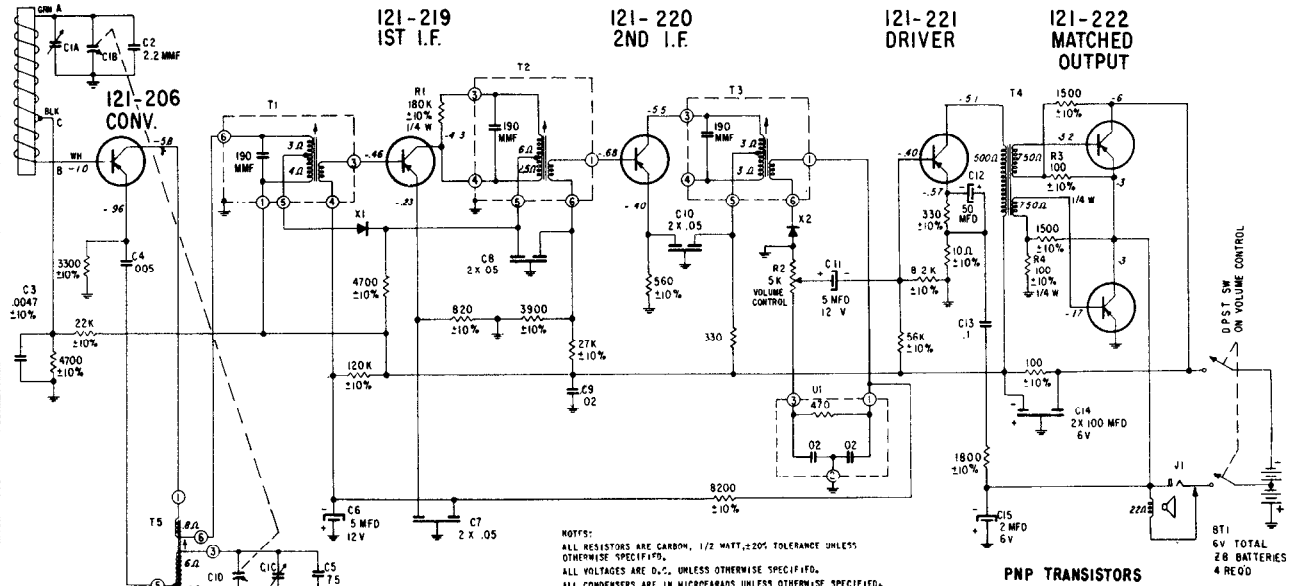




CHASSIS 6JT45Z1

MODEL "ROYAL 650"

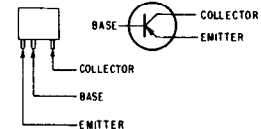
(Additional service material on the next page)



NOTES:
 ALL RESISTORS ARE CARBON, 1/2 WATT, ±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 A.C.-D.C. OR VACUUM TUBE VOLT METER.
 ⚡ DENOTES CHASSIS

BATTERY CURRENT DRAIN APPROX. 6.5 MA WITH VOLUME CONTROL AT 100%
 SPEAKER 1 IPEDIMP 22Ω AT 400 CPS

PNP TRANSISTORS



DRIVER	MATCHED OUTPUT
121-221	121-222
1. BROWN	7. VIOLET
2. RED	6. BLUE
3. ORANGE	5. GREEN
4. YELLOW	4. YELLOW

THE MATCHING IDENTIFICATION WILL BE A COLORED DOT.
 THE MATCHING OF TRANSISTORS WILL BE AS INDICATED IN THE ABOVE CHART.

CHASSIS INFORMATION CHART

Transistor Layout Label Color	Part No.	Conv.	1st. I.F.	2nd. I.F.	Crystal Diode Detector	Driver	Output-Output	Supplier
Black 102-8292	Zenith E1A Type	121-206 PNP	121-219 PNP	121-220 PNP	103-19 1N87G	121-221 PNP	121-222 Matched Pair PNP	Texas Instrument

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 T5	While rocking gang, adjust T5 for maximum output regardless of dial accuracy.
4	1260 KC		—	1260 KC	C1A	Align loop ant.
5	REPEAT STEPS 2, 3, & 4		—	—	—	—

