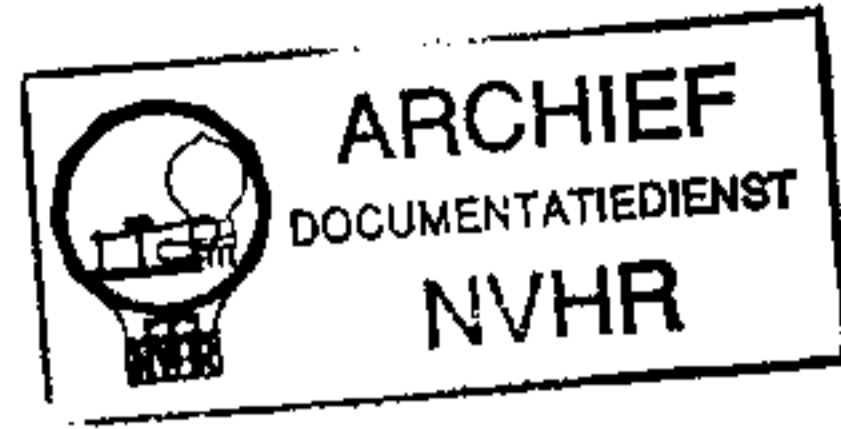


PHILIPS



directions for use

Ned. Ver. v. Historie v/d Radio



GA 207 / GA 407

hi
HIGH FIDELITY INTERNATIONAL
fi



INTRODUCTION

This two speed record player is a supreme example of advanced technology in new materials and their application combined with well-proven construction methods. The apparatus fully meets the HiFi standards of DIN 45500.

In order to minimize rumble and wow use is made of a belt drive system and a low speed synchronous motor, in combination with a free floating sub-chassis for turntable and pick-up arm, a construction that has been used already with much success in earlier models. Features of this record player are the automatic return of the pick-up arm to its rest position after playing a record and a direct stylus force indication by means of a calibrated measuring instrument. Its headshell with universal slide-in cartridge support can accommodate cartridges with the standard 1/2" RETMA mounting distance.

The viscosity damped pick-up lift permits the pick-up arm to be raised or lowered without touching the arm.

INSTALLATION (fig. 1)

Mains voltage adjustment

Before using the record player, check that the voltage adapter under the turntable (A) is set for the correct local mains voltage. If this is not the case turn the adapter with a coin until the correct voltage appears. **THIS PROCEDURE MUST BE COMPLETED BEFORE ANY ATTEMPT IS MADE TO CONNECT THE UNIT TO THE MAINS SUPPLY.**

The type plate is situated under the turntable near the voltage adapter.

Transport locking

For special secure of the sub-chassis suspension, during transport from manufacturer to consumer, the record player is equipped with a safeguard screw. This red labelled screw, situated under the turntable should be removed.

Turn the two locking swivels (B) anti-clockwise until the studs can move freely in their holes.

Each time before transporting the player, it should be locked again by turning the locking swivels clockwise.

Assembly

Place the turntable on the turntable spindle (C).

Slide the counterweight (F) packed separately on to the rear of the pick-up arm. (fig. 1)

Connection to mains and amplifier

Insert the mains lead plug (7) into the mains socket. Plug the pick-up lead (8) into the gramophone socket of the amplifier or radio.

Stylus force adjustment

Remove the protective cap from the pick-up cartridge (2) by sliding forward. Unlock the pick-up arm by pulling the pick-up arm lock (5) upwards. Depress rocker key (4) at the end marked ∇ . Turn knob (6) until the correct stylus force can be read on the stylus force indicator (D). Recommended stylus force for magnetic cartridges (Super M types GP400 and GP401) is 2.5 gf. (see also table of pick-up cartridges at the end of this page).

OPERATION (fig. 1)

- a. Adjust to the correct turntable speed with rocker key (1).
- b. Remove the protective cap from the pick-up cartridge (2) and unlock the pick-up arm lock (5).
- c. Place a record upon the turntable; for 45 r.p.m. records with a large centre hole use the adapter.
- d. Depress rocker key (4) at the end marked ∇ .
- e. Move the pick-up arm towards the record and the turntable will start revolving automatically.
- f. Position the pick-up above the running-in groove or any desired section of the record.
- g. Depress rocker key (4) at the end marked ∇ and the hydraulically damped mechanism then carefully lowers the pick-up arm on to the record.
- h. After playing a record the pick-up arm returns automatically to its rest position. To lock the pick-up arm press down the pick-up arm lock (5).
- i. The pick-up arm can be lifted at any desired moment during play by depressing rocker key (4) at the end marked ∇ .

