

MODEL RP-197-1

Other models of RP-197 Series differ in appearance of pickup arm and stabilizer arm; some models have a rubber mat on the turntable.



RCA VICTOR

RP-197 Series

Automatic Record Changers

SERVICE DATA

— 1955 No. 18 —

ISSUED BY

GENERAL SERVICE DEPARTMENT
RCA VICTOR COMPANY, LTD
MONTREAL, CANADA

SPECIFICATIONS

ALL MODELS

Turntable speed $33\frac{1}{3}$, 45 or 78 r.p.m.
Record capacity.....Up to fourteen 7 inch RCA type
or twelve 10 inch.
or ten 12 inch.
or ten 10 in. and 12 in. intermixed.

RP-197C-1

115 volts, 60 cycles Crystal pickup #77779

RP-197C-5

115 volts, 60 cycles
Moving coil pickup #100793 (1 mil stylus)
Used in Models 6-HF-1 and 6-HF-2

GENERAL DESCRIPTION

The RP-197 Series record changers are three-speed mechanisms designed to play, in automatic sequence, a stack of 7", 10" or 12" records, or 10" and 12" intermixed, and to shut off automatically after playing the last record.

Most models use a 180° turnover type of pickup (crystal or ceramic). Turnaround reluctance pickups and plug-in head moving coil pickups are used in some models.

CONTROLS

The record changer is provided with a dual control located in the right hand corner of the motor board and a stylus selector control located on the pickup arm.

The outer portion of the dual control designated as "reject-on-off" provides a means of controlling the operation of the mechanism while the inner control having the markings "78-45-33" governs the turntable speed.

By turning the outer control to the "on" position the turntable starts rotating. Turning the control one step further in a clockwise direction to the reject position and permitting the knob to return to the "on" position, the complete automatic operation of the mechanism is started.

The mechanism will stop automatically after the last record has been played but if desired, can be stopped by turning the control counter-clockwise to the "off" position and placing the pickup on the rest.

The inner or motor speed control makes possible the selection of one of three speeds, $33\frac{1}{3}$, 45, 78 r.p.m., by rotating the knob to the proper position.

The speed control should be turned to a neutral position midway between "45" and "78" to remove the force of the motor shaft against the idler wheel when the changer is not expected to be used for an extended period of time.

The stylus control for models using the crystal pickup (#77779) has two normal positions (right and left) and one shipping position (lever pointing up). When playing $33\frac{1}{3}$ or 45 r.p.m. records the lever is turned so that "33-45" is visible on the TOP of the lever and a .001" sapphire stylus is selected; likewise for 78 r.p.m. records "78" should be visible on the TOP and a .003" osmium stylus is selected.

Model RP-197C-5 has only a .001" diamond stylus and used only for playing 45 r.p.m. and $33\frac{1}{3}$ r.p.m. records. When it is desired to play 78 r.p.m. records, the plug-in head is replaced with one having a pickup with a .003" sapphire stylus. A thumb screw on the underside of the arm is loosened to permit removal of the head.

The removable centerpost is for use with 45 r.p.m. records having the large centerhole. It must be placed over the center spindle with the "RCA" trademark monogram FACING to the FRONT. Care should be exercised in inserting and removing 45 r.p.m. centerpost so as to prevent damage to smaller spindle.

To load or remove records, lift and turn the record stabilizer arm off to the side. After loading, the stabilizer arm should be turned to the center so it rests on the stack of records.

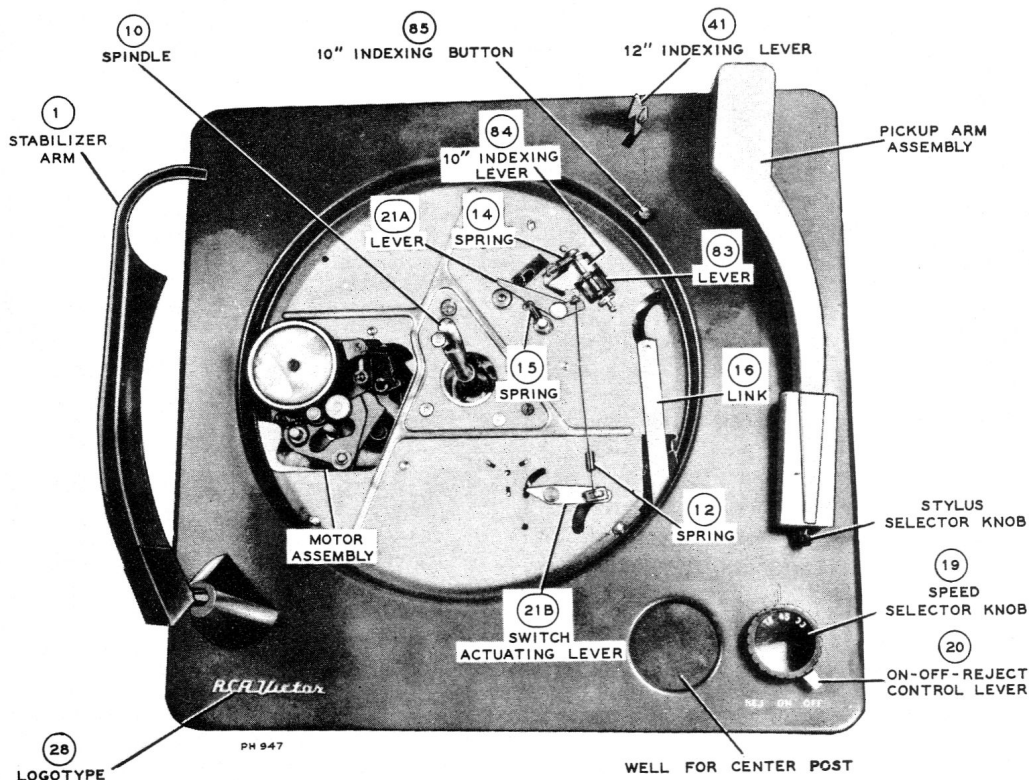


Figure 2—Top View of RP-197-1 with Turntable Removed

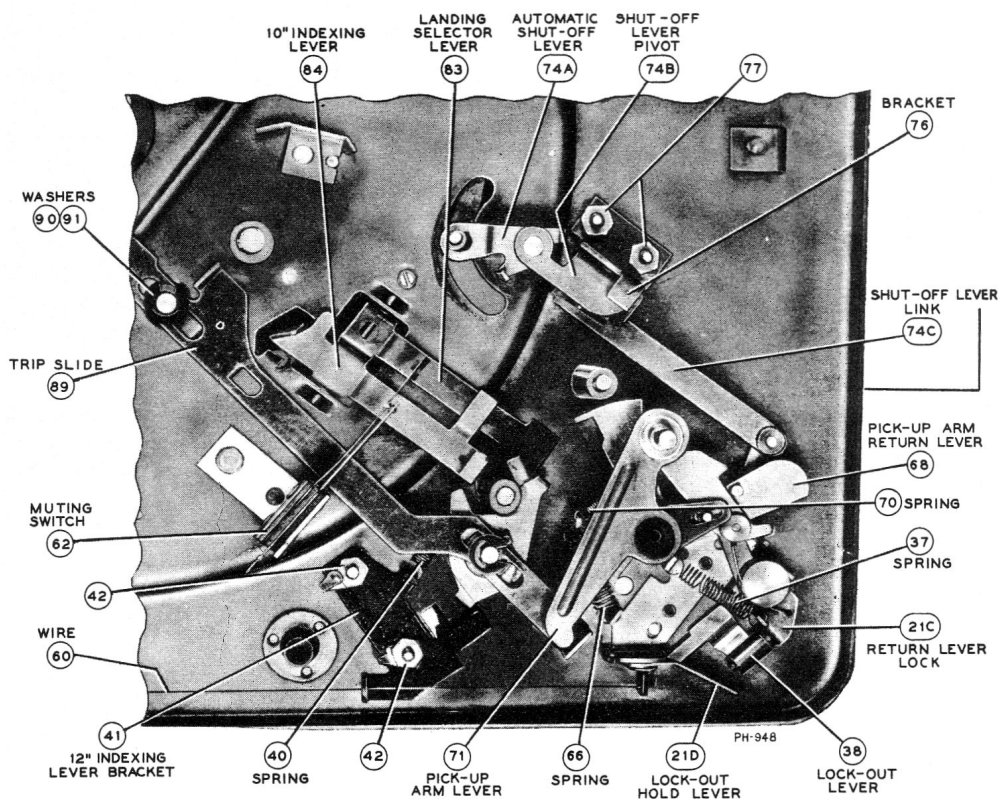


Figure 3—Partial Bottom View of RP-197-1 with Cycling Slide Removed

ADJUSTMENTS

LANDING ADJUSTMENT (Fig. 4)

When the pickup arm is mounted the clamp screw should seat in the depression in the pickup arm lever shaft, then only one landing adjustment is necessary. The landing position of the stylus is adjusted by means of the round head screw (slotted nut in late production) at the side of the pickup arm support bracket. When adjusted for correct landing on one size record (12" record preferably if convenient), the landing position for the other two sizes is automatically maintained.

Lift and turn the record stabilizer arm outward. Place a 12 inch or 78 rpm record on the turntable. Turn the speed control knob to the 78 rpm position and the control lever to the reject position. Rotate the turntable by hand until the stylus is just ready to set on the record. Then turn the landing adjustment screw so the stylus will set on the record midway between the outer edge and the starting groove.

Slight "touch up" or a compromise in this adjustment may be necessary so that the pickup will land correctly on all three size records when operating automatically.

PICKUP ARM HEIGHT ADJUSTMENT (Fig. 4)

The pickup arm height during cycle is adjusted by means of the hex head screw, located in the pickup arm.

Turn control knob to "REJ" and rotate turntable by hand until arm has risen to its maximum height. Adjust screw so that stylus is 1 3/8" above turntable.

RECORD DROPPING ADJUSTMENT

The eccentric stud (Ill. No. 101, Fig. 5) on the end of the cycling slide controls the time during cycle at which the record drops to the turntable.

Adjust the position of the stud so that the record drops to the turntable when the pickup arm has moved to its maximum

outward travel. If the record drops too soon it will strike the pickup arm. If timed too late the record may not drop.

10" INDEXING LEVER ADJUSTMENT

In late production the rubber tip on the 10" indexing lever is threaded and provides a means of adjustment for proper indexing.

Adjust rubber tip so it just touches the under side of a record that has been tilted to produce approximately 1/16" clearance between the record and the turntable.

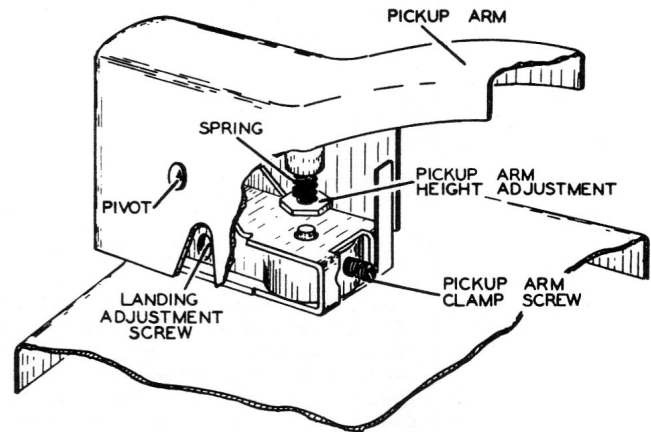


Figure 4—Pickup Arm Height and Landing Adjustments

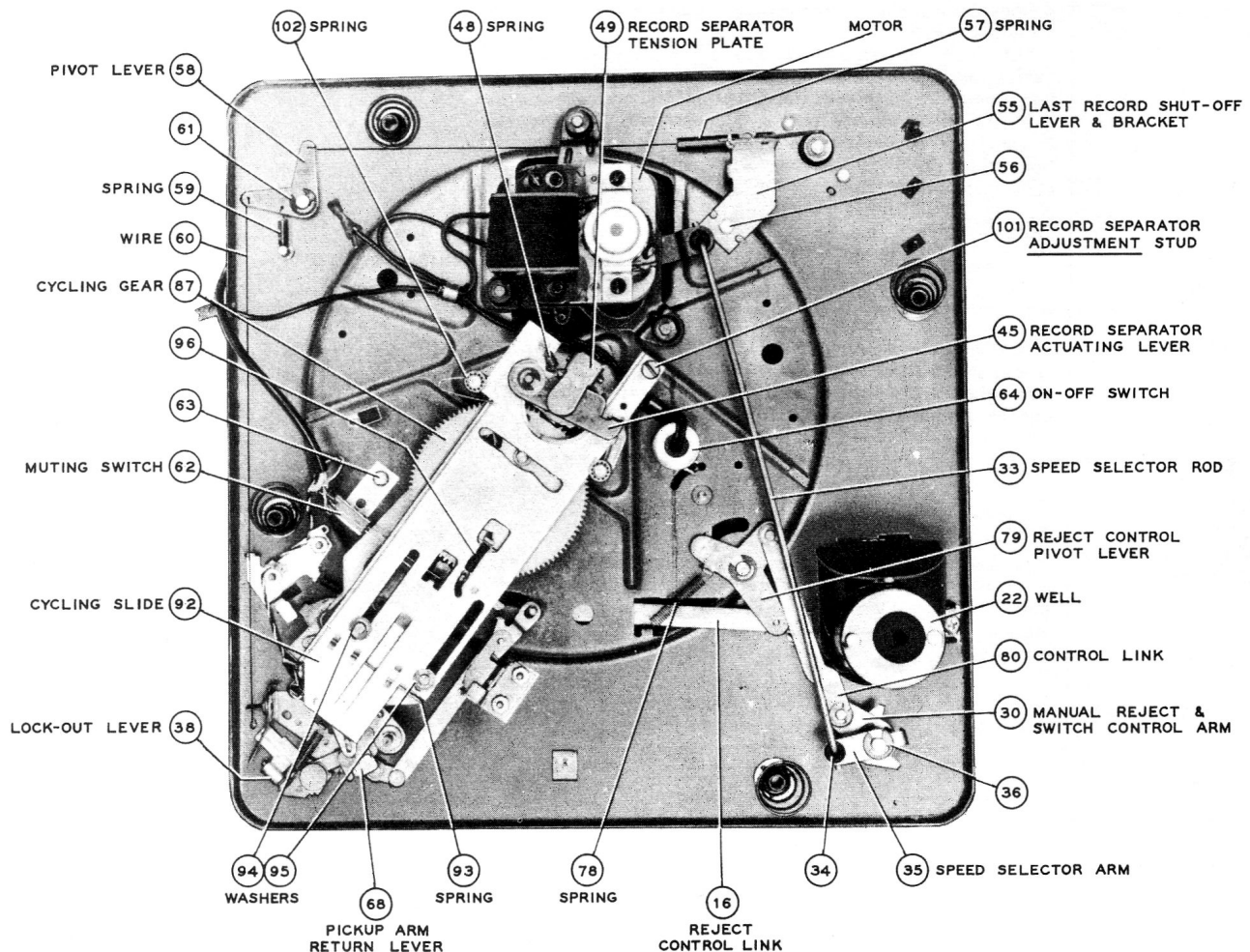
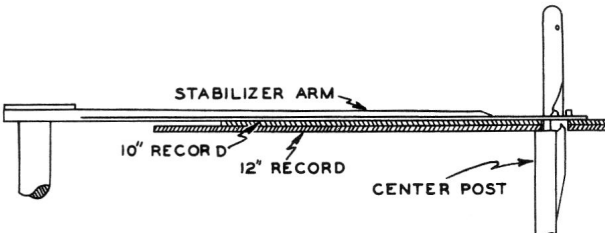
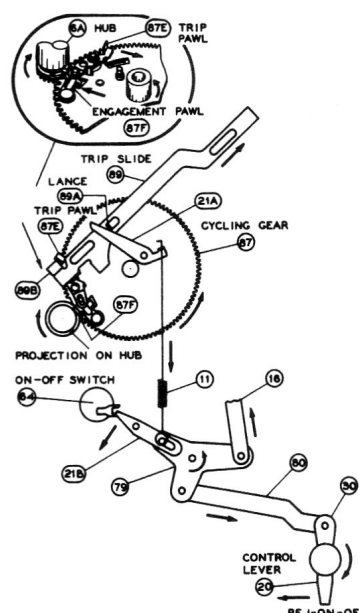
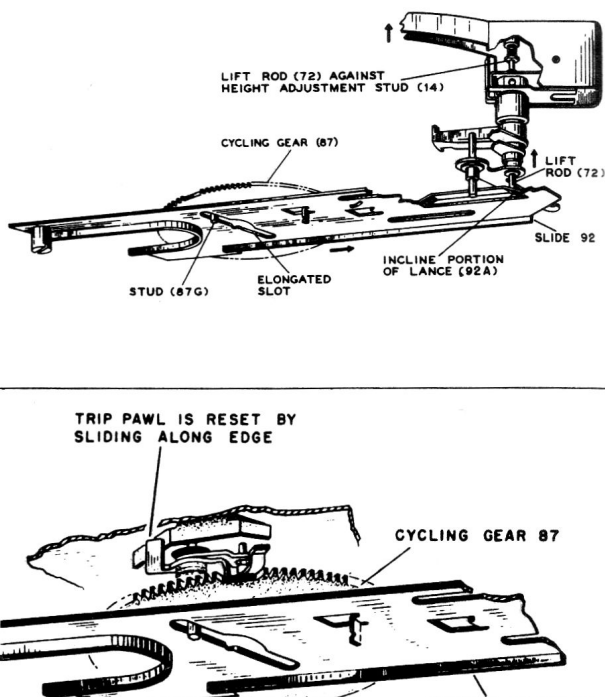


