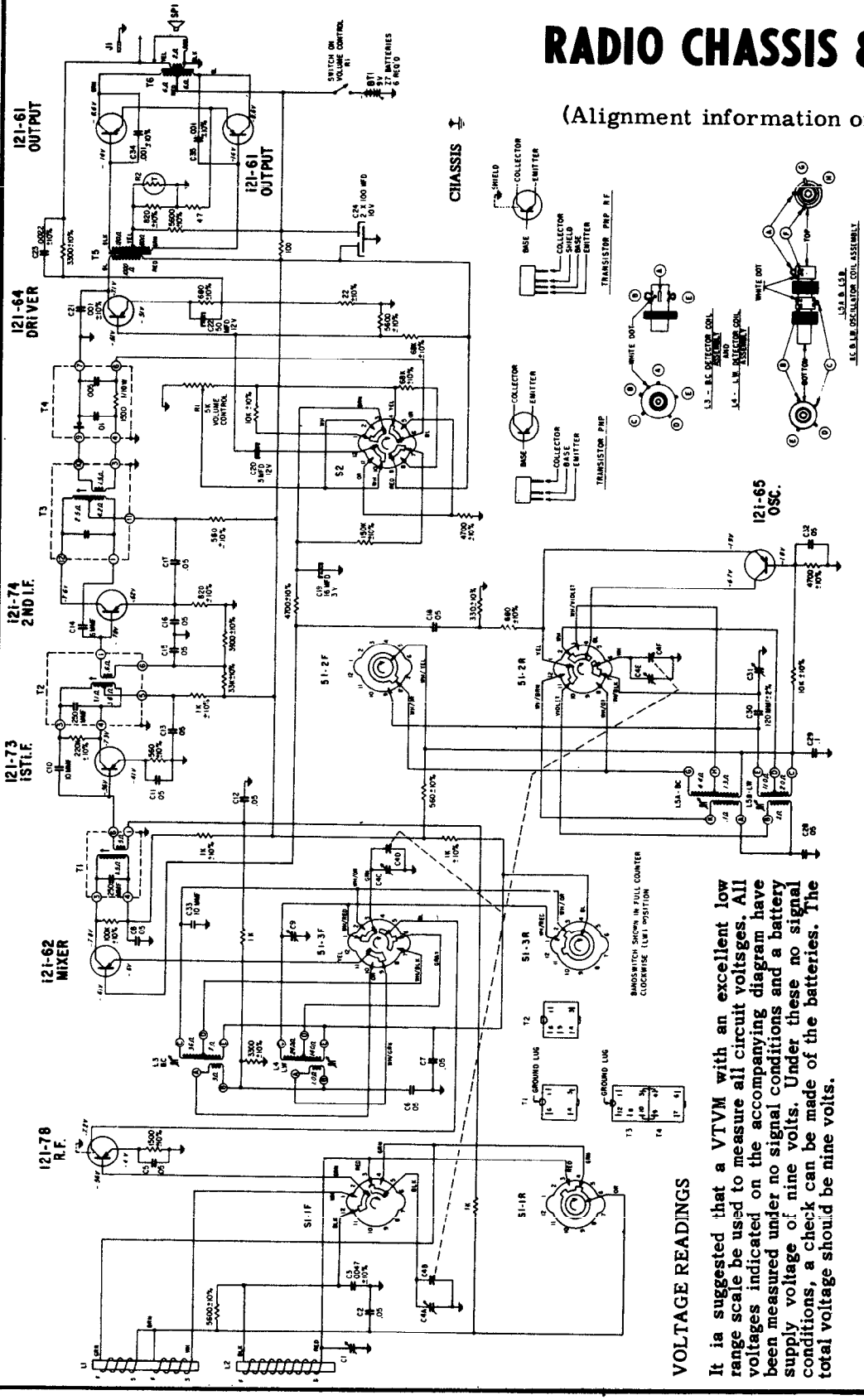
ZENITH RADIO CORP.

MODEL "ROYAL 760"

RADIO CHASSIS 8AT42Z2

(Alignment information on page 189)



VOLTAGE READINGS

It ia suggested that a VTVM with an excellent low range scale be used to measure all circuit voltsges. All voltages indicated on the accompanying diagram have been measured under no signal conditions and a battery supply voltage of nine volts. Under these no signal conditions, a check can be made of the batteries. The total voltage should be nine volts.

COMPONENT REPLACEMENT

When soldering components at the base of the transistor socket, it ia suggested that the tranaistor be removed to avoid sny possibility of excessive heat being transferred through the aocket to the transiator. When soldering the low voltage electrolytica and germanium diodes, it is augeated that the wire be held with a pair of long nose pliers while soldering. The long nose pliers will act aa a heat sink.

NOTES:

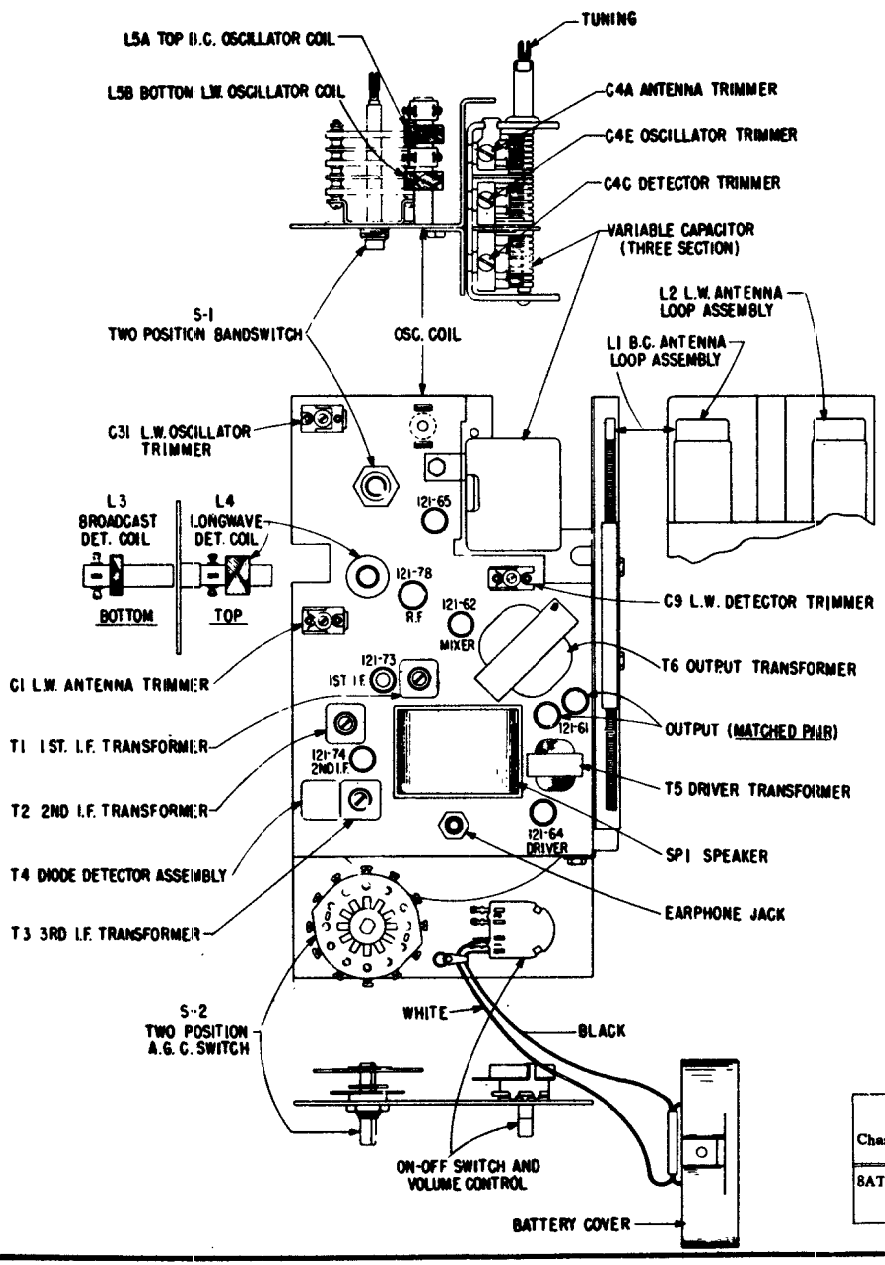
ALL RESISTORS ARE 1/2 WATT. CARBON ±20% TOLERANCE UNLESS OTHERWISE SPECIFIED.

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 BANDSWITCH IN BROADCAST POSITION AND NAVIGATE NORMAL SWITCH IN NORMAL POSITION WITH NO SIGNAL USING AN A.C. D.C. OR VACUUM TUBE VOLTMETER.

TRANSISTOR & TRIMMER LAYOUT FOR 8AT42Z2



ZENITH RADIO CHASSIS 8AT42Z2

MODEL "ROYAL 760"

(Continued from page 188)

ALIGNMENT PROCEDURE

NOTE: Alignment must be made with Nor. - Nav. switch in Nor. position.

OPER.	CONNECT GEN. TO DUMMY ANTENNA	INPUT SIG. FREQUENCY	BAND	SET DIAL AT	TRIMMERS	PURPOSE
1	One turn loop coupled loosely to Broadcast Wavemagnet	455 Kc	BC	1600 Kc	T1, T2, T3	Align I.F.
* 2	One turn loop coupled loosely to Broadcsst Wavemagnet	600 Kc	BC	600 Kc	Rock Gang, Adjust L5A	Alignment of BC at 600 Kc
3	One Turn Loop Coupled Loosely to Broadcast Wavemagnet	1600 Kc	BC	1600 Kc	C4E	Set osc. to scale
4		REPEAT OPERATIONS 2 & 3				
*5		600 Kc	BC	600 Kc	Rock, Adjust L3	Alignment of BC detector at 600 Kc
6		1400 Kc	BC	1400 Kc	C4C	Alignment BC detector
7		REPEAT DPERATIONS 5 & 6				
8		1400 Kc	BC	1400 Kc	C4A	Alignmeat of BC antenna
*9	One turn coupled loosely to Long Wave Wsvemegnet	165 Kc	LW	165 Kc	Rock Gang, Adjust L5B	Alignment of LW at 165 Kc
*10	One Turn Loop Coupled Loosely to Long Wave Wavemagnet	400 Kc	LW	400 Kc	C31	Set osc. to scale
11		REPEAT DPERATIONS 9 & 10				
*12		165 Kc	LW	165 Kc	Rock, Adjuat L4	Alignment LW detector at 165 Kc
*13		370 Kc	LW	370 Kc	C9	Alignment LW detector
14		REPEAT DPERATIONS 12 & 13				
15		370 Kc	LW	370 Kc	C1	Alignment of LW antenna

*NOTE: Rock tuning condenser when making alignment under Operations 2, 5, 9, 10, 12, 13.

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
8AT42Z2	Black	Black 102-3497	Zenith Typu	121-78 PNP	121-62 PNP	121-65 PNP	121-73 PNP	121-74 PNP	103-22 1N295	121-64 PNP	121-61 Matched Pair PNP PNP	R.C.A.