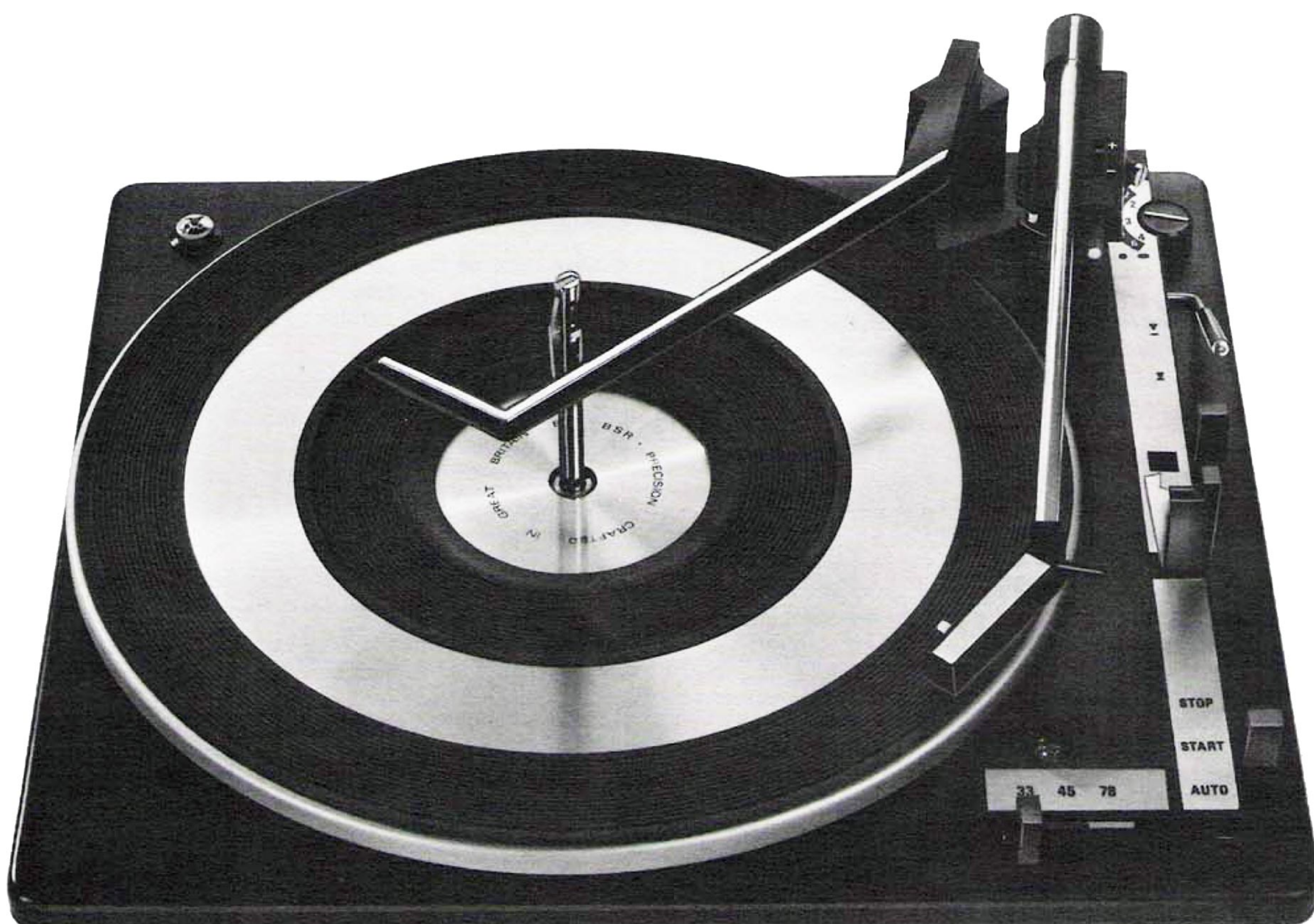


BSR

SERVICE MANUAL

C 141 R1



GENERAL INFORMATION

The BSR Model C141 R1 record changer will play a stack of one to six records in automatic sequences and shut off after playing the last record. 33 $\frac{1}{3}$, 45 and 78 rpm records can be played.

Indexing, correct tone arm set-down, for playing 12", 10" or 7" records is determined by the position of the size selector control knob.

The tripping method is the velocity type. Rapid tone arm acceleration is required to actuate the trip mechanism.

The changer operates on 117 VAC 60 Hz.

BSR (USA) LIMITED

ROUTE 303, BLAUVELT, NEW YORK 10913

OPERATING INSTRUCTION

Automatic Play

Grasp control arm 149 at the rear, raise it to its highest position and swing counterclockwise until it is positioned over the tone arm in the tone arm rest 115. Place a maximum of six records (all the same size and speed) on spindle 152. The first record to be played must be located carefully on the ledge of spindle 152 and held in place until the rest of the records are placed on spindle 152. Return control arm 149 to its center position and lower it onto the stack of records. Move the size selector knob to the 12, 10 or 7 position for the 12", 10" or 7" records to be played. Move the speed selector knob to the 33, 45, or 78 position for the 33 $\frac{1}{3}$, 45, or 78 rpm records to be played.

If the cartridge is equipped with more than one stylus, be sure the correct stylus is positioned for the records to be played.

If 45 rpm (large center hole) records without center hole adaptors are to be played, slip the 45 rpm adaptor spindle over automatic spindle 152. The arrow on the top of the 45 rpm adaptor spindle must point toward the front left corner of the changer.

Starting

Be sure the tone arm is free and resting on the tone arm rest 115. Move the control knob to the Auto position and hold until the turntable starts to revolve, then release.

Rejecting

To reject a record at any time while the changer is in operation, move the control knob to the Auto position and then release. If the record being played was not the last one in the stack, the next record will be dropped and played. If the record being played was the last record in the stack, the tone arm will move to the tone arm rest and the changer will shut off.

Stopping

The changer can be stopped at any time by moving the control knob to the Stop position. If the changer is stopped during the "change cycle," it must be allowed to complete the cycle (by manual rotation of the turntable, if necessary) before moving the tone arm and removing the records. During normal automatic operation, with the control arm in the center position, the changer will stop automatically after the last record has been played.

Unloading

To unload the changer, raise the control arm to its highest position and swing it into position over the tone arm rest 115. Using both hands, grasp the bottom record and gently lift the record stack straight up and off the spindle.

After unloading a stack of 45 rpm records, with large center holes, make certain the 45 rpm adaptor spindle is properly seated before playing additional 45 rpm records.

Semi-Automatic Play

For semi-automatic play and repeat of a single record, lift the control arm, move it to its position over the tone arm and leave it there. Place the record on the turntable and set the controls for correct record size and speed. Select correct stylus.

To start, move the control knob to the Auto position and release, allowing the knob to move back to the Start position. The turntable will revolve, the first (bottom) record will drop to the turntable and the tone arm will place the stylus in the starting groove to play the record.

If the control arm is returned to the center position over the turntable, after the stylus is in the starting groove, the tone arm will be returned to the tone arm rest and the changer will shut off automatically at the end of the record.

NOTE: Records that do not have the "starting" or "fast-finishing" grooves must be played manually.

Manual Play

To manually play a record, move the control arm to its position over the tone arm rest. With the correct speed and stylus selected, the record is placed on the turntable and the control arm moved to the center position.

The control knob is moved to the Start position to start the turntable.

Using the finger lift, raise the tone arm from the rest and move it to the playing position on the record.

At the end of the record, the tone arm will return to the tone arm rest and the changer will shut off automatically.

Cueing Lever

Raising or lowering the cueing lever 112 raises or lowers the tone arm, under positive control, from any point on or off the record. Lift the cueing lever and the tone arm is lifted into position where it can be moved manually to any position over the record and then lowered gently to the selected groove by lowering the cueing lever.

To pause while playing, raise the cueing lever to lift the stylus from the record for the desired length of time and lower the cueing lever to return the stylus to the same record groove.

The cueing lever must be in the lowered position during automatic operation of the changer.

