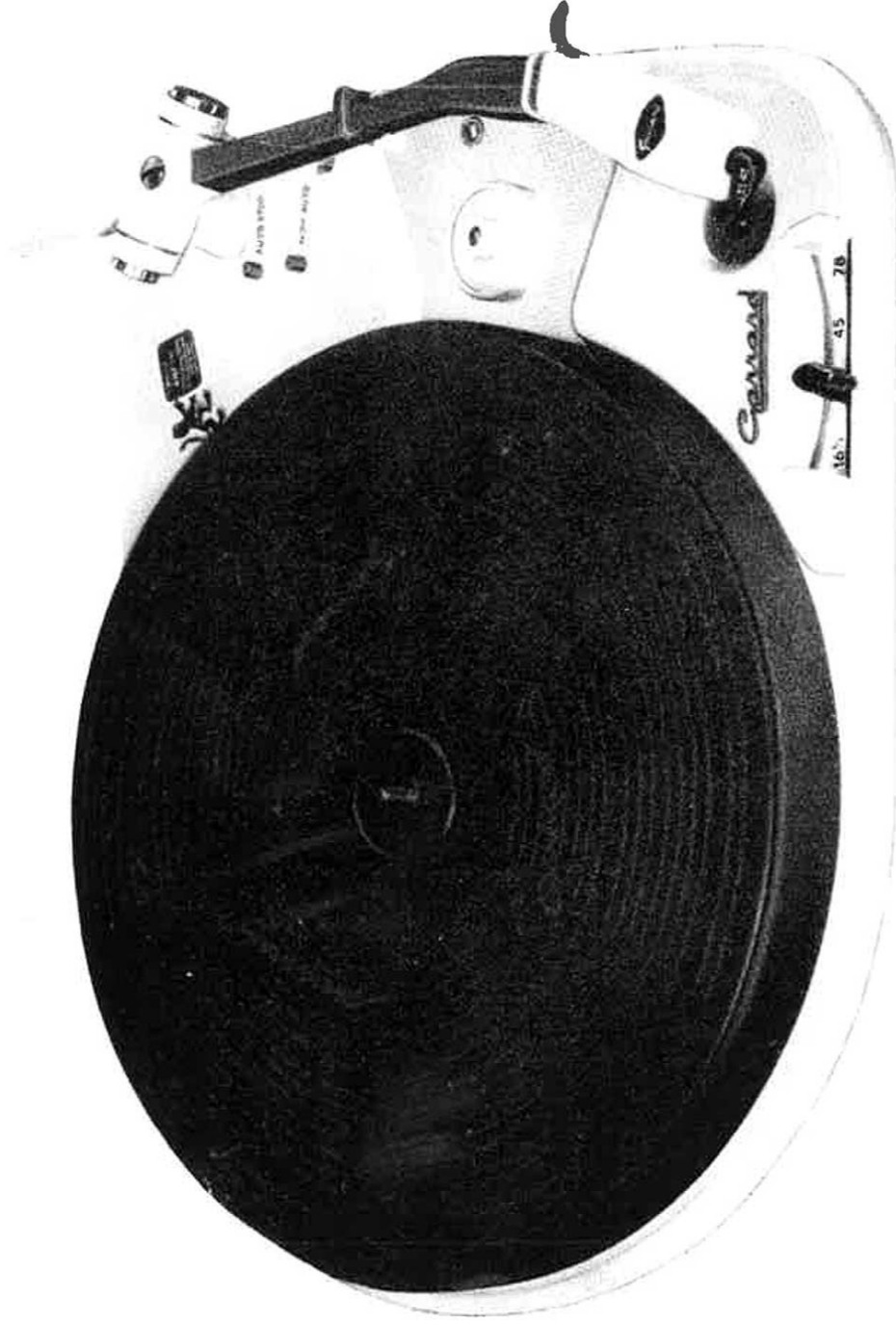


Garrard Service Sheet – Number 1

Complementary to
Sheets No. 2 to 12

Model: Single Record Player 4 HF

Subject: Index



INDEX

Sheet No.	Subject
2	OPERATION
3	INSTALLATION
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13	" " "
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Garrard Service Sheet — Number 2

Complementary to
Sheets No.

Model: Single Record Player 4 HF

Subject: Operation

DESCRIPTION

The Garrard Model 4 HF Single Record Player will play a record of any size up to 16" diameter at a speed of either 16 $\frac{2}{3}$, 33 $\frac{1}{3}$, 45 or 78 R.P.M.

TO OPERATE

- (1) See that the correct stylus or pickup head is in position for the type of record to be played.
- (2) Set speed change knob to the correct speed for record.
- (3) Unlatch pickup arm from rest and place record on turntable.
- (4) Lift pickup arm and move it to the right to start motor, then lower pickup on to record.

At end of record the unit will stop automatically if the auto stop is in operation; if it is not, the pickup will remain in the centre of the record and should be lifted and placed on rest when unit will stop; this procedure also applies should it be desired to switch off before the end of a record.

Two push buttons, coloured red, are provided to engage or disengage the auto stop mechanism as desired. To set, press the required button when the pickup arm is on its rest. The button pressed will remain in operation until the other one is depressed when the pickup arm is on its rest.

A record adaptor to fit the large hole of 7" 45 R.P.M. records is provided to fit over the top of the turntable spindle. when not in use it should be kept on the pin located on top of the unit plate.

SPEEDS

To set speed accurately, place stroboscope provided on a record and while pickup is playing, turn the speed adjusting knob until the lines on the stroboscope appear to remain stationary for the speed required, when viewed under a light from the power supply.

RECORDS

Records should be kept free from dust. Always keep them in their envelopes when not in use—do not leave them on the turntable. The turntable mat should also be kept clean. Avoid touching the music lines and do not play chipped or cracked records as they will damage the stylus point. Occasionally clear the stylus point from dust.

Garrard Service Sheet — Number 3

Complementary to
Sheets No.

..... 4

..... 9

Model: Single Record Player 4 HF

Subject: Installation

DIMENSIONS

The cabinet space required to accommodate the Garrard Model 4 HF Single Record Player is 17 $\frac{1}{4}$ " long by 13 $\frac{1}{2}$ " back to front with 3 $\frac{1}{2}$ " clearance above and 3 $\frac{3}{8}$ " clearance below top of motor board. These sizes provide clearance for the movement of the pickup arm to switch on and for the unit to float freely on its spring suspensions. Should it be desired to play 16" records, additional clearance will be required.

FITTING TO CABINET

Having opened the carton, the template, booklet and stroboscope will be found under the first liner. Remove these and untie the string loop which holds the pickup arm. Lift the unit out of the carton together with the small envelope containing the two transit fixing screws and washers, turntable retaining clip and plastic bottle of lubricating oil. The turntable will be found packed in bottom of carton.

