

Electrical Specifications

Type of Circuit:

Superheterodyne, with four tuning ranges; Delayed A. V. C.; Connections for a phonograph; Shadowmeter tuning; Connections for the Philco High Efficiency Aerial, and a push-pull pentode audio output circuit.

Power Supply:

Voltage	Frequency	Consumption
115	50 to 60 cycle	110 watts
115	25 to 40 cycle	110 watts
110/220	50 to 60 cycle	110 watts

The 110/220 volt power transformer Part No. 32-7608 has a voltage selection plug and socket, mounted on top of the power transformer. Place the plug with arrow pointing towards voltage being used.

Undistorted Output: 7 watts.

Tuning Ranges: Four

- Range 1—150 to 350 K. C.
- Range 2—530 to 1720 K. C.
- Range 3—5.7 to 11.6 M. C.
- Range 4—11.5 to 18.2 M. C.

Intermediate Frequency: 470 K. C.

Tone Control:

Four positions, brilliant, bright, mellow, and deep.

*Philco Tubes Used: Eight—Two 6K7EG; Two 6F6EG; one 6A8EG; one 6K5G; one 6J5G and one 5Y4G.

*Note: Receivers in the United States use tubes without the "E" designation.

Speaker: K35, B cabinet.
H26, X cabinet.

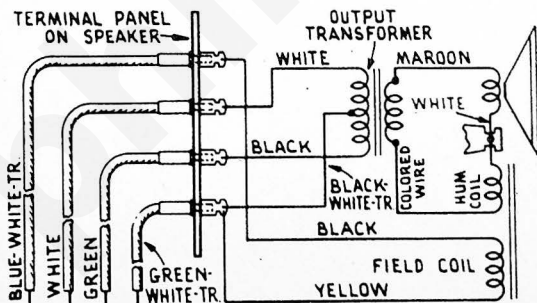


Fig. 2—Speaker Wiring, Types K35, H26

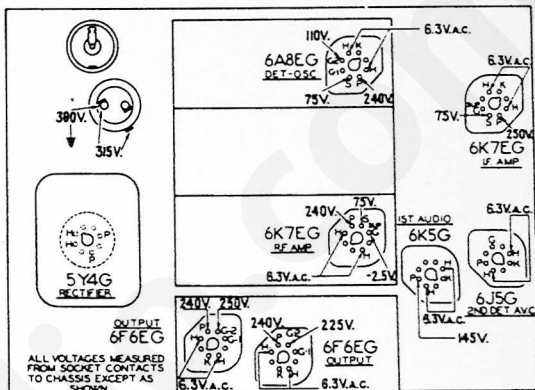


Fig. 1—Socket Voltages—Underside of Chassis View

The voltages indicated by arrows were measured with a Philco 025 Circuit Tester which contains a voltmeter having a resistance of 1000 ohms per volt. Volume Control at minimum, range switch in broadcast position, line voltage 115 A. C.