CHANGE CYCLE

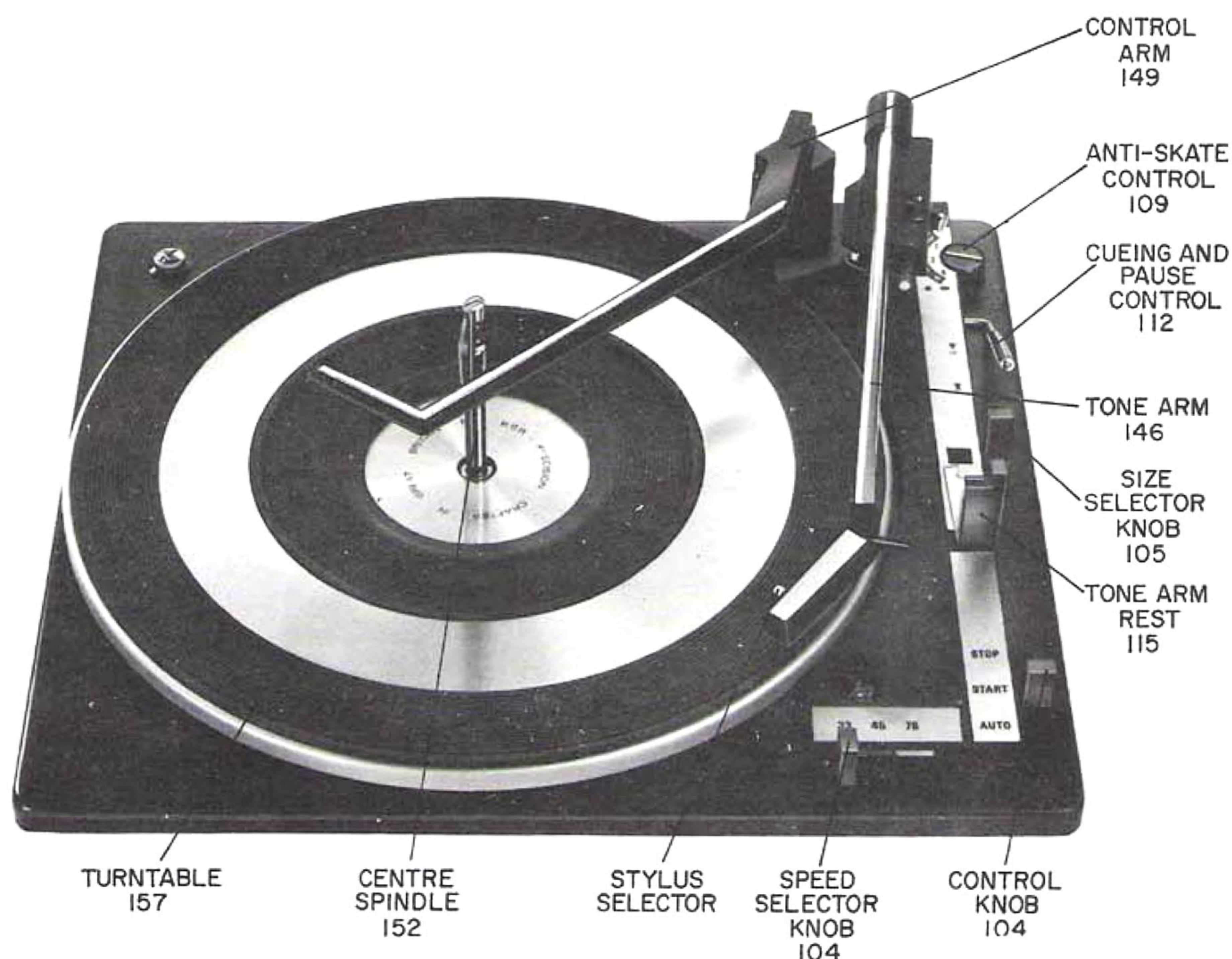
General Information

The change cycle is started by moving the control knob to the Auto position, then releasing it. The tone arm lifts and a record is dropped to the turntable. The tone arm moves toward the spindle, stops at the point determined by the setting of the 12 10 7 knob, where it is lowered to the lead-in groove of the record.

When the needle reaches the end of the recorded grooves and enters the fast-finish groove at the end of the record,

the tone arm movement toward the spindle accelerates rapidly to actuate the velocity trip mechanism. The tone arm is lifted and returned to a position over the tone arm rest, and the bottom record on the spindle drops into playing position on the turntable. The tone arm returns to the starting point of the record and is lowered to the lead-in groove.

The previously described action takes place each time the end of a record is reached until the last record has played.



At this time, the velocity trip mechanism starts another change cycle and the tone arm returns to its position over the tone arm rest. The tone arm is then lowered to the tone arm rest and automatic shutoff occurs.

NOTE: The following is a description of the functions that the various parts perform during a change cycle. Observe the change cycle operation while slowly rotating the turntable by hand. The following description can then be readily followed and the function of each part more easily understood.

Speed Change Mechanism

The model C141 R1 is driven by a 2-pole motor 27 or 4-pole motor 63 through the 3-step pulley shaft. Power is transmitted to turntable 157 by the idler pulley 36 pressing against the driving rim of turntable 157 and against one of the three steps of the motor pulley.

When the speed selector knob is moved to the 78 position, idler pulley 36 is positioned to engage the largest diameter step on the motor pulley. As the speed control knob is moved to the 45 and 33 positions, idler pulley 36 is progressively positioned to engage smaller diameter steps on the motor pulley for slower speeds.

Starting The Change Cycle

When the control knob 104 is pushed toward the Auto position, reject slide 90 moves reject plate assembly 88 causing switch link 97 to activate switch lever 94. In turn, switch lever 94 depresses the switch plunger to close off-on switch assembly 19. This impresses the necessary voltage on the mechanism drive motor. At the same time, switch lever 94 pivots away from idler arm 33 to allow jockey pulley spring 34 to move idler wheel 36 against the inside rim of the turntable and against the motor shaft. This action starts the turntable rotating in a clockwise direction.

When the control knob 104 is moved from the Stop position toward the Auto position, the angled tip of reject lever assembly 84 contacts actuating slide spring 57 causing actuating slide 66 to move toward the turntable shaft. Actuating slide 66 contacts and pivots actuating pawl 39

into the path of the projection on the turntable boss and gear.


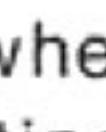
Since the turntable is rotating clockwise, the projection on the turntable boss and gear strikes actuating pawl 39 to move cam gear 40 far enough to mesh with the teeth on the turntable gear. This action starts cam gear 40 rotating in a counterclockwise direction to initiate the change cycle.