The motor board should be cut out to the template and if not already fitted, the power supply and amplifier leads should be connected. The power supply lead should be connected to the terminals in the block on the underside of motor—remove cover to do this. Connect the amplifier leads, which should be screened, to the pickup tags on the strip underneath the unit plate, diagrams 1 and 2.

If required for monaural reproduction, the amplifier leads should be connected as shown in diagram 1 and if for Stereophonic reproduction, as diagram 2. The motor should be earthed by connecting a lead from the earthing tag on the motor to a good earthing connection, see under "noise," Sheet Number 9.

The leads should be threaded through the motor board and the unit placed in position with the spring suspensions over the three $\frac{3}{4}$ " diameter holes. Press down evenly over each spring and the patented clip-in suspensions will spring through each hole and be retained in position.

To level the unit, place a spirit level on a record on the turntable and checking both from side to side and back to front, turn the suspension fixing screws, clockwise to lower and counterclockwise to raise the unit. It will be necessary to remove the turntable, Sheet number 4, to gain access to two of the fixing screws.

If the unit is already fitted into a cabinet, it should, after the transit screws have been removed, be checked and adjusted for level as instructed above when the cabinet is finally installed in position.

TRANSIT SCREWS

For transit purposes, two wood screws are provided to clamp the unit rigidly to the motor board. Two small fibre washers are also supplied for use under the screw heads to avoid marking the enamel. The position of these two screws are shown on template and diagram 4, Sheet Number 4.

THESE SCREWS MUST BE REMOVED BEFORE PLAYING THE UNIT.

VOLTAGE AND FREQUENCY

The model 4 HF unit is available in two voltage ranges, 100 to 130 or 200 to 250 volts, A.C. 50 or 60 cycles according to the size of the motor pulley fitted. These pulleys are colour finished, nickel for 50 cycles and brass for 60 cycles.

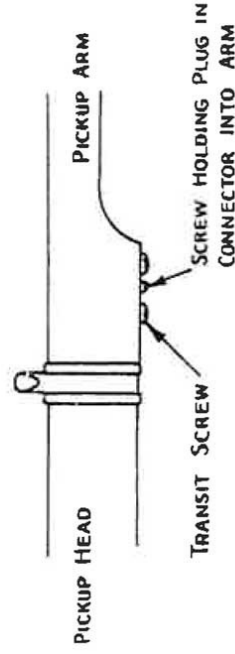
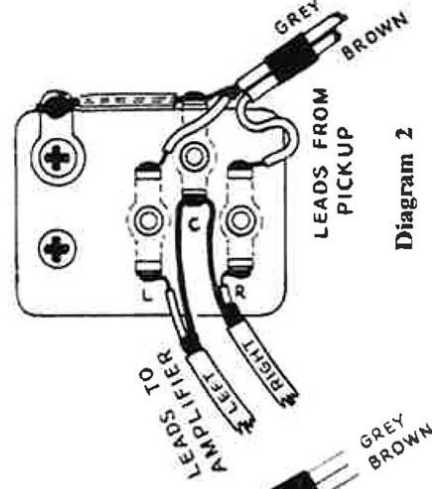
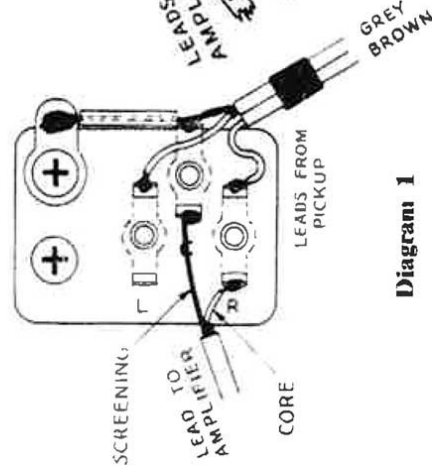
If the unit is to be connected to a radio set or amplifier which has a live chassis it is essential to isolate the pickup circuit by means of condensers or transformers, otherwise the pickup circuit will also become live. Should these isolating components not be included in the amplifier, they should be fitted externally in series with the pickup leads and adequately insulated. For crystal pickups a capacitor of 0.01mfd. max. should be connected in each pickup lead, the capacitors should have a high working voltage. For instructions regarding the isolation of magnetic pickups, consult the manufacturer of the cartridge.

Customers are recommended to consult their radio dealer if in doubt on this subject.

PICKUP

The plug-in pickup head is retained by a transit screw, shown on diagram 3. If the pickup head is not to be removed, as when using a turnover pickup on monaural records, this screw should remain tight but if the plug-in feature is used, as may be the case when also playing Stereo records, the screw should be removed.

When the unit is not in use, the pickup arm should be locked on its rest by the latch provided, which should also be used for transit purposes.



Garrard Service Sheet – Number 4

Complementary to
Sheets No.

Model: Single Record Player 4 HF

Subject: Maintenance

MAINTENANCE

The bearings of the turntable spindle, intermediate wheel and motor shaft are of the oil retaining type and rarely need attention. When, however, the need for lubrication becomes apparent, the turntable should be removed as described below, and a few drops of the special oil supplied or a light grade of machine oil applied to the bearings as indicated on diagram 4.

Access to the turntable spindle bearings for lubrication is by means of a screw adjacent to it, diagram 4. This screw should be removed, a few drops of fine machine oil put into the hole and the screw replaced.

Care must be taken to make sure that oil is not allowed to contact the driving surfaces and all surplus oil should be removed before the turntable is replaced.

REMOVING TURNTABLE

The turntable is removed by taking off the centre retaining clip and applying equal upward pressure under diametrically opposite sides with the fingers. Should the turntable prove difficult to remove, give the top of the turntable spindle a light tap with a small block of wood or handle of a screwdriver while lifting as described.

FITTING TURNTABLE

With unit in switched off position, place turntable on its spindle revolving it clockwise allowing it to drop into position. Switch on to free the brake pad, then switch off and replace the retaining clip.

