

## Philco Radio & Television Corp.

Model: *77*

Chassis:

Year: *Pre March 1934*

Power:

Circuit:

IF:

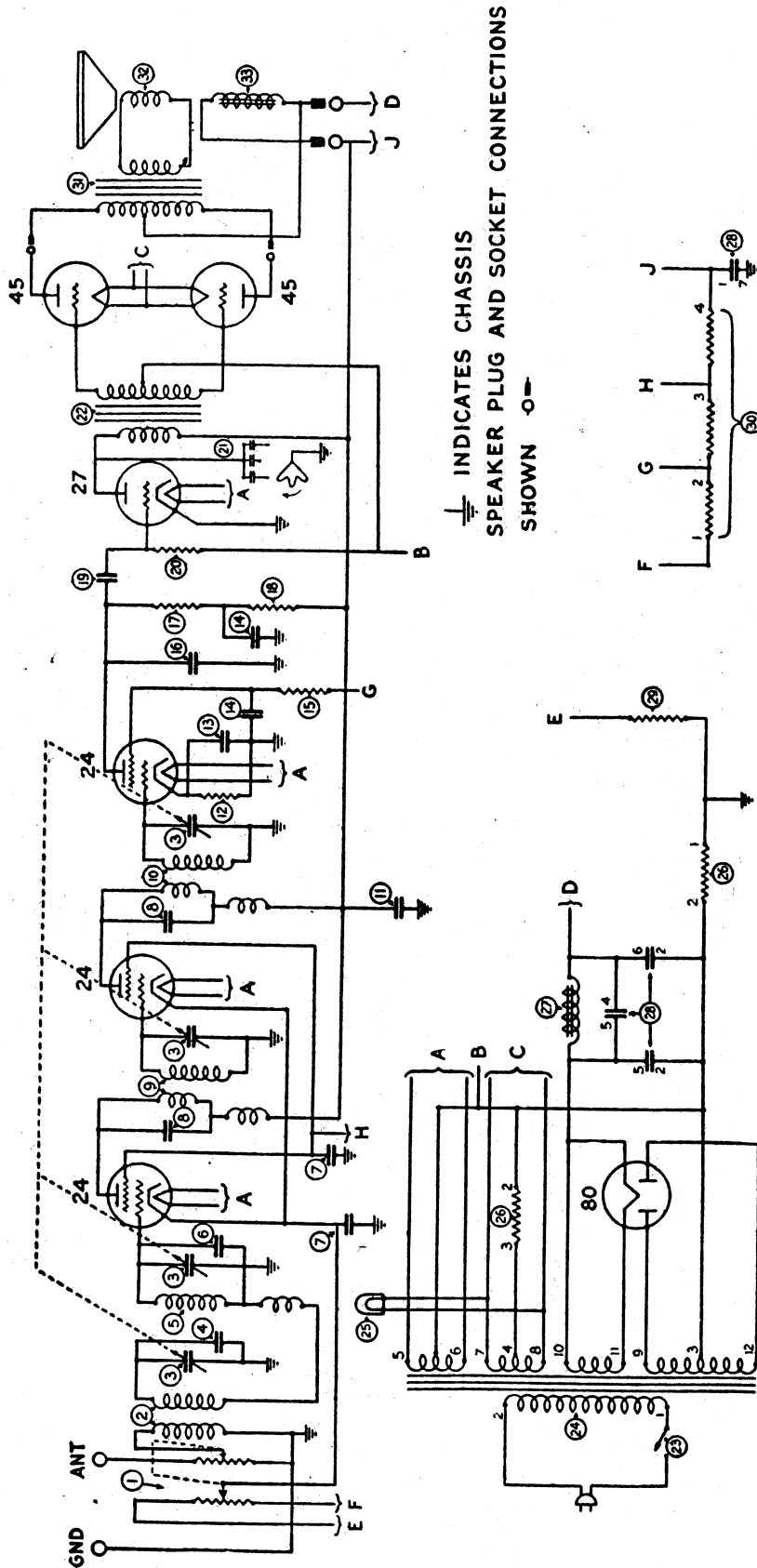
Tubes:

Bands:

### Resources

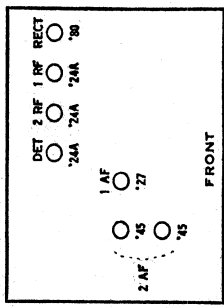
[Riders Volume 1 - PHILCO 1-20](#)

[Riders Volume 4 - PHILCO 4-60](#)



⊥ INDICATES CHASSIS  
SPEAKER PLUG AND SOCKET CONNECTIONS  
SHOWN ○

Models Philco's 76, 77, 77A



### COMPENSATING

Always use an oscillator signal when adjusting compensating condensers. With the Receiver set up for operation, adjust the oscillator and Receiver so the signal is turned in between 120 and 140 on the tuning scale. Have the Receiver volume control turned on full. Adjust the oscillator so that the received signal is very weak. Using a fibre wrench turn down on the adjusting nut of the first compensating condenser until it is quite tight. This purposely throws the first stage out of balance while adjusting the second stage.

After tightening this first adjusting nut compensate the second condenser in the usual manner, that is, tune the Receiver very carefully to the oscillator signal and adjust the compensating condenser for the maximum signal. After this adjustment has been made, adjust the first compensating condenser in the same manner.

MODEL 77, 77-A

Voltage Values

PHILCO RADIO & TELEVISION CORP.

Table 1—Tube Socket Readings Taken with AC Set Tester AC Line—115 volts

TUBE		FILAMENT VOLTS	PLATE VOLTS	SCREEN GRID VOLTS	CONTROL GRID VOLTS	CATHODE VOLTS	PLATE MILLI-AMPERES
TYPE	CIRCUIT						
24	1st R. F.	2.3	145	90	3	13	3.5
24	2d R. F.	2.3	145	90	3	13	3.5
24	Detector	2.3	36*	30†	1.4	12	0
27	1st A. F.	2.3	140		1	10	3
45	2d A. F.	2.2	230		46		30
45	2d A. F.	2.2	230		46		30
80	Rectifier	4.5					50/Plate

All readings taken with antenna disconnected and ground on. Volume control on full.  
 \*Read with a 250,000-ohm voltmeter. †Read with a 100,000-ohm voltmeter.

Table 2—Power Transformer Voltages

TERMINALS	A.C. VOLTS	
1-2		Primary Center Tap for 80 Plate Center Tap for 45 Tubes Heaters of 24 and 27 Tubes Filaments of 45 Tubes Filament of 80 Tube Plate of 80 Tube Center Tap for 24 and 27 Tubes
3		
4		
5-6	2.67	
7-8	2.68	
10-11	5.00	
9-12	750	
Rubber Covered Lead		

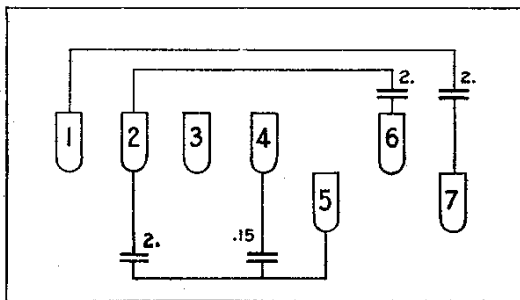
Table 3—RESISTOR DATA

No. on Figs. 3 and 4	Terminal	Resistance	Color
Ⓢ	1-2	1,400	Long Tubular
	2-3	1,500	
	3-4	2,000	
Ⓣ	1-2	250	Short Tubular
	3-4	800	
Ⓜ		100,000	Silver Gray
Ⓟ		250,000	White
Ⓡ		500,000	Battleship Gray
Ⓢ		85	Flatwire wound

Table 4—CONDENSER DATA  
(Other Than Filter Block)

No. on Figs. 3 and 4	Capacity MFD	Volts D.C. With Receiver Turned On
Ⓣ	.25	{ 95 on Screen Grid Cond. 15 on Cathode Cond.
Ⓜ	.05	150
Ⓟ	.5	12
Ⓡ	.25	{ 95 Plate Resistor Cond. 40 Screen Grid Cond.
Ⓢ	.00025	40
Ⓣ	.01	25

Model 77 Condenser Block Part No. 3870



Model 77A Condenser Block Part No. 3871

