

PHILIPS PHONOGRAM

MODEL NG1004/01

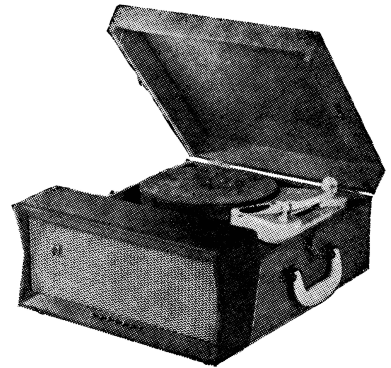
Model NG1004/01 differs from NG1004 in respect of record player only.

For additional descriptive details, refer NG1004 service data.

SPECIFICATIONS

(Subject to alteration without notice)

Power Supply	.....	6V Dry Battery (Lantern) type
		509 or 3509
Weight packed/unpacked	.....	15/12½ lbs.
Transistor Amplifier	.....	CZ.165-400
Av. Current Consumption (66-80°F)	.....	6mA
Av. Current Consumption (88-104°F)	.....	11.5mA
Record Player, 16⅔, 33⅓, 45, 78 R.P.M.	.....	Type NG1012
Av. Current Consumption (33⅓ R.P.M.)	.....	45mA
Pick-up Head	.....	Type AG3010 or AG3016



VOLTAGE ANALYSIS

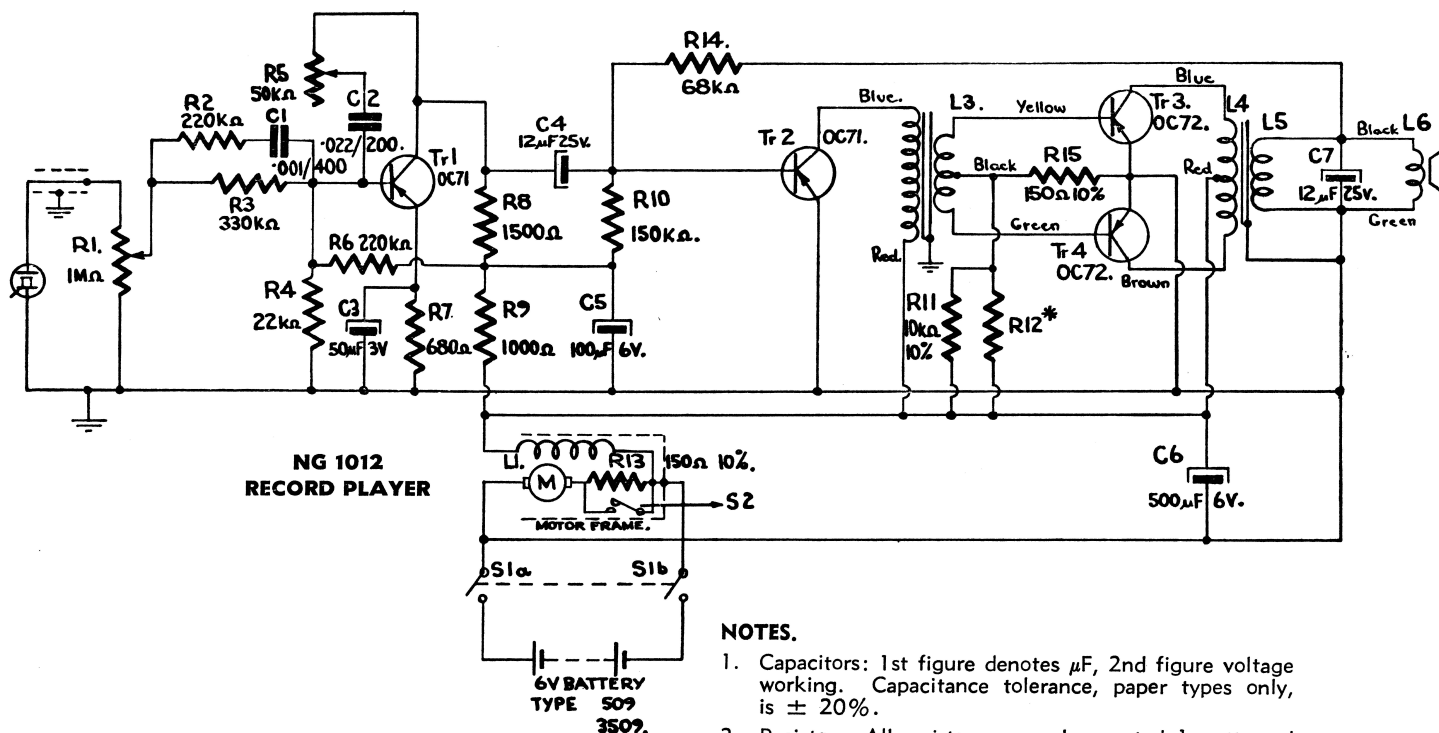
Transistor			Volts			Collector Current mA.
Function	Type	Ref. No.	Emitter	Base	Collector	
Pre-amplifier	OC71	Tr1	0.28	0.31	5.0	0.3
Driver	OC71	Tr2	0	0.15	5.5	2.5
Power Output	OC72	Tr3	0	0.15	6.0	1.0 at 72°F. 2.5 at 90°F.
Power Output	OC72	Tr4	0	0.15	6.0	1.0 at 72°F. 2.5 at 90°F.