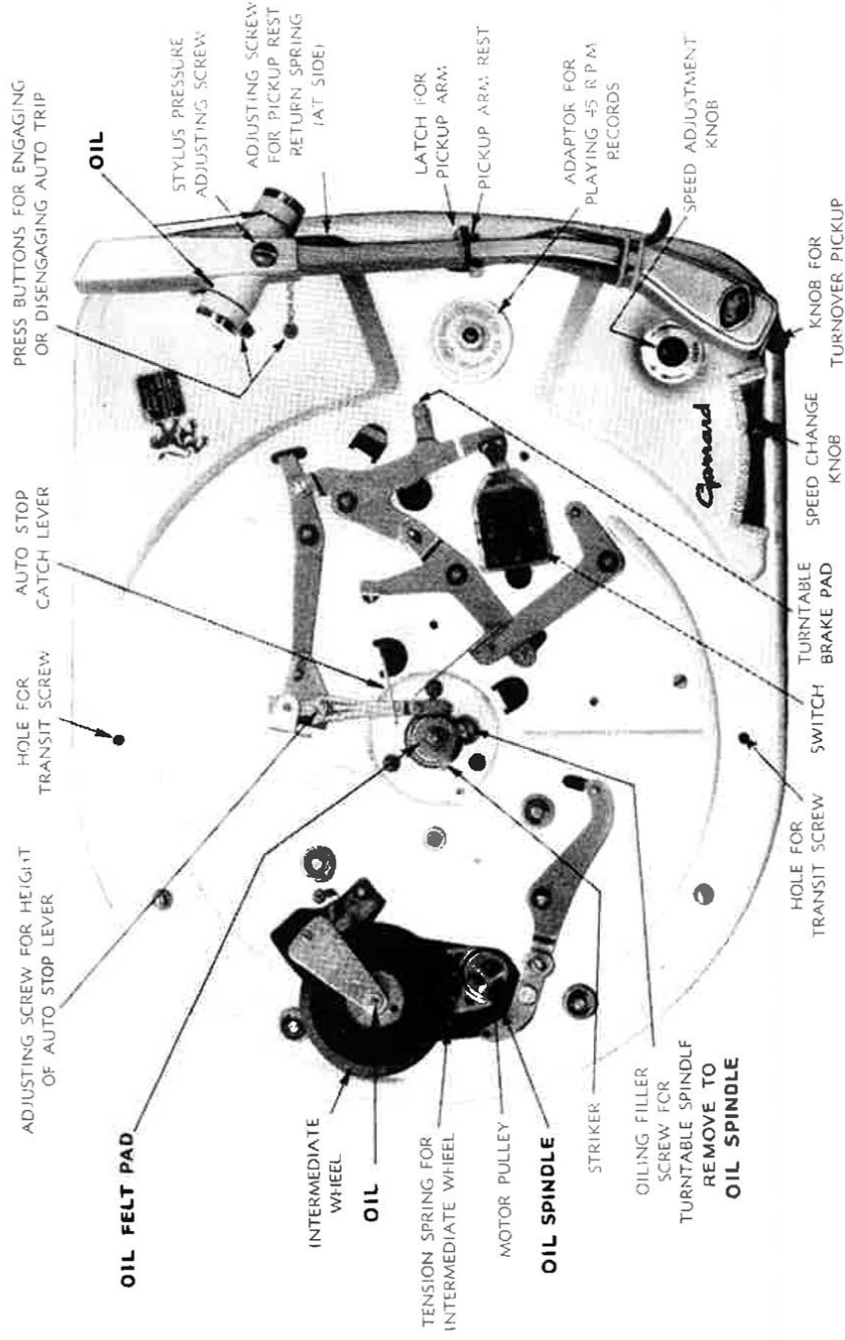


Diagram 4

Garrard Service Sheet — Number 5

Complementary to
Sheets No.

4
6

Model: Single Record Player 4 HF

Subject: Adjustments

DESCRIPTION

The adjustments described are those for which provision is made on the unit. Should these not be sufficient see sheet relating to the fault occurring.

STYLUS PRESSURE

The stylus pressure should be set to that recommended by the manufacturer of the cartridge used and a periodical check should be made to see that it remains correct. The stylus pressure should also be checked on installation or after any major adjustment to the unit.

To adjust the stylus pressure, turn the stylus pressure adjusting screw on top of the pickup arm, diagram 4, Sheet Number 4, clockwise to increase and counterclockwise to reduce the pressure. Should the range of adjustment be insufficient, further adjustment may be obtained by rotating the screw in the centre of the left hand pivot bush. This screw is locked by means of the bush itself, which should be slackened off slightly before making any adjustment, and re-tightened afterwards.

The small screw in the centre anchorage of a spiral hair spring and it should be turned clockwise to increase and counterclockwise to reduce stylus pressure. This adjustment should be made as a coarse setting using the screw on top of the arm as the final setting.

The use of a Garrard Stylus Pressure Gauge is recommended.

PICKUP REST

The pickup rest on the 4 HF unit serves a dual purpose, providing in addition to its normal function of resting the pickup, an automatic means of switching the unit off when the auto stop is not in operation.

When the auto stop is not in operation the pickup will remain in the centre of the record and to switch off, the pickup must be lifted and placed on its rest. The weight of the pickup and arm will depress the rest which pushes the auto stop trip lever into engagement with the striker on the revolving turntable spindle, and so cause the mechanism to operate and switch the unit off.

Means for adjusting the pressure required to depress the pickup rest is provided by a screw in the side of the pickup base, diagram 4, Sheet Number 4. This screw should be turned in a clockwise direction to increase the spring tension and counterclockwise to reduce it.

Should the pickup arm fail to cause the switch to operate when placed on its rest, the spring tension should be reduced. Alternatively, if the rest does not return the tension should be increased.

A plastic clip is provided on the rest to positively hold the pickup arm and this should always be used for transit or when the unit is not in use.

AUTO STOP

Provision has been made to adjust the height of the auto stop trip lever and instructions for this are given on Sheet No. 6.

Garrard Service Sheet — Number 6

Complementary to
Sheets No.
..... 2
..... 4
.....
.....

Model: Single Record Player 4 HF

Subject: Auto Stop

DESCRIPTION

The automatic stop operates on the velocity principle and it can be put in or out of operation as desired. This is operated by two red push buttons adjacent to the rear of pickup arm. The required button must be depressed when the pickup arm is on its rest—the buttons will not operate when the arm is not on its rest.

Should any fault occur with the operation of the auto stop, make sure that it is being operated correctly as described on Sheet No. 2. Note that on depressing one of the buttons it will remain in operation until the other one is pressed.

Symptoms

Unit does not switch off when pickup reaches centre of record

Fault

- (1) **Auto stop button not pressed**
- (2) **Non standard records**
- (3) **Trip Lever out of position**
- (4) **Misplaced levers**

- (1) Check that the Auto Stop button has been depressed when the pickup arm is on its rest. The buttons will not operate with the pickup arm in any other position.
- (2) To operate the auto stop, the records must have a run off groove having a pitch of at least $\frac{1}{16}$ " in the centre. There are a few old records which do not have a run off groove and in these cases the pickup arm should be lifted and placed on its rest when the unit will switch itself off.
- (3) Remove turntable, Sheet No. 4, and examine the position of the Trip Lever, diagram 4. It should move inward freely and must not touch the underside of the catch lever. Alternatively the trip lever may not be high enough to engage the striker on the turntable spindle when the movement of the pickup is accelerated as it runs into the record run off groove. In both these cases the adjusting screw for height of trip lever should be turned a small amount, clockwise to raise and counterclockwise to lower the lever.
- (4) With severe misuse such as forcing, the pickup arm or transit levers can become misplaced and if this is suspected they should be checked for position with the diagrams 4 and 5, Sheet Numbers 4 and 6, and returned to the positions shown.

