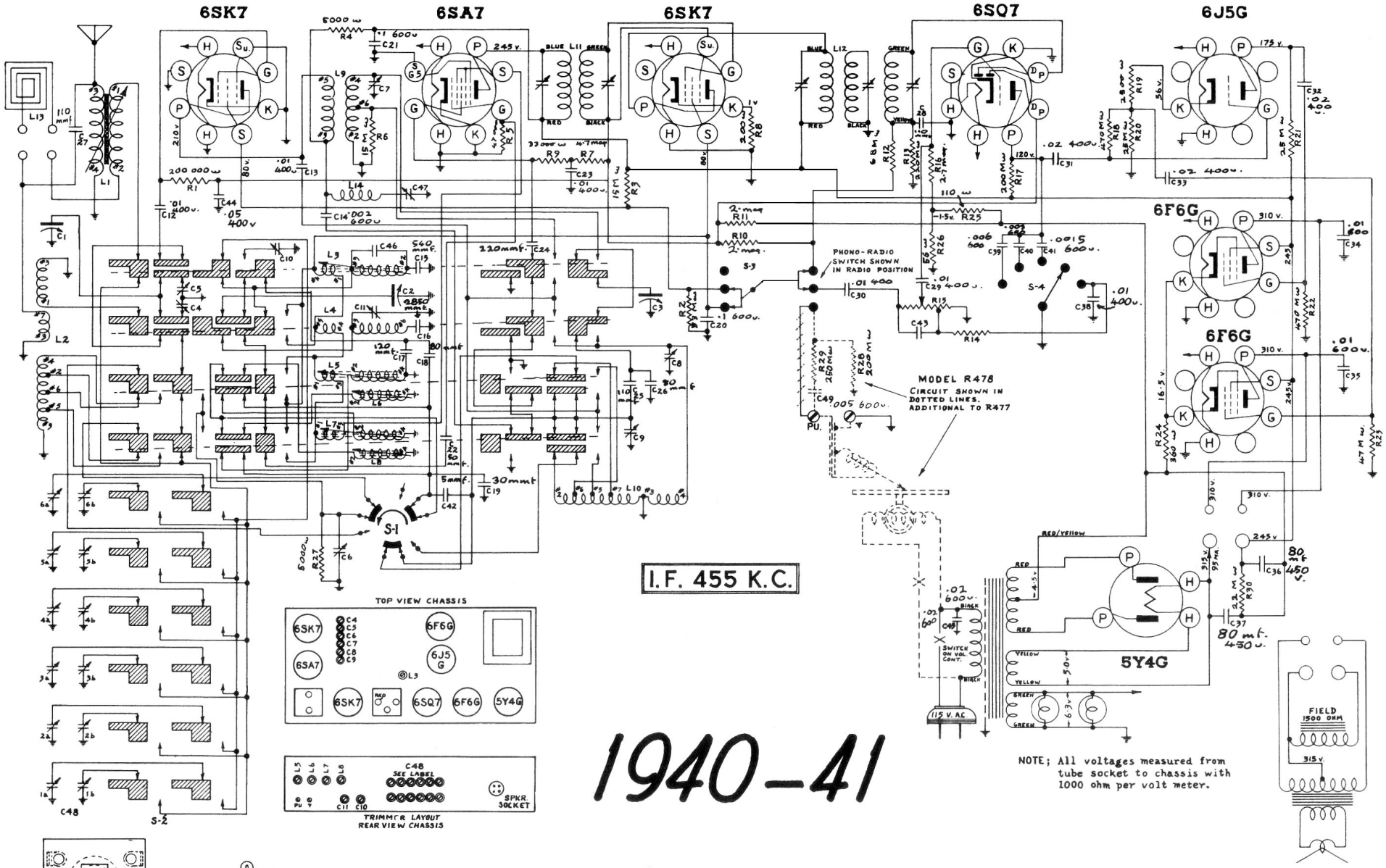

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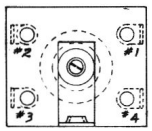
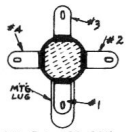
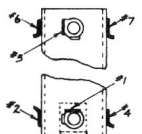