AERIAL CONNECTIONS

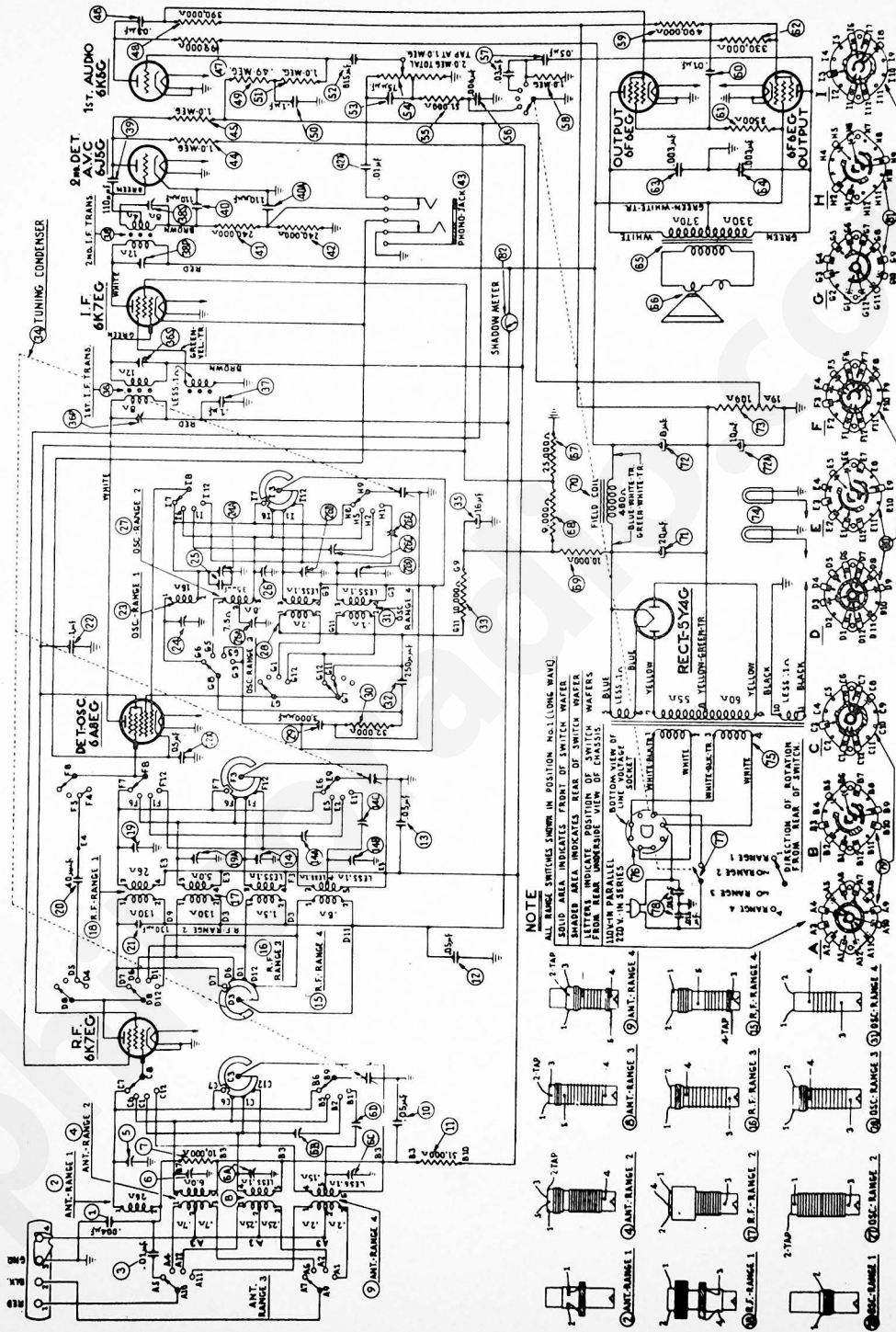
The red and black leads of the High-Efficiency Aerial "transmission line" are connected to terminals 1 and 2 respectively, of the terminal panel provided on the rear of the chassis. Connect the jumper on the terminal panel across terminals 3 and 4.

If a temporary aerial is used, the jumper should be across terminals 2 and 3. The aerial connects to terminal 1 and the ground lead to terminal 3. A good ground connection is desirable in all installations.

SHADOWMETER ADJUSTMENT

Apply power to the receiver and allow tubes to warm up. Then adjust shadowmeter as follows:

1. Move the shadow meter coil backwards and forwards, until the opposite edges of the shadow are $\frac{1}{8}$ of an inch from each end of the shadow screen, measuring along the bottom edge of the screen. Adjustment of the shadow meter light bracket may be necessary for perfect centering.
2. Remove the rectifier tube from its socket, and rotate coil until shadow reaches minimum width. This width must not exceed $\frac{3}{16}$ of an inch.
3. Replace the 5Y4G rectifier tube in its socket. The shadow should then widen to not more than $\frac{3}{16}$ inch or less than $\frac{1}{16}$ inch from each side of the screen measuring along the bottom edge. If these limits are not obtained readjust the shadow meter as given in paragraphs 1 and 2 again.