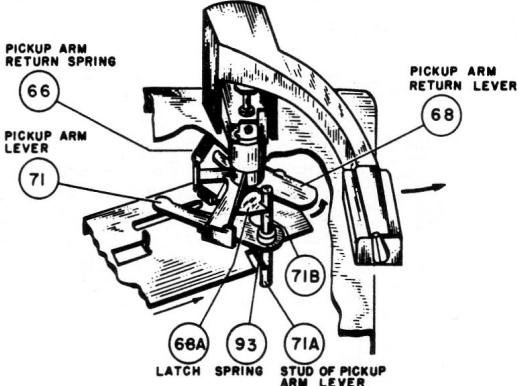
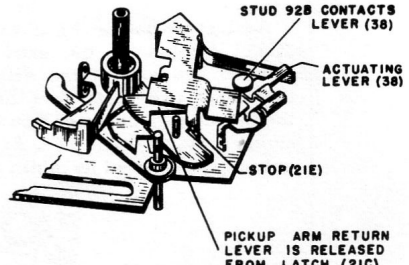
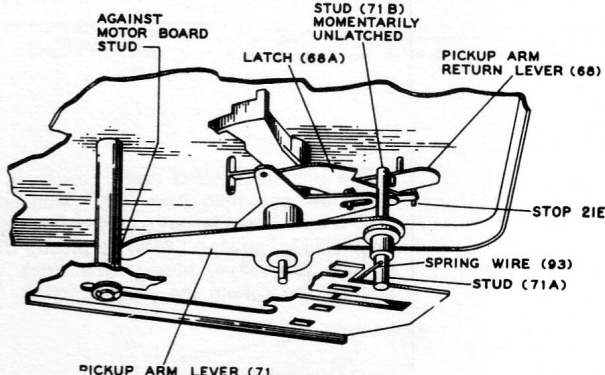
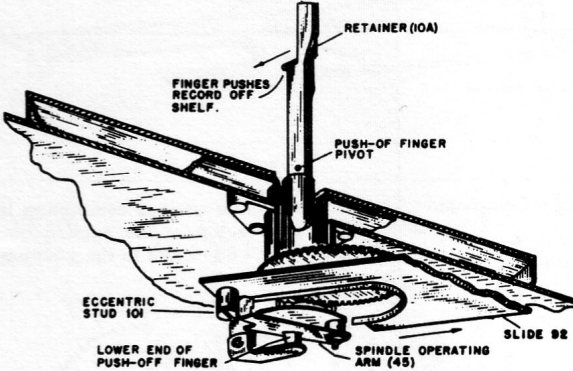
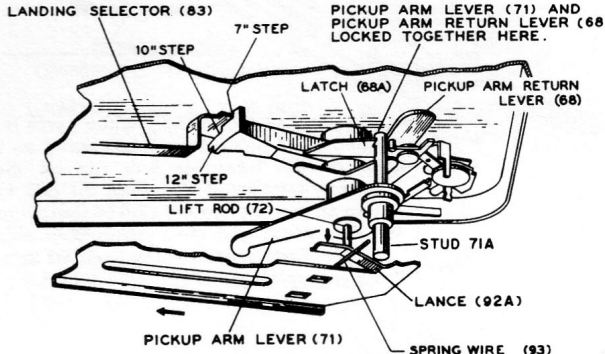
Figure 5—Bottom View of Mechanism RP-197C-1

CYCLE OF OPERATION

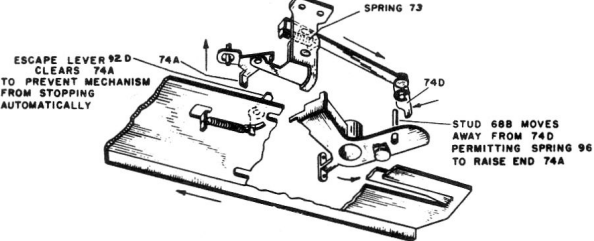
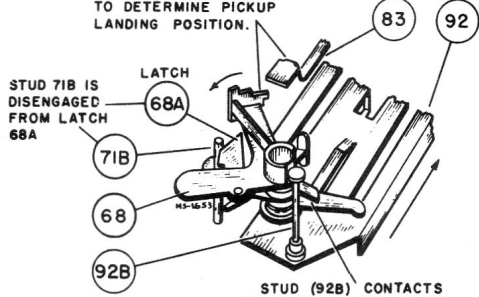
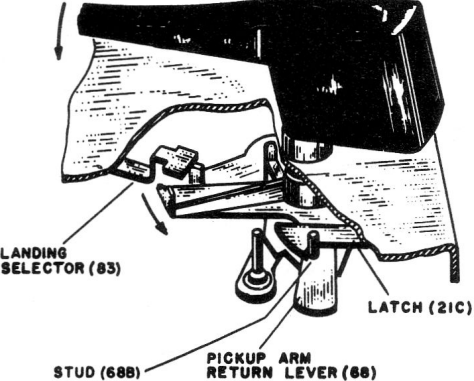
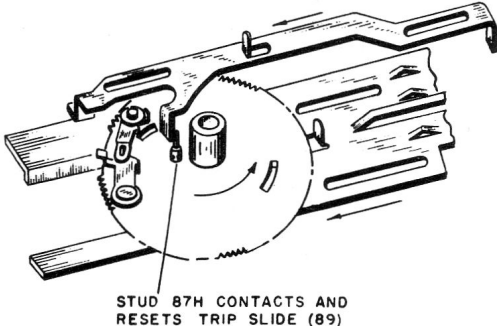
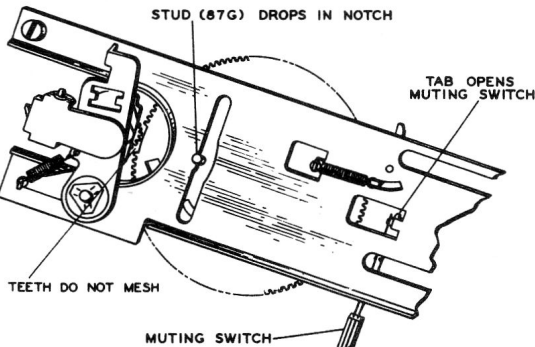
NOTE: In the cycle of operation it is assumed the mechanism has stopped automatically with the pickup arm on the rest.

FUNCTION	DESCRIPTION
Preliminary Procedure	<p>Place a stack of records 10" or 12" over the centerpost (intermixed if so desired). Place the record stabilizer arm so it rests on the records.</p> <p style="text-align: center;">OR</p> <p>If playing 45 r.p.m. records first slide the large centerpost over the regular centerpost, then proceed as for large records.</p> 
Manual Start	<p>Push control lever (20) in a clockwise direction to the "On" position. This movement of the control lever through the linkage of levers (30, 80, 79 and 21B) results in actuating the power switch (64) and the motor starts running. Then push control lever further clockwise to "Rej." position and permit it to return to the "On" position automatically.</p> <p>This movement of the control lever to the "Rej" position transmits a force from lever (21B) through spring (11) to lever (21A). The lever (21A) then contacts and applies force against turned up lance (89A) of trip slide (89) and pushes the trip slide in an outward direction away from the turntable spindle.</p> <p>Tab (89B) of trip slide makes a contact with trip pawl (87E) thereby moving engagement pawl (87F) into position where it is in the path of the projection on the turntable hub. As the turntable rotates, the projection on its hub momentarily strikes the engagement pawl (87F) causing the cycling gear (87) to rotate sufficiently so that the cycling gear teeth and those of the hub (6A) will mesh.</p> 
Cycling Starts	<p>As the cycling gear (87) rotates, the stud (87G) which is mounted on the bottom of the gear and extends through and rides in the elongated slot in the cycling slide (92) pushes the slide outward away from the center post.</p>
Pickup Arm Rises and Moves Out	<p>Almost immediately after the slide starts on its outward movement the pickup arm lift rod (72) rides up the inclined portion of the lance (92A) forcing the lift rod upward against the height adjustment stud (14) causing the pickup arm to rise.</p> <p>About this same time the cycling gear has rotated sufficiently for the trip pawl to slide over the edge of a small piece of metal extending from the bottom of the motor board and resets itself to prevent the mechanism from tripping continuously.</p> 

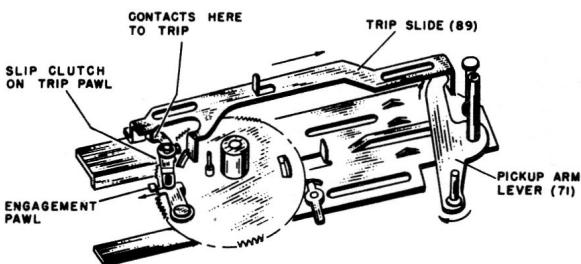
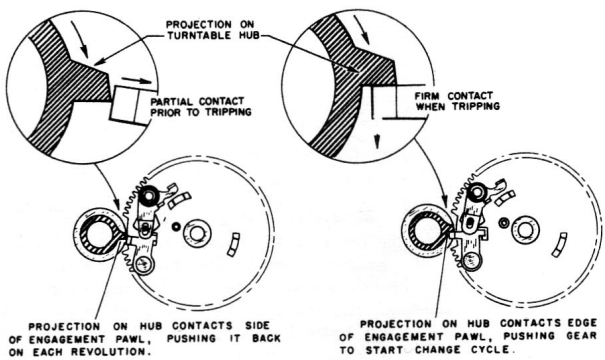
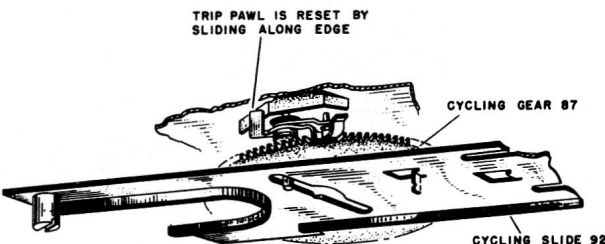
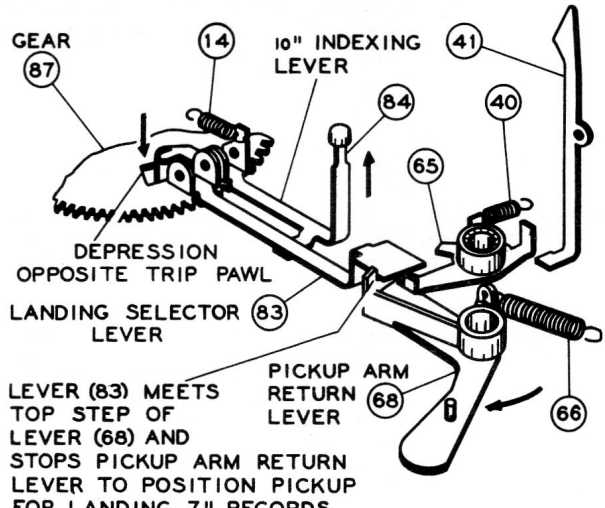
CYCLE OF OPERATION (Cont.)

FUNCTION	DESCRIPTION
Pickup Arm Rises and Moves Out (Cont.)	<p>Further movement of the slide (92) results in a contact between the straight spring wire (93 attached to the slide) and the bottom stud (71A) on the pickup arm lever (71) thereby rotating the lever and starting the pickup arm on its outward movement. At this time the upper stud (71B) slides over latch (68A) and locks the pickup arm return lever (68) to the pickup arm lever (71). This locked condition causes both the pickup arm lever and the pickup arm return lever to rotate as a unit in opposition to the force applied by the pickup arm return spring (66). Since the pickup arm is connected to the pickup arm lever through the pickup arm shaft, the pickup arm follows.</p> 
	<p>While the pickup arm lever and the pickup arm return lever are latching together, and the cycling slide is approaching the end of its outward travel the stud (92B) (mounted on cycling slide) contacts actuating lever (38) and unlatches (21C). It is important at this time to realize that the unlatching of (21C) is necessary or later when the pickup should land on the record, it will land in the rest position.</p> 
	<p>As the slide reaches the extreme end of its outward travel (mid cycle position) the pickup arm lever (71) is pushed to a position where one end of the lever is against the stud (extending from the bottom side of the motor board) while the stud on the other end of the lever remains against the wire takeup spring (93).</p> <p>The pickup arm lever (71) held in this wedged position (when the pickup arm is in its outermost position) produces a positive stabilizing action for the pickup arm as the record drops to the turntable. However it is necessary that latch (68A) remains latched so that pickup arm lever and pickup return arm lever remain coupled together as the pickup moves in for landing or erratic landing will result.</p> 
(Record Drops to Turntable)	<p>Just before slide (92) reaches its maximum travel outward, the eccentric stud (101) (mounted on the under side of the slide) contacts and pushes spindle operating arm (45).</p> <p>The lower end of the push-off finger extending through the hole in the operating arm rides along with the arm. Since the push-off finger is pivoted about a pin driven through the spindle, the upper end of the finger moves in a direction to push the record off the shelf in the spindle and the record drops to the turntable. The retainer (10A) effects record separation by blocking the adjacent record, thereby preventing it from being pushed off the shelf in the spindle. After the record drops to the turntable (mid-cycle position) the cycling slide (92) starts on its return trip to the normal out of cycle position.</p> 
The Pickup Lands on Record	<p>During the return travel of the cycling slide the wire spring (93) (attached to the slide) moves away from the stud (71A) (on the pickup arm lever) permitting the pickup arm lever and the pickup arm return lever (which are locked together) to direct the movement of the pickup arm inward.</p> <p>The pickup arm is pushed inward by the pickup arm return lever, until the pickup arm return lever is blocked by the landing selector lever (83) which contacts one of three steps formed in the return lever. Each step corresponds to one of the three (7, 10 or 12 inch records) landing position.</p> 

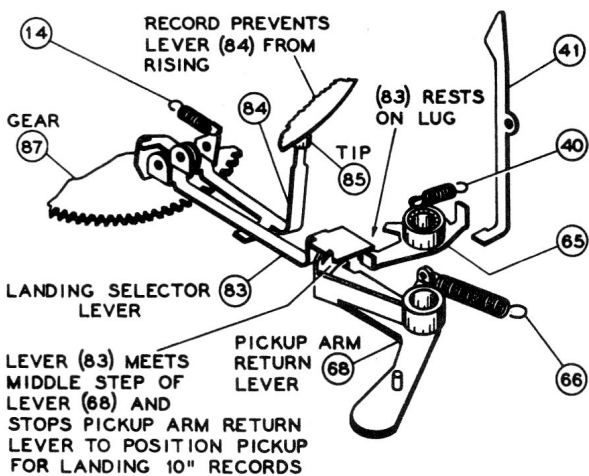
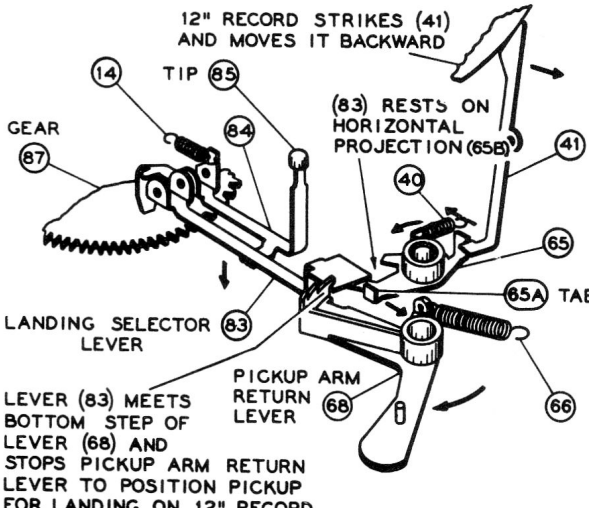
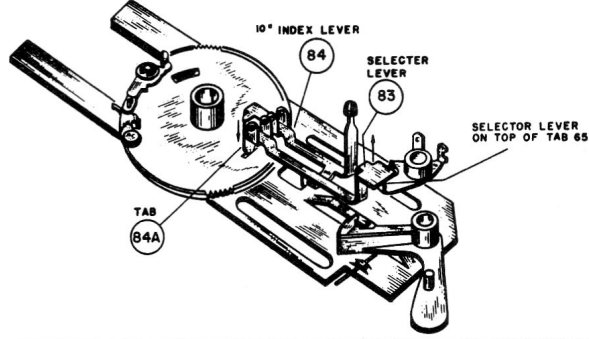
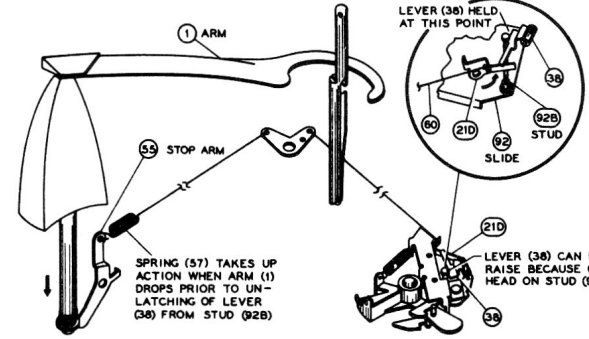
CYCLE OF OPERATION (Cont.)

