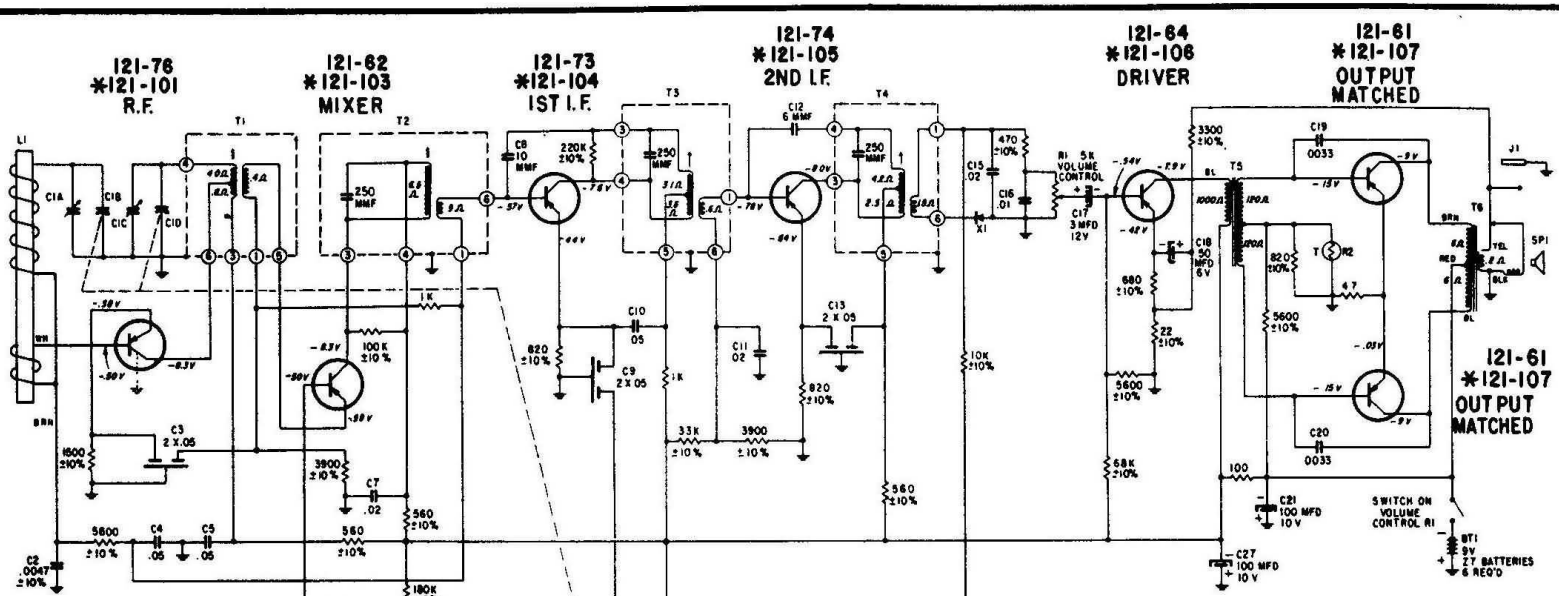
ZENITH RADIO CORP.

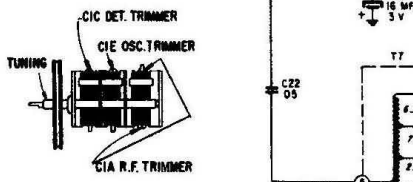
Model "Royal 755"

