



AUTOMATIC RECORD CHANGER

MODEL RP-200

# SERVICE DATA

-1950 No. 13-

GENERAL SERVICE DIVISION

RCA VICTOR COMPANY LIMITED

MONTREAL, QUE.

## **FEATURES**

- 1. This record changer is a center support, drop type, two speed (78-33 $\frac{1}{3}$  rpm) mechanism, designed to play automatically a series of twelve ten-inch, or ten twelve inch records of the standard 78 rpm type or of the long playing 33 $\frac{1}{3}$  rpm type.
- 2. The mechanism is equipped with a light weight, dual stylus crystal cartridge.
- 3. The automatic tripping device is of the acceleration type.
- 4. The two speeds of 78 or  $33\frac{1}{3}$  rpm are controlled by a single knob.
- 5. The stylus selection is accomplished by a single knob.

### AUTOMATIC OPERATION

- 1. Lift the record stabilizing clamp.
- Place a stack of records, ten inch if desired; over the center post leaving the edge of the stack resting on the ten-inch support.
  - When playing a stack of twelve-inch records, raise both the stabilizing clamp and the ten-inch record support before placing the stack over the center post. The twelve inch records will rest on the main support.
- 3. Lower the stabilizing clamp on the stack of records.
- 4. Turn the speed selector control for the proper speed.
- 5. Select the proper stylus by turning the knob at the front end of the pickup  $\alpha rm$ .

NOTE: The speed selector and the stylus selector controls must indicate the same when selecting for a certain type of record.

- Turn the control knob in the right hand end of the motorboard to "reject" and release.
   The mechanism will play one side of each record in the
  - The mechanism will play one side of each record in the stack automatically. It will continue to repeat the last record of the stack until the pickup is raised from the record and placed on the rest.
- To reject a record being played, turn the control knob to reject and release.
- To remove records, place pickup arm on the rest, turn control knob to "off," raise stabilizing clamp and lift the entire stack.

NOTE: The pickup arm should only be handled when the control is in the manual position or before the pickup has played approximately  $\frac{1}{3}$  the distance in, if playing automatically. The pickup arm can also be handled when the mechanism is stopped if it feels free to move.

### MANUAL OPERATION

- Raise both the stabilizing clamps and the ten-inch support shelf.
- 2. Place either a ten or twelve inch record on turntable.
- 3. Select the proper speed and stylus.
- 4. Turn control knob to manual.
- 5. Place pickup on start of the record.
- When selection is completed, lift pickup arm and place it on the rest.
- 7. Turn control knob to "off".
- 8. Lift record straight up to remove.

### HELPFUL SUGGESTIONS

Before servicing the mechanism, inspect the assembly to determine whether all levers, springs and parts are in place and not jammed or bent.

- Never use force to start or stop the turntable or any part of the mechanism.
- (a) If for any reason the mechanism becomes jammed, it may be released by pulling both the spiral engagement stud and the cycling carriage return stud downward. Then move the cycling carriage in a clockwise direction (viewed from the bottom).
  - (b) If the two studs cannot be pulled down try to remove the turntable by lifting straight up.
- 3. Cracked or badly chipped records may damage the stylus.
- Do not leave records on the mechanism for an extended period of time as a guard against warpage.

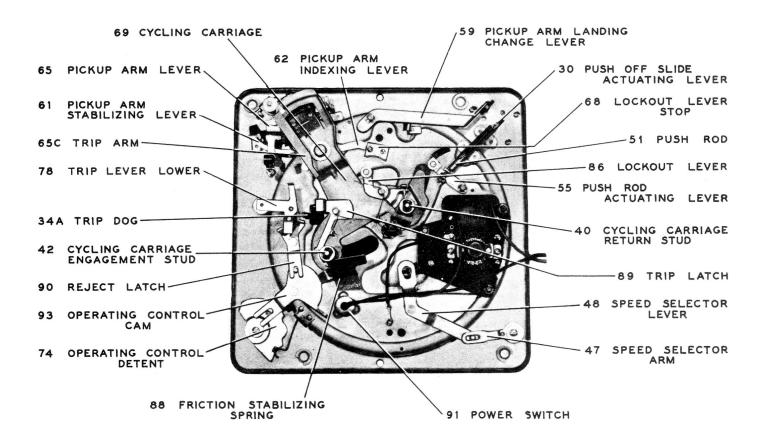
## LUBRICATION

The motor bearings and all pivot bearings excepting the pickup arm pivot use Singer sewing machine oil or a good grade of #10 machine oil.

The pickup arm and the trip lever bearings are riding on ball bearings which should be packed sparingly with light grease, preferably STA-PUT #512. Use STA-PUT #512 or equivalent grease on the edges of all cams and pivots or sliding contacts including the spiral track and engagement stud.

NOTE: Do not oil friction clutch or trip arm 65C, spring steel wedge on end of cycling carriage 69 or friction brake 88.

NOTE: Keep oil and grease from all rubber parts of the mechanism.



#### FUNCTIONS OF PRINCIPAL LEVERS

### Push-off slide actuating lever 30

The actuating lever located inside the support post extends through the motor-board. The function is to transfer the movement of the push rod 51 to the  $10~\rm and$   $12~\rm inch$  push-off slides.

#### Push-off slides 5, 10

The function of the slide is to push the records off the step in the center post.

### Cycling Carriage 69

The cycling carriage forms the main tie link between the various levers. When the mechanism is tripped the cycling carriage engagement stud 42 raises and engages the cycling spiral channel located on the underside of the turntable. This engagement causes the cycling carriage to rotate about its pivot in a counterclockwise direction (Viewed from the bottom). The movement of the carriage continues in the same direction until the inclined portion of the spiral channel pushes the stud down to engage the latch (89). The next instant the cycling carriage return stud (40) becomes unlatched after which it raises and engages the spiral channel which returns the cycling carriage to the normal out of cycle position.

### Cycling Carriage engagement Stud 42

The engagement stud forms  $\alpha$  link between the cycling carriage and the cycling spiral on the under side of the turntable. This stud causes the cycling carriage to rotate in  $\alpha$  counterclockwise direction (viewed from the bottom of the motorboard).

