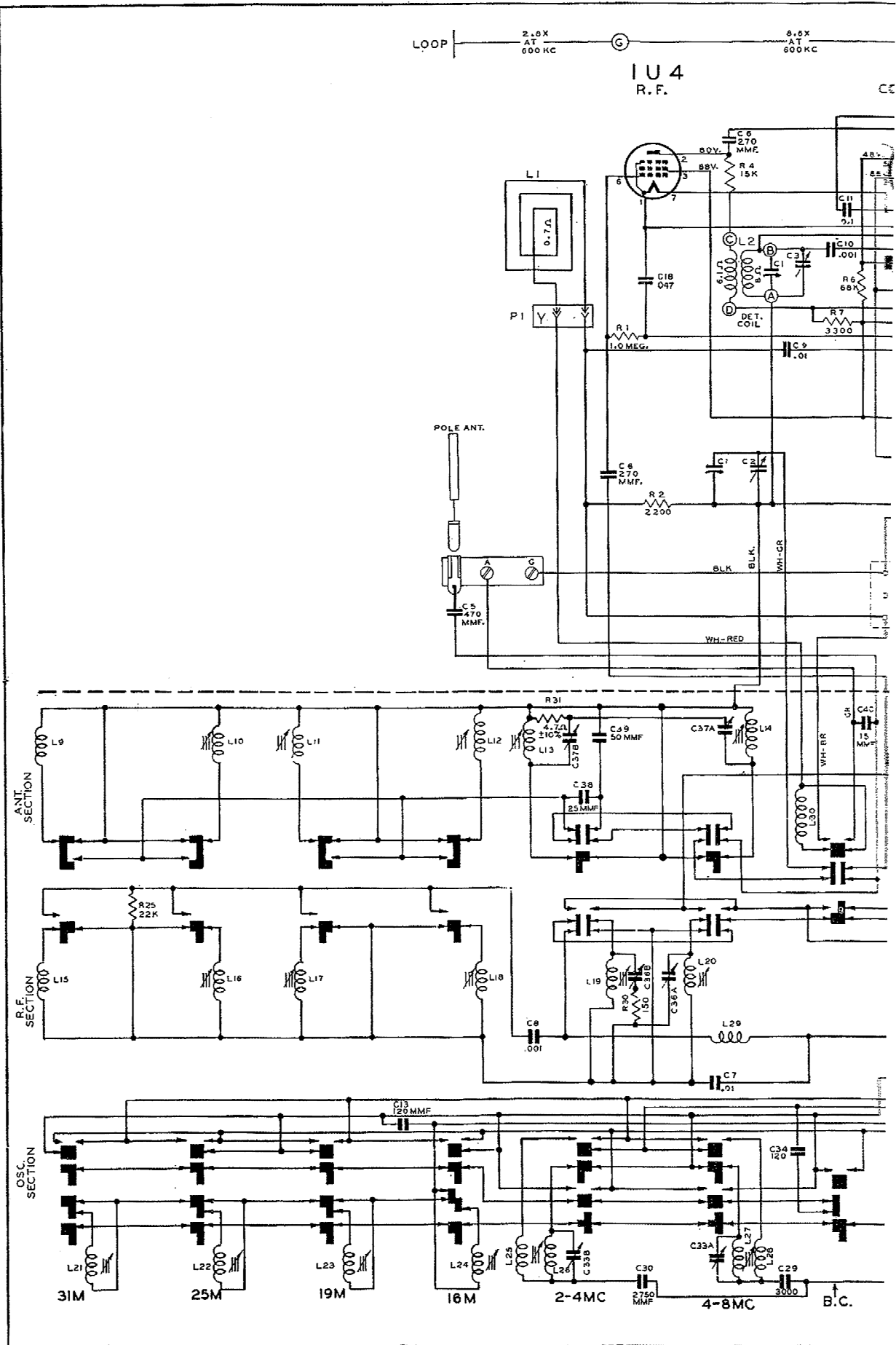
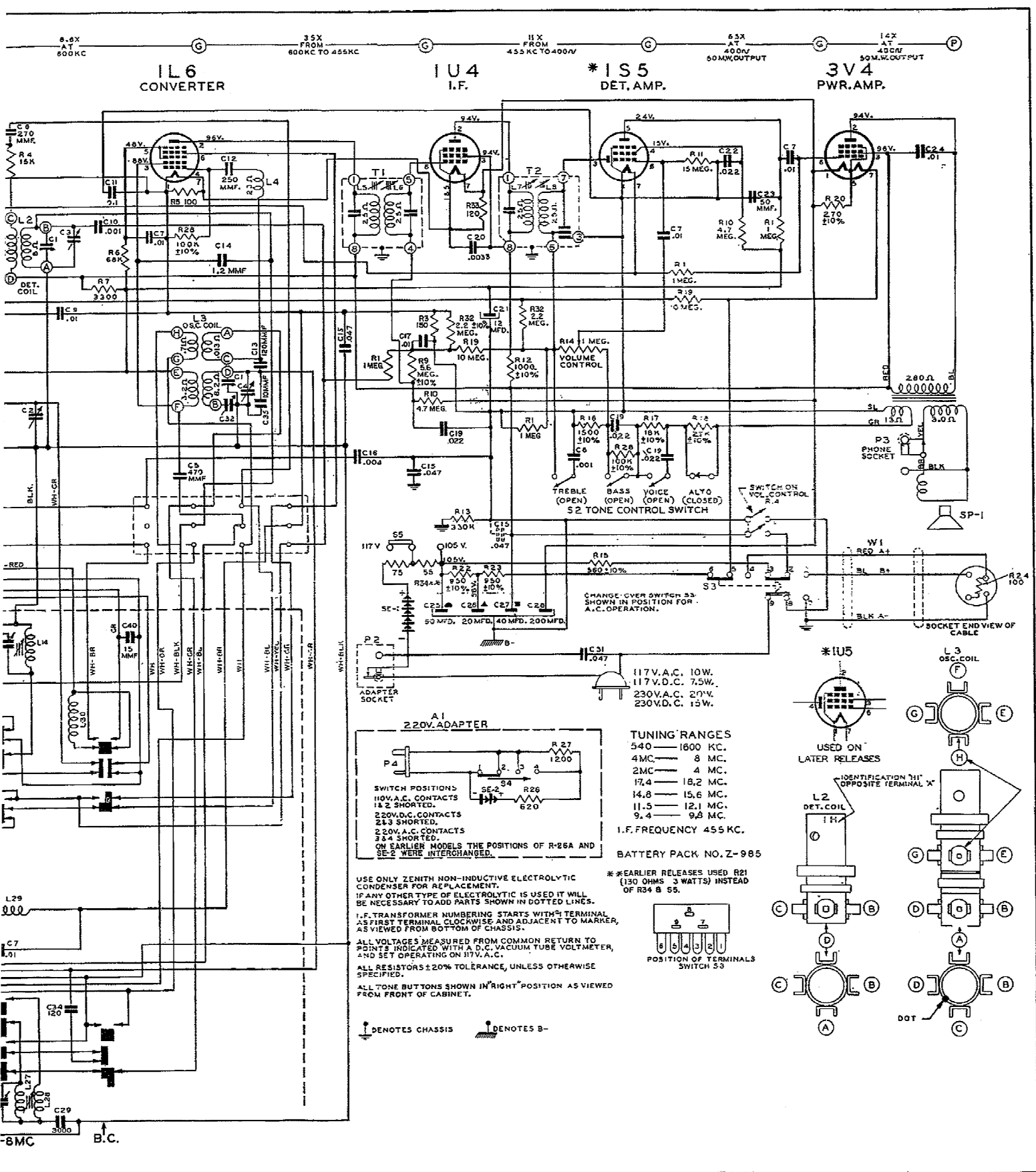