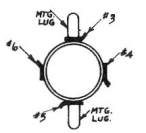
L1-ANT. B.C. COIL



L3-B.C. OSC. COIL

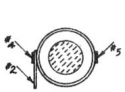


L2-ANT. S.W. COIL



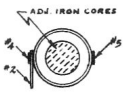
L4-OSC. INT. BAND COIL

L5-31 M. COIL

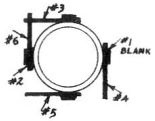


L6-25 M. COIL

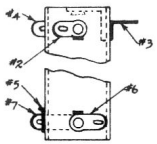
L7-19 M. COIL



L8-16 M. COIL



L9-B.C. R.F. COIL



L10-S.W. R.F. COIL

Alignment Data Will be Found on Data Sheet 100

STEWART-WARNER DATA SHEET 99

ALIGNMENT FOR;

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Set the pointer at the end calibration mark at the low frequency end of the dial (535 kc) with the gang in full mesh. Set the tone control at the Music positions and the volume control full on. Press the push button corresponding to the band being aligned, using broadcast for I.F. alignment.

* NOTE: The second I.F. transformer is triple tuned, and designed to give a broad characteristic to facilitate automatic tuning. It must be aligned by tightening the Red trimmer as far as it will go. Then adjust the other the other two trimmers for maximum output.

Item	Dummy Antenna	Connection of signal Generator to Receiver	Signal Gen. Freq.	Receiver Dial Setting	Trimmers to be Adjusted	Description of Adjustment
1.	.1 mfd. Condenser	Grid of 6SA7	455 kc	Any point that does not af fect signal.	2nd I.F. 1st I.F. Transformers.	Adjust for maximum output, then repeat operation. * See Note above.
2.	Standard Dummy	Antenna Lead	600 kc	600 kc	Oscillator Coil L8 Antenna Coil L1	Adjust iron cores to bring in signal.
3.	Standard Dummy	Antenna Lead	1500 kc	1500 kc	Oscillator Trimmer C10	Adjust to bring in the signal.
4.	Standard Dummy	Antenna Lead	455 kc	Any Automatic Station Button	Wave Trap Trimmer C47	Adjust for minimum signal.
5.	Standard Dummy	Antenna Lead	1500 kc	1500 kc	R.F. Trimmer C7 Ant. Trimmer C4	Adjust for maximum signal.
6.						Repeat operations 2&3.
7.						Repeat operation 5.
8.	.1 mfd. Condenser	Top Connector on middle section of gang.	6000 kc	6000 kc	Oscillator Trimmer C11	Adjust to bring in the signal.
9.	400 ohm Carbon Resistor	Antenna lead	6000 kc	6000 kc	R.F. Trimmer C8 Ant. Trimmer C5	Adjust for maximum output.
10.	.1 mfd. Condenser	Grid lead of 6SA7 (See Note)	9600 kc	9600 kc	Oscillator Coil L5	Adjust oscillator iron core to bring in signal.
11.	.1 mfd. Condenser	Grid of 6SA7	11800 kc	11800 kc	Oscillator Coil L6	Adjust iron core to bring in the signal.
12.	.1 mfd. Condenser	Grid of 6SA7	15300 kc	15300 kc	Oscillator Coil L7	Adjust iron core to bring in the signal.
13.	.1 mfd. Condenser	Grid of 6SA7	17800 kc	17800 kc	Oscillator Coil L8	Adjust iron core to bring in the signal.
14.	400 ohm Carbon Resistor	Antenna Lead	15300 kc	15300 kc	R.F. Trimmer C9 Ant. Trimmer C6	Adjust for maximum output while rocking the gang.
15.	400 ohm Carbon Resistor	Antenna Lead				Repeat operations 10, 11, 12, 13.

NOTE: In cases where it is not convenient to connect the signal generator to the control grid terminal of the 6SA7 tube, it may be connected to the Antenna lead, in which case a much higher signal input may be required.

When aligning the Short Wave spread bands, Operations 10 to 15, it is important to make sure that the oscillator frequency is below that of the desired signal rather than above as in the case of the Broadcast and Intermediate Bands. Check each oscillator setting operations 10, 11, 12 and 13 to see that the receiver will respond to a signal 910 kc below the desired frequency and not to a frequency 910 kc above. In operation 14, the receiver should be about 20 times more sensitive to 15300 kc than to 14390 kc.

Unless the signal generator is known to be absolutely accurate within 2 or 3 kc it is wise to perform operation 15 by changing the oscillator frequency to correspond with incoming signals of known frequency received on the antenna.

A 200 mmf Condenser may be used in place of the standard dummy antenna.

In operations 2, 6 and 7, if it is not convenient to align the receiver with the loop antenna connected, put a shorting connection across the loop terminals and align everything but the Broadcast Antenna circuit. This must be aligned at 600 kc and 1500 kc with the loop antenna attached.