Model 37-2650

Fig. 3—Schematic Diagram

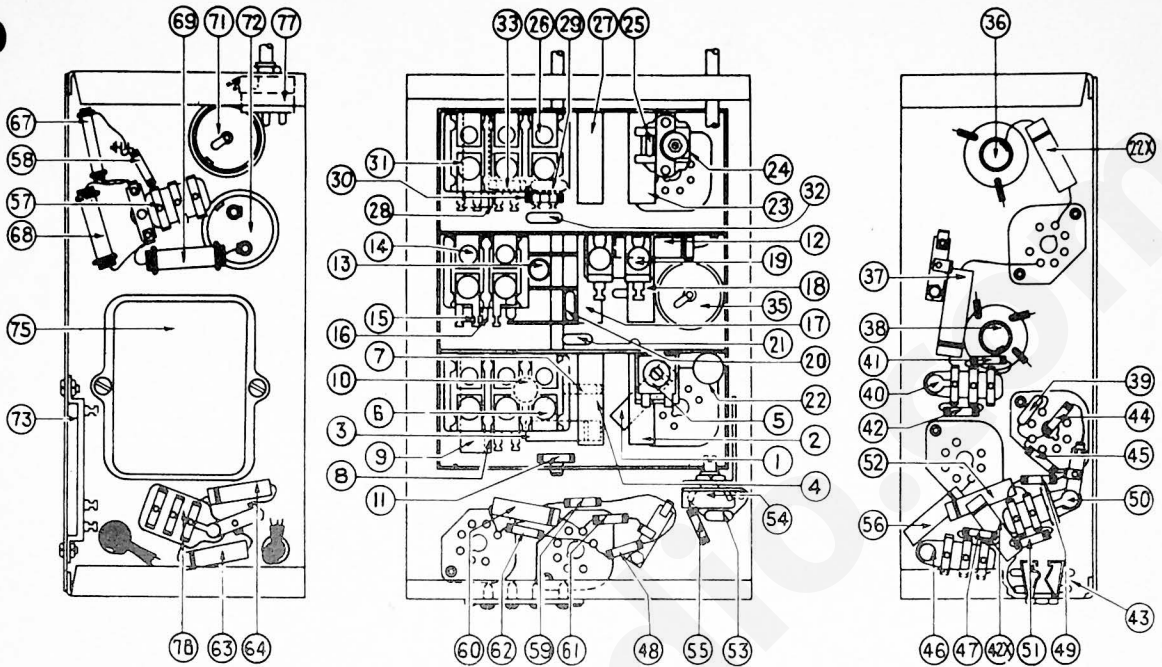


Fig. 4—View of Parts Underside of Chassis

Replacement Parts — Model 37-2650

Schem. No.	Description	Part No.	List Price	Schem. No.	Description	Part No.	List Price	Schem. No.	Description	Part No.	List Price
1	Condenser (0.04 mfd. tubular)	30-4185	\$0.25	48	Resistor (330,000 ohms, ½ watt)	33-433339	\$0.20	Mask	27-5273		\$0.20
2	Ant. Trans. (Range 1)	32-2218	.50	49	Resistor (490,000 ohms, ½ watt)	33-449339	.20	Mask Arm & Link Assembly	31-1940	.15	
3	Condenser (.01 mfd. tubular)	30-4189	.20	50	Condenser (1 mfd. Bakelite)	33-4989-5G	.35	Mask Washer	27-8318	.50	C
4	Ant. Transformer (Range 2)	32-2108	1.60	51	Resistor (1 megohm, ½ watt)	33-510339	.20	Mask Guide & Lamp Support Ass'y.	38-3844	.15	
5	Compensator, Long Wave	31-6126	.40	52	Condenser (.015 mfd. tubular)	30-4358	.20	Mtg. Grommet (R. F. unit)	27-4317	.04	
6	Compensator (Five sections)	31-6153	1.50	53	Condenser (.75 mmfd. mica)	30-1053	.20	Mtg. Sleeve (R. F. unit)	28-2257	.01	
7	Resistor (10,000 ohms, ½ watt)	33-310339	.20	54	Volume Control	33-5158	1.00	Mtg. Screw (R. F. unit)	W-729	.45	C
8	Ant. Trans. (Range 3)	32-2150	1.20	55	Resistor (51,000 ohms, ½ watt)	33-351339	.20	Mtg. Washer (R. F. unit)	27-3927	.20	
9	Ant. Trans. (Range 4)	32-2175	1.20	56	Condenser (.006 mfd. tubular)	30-4024	.25	Mtg. Washer (R. F. unit)	27-3807	.50	C
10	Condenser (.05 mfd. tubular)	30-4444	.20	57	Resistor (.03, .05 mfd. dual bakelite)	3615-YU	.40	Mtg. Bushing, Rubber, (Chassis)	27-4360	.04	
11	Resistor (51,000 ohms, ½ watt)	33-351339	.20	58	Resistor (1 megohm, ½ watt)	33-510339	.20	Mtg. Washer, Rubber, (Chassis)	3558	.03	
12	Condenser (.05 mfd. tubular)	30-4123	.20	59	Resistor (490,000 ohms, ½ watt)	33-449339	.20	Mtg. Washer, Chassis	28-2089	.50	C
13	Condenser (.05 mfd. tubular)	30-4444	.20	60	Condenser (.01 mfd. tubular)	30-4169	.20	Mtg. Bolt	W-783	2.20	C
