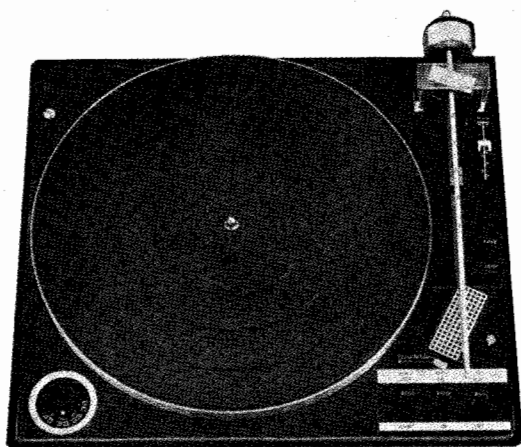
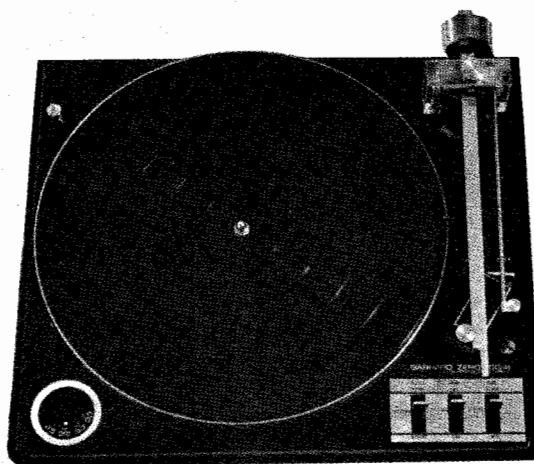


# Garrard

Exploded view, parts lists and service notes  
for  
Model 86SB and Zero 100SB  
Automatic Transcription Turntables



