

## 124330 & 930800 Series

**Automatic Record Changer** 

# SERVICE DATA

-1953 No. 24 --

RCA VICTOR COMPANY, LTD.

MONTREAL, CANADA

#### SPECIFICATIONS

Turntable speed	
Record capacity	
	12 ten-inch or 10 twelve-inch
or 10	ten- and twelve-inch intermixed

#### CONTROLS

The record changer has a dual control on the motor-board and a stylus selector control on the pickup arm. The inner control (circular knob) is the OFF-ON-REJECT control. Turning this knob to the center position energizes the motor and starts the turntable, when turned to the right (clockwise) it starts the mechanism into complete automatic operation. The mechanism will shut off automatically after the last record has been played but can be shut off manually by turning this knob to the left (counter-clockwise).

The outer control (double ended lever) is the speed control. It has three normal positions, "33", "45", "78" to select the turntable speed desired and a neutral position (midway between "45" and "78"). The control should be turned to this neutral position if the changer is not expected to be in use for an extended period of time.

The stylus control has two normal positions (right and left) and one shipping position (lever pointing up). When playing 33½ or 45 r.p.m. records the lever is turned so that "33-45" is visible on the TOP of the lever; likewise for 78 r.p.m. records "78" should be visible on the TOP.

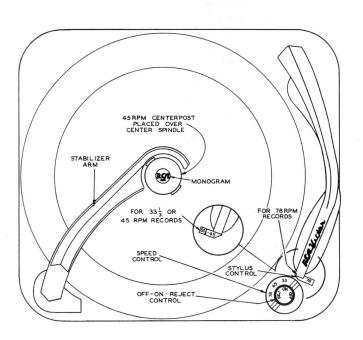
On 930800-4 and -5 the stylus control lever is on the underside of the pickup arm; white dot indicates "78 r.p.m." stylus, and red dot indicates "33 $\frac{1}{3}$  or 45 r.p.m." stylus.

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.

To load or remove records, the record stabilizer is lifted and turned off-side. After loading it is turned to the center where it rests on top of the stack of records.

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Controls

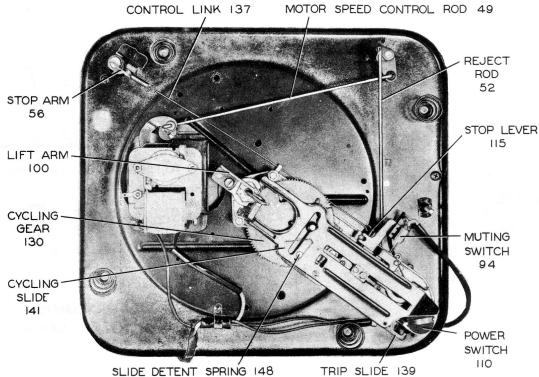


Figure 1-Bottom View

#### LUBRICATION

The mechanism is properly lubricated when it leaves the factory, additional lubrication should not be necessary for a long period of time. If the mechanism has unusual use or high operating temperatures, it may be necessary to lubricate more frequently.

It is suggested to use Lubricant S-5262 on:

- 1. Pickup arm pivot.
- 2. Points of sliding contact with cycling slide, including:
  - a. elevating rod
  - b. lift arm
  - c. roller on cycling cam
  - d. pickup arm return lever
  - e. pickup arm lever
- 3. End of selector lever contacting tab on cycling gear.
- 4. Turntable thrust bearing.
- 5. Sparingly on a trip slide.
- 6. All points of sliding contact.

Apply a small quantity of light machine oil to:

- 1. Trip pawl pivot.
- 2. Cycling engagement pawl pivot.
- 3. Bearing of record stabilizer.
- 4. Elevating rod.
- 5. Bearing of lift arm.
- 6. Bearing of reject lever.
- 7. Bearing of stop lever.
- 8. Bearing of cycling gear.
- 9. Motor bearings.

#### STYLUS REPLACEMENT

#### PICKUP NO. 77779

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

#### 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.

#### **PICKUP NO. 78748**

The dual stylus is mounted on the end of a small diameter extension of the control lever. The control lever is held in position by a formed spring. The small diameter part of the control lever assembly rests in a saddle. To remove control lever and stylus assembly, press on the control lever in a direction to lift the small diameter extension out of the saddle and then pull sideways out of the formed spring.

#### ADJUSTMENTS

# 14 STYLUS FORCE ADUSTMENT 17 HEIGHT ADJUSTMENT 20 A LANDING ADJUSTMENT

Figure 2-Adjustments

#### LANDING ADJUSTMENT

Only one landing adjustment is necessary. The landing position of the stylus is adjusted by means of the eccentric stud (20A), mounted on the pickup arm support bracket. When adjusted for correct landing on one size of record, the landing position for other sizes of records is automatically corrected.

#### PICKUP ARM HEIGHT ADJUSTMENT

The pickup arm height during cycle is adjusted by means of the hex head screw (17), located in the pickup arm.

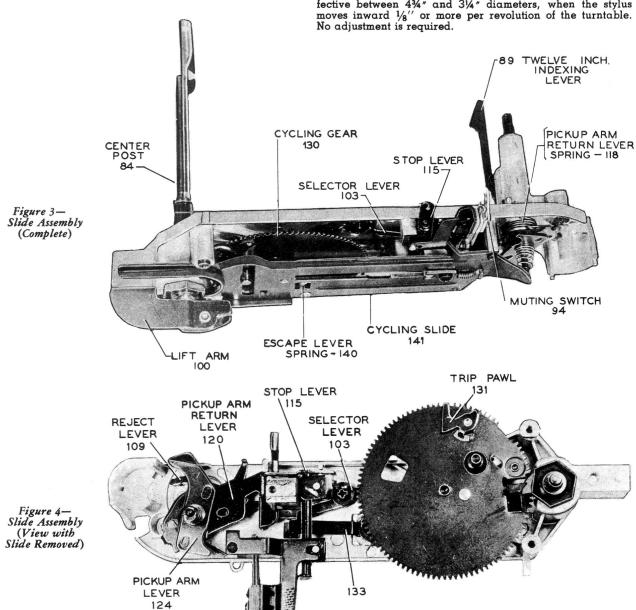
Turn control knob to "REJ" and rotate turntable by hand until arm has risen to its maximum height. Adjust screw so that stylus is 13/8" above turntable.

