

## Hallicrafters, Inc.

**Model:** 5R11

**Chassis:**

**Year:** Pre 1952

**Power:**

**Circuit:**

**IF:**

**Tubes:**

**Bands:**

### Resources

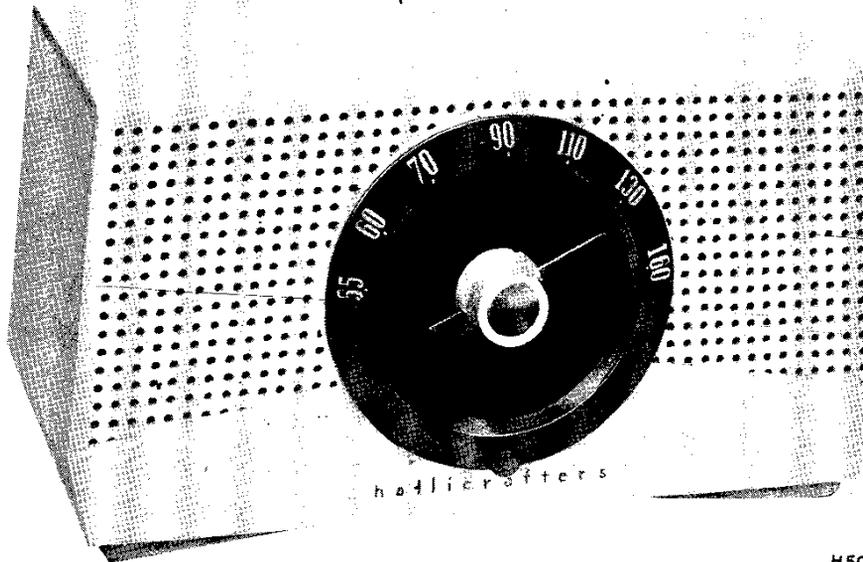
[Riders Volume 22 - HALLICRAFTERS 22-42](#)

[Riders Volume 22 - HALLICRAFTERS 22-43](#)

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MODELS 5R11, 5R12,  
5R13, 5R14

RADIO MODELS 5R11, 5R12, 5R13, 5R14



H505

SPECIFICATIONS

Power Supply	117 volts 60 cycle AC, 117 volts DC, 29 watts
Frequency Range	535 KC to 1630 KC
Intermediate Frequency	455KC
Antenna	Built-in Loop
Tuning	Variable Capacity
Speaker	4", P.M. voice coil impedance 3.2 ohms
Power Output	0.8 watt undistorted, 1.8 watts maximum
Sensitivity	400 uv/m average for 50 milliwatts output
Selectivity	55 KC broad at 1000 times, signal at 1000KC

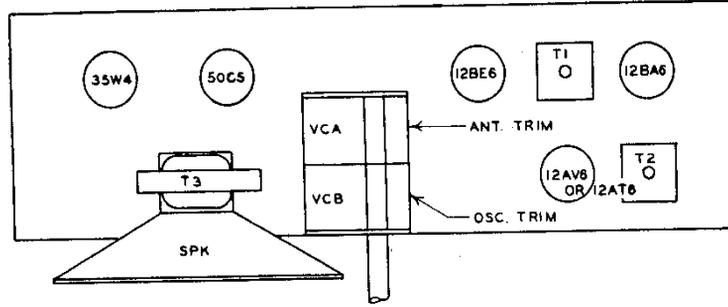
Tubes used are as follows:

12BE6 Oscillator-Converter	50C5 Power Output
12AV6 or 12AT6 AVC, Detector, and Audio	35W4 Power Rectifier
12BA6 I.F. Amplifier	