FUNCTION	DESCRIPTION
The Pickup Lands on Record (Cont.)	<p data-bbox="315 197 911 422">As the pickup arm return lever directs the movement of the pickup arm, the stud (68B) on the pickup arm return lever, moves away and permits the spring (73) to raise the end (74A) (of switch link shut-off assembly) so as to clear the escape lever (92D). Otherwise the mechanism would actuate switch (64) and motor would stop. When the pickup is directly above the landing position the cycling slide has returned sufficiently for the pickup arm lift rod to ride down the inclined portion of the lance in the slide and the pickup stylus sets on the start of the record.</p>  <p data-bbox="954 247 1105 306">ESCAPE LEVER 92D CLEARS 74A TO PREVENT MECHANISM FROM STOPPING AUTOMATICALLY</p> <p data-bbox="1398 323 1544 365">STUD 68B MOVES AWAY FROM 74D PERMITTING SPRING 96 TO RAISE END 74A</p> <p data-bbox="1089 464 1312 548">LANDING SELECTOR LEVER (83) STOPS PICKUP ARM RETURN LEVER (68) TO DETERMINE PICKUP LANDING POSITION.</p>  <p data-bbox="1003 590 1154 663">STUD 71B IS DISENGAGED FROM LATCH 68A</p> <p data-bbox="1235 793 1479 877">STUD (92B) CONTACTS ACTUATING LEVER 69 TO UNLATCH PICKUP ARM LEVER 71 FROM PICKUP ARM RETURN LEVER 68</p> <p data-bbox="315 596 911 751">An instant before the pickup sets on the record the stud (92B) located on the extreme end of the cycling slide contacts the end of the actuating lever (69), unlatching the pickup arm lever from the pickup arm return lever and the pickup arm becomes free in its movement at the time the stylus contacts the record. At this time the cycling cam has not quite completed its return travel.</p> <p data-bbox="315 1024 911 1163">The remaining short travel results in the stud (92B) carrying the actuating lever (69) sufficiently that the pickup arm return lever is pulled away from the landing selector lever (83). The stud (68B) on pickup arm return lever (68) is then latched to pickup arm latch (21C) and remains latched throughout the playing cycle.</p>  <p data-bbox="1003 1142 1122 1171">LANDING SELECTOR (83)</p> <p data-bbox="1365 1192 1474 1213">LATCH (21C)</p> <p data-bbox="1052 1255 1377 1276">STUD (68B) PICKUP ARM RETURN LEVER (68)</p>
Cycling Completed	<p data-bbox="315 1451 911 1520">As the cycling gear is completing its cycle a stud (87H) located on the top of the cycling gear contacts and pulls the trip slide (89) back to the position for the next tripping.</p>  <p data-bbox="1089 1619 1328 1654">STUD 87H CONTACTS AND RESETS TRIP SLIDE (89)</p> <p data-bbox="315 1751 911 1892">The final phase of the change cycle is completed after the cycling gear has rotated sufficiently so that the teeth in the gear on the turntable hub run off the last tooth at the cut-away section of the gear. At this time the stud (87G) riding in the elongated slot in the cycling slide, drops into the stop notch and the cycling gear stops rotating.</p> <p data-bbox="315 1892 911 1934">The muting switch is opened at this time by a tab on the cycling slide.</p>  <p data-bbox="1122 1709 1377 1730">STUD (87G) DROPS IN NOTCH</p> <p data-bbox="1382 1780 1511 1808">TAB OPENS MUTING SWITCH</p> <p data-bbox="980 1982 1138 2003">TEETH DO NOT MESH</p> <p data-bbox="1122 2032 1252 2053">MUTING SWITCH</p>

CYCLE OF OPERATION (Cont.)

FUNCTION	DESCRIPTION
Record Plays	<p>As the record plays and the pickup moves inward the pickup arm lever (71) contacts trip slide (89) and pushes the slide outward away from the center post. The other end of the trip slide contacts and moves trip pawl which through a friction clutch arrangement moves trip engagement pawl.</p>  <p>While the record continues to play the pickup moves in at a constant rate of speed until the sloped side of the engagement pawl lightly contacts the projection on the turntable hub. When this contact occurs the engagement pawl is pushed back with each rotation of the turntable, providing the pawl has not moved in too far that the contact is made on the leading edge. If the inward movement of the pickup should accelerate rapidly as it does when the stylus leaves the recorded section and enters the eccentric groove of the record, the trip engagement pawl moves in too far before the turntable has made a complete revolution; consequently the projection on the turntable hub makes contact on the side of the engagement pawl. This firm contact rotates the cycling cam sufficiently to have the teeth of the turntable hub and the cycling gear engage to start a change cycle. This tripping procedure is referred to as an acceleration trip. However if the pickup continues to move inward at a constant rate, there is a limit at which the edge of the engagement pawl will make a firm contact with the projection on the turntable hub and a constant diameter trip is effected.</p>  <p>As the cycling cam is carrying the mechanism through cycle a tab on the bottom of the motor board well, contacts and resets the trip pawl mechanism so the changer will not recycle without playing the next record.</p> 
Indexing for Pickup Landing Position	<p>As stated previously the pickup landing position for 7, 10 and 12 inch records is determined by the contact of the landing selector lever (83) and the various steps in the pickup arm return lever.</p> <p>There are two depressions (lances) in the cycling cam that play an important function in pickup landing position indexing. The depression located adjacent to the trip pawl mechanism provides a means of indexing for 7" records. This is accomplished by permitting the end of the 10" indexing lever (84) to drop down in the depression as the cam rotates causing the other end to push the landing selector lever (83) upward as far as it will go. The pickup arm return lever will then make contact with the landing selector lever (83) on the upper step and the pickup will land on the start of a 7" record.</p> 

CYCLE OF OPERATION (Cont.)

FUNCTION	DESCRIPTION
Indexing for Pickup Landing position (Cont.)	<p>When either a 10 or a 12" record is lying on the turntable the rubber end of the 10" indexing lever (84) is prevented from rising even though the other end of the lever tends to drop into the depression in the cam. Consequently the landing selector lever is only pushed up far enough, that the pickup arm return lever makes contact with the second step and the pickup will land on a 10" record.</p>  <p>RECORD PREVENTS LEVER (84) FROM RISING</p> <p>GEAR (87)</p> <p>TIP (85)</p> <p>(83) RESTS ON LUG</p> <p>LANDING SELECTOR LEVER</p> <p>PICKUP ARM RETURN LEVER (68)</p> <p>LEVER (83) MEETS MIDDLE STEP OF LEVER (68) AND STOPS PICKUP ARM RETURN LEVER TO POSITION PICKUP FOR LANDING 10" RECORDS</p> <p>However if a 12" record drops to the turntable the edge of the record strikes the 12" indexing lever (41) and causes the other end of the lever to rotate the selecting lever (65) sufficiently to permit landing selector lever (83) to drop off the tab (65A) and land on tab (65B). With the landing selecting lever in this position, it will make contact with the lower step in the pickup arm return lever stopping the pickup arm on its inward movement, so the pickup will then land on the start of a 12" record.</p>  <p>12" RECORD STRIKES (41) AND MOVES IT BACKWARD</p> <p>GEAR (87)</p> <p>TIP (85)</p> <p>(83) RESTS ON HORIZONTAL PROJECTION (65B)</p> <p>LANDING SELECTOR LEVER</p> <p>PICKUP ARM RETURN LEVER (68)</p> <p>LEVER (83) MEETS BOTTOM STEP OF LEVER (68) AND STOPS PICKUP ARM RETURN LEVER TO POSITION PICKUP FOR LANDING ON 12" RECORD</p> <p>65A TAB</p> <p>The other depression (lance) opposite the trip pawl mechanism provides a means of raising the end of the indexing selector (83) to the top of the tab (65A) so the landing is automatically returned to the 10" landing position. This means of automatically returning the pickup landing to 10" position makes it possible to play 10" and 12" records intermixed.</p>  <p>10" INDEX LEVER</p> <p>SELECTOR LEVER</p> <p>TAB (64A)</p> <p>SELECTOR LEVER ON TOP OF TAB 65A</p> <p>Starting Procedure in Automatic Stopping of Mechanism</p> <p>The stabilizer arm not only performs the function of stabilizing the records setting on the center post shelf but it also serves the purpose of actuating the automatic stopping device.</p> <p>As the last record of the stack drops to the turntable the record stabilizer arm (1) drops and actuates the stop arm (55). This stop arm in turn applies force to the stop lever (21D) through spring (57), lever 58 and connecting wire (60). At this moment the cycling slide has reached its outermost position and the end (21D) is pushing upward on escape lever (38) but is held from doing so by the knobbed end on the stud 92B which retards the movement of the escape lever (38) until the cycling slide has started on its return trip.</p>  <p>STOP ARM</p> <p>SPRING (57) TAKES UP ACTION WHEN ARM (1) DROPS PRIOR TO UNLATCHING OF LEVER (38) FROM STUD (92B)</p> <p>LEVER (38) HELD AT THIS POINT</p> <p>LEVER (38) CAN NOT RAISE BECAUSE OF HEAD ON STUD (92B)</p> <p>21D</p> <p>SLIDE</p> <p>92B STUD</p> <p>38</p> <p>58</p> <p>60</p> <p>55</p> <p>1 ARM</p>

CYCLE OF OPERATION (Cont.)

FUNCTION	DESCRIPTION
Mechanism Stops Automatically After Playing Last Record	<p>After the last record is played, the mechanism goes into the change cycle and as the cycling slide approaches its outermost position the knobbed end of the stud (92B) slides underneath and fails to contact the escape lever (38) so the latch (21C) remains latched. The pickup arm return lever is locked in position and cannot direct the pickup arm inward.</p> <p>The pickup arm will therefore remain in a position directly above the rest and when the elevating rod slides down the incline portion of the slide (92A) the pickup arm sets on the rest but the turntable continues to rotate for an instant until the shut-off switch is actuated as described in the following paragraph.</p> <p>When the mechanism is going through a change cycle (stack of records supported on spindle) and the automatic stopping device has not been actuated, the pickup arm return lever rotates to push the pickup in for landing.</p> <p>At this time the stud (68B) on the pickup return lever moves away from lever (74D) on the end of the switch link shut-off assembly and the tab (74A) on the other end of the assembly is pulled up by the tension of spring (73). While this tab (74A) is up and the cycling slide is returning to normal position the escape lever (92D) passes under the tab and the power switch is not actuated.</p> <p>However when the pickup arm return lever is latched the lever assembly (74C & D) is held in position so that the tab (74A) is down and the escape lever (92D) pushes against the tab as the cycling slide passes by. When these two points meet the motion is transferred to the control arm lever train and actuates the power switch (64) and the power is removed from the motor.</p> <p>STUD (68B) ON PICKUP ARM RETURN LEVER HOLDS LEVER (74A) AGAINST TENSION OF SPRING (73)</p> <p>LEVER (38) IS HELD UP BY LEVER (21D) PREVENTING UNLATCHING OF (21C)</p> <p>PICKUP ARM RETURN LEVER (68) IS HELD IN OUTWARD POSITION BY LATCH LEVER (21C)</p> <p>LEVER (74B) IS HELD DOWN IN POSITION TO CONTACT ESCAPE LEVER (92D) OF SLIDE</p> <p>LEVER (21B) ACTUATES SWITCH (64)</p> <p>SHUT OFF LEVER (92D) TURNS LEVER (74A) FORCING LINK (16) TO MOVE AND ACTUATE SWITCH SHUT OFF LINK ASSEMBLY.</p>

LUBRICATION

The mechanism is properly lubricated when it leaves the factory, additional lubrication should not be necessary for a long period of time.

A light machine oil (Singer sewing machine oil or equivalent) should be used to oil the bearings of the drive motor.

On all other bearing surfaces use equivalent lubricant sparingly.

Apply a medium weight clinging type of grease to points

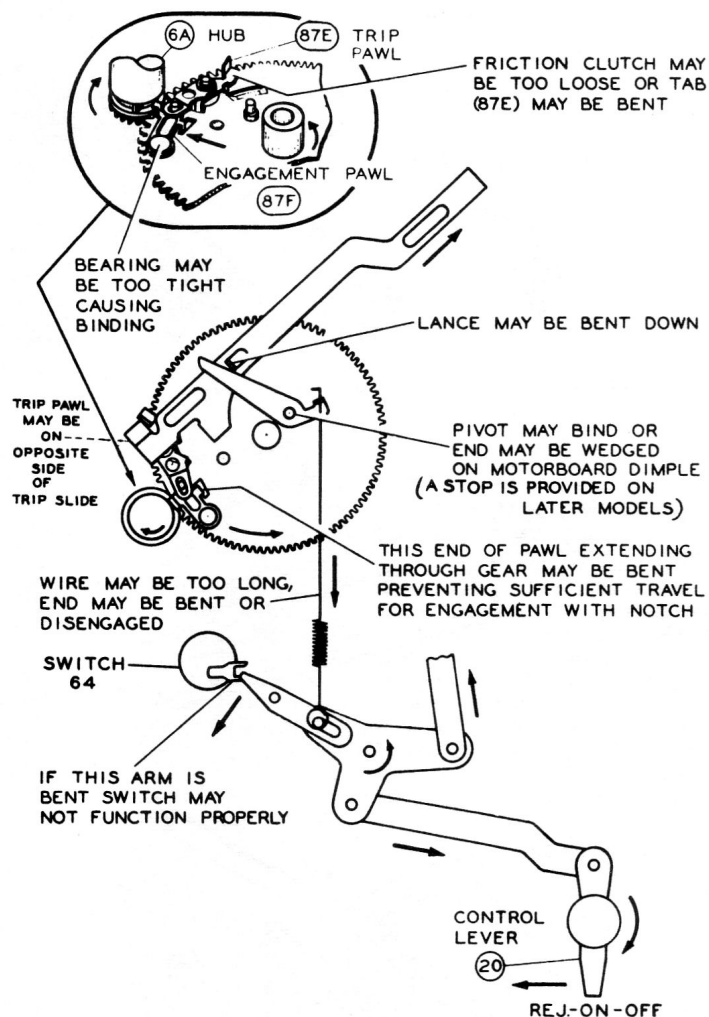
of sliding contact including tabs of cycling gear.

It is important that the drive motor spindle, all rubber tires and the inside rim of the turntable be kept clean and free of oil and grease.