#### STYLUS FORCE ADJUSTMENT

Stylus force should be 71/2 to 91/2 grams. Loosen screw (14), and move slide until the correct force is obtained.

#### TRIPPING

The tripping method used in this mechanism is a combination of velocity and fixed diameter. Velocity tripping is effective between 4¾" and 3¼" diameters, when the stylus moves inward ½" or more per revolution of the turntable. No adjustment is required.



#### CYCLE OF OPERATION

#### TURN ON-OFF-REJECT CONTROL KNOB TO REJECT POSITION & RELEASE

- 1. The on-off-reject control knob, through the linkage of the function control lever (54), reject rod (52), and reject lever (109) actuates the power switch and the trip slide (139).
- The closing of the power switch energizes the motor and starts the turntable rotating.

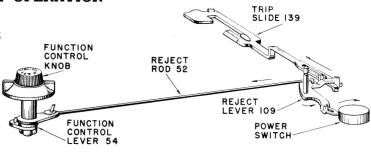


Figure 5

# PROJECTION ON TURNTABLE SHAFT ENGAGEMENT PAWL 130A UPPER TRIP PAWL 129 CYCLING GEAR 130 LOWER TRIP PAWL 131 TRIP SLIDE 139

Figure 6

#### CYCLING STARTS

- The trip slide (139) in its movement contacts the lower trip pawl (131) and moves both the lower and the upper trip pawls which are linked together. The movement of the upper trip pawl (129) actuates the cycling engagement pawl (130A) sufficiently to cause it to engage with the projection on the hub of the rotating turntable.
- 2. The contact between the cycling engagement pawl (130A) and the projection on the turntable hub gives the necessary push for the teeth in the cycling gear (130) to engage the teeth in the shaft of the turntable and thus start the change cycle.

#### PICKUP ARM RISES & MOVES OUTWARD

- As the cycling gear rotates, the stud (130B) mounted on the underside of the gear, rides inside a slot cut in the cycling slide (141). The rotation of the cycling gear pushes the cycling slide back, and later, allows it to return.
- As the slide moves away from the center post, an incline formed on the end of the slide causes the elevating rod (123) to rise and lift the pickup arm.
- 3. At the same time that the elevating rod is pushed upward, the pickup arm lever (124) is also pushed up by the force transferred through the spring (125). The raising of the pickup arm lever causes the two formed dimples in the pickup arm lever to engage the two holes in the pickup arm return lever (120), and couple them together. This directs the movement of the pickup arm during change cycle.
- 4. The cycling slide continues to move away from the center post until the formed end of the slide pushes against the pickup arm return lever. This relieves the force of pickup arm return lever against stop lever (115). This permits the stop lever return spring (114) to return the stop lever to the normal (raised) position.
- 5. The end (115A) of stop lever (115) pushes trip slide back ready for the next change cycle.

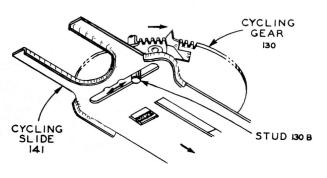
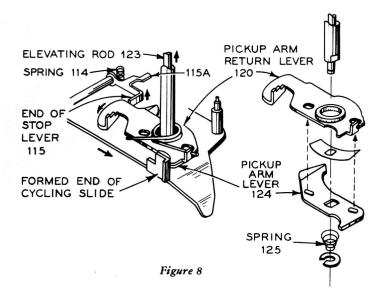


Figure 7



#### RECORD DROPS TO TURNTABLE

- After the cycling slide has raised the pickup arm and is moving it outward, the lift arm (100) is actuated by the cycling slide.
- The lift arm pushes up on the shaft extending from the bottom end of the center post. This shaft actuates the push-off mechanism inside the center post, and the record drops to the turntable.

#### SELECTION OF LANDING POSITION

- During rotation of the cycling gear the riveted tab (130C) near the center of the gear, pushes down on one end of the selector lever (103) (which is pivoted in the center) thereby raising the other end causing it to latch on the end (89A) of the twelve-inch indexing lever (89).
- The mechanism is thus automatically indexed to land on a ten inch record unless the selector lever (139) is disengaged from the end of the twelve-inch indexing lever.

#### 7 Inch Indexing:

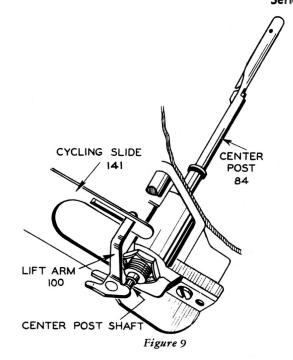
The ten-inch indexing lever (133) is pivoted in the center and one end (133A) is held (by tension of spring) against the top surface of the cycling gear. A hole in the gear will permit the end of the indexing lever to lower and thus raise the opposite end of the lever. A projection (133B) on the lever will at the same time lift the selector lever, permitting it to engage the top step of the pickup arm return lever (120). This position allows the pickup arm to land on the edge of the seven-inch record.

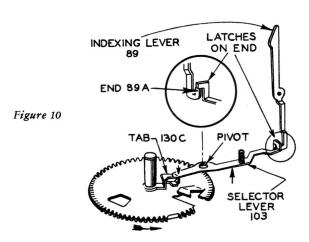
#### 10 Inch Indexing:

The ten-inch indexing lever will lift the selector lever unless a record on the turntable contacts the rubber tip of the ten-inch indexing lever (133), and prevents it from rising. When the lever is prevented from rising, the selector lever will remain in position to engage the middle step of the pickup arm return lever.