## Cycling Carriage Return Stud 40

The return stud forms a link between the

cycling carriage and the cycling spiral. This causes the cycling carriage to return to the normal out of cycle position.

### Push Rod 51

The push rod forms a link between the push rod actuating lever (55) and the push off slide actuating lever (30).

### Elevating Rod 19

The elevating rod functions as a lift for the pickup arm.

#### Push rod actuating lever 55

Push rod actuating lever is a tie link between the push rod (51) and the cycling carriage (69). It also is provided with an adjustment to govern the travel of the push-off slides 5 and 10.

### Friction stabilizing spring 88

This spring forms a wedge which holds the cycling carriage (69) from drifting when the mechanism is in the playing position. In its braking action it provides a means of slowing the movement of the pickup to provide a gentle landing.

### Trip lever (upper) 34

As the pickup arm travels towards the center of the record, the trip lever is carried along by the inter-connecting levers. A small offset located on the turntable shaft rotating with the turntable contacts the end of the trip lever once with each revolution. On each contact the trip lever is pushed back slightly. This slight backward movement continues as long as the pickup is moving at a constant rate of speed. When the pickup enters the eccentric groove of the record, the movement is accelerated and thus allows the trip dog (34A) to drop

off the edge of the trip latch (89) before the turntable has made a revolution, therefore, the small offset on the turntable strikes the trip lever and in so doing, moves trip latch (89) and starts change cycle.

## Trip Lever (lower) 78

The lower trip lever mechanically linked to the upper trip lever (34) transfers the action from the underside of the motorboard to the top of the motorboard.

## Pickup Arm Landing Change Lever 59

The pickup arm landing change lever functions as a stop for the pickup indexing lever (62). The change lever position is altered depending upon the position of the 10 inch record support 4.

### Pickup Arm Indexing Lever 62

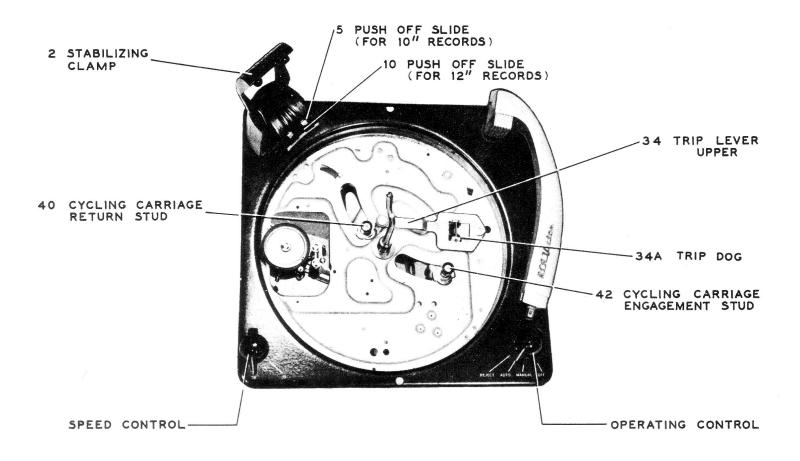
The pickup arm lever engages one of the notches in the indexing lever and in so doing determines the landing position of the pickup.

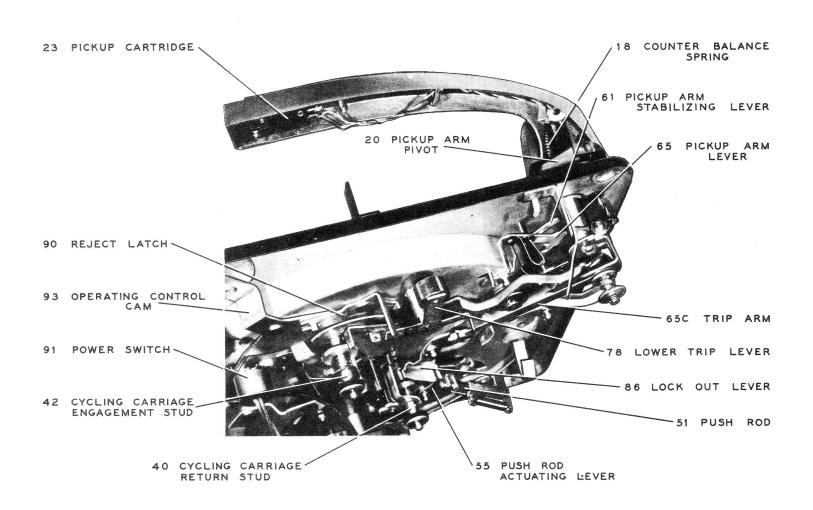
## Pickup arm lever 65

The pickup arm lever is connected to the pickup arm through the pickup arm pivot (20). The inward motion of the pickup arm causes the tripping action as a result of the contact between the pickup arm lever and the lower trip lever.

## Pickup Arm Stabilizing Lever 61

The pickup arm stabilizing lever is actuated by a small tab on the cycling carriage during the change cycle. The forward movement of this stabilizing lever permits contact with the stud (65A) on the pickup arm lever, thereby stabilizing the pickup arm during the change cycle of the mechanism.





## CYCLE OF OPERATION

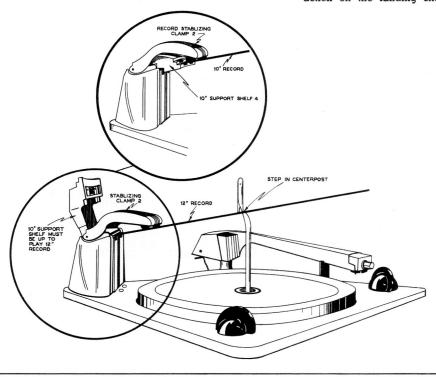
#### **Function**

### Description

Place a stack of 10 or 12 inch records over the center post. Lower the record stabilizing clamp.

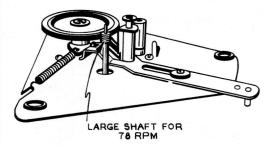
- 1. The records are supported by notch or step in center post.
- 2. The edge of the records rest on the separator shelf.