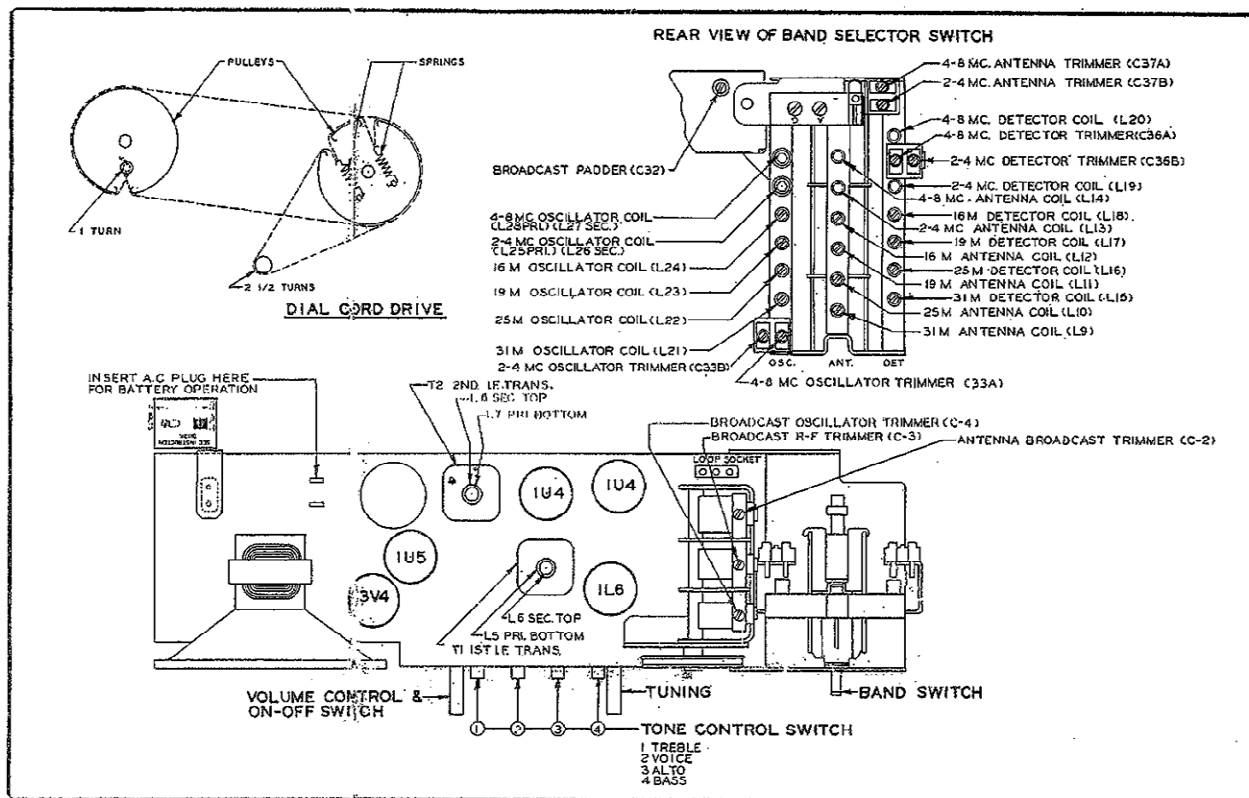