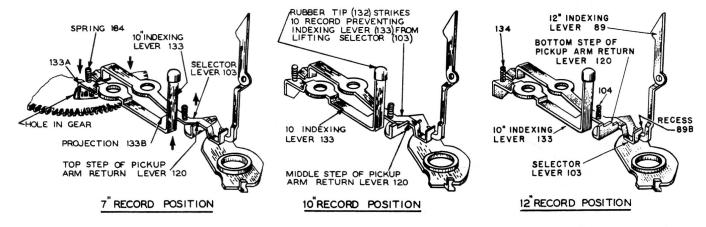
#### 12 Inch Indexing:

When a twelve-inch record drops to the turntable, it strikes the twelve-inch indexing lever (89) and forces it backward. This disengages the end of the selector lever





(103) from the edge of the indexing lever and permits the selector lever to drop down into the recess (89B) at the end of the indexing lever. This position of the selector lever causes it to engage the bottom step of the pickup arm return lever (120) and will push the pickup arm to land on the edge of a twelve-inch record.



#### CYCLE OF OPERATION (Cont.)

#### PICKUP MOVES IN FOR LANDING

 As the cycling slide returns, the formed end (141A) on the slide moves back, permitting the pickup arm return lever spring (118) to expand. This causes the pickup arm return lever (120) to move the pickup inward until the pickup arm return lever comes against the selector lever (103). The pickup is now directly above the point of landing.

#### PICKUP LANDS ON RECORD

- The elevating rod (123) slides down the incline on the slide permitting the pickup to land on the start of the record.
- A cut-away portion (130D) of the teeth of the cycling gear stops the return movement of the slide before completion of cycle. The stud (130B) in the cycling gear rests in the first indentation (offset from center) of the slide to stabilize it in this position.
- 3. Just before the cycling gear completes cycle, a small tab (141C) on cycling slide makes contact with lower trip pawl (131) thereby moving upper trip pawl and cycling engagement pawl back. This prevents the reengagement with the projection on the turntable hub which would start a new change cycle.
- 4. On the next revolution the projection on the hub of the turntable engages with a formed lug (130E) on the outer edge of the cycling gear. The cycling gear will then rotate until the second cut-away portion (130F) of the teeth again stops the movement of the slide, this time at completion of the cycle. The stud on the cycling gear rests in the second indentation (center) of the slide to stabilize it in this position.

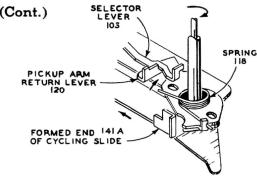
The purpose of this pause in the cycle is to allow the pickup to enter the starting groove of the record before the full effect of the feed-in spring is applied to the pickup arm.

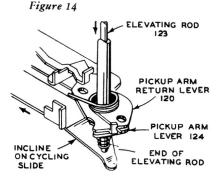
#### RECORD PLAYS

- As the record plays, the pickup moves in toward the center of the record carrying the trip slide along. This is due to the contact made with the pickup arm lever which turns with the pickup arm pivot.
- 2. The trip slide contacts the lower trip pawl, causing both (lower and upper) trip pawls and the cycling engagement pawl to move slightly with each revolution of the record. This slight movement of the pawls is reversed each time the projection on the turntable hub comes in contact with the cycling engagement pawl. The back movement is taken up in the friction connection between the upper and lower trip pawls.

#### TRIPPING

This slight movement of the pawls continues as long as the pickup moves in at a constant rate of speed. When the stylus leaves the recorded section of the record, the rapid acceleration results in rapid movement of the cycling engagement pawl. The cycling engagement pawl assumes a position in which the projection on the turntable hub makes a positive contact and the cycling cam is pushed sufficiently for engagement between the teeth of the cycling gear and the teeth on the turntable hub. This starts change cycle.





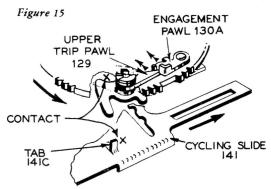
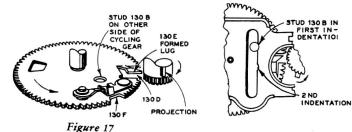
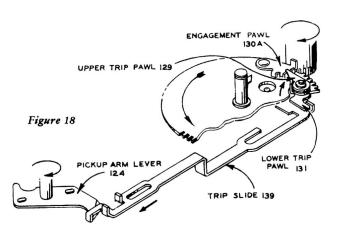


Figure 16





## MECHANISM STOPS AFTER PLAYING OF LAST RECORD

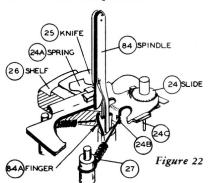
After the mechanism has been tripped it again follows the preceding sequence of cycling and playing the records until the last record of the stack has been played.

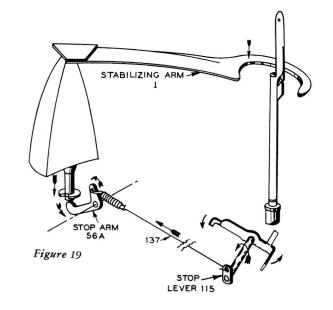
- 1. As the last record of the stack drops to the turntable the record stabilizer drops and actuates the stop arm (115). This stop arm in turn applies force to stop lever (115) through spring (115B) and connecting wire (137). At this moment the cycling slide is in the outermost position (away from centerpost) and the end (115B) of stop lever is forced against escape lever (141B) which prevents it from lowering any further.
- 2. As the cycling slide returns to the out of cycle position the end (115B) of stop lever slides off the escape lever permitting the end to extend down through the slot in the cycling slide. At this time the pickup arm return lever has rotated too far to be blocked by the other end (115C) of the stop lever and the pickup is permitted to land on the record.
- 3. After the last selection has been played the mechanism again goes into change cycle, and the cycling slide moves into its outermost position. At this moment the force which has been applied to the stop lever from the record stabilizer causes the end (115B) to lower, thus extending further through the cycling slide. The other end (115C) of stop lever raises and blocks the pickup arm return lever which at this moment is held back by the cycling slide.
- 4. As the cycling slide moves back, it carries the raised trip slide along until finally the formed end (139A) of the trip slide pushes reject lever which in turn actuates the power switch (110). This removes the power from the drive motor and mechanism stops.
- The elevating rod (124) lowers the pickup arm to the rest.

