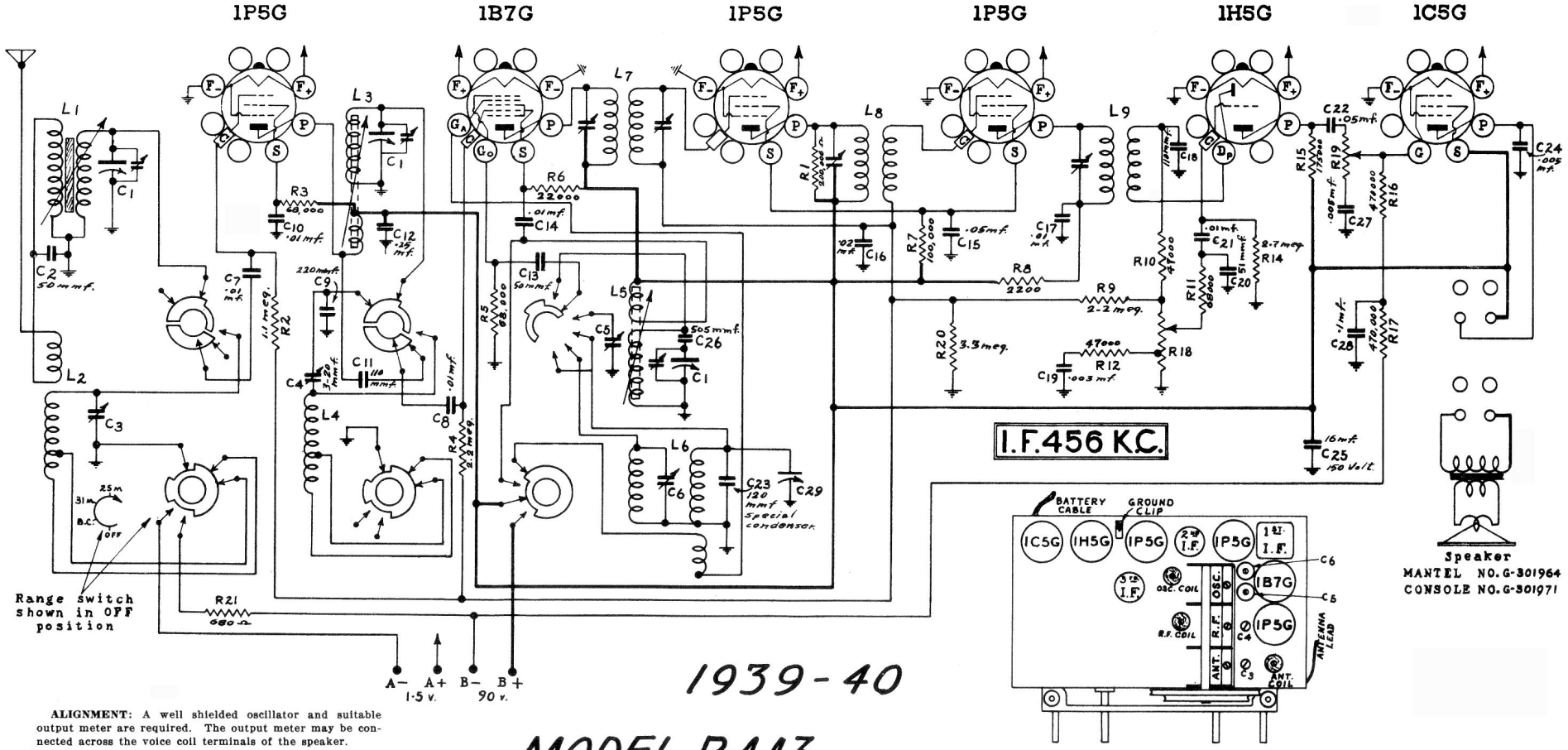

1939-40

MODEL R-443

Mantel Model R-4431

Console Model R-4435

BATTERY OPERATED

ALIGNMENT: A well shielded oscillator and suitable output meter are required. The output meter may be connected across the voice coil terminals of the speaker.

Set the pointer at the end calibration mark at the low frenquency end of the dial (530 kc). Set the tone control at the "high" position and the volume control full-on. Set the range switch knob for the band being aligned, using "broadcast" for the I.F. alignment.

No.	Dummy Antenna	Connection of Signal Gen. to Receiver	Signal Generator Frequency	Receiver Dial Setting	Trimmer to be Adjusted	Description of Adjustment
1.	.1 mfd condenser	1B7G top grid	456 kc	Point that does not afect signal	3rd, 2nd & 1st I.F. transformer	Adjust for maximum output and then repeat the operation
2.	Standard dummy	Antenna lead	600 kc	600 kc	Oscillator coil —L5	Adjust core to bring in signal
3.	Standard dummy	Antenna lead	600 kc	600 kc	R.F. coil L3. Antenna Coil L1	Adjust cores for maximum output
4.	Standard dummy	Antenna lead	1500 kc	1500 kc	On rear section of gang	Adjust oscillator circuit to bring in signal
5.	Standard dummy	Antenna lead	1500 kc	1500 kc	On centre and front section of gang	Adjust R.F. and antenna circuits for maximum output
6.	Standard dummy	Antenna lead	600 kc	600 kc	Repeat operations 2 and 3	
7.	Standard dummy	Antenna lead	1500 kc	1500 kc	Repeat operations 4 and 5	
8.	400 ohm carbon resistor	Antenna lead	9600 kc	9600 kc	C5	Adjust oscillator circuit to bring in signal
9.	400 ohm carbon resistor	Antenna lead	11800 kc	11800 kc	C6	Adjust oscillator circuit to bring in signal
10.	400 ohm carbon resistor	Antenna lead	11700 kc	11700 kc	C4	Adjust R.F. circuit for maximum signal while rocking gang
11.	400 ohm carbon resistor	Antenna lead	11900 kc	11900 kc	C3	Adjust antenna for maximum signal while rocking gang

NOTE 1: A 200 mmf mica condenser may be substituted for the standard dummy antenna.

NOTE 2: Unless the signal generator used can be absolutely guaranteed to be accurate in frequency calibration, it is wise to use a broadcasting station of known frequency to set the two band spread oscillator circuits to the dial scale. viz. Operations 8 and 9.

NOTE 3: Use the weakest readable signal for all alignment operations.

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