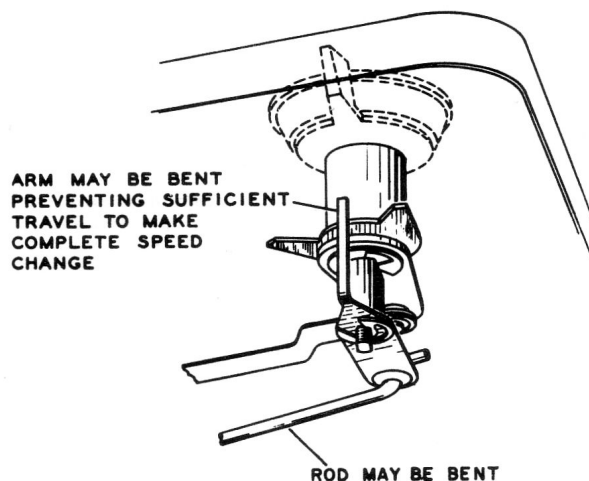
Carbon tetrachloride or naphtha is recommended for cleaning these parts.

SERVICE HINTS

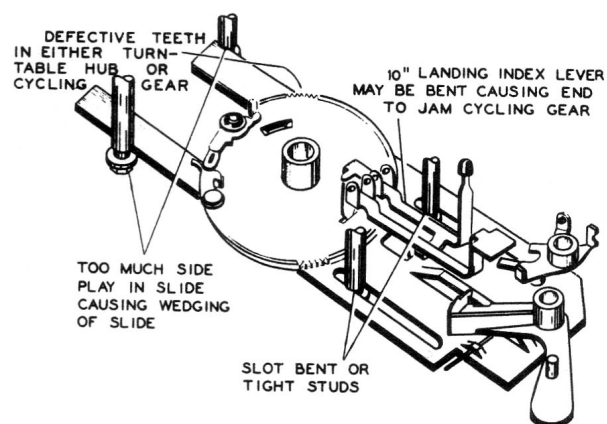
REJECT CONTROL DOES NOT FUNCTION PROPERLY



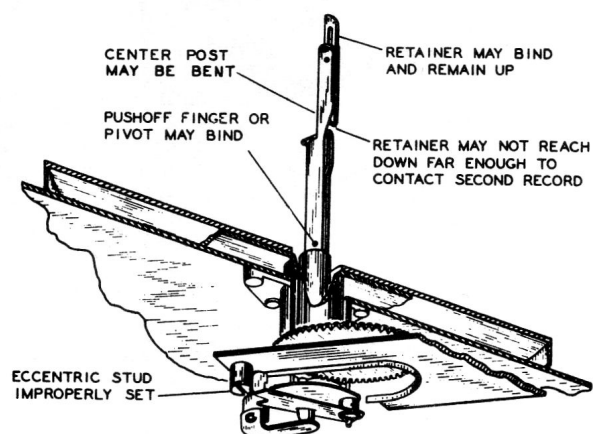
ERRATIC SPEED CHANGE



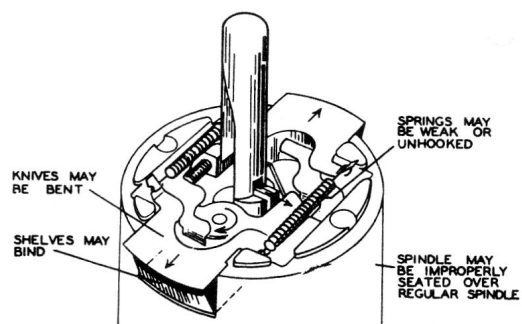
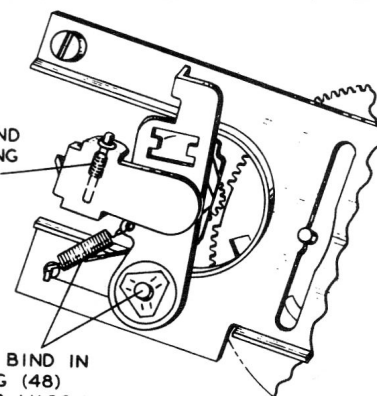
MECHANISM JAMS



RECORDS FAIL TO SEPARATE PROPERLY

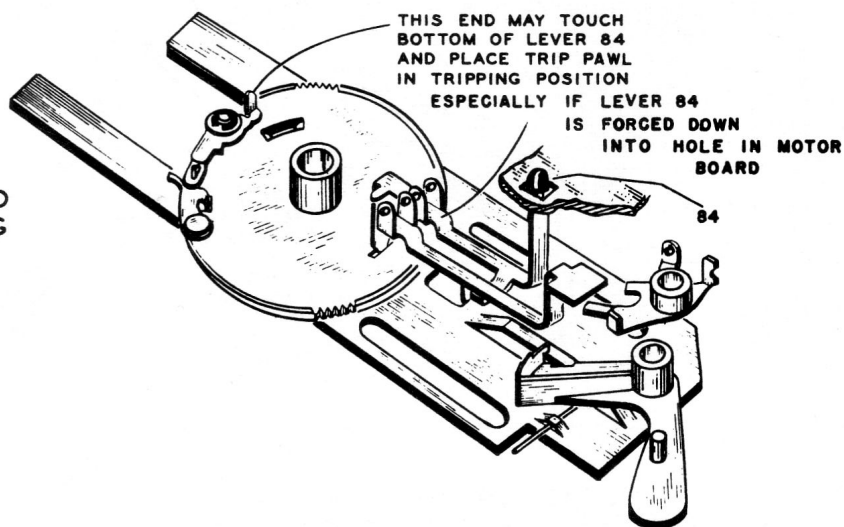
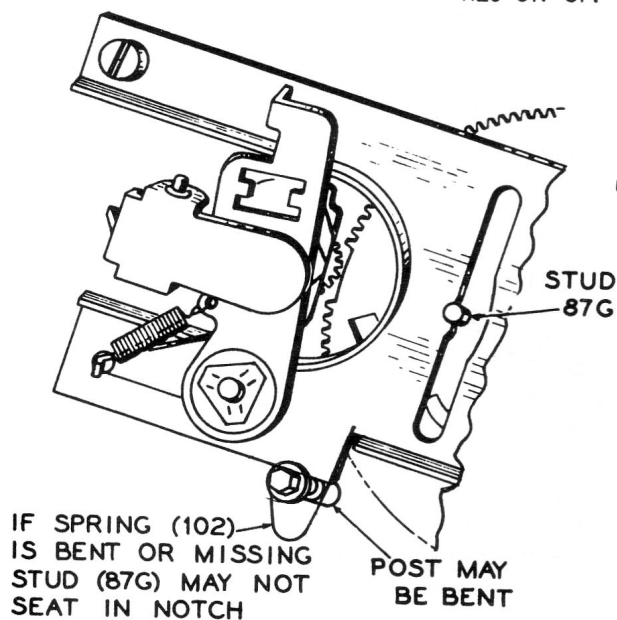
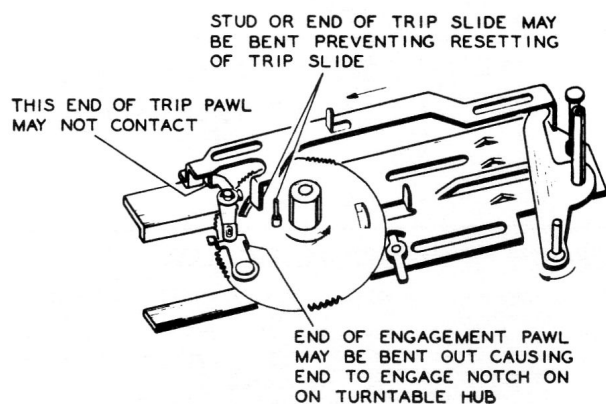
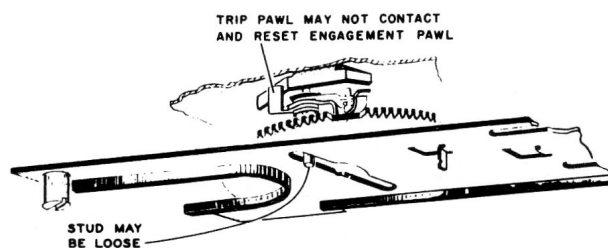
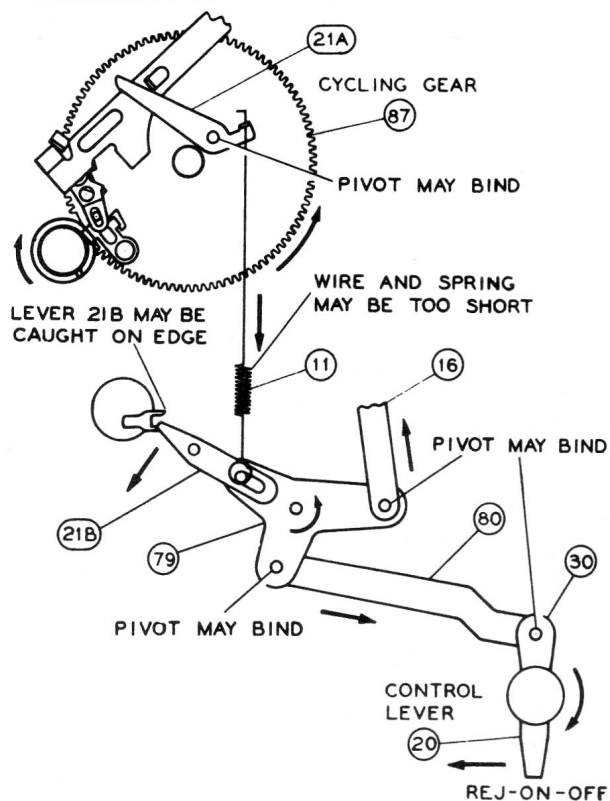


THERE MAY BE A BIND IN SHAFT OR SPRING (52) MAY BE WEAK OR MISSING

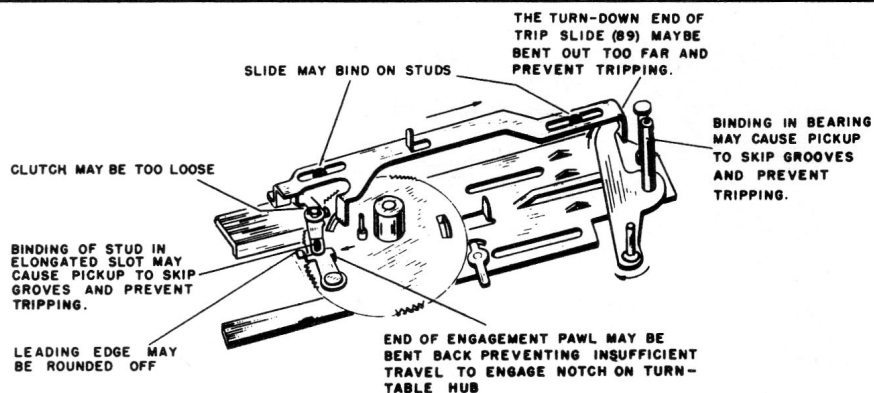
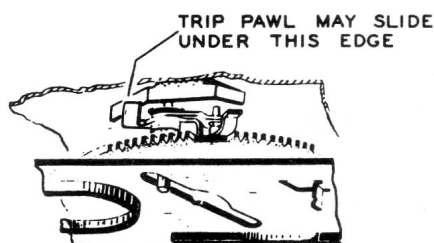


SERVICE HINTS

CONTINUOUS TRIPPING

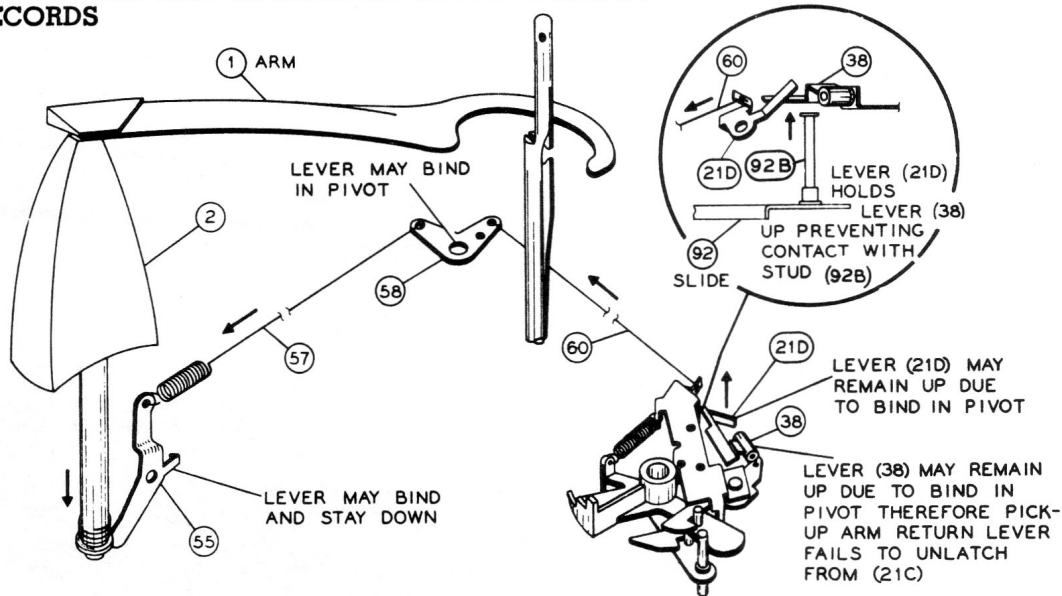


FAILS TO TRIP AUTOMATICALLY

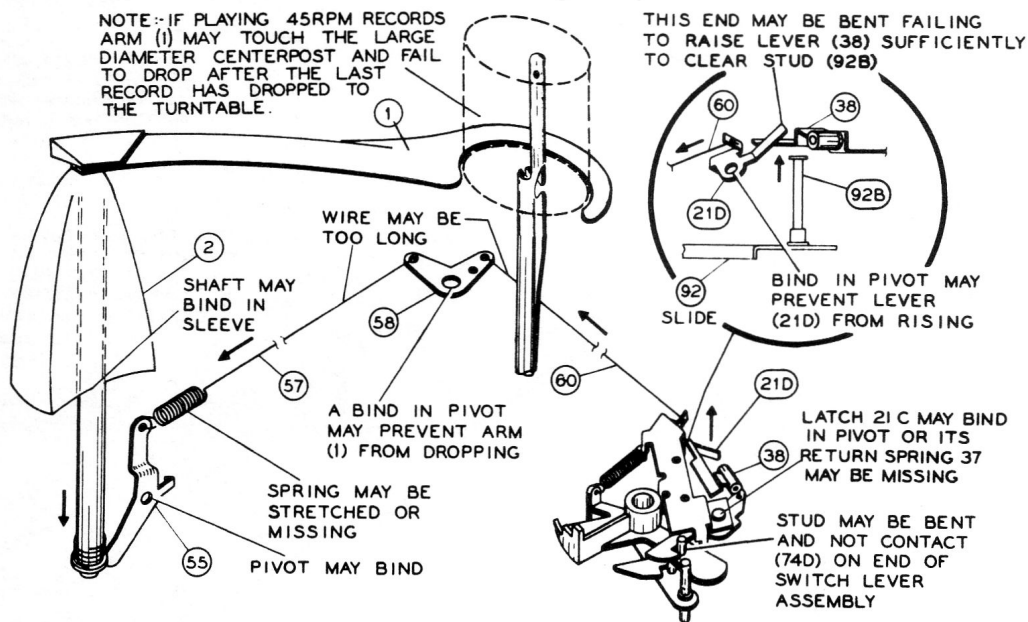


SERVICE HINTS

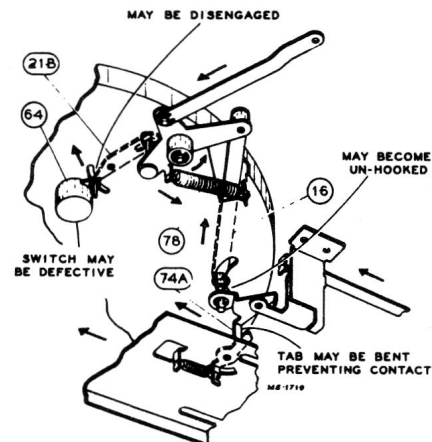
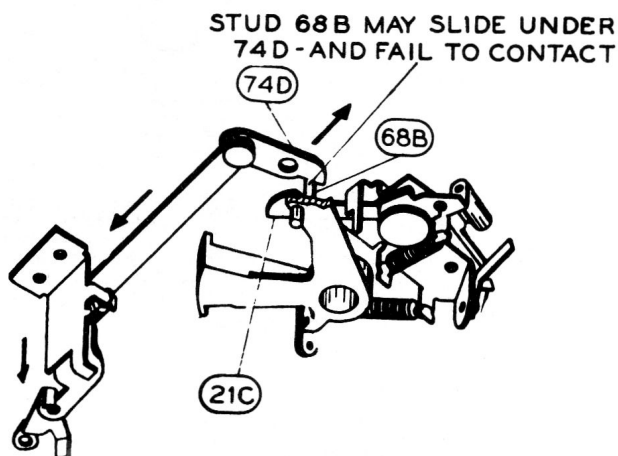
PICKUP SETS ON REST AND MECHANISM STOPS WITHOUT PLAYING RECORDS



