CHASSIS PARTS LIST

PART NO.	DIAG. NO.	DESCRIPTION	PRICE
12–1873		Bracket (part of S-20821)	.05
12–2053		Dial support bracket	.06
12–2054		Pointer shaft bracket	.15
12–2056		Tuning shaft bracket	.02
15–57		Cap & insulator (part of S-15785)	.10
19–189		Coil mtg. clip	.02
19–249		Coil mtg. clip	.03
22–3	C6,13,23, 25,34	.01 mfd. ceramic 500V (5 used)	.26
22–4	C2	.004 mfd. ceramic 500V	.26
22–11	C21	.0033 mfd. paper 400V	.26
22–17	C42	.001 mfd. paper 600V (2 used)	.26
22–1390	C14	470 mmf. mica 500V (2 used)	.26
22–1392	C30	25 mmf. ceramic 500V	.33
22–1433	C39	2750 mmf. mica 500V	.65
22–1674	C24	50 mmf. ceramic 500V	.20
22–1741	C41A,B,C, D	Electrolytic 20/150V, 40/150V, 60/150V, 200/10V	4.65
22–1761	C31	50 mmfd. ceramic 500V	.20
22–1775	C40	.047 mfd. paper 400V (2 used)	.26
22–1777	C10	.1 mfd. paper 200V	.26
22–1778	C46	.047 mfd. paper 200V	.26
22–1779	C27	.01 mfd. paper 600V	.26
22–1953	C17	10 mmf. ceramic 500V	.35
22–2056	C26	Electrolytic 12/150V	1.20
22–2058	C5, 8	270 mmf. mica 500V (2 used)	.26
22–2071	C20,43,44	.022 mfd. paper 200V (3 used)	.26
22–2072	C22	.022 mfd. paper 400V	.26
22–2126	C15	250 mmf. ceramic 500V	.26
22–2127	C32, 42	.001 mfd. paper 600V (2 used)	.26
22–2218	C11	.001 mfd. ceramic 500V	.35
22–2279	C18, 35	120 mmf. ceramic 500V (2 used)	.30
22–2280	C36	120 mmf. ceramic 500V	.35
22–2281	C37	3000 mmf. mica 500V	.55
22–2282	C16	Single section trimmer	.70
22–2283	C38A, C38B	2 section trimmer	.55
22–2284	C33A, C33B	2 section trimmer	.55
22–2285	C29A, C29B	2 section trimmer	.65
22–2329	C28	15 mmf. ceramic 500V	.20
22–2520	C3A,B,C, D,E,F	3 section variable	5.75
22–2569	C45	.047 mfd. paper 600V	
26–520		Dial scale (used on 6T40-Z)	3.50
26–530		Dial scale (used on 6T41-Z)	3.75
44–29	J2	Headphone jack	.75
49–748	LS1	5¼" PM speaker	10.00
54–34		6-32 × ¼ × 3/32 hex nut (2 mt. ea. 95-1148, 95-1149 and 212-13)	.01
54–139		3/8 × 32 × 9/16 palnut	.01
57–1911		Trim plate (used on 85-543)	.10
57–1986		Scale background plate (used on 6T40-Z)	.45
57–2030		Scale background plate (used on 6T41-Z)	.75
58–182	P2	Adapter plug on S-15715	
59–300		Dial pointer	.50
61–137		Idler pulley (3 part of S-20793)	.10
63–2276	R1	Volume Control & Switch	1.81
63–2395	R4A,R4B	Candohm (part of S-15715)	
63–2839	R2	130 ohm 3W Ins. 10%	.50
63–2930	R3	700 ohm 3W WW 10%	.35
64–306		Shoulder rivet (1 mt. ea. 61-137)	.03
78–274		Electrolytic socket	.03
78–543	J4	4 contact socket (part of S-15785)	.13
78–802	J1	Wavemagnet ant. socket	.10
78–806		Miniature tube socket	.15
78–807		Miniature tube socket (4 used)	.15
78–844	J3	Adapter socket (220V)	.25
78–846		Noval miniature tube socket	.20