Symptoms

Motor stops before record has finished playing

Fault

Auto Stop operating too early

To accommodate the majority of records the auto stop is set to commence operation when the stylus reaches a point $2\frac{3}{8}$ " from the record centre. This setting will accommodate all records complying with British Standard Specification BS1928/1957 and other international standards. There are, however, a few records which are not to these standards; these are usually the extended play type having a run over band within the radius of the auto stop operation. A feature of the 4 HF unit is that the auto stop can be disengaged by pressing the non auto button with the arm on its rest as already described in order to play these non standard records. Miniature card records may also be played in the same way.

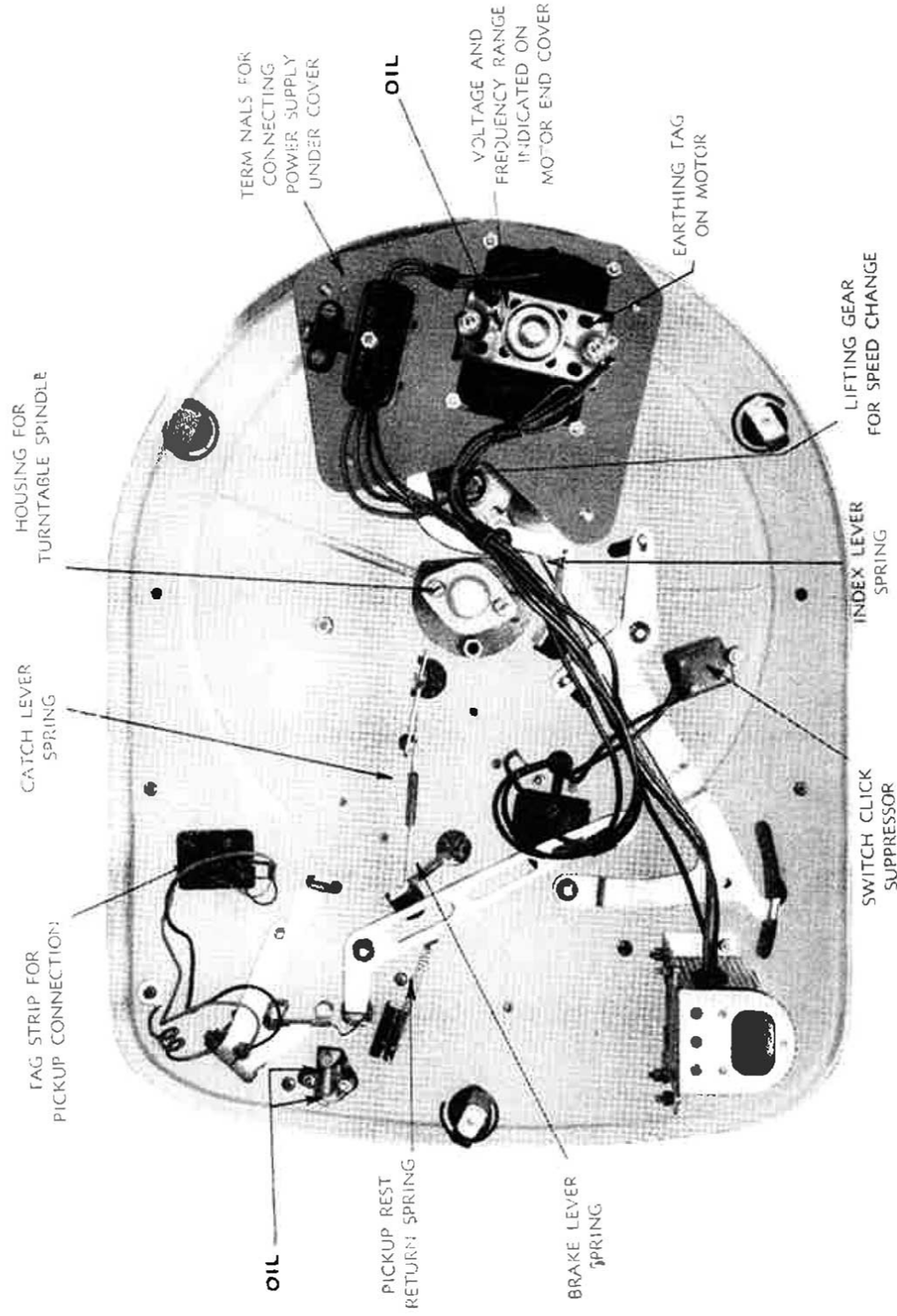


Diagram 5

Garrard Service Sheet – Number 7

Complementary to
Sheets No. 4

Model: Single Record Player 4 HF

Subject: Motor

Symptoms

Motor will not start

Fault

- | | |
|-----|---|
| (1) | Pickup arm movement restricted |
| (2) | No power supply |
| (3) | Loose connections |
| (4) | Bad switch contact |
| (5) | Open circuit motor coils or speed control resistances |

- (1) First make sure that the pickup arm when moved to the right has enough room in the cabinet to allow it to make its full movement so engaging the switch.
- (2) Check that the current is reaching the terminals in the power supply block by removing its cover and applying a test lamp or voltmeter.
- (3) Check all connections, tighten up the power supply terminals.
- (4) Remove turntable (see Sheet Number 4), also switch cover and see that both switch contacts are clean and move outward when the contact roller moves between them on switching on. Adjust if necessary by bending the blades.
- (5) Check the motor coils and resistances in the speed control for continuity, the values are given in diagrams 6 and 7. Remove the perforated cover round the speed control to gain access to the resistances.

Motor runs slowly

- (1) Motor lubricated with thick oil
- (2) Motor bearings out of line

- (1) It is important that only fine machine oil be used to lubricate the motor and if a thick oil has inadvertently been used preventing the motor shaft from spinning freely, the motor should be dismantled, the bearings and shaft thoroughly cleaned, lubricated with thin machine oil and reassembled.
- (2) Should the motor shaft not spin freely when spun with fingers (this may occur after reassembly or if the motor has been mishandled), give the body of the motor a sharp blow with a piece of wood such as the handle of a screwdriver; this should shock the self aligning bearings into line and free the shaft. If this treatment proves ineffective, the spring in one of the bearings which holds the self aligning bearings in place may have broken. This can be checked by removing the bearing covers and moving each bearing with a circular motion by means of the rotor shaft. If the bearing sticks in some positions, replace the whole cover and its bearing assembly with a new one.

