# RCA VICTOR

#### DESCRIPTION

The RP-199 "Side-O-Matic" mechanism is a 45 rpm single play record player which is operated by simply sliding a record through a slot in the cabinet and then raising the play control.

Raising the play control starts the turntable rotating and automatically permits the pickup stylus to set on the record. Since the pickup arm is not accessible it is almost impossible to get out of adjustment.

The mechanism will stop automatically after the selection has been played and the record can easily be withdrawn. Should a person wish to stop the mechanism while in operation, simply push in on play control; withdraw the record after play control drops down.

The mechanism is made up of a lower and upper subassembly. The lower subassembly is provided with a power switch mounting bracket, pickup arm mounting bracket, pickup arm lever and a hinged support for the upper subassembly.

The upper subassembly provides the necessary facilities to mount the drive motor, turntable, idler wheel, trip lever, reject lever, latch, bumper, record stop and guides.

The turntable is driven by a conventional idler wheel assembly which gives additional speed reduction by coupling together two rubber drive wheels of different diameters.

# Model RP-199

"Slide-O-Matic"

#### ADJUSTMENT

#### **Tripping Adjustment**

The mechanism is provided with a tripping adjustment screw that should be adjusted so the mechanism trips when the stylus is approximately  $1\frac{14}{9}$ " from the edge of the record center hole.

#### Pickup Inward Travel Limit

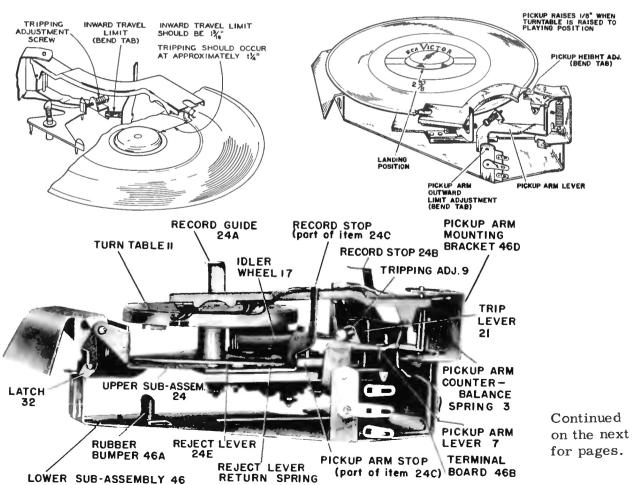
The inward travel of the pickup stylus should be limited to 1-3/16" from the edge of the center hole, so the stylus comnot enter the record label area. This limit is governed by bending of a metal tab.

#### Landing Adjustment

The contact between the pickup arm lever and a metal tab extending upward from the lower subassembly, limits the outward travel of the pickup arm. This outermost position coincides with the landing position of the pickup. Bend the tab so the pickup stylus lands approximately 25%" from the record center hole (Halfway between the outer edge and the recorded section of a standard record).

### Pickup Height Adjustment

The pickup height should be adjusted so the pickup raises approximately  $^{1/8}^{\prime\prime}$  when raising the play control to move the record into playing position. Adjust to desired height by bending of a metal tab.



# RCA Victor Model RP-199 Record Player

#### CYCLE OF OPERATION

#### Inserting Record

Slide a record over the turntable (thru slot in cabinet) until the record touches the stop, at which time the record will set on the turntable correctly.

#### Starting Mechanism

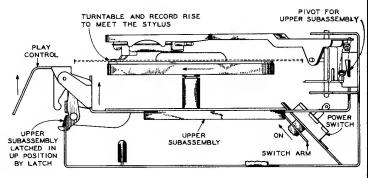
Raise the play control (38) that is mechanically connected to the upper subassembly; the upper subassembly (which is pivoted at the rear of the lower subassembly) raises with it. This action causes a small arm extending from the bottom of the upper subassembly to actuate the power switch and start the turntable rotating.

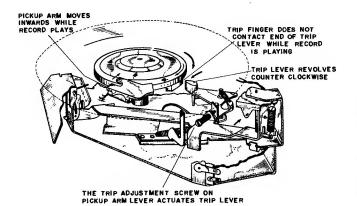
As the play control is raised up, the record on the rotating turntable gently meets the pickup stylus in the starting groove and the record starts playing.

When the play control is raised fully the upper subassembly becomes latched in the up position.

#### Record Plays

As the record plays, the pickup arm moves inward and the pickup arm lever (7) contacts and gradually rotates the trip lever (20) inward toward the turntable.





#### Mechanism Trips

When stylus has moved into finishing grooves of record, the trip lever has rotated sufficiently to make contact with the trip finger extending from the bottom of the rotating turntable. As the two meet, considerable force is transmitted from the rotating turntable to the trip lever. As a result the reject lever (coupled to the trip lever) is actuated and the latch, holding the upper subassembly in the up position, is released.

