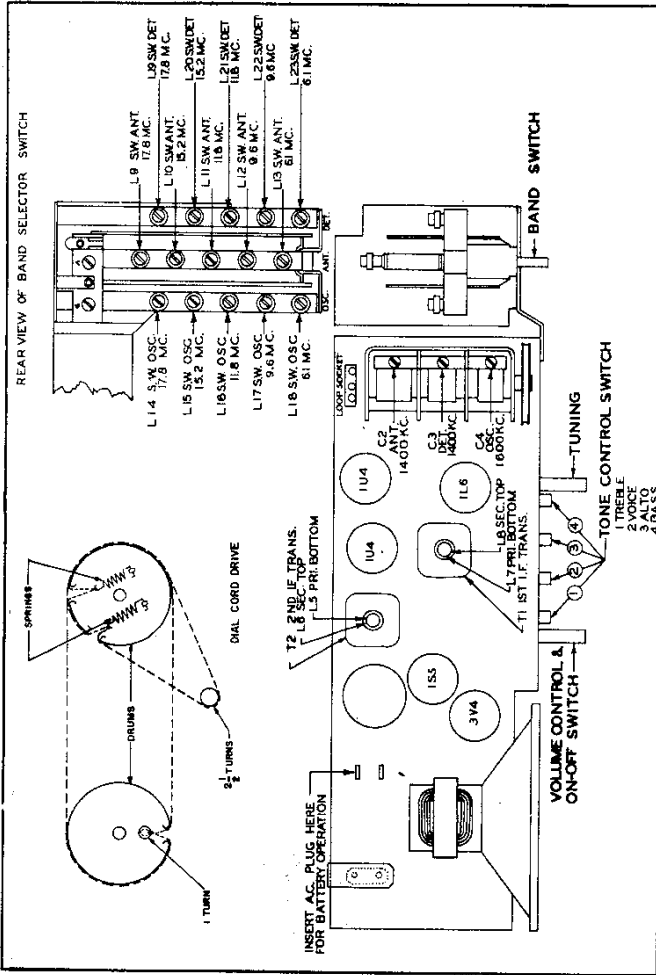


MODEL G500,
Ch. 5G40



TUBE, TRIMMER LOCATION AND DIAL CABLE DRAWING

ALIGNMENT PROCEDURE

OPERATION	CONNECT OSCILLATOR TO ANTENNA	DUMMY INPUT FREQUENCY	BAND	SET DIAL AT	TRIMMERS	PURPOSE
1	Converter Grid	455 Kc.	BC	600 Kc.	L5, 6, 7, 8	Align I.F. Set Oscillator to Scale
2	One turn loop Coupled loosely to Broadcast Wavemagnet	1600 Kc.	BC	1600 Kc.	C4	Alignment of Detector
3		1400 Kc.	BC	1400 Kc.	C3	Alignment of B.C. Wavemagnet
4		1400 Kc.	BC	1400 Kc.	C2	
5*		6.1 Mc.	49 Met.	6.1 Mc.	L18, 23, L17, 22, L12	
6*		9.6 Mc.	31 Met.	9.6 Mc.	L16, 21, L15, 20, L10, 19	
7*	3 feet of wire Approx. 1 foot from Extended Waverod	11.8 Mc.	25 Met.	11.8 Mc.		Alignment of S.W. Oscillator, detector and antenna
8*		15.2 Mc.	19 Met.	15.2 Mc.		
9*		17.8 Mc.	16 Met.	17.8 Mc.		

*NOTE: Rock Tuning Condenser When Making Alignment Under Operations 5, 6, 7, 8 and 9.

TO THE SERVICE MAN:

