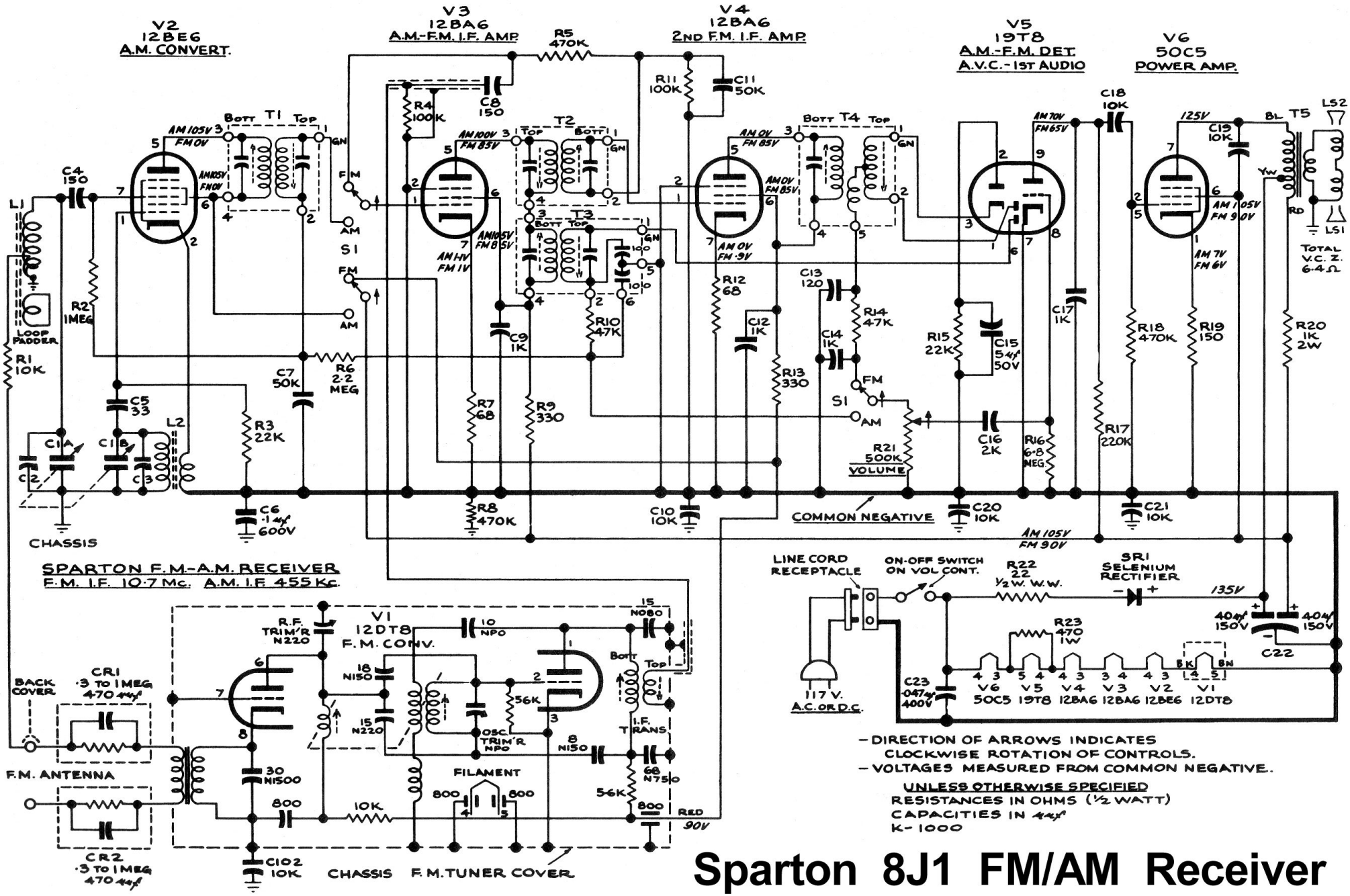


Sparton 8J1 FM/AM Receiver

Sparton 8J1 AM/FM Receiver

ALIGNMENT PROCEDURE

AM radio to be aligned first; then FM. Allow at least 15 minutes warm-up before making adjustments. Set should be plugged into isolation transformer during alignment to avoid electrical shocks.