FAILURE TO STOP AUTOMATICALLY

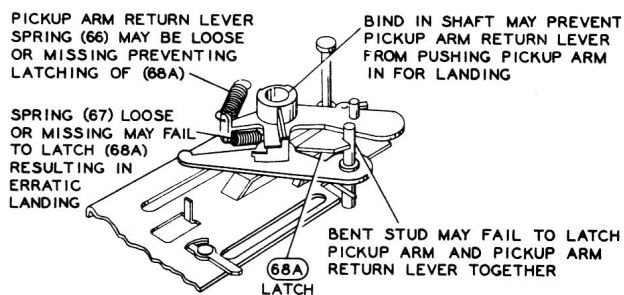
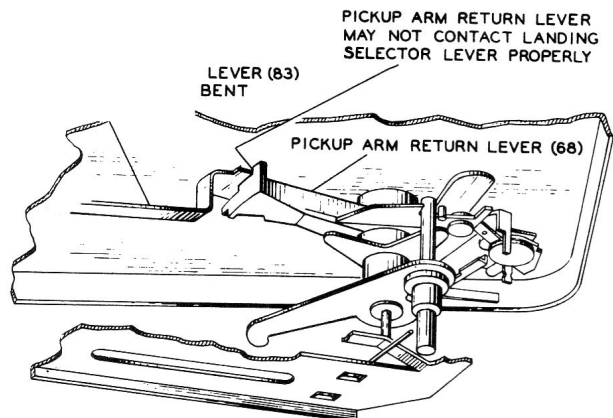


MOTOR FAILS TO SHUT OFF AFTER LAST RECORD HAS BEEN PLAYED

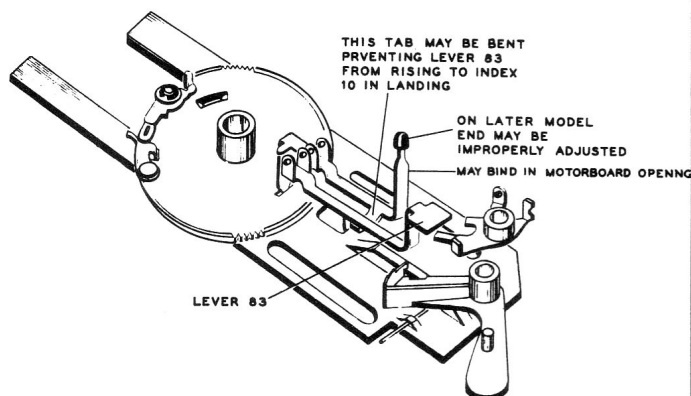


SERVICE HINTS

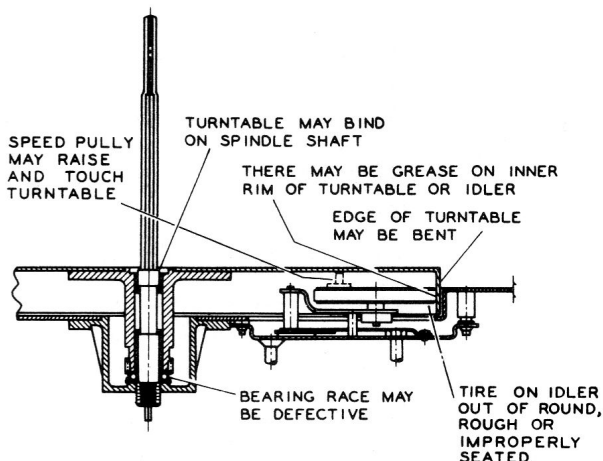
PICKUP FAILS TO LAND PROPERLY ON 7"-10"-12" RECORDS



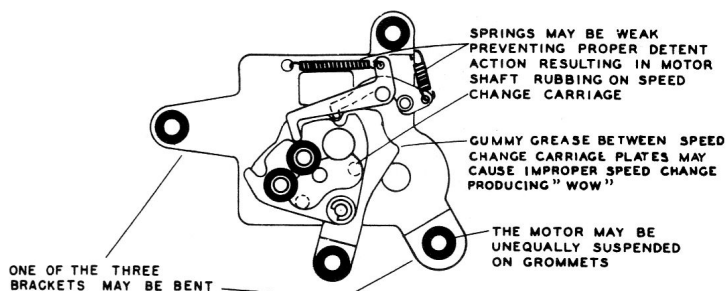
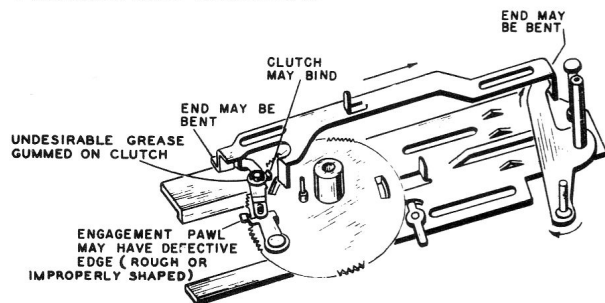
PICKUP LANDS IN 12" POSITION WHEN PLAYING 10" RECORDS



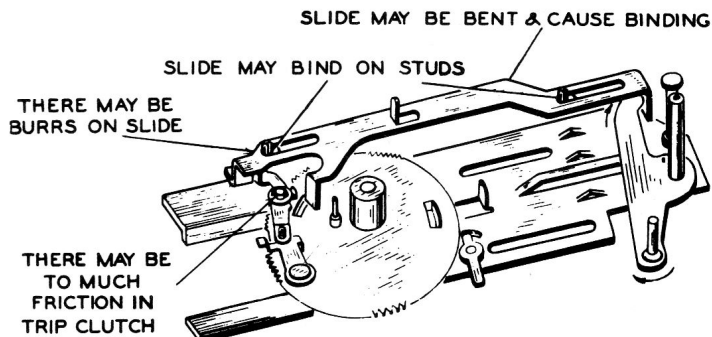
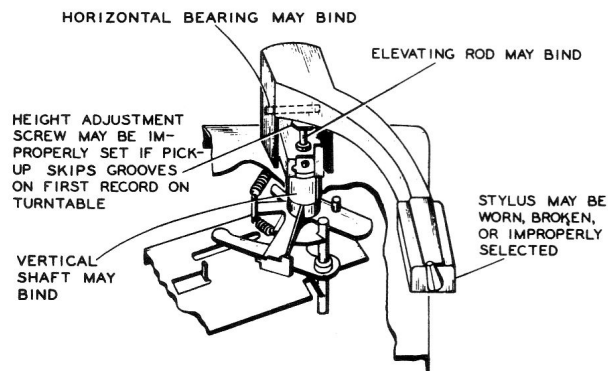
"WOW" OR TURNTABLE SPEED VARIATION



PREMATURE TRIPPING



PICKUP SKIPS GROOVES



STYLUS REPLACEMENT

CRYSTAL PICKUP #77779

The styli used on this pickup are held in position by small hex nuts (one for each stylus). Remove the nut and push threaded end of stylus through the cartridge.

Although the two styli are mechanically interchangeable, they should be replaced in such manner that the stylus which is coded red will contact the record when "33-45" on the stylus selector knob is visible from the top.

CAUTION:

The internal element of the pickups can be fractured by use of excessive force. It is advisable to grip stylus with pliers instead of holding pickup case while removing nuts.

MOVING COIL PICKUPS #100793 and #100566

The styli used in these pickups are not designed for field replacement.

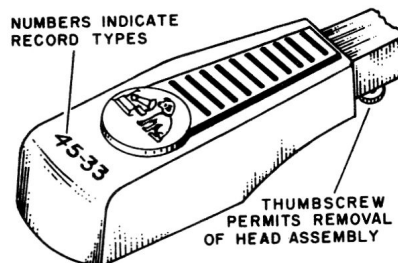


Fig. 8C—Moving Coil Pickup

REPLACEMENT PARTS

ILL. NO.	STOCK NO.	DESCRIPTION
1	100726	Arm—Stabilizer arm complete with shaft and plastic cap—taupe brown—for RP-197C-1
1	100729	Arm—Stabilizer arm complete with shaft and plastic cap—satin brass finish—for RP197C-5
1B	100994	Ring—"O" type rubber cushion ring for stabilizer arm—late production
1B	78683	Washer—Cork cushion washer for stabilizer arm—early production
2	101377	Support—Stabilizer arm support—rose gold for RP197C-1
2	101379	Support—Stabilizer arm support — lustrous aluminum—RP197C-5
3	78708	Spring—Return spring for stabilizer arm
4	.....	Washer—Flat washer for stabilizer arm $\frac{3}{8}$ " O.D. x .188" I.D. x .0625"
5	33726	Washer—"C" type retaining washer (.406" O.D., .125" I.D.)
6	100736	Turntable — Turntable assembly complete with hub and gear—taupe brown flock—for RP197C-1
6	100738	Turntable — Turntable assembly complete with hub and gear—heavy weight with rubber mat—for RP197C-5
7	78654	Ring—Retaining ring for spindle
8	78720	Washer—Flat washer for turntable thrust bearing
9	78660	Bearing—Thrust bearing for turntable
10	79242	Spindle—Spindle assembly
11	78680	Spring—Reject lever spring
12	74337	Nut—Speed nut for switch and reject lever assembly
13	78659	Pin—Bearing pin for landing selector levers #83 and #84
14	78747	Spring—Coil spring for motorboard assembly .200" O.D., .531" free length, 13 turns
15	78709	Spring—Return spring for landing selector lever
16	78663	Link—Reject link assembly complete with stud
17	78649	Washer—Flat washer for pickup arm pivot shaft
18	35969	Washer—"C" type retaining washer (.500" O.D., .183" I.D.)
19	100725	Knob—Speed control knob—black with "N"—for RP197C-5
19	100993	Knob—Speed control knob — gray — for RP197C-1
20	78696	Lever—"On-Off" reject control lever
21	100730	Motorboard—Motorboard assembly complete with stabilizer support and all welded and staked parts — rose gold — for RP197C-1
21	100732	Motorboard—Motorboard assembly complete with stabilizer support and all welded and staked parts — lustrous aluminum — for RP197C-5
21A	.....	Part of Motorboard
21B	.....	Part of Motorboard
21D	78669	Lever—Tone arm latch lever assembly
21E	.....	Screw—H.H.S.T. #4 x $\frac{1}{4}$ "
21F	.....	Screw—H.H.S.T. #8 x $\frac{3}{8}$ "
22	76921	Well—45 RPM centerpost well—less lid and grommet—for all versions of RP197 Series
23	100733	Lid—Plastic lid for centerpost well—black—for RP197C-1, 197C-5
24	76924	Pin—45 RPM centerpost well pin
25	78746	Spring—45 RPM centerpost well spring
26	.....	Screw—Pan h. machine #10-32 x $\frac{3}{8}$ " long
27	76940	Grommet—Rubber grommet for well
28	100569	Nameplate—"RCA Victor" nameplate—black finish metal for RP197C-1, 197C-5
28	100894	Nameplate—"RCA Victor" nameplate—black plastic—(Alternate for Stock No. 100569)

ILL. NO.	STOCK NO.	DESCRIPTION
29	77013	Nut—Speed nut for RCA Victor nameplate (3 req'd)—for mounting of metal nameplate
30	78668	Lever—Reject lever arm assembly complete with stud
31	76221	Washer—Control lever retaining washer
32	33726	Washer—"C" type retaining washer (.406" O.D. x .125" I.D.)
33	78682	Rod—Motor speed selector rod—for RP197C-1
33	100734	Rod—Motor speed selector rod—for RP197C-5
34	33139	Grommet—Rubber grommet for motor speed shift lever (Ill. 35)
35	78667	Lever—Motor speed shift lever
36	35969	Washer—"C" type retaining washer (.500" O.D., .183" I.D.) (For Ill. 35)
37	78698	Spring—Return spring for pickup arm latch —0.200 O.D. x 0.718 free length
38	78658	Lever—Actuating lever for pickup arm latch
39	78651	Washer—"C" type retaining washer
40	78712	Spring—Index lever return spring
41	100723	Lever—Index lever assembly—chrome—for 12" records for RP197C-1, 197C-5
42	.....	Nut—#6-32 nut (2 req'd)
43	78656	Bracket—Spindle mounting bracket assembly complete with stud
44	100342	Nut— $\frac{1}{2}$ "-32 hex nut
45	78670	Arm—Spindle operating arm assembly
46	79092	Washer—Flat metal washer, $\frac{3}{8}$ " O.D., .158" I.D.
47	73467	Retainer—Triangular push-on retainer—early production
47	33726	Washer—"C" type retaining washer—late production
48	78711	Spring—Return spring for spindle operating arm
49	78657	Lever—Spindle reset lever
50	78694	Pin—Pivot pin for spindle reset lever
51	78651	Washer—"C" type retaining ring for mounting bracket
52	78745	Spring—Actuating spring for reset lever
53	33726	Washer—"C" type retaining washer (.406" O.D., .125" I.D.) (3 req'd)
53A	75749	Washer—Flat washer for motor mounting
54	33139	Grommet—Rubber grommet for motor speed selector rod
55	78764	Lever—Shut-off lever assembly
56	.....	Screw—H.H.S.T. #8 x $\frac{3}{8}$ "
57	78681	Spring—Shut-off lever spring
58	78675	Arm—Transfer arm for shut-off mechanism
59	78714	Spring—Return spring for transfer arm
60	78679	Wire—Shut-off wire
61	35969	Washer—"C" type retaining washer (.500" O.D., .183" I.D.) (For Ill. 58)
62	78676	Switch—Muting switch assembly
63	.....	Screw—H.H.S.T. #8 x $\frac{3}{8}$ "
64	76301	Switch—"On-Off" switch SPST
65	78661	Lever—Selecting lever
66	78713	Spring—Return spring for pickup arm return lever
67	78699	Spring—Return spring for pickup arm return lever actuating lever
68	78655	Lever—Pickup arm return lever assembly
69	78724	Lever—Actuating lever assembly for pickup arm return
70	78653	Ring—Retaining ring for pickup arm return actuating lever (Ill. 69)
71	79091	Lever—Pickup arm lever
72	78672	Rod—Pickup arm lift rod
73	78698	Spring—Return spring for switch shut-off link
74	78695	Link—Switch shut-off link assembly
75	78651	Washer—"C" type retaining washer for pickup arm mounting bracket
76	78664	Bracket—Switch shut-off link bracket assembly

