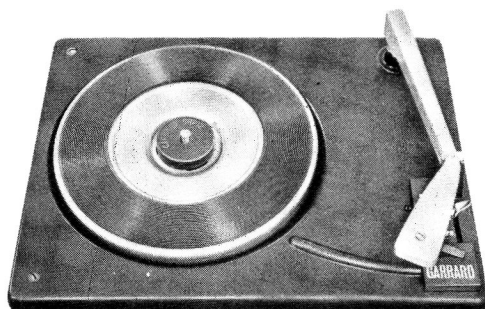




RCA VICTOR



Garrard S.R.P.22

SINGLE RECORD PLAYER SERVICE DATA GARRARD S.R.P. 22

GENERAL INFORMATION

Description

This unit will play any record up to 12" diameter at turntable speeds of 33 $\frac{1}{3}$, 45 and 78 revolutions per minute. A retractable adaptor is fitted to the centre of the turntable for use when records with 1 $\frac{1}{2}$ " centre holes are to be played.

Operation

1. Check that turntable speed and stylus are correct for the record to be played.
2. Place a record on the turntable, lift the pickup arm and move it to the right to start the motor, then carefully lower the pickup on to the record.
3. When the record has finished playing, the turntable will stop automatically. The pickup arm can then be returned to its rest.

Maintenance

Before carrying out maintenance, the record player should be disconnected from its power supply and the pickup cart-ridge's stylus protected.

To gain access to the mechanism, remove the turntable as follows:—

Turn the plastic adaptor at the centre counterclockwise and lift it, then compress the three legs in order to detach it. The spring clip holding the turntable can now be prised off sideways and the turntable lifted from its spindle. To replace the turntable, reverse this procedure and press the adaptor into position.

The turntable and intermediate wheel bearings rarely require lubrication. However, when the need is apparent, remove the turntable and lubricate them sparingly with thin machine oil, such as that used on sewing machines, taking great care to keep the periphery of the intermediate wheel, motor pulley and inside rim of turntable free from oil.

Before playing records with large centre holes, raise the plastic adaptor at the centre of the turntable by turning it counterclockwise. Turn the adaptor clockwise to retract it.

To stop the turntable before a record has been played completely, lift the pickup arm, move it inwards until the motor switches off, then return the arm to its rest.

Clip the pickup arm to its rest when the unit is not in use, particularly before transporting it.

The induction motor may also require lubrication at extended intervals. A drop of thin machine oil should be applied to the rotor shaft where it projects from the top bearing and very occasionally another to the lower end of the shaft where it enters the bottom bearing. Both felt pads should be kept moistened with oil.

The battery motor should not be lubricated unless this is essential, in which case a trace of oil on the top bearing around the armature spindle will suffice.

Unit Mechanism

After prolonged use, oil all pivots sparingly with thin machine oil and smear a little medium grease, similar to petroleum jelly in consistency, over the sliding surfaces of the speed change lever and between the switch lever and unit plate.

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Adjustments

Provision is made to reset both stylus pressure and the height of the intermediate wheel in relation to the motor pulley, although neither facility will normally be required unless the pickup cartridge or motor has been replaced.

STYLUS PRESSURE should be set in accordance with the recommendation of the manufacturer of the particular pickup cartridge fitted, provided that this is not lower than 5 grammes. Pressure is adjusted by turning the milled disc at the back of the pickup arm. Looking from the front of the arm, turn the disc clockwise to increase pressure and counterclockwise to reduce it.

INTERMEDIATE WHEEL HEIGHT should be set so that the wheel runs in the centre of each step on the rotor shaft at the appropriate turntable speed. To alter the height, disconnect the record player from its power supply, remove the turntable (see maintenance section) and turn the screw on the intermediate wheel support bracket, clockwise to lower and counterclockwise to raise it. See Diagram 1.

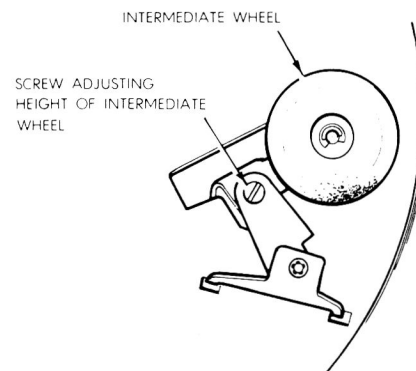


Diagram 1

SERVICE CHART

NOTE:—Numbers in brackets refer to Spare Parts List.