78–890	J5	Connector socket – phonograph	.10
114–39		8-32 × ¼ × ¼ Hex hd. self-tap screw (mts. 12-2053)	.01
114–51		6-32 × ½ × ¼ Hex hd. mach. screw (2 mt. 22-2520)	.01
114–116		6-32 × 1½ × ¼ Hex hd. mach. screw	
114–157		6-32 × ½ × ¼ Hex hd. self-tap screw (2 mt. 26-520)	.01
114–297		6-32 × ¼ × ¼ Hex hd. self-tap screw (6 used)	.01
114–435		8 × 5/16 × ¼ Hex hd. self-tap screw (flat washer att. – 2 mt. S-20776)	.03
114–437		6-32 × 7/16 × ¼ Hex hd. mach. screw (2 mt. 26-520)	.02
125–17		Rubber grommet	.03
139–96		Speaker baffle (part of S-20790)	.25
149–85		Iron core (part of S-20844)	.10
149–86		Iron core (12 used)	.10
149–96		Iron core (1 part of ea. S-17730, 17731, 18614 and 18615 – 2 on S-18735)	.10
188–148		Retaining ring (used on S-20794)	.02
188–149		Retaining ring (used on S-20791)	.02
188–168		Retaining ring (used on S-20794)	.06
196–174		Speaker gasket (part of S-20790)	.25
212–9	CR2	Selenium rectifier (part of S-15715)	
212–13	CR1	Selenium rectifier	2.25
100–162		Thermal Resistor	
S-14403	L5	R.F. choke coil assem.	.20
S-15785	W1	Battery cable and socket assem.	.55
S-15715	B1	Voltage adapter assem. (available for this model)	4.20
S-17686		Coil support bracket assem. (part of S-20821)	.25
S-17709	L4	Osc. coil assem. (B.C.)	1.00
S-17714	L19	RF coil assem. (16M)	.50
S-17715	L20	RF coil assem. (19M)	.50
S-17716	L21	RF coil assem. (25M)	.50
S-17717	L22	RF coil assem. (31M)	.50
S-17718	L13	Ant. coil assem. (16M)	.50
S-17719	L14	Ant. coil assem. (19M)	.50
S-17720	L15	Ant. coil assem. (25M)	.50
S-17721	L16	Ant. coil assem. (31M)	.50
S-17726	L25	Osc. coil assem. (16M)	.50
S-17727	L26	Osc. coil assem. (19M)	.50
S-17728	L27	Osc. coil assem. (25M)	.50
S-17729	L28	Osc. coil assem. (31M)	.50
S-17730	L23A,L23B	Osc. coil assem. (4-8M.C.)	.70
S-17731	L24A,L24B	Osc. coil assem. (2-4M.C.)	.70
S-17806		Band sw. mtg. bracket and term. assem. (part of S-20821)	.65
S-18615	L17	RF coil assem. (4-8M.C.)	.50
S-18735	L11	RF coil assem. (4-8M.C.)	.50
S-20776		A.C. cord and reel assem.	7.50
S-20782		RF terminal strip assem.	.35
S-20783		Drive cord & eyelet assem. (gang)	.08
S-20784		Drive cord & eyelet assem. (pointer)	.10
S-20790		Speaker, baffle and gasket assem.	10.75
S-20791		Pointer, pulley and shaft assem.	.35
S-20793		Dial mtg. bracket and rivet assem.	.55
S-20794		Drive shaft and pulley assem.	.60
S-20805		Drive cord and eyelet assem. (idler)	.08
S-20821		Band switch bracket and coil assem.	45.00
S-20844	L2	Detector coil assem. (BC)	.60
S-23856	L12, L18	RF coil assem. (2-4M.C.)	.50
S-23857	L10	Antenna loading coil assem.	.50
S-23858	L29	Antenna coupling coil	

