



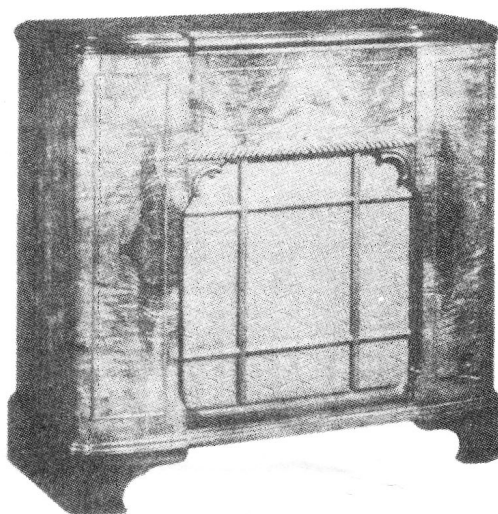
RCA Victor

MODEL VR-8

Eleven-Tube, Five-Band, Electric-Tuning, A-C, Victrola

TECHNICAL INFORMATION AND SERVICE DATA

SERVICE DIVISION • RCA VICTOR COMPANY LIMITED • MONTREAL



Electrical Specifications

FREQUENCY RANGES

"Standard Broadcast" (A)	540-1,720 kc
"49 Meter Band"	5,920-6,230 kc
"31 Meter Band"	9,480-9,690 kc
"25 Meter Band"	11,680-11,940 kc
"19 Meter Band"	15,080-15,390 kc

Intermediate Frequency

455 kc

TUBE COMPLEMENT

(1) Type-6K7	R-F Amplifier
(2) Type-6A8	First Detector
(3) Type-6J7	Heterodyne Oscillator
(4) Type-6K7	I-F Amplifier
(5) Type-6H6	Second Det., A.V.C., and Muting
(6) Type-6F5	Audio Voltage Amplifier

Pilot Lamps One Mazda 47, 6-8 volts, .15 amp; Two Mazda 44, 6.3 volts, .25 amp.
Fuse (Motor)

POWER SUPPLY RATINGS

Rating A	105-125 volts, 50-60 cycles, 145 watts
Rating B	105-125 volts, 25-30 cycles, 145 watts

POWER OUTPUT

Undistorted	10 watts
Maximum	12 watts

PHONOGRAPH

Record Capacity.....Seven ten or twelve inch
Turntable Speed.....78 R.P.M. (Adjustable)

R-F ALIGNMENT FREQUENCIES

"Standard Broadcast" (A)	1,500 kc (osc., det., ant.), 600 kc (osc.)
"49 Meter Band"	6,100 kc (osc.)
"31 Meter Band"	9,600 kc (osc., det., ant.)
"25 Meter Band"	11,800 kc (osc.)
"19 Meter Band"	15,200 kc (osc.)

(7) Type-6F5	A-F Amp. and Audio Phase Inverter
(8) Type-6F6	Power Output
(9) Type-6F6	Power Output
(10) Type-6U5	Tuning Tube
(11) Type-5T4	Full-Wave Rectifier

LOUDSPEAKER

Type 12-inch Electrodynamic
Voice Coil Impedance.....2.2 ohms at 400 cycles

Type Pickup.....Crystal
Pickup Impedance.....80,000 ohms at 1,000 cycles

Mechanical Specifications

Height	34 inches
Width	36 $\frac{1}{4}$ inches
Depth	17 $\frac{1}{8}$ inches
Weight (net)	101 pounds
Weight (shipping)	138 pounds
Chassis Base Dimensions	15 $\frac{5}{8}$ inches x 8 $\frac{1}{2}$ inches x 3 $\frac{3}{8}$ inches
Over-all Chassis Height	8 $\frac{1}{4}$ inches
Operating Controls.....(1) Power Switch-Tone; (2) Volume; (3) Tuning; (4) Range Selector, left to right, "A," "49 Meter," "31 Meter," "25 Meter," "19 Meter;" Ten Push Buttons; left to right, Victrola-Attachment Switch; Eight Station Buttons, Dial-Tuning Button.	
Tuning Drive Ratio (manual)	18 to 1

General Description

This receiver employs an eleven-tube, five-band "Magic Brain" superheterodyne circuit, the arrangement of which is shown in the Schematic Circuit Diagram. Features of design include electric tuning for eight broadcast stations; push-pull power output stage; magnetite-core i-f transformers; magnetite-core "A" band oscillator tracking adjustment; temperature-stabilized capacitors; four spread-bands; automatic volume control; "Magic Eye" tuning tube; 12-inch, dust-proof electrodynamic loudspeaker; aural-compensated audio volume control; continuously variable high-frequency tone control; provision for armchair control

attachment; new straight-line dial; illuminated band indicator; noise-reducing adjustment on "A" band and noise reduction on "C" band with RCA Victor Master Antenna; air-core trimmer condensers.

