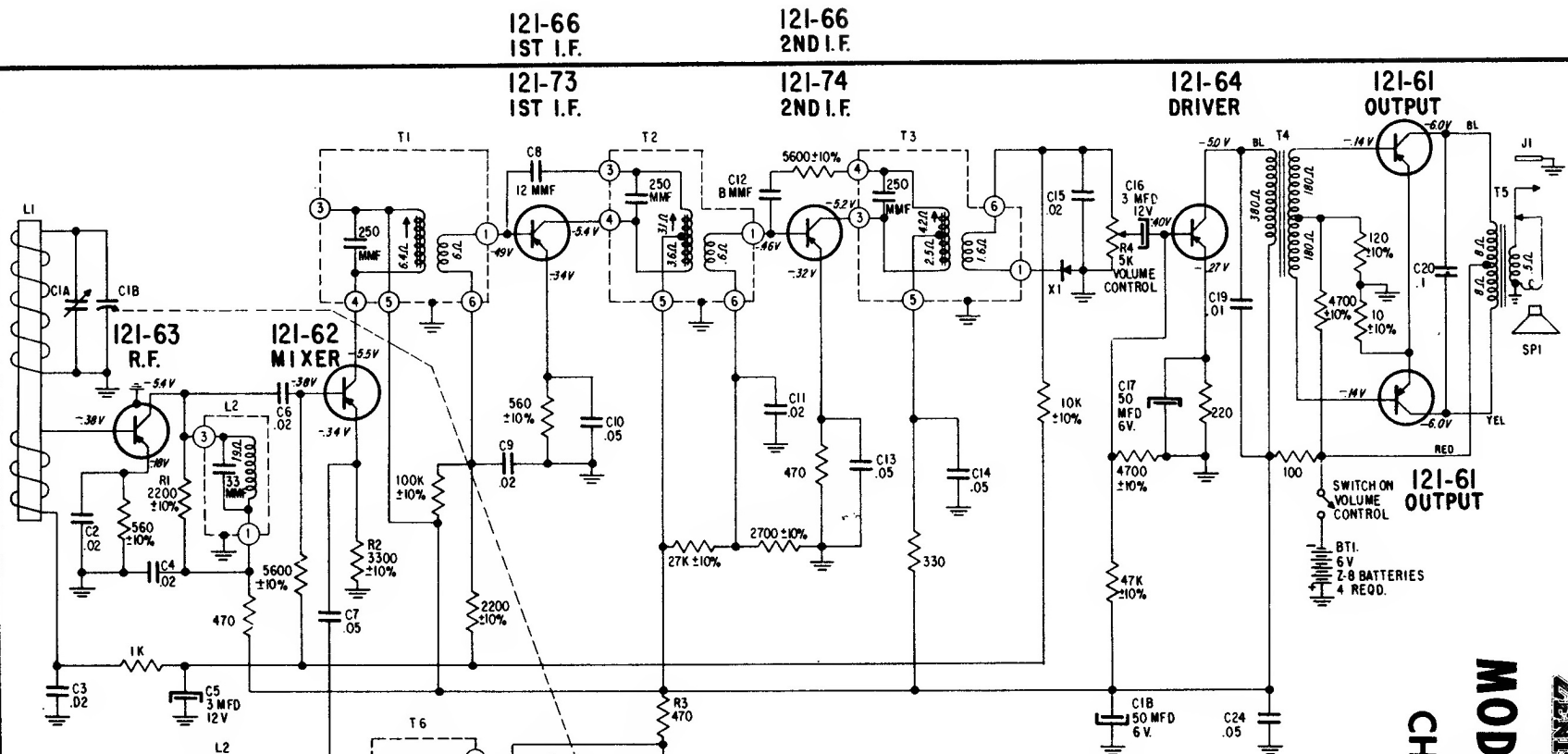
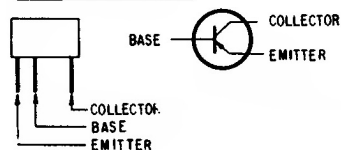


PNP TRANSISTORS



NOTES:

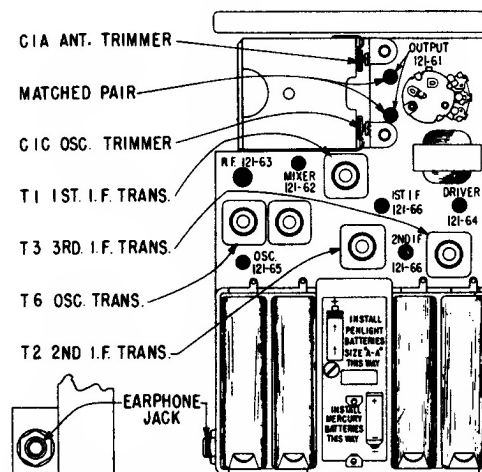
ALL RESISTORS ARE 1/2 WATT, CARBON, $\pm 20\%$ TOLERANCE UNLESS OTHERWISE SPECIFIED.

