter across the voice coil of the speaker or between the plate of the 3Q5GT output tube and chassis through a .1 mfd. condenser.

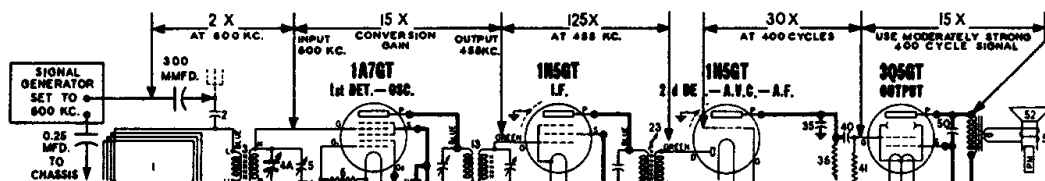
Connect the ground lead of the signal generator to chassis through a .25 mfd. condenser.

Set the volume control in the maximum position and use a weak signal from the generator.

Set "AC-DC-BAT.-CHARGE" Switch in "AC-DC" position.

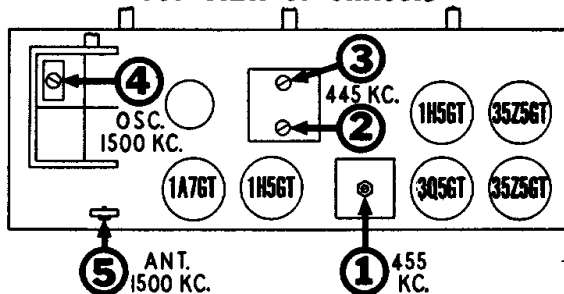
DUMMY ANT. IN SERIES WITH SIGNAL GENERATOR	CONNECT HIGH SIDE OF SIG. GENERATOR TO	SIGNAL GENERATOR FREQUENCY	RECEIVER DIAL SETTING	TRIMMER NUMBER	TRIMMER DESCRIPTION	TYPE OF ADJUSTMENT
300 MMFD. Condenser	Grid Cap of 1A7GT Tube	455 KC.	Any Point Where It Does Not Affect Signal	1	2nd I.F.	Loosen lock nut. Adjust screw for maximum output.
				2-3	1st I.F.	Adjust for maximum output. Re-check 1, 2 and 3 for maximum output and tighten lock nut on 1.
300 MMFD. Condenser	Center Terminal on Antenna Terminal Strip at bottom of cabinet.	1500 KC.	1500 KC. (Slide set into cabinet and replace pointer to set dial.)	4	Broadcast Oscillator (Shunt)	Adjust trimmer for maximum output.
300 MMFD. Condenser	Center Terminal on Antenna Terminal Strip at bottom of cabinet.	1500 KC.	Tune to 1500 KC. Generator Signal	5	Broadcast Antenna	Adjust for maximum output. Slide chassis all the way into cabinet when making this adjustment.

The R.F. and I.F. stage gains shown below are less than under normal operating conditions due to the use of 1½ volts fixed bias in order to establish a definite operating point. Therefore, these values are not intended to indicate the full capability of a stage.



Differences in tube characteristics, tolerance of parts, adjustment of tuned circuits, and variations of line voltage will influence stage gain. Accuracy of measurements is dependent upon careful tuning of receiver to generator signal and experience in using your test equipment. These factors may create considerable variation in gain measurements.

TOP VIEW OF CHASSIS



INDICATOR LAMP

The flashing neon lamp on the dial face indicates condition of batteries. This lamp is included in an oscillating (R-C) circuit which is designed to oscillate at approximately 3 pulses per second when batteries are in a fully charged condition. As the battery voltage decreases with use, number of pulses per second decreases.

This lamp will only show the true condition of the batteries when the Selector Switch is in the "Battery" position. Lamp flashes more rapidly during charging or "AC-DC" operation.

When battery voltage is low (approximately 72 volts) the lamp flashes more slowly (about once per second). The set should not be operated from battery power after this point is reached and batteries should be recharged immediately. Charge for at least twice the time they were used and as soon as possible after they are run down. As batteries age it is necessary to charge for a longer period. For longest battery life, charge immediately after using.

IMPORTANT: 1. Completely dead batteries cannot be recharged.

2. When set is connected to a DC line, check for correct polarity by operating it before attempting to charge the batteries.

3. Batteries will be discharged if ON-OFF switch is left ON when power cord is not connected to wall outlet.

CHARGING CIRCUIT

The battery charging circuit consists of a 35Z5GT rectifier and a suitable resistor voltage dividing network. This circuit provides a very low charging current when the receiver is operated on AC-DC and is just enough to maintain the batteries but will not charge them. A separate charging position is provided for the regular charging operation. A charging rate of approximately 1/3 the discharge rate is used to give best results.

DIAL DRIVE CORD ARRANGEMENT

To string dial cord, set gang condenser to fully meshed position