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Garrard

Servicing information for

Garrard GT55 Series

(including Model GT55 Automatic Turntable and Model GT55P Single Record Playing Automatic Turntable)

Information applies to both models unless stated otherwise.
It supplements details provided in the owner's instruction manual.

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Introduction

This manual provides instructions for servicing the Garrard GT55 series automatic turntables. The information contained in it applies to both versions unless specified otherwise. Different territories have their own names for particular parts of a unit. Hence, a turntable (the rotating component) may also be known as a platter and a pickup arm may be known as a tonearm.

The GT55 is a fully automatic belt-driven turntable which will play single records manually or automatically, and a stack of up to six records automatically.

The GT55P has similar features but is designed to play single records only.

Module versions are identical, but are assembled to a mounting base and provided with a moulded cover, connecting leads and, when ordered, a pickup cartridge.

Facilities

The Garrard GT55 and GT55P automatic turntables will play -

* single 33-1/3 or 45 rev/min records manually.

The pickup arm is lowered by hand or by fluid-damped cueing device.

*single 12in, 10in and 7in diameter records automatically.

For playing 7in records with 1½in diameter centre holes a record spindle adaptor (Part No. 72698) is provided.

The GT55 will also play -

*a stack of up to six 12in, 33-1/3 rev/min records, supported at their outside edge by a platform and released by an angled automatic (multi-play) record spindle.

*a stack of up to six 7in records with 1½in diameter centre holes using a record spindle (Type LRS100), available as an optional extra.

*a stack of up to six 7in records with 9/32in diameter centre holes, using a record platform adaptor (Part No. 75189), available as an optional extra.

The GT55 series will repeat a single record (or the last of a stack) continuously until stopped. A record can be rejected or play interrupted if required and the unit will switch off automatically at the end of record play with the pickup arm on its rest.

Features

They have -

*an electronically controlled D.C. servo motor for speed stability unaffected by power supply and load variations.

*two speeds - 33-1/3 and 45 rev/min, each speed adjustable by approximately ± 3% using an illuminated stroboscope in conjunction with a pitch control.

*a cast magnesium alloy pickup arm with gimbal ring and jewel and ball bearings for minimum friction. A detachable carrier accepts cartridges with ½in fixing centre holes which can be positioned for optimum tracking conditions.

A rotating pickup arm counterbalance weight has an integral stylus force gauge, calibrated in 0.25gm divisions.

The pickup arm is suitable for cartridges tracking down to 0.75gm and incorporates a magnetic anti-skate device calibrated for use with modern stereo and CD-4 quadraphonic types.

The pivotting pickup head provides the cartridge with conditions of minimum lateral tracking error.

*an adjustable rate of cueing which controls the pickup arm lowering speed during both manual and automatic operation. The arm lifting action is also damped when raised manually.

*a belt-driven diecast turntable with an anti-static rubber mat.

*a short manual spindle which revolves with the record and interchangeable manual and automatic record spindles (GT55 only).

*an automatic mechanism which incorporates the latest materials for quietness and smoothness of operation, and avoid the need for lubrication. It has no influence on the pickup arm after the stylus has touched the record.

*a pickup arm, turntable spindle housing and automatic mechanism of modular construction for ease of servicing.

*conveniently grouped operating control sliders.

Garrard record playing equipment is designed to play records complying with British Standards Specification B.S.1928/1965, IEC Publication 98 and similar standards.

Because of our policy of continuous development, Garrard reserves the right to alter the specification or appearance of these models without notice.

Power Supply Voltage

The GT55 series is made for one of the following two voltage ranges

1. 110/125V a.c.
2. 110/120 and 220/240V a.c. (dual voltage with changeover switch).

Power Supply Frequency

50 or 60Hz, depending only on the stroboscopic markings on the disc under the turntable. This disc is marked with its operating frequency.

Power consumption

Approximately 2 Watts.

WARNING. TO PREVENT FIRE OR SHOCK HAZARD, DO NOT EXPOSE THIS APPLIANCE TO RAIN OR MOISTURE.

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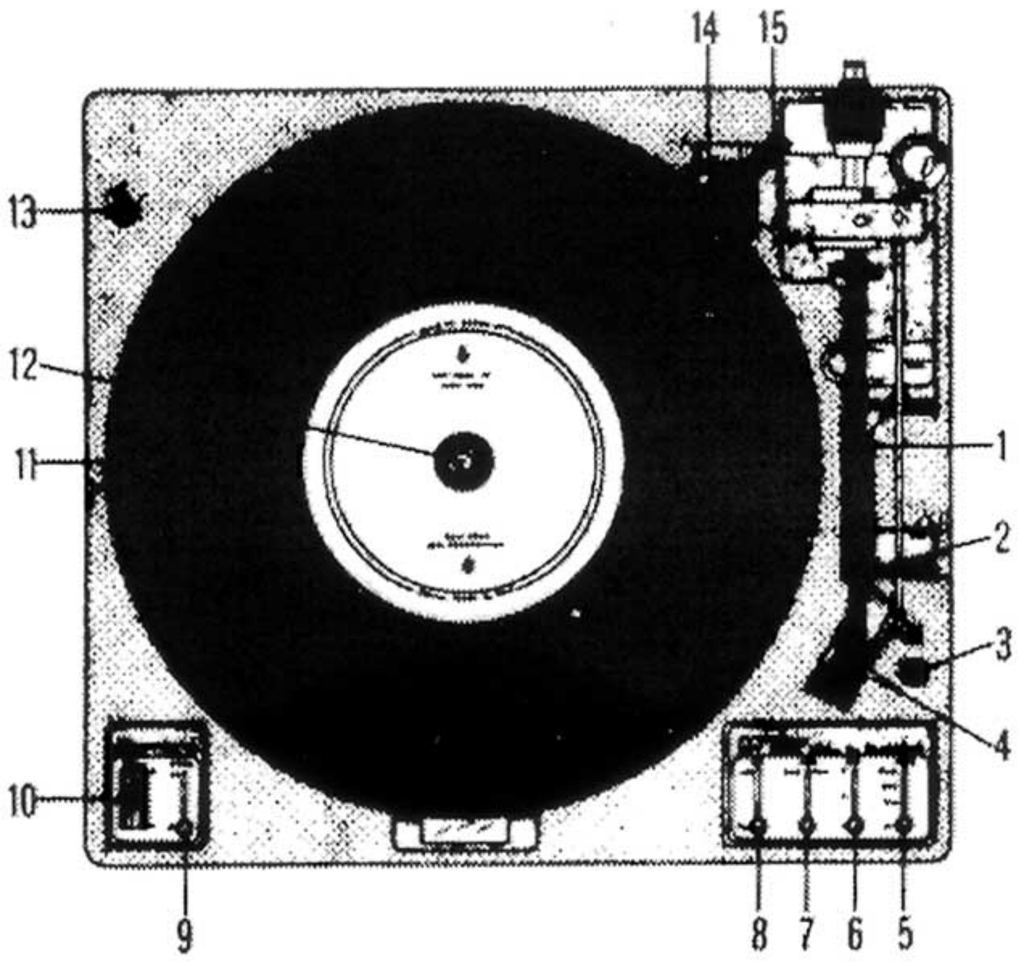
Operating Instructions



Before initial use

1. Both transit screws (3 & 13) must be turned fully clockwise.
2. Remove or retract the stylus guard.
3. Set record pitch control wheel (10) midway.
4. Lock pickup arm (1) to its rest (2) and rotate the turntable (11) for a few revolutions to make sure that the automatic mechanism is disengaged.

For safety, secure the pickup arm to its rest when not in use by moving the lever to 'Lock'. Release the arm before play by moving the lever to 'Free'.
After playing a single record, or a sequence of records (GT55), the pickup arm will return to a position above its rest. The unit will then switch off and the arm settle onto the rest.

To play a record manually

1. Place a record on the turntable and slide record speed selector (9) to 33 or 45 rev/min.
2. Slide mode control (5) to 'Man'.
3. Slide cue control (8) to 'Lift', position the pickup arm above the record using finger lift (4), then move the slider back to 'Play'.

A feature of this model is the precise control of the stylus lowering position. Inch the slider towards 'Play' until the stylus is approximately 2mm (1/16in) above the record surface and make any fine adjustment.
Move the slider fully to 'Play'.

To play a record automatically

1. Place a record on the turntable and set record size and speed selectors (6 & 9) for the record to be played.
2. Move mode control slider to 'Auto'. The turntable will now rotate and the automatic function is standing by, ready for use.
3. To begin play, move auto slider (7) fully to 'Start'. Hold it there for a moment while the mechanism engages, then release it.

To play a stack of records (GT55 only)

1. Fit long multi-play record spindle (12), rotate and press it down fully. This spindle must only be fitted when the unit has switched off automatically and the pickup arm is on its rest.
2. 12in records. Place up to six 33-1/3 rev/min records on the step of the record spindle with the edge of the lowest record resting on support plattorm (14). Lift record steady (15) fully, then move it inwards and downwards so that it bears lightly on top of the record stack.
   7in records with large centre holes. Fit the Garrard Type LRS100 large record spindle*
   7in records with small centre holes. Fit the Garrard Type A6 record platform adaptor*

*Available as optional extras, complete with instructions for use.

3. Set record size and speed selectors. For example 33 and 12 for 33-1/3 rev/min, 12in (30cm) records.
4. Slide mode selector to 'Auto'. Move auto control to 'Start' and hold it there for a moment.
5. When the records have played lift the record spindle straight out and unload them.

If the 'Mode' control is accidentally moved to 'Off' during the automatic cycle then it may not slide freely. In this unlikely event, rotate the turntable a few times by hand in a clockwise direction until the control is released.

Additional features

Pause

Record play can be interrupted by sliding the cue control to 'Lift'. To resume, move it back to 'Play'.

Repeat

To play a single record or the last of a stack (GT55) continually, slide mode selector to 'Repeat' during or before play.
To resume normal playing, move the mode selector 'Man' (GT55P) or to 'Auto' (GT55 only).
Caution - before selecting 'Repeat' from the manual playing mode, size selector must indicate the diameter of the record.

Switch off/Reject

To return the pickup arm to its rest during play and switch off (GT55P) or to play the next record in a stack (GT55 only), move the auto slider to 'Reject'.
To switch off while playing a stack of records (GT55 only), move mode selector to 'Man', then the auto slider to 'Reject'. The next record will first be lowered.

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Servicing

The unit should be disconnected from its power supply and the stylus protected before making adjustments wherever practicable.
When removing the turntable, hold the belt and take it off simultaneously, so that it does not contact the lubricated spindle.
Reference numbers in brackets, thus (24), are those of corresponding parts on the exploded view diagram.
Underlined numbers, thus 17, are those used on general views on the back of 'Exploded view, parts list and circuit diagrams'.
Please bear in mind that many faults, both real and apparent, can be caused by incorrect installation wiring or operation. They can also be the symptoms of warped or damaged records, faulty associated equipment or damage suffered as a result of rough handling in transit.

SYMPTOM	CAUSE	CURE
Turntable Speed Problems		
Turntable fails to run or lacks power when switched on, but neon strobe lamp is lit.	1. Speed selector 17 not engaged.	1. Move it fully to '33' or '45'.
	2. Turntable drive belt 12 disengaged or damaged.	2. Lift turntable mat and look through hole in turntable to check belt condition and location. Remove turntable to examine full length of belt if necessary. See 'Routine Maintenance'.
	3. Turntable not pushed fully down.	3. Press down from opposite sides until click of catch is felt. If it is not felt - lift turntable, rotate it and press again.
	4. Turntable bearings dry or dirty.	4. Clean turntable spindle and turntable bearing sleeve with lint-free cloth. Apply oil to both from capsule supplied with unit.
	5. Voltage selector 16 incorrectly set (dual voltage versions).	5. Look through turntable and slide the selector to show mains voltage. See 'Adjustment 11'.
	6. Fault in power supply circuit.	6. Check output voltage from transformer 32 secondary winding (10-20V AC) and from stabilised power supply unit (9-10V DC). Check input voltage to motor (4-6V DC across red and blue leads). Check security of slide-on connectors. Replace transformer or circuit board 36.
	7. Damaged motor.	7. Spin rotor. If stiff, tap motor body to realign bearings. Check continuity of motor (blue-red) coils. Fit new motor.
	8. Lubricant on turntable drum, motor pulley 22 or drive belt (35).	8. Clean them with a lint-free cloth moistened with alcohol.
	9. Automatic mechanism drive pinion (245) binding.	9. Fit new parts.
Turntable fails to run and neon strobe lamp is unlit.	1. No power supply to transformer 32.	1. Check plug and switch 27 connections, supply voltages and any external fuses. Replace faulty plugs or leads.
	2. Faulty connection between plug and transformer.	2. Check that plug is fitted properly. Press plug fully home or replace faulty connecting lead.
Turntable runs slightly fast or slow.	1. Fine speed control 18 and 37 incorrectly set.	1. Reset. See 'Adjustment 10 and 18'.
Turntable runs excessively fast.	1. Drive belt (35) running on top (or bottom) step of motor pulley.	1. Lift turntable mat and lower (or raise) the belt on both pulley and driving drum. The belt must run on the central recessed area of the pulley. Remove turntable to lower belt on drum if necessary.
	2. Damaged tachometer coils.	2. Check continuity of coils (white & red) leads. Fit new motor 33.
Turntable runs counterclockwise.	1. Motor connections incorrect.	1. Reverse blue and red leads at circuit board 36. Check connections with circuit diagram.