#### 45 R.P.M. CENTERPOST

For playing of 45 r.p.m. records which have a  $1\frac{1}{2}$  inch center hole, the 45 r.p.m. centerpost is placed over the  $\frac{1}{4}$  inch centerpost. The push-off finger (84Å), which is part of the  $\frac{1}{4}$  inch centerpost actuates the slide (24), this slide actuates the separator knives (25Å & 25B) and separator shelves (26Å & 26B) of the 45 r.p.m. centerpost.

As the push-off finger moves up it engages a finger (24B) of the slide (24) in the 45 r.p.m. centerpost; and, as it moves horizontally, it pushes the slide against the tension of the slide return spring (27). A projecting pin (24C) on the bottom of the slide engages both shelves and both knives and forces them to turn on their pivots. The shelves are pivoted near their center and are caused to retract as the slide is forced to move by the push-off finger. The knives are pivoted at their ends and are forced outward at the same time that the shelves are retracted. A formed spring (28) returns the shelves to the extended position.





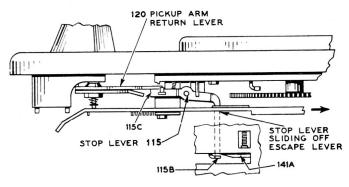
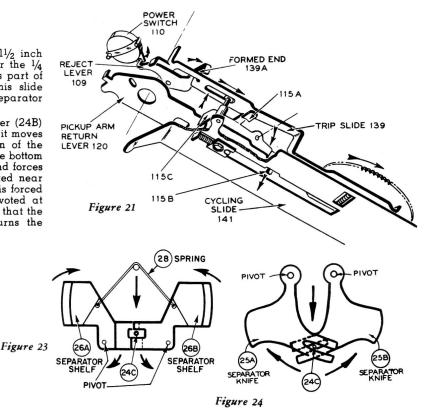