The phonograph has a self-starting motor, crystal pickup, and may be set to play ten-inch and twelve-inch records singly, or automatically. In the automatic position, seven twelve-inch; eight ten-inch; or a mixed group of seven, ten- and twelve-inch records, may be played in succession. The output of the pickup is "shorted" out when the pickup is on the pickup rest.

Calibration Scale

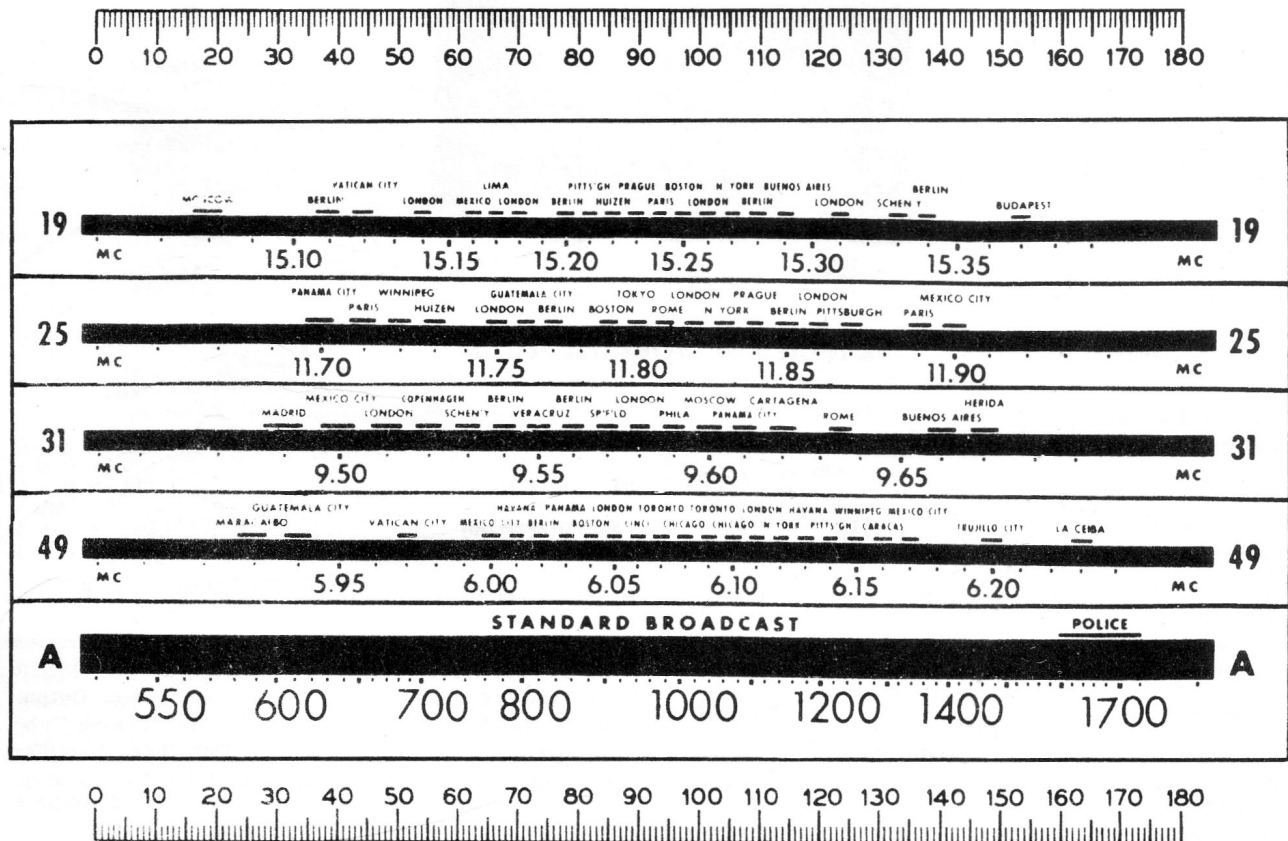


Figure 1—Reduced Reproduction of Receiver Dial, and Corresponding 0-180° Calibration Scales

The corresponding position of the dial indicator for any setting of the calibration scale can be determined by drawing a line from this point on the bottom calibration scale to the same point on the top calibration scale. For example 90° on the calibration scale corresponds approximately to 11.8 mc on the 25-meter band, and 940 kc on "A" band, etc. Read instructions under "Alignment Procedure."