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SYMPTOM	CAUSE	CURE
Sound Problems		
No sound on one or more channels or only low volume sound.	1. Pickup cartridge, amplifier or speakers faulty.	1. Check by substitution and interchanging channel connections. Repair or replace as appropriate.
	2. Connections at pickup head faulty. Pickup arm lead or audio connecting lead pinched or otherwise damaged.	2. Disconnect cartridge and carry out continuity checks on leads. Fit a substitute cartridge carrier. Repair or replace as necessary.
	3. Incorrect amplifier input selected.	3. Select input with sufficient gain for cartridge fitted.
Sound distorted, possibly as a result of pickup arm mistracking.	1. Insufficient or excessive stylus force.	1. Reset to cartridge manufacturer's advice. See 'Adjustment 1'.
	2. Worn, chipped or incorrect stylus tip.	2. Examine the tip microscopically and check condition of stylus bar. Fit new stylus if necessary.
	3. Accumulation of dust around stylus tip.	3. Clean with camel hair brush. See 'Routine Maintenance'.
	4. Pickup cartridge fixed insecurely or out of position.	4. Reset cartridge using gauge, tighten fixing screws. See 'Adjustment 8'.
	5. Incorrect amplifier input selected.	5. Select input with correct gain.
	6. Tight leads at back of pickup arm.	6. Relieve tension, leaving leads slack. Check that they are not caught in the moving parts of the mechanism.
	7. Back of cartridge touches record.	7. Fit tilt wedge, deep edge forward, between top of cartridge and underside of carrier. See 'Adjustment 9'.
	8. Acoustic feedback.	8. Check that turntable is not too close to speakers and that both transit screws (53 & 67) are turned fully clockwise. The unit must be able to float freely on its mounting springs.
	9. 'Cue' control 11 not moved to 'Play'.	9. Slide it fully forward.
	10. Unit not mounted level.	10. Check with spirit level. Stand base on a horizontal surface.
	11. Plastic dust cover cleaned with dry cloth, so that static electricity attracts the pickup arm.	11. Wipe the cover with a clean, moist cloth.
	12. Pickup arm or head bearings tight.	12. Check horizontal freedom at rear pivot (1) when the arm is pushed inwards against spring loading. Fit new pivot screw if necessary. Check 1mm (0.04") vertical play between gimbal (93) and bracket (3); check 0.25/0.50mm (0.01/0.02") clearance between top of pickup head and arm. See 'Adjustments 12 & 14'.
	13. Pickup arm control link (12) bent, or its rear pivot cover (94) set too low. Link adjustment upset.	13. Fit new link. Check 1mm (0.04") clearance between bearing (9) and cover. Reset effective length of link. See 'Adjustment 13'.
	14. Pickup lever (32) binding.	14. Slacken fixing screw and lower or raise the lever to give clearance. See 'Adjustment 15'.
	15. Anti-skate adjusting screw (26) incorrectly set.	15. Reset. See 'Adjustment 16'.
Hum.	1. Earthing lead(s) disconnected.	1. Reconnect.
	2. 'Earth loop' in pickup wiring system.	2. No part should be connected to earth by more than one route. If a second route exists, disconnect it.
	3. Faulty audio connections, such as plug, pickup head and socket. Damaged pickup leads (106).	3. Check security of leads to pickup cartridge (85) and amplifier (157 or 158). Fit substitute audio connecting lead if available. Check electrical continuity of pickup leads. Fit new leads if necessary.
	4. Proximity of audio and ac power leads.	4. Reroute leads, checking that pickup arm leads under unit plate do not hang in long loops.

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SYMPTOM	CAUSE	CURE
Rumble.	1. Turntable or turntable spindle bearings dirty or dry.	1. Clean and relubricate. See 'Routine Maintenance'.
	2. Rumble on particular records only.	2. Recorded rumble. Use amplifier's rumble filter, if fitted. Otherwise no cure.
	3. Unit plate mounting springs or motor suspension grommets not resilient.	3. Turn both transit screws (53 & 67) fully clockwise. Check that unit plate mounting springs locate recesses in supporting board or base. No part of the mechanism must touch the board due to an undersized cut-out hole. (Check with Garrard Template, Part No. 77235 Issue 3 (or later). The motor must hang free and level in its rubber mountings (69 & 70).
	4. Turntable or turntable spindle bearings damaged.	4. a) GT55 Remove retaining clip, turntable and drive sprocket (245) to check condition of thrust washers (222 & 220), ball race (221) and cushion ring (219). Fit new parts as needed and relubricate. Reassemble, passing mechanism drive belt (224) around sprocket.
		4. b) GT55P Remove turntable to check condition of ball on top of spindle. Fit new spindle housing and/or thrust casting (74) if necessary. Clean and lubricate, see 'Routine Maintenance'.
	5. Excessive a.c. ripple in regulated d.c. motor supply.	5. Remove turntable. Using a decoupling capacitor (200µF), measure the a.c. voltage across red motor lead and zero volts line. It should not exceed 20mV r.m.s. Check electrolytic capacitors by substitution and replace as necessary.
Wow or flutter.	1. Recorded wow or flutter. Record hole off-centre or enlarged.	1. No cure.
	2. Warped record in a stack slipping (GT55 only).	2. Play record singly.
	3. Record label paper or moulding 'flash' in centre hole binding on automatic record spindle (GT55 only).	3. Carefully ream hole with pencil or penknife.
	4. Lubricant on turntable drive belt (35).	4. Clean belt, turntable and motor pulley (256).
	5. Automatic mechanism drive belt (224) tight or slack.	5. Reset tension. See 'Adjustment 20'.
	6. Incorrect motor pulley height.	6. Slacken both fixing screws and set base of pulley 0.8mm above top of motor.
	7. Damaged motor spindle.	7. Fit new motor.
Radio or television sound heard through speakers.	1. Radio frequency signals detected by amplifier.	1. This trouble is seldom caused by the record player, provided earthing and audio connections have been made securely and the audio connecting lead is kept short. The amplifier manufacturer should be consulted in persistent cases.
Pickup Arm Movement Problems		
Pickup arm will not leave rest.	1. Pickup arm lifting height or height restriction adjustment upset. Arm not balanced before setting stylus force.	1. Reset. See 'Adjustments 1, 3 & 4'.
	2. Pickup arm not released from its rest.	2. Move locking lever 5 to 'Free'.
	3. 'Cue' control 11 not moved to 'Play'.	3. Slide it fully forward.
	4. Toothed belt (224) driving automatic mechanism broken.	4. Fit new belt.
	5. 'Auto' operating control not moved fully to Start/Reject.	5. Move it to full extent of travel and hold it there for a moment.

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SYMPTOM	CAUSE	CURE
	6. Cueing control lever torsion spring (268) weak.	6. Increase spring torsion. See 'Adjustment 17'.
Pickup arm lands too far in or out.	1. Pickup arm lowering position out of adjustment.	1. Reset. See 'Adjustment 5'.
	2. Record 'Size' selector 9 incorrectly set.	2. Move it to 7", 10" or 12" according to record diameter.
Pickup arm continuously lands on record and immediately returns to rest.	1. Automatic trip mechanism binding.	1. Check freedom of friction and cycle levers (188 & 176). Check condition and assembly of cycle rod (162) and its controlling spring (166). Check freedom of 'Auto' control slider.
Pickup arm lowers too fast.	1. Cueing rate requires adjustment.	1. Turn adjusting knob counterclockwise. See 'Adjustment 6'.
	2. Level of viscous damping fluid low.	2. Recharge cavity in underside of main cam, using only special Garrard fluid in a vial with a green cap top (Part No. 606/1/71724/004).
Pickup arm lowers onto record and jumps first few playing grooves.	1. Stylus lands at top of record groove guard rim and slides down it.	1. Set lowering position inwards so that stylus lands at bottom of rim. See 'Adjustment 5'.
	2. Insufficient anti-skate force applied.	2. Reset. See 'Adjustments 2 & 16'.
Various other problems		
Two records lowered at once (GT55).	1. Automatic record spindle damaged.	1. Check that both latches at top of spindle fall freely. Do not oil them. Fit a new spindle if necessary. Check shape of spindle with template diagram.
	2. Non-standard records.	2. If records are less than 1.35mm (0.053") thick at their centre holes, play them singly.
	3. Record support platform 25 position incorrect or record clip faulty (GT55 only).	3. Make sure that the clip on the platform steadies a stack of records and that the platform supports the record stack at its edge. To move the platform slacken both its fixing screws. See 'Adjustment 19'.
Records fail to lower (GT55 only).	1. Automatic record spindle damaged.	1. Remove spindle and check that its record pushing pawl moves freely. Check spindle with template diagram and fit a new spindle if necessary.
	2. Moulding 'flash' or label paper in centre hole of record.	2. Ream hole carefully with a penknife. Do not enlarge or distort it.
	3. Non-standard records.	3. Records with oversize centre holes or more than 2.3mm (0.09") thick at the centre. Play them singly.
	4. Record release lever (214) disengaged or its controlling spring blade damaged.	4. Refit retaining spring clip. Replace or fit new blade.
	5. Record spindle seated incorrectly.	5. Make sure that the turntable retaining clip (73) is fitted securely and press the record spindle fully down.
Unit fails to switch off automatically.	1. Programme lever (180) binding.	1. Check that it pivots freely and that the selector rod (170) can slide up and down.
	2. 'Mode' selector binding.	2. Check that slider knob 8 is not rubbing on control cover.
'Mode' selector cannot be reprogrammed.	1. Selector moved to 'Off' during automatic cycle.	1. Rotate turntable a few times by hand in a clockwise direction to release selector.

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Adjustments

These fall under two broad headings -

a) those that the user may need to set during initial installation, numbered 1 - 11

b) factory settings which should not be disturbed unless associated parts have been replaced. These are numbered 12 - 20 and should only be attempted by service engineers.

1. Stylus force.
2. Anti-skate force.
3. Pickup arm lifting height.
4. Pickup arm lifting height restrictor.
5. Pickup arm lowering position.
6. Cueing lowering rate.
7. Pickup arm return position.
8. Pickup cartridge angle (horizontal).
9. Pickup cartridge angle (vertical).
10. Record pitch control.
11. Power supply (a) Voltage selector.
    (b) Frequency conversion.
12. Pickup arm bearing (rear).
13. Pickup head tracking angle.
14. Pickup head bearing.
15. Pickup lever height.
16. Anti-skate magnet gap.
17. Cueing lifting rate.
18. Pre-set speed control.
19. Record support platform position (GT55 only).
20. Mechanism drive belt tension.

Adjustments

1. Stylus force

With the pickup arm locked to its rest, the cartridge fitted and its stylus guard removed or retracted -

1. Place a record on the turntable and thread the counterbalance weight (1.1) on to the arm.
2. Turn the anti-skating control (2.1) to the '0' position, as shown.
3. Unlock the pickup arm and support it over the record. Take care not to damage the stylus.
4. Wind the counterbalance weight (forward or backward) until the arm balances with the stylus tip just above the record. The arm may now drift slightly due to its low bearing friction - this is of no consequence provided the stylus does not touch the record. Lock the arm to its rest.
5. Hold the balance weight still and turn its adjusting cone (1.2) until the mark at 0 is against the red line (1.3) on the top of the pickup arm. Balance will be upset if the weight is accidentally turned with the cone.
6. Turn the counterbalance weight counter-clockwise (as seen from the front of the arm) until the line on the cone corresponding to the required stylus force touches the line on top of the arm. Set the stylus force recommended by the cartridge manufacturer.
7. Set the anti-skate force control, and release the arm from its rest by moving the locking lever to 'Free'.

2. Anti-skate force

The anti-skate force control (2.1) has two scales for cartridges with an elliptical or CD-4 stylus. Use the CD-4 range for cartridges with conical stylus tips.
Set the dial to correspond to the stylus force already set. For instance, if a cartridge with an elliptical stylus calls for a force of 1 gram then the figure '1' on the elliptical scale 'E' should be in line with the vertical marker (2.2)
Stylus forces for typical cartridges fitted by Garrard are:
Shure M95ED - ¾/1½gm.
Shure M75ED Type 2- ¾/1½gm.
Both cartridges have elliptical stylus tips.