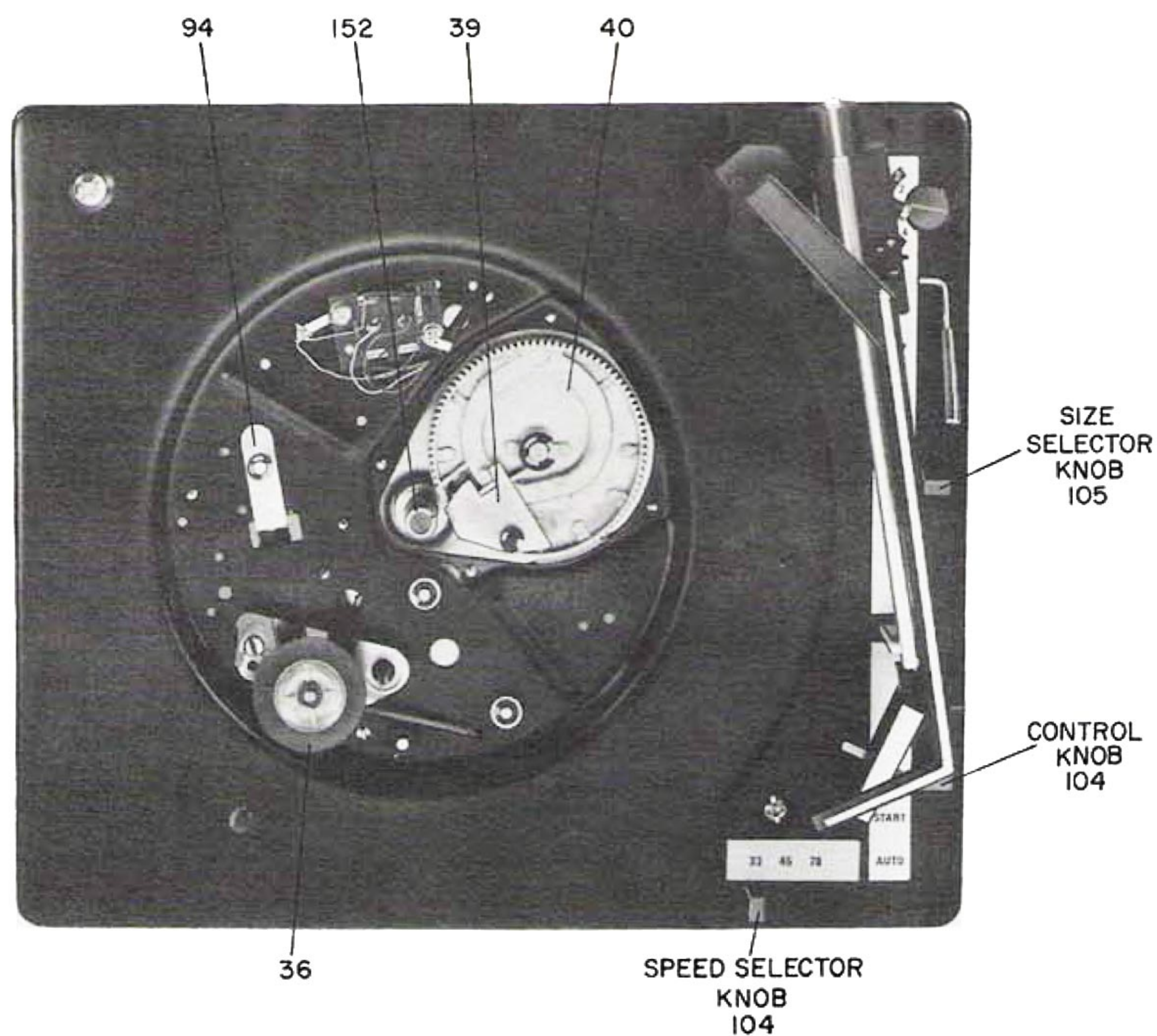
Tone Arm Action and Record Drop

The stud and roller on operating plate 61 follows the eccentric groove in the bottom of the cam gear 40. The resulting pivoting action of operating plate 61 controls the vertical and horizontal movements of the tone arm.

As operating plate 61 pivots, tone arm raising spindle 69 rides up the inclined portion of operating plate 61 to lift the tone arm from the tone arm rest 115. As operating plate 61 continues to pivot, feed lever link 58 retracts the feed lever in automatic spindle 152 to slide the bottom record off the spindle 152 ledge so the record will drop to the turntable 157.

The tone arm set-down point is determined by the position of the 12 10 7 knob. When the 12 10 7 knob is moved to the desired position, selector slide 91 moves detent plate 87 to hold the cut-off slide 41 in position to stop the selector lever 79 at the correct position to fit into the notch of quadrant 73 for tone arm set-down for the record size selected.

As operating plate 61 continues to pivot during the change cycle the spring  fitted to operating plate 61 engages with toggle wheel 67, causing the quadrant to move in the opposite direction operating plate 61 is pivoting. The movement of the quadrant is stopped by the selector lever 79 at the point determined by the size selector knob. Since tone arm hinge 127 is mounted on the spindle of quadrant 73 the tone arm is now positioned at the set-down point for the record size selected. After the set-down point is reached toggle wheel 67 slips off spring  on operating plate 61. Operating plate 61 continues to cycle, reversing direction allowing the tone arm raising spindle 69 to ride down the inclined portion of the operating plate 61 lowering the tone arm to the record surface.



After the tone arm is in place on the record, operating plate 61 continues to move, pushing the selector lever clear of quadrant 73. This allows quadrant 73 and the tone arm to move freely as the stylus follows the record grooves. The operating plate 61 now stops since the cam gear 40, which drives it, has made a complete revolution and, being no longer meshed with the turntable gear has stopped.

Velocity Trip

After a record has been played, a velocity type trip mechanism initiates a new change cycle. This is due to the accelerated inward movement of the tone arm as the stylus enters the trip groove at the end of the record.

While the record is playing, the tone arm moves slowly toward the spindle 152. Actuating slide 66 is moved by the pin on quadrant 73, to make contact with actuating pawl 39. As the record continues to play, actuating slide 66 moves the actuating pawl 39 toward the turntable 157 hub and gear. On each revolution of turntable 157 the projection on turntable 157 hub pushes actuating pawl 39 out of the way to prevent a premature change cycle. This is possible because of the slow movement of the tone arm while the record is playing. When the stylus enters the record lead-out groove, the tone arm accelerates rapidly and actuating pawl 39 is moved far enough to cause engagement with the projection on the turntable 157 hub. The contact between actuating pawl 39 and turntable 157 hub projection gives the necessary push for the teeth in cam gear 40 to mesh with

the teeth on the turntable 157 gear and initiate a change cycle.

Automatic Shut-Off

When the last record drops to turntable 157, control arm 149 drops below the ledge of automatic spindle 152. The spindle of the control arm contacts cut-off slide 41 and pivots cut-off slide 41 down away from selector lever 79 during the next change cycle. At the end of the last record, the changer goes into a change cycle and the tone arm is lifted from the record and moved to its position over tone arm rest 115. As operating plate 61 moves and the tone arm reaches the position over rest 115, since the selector lever is not stopped by cut-off slide 41, spring 57 pushes the selector lever 79 into the position where, as operating plate 61 changes direction, it blocks quadrant 73 and holds the tone arm in the rest position during the remainder of the change cycle. Operating plate 61 continues to move in this direction until cam gear 40 is unmeshed from the gear on turntable 157. Before it stops, the moving operating plate 61 lowers the tone arm to rest 115 and the released selector lever is pushed against cut-off lever 78. Cut-off lever 78 moves reject lever 84 and reject link 83 to turn reject plate 88. When reject plate 88 turns, switch link 97 pushes on switch lever 94 to open switch 19 and moves speed change arm to retract idler pulley 26 from turntable 157 driving rim and motor pulley. Reject plate 88 being connected to control knob 104 by means of reject slide 90 moves control knob 104 to the Stop position.

ASSEMBLY SERVICE INFORMATION

Standard Automatic Spindle

To remove standard automatic spindle 152 pull spindle 152 straight up, turn clockwise to release from retaining spring 74 and lift out of the center hole in turntable 157.

