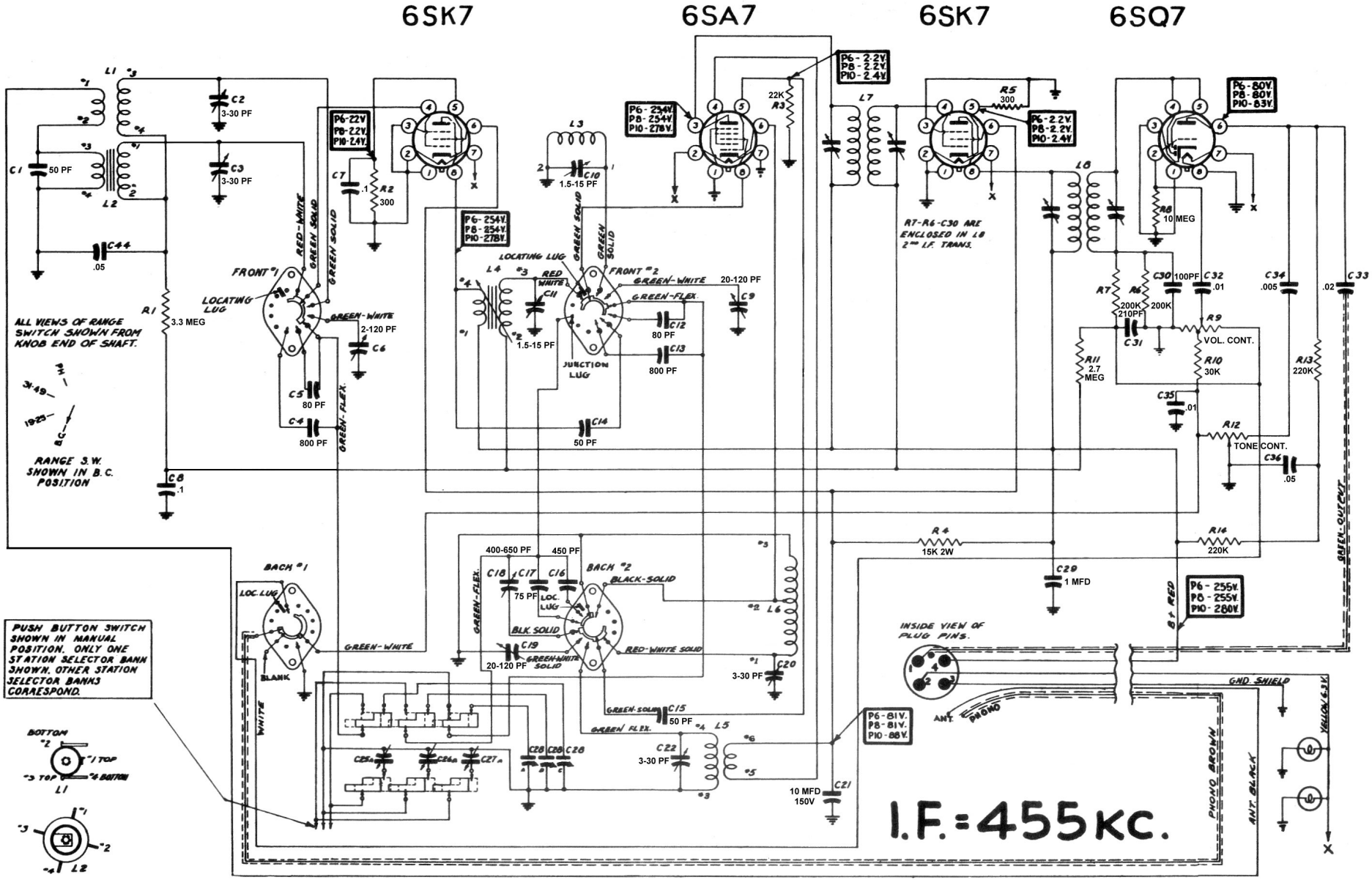
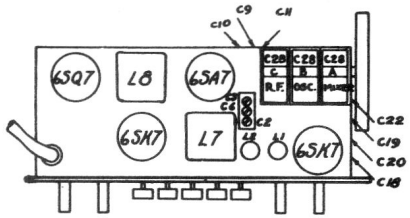