  10 inch records on the 10 inch shelf (4)
- 12 inch records on the 12 inch shelf (9)
- The position of the 10 inch support shelf (4) (up or down)
  determines the landing position of the pickup due to the
  action on the landing change (59) and index (62) levers.



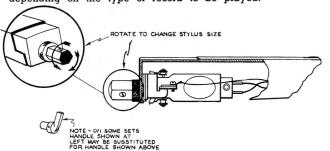
Turn speed selector knob to 78 or 33½ rpm position (depending on type of record).

 The motor has a turned down shaft providing a means of changing speed by raising or lowering the idler on the dual diameter shaft.



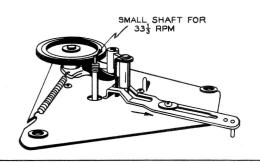
Rotate stylus knob.

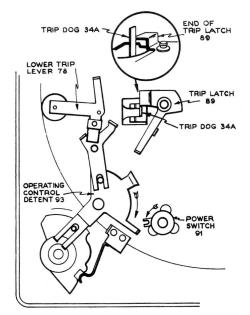
 The rotation of the stylus knob selects the proper stylus depending on the type of record to be played.

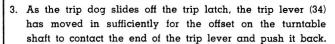


Push Control knob to reject position and release.

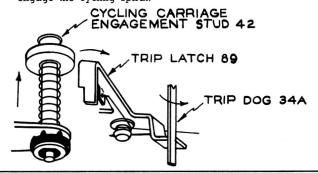
- The Operating Control detent (74) mechanically connected to control knob engages and actuates the power switch (91) starting the turntable rotating.
- Further rotation of the control knob moves the lower trip lever (78) sufficiently to allow the trip dog (34A) to slide off the end of the trip latch (89).

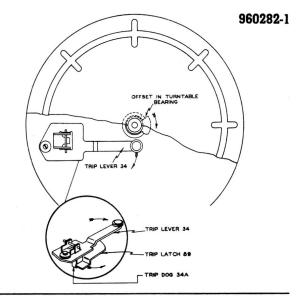






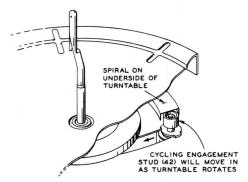
4. The backward movement of the trip lever (34) unlatches cycling engagement stud (42) allowing it to raise and engage the cycling spiral.



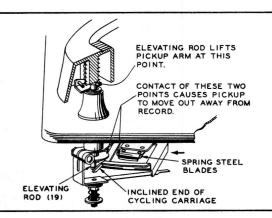


Cycling starts.

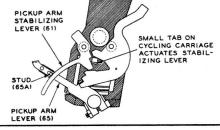
 As the cycling carriage engagement stud (42) engages the spiral on the under side of the turntable, the carriage begins to move counterclockwise (viewed from the bottom of the motorboard) about its pivot.



- The inclined end of the carriage located beneath the pickup arm pivot raises the elevating rod (19) lifting the pickup arm.
- 3. The same end of the cycling carriage has two spring steel blades forming a frictional connection between the cycling carriage and the pickup arm lever (65) by wedging the disc portion of the pickup arm lever between the two blades. This moves the pickup arm outward.



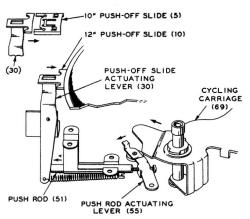
4. A small tab on the cycling carriage contacts and moves the pickup arm stabilizing lever (61) against the stud (65A) mounted on the tension spring incorporated in the pickup arm lever (65). This contact stabilizes the pickup arm in its movement during change cycle.



Record drops to the turntable.

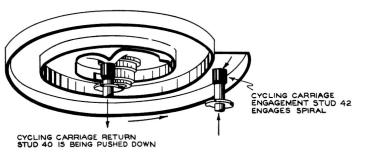
- As the cycling carriage continues to rotate, the end nearest the support post contacts push rod actuating lever (55), starting the action necessary to push the record off the center post.
- 2. The movement of the push rod actuating lever (55) through the linkage of push rod (51) push-off slide actuating lever (30) and push-off slide (5 or 10) pushes the record off the center post.
- 3. Record drops to turntable.

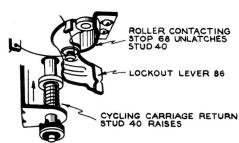
Note: The mechanism incorporates two push-off slides; one for ten inch (5) and one for twelve inch records (10).



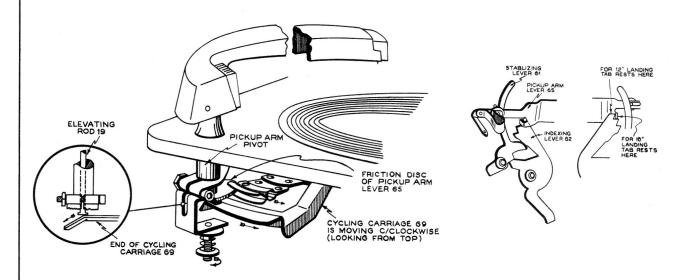
Pickup moves in for landing.

- Up to this time the cycling carriage (69) is moving in α counterclockwise direction (viewed from the bottom).
   After the record is pushed off the center post the lock out lever (86) mounted on cycling carriage contacts the stop and in so doing unlatches the cycling carriage return stud (40).
- As the cycling carriage return stud (40) raises to engage the spiral on the underside of the turntable, the cycling engagement stud (42) is pushed down and latched by the action of the incline in the spiral tract, thereby disengaging it from the spiral.
- The cycling carriage is now moving clockwise (viewed from the bottom of the motorboard).