Model 86SB



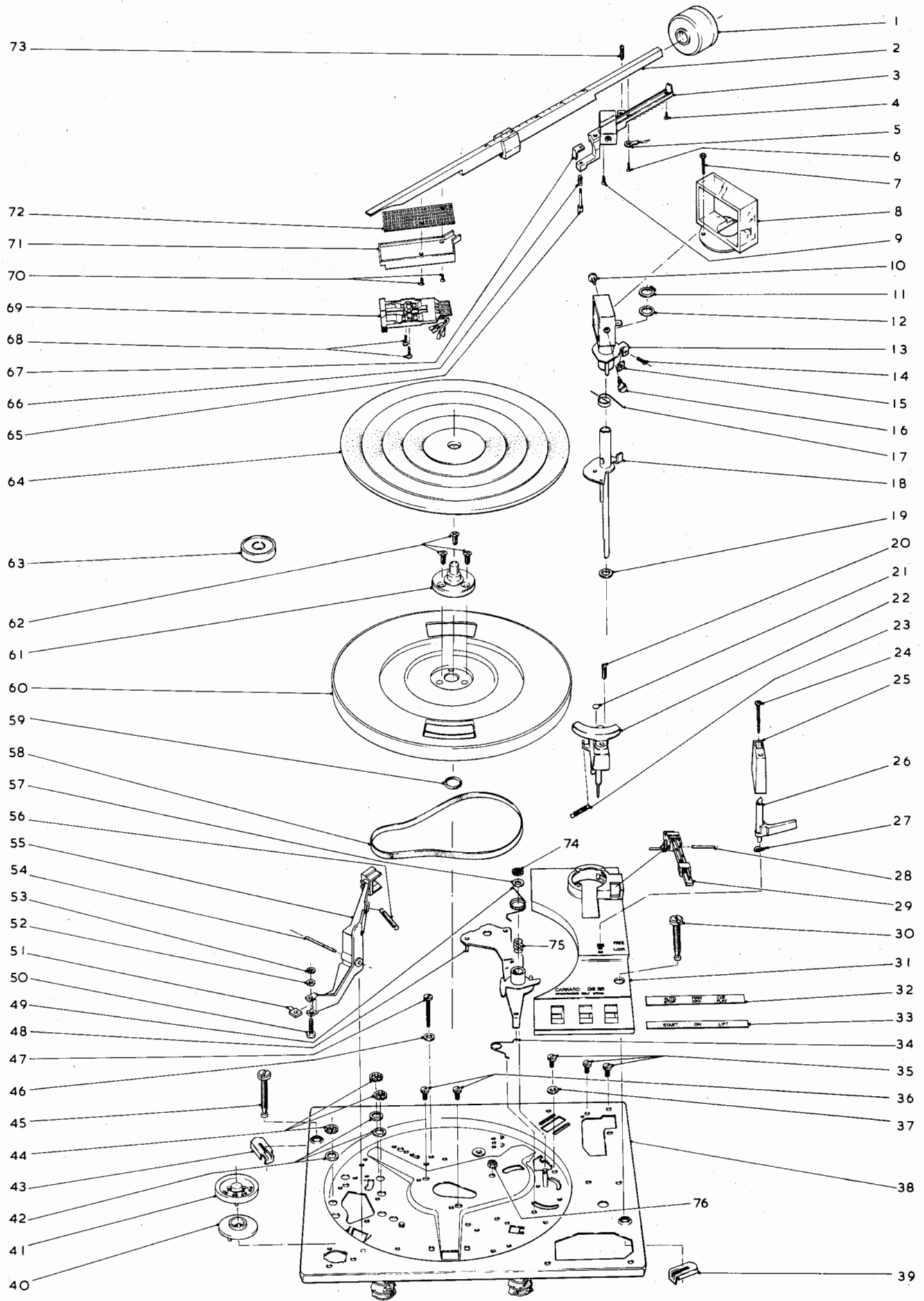
Zero 100SB

#### Important

When ordering spares, quote the model type, code (from inspection label), part number, colour if part is enamelled or plastic, and voltage range for motor parts.

Garrard  
