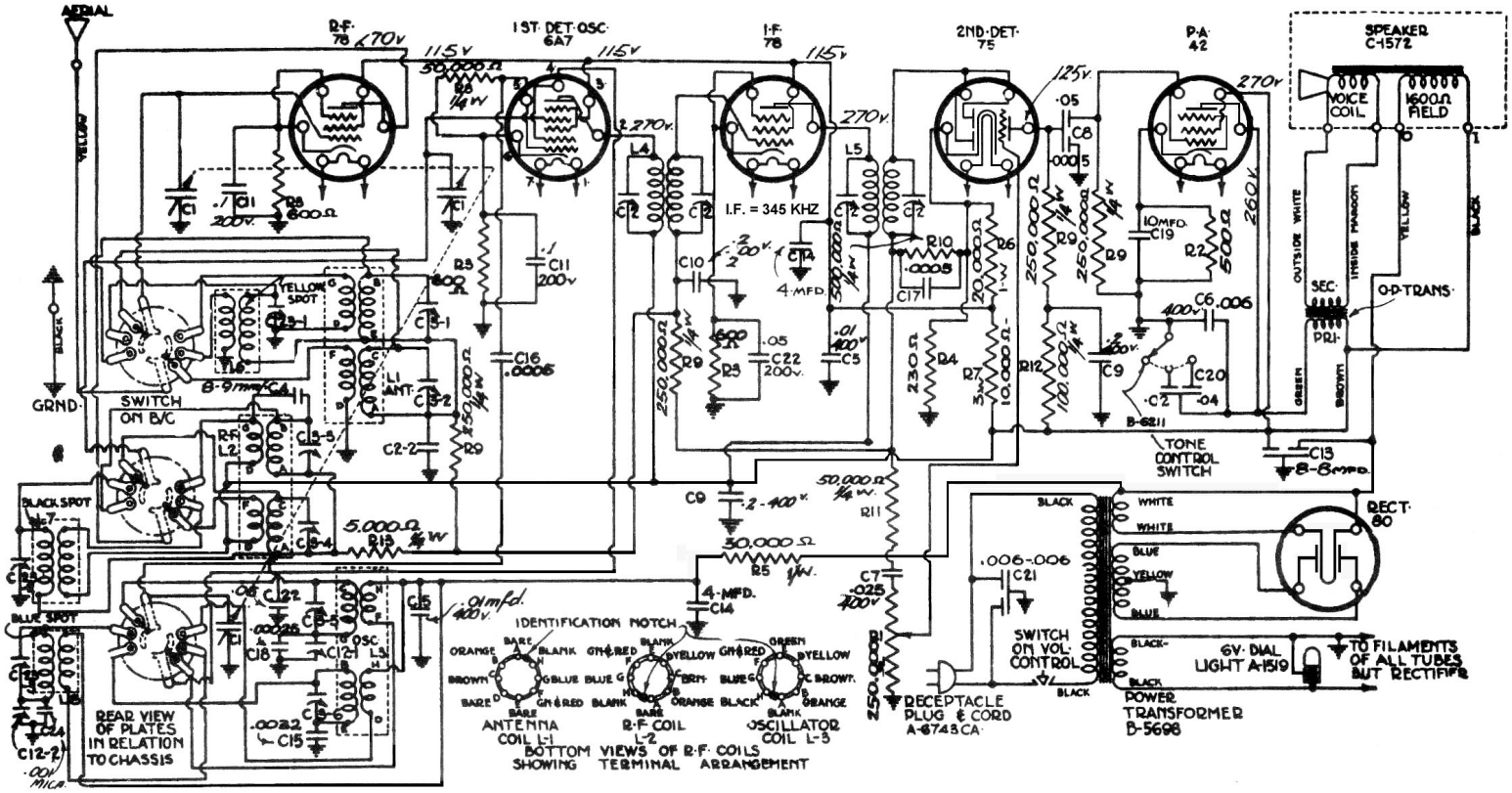
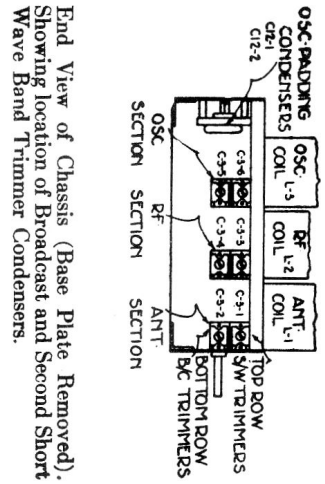
Sparton Model 468