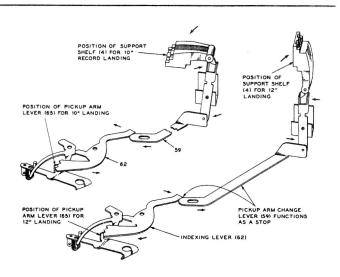
- The end of the cycling carriage beneath the pickup arm pivot again makes the frictional contact with the disc on the pickup arm lever (65). This contact moves the pickup arm in for landing.
- 5. The pickup arm on its inward movement continues to be stabilized by the pickup arm stabilizing lever (61). This stabilizing continues until the tab on the pickup arm lever is against the ten or twelve inch landing notch in the
- indexing lever. At this point the pickup should be directly over the point of landing on the record.
- 6. An instant later the small tab on the cycling carriage contacts the side of the pickup arm stabilizing lever, unlatching the indexing lever (62) and permitting free motion of the pickup arm.
- The elevating rod sliding down the small incline on the cycling carriage permits the pickup to land on the start of the record.



Note: It should be understood that the function of the indexing lever (62) is to determine the landing position of the pickup, both on ten and twelve inch records.

This is done by the pickup arm change lever (59) functioning as a stop for the indexing lever (62). The position of the pickup arm change lever in turn is governed by the position of the ten inch support shelf (4) (up or down).

8. As the pickup is landing the cycling carriage has reached its starting position and the cycling carriage return stud (40) is pushed down by the incline in the cycling spiral and locked in position.

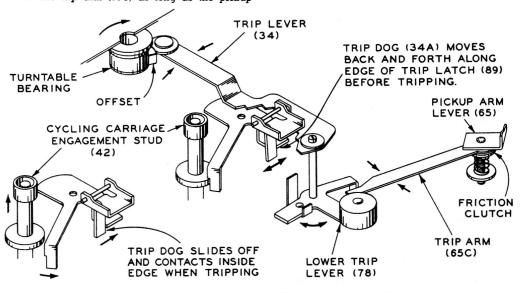


Cycling is completed and record plays.

- While the record plays, the end of the trip lever (34) is slowly moving toward the center post due to the force produced by the pickup arm down through the linkage of the pickup arm lever (65) trip arm (65C) and the lower trip lever (78).
- As the trip lever slowly (34) approaches the offset on the inner shaft of the turntable it is pushed back slightly with each revolution of the turntable.
- 3. The trip lever continues to be pushed back against the friction clutch of the trip arm (65C) as long as the pickup

arm moves in at a constant rate of speed.

4. When the pickup reaches the end of the selection the pickup moves into the eccentric groove quite rapidly. This rapid movement permits the trip dog (34A) to slide off the edge of the trip latch (89) before the offset on the turntable shaft has made one revolution. As the offset contacts the trip lever (34), it unlatches the trip latch (89) permitting the cycling carriage engagement stud (42) to raise and engage the cycling spiral starting a new cycle.



Pickup raises and moves out.

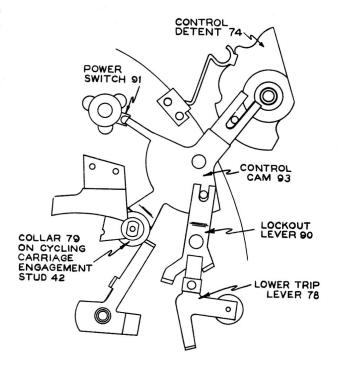
- After the mechanism has been tripped the pickup arm moves out and rises by action of the cycling carriage (69) on the pickup arm lever (65) and the elevating rod (19).
- 2. The mechanism again follows the preceding sequence of dropping and playing records until the last record of this stack has been played. The mechanism is not provided with an automatic stop so the last selection is repeated until the pickup arm is placed on the rest and the power removed from the drive motor.

Note: The pickup arm can be raised and moved to the rest position any time after the mechanism has completed the change cycle, providing the pickup has not played more than approximately  $\frac{1}{3}$  of the selection. If the pickup arm is moved after this time, the mechanism will go into change cycle and the pickup arm should not be retarded in its movement.

The pickup arm can also be handled when the mechanism is not in operation, providing the pickup arm has freedom of motion.

Turn function control knob to manual.

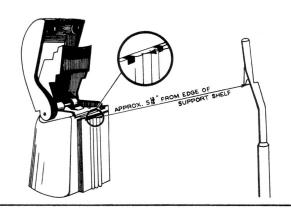
- The control detent (74) which is mechanically connected to the control knob, actuates the power switch through the control cam (93). This action starts the turntable rotating.
- 2. One end of the control cam also slides under the collar (79) on the cycling carriage engagement stud (42). This prevents the stud from raising if the trip lever is disturbed.
- The control cam also holds the manual lock out lever (90)
  in such a position that it locks the lower trip lever (78) to
  prevent tripping. In this position, the trip lever (34) is
  held away preventing contact with off-set on turntable
  shaft.



### **ADJUSTMENTS**

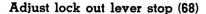
### POSITION OF SUPPORT POST

- Loosen three mounting screws at the base of the support post.
- Slide support post to a position as indicated in accompanying drawing. The curvature of the shelf should conform with a 12" record.
- After push-off slides have been adjusted, try a stack of both 10 and 12 inch records to determine the ease of separation. A compromise from the setting may be necessary due to differences in length of the 10 inch support shelf (4).



### Adjustment of Push-Off Slides

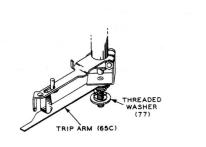
- Trip the mechanism and turn the turntable by hand until the cycling carriage has rotated counterclockwise, (Viewed from the bottom) to its limit.
- 2. Adjust screw 57 on push rod actuating lever until the 12 inch push-off slide is extending approximately 1/16'' over the edge of the shelf.
- Turn lock nut to hold screw and try a stack of 10 and 12 inch records for ease in separation.

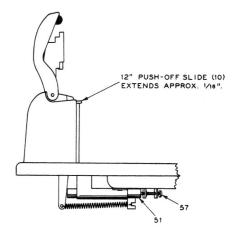


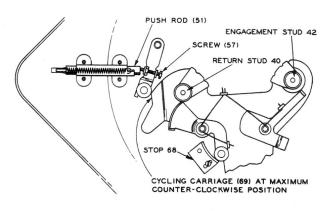
The lock out lever stop (68) should be so adjusted that the cycling carriage return stud (40) raises an instant before the spiral engagement stud (42) is pushed down. If this timing is not properly made the mechanism will jam.



