

Model RP-199

"Slide-O-Matic"

45 R.P.M. Manual Record Player

SERVICE DATA

– 1955 No. 9 –

ISSUED BY

GENERAL SERVICE DEPARTMENT
RCA VICTOR COMPANY, LTD
MONTREAL, CANADA

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The mechanism will stop automatically after the selection has been played and the record can easily be withdrawn.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.

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 $1\frac{1}{4}$ " from the edge of the record center hole.

Pickup Inward Travel Limit

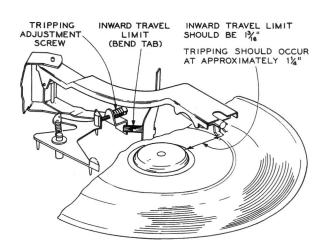
The inward travel of the pickup stylus should be limited to 1-3/16" from the edge of the center hole, so the stylus cannot enter the record label area. This limit is governed by bending of a metal tab.

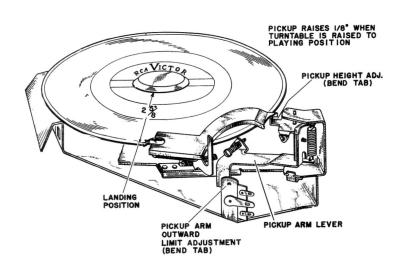
Landing Adjustment

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 2%" 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 $\frac{1}{8}$ " when raising the play control to move the record into playing position. Adjust to desired height by bending of a metal tab.





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

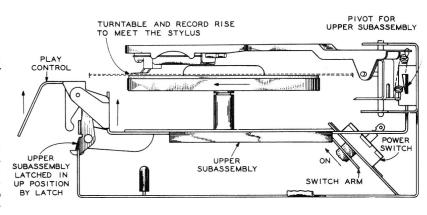
Raise the play control (38) that is mechanically connected to the upper subassembly; the upper subassembly (which is pivoted at the rear of the lower subassembly) raises with it. This action causes a small arm extending from the bottom of the upper subassembly to actuate the power switch and start the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

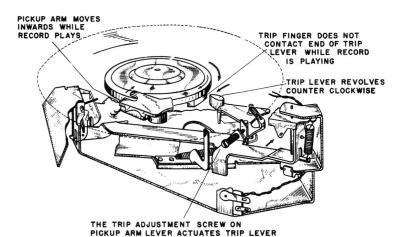
As the play control is raised up, the record on the rotating turntable gently meets the pickup stylus in the starting groove and the record starts playing.

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.

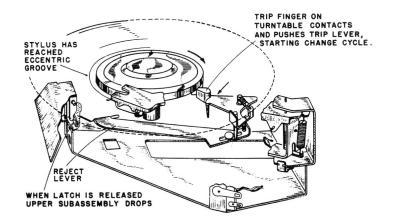
Mechanism Stops Automatically

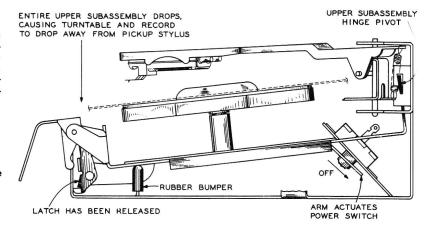
When the latch is released and the upper subassembly drops, the turntable and record drop away from the pickup stylus. At this time the power switch lever actuates the power switch and the mechanism stops.

