

PHONOGRAPH MODEL 41-620

SPECIFICATIONS

Model 41-620 is a table type Electric Phonograph incorporating a five tube amplifier; PHILCO LIGHT-BEAM REPRODUCER; Manually operated turntable driven by an electric motor; and a new oval type dust proof speaker that has exceptionally high sound output. Other features included are: Continuously variable tone control; volume control, bass compensation, and a push-pull Pentode output stage with screen phase inversion.

POWER SUPPLY: 115 volts, 60 cycle A. C. This model can also be operated on a 115 volt, 50 cycle power supply by changing the phonograph motor as indicated in the parts list.

PHILCO TUBES USED: One 7F7, Pre-amplifier and 1st audio; one 7B5, Light-Beam Reproducer Oscillator; two 7B5, Push-pull output stage; one 7Y4, Rectifier.

AUDIO OUTPUT: 2.5 watts.

CABINET DIMENSION: Height, Width, Depth.
12 $\frac{1}{4}$ " 18 $\frac{1}{4}$ " 13 $\frac{3}{4}$ "

LIGHT-BEAM REPRODUCER ADJUSTMENTS

To reproduce the sound from a record, the light beam of the reproducer must be carefully positioned on the light sensitive cell. If the light beam is not carefully set, the sound reproduction will be distorted, weak or, if the light beam is completely on or off the cell, the phonograph will be silent.

If any of these conditions exist, the following adjustment procedure should be made: —

NOTE — These adjustments should be made with the power line voltage at 118 volts A. C.

A.—ADJUSTING WIDTH OF LIGHT-BEAM

To make this adjustment push the lamp socket assembly into its holder until a clear image of the lamp filament appears on the light cell. The socket should then be slightly pushed in beyond this point until the rectangular spot of light is 5/32" in width. The socket assembly is now rotated so that the spot light is vertical.

B.—POSITIONING THE LIGHT-BEAM

To position the light-beam on the light cell, turn the adjusting screw at the lower left side of the reproducer until the spot is half on the cell and half on the metal frame surrounding the cell.

C.—ADJUSTING INTENSITY OF LAMP

When shipped from the factory, the lamp of the reproducer is adjusted for best operating efficiency. The intensity of the light from the lamp is adjusted by compensator (22) located on the radio chassis. Under ordinary circumstances, an adjustment will not be necessary. When replacing the reproducer or lamp, however, there may be a tendency towards microphonic feedback. In this case the compensator is adjusted as follows:

1. Turn volume control on full and play a record.
2. While the record is playing, turn compensator in the direction necessary to eliminate microphonic feedback. By turning the compensator the strength of the pick-up output is increased or decreased.

