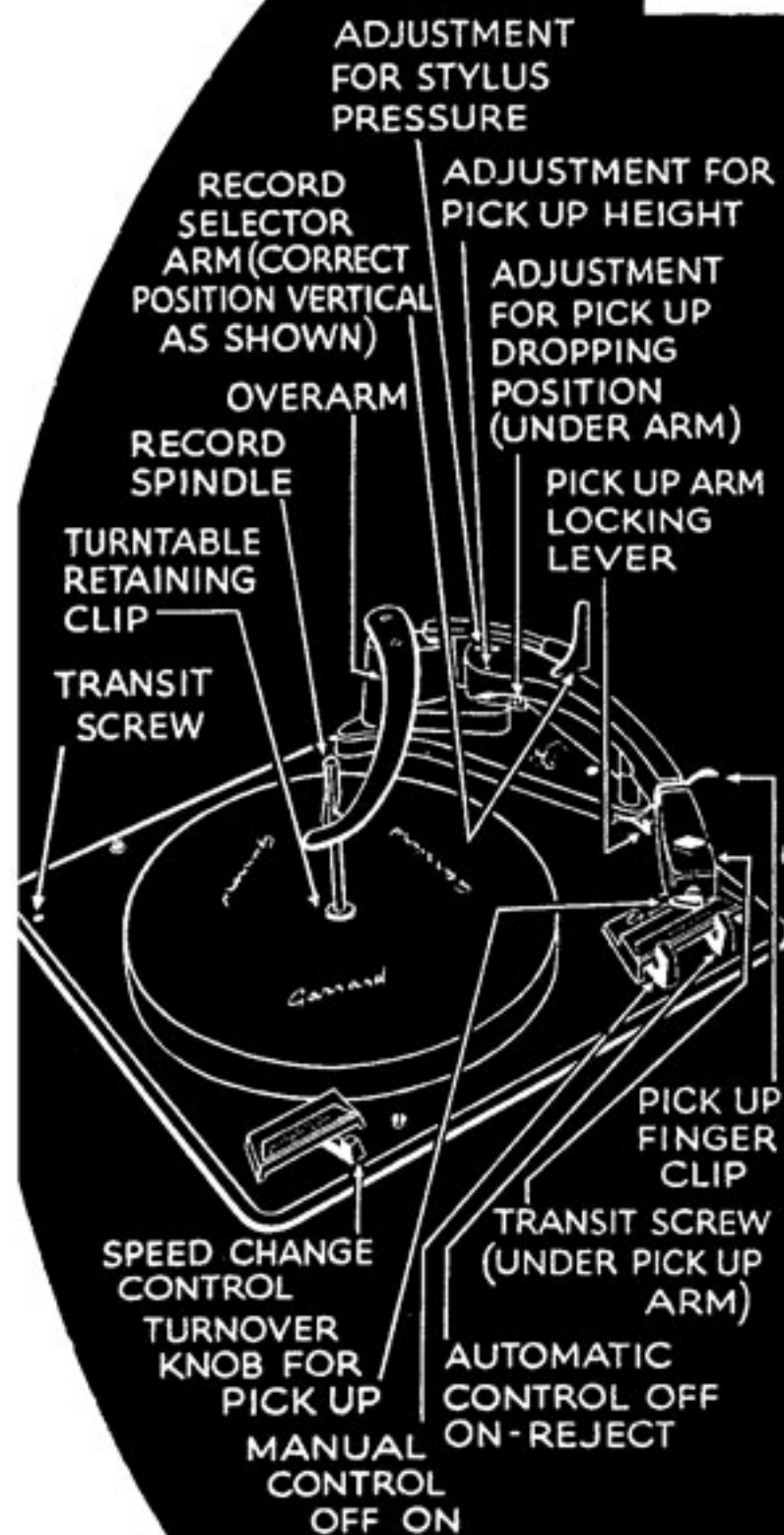


Garrard

MODEL 210/209 FOUR SPEED RECORD PLAYER AND CHANGER



THIS IS YOUR SERVICE
MANUAL AND SHOULD
BE CAREFULLY RETAINED



Both Model 210 and 209 Record Player and Changer have facilities for complete manual operation enabling them to be used as high quality single record players. There are independent controls for Manual and Automatic operation.

The Model 210 has a plug-in pick-up head. The 209 has the pick-up head integral with the arm. Apart from this difference the models are similar.

