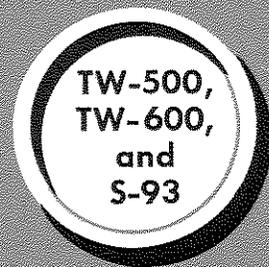




hallicrafters

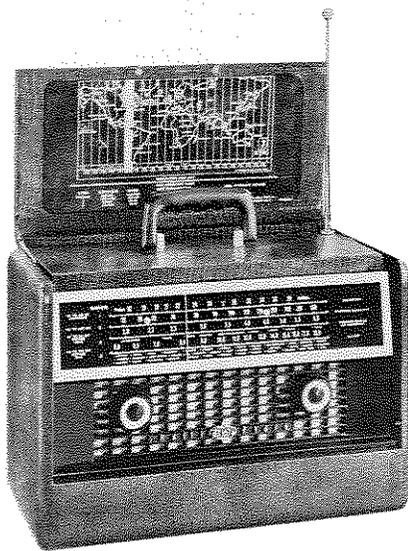
4-Band Portable

SERVICE INSTRUCTIONS



the hallicrafters co.

MANUFACTURERS OF RADIO, TELEVISION AND ELECTRONIC EQUIPMENT, CHICAGO 24, U. S. A.



Model TW-500, green "lizard" leatherette

92X2190

TECHNICAL SPECIFICATIONS

TUBES AND RECTIFIERS 5 tubes plus 1 selenium rectifier.

POWER SUPPLY 105-120 volts DC or 50/60 cycle AC, 90V "B"/9V "A" battery pack, or 220 volts AC/DC with Ballast Adapter 1X1438.

POWER CONSUMPTION 20 watts

SPEAKER 5 inch round; 3.2-ohm voice coil.

INTERMEDIATE FREQUENCY 455 KC

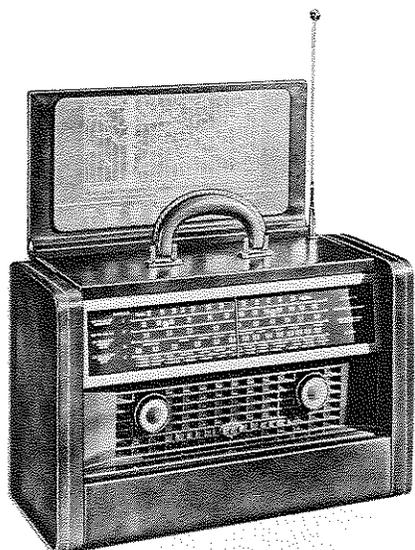
ANTENNA Stick-loop for BC and LW bands, whip for SW bands, and terminals for long wire for use on all bands.

FREQUENCY COVERAGE

Band	Frequency Range	Reception
1	170 - 415 KC	Longwave
2	530 - 1620 KC	Std. Broadcast
3	2.0 - 6.0 MC	Shortwave
4	6.0 - 18.0 MC	Shortwave

REPLACEMENT BATTERY PACKS

Hall-crafters	Burgess	Ever-easy	RCA	Ray O-Vac	Sears
P1000	F6A60P	757	VS058	AB909	6410

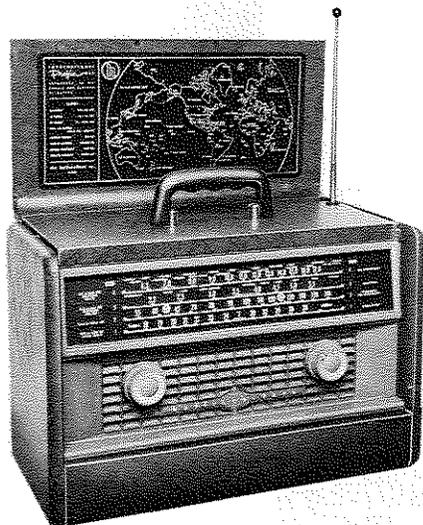


Model TW-600, genuine top-grain cowhide

92X2235

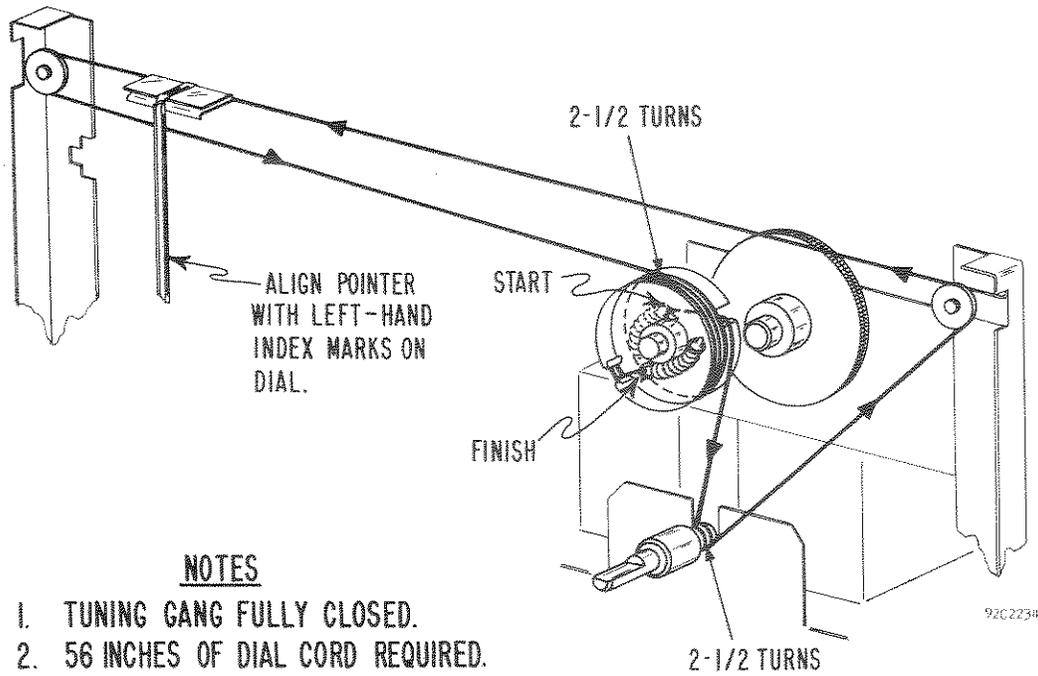
TO REMOVE CHASSIS FROM CABINET

1. Remove the front control knobs by pulling in the outward direction.
2. Disconnect the whip antenna lead at the antenna terminal strip.
3. Remove the 6-32 self-tapping screw at the bottom rear of the cabinet which secures the whip antenna.
4. Remove the whip antenna from the cabinet.
5. Remove the four #10 self-tapping screws at the bottom of the cabinet which secure the chassis.
6. Slide the chassis out through the rear of the cabinet.



Model S-93, Gray Leatherette

92X2368



- NOTES**
1. TUNING GANG FULLY CLOSED.
 2. 56 INCHES OF DIAL CORD REQUIRED.

