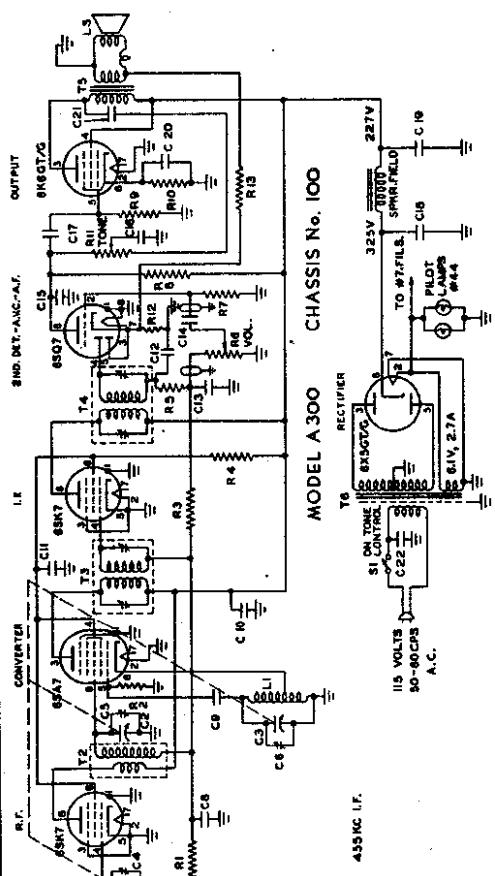
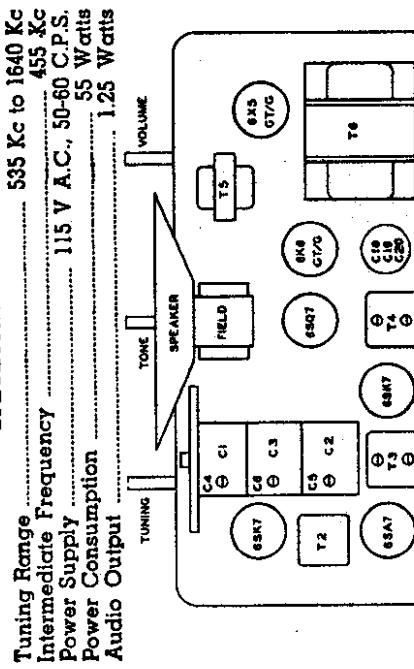


SYMBOL	DESCRIPTION	HOFFMAN NO.
C1-C2-C3	Three-Section Variable (358-353-350 M.M.F.)	4400
C4, C5, C6	Trimmers; Part of Variable Condenser	4100
C7, C8	.05 M.M.F. 200 Volt, Tubular Paper	4000
C9, C12	.05 M.M.F. $\pm 10\%$, Mica	4101
C13, C15	.100 M.M.F. $\pm 10\%$, Mica	4102
C10, C11	.05 M.M.F. 400 Volt, Tubular Paper	4103
C14, C16	.005 M.M.F. 600 Volt, Tubular Paper	
C17	.01 M.M.F. 600 Volt, Tubular Paper	
C18-C19-C20	Dry Electrolytic Condenser (120-20-20 M.M.F. 450-450-25 Volt)	4200
	.001 M.M.F. 600 Volt, Tubular Paper	4104
	.01 M.M.F. 600 Volt, Tubular Paper (Metal Can)	4105
L1	Oscillator Coil	5200
L5	5" P.M. Loudspeaker	9003
R1, R8	.22 Megohm $\pm 20\%$, $1/2$ Watt	4500
R2	22,000 Ohm $\pm 20\%$, $1/2$ Watt	4501
R3	2.2 Megohm $\pm 20\%$, $1/2$ Watt	4502
R4	10,000 Ohm $\pm 10\%$, 2 Watt	4503
R5	47,000 Ohm $\pm 20\%$, $1/2$ Watt	4504
R6	.5 Megohm Potentiometer (Volume)	4800
R7	10 Megohm $\pm 20\%$, $1/2$ Watt	4505
R9	.47 Megohm $\pm 20\%$, $1/2$ Watt	4506
R10	560 Ohm $\pm 10\%$, $1/2$ Watt	4507
R11	.25 Megohm Potentiometer With Switch (Tone)	4801
R12	.47 Ohm $\pm 20\%$, $1/2$ Watt	4508
R13	330 Ohm $\pm 20\%$, $1/2$ Watt	4509
R14	1500 Ohm $\pm 10\%$, 10 Watt, W.W.	4702
S1	On-Off Switch (On Tone Control)	5201
T1	Antenna Loop	5202
T2	R.F. Coil (Shielded)	
T3	Input I.F. Transformer (455 K.C.)	5203
T4	Output I.F. Transformer (455 K.C.)	5204
T5	Audio Output Transformer	5100
T6	Power Transformer	5000

Hoffman Model A300 is a 6-tube broadcast band AC operated superheterodyne table model receiver incorporating such features as built-in loop antenna, a stage of rf amplification preceding the converter tube, and a variable tone control. An additional feature, usually not found in receivers of this type, is an inverse feedback network to reduce audio distortion.

SPECIFICATIONS



- Hoffman Model A300 with Chassis number 100S is electrically identical with Chassis number 100 except for the following:
1. Five-inch P.M. speaker, part number 9003, has been substituted for 4 x 6 inch oval dynamic speaker, part number 9000.
 2. A 1500-ohm resistor, part number 4701, has been connected in the filter circuit in place of the 1500-ohm speaker field.
- These changes have been incorporated in the schematic diagram shown below.