NOTE: All voltages, measured at transistor lead ends, are 20,000 Ω per volt meter readings and may vary $\pm 10\%$ of quoted figure. Milliammeter is shunted by a 2,000 μF capacitor for collector current measurement. Tr3 and Tr4 are matched pair.

MISCELLANEOUS COMPONENTS

Description	Code No.	Description	Code No.
Badge	CR.531.422	Motor assembly complete	AE.150.46
Clip, pick-up arm retaining	CS.210.606	Cap, aluminium, protective	49.892.07
Container, battery—		Padding, sponge rubber protective	49.892.39
Blue	CR.248.448	Pulley (4 speed)	AE.002.49
Tan	CR.248.453	Grommet, motor mounting, x3	A9.999.75/5x10
Grey	CR.248.452	Screw, speed adjustment	49.892.43
Screw, battery securing	CS.258.853	Speed, governor assembly	AE.600.09
Disc, stroboscopic	CS.413.212	Brush assembly	A9.023.60
Intermediate wheel	AE.150.48	Clip and fixed governor contact	AE.600.08
Knob, x2	CR.523.739	Name, Philips	CS.436.446
		Pad, pressure, turntable	CS.424.178
		Screw, knurled x2 (batt. plt. to mtg. board)	CS.258.857

For remaining parts comprising record player Type NG1012, refer NG1009 service data.



NOTES.

1. Capacitors: 1st figure denotes μF , 2nd figure voltage working. Capacitance tolerance, paper types only, is $\pm 20\%$.
2. Resistors: All resistors are carbon, rated $\frac{1}{2}$ watt, and unless otherwise specified value tolerance is $\pm 20\%$.
3. R12 is selected from a value range 68K Ω to 8.2K Ω to achieve a combined Tr3, Tr4 collector operating current of 2mA $\pm 25\%$ at 72°F.
4. Switch S1a, S1b is operated by pick-up arm.
5. Switch S2 is part of motor speed governor.

PARTS LIST

RESISTORS

No.	Description	Code No.
R1	0.5 M Ω carbon pot. (vol.)	CZ.029.321
R2, 6	0.22 M Ω $\frac{1}{2}$ W carbon	
R3	0.33 M Ω $\frac{1}{2}$ W carbon	
R4	22 K Ω $\frac{1}{2}$ W carbon	
R5	50 K Ω carbon pot. (tone)	CZ.029.080
R7	680 Ω $\frac{1}{2}$ W carbon	
R8	1.5 K Ω $\frac{1}{2}$ W carbon	
R9	1.0 K Ω $\frac{1}{2}$ W carbon	
R10	0.15 M Ω $\frac{1}{2}$ W carbon	
R11	10 K Ω $\frac{1}{2}$ W carbon	
R12	Selected from:—	
	68 K Ω $\frac{1}{2}$ W carbon	
	27 K Ω $\pm 10\%$ $\frac{1}{2}$ W carbon	
	18 K Ω $\pm 10\%$ $\frac{1}{2}$ W carbon	
	10 K Ω $\pm 10\%$ $\frac{1}{2}$ W carbon	
	8.2 K Ω $\pm 5\%$ $\frac{1}{2}$ W carbon	
R13, 15	150 Ω $\pm 10\%$ $\frac{1}{2}$ W carbon	
R14	68 K Ω $\frac{1}{2}$ W carbon	

CAPACITORS

No.	Description	Code No.
C1	0.001 μF $\pm 20\%$, 400V paper	
C2	50 μF , 3VW electrolytic	CZ.099.806
C3	0.022 μF $\pm 20\%$ 200V paper	
C4, 7	12 μF 25 VV electrolytic	CZ.099.502
C5	100 μF 6VW electrolytic	CZ.100.102
C6	500 μF 6VW electrolytic	CZ.100.103

INDUCTORS

No.	D.C. Resistance Ohms	Description	Type or Code No.
L1	2.4	Motor filter wdg., Part of AE.150.46	
L2, 3	250:45/45	Drive transformer	Rola DR1
L4, 5	5.0/5.0: <0.5	Output transformer	Rola TR6
L6		Loudspeaker, 3.5 Ω	Rola 5F, F87

IMPORTANT! When ordering spare parts, quote **CODE NUMBER** of part and **MODEL NUMBER** of Receiver. In claiming free replacement under **GUARANTEE**, return defective part **PROMPTLY** and quote **MODEL** and **SERIAL NUMBER** of Receiver and **DATE OF PURCHASE**.

All tolerances are $\pm 20\%$ unless otherwise specified.

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