

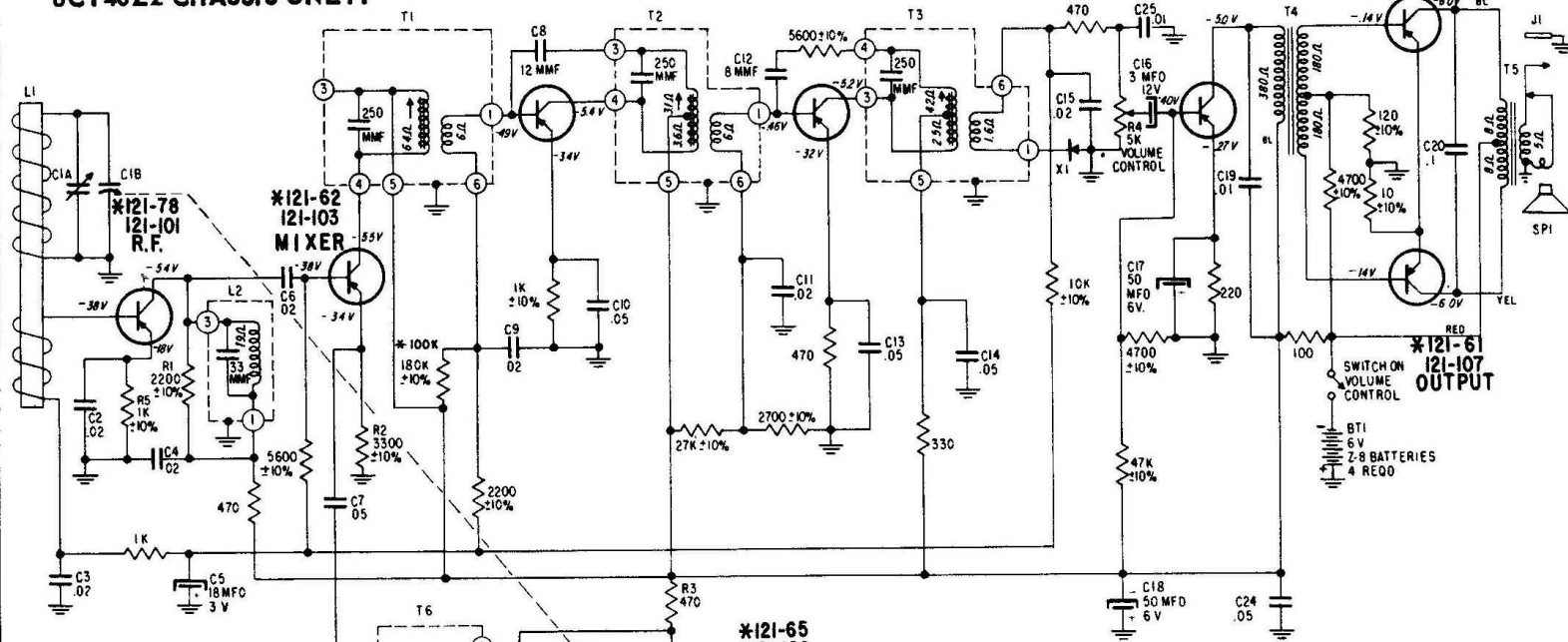
* INDICATES PARTS USED ON 8CT40Z2 CHASSIS ONLY.

* 121-73
121-104
1ST I.F.

* 121-74
121-105
2ND I.F.

* 121-64
121-106
DRIVER

* 121-61
121-107
OUTPUT



These transistor portable chassis are conventional superheterodyne receivers. They use an untuned R.F. stage with an individual mixer and oscillator to produce the 455 Kc intermediate frequency. Chassis 8CT40 and 8CT40Z2 are virtually identical except for different transistors and a few other parts. The parts marked by asterisks on the chassis wiring and component drawing apply only to chassis 8CT40Z2.

(Continued on page 182)

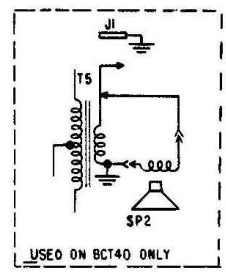
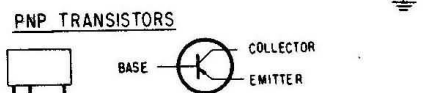
ZENITH RADIO CORP. Model "Royal 500E" - Chassis 8CT40, 8CT40Z2

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. T1, T2 T3 for maximum output.	For I.F. Alignment	
2	1620 KC		—	Gang wide open	C1C	Set oscillator to dial scale.	
3	600 KC		—	Near 600 KC	Adjust slug in T6	Adjust T6 for maximum output while rocking gang. Tune T6 for maximum output regardless of dial accuracy.	
4	REPEAT STEPS 2 & 3		—	—	—	—	—
5	1260 KC		—	—	1260 KC	C1A	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
8CT40	Black	Black 102-6283	Zenith E.I.A. Type	121-101 2N544 PNP	121-4 03 2N411 PNP	121-102 2N409 PNP	121-104 2N409 PNP	121-105 2N409 PNP	103-19 1N87G	121-106 2N407 PNP	121-107 2N407 PNP	Sylvania Matched Pair PNP
*8CT40Z2	Red	Red 102-5720	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 PNP	R.C.A. Matched Pair PNP

