

Philco Radio & Television Corp.

Model: 511

Chassis:

Year: Pre October 1937

Power:

Circuit:

IF:

Tubes:

Bands:

Resources

[Radio College Of Canada - PHILCO 3](#)

[Riders Volume 9 - CHANGES 9-4](#)

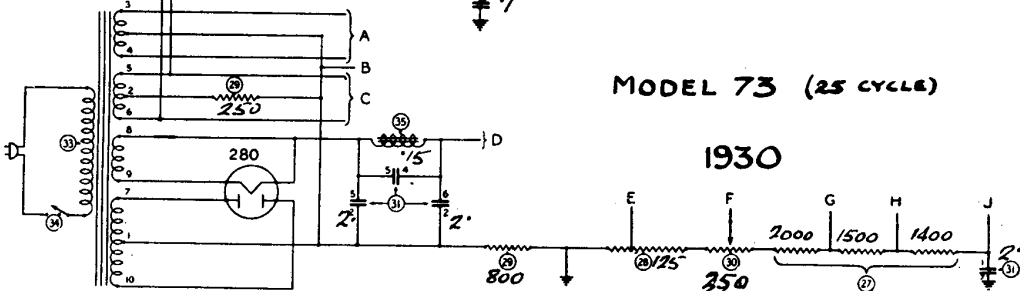
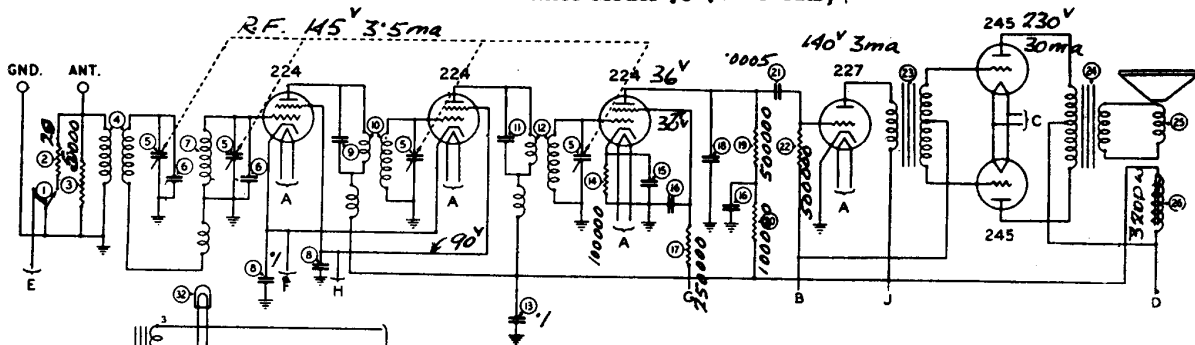
[Riders Volume 8 - PHILCO 8-107](#)

Philco Model 76 (60 CYCLE)

Models
73-76
1930

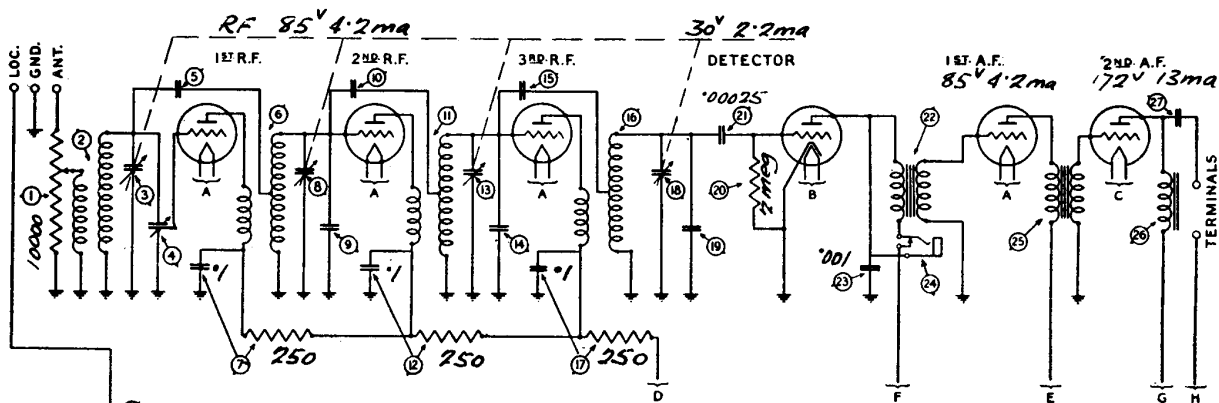
Table
Low Boy
High Boy
De Luxe
High Boy

NOTE—
Condensers
No. 9 and 11
Must on no
account be
disturbed as
they cannot
be adjusted
correctly in
the field