Alignment Procedure

Cathode-Ray Alignment is the preferable method. Connections for the oscillograph are shown in the chassis drawing.

Output Meter Alignment.—If this method is used, connect the meter across the voice coil, and turn the receiver volume control to maximum.

Test-Oscillator.—For all alignment operations, connect the low side of the test-oscillator to the receiver chassis, and keep the output as low as possible to avoid a-v-c action.

Calibration Scale on Indicator-Drive-Cord Drum.—The tuning dial is fastened in the cabinet and cannot be used for reference during alignment, therefore a calibration scale is attached to the rear of the indicator-drive-cord drum which is mounted on the front shaft of the gang condenser. The setting of the gang condenser is read on this scale, which is calibrated in degrees. The correct setting of the gang in degrees, for each alignment frequency, is given in the alignment table.

As the first step in r-f alignment, check the position of the drum. The "0" mark on the drum scale must be vertical, and directly over the center of the gang-condenser shaft when the plates are fully meshed. The drum is held to the shaft by means of two set screws, which must be tightened securely when the drum is in the correct position.

Pointer for Calibration Scale.—Improvise a pointer for the calibration scale by fastening a piece of wire to the gang-condenser frame, and bend the wire so that

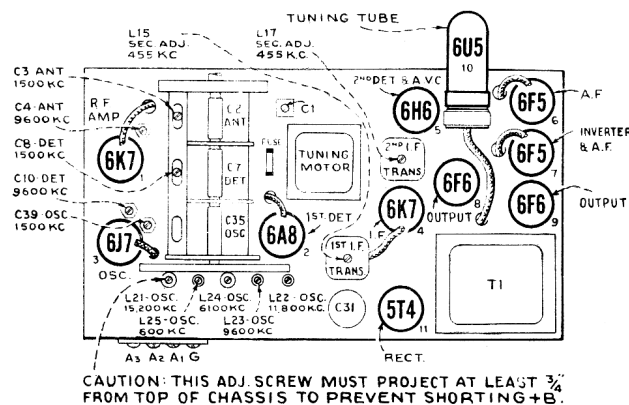


Figure 2—Tube and Trimmer Locations

it points to the "0" mark on the calibration scale when the plates are fully meshed.

Dial-Indicator Adjustment.—After fastening the chassis in the cabinet, attach the dial indicator to the drive cable with indicator at the 530 kc mark, and gang condenser fully meshed. The indicator has a spring clip for attachment to the cable.

For additional details, refer to the "RCA Victor Service Manual."

Steps	Connect the high side of test-oscillator to—	Tune Test-Oscillator to—	Range Selector	Set Tuning Gang to—	Adjust the following for max. peak output
No. 1	6K7 I-F grid cap, in series with .01 mfd.	455 kc	"A"	Quiet point between 550-750 kc	L16, L17 (2nd I-F transformer)
No. 2	6A8 1st-det. grid cap, in series with .01 mfd.	455 kc	"A"		L14, L15 (1st I-F transformer)
No. 3	A2, in series with 100 mmf. Connect A3 to chassis.	1,500 kc	"A"	1,500 kc (151.5°)	C39 (osc.) C3 (ant.) C8 (det.)
No. 4	A2, in series with 100 mmf. Connect A3 to chassis.	600 kc	"A"	600 kc (30.0°)	L25 (osc.)
No. 5	A2, in series with 100 mmf. Connect A3 to chassis.	1,500 kc	"A"	1,500 kc (151.5°)	C39 (osc.)
No. 6	A2. Connect A1 to chassis.	6,100 kc	"49M"	6,100 kc (106°)	L24 (osc.)*
No. 7	A2. Connect A1 to chassis.	9,600 kc	"31M"	9,600 kc (102°)	L23 (osc.)** C4 (ant.) C10 (det.)
No. 8	A2. Connect A1 to chassis.	11,800 kc	"25M"	11,800 kc (90.0°)	L22 (osc.)**
No. 9	A2. Connect A1 to chassis.	15,200 kc	"19M"	15,200 kc (78.0°)	L21 (osc.)**

* Use maximum inductance peak (plunger in) if two peaks can be obtained.