Alignment Data on Sheet 128

Power Supply and Audio on Sheets 128 & 129

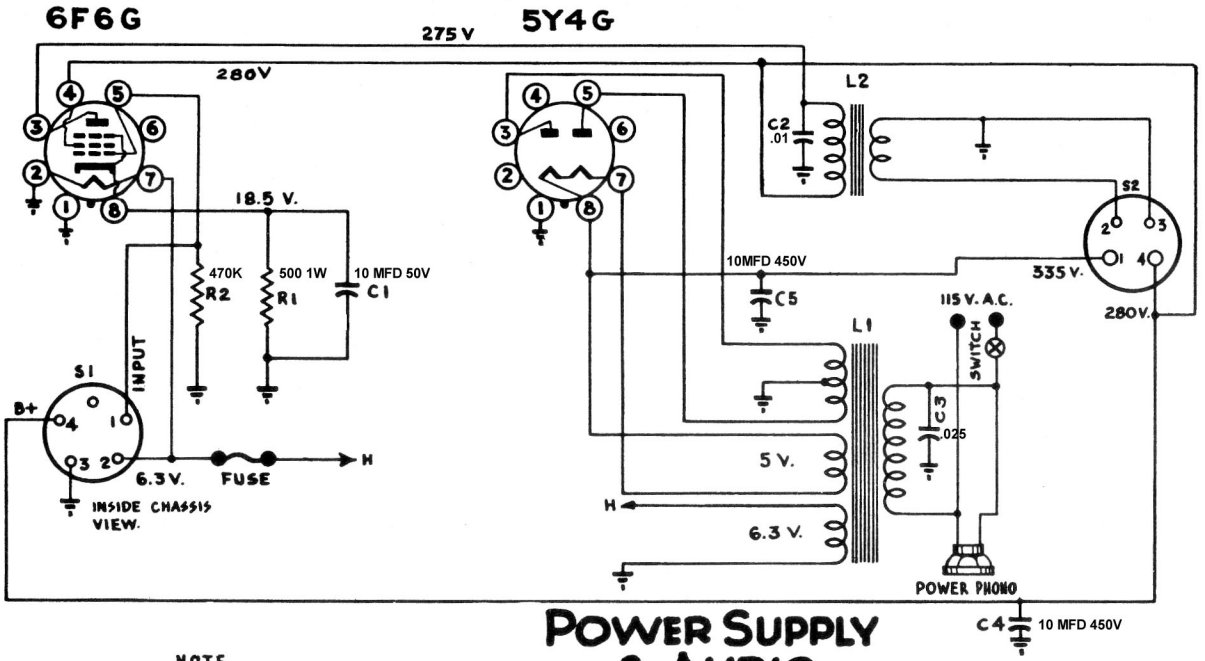
1946-47



MODELS M1 - M2 M3 - M4 TUNING UNIT

STEWART-WARNER DATA SHEET 127

RCC - Stewart-Warner Data Sheet 127 - 1946 - 47

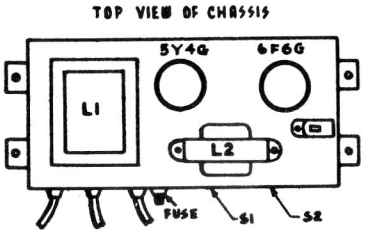


POWER SUPPLY & AUDIO MODEL P-6

NOTE

ALL TUBE VOLTAGES MEASURED TO CHASSIS WITH 20,000 OHMS PER VOLT METER.

PARTS ARE SUBJECT TO CHANGE OR WITHDRAWAL WITHOUT NOTICE.



