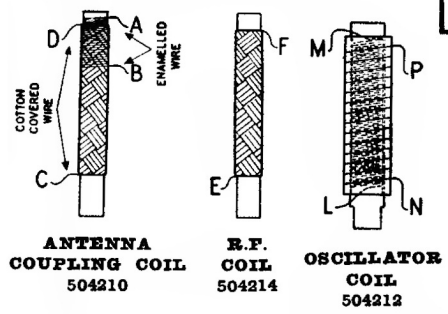
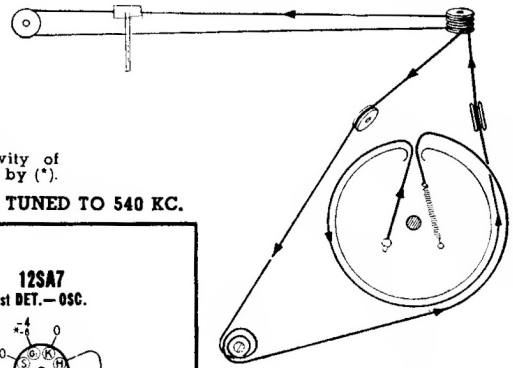


Lettered terminals in illustrations correspond to similarly lettered terminals on the circuit diagram.



SLUG CORES FOR COILS
 ANT.—504211
 R.F.—504215
 OSC.—504213



DIAL AND POINTER DRIVE CORD ARRANGEMENT

- To string dial cord, turn the main drive drum to maximum counter-clockwise position and use following parts:
- 114955 Clip on end of cord
 - 117057 Cord (55 inches)
 - 119087 Ring for dial cord
 - 161384 Tension Spring

CONDENSERS

- 3-A, B, C 504086 Condenser—trimmer assembly
- A—10 to 160 Mmfd.
- B—20 to 270 Mmfd.
- C—20 to 270 Mmfd.
- 6 502271 Condenser—mica 260 Mmfd. 500 volt
- 7 502165 Condenser—mica 1,000 Mmfd. 500 volt
- 10 502159 Condenser—mica 50 Mmfd. 500 volt
- 11 502155 Condenser—1 Mfd. 200 volt
- 12 502158 Condenser—.2 Mfd. 400 volt
- 20 502453 Condenser—.002 Mfd. 400 volt
- 21 502160 Condenser—mica 110 Mmfd. 500 volt
- 23 502470 Condenser—.0008 Mfd. 400 volt
- 27 502160 Condenser—mica 110 Mmfd. 500 volt
- 28 502153 Condenser—.05 Mfd. 200 volt
- 31 502156 Condenser—.004 Mfd. 400 volt
- 35 502151 Condenser—.01 Mfd. 400 volt
- 36-A, B 500256 Condenser—electrolytic
- A—40 Mfd. 150 volt
- B—20 Mfd. 150 volt
- 40 502152 Condenser—.02 Mfd. 400 volt
- 43 502157 Condenser—.05 Mfd. 400 volt

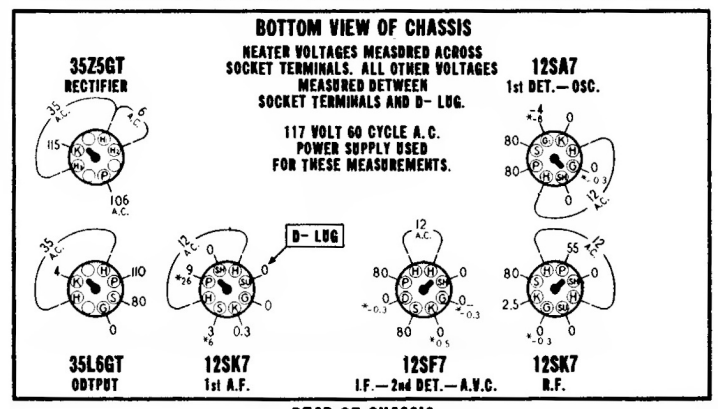
RESISTORS

- 4 502140 Resistor—carbon 390 ohms 1/4 watt
- 5 502291 Resistor—carbon 4700 ohms 1/4 watt
- 8 502134 Resistor—carbon 470,000 ohms 1/4 watt
- 9 502130 Resistor—carbon 22,000 ohms 1/4 watt
- 13 502133 Resistor—carbon 220,000 ohms 1/4 watt
- 15 502264 Resistor—carbon 47 ohms 1/4 watt
- 16 502269 Resistor—carbon 3.3 Meg. 1/4 watt
- 18 502131 Resistor—carbon 47,000 ohms 1/4 watt
- 19-A, B 502145 Volume control 500,000 ohms (with switch)
- 22 502136 Resistor—carbon 10 Meg. 1/4 watt
- 25 502128 Resistor—carbon 2200 ohms 1/4 watt
- 26 502135 Resistor—carbon 2.2 Meg. 1/4 watt
- 29, 30 502133 Resistor—carbon 220,000 ohms 1/4 watt
- 32 502134 Resistor—carbon 470,000 ohms 1/4 watt
- 33 502138 Resistor—carbon 130 ohms 1/4 watt
- 38 502469 Resistor—carbon 1500 ohms 1 watt
- 39 502574 Resistor—carbon 33 ohms 1/2 watt

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.