Figure 20



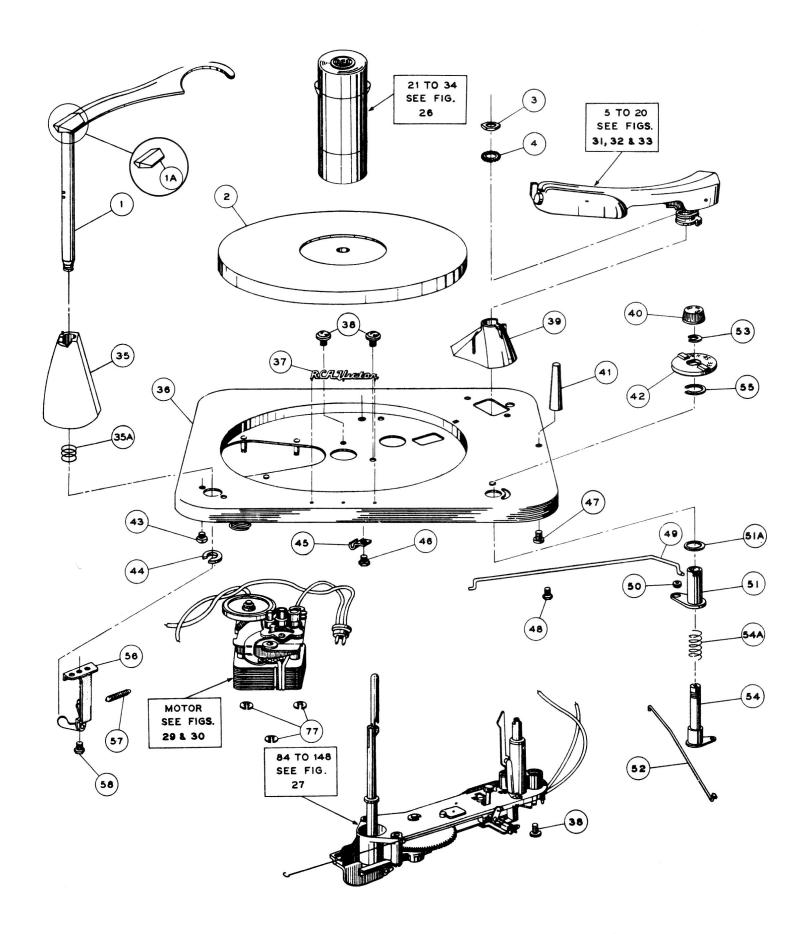


Fig. 25-Exploded View of Mechanism

ILL. NO.	STOCK NO.	DESCRIPTION
1	78469	Stabilizer — Record stabilizer — dark brown—complete with plastic cap—for 124330-1,-2
1	77255	Stabilizer — Record stabilizer — plum — complete
1	78788	with plastic cap—for 930800-4 Stabilizer — Record stabilizer — beige — complete
1 <b>A</b>	78470	with plastic cap—for 930800-5  Cap—Plastic cap—plum—for record stabilizer
1A	75805	Cap—Plastic cap—beige—for record stabilizer
2	77118	Turntable — Turntable and hub assembly — maroon flock—for 930800-4, 124330-1,-2
2	77119	Turntable—Turntable and hub assembly—tar flock—for 930800-5
3 4	76905	Nut- $\frac{1}{4}$ "-28 hex nut for pickup arm bracket Lockwasher- $\frac{1}{4}$ " external tooth lockwasher for
35	78471	pickup arm shaft Mounting—Record stabilizer mounting—autumn
35	77256	gold  Mounting—Record stabilizer mounting—plum
35	78820	Mounting—Record stabilizer mounting—biege
35A	77257	Spring—Record stabilizer return spring
36	77850	Motorboard—Motorboard—autumn gold—less de- tachable parts
36	78837	Motorboard—Motorboard—plum—less detachable parts
36	78838	Motorboard—Motorboard—beige—less detachable parts
37 38	78760	Emblem—''RCA Victor'' emblem Screw—#10-24 x 3%" binding head machine screw
39	78472	and internal lockwasher Housing—Pickup arm pivotshaft housing—autumr
39	75829	gold—for 930800-1, -2, -3 Housing—Pickup arm pivot shaft housing—plum—
39	75873	for 930800-4  Housing—Pickup arm pivot shaft housing—autumn
40	78473	gold — for 124330-1,-2 Knob—Reject control knob—maroon
40	78821	Knob—Reject control knob—beige
41	78474	Rest—Pickup arm rest—maroon
41 42	75828 78475	Rest—Pickup arm rest—beige Knob—Motor speed control knob—maroon
42	78822	Knob-Motor speed control knob-heige
43		Screw — #6-32 x 1/4" hex head screw
44 45	75385	Washer—''C'' washer to retain record stabilized Clamp—Cable clamp
46 47	75380	Screw—Screw for mounting cable clamp Screw—#10 x ½" cross recessed pan head screw to
		mount pickup arm rest
48 49	78476	Screw—#6-32 x 1/4" hex head screw  Rod — Motor speed control rod for motor stampe #5684, #5686 or #5687 for 930800
49	78477	Rod — Motor speed control rod for motor stampe #4638, or #5434 for 930800
49		Rod — Motor speed control rod for 25 and 50 cycle motor on 124330
49		Rod — Motor speed control rod for 60 cycle motor on 124330
50	77229	Grommet—Rubber grommet for motor speed con- trol rod
51 51A	75863 76903	Lever—Motor speed control lever and shaft Washer—Fiber bearing washer for control shaft
52 52	75840	Rod-"On-Off"-"Reject" control rod
53	75399	Washer—"C" washer to retain switch control level and shaft
54	75839	Lever—Switch control lever and shaft
54A 55	75838 75825	Spring—Compression spring for control shaft Washer—''C'' washer for motor speed control
56	76927	lever and shaft Arm—Stop arm assembly
57	76926	Spring—Return spring (coil type) for stop arm (1/8" I.D. x 19/32")
58		Screw-6-32 x 5/16" cross recessed round head screw
59 60)	75876	Washer—''C'' washer to mount motor
to {		Not used
	S 00000	45 RPM CENTERPOST ASSEMBLY
21	S-20023 76928	Centerpost—45 r.p.m. centerpost complete Cap—Nose cap
22	76930	Spring—Nose spring (formed)
23	76909	Screw—#4-40 x 1/4" cross recessed binding head screw for nose spring
24	76933	Plate—Slider plate assembly complete with springs 24A
25	76932	Knife—Record separator knife (1 set)
26 27	76931 76934	Shelf—Record support shelf (1 set)
27 28	76934	Spring—Slider return spring (coil type—2 in 1) Spring—Shelf return spring (formed)
		Body—Spindle body assembly
29		
30	76936	
	76936 76954	Screw—#4-40 x $\frac{7}{8}$ " fillister head screw for nose cap Rotor—Die-cast rotor Spring—Rotor lift spring (coil) (1.168" O.D. x 1"—
30 31		Rotor—Die-cast rotor

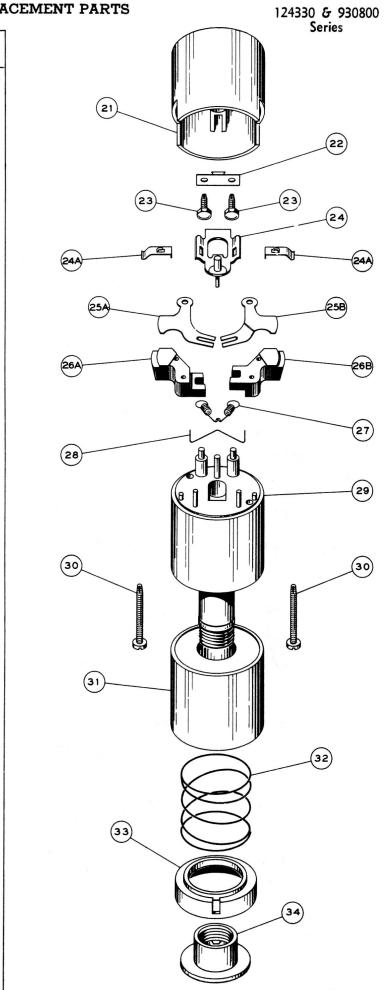
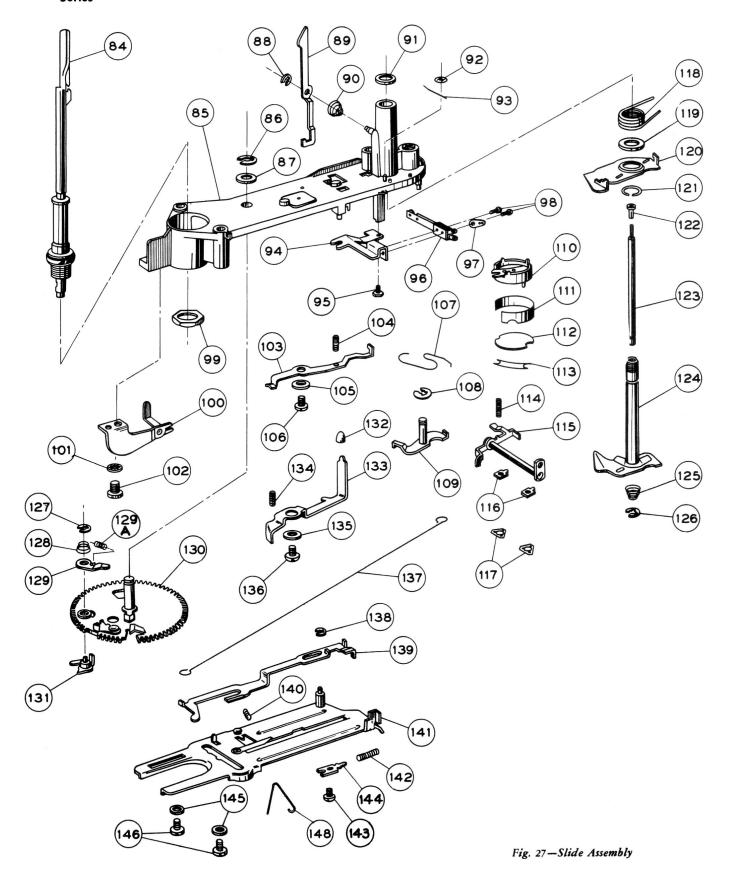


