

the hallicrafters Canada Limited

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MANUFACTURERS OF RADIO, TELEVISION AND ELECTRONIC EQUIPMENT

SERVICE INSTRUCTIONS

Model 7R300 Radio-Phonograph Combination



MODEL 7R300

TUBE COMPLEMENT

Type	Function
6BA6	R.F. Amplifier
6BE6	Converter
6BA6	I.F. Amplifier
6SQ7	Detector, AVC & 1st A.F. Amplifier
(2) 6K6GT's	Power Output P.P.
5Y3GT	Rectifier

GENERAL DESCRIPTION

TYPE: 7-tube, single band, Superheterodyne.

FREQUENCY RANGE: 540 to 1620 kc.

INTERMEDIATE FREQUENCY: 455 kc.

POWER SUPPLY: a.c. 25 and 60 cycle.

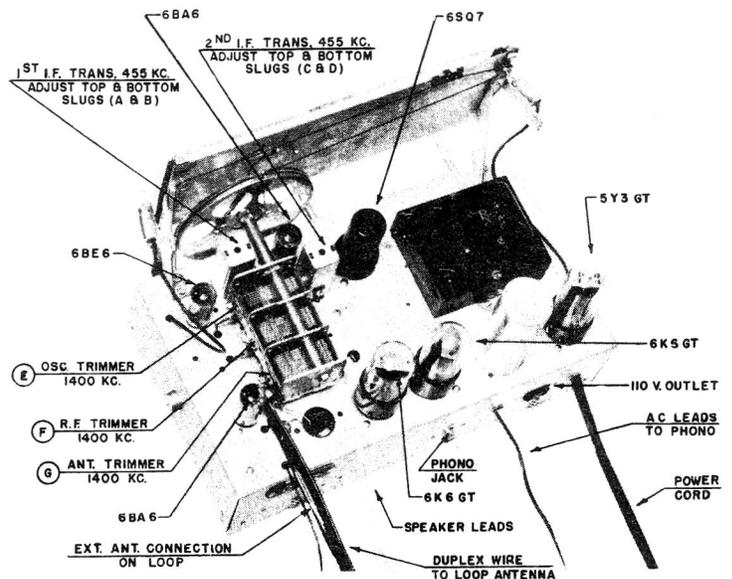
VOLTAGE RATING: 105-125 volts.

POWER OUTPUT: 4.7 watt maximum.

POWER CONSUMPTION:

Changer 20 watts

Radio 65 watts



THE **hallicrafters** CANADA LIMITED

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P.O. BOX 27 - POSTAL STATION R

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1. Connect an output meter across the speaker voice coil.
2. The r.f. signal input from the signal generator should be connected as indicated in the alignment chart.
3. Turn the volume control on full and adjust the signal generator output to produce approximately midscale deflection of the output meter, but maintain signal generator output as low as possible to prevent AVC action in the receiver.

ALIGNMENT NOTES

1. Receiver output must not exceed 0.5 watt, reduce signal generator input to receiver when necessary.
2. Rock gang while adjusting R.F. and antenna trimmers for max. sensitivity.
3. Antenna trimmer must be realigned at 1400 KC. after chassis is installed in its cabinet. A weak signal must be used so that the trimmers can be adjusted to maximum receiver sensitivity.

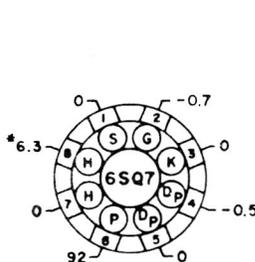
ALIGNMENT CHART

Alignment adjustment locations are shown on page 1, "CHASSIS, TOP VIEW."