** Use minimum inductance peak (plunger out) if two peaks can be obtained

Note that the heterodyne oscillator tracks **above** the signal frequency on all bands except "49M," where it is lower than the signal frequency.

Adjustments for Electric Tuning

1. Make a list of the desired eight stations, arranged in order from low to high frequencies.
2. Turn range selector to "A" band, turn power on, and allow a few minutes for warming up.
3. Press down the "dial-tuning" (right-hand) button.
4. Manually tune in the first station on the list, using the "Magic Eye" for accurate tuning.
5. Hold down the "dial-tuning" button, and press down station button No. 1 (second from left). Both buttons will stay down. Move adjusting pin No. 1

to the insulating line on the disc at the rear of gang. When the pin is correctly centered on the insulating line, the central dial lamp will go out.

6. Press down any other button in order to release the dial-tuning button and station button No. 1. Then press down station button No. 1 again. The electric tuning mechanism will function to tune in the station, and the central dial lamp will stay on.
7. Repeat this process for the remaining stations.

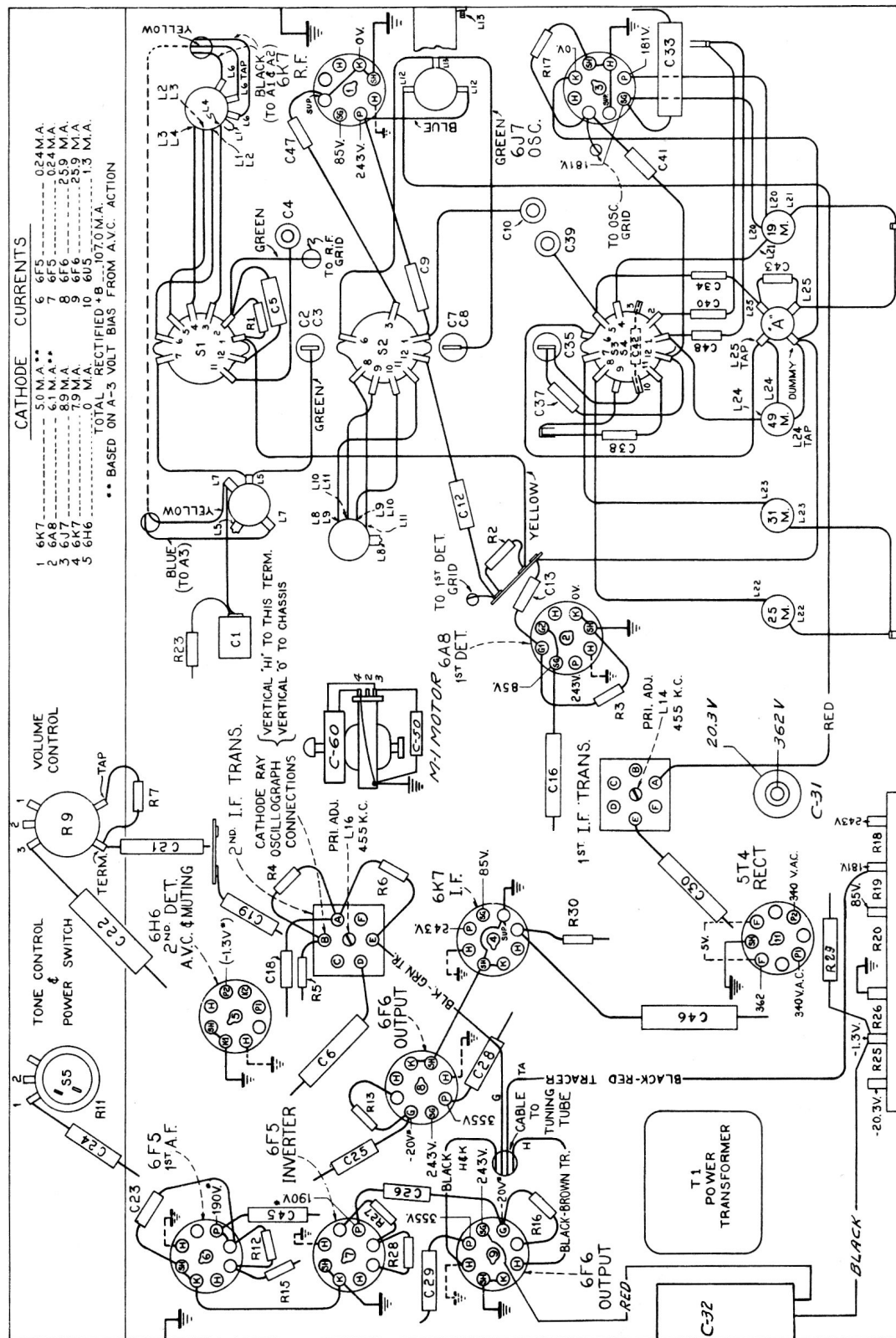


Figure 3—R-F Wiring Diagram and Socket Voltages

Measurements made to chassis unless otherwise indicated, with set tuned to quiet point and volume control at minimum. Values should hold within approximately $\pm 20\%$ with 117-volt a-c supply.

*** NOTE:** Values with star (*) are operating voltages in circuits with high series-resistance. The actual measured voltages will be lower, depending on the voltmeter loading.

