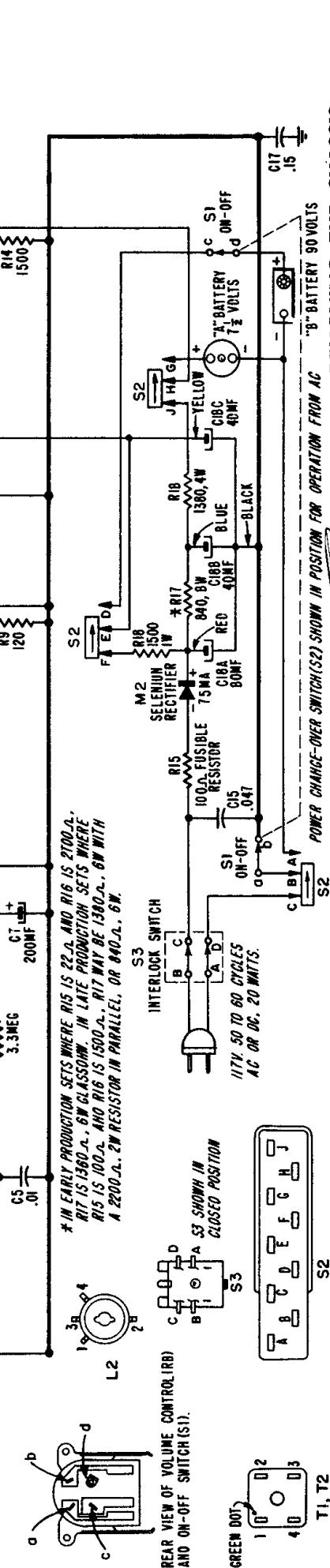
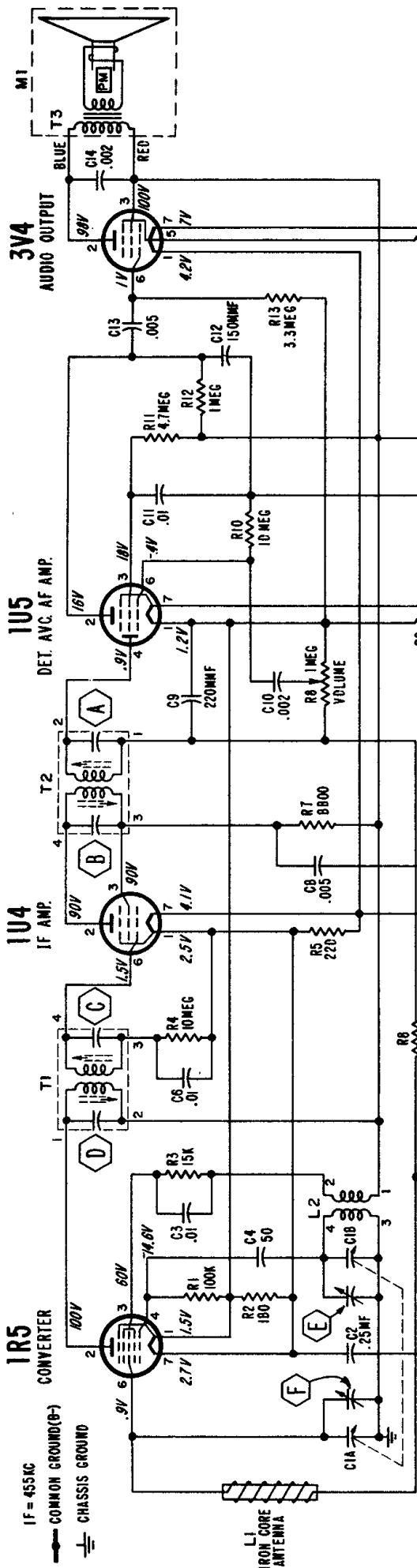


Admiral

CHASSIS 4E2 and 4H2
 MODELS 4E21 • 4F22 • 4F24 • 4F26 • 4F28
 4H22 • 4H24 • 4H26 • 4H28



VOLTAGE DATA

Voltages shown on schematic diagram.

- All voltages taken between the tube socket terminals and B minus (pin 7 of 1U5 tube).
- Dial set at low frequency end; volume control at minimum.
- Voltages measured on 117 volts AC with vacuum-tube voltmeter.

SCHEMATIC NOTES

The chassis need be removed from the cabinet top section only when servicing the printed wiring side.

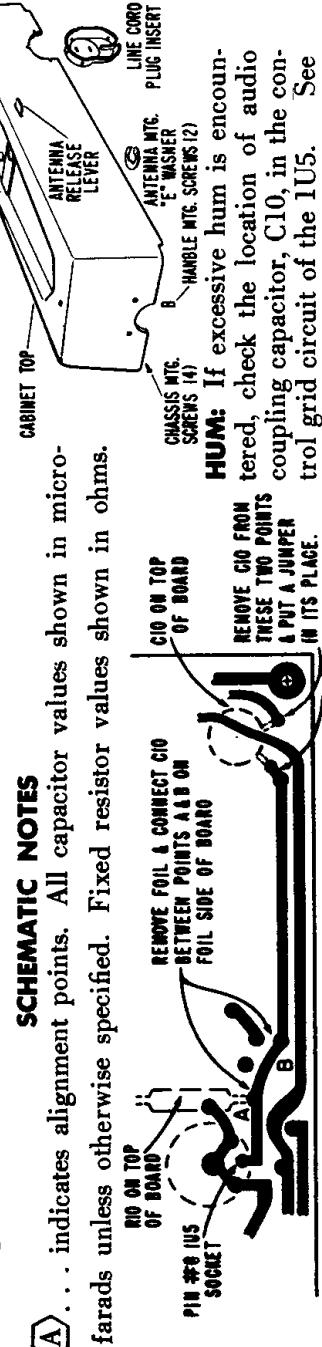
To remove the chassis, proceed as follows:

- Remove On-Off-Volume and Tuning knobs.
- Remove screws mounting cabinet cover to chassis (2 on each side).
- Free cabinet cover from chassis by lifting cover up. Be careful not to cause any undue strain on leads going from "pop-up" antenna in cabinet cover to chassis.

