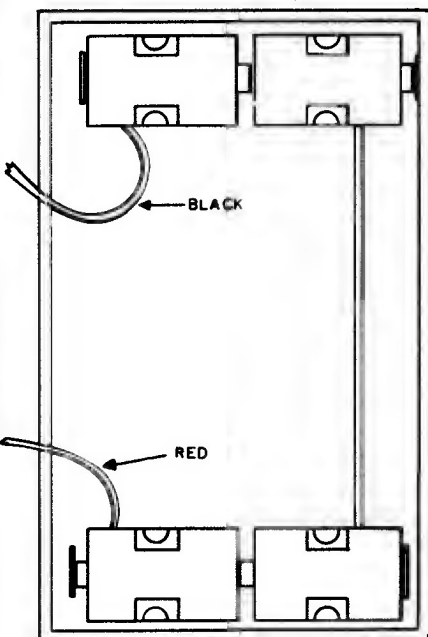
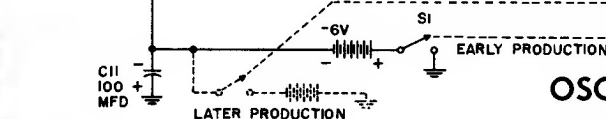


NOTE: ALL VOLTAGES TAKEN WITH VTVM AND NO SIGNAL. ALL RESISTORS 1/2 WATT  $\pm 10\%$



**CAUTION:** Always consult figure when installing the batteries and be sure that they are placed in the clips exactly as shown. Incorrect placement of the batteries will make the receiver inoperative and will cause damage to some of its parts.



## OSCILLATOR COUPLING

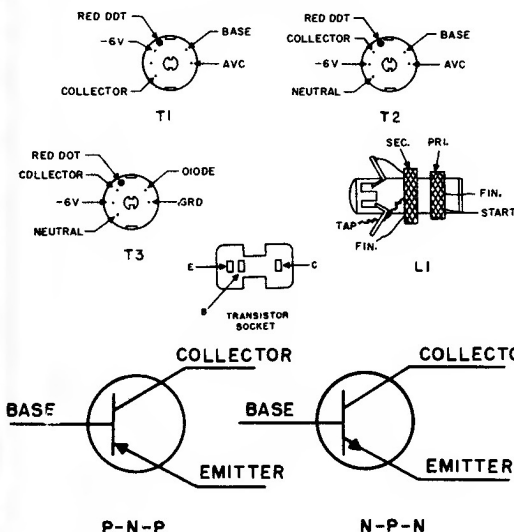
The oscillator injection voltage is variable by changing the coupling between the windings of the oscillator coil. The injection voltage should be checked:

1. Whenever the MIXER/OSC transistor,  $Q_1$  is replaced.
2. If the receiver will not operate properly when the battery supply voltage drops to approximately 4 volts.
3. If the receiver is lacking in sensitivity at the low frequency end of the dial or has "squaging" near the high end of the dial.

## ADJUSTMENT

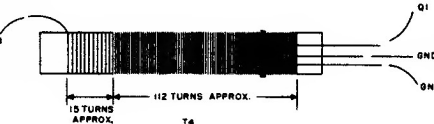
The coupling between windings of the oscillator coil has been factory set to provide an oscillator injection voltage (as measured across  $R_2$  with a sensitive R-F voltmeter) of 60 millivolts. The injection voltage is set with the tuning gang closed, and a battery supply voltage of a full 6 volts. With the tuning gang open the reading should not exceed 150 millivolts.

If careful measurement reveals that the injection voltage is not within the approximate factory set range it may be corrected simply by loosening the wax seal on the coupling winding and moving it a short distance as required. Be sure to reseal the winding in position when the adjustment has been completed.



P-N-P

N-P-N



## IF ALIGNMENT

STEP	SIGNAL GENERATOR CONNECTIONS	GENERATOR FREQUENCY	RECEIVER DIAL SETTING	ADJUST	REMARKS
1	Across secondary of stick-loop ant. (terminal strip on top side of chassis).	455 KC modulated	Tuning gang open.	A, B & C i-f slugs	Tune for maximum output.
2	Same as step 1.	Same as step 1	Slowly tune over entire range.	E & D Neutralizing adj.	Adjust so that no oscillation occurs throughout the tuning range.

I-F oscillation will appear in the output, as heard in the speaker, as distortion that may range from "motor boating" to howl. Some compromise adjustment of the i-f slugs A, B & C, may be required to permit neutralization over the entire tuning range.

## RF ALIGNMENT

3	Loosely couple to stick-loop antenna.	1620 KC modulated	Tuning gang open.	G, Osc. trimmer	Tune for maximum output.
4	Same as step 3.	535 KC modulated	Tuning gang closed.	F, Osc. Coil slug	Same as step 3.
5	Same as step 3.	1400 KC modulated	1400 KC	H, Ant. trimmer	Same as step 3.

## TRANSISTOR SUBSTITUTION CHART

Hallicrafter Part	General Transistor	G. E.	Raytheon	RCA	Texas Inst.
112-001	GT 761	2N136	760, 2N112, C K 761	--	--
112-002	GT 760	2N135	CK760, 2N112 CK760	2N139	--
112-003*	GT2N109	2N186	--	2N109	2N109, 352
112-004	GT81, 2N109	2N191		2N109	310

\* The audio output transistors were installed at the factory as a matched pair. If replacement of either unit becomes necessary it is recommended that a new matched pair be installed.