Fig. 1. Dial Stringing Diagram (Early Sets)

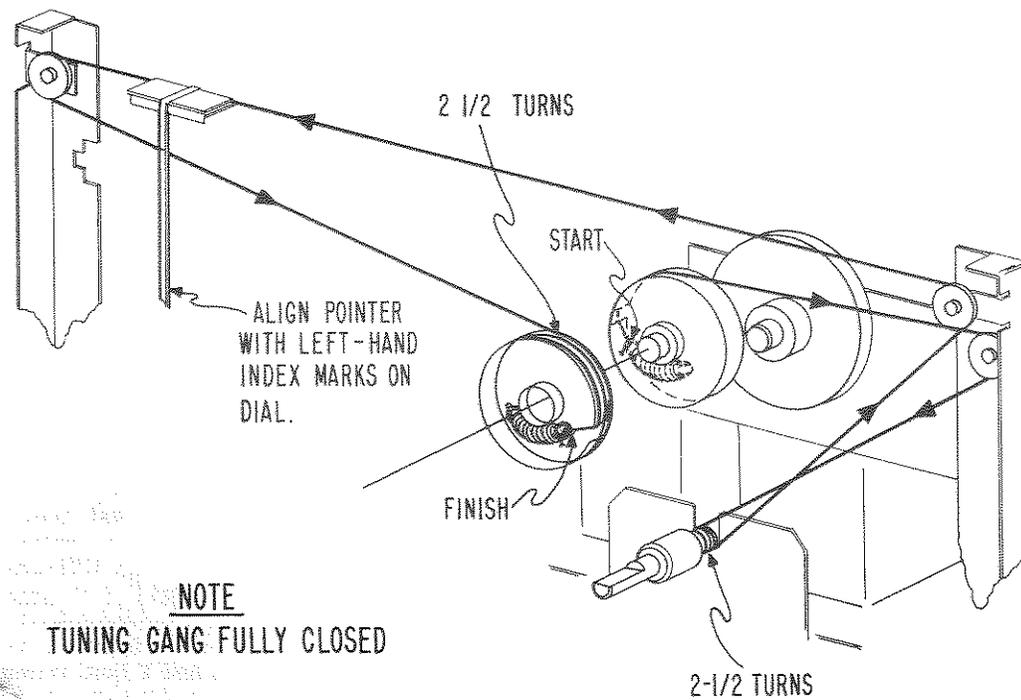


Fig. 2. Dial Stringing Diagram (Later Sets)

ALIGNMENT INSTRUCTIONS

- Be sure both the set and the signal generator are thoroughly warmed up before starting alignment.
- Use an accurate signal generator which has a modulated output and covers 455 KC to 14.0 MC.
- Set the volume control at maximum and disconnect the SW whip antenna.
- Use a non-metallic alignment tool with a 3/32"-wide screwdriver blade.
- Connect the output meter across the speaker voice coil.
- To avoid AVC action, use lowest output setting of signal generator which gives satisfactory reading on meter (approx. 50 milliwatts).
- Refer to Figs. 5 and 6 for location of the alignment adjustments.
- The local oscillator frequency is higher than the signal frequency on all bands.

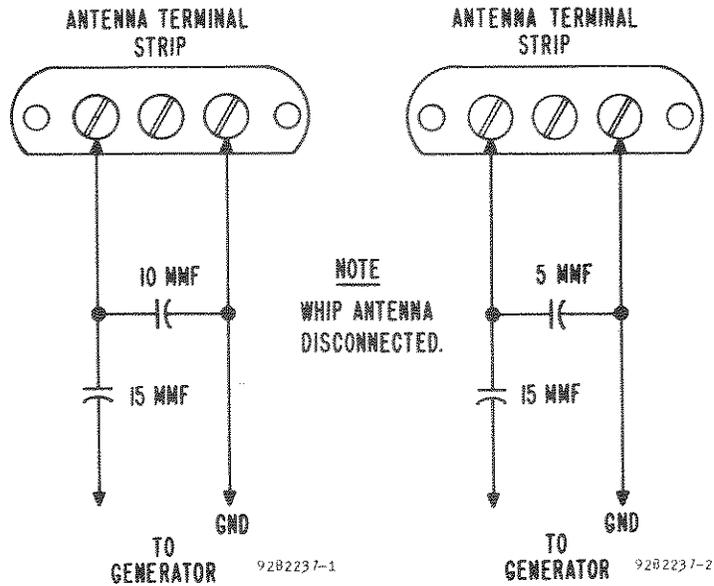


Fig. 3. Dummy Antenna for Band 3

Fig. 4. Dummy Antenna for Band 4

ALIGNMENT PROCEDURE

Step	Signal Generator Connections	Generator Frequency	Band Selector Setting	Receiver Dial Setting	Adjust for Maximum Output
1	High side thru .1 mfd capacitor to stator plates of center section of tuning gang. Low side to chassis.	455 KC	2	1000 KC	A and B (2nd IF) C and D (1st IF)
2	Radiate gen. signal into stick-loop antenna.	360 KC	1	360 KC	E (osc. trimmer), F (mixer trimmer) and G (ant. trimmer)
3	Same as Step 2.	200 KC	1	200 KC	H (osc. slug), I (mixer slug), and J (ant. loading slug)
4	Repeat Step 2.				
5	Same as Step 2.	1400 KC	2	1400 KC	K (osc. trimmer), L (mixer trimmer) and M (ant. trimmer)
6	Same as Step 2.	600 KC	2	600 KC	N (osc. slug), O (mixer slug), and P (ant. loading slug)
7	Connect dummy antenna shown in Fig. 3.	5.0 MC	3	5.0 MC	Q (osc. trimmer), R (mixer trimmer) and S (ant. trimmer)
8	Same as Step 7.	2.2 MC	3	2.2 MC	T (osc. slug), U (mixer slug), and V (ant. slug)
9	Disconnect dummy antenna used for Steps 7 and 8 and connect dummy antenna shown in Fig. 4.	14.0 MC	4	14.0 MC	W (osc. trimmer), X (mixer trimmer) and Y (ant. trimmer)
10	Same as Step 9.	7.0 MC	4	7.0 MC	Z (osc. slug), AA (mixer slug), and AB (ant. slug)