Should further information be required on your Garrard unit, please write to our Technical Service Department, Newcastle Street, Swindon, Wilts. (Telephone: Swindon 5381 - 5 lines) or, for spare parts and service returns, to our Service and Spares Department, 50-54 Radnor Street, Swindon, Wilts. (Telephone: Swindon 2606). In U.S.A.: Garrard Sales Corporation, 80 Shore Road, Port Washington, New York (Telephone: P07.7700).

DESCRIPTION

The Garrard Model 210 Record Player and Changer will play automatically an unlimited number of records up to 8, either 7", 10" or 12" diameter at 16 $\frac{1}{2}$, 33 $\frac{1}{3}$, 45 or 78 r.p.m. 10" and 12" records of the same speed can be mixed in any order. No setting for record size required, the selection is completely automatic.

7" 45 r.p.m. records with large centre hole may be played using large record spindle Type LRS4/W (available as an optional extra) or clip-in centre hole adaptors obtainable from record stores.

The Changer may be stopped and started without rejecting the record being played and records can be played manually as on a single record player.

OPERATING INSTRUCTIONS

To operate proceed as follows:

- (1) See that correct stylus is in position for type of record to be played.
- (2) Move Speed Change Control to desired speed.
- (3) Place records horizontally on Record Spindle, lift and move Overarm inward.
- (4) Switch on by moving the Automatic Control to "On".

INSTALLATION

When your radiogram is installed, check that the two transit screws are removed and that the changer is floating freely on its suspension springs. The transit screws are copper plated for identification and their position is shown on diagram. To facilitate packing, the Selector Arm on this unit is turned downward. Normal operating position is achieved by pulling the plastic portion forward against the spring and turning it so as to point upwards, at the same time allowing the locator to engage in its slot. It is desirable to support the Selector Arm with one hand whilst performing the above operation.

To unload:

- (1) Lift Overarm, move to right-hand side and lower.
- (2) Lift records off spindle. If replaying the same records, lift clear of spindle before replacing.

Manual operation:

- (1) Place record on turntable by threading over record spindle, moving record horizontally over step on spindle.
- (2) Switch on by moving Manual Control to "On". On completion of playing the record, the pick-up will return to its rest and the motor switch off.

Reject:

A record being played may be rejected by moving the Automatic Control to "Reject".

Stop:

The changer automatically stops on completion of playing the records placed on it. If it is desired to stop while playing a record, move either Control to "Off", the motor will then stop with the pick-up remaining on the record. Restart by moving the Manual Control to "On" and the same record will continue playing. (Restarting by moving the Automatic Control to "On" will cause the record being played to be rejected and the next record played). The pick-up arm may be locked on its rest by moving the Pick-up Arm Locking Lever to the left. It is automatically disengaged when switching on either Automatic or Manual.

Note:

The pick-up arm will not automatically move from its rest unless one or more records are loaded on the Record Spindle. This is a safety measure to prevent damage to the pick-up by inadvertently switching on. To obtain the best results from your records see that they are stored and cleaned as recommended by the record manufacturers.

Do not leave records on the changer when not in use.

See reverse for Maintenance,
Service and Accessories

Garrard

RECORD CHANGER MODEL 210/209

MAINTENANCE & SERVICE

MAINTENANCE

The motor turntable spindle and intermediate wheel bearings are of the oil retaining type and rarely need lubricating. When the need for oil is apparent, remove the turntable and lubricate these bearings with a fine grade of machine oil. Carefully remove all traces of surplus oil—especially from the motor pulley and rubber intermediate wheel.

To remove turntable:

Remove turntable retaining clip and lift with equal pressure on diametrically opposite sides. If difficulty is experienced, give the record spindle a light downward tap with a piece of wood, such as the handle of a screwdriver, while lifting the turntable.

SERVICE ADJUSTMENTS

Speed:

Should the speed vary during the playing of a record, make sure that it is not due to record slip caused by warped records. Next remove the turntable and examine the motor pulley, intermediate wheel and inside of turntable rim for traces of oil. Wipe all driving surfaces with a

clean cloth before replacing turntable. Check that the rubber intermediate wheel runs in the centre of the appropriate step on the motor pulley and is not rubbing the side of the adjacent step. If necessary, loosen the screws holding the pulley to the motor shaft and move pulley to its correct position.