MODEL H500  
CHASSIS 5H40





The I.F. transformers incorporated in this receiver are of the new permeability tuned type. The advantage of an I.F. transformer of this type is its extreme stability under various humidity and temperature conditions. The upper coil is the secondary and the lower the primary. When adjusting these I.F. transformers the tuning wrench 68-19 can be inserted into the top slug, rotated until maximum output is obtained and then dropped down to the lower slug and the same operation repeated. The tuning wrench is so designed that turning one slug does not affect the adjustment of the other.



## TUBE, TRIMMER LOCATION AND DIAL CABLE DRAWING ALIGNMENT PROCEDURE

OPER.	CONNECT OSCILLATOR TO DUMMY ANTENNA	INPUT SIGNAL FREQ.	BAND	SET DIAL AT	TRIMMERS	PURPOSE
1	Positive lead of signal generator to converter grid through a .1 Mfd. condenser & negative lead to negative filament of 1L6 tube.	455 Kc	BC	600 Kc	L5, 6, 7, 8	Align I.
2	One turn loop coupled loosely to broadcast wavemagnet	1600 Kc.	BC	1600 Kc	C4	Set oscillator to scale.
3		1400 Kc	BC	1400 Kc	C3	Alignment of detector.
4		1400 Kc	BC	1400 Kc	C2	Alignment of BC antenna.
5*		600 Kc	BC	Rock at 600 Kc	C32	Alignment of BC at 600 Kc

NOTE: If Trimmers C2, C3, C4 are adjusted after procedures #2 through #15 are completed, will be necessary to repeat alignment procedures #2 through #15.

