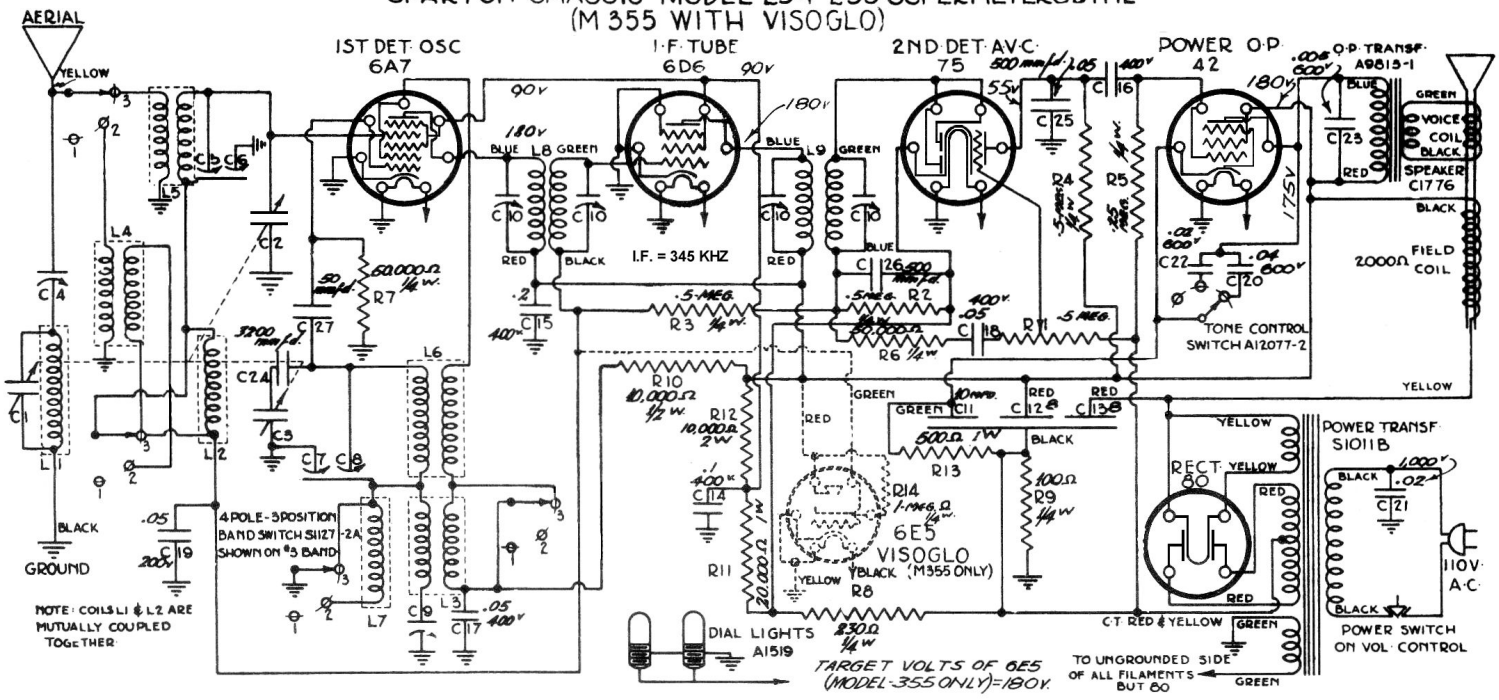
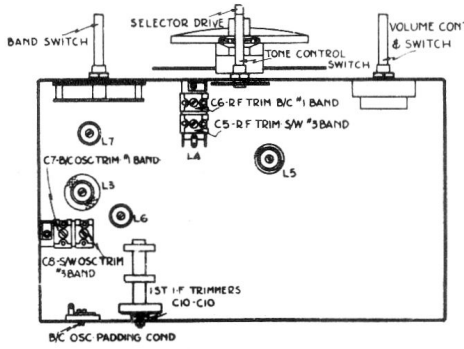
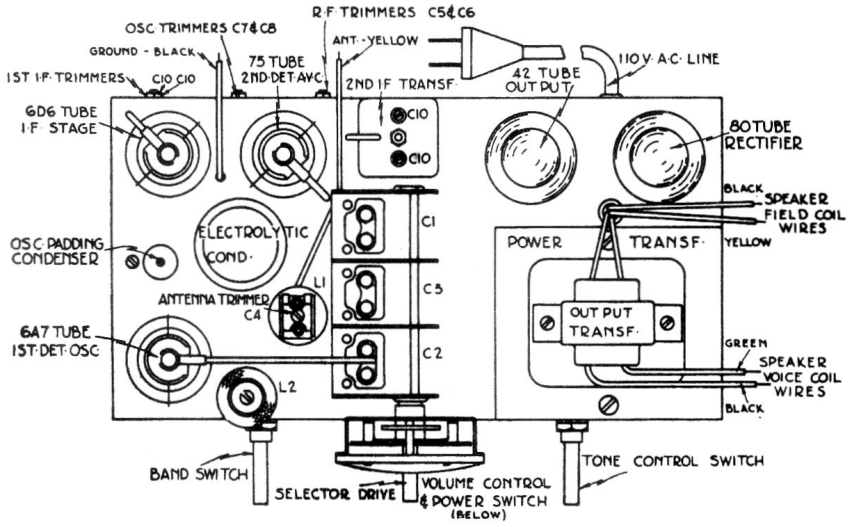
Sparton Model 254, 255 & M 355

