

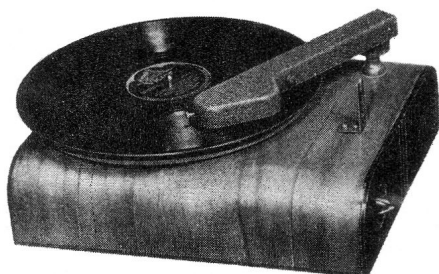


# RCA Victor

## MODELS V5, V5-1 and V5-A RECORD PLAYERS

### TECHNICAL INFORMATION AND SERVICE DATA

SERVICE DIVISION • RCA VICTOR COMPANY LIMITED • MONTREAL



Models V5 and V5-1



Model V5-A

### Electrical and Mechanical Specifications

#### MOTOR

Type \_\_\_\_\_ (Self-starting) Synchronous  
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, 14 watts

#### General Description

The RCA Victor Record Player Models V5 and V5-1 consist of a rim drive motor turntable mechanism and a new type, light weight, crystal pickup housed in a compact, modern styled, cabinet of walnut veneer. These record players are designed to play records through the audio amplifier-loudspeaker system of practically every type of radio receiver.

Model V5-A is similar to Models V5 and V5-1 with the exception of the pickup assembly which is an improved type provided with a permanent stylus.

#### 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 the needle and record grooves. If failure occurs due to a defective crystal unit, no attempt should be made to repair the unit, but a new replacement crystal unit should be installed.

#### 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 \_\_\_\_\_ 2⅞ inches  
Depth \_\_\_\_\_ 9⅞ inches  
Width \_\_\_\_\_ 11⅜ inches  
Net Weight \_\_\_\_\_ 6 pounds  
Shipping Weight \_\_\_\_\_ 8 pounds

#### To Remove Pickup Arm on Model V5-A:—

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 one arm and lift the arm off.

#### Phonograph Motor Service Data:—

The phonograph motor is of the self starting synchronous type and operates the turntable through friction drive between the motor drive spindle and the rubber tired idler on the rim of the turntable.

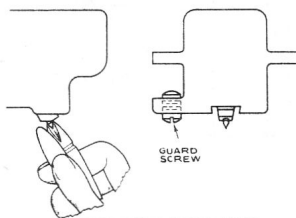
The motor should be lubricated once or twice a year by placing a few drops of S. A. E. 20 (or equivalent) on the turntable spindle and saturating the oil retaining felt pads on the motor shaft with S. A. E. 10 oil. Caution—The motor drive spindle and the rubber tire on the idler must be kept clean and entirely free from oil and grease at all times. Any quick drying naphtha is satisfactory for cleaning these parts.

#### Connecting Record Player to Radio Receivers

Plug male connector on the end of the "phono" lead into the female connector on the receiver chassis. Push or turn the "Phono" switch to "Phono" position, and operate the Record Player Attachment according to instructions.

### Replacement of Permanent Stylus

As an additional precaution against rough handling, the top of the permanent 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.



Naphtha 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 naphtha. After insertion clean the point with naphtha if there is any doubt as to the presence of cement.