CABINET PARTS LIST

PART NO.	DIAG. NO.	DESCRIPTION	PRICE
Z985X		Complete battery pack	
12–1082		Telescoping ant. mtg. bracket	.06
12–2058		Inside cover hinge bracket (2 part of S-20815 or 21426)	.10
14–1633		Model Y600 portable cabinet	
14–1675		Model Y600L portable cabinet	
16–1113		Packing carton	
17–67		Telescoping ant. rod. ret. clamp	.08
19–253		Battery ret. clip	.07
70–189		6 × 5/16 Rd. hd. wood screw (1 mt. ea. 19-258)	.03
70–202		4 × 3/8 Phils. binding hd. wood screw (used on 40-147)	.04
70–214		6 × ½ Phils. rd. washer hd. wood screw (5 used on S-22866 or S-22893 and 1 on 19-253)	.04
72–115		3 × 3/8 Phils. flat hd. wood screw (1 used on ea. 159-49)	.03
72–121		4 × 3/8 Phils. flat hd. wood screw (5 used on S-20815 or 21426 and 3 on 24-671 or 696)	.03
78–985		Dial light socket	.20
80–976		Cover return spring (2 part of S-20815 or 21426)	.10
83–1617		Pull tab (part of S-20809)	.06
83–1876		Push button felt strip	.15
83–2320		Felt strip	.07
83–2422		Wavemagnet ant. mtg. strip (part of S-22866)	
83–2423		Wavemagent ant. mtg. strip (part of S-22893)	
85–542	S6	Momentary contact sw. (S.P.–Model Y600)	.40
85–550	S6	Momentary contact sw. (S.P.–Model Y600L)	.45
93–126		Int. lockwasher (2 mt. S-15802 or 21433)	.01
93–132		.038 × 11/64 × 7/16 steel washer (1 used on ea. 112-919)	.01
93–799		Brass washer (used with 97-441)	
93–1188		Shakeproof lockwasher (2 used on chassis)	.03
93–1195		Brass washer (used on chassis)	.03
97–367		Handle mtg. stud (2 part of S-20823 or 21437)	.20
97–428		Wavemagnet ant. ret. stud (2 part of S-22866 or 22893)	.20
97–441		Wavemagent ant. mtg. stud (part of S-22864 or 22891)	
100–171	PL1	Pilot light bulb (78-985)	.20
112–419		Mach. screw (2 part of 14-1633 or 1675)	.03
112–919		Screw (2 used on S-22865 or 22892)	.08
112–920		6-20 × 3/8 Phils. binding hd. self-tap screw (4 part of S-22865 or 22892)	.02
114–197		Hex washer hd. self-tap screw (2 used on chassis)	.02
114–294		6-20 × ¼ × ¼ Hex hd. self-tap screw (4 part of S-20815 or 21426)	.02
114–446		6-32 × ¼ × ¼ Hex slotted hd. self-tap screw (used on 57-1520)	.02
156–42		Door latch – upper half (part of 14-1633 or 1675)	1.25
156–43		Door latch – lower half (part of 14-1633 or 1675)	1.25
157–7		Strike fastener (2 part of 14-1633 or 1675)	.08
157–8		Strike fastener (2 part of 14-1633 or 1675)	.05
159–49		Snap button (2 used on S-22864 or S-22891 and 2 on 14-1633 or 1675)	.01
166–75		Recessed bumper (4 part of 14-1633 or 1675)	.10
199–160		Ant. insullation sleeve (2 used)	.08
202–1103		Operating guide	
202–1104		Service notes	
202–1105		Special booklet	
202–1106		Shortwave chart book	
S-15635		Wavemagnet ant. suction cup assem. (2 used)	.15
S-15722		Ant. knob and latch spring assem. (part of S-15802)	.45
S-15802	E1	Telescoping ant. assem. (Model Y600)	7.50
S-20799		Front cover hinge assem. – Left (part of 14-1633)	.75
S-20800		Front cover hinge assem. – Right (part of 14-1633)	.75
S-20809		Cable and plug assem. (part of S-22865 or S-22892)	.40
S-20811		Wavemagnet ant. wdg. assem. (part of S-22865 or S-22892)	2.00
S-20815		Inside cover and housing assem. (Model Y600)	5.40
S-21424		Front cover hinge assem. – Left (part of 14-1675)	.85
S-21425		Front cover hinge assem. – Right (part of 14-1675)	.85
S-21426		Inside cover and housing assem. (Model Y600L)	5.40
S-21432		Ant. knob and latch spring assem. (part of S-21433)	.60
S-21433		Telescoping ant. assem. (Model Y600L)	8.80
S-22864		Wavemagnet ant. cover assem. (part of S-22865 – Model Y600)	
S-22865	L1	Complete wavemagnet ant. assem. (Model Y600)	
S-22866		Wavemagnet ant. mtg. strip assem. (Model Y600)	
S-22891		Wavemagnet ant. cover assem. (part of S-22892) (Model Y600L)	

