

Philco Radio & Television Corp.

Model: 87

Chassis:

Year:

Power:

Circuit:

IF:

Tubes:

Bands:

Resources

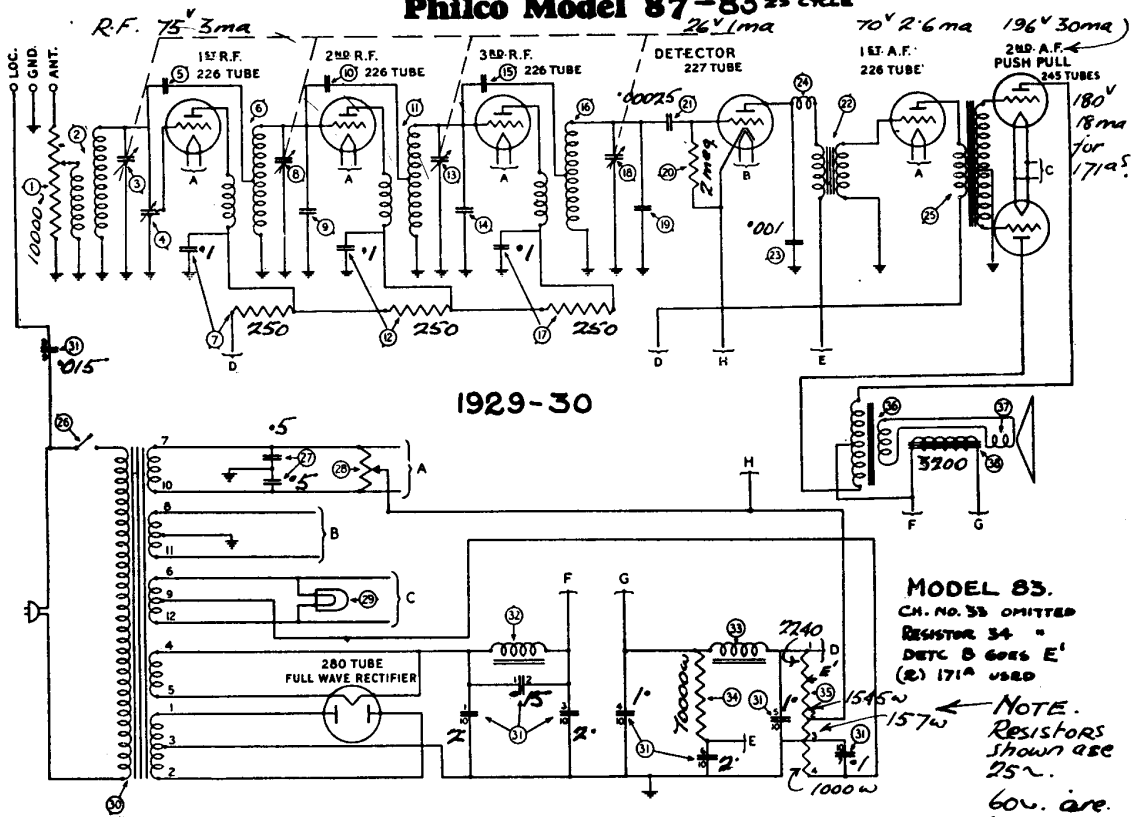
[Radio College Of Canada - PHILCO 4](#)

[Riders Volume 2 - PHILCO 2-20](#)

[Riders Volume 2 - PHILCO 2-21](#)

[Riders Volume 1 - PHILCO 1-22](#)

