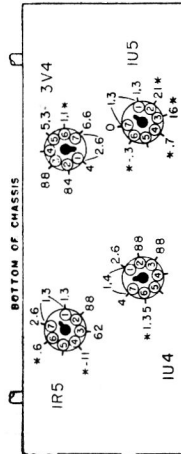


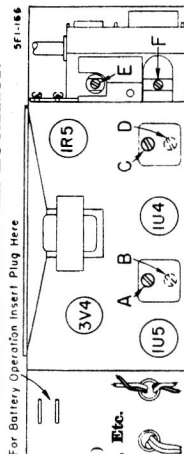
VOLTAGE DATA

- Voltage readings taken between tube socket terminals and B minus (metal shell of electrolytic condenser).
- Dial set to low frequency, no signal, and volume control minimum.
- Measurements made from 117 volts AC line. If measured from DC line, voltages may be slightly lower.
- Voltage readings taken with a vacuum tube voltmeter. Socket terminals marked with an asterisk indicate much lower voltage or zero voltage if measured with a 1000 ohm-per-volt meter.
- If measurements are made on battery operation, tube filament and B plus voltages will vary with the condition of the batteries. These voltages will equal the terminal voltage of the A or B battery less the voltage drop through components.



* If taken with a 100 ohm-per-volt meter, readings will be lower or zero.

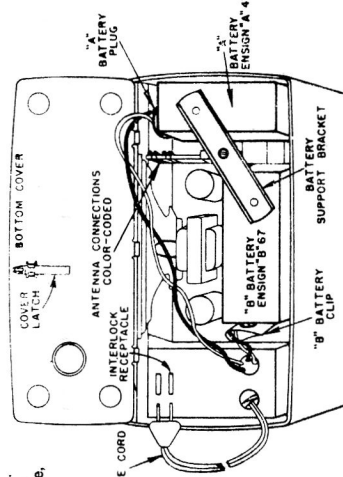
TUBE AND TRIMMER LOCATION



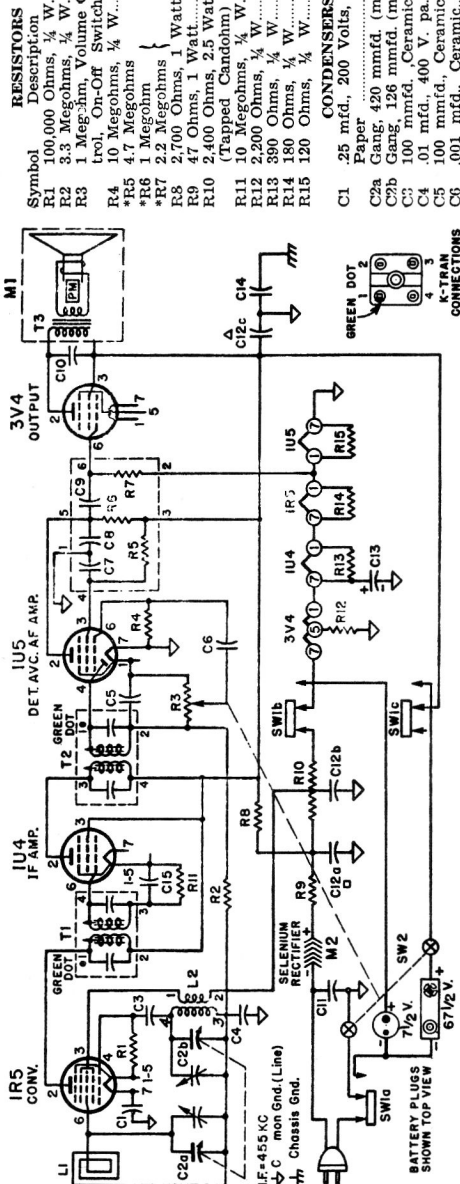
For Battery Operation Insert Plug Here

COILS, TRANSFORMERS, Etc.

- L1 Antenna, Loop
- L2 Coil, Oscillator
- T1 Transformer, 1st I.F.
- T2 Transformer, 2nd I.F.
- T3 Transformer, Output
- M1 Speaker (4"PM) and Output Transformer
- M2 Rectifier, Selenium
- SW1 Switch, Power Change, 4PDT
- SW2 Switch, On-Off
- *Couplete (Includes C7, C8, C9, R5, R6, R7)



To install replacement batteries, slide the cover latch and open the hinged bottom cover. Then remove the screw which holds the battery support bracket in place. Thus bracket holds the batteries in place. "B" battery by means of snap buttons. Remove the "A" battery plug and replace the batteries. Connect the new batteries and re-install the battery support bracket.



* C7, C8, R5, R6, R7 are contained in a multiple-unit component called a couplete (part of number 69A4-3). Although a defective section of the couplete can sometimes be replaced by individual components, we recommend replacing the entire couplete.

Note that numerals 1, 2, 3, 4, 5, and 6 shown at schematic connections, correspond to couplete lead numbers printed on body of couplete directly above the leads.

ALIGNMENT PROCEDURE

- Use battery power for alignment if fresh batteries are available.
- When using AC power, an isolation transformer should be used if available. If not using an isolation transformer, connect a .1 mfd. condenser in series with the signal generator low side to B minus of radio chassis.
- Connect loop antenna and maintain same relative position as when in cabinet.
- Set volume control full on.
- Connect output meter across speaker voice coil.
- Use lowest setting of signal generator capable of producing adequate output meter indication and then proceed as outlined below.
- Repeat adjustments to insure good results.

NOTE

To avoid splitting the slotted head of powdered iron core tuning slugs in I.F. transformer, use an alignment tool with a screw driver blade $\frac{1}{8}$ " wide.

Step	Dummy Antenna in Series with Signal Generator (High Side)	Signal Generator Frequency	Receiver Gang Setting	Trimmer Description	Trimmer Designation	Type of Adjustment
1	.001 mfd. when using A. C. .1 mfd. when using Battery	455 KC	Gang fully open	2nd IF 1st IF	A, B C, D (see note below)	Maximum Output
2	.001 mfd. when using A. C. .1 mfd. when using Battery	1620 KC	Gang fully open	Oscillator (on gang)	E	Maximum Output
Install chassis in cabinet. Connect loop antenna.						
3	Loop of several turns of wire, or place generator lead close to receiver loop for adequate signal.	1400 KC	Time in generator signal	Antenna (on gang)	F	Maximum Output
Mount dial pointer. Set pointer at 1400 KC with gang condenser tuned to 1400 KC signal.						

NOTE: Adjustments B and D are made from underside of chassis.