80–69		Dial cord tension spring (1 used on ea. S-20783 and S-20805)	.05
80–209		Dial cord tension spring (used on S-20784)	.03
83–1102		2 lug terminal strip	.05
83–1071		Threaded retaining strip (1 used on ea. 149-86)	.02
83–1880		Ant. terminal strip (part of S-17806)	.20
83–1919		2 lug terminal strip	.05
83–2190		7 lug terminal strip	.15
83–2307		4 lug terminal strip	.06
85–473	S4	3 position switch on S-15715	
85–495	S7	Phono-Radio switch	.40
85–502	S1	Band switch (part of S-20821)	12.25
85–503	S2	Tone Control switch	1.00
85–543	S3	Power change-over switch	1.40
or 85–520	S3	Power change-over switch	1.00
93–2		Brass washer (2 mt. ea. 78-802 and 84-4)	.01
93–125		Internal lockwasher (2 mt. ea. 95-1148 and 95-1149; 1 mt. 212-13)	.01
93–158		1/8 × .142 × .318 steel washer (used on 212-13)	.05
93–209		.031 × .140 × 7/16 steel washer (2 mt. 26-520)	.02
93–1073		Insulating washer	.02
94–295		Gang capacitor and speaker mtg. bushing (3 used on ea. 22-2520 and 49-748)	.04
94–742		Tuning slug insert (1 part of ea. S-17730 and S-17731)	.09
94–773		Insert (1 part ea. S-18614 and S-18615; 2 on S-18735)	.06
94–812		Coil insert bushing (part of S-20844)	.05
95–1148	T1	1st IF transformer	1.60
95–1149	T2	2nd IF transformer	1.60
95–1369	T3	Audio output transformer (part of 49-748)	2.50
113–8		6-32 × ¼ × ¼ Hex hd. mach. screw (lockwasher att. – 11 used)	.02
113–13		6-32 × 7/16 × ¼ Hex hd. mach. screw (lockwasher att. – 1 mt. 22-2520 and 3 mt. 49-748)	.02
113–18		6-32 × 5/16 Hex hd. mach. screw (lockwasher att. – used on 12-1873)	.02
113–19		6-32 × 9/16 × ¼ Hex hd. mach. screw	.02
113–56		4-40 × ¼ Hex hd. mach. screw (lockwasher att. – 2 used)	.02
19–258		Retaining clip (3 used)	.03
24–670		Inside front cover (Model Y600–part of S-20815)	1.80
24–671		A.C. plug cover (Model Y600)	.15
24–695		Inside front cover (Model Y600L-part of S-21426)	1.95
24–696		A.C. plug cover (Model Y600L)	.45
36–110		Cabinet handle (part of 14-1675)	
36–111		Cabinet handle (part of 14-1633)	
40–73		Cabinet back cover hinge (2 part of 14-1633 or 1675)	.25
40–147		Inside cover stop hinge	.15
43–233		Wavemagnet ant. housing (Model Y600 – part of S-22865)	1.25
43–234		Cover housing (part of S-20815)	1.65
43–244		Wavemagnet ant. housing (Model Y600L – part of S-22892)	1.60
43–245		Cover housing (part of S-21426)	1.80
46–912		Band switch knob (Model Y600 – 7 used)	.10
46–913		Tuning knob (Model Y600)	.15
46–1242		Vol. control knob (Model Y600)	.30
46–1288		Band switch knob (Model Y600L – 7 used)	.10
46–1289		Tuning knob (Model Y600L)	.30
46–1290		Vol. control knob (Model Y600L)	.30
54–341		8-32 × ¼ – 3/32 Hex nut (2 mt. S-15802 or 21433)	.02
54–369		Cable retaining nut (2 used)	.05
54–391		3/8 – 32 hex nut (used on chassis)	.04
56–320		Inside cover hinge pin (part of S-20815 or 21426)	.20
57–1520		Adapter socket cover plate	.15
57–1725		Emblem plate (part of S-20815)	.20
57–2082		Escutcheon (Model Y600)	10.50
57–2083		Escutcheon (Model Y600L)	10.50
58–157		Battery plug (used with 85-542)	.05
58–179	P1	3 Prong plug (part of S-20809)	.15
69–108		6-32 × ¼ Rd. hd. mach. screw (2 part of S-22866 or 22893)	.02
69–292		4-40 × ¼ Phils. rd. hd. mach. screw (2 mt. 85-542 or 550)	.03
70–166		6 × ½ Phils. rd. hd. wood screw (1 used on chassis)	.02
70–168		4 × ½ Phils. rd. hd. wood screw (3 mt. 57-2082 or 2083)	.02
70–169		4 × ¾ Phils. rd. hd. wood screw (4 mt. 57-2082 or 2083)	.02
S-22892		Complete wavemagnet ant. assem. (Model Y600L)	
S-22893		Wavemagnet ant. mtg. strip assem. (Model Y600L)	