FAULT	CAUSE	ACTION
Turntable fails to revolve when motor is switched on.	1. No power supply.	Check that current reaches motor, by means of test meter or lamp.
	2. Loose or broken connections in motor circuit.	Disconnect power supply and test leads and switch (2) for continuity. Reconnect or replace lead(s) or switch as necessary.
	3. (a) Defective a.c. induction motor.	Remove turntable and disengage intermediate wheel (15) from motor pulley. Spin motor spindle. If tight, tap motor body sharply with light wooden object, e.g. screwdriver handle, to re-align bearings. If free, disconnect power supply and check continuity of windings. Replace stator if necessary.
	(b) Defective battery motor.	Check continuity of armature by applying test meter to leads. Check carbon brushes, their springs and the tubes holding them by sliding the foam rubber muff from the motor case, taking out both screws retaining the terminal plate, removing plate and examining. Be extremely careful when releasing terminal plate in order to avoid loss of spring-loaded brushes. If the brushes have worn down to $\frac{5}{16}$ in. (4 mm) or less, replace them with a new pair supplied by our Spares Department. If the brushes do not move freely in their tubes, clean brushes and tubes before re-assembling.
	4. Defective drive.	Check that intermediate wheel rotates freely; oil its bearing if necessary. Check that tension spring (14) draws wheel firmly against turntable and motor pulley when switched on. Wipe driving surfaces of motor pulley, intermediate wheel tyre and turntable rim to remove any trace of oil or grease which may result in drive slippage. Check that side of intermediate wheel does not rub against adjacent pulley step. If it does, reset height as described in "Adjustments".

FAULT	CAUSE	ACTION
Turntable speed fast, slow or unsteady.	1. Damaged turntable driving rim or bearing.	Replace turntable.
	2. Defective drive.	See "Turntable fails to revolve"—Cause 4.
	3. Low battery voltage.	Check with voltmeter with motor switched on; replace battery if voltage is below 6.5.
	4. Induction motor incorrect for a.c. power supply in use.	Replace rotor and top motor cover if frequency is incorrect or complete motor if voltage is incorrect.
	5. Motor bearings out of alignment.	See "Turntable fails to revolve"—Cause 3.
	6. Damaged motor spindle.	Replace rotor and top cover or armature assembly.
	7. Friction in turntable bearing.	Remove turntable; clean and lightly oil its spindle and bearing.
	8. Oil or other foreign matter between commutator segments or governor contacts of battery motor.	Remove foam rubber muff and bottom half of motor casing. Clean between segments with petrol-moistened cloth. Draw piece of thin, non-fibrous card between governor contacts.
Speed control inoperative.	1. Friction between intermediate wheel support bracket (16) and its spindle.	Clean spindle and oil it lightly. Check condition of return spring.
Pickup arm fails to track across record correctly and/or distorted sound output.	1. Stylus pressure too low.	Reset pressure, see "Adjustments".
	2. Stylus worn, damaged or wrong stylus.	Replace stylus.
	3. Stylus fitted incorrectly.	Check and correct.
	4. Accumulation of dust around stylus.	Clean stylus.
	5. Pickup arm not moving freely.	Check freedom of pivots; oil lightly if necessary. Check pickup leads; they should not be pulled tight.
	6. Defective pickup cartridge.	Replace cartridge.
Record player does not switch off at end of record.	1. Lug on operating lever (22) which engages turntable striker is bent.	Bend it back to vertical position.
Interference on reproduction.	1. Electrical interference from battery motor.	<p>If separate batteries are used for motor and amplifier, connect a 0.01–0.10 μF capacitor between each motor terminal and the die cast case. If not, wire a reservoir capacitor, 50–5000 μF, across battery terminals and connect amplifier, motor and battery leads at the capacitor.</p> <p>Connect 0.05 μF capacitor across motor terminals and/or small R.F. chokes in either or both leads from the battery as close to the motor as possible.</p> <p>Experiment with earthing arrangements, taking care to avoid "earth loops".</p>

