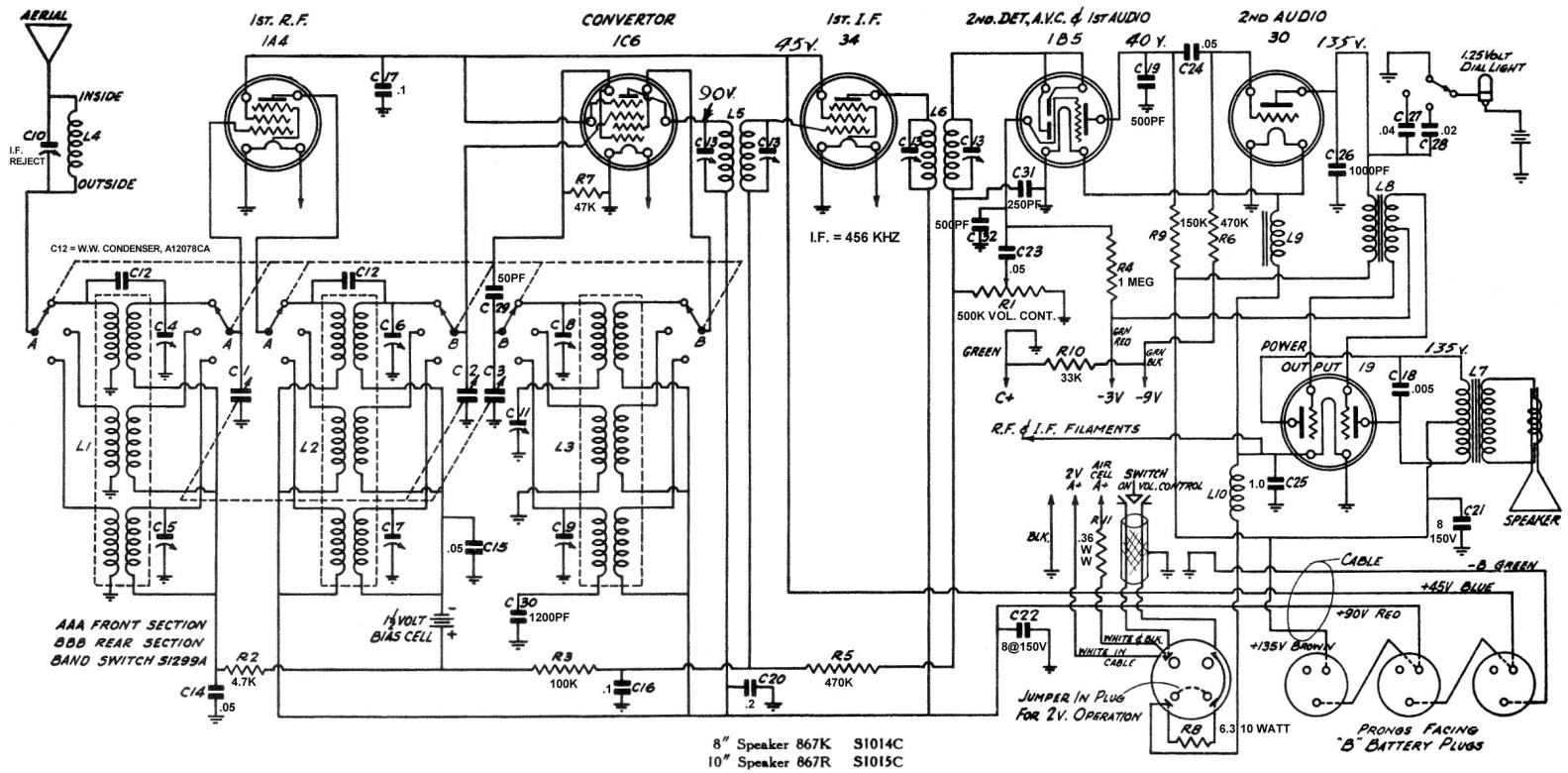


TOP VIEWS OF ALL SOCKET CONNECTIONS



Sparton Models 867 Battery Operated Receiver

WHAT TO LOOK FOR IN CASE OF TROUBLE

AUDIO HOWL—Check chassis bolts, these should be loose enough to allow chassis to "float" on its rubber mounting washers, the selector should also be free to float on its rubber cushions.

POOR SELECTIVITY—Check alignment.

EXCESSIVE NOISE—Check alignment, check aerial, too short an aerial will result in the picking up of too large a percentage of noise. A GROUND SHOULD ALWAYS BE USED.