Symptoms

Motor runs hot

Fault

- (1) Normal running conditions
- (2) Short circuit in windings
- (3) Incorrect voltage
- (4) Insulation leakage to earth

- (1) It may be found that after running for long periods the motor becomes rather hot. This is not detrimental providing the current does not exceed 20 watts.
- (2) Check the windings for short circuit with an ohmmeter, the correct coil values are given in diagrams 6 and 7.
- (3) Check that the voltage applied to the motor is within its range as shown stamped around the flange of bottom bearing cover.
- (4) Test the motor insulation with a 500 volt "megger," it should not be less than 2 megohms between windings and frame. An earthing tag is provided under one of the motor cover fixing nuts and it is recommended that this tag be used to connect the motor to a good earthing point.

WIRING DIAGRAM FOR HIGH VOLTAGE RANGE UNIT

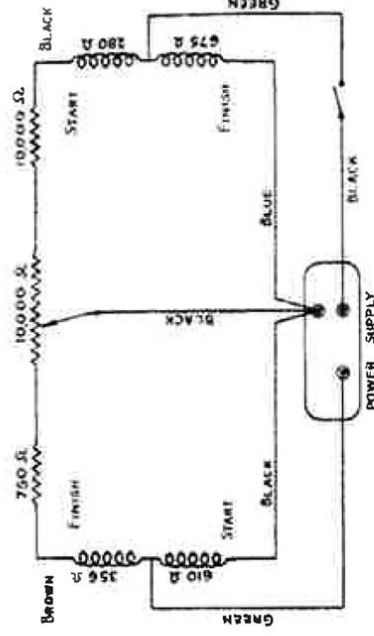


Diagram 6

WIRING DIAGRAM FOR LOW VOLTAGE RANGE UNIT

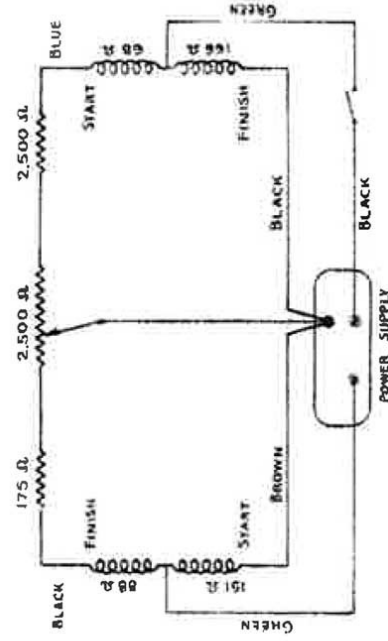


Diagram 7

Garrard Service Sheet — Number 8

Complementary to
Sheets No.

4

7

Model: Single Record Player 4 HF

Subject: Speed

Symptoms

Speed excessively fast or slow

- (1) Check the motor pulley; for 50 cycle it should be nickel plated and 60 cycle power supply brass. If incorrect, change it for one obtained from our Spares Department, please give Model number and frequency of power supply when ordering.
- (2) Check voltage range of motor. Two types are supplied, one having a voltage range of 100/130 the other 200/250 volts. The voltage range of the motor is stamped around the flange of the bottom motor bearing end cover and should correspond to the voltage of the power supply
- (3) When setting the turntable speed for optimum accuracy, it should be adjusted by means of the speed adjusting knob while the pickup is playing a record. The stroboscope supplied with the unit is for 50 cycles one side and 60 cycles the other. Make sure the correct side is used.

Speed too fast or slow

Should it be found impossible to obtain the correct speed by means of the speed adjusting control after checking the points above, set the speed control to its centre position and carefully check the speed of the turntable with a watch while playing a record. Write to our Technical Service Department giving the model number of the unit, the speed of the turntable and return the existing motor pulley which will be replaced with one to give the right speed.

Speed varies erratically

- (1) Should the turntable speed vary erratically, then the cause may be due to lubricating oil on the driving surfaces. Remove turntable, Sheet No. 4, and with a clean rag thoroughly wipe the motor pulley, rubber intermediate wheel and inside rim of turntable, also remove any surplus oil which may be observed, especially from the face of the intermediate wheel.
- (2) The motor pulley is held on the motor shaft by two small screws and both of these screws should be tight, check that the motor pulley is in its correct position as described below, before tightening up both screws.
- (3) The position of the motor pulley on the motor shaft should be such that when the intermediate wheel is in contact with it on either the $16\frac{1}{4}$, $33\frac{1}{2}$ or 45 R.P.M. steps, the lower face of the intermediate wheel is about $\frac{1}{16}$ " clear of the adjacent pulley step, diagram 8. As the hole in the motor pulley is blind, there may be a tendency for it to rise on the shaft due to the air in the hole being unable to escape, this will be especially so if oil is present. Clean the shaft and hole in pulley and on assembly push it right down on the motor shaft to exclude the air, then lift it and fasten in its correct position.

Fault

- (1) Incorrect size motor pulley
- (2) Incorrect motor for voltage of power supply
- (3) Wrong stroboscope being used

- (4) If the motor shaft is tight in its bearing it will not spin freely when spun with the fingers. This may be caused by too heavy a lubricating oil having been used, or the motor bearings being out of line. Instructions on these points are given under "Motor" on Sheet No. 7.

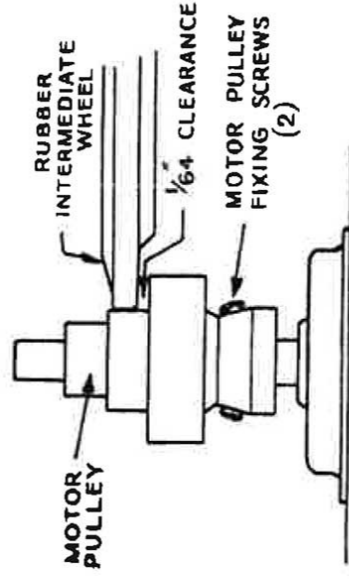
Symptoms

Speed varies consistently (Wow and Flutter)

Fault

- (1) Dirt on inside of turntable rim
- (2) Tight turntable spindle
- (3) Flats on intermediate wheel
- (4) Loose Motor Pulley
- (5) Bent motor shaft, unbalanced rotor

- (1) Consistent speed variation, if at turntable speed, may be caused by dirt on the running surface of the turntable rim. Remove the turntable, Sheet No. 4, and run the fingers round the inside of the rim and remove any roughness or dirt.
- (2) Remove turntable and revolve its spindle with the fingers, it should turn freely and smoothly, if rough or sticky, the spindle assembly should be removed, dismantled and washed in paraffin. Lubricate with fine machine oil before assembly, taking care to keep all parts scrupulously clean.
- (3) A fast rate of speed variation could be caused by flats on the periphery of the rubber intermediate wheel. With normal conditions of use, it is not possible for flats to appear on the running surface of the intermediate wheel as it is retracted from contact with the turntable rim and motor pulley on switching off. If, however, the unit is switched off from say the power supply point with its own switch left in the "on" position, then the stationary intermediate wheel will remain in contact with the motor pulley and turntable rim and be indented at the points of contact. If this has occurred, try running the unit for a few hours, this will roll out the indents if not too severe. If this is not effective, a new intermediate wheel should be fitted. On fitting a new intermediate wheel, clean its periphery with a clean rag and make sure that it spins freely in its bearings when not in contact with the motor pulley. It may be necessary to re-set the motor pulley position on fitting a new wheel, and this is described in Item 3 under "Speed varies erratically" above.
- (4) Check the motor pulley and tighten both its screws; it is important that both screws are equally tightened, if one is loose it may cause the pulley to run out of truth and so produce flutter in the reproduction.
- (5) A bent motor shaft or out of balance rotor could only be caused by bad handling in transit or installation. Should the motor shaft with pulley removed be more than .0005" out of truth total indicator reading or the motor vibrate badly, the rotor and shaft assembly should be replaced. The rotor and shaft are integral and no attempt should be made to separate them.