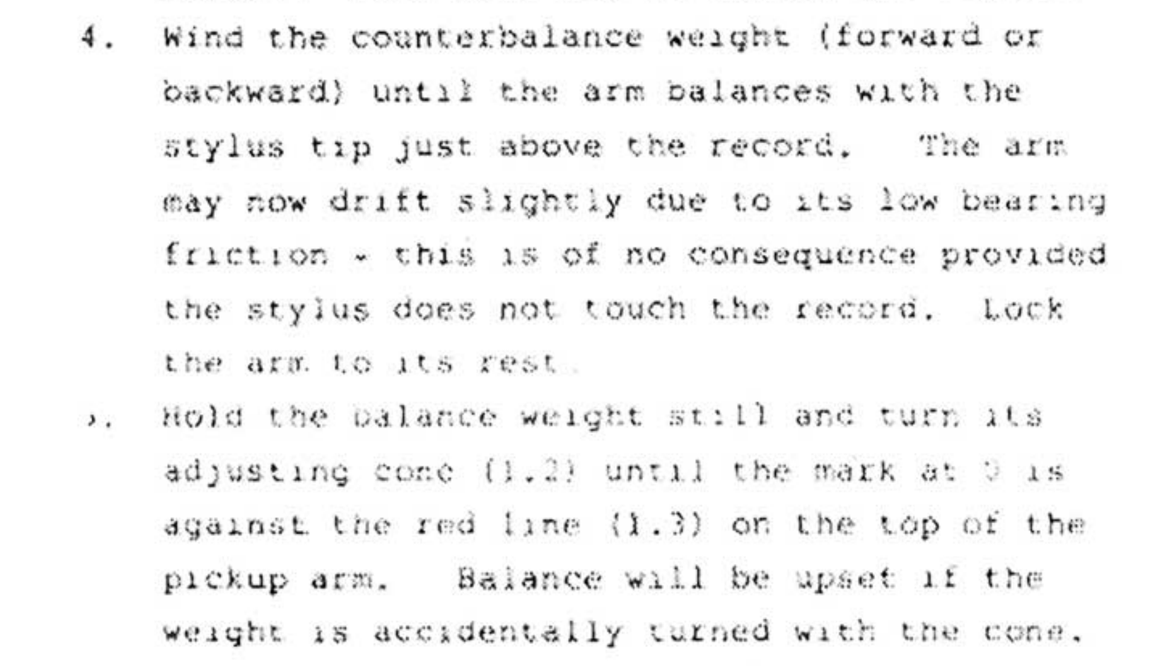
3. Pickup Arm Lifting Height

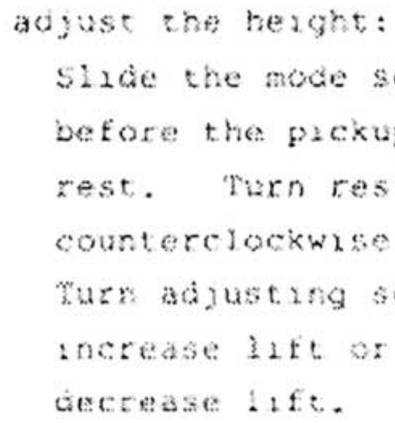
As the pickup arm returns to its rest after playing a record, there are three conditions to be met:

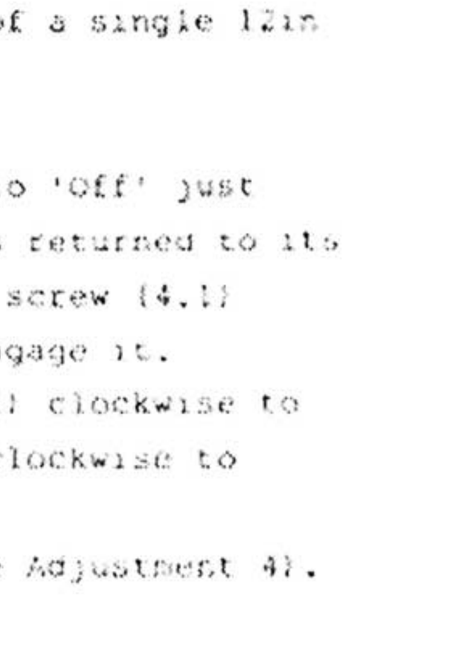
1. It must rise sufficiently to clear the rest before being lowered onto it.
2. It must rise sufficiently to clear a stack of six records on the turntable (GT55 only).
3. It must not rise so high that it touches the underside of a record on the step of the automatic record spindle (GT55 only).

A restrictor screw prevents the pickup arm from rising too high.
The height setting will depend on the depth of the pickup cartridge and the thickness of the records. For guidance, the top of the front of the pickup arm should return to its rest 47mm (1-7/8in) above the top of a single 12in record on the turntable.
To adjust the height:

1. Slide the mode selector to 'Off' just before the pickup arm has returned to its rest. Turn restricting screw (4.1) counterclockwise to disengage it.
2. Turn adjusting screw (3.1) clockwise to increase lift or counterclockwise to decrease lift.
3. Reset the restrictor (See Adjustment 4).







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4. Pickup Arm Lifting Height Restrictor

To reset the restrictor, turn the screw (4.1) clockwise until the front of the pickup arm has 1.5mm (1/16") free upward movement.
After making adjustments 3 and 4, rotate the turntable by hand to switch off.

5. Pickup Arm Lowering Position

Under automatic control the stylus should land 3mm (1/8in) inwards from the outside edge of a 12in record. It must not land on the sloping surface of the groove guard rim.
With the pickup arm locked to its rest, turn the adjusting screw (5.1) counterclockwise to move the lowering position inwards or clockwise to move it outwards.
Settings for 10in and 7in records will then automatically be correct when the 12in position has been set.

6. Cueing lowering Rate

Speed of pickup arm descent has been adjusted during assembly but it can be accelerated by rotating the cueing rate control (6.1) clockwise - a quarter turn at a time. The control is effective for both automatic and manual operation.

7. Pickup Arm Return Position

If the pickup arm stops short of its rest after playing a record, first lock the arm to its rest for safety, then rotate the adjusting screw (7.1) counterclockwise a quarter turn and test again.
Repeat the process if necessary. Similarly, if the arm overshoots its rest, turn the adjusting screw clockwise.
Carefully lock the pickup arm to its rest, to make sure that the locking tabs on the arm and rest engage without being forced.

8. Pickup Cartridge Angle (Horizontal)

Withdraw the cartridge carrier from the pickup head. Slide clear plastic setting gauge (8.1) onto the back of the carrier. Be sure that the stylus does not catch on the gauge as the cartridge enters. With the cartridge parallel to the sides of the carrier, its stylus must be vertically below the point at which the lines on the gauge cross.
If not, slacken its fixing screws (8.2) and move the cartridge until the stylus position is satisfactory. Tighten both fixing screws and recheck the stylus position, in case the cartridge has moved. Remove the gauge and make sure that the connecting leads '8.3) are secure. Slide the carrier back into the pickup head and press until it snaps into place.

9. Pickup Cartridge Angle (Vertical)

If the design of the cartridge is such that the back of its body touches the record at any time. then a cartridge tilt wedge (9.2) should be used. The Garrard tilt wedge (Part No. 75392) is made to be fitted between the body of the cartridge (9.1) and the slide-in cartridge carrier (9.3), deep edge forward.

10. Record Pitch Control

The DC servo controlled motor ensures that the turntable will revolve without variation from its precise 33 or 45 setting. The turntable is revolving at the correct speed when the image of the bars in the stroboscope window (10.1) appear to be stationary. View the inner row of bars for 45 rev/min, and the outer row for 33 rev/min setting while a record is playing.
To correct out-of-pitch recordings, rotate the pitch control (10.2); this variable speed control has a range of approximately ± 3% (one semi-tone).

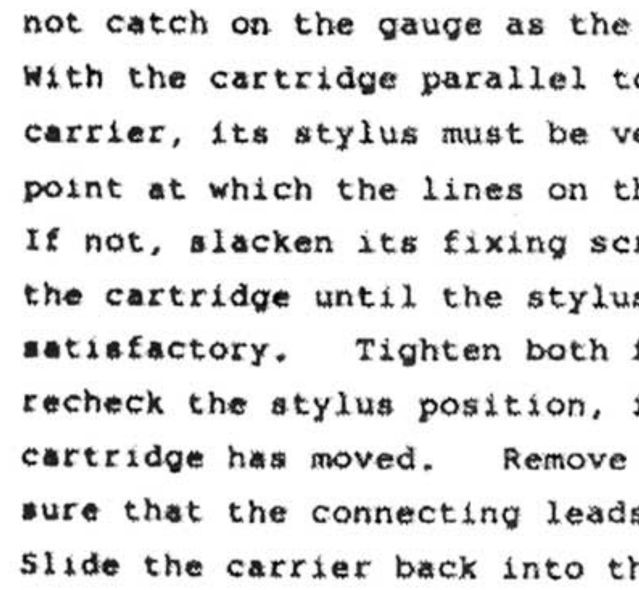
11. Power Supply

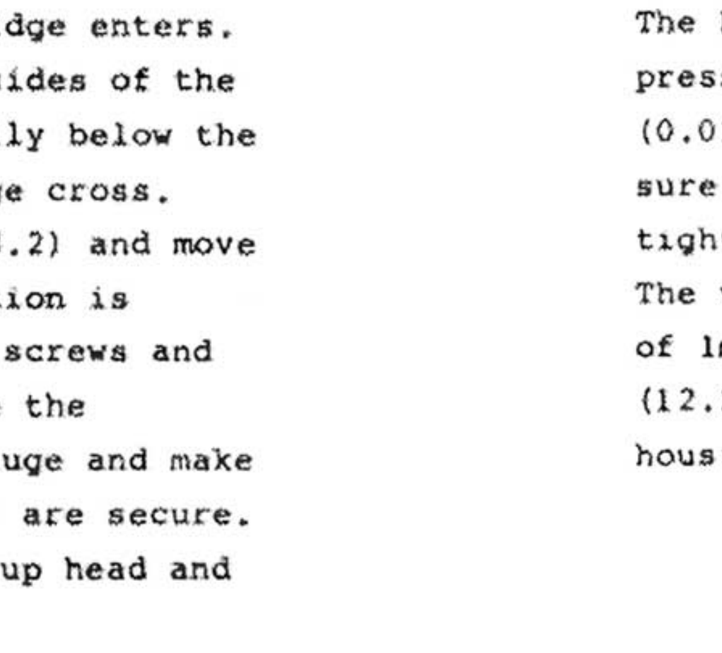
a) Voltage Selector (Dual voltage models only)
Lift the turntable mat and look through the hole in the turntable to see the voltage indicated by the selector switch (11.1) through its opening in top of unit plate. Slide the switch to show '115' for 100/130V a.c. power supplies and to '230' for 200/240V a.c. supplies.

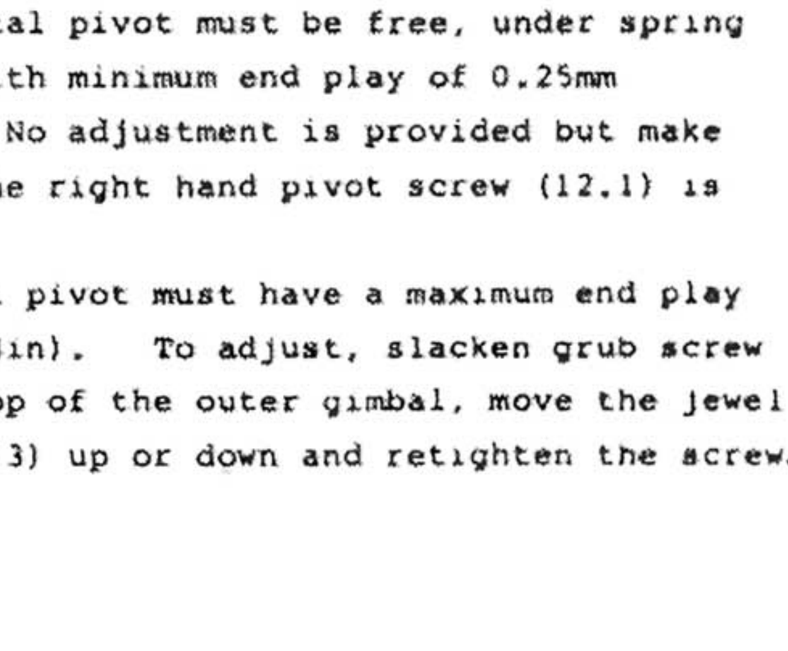
b) Frequency Conversion - There is no need for adjustment since the motor is d.c. operated, but a replacement stroboscope ring must be fitted to the underside of the turntable if the frequency is changed. The ring has a self-adhesive backing and should be pressed exactly on top of the factory-fitted ring for true concentricity. It is marked with its operating frequency, either 50Hz or 60Hz.

12. Pickup Arm Bearing (Rear)

The horizontal pivot must be free, under spring pressure, with minimum end play of 0.25mm (0.01in). No adjustment is provided but make sure that the right hand pivot screw (12.1) is tight.
The vertical pivot must have a maximum end play of 1mm (0.04in). To adjust, slacken grub screw (12.2) on top of the outer gimbal, move the jewel housing (12.3) up or down and retighten the screw.







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13. Pickup Head Tracking Angle

With the pickup arm on its rest, the rib along the top of the pickup head casting should be in line with the end of the pickup arm. If it is not, then the control link (13.1) has been bent, or its effective length from front to rear pivot is incorrect.
To adjust the length, remove the grub screw (13.2) securing the rear pivot cover and lift out the cover. The grub screw (13.3) securing the pickup arm control link to its rear bearing will now be seen. Slacken this screw and slide the link backwards or forwards to set its length as already described. Retighten the screw and refit the cover, making sure that there is 1mm (0.04in) clearance between the bearing and the cover when the bearing is resting on its pivot.

