

PART NO.	DIAG. NO.	DESCRIPTION	PART NO.	DIAG. NO.	DESCRIPTION	PART NO.	DIAG. NO.	DESCRIPTION
DIAL ASSEMBLY			RESISTORS (Cont'd.)			CABINET PARTS (Cont'd.)		
12-1824		Pointer Shaft Bracket	63-1869	R28	100K Ohm 1/2W 10% Ins. Res.	159-49		Snap Button (4 used on S17747 & 2 used on 19-134 & S-17762)
26-457		Dial Scale	63-1880	R8	180K Ohm 1/2W 10% Ins. Res.	199-119		Antenna, Insulating Sleeve
59-257		Dial Pointer	63-1891	R13	330K Ohm 1/2W 20% Ins. Res.	202-869		Instruction Book & Station Log
76-621		Tuning Control Shaft	63-1912	R1	1 Megohm 1/2W(5 used)20%Ins. Res.	202-870		Service Notes
80-69		Dial Cord Tension Spring (2 used)	63-1926		2.2 Megohm 1/2W 20% Ins. Res.	202-872		Weather Bureau Bulletin
83-1885		Dial Scale Support Strip	63-1940	R10	4.7 " 1/2W(2 used)20%Ins. Res.	202-880		Short Wave Station List
93-209		.031 x .140 x 7/16 Steel washer-Cad (2 used on 26-457)	63-1943	R9	5.6 " 1/2W 10% Ins. Res.	S-15635		Wavemagnet Suction Cup Assem. (2 used)
114-157		6-32 x 1/2" lg. x 1/4" Hex Hd. S.T. (2 used on 26-457)	63-1954	R19	10 " 1/2W(2 used)20%Ins. Res.	S-15722		Antenna Knob & Latch Spring Assembly
114-248		6-20 x 5/16 lg. x 1/4" Hex Hd. S. T. (used on 26-457)	63-1961	R11	15 " 1/2W 20%Ins. Res.	S-15799		Wavemagnet Cable Assembly
188-128		Retaining Ring (1 ea. used on 76-621 & S-17798)	63-2018	R21	130 Ohm 3W Zipohm 10%	S-15802		Telescoping Antenna Assembly
S-15781		Pointer Pulley Cord & Eyelet Assem. Short	63-2276	R14	Volume Control & Switch	S-15805		Wavemagnet Ext. Cable Assembly
S-15782		Pointer Pulley Cord & Eyelet Assem. Long	63-2817	R34	Two Section Zipohm	S-15806		Eyelet & Wire Assembly
S-17798		Pointer Pulley & Shaft 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
COILS & CHOKES			MISCELLANEOUS			FREQUENCY BAND SWITCH ASSEMBLY		
95-1140	T1	1st. I. F. Transformer	11-104		Line Cord & Plug	12-1825		Band Switch Mtg. Brkt.
95-1149	T2	2nd. I. F. Transformer	15-57		Cap & Insulator (used on S-15785)	22-3	C7	.01 Mfd. Ceramic 500V
S-11952	L29	R. F. Shunt Coil Assembly	44-29	P3	Phone Socket	22-1390	C5	470 Mmfd. Mica 500V
S-14403	L4	R. F. Choke Coil Assembly	49-668	SP-1	5 1/4" PM Speaker	22-1392	C3	25 Mmfd. Ceramic 500V
S-17709	L3	Oscillator Coil Assembly (B.C.)			ZC5091 Cond	22-1433	C30	2750 Mmfd. Mica 500V
S-17710	L2	Detector Coil Assembly (B. C.)				22-1761	C39	50 Mmfd. Ceramic 500V
