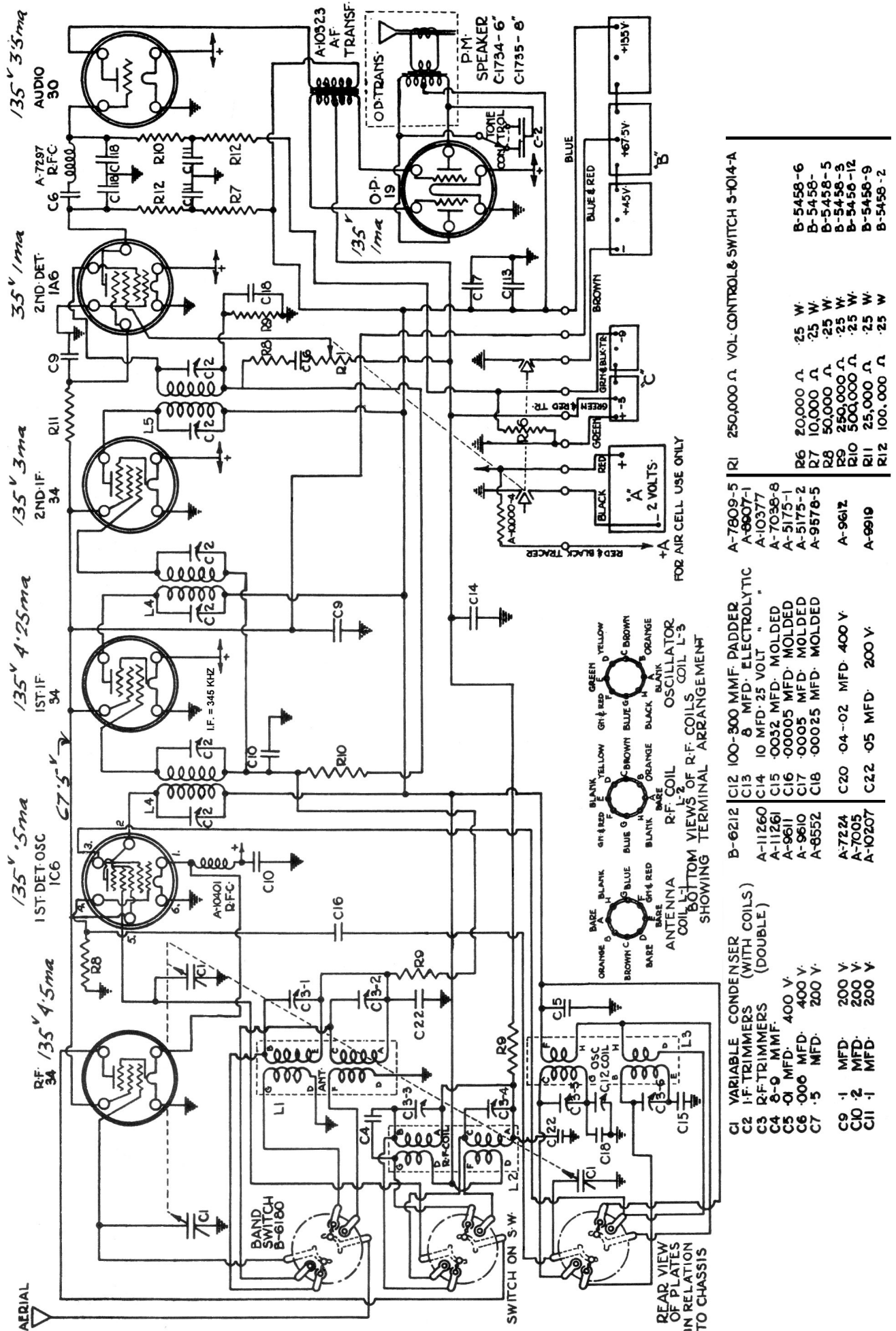


# Sparton 970A & 970B Battery Receiver

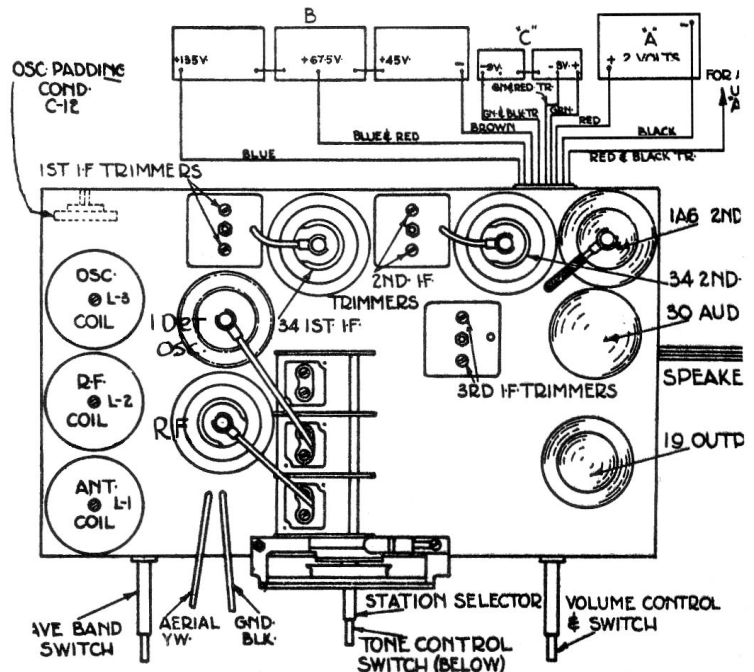
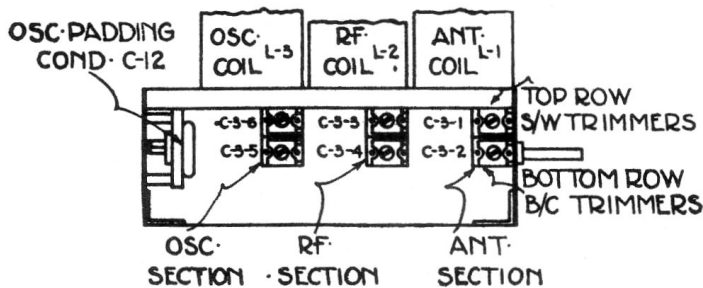


# Alignment Instructions Models 970A & 970B

**NOTE**—Before commencing the alignment of this receiver, see that the gang condenser plates are just flush when the dial pointer reads exactly 540 Kilocycles. If they do not flush at that frequency, loosen the lock-nut on the end of the station selector shaft, and with the plates flush turn the dial pointer to 540 by the lower cable drum and retighten the lock-nut.

1. Connect the output meter to the voice coil leads of the speaker, (maroon and white leads).
2. Attach the test oscillator to the receiver, feeding a signal of exactly 345 Kilocycles into the grid of the type 6A7 Converter tube. With the volume control full on and the receiver pointer set to the low frequency end of the dial, adjust the output of the oscillator to give  $\frac{1}{2}$  to  $\frac{3}{4}$  scale reading on the output meter.
3. Adjust both the first and second I. F. trimmers located on the top of the chassis (see Fig. 1) to a maximum reading on the output meter. If the adjustment of these trimmers produces a maximum reading off the scale of the meter, reduce the oscillator output still further. Correct alignment of these trimmers is indicated by a maximum reading of the output meter for a minimum input signal from the test oscillator.
4. Attach the oscillator to the antenna and ground leads of the receiver, and adjust the frequency to exactly 1500 Kilocycles. Turn Band Selector switch to the Broadcast Band position. Adjust trimmer condenser C3-5 until, with the signal tuned in on the receiver, the dial pointer indicates exactly 1500 K.C.