 Turn the threaded washer on the pickup arm lever to produce sufficient friction for trip arm so the mechanism will have positive tripping. Care must be exercised against excessive friction as it would cause premature wear on the side walls of the record or in many cases, actually jump the grooves.

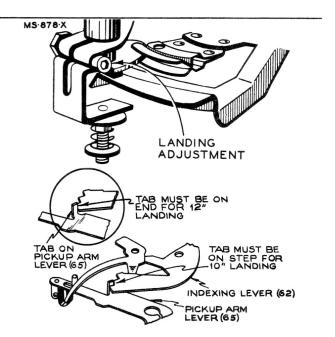




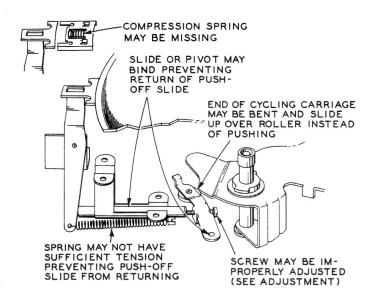


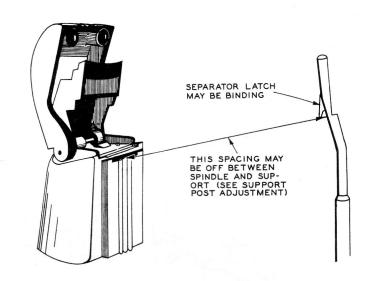
## Pickup Landing Adjustment

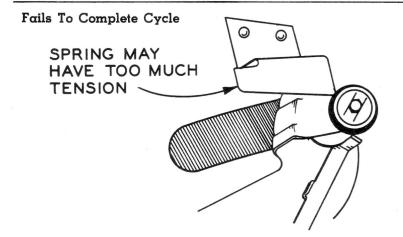
- 1. Disconnect power from mechanism.
- 2. Place a 10" record on turntable.
- 3. Turn the operating control to reject and release.
- 4. Rotate the turntable by hand until the tab on the pickup arm lever (65) is about ready to move away from the indexing lever. (The pickup will be a few inches above the record at this moment).
- 5. Loosen adjustment screw and hold the pickup arm lever in this position while moving the pickup arm directly above the point of landing. (Landing should be about half way between the edge of the record and the start of the recorded section. Approximately 4-11/16'' from the side of the center post for a 10'' record).
- 6. Tighten adjustment screw, apply power and check the pickup landing on both 10 and 12 inch records. If mechanism fails to land properly on 12" records the tab may be bent. In that case bend slightly.