OPERATION	CONNECT OSCILLATOR TO DUMMY ANTENNA	INPUT SIGNAL FREQ.	BAND	SET DIAL AT	TRIMMERS	PURPOSE
6	3 feet of wire approxi- mately 1 foot from ex- tended wave rod.	7.8 Mc	4-8 Mc	7.8 Mc	C33A, C36A, C37A	Alignment of S. W. Oscillator Detector and Antenna
7*		4.2 Mc	4-8 Mc	Rock at 4.2 Mc	4-8 Mc. Osc. slug	
8		Repeat Operations 6 & 7				
9		3.9 Mc	2-4 Mc	3.9 Mc	C33B, C36B, C37B	
10		2.1 Mc	2-4 Mc	Rock at 2.1 Mc	2-4 Mc. Osc. slug	
*		Repeat Operation 9 & 10				
11		17.8 Mc	16Meters	17.8 Mc	L24, L18, L12	
*		15.2 Mc	19Meters	15.2 Mc	L23, L17, L11	
13		11.8 Mc	25Meters	11.8 Mc	L22, L16, L10	
*		9.6 Mc	31Meters	9.6 Mc	L21, L15 L9	

PART NO.	DIAG. NO.	DESCRIPTION
<b>DIAL ASSEMBLY</b>		
12-1826		Pointer Shaft Bracket
26-457		Dial Scale
59-257		Dial Pointer
76-621		Tuning Control Shaft
80-69		Dial Cord Tension Spring (2 used)
93-1885		Dial Scale Support Strip
93-209		.031 x .140 x 7/16 Steel washer-Cad (2 used on 26-457)
114-157		6-32 x 1/2" lg. x 1/4" Hex Hd. S.T. (2 used on 26-457)
114-248		6-20 x 5/16 lg. x 1/4" Hex Hd. S. T. (used on 26-457)
188-128		Retaining Ring (1 ea. used on 76-621 & S-17798)
S-15781		Pointer Pulley Cord & Eyelet Assem. Short
S-15782		Pointer Pulley Cord & Eyelet Assem. Long
S-17798		Pointer Pulley & Shaft Assembly

#### COILS & CHOKES

95-1148	T1	1st. I. F. Transformer
95-1149	T2	2nd. I. F. Transformer
S-11952	L29	R. F. Shunt Coil Assembly
S-14403	L4	R. F. Choke Coil Assembly
S-17709	L3	Oscillator Coil Assembly (B. C.)
S-17710	L2	Detector Coil Assembly (B. C.)

#### CONDENSERS

22-3	C7	.01 Mfd. Ceramic (3 used)	500V
22-4	G16	.004 Mfd. Ceramic	500V
22-1390	C5	470 Mmfd. Mica	500V
22-1674	C23	50 Mmfd. Ceramic	500V
22-1741	G25,26, 27 & 28	Elect. Cond. 50 Mfd.-150V x 40 Mfd. 150V. 20 Mfd.-150V x 200 Mfd. 10V	500V
22-1765	C14	1.2 Mmfd. Molded	500V
22-1775	C15	.047 Mfd. (2 used)	400V
22-1777	C11	.1 Mfd.	200V
22-1778		.047 Mfd. (Molded)	200V
22-1779	C24	.01 Mfd.	500V
22-1780	C20	.0033 Mfd.	400V
22-1784	C9	.01 Mfd.	400V
22-1844	C31	.047 Mfd.	500V
22-1846	C17	.01 Mfd.	400V
22-1866	C10	.001 Mfd. Ceramic	500V
22-1953	C35	.001 Mfd. Ceramic	500V
22-2056	C21	Elect. Cond. 12 Mfd. 150V	500V
22-2058	C6	270 Mmfd. Mica (2 used)	500V
22-2071	C19	.022 Mfd. (3 used)	200V
22-2072	C22	.022 Mfd.	400V
22-2126	C12	250 Mmfd. Ceramic	500V
22-2127	C8	.001 Mfd. Ceramic	500V
22-2279	C13	120 Mmfd. Ceramic	500V
22-2282	C32	Single Section Trimmer	
22-2286	C1	Three Section Variable	