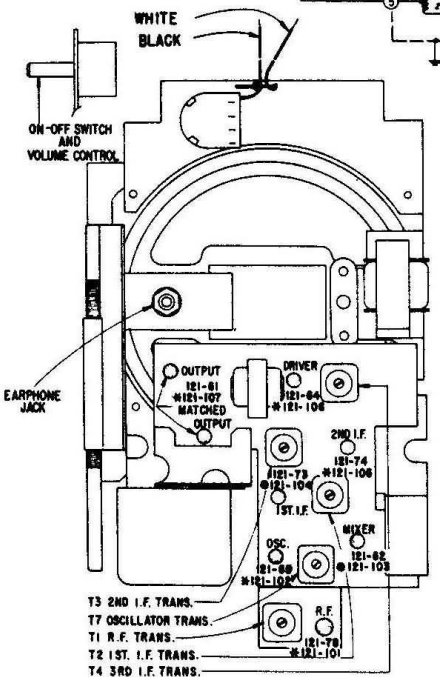
Chassis 8CT41, 8CT41Z2

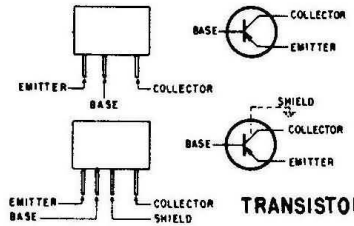
(Continued on page 188, over)

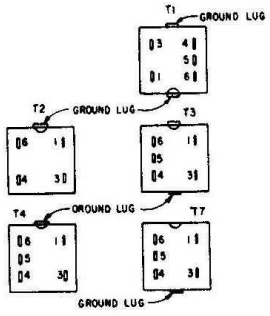
These transistor portable chassis are conventional superheterodyne receivers with a tuned R.F. amplifier. They use an individual mixer and oscillator to produce the 455 Kc intermediate frequency. Chassis 8CT41 and 8CT41Z2 are virtually identical except for different transistors and a few other parts.











SCHEMATIC DIAGRAM FOR 8CT41 & 8CT41Z2

ALL RESISTORS ARE 1/2 WATT, CARBON, ±20% TOLERANCE UNLESS OTHERWISE SPECIFIED
ALL VOLTAGES ARE DC UNLESS OTHERWISE SPECIFIED
ALL CONDENSERS ARE IN MICROFARADS UNLESS OTHERWISE SPECIFIED
D.C. VOLTAGES SHOWN ARE MEASURED FROM CHASSIS WITH NO SIGNAL USING AN A.C.-D.C. OR VACUUM TUBE VOLTMETER
DENOTES CHASSIS