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-D.C. OR VACUUM TUBE VOLTMETER.

DEMOTES CHASSIS



TRANSISTOR & TRIMMER LAYOUT FOR CHASSIS 8AT40Z2 USING 121-66 TRANSISTORS

ZENITH RADIO CORPORATION MODEL "ROYAL 500D" CHASSIS 8AT40Z2

ZENITH RADIO Chassis 7AT42 & 7AT42Z1

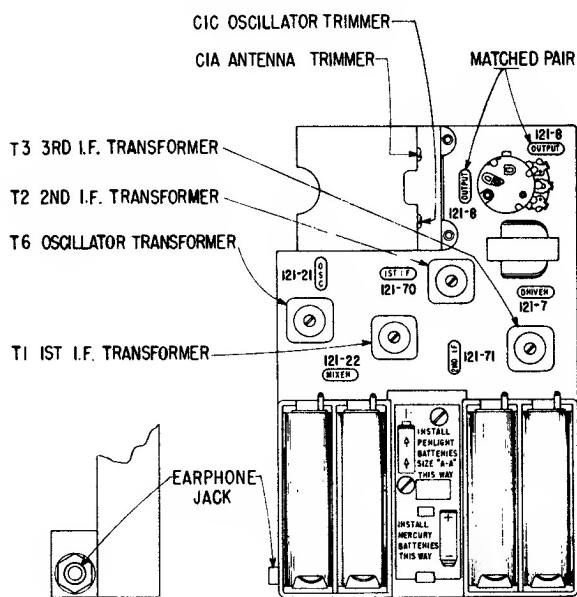
Model "Royal 300"

CHASSIS IDENTIFICATION

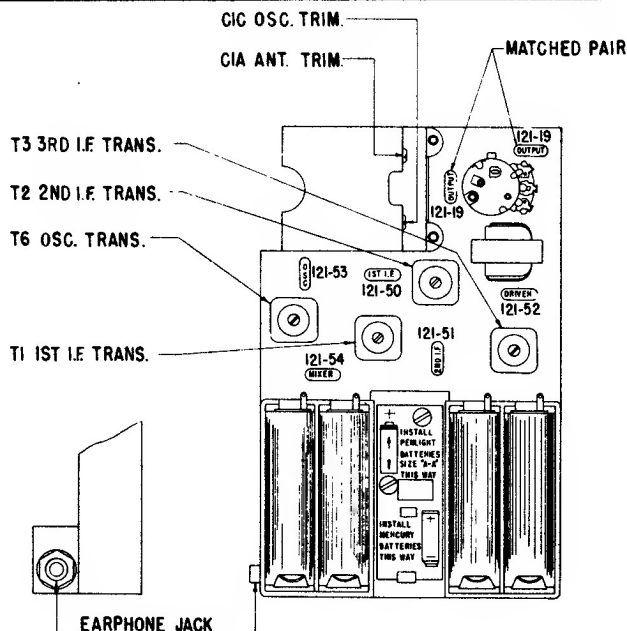
The "Royal 300" seven transistor portable has been produced with two basic chassis. This expedient was necessary to enable us to produce sufficient quantities by using transistors from several sources. Both chassis have the chassis number stamped on them as well as a color identifying code on the battery compartment just above the battery installation instruction label.

The 7AT42 chassis uses transistors manufactured by Sylvania. The 7AT42Z1 chassis uses transistors manufactured by Texas Instrument. In addition to this, both chassis have individual transistor layout labels. The color of the printing on these labels conforms respectively to the color dot on the chassis. The accompanying chart gives all the necessary information on chassis number, color dot, transistor layout labels, transistor numbers, Zenith part number, RETMA part number (where available), transistor supplier, etc.

Chassis	Chassis Color Dot	Transistor Layout Label Color	Part No.	Mixer	Osc.	1st I.F.	2nd I.F.	Crystal Diode Detector	Driver	Output-Output	Supplier
7AT42	Green	Green 102-3498	Zenith RETMA Type	121-22 2N194 NPN	121-21 2N193 NPN	121-70 NPN	121-71 NPN	103-19 1N87G	121-7 2N35 NPN	121-8 2N35-2N35 Matched Pair NPN NPN	Sylvania
7AT42Z1	Red	Red 102-3474	Zenith Type	121-54 PNP	121-53 PNP	121-50 NPN	121-51 NPN	103-19 1N87G	121-52 PNP	121-19 Matched Pair PNP PNP	Texas Instrument



TRANSISTOR & TRIMMER LAYOUT
FOR 7AT42



TRANSISTOR & TRIMMER LAYOUT
FOR 7AT42Z1

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.