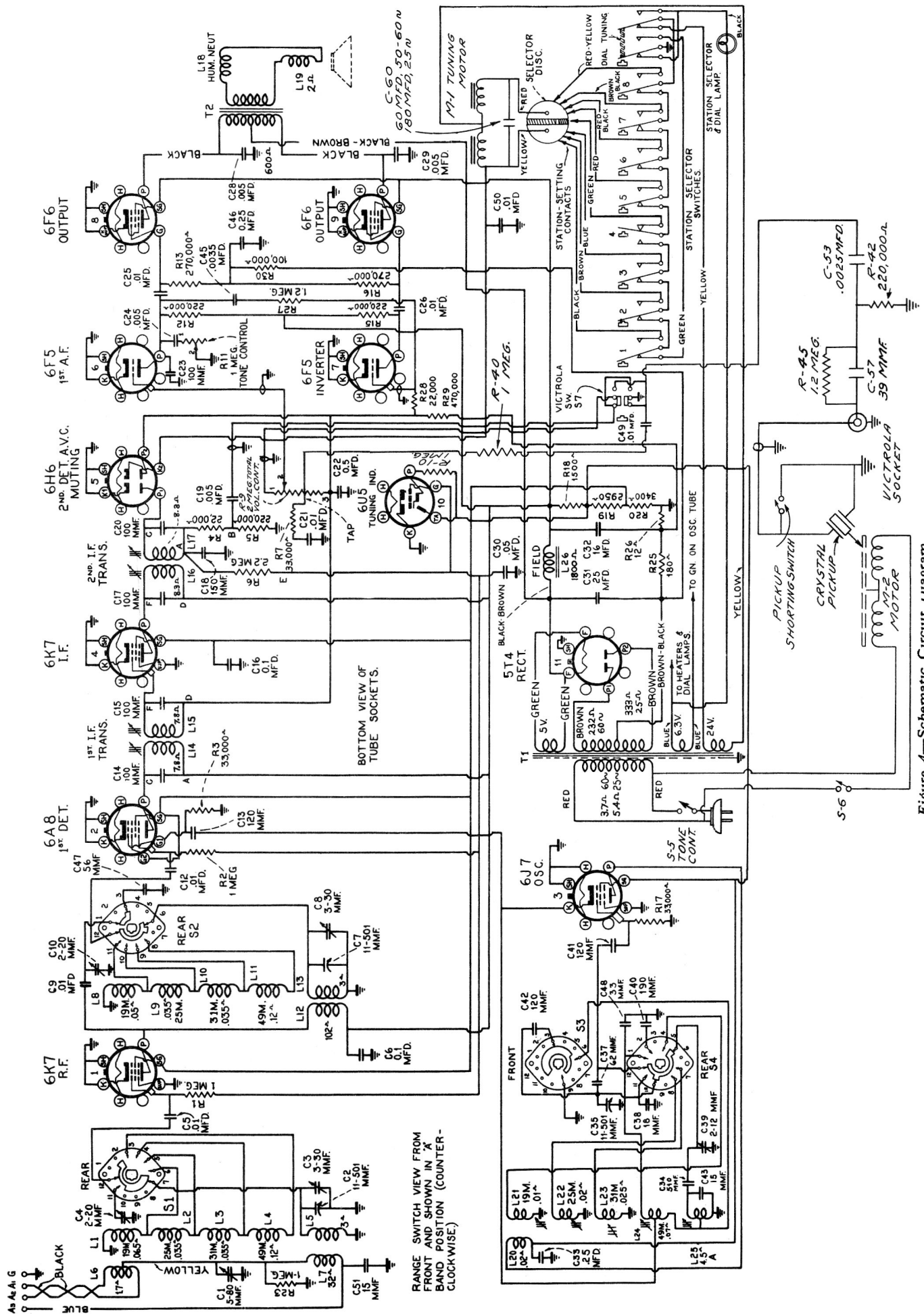
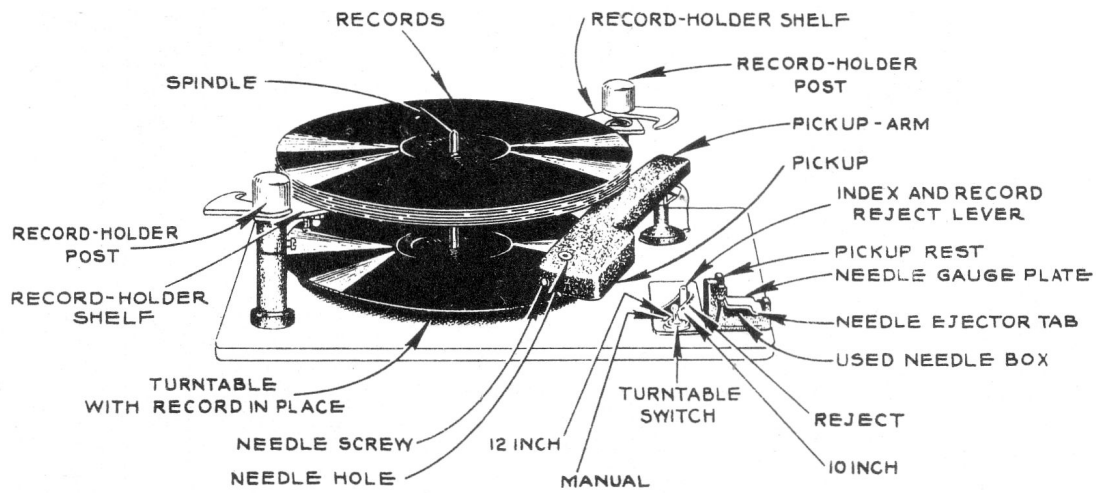