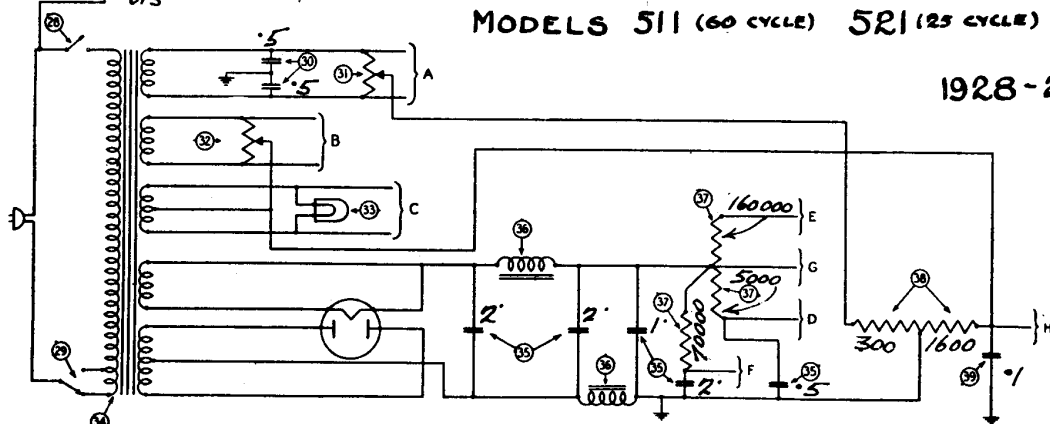
MODEL 73 (25 CYCLE)

1930



MODELS 511 (60 CYCLE) 521 (25 CYCLE)

1928-29



Printed in Canada

—Courtesy Philco Products Ltd. of Canada

Philco 38-38

Beginning with Run No. 3, the 8000-ohm resistor, No. 21, was removed from the 90-volt tap and re-connected to the 135-volt tap of the battery cable. At the same time the value of this resistor was changed from 8000 to 25,000 ohms, Part No. 33-325339. The battery cable assembly was changed also to Part No. 41-3394.

In Run No. 4, the 900-ohm resistor No. 38 was changed to 2000 ohms, Part No. 33-220339. This change was made to decrease current drain on the "BC" battery. For schematic see page 8-73 of *Rider's Volume VIII*.

Philco 511, 521

The model 521 is for operation on 25-40 cycles and is similar to the model 511 (60-cycle operation) except as noted below. Please add 521 to the designation on page 8-107 in *Rider's Volume VIII*.

A change in the wiring has been made. The primary of the third r-f transformer instead of going to the left side of the resistor No. 17 now is connected to the other end. Plate voltage for the r-f tubes obtained from the point marked "D" in the voltage divider, No. 37, now is fed in to the resistors Nos. 7, 12, and 17 through

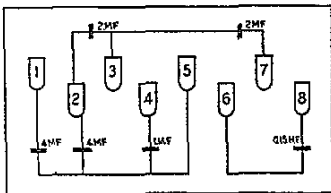


Fig. 2. Filter condenser pack of Philco Model 511 for 60-cycle operation.

the left end of this combination immediately below the first r-f tube. The primary of this r-f transformer now is connected to the right side of No. 7 in the schematic. In other words, the lead marked "D" at the right end of the three series resistors now is at the left end.

The accompanying partial schematic

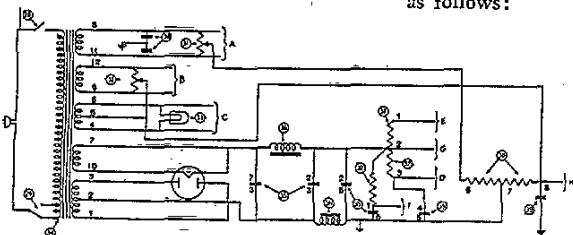


Fig. 1. Schematic of the power pack and filter used in Philco Models 511 and 521. The condenser values for each model can be found in Figs. 1 and 3 above.

Fig. 1 of the power pack and filter carries various numberings, which correspond to those of Figs. 2 and 3 and show the capacity values of the filter condenser packs No. 35 used for model 511 and 521 respectively. Note that the connections of the 1-mf condenser, 4-5, have been changed from the way they are shown in the schematic on page 8-107. Instead of terminal 4 of No. 35 being connected to terminal 3 of No. 37 it is connected to terminal 1 of No. 35.