14. Pickup Head Bearing

The pickup head pivot must have 0.25/0.50mm (.010/.020in) vertical clearance. This will be taken up by expansion of the spring washer between the head and the arm. Turn the adjusting nut (14.1) on top of the head to set clearance.

15. Pickup Lever Height

If the pickup lever binds against the underside of the unit plate, then pickup arm movement will be impeded. The top face of the die-cast pickup lever should be approximately 0.3mm (0.012in) clear of the unit plate.
To set height, slacken the grub screw (15.1) in the inner gimbal bracket securing the pickup spindle, move the pickup lever up or down and retighten the screw.
Make sure that the pickup lever fixing screw engages the flat face on the spindle.

16. Anti-skate Magnet Gap

The gap between the magnets of the anti-skate device is set in the factory and should not normally be re-adjusted. The magnets should be 1mm (0.04in) apart when the anti-skate control is set fully counterclockwise to its maximum effective position. The adjusting screw (16.1) is visible through a slot in the back of the pickup housing but is best set after the pickup arm module has been removed from the unit.

17. Cueing Lifting Rate

When the 'Cue' control is moved to 'Lift' the pickup arm should rise steadily. If it does not, adjust the tension of the torsion spring (17.1) regulating the cueing control lever by hooking its tail into another hole to increase or reduce tension. This spring is on the underside of the unit, close to the cueing control.

18. Pre-set Speed Control

With slider in '33' position and control wheel in central position switch on and adjust the 33 rev/min speed preset screw (18.1) from underneath until the image of the outer row of bars appears stationary in the stroboscope viewing window.
Move slider to '45' and adjust 45 rev/min preset screw (18.2) until the image of the inner row of bars is stationary.

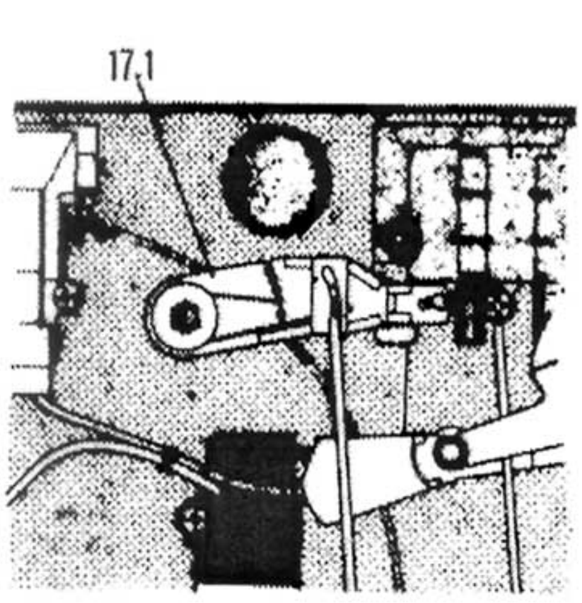
19. Record Support Platform Position (GT55 only)

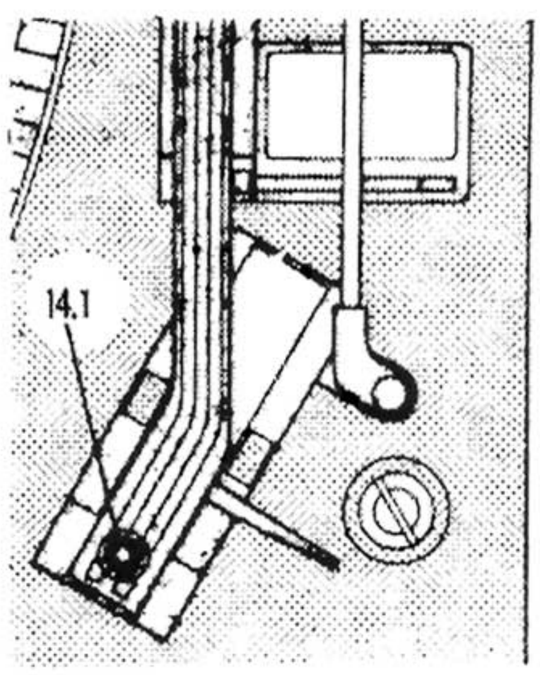
Top front edge of record support platform (19.1) to be at 151mm (5.95in) radius. From under the unit plate, slacken both record platform fixing screws (19.2). Move the platform in or out until a 12in record made to international standard size on the multi-play spindle overlaps both the leading edges of the V-shaped record support arms at the top of the platform equally by 1.6mm (1/16in).

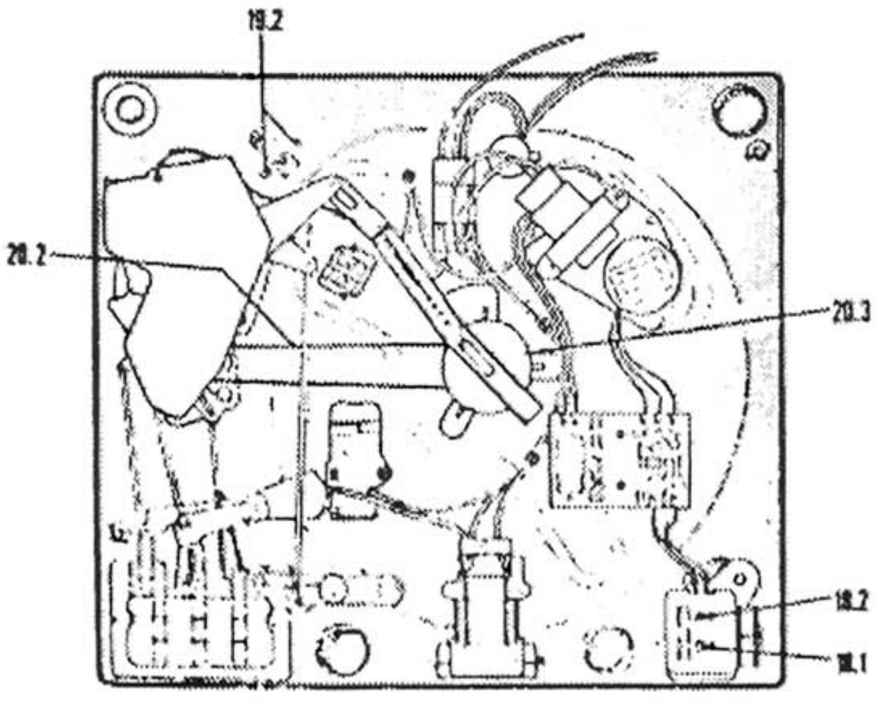
20. Mechanism Drive Belt Tension

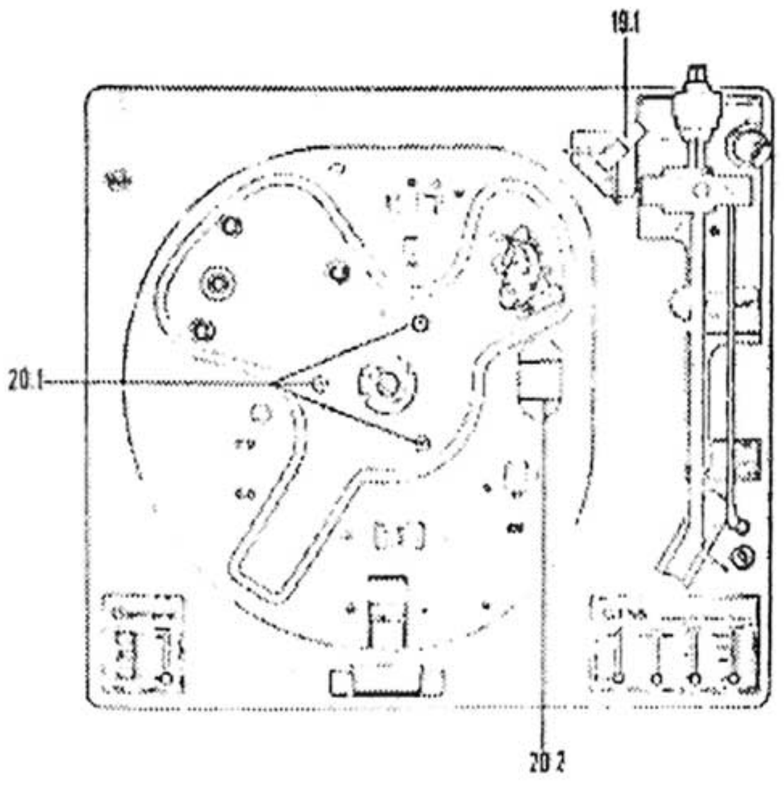
To set belt tension:

1. Remove the turntable with its drive belt.
2. Slacken the 3 screws (20.1) securing the turntable spindle housing and wedge the drive sprocket control on the spindle using thin card.
3. Insert an index finger and thumb down through the large slot in the unit plate and pinch opposite sides of the toothed belt (20.2) together. If there is access to the underside of the unit the slot need not be used.
4. Rotate the turntable spindle housing (20.3) to the left to eliminate excessive slackness in the belt.
5. Retighten the 3 fixing screws, remove the wedge and refit the turntable and belt.









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Maintenance

Careful design has reduced the need for maintenance to a minimum, but attention to the following points will prolong trouble-free listening.
It will be noted that only the turntable and its spindle require lubrication.

The pickup cartridge stylus

If the stylus tip gathers dust, sound quality will suffer.
Brush the dust away with an artist's camel-hair brush, working only from the back of the stylus towards the front to avoid bending it. Do not use solvent without the cartridge manufacturer's approval.
Examine the stylus tip under a microscope of 50X magnification for wear periodically, as the cartridge manufacturer advises. A worn or chipped tip damages records permanently.

The turntable mat

Periodically remove the mat and clean it with a soft brush or a slightly moistened sponge. It is made of conductive rubber to minimise the effect of static electricity on records.

The drive system

Once a year, remove the turntable (see later instructions) and drive belt simultaneously to avoid contaminating the belt with lubricant. Clean the turntable bearing sleeve and the turntable spindle with a lint-free cloth. At the same time, remove and clean the turntable spindle thrust washers (GT55 only).
Before reassembly (see later instructions), apply a thin film of Garrard Lubricating Oil, Part No. 606/7/78243/001, or similar grade sewing machine oil, to the thrust washers (GT55 only), turntable spindle and turntable bearing sleeve. Also, check the condition of the drive belt and fit a new one if in doubt.
Caution; keep oil off the driving surfaces of the rubber belt and turntable drum. If they become contaminated, wipe them with a clean, lint-free cloth moistened with alcohol.
The motor has oil-retaining bearings and needs no further lubrication.

Dust cover (module versions)

When necessary, remove the cover and wipe it with a clean, moist cloth to avoid a build-up of static electricity.

To remove the turntable

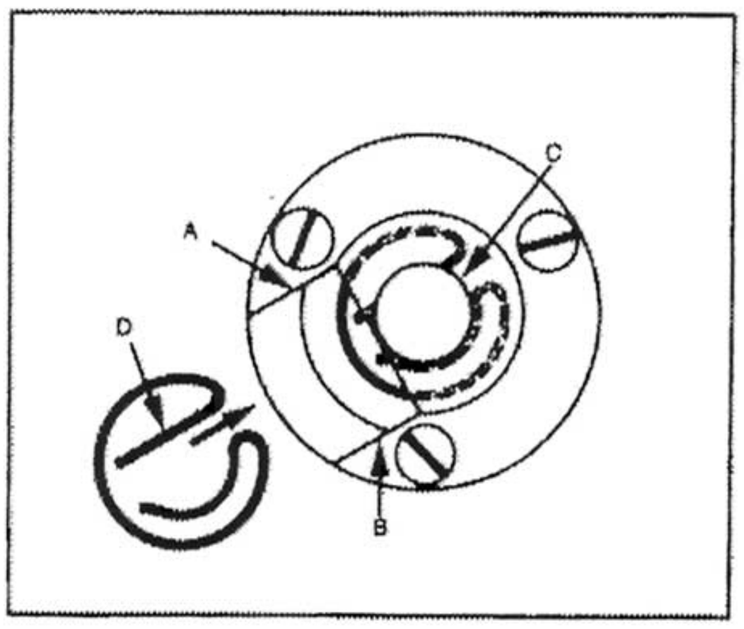
1. Lift off the rubber mat.
2. Remove the record spindle and slide out the C-shaped wire turntable clip (GT55 only).
3. Rotate the turntable until the motor pulley is visible through one of the two larger holes.
4. Stretch the drive belt over the pulley with the left thumb. Lift the turntable and belt off together, using a thumb in each hole and bearing against the unit plate with the fingers. As the turntable is retained by two spring-loaded catches it must be lifted firmly and level.