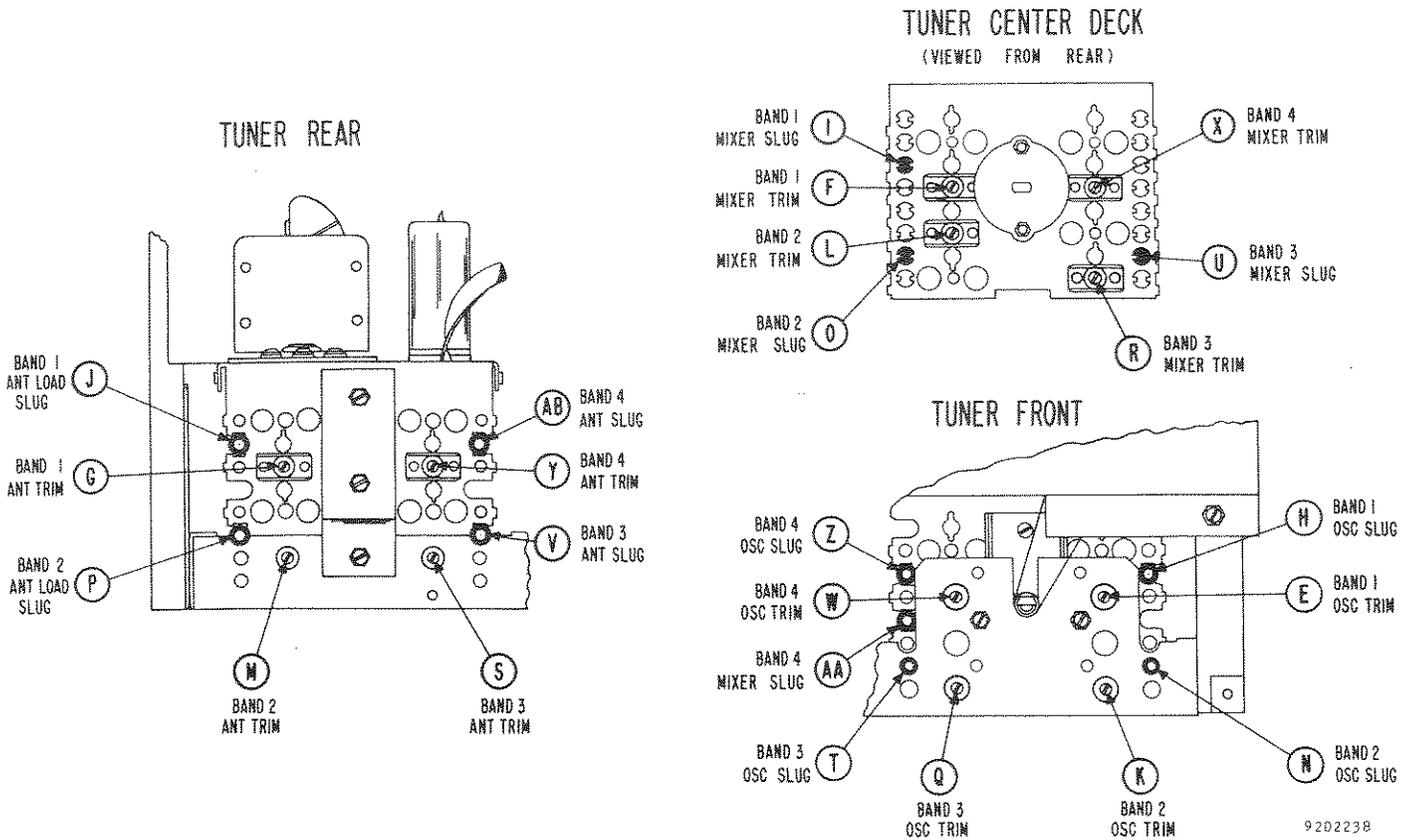


Fig. 5. Tuner Alignment Adjustments

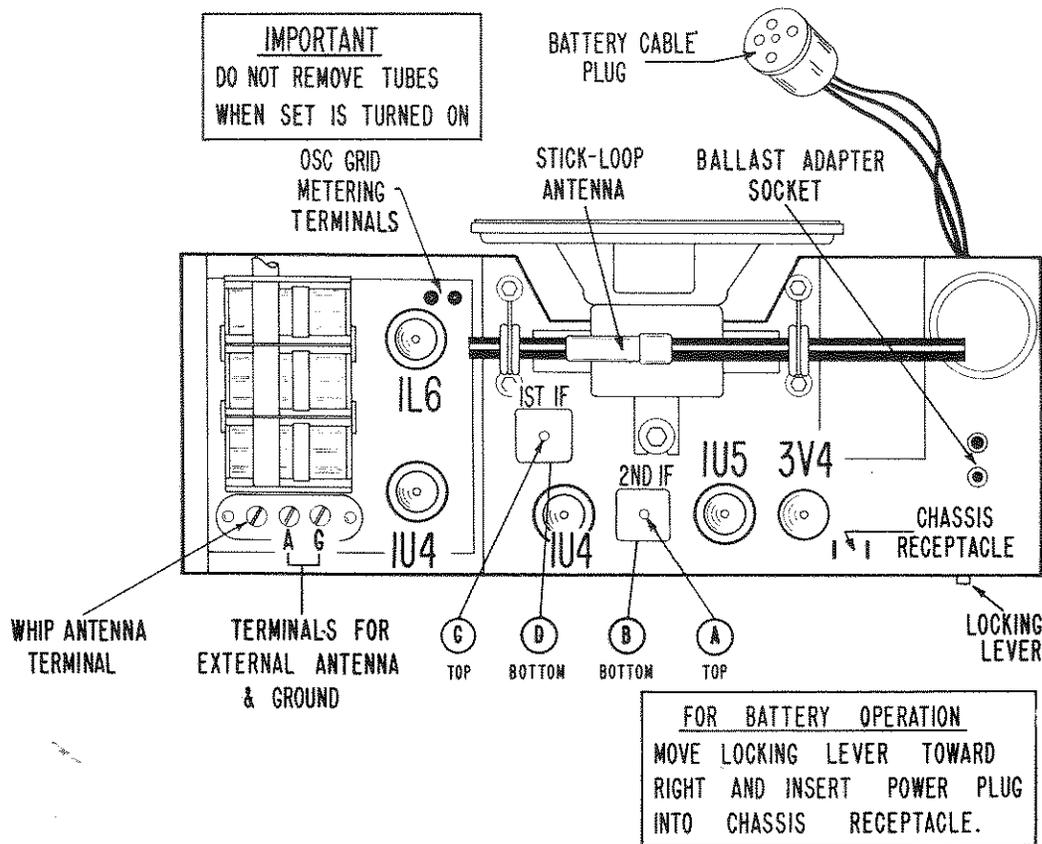


Fig. 6. Top View of Chassis Showing Location of Alignment Adjustments and Tubes

92C2239-A

MAIN CHASSIS PARTS LIST

Schematic Symbol	Description	Hallicrafters Part Number	Schematic Symbol	Description	Hallicrafters Part Number
CAPACITORS			COILS AND TRANSFORMERS		
C-1,3,16	.047 mfd. 200V., molded tubular paper	46BS473L2	L-1	Antenna, stick-loop (less mtg. parts and twin-line)	57B203
**C-2	.001 mfd. GMV. 500V., ceramic	47C20A102N	L-2,3	Choke, RF; 1.0 Mh	53A265
C-6	.005 mfd. 450V., ceramic disc	47A168	T-1	Transformer, 1st IF	50C233
C-10	220 mmfd. 500V., ceramic	47CA20A221K	T-2	Transformer, 2nd IF	50C242
C-11	.0047 mfd. 600V., molded tubular paper	46BS472L6	T-3	Transformer, audio output (part of speaker LS-1)	-----
C-12,17	.047 mfd. 600V., molded tubular paper	46BR473L6	PLUGS AND SOCKETS		
C-13	.02 mfd. 500V., ceramic disc	47A242	PL-1	Line cord and plug	87A3592
C-14	100 mfd. 25V., electrolytic	45B214	SO-1	Socket, battery cable (less shell)	10A296
⊙C-15	Dual 40 mfd. 150V., 80 mfd. 150V., 80 mfd. 25V., electrolytic	45B215	SO-2	Shell for socket SO-1 above	10A294
or				Socket, ballast adapter	10A507
⊙C-15	Dual 40 mfd. 150V., 80 mfd. 150V., 200 mfd. 10V., electrolytic	45B251	SR-1	Socket, tube; 7 pin miniature	6B297
				Rectifier, selenium; 100 ma	27B190
⊙ See part number stamped on side of capacitor.			TUBES AND RECTIFIERS		
** Guaranteed Minimum Value.			V-1	1U4: IF amplifier	90X1U4
			V-2	1U5: detector and audio amplifier	90X1U5
			V-3	3V4: audio output	90X3V4
			SWITCHES		
			S-1	Switch, on-off (part of Volume control R-5)	-----
			S-2	Switch, power changeover	60B593
RESISTORS			MISCELLANEOUS		
R-1,18,19	1000 ohms 10%, 1/2 watt, carbon	23X20X102K		Clip, IF transformer mtg.	76A385
R-2,3	2.2 megohms 10%, 1/2 watt carbon	23X20X225K		Cord, dial (specify length)	38A026