D.—INSTALLING NEW LAMP

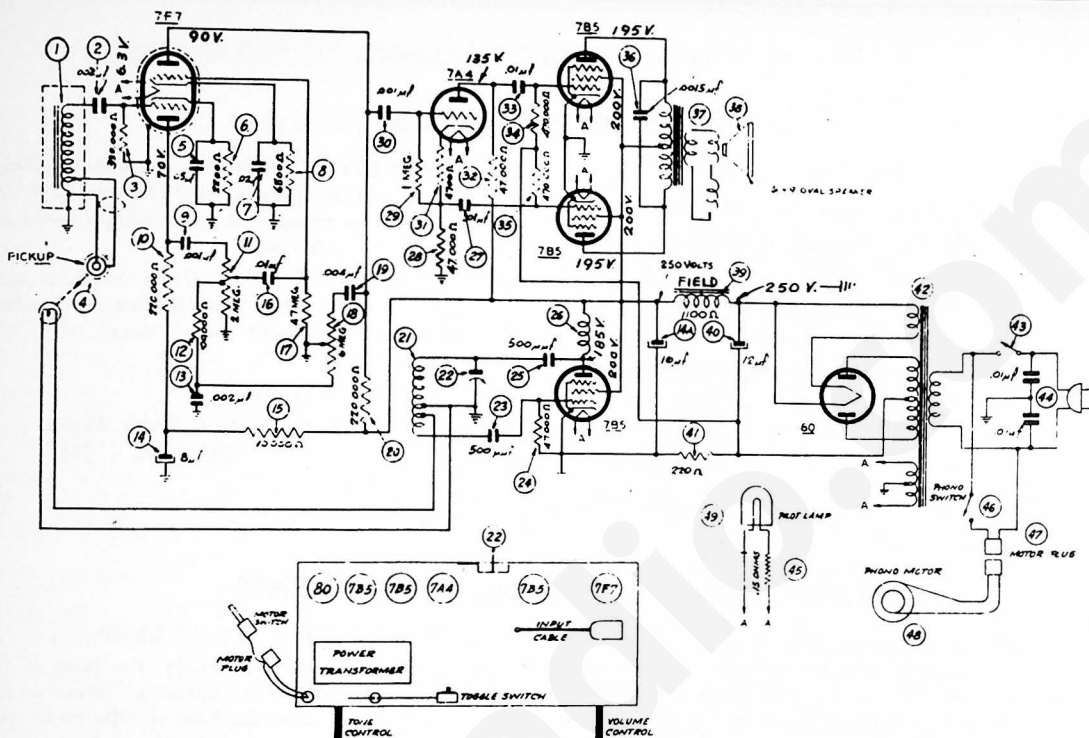
When installing a new lamp in the socket, there are two positions in which the lamp can be inserted. Ordinarily, either of these positions can be used. In some cases, however, due to the lamp filament being off center, the lamp must be inserted in the position that gives the best centering of the spot of light on the vibrating mirror.

PRODUCTION CHANGES

The part number of condenser (36) in the Replacements Parts List should be 30-4616 instead of 30-4615. The value remains the same.

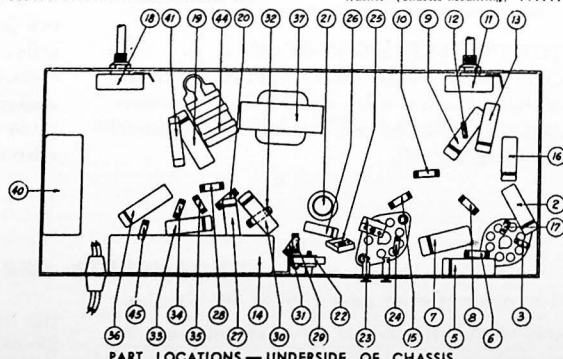
To prevent microphonics from developing when the lid of the cabinet is closed, a cork foot, Part No. 27-9337, is cemented under each front corner of the cabinet.

PHONOGRAPH MODEL 41-620 (CONTINUED)