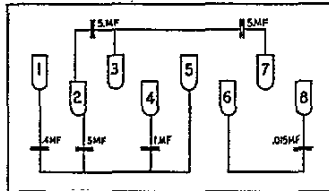


Fig. 3. Filter condenser pack of Philco Model 521 for 25-cycle operation.

The voltage readings are as follows:

Type	Circuit	Fil.	Plate	Grid	MA
26	1, 2, 3 r-f, 1 a-f	1.62	98	6	4
27	Detector	2.65	38	..	1.5
71	2 a-f	5.26	148	29	17
80	Rect.	5.26	375 a-c	EA.	pl. 30

The voltages at the terminals of the power transformer, No. 34, are:

Terminals	A-C Volts
1-3	375
4-6	4.85
7-10	4.8
8-11	1.55
9-12	2.47

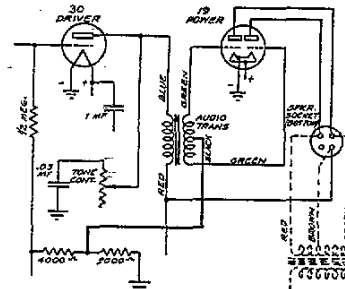
In the bottom view of the chassis on page 8-107, the voltage divider (in the lower left corner) has its terminals numbered corresponding to those numbers in the accompanying schematic. Some chassis of both models have been assembled with a resistor, Part No. 3088W, which does not include the detector plate section of 70,000 ohms; on other chassis Part No. 3088 is used. A separate resistor of 70,000 ohms value, Part No. Z-129, is mounted at the end of the sub-base. In this case, the terminals marked 3 and 4 in the layout must be disregarded. The values of the voltage divider sections of Part No. 3088 are as follows:

1-2	16,500 ohms
2-3	5,500 "
4-5	70,000 "
6-7	375 "
7-8	1,500 "

The values of the sections of Part No. 3088W are the same with the exceptions that section 4-5 is omitted as explained above, and the value of 7-8 is 1,590 ohms. The resistance of the volume control, No. 1, is 10,000 ohms and the value of the three resistors, Nos. 7, 12, and 17, is 100 ohms each.

Sentinel 65B

The "B" battery drain of the early production of Model 65B sets can be reduced by about 20% and a corresponding increase in battery life obtained by adding the 2000-ohm and 4000-ohm resistors as shown in the accompanying partial schematic. It is also necessary to change the connection of the black wire, which is shown going to ground from the tap on the sec-



The addition of the two resistors reduce the battery drain in Sentinel Model 65B.

ondary of the output transformer on page 8-27 in *Rider's Volume VIII*. This ground connection is changed to the junction of the two resistors mentioned above. This change puts a 3-volt bias on the 19 tube and reduces the "B" battery drain to 18-20 ma.

This change is incorporated in late production receivers and these will be stamped with the letter "A" on the chassis.