R-5	Volume control, 1 megohm (includes on-off switch S-1): for Models TW-500 and TW-600	25B1076		Dial plate, calibrated:	
		25B1077		for Model TW-500, green	83C473
		25B1077		for Model TW-600, brown	83C474
R-6	1500 ohms 10%, 1/2 watt, carbon	23X20X152K	PC-50	for Model S-93, black	83A487
R-7,14	10 megohms 10%, 1/2 watt, carbon	23X20X106K		Diode filter plate (includes R-4, C-4, and C-5)	49A016
R-11	33,000 ohms 10%, 1/2 watt, carbon	23X20X333K		Grommet, rubber; 1/2" od	16A190
R-12	330,000 ohms 10%, 1/2 watt, carbon	23X20X334K		Grommet, rubber, 5/8" od	16A125-1
R-13	68 ohms 5%, 1/2 watt, carbon	23X20X680J		Lock, line cord	76A974
R-15	100 ohms 5%, 1/2 watt, carbon	23X20X101J		Mounting base for tube shield	69A308
R-16	220 ohms 5%, 1/2 watt, carbon	23X20X221J		Mounting plate for electrolytic capacitor C-15	8A749
R-17	1500 ohms 5%, 1/2 watt, carbon	23X20X152J	PC-90	Pentode couplate (includes R-8, R-9, R-10, C-7, C-8 and C-9)	49B043
R-20	3300 ohms 5%, 1/2 watt, carbon	23X20X332J		Pointer, dial	82B252
R-21	2000 ohms 5%, 10 watts; wire-wound	24B981		Shield, tube	69A306
R-22	82 ohms 5%, 2 watts, carbon	23X40X820J	LS-1	Snap-in trimount; for mounting chassis bottom plate	76A1055
				Speaker assembly, 5" PM; 3.2 ohm voice coil (includes output transformer T-3)	85C161
				Spring, dial cord tension	75A163

TUNER CHASSIS PARTS LIST

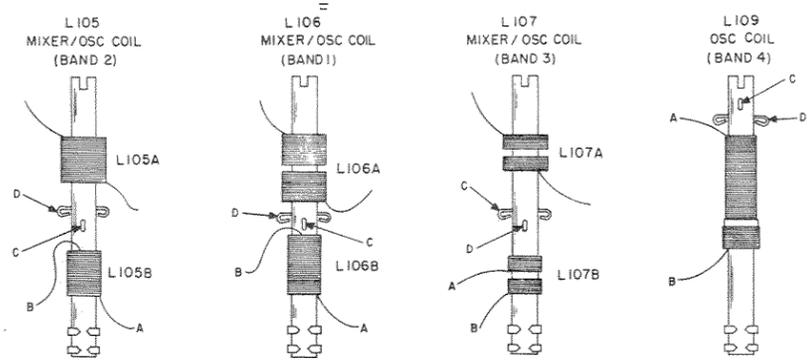
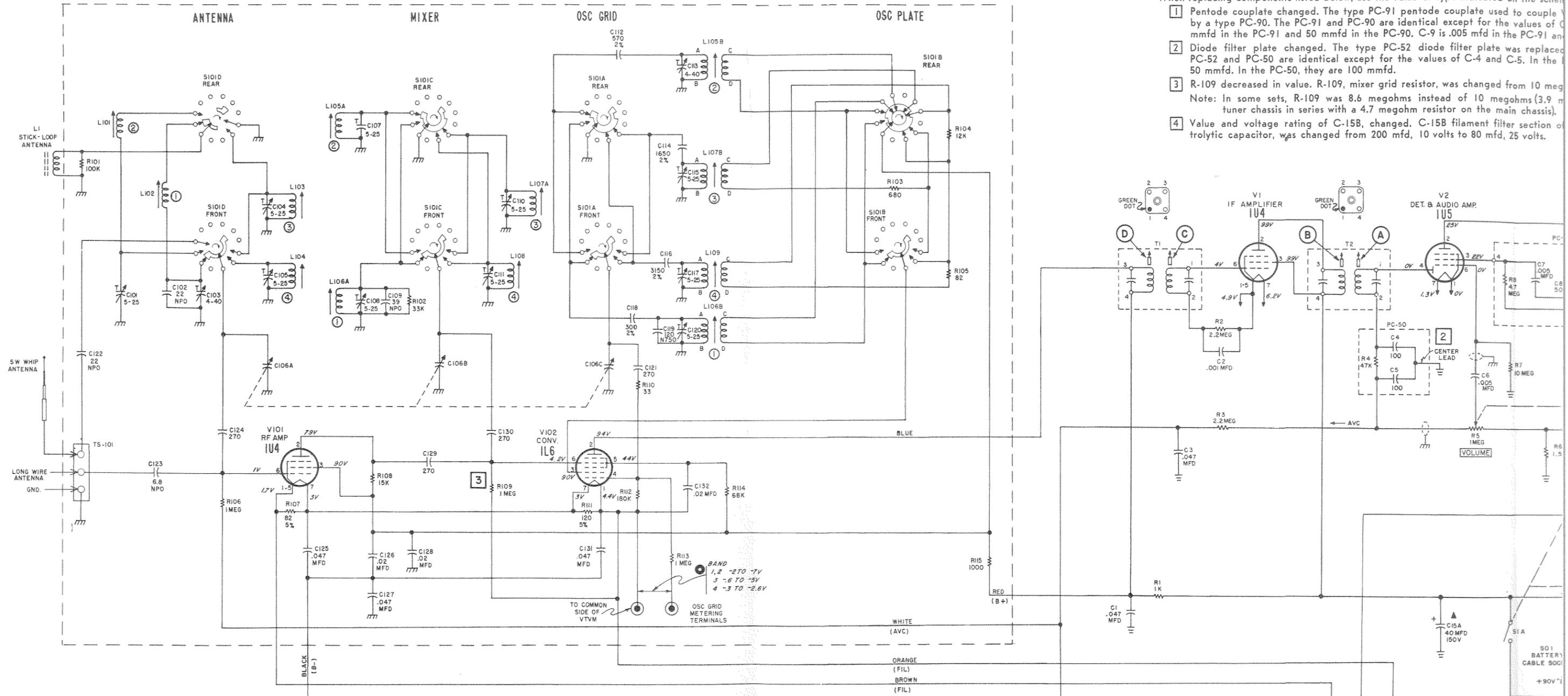
Schematic Symbol	Description	Hallicrafters Part Number	Schematic Symbol	Description	Hallicrafters Part Number
CAPACITORS			CAPACITORS		
C-101,104,105,107,108,110,111,115,117,120	5-25 mmfd.; ceramic trimmer	44A446	C-106	Tuning capacitor, 3 section	48C326
*C-102,122	22 mmfd. 10%, NPO, 500V.; ceramic	47X20CG220K	*C-109	39 mmfd. 5%, NPO, 500V.; ceramic	47X30CG390J/D
C-103,113	4-40 mmfd.; ceramic trimmer	44B443	C-112	570 mmfd. 2%, 500V.; silver mica	47X20C571G
			C-114	1650 mmfd. 2%, 500V.; silver mica	47A445
			C-116	3150 mfd. 2%, 500V.; silver mica	47B446

