

Philco Radio & Television Corp.

Model: 38-116

Chassis:

Year: Pre October 1937

Power:

Circuit:

IF:

Tubes:

Bands:

Resources

[Riders Volume 8 - PHILCO 8-80, 81](#)

[Riders Volume 8 - PHILCO 8-83](#)

[Riders Volume 8 - PHILCO 8-84](#)

[Riders Volume 8 - PHILCO 8-85](#)

[Riders Volume 8 - PHILCO 8-86](#)

PHILCO RADIO & TELEV. CORP. Chassis, Notes

PHILCO TUBES USED: 6K7G R.F.; 6L7G Mixer; 6A8G Oscillator; 6N7G Oscillator control; two 6K7G I. F.; 6K7G 2nd Detector Magnetic tuning amplifier; two 6J5G discriminator; 6J5G A. V. C.; 6R7G 1st audio; 6J5G audio driver; two 6L6G audio output, and one 5X4G rectifier.

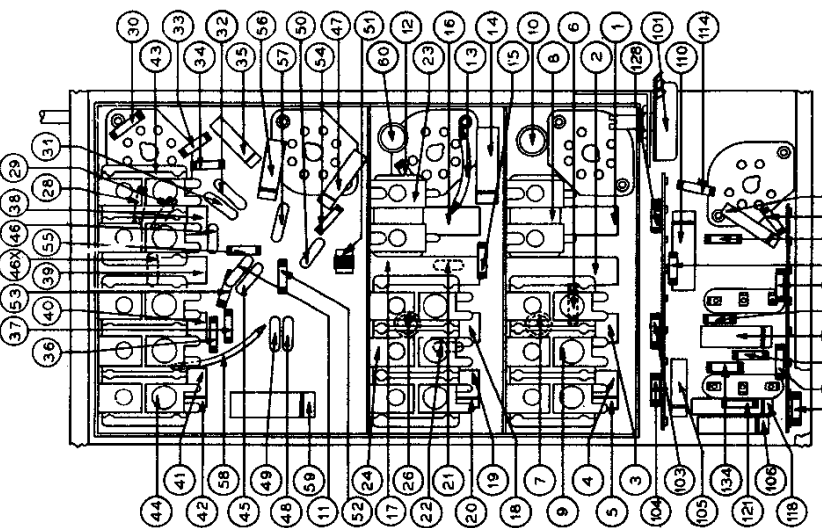
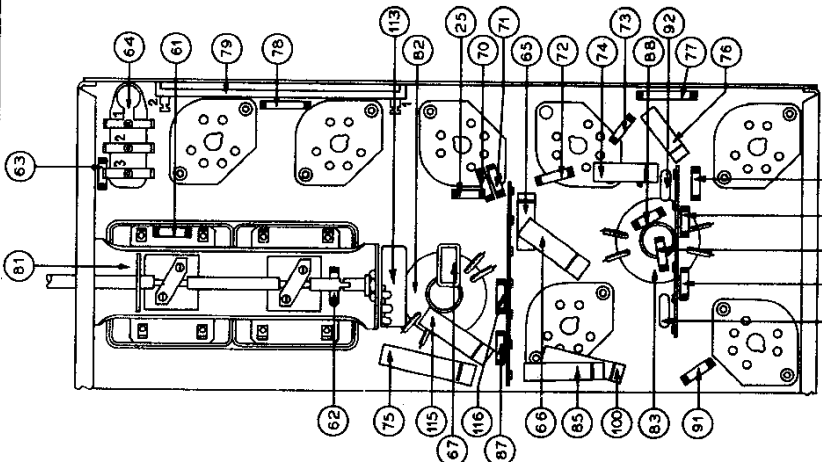
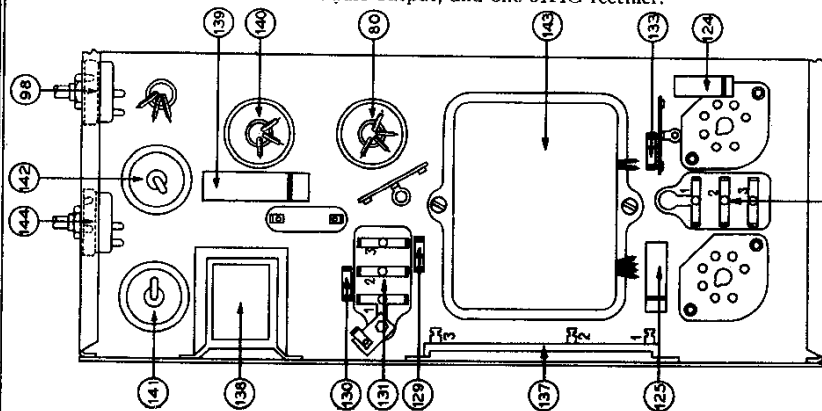


Fig. 2. Underside View of Chassis
 Different transformers are required for operation on the voltages and frequencies listed above. The part numbers for these transformers are listed on page 5. A special transformer for operation on either 115 or 230 volt—50 to 60 cycle A.C. power circuit can be obtained. This transformer is provided with a plug and socket for selection of either voltage rating. Place the plug with arrow pointing toward voltage being used.