						22-1953	C35	10 Mmfd. Ceramic 500V
CONDENSERS						22-2127	C8	.001 Mfd. 600V
22-3	C7	.01 Mfd. Ceramic (3 used) 500V	78-274		Elect. Cond. Socket	22-2279	C13	120 Mmfd. Ceramic 500V
22-4	C16	.004 Mfd. Ceramic 500V	78-543		Four Contact Socket	22-2280	C34	120 Mmfd. Ceramic 500V
22-1390	C5	470 Mmfd. Mica 500V	78-802	P1	Wavemagnet Socket	22-2281	C29	3000 Mmfd. Mica 500V
22-1674	C23	50 Mmfd. Ceramic 500V	78-806		Miniature Tube Socket	22-2283	C31A, 33B	Two Section Trimmer
22-1741	C25,26, 27 & 28	Elect. Cond. 60 Mfd., 150V x 40 Mfd. 150V, 20 Mfd., 150V x 200 Mfd. 10V	78-817		Miniature Tube Socket	22-2284	C36A, 36B	Two Section Trimmer
			78-844	P2	Adapter Socket (220V)	22-2285	C37A, 37B	Two Section Trimmer
			78-845		Miniature Tube Socket (3 used)	63-1581	R11	4.7 Ohm W.W. 1/2W 10% Ins. Res.
			85-450	S3	Power Changeover Switch	63-1701	R29	10 Ohm 1/2W 10% Ins. Res.
			85-503	S2	Band Switch	63-1758	R30	220 Ohm 1/2W 10% Ins. Res.
			94-295		Gang Cond. & Spkr. Mtg. Bushing (6 used)	85-502	S1	Band Switch
			114-308		6-32 x 1 1/8" lg. x 1/4" F.I. M.S. Steel (used on 212-10)	85-522	S5	Voltage Change Switch
						149-96		Iron Core (1 used on S-17730 & S-17731)
22-1765	C14	1.2 Mmfd. Molded 500V	125-81		Strain Relief/Grommet - Male	S-18429	L30	Antenna Loading Coil Assembly
22-1775	C15	.047 Mfd. (2 used) 400V	125-82		Strain Relief/Grommet - Female	S-17688		Band Switch, Brkt. & Coil Assembly
22-1777	C11	.1 Mfd. 200V	139-96		Speaker Baffle	S-17714	L18	R.F. Coil Assembly (16M)
22-1778		.047 Mfd. (Molded) 200V	149-86		Iron Core (16 used)	S-17715	L17	R.F. Coil Assembly (19M)
22-1779	C24	.01 Mfd. 600V	196-174		Speaker Gasket	S-17716	L16	R.F. Coil Assembly (25M)
22-1780	C20	.0033 Mfd. 400V	212-5	SE-2	Selenium Rectifier	S-17717	L15	R.F. Coil Assembly (31M)
22-1784	C9	.01 Mfd. 400V	S-15785	W1	Battery Cable & Socket Assembly	S-17718	L12	Ant. Coil Assembly (16M)
22-1844	C31	.047 Mfd. 600V	S-15715	A1	Voltage Adapter Assembly	S-17719	L11	Ant. Coil Assembly (19M)
22-1846	C17	.01 Mfd. 400V				S-17720	L10	Ant. Coil Assembly (23M)
22-1886	C10	.001 Mfd. Ceramic 500V				S-17721	L9	Ant. Coil Assembly (31M)
22-1953	C35	10 Mmfd. Ceramic 500V				S-18614	L19	R.F. Coil Assembly (3-4 MC)
22-2056	C21	Elect. Cond. 62 Mfd. 150V				S-18615	L20	R.F. Coil Assembly (4-8 MC)
22-2058	C6	270 Mmfd. Mica (2 used) 500V				S-18614	L13	Ant. Coil Assembly (2-4 MC)