ALIGNMENT PROCEDURE

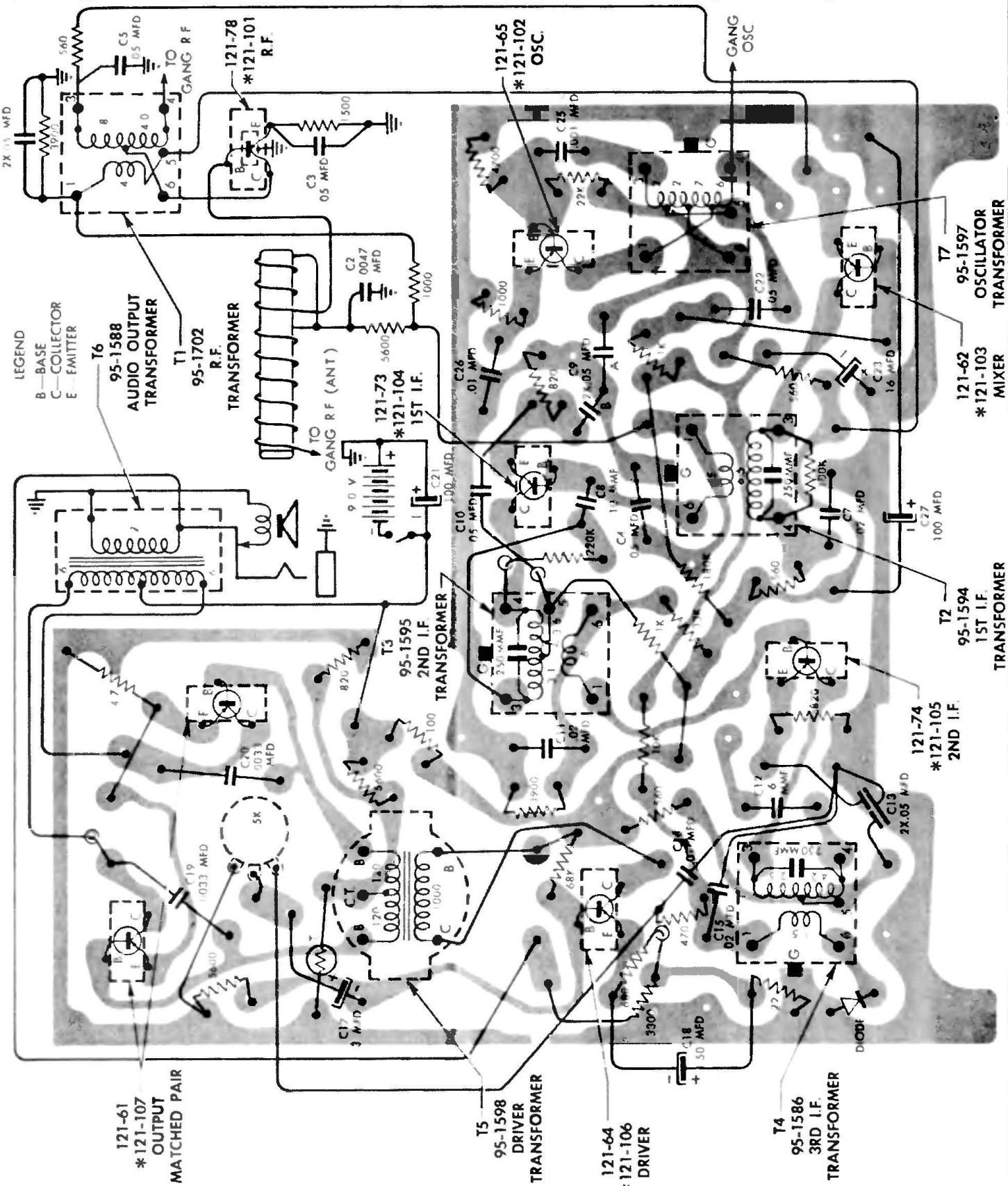
Operation	Input Signal Frequency	Connect Inner Conductor From Oscillator To	Connect Outer Shield Conductor From Oscillator To	Set Dial At	Trimmers	Purpose
1	455 KC	ONE TURN LOOSELY COUPLED TO WAVEMAGNET	Chassis	600 KC	Adj. T2, T3, T4 for maximum output.	For I.F. Alignment
2	1620 KC		—	Gang wide open	C1E	Set oscillator to dial scale.
3	600 KC		—	Set dial near 600 KC	Adjust slug in T7	Adjust T7 for maximum output while rocking gang. Tune T7 for maximum output regardless of dial accuracy.
4	REPEAT STEPS 2 & 3		—	—	—	
5	1260 KC		—	1260 KC	C1A. C1E	Align loop ant.

CHASSIS INFORMATION CHART

Chassis	Chassis Color Dot	Transistor Layout Label Color	Part No.	R.F.	Mixer	Osc.	1st I.F.	2nd I.F.	Crystal Diode Detector	Driver	Output-Output	Supplier
*8CT41	Red	Black 102-6298	Zenith E.I.A. Type	121-101 2N544 PNP	121-103 2N411 PNP	121-102 2N409 PNP	121-104 2N409 PNP	121-105 2N409 PNP	103-19 1N87G	121-106 2N407 PNP	121-107 2N407 Matched Pair PNP PNP	Sylvania
8CT41Z2	Black	Red 102-6266	Zenith E.I.A. Type	121-78 2N544 PNP	121-62 2N411 PNP	121-65 2N409 PNP	121-73 2N409 PNP	121-74 2N409 PNP	103-19 1N87G	121-64 2N407 PNP	121-61 2N407 Matched Pair PNP PNP	R.C.A.

COMPONENT REPLACEMENT

Resistors and capacitors should be replaced by clipping out the defective part and neatly soldering in the new part. If a unit, such as the oscillator coil or I.F. transformer, is to be removed heat the mounting lugs with a pencil type soldering iron and move them away from the soldered connection 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.



CHASSIS, WIRING AND COMPONENTS VIEWED FROM WIRING SIDE