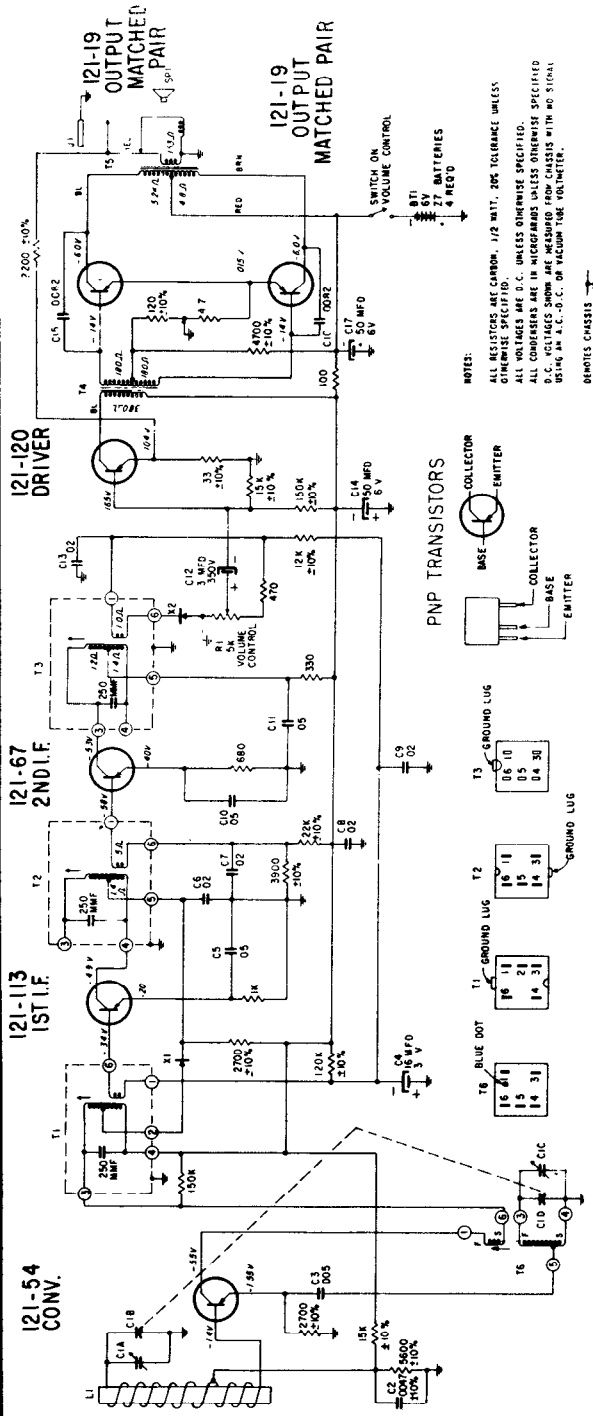


# ZENITH

CHASSIS 6CT41Z1  
MODEL "ROYAL 675"

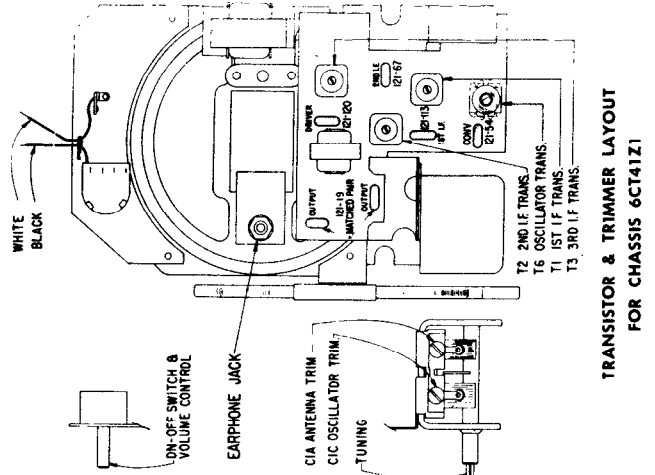
(Continued on page 184, over)



NOTES:  
ALL RESISTORS ARE CARBON, 1/2 WAT. 20% TOLERANCE UNLESS OTHERWISE SPECIFIED.  
ALL CAPACITORS ARE POLYESTER UNLESS OTHERWISE SPECIFIED.  
ALL VOLTAGES ARE D.C. 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

This transistor portable chassis is a conventional superheterodyne receiver. This chassis has a converter to produce the 455 Kc intermediate frequency. The first and second intermediate frequency amplifiers are conventional. A (103-19) X1 diode acts as a variable R.F. load across one half of the primary of the 1st I.F. transformer, thus preventing overload on strong signals. On strong signals the AVC voltage is increased and is fed to the base of the 1st I.F. amplifier, this tends to reduce  $I_c$  of the 1st I.F. As  $I_c$  decreases  $E_c$  in the 1st I.F. rises and approaches that of  $E_c$  in the converter. When this occurs, X1 begins to conduct and loads down the 1st I.F. transformer.