Sales Service Department  
Crowdy's Hill Estate  
Kembrey Street  
Swindon SN2 6BP Wiltshire England  
Telephone: Swindon (0793) 6211  
Telex: 44271

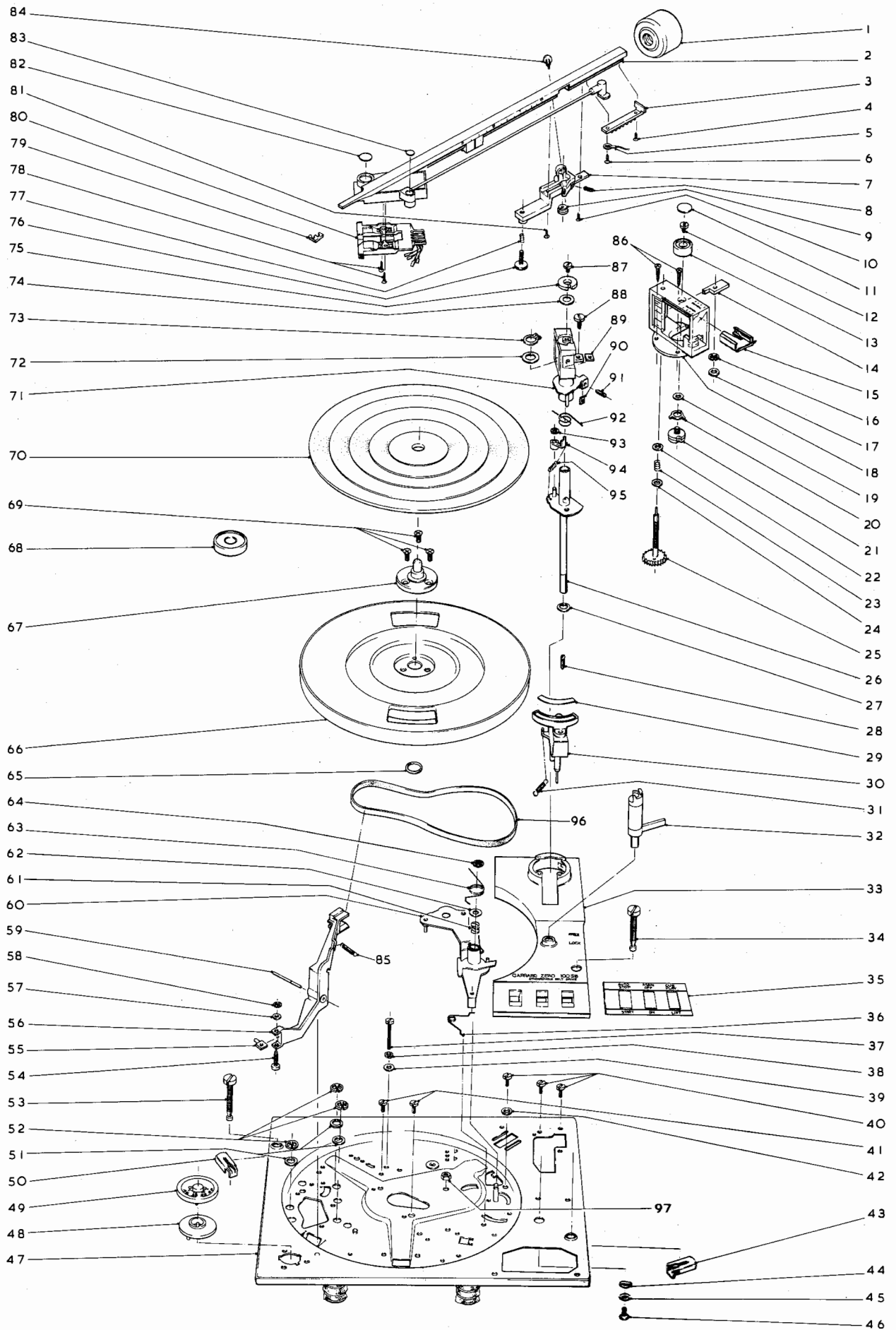
# Garrard Model 86SB exploded view Parts above unit plate