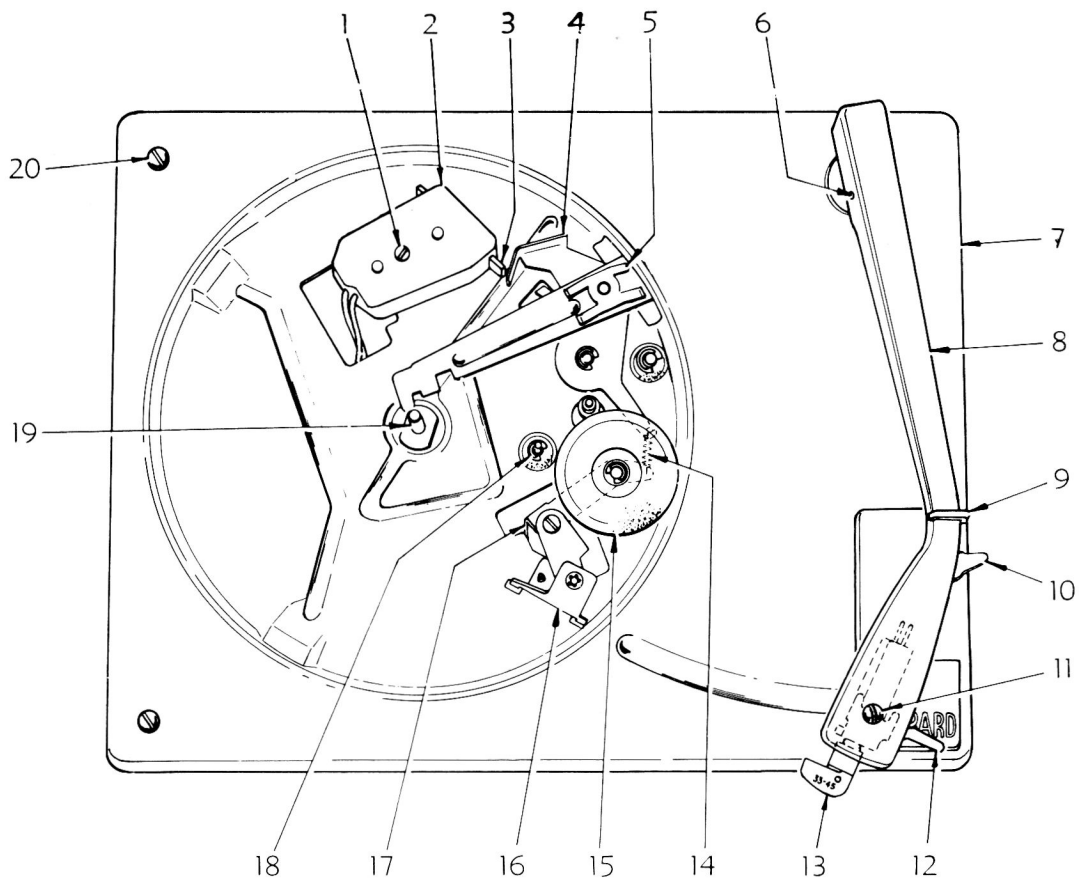


Diagram 2

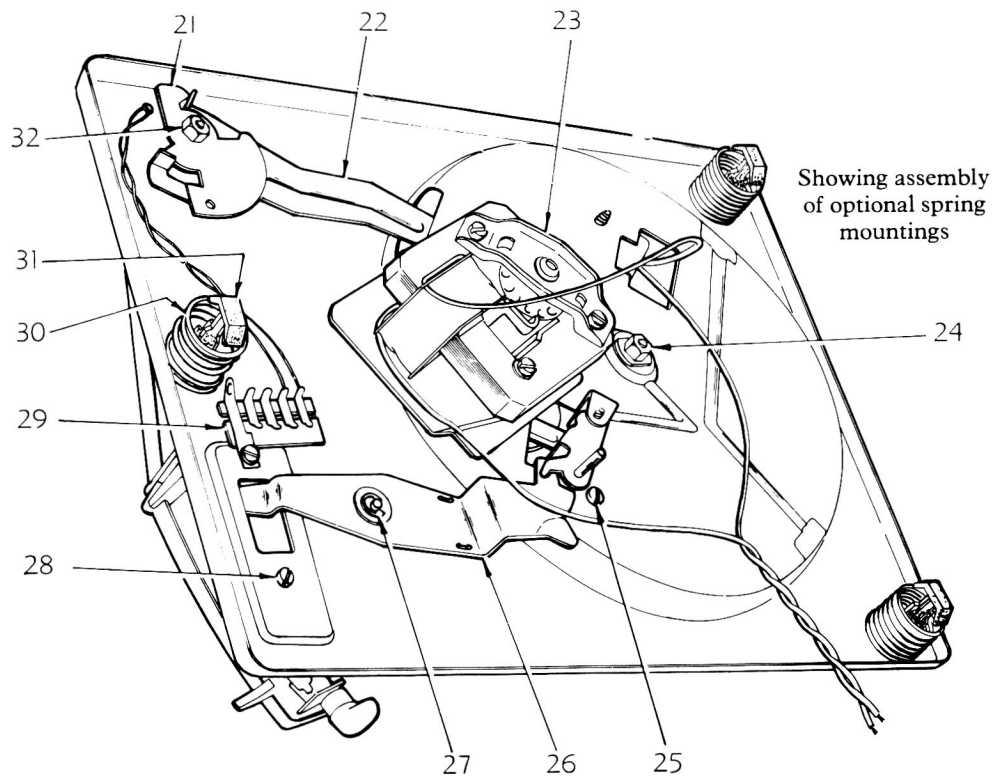


Diagram 3

REPLACEMENT PARTS LIST

MODEL
GARRARD S.R.P.22

Insist on Genuine Factory Tested Parts, which are readily identified and may be purchased from Authorized Dealers.