Fig. 26-45 r.p.m. Centerpost Assembly



ILL. NO.	STOCK NO.	DESCRIPTION		LL. 10.	STOCK NO.	DESCRIPTION
		SLIDE ASSEMBLIES	11	15	76313	Lever—Stop lever
			11	16	77258	Strip—Bearing strip for stop lever shaft
84	76904	Spindle — 33 1/3-78 r.p.m. spindle complete with bearing for 124330-1, 2	11	17	76912	Nut—Speed nut for mounting stop lever bearing shafts
84	78793	Spindle—331/3-78 r.p.m. spindle complete with bear- ing for 930800-4 and -5	11	18	76944	Spring—Pickup arm return lever spring (coil) (.593" O.D.—3½ turns)
85	78635	Frame—Main frame—(die-cast)	11	19		Not used
86	75373	Washer—''C'' washer for mounting cycling gear	12	20	78636	Lever—Pickup arm return lever
87	75845	Washer—Fibre washer for mounting cycling gear	12	21	78637	Retainer—Retaining ring for pickup arm return
88	75397	Washer—''C'' washer for 12" indexing lever				lever
89	75844	Lever—12" record indexing lever	12	22	76952	Nut—Elevating rod adjustment nut
90	76309	Spring—12" record indexing lever spring	12	23	76951	Rod—Elevating rod
91	76903	Washer—Pickup thrust washer (fibre)	12	24	76946	Shaft—Pickup arm pivot shaft and lever
92	75841	Nut—Speed nut for 12" indexing lever return spring	12	25	76906	Spring—Thrust spring (conical) for elevating rod
93	75842	Spring-12" indexing lever return spring (formed)	12	26	77269	Ring—Retaining ring
94		Bracket—Muting switch bracket	12	27	75397	Washer—"C" washer
95		Screw—#4-40 x 1/4" hex head (indented) thread	12	28	76309	Spring—Trip pawl spring
		cutting screw to mount muting switch assembly	12	29	77250	Pawl—Trip pawl—upper
96	77191	Switch—Muting switch—less mounting bracket	12	29A	77249	Spring—Trip pawl cushion spring (coil)
97		Terminal—#4 locking terminal for muting switch assembly	13	30	76955	Gear—Cycling gear complete with shaft and engagement pawl 130A
98		Screw—#3-48 x 13/32" binding head machine screw	13	31	76953	Pawl-Trip pawl-lower
		for muting switch	13	32	76900	Bumper—Rubber bumper for 10" indexing lever
99		Nut—½-20 pal nut for mounting 33½-78 r.p.m. spindle	13	33	76901	Lever—10" indexing lever
100	75864	Arm—Lift arm	13	34	76314	Spring—Return spring (coil type) (.125" O.D. x 7/16" —14 turns)
101		Screw—#10-24 x 3%" binding head machine screw and internal lockwasher	13	35		Washer—Metal washer (steel) (1/32" x 7/16" O.D. x .140)
102		Screw—#10-24 x 3/8" binding head machine screw	13	36		Screw—#6-32 x 1/4" hex head screw
,,,,	77000	and internal lockwasher	13	37	75862	Link-Control link
103	75859	Lever—Landing selector lever	13	38	75397	Washer—''C'' washer
104	75860	Spring—Return spring (coil type) for landing selector lever (.110" O.D. x 3%"—14 turns)	13	39	76950	Slide—Trip slide
105		Washer—Metal washer (steel) (1/32" x 7/16" O.D. x .140)	14	10	75861	Spring—Escape lever spring (coil) (.120" O.D. x ½" —21 turns)
106		Screw—#6-32 x 1/4" hex head screw	14	11	76956	Slide—Cycling slide and cam assembly—less escape
107	76312	Spring—Reject spring (special)			77000	lever spring
108	75392	Washer—"C" washer for mounting reject lever	14	12	77228	Spring—Stabilizing spring (coil) for cycling slide (.146" O.D. x 3/4"—141/2 turns)
109	75856	Lever—Reject lever	14	13		Screw—#6-32 x 1/4" hex head screw
110)			14		75872	Plate—Bearing plate for cycling slide
111 }	76301	Switch—"On-Off" switch complete with insulating strip (111) and cover (112)	14	-	76897	Washer—Metal washer (brass) for cycling slide
112)	76908	Retainer—Switch cover retainer (flat)	14	-		Screw-#6-32 x 1/4" hex head screw
113	76314	Spring—Return spring (coil type) (.125" O.D. x 7/16"	14	7		Not used
114	10314	-14 turns)	14	18	77934	Spring—Slide detent spring

## MOTOR ASSEMBLIES For 930800 Mechanisms

Motors stamped 5686 are made for 60 cycle operation only. It is not advisable to operate these motors on 50 cycles.

Motors stamped 4638 or 5684 are made for 60 cycle operation but may be converted for 50 cycle operation by changing the spring sleeve on the motor shaft.

Motors stamped 5687 or 5434 are made for 50 cycle operation but may be converted for 60 cycle operation by changing the spring sleeve on the motor shaft.