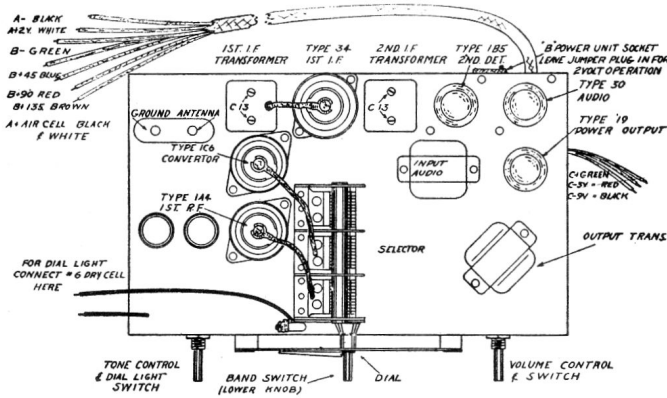


FIG. 1
TOP VIEW OF MODEL 867

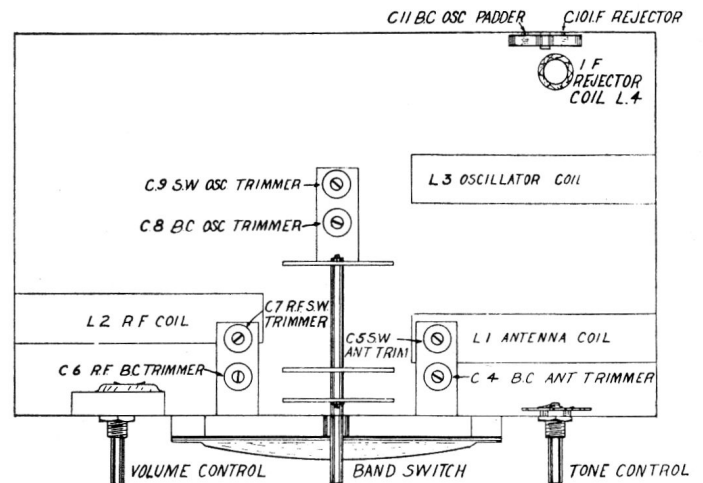


FIG. 2
BOTTOM VIEW OF MODEL 867

Sparton Model 867 Battery Receiver Alignment Data

This set differs from the usual type of superheterodyne when operating on the red 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 345 K.C., the oscillator would be automatically tuned to 10,000 plus 345 or 10345 K.C. This, beating with the incoming signal, would produce an I. F. of 345. In this machine the oscillator tunes to a lower frequency. A 10,000 K.C. signal would result in an oscillator frequency of 9655 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 345 K.C. and the oscillator lead connected to the 1C6 grid cap, adjust trimmers C13 for maximum output.

I. F. rejector. With the service oscillator set at 345 K.C. and its output lead attached to the aerial of the chassis, adjust trimmer C10 for minimum output. Caution—make sure that the chassis is not tuned to a harmonic of 345.

B. C. Band Oscillator Trimmer

1. R. F. ALIGNMENT—

With the band switch in the B. C. position and the service oscillator tuned to 1500 K.C., adjust trimmer C8 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 C11 until with set tuned to 600 signal is tuned in. Re-check at 1500 K.C. as above section one.

3. B. C., R. F. TRIMMERS—

With service oscillator set at 1500 K.C., adjust C6 and C4 for maximum output.

4. S. W., R. F. (turn Band switch to red position).

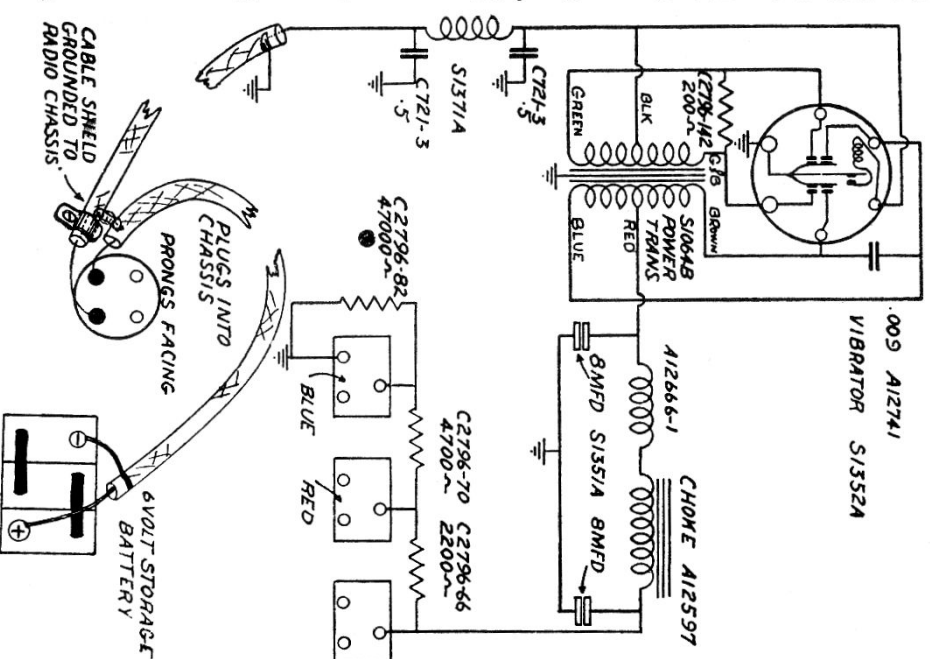
Red band oscillator trimmer.

With service oscillator set at 15,000 K.C. and set tuned to 15 Meg., adjust trimmer C9 until signal is tuned in.

5. S. W., R. F. TRIMMERS—

With service oscillator still set at 15,000 K.C., adjust trimmers C5 and C7 for maximum output.

Note---There is no adjustment on the intermediate S. W. Band.



"B" Eliminator Unit

INSERT COLOURED PLUGS INTO CORRESPONDING COLOURED SOCKETS