MOTOR
Diagram 8

Garrard Service Sheet – Number 9

Complementary to
Sheets No.
..... 4
..... 8
.....
.....

Model: Single Record Player 4 HF

Subject: Noise

Symptoms Mechanical Noise

Fault
(1) Lack of lubrication
(2) Indented intermediate wheel
(3) Loose lever

- (1) Lubricate all bearings as described on Sheet No. 4.
- (2) Check intermediate wheel for indents Sheet No. 8.
- (3) A buzz or chattering noise when the unit is playing could be caused by a loose lever which can be located by touching various levers with a finger. When the offending lever is found, a spot of fine machine oil on its pivot and points of contact usually clears the trouble.

Rumble

(1) Lack of lubrication
(2) Motor mountings
(3) Power supply cable
(4) Excessive tension on interwheel spring
(5) Dirt on rubber tyre of interwheel
(6) Hard interwheel tyre

- (1) Lubricate all bearings as described on Sheet No. 4.
- (2) If, after a long period of use, rumble becomes noticeable, the cause could be the hardening of the resilient motor mountings. If this is suspected, fit new mountings.
- (3) Check that the motor is perfectly free on its suspensions and is not biased in any way by the attachment of heavy supply cable. The cable from the motor should not be the heavy type and should be looped before attaching to the cord grip on the unit plate. On some models, the cord grip was mounted on the motor assembly and in these cases, see that the cord is slack so as not to pull on the motor.
- (4) The tension of the spring which pulls the intermediate wheel into engagement when the unit is switched on, is important in that if it is too strong, rumble may be generated. The tension of this spring is adjustable by means of a pivoted lever held in position by a screw, diagram 4, Sheet Number 4, and if it is suspected that the tension is too strong, loosen the screw, move the pivoted lever a little toward the intermediate wheel and retighten the screw. Alternatively if the tension is too weak the motor will not drive the turntable especially on 16½ R.P.M. and in this case the tension should be increased.
- (5) Examine the running face of the intermediate wheel and remove any obvious dirt, it may be necessary to lightly scrape the surface to remove it.
- (6) After years of use the rubber tyre on the intermediate wheel may harden and a new wheel should be fitted.

Symptoms

Fault

Hum

Earthing of motor

The motor frame is connected to the unit plate by an earthing lead and in the majority of cases this will be satisfactory. If not, disconnect this lead and connect the motor frame and unit plate separately to a good earthing point.

Loud click as switch breaks contact

- (1) **Faulty switch click suppressor**
- (2) **Bad connection on switch blades**

- (1) The switch click suppressor is connected across the switch blades to eliminate the “plop” in the reproducing system, when the switch breaks contact. It consists of an 0.05 mfd. condenser with a 220 ohm. resistor in series. It is extremely rare for this component to cause trouble, but if it is suspected, it should be replaced.
- (2) Examine the connections to the switch blades by removing the switch cover Resolder if necessary.

Garrard Service Sheet – Number 10

Complementary to
Sheets No.

4
5
11
.....

Model: Single Record Player 4 HF

Subject: Miscellaneous

Symptoms Pickup does not track

Fault

- (1) Worn stylus point
- (2) Pickup head out of position
- (3) Stylus pressure too light
- (4) Pickup leads strained

- (1) Check stylus point, if worn, fit replacement.
- (2) Adjust pickup head as described on Sheet No. 11.
- (3) Check and adjust stylus pressure, Sheet No. 5.
- (4) Examine the pickup leads and make sure they are free and not biasing the free movement of the arm in any way.

Does not switch off when pickup is placed on its rest

Tension spring incorrectly set

Adjust as advised on Sheet No. 5.

Does not switch on when pickup arm is moved to the right

Position of pickup arm in relation to operating lever, incorrect

An adjustment is provided to set the position of the pickup arm in relation to the switch operating lever. This is an eccentric bush, diagram 4, Sheet No. 4 and it should be adjusted should the switch catch not engage when the pickup arm is moved fully to the right.

Turntable continues revolving for several revolutions after unit has switched off

Turntable brake worn

Remove turntable, Sheet No. 4, and prise the felt turntable brake a little further out.

Garrard Service Sheet – Number 11

Complementary to
 Sheets No. 4

Model: Single Record Player 4 HF

Subject: Pickup

The plug-in pickup moulding supplied with the model 4 HF unit will accommodate practically all makes of pickup cartridge, both monaural and stereophonic. If the unit is supplied without a pickup cartridge, a set of fixing screws, collars, etc., will be supplied with the pickup moulding, enabling most types of cartridge to be assembled, details of which are shown on diagram 9.

A knock out is provided in the front of the pickup moulding to give clearance for the knob of turnover type pickup cartridges and in the top is a hole, accessible on removing the name plate, for the knob of the turn round styli type of cartridge. The Garrard plug-in feature is particularly useful if it is desired to play stereophonic records with a separate pickup and for those wishing to use this feature, the connections are given on diagram 10. Also diagrams 1 and 2 on Sheet Number 4.

The plug-in pickup moulding is held in the pickup arm by a spring loaded ball, locating in a groove in the shank of the pickup moulding. If the lower face of the pickup moulding is not parallel with the surface of a record on the turntable, the pickup position can be biased enough to correct this by loosening the screw underneath the pickup arm, diagram 11, which holds the plug-in socket, turning the head to its correct position and re-tightening the screw.

The plug-in pickup head may be locked into position for transit by tightening up the pickup transit screw located underneath the pickup arm; this screw should also remain tightened up if the plug-in feature is not used, but removed if it is.