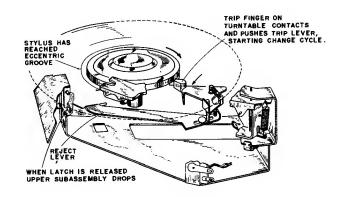
#### Mechanism Stops Automatically

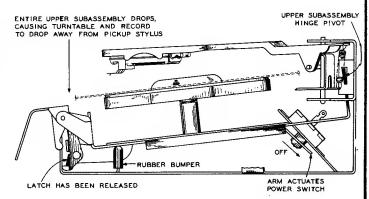
When the latch is released and the upper subassembly drops, the turntable and record drop away from the pickup stylus. At this time the power switch lever actuates the power switch and the mechanism stops.

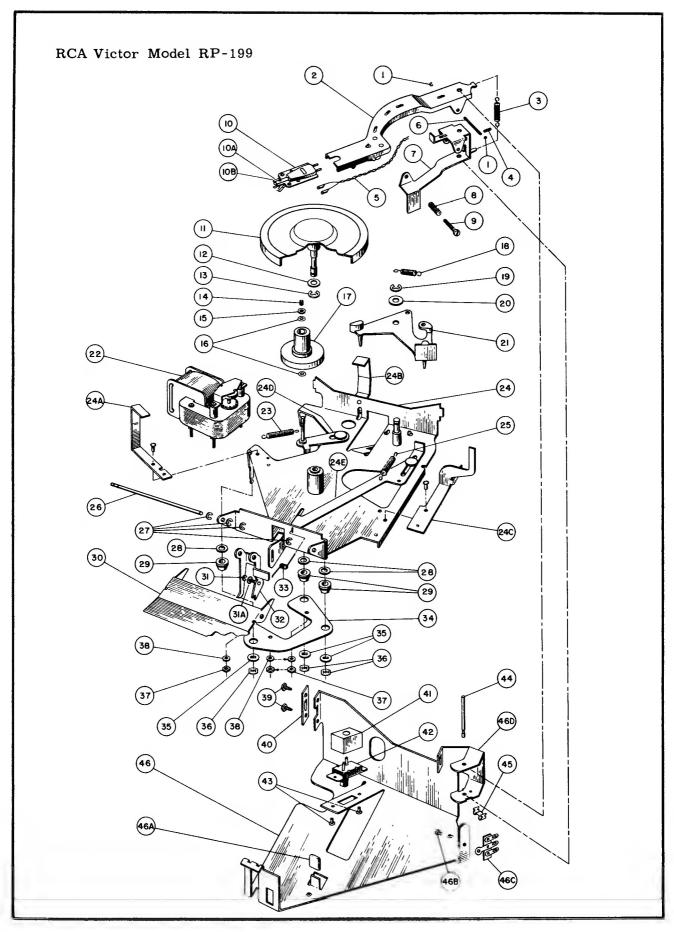
The pickup arm is returned to its outermost position (landing position) as a result of a slight push derived from the reject lever return spring directing a force through the trip lever and pickup arm lever assemblies. There is however a tendency for the pickup arm to return to its outermost position because of its weight distribution and its slightly forward tilt.

#### Remove Record

Simply pull the record forward out of the slot in the cabinet to remove it from the mechanism.