# Garrard Model 86SB spare parts list Parts above unit plate

Ref. No.	Garrard Part No.	Description	Ref. No.	Garrard Part No.	Description
1	76640/002	Counterbalance weight	39	43855	Transit clip
2	76690/003	Pickup arm	40	77243	Speed control moulding
3	76688	Pivot bracket	41	77245	Speed control knob
4	44295	Screw	42	41218/026	Washer (3)
5	43043	Solder tag	43	43855	Transit Clip
6	44295	Screw	44	00432/007	Spring Clip (3)
7	44378	Screw	45	77177	Transit screw
8	76679/002	Gimbal surround	46	41218/011	Washer
9	44295	Screw	47	00245/044	Screw
10	74407	Pivot screw	48	77656	Stop lever, with spring
11	02651/013	Spring clip	49	44952	Spring
12	41218/066	Washer	50	44377	Adjusting screw
13	76678	Gimbal	51	76989	Cam follower
14	00525/105	Adjusting screw	52	41229/001	Washer
15	40906	Locking washer	53	00431/002	Spring clip
16	72947	Pivot screw	54	76996	Pivot pin
17	44434	Spring	55	76982	Speed change lever
18	76616	Pickup spindle	56	44587	Spring
19	41218/079	Washer	57	41218/039	Washer
20	44210	Adjusting screw	58	76992	Drive belt
21	73873	Friction button	59	73139	'O' ring
22	76656	Lifting platform	60	76997	Turntable
23	44980	Spring	61	77029	Thrust casting
24	44375	Screw	62	01758/289	Screw (3)
25	76631	Pickup rest body	63	72698	Adaptor for large hole records
26	76632	Pickup rest post	64	77031	Turntable mat
27	44561	Bowed washer	65	44383/001	Adjusting screw
28	76619	Pivot pin	66	44972	Spring
29	76622	Bias compensator arm	67	76624	Locking pad
30	77177	Transit screw	68	59048/113	Cartridge fixing screws, with setting gauge and tilt wedge
31	76620	Control moulding with trim plates	69	75903/001	Type C3A pickup cartridge carrier
32	76627	Rear trim plate	70	01512/001	Screw (2)
33	76626	Front trim plate	71	76284/002	Pickup head, with lead
34	44953	Spring	72	76714	Trim plate
35	44376	Screw (3)	73	00525/105	Adjusting screw
36	00245/010	Screw (2)	74	00432/007	Spring clip
37	41218/042	Washer	75	44557	Spring
38	SC/ 76995/002	Unit plate with pins, bushes, etc.	76	00451/001	Nut