CONTINUED ON PAGE 16

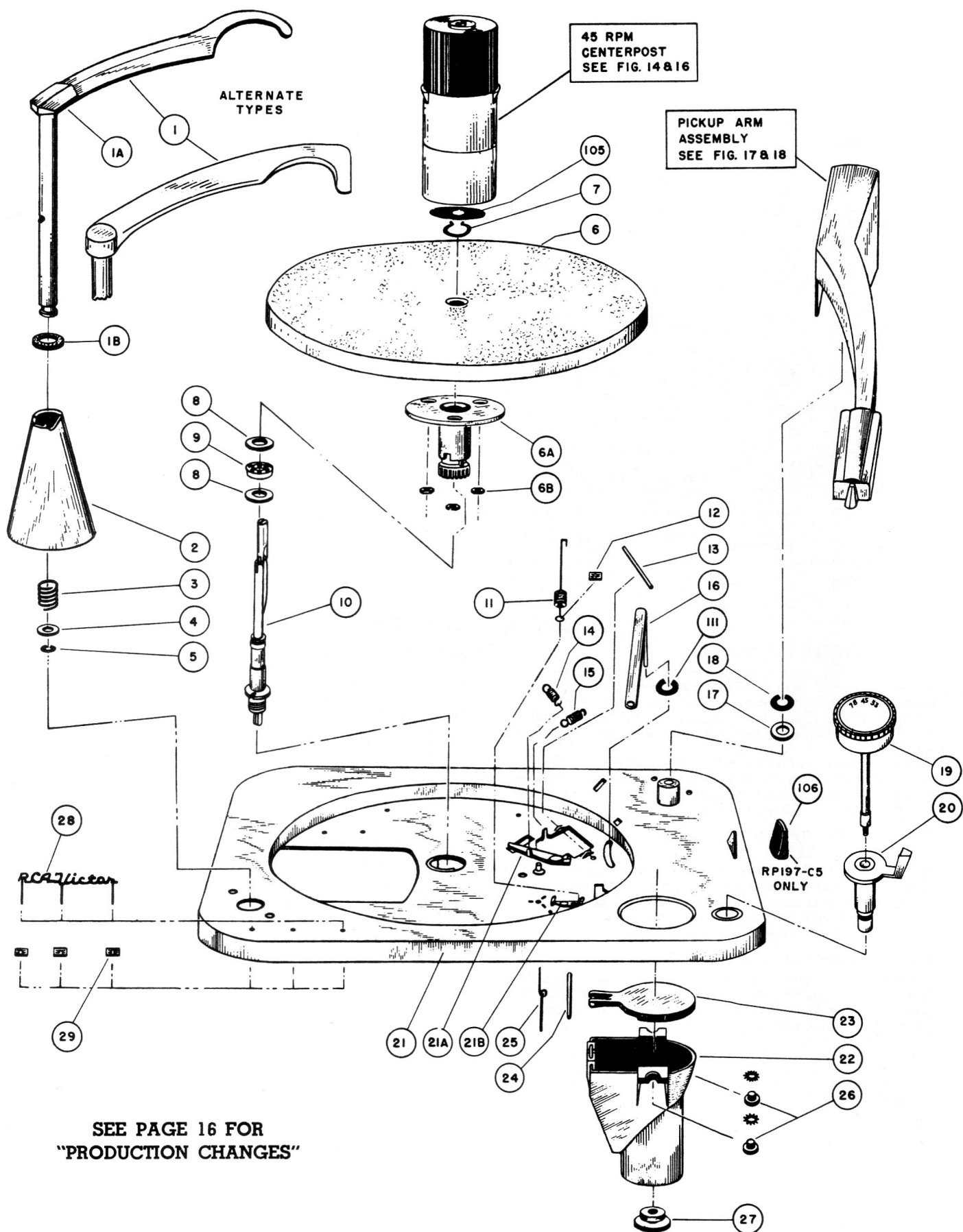


Figure 9A—Exploded View Showing Mechanism Parts Above Motor Board

REPLACEMENT PARTS (Continued)

ILL. NO.	STOCK NO.	DESCRIPTION
77	.....	Nut—#6-32 (2 req'd)
78	78710	Spring—Return spring for switch and reject lever
79	78662	Lever—Reject control pivot-lever—early type with attached bushing
79	100985	Lever—Reject control pivot lever—late type without attached bushing
80	78673	Link—Control link for "On-Off-Rej." (for RP197 Series)
81	33726	Washer—"C" type retaining washer (.406" O.D., .125" I.D.) (For Ill. #80)
82	35969	Washer—"C" type retaining washer (.500" O.D., .183" I.D.) (For Ill. #79-100985)
83	78689	Lever—Landing selector lever
84	78690	Lever—Index lever for 10" records—late type complete with adjustable cushion
85	100913	Cushion—Rubber cushion and screw assembly for index lever—late type
86	78721	Washer—Flat washer for landing control bearing pin
87	78691	Gear—Cycling gear assembly complete Ill. 87A, 87B, 87C, 87D, 87E
87A	78561	Washer—"C" type retaining washer
87B	79240	Washer—Flat washer for trip pawl pressure spring
87C	78727	Spring—Trip pawl pressure spring
87D	78725	Lever—Trip pawl actuating lever
87E	78726	Lever—Trip pawl intermediate lever
88	35969	Washer—"C" type retaining washer (.500" O.D., .183" I.D.) (For Ill. #87)
89	78688	Lever—Trip slide lever
90	78719	Washer—Flat washer for trip slide (1 req'd)
91	33726	Washer—"C" type retaining washer (.406" O.D., .125" I.D.) (1 req'd)
92	78794	Slide—Cycling slide assembly
93	.....	Wire—Music wire, .059" dia. stock 2 $\frac{1}{8}$ " long
94	75749	Washer—Flat washer for slide assembly
95	33726	Washer—"C" type retaining washer (.406" O.D., .125" I.D.)
96	78705	Spring—Actuating spring for escape shut-off lever
97	.....	Washer—#6 flat washer, $\frac{5}{8}$ " I.D., $\frac{3}{8}$ " O.D.
98	.....	Lockwasher—Ext. #6

ILL. NO.	STOCK NO.	DESCRIPTION
99	.....	Screw—H.H. #6-32 x $\frac{5}{8}$ "
100	74431	Washer—Spring retaining washer for eccentric stud
101	78685	Stud—Eccentric stud for drop adjustment
102	79352	Spring—Formed wire spring for slide assembly
103	100735	Support—Spindle bearing support — for RP197C1, 197C-5
104	.....	Screw—#6-32 x $\frac{5}{8}$ " hex head screw for mounting #100735 support
105	101264	Washer—Black neoprene washer — for RP197C-5
106	101199	Bumper—Rubber insulating bumper for pickup arm rest for RP197C-5
107	100987	Spring—Tension spring for pickup arm latch actuating lever Ill. 38
108	100986	0.192 O.D. x 0.395 free length
109	78653	Plate—Spacer plate under switch-off link bracket Ill. 76
110	77586	Ring—Retaining ring for selector lever Ill. 65—late production only
111	33726	Washer—"C" type retaining washer for link Ill. 74
100157	.....	Washer—#10 Ext. tooth lockwasher for spindle well mounting screws
.....	.....	Washer—"C" type retaining washer for lever 78688 Ill. 89 (1 req'd)
		MISCELLANEOUS
.....	74545	Cable—Shielded audio cable (66 in.) with pin plug—for Record Changer Attachment models
.....	79149	Capacitor—Fixed, paper 0.1 mf. $\pm 20\%$, 600 v. (part of click filter)—for RP197C-5
.....	100211	Connector—Closed end connector for power leads
.....	70392	Cord—Power cord (6 ft.) with standard two prong plug—for Record Changer Attachment models
.....	31048	Plug—Single-pin plug for audio cable
.....	74192	Plug—3-prong plug for audio cable
.....	502068	Resistor—Fixed, composition, 68 ohm, $\pm 10\%$, $\frac{1}{2}$ watt (part of click filter)—for RP197C-5

PRODUCTION CHANGES

10" INDEX LEVER (ILL. NO. 84)

A change has been made in the 10" indexing lever (Item No. 84) to permit height adjustment. The adjustable type is being supplied on all orders for Stock No. 78690 and includes rubber cushion. The rubber cushion for this lever is molded onto the adjusting screw and is available separately as Stock No. 100913.

The original cushion (Stock No. 78666) which was attached by pushing on to the end of the lever has been discontinued. A screw-on type of cushion which was used as an interim substitute has never been stocked.

SPINDLE SUPPORT (ILL. NO. 103)

All production of late models uses a die-cast spindle support (#100735) which includes two supports for the cycling slide. The original type spindle support was riveted to the motorboard and is not available as an individual replacement part. The original type cycling slide supports were individually staked to the motorboard.

MOTORS WITH "NEUTRAL" POSITION

Late production uses motors having a "neutral" position. The "neutral" position disengages the idler wheel from contact with the motor turret pulleys. Motors having the "neutral" position are directly interchangeable with motors

not having the "neutral" position.

Speed control knobs used in conjunction with motors having a "neutral" position have an "N" designation midway between "45" and "78". These knobs are directly interchangeable with knobs not having the "N" designation.

REJECT CONTROL PIVOT (ILL. NO. 79)

The original type pivot lever (#78662) had a staked collar and was mounted on a shoulder stud.

The late type pivot lever (#100985) is flat (without collar) and is mounted on a straight stud. It is held in position by two "C" type retaining washers (#35969 Ill. No. 82).

SPINDLE OPERATING ARM RETAINER (ILL. NO. 47)

The original type of retainer used for this purpose was a triangular push-on retainer (#73467). A "C" type retaining washer (#33726) is now being used for this purpose but cannot be used to replace the triangular type; a slot in the mounting stud is necessary when using the "C" type.

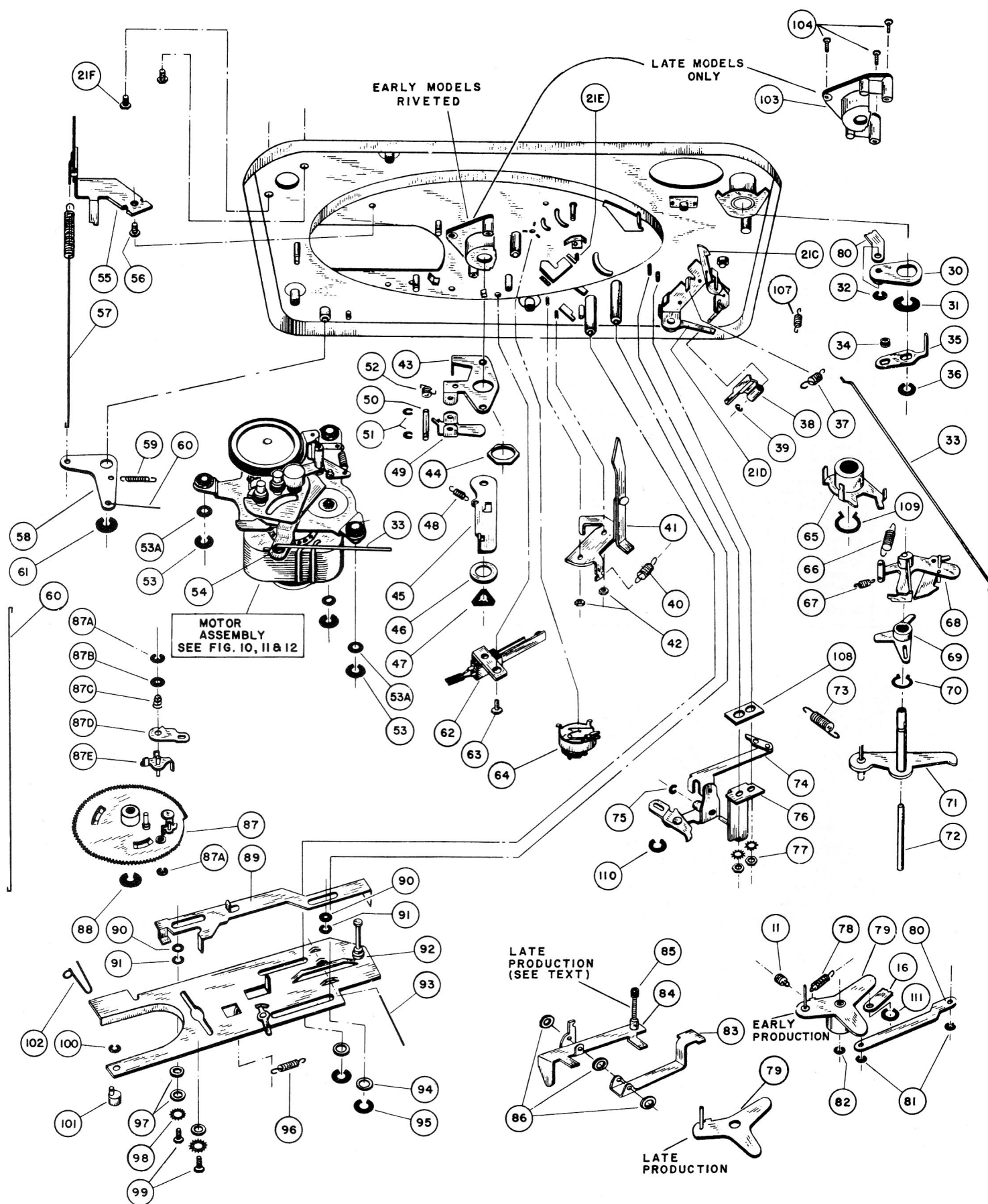


Figure 9B—Exploded View Showing Parts Below Motor Board

REPLACEMENT PARTS

ILL. NO.	STOCK NO.	DESCRIPTION
		MOTOR ASSEMBLY Stamped: 938784-1 190 (60-cycle) 938784-3 190 (60-cycle)
1	76750	Wheel—Idler wheel
2	75433	Washer—Thrust washer
3	76744	Retainer—Hairpin spring retainer for idler wheel
4	78645	Plate—Idler wheel support plate
5	78646	Retainer—Hairpin spring retainer for idler wheel support
6	78647	Washer—Flat metal washer for idler wheel support
7	78648	Link—Idler wheel support link
8	78764	Spacer—Idler support spacer
9	78374	Spring—Idler support spring
10	76751	Grommet—Rubber grommet for motor mounting
11	76749	Spring—Spring pulley for motor shaft
12	78678	Motor—Motor assembly complete—115 volts 60-cycle—without "neutral" detent
12	101053	Motor—Motor assembly complete—115 volts 60-cycles—with "neutral" detent
14	76755	Spring—Detent spring
15	77134	Collar—Speed shift lever mounting collar (nut)
16	79190	Plate—Motor mounting plate assembly includes: Ill. 4 to 9
17	.....	Lockwasher—For speed shift lever mounting plate
18	79189	Lever—Speed shift lever—without "neutral" detent
18	101582	Lever—Speed shift lever with "neutral" detent
19	77229	Grommet—Speed shift lever grommet
20	79188	Plate—Speed pulley mounting plate WITH three pulleys (without "neutral" detent)
20	101583	Plate—Speed pulley mounting plate—LESS pulleys (with "neutral" detent)
20A	76748	Pulley—33 $\frac{1}{8}$ r.p.m. drive pulley
20B	76747	Pulley—45 r.p.m. drive pulley
20C	76746	Pulley—78 r.p.m. drive pulley
20D	75428	Washer—Felt washer for turret pulleys (early production) $\frac{7}{16}$ " O.D. x $\frac{3}{16}$ " I.D.
20D	101584	Washer—Felt washer for turret pulleys (late production) $\frac{11}{32}$ " O.D. x $\frac{3}{16}$ " I.D.
20E	75427	Retainer—"C" type retainer ring for pulleys

ILL. NO.	STOCK NO.	DESCRIPTION
		MOTOR ASSEMBLIES Stamped: 938784-1 107 (60-cycle) 938784-3 107 (60-cycle) 971507-2 (50-cycle)
1	78508	Wheel—Idler wheel with fibre washer
2	78516	Plate—Idler plate assembly
3	78510	Washer—Felt washer
4	78509	Washer—Fibre washer
5	78511	Washer—"C" washer
6	78512	Spring—Idler spring
7	78515	Washer—Blued steel washer
8	78517	Link—Idler link
9	.....	Screw—Holddown plate mounting screw (#6-32)
10	.....	Lockwasher—Holddown plate mounting screw lockwasher
11	78513	Plate—Holddown plate
12	78519	Spring—Pulley latch spring
13	78518	Arm—Pulley plate latch arm
14	78514	Grommet—Motor mounting grommet
15	78520	Spring—Shifter latch spring
16	78521	Lever—Latch arm lever
17	78522	Sleeve—Sleeve pulley for 60-cycle operation
17	79967	Sleeve—Spring pulley for 50-cycle operation
18	78524	Plate—Speed pulley mounting plate (without "neutral" detent)—less pulleys
18	101304	Plate—Speed pulley mounting plate (with "neutral" detent)—less pulleys
18A	78525	Pulley—33 $\frac{1}{8}$ r.p.m. pulley
18B	78526	Pulley—45 r.p.m. pulley
18C	78527	Pulley—78 r.p.m. pulley
18D	78528	Washer—Speed pulley fibre washer
19	.....	Washer—Flat metal washer
20	33139	Grommet—Speed shift lever grommet
21	78529	Lever—Speed shift lever—without "neutral" detent
21	101305	Lever—Speed shift lever—with "neutral" detent
	78678	Motor—Motor assembly complete—115 volt 60-cycle—without "neutral" detent
	79852	Motor—Motor assembly complete—115 volt 50-cycle
	101053	Motor—Motor assembly complete—115 volt 60-cycle—with "neutral" detent