* USE EXACT REPLACEMENT ONLY

PRODUCTION CHANGES

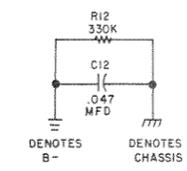
Production changes are indicated on the schematic diagram by the numerical symbol. When replacing components listed below, use the value or type indicated on the schematic.

- 1 Pentode couplate changed. The type PC-91 pentode couplate used to couple L105A to L105B by a type PC-90. The PC-91 and PC-90 are identical except for the values of C-4 and C-5. C-4 is .005 mfd in the PC-91 and .010 mfd in the PC-90. C-5 is .005 mfd in the PC-91 and .010 mfd in the PC-90.
- 2 Diode filter plate changed. The type PC-52 diode filter plate was replaced by a type PC-50. The PC-52 and PC-50 are identical except for the values of C-4 and C-5. In the PC-52, C-4 is .010 mfd and C-5 is .010 mfd. In the PC-50, they are 100 mmfd.
- 3 R-109 decreased in value. R-109, mixer grid resistor, was changed from 10 megohms to 1 megohm.
Note: In some sets, R-109 was 8.6 megohms instead of 10 megohms (3.9 megohm resistor in series with a 4.7 megohm resistor on the main chassis).
- 4 Value and voltage rating of C-15B, changed. C-15B filament filter section of electrolytic capacitor, was changed from 200 mfd, 10 volts to 80 mfd, 25 volts.

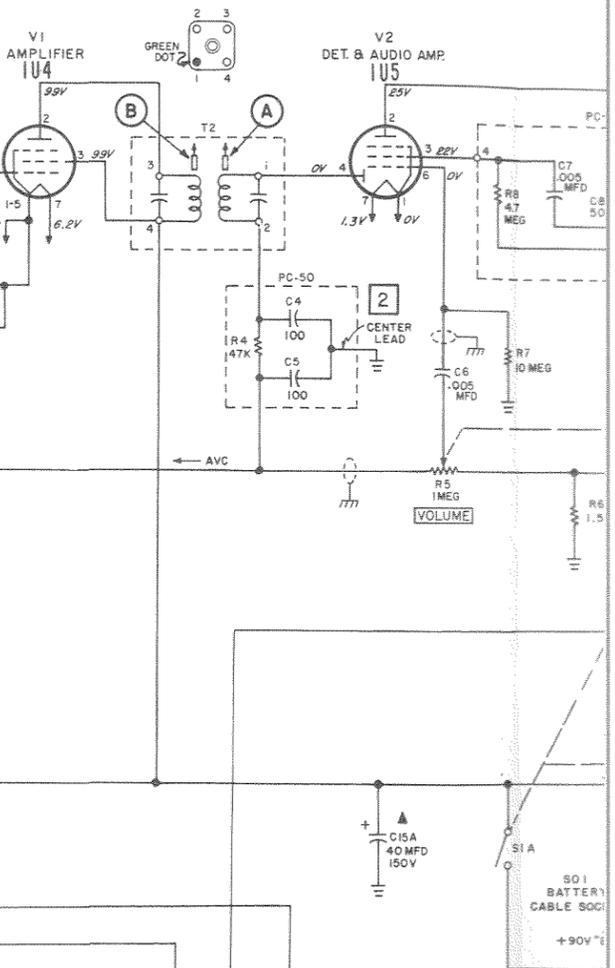


NOTES

1. RESISTORS ARE 1/2 WATT AND 10% UNLESS OTHERWISE SPECIFIED.
2. RESISTANCE IN OHMS AND CAPACITANCE IN MMF UNLESS OTHERWISE SPECIFIED. K=1000
3. INTERMEDIATE FREQUENCY +455 KC.
4. POWER CHANGEOVER SWITCH S-2 SHOWN IN AC/DC POSITION. FOR BATTERY OPERATION, INSERT LINE CORD PLUG INTO CHASSIS RECEPTACLE (SEE FIG. 6).
5. LINE VOLTAGE: AC/DC OPERATION - 117 VOLTS
BATTERY OPERATION - 90V "B" AND 9V "A"
6. ALL VOLTAGES MEASURED WITH VTVM BETWEEN TUBE SOCKET TERMINALS AND B-($\frac{1}{2}$). VOLTAGES ARE DC AND POSITIVE UNLESS OTHERWISE SPECIFIED.
7. ALL VOLTAGES ARE MEASURED WITH ANTENNA TERMINALS AND STICK-LOOP ANTENNA SHORTED.
8. BAND SELECTOR SWITCH S101 SHOWN IN BROADCAST POSITION. (BAND 2). ALL SWITCH SECTIONS ARE AS VIEWED FROM FRONT OF SET.
9. AVAILABLE AS AN ACCESSORY.
10. VOLTAGE VARIES WITH SETTING OF TUNING GANG.