22-2071	C19	.022 Mfd. (3 used) 200V				S-18735	L14	Ant. Coil Assembly (4-8 MC)
22-2072	C22	.022 Mfd. 400V				S-17726	L24	Osc. Coil Assembly (16M)
22-2126	C12	250 Mmfd. Ceramic 500V				S-17727	L23	Osc. Coil Assembly (19M)
22-2127	C8	.001 Mfd. Ceramic 600V				S-17728	L22	Osc. Coil Assembly (25M)
22-2279	C13	120 Mmfd. Ceramic 500V				S-17729	L21	Osc. Coil Assembly (31M)
22-2282	C32	Single Section Trimmer				S-17730	L27,28	Osc. Coil Assembly (4-8 MC)
22-2286	C1	Three Section Variable				S-17731	L25,26	Osc. Coil Assembly (2-4 MC)
RESISTORS			CABINET PARTS			VOLTAGE ADAPTER		
63-1362	R22-R23	Two Section Candohm	12-1082		Telescoping Ant. Mtg. Brkt.	57-1564		Voltage Indicator Plate
63-1743		100 Ohm 1/2W 10% Ins. Res.	14-1303		Cabinet for #500 Portable Model	58-182		Two Prong Plug
63-1744	R24	100 Ohm 1/2W 20% Ins. Res.	16-676		Packing Carton - Complete	63-2155		Dual Resistor 620 Ohm 15W & 1200 Ohm - 7W
63-1747		120 Ohm 1/2W 10% Ins. Res.	17-67		Telescoping Ant. Ret. Clamp			Three Position Switch
63-1750		150 Ohm 1/2W 10% Ins. Res.	19-134		Wavemagnet Cable Ref. Clip			Thumb Screw
63-1761	R20	270 Ohm 1/2W 10% Ins. Res.	19-188		Cable Retaining Clip			Selenium Rectifier
63-1785	R12	1000 Ohm 1/2W 10% Ins. Res.	36-46		Cabinet Handle			Voltage Adapter Assem. (Complete)
63-1792	R16	1500 Ohm 1/2W 10% Ins. Res.	40-73		Cabinet Back Cover Hinge (2 used)			
63-1800	R2	2200 Ohm 1/2W 20% Ins. Res.	46-912		Band Switch Knob (7 used)			
63-1807	R7	3300 Ohm 1/2W 20% Ins. Res.	46-913		Tuning & Vol. Control Knobs (2 used)			
63-1835	R4	15K Ohm 1/2W 20% Ins. Res.	54-295		Wavemagnet Ret. Nut (#6-32) (used on S-17747)			
63-1836	R17	18K Ohm 1/2W 10% Ins. Res.	54-296		Wavemagnet Ret. Nut (#10-32) (used on S-17747)			
63-1842	R25	22K Ohm 1/2W 20% Ins. Res.	57-1724		Front Panel Escutcheon			
63-1846	R18	27K Ohm 1/2W 10% Ins. Res.	57-1725		Emblem Plate			
63-1853	R6	68K Ohm 1/2W 20% Ins. Res.	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" Phill. R.H. Wood Screw			
					Brass-Blk. Ox. (3 used on 57-1724)			
			70-169		#4 x 3/4" Phill. R.H. Wood Screw			
					Brass-Blk. Ox. (4 used on 57-1724)			
			83-1876		Push Button Felt Strip			
			97-367		Handle Mtg. Stud (2 used)			
			114-177		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)			
			159-40		Snap Button (2 used on S-15805 & 2 used on S-17762)			