Philco Model 87-83 25 CYCLE



Models
83-87
1929-30

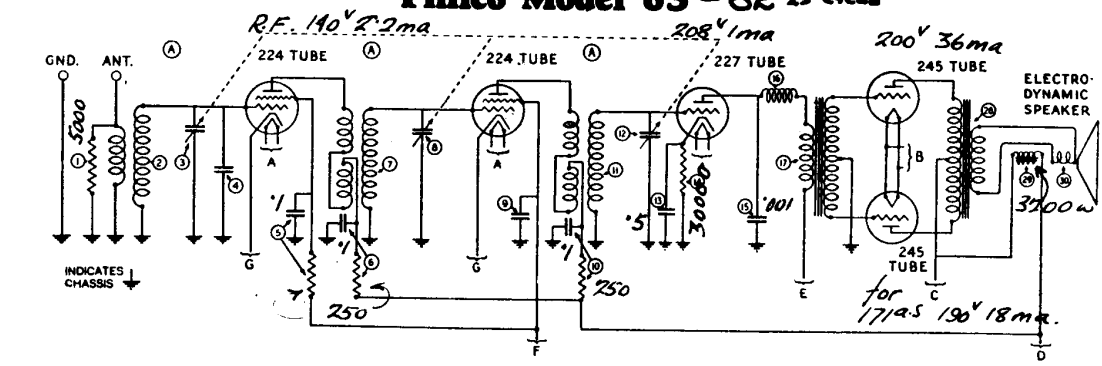
Low Boy
High Boy
De Luxe
High Boy

1929-30

MODEL 83.
CH. NO. 33 OMITTED
RESISTOR 34 =
DET. B GOES E'
(2) 171A USED

NOTE.
RESISTORS
SHOWN ARE
25Ω.
60W. ARE.
650-157
-3785Ω.

Philco Model 65-62 25 CYCLE

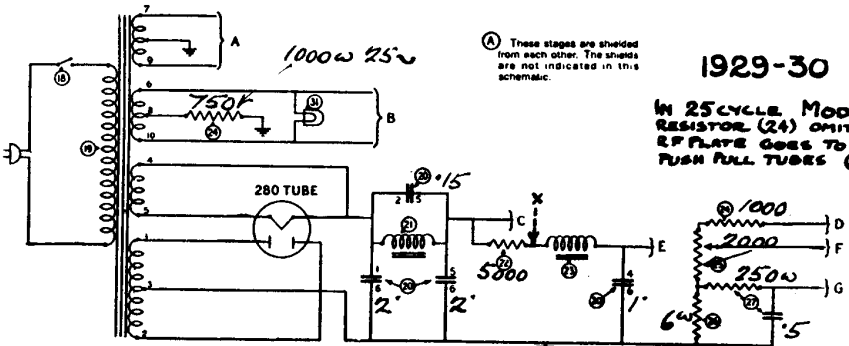


Models
62-65
1929-30

Table
Low Boy
High Boy
De Luxe
High Boy

1929-30

IN 25 CYCLE, MODEL 62
RESISTOR (24) OMITTED
RF PLATE GOES TO POINT X
PUSH PULL TUBES (2) 171A



(A) These stages are shielded from each other. The shields are not indicated in this schematic.

MODEL 87

Voltage Data
Condenser Data
Neutralization

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tion. Remove the third (next to the detector) R. F. Tube, and after insulating one of the filament prongs put it back into the socket. When the neutralizing tube is inserted, the volume should be quite low. To properly neutralize this stage, turn the third neutralizing condenser with a fiber wrench, first one way then the other, until the minimum signal is obtained. This adjustment for minimum signal is very critical, and must be done with extreme care. Remove the neutralizing tube and after taking the insulating material from the filament prong put the tube back into the socket. Repeat the above procedure for the second and then the first R. F. stage. It is important that the neutralizing be done with the volume control on full.