MECHANICAL PARTS

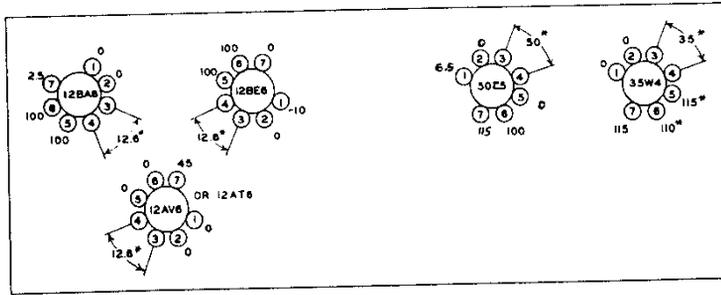
PART NO.	DESCRIPTION	MODEL RADIO		
2A2047	Nut, Push-on	Used On Radio	15B318	Knob, Pointer Ass'y
3A189	Screw, #6X3/8 Pan Hd.	Models 5R11,	33A325	Waxpaper
3A974	Screw, Sems 6-32X1/4 Rd. Hd.	5R12, 5R13,	66C636	Chassis Cover
3A1628	Screw, Sems 8-32X3/16 Rd. Hd.	5R14 Unless	70D956	Chassis
32VLYX	Screw, 6-32X3/8 H H S Tap	Otherwise	73A591	Spacer 1 1/8
3ZVUKZ	Screw, 6-32X1 1/2 Pan Hd.	Indicated	76A651	I.F. Mounting Clip
4AXEV	Washer, Flat #6		78F567	Cabinet
5AO58	Rivet .088X.187		78F568	Cabinet
6A340	Socket, 7 Pin		78F569	Cabinet
7C237	Dial Escutcheon		78F570	Cabinet
8A1211	Strain Relief		87A716	Wire, #22 Blue
11A110	Ground Lug		87A717	Wire, #22 Red
15A309	Knob, Volume	5R11, 5R12, 5R13	87A718	Wire, #22 Green
15A310	Knob, Volume	5R14	87A721	Wire, #22 Orange
15B313	Knob, Tuning (Front)	5R11, 5R12, 5R13	87A723	Wire, #22 Tinned Buss
15B314	Knob, Tuning (Front)	5R14	87B1669	Line Cord
15B317	Knob, Pointer Ass'y	5R11, 5R12, 5R13	94X655	Instruction Book
			98C215	Packaging Sequence

MODELS 5R11, 5R12,  
5R13, 5R14



CHASSIS LAYOUT TOP VIEW

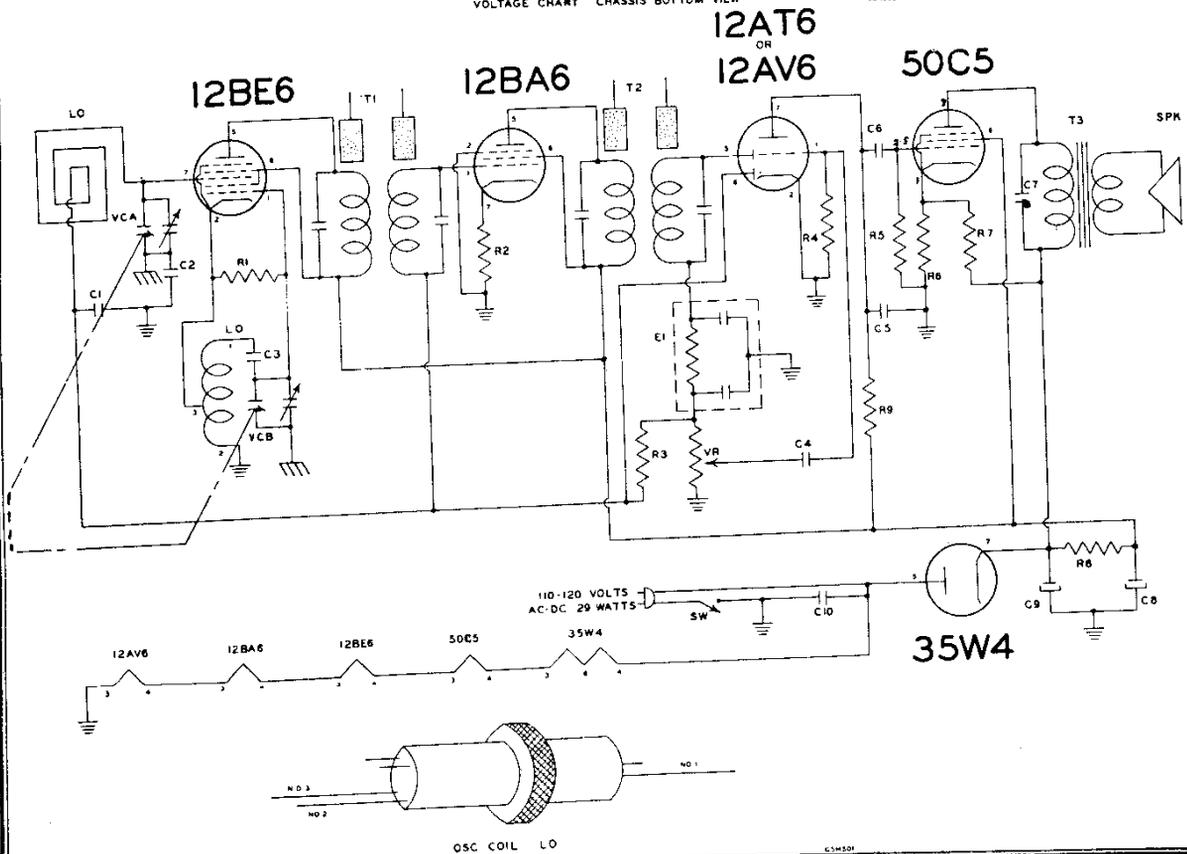
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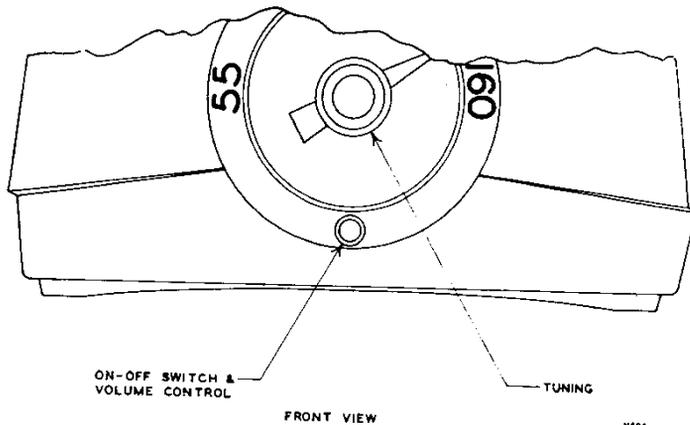
ALL DC VOLTAGES IN REFERENCE TO COMMON GROUND  
\* AC EXCEPT WHEN USED ON DC