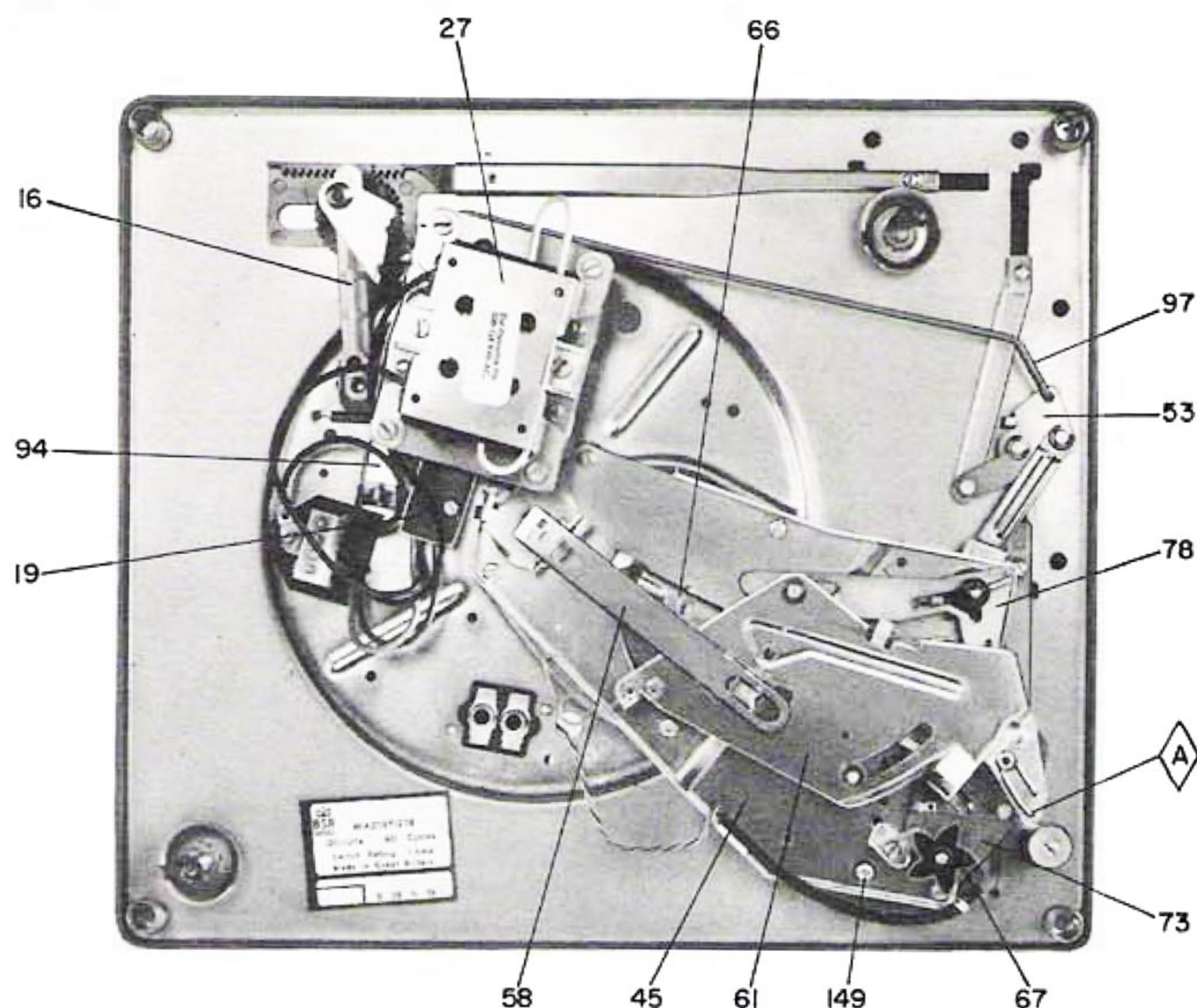
To install standard automatic spindle 152 insert spindle 152 into the center hole of turntable 157. Rotate spindle 152 until the projecting lug on the side of spindle 152 enters the slot in the turntable bearing and is locked in position by retaining spring 74.

Turntable Assembly

Remove center disc 154 from turntable 157. Move control knob to Stop. Remove circlip 46 and lift turntable 157 off changer. When replacing turntable 157 make certain the control knob is in the Stop position so that idler pulley 36 is not damaged by the driving rim of turntable 157.

Tone Arm Assembly

To remove the complete tone arm assembly, first un-



Control Arm Assembly

To remove control arm 149 remove circlip 6 spacer 48, and control arm spindle spring 47. Pull control arm 149 up and out of control housing 110.

solder cable 132 leads at tag mounting strip 13 or phono socket 38 and release cable 132 from all fastenings. Unhook stylus pressure spring 126 from hook on tone arm hinge 127. Remove tone arm pivot screw 136 to release tone arm from hinge 127. Tone arm may now be removed.

ADJUSTMENTS

This changer has been accurately pre-adjusted for correct stylus set-down, stylus pressure and tone arm height. If new adjustments should ever be needed, make them with a 12" record; then position will be correct for all sizes.

Idler Pulley

Disconnect changer from AC source and remove turntable 157. Set speed selector knob on 33 and control knob to Start so idler pulley 36 rests against the 33 rpm step on the motor pulley 27. Using a screwdriver, turn adjustment screw 32 until idler pulley 36 is centered on the 33 rpm step of motor pulley. Check the alignment of idler pulley 36 at all speeds and readjust if necessary. Move the control knob to Stop and replace turntable 157 taking care not to damage idler pulley 36.

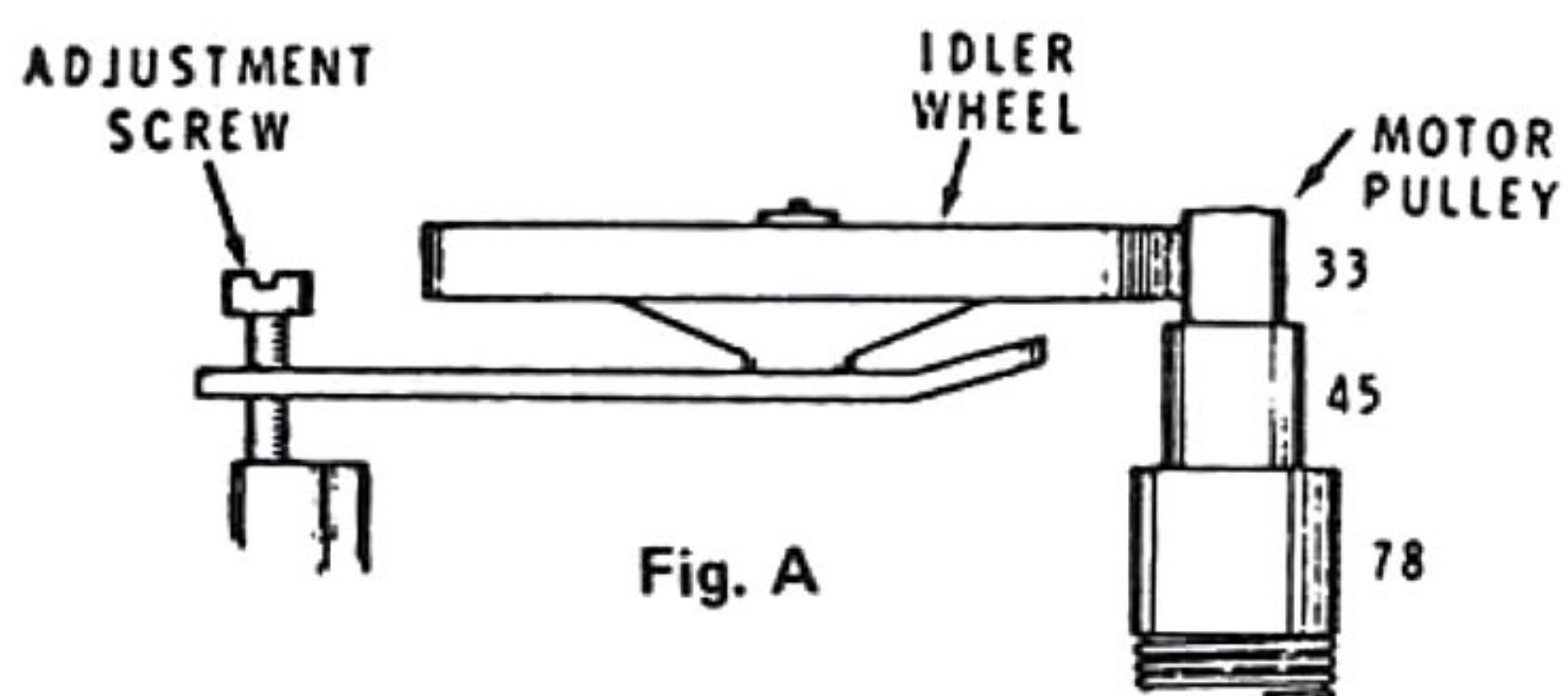


Fig. A

Tone Arm Height

To raise, hold plastic nut 120 firmly and turn screw head 121 by hand counterclockwise; to lower, turn screw head 121 clockwise. Adjust stylus to clear a full stack of records by 1/8".