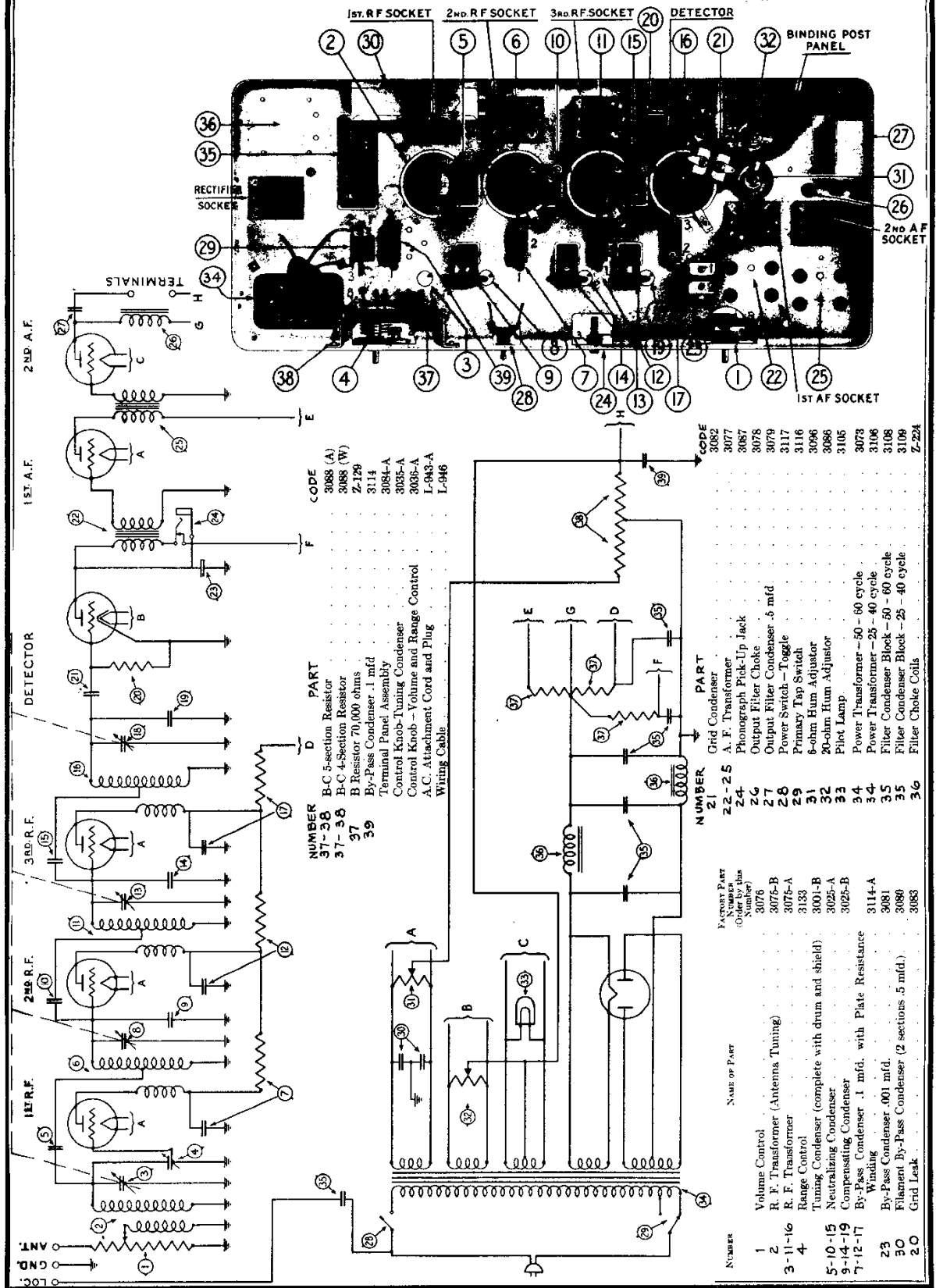
Silvertone 4428A, 4448A, etc.

Due to variations in the 6D8G first detector-oscillator tube, whistles and oscillations may occur at the high-frequency end of the Foreign band. To correct such oscillations, change the value of the oscillator grid leak, R-4, from 50,000 ohms to 25,000 ohms. See schematic on page 7-61 of *Rider's Volume VII*.

Chassis in which this change has already been made in production are rubber-stamped with the letter "D" or some following letter on the chassis identification sticker.

PHILCO RADIO & TELEV. CORP.

MODEL 511
Schematic, Chassis
Parts



NUMBER	PART	CODE
37-38	B-C 5-section Resistor	3088 (A)
37-38	B-C 4-section Resistor	3088 (W)
37	B Resistor 70,000 ohms	Z-129
39	By-Pass Condenser .1 mfd	3114
	Terminal Panel Assembly	3084-A
	Control Knob-Tuning Condenser	3035-A
	Control Knob - Volume and Range Control	3035-A
	A.C. Attachment Cord and Plug	L-943-A
	Wiring Cable	L-946

NUMBER	PART	CODE
21	Grid Condenser	3082
22-25	A. F. Transformer	3077
24	Phonograph Pick-Up Jack	3087
26	Output Filter Choke	3078
27	Output Filter Condenser .5 mfd	3079
28	Power Switch - Toggle	3117
29	Primary Tap Switch	3116
31	6-ohm Hum Adjustor	3096
32	20-ohm Hum Adjustor	3086
33	Pilot Lamp	3105
34	Power Transformer - 50 - 60 cycle	3073
34	Power Transformer - 25 - 40 cycle	3106
35	Filter Condenser Block - 50 - 60 cycle	3108
35	Filter Condenser Block - 25 - 40 cycle	3109
36	Filter Choke Coils	Z-24

NUMBER	NAME OF PART	FACTORY PART NUMBER (Order by this Number)
1	Volume Control	3076
2	R. F. Transformer (Antenna Tuning)	3075-B
3-11-16	R. F. Transformer	3075-A
4	Range Control	3133
5-10-15	Tuning Condenser (complete with drum and shield)	3001-B
9-14-19	Neutralizing Condenser	3025-A
7-12-17	Compensating Condenser	3025-B
	By-Pass Condenser .1 mfd. with Plate Resistance Winding	3114-A
23	By-Pass Condenser .001 mfd.	3081
30	Filament By-Pass Condenser (2 sections .5 mfd.)	3080
20	Grid Leak	3083