TO THE SERVICE MAN:

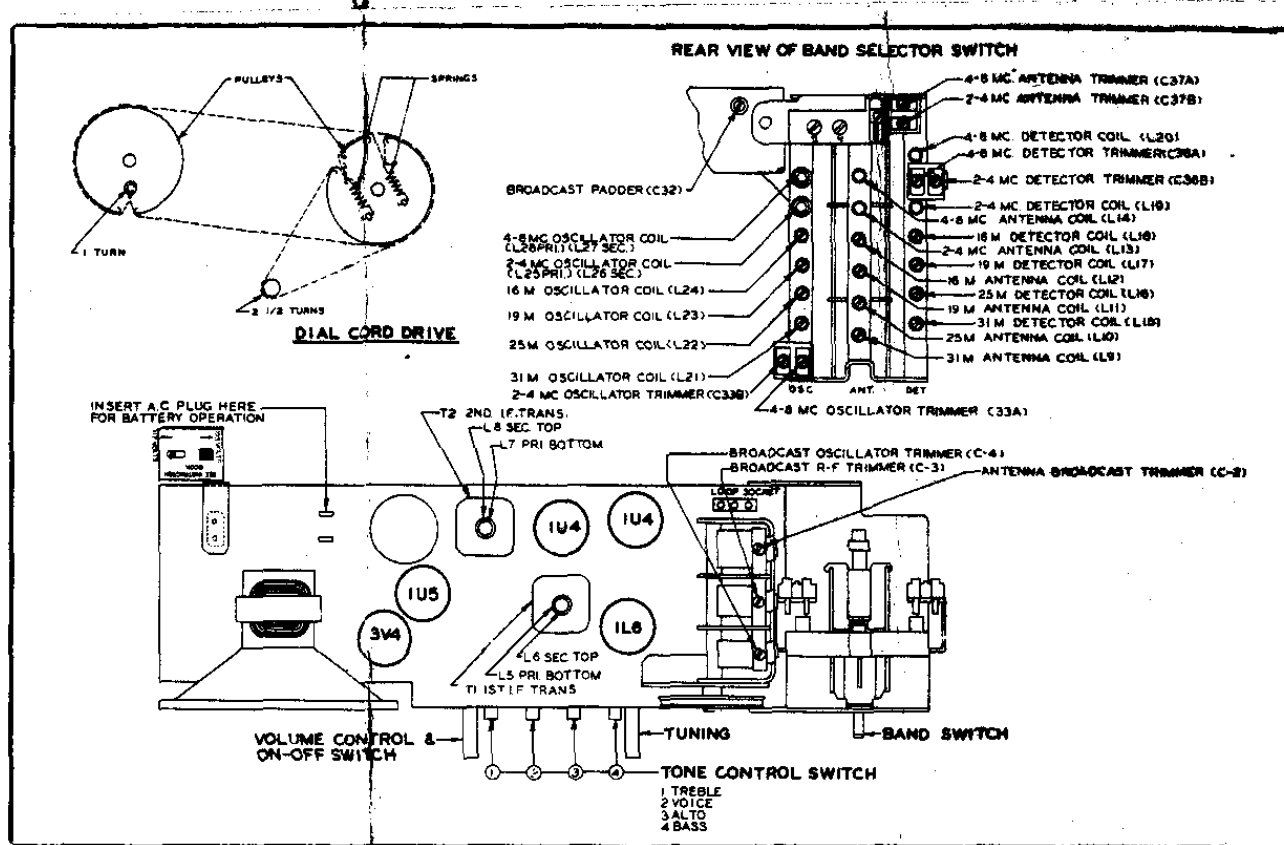
Chassis 5H40 features a high gain tuned RF stage ahead of a conventional superheterodyne circuit with band spread tuning on the 31, 25, 19 and 16 meter bands. There are two continuous coverage bands, one covering 2-4 megacycles and one covering 4-8 megacycles.

If removal of the chassis from the cabinet ever becomes necessary this should be done with care.

The alignment of chassis 5H40 is conventional. However, care must be exercised when making adjustments, and the alignment procedure must be followed exactly. Set the chassis over a metal plate approximately the same distance the battery pack is from the bottom of the chassis when it is in the cabinet. This procedure will introduce the approximate amount of metal in the field of the RF and oscillator coils as when the chassis is in the cabinet. A signal generator of reasonable accuracy and good attenuation must be used. An output meter (AC) of the copper oxide rectifier type with a range of 1 to 30 volts in several steps is necessary to get accurate output readings. Alignment wrenches should be of the non-metallic type, especially when making adjustments at the higher frequencies.

When reinstalling the chassis in the cabinet be careful not to disturb the cabling between the short wave coil assembly and chassis. Tune in a weak broadcast signal near 1400 Kc. and touch up trimmer C2. This will insure maximum performance after alignment.

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. F.
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: Rock Tuning Condenser When Making Alignment Under Operations 5, 7, 10, 12, 13, 14 & 15.

NOTE: If Trimmers C2, C3, C4 are adjusted after procedures #1 through #15 are completed, it 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 approximately 1 foot from extended 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		
11		Repeat Operation 9 & 10					
12		17.8 Mc	16 Meters	17.8 Mc	L24,L18, L12		
13		15.2 Mc	19 Meters	15.2 Mc	L23,L17, L11		
14		11.8 Mc	25 Meters	11.8 Mc	L22,L16, L10		
15		9.6 Mc	31 Meters	9.6 Mc	L21,L15 L9		