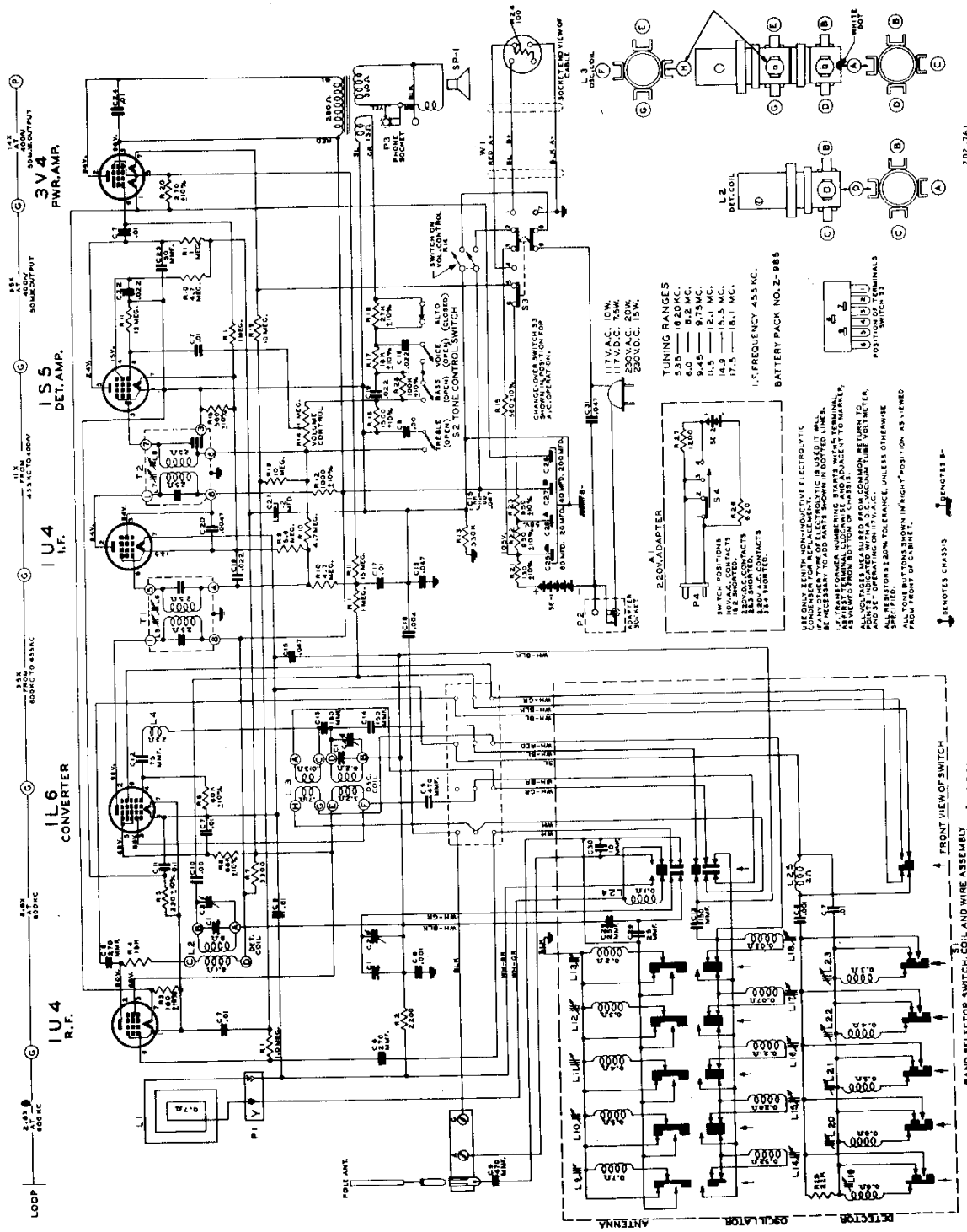
Chassis 5G40 features a high gain tuned RF stage ahead of a conventional superheterodyne circuit with band spread tuning on the 49, 31, 25, 19 and 16 meter bands.

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

The alignment of chassis 5G40 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 68-7 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.