Philco Model 87 Receiver

POWER TRANSFORMER (30)

TERMINAL No.	COLOR OF CABLE WIRE	CONNECTION
1		Plate Rectifier (280) Tube
2		Plate Rectifier (280) Tube
3		Center Tap Grounded
4		Filament 280 Tube
5		Filament 280 Tube
6	Green with Yellow Tracer	Filament 245 Tube and Pilot
7	Black with White Tracer	Filament 228 Tube
8	Yellow	Heater 227 Tube
9	Green with Black Tracer	Terminal 7 of No. ⑥, Terminal 4 of No. ⑤
10	White with Black Tracer	Filament 228 Tube
11	Yellow with Green Tracer	Heater 227 Tube
12	Green	Filament 245 Tubes and Pilot
	Green Rubber-Covered Wire	A.C. Supply
	Black Rubber-Covered Wire	A.C. Supply
	Covered Wire	Terminal 3 of No. ⑤
	Yellow Rubber-Covered Wire	

FILTER CONDENSER BLOCK (31)

1	White	Terminal of No. ⑥
2-3	Black with Yellow Tracer (Two Wires)	Terminal of No. ⑤
4	Blue	*Right Lower Lug Electro-Dynamic Speaker Plug Jack
		Terminal of No. ⑥
5	Yellow with Green Tracer (Two Wires)	*Left Lower Lug Electro-Dynamic Speaker Plug Jack
6	Yellow	Terminal of No. ⑥
7	Green with Black Tracer	Terminal of No. ⑥
8	Blue with White Tracer	Terminal 9 of No. ⑤
9	Black	Terminal of No. ⑤
10		Local on Binding Post Strip Grounded

Neutralizing: Use a neutralizing tube as described above and a good oscillator, such as is shown on Page 17, to neutralize the Philco Receiver.

When adjusting the Neutralizing Condensers connect the test lead from the oscillator to the ANT terminal. Have a good ground connection. Turn on the oscillator. With the Receiver turned on, tune it carefully until the oscillator signal is brought in at maximum strength. Have the oscillator coupler plug in for loud volume.

Table 3

Tube Socket Voltag

A.C. LINE Volts	1st, 2d, 3d, R. F. 1st A. F.		DETECTOR		2d A. F.		RECTIFIER
	F. V.	P. V.	F. V.	P. V.	F. V.	P. V.	F. V.
125	1.5	90	2.5	30	2.5	245	5.0

Table 4

D. C. Voltage Across Filter Condenser Block

TERMINALS	D.C. VOLTS	CAPACITY	CIRCUIT
1-10	310	2.00 Mfd.	First Plate Filter Condenser
1-2	20	0.15 Mfd.	Across First Filter Choke
3-10	290	2.00 Mfd.	Second A. F. to Ground
4-10	155	1.00 Mfd.	Speaker Field to Ground
6-10	30	2.00 Mfd.	Detector Plate to Ground
5-10	96	1.00 Mfd.	R. F. and 1st A. F. Plates to Ground
7-10	45	0.10 Mfd.	B- of Second A. F. to Ground
8-9	110 A.C.	0.015 Mfd.	LOC Terminal Condenser

Table 5

Voltage Across "B-C" Resistor

TERMINALS	VOLTAGE DROP	TERMINAL	CIRCUIT
1-2	90	1	B+ for 226 Tubes
2-3	6	2	C+ and B- of 226 and 227 Tubes
3-4	45	3	Grounded C- of 226 and 245 Tubes
		4	C+ and B- of 245 Tubes