# Garrard Zero 100SB exploded view Parts above unit plate

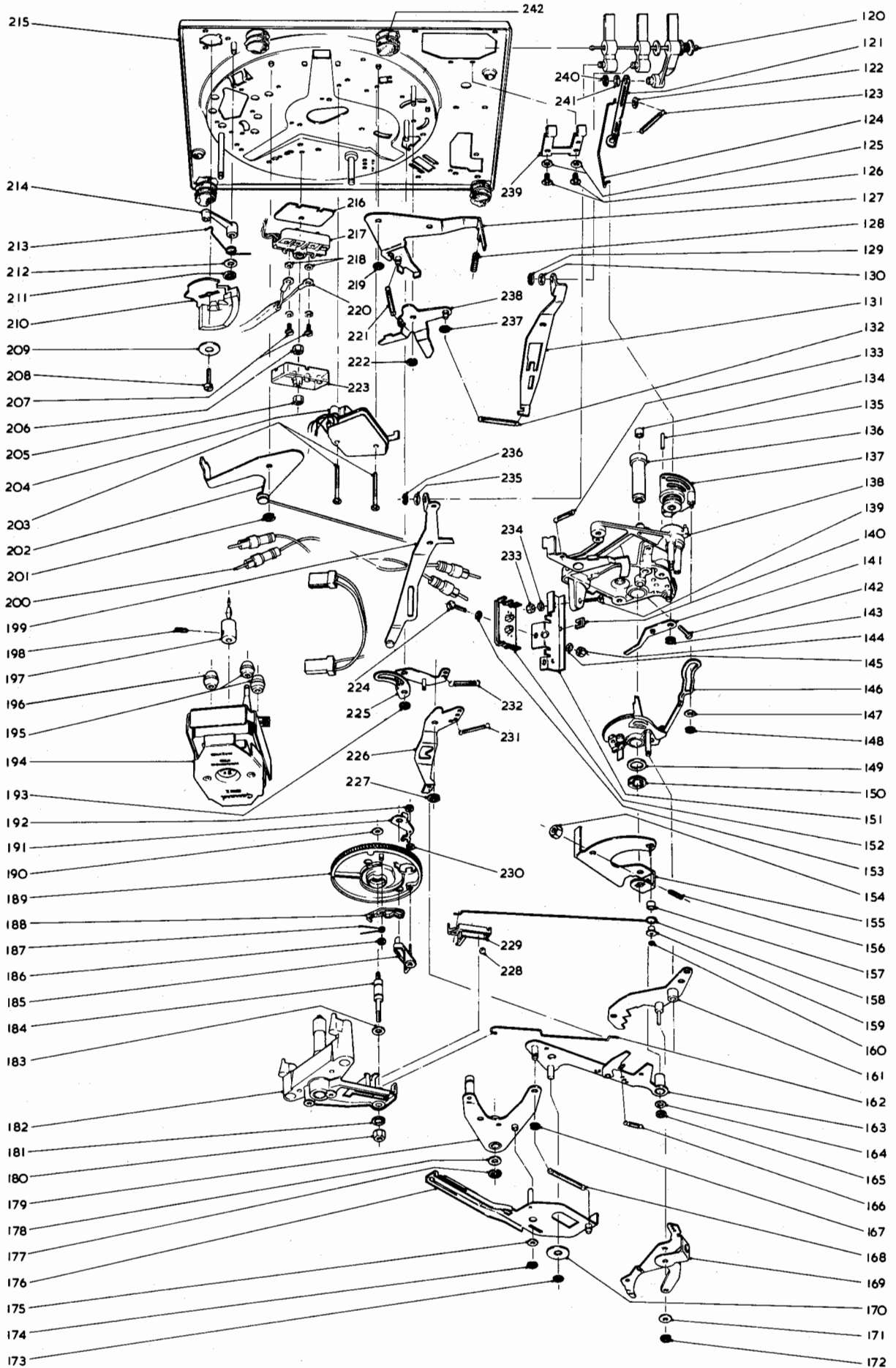


# Garrard Zero 100SB spare parts list Parts above unit plate

Ref. No.	Garrard Part No.	Description	Ref. No.	Garrard Part No.	Description
1	76092/002	Counterbalance weight	49	77245	Speed control knob
2	76721/003	Pickup arm	50	43855	Transit clip
3	75112	Guide moulding	51	41218/026	Washer (3)
4	01515/001	Screw	52	00432/007	Spring clip (3)
5	43043	Solder tag	53	44350	Transit screw
6	01515/001	Screw	54	44377	Adjusting screw
7	77584/002	Pivot bracket	55	76989	Cam follower
8	00525/101	Grub screw	56	76982	Speed change lever
9	75309	Lead clamp	57	41229/001	Washer
10	44372	Screw	58	00431/002	Spring clip
11	75154/003	Trim disc	59	76996	Pivot pin
12	44356	Screw	60	77656	Stop lever
13	75235	Adjusting knob	61	44557	Spring
14	76573	Indicator nut	62	41218/039	Washer
15	75236	Shield	63	44952	Spring
16	00431/010	Spring clip	64	00432/007	Spring clip
17	41219/026	Plastic washer	65	73139	'O' ring
18	76580	Gimbal surround	66	76997	Turntable
19	41218/018	Washer	67	77029	Thrust casting
20	44498	Spring	68	72698	Adaptor for large hole records
21	75232	Magnet	69	01758/289	Screw (3)
22	41218/094	Washer	70	77031	Turntable mat
23	44557	Spring	71	76582	Gimbal assembly
24	41218/094	Washer	72	41218/066	Washer
25	76570	Ratchet screw	73	02651/013	Spring clip
26	76578	Pickup spindle	74	41227	Washer (as required)
27	41218/079	Washer	75	75234	Magnet
28	44210	Grub screw	76	75249/002	Adjusting screw
29	75239	Trim plate	77	44972	Spring
30	75177	Lifting platform	78	59048/113	Cartridge fixing screws, with setting gauge and tilt wedge
31	44980	Spring			End trim
32	75156/002	Pickup rest	79	75259	End trim
33	76587/003	Control moulding	80	75903/001	Type C3A pickup cartridge carrier
34	44350	Transit screw	81	01144/005	Screw
35	77375	Trim plate	82	75154/001	Trim disc
36	44953	Spring	83	75154/002	Trim disc
37	00245/044	Screw	84	74407	Pivot screw
38	00201/002	Spring washer	85	44587	Spring
39	41218/011	Washer	86	44378	Screw (2)
40	44376	Screw (3)	87	44356	Screw
41	00245/010	Screw (2)	88	44352	Adjusting screw
42	41218/042	Washer	89	40906	Locking washer
43	43855	Transit clip	90	40906	Locking washer
44	02293/012	Bowed washer	91	00525/105	Grub screw
45	41218/014	Washer	92	44585	Spring
46	01577/066	Screw	93	00431/010	Spring clip
47	SC/ 76995/002	Unit plate with pins, bushes, etc.	94	76577	Catch lever
48	77243	Speed control moulding	95	44558	Spring
			96	76992	Drive belt
			97	00451/001	Nut