## SCHEMATIC DIAGRAM FOR 6CT41Z1

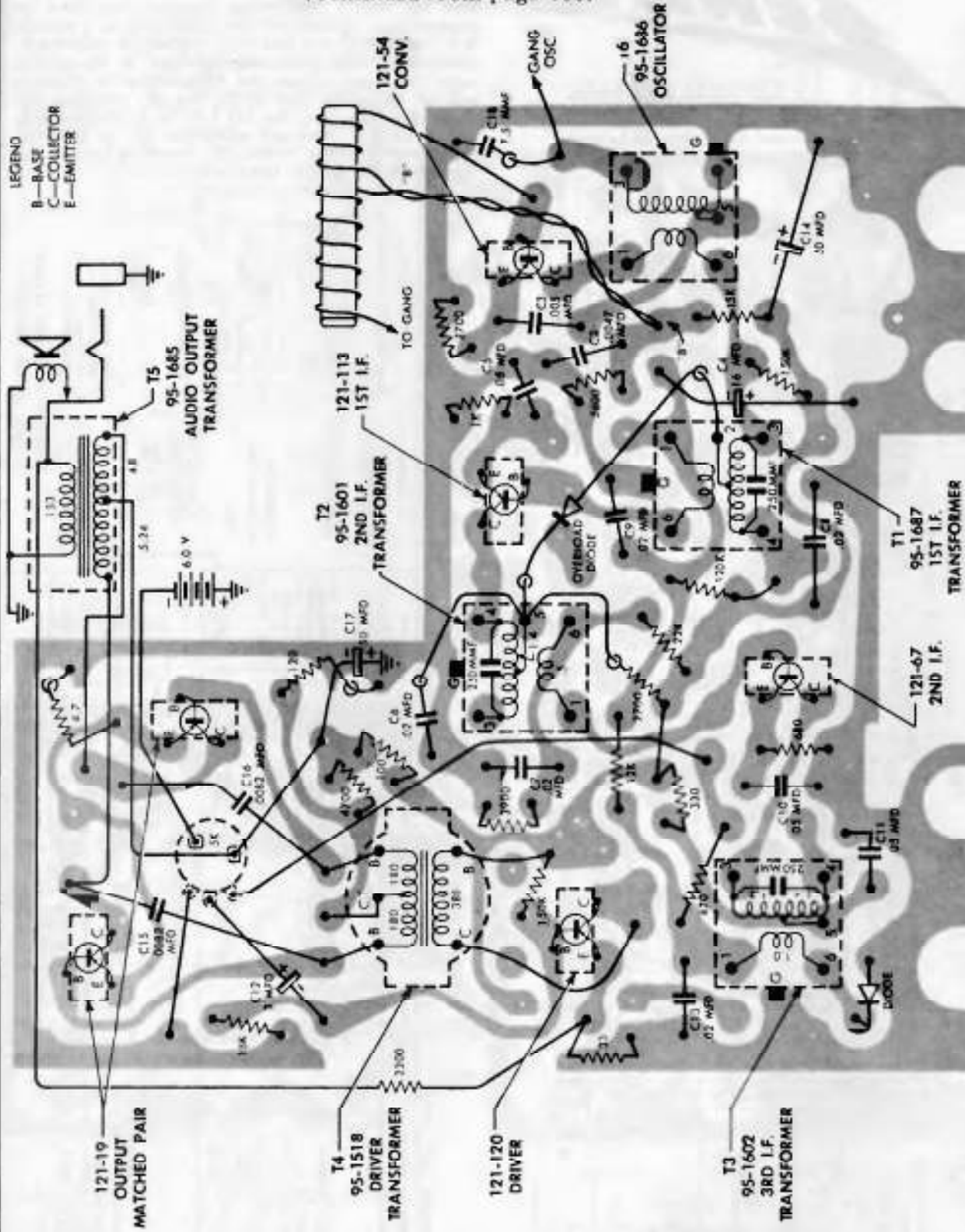
### ALIGNMENT PROCEDURE

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	535 KC			Gang Closed	Adjust slug in T6	Set Oscillator to dial scale.
4	REPEAT STEPS 2 & 3					
5	1260 KC			1260 KC	C1A	Align loop ant.

### CHASSIS INFORMATION CHART

Chassis Color Dot	Chassis Label Color	Transistor Layout Color	Part No.	Conv.	1st. I.F.	2nd. I.F.	Crystal Diode Detector	Driver	Output-Output	Supplier
Black	Black	Black	Zenith RETMA Type	121-54	121-113	121-67	103-19 2N308 1N87G	121-120 R119 PNP	121-19 R16 Matched Pair PNP	Texas Instrument

ZENITH RADIO Chassis 6CT41Z1, Model "Royal 675"  
(Continued from page 183)



CHASSIS, WIRING AND COMPONENTS

VIEWED FROM WIRING SIDE