14	Compensator, R. F. (Four sections)	31-6125	1.00	61	Resistor (3500 ohm, ½ watt)	33-233339	.20	Pilot Lamp Assembly	38-7706E	.35	
15	R. F. Trans. (Range 4)	32-2176	1.20	62	Resistor (330,000 ohms, ½ watt)	33-433339	.20	Panel (Ant. & Ground)	38-7714	.15	
16	R. F. Trans. (Range 3)	32-2151	.70	63	Condenser (.003 mfd. tubular)	30-4469	.20	Set Screw (Dial Drive)	W-1641	.02	
17	R. F. Trans. (Range 2)	32-2105	1.00	64	Condenser (.003 mfd. tubular)	30-4469	.20	Sleeve Paper (Vol. Draft)	27-8687	.11	
18	R. F. Trans. (Range 1)	32-2219	1.00	65	Output Trans.	32-7034	1.50	Socket (rectifier)	27-6052	.20	
19	Compensator R. F. (Two sections)	31-6115	.50	66	Cone & Voice Coil, K 35	26-3174	1.00	Socket (7 prong)	27-6057	.11	
20	Condenser (.40 mmfd. mica)	30-1076	.20	67	Cone & Voice Coil, H 26	02825	1.40	Socket (8 prong)	27-6058	.11	
21	Condenser (.250 mmfd. mica)	30-1032	.25	68	Resistor (25,000 ohms, 1 watt)	33-325439	.20	Shield (Shadowmeter Light)	28-2917	.02	
22	Condenser (.1 mfd. tubular)	30-4455	.25	68	Resistor (9000 ohms, 2 watts)	33-290539	.20	Shaft & Plate (range switch)	42-1237	.70	
22X	Condenser (.05 mfd. tubular)	30-4020	.20	68	Resistor (10,000 ohms, 3 watts)	33-310639	.20	Shaft (Volume control)	38-8060	.12	
23	Ant. Trans. (Range 1)	32-2221	.50	70	First Coil, K 35, H 26 Speakers	31-3657	4.00	Spring (Shadowmeter)	28-8623	.70	C
24	Compensator (Osc. two sections)	31-6074	.40	71	Elect. Cond. (8 mfd.)	30-2024	1.10	Spring (Volume Shaft)	28-4117	.40	C
25	Condenser (.35 mmfd. mica)	30-1044	.20	72	Elect. Cond. (20, 10 mfd.)	30-2163	2.40	Spring Thrust (Dial Drive)	28-8611	.01	
26	Compensator (Osc. 6 sections)	31-6111	1.50	73	Bias Resistor (128 ohms, 1 tap)	33-3280	.30	Washer			
27	Osc. Trans. (Range 2)	32-2120	1.00	74	Pilot & Shadowmeter Lamps	34-2039	.15	Washer "C" (Dial Drive)	28-3904	.01	
28	Osc. Trans. (Range 3)	32-2152	.70	75	Power Trans. 115 volt (50 to 60 cycle)	32-7606	6.25	Washer, Thrust (Dial Drive)	28-3976	.50	C