To fit the turntable

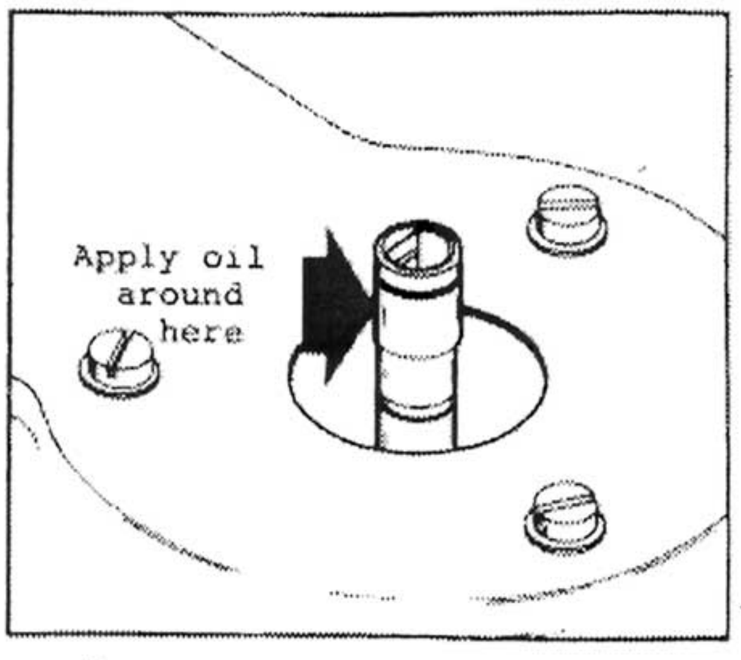
1. Lightly oil the turntable spindle and turntable bearing sleeve, if this has not already been done.
2. Fit the drive belt, untwisted and with the gold or silver marker stripe outwards, around the centre of the turntable driving drum.
3. Extend the belt with the left thumb through one of the large holes and fit the turntable onto its spindle.
4. Pass the belt over the centre of the motor pulley and press the turntable down firmly from diametrically opposite sides until the click of the retaining catches is felt. If there is no click and the turntable is not retained, lift it slightly, rotate it a fraction of a turn and press it down again.
5. Fit the C-shaped turntable retaining clip, see later instructions (GT55 only). Fit the rubber mat.

To fit the turntable retaining clip

1. Align the turntable so that the edges of the cut-out (A and B) are parallel to the flat edge of the turntable spindle (C).
2. Slide the clip onto the turntable spindle so that the straight section (D) fits into the slot in the spindle.



Fitting the retaining clip.



Lubricating the turntable spindle.

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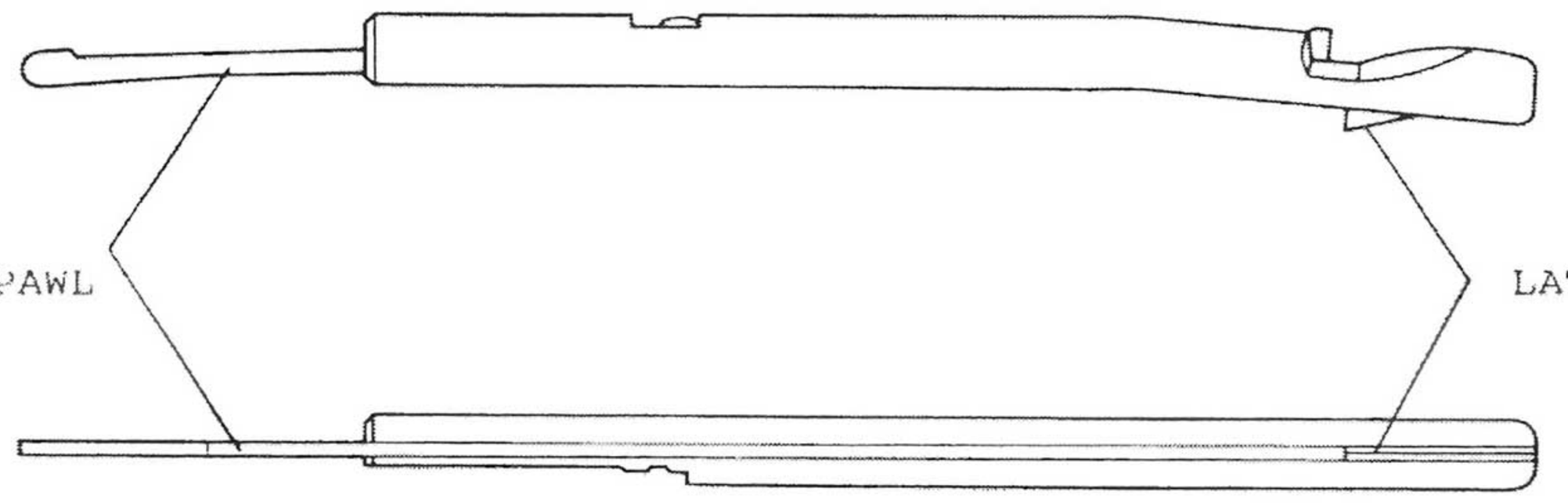
TEMPLATE FOR AUTOMATIC RECORD SPINDLE (G155)



If records fail to change automatically, check that

1) the turntable retaining clip is fitted correctly
2) the record spindle is pressed down fully
3) The spindle has not been bent out of shape, using the template above.

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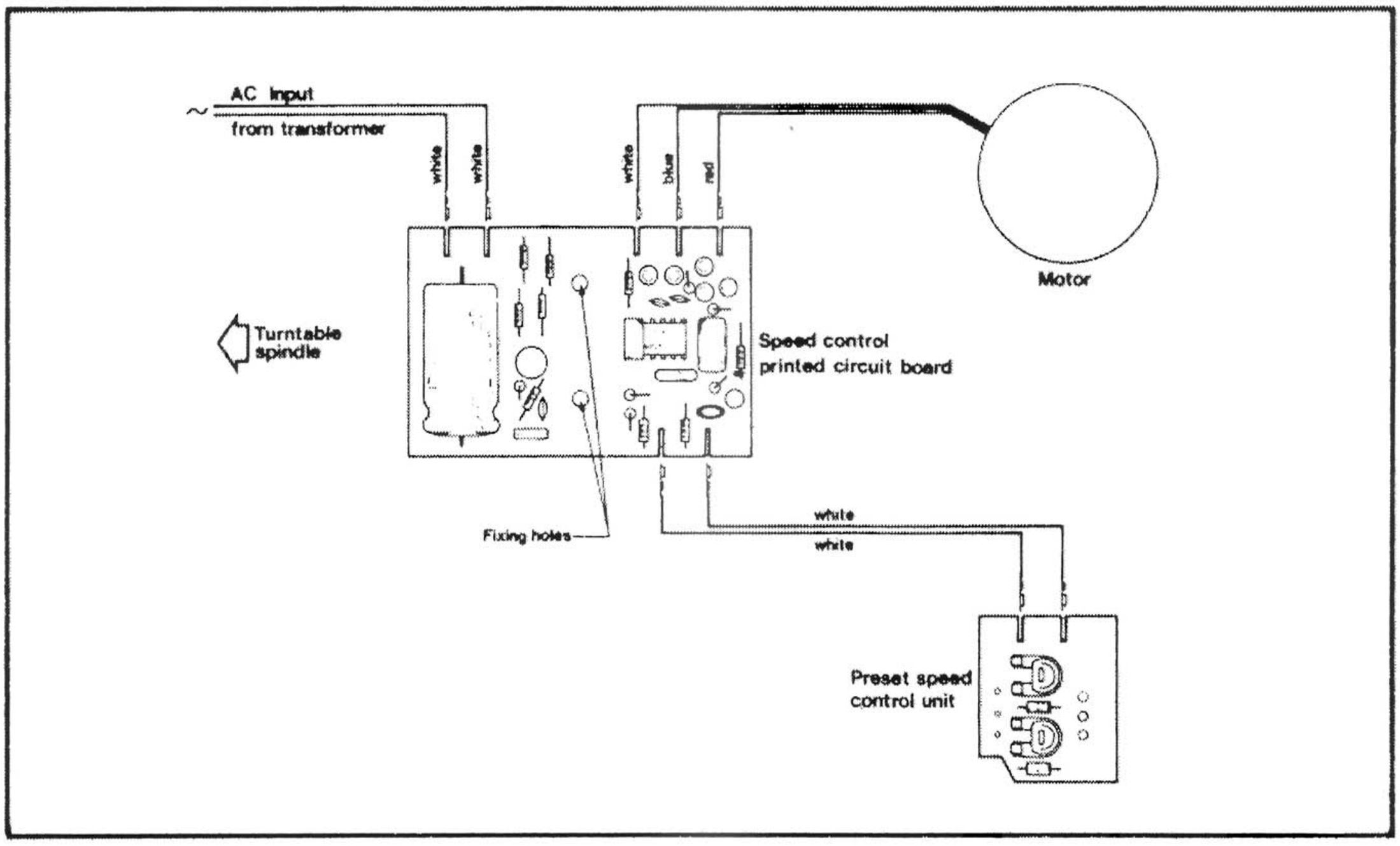
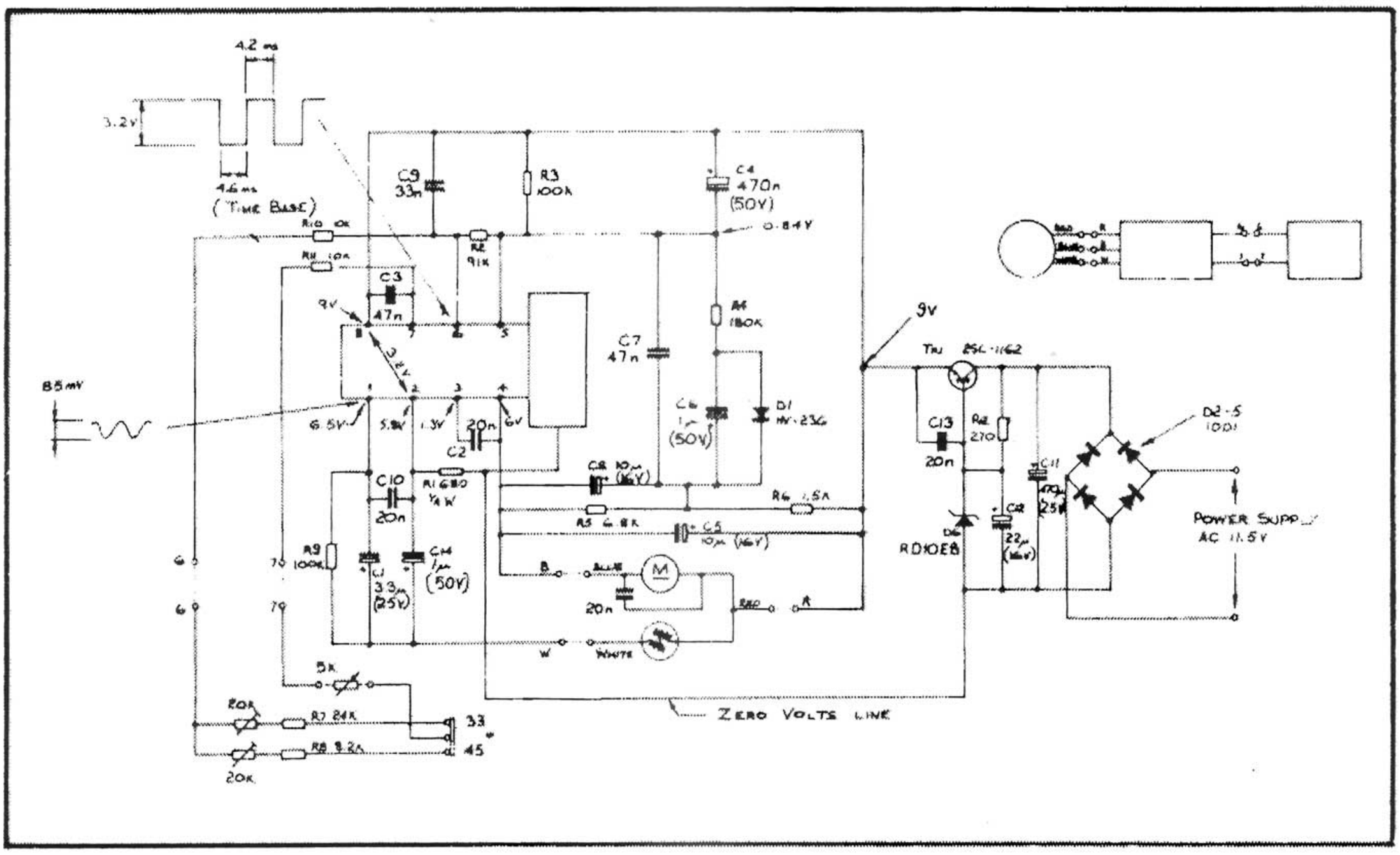
Exploded view, parts list and circuit diagrams

Motor and speed control circuits



Connections to printed circuit board



Circuit diagram (showing typical test waveforms and d.c. voltages)

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Garrard GT55 Series spare parts list

Parts are common to both GT55 (Single and Multiple Play) and GT55P (Single Play) except where specified otherwise.