TO THE SERVICE MAN:

Chassis 6T40Z 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 6T40Z 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 of 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 C3B. This will insure maximum performance after alignment.

The I.F. transformers incorporated in this receiver are of the new permeability

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.	455Kc	BC	600 Kc	L6,7,8,9	Align I.F.
2		1600Kc	BC	1600 Kc	C3F	Set oscillator to scale

ity 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 tuning one slug does not affect the adjustment of the other.

Thermal Regulator Tube 50A1 is an automatic rheostat designed to keep the current in a circuit at a definite value. Should the supply voltage change, either upward or downward, the Thermal Regulator will automatically increase or decrease its resistance to compensate for this change and keep the current thru the controlled circuit at a constant value.

As used in the Y600, the controlled circuit consists of the filament of the five vacuum tubes connected in series. A constant current thru these filaments is equivalent to a constant voltage applied across them.

The Thermal Regulator tube is capable of performing its function because of its peculiar electric thermal characteristics. Basically the tube consists of a fine iron wire filament hermetically sealed in a hydrogen atmosphere. By balancing the temperature resistance curve of the wire against the thermal conductivity curve of the gas, it is possible to make a unit that automatically changes its resistance to keep a constant current flowing over a large range of voltage variation.

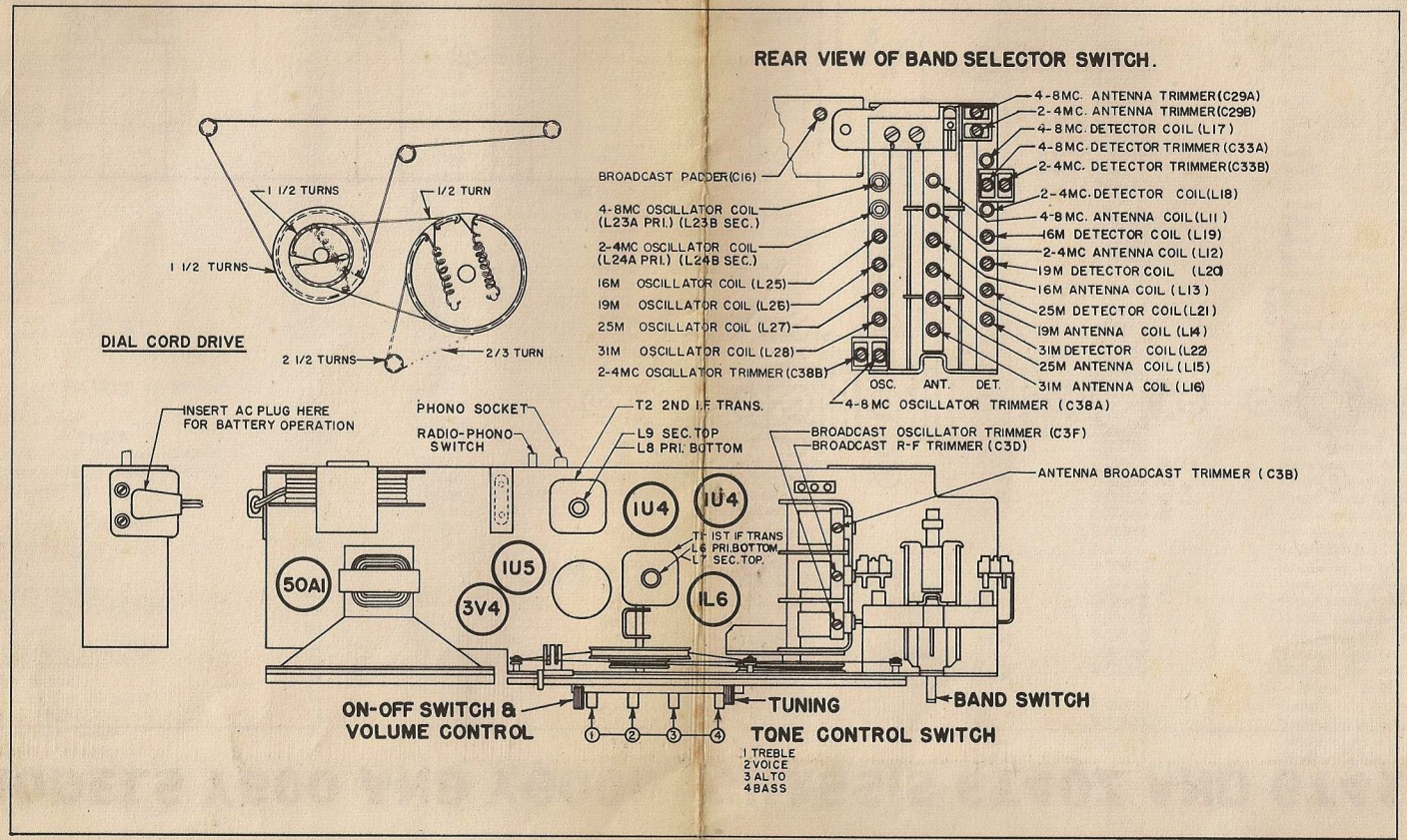
By keeping the filament current of the vacuum tubes constant at 50 milliamperes we extend the line voltage range over which the set will operate from 90 to 130 volts and increase tube life by an indefinite amount.