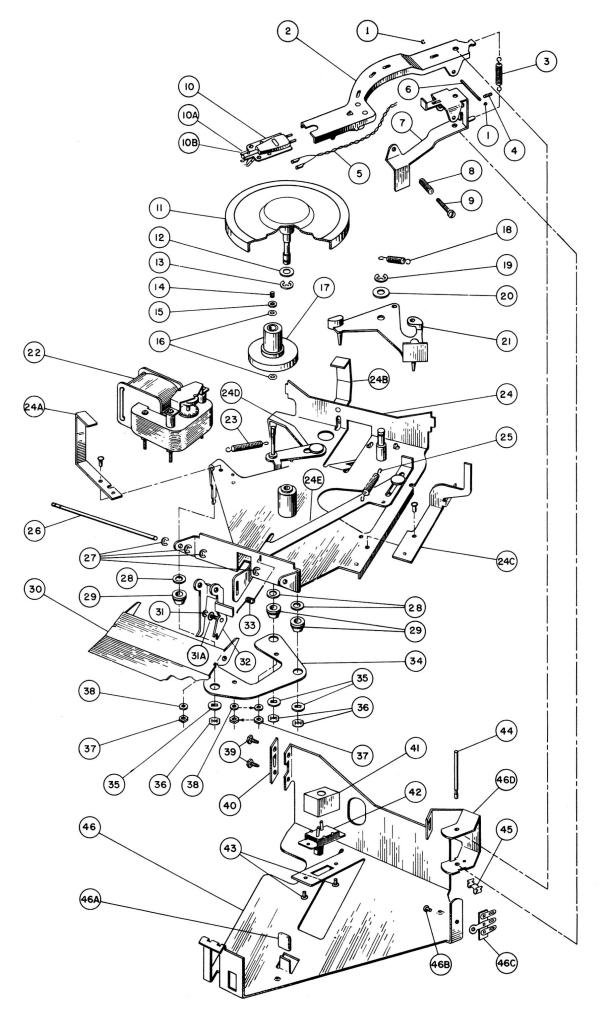
The pickup arm is returned to its outermost position (landing position) as a result of a slight push derived from the reject lever return spring directing a force through the trip lever and pickup arm lever assemblies. There is however a tendency for the pickup arm to return to its outermost position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



