

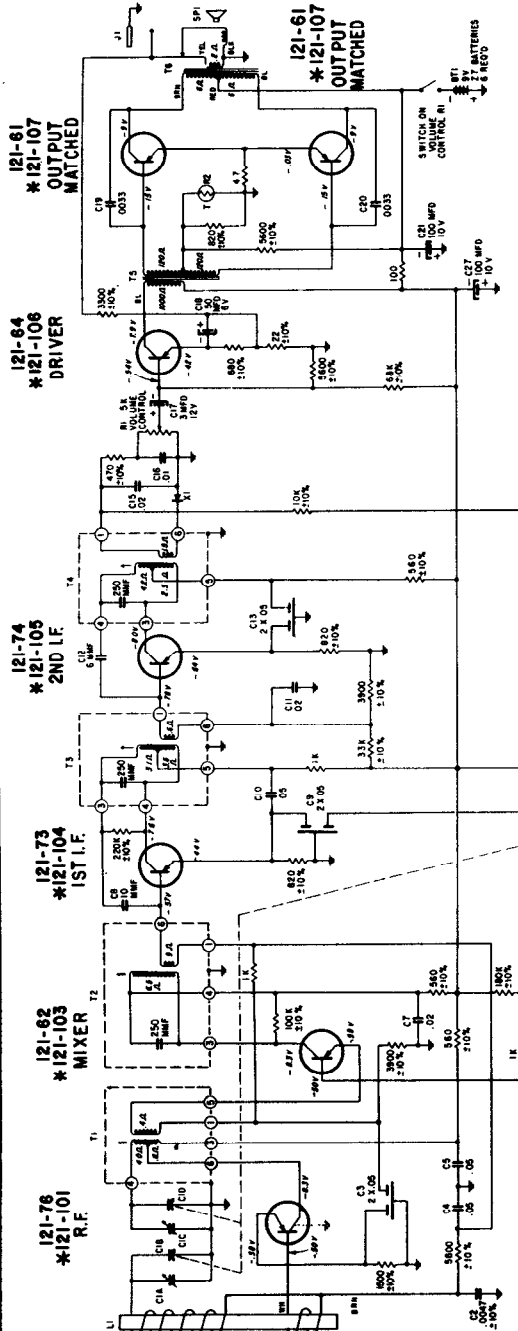
# ZENITH RADIO CORP.

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

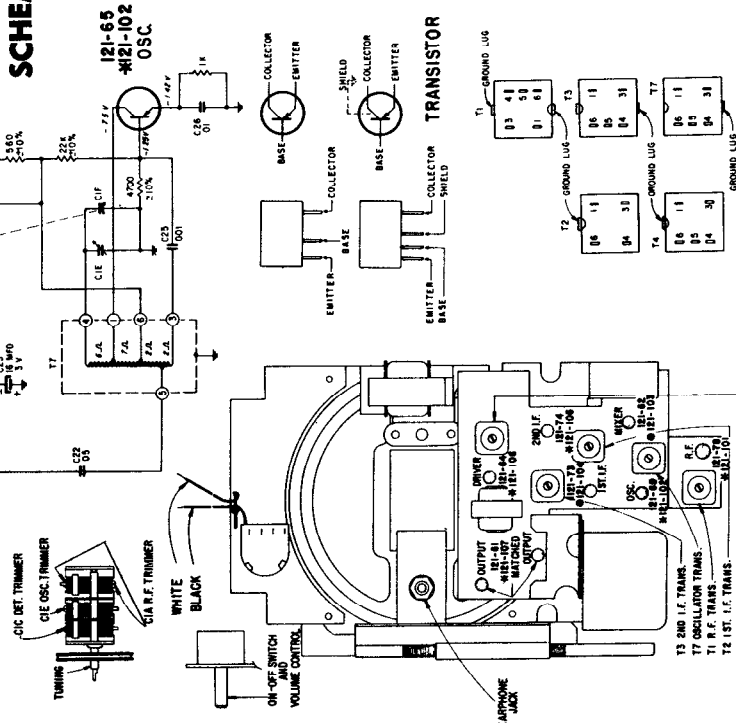
ALL RESISTORS ARE 1/4 WATT, CARBON, 5% TOLERANCE UNLESS OTHERWISE SPECIFIED  
 ALL VOLTAGES ARE DC UNLESS OTHERWISE SPECIFIED  
 ALL CAPACITORS ARE IN MICROFARADS UNLESS OTHERWISE SPECIFIED  
 USE AN AC METER WITH NO SIGNAL  
 USING AN AC METER WITH NO SIGNAL  
 \*REOTES CHASSIS

