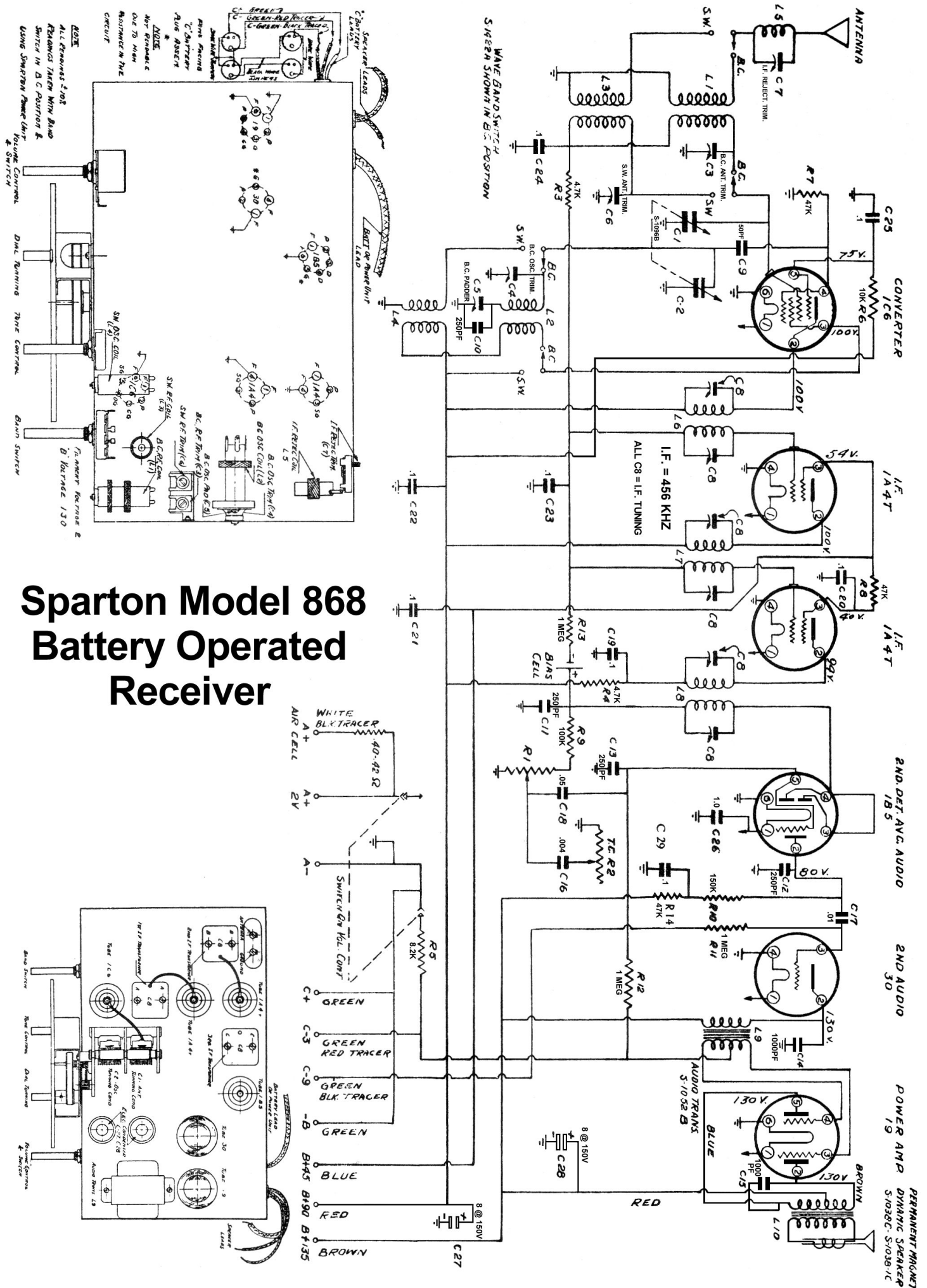


Sparton Model 868 Battery Operated Receiver



Sparton Model 868 Battery Receiver Alignment

ALIGNMENT DATA—

This set differs from the usual type of superheterodyne when operating on the S.W. band. In the usual superheterodyne set, the I.F. signal is obtained by beating with the incoming signal, a signal generated by the set oscillator and being higher in frequency by the amount of the I.F. For example, if the incoming signal is 10,000 K.C., then for an I.F. of 456 K.C., the oscillator would be automatically tuned to 10,000 plus 456 or 10,456 K.C. This, beating with the incoming signal, would produce an I.F. of 456. In this machine the oscillator tunes to a lower frequency. A 10,000 K.C. signal would result in an oscillator frequency of 9544 K.C. The I.F. of course would be the same.

The only place this will be noticed is in aligning the set. When a short wave superheterodyne is fed directly from a service oscillator, two signals are heard separated by twice the I.F., the lower in frequency being known as the image, the higher being used to align the set to. In this model, these conditions are reversed and the higher frequency signal becomes the "image." The one lower in frequency is used.

I.F. ALIGNMENT—

With the service oscillator set at 456 K.C. and the oscillator lead connected to the 1C6 grid cap, adjust trimmers C8 for maximum output.

I.F. REJECTOR—

With the service oscillator set at 456 K.C. and its output lead attached to the aerial of the chassis, adjust trimmer C7 for minimum output. Caution—Make sure the chassis is not tuned to a harmonic of 456.

R.F. ALIGNMENT:

1. B.C. OSCILLATOR TRIMMER—

With the band switch in B.C. position and the service oscillator tuned to 1500 K.C., adjust trimmer C4 until with set dial turned to 1500 signal is tuned in.

2. B.C. OSCILLATOR PADDER—

With service oscillator tuned to 600 K.C., adjust padder C5 until with set turned to 600 signal is tuned in. Re-check at 1500 K.C. as in section one above.

3. B.C. ANTENNAE TRIMMER—

With service oscillator set at 1500 K.C., adjust C3 for maximum output.

4. S.W. ANTENNAE TRIMMER—

With service oscillator set at 15,000 K.C., adjust trimmer C6 for maximum output while rocking selector knob.

Note: There is no S.W. Oscillator Trimmer. The S.W. Oscillator coil is designed to track with the selector when set is properly lined up on the B.C. band.

By rocking selector knob we mean to follow the signal while adjusting the S.W. Ant. Trimmer. This is a dual operation and characteristic procedure in all S.W. alignment.