1946-47

ALIGNMENT DATA MODELS M1-2-3 & 4

Order of Alignment	TEST OSCILLATOR			Range Selector	R'c'vr Dial Setting	Circuit to adjust	Adjust. Symbol
	Connection to Receiver	Dummy Ant.	Freq. Setting				
1.	Control Grid 6SK7 Pin #4	.1 Mfd.	455 Kc	Broadcast	1500 Kc	2nd I.F. Transformer	.....
2.	Control Grid 6SA7 Pin #8	.1 Mfd.	455 Kc	Broadcast	1500 Kc	1st I.F. Transformer	.....
3.	Antenna Lead	400 ohms	600 Kc	Broadcast	600 Kc	Broadcast Band and slug of coil L4	C18, L4
4.	Antenna Lead	400 ohms	1500 Kc	Broadcast	1500 Kc	Broad. Oscil. RF & Ant. Trimmers	C20, C11, C3
5.	Antenna Lead	400 ohms	10 Mc	31-49	10 Mc	SW_1 Oscil. RF & Ant. Trimmers	C19, C9, C6
6.	Antenna Lead	400 ohms	6 Mc	31-49	6 Mc	SW_1 Oscil. Coil End Turn*	L5
7.	Antenna Lead	400 ohms	15 Mc	19-25	15 Mc	SW_2 Oscil. RF & Ant. Trimmers	C22, C10, C2
8.	Antenna Lead	400 ohms	11.8 Mc	19-25	11.8 Mc	SW_2 Oscil. coil End Turn *	L5

* Note: Any adjustment to the end turn of the SW Oscillator coil effects the low frequency end of **both SW bands.**

ALIGNMENT:

Push Buttons These are best adjusted on actual station reception. The push button arrangement makes possible the selection of four pre-selected Broadcast Stations; two of these must have carrier frequencies that lie within the range 540-1000 kc; one station within the frequency range 750-1400 kc and one station within the frequency range 1000-1600 kc.

The procedure is to adjust the oscillator section first until the desired signal is heard and to bring the RF and Antenna trimmers into line subsequently.

CIRCUIT ARRANGEMENT:

Two coils only are used in each stage, although three bands are operated; the broadcast band has its own set of coils, one for each stage and the two short wave bands have one common coil per stage. The RF trimmers are switched in separately; any adjustments made at the high frequency ends of the two short wave bands are thereby made independently; one adjustment doesn't affect the other. However, any end turn adjustment of the SW oscillator coil does affect both SW bands at the low frequency end.

A conventional I.F. amplifier circuit employing capacitor tuning and air core coils is used; the second I.F. transformer secondary being detected by means of a diode enclosed within the 6SQ7 tube. A compensated volume control circuit is employed and the tone control circuit design around this compensation is associated with the plate circuit of the triode section of the 6SQ7.

At one extremity the tone control introduces a bi-pass condenser between the plate circuit of the audio triode and ground, cutting the upper register; simultaneously the full effect of the volume compensation circuit (conventionally introduced by means of a tapped volume control) is brought into play.