Stylus Set-Down

The set-down position of the stylus on the record is adjusted by means of the stylus adjusting screw 136. This screw is adjusted to obtain correct set-down for a 12" record. It should be adjusted so the stylus will set down 1/8" from the outside edge of the record. This adjustment should be made with a 12" record on the turntable. When

the stylus set-down is adjusted correctly for 12" record, it will automatically be correct for 7" and 10" records.

Stylus Pressure

NOTE: It is necessary to use a stylus pressure gauge in adjusting the stylus pressure of the tone arm. One can be obtained from a local hi-fi store. The stylus pressure indicator on the side of the tone arm is for reference only and indicates an increase or decrease in the nominal stylus pressure setting.

Turn stylus pressure adjusting screw 138 clockwise to reduce stylus pressure; counterclockwise to increase pressure.

Anti-Skate

This control has three positions: 2, 4, and 6 grams. Set this control to the number that is closest to the stylus pressure setting. This anti-skate feature prevents the tone arm from making quick lateral movements, such as skating through the "lead-in" grooves of a record.

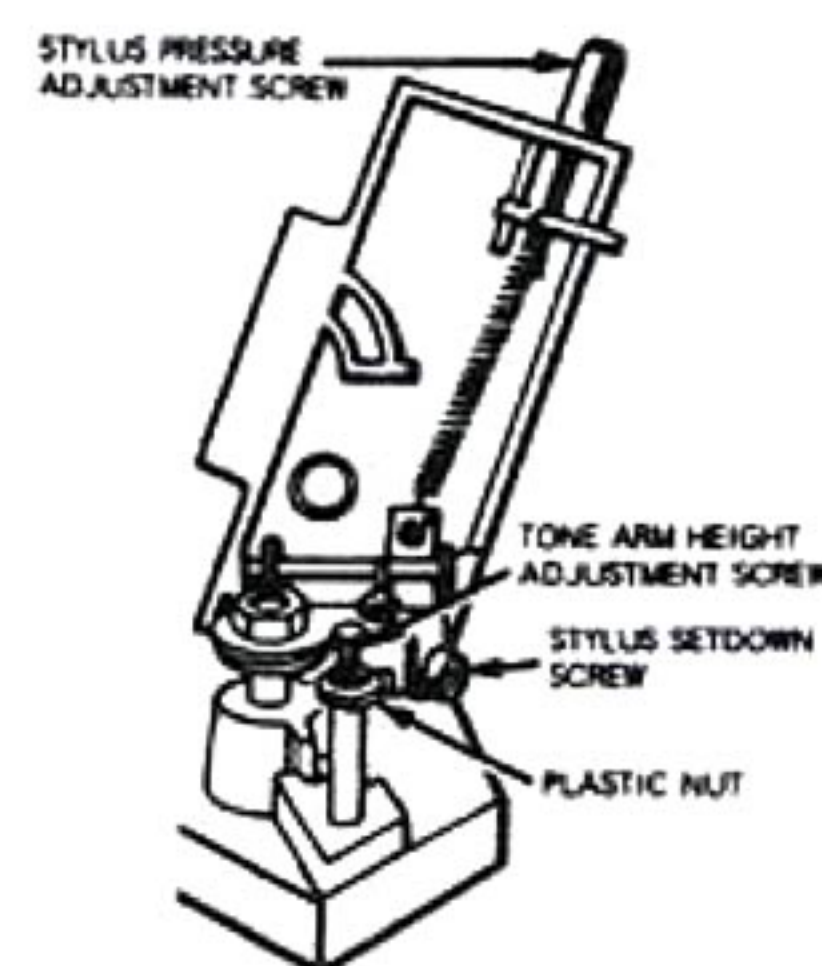
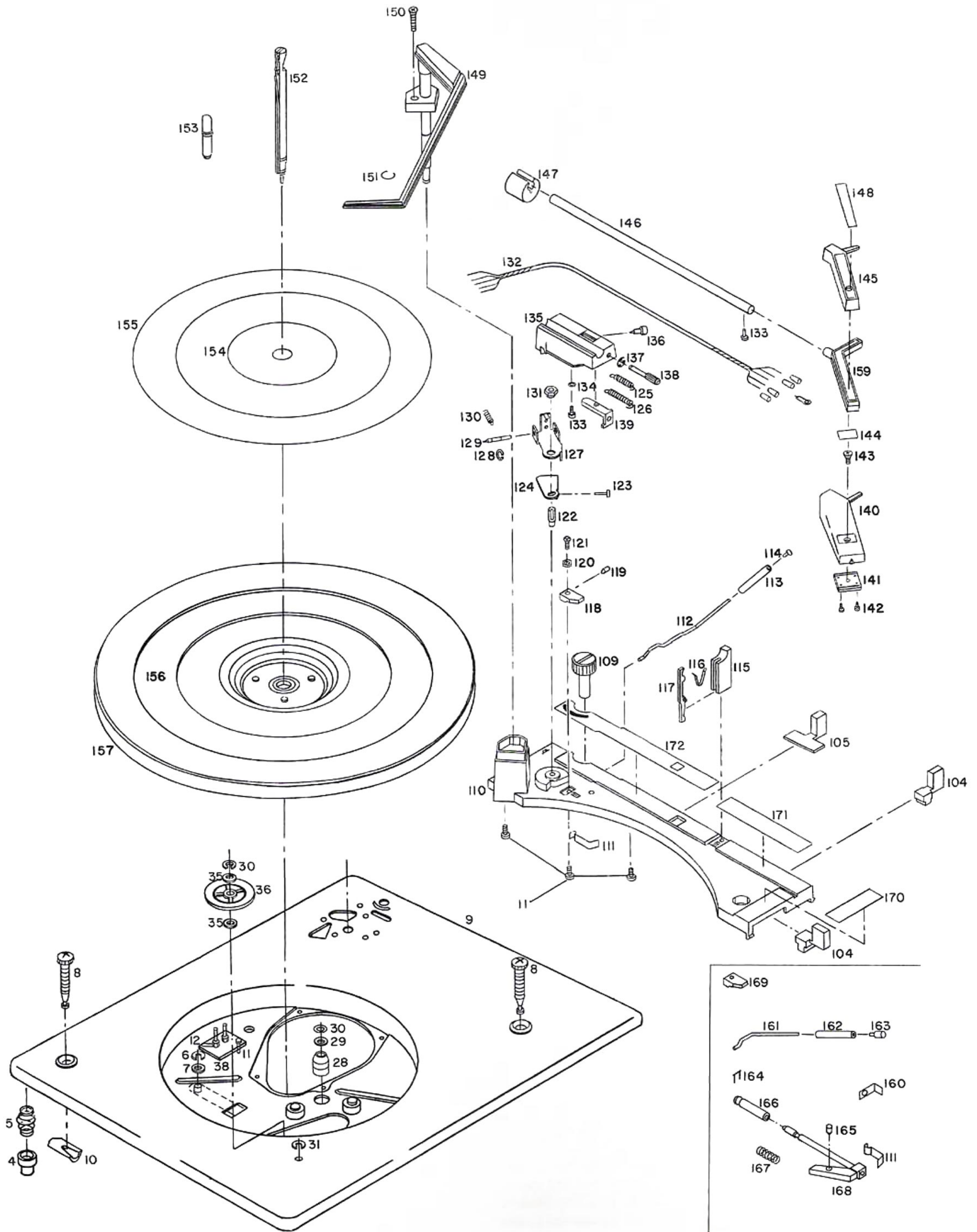
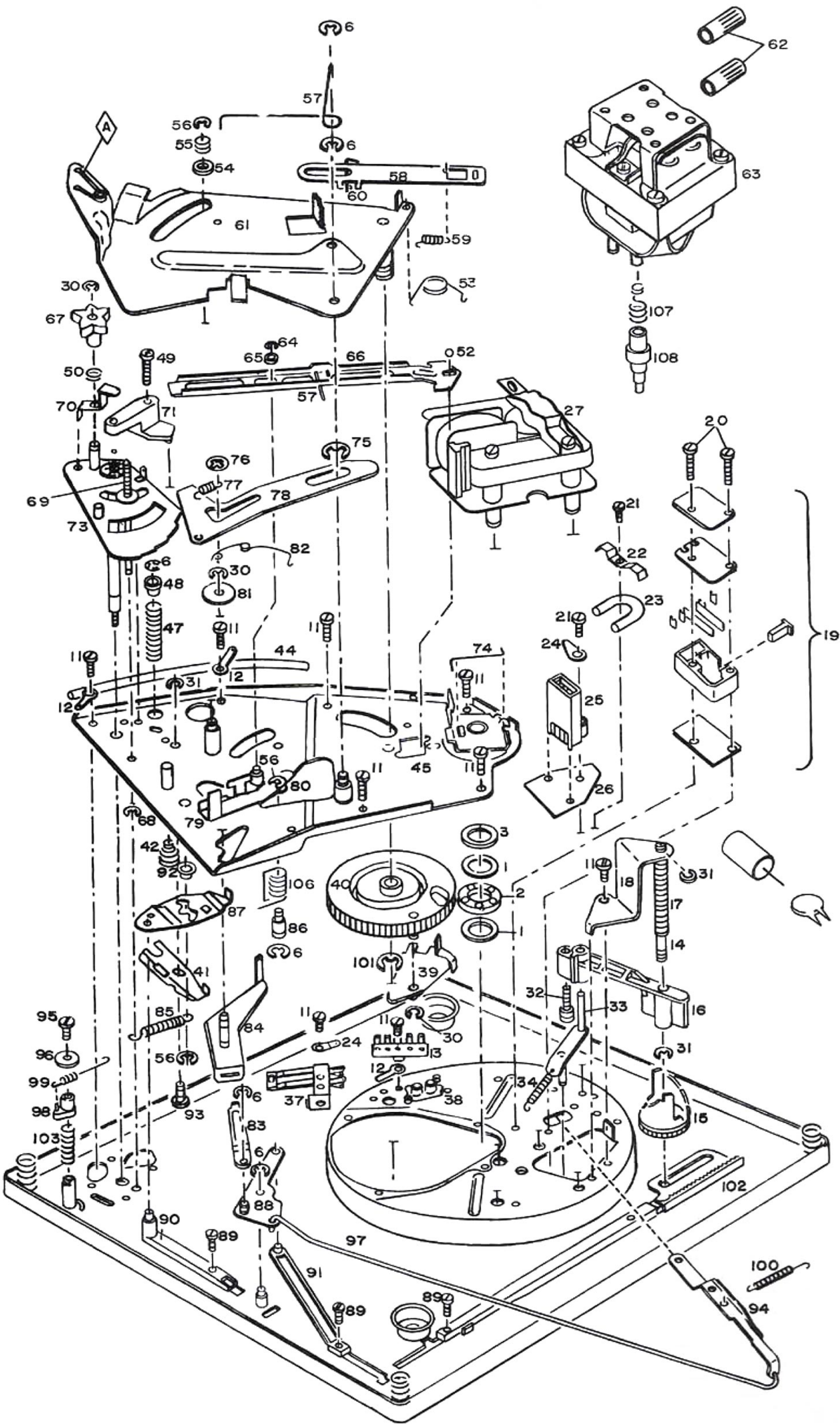