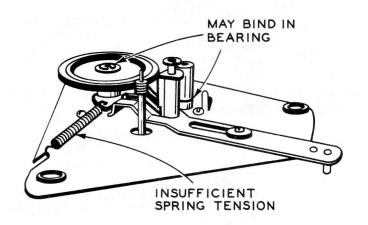


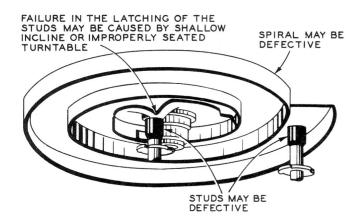
## Fails To Separate Records Properly

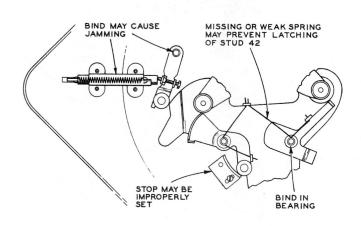


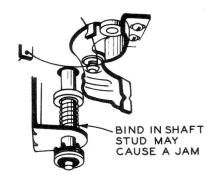


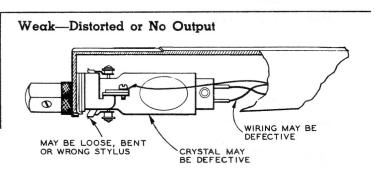






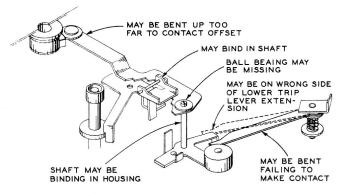


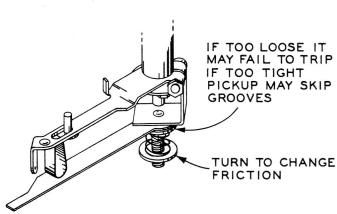


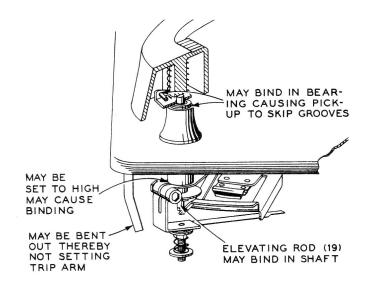


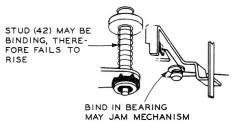
### Fails to Trip

## SERVICE HINTS (Continued)

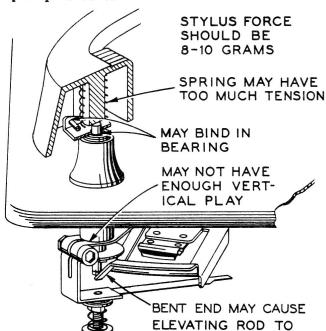


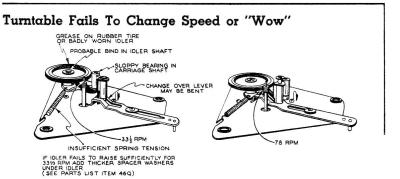




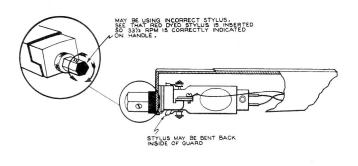


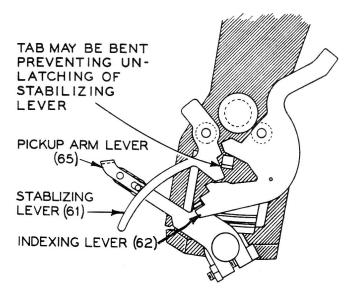




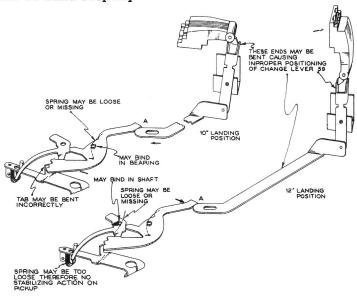


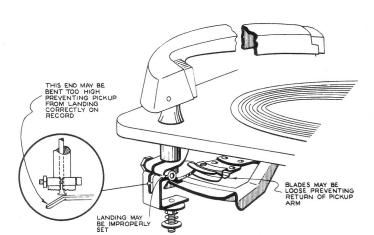
RIDE TOO HIGH



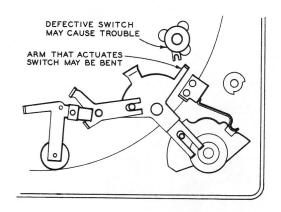


## Fails To Land Properly

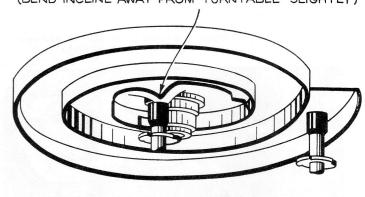




## Turntable Fails To Rotate

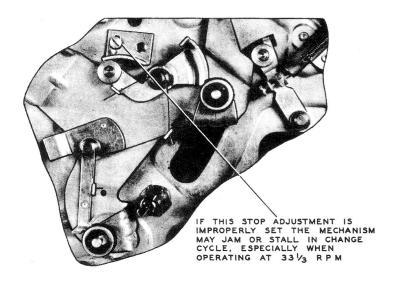


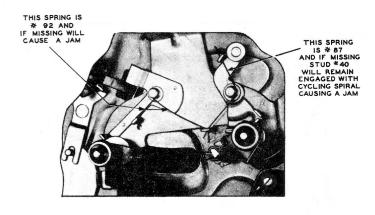
INCLINE IN SPIRAL MAY BE TOO SHALLOW THEREBY FAILING TO PUSH STUDS DOWN FAR ENOUGH CAUSING A JAM.
(BEND INCLINE AWAY FROM TURNTABLE SLIGHTLY)



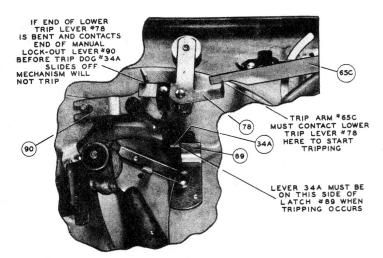
## DO YOU KNOW?

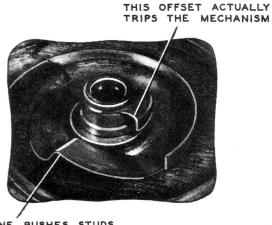
(Jam)





#### (Tripping)

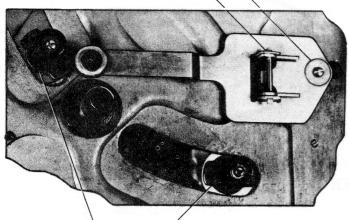




THIS INCLINE PUSHES STUDS
#40 & 42 DOWN DURING CHANGE CYCLE

### (Jumping grooves)

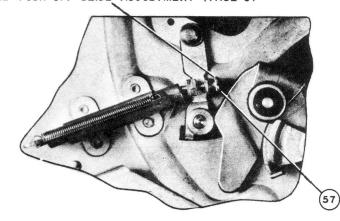




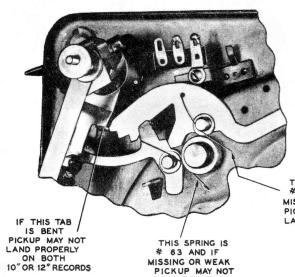
THESE BRASS BUSHINGS CAN BE TURNED TO REMOVE CYCLING CARRIAGE

## (Record separation)

RECORDS WILL NOT SEPARATE PROPERLY IF THIS ADJUSTMENT IS NOT CORRECT.
SEE PUSH-OFF SLIDE ADJUSTMENT (PAGE 8)



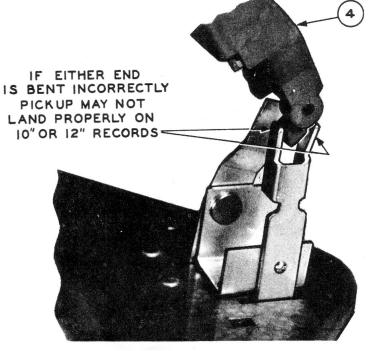




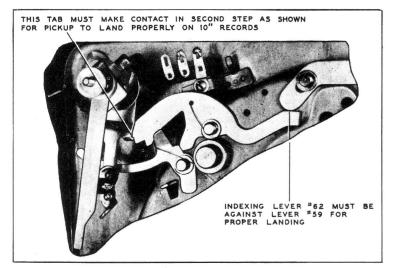
LAND PROPERLY

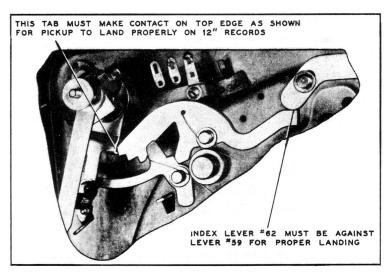
THIS SPRING IS

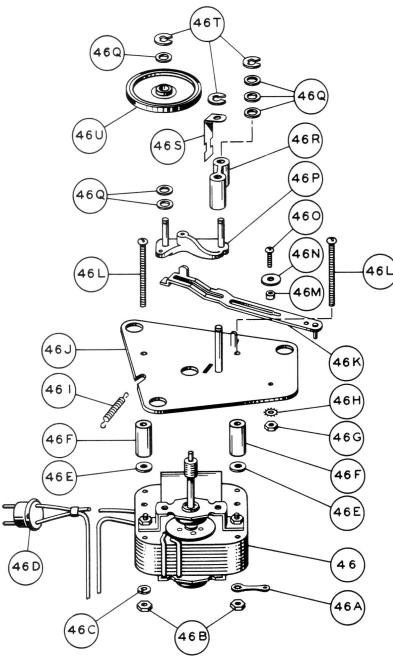
\* 67 AND IF
MISSING OR WEAK
PICKUP MAY NOT
LAND PROPERLY



