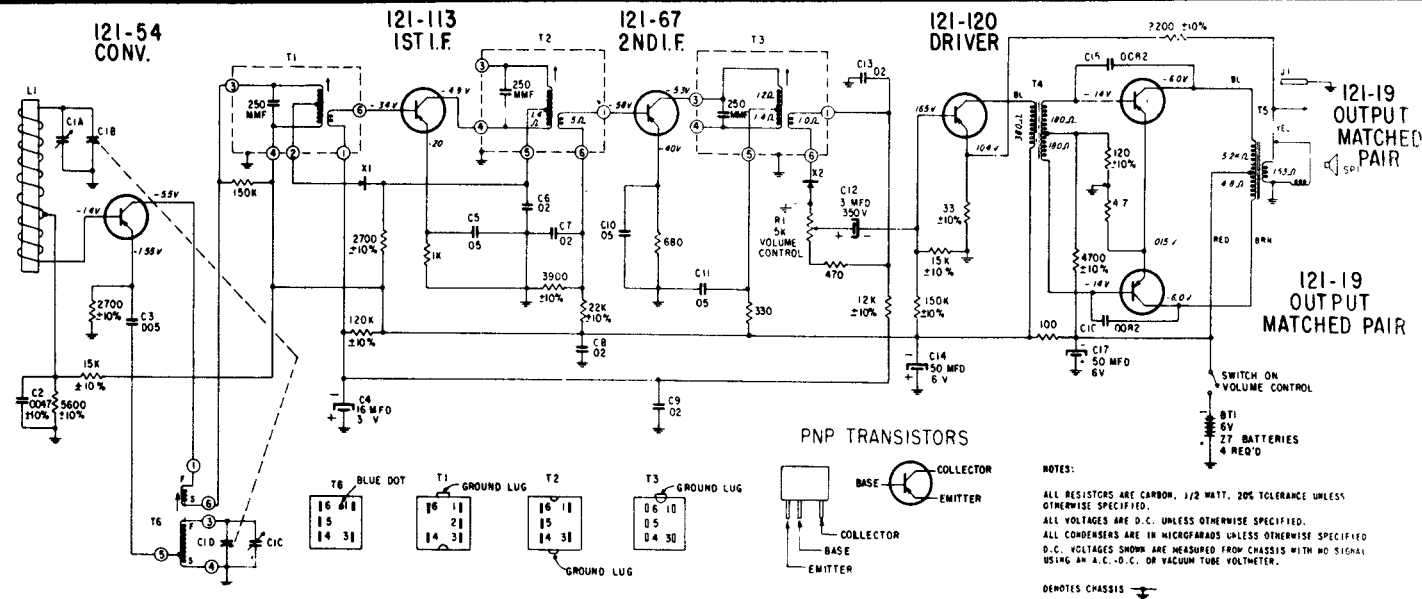


(Continued on page 184, over)

CHASSIS 6CT41Z1
MODEL "ROYAL 675"

ZENITH



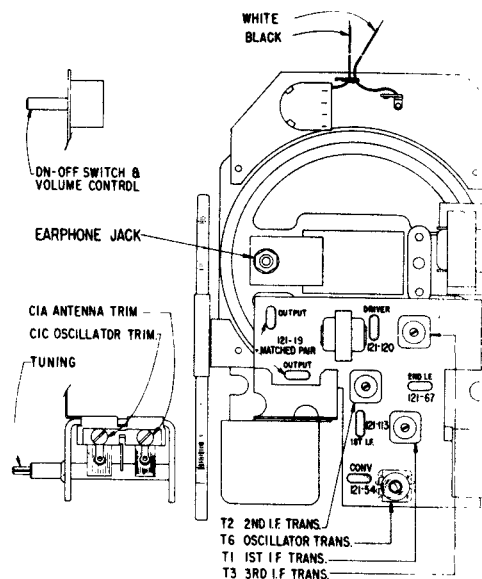
SCHEMATIC DIAGRAM FOR 6CT41Z1

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	Chassis Color Dot	Transistor Layout Label Color	Part No.	Conv.	1st. I.F.	2nd. I.F.	Crystal Diode Detector	Driver	Output-Output	Supplier
6CT41Z1	Black	Black	Zenith RETMA Type	121-54 2N252 PNP	121-113 2N309 PNP	121-67 2N308 PNP	103-19 1N87G	121-120 R119 PNP	121-19 R16 Matched Pair PNP	Texas Instrument



TRANSISTOR & TRIMMER LAYOUT
FOR CHASSIS 6CT41Z1

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_b of the 1st I.F. As I_b decreases I_c in the 1st I.F. rises and approaches that of I_c in the converter. When this occurs, X1 begins to conduct and loads down the 1st I.F. transformer.

121-19
OUTPUT
MATCHED PAIRT4
95-1518
DRIVER
TRANSFORMER121-120
DRIVERT3
95-1602
3RD I.F.
TRANSFORMER

DIODE

121-67
2ND I.F.T1
95-1687
1ST I.F.
TRANSFORMEROVERLOAD
DIODET2
95-1601
2ND I.F.
TRANSFORMERT5
95-1685
AUDIO OUTPUT
TRANSFORMER121-54
CONV.16
95-1686
OSCILLATORLEGEND
B—BASE
C—COLLECTOR
E—EMITTERZENITH RADIO Chassis 6CT41Z1, Model "Royal 675"
(Continued from page 183)