RCA VICTOR

"HIS MASTER'S VOICE"

MODEL VE 66D

SIX-TUBE, A-C ELECTRIC PHONOGRAPH

TECHNICAL INFORMATION AND SERVICE DATA

1948 No. 6

GENERAL SERVICE DIVISION • RCA VICTOR COMPANY LTD.

Electrical and Mechanical Specifications

Tube Complement

(1) RCA-6J5.....1st Audio Amplifier
(2) RCA-6SQ7.....2nd Audio Amplifier
(3) RCA-6SQ7.....Phase Inverter
(4) RCA-6K6GT.....Power Output
(5) RCA-6K6GT.....Power Output
(6) RCA-5Y3GT.....Rectifier

Power Supply Rating

105-125 volts AC, 60 cycles.....100 watts
105-125 volts AC, 25 cycles.....100 watts

Loudspeaker

Type.....Twelve-inch PM
Voice Coil Impedance.....2.2 ohms at 400 cycles

Motor Board

Motor.....Shaded Pole Self-starting
Turntable speed.....78 RPM
Pickup.....Crystal (Low noise, low voltage, sapphire point)

Lid Removed

Cabinet Dimensions

Height 14⅛"..... Width 18½"..... Depth 20⅝"

Pilot Lamps

(2) Mazda 55 (Control and compartment lamp)....6-8 volts
(1) Mazda 51 (Pilot lamp).....6-8 volts