#### RESISTORS

63-1362	R22-R23	Two Section Candeohm	
63-1743		100 Ohm 1/2W 10% Ins. Res.	
63-1744	R24	100 Ohm 1/2W 10% Ins. Res.	
63-1747		120 Ohm 1/2W 10% Ins. Res.	
63-1750		150 Ohm 1/2W 10% Ins. Res.	
63-1761	R20	210 Ohm 1/2W 10% Ins. Res.	
63-1785	R12	1000 Ohm 1/2W 10% Ins. Res.	
63-1792	R16	1500 Ohm 1/2W 10% Ins. Res.	
63-1799	R2	2200 Ohm 1/2W 20% Ins. Res.	
63-1807	R7	3300 Ohm 1/2W 20% Ins. Res.	
63-1815	R4	15K Ohm 1/2W 20% Ins. Res.	
63-1818	R17	18K Ohm 1/2W 10% Ins. Res.	
63-1842	R25	22K Ohm 1/2W 20% Ins. Res.	
63-1845	R18	27K Ohm 1/2W 10% Ins. Res.	
63-1863	R6	68K Ohm 1/2W 20% Ins. Res.	

PART NO.	DIAG. NO.	DESCRIPTION
<b>RESISTORS (Cont'd.)</b>		
63-1869	R28	100K Ohm 1/2W 10% Ins. Res.
63-1860	R8	180K Ohm 1/2W 10% Ins. Res.
63-1891	R13	330K Ohm 1/2W 20% Ins. Res.
63-1912	R1	1 Megohm 1/2W (5 used) 20% Ins. Res.
63-1926		2.2 Megohm 1/2W 20% Ins. Res.
63-1940	R10	4.7 " 1/2W (2 used) 20% Ins. Res.
63-1943	R9	5.6 " 1/2W 10% Ins. Res.
63-1954	R19	10 " 1/2W (2 used) 20% Ins. Res.
63-1961	R11	15 " 1/2W 20% Ins. Res.
63-2018	R21	130 Ohm 3W Zipohm 10%
63-2276	R14	Volume Control & Switch
63-2817	R34	Two Section Zipohm

#### MISCELLANEOUS

11-104		Line Cord & Plug
15-97		Gap & Insulator (used on S-15785)
44-29	P3	Phone Socket
49-168	SP-1	5 1/4" PM Speaker
		Z55091 Cone
78-274		Elect. Cond. Socket
78-543		Four Contact Socket
78-802	P1	Wavemagnet Socket
78-806		Miniature Tube Socket
78-817		Miniature Tube Socket
78-844	P2	Adapter Socket (220V)
78-845		Miniature Tube Socket (3 used)
85-450	G3	Power Changeover Switch
85-503	G2	Band Switch
94-295		Gang Cond. & Spkr. Mtg. Bushing (6 used)
114-308		6-32 x 1 1/8" lg. x 1/4" Fl. M.S. Steel (used on 212-10)
125-81		Strain Relief Crommet - Male
125-82		Strain Relief Crommet - Female
139-96		Speaker Baffle
149-84		Iron Core (16 used)
196-174		Speaker Gasket
212-5	SE-2	Selenium Rectifier
S-15785	W1	Battery Cable & Socket Assembly
S-15715	A1	Voltage Adapter Assembly

#### CABINET PARTS

12-1882		Telescoping Ant. Mtg. Brkt.
14-1303		Cabinet for H500 Portable Model
16-676		Packing Carton - Complete
17-67		Telescoping Ant. Ret. Clamp
19-134		Wavemagnet Cable Ret. Clip
19-188		Cable Retaining Clip
35-46		Cabinet Handle
40-73		Cabinet Back Cover Hinge (2 used)
46-912		Band Switch Knob (7 used)
46-913		Tuning & Vol. Control Knobs (2 used)
54-295		Wavemagnet Ret. Nut (#6-32) (used on S-17747)
54-296		Wavemagnet Ret. Nut (#10-32) (used on S-17747)
57-1724		Front Panel Escutcheon
57-1725		Emblem Plate
58-179		Three Prong Plug (1 ea. used on S-15799 & S-15805)
70-122		#6 x 5/16 R.H.W.S. Steel (2 used on 19-188)
70-168		#4 x 1/2" Phil. R.H. Wood Screw
		Brass-Blk. Ox. (3 used on 57-1724)
70-169		#4 x 3/4" Phil. R.H. Wood Screw
		Brass-Blk. Ox. (4 used on 57-1724)
83-1876		Push Button Full Strip
97-367		Handle Mtg. Stud (2 used)
114-197		Hexagon Washer Hd. S. T. Screw (2 used on Chassis Mtg.)
156-42		Door Latch (upper half)
156-43		Door Latch (lower half)
157-7		Strike Fastener (2 used)
157-8		Strike Fastener (2 used)
159-49		Snap Button (2 used on S-15805 & 2 used on S-17782)