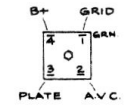
AM ALIGNMENT

1. Switch Receiver to AM.
2. Form a loop of 6 to 8 turns of insulated wire 6 inches in diameter. Connect to Signal Generator and set Generator to 455 Kcs. Place this loop near loop antenna of receiver.
3. Connect output meter across secondary of OP transformer.
4. Adjust bottom, then top of T3; bottom, then top of T1 for maximum output, using as low a signal as possible and still obtain readings.
5. Set Signal Generator to 1640 Kcs and set Tuning Capacitor to minimum capacity. Adjust C3 (osc. trimmer) for maximum output.
6. Set Signal Generator and Receiver to 1500 Kcs and adjust C2 (ant. trimmer) for maximum output.
7. Set Signal Generator and Receiver to 600 Kcs and adjust Loop Padder for maximum output.
8. Set Signal Generator and Receiver to 1500 Kcs and repeak C2.

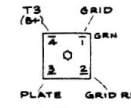
FM ALIGNMENT

1. Use AM Signal Generator set to 10.7 Mcs.
2. Switch Receiver to FM.
3. Connect Signal Generator to grid of V3 (term 1 12BA6). Connect VTVM across C15 (5 mf. 50V electrolytic). Switch VTVM to low DC range.
4. Using lowest signal level necessary to obtain indication on VTVM, adjust bottom of T4, and top and bottom of T2 for maximum indication on meter.
5. Connect Signal Generator to FM antenna terminals and using low input signal adjust FM Tuner IF, bottom first, then top, for maximum meter reading.
6. Connect two 100,000 Ohm resistors in series across C15. Connect the VTVM from the junction of these resistors to the junction of R14 and C14.
7. Turn gain of Signal Generator to maximum and adjust top of T4 for zero on meter. Meter reading will swing positive and negative with this adjustment.

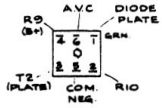
Further alignment of FM Tuner should not be attempted. Tuner has been preset at the factory.



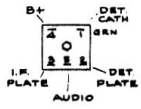
T1
1ST A.M. I.F. TRANS.



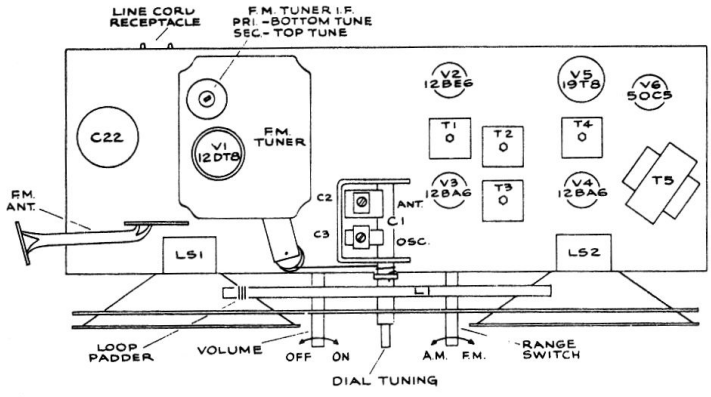
T2
2ND F.M. I.F. TRANS.



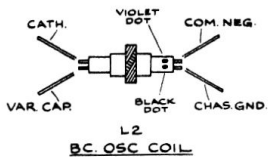
T3
2ND A.M. I.F. TRANS.



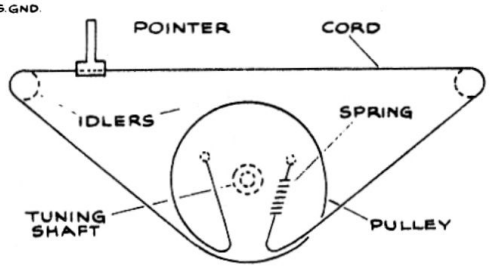
T4
RATIO DET. TRANS.



TOP VIEW OF CHASSIS



L2
BC. OSC. COIL



DIAL CORD ARRANGEMENT
(SELECTOR CLOSED)