Fig. B





LUBRICATION

The mechanism has been thoroughly lubricated at the factory and under normal use should not require additional lubrication for at least one year. However, after prolonged use, it may be necessary to lubricate parts as specified.

Use a medium grade grease only on these parts.

1. Speed change arm 16.
2. Idler pulley arm 33.
3. Bearing surfaces of operating plate 61.
4. Gear teeth, bearing and cam track on cam gear 40.

5. Ball race 3.

Use a light machine oil on these parts:

1. Tone arm raising spindle 69.
2. Idler pulley spindle on pulley arm 33.
3. Upper and lower bearings of motor 27.

NOTE: Oil or grease should never be applied to or allowed to collect on the rubber tire of the idler pulley 36 the inside surface of the driving rim of turntable 137 or on the motor pulley.

TROUBLE CHART

Symptom	Cause	Remedy
Turntable does not revolve when the control knob is moved to the Auto position.	<ol style="list-style-type: none"> 1. No current to motor 27. 2. Defective motor 27. 3. Idler pulley 36 not engaging driving rim of turntable. 4. Idler pulley 36 not driving. 	<ol style="list-style-type: none"> 1. Make sure that current is reaching the AC leads. Check switch 19 and AMP lock 25. Replace if necessary. 2. Remove turntable 157 and check motor 27. Repair or replace motor 27. 3. Connect or replace spring 34. Check that idler arm 33 pivots freely. 4. Clean idler pulley 36 and driving rim of turntable 157 to ensure that driving surfaces are free from oil and dirt.
Turntable 157 revolves when the control knob is moved to the Auto position but the tone arm does not leave rest 115.	<ol style="list-style-type: none"> 1. Tone arm not adjusted for correct height. 2. Spring of actuating slide 57 bent or missing. 	<ol style="list-style-type: none"> 1. Adjust screw 121 as described under "Adjustments." 2. Adjust or replace.
Turntable stops or slows down in middle of change cycle.	<ol style="list-style-type: none"> 1. Idler pulley 36 slips. 2. Insufficient tension on idler pulley spring 34. 	<ol style="list-style-type: none"> 1. Clean inside of driving rim of turntable 157 and rubber tire of idler pulley 36 to remove any oil or dirt. 2. Check tension of spring 34 and replace if necessary.
Turntable speed too slow.	<ol style="list-style-type: none"> 1. Tight motor 27 bearings. 2. Binding turntable bearing 157. 3. Idler pulley 36 slips. 4. AC line voltage too low. 5. Operating temperature too low. 6. Idler pulley height incorrect. 	<ol style="list-style-type: none"> 1. Lightly tap side of motor 27 laminations to free self-aligning bearings. Lubricate bearings. 2. If turntable 157 does not turn freely when idler pulley 36 is disengaged, remove turntable 157 and clean turntable bearing. Lubricate bearing with light machine oil. 3. Idler arm 33 must pivot freely in speed change arm 16. Check tension of spring 34. Replace spring 34 if necessary. 4. Line voltage should not be less than 100 V. 5. Prolonged exposure to temperature below 45 degrees F will cause slow initial speed. 6. Adjust as outlined under "Adjustments."
Record fails to drop when changer cycles.	<ol style="list-style-type: none"> 1. Spindler 152 not fully inserted in center of turntable 157. 2. Bent record feed lever in spindle 152. 3. Spring 60 missing or detached from feed lever link 58. 	<ol style="list-style-type: none"> 1. Make certain spindle 152 is fully engaged and locked in place. 2. Replace spindle 152. 3. Replace or reposition.