202-761

MODEL G500,
Ch. 5G40

PART NO.	REF. NO.	DESCRIPTION	PART NO.	REF. NO.	DESCRIPTION	PART NO.	REF. NO.	DESCRIPTION
12-1079		DIAL ASSEMBLY	63-1362	R22, 23	Two Section Condohm	12-1082		CABINET PARTS
26-398		Pointer Shaft Bracket	63-1784	R24	100 Ohm 1/2W	14-1203		Telescoping Ant. Mtg. Brkt.
46-539		Dial Scale	63-1784	R3	180 Ohm 1/2W	17-57		Model G500 Portable Cab.
46-540		Band Switch Knob (18M)	63-1784	R20	270 Ohm 1/2W	17-57		Telescoping Ant. Rod Retaining Clamp
46-541		Band Switch Knob (23M)	63-1784	R3	270 Ohm 1/2W	19-134		Wavemagnet Cable Retaining Clip
46-542		Band Switch Knob (31M)	63-1784	R12	330 Ohm 1/2W	36-42		Cab. Handle
46-543		Band Switch Knob (49M)	63-1784	R15	330 Ohm 1/2W	46-806		Ant. Knob (part of S-15802)
46-544		Band Switch Knob (BC)	63-1792	R16	1500 Ohm 1/2W	54-211		Speed Nut (6 used)
57-1053		Tuning & Volume Control Knob (2 used)	63-1800	R2	2200 Ohm 1/2W	54-215		Wavemagnet Retaining Nut (#4-32)
59-1555		Front Panel Escutcheon	63-1807	R7	2200 Ohm 1/2W	57-1052		Wavemagnet Retaining Nut (#10-32)
59-1955		Dial Pointer	63-1835	R4	3300 Ohm 1/2W	57-1052		Escutcheon Panel
61-141		Indicator Lever & Bushing Assembly	63-1838	R17	15K Ohm 1/2W	57-1495		Escutcheon Panel
73-113		Drive Pulley Cord & Eyelet Assembly (short)	63-1838	R17	15K Ohm 1/2W	70-6		4# x 1/4 R.H. Wood Screw
76-415		Pointer Drive Shaft	63-1845	R6	27K Ohm 1/2W	70-131		4# x 1/2 Phillips B.H. Wood Screw (4 used)
80-53		Coil Core Tension Spring (2 used)	63-1863	R28	68K Ohm 1/2W	81-1822		Push Button Feet Strip
80-553		Pusher, Top (40x26-39)	63-1869	R28	100K Ohm 1/2W	91-684		1/16 x 5/32 x 5/8 Black Felt Washer
83-1661		1/64 x 1 1/16 x 5/16 Black Fibre Washer	63-1880	R8	180K Ohm 1/2W	91-721		1/16 x 25/64 x 3/16 Black Felt Washer
93-470		1/32 x .144 x 3/8 Washer Steel (2 used on 26-398)	63-1891	R13	330K Ohm 1/2W	91-721		(2 used)
93-556		Retaining Ring	63-1912	R1	1 Megohm 1/2W	97-367		Handle Mounting Stud (2 used)
188-32		Indicator Lever & Bushing Assembly	63-1940	R10	4.7 Megohm 1/2W	114-197		#10 x 3/4" Hex. Slotted Washer Hd.
S-11207		Drive Pulley Cord & Eyelet Assembly (short)	63-1943	R9	4.7 Megohm 1/2W	156-22		S.T. Screw (2 used)
S-15781		Pointer Pulley Cord & Eyelet Assembly (long)	63-1943	R9	4.7 Megohm 1/2W	156-23		Door Latch (Upper Half)
S-15782		Pointer Pulley & Shaft Assembly	63-1943	R11	10 Megohm 1/2W	157-1		Strike Fastener (2 used)
S-15784		Pointer Pulley & Shaft Assembly	63-2018	R21	130 Ohm (21ohm) 1/2W	157-1		Soap Buttons (2 used)
			63-2037	R14	Volume Control & Switch	159-48		Soap Buttons (2 used)
						159-49		Dial Crystal
						192-129		Ant. Insulating Sleeve
						199-119		Ant. Insulating Sleeve
						202-734		Instruction Book & Station Log
								FREQUENCY BAND SWITCH ASSEMBLY
								Band Sw. Brkt. & Coil Assem. (Complete)
								R. F. Coil Assembly (16M)
								R. F. Coil Assembly (19M)
								R. F. Coil Assembly (25M)
								R. F. Coil Assembly (31M)
								R. F. Coil Assembly (49M)
								Antenna Coil Assembly (16M)
								Antenna Coil Assembly (19M)
								Antenna Coil Assembly (25M)
								Antenna Coil Assembly (31M)
								Antenna Coil Assembly (49M)
								Oscillator Coil Assembly (16M)
								Oscillator Coil Assembly (19M)
								Oscillator Coil Assembly (25M)
								Oscillator Coil Assembly (31M)
								Oscillator Coil Assembly (49M)
								Antenna Loading Coil Assembly
								Band Switch Mounting Bracket
								.01 Mgd. Ceramic
								470 Mmhd. Mica
								500V
								25 Mmhd. Ceramic
								500V
								150 Mmhd. Ceramic
								500V
								10 Mmhd. Ceramic
								500V
								22K Ohm 1/2W 20% Res.
								Band Switch
								VOLTAGE ADAPTOR
								Volume Adaptor Assembly (Complete)
								Volume Indicator Plate
								Two Prong Plug
								620 Ohm W.W. 10% Incl.
								1500 Ohm W.W. 10% 5W Incl.
								Three Position Sw.
								Thumb Screw
								Selenium Rectifier