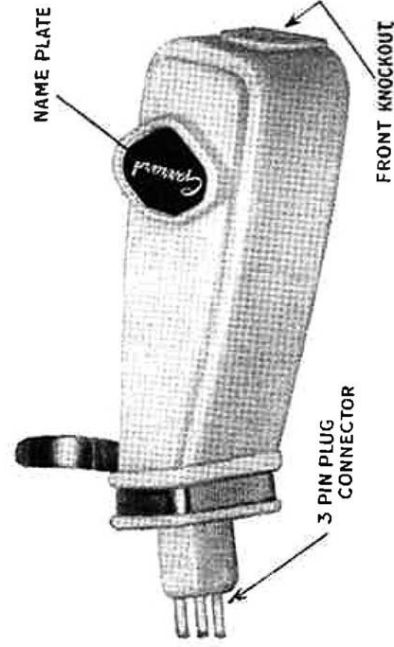
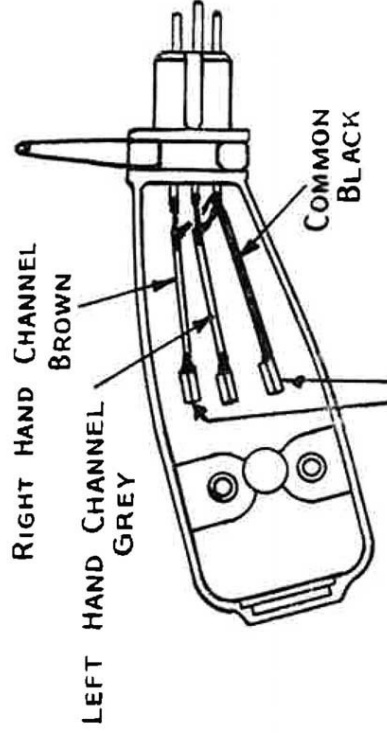
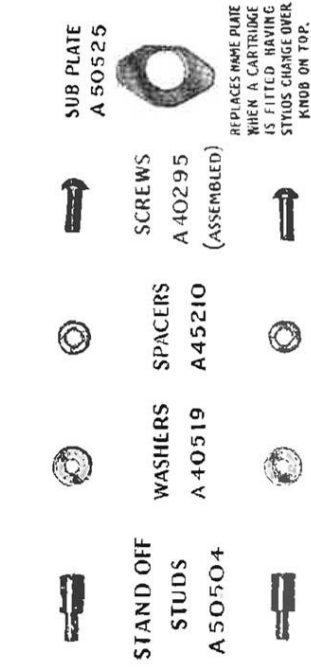


Diagram 9



USE THESE TWO FOR
 MONAURAL PICKUP CARTRIDGE

Diagram 10

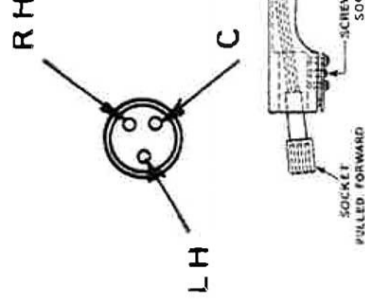


Diagram 11

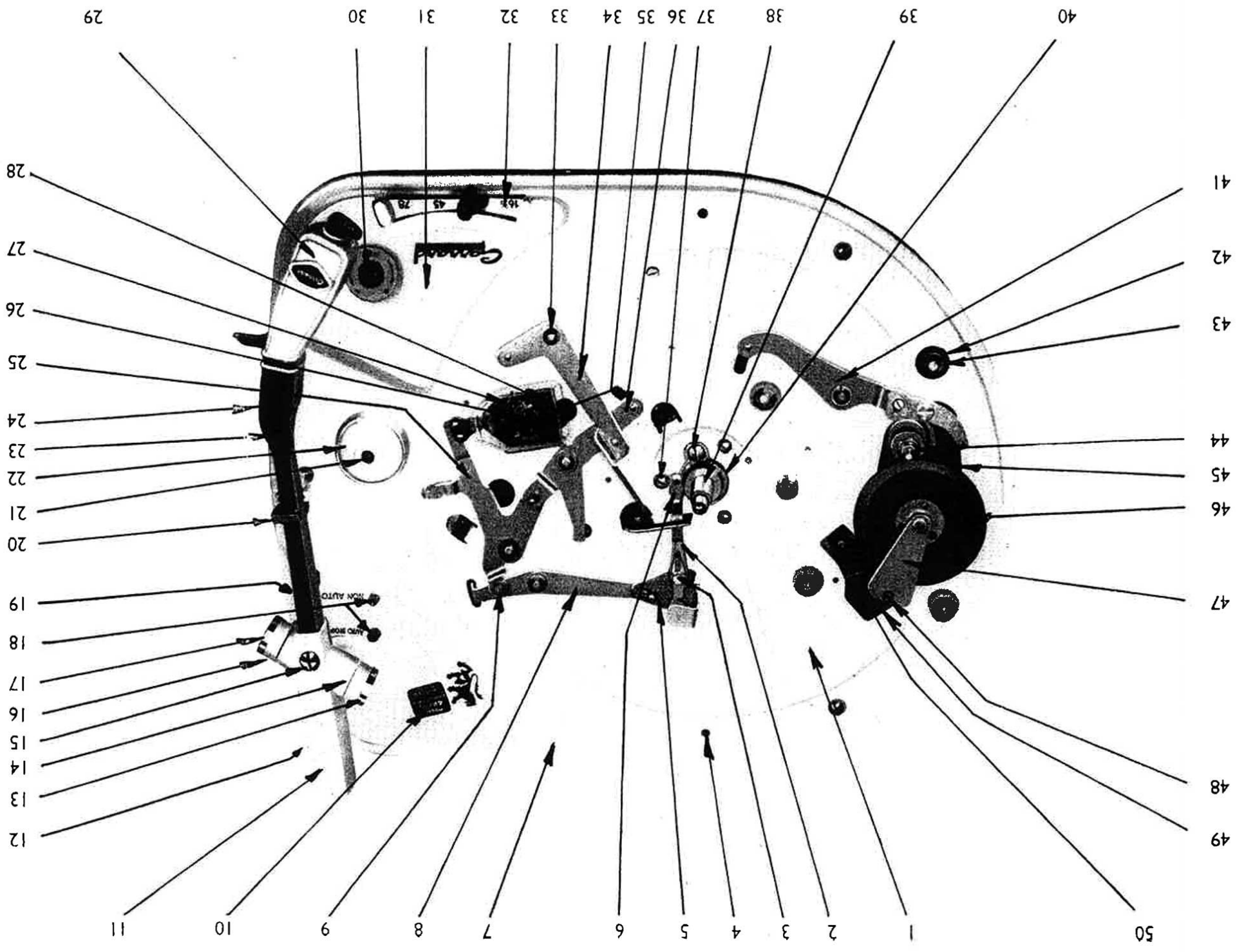
Garrard Service Sheet — Number 12

Spare Parts List for Model 4 HF Record Player

Items without diagram numbers are associated with the parts shown by the diagram numbers immediately above.