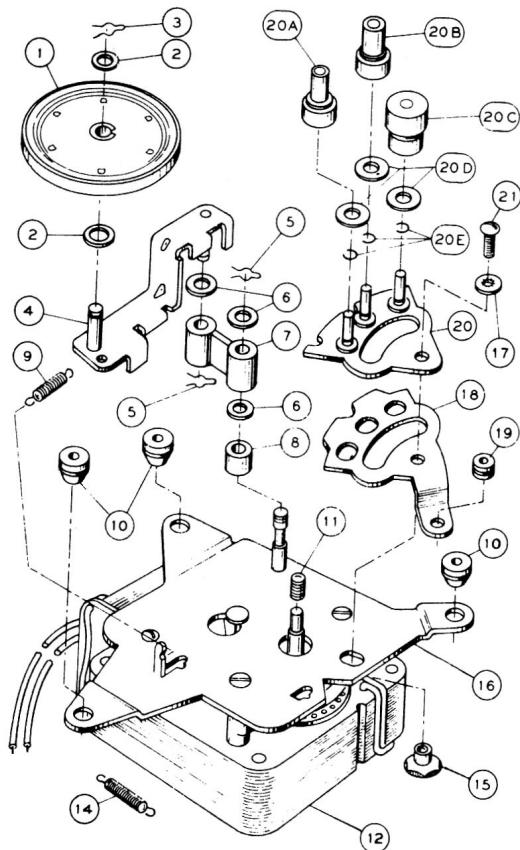


Figure 10—Motor Assembly Stamped 938784-1 190
or 938784-3 190

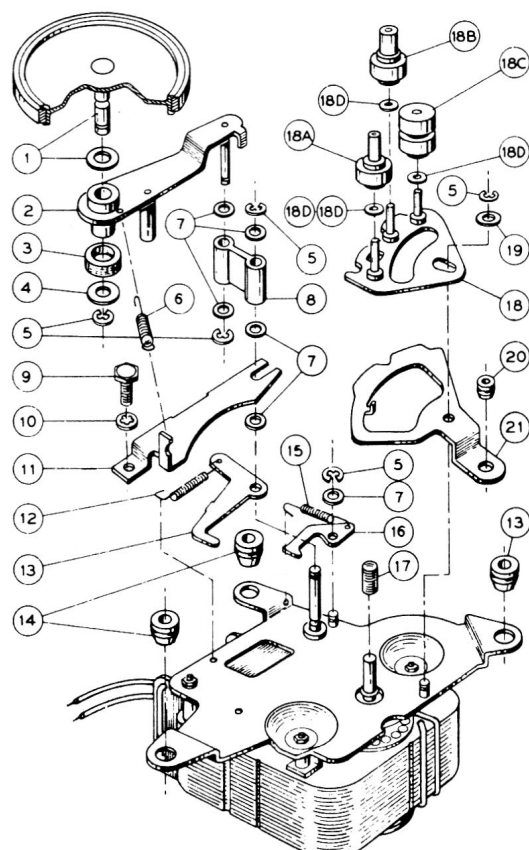


Figure 11—Motor Assembly Stamped 938784-1 107
or 938784-3 107 or 971507-2

REPLACEMENT PARTS

ILL. NO.	STOCK NO.	DESCRIPTION
		MOTOR ASSEMBLY
		Stamped: 971525-5 107
		971525-6 107
		Same as listed for motor stamped 938784-3 107 except:
17	100989	Spring—Spring sleeve for 50-cycle operation
17	100988	Spring—Spring sleeve for 60-cycle operation
100991		Motor—115v./230v., 60-cycle motor complete
		—with "neutral" detent
100992		Motor—115v./230v., 50-cycle motor complete
		—with "neutral" detent
		REFER TO FIGURE 11
		MOTOR ASSEMBLY
		Stamped: 971526-3 (60-cycle)
		REFER TO FIGURE 12
1	78756	Pulley—33½ r.p.m. turret pulley
2	78755	Pulley—45 r.p.m. turret pulley
3	78757	Pulley—78 r.p.m. turret pulley
4	75428	Washer—Felt washer for turret pulleys
5	75427	Retainer—Pulley retainer ("C" ring)
6	101585	Plate—Speed pulley mounting plate
7	.....	Screw—Screw for speed pulley plate mounting
8	.....	Lockwasher—Lockwasher for speed pulley plate mounting
9	101586	Lever—Speed shift lever
10	75403	Grommet—Rubber grommet for shift lever
11	.....	Screw—Round head machine screw for motor mounting plate
12	76751	Grommet—Rubber grommet for motor mounting plate
13	78765	Pulley—Motor shaft pulley—less set screw
14	78767	Screw—Set screw for motor shaft pulley
101197		Spring—Spring sleeve for operation on 50-cycle supply (.449 O.D. x .373 I.D.)
79249		Resistor—Flexible wire wound resistor, 60 ohms, ±10%, 5 watt (used in series with motor winding on 50-cycle operation)
15	.....	Lockwasher—Lockwasher for motor mounting plate
16	77134	Collar—Speed shift lever collar (nut)
17	76755	Spring—Detent spring
18	30870	Connector—Two-prong male connector
19	78766	Plate—Motor mounting plate only
20	78374	Spring—Idler wheel tension spring
21	78760	Plate—Idler wheel support plate
22	78764	Spacer—Idler support spacer
23	78762	Washer—Flat metal washer for idler support
24	78761	Retainer—Hairpin spring retainer for idler wheel mounting plate and support
25	78763	Link—Idler wheel support link
26	75433	Washer—Flat metal washer for idler wheel mounting
27	76750	Wheel—Idler wheel
28	76744	Retainer—Hairpin spring retainer for idler wheel
	100972	Motor—Motor assembly complete—115 volt, 60-cycle, 4 pole

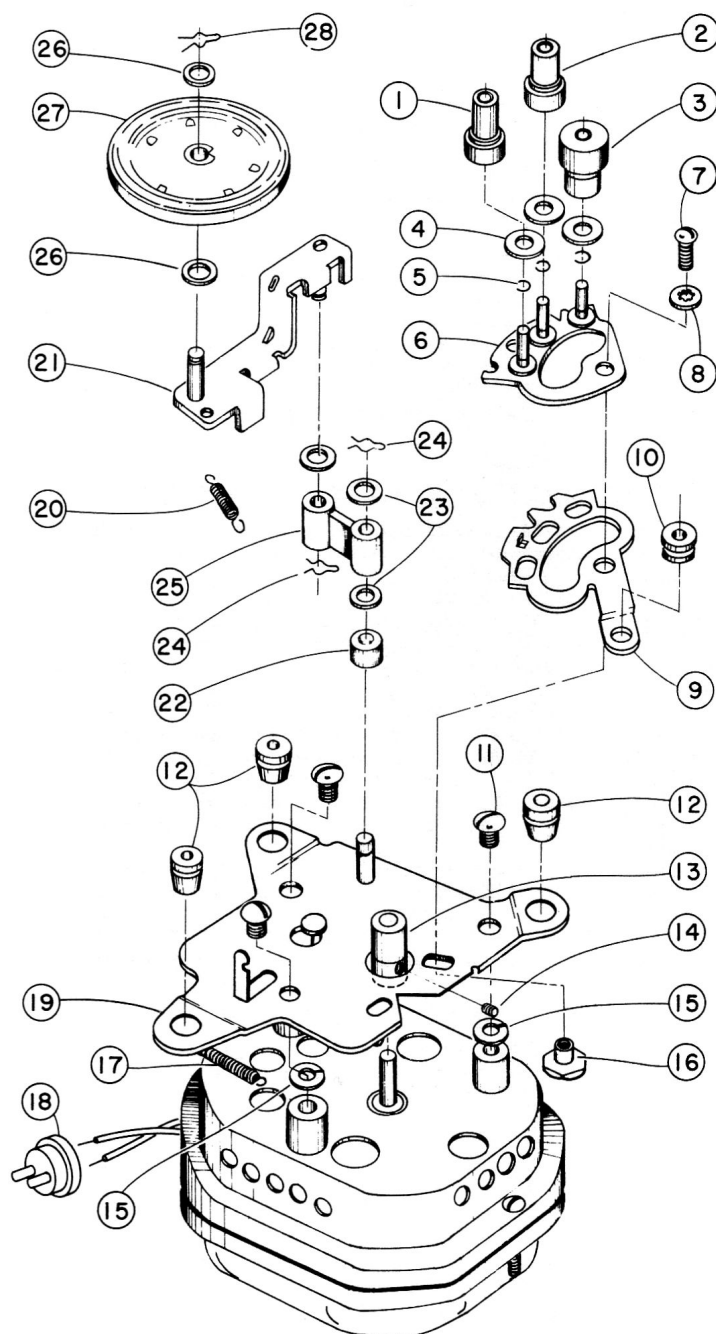


Figure 12—Four-Pole Motor Assembly (Stamped 971526-3)

REPLACEMENT PARTS

ILL. NO.	STOCK NO.	DESCRIPTION
		45 R.P.M. CENTERPOST METAL BODY TYPE
	79096	Centerpost—45 r.p.m. centerpost complete
1	79201	Cap—Nose cap
2	79203	Knife—Record separator knife (1 set)
3	79202	Spring—Record separator knife spring
4	79204	Lever—Actuator lever assembly
5	79205	Shelf—Record support shelf
6	79206	Spring—Record support shelf spring (16 turns)
7	.....	Body—Centerpost body assembly
8	79207	Screw—#4-40 screw for nose cap
9	79208	Washer—Fibre washer
10	.....	Rotor—Die cast rotor
11	76954	Spring—Rotor lift spring (coil) (1.168" O.D. x 1" —4½ turns)
12	79209	Lift—Rotor lift
13	79210	Retainer—Rotor lift retainer (8 tooth)

OPERATION OF 45 R.P.M. CENTERPOST

In the out-of-cycle position (playing), the 45 r.p.m. records (with 1½" centerhole) rest upon the protruding shelves of the centerpost (knives are retracted).

When the mechanism goes through cycle, the record push-off finger in the ¼" center spindle pushes against the actuator lever. This lever is pivoted and pushes outward on both separator knives. The knives will then support all records except the bottom record.

Projecting tabs on each knife engage the OPPOSITE shelf and thus retract the shelves and allow the bottom record to fall to the turntable. As the push-off finger moves back to the normal position, one pair of springs pull the knives inward and another pair of springs push outward on the shelves. The stack of records then drop a short distance and rest upon the shelves.

Careless placement or removal of the 45 r.p.m. centerpost on the center spindle may result in bending of the center spindle. The 45 r.p.m. centerpost should be placed on or removed from the center spindle with a STRAIGHT VERTICAL MOTION. The "RCA" monogram should always face to the front.

REMOVAL OF ROTOR LIFT RETAINER

The rotor lift retainer can be easily removed by inserting a small screwdriver between the retainer and centerpost body and prying outward. Repeat this process at several points.

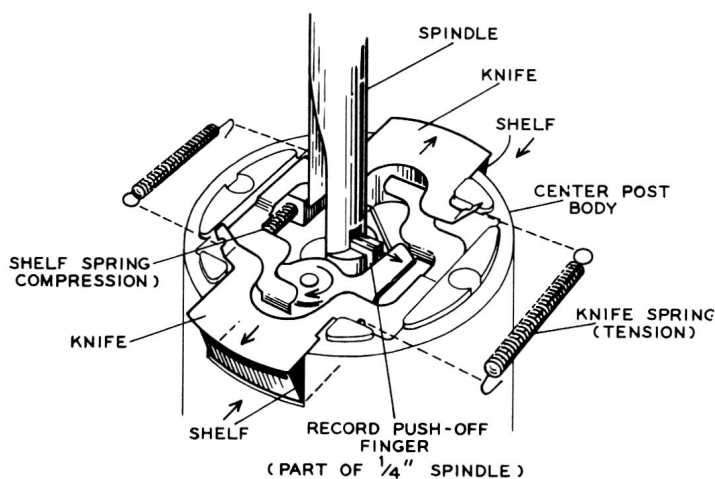
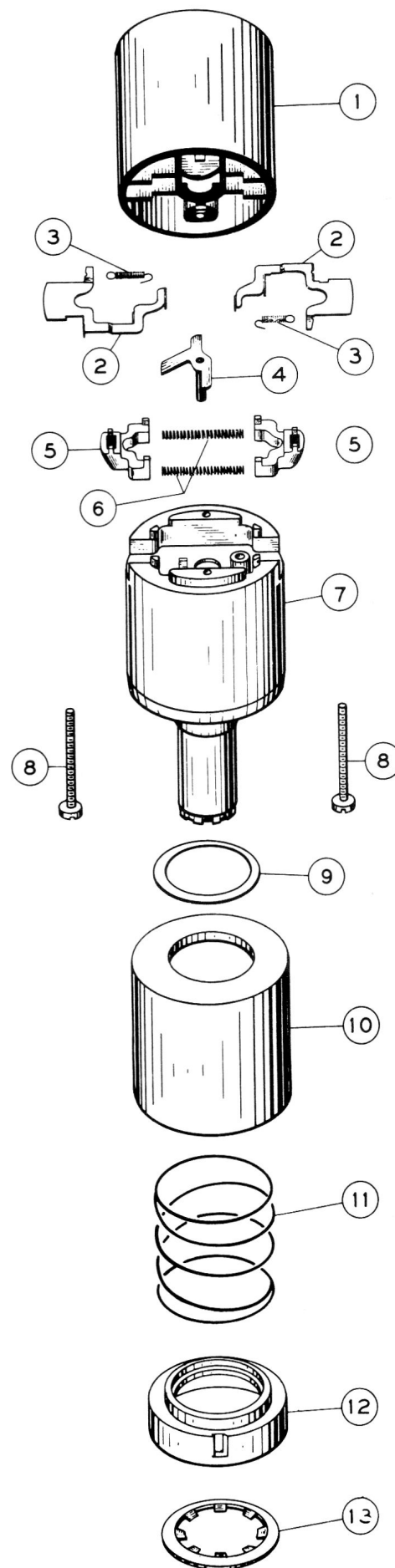


Figure 13—Centerpost Operation

Figure 14—45 r.p.m. Centerpost
(Metal Body Type)

REPLACEMENT PARTS

ILL. NO.	STOCK NO.	DESCRIPTION
		45 R.P.M. CENTERPOST Plastic Body Type
1	100499	Cap—Nose cap—red—polystyrene for all mod-
1A	100501	Spring—Nose cap spring, $\frac{5}{16}$ " wide
2	100498	Spring—Nose cap spring, $1\frac{3}{4}$ " long, $\frac{1}{4}$ " wide
3	100494	Slide—Record separators actuator slide
4	100497	Sleeve—Actuating lever mounting sleeve
5 & 6	100495	Lever—Slide actuating pivot lever—L.H. & R.H. (1 set)
7	100493	Knife—Record separator knife (1 set)
8 & 9	100491	Shelf—Record support shelves—L.H. & R.H. (1 set)
10	100492	Spring—Record support shelf spring
11	101566	Body—Centerpost body assembly
12	100502	Screw—#4-24 x $1\frac{1}{2}$ " S.T.
13	100503	Washer—Flat metal washer 1" O.D., .814 I.D., .005" thick
14	101567	Rotor—Die cast rotor
15	100504	Spring—Rotor lift spring (coil) $2\frac{3}{4}$ turns
16	100505	Lift—Rotor lift
17	100506	Retainer—Rotor lift retainer (12 teeth)

OPERATION OF 45 R.P.M. CENTERPOST

In the out-of-cycle position (playing), the 45 r.p.m. records (with $1\frac{1}{2}$ " centerhole) rest upon the protruding shelves of the centerpost (knives are retracted).

When the mechanism goes through cycle, the record push-off finger in the $\frac{1}{4}$ " center spindle pushes against the actuator slide. This slide actuates two pairs of pivot levers. One pair of these levers pull the shelves inward (downward projections of pivot levers extend through long slots of knives and engage in short slots of the shelves). The other pair of levers push the separator knives outward (downward projections of pivot levers engage small holes in knives—long slot of shelves allow freedom of movement).