Symptom	Cause	Remedy
Tone arm strikes under side of record on ledge of spindle 152, or stylus catches on top of last record while moving into playing position.	1. Incorrect tone arm height adjustment.	1. Adjust screw 121 as described under "Adjustments."
Tone arm does not correctly locate on record.	1. Tone arm set-down not adjusted correctly.	1. Adjust screw 123 as described under "Adjustments."
Tone arm does not track correctly across record.	1. Stylus may be clogged with an accumulation of dust, or stylus may be chipped or worn. 2. Pick-up leads too tight. 3. Changer not level. 4. Insufficient stylus pressure. 5. Record with worn or damaged grooves. Lateral friction caused by: 6. Excessive tension on support spring 70. 7. Excessive anti-skate compensation. 8. Weak support spring 70. 9. Actuating pawl assembly sticking.	1. Clean foreign material from around stylus. Replace stylus if badly worn or broken. 2. Give Pick-up leads enough slack to allow tone arm to move freely across record. 3. See that changer is level before operating. 4. Adjust stylus pressure as described under "Adjustments." 5. Replace record. 6. Bend support spring out slightly to release tension. 7. Reduce anti-skate setting. 8. Bend support spring inwards. 9. Release or replace actuating pawl 39.
Unit will not re-cycle at end of record.	1. Tripping pawls assembly 39 binding. 2. Needle set-down inside music groove.	1. Check for friction and free movement. 2. Adjust needle to set down at center of lead-in groove.
Two records drop together.	1. Hole in record too large. 2. Control arm 149 not fully down possibly due to incorrectly loaded records. 3. Control arm 149 not holding records level.	1. Replace record. 2. Carefully clean shaft of control arm and remove burrs, if any. Do not oil shaft. Control arm 149 should fall in position of its own weight. 3. Gently twist control arm 149 until it will hold record stack parallel to the top surface of turntable 157.
Changer fails to shut off after last record has played and tone arm has returned to rest.	1. Switch 19 fouled by AC leads. 2. Faulty switch 19.	1. Move leads clear of switch 19. 2. Replace switch 19.
Noise during playing of record.	1. Motor rumble. 2. Turntable 157 bearings and ball race 2. 3. Defective idler pulley 36.	1. Motor 27 must float freely on mounting grommets 28. Replace grommets 28, if necessary. Motor leads must be positioned to allow free movement of motor 27. 2. Clean and lubricate bearings. Replace ball race 2 if necessary. Use light machine oil on bearing of turntable 157 and medium grade grease on ball race 2. 3. Replace idler pulley 36.

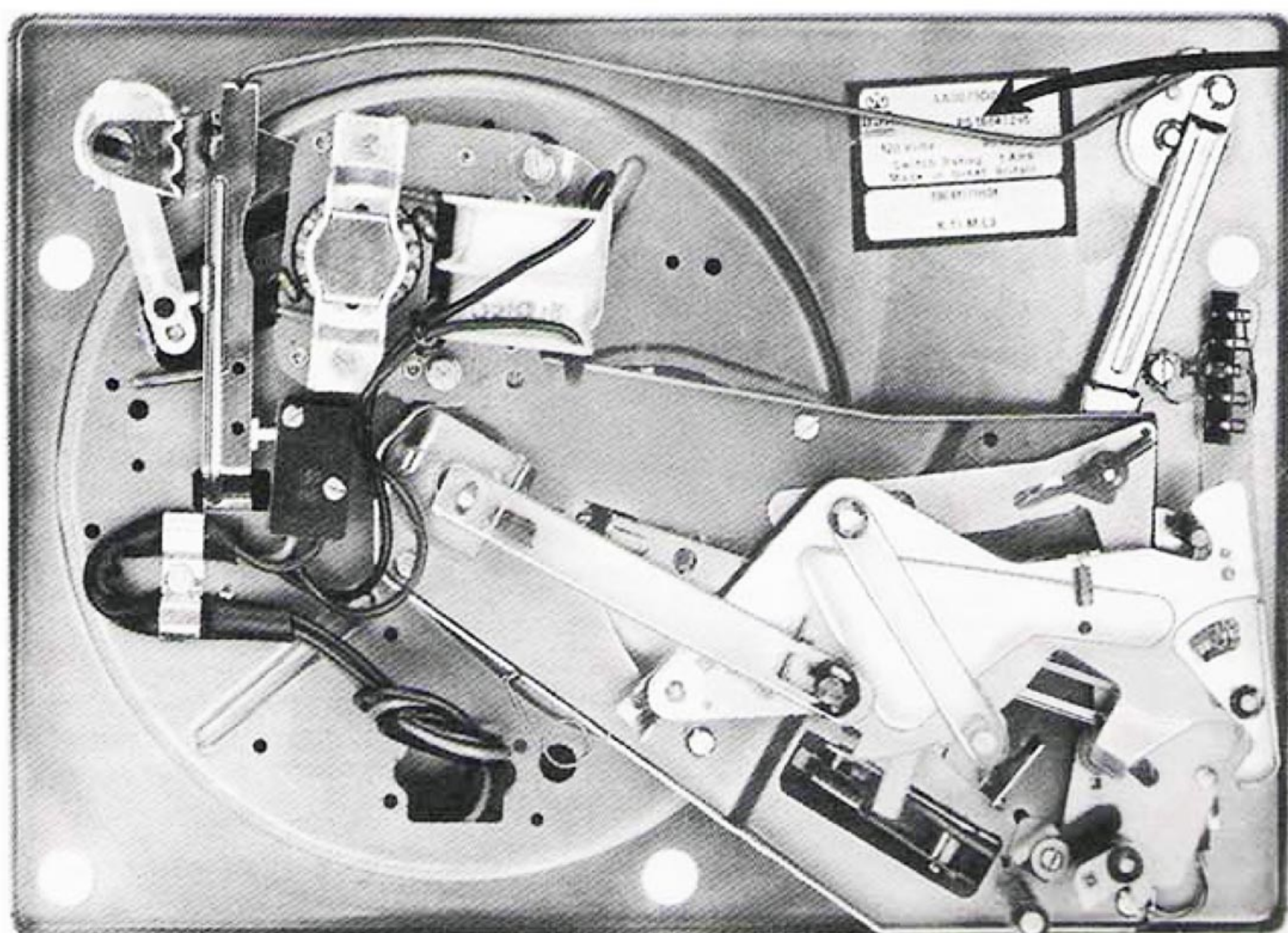


BSR (USA) LIMITED

ROUTE 303, BLAUVELT, NEW YORK 10913

Listed below is our revised Color Coding. If you will make use of this Code when ordering parts, it will enable us to fill your orders with optimum speed and efficiency. For example: "D105146-1" would be "PU Arm – brown"

Suffix No.	Color	Suffix No.	Color
1.	Brown	23.	Pewter
2.	Grey	24.	Warm Grey
3.	Black	25.	Blue Grey
4.	Beige	26.	Plebe Grey
5.	Pearl Grey	27.	Charcoal Blue
6.	Off White	28.	Satin Silver
7.	Gold	29.	Sand
8.	Silver	30.	Chalk
9.	Platinum	31.	Kriss White
10.	Lt. Grey	32.	Polar White
11.	Tan	33.	Mustard
12.	Lustre Aluminum	34.	Regency Beige
13.	Blue	35.	Olive Green
14.	Sepia	36.	Avocado
15.	Slate	37.	Smoke Grey
16.	Warm White	38.	Dark Grey
17.	Ochre	39.	Parchment
18.	Charcoal	40.	Chestnut
19.	Khaki	41.	Caramel
20.	Azure	42.	Beach White
21.	Chocolate	43.	Wedgewood
22.	Ivory	44.	Birch Grey



When in doubt of color, or Changer Model, Please quote the Number on the label which is located under mainplate of changer.

C 141 R1



PARTS AND PRICE LIST

Prices subject to change without notice.