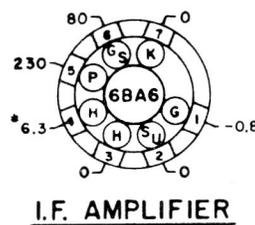
Alignment Sequence	Signal Generator Output			Position of Dial pointer	Adjust for Maximum Output
	Frequency in KC	In Series with	To		
1.	455 kc	.05 mfd	Stator plates of CIB center section	Gang open	A & B (See Note 1.)
2.	455 kc	.05 mfd	Stator plates of CIB center section	Gang open	C & D (See Note 1.)
3.	1400 kc	200 mmf	Ext. Ant. Term	1400 kc	E (See Notes 1 & 2.)
4.	1400 kc	200 mmf	Ext. Ant. Term	1400 kc	F (See Notes 1 & 2.)
5.	1400 kc	200 mmf	Ext. Ant. Term	1400 kc	G (See Notes 1, 2, & 3.)

NOTES

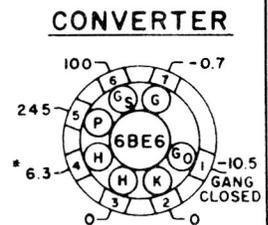
1. BOTTOM VIEW OF TUBE SOCKETS
2. VOLTAGE MEASURED WITH AN ELECTRONIC VOLTMETER FROM SOCKET LUG TO CHASSIS (GROUND)
3. LINE VOLTAGE - 117 V
4. N.C. = NO CONNECTION
5. W.J. = WIRING JUNCTION
6. * = A.C. VOLTAGE
7. SOCKET VOLTAGE TOLERANCE $\pm 10\%$



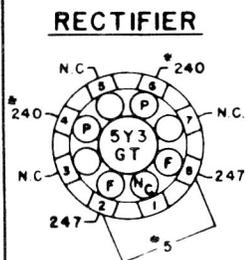
DET.-AVC.-1ST AUDIO AMPL.