PART NO.	DIAG. NO.	DESCRIPTION
<b>CABINET PARTS (Cont'd.)</b>		
159-49		Snap Button (4 used on S17747 & 2 used on 19-134 & S-17782)
199-119		Antenna, Insulating Sleeve
202-869		Instruction Book & Station Log
202-870		Service Notes
202-872		Weather Bureau Bulletin
202-880		Short Wave Station List
S-15635		Wavemagnet Suction Cup Assem. (2 used)
S-15722		Antenna Knob & Latch Spring Assembly
S-15799		Wavemagnet Cable Assembly
S-15802		Telescoping Antenna Assembly
S-15805		Wavemagnet Ext. Cable Assembly
S-15806		Eyelet & Wire Assembly
S-17743		Front Cover Hinge & Terminal Assem. (R.H.)
S-17744		Front Cover Hinge & Terminal Assem. (L.H.)
S-18431	L1	Wavemagnet Assembly
S-17782		Tube Holder Assembly

#### FREQUENCY BAND SWITCH ASSEMBLY

12-1825		Band Switch Mtg. Brkt.	
22-3	G7	.01 Mfd. Ceramic	500V
22-1390	C5	470 Mmfd. Mica	500V
22-1392	C3	25 Mmfd. Ceramic	500V
22-1433	C30	2750 Mmfd. Mica	500V
22-1761	C39	50 Mmfd. Ceramic	500V
22-1953	C35	10 Mmfd. Ceramic	500V
22-2127	C8	.001 Mfd.	600V
22-2279	C13	120 Mmfd. Ceramic	500V
22-2280	C34	120 Mmfd. Ceramic	500V
22-2281	C29	3000 Mmfd. Mica	500V
22-2283	C33A,33B	Two Section Trimmer	
22-2284	C36A,36B	Two Section Trimmer	
22-2285	C37A,37B	Two Section Trimmer	
63-1581	R31	4.7 Ohm W.W. 1/2W 10% Ins.	Res.
63-1701	R29	10 Ohm 1/2W 10% Ins.	Res.
63-1758	R30	220 Ohm 1/2W 10% Ins.	Res.
85-502	S1	Band Switch	
85-522	S5	Voltage Change Switch	
149-96		Iron Core (1 used on S-17730 & S-17731)	
S-18429	L30	Antenna Loading Coil Assembly	
S-17688		Band Switch, Brkt. & Coil Assembly	
S-17714	L18	R.F. Coil Assembly	(16M)
S-17715	L17	R.F. Coil Assembly	(19M)
S-17716	L16	R.F. Coil Assembly	(25M)
S-17717	L15	R.F. Coil Assembly	(31M)
S-17718	L12	Ant. Coil Assembly	(16M)
S-17719	L11	Ant. Coil Assembly	(19M)
S-17720	L10	Ant. Coil Assembly	(25M)
S-17721	L9	Ant. Coil Assembly	(31M)
S-18614	L19	R.F. Coil Assembly	(2-4 MC)
S-18615	L20	R.F. Coil Assembly	(4-8 MC)
S-18614	L13	Ant. Coil Assembly	(2-4 MC)
S-18735	L14	Ant. Coil Assembly	(4-8 MC)
S-17726	L24	Osc. Coil Assembly	(16M)
S-17727	L23	Osc. Coil Assembly	(19M)
S-17728	L22	Osc. Coil Assembly	(25M)
S-17729	L21	Osc. Coil Assembly	(31M)
S-17730	L27,28	Osc. Coil Assembly	(4-8 MC)
S-17731	L25,26	Osc. Coil Assembly	(2-4 MC)

#### VOLTAGE ADAPTER

57-1564		Voltage Indicator Plate
58-182		Two Prong Plug
63-2155		Dual Resistor 620 Ohm 15W & 1200 Ohm - 7W
85-473		Three Position Switch
112-784		Thumb Screw
212-9		Selenium Rectifier
S-15715		Voltage Adapter Assem. (Complete)

ZENITH RADIO CORPORATION