ITEM	PART NO.	DESCRIPTION	LIST PRICE	ITEM	PART NO.	DESCRIPTION	LIST PRICE
1.	A101506	Thrust Washer	.09	64.	A104077	Circlip	.05
2.	A101649	Ballrace	.90	65.	A106966	Washer	.04
3.	A102058	Damping Washer	.15	66.	B106962	Actuating Slide	.41
4.	A106089	Spring Cup	.24	67.	B108073	Toggle Wheel	.25
5.	A106090	Unit Mounting Spring	.14	68.	A108334	Circlip	.05
6.	A102109	Circlip	.05	69.	A106697	P.U. Raising Spindle Assembly	.45
7.	A102595	Washer	.03	70.	A107004	Support Spring	.09
8.	A104189	Transit Screw	.15	71.	A106965	Support Bracket	.18
9.	B108656	Mainplate Sub-Assembly	11.32	72.	A107154	Ball Bearing 3/32" Dia.	.05
10.	A102166	Retaining Clip	.12	73.	B108085	Quadrant Assembly	2.16
11.	A106510	Screw type B No. 6 x 1/4" rec. Pan Hd.	.10	74.	A104882	Retaining Clip	.02
12.	A102126	Solder Tag	.05	75.	A101526	Circlip	.05
13.	A106206	Tag Mounting Strip	.36	76.	A102251	Retainer	.06
14.	A108589	Raising Spindle	.18	77.	A102623	Cut-Off Lever Spring	.12
15.	B110364	Raising Cam	.25	78.	B105592	Cut-Off Lever	.12
16.	B106021	Speed Change Arm	2.88	79.	B108036	Selector Lever	.30
17.	A105831	Raising Spindle Spring	.05	80.	A108893	Washer	.05
18.	A106034	Speed Change Bracket	.54	81.	A105660	Control Washer	.05
19.	A107148	Insulating Sleeve	.11	82.	A106627	Detent Spring	.03
	A106015	Retaining Strip	.01	83.	A106134	Reject Link	.18
	A106970	Capacitor	.77	84.	A108283	Reject Lever Assembly	.30
		Solder Tag		85.	A108075	Detent Plate Spring	.15
		Switch Dolly		86.	A108894	Selector Pivot	.36
	B108285	Flat Contact	1.80	87.	A108033	Detent Plate	.15
		Domed Contact		88.	A106193	Reject Plate Assembly	.18
		Switch Cover		89.	A105267	Screw type BT 4-24 x 5/16" rec. Pan Hd.	.03
		Switch Cover		90.	B106119	Reject Slide	.24
20.	A107418	Screw type BT 4-24 x 3/4" rec. Pan Hd.	.10	91.	B106143	Selector Slide	.15
21.	A105263	Screw type BT 6-20 x 3/8" rec. Pan Hd.	.05	92.	A108461	Roller	.06
22.	A102718	Cable Clamp	.12	93.	A108064	Slide Pin	.10
23.	A106513	3" - 5mm P.V.C. Sleeving	.03	94.	A106129	Switch Lever	.36
24.	A106749	4 B.A. Tag Lockwasher	.05	95.	A107863	Screw type BT 4-24 x 9/16" rec. Pan Hd.	.03
25.	A103096	'Amp' Plug Housing	.40	96.	A106816	Washer	.02
26.	A104865	Insulating Strip	.09	97.	B106405	Switch Link	.21
27.		Two Pole Motor Assembly	10.00	98.	B106815	Spring Anchor	.12
28.	A102181	Rubber Mounting	.12	99.	A106812	Anti-Skate Spring	.22
29.	A101646	Motor Mounting Washer	.10	100.	A105826	Switch Lever Spring	.12
30.	A100762	Circlip	.05	101.	A102110	Circlip	.05
31.	A102128	Circlip	.06	102.	B108113	Speed Change Slide Assembly	.36
32.	A105619	Adjusting Screw	.12	103.	A106813	Anti-Skate Control Spring	.04
33.	A105965	Jockey Arm Riveting Assembly	.30	104.	B106122	Knob	.12
34.	A105824	Jockey Pulley Spring	.15	105.	B110426	Selector Knob	.36
35.	A101620	J.P. Spindle Washer	.05	106.	A108891	Selector Pivot Spring	.15
36.	A101623	Jockey Pulley Assembly	1.53	107.	A104765	Drive Spring	.18
37.	A107086	Muting Switch Assembly	1.83	108.	A106719	50c Motor Pulley	1.00
38.	A102616	Phono Socket	.72		A106720	60c Motor Pulley	1.00
39.	A106819	Actuating Pawl Assembly	.39	109.	B108629	Anti-Skate Control	.35
40.	A102133	Cam Gear Riveting Assembly	2.25	110.	D111169	Escutcheon	2.50
41.	A108034	Cut-Off Slide	.30	111.	A108410	Spring	.10
42.	A108083	Cut-Off Slide Spring	.15	112.	A110451	Raising Arm	.15
43.	A110609	Screw No. 8 x 1/2" Hi-Lo rec. Pan Hd.	.10	113.	A110381	Knob	.18
44.	A108401	7" - 3mm P.V.C. Sleeving	.10	114.	A110408	Cap	.10
45.	C108104	Main Sub Plate Riveting Assembly	4.46	115.	A106663	P.U. Rest	.27
46.	A105678	Circlip	.05	116.	A106173	P.U. Rest Spring	.05
47.	A110985	Control Spindle Spring	.20	117.	A106664	P.U. Clip	.12
48.	A104861	Spacer	.18	118.	A110454	Raising Pad	.12
49.	A106512	Screw type BT 4-24 x 5/8" rec. Pan Hd.	.03	119.	A106505	Grub Screw 6 B.A. x 1/8" pointed	.03
50.	A108654	Spring Clip	.05	120.	A105907	Nut	.03
51.	A105901	Actuating Slide Spring	.03	121.	A105712	Adjusting Screw	.07
52.	A107419	Ball Bearing 9/64" Dia.	.10	122.	A106047	Locking Sleeve	.12
53.	A106980	Operating Plate Spring	.14	123.	A106917	Screw type 6 B.A. x 3/8" Std. Ch. Hd.	.03
54.	A103290	Washer	.06	124.	A106654	P.U. Adjuster	.09
55.	A108077	Spring	.10	125.	A200510	P.U. Balance Spring	.12
56.	A100785	Circlip	.05	126.	A105669	P.U. Balance Spring	.12
57.	A108078	Selector Drive Spring	.15	127.	A108384	Hinge Bracket Riveting Assembly	.18
58.	B105597	Feed Lever Link	.18	128.	A106205	Circlip	.02
59.	A105827	Link Return Spring	.12	129.	A108381	P.U. Pivot	.09
60.	A106968	Feed Lever Link Spring	.05	130.	A108382	Hinge Retainer Spring	.03
61.	B108168	Operating Plate Assembly	1.38	131.	A105624	P.U. Spindle Nut	.18
62.	A105472	'Screw On' Connector	.30	132.	A106745	20" - Quin P.U. Lead	.60
63.		Four Pole Motor Assembly	16.00	133.	A109551	Screw type A No. 4 x 1/4" rec. Pan Hd.	.10

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PARTS AND PRICE LIST (Cont'd.)

Prices subject to change without notice.

ITEM	PART NO.	DESCRIPTION	LIST PRICE
134.	A106504	6 B.A. External Lockwasher	.02
135.	A110574	P.U. Arm Body Sub Assembly	1.10
136.	A106652	P.U. Pivot Screw	.06
137.	A108348	Circlip	.05
138.	A108344	Balance Adjusting Screw	.23
139.	B110417	Balance Adjuster	.25
140.	C110397	P.U. Head	.55
141.	A106775	Adaptor Plate	.10
142.	A106506	Screw type B No. 2 x 1/8" rec. Pan Hd.	.05
143.	A106573	Screw 6 B.A. x 3/16" rec. c'sunk Hd.	.03
144.	A110449	P.U. Head Trim	.10
145.	D110872	Pick-Up Head	.50
146.	B111172	P.U. Tube	2.16
147.	B111159	Counterweight	.25
148.	A110864	P.U. Head Trim	.10
149.	B111189	Control Arm Assembly	2.50
150.	A108827	Screw type B No. 2 x 1/2" rec. c'sunk Hd.	.05
151.	A108841	Circlip	.05
152.	A107043	Centre Spindle Assembly	7.50
153.	A108748	Stub Spindle	.10

ITEM	PART NO.	DESCRIPTION	LIST PRICE
154.	A106024	T.T. Centre Disc	2.16
155.	B106139	T.T. Trim	2.16
156.	C109261	T.T. Mat	2.16
157.	C106194	Turntable Assembly	10.00
158.	A106507	Screw type B.T. 6-20 x 3/4" rec. Pan Hd.	.06
159.		'Custom Design' Head	
160.	A110908	Retainer	.10
161.	A108413	Raising Arm	.12
162.	A110381	Knob	.18
163.	A110407	Cap	.18
164.	A110895	Circlip	.10
165.	A108746	Adjusting Screw Assembly	.05
166.	A108408	Cylinder	.25
167.	A108415	Spring	.10
168.	A110423	Raising Slide Assembly	.60
169.	A110455	Raising Pad	.12
170.	A111174	Speed Change Trim	.25
171.	A111173	Control Trim	.25
172.	A111176	Trim	.65
	PS899	45 RPM Adaptor (optional)	1.95

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