Ref. No.	*Garrard Part No.*	*Description*
1	606/1/78701/001	Pivot screw
2	606/7/78137/001	Jewel housing
3	606/1/79786/001	Gimbal bracket, with bearings
4	999/4/30995/001	Screw
5	606/1/78714/001	Counterbalance weight
6	606/7/78474/001	Retainer
7	606/2/78630/001	Weight tube
8	606/2/78494/001	Screw
9	606/1/78703/001	Rear bearing, with screw
10	606/7/78475/001	Isolator
11		Not used
12	606/1/78698/001	Control link
13	606/7/78497/001	Trim for knob
14	606/2/78458/001	Bias knob
15	606/1/78710/001	Lifting platform
16	606/7/78691/001	Trim (anti-skate)
17	606/1/78709/001	Pickup housing, with trims (see also item 128)
18	606/7/44636/001	Washer
19	606/2/41218/055	Washer
20	991/4/02076/081	Screw
21		Not used
22	606/4/79423/001	Spring clip
23		Not used
24	606/4/44685/001	Spring
25	606/1/78706/001	Bias lever, with magnet
26	606/2/44679/001	Screw
27	991/4/01668/053	Screw
28	606/1/78718/001	Pickup spindle
29	606/7/78766/001	Locking washer
30	606/7/44635/001	Spring
31		Not used
32	606/1/78705/001	Pickup lever and spindle
33	606/2/41218/066	Washer
34	999/4/02651/013	Spring clip
35	606/7/76992/001	Turntable drive belt
36	606/1/79256/001	Turntable – 60Hz (GT55)
	606/1/78640/001	Turntable – 60Hz (GT55P)
	606/1/79256/002	Turntable – 50Hz (GT55)
	606/1/78640/002	Turntable – 50Hz (GT55P)
37	606/7/77892/001	Stroboscope band – 60Hz
	606/7/77892/002	Stroboscope band – 50Hz
38	606/7/78982/001	Cover for phono socket
39	999/4/30979/002	Screw (2)
40	606/4/43000/001	Solder tag
41	606/7/79246/001	Platform cover (GT55)
42	606/1/79249/001	Record platform with spring (GT55)
43	606/7/44666/001	Spring (GT55)
44	606/2/74285/003	Trim (GT55)
45	606/4/77640/001	Phono socket
46	606/1/79254/001	Unit plate, with pins, mounting springs etc. (GT55)
	606/1/78601/001	Unit plate, with pins, mounting springs etc. (GT55P)
47	606/7/79278/001	Trim for rest
48	606/1/79624/001	Graphics casting with trim
49	606/2/78457/001	Pickup rest
50	606/2/78680/001	Paddle for rest
51		Not used
52	606/7/44562/001	Washer
53	606/7/77177/001	Transit screw
54	606/4/43855	Transit clip
55	606/1/78652/001	Control casting, with trim (GT55P)
	606/1/78652/002	Control casting, with trim (GT55)
56	606/7/78663/001	Trim (GT55P)
	606/7/78663/002	Trim (GT55)
57	606/2/78743/001	Control knob (4)
58	606/7/77089/001	Strobe window
59	606/2/79285/001	Window surround
60		Not used
61		Not used
62	999/4/00852/022	Washer (3)
63	991/4/02076/134	Screw (3)
64	606/4/43855	Transit clip
65	606/1/78747/001	Speed control casting, with trim
66	606/7/78746/001	Trim
67	606/7/77177/001	Transit screw
68	606/2/78743/001	Control knob
69	606/4/43140/001	Motor mount
70	606/4/43129/001	Motor mount (2)
71		Not used
72	999/4/02654/001	Spring clip (3)
73	606/4/43857	Retaining clip (GT55)
74	606/2/75289/001	Spindle housing (GT55)
	606/1/77029/001	Thrust casting with record spindle (not shown) (GT55P)
75	991/4/00245/037	Screw (3) (GT55)
	999/4/01758/289	Screw (3) (GT55P)
76	606/7/78607/001	Turntable mat
77	606/7/79429/001	Centre disc
78	606/1/79250/001	Long record spindle (GT55)
79	606/1/75196/001	Single record spindle (GT55)
80	606/4/72698/001	Adaptor for single large hole records
81		Not used
82	606/1/75461/001	LRS100 large automatic record spindle (optional extra) (GT55)
83	606/7/78948/001	Cartridge setting gauge
84		Various 2.4mm cartridge fixing screws
85	606/1/78715/001	Pickup cartridge carrier, type C6
	606/1/79513/001	Pickup cartridge carrier kit, with fixing screws
86	606/2/78480/001	Nut (2)
87	606/4/44489/001	Washer
88	606/2/41218/077	Washer
89	606/4/75107	Bearing (2)
90	606/7/78477/001	Nut
91		Not used
92	606/1/78704/001	Rear pivot
93	606/1/79792/001	Outer gimbal
94	606/2/78488/001	Cover for rear pivot
95	606/1/79621/001	Jewel housing
96		Not used
97	991/4/01668/032	Screw (2)
98		Not used
99	606/1/79051/001	Restrictor screw
100	606/1/78694/001	Pickup arm body, with weight tube (see also item 128)
101		Not used
102	606/2/79532/001	Insert
103	606/1/79118/001	Lifting screw
104	606/7/78690/001	Lead retainer (5)
105	606/1/78697/001	Pickup head
106	606/1/78695/001	Contact holder with leads
107	606/2/78493/001	Pivot screw
108	606/7/78692/001	Trim (cueing rate)
109	606/7/78473/001	Pin retainer
110	606/2/78481/001	Overload pin
111		Not used
112	606/7/79105/001	Magnet carrier
113	606/7/44631/001	Spring
114	991/4/02076/097	Screw (2)
115	606/7/44630/001	Spring
116	991/4/02076/081	Screw
117	606/7/42963/001	Earth tag
118	606/2/79344/001	Cueing adjuster
119	606/1/78717/001	Cueing rate knob
120	606/2/41219/021	Washer
121	999/4/00431/002	Spring clip
122	606/7/78498/001	Trim for knob
123	991/4/01668/037	Screw
124	606/2/78476/001	Locking nut
125	606/2/78476/002	Locking nut
126	606/7/79503/001	Trim for cover
127	991/4/01668/048	Screw
128	606/1/78500/001	Complete pickup arm and housing module (not shown)
129-147		Not used
148	991/4/02076/097	Screw (2)
149	606/4/78057/001	Damping pad (4)
150	606/7/79434/001	Spacer
151		Not used
152	606/2/41218/086	Washer (2)
153	999/4/03302/011	Screw (2)
154	606/7/79112/001	Selector index spring (2)
155	606/2/79103/001	Slider (4)
156	606/7/78610/001	Control housing
157	606/1/79489/001	Audio lead – 2 phono/2 phono plugs
158	606/1/79487/001	Audio lead – 2 phono/5-pin DIN plug
159	999/4/30997/004	Retainer
160		Not used
161	606/4/79544/001	Gripper ring
162	606/7/78890/001	Cycle rod
163	999/4/02664/003	Retainer
164	606/2/41218/075	Washer
165	606/7/79228/001	Cueing rod
166	606/7/44693/001	Spring
167	606/7/78608/001	Selector control lever
168	606/7/78622/001	Programme link
169	606/7/78606/001	Switch control lever
170	606/7/78650/001	Selector rod
171	999/4/02664/003	Retainer
172	606/7/78651/001	Programme rod
173	606/7/44399/001	Screw
174	606/7/79235/001	Bearing
175	606/1/78921/001	Support plate, with cycle lever
176	606/7/78889/001	Cycle lever
177	606/2/41218/098	Washer
178	999/4/00431/011	Spring clip
179	999/4/00431/002	Spring clip
180	606/7/78671/001	Programme lever
181		Not used

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Ref. No.	Garrard Part No.	Description
182	606/7/44644/001	Spring
183	606/4/43217/001	Ball
184	606/2/78654/001	Trip pawl
185	999/4/30993/002	Fastener
186	606/2/41234/008	Washer
187	606/2/41234/002	Washer
188	606/7/78653/001	Friction lever
189	606/7/44643/001	Spring
190	606/1/78664/001	Main cam, with lever (fill cavity with Damping Fluid 606/1/71724/004 before assembling)
191	606/7/78762/001	Sealing washer
192	606/7/79449/001	Friction washer
193	606/1/79060/001	Pickup actuating lever
194	999/4/01515/006	Screw
195	606/7/79230/001	Lifting blade
196	606/1/78674/001	Complete mechanism module
197	999/4/02651/003	Spring clip
198	999/4/30979/020	Screw
199	606/2/41234/003	Washer
200	606/4/79526/001	Spring clip
201	606/2/41234/002	Washer (2)
202	999/4/00985/011	Fastener (2)
203	606/7/78675/001	Lower bearing pinion
204	999/4/01576/049	Screw
205	999/4/30979/020	Screw
206	914/7/00539/001	Clip
207	606/2/79721/001	Overload slider
208	999/4/00431/021	Spring clip (GT55)
209	606/7/44696/001	Spring
210	999/4/01515/007	Screw (GT55)
211	606/2/79241/001	Spring blade (GT55)
212	606/7/79543/001	Spacer (GT55)
213	606/2/41218/073	Washer (GT55)
214	606/7/79244/001	Release lever (GT55)
215	606/2/79242/001	Retainer (GT55)
216	606/7/44660/001	Spring (GT55)
217	606/1/78616/001	Turntable spindle housing (GT55P)
	606/1/79255/001	Turntable spindle housing (GT55)
218	606/7/78639/001	Spacer (GT55P)
219	606/4/58174/001	Cushion ring (GT55)
220	606/2/75417/001	Thrust washer (GT55)
221	606/1/75285/001	Ball race (GT55)
222	606/4/75417/001	Thrust washer (GT55)
223	606/2/79517/001	Flange
224	606/7/78973/001	Drive belt for mechanism
225	606/7/78613/001	Drive sprocket
226	999/4/01515/019	Screw
227	999/4/30980/001	Cable strap (3)
228	501/7/61243/001	Cable grip
229	999/4/01574/003	Screw (2)
230	501/7/61231/001	Strobe moulding with mirror
231	606/4/75202/001	Mirror
232	999/4/30997/004	Retainer (2)
233	606/7/78751/001	Cover for speed control
234	606/1/79001/001	Speed control with wheel
235	501/4/61358/001	Lead (speed control) (2)
236	606/2/79103/001	Slider
237	501/4/61306/001	Spacer (2)
238	501/7/61301/001	Speed control circuit board
239	999/4/00985/011	Retainer (2)
240	501/7/61232/001	Light cover
241		Not used
242	501/1/61251/001	Bulb with resistor
243	999/4/02439/008	Spring clip
244	606/1/78742/001	Pinion spindle with spring clip
245	606/1/79793/001	Pinion
246	999/4/30979/004	Screw
247	606/2/73791/001	Strain relief
248	606/2/73821/001	Insulating plate
249	999/4/30979/002	Screw
250	999/4/30979/021	Screw
251		Not used
252	501/1/61287/001	Loom, with stroboscope, motor switch and connectors (U.S.A. and Canada)
	501/1/61287/002	Loom, with stroboscope, motor and changeover switches and connectors (U.K. and Europe)
253	501/4/61276/001	Motor
254	501/1/61330/001	Transformer, with mounting plate
255	999/4/30975/001	Screw (3)
256	501/1/61290/001	Motor pulley, with screws
257	991/4/01668/034	Screw (2)
258	999/4/30997/004	Retainer (2)
259	606/2/41218/009	Washer (2)
260	991/4/02076/097	Screw (2)
261		Not used
262	501/1/61324/002	Lead (transformer)
263	606/7/79227/001	Friction washer
264	999/4/00985/011	Retainer
265	999/4/00852/008	Washer
266	606/7/79618/001	Cueing control lever
267	606/4/44697/001	Spring
268	606/4/44698/001	Spring
269	606/2/41218/053	Washer
270	991/4/01911/004	Nut
271	999/4/30979/002	Screw
272	606/7/45003/001	Spring
273	999/4/02654/001	Spring clip
274	606/2/41234/003	Washer
275	606/1/72192/003	Power supply and ground leads with connectors (U.S.A. and Canada)
276		Part of 252
277	606/7/44690/001	Spring
278		Not used
279		Not used
280	606/1/79617/001	Cam lever, with friction plate etc. (spring tension critically set)
281	606/2/41218/055	Washer
282	606/7/78672/001	Selector lever
283	606/7/44668/001	Spring
284	606/2/78761/001	Cueing pad (saturate with Damping Fluid 606/1/71724/004 for ½ hour before assembling)
285	606/2/41234/001	Washer
286	606/7/44557/001	Spring
287	606/7/79066/001	Inter selector lever
288	999/4/00431/001	Spring clip
289		Not used
290	606/7/78673/001	Cueing lever
291		Not used
292	606/4/44699/001	Spring
293	606/7/78670/001	Index lever
294	999/4/02654/001	Spring clip
295	606/2/41218/046	Washer

NOT SHOWN

606/1/71724/004	Damping fluid for main cam – 2 grams (green top)
606/7/76709/001	Type A6 record platform adaptor for 7in records (GT55)

Notes

1 Resistors are rated at ¼W.

2 Working voltage of electrolytic capacitors is shown after their value, thus: 3.3μ (25V).

3 D.C. test voltages are measured relative to the 'Zero Volts Line'. A convenient connection point is the negative wire lead of capacitor C11.