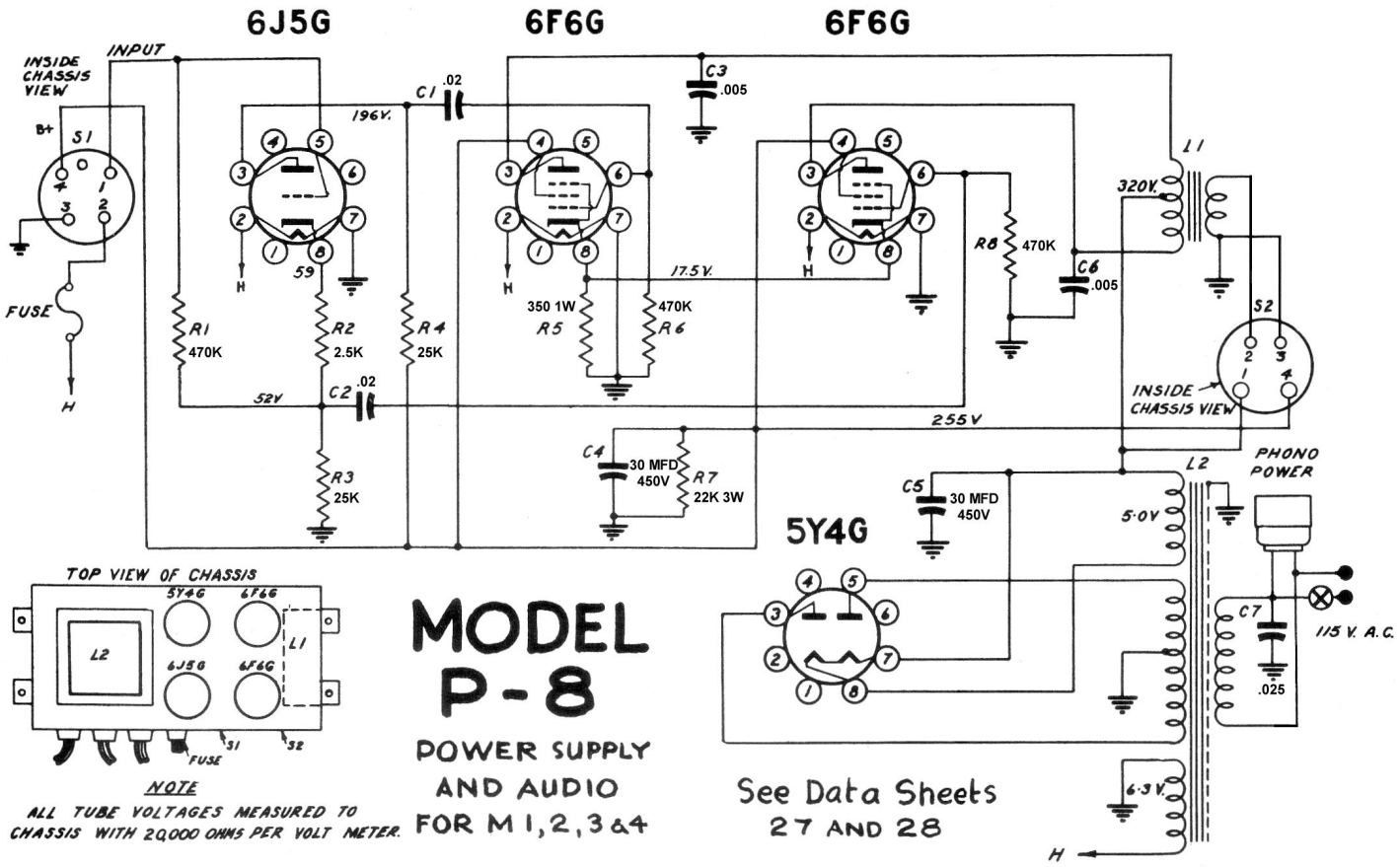
At the other end of the control, the compensation condenser is short circuited and the effect of the bi-pass condenser is nullified by the resistance element of this control. Intermediate positions of the slide contact of the tone control produces tone balance to suit the individual. A condenser couples the plate of the audio triode to the cable connector; this connection feeds the power amplifier circuit chosen.