Two small coil springs push outward on the shelves and thus return them to the normal outward position. A formed metal spring extending up into the nose cap returns the slide to its normal position.

In the normal position the stack of records is supported by the shelves. During cycle the separator knives are extended first and then the shelves are retracted. The knives extend into the opening between the bottom record and the one adjacent; thus supporting all but the bottom record. When the shelves retract the bottom record falls to the turntable.

Careless placement or removal of the 45 r.p.m. centerpost on the center spindle may result in bending of the center spindle. The 45 r.p.m. centerpost should be placed on or removed from the center spindle with a STRAIGHT VERTICAL MOTION. The "RCA" monogram should always face to the front.

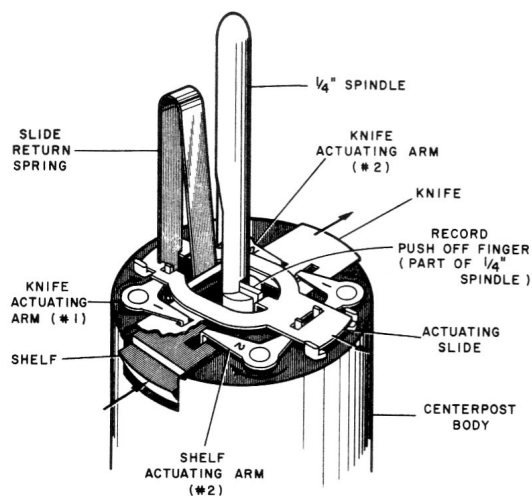


Figure 15—45 r.p.m. Centerpost
(Plastic Body Type)

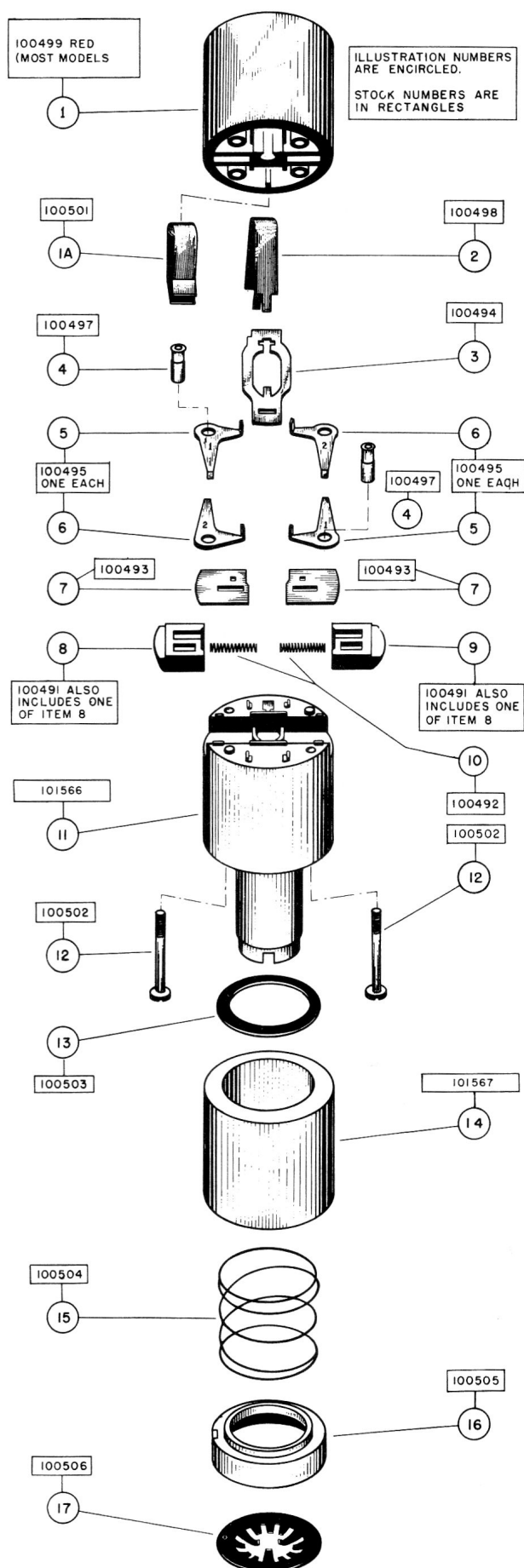


Figure 16—Centerpost Operation

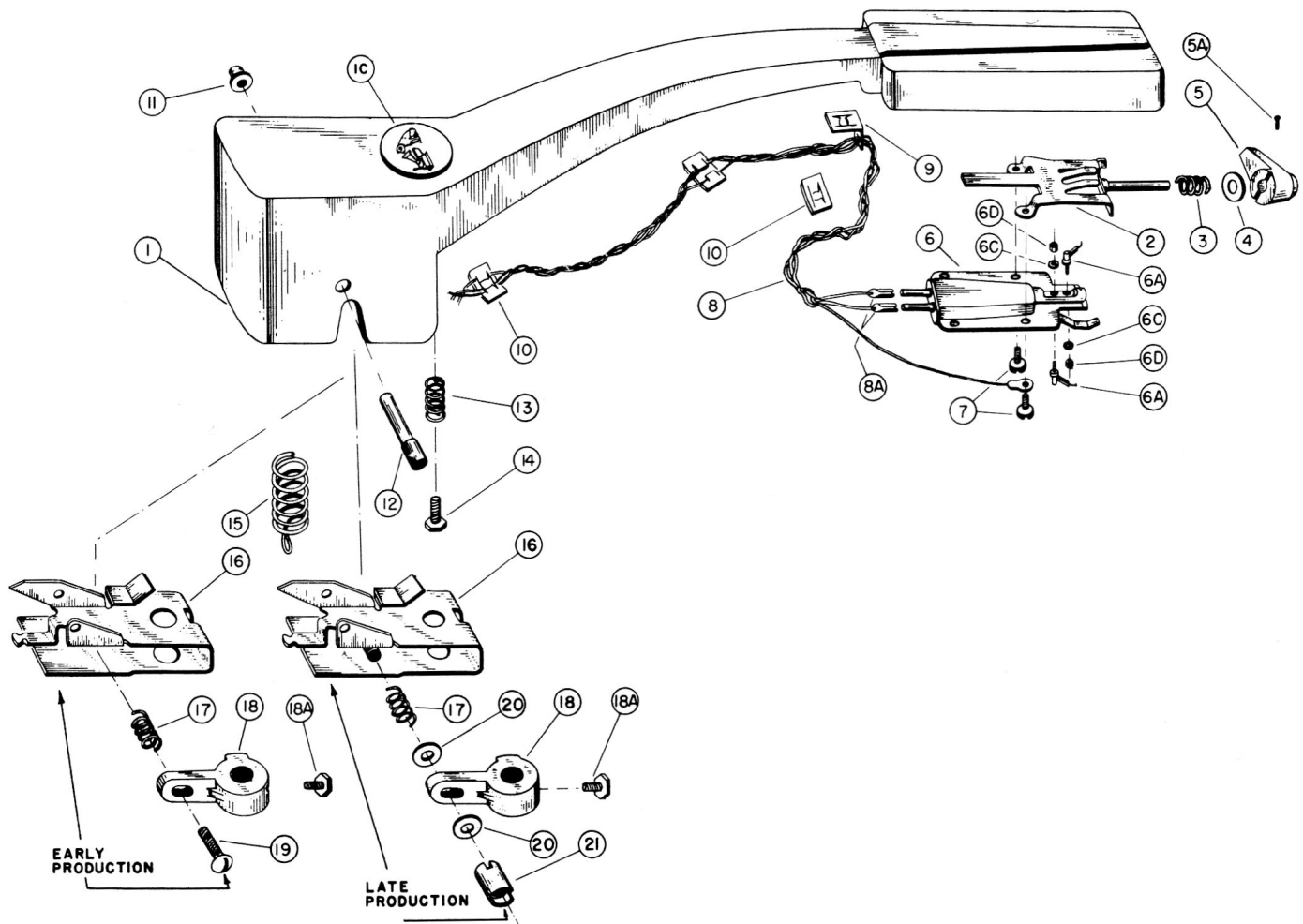


Figure 17—Pickup & Arm Assembly

REPLACEMENT PARTS

ILL. NO.	STOCK NO.	DESCRIPTION
		PICKUP & ARM ASSEMBLY FOR RECORD CHANGER MODELS: RP197C-1
1	100760	Arm — Pickup arm shell only — with non-detachable pickup housing — grey — for RP197C-1
1C	100757	Monogram—RCA Victor trademark emblem on pickup arm—for RP197C-1
2	78731	Bracket — Pickup mounting bracket — for RP197C-1
3	79244	Spring—Pickup mounting bracket spring—for RP197C-1
4	100758	Washer—Bearing washer for pickup mounting bracket spring (79244)—for RP197C-1
5	100746	Knob—Stylus selector knob—smoked pearl gray—less screw—for RP197C-1
5A	79359	Screw—#1-72 x 1/4" round head for stylus selector knob—for RP197C-1
6	77779	Pickup—Crystal pickup complete with two styli for RP197C-1
6A	75497	Stylus—78 RPM stylus (.003" osmium) for #77779 pickup
6B	77899	Stylus—45, 33 1/3 RPM stylus (.001" sapphire) for #77779 pickup

ILL. NO.	STOCK NO.	DESCRIPTION
6D	74230	Nut—#00-112 nut and washer to mount stylus in #77779 pickup
7	74410	Screw—Pickup mounting screw, #4-40 x 3/8" fillister head—2 req'd for RP197C-1
8	78733	Cable—Pickup cable (3 wire) complete with terminals—for RP197C-1
9	100759	Bracket—Pickup cable retaining bracket — for RP197C-1
10	74337	Nut—Speed nut to hold pickup cable
11	78741	Pivot—Brass pivot bearing
12	78742	Shaft—Pivot shaft
13	78738	Spring for height adjustment screw
14	78740	Screw—Hex head #6-32 height adjustment screw
15	101268	Spring—Counterbalance spring—for RP197C-1
16	78734	Bracket—Pickup arm mounting bracket
18	78732	Collar—Pickup arm mounting collar — less set screw
18A	79245	Screw—#10-32 set screw for pickup arm collar
20	.....	Washer—Flat metal washer for landing adjustment (2 req'd)—late production only

REPLACEMENT PARTS

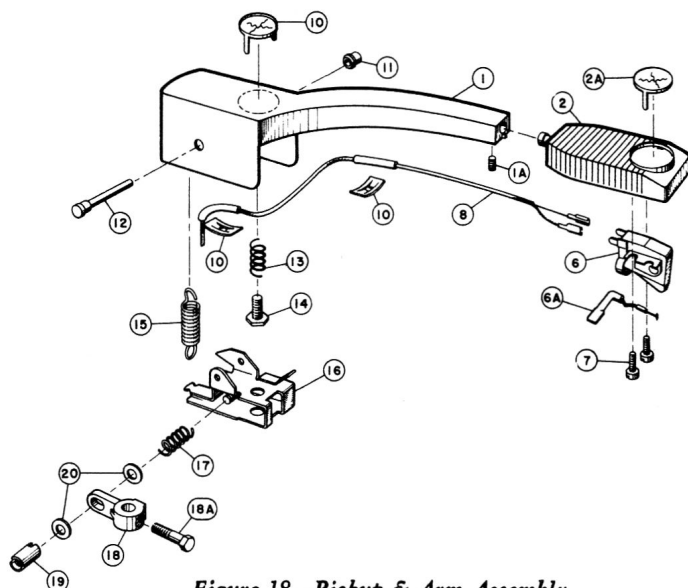


Figure 18—Pickup & Arm Assembly

ILL. NO.	STOCK NO.	DESCRIPTION
		PICKUP & ARM ASSEMBLY FOR RECORD CHANGER MODELS:
1	100761	Arm—Pickup arm shell only—less detachable housing—with counterbalance spring retainer—for RP197C-5
1A	78767	Screw—#6-32 x 1/8". Pickup head retaining screw—for all except RP197C-5
1A	100747	Screw—Pickup head retaining thumbscrew, #6-32—for RP197C-5
1B	101271	Connector—2 contact female connector—pickup arm to pickup head—for RP197C-5
2	100568	Housing—Pickup head housing—less pickup, monogram and ornamental cover—for RP197C-5
2A	100567	Monogram—"RCA Victor" trademark monogram—for RP197C-5
2C	100563	Cover—Ornamental cover on pickup head—for RP197C-5
2D	100564	Connector—2 contact male connector for pickup head—for RP197C-5
2E	100562	Ring—Pickup head connector retaining ring—for RP197C-5
2F	100911	Decalcomania—"33/45" speed marker—for RP197C-5
2F	100912	Decalcomania—"78" speed marker—for RP197C-5
3	78772	Spring—Tension spring for stylus mounting for pickup #78769 33, 45
4	78773	Washer—Flat metal washer for stylus mounting—for #78769—78
5	78774	Washer—"C" washer—stylus retainer—for pickup #78769
6	100793	Pickup—Moving coil pickup with 1 mil. diamond stylus—for RP197C-5
6	100566	Pickup—Moving coil pickup with 3 mil. sapphire stylus—for RP197C-5
7	100561	Screw—Pickup mounting screw #4-40 x 1/8" (2 req'd)—for RP197C-5
8	100742	Cable—Pickup cable assembly (3 wire) complete with ground terminal—for RP197C-5
10	74337	Nut—Speed nut to hold cable (2 req'd)
11	78741	Pivot—Bearing for pivot shaft
12	78742	Shaft—Pivot shaft
13	78738	Spring—Spring for height adjustment screw
14	78740	Screw—Hex head, #6-32 height adjustment screw
15	101267	Spring—Counterbalance spring—for RP197C-5
16	78734	Bracket—Mounting bracket for pickup arm
17	100999	Spring—Landing adjustment screw spring
18	78732	Collar—Pickup arm mounting collar—less screw
18A	79245	Screw—#10-32 set screw for pickup arm collar
19	101270	Nut—Split nut for pickup arm landing adjustment
20	.....	Washer—Flat metal washer—bearing for split nut landing adjustment (2 req'd)

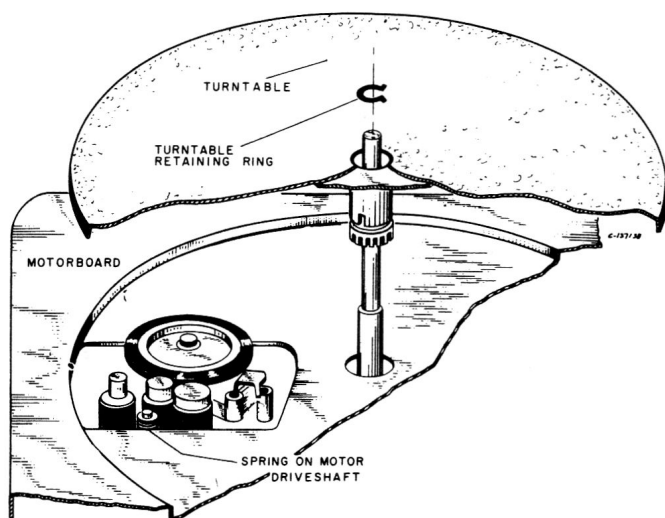


Figure 19—Turntable Removal, and 50/60 Cycle Conversion

REMOVAL OF TURNTABLE

The turntable retaining ring (Illust. #7) must be removed before the turntable can be lifted off.

If the special tool is not available, the retaining ring can be easily removed by using two pointed tools such as awls or ice picks.

When replacing the turntable, it will be necessary to push inward on the idler wheel, that contacts turntable rim, before the turntable will lower to original position. This is best done by pushing with a piece of cardboard or a thin wood stick. Turn the turntable clockwise after idler wheel is pushed inward.

50/60-CYCLE CONVERSION

Remove the turntable as described above, remove SPRING SLEEVE from motor driveshaft and replace with the specified SPRING SLEEVE for the frequency of the available power supply. Hold motor driveshaft stationary and turn SPRING SLEEVE clockwise when installing. Use care to prevent distortion of spring or damage to motor driveshaft. Replace the turntable using the procedure outlined above.

NOTE: The 4-pole motor used on 197C-5 uses a spring sleeve for 50-cycle operation only. (None required for 60-cycles). Motors stamped 938784-1 190 or 938784-3 190 are not recommended for 50-cycle operation.

A 60 ohm resistor is used in series with the winding of four-pole motors (stamped 9715263) when separated on 50 cycles.