TONE CONTROLS: Two—1. High audio-frequency tone varied by Treble-Selectivity control.
 2. Low audio-frequency tone varied by "Bass Tone Control," in the volume control circuit.

UNDISTORTED OUTPUT: 15 watts.

CABINET: Type XX.

PHILCO SPEAKERS USED: One type "W4" with three acoustic clarifiers.

TYPE OF CIRCUIT: Model 38-116, code 121 employs a fifteen tube A.C. operated superheterodyne circuit with a spread-band dial having five tuning ranges covering a frequency range from 530 K.C. to 18.2 M.C.

Incorporated in this model are design features such as: magnetic tuning control on each tuning range; automatic volume control; treble-selectivity expander unit in the intermediate-frequency circuit; audio bass compensation; acoustic clarifiers to eliminate cabinet resonance; special push-pull audio output circuit using 6L6G beam tubes, and the Philco automatic tuning mechanism.

POWER SUPPLY:	Voltage	Frequency Cycles	Power Consumption
	115	50 to 60	165 watts
	115	25 to 40	165 watts

REPLACEMENT PARTS—Models 38-116, Code 121

PRICES SUBJECT TO CHANGE WITHOUT NOTICE

Schem. No.	Part No.	Description	List Price	Schem. No.	Part No.	Description	List Price
1	32-3098	1 Adv. Trans. (Range 1)	1.20	77	32-20439	Resistor (70,000 1 watt)	10.00
2	32-2142	2 Adv. Trans. (Range 2)	1.20	78	32-20439	Resistor (70,000 1 watt)	10.00
3	32-2183	3 Adv. Trans. (Range 3)	1.20	79	32-20439	Resistor (14,000 1/2 watt)	1.20
4	32-2185	4 Adv. Trans. (Range 4)	1.20	80	32-20439	Resistor (14,000 1/2 watt)	1.20
5	32-2175	5 Adv. Trans. (Range 5)	1.20	81	32-20439	Resistor (14,000 1/2 watt)	1.20
6	32-351339	6 Resistor (51,000 1/2 watt)	2.00	82	32-8912	1. F. Transformer (3rd)	2.50
7	30-4444	7 Compensator (0.5 mf. tubular)	2.00	83	32-2980	Discriminator Trans.	2.50
8	31-8663	8 Compensator (Range 1 & 2 Ant.)	2.00	84	30-1031	110 mf. Condenser (Part of 83)	2.50
9	31-8112	9 Compensator (3, 4 & 5 Ant.)	2.00	85	32-2061	Discriminator Trans.	2.50
10	31-8123	10 Compensator (.05 mf. tubular)	2.00	86	32-2061	Discriminator Trans.	2.50
11	32-1049	11 Condenser (.05 mf. mica)	2.00	87	32-2061	Discriminator Trans.	2.50
12	32-1059	12 Resistor (1 meg. 1/2 watt)	2.00	88	32-2061	Discriminator Trans.	2.50
13	32-1059	13 Resistor (400 ohms 1/2 watt wire wound)	2.00	89	32-2061	Discriminator Trans.	2.50
14	32-1059	14 Resistor (10,000 ohms 1/2 watt)	2.00	90	32-2061	Discriminator Trans.	2.50
15	32-1059	15 Resistor (100,000 ohms 1/2 watt)	2.00	91	32-2061	Discriminator Trans.	2.50
16	32-1059	16 R. F. Trans. (Range 1)	2.00	92	32-2061	Discriminator Trans.	2.50
17	32-2147	17 R. F. Trans. (Range 2)	2.00	93	32-2061	Discriminator Trans.	2.50
18	32-2177	18 R. F. Trans. (Range 3)	2.00	94	32-2061	Discriminator Trans.	2.50
19	32-2178	19 R. F. Trans. (Range 4)	2.00	95	32-2061	Discriminator Trans.	2.50
20	32-2178	20 R. F. Trans. (Range 5)	2.00	96	32-2061	Discriminator Trans.	2.50
21	32-2178	21 R. F. Trans. (Range 5)	2.00	97	32-2061	Discriminator Trans.	2.50
22	32-2178	22 R. F. Trans. (Range 5)	2.00	98	32-2061	Discriminator Trans.	2.50
23	32-2178	23 R. F. Trans. (Range 5)	2.00	99	32-2061	Discriminator Trans.	2.50
24	32-2178	24 R. F. Trans. (Range 5)	2.00	100	32-2061	Discriminator Trans.	2.50
25	32-2178	25 R. F. Trans. (Range 5)	2.00	101	32-2061	Discriminator Trans.	2.50
26	32-2178	26 R. F. Trans. (Range 5)	2.00	102	32-2061	Discriminator Trans.	2.50
27	32-2178	27 R. F. Trans. (Range 5)	2.00	103	32-2061	Discriminator Trans.	2.50