29	Condenser (3000 mmfd. mica)	30-1028	.45		Power Trans. 110/220 volt (50 to 60 cycle)	32-7607	9.00	Washer, Felt (Range switch coupling)	27-8399	1.25	
30	Resistor (32,000 ohm, ½ watt)	33-332339	.20								
31	Osc. Trans. (Range 4)	32-2182	.70								
32	Condenser (.250 mmfd. mica)	30-1032	.25	76	Socket (line voltage socket)	42-1184	.75	Baffle & Silk	40-5976	.60	
33	Resistor (10,000 ohms, ½ watt)	33-310339	.20	77	Power Switch & Tone Control	42-1184	.75	Baffle (wood)	16271	.80	
34	Tuning Condenser	31-1857	5.00	78	Condenser (.015 mfd. Dual Bakelite)	3793-DG	.40	Bezel & Frame Assembly	40-5947	.80	
35	Elect. Cond. (16 mfd.)	30-2118	1.65	79	Range Switch Ant.	42-1202	1.50	Bolt (Speaker)	W-1495	1.50	C
36	First I. F. Trans.	32-2170	2.20	80	Range Switch R. F.	42-1254	1.50	Gasket (Bezel)	27-8313	.01	
37	Condenser (.1 mfd. tubular)	30-4170	.25	81	Range Switch Osc.	42-1204	1.50	Glass (Bezel)	27-8300	.06	
38	2nd I. F. Trans.	32-2172	2.20	82	Shadowmeter	45-2307	2.50	Ring (Bezel)	28-3988	.45	
39	Condenser (110 mmfd. mica)	30-1031	.20		Bracket (Indicator and Lens Ass'y.)	38-7912	.30	Speaker H 26	36-1238	8.25	
40	Resistor (110 mmfd. dual bakelite)	8035-DG	.25		Clip (Volume Control)	28-4394	.01	Shield (Chassis)	38-8276	.45	
41	Resistor (240,000 ohms, ½ watt)	33-424339	.20		Clamp	28-3900	.03				
42	Resistor (240,000 ohms, ½ watt)	33-424339	.20		Clamp Locking Plate	28-3982	.01				
42X	Condenser (.01 mfd. tubular)	30-4479	.60		Coupling (Range Switch)	31-1941	.12	Baffle & Silk	40-5975	.40	
43	Phono Jack	42-1197	.20		Dial	27-5289	.50	Bezel Assembly	40-5945	.70	
44	Resistor (1 megohm, ½ watt)	33-510339	.20		Dial Guard	27-8324	.02	Gasket (Bezel)	27-8312	.01	
45	Resistor (1 megohm, ½ watt)	33-510339	.20		Gear (Drive)	31-1884	.25	Glass (Bezel)	27-8299	.06	
46	Condenser (.05 mfd. Bakelite)	8318-SU	.35		Gear (Dial Assembly)	28-7185	.12	Ring (Bezel)	28-3987	.40	
47	Resistor (99,000 ohms, ½ watt)	33-309339	.20		Hub (Dial)	28-7187	.12	Speaker (K 35)	36-1231	7.25	

Prices Subject to Change Without Notice