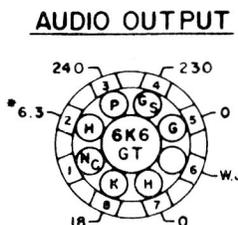
I.F. AMPLIFIER



R.F. AMPLIFIER



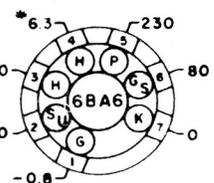
RECTIFIER

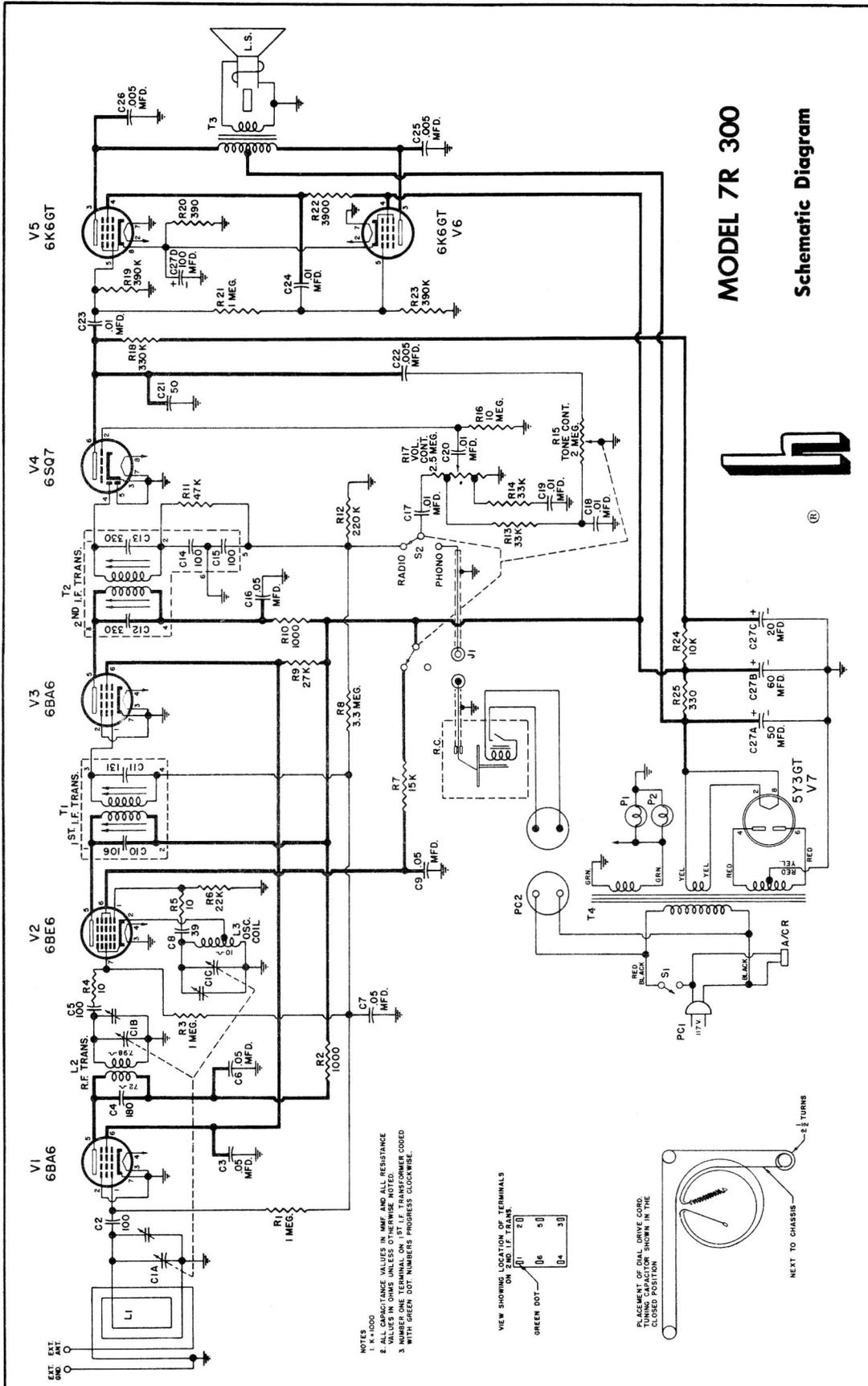


AUDIO OUTPUT



AUDIO OUTPUT



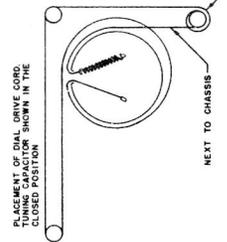
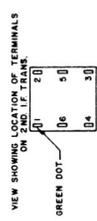


MODEL 7R 300

Schematic Diagram



- NOTES
1. K=1000
 2. ALL CAPACITANCE VALUES IN MFD. AND ALL RESISTANCE VALUES IN OHMS UNLESS OTHERWISE NOTED.
 3. NUMBER ONE TERMINAL ON 1ST I.F. TRANSFORMER CODED WITH GREEN DOT NUMBERS PROGRESS CLOCKWISE.