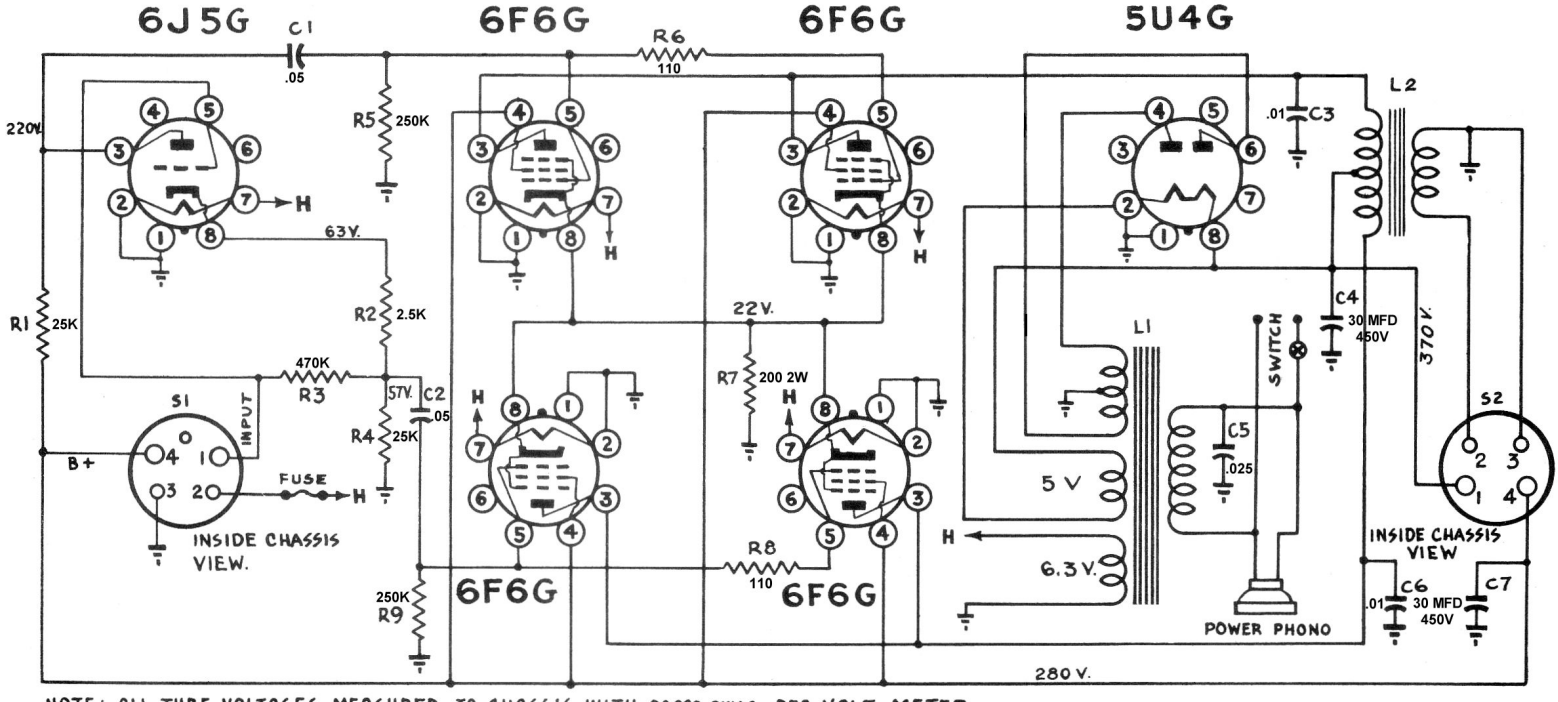
THE CABLE CONNECTIONS:

These consist of the power feed (B-plus, heater and ground) the antenna connection, the phonograph input (switched by the range switch mechanism) and the connection to the input of the audio power amplifier in the Audio and power unit selected, i.e. P6, P8 or P10.

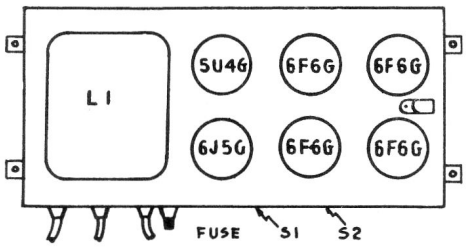
The phonograph connection terminates in the Record Changer unit; the antenna is brought to the outside of the cabinet. The remaining connection terminates in a plug; the numbers of the pins are shown in the circles (See Circuit Diagram).

STEWART-WARNER DATA SHEET 128





NOTE: ALL TUBE VOLTAGES MEASURED TO CHASSIS WITH 20,000 OHMS PER VOLT METER.



MODEL P-10

1946-47

Power Supply and Audio For M 1,2,3 & 4

STEWART-WARNER

DATA SHEET 129