To service the component side of the chassis, move the bottom section of the cabinet by rotating the plastic knob at the bottom of the cabinet one-third of a turn to the left; then slide off bottom section of cabinet.

To service the chassis in operation with bottom cabinet section removed, the INTERLOCK SWITCH must be in a closed position.

View of Wiring Side of Printed Board.



Admiral

CHASSIS 4E2 and 4H2
 MODELS 4E21 • 4F22 • 4F24 • 4F26 • 4F28
 4H22 • 4H24 • 4H26 • 4H28

ALIGNMENT PROCEDURE

- Battery power is preferable for alignment; use FRESH batteries. If this set is to be aligned while operating on an AC power line, an isolation transformer should be used. If an isolation transformer is not available, connect a .1 mfd. capacitor in series with the signal generator low side to B minus (pin 7 of 1U5 tube).
- The case top cover must be removed to align IF (step 1).

- Set Volume control to maximum.
- Connect output meter across speaker voice coil.
- Use lowest setting of signal generator capable of producing adequate indication on lowest scale of output meter.
- Use a non-metallic alignment tool for IF transformers.
- Repeat adjustments to insure good results.

Step	Dummy Antenna in Series with Signal Generator	Connection of Signal Generator (High Side)	Signal Generator Frequency	Receiver Gang Setting	Adjustment Description	Adjustment Designation	Type of Adjustment
1	.1 mfd. capacitor	Stator of antenna tuning capacitor	455 KC	Gang fully open	2nd IF 1st IF	A, B* C, D*	Maximum output
Install the case top section removed during IF Alignment							
2	Loop of several turns of wire, or place generator lead close to receiver for adequate signal pickup.	No actual connection (signal by radiation)	1620 KC	Gang fully open	Oscillator (on gang)	E	Maximum output
3	Loop of several turns of wire, or place generator lead close to receiver for adequate signal pickup.	No actual connection (signal by radiation)	1400 KC	Tune in generator signal	Antenna (on gang)	F	Maximum output

*Adjustments B and D are made from underside of chassis. See figure 1. To avoid splitting the slotted head of powdered iron tuning slug in IF transformers, use an alignment tool with a blade 3/32" wide.

SERVICING THE SET

Servicing "printed" circuit sets is, in general, much the same as servicing ordinary receivers. However, certain tools and techniques are well suited for this type of work. The following items are especially useful:

1. Good pair of long-nose pliers.
2. Sharp wire cutters.
3. Small stiff glue brush (for solder removal).
4. Pencil type soldering iron with a small tip (35 watts or less).
5. 60-40 low temperature rosin core solder (should be used for all soldering).
6. Tinned jumper wires.
7. Metal pick (soldering aid).

WARNING: Excessive heat may damage the "printed" circuit during component replacement if a soldering pencil, iron or gun of higher wattage rating is used.

5. 60-40 low temperature rosin core solder (should be used for all soldering).
6. Tinned jumper wires.
7. Metal pick (soldering aid).

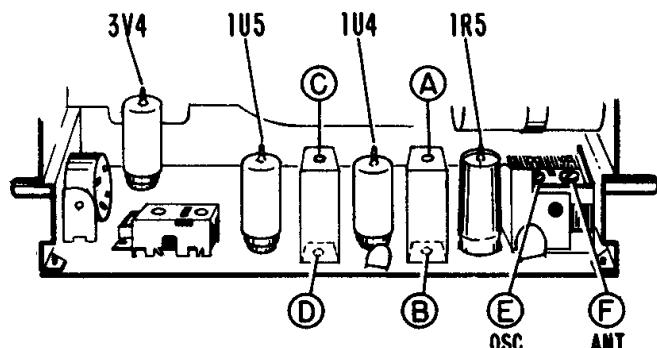


Figure 1. Tube and Adjustment Location.

COMPONENT REPLACEMENT

All components used in this receiver are of standard size and design and are mounted on the top side of the chassis.

Resistors and capacitors should be replaced by clipping out the defective part and neatly soldering the new part to the connecting leads remaining from the original part.

If a unit, such as the oscillator coil or IF transformer is to be removed, heat the mounting lugs with a pencil type soldering iron and straighten them with a long nose pliers or metal pick. Continue heating the lugs and brush away the molten solder with a small stiff glue brush. Remove the defective unit by lifting it off the chassis. Before inserting the new unit, be certain that the lug holes are open and free from solder. Forcing a lug against a solder filled lug hole may break the bond between the chassis base and the "printed" wiring.

An open or damaged section of "printed" circuit wiring can be replaced by soldering a short jumper wire across the points to be connected.

To avoid need for complete tube socket replacement, defective tube socket pin clips may be replaced individually. Tube socket pin clips are available under part number 87A35-2.

Note: If sockets must be replaced, the tubular shield (center connection) at the bottom of each tube socket must be securely soldered to the "printed" circuit wiring, otherwise hum or oscillation will result.