Parts for the above motors are listed on the following page. It should be noted that there are two motor types.

Complete motors may be interchanged provided that the proper speed control rod (Ill. No. 49) is employed. The listing of complete motors is given below.

#### MOTOR FOR 930800 MECHANISMS

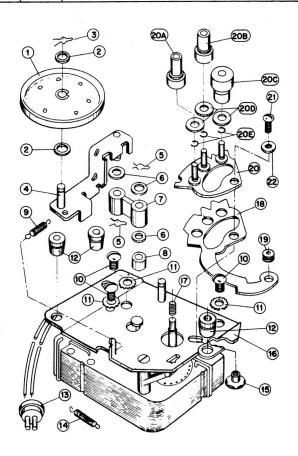
STOCK NO.	DESCRIPTION						
78531	Motor—Motorassembly (#4638) COMPLETE—less mount- ing grommets and plug—for 115 volts, 60 cycles.						
78372	Motor—Motor assembly (#5686) with mounting plate and idler support—LESS idler wheel, speed shift lever and pulley mounting plate for 115 volts, 60 cycles.						
78373	Motor—Motor assembly (#5687) COMPLETE for 115 volts, 50 cycles.						

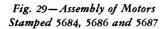
#### MOTORS FOR 124330 MECHANISMS

S 6886	Motor-25 cycle complete	
S-6969	Motor—50 cycle complete	
S-6956	Motor-60 cycle complete	

#### REPLACEMENT PARTS (Cont.)

ILL. NO.	STOCK NO.	DESCRIPTION	ILL. NO.	STOCK NO.	DESCRIPTION
		MOTOR ASSEMBLIES			MOTOR ASSEMBLIES
		Stamped: 5684—for 115 v. 60 cycles			Stamped: 4638—for 115 v. 60 cycles
	20.00	5686—for 115 v. 60 cycles 5687—for 115 v. 50 cycles			5434—for 115 v. 50 cycles
1	76750	Wheel—Idler wheel	1	78508	Wheel—Idler wheel with fibre washer
2	75433	Washer—Fibre washer	2	78509	Washer—Fibre washer
3	76744	Retainer—Idler wheel retainer (hairpin spring)	3	78510	Washer—Felt washer
4	78645 78646	Support—Idler wheel support  Retainer—Support retainer (hairpin spring)	4	78511	Washer—''C'' washer
5 6	78647	Washer—Bearing washer	5	78512	Spring—Idler spring
7	78648	Link—Idler wheel support link	6		Screw-Holddown plate mounting screw
8	78464	Spacer—Metal spacer for link mounting	7		Lockwasher-Holddown plate mounting screw lock
9	78374	Spring—Idler wheel tension spring			washer
10		Screw—Screw for mounting plate	8	78513	Plate—Holddown plate
11		Lockwasher—Lockwasher for mounting plate	9	78514	Grommet-Motor mounting grommet
12	76751	Grommet—Rubber grommet for motor mounting	10	78515	Washer-Blued steel washer
13	30870	Plug—Two (2) prong male plug	11	78516	Plate—Idler plate assembly
14	76755	Spring—Detent spring	12	78517	Link—Idler link
15	77134	Collar—Speed shift lever collar (nut)	13	78518	Arm—Pulley plate latch arm
16	78371	Plate—Mounting plate assembly includes items 4, 5, 6, 7, 8, and 9	14	78519	Spring—Pulley latch spring
17	76749	Sleeve—Spring sleeve pulley for 60 cycle operation	15	78520	Spring—Shifter latch spring
		of #5684, #5686 and #5687	16	78521	Lever—Latch arm lever
17	77686	Sleeve—Spring sleeve pulley for 50 cycle operation of #5684 and #5687	17	78522	Sleeve—Sleeve pulley for 60 cycle operation
18	77685	Lever—Speed shift lever	17	78523	Sleeve—Spring pulley for 50 cycle operation
19	77229	Grommet—Rubber grommet for shift lever	18	78524	Plate—Speed pulley mounting plate—less pulleys
20	77132	Plate—Speed pulley mounting plate with 3 pulleys	18 <b>A</b>	78525	Pulley—331/3 r.p.m. pulley
20A	76748	Pulley—33½ r.p.m. speed pulley	18B	78526	Pulley—45 r.p.m. pulley
20B	76747	Pulley—45 r.p.m. speed pulley	18C	78527	Pulley—78 r.p.m. pulley
20C	76746	Pulley—78 r.p.m. speed pulley	18D	78528	Washer—Speed pulley fibre washer
20D	75428	Washer—Felt washer	19	78529	Lever—Speed shift lever
20E	75427	Retainer—Retainer for speed pulleys	20	78530	•
21		Screw—Screw for mounting pulley plate			Grommet—Speed shift lever grommet
22		Lockwasher—Lockwasher for pulley plate	21	30870	Plug—2 prong male plug