28	32-2178	28 R. F. Trans. (Range 5)	2.00	104	32-2061	Discriminator Trans.	2.50
29	32-2178	29 R. F. Trans. (Range 5)	2.00	105	32-2061	Discriminator Trans.	2.50
30	32-2178	30 R. F. Trans. (Range 5)	2.00	106	32-2061	Discriminator Trans.	2.50
31	32-2178	31 R. F. Trans. (Range 5)	2.00	107	32-2061	Discriminator Trans.	2.50
32	32-2178	32 R. F. Trans. (Range 5)	2.00	108	32-2061	Discriminator Trans.	2.50
33	32-2178	33 R. F. Trans. (Range 5)	2.00	109	32-2061	Discriminator Trans.	2.50
34	32-2178	34 R. F. Trans. (Range 5)	2.00	110	32-2061	Discriminator Trans.	2.50
35	32-2178	35 R. F. Trans. (Range 5)	2.00	111	32-2061	Discriminator Trans.	2.50
36	32-2178	36 R. F. Trans. (Range 5)	2.00	112	32-2061	Discriminator Trans.	2.50
37	32-2178	37 R. F. Trans. (Range 5)	2.00	113	32-2061	Discriminator Trans.	2.50
38	32-2178	38 R. F. Trans. (Range 5)	2.00	114	32-2061	Discriminator Trans.	2.50
39	32-2178	39 R. F. Trans. (Range 5)	2.00	115	32-2061	Discriminator Trans.	2.50
40	32-2178	40 R. F. Trans. (Range 5)	2.00	116	32-2061	Discriminator Trans.	2.50
41	32-2178	41 R. F. Trans. (Range 5)	2.00	117	32-2061	Discriminator Trans.	2.50
42	32-2178	42 R. F. Trans. (Range 5)	2.00	118	32-2061	Discriminator Trans.	2.50
43	32-2178	43 R. F. Trans. (Range 5)	2.00	119	32-2061	Discriminator Trans.	2.50
44	32-2178	44 R. F. Trans. (Range 5)	2.00	120	32-2061	Discriminator Trans.	2.50
45	32-2178	45 R. F. Trans. (Range 5)	2.00	121	32-2061	Discriminator Trans.	2.50
46	32-2178	46 R. F. Trans. (Range 5)	2.00	122	32-2061	Discriminator Trans.	2.50
47	32-2178	47 R. F. Trans. (Range 5)	2.00	123	32-2061	Discriminator Trans.	2.50
48	32-2178	48 R. F. Trans. (Range 5)	2.00	124	32-2061	Discriminator Trans.	2.50
49	32-2178	49 R. F. Trans. (Range 5)	2.00	125	32-2061	Discriminator Trans.	2.50
50	32-2178	50 R. F. Trans. (Range 5)	2.00	126	32-2061	Discriminator Trans.	2.50
51	32-2178	51 R. F. Trans. (Range 5)	2.00	127	32-2061	Discriminator Trans.	2.50
52	32-2178	52 R. F. Trans. (Range 5)	2.00	128	32-2061	Discriminator Trans.	2.50
53	32-2178	53 R. F. Trans. (Range 5)	2.00	129	32-2061	Discriminator Trans.	2.50
54	32-2178	54 R. F. Trans. (Range 5)	2.00	130	32-2061	Discriminator Trans.	2.50
55	32-2178	55 R. F. Trans. (Range 5)	2.00	131	32-2061	Discriminator Trans.	2.50
56	32-2178	56 R. F. Trans. (Range 5)	2.00	132	32-2061	Discriminator Trans.	2.50
57	32-2178	57 R. F. Trans. (Range 5)	2.00	133	32-2061	Discriminator Trans.	2.50
58	32-2178	58 R. F. Trans. (Range 5)	2.00	134	32-2061	Discriminator Trans.	2.50
59	32-2178	59 R. F. Trans. (Range 5)	2.00	135	32-2061	Discriminator Trans.	2.50
60	32-2178	60 R. F. Trans. (Range 5)	2.00	136	32-2061	Discriminator Trans.	2.50
61	32-2178	61 R. F. Trans. (Range 5)	2.00	137	32-2061	Discriminator Trans.	2.50
62	32-2178	62 R. F. Trans. (Range 5)	2.00	138	32-2061	Discriminator Trans.	2.50
63	32-2178	63 R. F. Trans. (Range 5)	2.00	139	32-2061	Discriminator Trans.	2.50
64	32-2178	64 R. F. Trans. (Range 5)	2.00	140	32-2061	Discriminator Trans.	2.50
65	32-2178	65 R. F. Trans. (Range 5)	2.00	141	32-2061	Discriminator Trans.	2.50
66	32-2178	66 R. F. Trans. (Range 5)	2.00	142	32-2061	Discriminator Trans.	2.50
67	32-2178	67 R. F. Trans. (Range 5)	2.00	143	32-2061	Discriminator Trans.	2.50
68	32-2178	68 R. F. Trans. (Range 5)	2.00	144	32-2061	Discriminator Trans.	2.50
69	32-2178	69 R. F. Trans. (Range 5)	2.00	145	32-2061	Discriminator Trans.	2.50