9 DENOTES B-
10 DENOTES CHASSIS

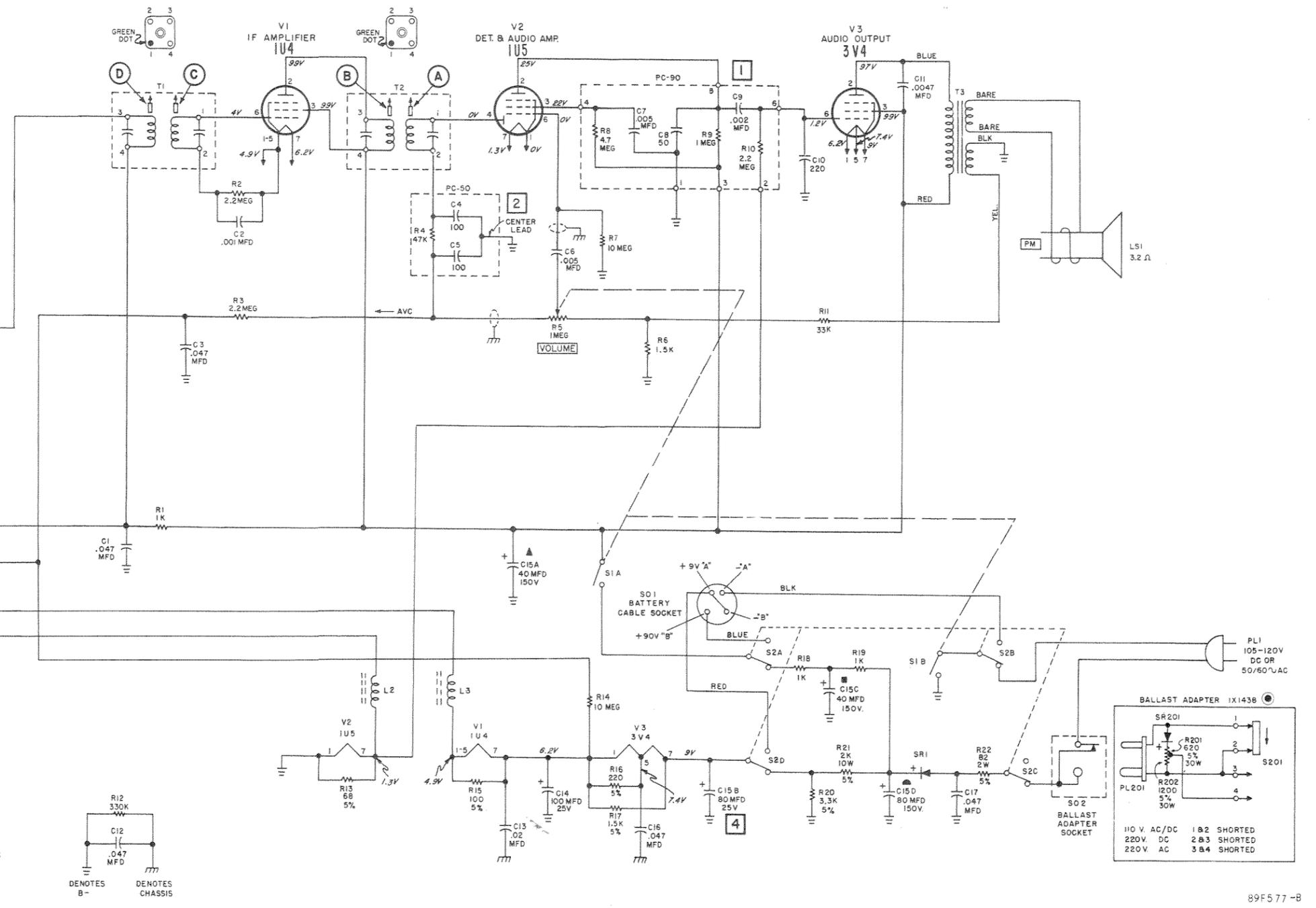
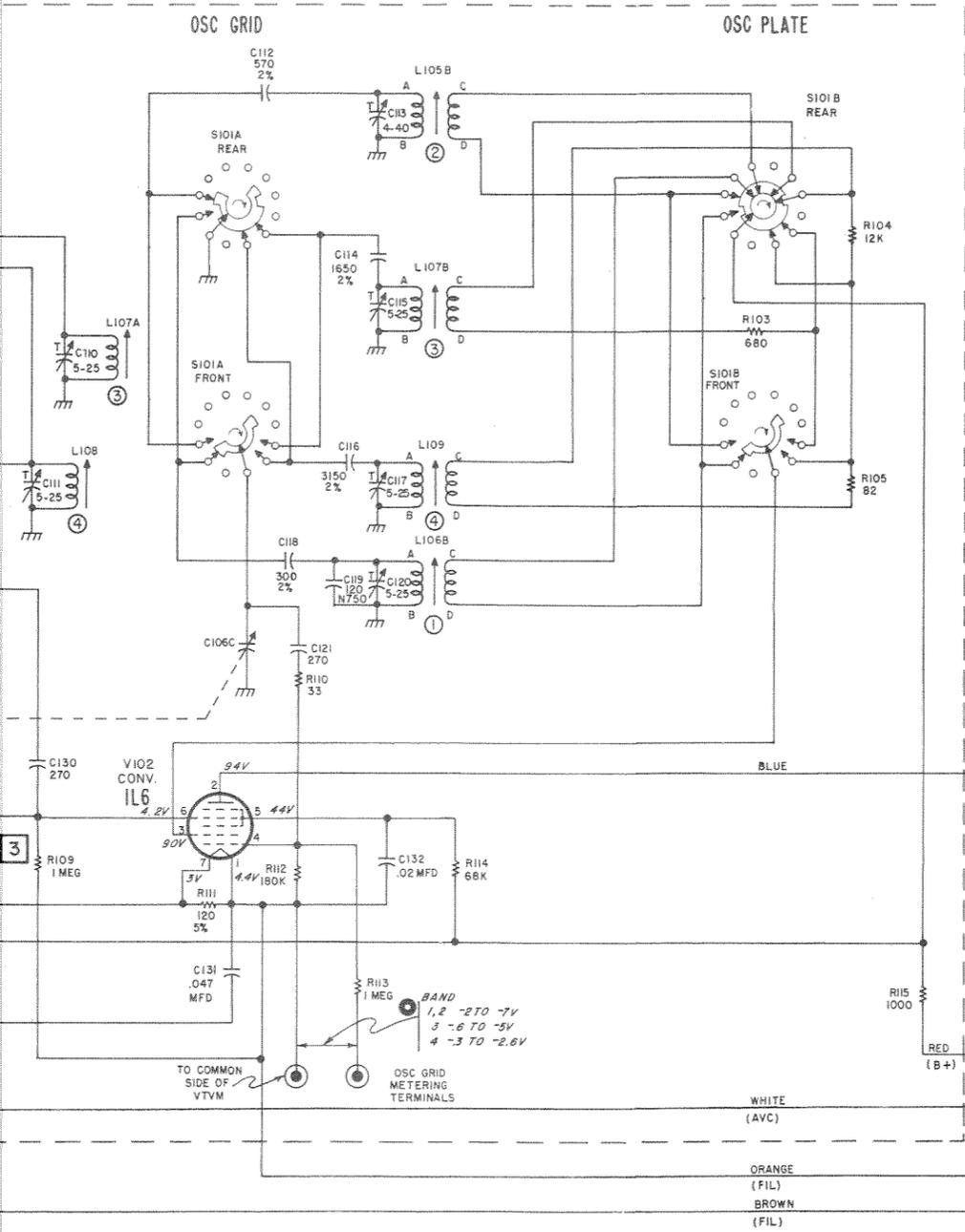


VALUES AND TOLERANCES SHOWN ARE NOMINAL AND VARIATIONS MAY BE FOUND. IT IS RECOMMENDED THAT THE VALUE OF ANY REPLACEMENT CORRESPOND TO THE NOMINAL VALUE OF THE PART BEING REPLACED.

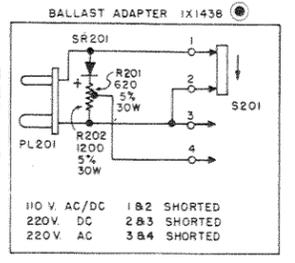
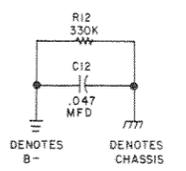
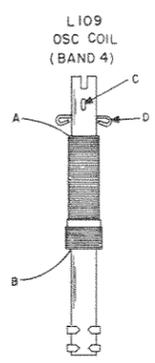
PRODUCTION CHANGES

Production changes are indicated on the schematic diagram by the numerical symbols 1, 2, 3, etc. When replacing components listed below, use the value or type indicated on the schematic diagram.