J. To stop during reproduction depress rocker key (3) at the end marked stop. The pick-up arm returns to its rest position and the motor is switched-off automatically.

MAINTENANCE

Although the stylus is subject to very little wear, it is recommended to have it checked regularly by your dealer. The life of records is prolonged if they are kept clean e.g. by means of a "Discleaner". Putting on, taking off or cleaning a record should only be done while the turntable is at rest. The mechanism of this record player does not require any maintenance since its bearings are self-lubricating.

RE-ADJUSTING THE COVER HINGES (fig. 2)

This apparatus is equipped with friction hinges designed to support the opened cover in practically any position. If the cover does not stand in the required position re-adjust by tightening the hinge screw (E).

Note: Do not oil the hinges.

INTERCHANGING THE PICK-UP CARTRIDGE

This can easily be removed by pulling plate + pick-up cartridge carefully out of the headshell (fig. 3A).

Other pick-up cartridges with RETMA standard mounting distance

With this record player is a small plastic bag containing: a plastic plate, screws, nuts, distance pieces and a jig. The jig is to check that the stylus is in the correct position. This is achieved by mounting the cartridge with distance pieces and screws to the plastic plate in such a way that when the plate and cartridge are slid into the slots of the jig, the stylus lines up with the notch as shown in fig. 6. The sides of the cartridge should be parallel to the lines on the upperside of the jig. When this adjustment is correct, push the cable tags of the coloured wires on the terminals of the cartridge. The coding is as follows:

- Red right hand channel (R)
- White left hand channel (L)
- Green right hand return (RG)
- Blue left hand return (LG)

Slide plate and cartridge into the head shell (fig. 3B).

Replacement of Super M pick-up cartridges (GP 400 - GP 401)

Pull the cartridge carefully from the plate (fig. 4). Mounting the new cartridge is done by pushing it on to the plate (fig. 5). Slide plate + pick up cartridge into the headshell (fig. 3B). The electrical connections are made automatically.

Replacement of the stylus unit (GP 400 - GP 401)

Pull the support with the pick-up cartridge out of headshell (fig. 3A). Take the plate and cartridge, upside down, in the left hand and take the stylus unit with thumb and fore-finger of the right hand (fig. 7). Now pull it carefully straight out of the cartridge without jerking. Slide the new stylus unit straight and without jerking into the cartridge and slide the support and cartridge back into the head shell (fig. 3B). Replacement of the stylus unit of the GP 390 should be done by your dealer.

TECHNICAL DATA

Record player

Turntable speeds	33 1/3 and 45 r.p.m.
Wow/flutter	≤ 0,2 %
Rumble (DIN A)	< - 35 dB
Rumble (DIN B)	< - 55 dB
Stylus force	1 ... 4 gf adjustable
Tracking error	< 0° 15'/cm
Motor	24 - pole synchronous
Mains voltages	110, 127, 220, 240 V
Mains frequency	50 Hz
Power consumption	5 W

Pick-up cartridges	GP 214/GP 215	GP 390	GP 400	GP 401
Stylus (Diamond)	18 (GP 215)	15	15	7 x 18 μm
Stylus (Sapphire)	18 (GP 214)			
Sensitivity (5cm/sec)	65	5	6	6 mV
Load impedance	1 M ohm	47	47	47 kOhm
Compliance:				
(Stat.) lat.	≥ 5	> 20	> 32	> 32.10 ⁻⁶ cm/dyne
vert.	≥ 2,5	> 10	> 17	> 17.10 ⁻⁶ cm/dyne
(Dyn.) lat.	≥ 3	> 12	> 20	> 20.10 ⁻⁶ cm/dyne
vert.	≥ 1,5	> 6	> 16	> 16.10 ⁻⁶ cm/dyne
Stylus force	4	2,5	2,5	2,5 gf
Channel separation	> 18	> 20	> 24	> 24 dB
Channel balance	< 4	< 2	< 2	< 2 dB
Net weight	2	5	7	7 gf
Replacement stylus		4822 251 30009	4822 251 30041	4822 251 30039

Note: Some of the associated items mentioned in this booklet may not be available in every country, but your Dealer will be pleased to advise you on enlarging your range of equipment.