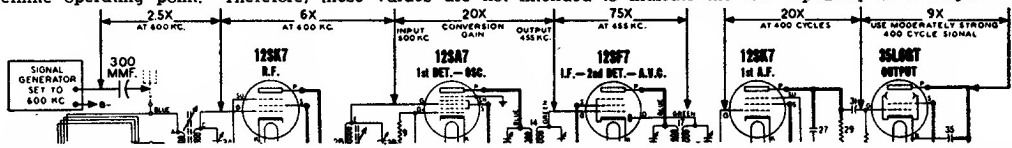


REAR OF CHASSIS

*—Measured with vacuum tube voltmeter

STEWART-WARNER MODELS 61T16 AND 61T26

The R.F. and I.F. stage gains shown below are less than under normal operating conditions due to the use of 3 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.

ALIGNMENT PROCEDURE

Remove chassis and loop from cabinet. Solder approximately 8" of insulated wire to any B— connection (see voltage chart on opposite side for convenient B— location). Then reinstall chassis and loop in cabinet. The B— lead should extend from under the chassis at the back.

Connect ground lead of signal generator to B— lead.

Connect output meter across the speaker voice coil (terminals at back of speaker.)

Turn the tuning control knob clockwise as far as it will go (tuner mechanism is now in maximum open position with tuning slugs almost completely withdrawn from coils). Dial pointer should then point to 1600 Kc mark on scale. If it is set incorrectly, release pointer clip on dial cord and reposition pointer.

DUMMY ANT. IN SERIES WITH SIGNAL GENERATOR	CONNECT HIGH SIDE OF GENERATOR TO	SIGNAL GENERATOR FREQUENCY	RECEIVER DIAL SETTING	TRIMMER NUMBER	TRIMMER DESCRIPTION	TYPE OF ADJUSTMENT
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Set tuner mechanism to maximum open position by turning the tuning control knob clockwise as far as it will go (Dial pointer at 1600 Kc). Then check whether the positions of the tuning slugs correspond to the positions shown in Fig. 1 below. If settings are incorrect, rotate the individual core and threaded stem until desired position is reached. Note that threaded stem is prevented from moving by a dab of speaker cement at top.

.1 MFD. Condenser	Ungrounded terminal of trimmer No. 6 (see Fig. 2 below for location of trimmer.)	455 KC	Any point where it does not affect the signal.	1-2	2nd I.F.	Adjust for maximum output. Then repeat adjustment.
				3-4	1st I.F.	
300 MMFD. Mica Condenser	External Antenna Clip on Loop Frame	1600 KC	1600 KC	5	Broadcast Oscillator (Shunt)	Adjust for maximum output.
300 MMFD. Mica Condenser	External Antenna Clip on Loop Frame	1600 KC	Tune to 1600 KC generator signal	6	Broadcast R.F.	Adjust for maximum output.
				7	Broadcast Antenna	Adjust for maximum output.
300 MMFD. Mica Condenser	External Antenna Clip on Loop Frame	1400 KC	Tune to 1400 KC generator signal	Ant. coil tuning slug		Adjust position of slug for maximum output.
				R.F. coil tuning slug		Adjust position of slug for maximum output.
300 MMFD. Mica Condenser	External Antenna Clip on Loop Frame	1600 KC	Tune to 1600 KC generator signal	6	Broadcast R.F.	Recheck adjustment for maximum output.
				7	Broadcast Antenna	Recheck adjustment for maximum output.

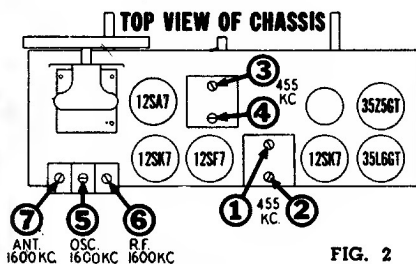


FIG. 2

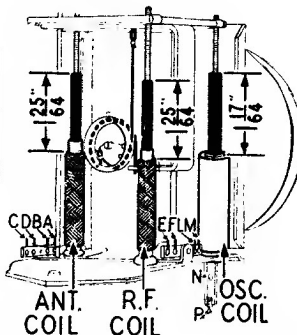


FIG. 1

SLUG TUNER ASSEMBLY (Drive Parts)

117057 Cord (8")
114955 Clip on cord
504012 Spring

AUDIO OSCILLATION

The audio system of this receiver utilizes a two stage type of inverse feed-back arrangement and, should it ever be necessary to replace the speaker or output transformer, it is important to maintain a definite phase relationship in the feed-back circuit. If the connections to the output transformer are reversed or if the feed-back connection is made to the wrong side of the output transformer secondary, the system will become regenerative instead of degenerative. Under those conditions audio oscillation may result. If that occurs, oscillation may be prevented by reversing the connections to the secondary of the output transformer.