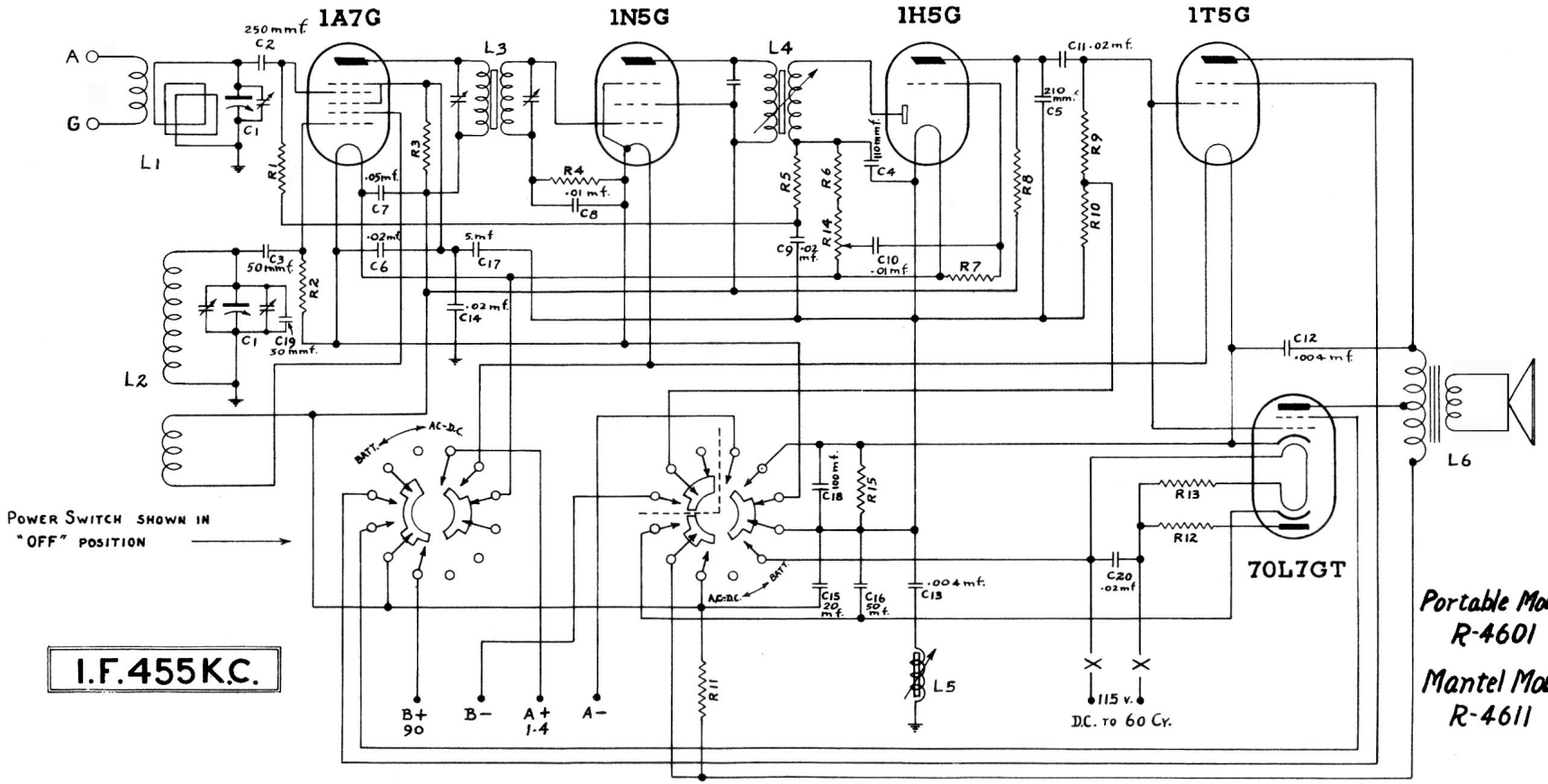
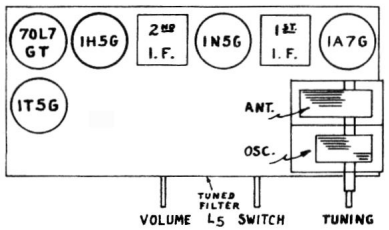


MODELS R-460 - 461 1939 - 40

Portable Model R-4601
Mantel Model R-4611



ALIGNMENT: A well shielded oscillator and suitable output meter are required. The output meter may be connected across the speaker voice coil terminals. Proceed with alignment as follows using the weakest possible signal that will give readable output and having the volume control full on. It is preferable to align the chassis on AC-DC because under these conditions the tuned filter (L5) adjustment will be proper for battery operation also.

No.	Dummy Antenna	Connection of Signal Generator to Receiver	Signal Generator Frequency	Receiver Dial Setting	Trimmer to be Adjusted	Description of Adjustment
1.	.1 mfd condenser	1A7G grid cap	455 kc	High frequency end	Core on top of 2nd I.F. transformer	Peak for maximum output with the filter coil core (L5) screwed well out
2.	.1 mfd condenser	1A7G grid cap	455 kc	High frequency end	1st I.F. trimmers	Peak for maximum output
3.	.1 mfd condenser	1A7G grid cap	455 kc	High frequency end		Screw in L5 core until there is no oscillation, squeal or excess swish
4.	.1 mfd condenser	1A7G grid cap	455 kc	High frequency end	Repeat operation 2	
5.	.1 mfd condenser	1A7G grid cap	455 kc		Repeat operation 3	
6.	.1 mfd condenser	1A7G grid cap	1550 kc	High frequency end	Trimmer on oscillator (front) section of gang Condenser	Adjust to bring in signal
7.	Tune in a weak broadcast station between 1450 and 1500 kc				Trimmer on antenna (rear) section of gang condenser	Peak for maximum output while rocking the gang slightly back and forth

IMPORTANT -- The model R460 up to serial number 16475 will be as shown above. On all sets above this serial number the 70L7GT tube has been replaced by a 35L6GT tube and a 35Z5GT tube. The circuit will remain exactly as shown, the bottom half of the 70L7GT tube circuit representing the 35Z5GT tube and the top half representing the 35L6GT tube. When checking this part of the set a reference to your tube data book will give you the proper pin connections for each tube. All of the model R461 will have separate output and rectifier tube as described above.

NOTE: This last operation should be performed with the chassis replaced in the case in its normal operating location.

NOTE 2: When replacing the chassis make sure that the speaker leads are kept clear of the speaker cone but at the same time well toward the front corner of the case and away form the 1H5G grid lead.

NOTE 3: In order to obtain correct calibration on the dial scale, the red pointer line on the pointer disc should be set just above the horizontal position when the gang condenser is fully meshed.