- 1 Pentode couplate changed. The type PC-91 pentode couplate used to couple V-2 to V-3 was replaced by a type PC-90. The PC-91 and PC-90 are identical except for the values of C-8 and C-9. C-8 is 100 mmfd in the PC-91 and 50 mmfd in the PC-90. C-9 is .005 mfd in the PC-91 and .002 mfd in the PC-90.
- 2 Diode filter plate changed. The type PC-52 diode filter plate was replaced by a type PC-50. The PC-52 and PC-50 are identical except for the values of C-4 and C-5. In the PC-52, C-4 and C-5 are 50 mmfd. In the PC-50, they are 100 mmfd.
- 3 R-109 decreased in value. R-109, mixer grid resistor, was changed from 10 megohms to 1 megohm. Note: In some sets, R-109 was 8.6 megohms instead of 10 megohms (3.9 megohm resistor on the tuner chassis in series with a 4.7 megohm resistor on the main chassis).
- 4 Value and voltage rating of C-15B, changed. C-15B filament filter section of the quad-section electrolytic capacitor, was changed from 200 mfd, 10 volts to 80 mfd, 25 volts.



- NOTES**
1. RESISTORS ARE 1/2 WATT AND 10% UNLESS OTHERWISE SPECIFIED.
 2. RESISTANCE IN OHMS AND CAPACITANCE IN MMF UNLESS OTHERWISE SPECIFIED. K=1000
 3. INTERMEDIATE FREQUENCY = 455 KC.
 4. POWER CHANGEOVER SWITCH S-2 SHOWN IN AC/DC POSITION. FOR BATTERY OPERATION, INSERT LINE CORD PLUG INTO CHASSIS RECEPTACLE (SEE FIG. 6).
 5. LINE VOLTAGE: AC/DC OPERATION - 117 VOLTS
BATTERY OPERATION - 90V "B" AND 9V "A"
 6. ALL VOLTAGES MEASURED WITH VTVM BETWEEN TUBE SOCKET TERMINALS AND B-($\frac{1}{2}$). VOLTAGES ARE DC AND POSITIVE UNLESS OTHERWISE SPECIFIED.
 7. ALL VOLTAGES ARE MEASURED WITH ANTENNA TERMINALS AND STICK-LOOP ANTENNA SHORTED.
 8. BAND SELECTOR SWITCH S101 SHOWN IN BROADCAST POSITION. (BAND 2). ALL SWITCH SECTIONS ARE AS VIEWED FROM FRONT OF SET.
- AVAILABLE AS AN ACCESSORY.
● VOLTAGE VARIES WITH SETTING OF TUNING GANG.



VALUES AND TOLERANCES SHOWN ARE NOMINAL AND VARIATIONS MAY BE FOUND. IT IS RECOMMENDED THAT THE VALUE OF ANY REPLACEMENT CORRESPOND TO THE NOMINAL VALUE OF THE PART BEING REPLACED.

MAIN CHASSIS PARTS LIST

Schematic Symbol	Description	Hallicrafters Part Number	Schematic Symbol	Description	Hallicrafters Part Number
CAPACITORS			COILS AND TRANSFORMERS		
C-1,3,16	.047 mfd. 200V., molded tubular paper	46BS473L2	L-1	Antenna, stick-loop (less mtg. parts and twin-line)	57B203
**C-2	.001 mfd. GMV. 500V., ceramic	47C20A102N	L-2,3	Choke, RF; 1.0 Mh	53A265
C-6	.005 mfd. 450V., ceramic disc	47A168	T-1	Transformer, 1st IF	50C233
C-10	220 mmfd. 500V., ceramic	47CA20A221K	T-2	Transformer, 2nd IF	50C242
C-11	.0047 mfd. 600V., molded tubular paper	46BS472L6	T-3	Transformer, audio output (part of speaker LS-1)	-----
C-12,17	.047 mfd. 600V., molded tubular paper	46BR473L6	PLUGS AND SOCKETS		
C-13	.02 mfd. 500V., ceramic disc	47A242	PL-1	Line cord and plug	87A3592
C-14	100 mfd. 25V., electrolytic	45B214	SO-1	Socket, battery cable (less shell)	10A296
⊙C-15	Dual 40 mfd. 150V., 80 mfd. 150V., 80 mfd. 25V., electrolytic	45B215	SO-2	Shell for socket SO-1 above	10A294
⊙C-15	Dual 40 mfd. 150V., 80 mfd. 150V., 200 mfd. 10V., electrolytic	45B251	SR-1	Socket, ballast adapter	10A507
				Socket, tube; 7 pin miniature	6B297
				Rectifier, selenium; 100 ma	27B190
			TUBES AND RECTIFIERS		
⊙ See part number stamped on side of capacitor.			V-1	1U4: IF amplifier	90X1U4
** Guaranteed Minimum Value.			V-2	1U5: detector and audio amplifier	90X1U5
			V-3	3V4: audio output	90X3V4
			SWITCHES		
			S-1	Switch, on-off (part of Volume control R-5)	-----
			S-2	Switch, power changeover	60B593
			MISCELLANEOUS		
				Clip, IF transformer mtg.	76A385
				Cord, dial (specify length)	38A026
				Dial plate, calibrated:	
				for Model TW-500, green	83C473
				for Model TW-600, brown	83C474
				for Model S-93, black	83A487
			PC-50	Diode filter plate (includes R-4, C-4, and C-5)	49A016
				Grommet, rubber; 1/2" od	16A190
				Grommet, rubber, 5/8" od	16A125-1
				Lock, line cord	76A974
				Mounting base for tube shield	69A308
				Mounting plate for electrolytic capacitor C-15	8A749
			PC-90	Pentode couplate (includes R-8, R-9, R-10, C-7, C-8 and C-9)	49B043
				Pointer, dial	82B252
				Shield, tube	69A306
				Snap-in trimout; for mounting chassis bottom plate	76A1055
			LS-1	Speaker assembly, 5" PM; 3.2 ohm voice coil (includes output transformer T-3)	85C161
				Spring, dial cord tension	75A163

TUNER CHASSIS PARTS LIST

Schematic Symbol	Description	Hallicrafters Part Number	Schematic Symbol	Description	Hallicrafters Part Number
CAPACITORS			CAPACITORS		
C-101,104, 105,107, 108,110, 111,115, 117,120	5-25 mmfd.; ceramic trimmer	44A446	C-106	Tuning capacitor, 3 section	48C326
*C-102,122	22 mmfd. 10%, NPO, 500V.; ceramic	47X20CG220K	*C-109	39 mmfd. 5%, NPO, 500V.; ceramic	47X30CG390J/D
C-103,113	4-40 mmfd.; ceramic trimmer	44B443	C-112	570 mmfd. 2%, 500V.; silver mica	47X20C571G
			C-114	1650 mmfd. 2%, 500V.; silver mica	47A445
			C-116	3150 mfd. 2%, 500V.; silver mica	47B446

* USE EXACT REPLACEMENT ONLY

TUNER CHASSIS PARTS LIST (Cont.)

