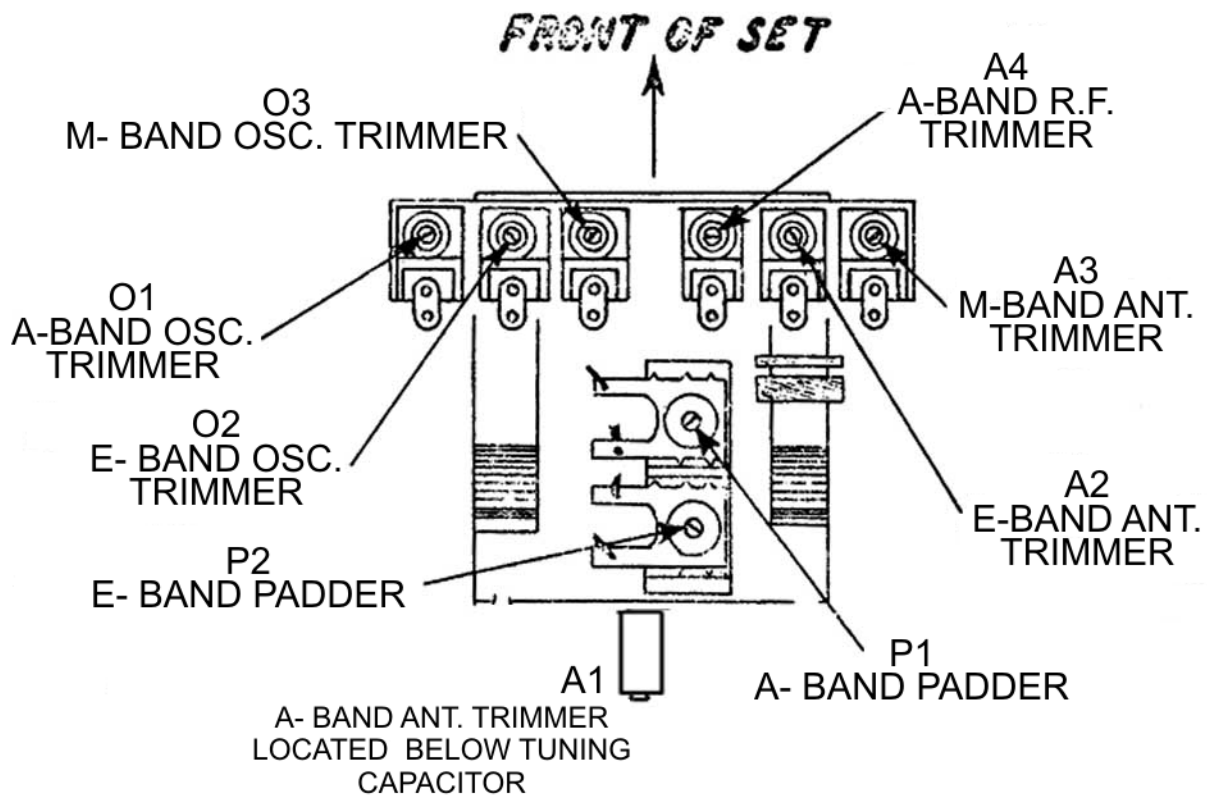


**MIDWEST**  
**16 TUBE SPECIAL**  
 Nineteen Thirty Eight

**MIDWEST 1938**  
**16 TUBE SPECIAL**  
 August 17, 2013  
*Mike Simpson*



**MIDWEST 1938  
16 TUBE SPECIAL  
ADJUSTMENT LOCATIONS**

Revised October 20, 2015

*Mike Simpson*

**ALIGNMENT INSTRUCTIONS  
FOR MIDWEST CHASSIS  
SPECIAL 16-38**

1. Remove oscillator tube.
2. Connect high side of signal generator to grid cap of mixer through .01uFD capacitor, low side to chassis.
3. Set Signal Generator for 456 KC, modulated output.
4. Connect voltmeter to measure AC voltage at voice coil or DC voltage on AVC line.
5. Adjust IF trimmers A5 thru A9 for maximum output. Repeat several times using as low as possible output from Signal Generator. (A10 will be adjusted later)
  
6. Replace Oscillator tube.
7. Connect Signal Generator to antenna terminal through a 200 ohm resistor in parallel with a 10 MMFD capacitor.
8. Turn Tone Control/AFC switch to the AFC OFF (Counter-clockwise) positions.
9. Set band switch to "A" band, receiver and generator to 1400 KC.
10. Adjust Oscillator Trimmer O1, Antenna and RF trimmers A1 & A4 for Maximum.
11. Set Generator and receiver to 600 KC. Adjust Oscillator Padder P1 for maximum.
12. Repeat steps 9 thru 11 for proper tracking.
  
13. Set band switch to "E" band, receiver and generator to 4.0 MC.
14. Adjust Oscillator trimmer O2 and Antenna Trimmer A2 for Maximum.
15. Set Generator and receiver to 1700 KC. Adjust Oscillator Padder P2 for maximum.
16. Repeat steps 13 thru 15 for proper tracking.
17. Set band switch to "M" band, receiver and generator to 29 MC.
18. Adjust Oscillator Trimmer O3 and Antenna Trimmer A3 for Maximum.

**Automatic Frequency Control Adjustment**

1. Set receiver band switch to Broadcast band A position.
2. Turn Tone Control/AFC switch to the AFC OFF (Counter-clockwise) positions.
3. Connect 5 Milliamp meter in series with 6J7, AFC Control Tube, cathode.

4. Adjust signal generator output to simulate an average radio signal at approximately 1000KC and tune receiver to exact resonance of the signal generator.
5. Note reading on Milliamp meter.
6. Turn Tone Control/AFC switch to the AFC ON (Clockwise) positions.
7. Adjust IF trimmer A10 to obtain same reading on meter.

Trimmer A10 may require a touch-up using a station to assure proper AFC function.