# Garrard Model 86SB and Zero 100SB exploded view

Parts below unit plate



# Garrard Model 86SB and Zero 100SB spare parts list

## Parts below unit plate

Ref. No.	Garrard Part No.	Description	Ref. No.	Garrard Part No.	Description
120	77171/002	Control paddles, with spindle	184	77248	Stud
121	77170	Cueing bracket, with rod	185	77246	Friction lever
122	41218/035	Washer	186	00431/011	Spring clip
123	45000	Spring	187	44973	Spring
124	77167	Cueing rod	188	72404	Cam index lever
125	41218/017	Washer (2)	189	77247	Cam
126	44348	Screw (2)	190	41218/013	Washer
127	74331	Switch lever with spring	191	75228	Trip pawl
128	44445	Spring	192	00431/002	Spring clip
129	00432/007	Spring clip	193	00432/007	Spring clip
130	41218/042	Washer	194	61027	Synchronous motor (state no. on bottom bearing cover)
131	74302	Manual operating lever			
132	44444	Spring	195	43129/003	Motor mounting (2)
133	44951	Spring	196	43129/002	Motor mounting
134	43622	Bearing	197	61086	Motor pulley (50Hz)
135	74871	Cueing plunger	197	61151	Motor pulley (60Hz)
136	77211	Bearing housing	198	44052	Screw
137	74335	Cueing cam	199	74332	Auto operating lever
138	77701	Pickup base (Zero 100SB)	200	74760	Stereo connecting lead (4 phono plugs)
138	77304	Pickup base (Model 86SB)			
139	00245/037	Screw	200	76182	Stereo connecting lead (1 5-pin DIN and 2 phono plugs)
140	75922	Lead clip			
141	72467	Retracting lever	201	00431/005	Spring clip
142	00245/058	Screw	202	72445	Selector follower
143	00432/007	Spring clip	203	01577/006	Screw (2)
144	00451/002	Nut	204	60365	Part of loom assembly (state no. on tape around switch)
145	00852/012	Shakeproof washer			
146	74370	Pickup cam assembly	205	00451/002	Nut
147	41219/010	Washer	206	00451/002	Nut
148	00431/010	Spring clip	207	44054	Screw (2)
149	41218/054	Washer	208	44384	Screw
150	00431/029	Spring clip	209	41218/053	Washer
151	75920	Leg	210	76978	Speed change cam
152	72610	Twin phono socket, with earth strap	211	00432/007	Spring clip
			212	41218/026	Washer
152	75919	Twin phono socket	213	44578	Spring
153	41218/035	Washer	214	76983	Index lever
154	00451/001	Nut	215	SC/	
155	77160	Pickup lever		76695/002	Unit plate with pins, bushes, etc.
156	00245/032	Screw	216	51333	Cover plate
157	77567	Restrictor bush	217	60365	Part of loom assembly (state no. on tape around switch 204)
158	77249	Trip rod with bushes and actuator			
159	77302	Bush	218	41218/035	Washer (4)
160	00431/002	Spring clip	219	00431/005	Spring clip
161	75186	Selector lever (Zero 100SB)	220	76416	Power supply lead (2-core)
161	76695	Selector lever (Model 86SB)	220	77259	Power supply lead (3-core)
162	77158	Impulse rod	221	44363	Spring
163	73504	Cam link	222	00432/007	Spring clip
164		No longer used	223	58179	Cover
165	00432/007	Spring clip	224	00247/057	Screw
166	44981	Spring	225	74333	Trip operating lever
167	00432/007	Spring clip	226	74300	Trip lever
168	41631	Spring	227	00431/015	Spring clip
169	73495	Switch-off return lever	228	77159	Ball
170	41218/058	Washer	229	77373	Actuator
171	41218/091	Washer	230	00431/002	Spring clip
172	00432/007	Spring clip	231	44948	Spring
173	00432/007	Spring clip	232	41506	Spring
174	00432/007	Spring clip	233	00451/002	Nut
175	41218/026	Washer	234	00852/012	Shakeproof washer
176	77151	Release lever	235	41218/042	Washer
177	00290/004	Spring clip	236	00432/007	Spring clip
178	41218/039	Washer	237	00432/007	Spring clip
179	72328	Cam lever	238	74334	Catch lever
180	00451/001	Nut	239	74306	Clamp plate
181	00201/003	Spring washer	240	00432/007	Spring clip
182	77027	Turntable spindle housing	241	41218/092	Washer
183	41218/013	Washer	242	71084	Damping pad (4)

## Service Notes

It is assumed that the engineer using these notes has previous experience of servicing record playing mechanisms and will not need to be reminded of checks normally carried out when routine problems arise. The faults shown below are, therefore, those of a nature likely to be peculiar to this series of mechanisms.