SERVICE PARTS LIST

7R300

Schematic Symbol	Description	Hallcrafters Part Number	Schematic Symbol	Description	Hallcrafters Part Number
	CAPACITORS			RESISTORS	
C 1A } C 1B } C 1C }	Capacitor & Pulley	13172	R 1 R 2 R 3 R 4 R 5 R 6 R 7 R 8 R 9 R 10 R 11 R 12 R 13 R 14 R 15 R 16 R 17 R 18 R 19 R 20 R 21 R 22 R 23 R 24 R 25	1. Meg. $\frac{1}{2}$ w. 20% 1,000 ohms $\frac{1}{2}$ w. 20% 1. meg. $\frac{1}{2}$ w. 20% 10 ohms $\frac{1}{2}$ w. 20% 10 ohms $\frac{1}{2}$ w. 20% 22,000 ohms $\frac{1}{2}$ w. 20% 15,000 ohms 2 w. 10% 3.3 meg. $\frac{1}{2}$ w. 20% 27,000 ohms 1 w. 10% 1,000 ohms $\frac{1}{2}$ w. 20% 47,000 ohms $\frac{1}{2}$ w. 20% 220,000 ohms $\frac{1}{2}$ w. 20% 33,000 ohms $\frac{1}{2}$ w. 20% 33,000 ohms $\frac{1}{2}$ w. 20% Control Tone 10 meg. $\frac{1}{2}$ w. 20% Control Volume 330,000 ohms $\frac{1}{2}$ w. 10% 390,000 ohms $\frac{1}{2}$ w. 10% 390 ohms 2 w. 10% 1 meg. $\frac{1}{2}$ w. 20% 3,900 ohms. $\frac{1}{2}$ w. 10% 390,000 ohms. $\frac{1}{2}$ w. 10% 10,000 ohms. $\frac{1}{2}$ w. 20% 330 ohms. 1 w. 10%	23X20X105M 23X20X103M 23X20X105M 23X20X100M 23X20X100M 23X20X223M 23X40X153K 23X20X335M 23X30X273K 23X20X102M 23X20X473M 23X20X224M 23X20X333M 23X20X333M 11716 23X20X106M 11717 23X20X334K 23X20X394K 23X40X224M 23X20X105M 23X20X392K 23X20X394K 23X20X103M 23X30X331K
C 2	Ceramic 100 MMF, 500 W.V.	47X20UK101K			
C 3	Tub. .05 MFD, 400 W.V.	46AW503J			
C 4	Ceramic 180 MMF.500 W.V.	12215-10			
C 5	Ceramic 100 MMF.500 W.V.	47X20UK101K			
C 6	Tub. .05 MFD. 400 W.V.	46AW503J			
C 7	Tub. .05 MFD. 200 W.V.	46AU503J			
C 8	Ceramic 39 MMF.500 W.V.	12215-8			
C 9	Tub. .05 MFD. 400 W.V.	46AW503J			
C 10	106 MMF. (Part of T1)				
C 11	131 MMF. (Part of T1)				
C 12	330 MMF. (Part of T2)				
C 13	330 MMF. (Part of T2)				
C 14	100 MMF. (Part of T2)				
C 15	100 MMF. (Part of T2)				
C 16	Tub. .05 MFD. 400 W.V.	46AW503J			
C 17	Tub. .01 MFD. 400 W.V.	46AW103J			
C 18	Tub. .01 MFD. 400 W.V.	46AW103J			
C 19	Tub. .01 MFD. 400 W.V.	46AW103J			
C 20	Tub. .01 MFD. 400 W.V.	46AW103J			
C 21	Ceramic 50 MMF. 500 W.V.	47X20UJ500K			
C 22	Tub. .005 MMD. 600 W.V.	46AY502J			
C 23	Tub. .01 MFD. 400 W.V.	46AW103J			
C 24	Tub. .01 MFD. 400 W.V.	46AW103J			
C 25	Tub. 005 MFD. 600 W.V.	46AY502J			
C 26	Tub. 005 MFD. 600 W.V.	46AY502J			
C 27A } C 27B } C 27C } C 27D }	Elect. 50 MFD. 350W.V. } Elect. 60 MFD. 350W.V. } Elect. 20 MFD. 350W.V. } Elect. 100 MFD. 25W.V. }	11894	S 1 S 2 J 1 A/CR	Switch off-on (Part of R17) Switch Phono-Radio (Part of R15) Connector Phono Socket A/C (Aldon 502P with leader	11502 11720
	COILS AND TRANSFORMERS			MISCELLANEOUS PARTS	
T 1	Transformer 1st I.F.	11794		Line Cord	11713
T 2	Transformer 2nd I.F.	11718	PC 1	Cord - Phono Motor - 502FC	11714
T 3	Transformer Output	11719	PC 2	Pilot Light No. 47	
T 4	Transformer Power 60 cy	11745	P 1	6-8 Min. Bayonet	39A004
	Transformer Power 25 cy	11746		Pilot Light No. 47	
L 1	Antenna Loop	11725	P 2	6-8 Min. Bayonet	39A004
L 2	Transformer R.F.	11722		Speaker 10" PM	13261
L 3	Coil B.C. OSC.	11721	L.S.	H. Medallion	7B384
				Name - Hallcrafters	13C1042
				Dial Escutcheon	13255
				Dial Scale	13254
				Dial Spring	75A012
				Dial Pointer	13168
				Cabinet Blonde	13251-1
				Cabinet Mahogany	13251-2
				Cabinet Walnut	13251-3
VM No. 950	RECORD CHANGER 25 or 60 cycles				