Replacement Parts — Model 41-620

SCHEM. No.	DESCRIPTION	PART No.	SCHEM. No.	DESCRIPTION	PART No.	SCHEM. No.	DESCRIPTION	PART No.
①	Input Transformer	32-8156	④	Resistor (220 ohms, 1 watt)	33-122439	⑥	Turntable	35-3056
②	Screw	W-658	⑤	Power Transformer (115 volts, 60 cycle)	32-8157	⑦	Pilot Lamp	34-2210
③	Condenser (.002 mfd., 400 volts)	30-4579	⑥	Power Switch (On-Off amplifier)	42-1632	MISCELLANEOUS		
④	Resistor (330,000 ohms, ½ watt)	33-433339	⑦	Switch Plate	28-2401	①	Cabinet	10529A
⑤	Light-Beam Reproducer (complete)	35-2533	⑧	Nut	W-1757	②	Cable Speaker	41-3541
⑥	Rubber Bumper	34-4056	⑨	Line Filter Condenser (.01-.01 mfd.)	3903-D0	③	Cable Input Transformer	41-3566
⑦	Condenser (.05 mfd., 200 volts)	30-4519	⑩	Resistor (15 ohms, wirewound)	33-015334	④	Cable Power	L-3245
⑧	Resistor (2200 ohms, ½ watt)	33-222339	⑪	Phono Motor Switch	42-1643	⑤	Jewel (Pilot Lamp)	27-4777
⑨	Condenser (.02 mfd., 400 volts)	30-4516	⑫	Motor Plugs		⑥	Knobs	27-4987
⑩	Resistor (6800 ohms, ½ watt)	33-268339	⑬	Male Plug (Shell)	28-5390	⑦	Screw (Chassis Mounting)	W-1345
⑪	Condenser (.001 mfd., 1,000 volts)	30-4453	⑭	(Plug Prongs)	27-4622	⑧	Socket (Oscillator Tube)	27-6151
⑫	Resistor (250,000 ohms, ½ watt)	33-422339	⑮	Female	56-1819	⑨	Socket (Loktal Tube)	27-6138
⑬	Volume Control	33-5432	⑯	Phono Motor (115 volts, 60 cycle)	35-1257	⑩	Socket (Rectifier)	27-6044
⑭	Mounting Nut	W-2157	⑰	Phono Motor (115 volts, 50 cycle)	35-1277	⑪	Socket Pilot Lamp	76-1177
⑮	Resistor (100,000 ohms, ½ watt)	33-410339	⑱	Mounting Grommet	27-4596	⑫	Speaker	36-1537
⑯	Condenser (.002 mfd., 400 volts)	30-4579	⑲	Nut	W-1758	⑬	Washer	27-7467
⑰	Electrolytic Condenser (8-16 mfd.)	30-2480	⑳	Rubber Coupling Washer	54-4055	⑭	Sleeve	28-5666
⑱	Resistor (250,000 ohms, ½ watt)	33-422339	㉑	Mounting Washer	W-152	⑮	Nut	W-124
⑲	Volume Control	33-5432	㉒	Lockwasher	W-181	⑯	Grommet	27-4596
⑳	Resistor (10,000 ohms, ½ watt)	33-310339	㉓	Screw	W-814	⑰	Washer (Chassis Mounting)	W-1715
㉑	Condenser (.01 mfd., 400 volts)	30-4572						
㉒	Resistor (4.7 meg. ohms)	33-547339						
㉓	Tone Control	33-5433						
㉔	Mounting Nut	W-2157						
㉕	Condenser (.004 mfd., 400 volts)	30-4578						
㉖	Resistor (220,000 ohms, ½ watt)	33-422339						
㉗	Oscillator Transformer							
㉘	(Light-Beam Reproducer)	32-3527						
㉙	Call Clip	28-5092						
㉚	Compensator (Adjusting Reproducer Light)	31-6388						
㉛	Mica Condenser (500 mmfd.)	60-150157						
㉜	Resistor (47,000 ohms, ½ watt)	33-347339						
㉝	Mica Condenser (500 mmfd.)	60-150157						
㉞	Oscillator R. F. Choke	32-3401						
㉟	Condenser (.01 mfd., 400 volts)	30-4572						
㊱	Resistor (47,000 ohms, ½ watt)	33-347339						
㊲	Resistor (1 megohm)	33-510339						
㊳	Condenser (.001 mfd., 200 volts)	30-4592						
㊴	Resistor (4700 ohms, ½ watt)	33-247339						
㊵	Resistor (47,000 ohms, ½ watt)	33-347339						
㊶	Condenser (.01 mfd., 400 volts)	30-4572						
㊷	Resistor (470,000 ohms, ½ watt)	33-447339						
㊸	Resistor (470,000 ohms, ½ watt)	33-447339						
㊹	Condenser (.0015 mfd., 1000 volts)	30-4615						
㊺	Output Transformer	32-8120						
㊻	Cone Assembly (for speaker 36-1537-4)	36-4197						
㊼	Field coil (replace speaker 36-1537)	30-2481						
㊽	Electrolytic Condenser (12 mfd.)	30-2481						
㊾	Mounting Strap	56-1346						



PART LOCATIONS — UNDERSIDE OF CHASSIS