



RCA Victor

MODEL V4X RECORD PLAYER

TECHNICAL INFORMATION AND SERVICE DATA

1945 No. 1

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, 14 watts
Rating B 105-125 volts, 25 cycles, 15 watts

PICKUP

Type Crystal
Impedance 100,000 ohms at 1,000 cycles
Volume Control Resistance 250,000 ohms
Average Output Voltage 1½ volts at 1,000 cycles
across 250,000 ohm load

CABINET DIMENSIONS

Height 7½ inches
Depth 13¼ inches
Width 15¼ inches

General Description

The RCA Victor Record Player Model V4X includes a rim drive motor, and a new type, light weight, crystal pick-up. This record player can be adapted to play records through the audio amplifier and loudspeaker system of practically every type of radio receiver. The cabinet is of walnut veneer, with a hinged lid, which locks in the "open" position. It is recommended that the lid be closed while records are being played. This instrument is designed for 10-inch or 12-inch diameter records.

Service Data

The crystal pick-up unit is thoroughly sealed in a metal casing, against extreme changes of climate. The offset 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. To replace crystal: Remove two filister head screws. Lift crystal from arm. Remove plug-in cable. The crystal unit uses a removable type needle.

The turntable speed should be 78 R.P.M., and the speed may be checked by a stroboscopic disc. When unavailable, place a piece of paper between a record and the turntable, with the paper protruding beyond the edge of the record, and then count the number of revolutions of the turntable per minute.

The motor should be lubricated once or twice a year by placing a few drops of S.A.E. 20 (or equivalent) on the turntable spindle and saturating the oil retaining felt pads on the motor shaft with S.A.E. 10 oil. See Fig. #1.

It is important that the motor drive 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 output lead from the volume control is a single conductor shielded cable, terminating in a small, male, pin plug. This pin plug fits into the female jack receptacle provided on most RCA Victor radio receivers. If no receptacle is provided on the receiver the correct adaptor with No. S-3122 Switch may be used.

Motor and Pickup Data

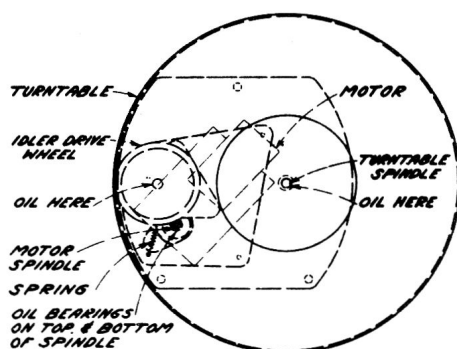


Figure 1—Motor Top View

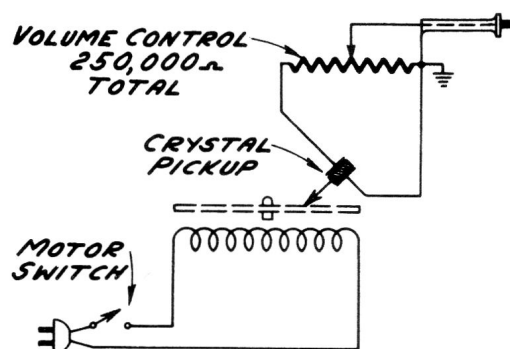


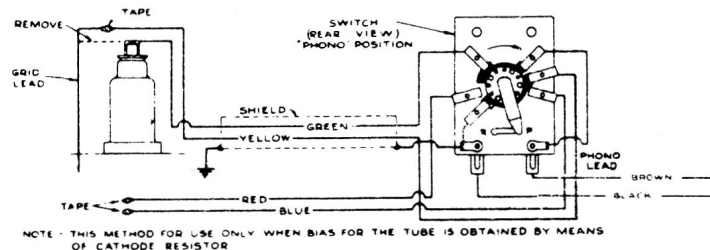
Figure 2—Motor and Pickup Schematic

Connecting Record Player to Radio Receivers

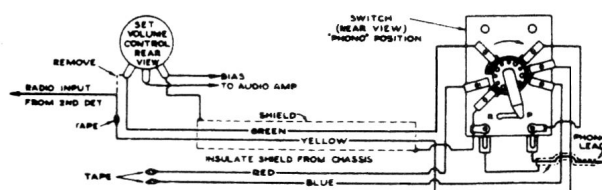
In general, the Record Player must be used with radio receivers having at least two stages of high-gain audio amplification. The output of the Record Player should be connected to the input of the first audio tube, and at the same time the output of radio receiver portion of the chassis should be shorted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

Methods of connecting the Record Player to various types of audio systems are given in the accompanying diagrams. The data given requires that a Stock No. S-3122 Radio-Phono switch be used for switching from radio to phonograph. For ease in connecting the "phono" lead to the Stock No. S-3122 switch, the male plug on the end of the lead should be removed by unsoldering or by cutting it off.

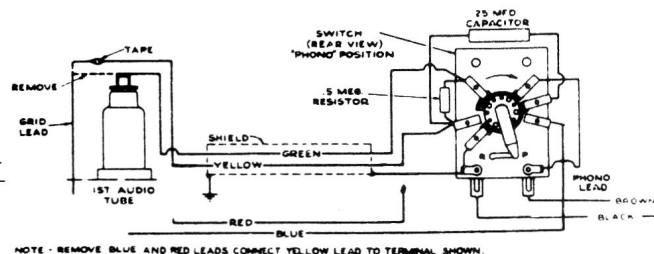
RADIO RECEIVERS WHERE FIRST AUDIO AMPLIFIER TUBE IS OF THE GRID CAP TYPE.



RADIO RECEIVERS WHERE THE VOLUME CONTROL IS IN THE AUDIO INPUT CIRCUIT.



RADIO RECEIVERS WHERE FIRST AUDIO TUBE IS OF THE GRID CAP TYPE, AND FIXED BIAS FOR TUBE IS OBTAINED THROUGH GRID LEAD.



REPLACEMENT PARTS FOR MODEL V4X

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.....	31054	Grommet-Pickup base rubber grommet..
S-3078	Motor-110 volt, 25 cycle motor.....	S-3462	Screw-Pickup needle screw (Pkg.2)...
S-3079	Spindle-Turntable spindle.....	S-3465	Screw-Pickup crystal retaining screw (Pkg.10).....
S-3080	Spring-Drive wheel tension spring (Pkg.2).....	S-3466	Spring-Pickup cable retaining spring (Pkg.2).....
S-3081	Turntable-Motor turntable.....	MISCELLANEOUS ASSEMBLIES	
S-3082	Wheel-Rubber tired drive wheel.....	31986	Cable-Pickup cable.....
PICK-UP ASSEMBLIES		S-3266	Knob-Volume control knob.....
S-3459	Arm-Pickup arm.....	S-3464	Nut-Knurled for volume control.....
S-3460	Base-Pickup arm base.....	S-3463	Rest-Pickup arm rest (Pkg.2).....
S-3461	Crystal-Pickup crystal cartridge....	S-2865	Support-Cabinet lid support.....
		S-3268	Volume control and "Off-on" switch..

All parts subject to change or withdrawal without notice.