



Radio Service Bulletin - No. 47

MODEL 220 AND 220-A RADIO-PHONOGRAPH

MODEL 220 IS FOR USE ON 50-60 CYCLE 105-125 VOLT AC LINES
 MODEL 220-A IS FOR USE ON 25-60 CYCLE 105-125 VOLT AC LINES

The chassis of the 220 and 220-A are the same as the chassis for the 20 and 20-A except for the additional wiring to the radio-phonograph switch and the electric turntable and pick-up.

The tube socket readings, transformer, condenser and resistor data, the filter condenser arrangement and all other information given in Bulletin No. 36 should be used for the 220 and 220-A respectively.

The parts list in Bulletin No. 36 is supplemented with the following which are the additional parts used in the Radio Phonograph.

ADDITIONAL PARTS LIST - MODELS 220 AND 220-A

No. on Fig. 1		Part No.
13	Condenser (.0005) See Note 1.	3910
31	Condenser (.5)	3583
32	AC Outlet	4124
33	AC Plug (Phonograph)	4091
34	Switch	4536
35	Motor	4543
36	Phono-Radio Switch	4536
37	Pick-Up Volume Control	4513
38	Pick-Up	4504

NOTE 1. On the Models 220 and 220-A, 13 shown on Fig. 1 of this Bulletin is a .0005 Mfd. Condenser. On the Models 20 and 20-A, 13 shown on Figs. 3 and 4 of Bulletin No. 36 is a .5 Mfd. Condenser.

The numbering in Fig. 1 from 1 to 30 is the same as the numbering in Figs. 3 and 4 shown in Bulletin No. 36.

Do not attempt repair work on the turntable motor. Should this part become defective, replace with another motor and return it to the factory.

The pick-up should be handled in the same way. If it doesn't operate properly, - remove the mounting bolt which holds the pick-up head to the tone arm, - replace with another and return it to the factory.

Grease the worm gear of the motor with a clear petroleum jelly or a commercially pure vaseline. In order to oil the bearings of the motor it is necessary to remove the turntable.

There is an oil cup located at the top of the motor board, in which a few drops of light machine oil may be added if needed.

January 8th, 1931
 Philadelphia, Pa.

Philadelphia Storage Battery Co.

Robert F. Terry

Service Engineer.

PHILCO MODELS 220 AND 220-A

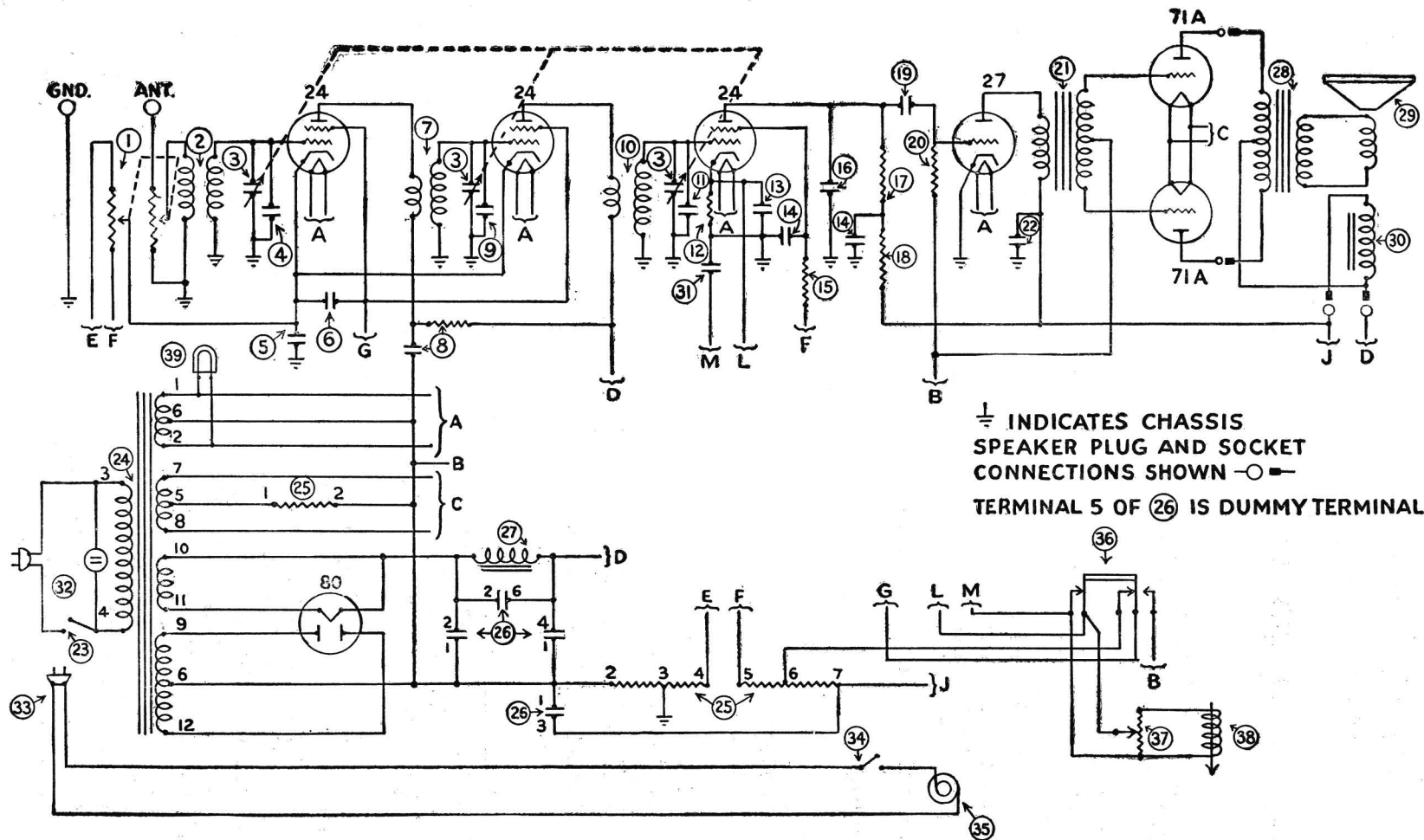


Fig. 1

DIFFERENT CIRCUIT ARRANGEMENT FOR MODEL 220-A

Model 220-A for use on 25-60 cycle lines is wired differently than the Model 220. The plate supply lead for the two 24 R. F. Tubes is taken from the low side of the Speaker field Coil. The lead "D" to the 24 tubes should be changed to "J" for the Model 220-A only. This will change the plate voltage from 250 volts to 115-125 volts. The plate current readings will also be lower than those given in the table.