## DO YOU KNOW?

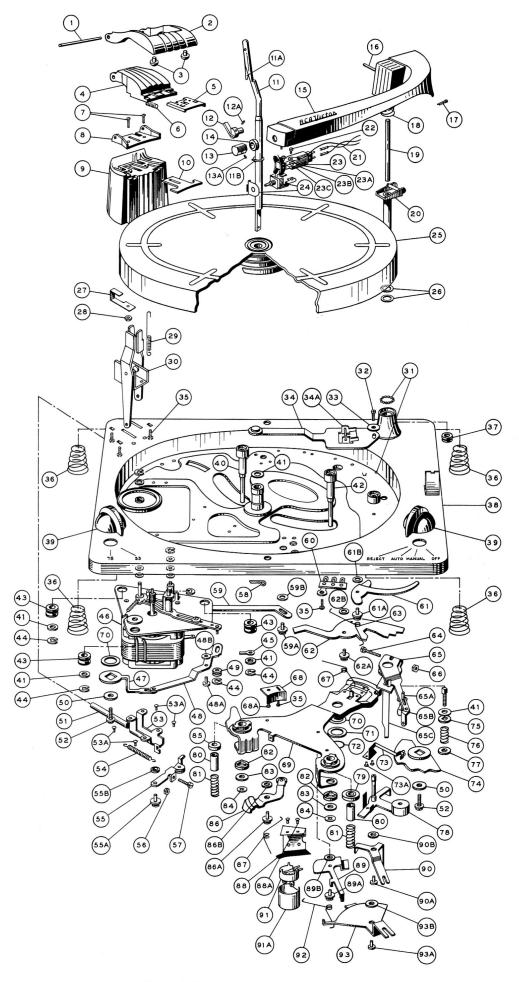




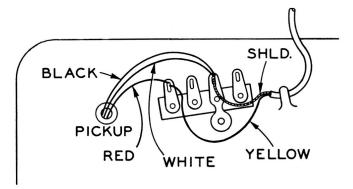


Exploded view of 60 cycle motor for RP-200 (960282-1)