SYMBOL	STOCK NO.	DESCRIPTION	SYMBOL	STOCK NO.	DESCRIPTION
PARTS ABOVE UNIT PLATE			PARTS BELOW UNIT PLATE		
1	*63-10258	Screw, for Switch	21	*63-10235	Friction Plate
2	*63-10202	Switch, with Leads, for induction motor	22	*63-10236	Operating Lever Pad
	*63-10203	Switch, with Leads, for battery motor	23	*63-10237	Induction Motor with Mounting Plate and Switch. (Please specify voltage and frequency of power supply.)
	*63-10204	Switch, Body		*63-10238	Stator and Coil. (Please specify power supply voltage)
	*63-10205	Switch Cover Plate		*63-10239	Rotor with Top Cover, Bearing and Pulley. (Please specify power supply frequency)
	*63-10206	Switch Blade. Induction Motor (1)		*63-10240	Bottom Cover with Bearing
		Battery Motor (2)		*63-10241	Mounting Plate for Induction Motor Screws, holding Stator to Mounting Plate (3)
	*63-10207	Switch Contact. Induction Motor (1)			Plain Washers, for Screws
		Battery Motor (2)			Spring Washers, for Screws
3	*63-10208	Switch Plunger			Spacer for Screw
4	*63-10209	Switch Lever			Solder Tag, for Earthing
		Spring Clip, for Lever		*63-10242	Model 32 BM Battery Motor with Mounting Plate, Switch and Leads
		Plain Washer			Model 32 BM Battery Motor
5	*63-10210	Leaf Spring		*63-10259	Mounting Plate for Battery Motor
6	*63-10211	Pivot Spindle, for Pickup Arm		*63-10243	Carbon Brush (2)
7		Unit Plate, with Pins, etc.		*63-10244	Compression Spring, for Brush (2)
*8	*63-10212	Pickup Arm, with Leads and counterbalance mechanism.			Brush Holder Moulding
	*63-10213	Pickup Leads with Connectors.			Contact Plate
	*63-10214	Pivot Bracket.		*63-10245	Suppressor Capacitor, 1000pF
	*63-10215	Counterbalance Spring.			Motor Leads—red and blue
	*63-10216	Counterbalance Screw.		*63-10246	Bearing, for Armature (2)
	*63-10217	Washer, spacing Pickup Arm and Counterbalance Screw.		*63-10247	Armature
		Spring Clip.			Screws, for Contact Plate, Mounting Plate and Motor Covers (6)
	*63-10218	Spring Washer.		*63-10248	Foam Rubber Muff, for Motor Cover
	*63-10219	Adjusting Bracket.			
		Cover Plate, for top of Pickup Head.	24	*63-10249	Plain Washer for Turntable Spindle
9	*63-10220	Clip, for Pickup Arm Rest			Spring Washer, for Spindle
10	*63-10221	Combined Speed Control Cover and Pickup Arm Rest			Nut, for Spindle
11		Screw, holding Finger Lift and Pickup Cartridge	25		Screw, for Intermediate Wheel Support Bracket
13		Pickup Cartridge. Please specify make and type when ordering	26	*63-10250	Speed Changing Lever
14	*63-10222	Tension Spring, for Intermediate Wheel for Induction Motor	27	*63-10251	Compression Spring
(Hidden)	*63-10223	Tension Spring, for Intermediate Wheel for Battery Motor			Plain Washer
15	*63-10224	Intermediate Wheel			Spring Clip
		Spring Clip, for Wheel	28		Screws, for Speed Control Cover (2)
		Fibre Washers, above and below Wheel (2)	29	*63-10252	Pickup Lead Connecting Strip
16	*63-10225	Support Lever and Bracket, for Wheel	30	*63-10253	Suspension Springs—Left Hand Side (optional) (2)
17	*63-10226	Support Lever, for Wheel		*63-10254	Suspension Spring—Right Hand Side (optional)
18	*63-10227	Motor Mounting Grommets for Battery Motor (3)	31	*63-10255	Plastic Mounts, for Suspension Springs (3)
	*63-10228	Motor Mounting Grommets for Induction Motor (3)	32	*63-10256	Nut, for Friction Plate
	*63-10229	Spring Clips, for Motor Mounting Pillars (3)			Plain Washer
19	*63-10230	Turntable Spindle			Spring Mounting Kit (optional)
20		Wood Screws, for fixing (3)			
		Screws, for Spring Mounts if fitted (3)			
		Fibre Washers for Screws (3)			
		Turntable with Mat			
Not Shown	*63-10231	Turntable			
	*63-10232	Turntable Mat			
	*63-10233	Adaptor for 7in. records with large centre holes			
	*63-10234	Spring Clip, retaining Turntable			

* Indicates New Stock Items.

Only items listed under stock numbers are available as Replacement Parts.

All parts subject to change or withdrawal without notice.

MODEL
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