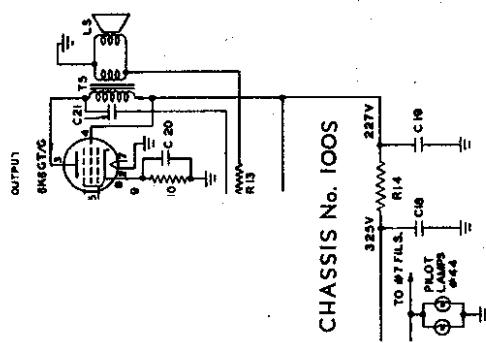


Fig. 3. Bottom of Chassis

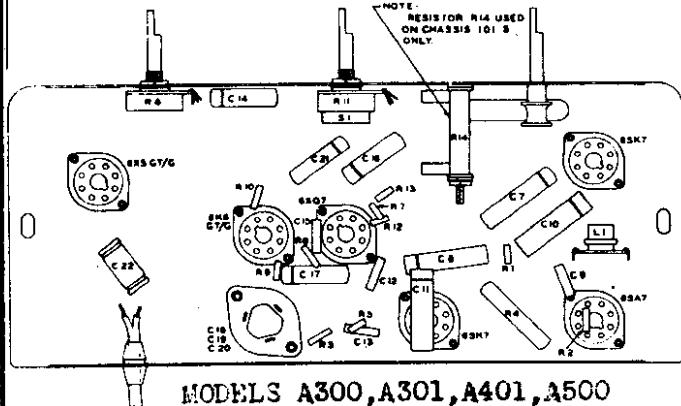
HOFFMAN RADIO CORP.

MODEL A300
MODEL A301
MODEL A401
MODEL A500

MODEL A300, Chassis 100,100S
MODEL A301, Chassis 101,101S

DIAL ADJUSTMENTS:

To set the dial on calibration, tune in a station of known frequency near the center of the dial and move the pointer by hand as required.



MODELS A300, A301, A401, A500

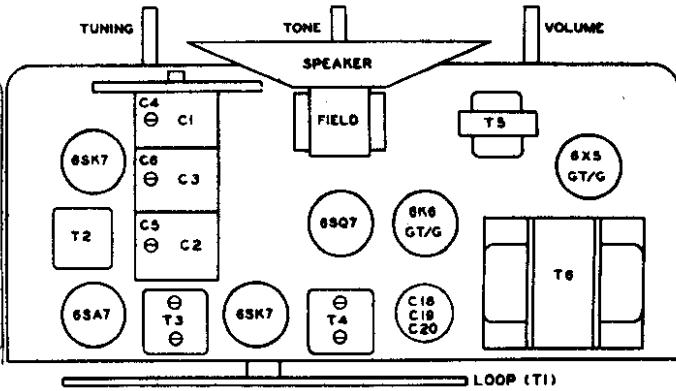


Fig. 1 Top of Chassis

NORMAL OPERATING VOLTAGES

The following table lists the normal operating voltages to be expected at the various tube socket terminals.

PIN NO.	1	2	3	4	5	6	7	8
6SK7 (R.F.)	0	0	0	-.5	0	+85	6.1A.C.	+227
6SA7	0	0	+227	+85	-7	0	6.1A.C.	-.7
6SK7 (I.F.)	0	0	0	-.7	0	+85	6.1A.C.	+227
6SQ7	0	-.5	0	-.25	0	+95	6.1A.C.	0
6K6GT/G	0	0	+217	+227	0	+325 *	6.1A.C.	+15
6X5GT/G	0	6.1A.C.	290A.C.	—	290A.C.	—	0	+325

D.C. voltages measured with 20,000 ohm/volt meter.

A.C. voltages measured with 1,000 ohm/volt meter.

All voltages measured with reference to chassis.

Line voltage 117.5.

MODELS A300, A301, A401, A500

* Means tie point.

NOTE: The above readings are obtained with no signal input to the receiver.

NORMAL OPERATING CURRENTS

6X5GT/G	Cathode Current	65 Ma
6K6GT/G	Cathode Current	24.5 Ma

ALIGNMENT PROCEDURE

CAUTION:

No alignment adjustments should be attempted without first thoroughly checking over all other possible causes of trouble such as defective tubes, resistors, and condensers. In order to align the receiver properly, remove the chassis from the cabinet and proceed as follows:

EQUIPMENT REQUIRED:

1. Signal Generator
2. Output Meter with 2.5 Volt Scale.
3. .1 Mid. Condenser

I.F. ALIGNMENT:

1. Connect output meter across speaker voice coil; set meter on 2.5 Volt Scale.
2. Connect output of signal generator to stator of C2 (see schematic) through a .1 Mid. condenser; connect ground side of generator directly to chassis of receiver. Set signal generator on 455 Kc (modulated).
3. Adjust I.F. trimmers (first T4 and then T3) for maximum reading on output meter. (Note: Keep signal level low, just enough to keep maximum reading on lower half of meter scale.) The tuning condenser plates should be all

the way out; volume and tone controls should be in extreme clockwise position.

R.F. ALIGNMENT:

1. Set tuning condenser with plates completely out.
2. Set signal generator at 1650 Kc (modulated) and feed its output into a loop of wire about 6 inches in diameter. Place this loop about one foot away from and parallel to the receiver loop antenna.
3. Tune in signal by adjusting oscillator trimmer (C6).
4. Adjust output of signal generator to obtain deflection on lower half of meter scale.
5. Adjust oscillator trimmer for maximum output.
6. Set signal generator at 1400 Kc and tune in signal with tuning condenser.
7. Adjust antenna and RF trimmers (C4 and C5) while rocking gang condenser for maximum reading on output meter. Feed only enough signal from generator to keep maximum reading on lower half of meter scale.