

MODELS 547, 547A, NOBLITT-SPARKS INDUSTRIES, INC. MODELS 442, 444AH,
 CHASSIS RE-242 ALIGNMENT PROCEDURE CHASSIS RE-91, RE-200

PRELIMINARY:

| | | |
|---|-------------------------------|-----------------|
| Output meter connection | Across loudspeaker voice coil | 0.8 volts |
| Output meter reading to indicate 200 milliwatts (standard output) | See chart below | Floating ground |
| Dummy antenna to be in series with signal generator output | See chart below | Floating ground |
| Connection of generator ground lead | See chart below | 30% 400 cycles |
| Generator modulation | Fully clockwise | 54 on dial |
| Position of Volume Control | 54 on dial | |
| Position of pointer with variable fully closed | | |

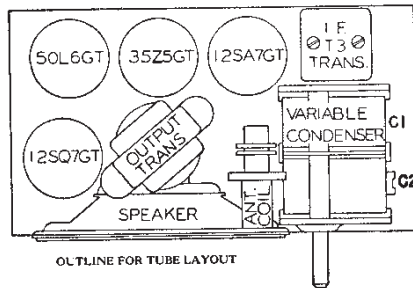
| Position of Variable | Generator Frequency | Dummy Antenna | Generator Output Connection | Trimmers Adjuster | Trimmer Function | Approximate Sensitivity |
|----------------------|---------------------|---------------|-------------------------------|--------------------------------|------------------|-------------------------|
| Open | 455 Kc | .05 uf | 12SA7 Grid (Stator of C-1) | 2 trimmers on top of T-3 **C-2 | IF | 3000 uv |
| 1400 Kc | 1400 Kc | .00005 uf | Antenna lug with Ant. Removed | | Oscillator | 360 uv |

**Since the antenna section of the variable has no trimmer, the rotor of the variable should be rocked back and forth on both sides of 1400 Kc while adjusting the oscillator trimmer for maximum output. This is to obtain the combination of rotor and trimmer setting to give perfect tracking of the two sections of the variable condenser and consequently give maximum output.

Check sensitivity at 600 Kc. If weak, adjust antenna section plates for maximum output at 600 Kc. Tracking of the condenser at points other than 1400 Kc is accomplished by bending the outside plates on the variable condenser rotor, which are cut for this purpose. When bending plates to track the condenser at any given frequency, keep in mind the fact that this will affect the tracking at all frequencies below the point where the plates are bent. A tuning wand is very helpful in checking the tracking of this condenser, to indicate whether more or less capacity is needed.

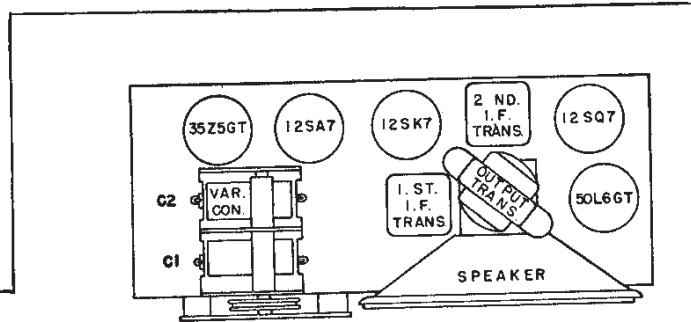
The alignment procedure should be repeated stage by stage in the original order for greatest accuracy.

Always keep the output from the test oscillator at its lowest possible value to make the AVC action of the receiver ineffective.



OUTLINE FOR TUBE LAYOUT

MODELS 442, 444AH,
 CHASSIS RE-91, RE-200



OUTLINE FOR TUBE LAYOUT

MODELS 547, 547A,
 CHASSIS RE-242

ALIGNMENT PROCEDURE

PRELIMINARY:

| | | |
|--|-------------------------------|-----------------|
| Output meter connection | Across loudspeaker voice coil | 0.8 volts |
| Output meter reading to indicate 200 milliwatts (standard output) | See chart below | See chart below |
| Dummy antenna to be used in series with generator output | See chart below | Floating ground |
| Connection of generator output lead | See chart below | Floating ground |
| Connection of generator ground lead | See chart below | 30% 400 cycles |
| Generator modulation | Fully clockwise | Horizontal |
| Position of Volume Control | Horizontal | |
| Position of dial pointer with variable fully closed | | |
| Place the set loop in the same position with respect to the rear of the chassis, and the same distance from the chassis, as it would be with the set mounted in the cabinet. | | |

| Position of Variable | Frequency of Generator | Dummy Antenna | Generator Output Connection | Trimmers Adjusted In Order Shown For Maximum Output | Function of Trimmer |
|----------------------|------------------------|---------------|-----------------------------|---|---------------------|
| Open | 455 | .05 mfd. | 12SA7 Grid (Stator of C-1) | Top of 2nd & 1st IF trans, T2 & T1 | IF |
| 1400 | 1400 | | *Test Loop | C2; C1, Trimmers on Variable Condenser | Osc. Ant. |
| 600 | 600 | | *Test Loop | Check Point (If weak, adjust variable plates for maximum output.) | |

*Standard Hazeltine Test Loop Model 1150 or 3 turns of wire about 6" in diameter, placed about one foot from the set loop.

The alignment procedure should be repeated in the original order for greatest accuracy. Always keep the output from the signal generator at its lowest possible value to make the AVC action of the receiver ineffective.