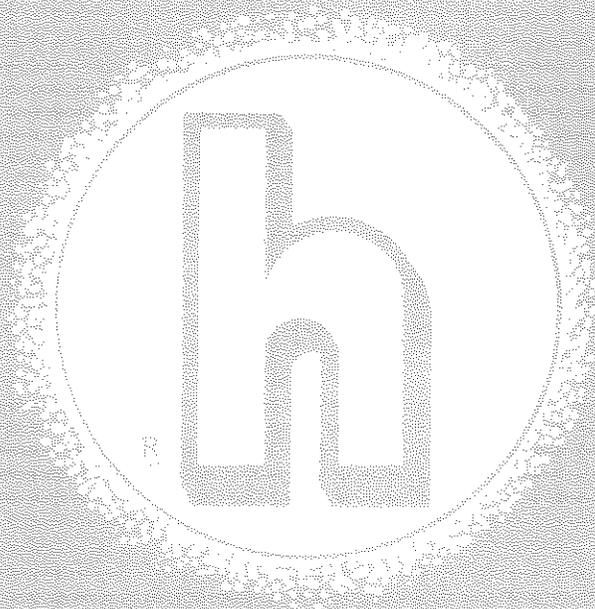
Schematic Symbol	Description	Hallicrafters Part Number	Schematic Symbol	Description	Hallicrafters Part Number
CAPACITORS (Cont.)					
C-118	300 mmfd. 2% 500V.; silver mica	47X20C301G	L-105	Coil, oscillator and mixer; band 2	51B1827
*C-119	120 mmfd. 5%, N750, 500V.; ceramic	47X30UK121J/D	L-106	Coil, oscillator and mixer; band 1	51B1826
C-121,124,129,130	270 mmfd. 10%, 500V.; ceramic	47CA20A271K	L-107	Coil, oscillator and mixer; band 3	51B1828
*C-123	6.8 mmfd. 10%, NPO, 500V.; ceramic	47X20CG068K/D	L-108	Coil, mixer; band 4	51B1830
C-125,131	.047 mfd. 20%, 200V.; molded tubular paper	46BS473L2	L-109	Coil, oscillator; band 4	51B1829
C-126,128,132	.02 mfd. 500V., ceramic disc	47A242	TUBES		
C-127	.047 mfd. 20%, 600V.; molded tubular paper	46BS473L6	V-101	1U4: RF amplifier	90X1U4
RESISTORS					
R-101	100,000 ohms 10%, 1/2 watt, carbon	23X20X104K	V-102	1L6: converter	90X1L6
R-102	33,000 ohms 10%, 1/2 watt, carbon	23X20X333K	MISCELLANEOUS		
R-103	680 ohms 10%, 1/2 watt, carbon	23X20X681K	Bushings and gear assembly (less springs and set screws)		
R-104	12,000 ohms 10%, 1/2 watt, carbon	23X20X123K	Grommet, rubber; 1/2" od (gang mounting)		
R-105	82 ohms 10%, 1/2 watt, carbon	23X20X820K	Pinion and pulley assembly		
R-106,113	1 megohm 10%, 1/2 watt, carbon	23X20X105K	Ring, retaining (for pulley and rear of band selector shaft)		
R-107	82 ohms 5%, 1/2 watt, carbon	23X20X820J	Ring, retaining (for front of band selector shaft)		
R-108	15,000 ohms 10%, 1/2 watt, carbon	23X20X153K	Shield, tube; 7 pin miniature		
R-109	1 megohm 10%, 1/2 watt, carbon	23X20X105K	Snap-in trimount (for mounting insulator strip on tuner)		
R-110	33 ohms 10%, 1/2 watt, carbon	23X20X330K	Socket, tube; 7 pin miniature		
R-111	120 ohms 5%, 1/2 watt, carbon	23X20X121J	Spring, gear; 13/32" lg.		
R-112	180,000 ohms 10%, 1/2 watt, carbon	23X20X184K	Switch assembly, Band Selector (includes center coil and trimmer mtg. bkt. of tuner)		
R-114	68,000 ohms 10%, 1/2 watt, carbon	23X20X683K	S-101	Terminal strip, antenna	88B945
R-115	1000 ohms 10%, 1/2 watt, carbon	23X20X102K	TS-101		
COILS AND TRANSFORMERS					
L-101	Coil, antenna loading; band 2	51B1832			
L-102	Coil, antenna loading; band 1	51B1831			
L-103	Coil, antenna; band 3	51B1833			
L-104	Coil, antenna; band 4	51B1834			

CABINET PARTS LIST

Description	Hallicrafters Part Number	Description	Hallicrafters Part Number	Description	Hallicrafters Part Number
Antenna, telescoping whip (with lead and lug)	57B204	Cabinet replacement parts: (Cont.)		Front panel assembly, plastic:	
Baffle board:		Grip, finger; front door:		for Model TW-500, green...	7D531
for Models TW-500 and TW-600, gold	7C532	for Models TW-500 and TW-600	30B302	for Model TW-600, brown	7A533
for Model S-93, silver	7A590	for Model S-93	30B289	for Model S-93, gray	7A589
Cabinet, complete with carrying handle, map, mtg. feet, fiber eyelet, front door finger grip, and hinges:		Handle, carrying:		Knob, Band Selector:	
for Model TW-500, green		for Model TW-500, green	121-331	for Model TW-500, green	15C713
lizard leatherette	78F1082	for Model TW-600, brown (with mtg. hdwe.)	121-332	for Model TW-600, brown	15A718
for Model TW-600, top-grain cowhide	78F1084	for Model S-93, gray	8A2593	for Model S-93, gray	15A795
for Model S-93, gray leatherette	78A1147	Hinge assembly, front door:		Knob, Tuning:	
Cabinet replacement parts:		Left hand (viewed from front):		for Model TW-500, green	15A710
Eyelet, fiber; for whip antenna (mounted in top of cabinet):		for Models TW-500 and TW-600	30B312	for Model TW-600, brown	15A715
for Model TW-500, green	8A2350	for Model S-93	30A335	for Model S-93, gray	15A794
for Model TW-600, brown	8A2351	Right hand (viewed from front):		Knob, Volume:	
for Model S-93, gray	8A2592	for Models TW-500 and TW-600	30B311	for Model TW-500, green	15B728
Foot, mtg.; rubber:		for Model S-93	30A334	for Model TW-600, brown	15A729
for Model TW-500 and S-93, black	16A347	Map:		for Model S-93, gray	15A793
for Model TW-600, brown	16A396	for Model TW-500, green	14C382	Operating Instruction Booklet:	
		for Model TW-600, brown	14C384	for Models TW-500 and TW-600	94X1255
		for Model S-93, gray	14C392	for Model S-93	94X1346
		Eyelet, fiber; for whip antenna (mounted in bottom of cabinet)	8A2348	Spacer, fiber; for whip antenna (3/4" od, 1/4" id, 9/32" t)	8A2370

* USE EXACT REPLACEMENT ONLY

NOTES



BOOK NO. 94x1434

135

TX-500 (pages 1, 2, and 2x)

TX-600 (pages 1 and 2x)

2-93 (Run 1)