The instruction manual supplied with each unit and service manuals for earlier Garrard models provide more basic and general information.

Numbers in brackets are those used on the exploded view diagram of Model 86SB. The functions of both models are similar.

## Fault Chart

Fault	Check that . . .
<b>A</b> Turntable fails to start or runs slowly or erratically	<ol style="list-style-type: none"> <li>1 the drive belt (58) is attached, untwisted and undamaged.</li> <li>2 the drive belt runs in the centre of the gap in the speed change lever (55), if necessary set the position of the lever by turning its adjusting screw (50).</li> <li>3 the catch lever (238) holds the switch lever (127) after switching on.</li> <li>4 driving surfaces of motor pulley (197), drive belt and turntable drum are clean and dry. If necessary wipe them with a clean lint-free cloth moistened with alcohol.</li> </ol>
<b>B</b> Pickup arm tracks incorrectly	<ol style="list-style-type: none"> <li>1 automatic trip links (185, 188, 191, and 158) slide freely.</li> <li>2 the friction cap (21) if fitted is clear of the underside of the pickup arm during play. Turn the cueing height adjusting screw (20) counterclockwise sufficiently to provide clearance.</li> <li>3 the ball (228) can rotate freely.</li> </ol>
<b>C</b> Pickup arm lands on record too far in or out	the tail of the pickup lever (155) is square.
<b>D</b> Pickup arm fails to lower	<ol style="list-style-type: none"> <li>1 the spring (231) is anchored to the cueing cam (137) and trip lever.</li> <li>2 the pickup arm rest safety catch is at 'Free' and the cueing control at 'Play'.</li> <li>3 the pickup arm pivot screw (10) is undamaged.</li> </ol>
<b>E</b> Pickup arm fails to lift under auto control or to return after playing a record	<ol style="list-style-type: none"> <li>1 the lug on the trip pawl (191) is vertical.</li> <li>2 the trip rod (158) is not mis-shapen or disengaged; and that the ball (228) is in position in the trip actuator (229).</li> </ol>
<b>F</b> Pickup arm returns to its rest prematurely	<ol style="list-style-type: none"> <li>1 the spring (232) is anchored to trip operating lever (225) and switch-off return lever (169).</li> <li>2 the automatic operating control returns from 'Start' to a vertical position when released.</li> </ol>
<b>G</b> Fails to switch off automatically	<ol style="list-style-type: none"> <li>1 the action of stop lever (48) is not impeded by excess grease.</li> <li>2 the automatic operating control and its associated levers move freely.</li> </ol>
<b>H</b> Speed cannot be changed	the cam follower (55) locates the track in the speed change cam (210).

### Adjustments

Primary adjustments such as stylus force and pickup arm bias compensation (tonearm anti-skating) are detailed in the instruction manual supplied with each unit.

However, there are a few other adjustments which are initially set before the unit leaves the factory. These may never need to be reset but are mentioned below for completeness.

#### Pickup arm lifting height restriction

The restrictor screw (73) should prevent the pickup arm from rising more than  $\frac{1}{8}$  in (1.5mm) higher than the pickup lifting height adjustment (see page 12 in the instruction manual). Turn this screw counterclockwise to reduce restriction.

#### Pickup arm cueing height

When the cueing control tab is moved fully to 'Lift' the pickup arm should rise until the top of the finger lift at the front of the arm is at least  $1\frac{7}{8}$  in (36.5mm) above the turntable mat. This should be set by turning the screw (20) in the lifting platform.

#### Motor pulley height

The bottom of the motor pulley should be  $\frac{1}{4}$  in (3mm) above the top of the motor screen plate. The pulley is held by a fixing screw (198). It may also be a press fit on the motor spindle, in which case a gentle heat with a clean, dry soldering iron can be applied to the base of the pulley to expand it and facilitate movement.

#### Speed change lever height

The rubber drive belt should run in the centre of the gap in the speed change lever (55) at each speed setting. The lever can be raised or lowered in relation to the belt by turning its adjusting screw (50).

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**Garrard**  
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