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 ½ to ¾ 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 futher 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 second 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.
9. Adjust service oscillator to 4200 Kilocycles, turn Band Selector switch to the first short wave position and adjust condenser C23-3 so that when the signal is tuned in on the receiver, the dial pointer reads 4.2 megacycles or 4200 Kilocycles on the upper green dial. Reset the test oscillator to 2700 Kilocycles and adjust condenser C12-2 until signal is heard in set with dial pointer reading 2.7 on the green dial. It may be found that by adjusting the dial slightly off 2.7, e.g. 2.69 and readjusting the test oscillator to show a maximum reading on the output meter, that this reading is higher, indicating an increased gain. If the reading is lower than when set exactly at 2.7, the increased effect may be noticed at 2.71. Continue to throw the set slightly off calibration until a maximum increase in gain is noticed. This point is never far enough off calibration to affect station identification by frequency and yet in many instances a marked increase in sensitivity is obtained.
10. Reset the test oscillator to 4200 K.C. and tune the signal in on the dial of the receiver, adjusting it carefully to give a maximum reading on the output meter. Adjust condensers C23-1 and C23-2 for maximum gain as indicated by a further maximum reading on the output meter.



End View of Chassis (Base Plate Removed), Showing location of Broadcast and Second Short Wave Band Trimmer Condensers.

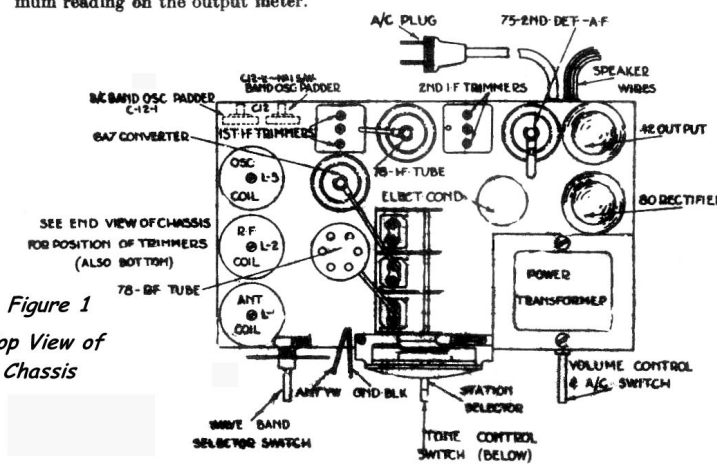
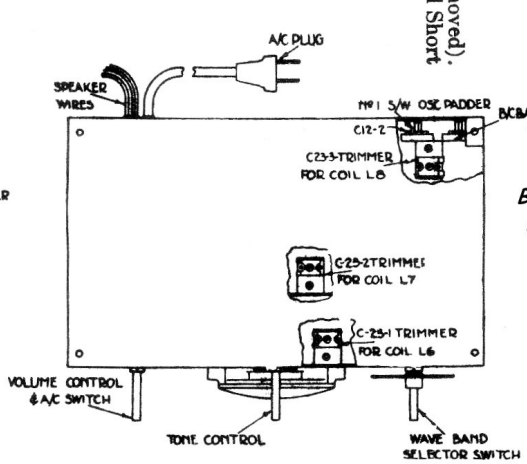


Figure 1

Top View of Chassis



Bottom View of Chassis