3	loosely to broadcast	1400 Kc	BC	1400 Kc	C3D	Alignment of BC Det.
4	wavemagnet	1400 Kc	BC	1400 Kc	C3B	Alignment of BC ant.
5*		600 Kc	BC	600 Kc	Rock C16	Alignm't of BC at 600 Kc
6	3 feet of wire approximately 1 foot from extended wave rod.	7.8 Mc	4-8 Mc	7.8 Mc	C38A, C33A, C29A	Alignment of S. W. Oscillator Detector and Antenna.
7*		4.2 Mc	4-8 Mc	4.2 Mc	Rock L23B	
8		REPEAT OPERATIONS 6 & 7				
9		3.9 Mc	2-4 Mc	3.9 Mc	C38B, C33B, C29B	
10*		2.1	2-4 Mc	2.1 Mc	Rock L24B	
11		REPEAT OPERATIONS 9 & 10				
12		17.8 Mc	16 Meters	17.8 Mc	L25, L19, L13	
13*		15.2	19 Meters	15.2	L26, L20, L14	
14		11.8 Mc	25 Meters	11.8	L27, L21, L15	
15*		9.6 Mc	31 Meters	9.6 Mc	L28, L22, L16	

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

NOTE: If Trimmers C3F, C3D, C3B are adjusted after procedures No. 2 through No. 15 are completed, it will be necessary to repeat alignment procedures No. 2 through No. 15.