5. Adjust the oscillator signal to exactly 600 K. C., and adjust the padding condenser C-12 until, with the oscillator signal tuned in on the dial, the dial pointer indicates exactly 600 K. C. Repeat the calibration of both 1500 and 600 K.C. on the dial until both points are correct without further adjustment of either C3-5 or C-12.
6. Adjust test oscillator to 1500 K.C. again and tune the receiver in to this signal, adjusting the dial carefully to give a maximum reading of the output meter. Adjust trimmer condensers C3-4 and C3-2 for a further maximum of the output meter, reducing the output of the test oscillator if necessary to bring this maximum reading on scale. The alignment of the Broadcast band of the receiver is complete.
7. Adjust the oscillator again to 1500 K.C. and tune the receiver exactly to that signal. Turn the Band selector switch to the Short-Wave Band position, and adjust the test oscillator to exactly 15,000 Kilocycles. Leaving the dial pointer set, adjust trimmer condenser C3-6 until the oscillator signal is heard, and the output meter is at a maximum reading.
8. With the same signal from the oscillator, and the dial pointer still set at the same position, adjust trimmer condensers C3-3 and C3-1 for a further maximum reading of the output meter.

**CAUTION**—With the oscillator set at 15,000 K.C. two signals can be heard in the receiver, one at 15,000 and the other at 14,100 K.C. Do not mistake the latter signal for the former. In aligning the receiver at 15,000 K.C. the signal of highest frequency is the correct one, and the receiver is adjusted to it. After the alignment is complete, check to see if a second signal is audible at 14,100 K.C. If so, you will have been using the proper signal for the alignment.



## Sparton 970A & 970B

### Battery Operated

### Receiver