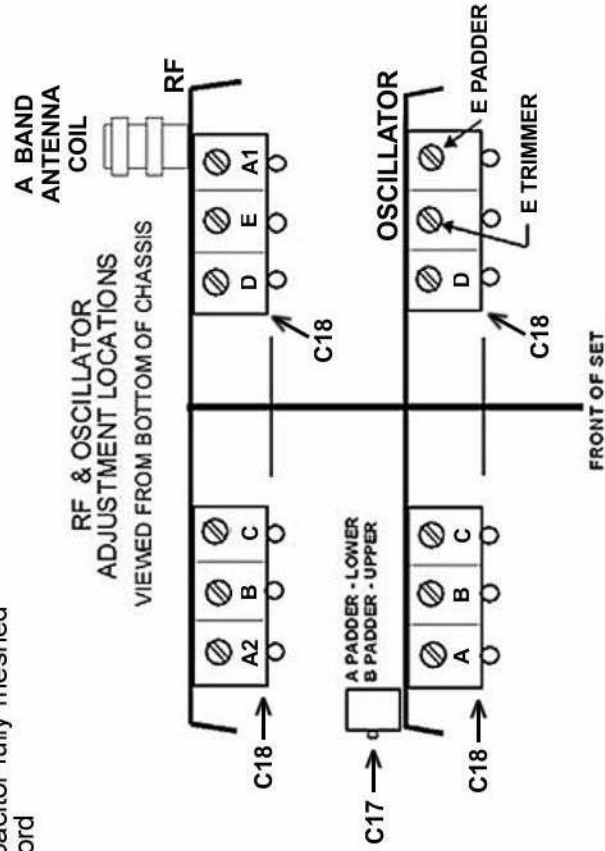


A diagram showing a circle with a center point. A radius is drawn from the center to the circumference. A tangent line is drawn from an external point to the circumference, touching it at a single point. The angle between the radius and the tangent line is labeled $1 - 1/2$.

Viewed from front
Tuning capacitor fully meshed
Use fine cord



R1	200 OHM 1/4W
R2	500 OHM 1/4W
R3	1000 OHM 1/4W
R4	2000 OHM 1/4W
R5	5000 OHM 1/4 W
R6	25K OHM 1/4W
R7	50K OHM 1/4W
R8	100K OHM 1/4W
R9	200K OHM 1/4W
R10	500K OHM 1/4W
R11	1 MEGOHM 1/4W
R12	3 MEGOHM 1/4W
R13	40 K OHM 1/4W
R14	25K OHM 1/2W
R15	50K OHM 1/2W
R16	15K OHM 1W
R17	VOLUME 500K Tap@25K
R18	15 OHM W.W.

CHASSIS 170 (17-40)

Mike Simpson

**ALIGNMENT INSTRUCTIONS
FOR MIDWEST CHASSIS
12-39, 17-39, 120 (12-40) & 170 (17-40)**

1. Remove oscillator tube.
2. Connect high side of signal generator output to grid cap of mixer through .01uFD capacitor, low side to chassis.
3. Set Signal Generator for 456 KC, modulated output.
4. Connect volt meter to measure AC voltage at voice coil or DC voltage on AVC line.
5. Adjust IF trimmers A1 thru A5 for maximum output. Repeat several times using as low as possible output from Signal Generator. (A6 will be adjusted later)

6. Replace Oscillator tube.
7. Connect output of Signal Generator to antenna terminal through a 200 ohm resistor in parallel with a 10 MMFD capacitor.
8. Set MOTOR switch to the OFF position.
9. Set band switch to "A" band, receiver and generator to 1500 KC.
10. Adjust Oscillator Trimmer A, Antenna and RF trimmers A1 & A2 for Maximum.
11. Set Generator and receiver to 600 KC. Adjust Oscillator A Padder for maximum.
12. Repeat steps 9 thru 11 for proper tracking.

13. Set band switch to "B" band, receiver and generator to 4.1 MC.
14. Adjust Oscillator trimmer B and Antenna Trimmer B for Maximum.
15. Set Generator and receiver to 1.6 MC. Adjust Oscillator B Padder for maximum.
16. Repeat steps 13 thru 15 for proper tracking.

17. Set band switch to "C" band, receiver and generator to 12 MC.
18. Adjust Oscillator trimmer C and Antenna Trimmer C for Maximum.

19. Set band switch to "D" band, receiver and generator to 30 MC.
20. Adjust Oscillator trimmer D and Antenna Trimmer D for Maximum.

21. Set band switch to "E" band, receiver and generator to 350 KC.
22. Adjust Oscillator trimmer E and Antenna Trimmer E for Maximum.
23. Set Generator and receiver to 125 KC. Adjust Oscillator E Padder for maximum.
24. Repeat steps 21 thru 23 for proper tracking.

Automatic Frequency Control Adjustment

1. Set receiver band switch to Broadcast band A position.
2. Set the MOTOR switch to the OFF position.
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 1000 KC and tune receiver to exact resonance of the signal generator.
5. Note reading on Milliamp meter.
6. Set MOTOR switch to the ON position.
7. Adjust IF trimmer A6 to obtain same reading on meter.

Trimmer A6 may require a touch-up using a station to assure proper AFC function.