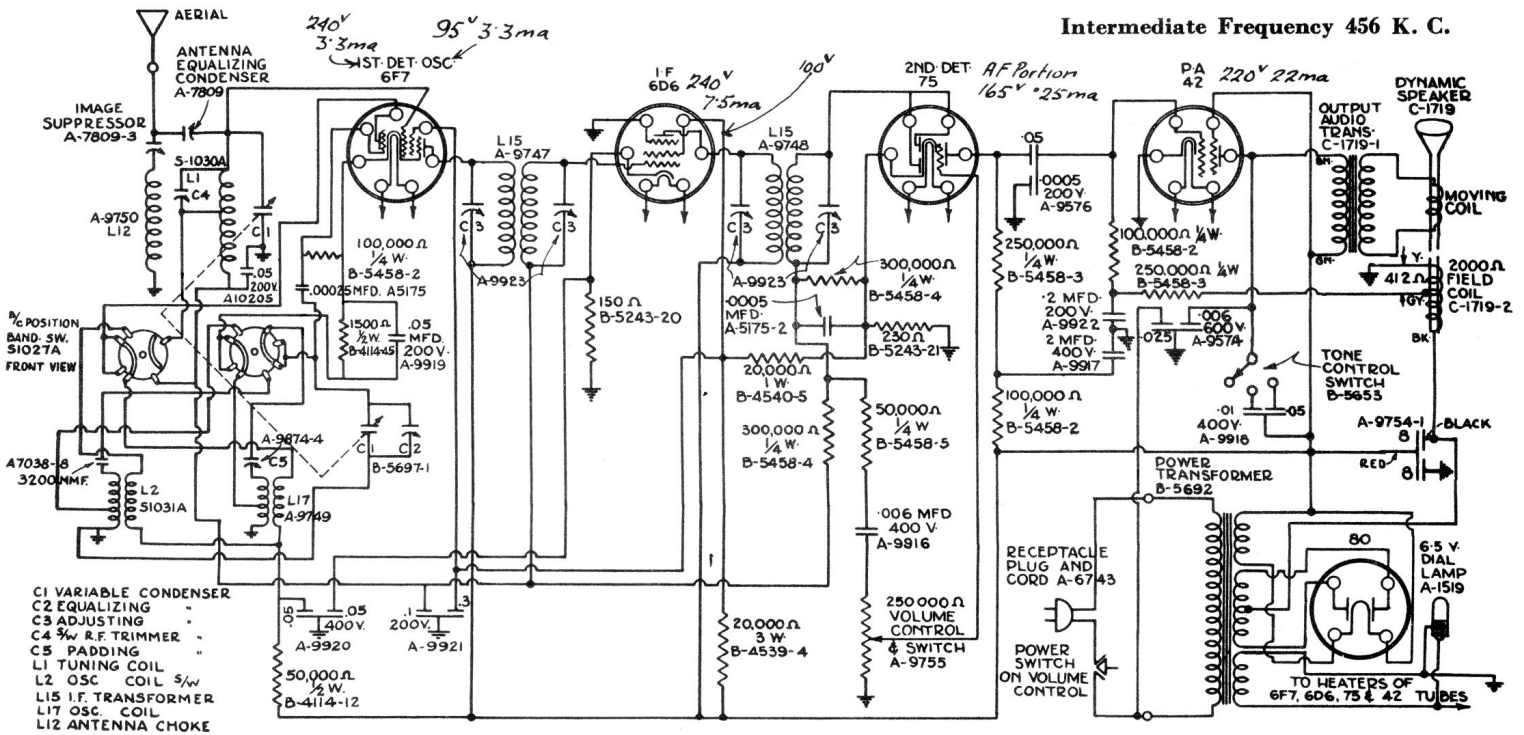


# SPARTON MODEL 253 C (Also Model 253 A)



## 1. INTERMEDIATE FREQUENCY ALIGNMENT

Adjust frequency of test oscillator to 456 Kilocycles and feed this signal to the grid cap of the type 6F7 oscillator mixer tube. Attach output meter across voice coil of speaker and adjust signal strength of oscillator to give mid-scale reading on output meter. Adjust all four Intermediate frequency condensers (see Fig. 1) for maximum reading of the output meter. (Note the I. F. condensers are of the dual type with the set screw forming one trimmer and the hex-head nut forming the second trimmer. Two of these condensers are shown in Fig. 1 making 4 trimmers in all).

## 2. IMAGE SUPPRESSOR

Leaving the test oscillator set at 456 K. C. feed this signal to the antenna of the receiver and adjust the Image Suppressor (see Fig. 1) for a minimum speaker output. The oscillator should be turned on full for this adjustment.

## 3. OSCILLATOR EQUALIZING CONDENSERS

Set the test oscillator to exactly 1500 K. C. and adjust the oscillator equalizing condenser (see Fig. 1) until with the test oscillator signal fed into the antenna wire of the set, dial reads exactly 1500 with the signal tuned in. Readjust the test oscillator to 600 K. C. and adjust oscillator padding condenser until this new signal locates at exactly 600 on the dial. Repeat these two adjustments again until the dial is properly calibrated at both points.

## 4. ANTENNA TRIMMER CONDENSERS

With the oscillator set at 1500 K. C. and this signal tuned in exactly on the dial, adjust Antenna Trimmer (Fig. 1) for maximum reading on the output meter. Turn Band selector to the short wave position. Adjust the test oscillator signal to 12,000 K. C. and locate this signal on the dial of the receiver. Adjust the short wave trimmer (Fig. 1) to maximum reading on the output meter. The exact value of this maximum reading depends on the location of the dial pointer. In adjusting the S. W. Trimmer, the dial of the receiver should be slowly "rocked" back and forth over a narrow band and finally adjusted in a position where the peak reading on the output meter when the trimmer is adjusted, is the greatest.

**Note**—With a strong oscillator signal, two signals may be audible in the receiver, separated by approximately 900 K.C. The signal of **highest frequency** is the one to be used in alignment. In trimming to 12,000 K.C. a second signal at 11,100 must be audible before proceeding with the alignment on 12,000 K.C.

**Note**—Before commencing alignment ascertain that, with condenser plates flush, the dial reads exactly 530 Kilocycles.

**Fig. 1**  
Top view of Model 253 Chassis