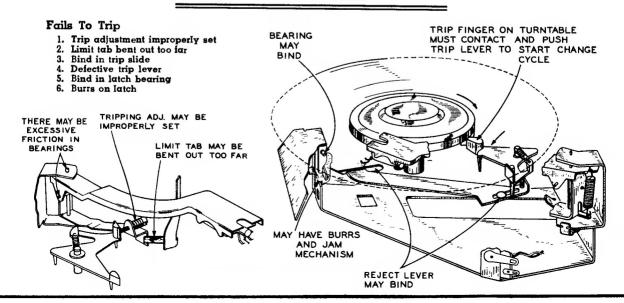


# RCA Victor Model RP-199 Record Player

#### REPLACEMENT PARTS

ILL. No.	STOCK No.	DESCRIPTION	ILL. No.	STOCK No.	DESCRIPTION
1	100174	Washer—Retainer, "C" washer for hori-	24E		Lever—Reject lever
2	100172	zontal pickup arm shaft Arm—Pickup arm complete with pickup	25	100192	Spring—Reject lever return spring
1 -		retainer spring.	26	100203	Shaft—Shaft for play control & latch as- semblies
3	78698 100200	Spring—Pickup arm counterbalance spring Screw—Allen set screw for pickup arm	27	78652	Washer—"C" washer retainer for latch as-
1 -		horizontal mounting shaft	28	100202	sembly shaft (4 Read) Washer—Flat washer over motor mount-
5	100181	Cable—2 conductor pickup cable complete with contacts	40	100202	ing grommet (3 Reqd)
6	100205	Shaft—Pickup arm horizontal mounting	29	100175	Grommet—Rubber motor mounting grom-
7	100207	shaft Lever—Pickup arm lever	30	100189	met (3 Reqd) Latch—Latching assembly (Play Control)
8	100207	Spring—Lock spring for tripping adjust-	31	100173	Washer—"C" washer—retainer for latch
9		ment screw		,,,,,,,,	assembly #32
10	74067	Screw—Tripping adjustment screw Pickup—Crystal pickup cartridge complete	31 A	1001 <b>83</b> 1001 <b>8</b> 0	Washer—Flat washer for latch assembly
-		with stylus	32	100180	Lever—Latch lever to hold upper sub- assembly in play position
10A	74230	Hardware—Washer and nut to mount sap-	33	100182	Spring—Play control tension spring
10B	74068	phire assembly Stylus—Replacement sapphire stylus and	34		Plate—Motor mounting plate
		holder for crystal pickup	35	100184	Washer—Motor mtg. washer rectangular hole (3 Read)
11	100194	Turntable—Turntable complete with shaft	36	100188	Nut—Speed nut for mounting motor as-
12 13	100197 77586	Washer—Flat washer for turntable shaft Washer—"C" washer for turntable shaft	1 30	100100	sembly to upper subassembly
14	100199	Spring—Retainer sleeve for idler wheel	37		Nut—Hex nut for mounting motor to motor
15	100196	Washer—Retainer washer for idler wheel	"		mounting plate (3 Read)
16	100198	Washer—Flat washer for idler wheel	38		Lockwasher-Lockwasher for securing mo-
	100	(fiber) (2 Reqd)			tor hex nuts (3 Reqd)
17	100176	Wheel—Idler wheel	39		Screw—Self tapping screw for mounting
18	100190	Spring—Trip lever return spring		'	hinge plate
19	77586	Washer—"C" washer for trip lever shaft	40	100178	Plate—Hinge plate for upper subassembly
20	100202	Washer—Flat washer for trip lever complete Ill. No's 29 & 34	41	100105	Insulator—Switch cover
23	100193	Spring—Idler wheel carriage assembly	42	100185	Switch—Power switch complete with in-
21	100195	Lever—Trip lever	43		sulator (41) and rivets (43) Rivet—Switch mounting
22	100206	Motor Assembly—105/125 volts, 60 cycle	44	100204	Shaft—Pickup arm vertical mounting shaft
		tension spring	45	100204	Bearing—Thrust bearing for pickup arm
24	100208	Plate—Upper subassembly plate complete	1		vertical mounting shaft
24A		with Ill. No's: 24A, 24B, 24C, 24D, 24E	46	100209	Plate—Lower subassembly plate complete
24A 24B		Guide—Record guide Stop—Record stop	46A	100177	with Ill. No's 41, 42, 43, 46A, 46B, 46C
24C		Bracket—Pickup arm bracket	40A	1001//	Bumper—Rubber bumper to cushion land- ing for upper chassis
24D		Lever—Idler lever assembly—carriage for	46B		Board—Terminal board for resistor and
		idler wheel			pickup cable assembly
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## SERVICE HINTS

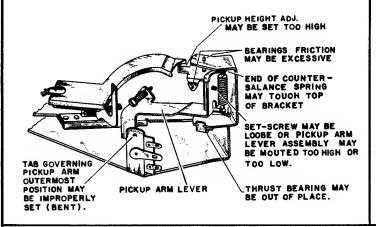


# RCA Victor Model RP-199

#### SERVICE HINTS (Continued)

#### Incorrect Landing

- 1. Outward travel limit tab bent to incorrect position
- 2. Excessive friction in vertical bearing of pickup arm
- 3. Thrust bearing may be out of place
- 4. Counterbalance spring touches pickup arm mounting bracket

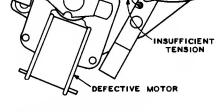


# "Wow" and Slow Speed

- 1. Grease or oil on idler wheel
- 2. Bind in idler wheel carriage
- 3. Bind in turntable bearing
- 4. Insufficient tension in idler carriage spring
- 5. Excessive stylus pressure

GREASE ON TIGHT TURNTABLE RUBBER IDLER WHEEL BEARING BINDING IDLER WHEEL CARRIAGE

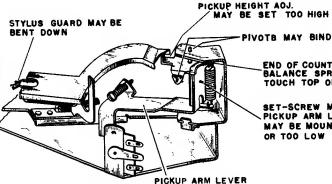
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"WOW" MAY ALSO BE CAUSED BY TOO MUCH STYLUS PRESSURE. (THIS WILL CAUSE PREMATURE RECORD WEAR)

# Skips Grooves

- 1. Bind in pickup shaft
- 2. Height adjustment tab bent up too high
- 3. Stylus guard bent down too far
- Pickup arm vertical pivot set too high (counterbalance spring touches bracket)



END OF COUNTER-Balance spring may Touch top of Bracket

SET-SCREW MAY BE LOOSE OR PICKUP ARM LEVER ASSEMBLY MAY BE MOUNTED TOO HIGH OR TOO LOW

# Play Control Will Not Latch

- 1. Bind in trip slide
- 2. Trip slide tension spring missing
- 3. Bind in latch pivot

