



RCA Victor

MODEL V-4A

RECORD PLAYER

TECHNICAL INFORMATION AND SERVICE DATA

SERVICE DIVISION • RCA VICTOR COMPANY LIMITED • MONTREAL



Electrical and Mechanical Specifications

MOTOR

Type ----- Self-starting Rim drive
Turntable Speed ----- 78 r.p.m.
Turntable Diameter ----- 9 inches

POWER SUPPLY RATING

Rating A ----- 105-125 volts, 60 cycles, 15 watts
Rating B ----- 105-125 volts, 25 cycles, 15 watts

General Description

The RCA Victor Record Player Model V-4A consists of a self-starting motor turntable mechanism, a crystal pickup incorporating a long life stylus, an aurally compensated volume control, and an automatic motor switch. This record player can be adapted to play records through the audio amplifier—loudspeaker system of practically every type of radio receiver. The cabinet is of walnut veneer, and has a hinged lid, which locks in the "open" position—but should be closed while records are being played. Any record up to and including the 12-inch diameter size may be played on this instrument. An automatic switch turns the motor "off" when the end of the record has been reached.

Service Data

The crystal pickup unit is thoroughly sealed in a metal casing, against extreme changes of climate. The offset mounting of the crystal unit in the pickup arm insures ideal tracking between needle and record grooves. If failure occurs due to a defective crystal, no attempt should be made to repair the unit, but a new replacement crystal unit should be installed. The motor speed should be 78 r.p.m., and may be checked by placing a piece of paper between a record and the turntable, with the paper protruding beyond the edge of the record, and then counting the number of revolutions of the turntable per minute. The motor is designed to be simple and foolproof in operation. Occasionally, however, lubrication and certain adjustments may be required.

PICKUP

Type—Permanent Stylus ----- Crystal
Impedance ----- 100,000 ohms at 1,000 cycles
Volume Control Resistance ----- 250,000 ohms
Average Output Voltage ----- $1\frac{1}{2}$ volts at 1,000 cycles
across 250,000 ohm load

CABINET DIMENSIONS

Height ----- $7\frac{1}{8}$ inches
Depth ----- $13\frac{1}{4}$ inches
Width ----- $15\frac{1}{2}$ inches

It is important that the drive motor spindle, and rubber tire be kept clean and free from oil, grease, dirt, or any foreign matter at all times. Any quick-drying naphtha is satisfactory for cleaning these parts.

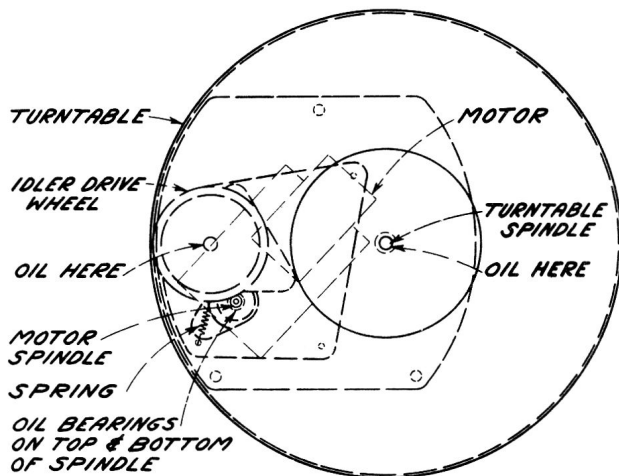
The motor is started by moving the pickup arm towards the turntable. The adjustment on the automatic motor switch cam should be made so that the switch will be in the "off" position when the needle in the pickup head is $1\frac{3}{4}$ inches away from the center of the turntable.

The volume control is of the potentiometer type, tapped to give aural compensation at low volume settings. The output lead from the volume control is a single shielded wire, terminating in a small, male, pin plug. This pin plug fits into the female jack receptacle provided on most of the RCA Victor radio receivers. If no receptacle is provided on the receiver the correct adaptor and a transfer switch stock No. 9824 may be used.