Tube, Trimmer Location and Dial Cable Drawing



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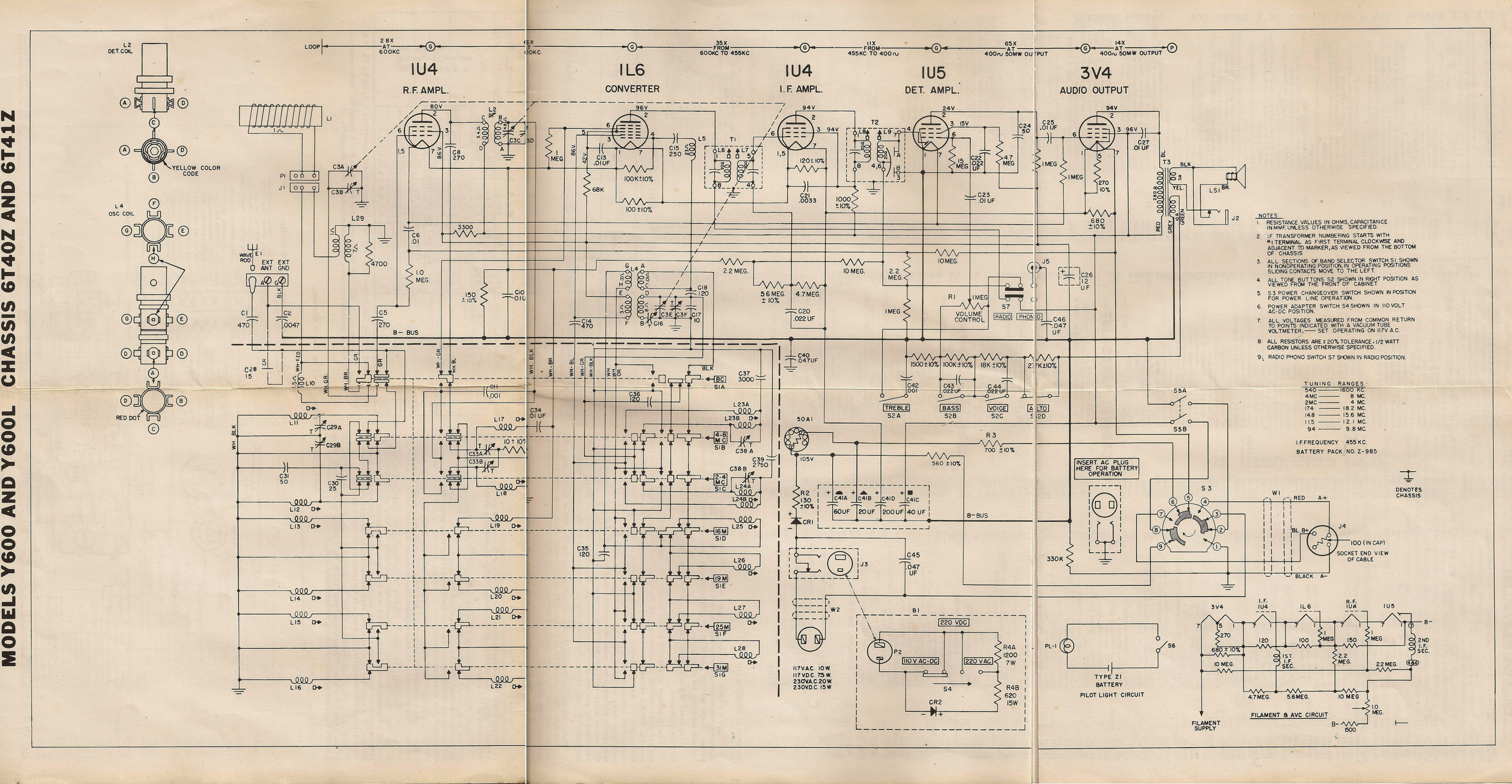
MODELS Y600 AND Y600L CHASSIS 6T40Z AND 6T41Z



NOTES.

1. RESISTANCE VALUES IN OHMS, CAPACITANCE IN MMF. UNLESS OTHERWISE SPECIFIED.
2. I.F. TRANSFORMER NUMBERING STARTS WITH #1 TERMINAL AS FIRST TERMINAL CLOCKWISE AND ADJACENT TO MARKER, AS VIEWED FROM THE BOTTOM OF CHASSIS
3. ALL SECTIONS OF BAND SELECTOR SWITCH S1 SHOWN IN NONOPERATING POSITION, IN OPERATING POSITIONS SLIDING CONTACTS MOVE TO THE LEFT.
4. ALL TONE BUTTONS S2 SHOWN IN RIGHT POSITION AS VIEWED FROM THE FRONT OF CABINET.
5. S3 POWER CHANGEOVER SWITCH SHOWN IN POSITION FOR POWER LINE OPERATION.
6. POWER ADAPTER SWITCH S4 SHOWN IN 110 VOLT AC-DC POSITION.
7. ALL VOLTAGES MEASURED FROM COMMON RETURN TO POINTS INDICATED WITH A VACUUM TUBE VOLTMETER. — SET OPERATING ON 117V. A.C.
8. ALL RESISTORS ARE ± 20% TOLERANCE, 1/2 WATT CARBON UNLESS OTHERWISE SPECIFIED.
9. RADIO PHONO SWITCH S7 SHOWN IN RADIO POSITION.

TUNING RANGES

540	1600 KC.
4 MC	8 MC.
2 MC	4 MC.
1 7 4	18.2 MC.
14.8	15.6 MC.
11.5	12.1 MC.
9 4	9.8 MC.

I.F. FREQUENCY 455 KC.

BATTERY PACK NO. Z-985