

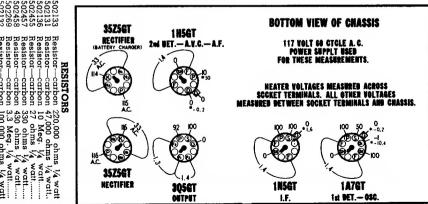
# SOCKET VOLTAGES

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.

	OSC. 6 5024																
27 20	40 42 48 50 56-A,B,C	28 31 35 37	15 16 17 25, 26	1 8 7	2 4.A, B	54	49.A,B,C		44	39	36	A, B, C, D.				14	6
502153	502527 502527 502155 502453 500714			2222		502 <b>454</b> 502 <b>4</b> 54	7	44	226	::2:	502268	222	0226	502269	0245	850	502133 502131
A-20 Mid. 150 voit B-20 Mid. 200 voit C-20 Mid. 200 voit Condenser05 Mid. 200 voit	r—electrolytic 5 r—. 1 Mfd. 200 r—.002 Mfd. 400 r—electrolytic	Condenser—1 Mid. 200 Volt	-05 Mfd. 200 volt	Condenser—mica 50 Mmid. 500 volt Condenser—mica 50 Mmid. 500 volt Condenser—05 Mid. 200 volt Condenser—electrolytic 4 Mid. 150 volt	DENSERS	Resistor—wire wound 47 ohms 1 watt Resistor—wire wound 47 ohms 1 watt	l460 ohms 10	—carbon	—carbon 15,000 ohms	—wire wound 1830 ohms 5 —carbon 2.2 Meg. 1/4 watt	ms w	-carbon	—carbon 3.3 Meg. 1/4 wat	—carbon 3.3 Meg. 1/4 v	—carbon 330 ohms 1/4	Resistor—carbon 10 Meg. 1/4 watt Resistor—carbon 27 ohms 1/4 watt	Resistor—carbon 220,000 ohms 1/4 watt Resistor—carbon 47,000 ohms 1/4 watt.

# 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.

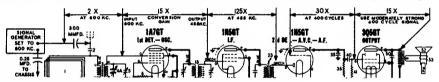
Connect the ground lead of the signal generator to chassis through a .25 mfd. condenser.

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

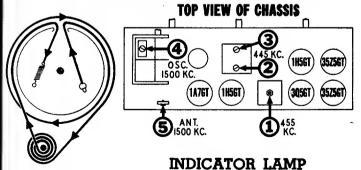
Set "AC-DC-BAT.-CHARGE" Switch in "AC-DC" position.

DUMMY ANT. IN SERIES WITH SIGNAL GENERATOR	CONNECT HIGH SIDE OF SIG. GENERATOR TO	SIGNAL GENERATOR FRE- QUENCY	RECEIVER DIAL SETTING	TRIMMER NUMBER	TRIMMER DESCRIPTION	TYPE OF ADJUSTMENT			
	Grid Cap		Any Point	1	2nd I.F.	Loosen lock nut. Adjust screw for maximum output.			
300 MMFD. Condenser	of 1A7GT Tube	455 KC.	Where It Does Not Affect Signal	2-3	lst 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 re- place 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.	15 <b>00 KC.</b>	Tune to 1500 KC. Generator Signal	5	Broadcast Antenna	Adjust for maximum output. Slide chassis all the way into cabinet when making this ad- justment.			

The R.F. and I.F. stage gains shown below are less than under normal operating conditions due to the use of  $1\frac{1}{2}$  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.



#### DIAL DRIVE CORD ARRANGEMENT

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

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: I. Completely dead batteries cannot be recharged.

- When set is connected to a DC line, check for correct polarity by operating it before attempting to charge the batteries.
- 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 3525GT 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  $\frac{1}{3}$  the discharge rate is used to give best results.