VOLTAGE CHART CHASSIS BOTTOM VIEW

CS4103



MODELS 5R11, 5R12,  
5R13, 5R14



ALIGNMENT PROCEDURE  
(Refer to chassis view)

The following procedure is for use only by competent servicemen having the proper equipment. The alignment should be made with volume control fully on, and the output from the signal generator as low as possible, to prevent AVC action from interfering with proper alignment.

With the output meter connected across the voice coil of the speaker, the output meter reading for 50 milliwatts is 0.4 volts, using a signal which is modulated 400 c.p.s.

Adjust all trimmers for maximum output. Repeat the alignment procedure given below as a final check.

CAUTION: This is an AC/DC receiver, and when aligning the set it is necessary to isolate the signal generator or the receiver from the line by use of a transformer, or to place a .2 MFD condenser in each test lead of the signal generator.

Frequency	SIGNAL GENERATOR Dummy Antenna	Connection to Radio	POSITION OF VARIABLE	ADJUST FOR MAXIMUM OUTPUT
455 KC	.1 MFD	12BE6 Grid Stator VCA	Fully Open	T1 & T2
1625 KC		12BE6 Grid Stator VCA	Fully Open	VC8 Oscillator
1400 KC	.1 MFD	Loosely Coupled to Loop	Tune in Signal Generator	VCA Antenna

Connect low side of signal generator to common negative.

PARTS VALUES FOR HALLICRAFTER MODELS 5R11, 5R12, 5R13, 5R14

CIRCUIT COMPONENTS

SYMBOL	PART NO.	DESCRIPTION	VALUE	RATING	TOL.
VCA-VCB	48-248	Variable Capacitor			
C1	46AU503J	Capacitor, Tub. Paper	.05 MFD	200 volts	
C2	46AU104J	Capacitor, Tub. Paper	.1 MFD	400 volts	
C3	46AY203J	Capacitor, Tub. Paper	.02 MFD	600 volts	
C4, C6, C7	46AY502J	Capacitor, Tub. Paper	.005 MFD	600 volts	
C5	47X20B251K	Capacitor, Mica	250 MMF	500 volts	
C9, C8	45B183	Capacitor, Elect.	40-20 MFD	150 volts	
C10	46AW503J	Capacitor, Tub. Paper	.05 MFD	400 volts	
R1	23X20X223K	Resistor, Carbon	22K Ohm	1/2 watt	20%
R2	23X20X391K	Resistor, Carbon	390 Ohm	1/2 watt	10%
R3	23X20X105M	Resistor, Carbon	1 Megohm	1/2 watt	20%
R4	23X20X106M	Resistor, Carbon	10 Megohm	1/2 watt	20%
R5, R9	23X20X474M	Resistor, Carbon	470K Ohm	1/2 watt	20%
R6	23X20X121K	Resistor, Carbon	120 Ohm	1/2 watt	10%
R7	23X30X103K	Resistor, Carbon	10K Ohm	1 watt	20%
R8	23X30X102K	Resistor, Carbon	1000 Ohm	1 watt	20%
VR-SW	25B918	Volume Control & Switch	1 Megohm	S.P.S.T.	
E1	49A016	Diode Filter Unit	2x100 MMFD-47K Ohm		
LA	57C149-B	Loop Antenna & Back			
LO	51B1300	Oscillator Coil			
T1, T2	50B487	I. F. Coil			
SPK-T3	85C109	Speaker & Output Transformer			
12AV6	90X12AV6	Tube, Type 12AV6			
12BA6	90X12BA6	Tube, Type 12BA6			
12BE6	90X12BE6	Tube, Type 12BE6			
35W4	90X35W4	Tube, Type 35W4			
50C5	90X50C5	Tube, Type 50C5			