Motor:

Should the motor, if dual range, run too hot or be too weak to operate the changer, disconnect the power supply and check that the links in the voltage change-over block are correctly placed to correspond with the voltage of the power supply. Details are given on the cover of the block. Check that the links are tight. Should the motor run consistently too fast or slow, check that the motor pulley is correct for the frequency of the power supply. The pulley is colour finished, nickel for 50 cycles and brass for 60 cycle power supply.

Pick-up dropping position:

The pick-up arm dropping position is set for optimum accuracy. Should, however, any minor adjustment be required, lift the pick-up arm which will reveal a horizontal screw (covered by a spring). The slotted head of this screw should be turned clockwise to move arm in and counterclockwise to move arm outward.

Pick-up height:

The height of the pick-up lift can be adjusted by turning the small screw accessible on top of the rear of the pick-up arm. The height should be adjusted so that the pick-up stylus point is 1" above the turntable surface as the pick-up returns to its rest.

Stylus pressure:

The stylus pressure should be that recommended by the pick-up manufacturer but in any case should not exceed 10 grammes. It is recommended that a periodical check be made, preferably with a Garrard stylus pressure gauge, to see that the correct pressure is maintained. To adjust the stylus pressure, turn the serrated projection on top of the rear of the pick-up arm, clockwise to increase and counterclockwise to reduce stylus pressure.

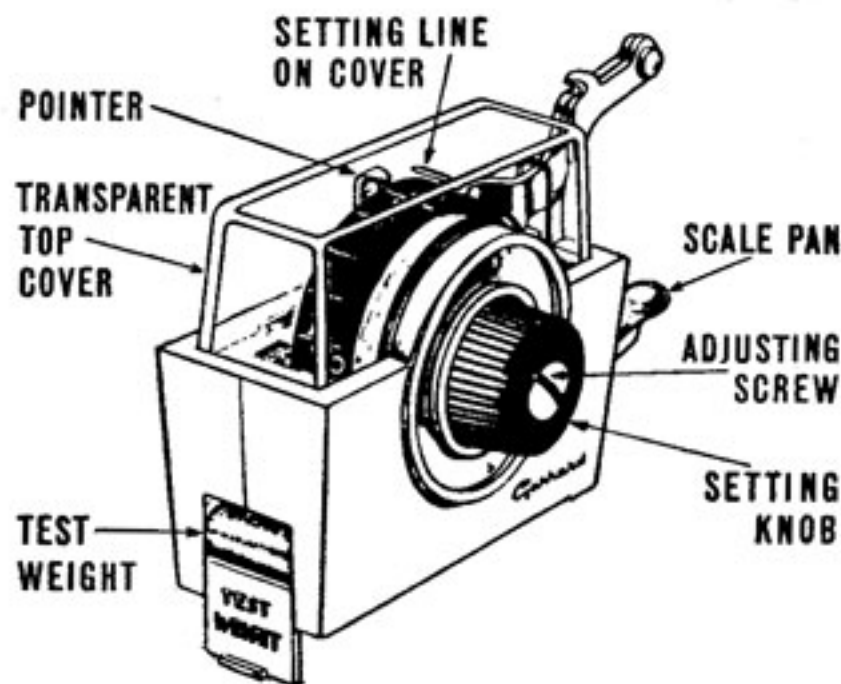
Pick-up:

Replace stylus when worn and keep free from accumulated dust.

Garrard Stylus Pressure Gauge Model SPG3

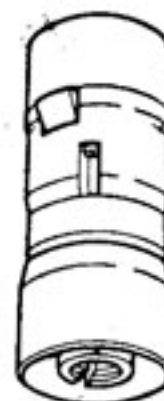
AN INDISPENSABLE ACCESSORY FOR THE ENTHUSIAST

- Easily readable scale, visible through a clear plastic window, reading 0-12 grammes, with $\frac{1}{2}$ gramme indications
- Accurate through the entire scale, 0-12 grammes
- Plastic Scale Pan—no damage to delicate stylus
- Will accommodate all current Pick-up Arms and Heads
- Measures the exact Stylus Pressure at the actual stylus and at record level
- Supplied complete with a 5 gramme checking weight



LARGE RECORD SPINDLE LRS4/W

FOR USE WHEN PLAYING RECORDS WITH LARGE CENTRE HOLE



OBTAINABLE FROM YOUR
LOCAL DEALER