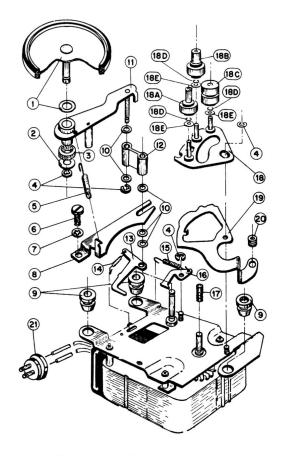


Fig. 30—Assembly of Motors Stamped 4638 or 5434

ILL.	STOCK NO.	DESCRIPTION	ILL. NO.	STOCK NO.	DESCRIPTION
10 10A 10B	77779 75497 77899 74230	PICKUP ASSEMBLY  124330-1,-2  Pickup—Crystal pickup complete with two styli  Stylus—Osmium tip stylus (.003" r. uncoded) for 78 r.p.m.  Stylus—Sapphire tip stylus (.001" r. coded RED) for 33½-45 r.p.m.  Nut—#00-112 nut and washer to mount stylus  PICKUP ARM ASSEMBLIES  For 124330-1,-2	9 11 12 13 14 15	76957 75809 75810 76899 76896	Screw—#4-40 x ½" fillister head screw to mount pickup cartridge Swivel—Pickup cartridge mount and swivel assembly for 124330-1-2 Spring—Pickup arm counterbalance spring Bracket—Pickup arm weight adjustment bracket (slide) Screw—#6-32 x ½" round head screw for pickup arm weight adjustment bracket Screw—#4 x ½" binding head sheet metal screw to mount swivel assembly in arm Spring—Lock spring (coil type) for height adjustment screw
5 6 7 7A 7B 8	78481 76898 78482 76948 76947 75808	Knob—Stylus selector knob—less screw  Screw—#2-56 x 3/16" headless set screw for stylus selector knob  Arm—Pickup arm shell (plastic)  Screw—Pickup arm mounting bracket pivot screw  Bearing—Pickup arm mounting bracket pivot bearing  Cable—Three (3) wire pickup cable complete with connectors for 124330-1,-2	17 18 19 20 20A 20B	75813 76943 76911 76907 75816 75818	Screw—Height adjustment screw (hex head— #5-40 thread) Spring—Tension spring (coil) for landing adjust- ment stud Cam—Landing adjustment cam Bracket—Pickup arm mounting bracket complete with pin Stud—Landing adjustment stud (eccentric) Nut—Speed nut for landing adjustment stud

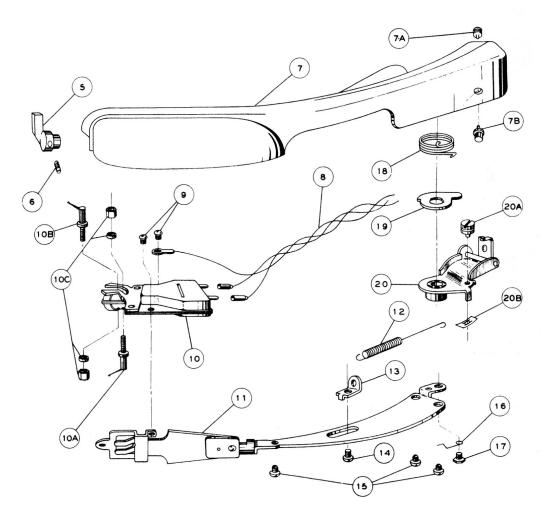


Fig. 31 — Pickup Arm Assembly for 124330-1,-2

### REPLACEMENT PARTS (Cont.)

ILL. NO.	STOCK NO.	DESCRIPTION	ILL. NO.	STOCK NO.	DESCRIPTION	
10 10A	78748 78827	PICKUP ASSEMBLY For 930800-4 and -5  Pickup—Ceramic pickup complete with dual stylus Stylus—Dual stylus (.003" r. and .001" r.) complete with control arm  PICKUP ARM ASSEMBLY For 930800-4 and -5	14A 15 15A 16 17	78786 	Screw—Round head screw for mounting weight adjustment bracket  Washer—Lockwasher for weight adjustment bracket Screw—#4-40 x ½" hex head screw for pickup cartridge housing retaining clip  Washer—Flat metal washer for retaining clip Spring—Lock spring for height adjustment screw Screw—Height adjustment screw (#5-40 thread) Spring—Tension spring for landing adjustment cam	
7	78775	Arm—Pickup arm shell (aluminum)—less cart-ridge housing	19 20	76911 78787	Cam—Landing adjustment cam Bracket—Pickup arm mounting bracket complete	
7A	76948	Screw—Pickup arm mounting pivot screw			with pin and landing adjustment stud	
7B 7C 7D 8 8A 9	76947 78826 78811 78779 78824 ———	Bearing—Pickup arm mounting pivot bearing Housing—Pickup cartridge housing Spacer—Pickup cartridge mounting spacers Cable—Shielded pickup cable—less connectors Clip—Pickup connecting clips Screw—Fillister head screw to mount pickup cartridge (#4-40 thread) Clip—Retaining clip (formed wire) for pickup cartridge housing	EARLY PRODUCTION ASSEMBLY  Early production of 930800-4 and -5 used an arm assembly which permitted the pickup cartridge housing to be removed from the arm by a slight pull.  A plate type of spring clamp was used to hold the housing to tarm. A plug and socket was used in series with the pickup cab These parts are as follows:			
12 13	78881 78784	Spring—Pickup arm counterbalance spring Bracket—Pickup arm weight adjustment bracket (slide)	78	778 Con	mp—Pickup cartridge housing clamp (spring plate) nector—Pickup cable female connector nector—Pickup cable male connector	

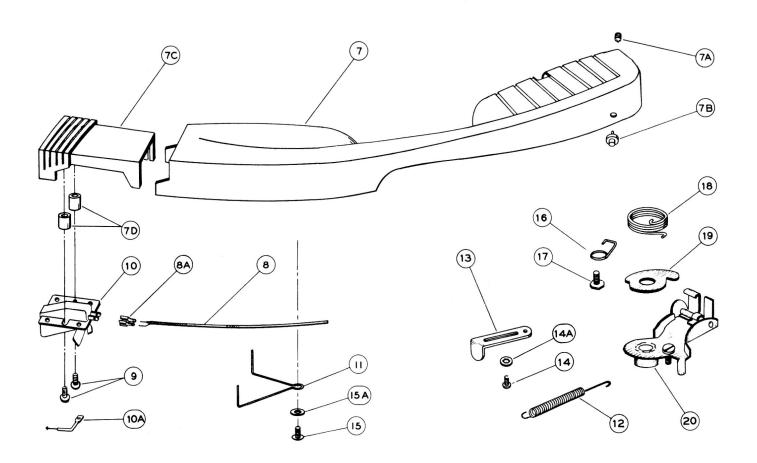


Fig. 33-Pickup Arm Assembly for 930800-4 and -5