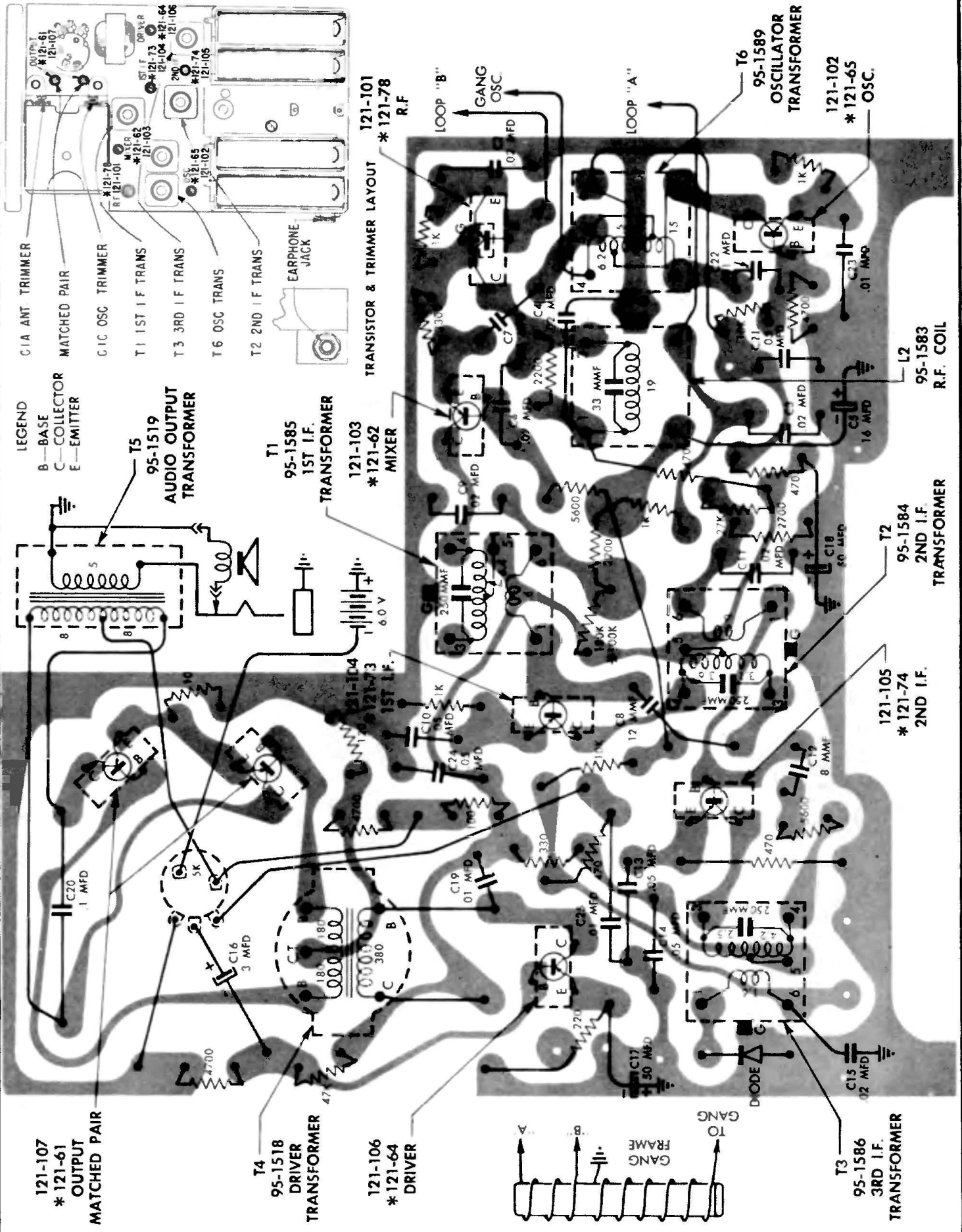


NOTES
 ALL RESISTORS ARE 1/2 WATT, CARBON, ±20% TOLERANCE UNLESS OTHERWISE SPECIFIED
 ALL VOLTAGES ARE D.C. UNLESS OTHERWISE SPECIFIED
 ALL CONDENSERS ARE IN MICROFARADS UNLESS OTHERWISE SPECIFIED
 D.C. VOLTAGES SHOWN ARE MEASURED FROM CHASSIS WITH NO SIGNAL USING AN AC-DC OR VACUUM TUBE VOLTMETER
 DEMOTES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

DIAGRAM FOR 8CT40 & 8CT40Z2

ZENITH RADIO CORP. Model "Royal 500E" -- Chassis 8CT40, 8CT40Z2

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CHASSIS, WIRING AND COMPONENTS