Power Output

Undistorted.....7 watts

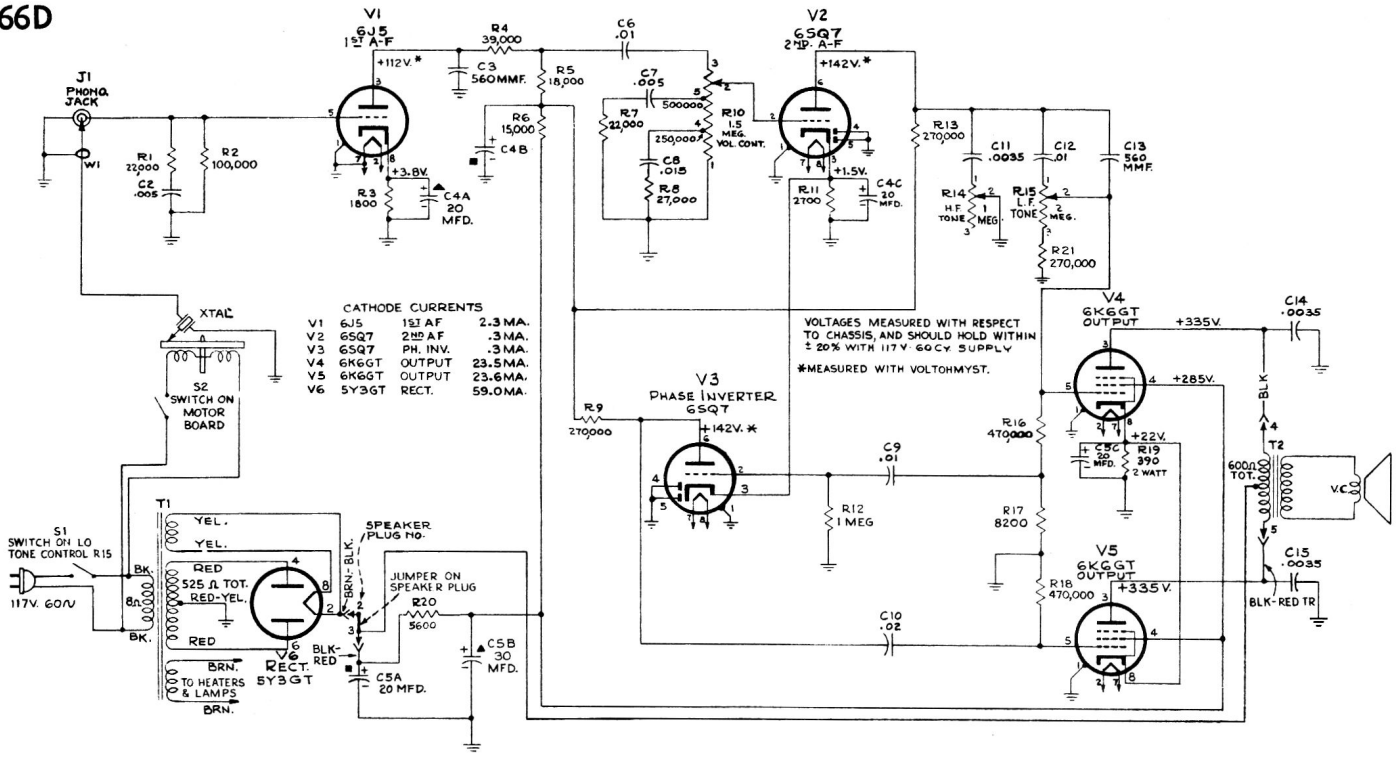
REPLACEMENT PARTS FOR MODEL VE 66D

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

STOCK NO.	DESCRIPTION	
	AMPLIFIER ASSEMBLY	
39646	Capacitor-560 MMF (C3,C13).....	
S-3645	Capacitor-.0035 Mfd.(C14,C11,C15)..	
S-3646	Capacitor-.005 Mfd. (C2,C7).....	
S-3648	Capacitor-.01 Mfd. (C6,C9,C12)....	
S-3649	Capacitor-.015 Mfd. (C8).....	
S-3650	Capacitor-.02 Mfd. (C10).....	
71976	Capacitor-Electrolytic 20-30-20 Mfd. (C5A,C5B).....	
38233	Capacitor-Electrolytic 20-20-20 Mfd.(C4A,C4B,C4C).....	
72325	Resistor-390 ohms 2 watt (R19).....	
30930	Resistor-1800 ohms 1/2 watt (R3)...	
30730	Resistor-2700 ohms 1/2 watt (R11)..	
S-4035	Resistor-5600 ohms 2 watt (R20)....	
14250	Resistor-8200 ohms 1/2 watt (R17)..	
36714	Resistor-15000 ohms 1/2 watt (R6).	
3219	Resistor-18,000 " 1/2 watt (R5)..	
30492	Resistor-22,000 ohms 1/2 " (R1,R7).	
30409	Resistor-27,000 ohms 1/2 watt (R8).	
30147	Resistor-39,000 ohms 1/2 watt (R4).	
3252	Resistor-100,000 ohms 1/2 watt (R2)	
30651	Resistor-270,000 ohms 1/2 watt (R9, R13,R21).....	
30648	Resistor-470,000 ohms 1/2 watt(R16, R18).....	
30652	Resistor-1 Megohm 1/2 watt (R12)...	
31319	Socket-Tube Socket.....	
31251	Socket-Tube Socket wafer.....	
35787	Socket-Phono socket.....	
S-4023	Transformer-Power 60 cycle (T).....	
S-4024	Transformer-Power 25 cycle (T1)....	
38402	Tone Control & switch(LF)(R15,S1)..	
38405	Tone Control H.F. (R14).....	
71596	Volume Control (R10).....	
	SPEAKER ASSEMBLY	
31825	Dust Cap (Pkg.5).....	
S-4299	Cone-Cone and Voice Coil Assembly..	
S-4319	Speaker.....	
S-2934	Output Transformer.....	

STOCK NO.	DESCRIPTION	
	MOTORBOARD ASSEMBLY	
71294	Arm-Pickup arm.....	
70332	Crystal-Crystal cartridge.....	
S-4015	Motor-60 cycle.....	
S-3951	Motor-25 cycle.....	
70546	Motorboard Mtg. Kit.....	
72208	Rest-Pickup arm rest.....	
72203	Switch-off/on switch (S2).....	
72205	Spindle-turntable spindle.....	
38449	Sapphire.....	
71414	Spring-Idler tension spring.....	
S-4034	Stop-Volume control stop.....	
72206	Turntable.....	
71413	Wheel-Idler wheel.....	
	MISCELLANEOUS ASSEMBLY	
S-4036	Cable-Speaker cable.....	
71978	Cover-Compartment lamp lead cover..	
4577	Connector male.....	
S-3467	Cord-Power cord.....	
72115	Decal RCA Victor.....	
72116	Decal Control panel.....	
38386	Decal RCA Victor.....	
72112	Grille cloth and wire screen.....	
72105	Hinge-lid hinge.....	
13103	Jewel.....	
S-3871	Knob.....	
72110	Lid support (LH).....	
11765	Lamp-Pilot lamp.....	
5117	Lamp-Pilot lamp.....	
31364	Socket-Dial lamp socket and lead...	
30900	Spring-Knob retaining spring (Pkg.5)	
31048	Plug-Plug for pickup cable.....	
30868	Plug-2 pin plug for motor cable....	
12493	Plug-5 pin plug for speaker.....	