## Motor and Pickup Data

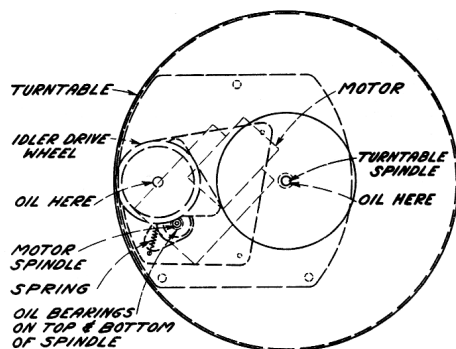


Figure 1—Motor Top View

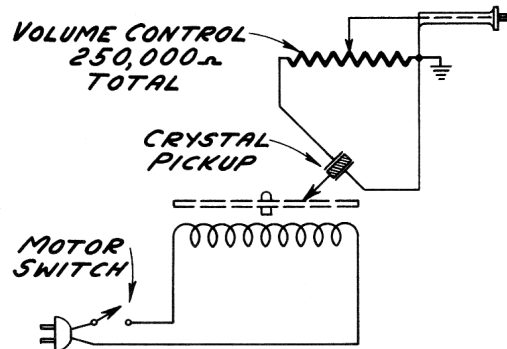


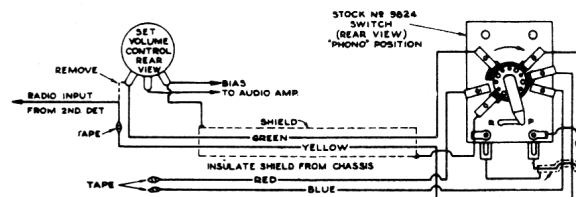
Figure 2—Motor and Pickup Schematic

## Connecting Record Player Attachment to Radio Receivers

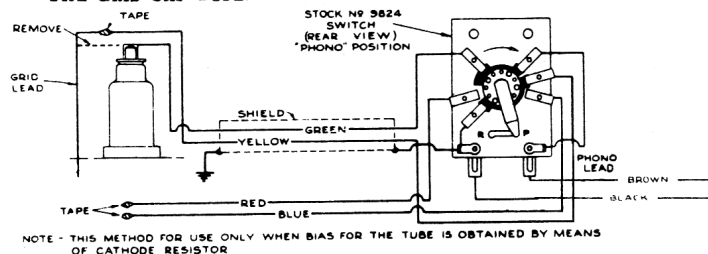
In general, the Record Player Attachment must be used with radio receivers having at least two stages of high-gain audio amplification. The output of the Record Player Attachment should be connected to the input of the first audio tube, and at the same time the output of radio receiver portion of the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

Methods of connecting the Record Player Attachment to various types of audio systems are given in the accompanying diagrams. The data given requires that a Stock No. 9824 Radio-Phono switch be used for switching from radio to phonograph. For ease in connecting the "phono" lead to the Stock No. 9824 switch, the male plug on the end of the lead should be removed by unsoldering or by cutting it off.

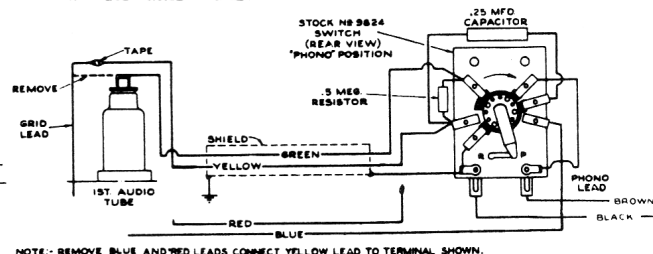
### RADIO RECEIVERS WHERE THE VOLUME CONTROL IS IN THE AUDIO INPUT CIRCUIT.



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



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



## REPLACEMENT PARTS FOR MODELS V5, V5-1, V5-A

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

STOCK NO.	DESCRIPTION	STOCK NO.	DESCRIPTION
<b>MOTOR ASSEMBLIES</b>			
S-3077	Motor-110 volt, 60 cycle Motor.....	39949	Damper-Viscoid damper.....
S-3078	Motor-110 volt, 25 cycle Motor.....	31054	Grommet-Pickup base rubber grommet....
S-3079	Spindle-Turntable spindle.....	38458	Nut-Speed nut to hold cable in arm (Pkg.2).....
S-3080	Spring-Drive wheel tension spring(Pkg.2)	39387	Plate-Bottom Plate for pickup arm, less screws.....
S-3081	Turntable-Motor Turntable.....	38609	Screw-No.4-40x1/4 in. headless set screw for pickup arm (Pkg.10).....
S-3082	Wheel-Rubber tired drive wheel.....	38605	Screw-No.4-40x1/4 in. screw to mount crystal (Pkg.25).....
<b>PICKUP ASSEMBLIES (Model V-5)</b>		38611	Screw-No.4-40x3/16 in.headless set screw for pickup crystal (oval point) (Pkg.5).....
33589	Arm-Pickup arm less crystal,base & cable.	39388	Screw-No.4-40x3/16 in.screw for pickup arm bottom plate (Pkg.25)....
S-3264	Base-Pickup arm mounting base & pivot shaft	38608	Screw-No.6-32x9/32 in.headless set screw for pickup arm (Pkg.15).....
33217	Crystal-Pickup crystal cartridge & needle screw.....	30585	Spring-Pivot arm spring (Pkg.2).....
33114	Damper-Viscoid damper for pickup armature	39564	Stylus-Permanent stylus.....
31160	Screw-Pickup needle screw.....	<b>MISCELLANEOUS ASSEMBLIES</b>	
<b>PICKUP ASSEMBLIES (Model V5-1)</b>		S-3266	Knob-Volume control knob.....
S-3236	Arm-Pickup arm,less crystal,base & cable.	31048	Plug-Pickup cable plug.....
S-3265	Base-Pickup arm mounting base & pivot shaft	33673	Support-Pickup arm support (used on Models V5 and V5-1).....
31050	Crystal-Pickup crystal cartridge and needle screw.....	9824	Switch-Radio Record Switch and Cable..
33114	Damper-Viscoid damper for pickup armature	31041	Tip-Pickup rest rubber tip(Model V5A) (Pkg.2).....
31160	Screw-Pickup needle screw.....	S-3268	Volume Control and off-on switch.....
<b>PICKUP ASSEMBLIES (Model V5-A)</b>			
38602	Arm-Pickup Arm-shell only.....		
S-3403	Base-Pickup arm base and pivot shaft....		
S-3405	Crystal-Crystal cartridge with permanent Stylus.....		