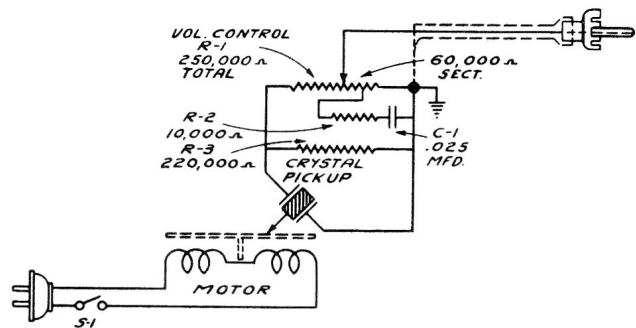
Connecting Record Player to Radio Receivers

In general, the Record Player must be used with radio receivers having at least two stages of high-gain audio amplification. The Record Player output should be connected to the grid of the first audio tube, and at the same time the output of the radio receiver portion of the chassis should be shorted or opened, to prevent radio signals being heard while the Record Player is in operation.

Motor and Pickup Data



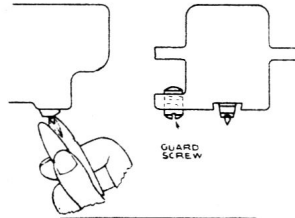
Motor Lubrication Points



Motor and Pickup Circuit

Replacement of Pickup Stylus

As an additional precaution against rough handling, the top of the stylus is dipped in a rubber cement before being inserted in the pickup. To remove the stylus, grasp it firmly with a pair of tweezers, give it a few turns to loosen the cement and then pull it out. Much easier handling of the stylus will result if the tweezers are



notched with a file as shown. Naptha may be used as a thinner should difficulty with the rubber cement be experienced. Before inserting the new stylus it should be dipped in the rubber cement previously thinned with naptha. After insertion clean the point with naptha if there is any doubt as to the presence of cement.

To Remove Pickup Arm.—

One of the tone arm bearings has a slotted head and can be turned out to facilitate removal of the tone

arm. Raise the tone arm and loosen the bearing set screw. Turn the bearing partly out through the hole in the side of the tone arm and lift the arm off.

REPLACEMENT PARTS FOR MODEL V-4A

Insist on genuine factory tested parts, which are readily identified and may be purchased from authorized dealers.

STOCK NO.	DESCRIPTION	STOCK NO.	DESCRIPTION
MOTOR ASSEMBLIES			
S-3077	Motor-110 volt, 60 cycle Motor.....	39388	Screw-No.4-40x3/16 in.screw for pickup arm bottom plate(Pkg.25)
S-3078	Motor-110 volt, 25 cycle Motor.....	38608	Screw-No.6-32x9/32 in.headless set screw for pickup arm (Pkg.15)....
S-3079	Spindle-Turntable Spindle.....	30585	Spring-Pivot arm spring (Pkg.2)...
S-3080	Spring-Drive wheel tension spring (Pkg.2).....	39564	Stylus-Permanent Stylus.....
S-3081	Turntable-Motor Turntable.....	AUTOMATIC MOTOR SWITCH ASSEMBLIES	
S-3082	Wheel-Rubber tired drive wheel.....	36772	Cam-Cam Assembly comprising main and auxiliary cam, hub and set screw
PICKUP ASSEMBLIES		32869	Screw-Set screw for cam hub(Pkg.10)
38602	Arm-Pickup arm-shell only.....	36521	Spring-Actuating lever tension spring (Pkg.2).....
S-3403	Base-Pickup arm base and pivot shaft	36529	Switch-Contact and plunger assembly
38610	Crystal-Crystal cartridge with permanent stylus.....	MISCELLANEOUS ASSEMBLIES	
39949	Damper-Viscoid damper.....	4870	Capacitor-.025 mfd. (C1).....
31054	Grommet-Pickup base rubber grommet.	S-3407	Knob-Volume control knob.....
38458	Nut-Speed nut to hold cable in arm (Pkg.2).....	31048	Plug-Pickup cable plug.....
39387	Plate-Bottom plate for pickup arm, less screws.....	3078	Resistor-10,000 ohm 1/4 watt (R2).
38609	Screw-No.4-40x1/4 in.headless set screw for pickup arm (Pkg.10).....	14583	Resistor-220,000 ohm 1/4 watt(R3).
38605	Screw-No.4-40x1/4 in.headless set screw for pickup crystal (oval point) (Pkg.5).....	9824	Switch-Phono adaptor switch and cable.....
38611	Screw-No.4-40x3/16 in.headless set screw for pickup crystal (oval point) (Pkg.5).....	31041	Tip-Pickup rest rubber tip (Pkg.2)
		S-3395	Volume Control (R1).....