All prices and parts are subject to change or withdrawal without notice.



Schematic Circuit Diagram

ADJUSTMENT OF VOLUME CONTROL LOCK

This instrument is provided with a Volume Control Lock, which can be adjusted in such a manner that will permit the control to be operated from zero to some pre-determined "Maximum" level to which it has been locked.

1. While instrument is in operation, remove Volume control knob.
2. The ends of two different weight springs can be seen in the Volume control shaft opening in the cabinet.
3. Turn Control "Maximum" clockwise until it is against stop.
4. To INCREASE desired maximum Volume level—
   (a) Apply just enough force (to unlock volume control shaft) with the eraser end of a pencil, on the end of the light weight spring, in direction indicated in sketch "B"

   (b) Rotate volume control shaft in direction indicated until desired level is reached.
   (c) Releasing force on spring automatically locks control so it can be operated from zero to the level where it has been locked.
5. To DECREASE desired maximum Volume level—
   (a) Apply force with the eraser end of a pencil on the heavy weight spring as indicated in sketch (c).
   (b) Rotate to a very low level, then proceed as in step 4.

NOTE: The procedure in step (5b) is necessary to prevent possible error that may be introduced due to backlash.

VIBRATION OF LID HOLD

A small piece of spring material is fastened on the inside of the cabinet in such a position as to apply force against the lid hold and keep it from vibrating when the lid is closed.

When servicing the instrument, make certain this spring is in position and serving its purpose.

Removal of Speaker and Jewel Pilot Light

The bottom front and the inside sloped panels are removable, making it convenient for removal of speaker and jewel pilot light.

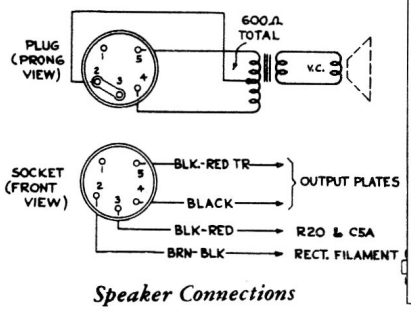
Lubrication

Under normal operating conditions the turntable drive motor should not require lubrication for a long period of time. When lubrication becomes necessary, use good quality light machine oil (SAE #10).

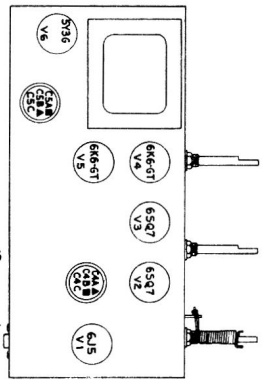
CAUTION:
Exercise extreme care to prevent getting any oil on the rubber tire or on the motor shaft. Oil on these parts will cause slippage with resultant irregular turntable speed.

CRITICAL LEAD DRESS

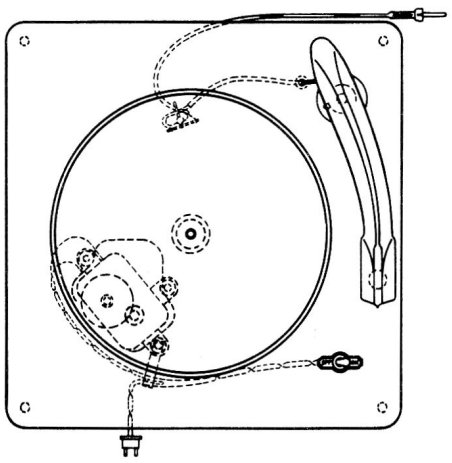
1. All leads and parts connected to the 6J5 socket should have sufficient slack to insure flexibility of socket.
2. The green lead from the center terminal of R10 volume control to terminal #2 of the 6SQ7 socket should be dressed up and away from all other leads and parts.
3. The lead from pin #5 of the 6J5 socket to the phono jack should be dressed up and away from all other leads and parts.

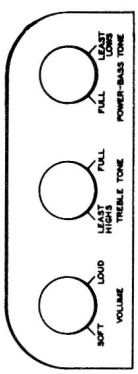


Speaker Connections



Location of Tubes





Controls