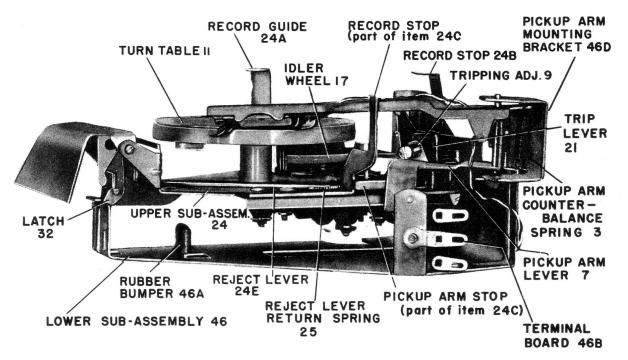




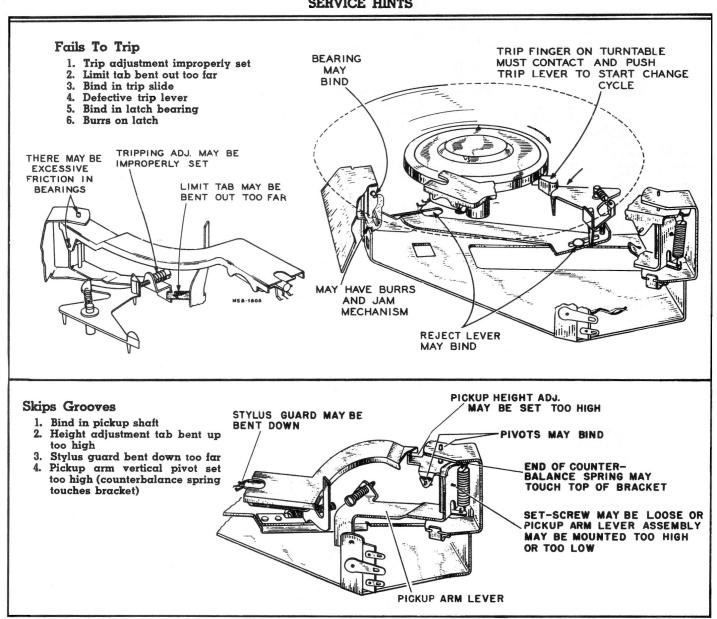
ILL. No.	STOCK No.	DESCRIPTION	ILL. No.	STOCK No.	DESCRIPTION
1	100174	Washer—Retainer, "C" washer for hori-	24E		Lever—Reject lever
2	100172	zontal pickup arm shaft Arm—Pickup arm complete with pickup	25	100192	Spring—Reject lever return spring
	100172	retainer spring.	26	100203	Shaft—Shaft for play control & latch as- semblies
3	78698	Spring—Pickup arm counterbalance spring	27	78652	Washer—"C" washer retainer for latch as-
4	100200	Screw—Allen set screw for pickup arm horizontal mounting shaft	-		sembly shaft (4 Reqd)
5	100181	Cable—2 conductor pickup cable complete	28	100202	Washer—Flat washer over motor mount-
	100005	with contacts	29	100175	ing grommet (3 Reqd) Grommet—Rubber motor mounting grom-
6	100205	Shaft—Pickup arm horizontal mounting shaft	23	1001/3	met (3 Regd)
7	100207	Lever—Pickup arm lever	30	100189	Latch—Latching assembly (Play Control)
8	100191	Spring—Lock spring for tripping adjust-	31	100173	Washer—"C" washer—retainer for latch
9		ment screw Screw—Tripping adjustment screw	31A	100183	assembly #32 Washer—Flat washer for latch assembly
10	74067	Pickup—Crystal pickup cartridge complete	32	100103	Lever—Latch lever to hold upper sub-
10.	74000	with stylus			assembly in play position
10A	74230	Hardware—Washer and nut to mount sap- phire assembly	33	100182	Spring—Play control tension spring
10B	74068	Stylus—Replacement sapphire stylus and	34	100184	Plate—Motor mounting plate
,,	100104	holder for crystal pickup	35	100184	Washer—Motor mtg. washer rectangular hole (3 Read)
11 12	100194 100197	Turntable—Turntable complete with shaft Washer—Flat washer for turntable shaft	36	100188	Nut—Speed nut for mounting motor as-
13	77586	Washer—"C" washer for turntable shaft			sembly to upper subassembly
14	100199	Spring—Retainer sleeve for idler wheel	37		Nut—Hex nut for mounting motor to motor
15 16	100196 100198	Washer—Retainer washer for idler wheel Washer—Flat washer for idler wheel	38		mounting plate (3 Reqd) Lockwasher—Lockwasher tor securing mo-
	100130	(fiber) (2 Regd)	30		tor hex nuts (3 Read)
17	100176	Wheel—Idler wheel	39		Screw—Self tapping screw for mounting
18 19	100190 77586	Spring—Trip lever return spring Washer—"C" washer for trip lever shaft	40	100170	hinge plate
20	100202	Washer—Flat washer for trip lever	40	100178	Plate—Hinge plate for upper subassembly Insulator—Switch cover
		complete Ill. No's 29 & 34	42	100185	Switch—Power switch complete with in-
23 21	100193 100195	Spring—Idler wheel carriage assembly Lever—Trip lever	40		sulator (41) and rivets (43)
22	100206	Motor Assembly—105/125 volts, 60 cycle	43	100204	Rivet—Switch mounting Shaft—Pickup arm vertical mounting shaft
		tension spring	45	100204	Bearing—Thrust bearing for pickup arm
24	100208	Plate—Upper subassembly plate complete	40	100000	vertical mounting shaft
24A		with Ill. No's: 24A, 24B, 24C, 24D, 24E Guide—Record guide	46	100209	Plate—Lower subassembly plate complete with Ill. No's 41, 42, 43, 46A, 46B, 46C
24B		Stop—Record stop	46A	100177	Bumper—Rubber bumper to cushion land-
24C 24D		Bracket—Pickup arm bracket	405		ing for upper chassis
240		Lever—Idler lever assembly—carriage for idler wheel	46B		Board—Terminal board for resistor and pickup cable assembly
					pickup conie assembly

APPLY TO YOUR RCA DISTRIBUTOR FOR PRICES OF REPLACEMENT PARTS

IDLER WHEEL 17 RECORD STOP 24B TRIP LEVER 21 HINGE SUPPORT (for upper subassembly) SPRING 18 REJECT LEVER 24E REJECT LEVER RETURN SPRING 25 RECORD and PICKUP ARM STOP BRACKET 24C PLAY CONTROL 30



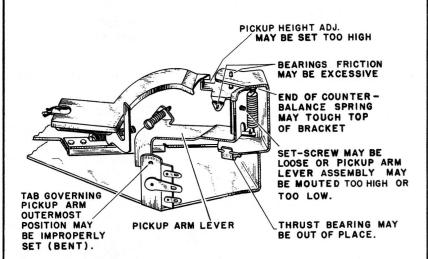
SERVICE HINTS



SERVICE HINTS (Continued)

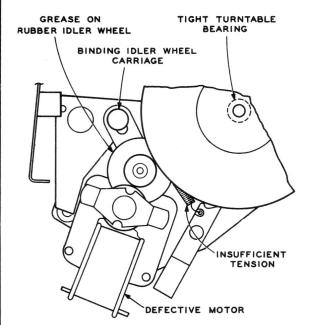
Incorrect Landing

- 1. Outward travel limit tab bent to incorrect position
- 2. Excessive friction in vertical bearing of pickup
- 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



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

Play Control Will Not Latch

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