### 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 gang 600 KC	Adjust slug in T7	Adjust T7 for maximum output while holding T4 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 Color	Part No.	R.F.	Mixer	Osc.	1st I.F.	2nd I.F.	Crystal Diode Detector	Driver	Output-Output	Supplier
*8CT41	Red	Black	Zenith E.A. Type	121-101, 2K544 PNP	121-103, 2K544 PNP	121-102, 2N409 PNP	121-104, 2N409 PNP	121-105, 2N407 PNP	103-19, 1N87G	121-106, 2N407 PNP	121-107, 2N407 PNP	Sylvania Matched Pair PNP
8CT41Z2	Black	Red	Zenith E.L.A. Type	121-78, 2K544 PNP	121-62, 2K411 PNP	121-55, 2K409 PNP	121-73, 2K409 PNP	121-74, 2N409 PNP	103-19, 1N87G	121-64, 2N407 PNP	121-61, 2N407 PNP	R.C.A. Matched Pair PNP



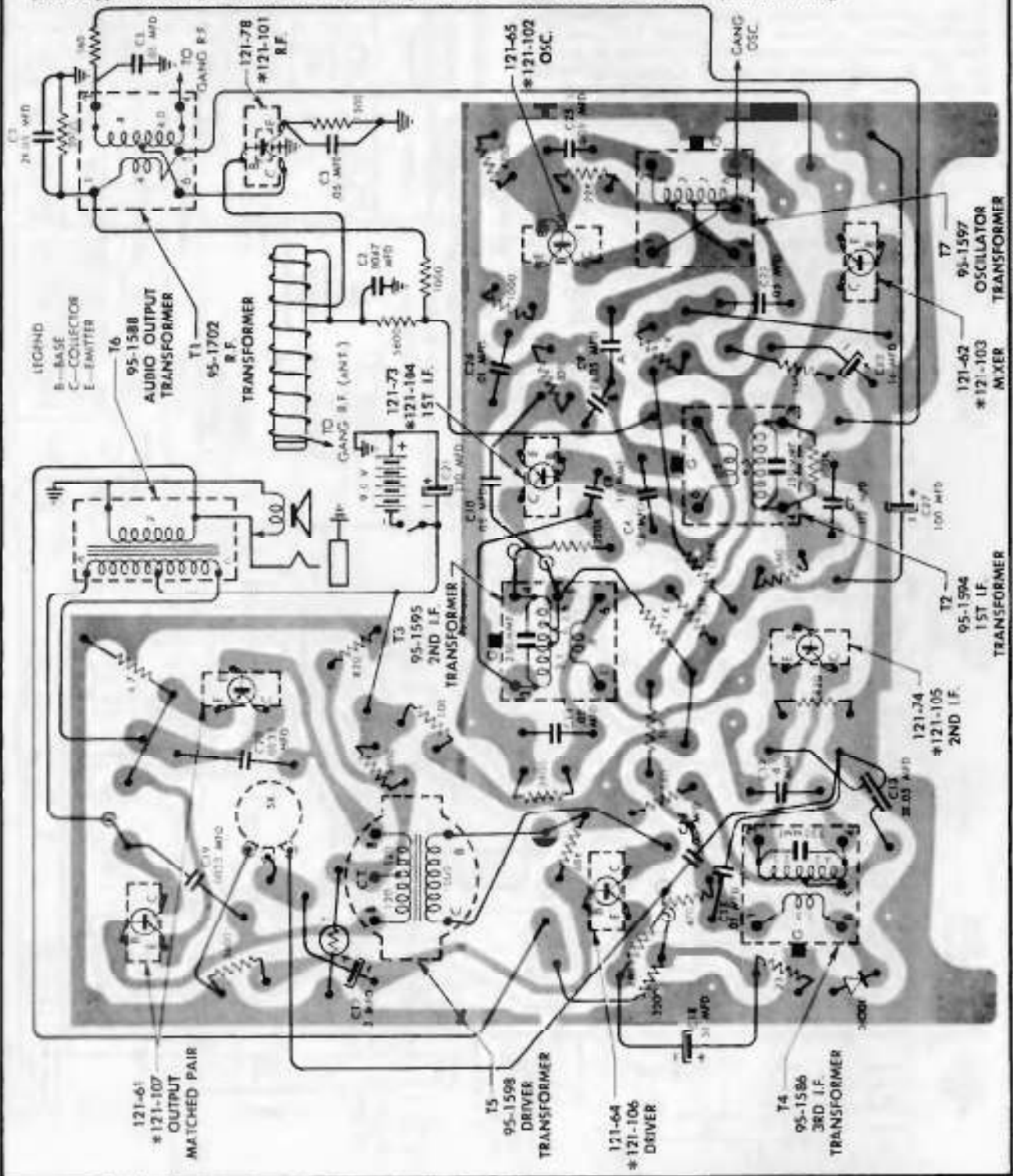
### TRANSISTOR & TRIMMER LAYOUT

ZENITH RADIO Model "Royal 755" - Chassis 8CT41, 8CT41Z2 (Continued)

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.



VIEWED FROM WIRING SIDE

CHASSIS, WIRING AND COMPONENTS