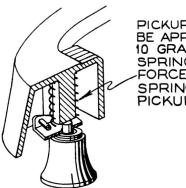
ILL. No.	STOCK No.	DESCRIPTION	ILL. No.	STOCK No.	DESCRIPTION
1	75254	Pin—Push-off box hinge pin	46M	75294	Spacer—Metal spacer to mount idler riser slide
2	75255	Clamp—Stabilizing clamp assembly (includes rubber bumpers)	46N 46O	_	Washer—Flat washer to mount idler riser slide Screw—Screw to mount idler riser slide (#4-40
3	75256	Bumper—Rubber bumper for stabilizing clamp (2 reg'd) (2 included)	46P	75295	x 3/8" round head steel machine screw) Carriage—Idler carriage
4 5	75257 75258	Support—10" record support Slide—10" record push-off slide	46Q	75296 75436	Washer—Fibre dampening washer .010 thick Washer—Fibre dampening washer .020 thick
6	75259	Spring—Return spring for 10" push-off slide (.250" O.D. x 9/16"—5 turns)	46R 46S	75297 75298	Link—Idler pivot link Guide—Idler riser slide guide
7		Screw—#4-40 x 3/8" round head steel machine	46T	75287	Washer—"C" washer to mount idler carriage and idler wheel
8	75260	screw Cover—12" record push-off slide cover	46U 47	75300 75301	Wheel—Idler wheel Arm—Speed selector arm
9	75261	Support—Main support (casting) for push-off mechanism	48	75301	Lever—Speed selector lever complete with
10 11	75262 75263	Slide—12" record push-off slide Spindle—Turntable spindle or centerpost (in-	_		mounting pivot stud and washer SEE PAGE 17 FOR LEVER USED ON EXPORT INSTRUMENTS
11B	75303	cludes ILL.11A) Ring—Turntable retainer ring	49	75282	Grommet—Rubber grommet used in speed
12	75264	Knob—Cartridge control knob complete with set screw	50	75304	change assembly Washer—Spacer washer (small) for speed selector arm (.059" x .190" I.D. x 5/8" O.D.)
12A		Screw—Screw for handle type stylus selector knob (included with ILL.12)	51 52	75305	Rod—Push rod
14	75265	Collar—Threaded collar for crystal mounting assembly	32	75306	Screw—Mounting screw complete with lock- washer for control knobs (10-32 x 3%" fillister
15	75266	Arm—Pickup arm shell complete with fibre guide	53	75307	head-special) Housing—Push rod housing complete with four
16 17	75267 75268	Pin—Pivot arm pin Spring—Retaining spring (hair-pin) for pivot	54	75308	(4) rivets Spring—Tension spring for push rod
18	75269	Spring—Counterbalance spring (17/32" O.D. x	55	75309	Lever—Push rod actuating lever complete with mounting pivot stud and washer (includes
19	75270	2-13/16" long—25 turns) Rod—Elevating rod	56		Ill. 56 and 57) Nut—#6 hex nut for push rod travel adjusting
20 21	75271 75272	Arm—Pivot arm and shaft Cable—Three wire pickup cable (12") complete	57		screw (includes 75309, Ill. 55) Screw—Adjusting screw for push rod travel
22		with connectors Screw—Mounting screw for crystal cartridge	E0.	75015	(#6-32 x 5%" fillister head screw) (included in 75309, Ill. 55)
23	75044	(2 req'd) (4140 x ½" fillister head screw)  Crystal—Replacement crystal complete with	58	75310	Pin—Cotter pin for turntable spindle or center- post
		styluses SEE PAGE 17 FOR EXPORT PICKUP CARTRIDGE	59	75311	Lever—Pickup arm landing change lever com- plete with mounting pivot stud and washer
23A 23B	75045 75046	Stylus—Stylus (red) only for 33-1/3 RPM section Stylus—Stylus (plain) only for 78 RPM section	60 61	75312	Board—Terminal board (3 contact) Lever—Pickup arm stabilizing lever complete
23C 24	75274 75273	Nut—Mounting nut (knurled) for stylus Mount—Crystal cartridge mount assembly (2	62	75313	with mounting pivot stud and washer Lever—Pickup arm indexing lever complete
25	75275	piece assembly) Turntable—10" dia.	63	75314	with mounting pivot stud and washer Spring—Tension spring for stabilizing lever
26	75276	Washer—Spacing washer (2 req'd) (.008 x 13/32" I.D. x 9/16" I.D.—Phosphor Bronze)	64	75315	Screw—Screw to mount pickup arm lever (10-32" x 1" socket head cap screw)
27 28	75277	Spring—Pressure spring for 10" record support Nut—4-40 hex nut	65	75316	Lever—Pickup arm lever including trip arm, engagement stud and tension spring
29	75278	Spring—Tension spring for stabilizing clamp (.216" O.D. x 17/8"—20 turns)	66		Nut—#10 hex nut for pickup arm lever mount- ing screw
30 31	75279 3658	Lever—Push-off slide actuating lever assembly Ball—Steel ball (3/32" dia.)	67	75317	Spring—Tension spring for indexing lever (2 turns)
32 33	75280	Screw—#4-40 x ½" fillister head screw Washer—Steel washer (.031" x .125" x ½")	68	75318	Stop—Lockout lever stop complete with mount- ing rivet
34	75281	Lever—Trip lever assembly including trip dog. ILL. 34A	69 70	75319 75320	Carriage—Cycling carriage Washer—Mounting washer (thin) for cycling
35	28360	Screw—Screw to mount main support (3 req'd) (#6-32 x 3/8" thread cutting)	71	75321	carriage Washer—Mounting washer (thick) for cycling
36	75040	Spring—Conical spring to mount record changer (4 req'd)	72	75322	carriage Washer—Mounting washer (split) for cycling
37	75282	Grommet—Rubber grommet for pickup cable exit	73	75323	carriage Spring—Lock spring for detent complete with
38		Board—Motorboard complete with all riveted, staked and welded parts	74	75324	(2) rivets Detent—Operating control detent
39 40	75283 75284	Knob—Control knob Stud—Cycling carriage return stud including	75	75325	Washer—Friction washer (square-hole) for trip arm (.060" x .189" square I.D. x 5/8" O.D.)
41	75285	shaft, washer and cambric roller Washer—Friction spring washer for turntable	76	75326	Spring—Friction adjustment spring for trip arm (.360" O.D. x 33/64"—5½ turns)
		and motor mounting. (.250" x .281" I.D. x .450" O.D.)	77	75327	Washer—Threaded washer for adjusting trip arm friction (.0673 x .159" I.D. x 5%" O.D.—
42	75284	Stud—Cycling carriage engagement stud in- cluding shaft, washer and cambric roller	78	75328	.159" I.D. hole tapped #10-32) Lever—Lower trip lever
43	75286	Grommet—Rubber grommet to mount motor (3 req'd)	79	75329	Washer—Shouldered washer for cycling car- riage engagement stud for Ill. 42
44 45	75287	Washer—''C'' washer to mount motor (3 req'd) Lug—Terminal lug	80	75330	Spacer—Metal spacer for cycling carriage studs
46	75288	Motor—117 volt, 60 cycle	81	75331	Spring—Tension spring for cam roller (.379" O.D. x 1-1/32"—7 turns)
46 46A	S-5812	Motor 117 volt, 25 cycle Lug—Terminal lug	82	75332	Grommet—Rubber grommet for cycling carriage studs
46B 46C		Nut—#6-32 hex nut to mount top plate (2 reg'd) Lockwasher—#6 lockwasher (split) to mount	83	75304	Washer—Stop washer for cam studs (.059" x
46D	30870	top plate Connector—2 contact male connector for motor	84 85	75334 75335	Nut—Speed nut for cycling carriage studs Washer—Engagement washer for cycling car-
	55676	leads Washer—Flat washer for under metal spacer	86	75336	riage return stud  Lever—Lockout lever complete with mounting
46E	means.	(2 req'd)	87	75337	pivot stud and washer Spring—Tension spring for lockout lever (2
46F	75290	Spacer—Metal spacer for motor mounting (2 req'd)	88	75338	turns) Spring—Friction stabilizing spring for cycling
46G 46H		Nut—#4 hex nut to mount idler riser slide Lockwasher—#4 (external) lockwasher to mount	89	75338	carriage complete with two (2) rivets Latch—Trip latch complete with mounting pivot
46I	75291	idler riser slide Spring—Tension spring for idler carriage	90		stud and washer Lever—Manual lockout lever complete with
46J	75292	Plate-Motor top plate including stud for idler		75340	mounting pivot stud and washer
46K	75293	pivot link Slide—Idler riser slide	91 92	75341 75342	Switch—Power switch complete with cover Spring—Trip latch tension spring—2 turns
46L		Screw—#6-32 x 13/4" round head brass machine screw to mount top plate (2 req'd)	93	75343	Cam—Operating control cam complete with mounting pivot stud and washer
$\Box$					



Exploded view of RP-200 (960282-1)



Pickup lead connections to motor board terminal strip.



PICKUP FORCE SHOULD BE APPROXIMATELY 8-10 GRAMS. STRETCHING SPRING WILL DECREASE FORCE. COMPRESSING SPRING WILL INCREASE PICKUP FORCE.