(H denotes High and L Low Voltage Range Unit.)

No. on Diagram	Drawing Numbers	Description	No. on Diagram	Drawing Numbers	Description
1	C55541	Unit Plate and Pins, Lifting Spindle and Catch Lever	A43203	Ball	
2	A54433	Auto Stop Operating Lever	A40454	Screws 6.BA x 5/32	
3	A48836	Friction Pad Cup with Felt Pad	A40324	Grub Screw	
4	A40480	Transit Screws	A55639	Switch Lever with Contact and Brake Pad	
5	A56179	Friction Plate	A40343	Screw for Switch Cover	
	A52504	Pivot Pin	B51322	Switch Block	
	A42501	Spring Washer	A51327	Switch Block Cover	
	A41012	Nut	A40130	Screws, fixing Switch Block	
	A40501	Washer	A41008	Nuts 6.BA	
6	A48834	Felt Pad for Operating	A42526	Spring Washer	
7	B55577	Pickup Base	A56191	Pickup Head MPM 4 Closed Front	
8	A55552	Delay Lever with Bush and Pin	A56193	Pickup Head MPM 4 Open Front	
9	A45518	Eccentric Disc	A56195	Pickup Head MPM 4 Stereo	
	A40014	Screw for Disc	A54963	Potentiometer (H) 10,000 ohms	
	A42526	Spring Washer	A54964	Potentiometer (L) 2,500 ohms	
10	A55679	Name Plate 4 HF (H)	B55614	Cover, with Garrard motif	
	A55661	Name Plate 4 HF (L)	A55633	Speed Plate	
11	B55584	Pickup Arm Body with Bearings	A41723	Spring Clips for Lever Pivots Spin Washer	
	A55585	Locking Pad for Pickup Arm			
	A44058	Locking Screw for Pickup Arm	A55629	Rest Operating Lever with Spring	
12	A41631	Counterbalance Spring	A41686	Switch Contact Springs	
13	A53539	Bearing Cap (LH)	A55547	Trip Lever	
	A53766	Pivot for LH Bearing	A44044	Screws fixing Turntable Spindle Housing	
	A41780	Spring			
14	A53693	Spring Case with Spring	A41006	Nuts	
15	A44059	Adjusting Screw	A42520	Spring Washers	
	A55795	Nut for Adjusting Screw	A40061	Oil Filler Screw	
	A56127	Collar for Adjusting Screw	A40777	Washer	
16	A55580	Pivot Bracket with Spindle	A56184	Turntable Spindle with Striker	
	A43201	Ball Bearings	A40776	Felt Washer	
	A40851	Washer	A55664	Tension Lever with Extension	
17	A43810	Spring Clip	A43118	Flexible Motor Mounting	
18	A53537	Bearing Cap (RH)	A43800	Spring Clip	
	A55589	Plunger	A40612	Washer	
19	A41830	Spring for Plunger	A55606	Pulley 50 cycle	
20	A52967	Lead Clip	A55608	Pulley 60 cycle	
	A55714	Pickup Rest with Latch	A41792	Spring for Inter-Wheel	
	A41039	Nut 5.BA	A55568	Intermediate Wheel with Spindle	
21	A56163	Pin for 45 RPM Adaptor	A51831	Top Plate with Bearing	
	A56164	Plastic Bush for Pin	A40105	Screw fixing Top Plate	
	A41008	Nut 6.BA	A55566	Support Bracket Assembly	
	A42526	Spring Washer	A54390	Pivot Pin	
22	A50391	Adaptor for 45 RPM Records	A41787	Spring Clip	
23	A55663	Connector for Pickup, with Springs	A40131	Screw 4.BA x 1/4	
24	A55624	Pickup Arm	A40639	Shim Washer	
	A41673	Flat Spring	A41808	Spring, Retracting Inter-Wheel	
	A50478	Brass Cap			



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No. on Diagram	Drawing Numbers	Description	No. on Diagram	Drawing Numbers	Description
51	A53571	Switch Suppressor with Leads	76	A55560	Turntable Spindle Housing with Bushes
52	A40367	Screw fixing Suppressor	77	A40132	Screw fixing Thrust Cover
	A41012	Nut 4 B.A.		A42501	Spring Washers
	A42501	Spring Washer	78	A55665	Thrust Cover
53	A55573	Rack Assembly, with Lever and Knob		A55744	Thrust Disc (inside cover)
54	A40105	Screws fixing Potentiometer Unit		A51888	Spring Clip
	A41008	Nuts 6.BA		A52075	Gasket
	A42526	Spring Washers	79	A51716	Spring Mounting Assembly
55	A43102	Grommet for Leads		A41724	Spring
56	A53006	Cage		A40053	Screw
57	A55897	Resistor (H) 10,000 ohms		A40777	Washer
	A55896	Resistor (H) 750 ohms	80	A55742	Support Lever with Pin and Roller
	A55963	Resistor (L) 2,500 ohms		A55569	Cam
	A55962	Resistor (L) 175 ohms		A41831	Spring
58	A40105	Screws fixing Cage		A40817	Cup Washer
	A41008	Nuts	81	A46980	Cord Grip
	A42526	Spring Washers	82	A40146	Screw for Cord Grip
59	A53005	Insulation Plate		A42501	Spring Washer
60	A44034	Screws fixing cover	83	A53106	Cover for Terminal Block
61	A55668	Rest Knock-off Lever	84	A41012	Nut fixing Cover
62	A41506	Spring for Switch Lever	85	A41788	Spring Clip
63	A41503	Spring for Pickup Rest	86	A45359	Dowel for Stator
64	A44061	Spring Adjusting Screw	87	C55570	Motor Assembly Complete (H)
	A55637	Spring Bracket		A55682	Stator Complete with Coils (H)
65	A55625	Rocker		C55670	Motor Assembly Complete (L)
66	A42172	Pivot Pin for Rocker		A55684	Stator Complete with Coils (L)
67	A40090	Adjusting Screw		A48319	Rotor Complete with Spindle
	A41008	Nut (6.BA)	88	A55693	Coil LH (H)
	A42544	Spring Washer (5.BA)		A55685	Coil LH (L)
68	A44069	Clamping Screw for Pickup	89	A55694	Coil RH (H)
	A41006	Nut		A55686	Coil RH (L)
	A42520	Spring Washer	90	A55571	Index Lever with Bush
69	A55638	Pickup Lever with Extension	91	A55554	Intermediate Lever with Bush
70	A54876	Pickup Earthing Lead	Not shown on Diagram	C55594	Turntable
71	A44062	Screw Fixing Base		C55599	Turntable Mat
72	A55719	Connector for Pickup Leads		A41784	Turntable Clip
73	A44062	Screw fixing Connector			
	A45012	Distance Piece			
74	A43063	Earthing Tag			
75	A41801	Spring for Catch Lever			