SCHEMATIC DIAGRAM
SPARTON CHASSIS MODEL 254-255 SUPERHETERODYNE
(M 355 WITH VISOGLO)

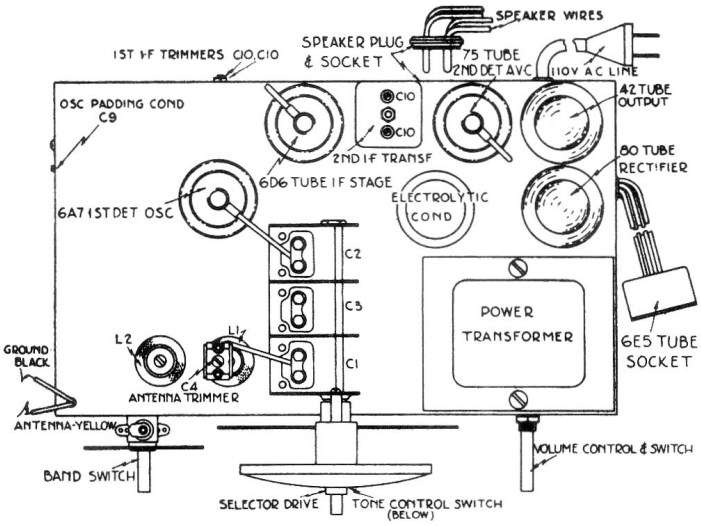




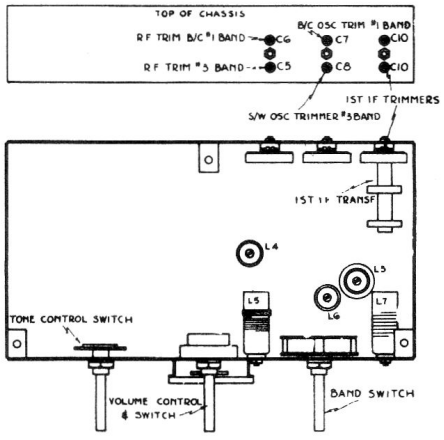
Bottom View 255 and 355



Model 254



Models 255 and 355



Bottom View 254

ALIGNMENT MODELS 254 - 255 - 355

ALIGNMENT PROCEDURE

NOTE—Before commencing alignment make sure that the dial is set so that with the selector plates in flush, the pointer points to the last division on the broadcast scale.

1. INTERMEDIATE FREQUENCY AMPLIFIER

Set service oscillator at 345 K. C. and with test lead attached to 6A7 (converter) grid cap adjust the six condensers C10 for maximum reading on output meter.

2. OSCILLATOR TRIMMER

Set service oscillator at 1500 K.C. and connect test lead to yellow antenna lead, adjust trimmer C7 until with signal tuned in dial points to 150.

3. OSCILLATOR PADDER

Set service oscillator at 600K.C., and adjust padder (C9) until with signal tuned in dial points to 60.
Re-check at 1500 as in section 2 (above).

4. R. F. TRIMMERS

With service oscillator set at 1500 K.C., and set tuned to that frequency, adjust trimmers C4 and C6 for maximum output.

SHORT WAVE ALIGNMENT

1. With the service oscillator set at 15.000 K.C., adjust trimmer C8 until with signal tuned in, dial points to 15 on the red band.

2. Adjust short wave R. F. trimmer C5 to point of greatest output. The trimmer should then be turned a very small amount (about 1/16 turn) to the right to increase capacity slightly. This completes the alignment, there is no adjustment on the green band, this falls in with the other bands.

WARNING—Do not bend the selector plates, this destroys the selector alignment. Note—In some cases better results will be obtained if C4 (the antenna trimmer) is readjusted on a station at 1400 K.C., with the set connected to the aerial with which it is to operate.

CAUTION—With the oscillator set at 15000K.C. two signals can be heard in the receiver, one at 15000 K.C. and the other at 14310 K.C. Do not mistake the latter signal for the former In aligning the receiver at 15000 K.C. the signal of highest frequency is the correct one and the receiver is adjusted to it. After the alignment is made check to see if a second signal is heard at 14310 K.C. If so you will have been using the correct signal for the alignment. This secondary image is noticeable on all short wave bands and should be considered before choosing any signal for alignment.

WHAT TO LOOK FOR IN CASE OF TROUBLE:

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

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 MUST ALWAYS BE USED.