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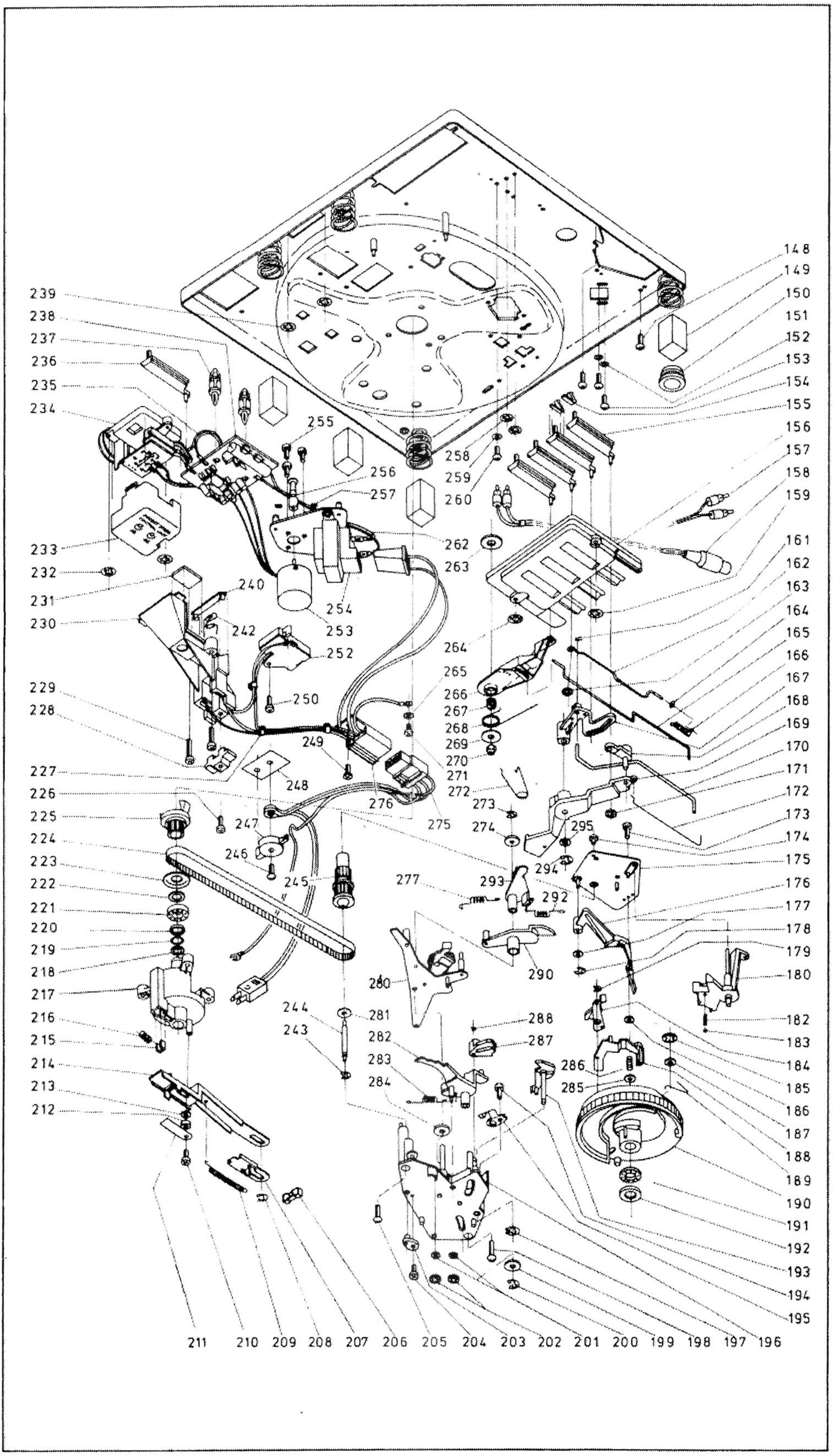
Garrard GT55 Series exploded view

Parts below unit plate



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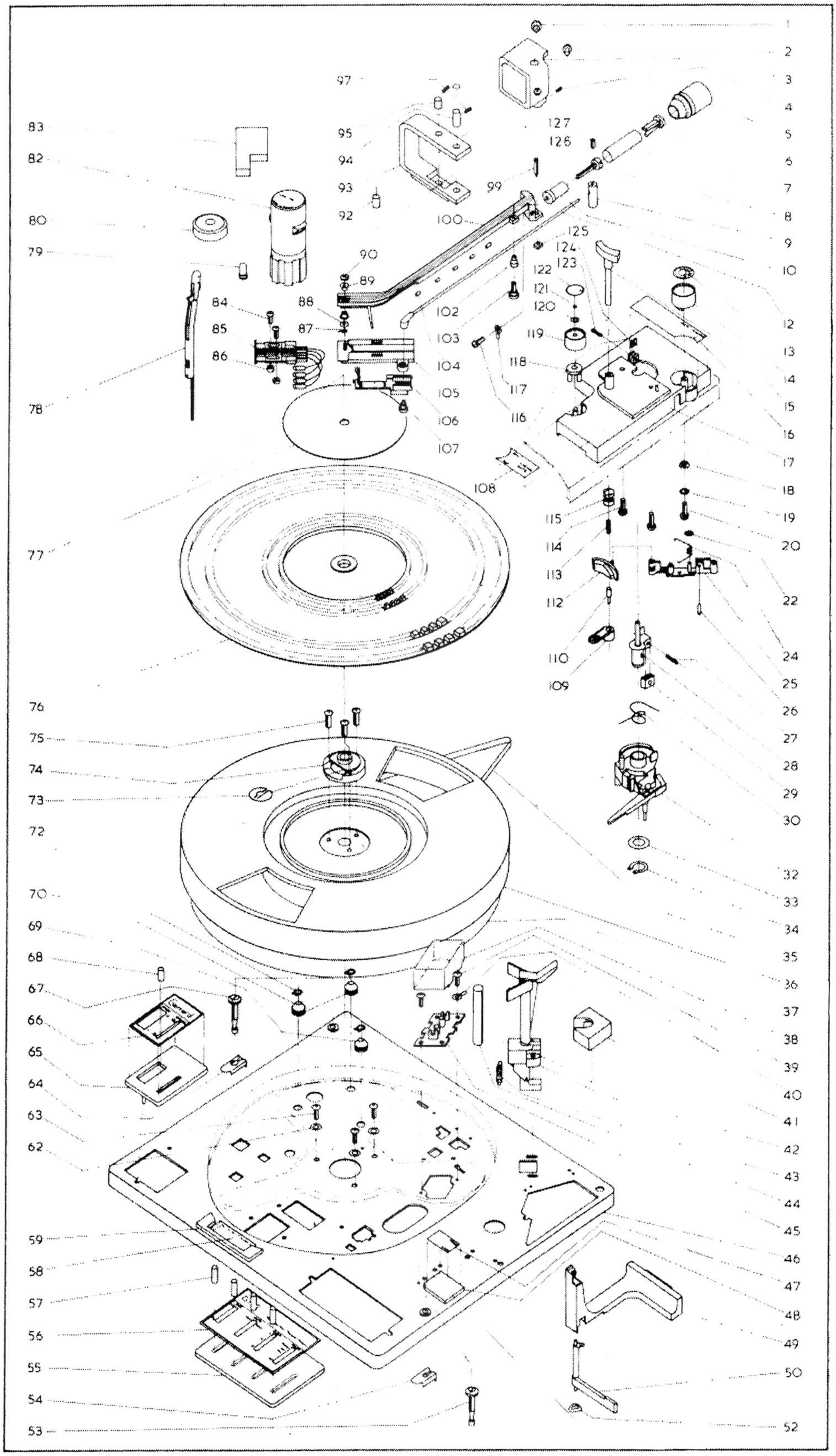
Garrard GT55 Series exploded view

Parts above unit plate



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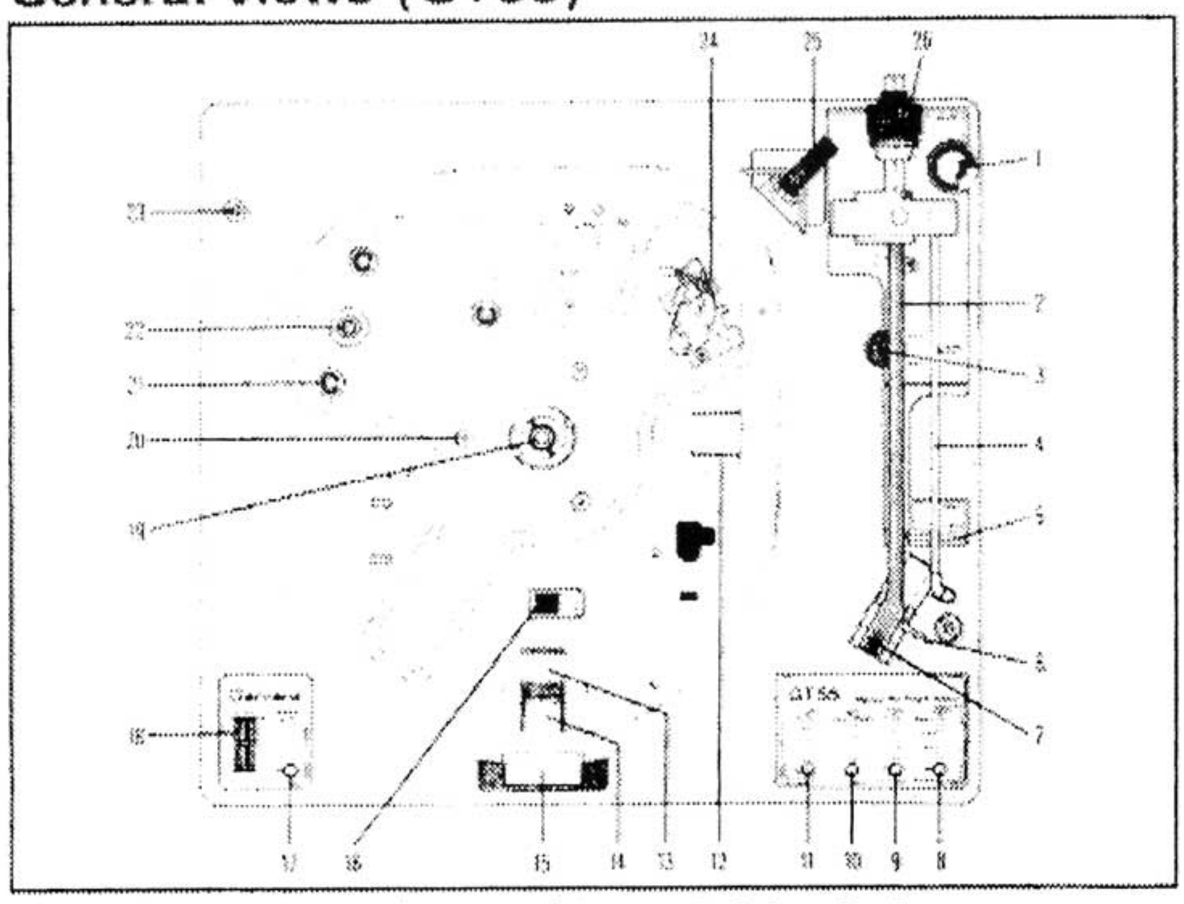
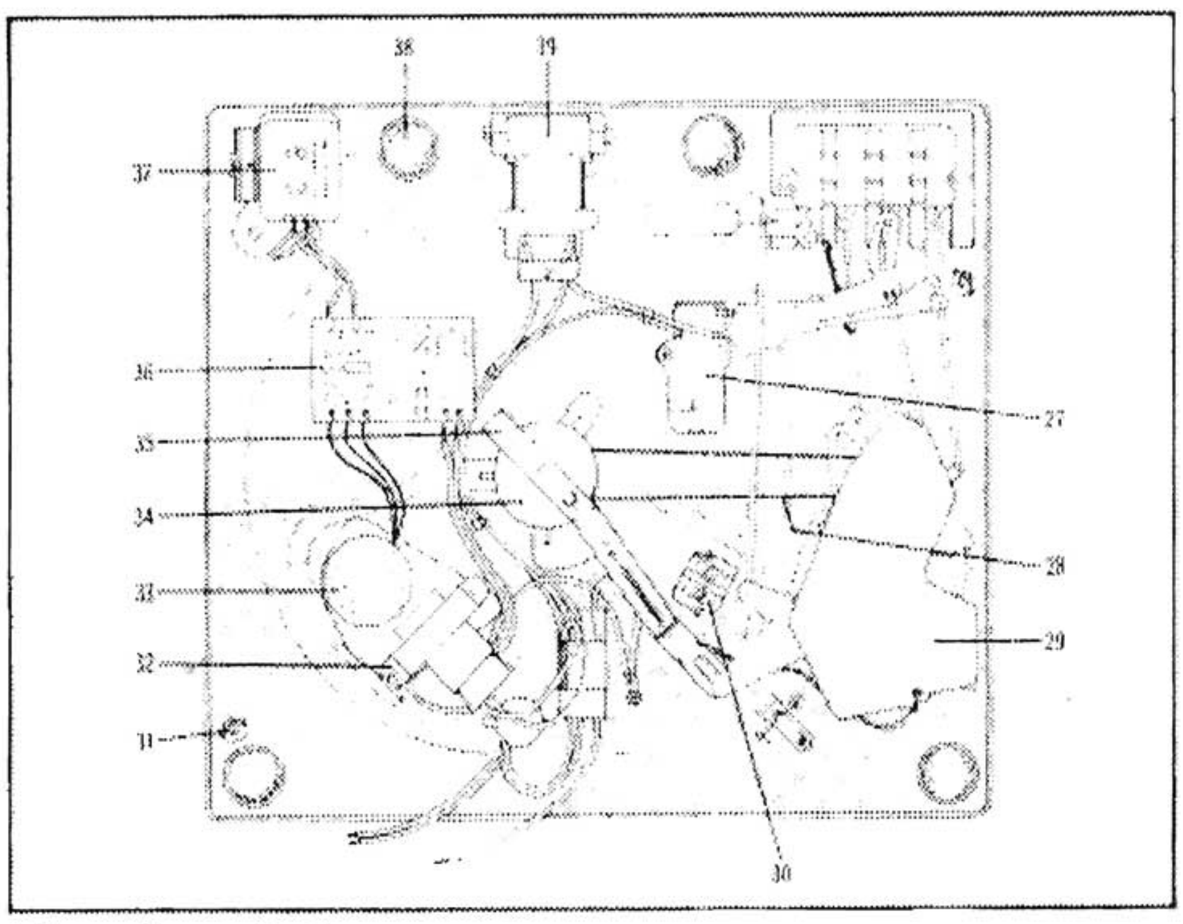
General views (GT55)