Table 6

Power Transformer Voltages

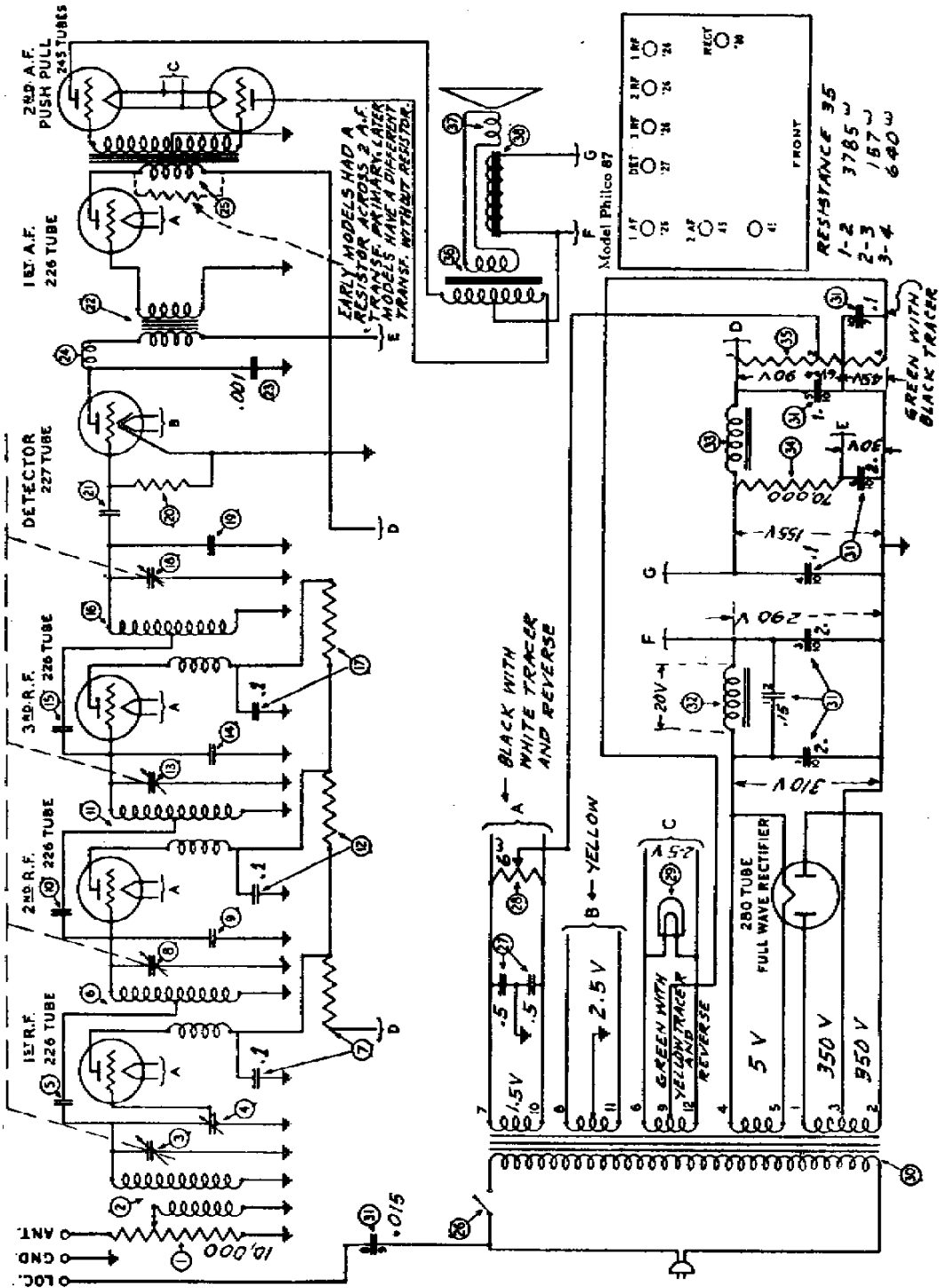
Current Consumption - 125-volt Line - A. C. Watts - 95

TERMINALS	A.C. VOLTS	SECONDARY
7-10	1.5	A.C. Filament of 226 Tube
8-11	2.5	A.C. Filament of 227 Tube
6-12	2.5	A.C. Filament of 245 Tubes
9		Center Tap of 245 Filament Secondary
4-5	5.0	A.C. Filament of Rectifier Tube
1-2	700	A.C. Supply to Plate of Rectifier Tube
3		Center Tap of Rectifier Plate Secondary

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MODEL 87
Schematic
Socket

Philco Model 87



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MODEL 87
Schematic
Socket

Philco Model 87