View from above (turntable and drive belt removed)



View from below

Key to diagrams

1 Anti-skate control
2 Pickup arm (tonearm)
3 Cueing rate control
4 Pickup arm control link
5 Pickup arm locking lever
6 Finger lift
7 Pickup head bearing
8 Operating mode selector
9 Record size selector
10 Automatic control
11 Cueing control
12 Automatic mechanism drive belt (shown through access slot)
13 Stroboscope lamp
14 Stroboscope mirror
15 Stroboscope viewing window
16 Voltage changeover switch (dual voltage models only)
17 Speed selector
18 Pitch control (shown at mid-setting)
19 Turntable spindle
20 Screw fixing spindle housing (3) (Slacken to set tension in belt 12)
21 Motor mounting grommet (3)
22 Motor pulley
23 Transit screw (2)
24 Rear of phono sockets
25 Record support platform (GT55 only)
26 Pickup arm counterbalance weight
27 Motor switch
28 Automatic mechanism drive belt
29 Automatic mechanism module
30 Phono sockets
31 Transit clip (2)
32 Mains transformer
33 Motor
34 Turntable spindle housing
35 Record release lever (GT55 only)
36 Speed control circuit board
37 Preset speed control unit (Access to trimmers through cover)
38 Foam damping pad (4)
39 Stroboscope housing

Dismantling

The GT55 series has been designed to simplify fitting replacement parts. The major assemblies, such as the pickup arm, turntable spindle and the automatic mechanism are of modular construction. They can be removed easily and with minimal disturbance to other components.
Bold numbers are those used on the general views.
Numbers in brackets are those used on the exploded views.

Pickup arm module 2 (complete with base casting and leads)

1 Unsolder and release five pickup leads from the phono socket terminals (45), noting their positions for reassembly, after removing turntable (36), drive belt (35) and cover (38).
2 Move pickup arm locking lever to 'Free'.
3 Release two fixing screws (148) and lift module clear.

After reassembly, carry out any necessary pickup arm adjustments such as stylus force. Make sure that the pickup leads are sufficiently slack to avoid impeding free arm movement.

Automatic mechanism module 29

1 Remove the turntable (36), drive belt (35) and cover (38).
2 Unsolder and release five pickup leads from the phono socket terminals (45), noting their position for reassembly.
3 Remove the fixing screw (210) - with washers, spring blade and release lever (214) from the turntable spindle housing (GT55).
4 Release both mechanism fixing screws (198, 205), ease the mechanism away from the unit plate and carefully disengage control rods.
5 Manoeuvre the toothed mechanism drive belt (224) around the drive sprocket (225) and over the turntable spindle. It can then be withdrawn through the round hole in the unit plate and released together with the mechanism module. Be careful, when withdrawing the module, not to damage the fine pickup leads.

When reassembling, check that the cycle, cueing, selector and programme rods (162, 165, 170 and 172) are engaged.

Motor 33 and mains transformer 32

Disconnect the power supply

1 Pull off two slide-on lead connectors from the transformer output terminals and three slide-on connectors from the motor at the speed control circuit board (238). Unplug the 2-way connector from the transformer input.
2 Remove three spring clips (72) securing the mounting plate pillars to the rubber motor mounts (69, 70) in the unit plate.
3 Pull the mounting plate straight out of the mountings.

When reassembling, press the pillars fully into the rubber grommets and check that the mounting plate hangs freely and evenly before refitting the spring clips. Fit a set of new grommets if in doubt, noting the different types and their locations.

Turntable spindle housing 34

1 Remove the turntable (36) and its drive belt (35).
2 Remove the fixing screw (210) - with washers, spring blade and release lever (214) from the bottom of the spindle housing (GT55).
3 Release three screws securing the spindle housing to the unit plate (63).
4 Lower the spindle housing and disengage the toothed mechanism drive belt (224).

Speed control circuit board 36

Disconnect the power supply

1 Pull off seven slide-on lead connectors.
2 Compress the heads of the two plastic spacers (237) and lift the board off. If the spacers are damaged, fit new ones before replacing the circuit board.

Preset speed control unit 37

1 Pull off two slide-on lead connectors from control unit at circuit board (238).
2 Compress sides of moulded control unit cover (233) and lift it clear.
3 Prise off both retainers (232) to release control unit. Fit new retainers for reassembly.

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SERVICE BULLETIN #10

DATE: December 1, 1976

TO: ALL AUTHORIZED SELF SERVICING DEALERS AND SERVICE AGENCIES

FROM: Nick Romano

SUBJECT: GT55 SERVICE MANUAL

Enclosed please find a copy of the Garrard GT55 Service Manual. This manual should be used for service referencing, spare parts ordering and for the general operating information on this unit.

Please read this manual carefully as this unit incorporates an all new, silent mechanism. The operation of the controls provide special features not available on other Garrard models. The new GT55 Professional Belt Drive Multiple Play Turntable features the following:

1-Magnesium True Tangent Tracking Tonearm with a mass of only 14 grams.
2-1,000 rpm electronic servo-controlled DC motor.
3-Electronically governed variable speed control.

Additional quantities of the Service Manual may be ordered from our National Service Department.

If you have any questions concerning this unit, please do not hesitate to let me know.

Sincerely,

NR:gg
enclosure

Nick Romano
National Service Manager

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SERVICE BULLETIN #12

DATE: January 25, 1977

TO: ALL AUTHORIZED SERVICE AGENCIES AND SELF-SERVICING DEALERS

FROM: Nick Romano

SUBJECT: GENERAL SERVICE BULLETIN

This Service Bulletin deals with two of our newer models, the DD75 and the GT55. Although we have supplied you with service manuals and exploded views, there are questions and problems that come up in the field which are not covered by the manuals.

GT55

Operation - The new mechanism of the GT55 has a different operating sequence than that of other Garrard turntables. For instance, if you index the tonearm manually with the mode control set in automatic, the turntable won't shut off automatically. Instead, the arm will recycle and play the record one more time before it shuts off. The normal procedure for playing one record at a time automatically is to place the mode control in automatic, then push the start control.

Field Condition - A -

We have found a few instances where the pick-up arm will not complete a full cycle. The problem was caused, not by the turntable, but by a slightly oversized dimension on the motor board of the BW40 base (diagram attached). The repair is quick and easy; a few swipes with a wood file on the motor board should eliminate the problem.

B Cue Rate Control

Early production of this unit incorporated a variable cueing control which was factory set for optimum performance. In some instances, the consumer has readjusted this control fully clockwise, resulting in the pick-up arm setting down too quickly and possible damage to the stylus may occur. The other possibility is that the control has been rotated to the extreme counter-clockwise position, resulting in too much pressure being applied to the arm in an upward direction, thus causing the pick-up arm not to lower. There is also the extremely remote possibility that the pressure could cause some of the viscous damping fluid to ooze out.

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If this is the case and it has contaminated the mechanism, simply remove it and return it to us for replacement under the terms of our warranty agreement.

C - Slow Speeds

This is caused by the turntable not being fully seated into the drive sprocket (Ref. #225 on the exploded view). Turntable should actually snap into place.

DD75

Field Condition

Unit tracks record, but fails to shut off upon completion. This is caused by trip lever assembly (Ref. #34 on exploded view) being out of adjustment. Realigning the trip lever so that it clears the photo transistor housing, (Ref. #168 on exploded view) should eliminate problem.

DD75 - GT55

Warranty Parts Replacement

We ask that all defective printed circuit boards be returned for replacement. Please do not replace the individual components on the board. As soon as we receive the defective board with copies 3 and 4 of the warranty claim, a replacement will be sent to you.

We trust that this information will be of help to you.

Sincerely,

Nick Romano
National Service Manager

NR:mb
attachment

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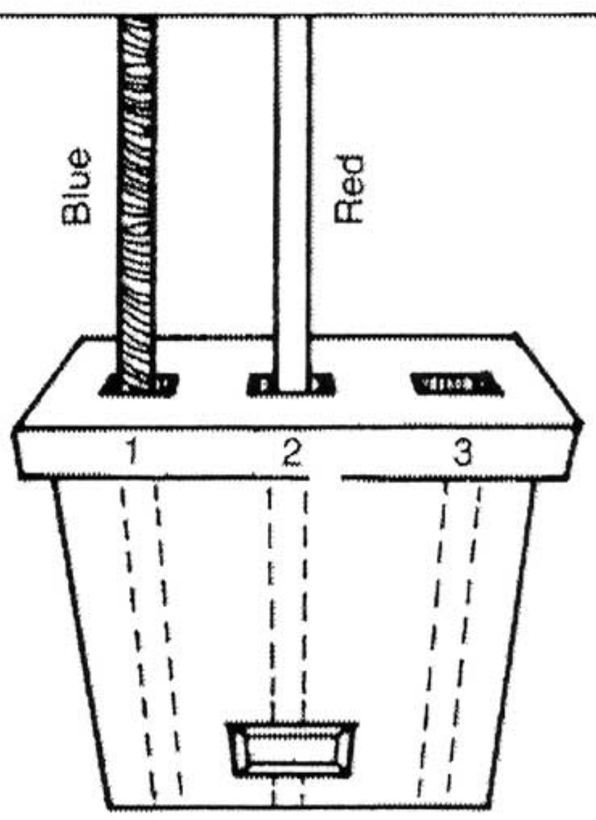
CONVERTING GARRARD MODEL GT55 FROM 110 VOLT TO 220 VOLT OPERATION

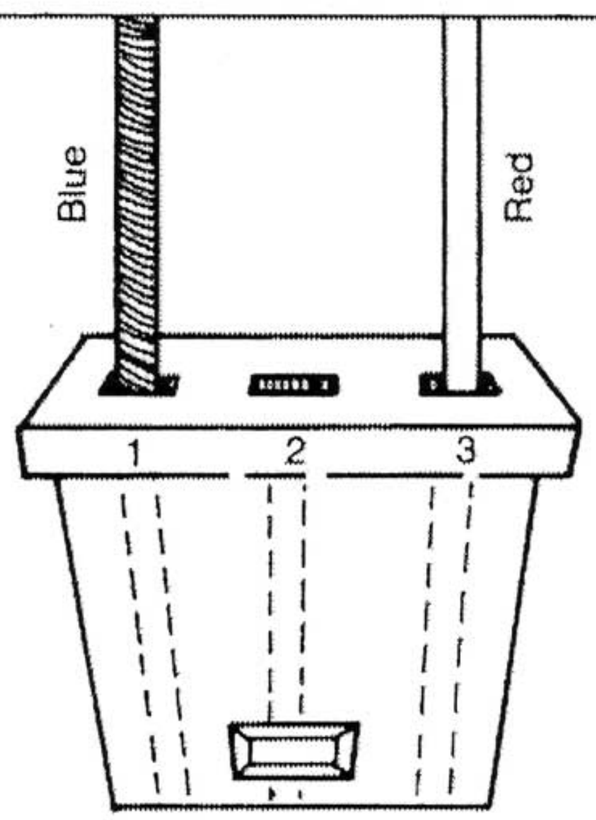
In order to convert the Garrard GT55 from 110 volt to 220 volt operation, the following rewiring must be performed. This should be done by one of our Authorized Service Agencies or by the dealer from whom you made your purchase. Before performing any work, unplug the unit from its power outlet and lock the pick-up arm on its rest.

PROCEDURE

Stand the unit up in its base. Disconnect the red lead from the male plug going into the transformer from pin 2, and connect to pin 3 (See figures 1 and 2). Change the resistor in series with the neon bulb from the existing 27K ohm to 100K ohm 1/4 watt.



Before
Figure 1



After
Figure 2

The unit will operate on either 50 or 60 hertz without modification. For visual confirmation of correct speed, a replacement strobe ring may be purchased from our National Parts Department or by contacting any of our Authorized Service Agencies.

GARRARD

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