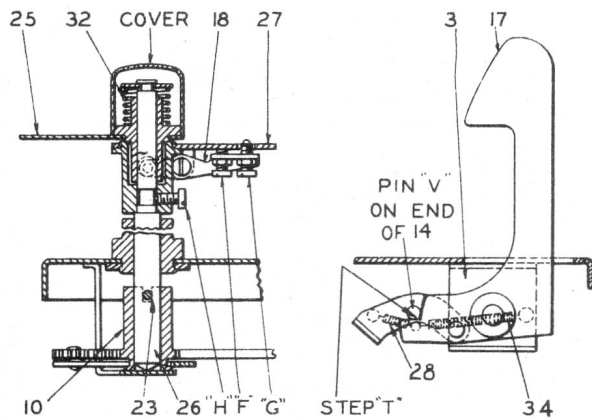


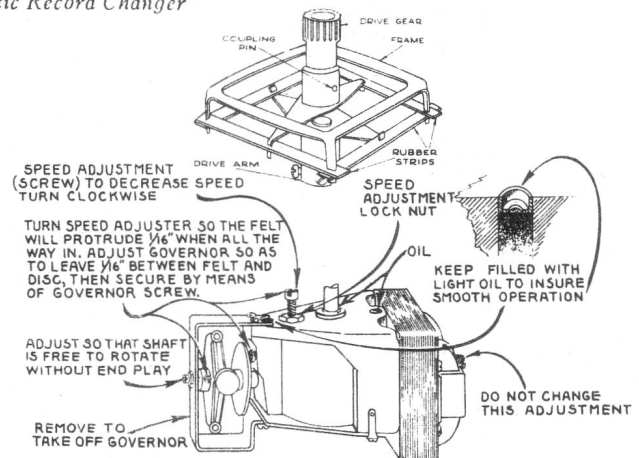
Figure 4—Schematic Circuit Diagram



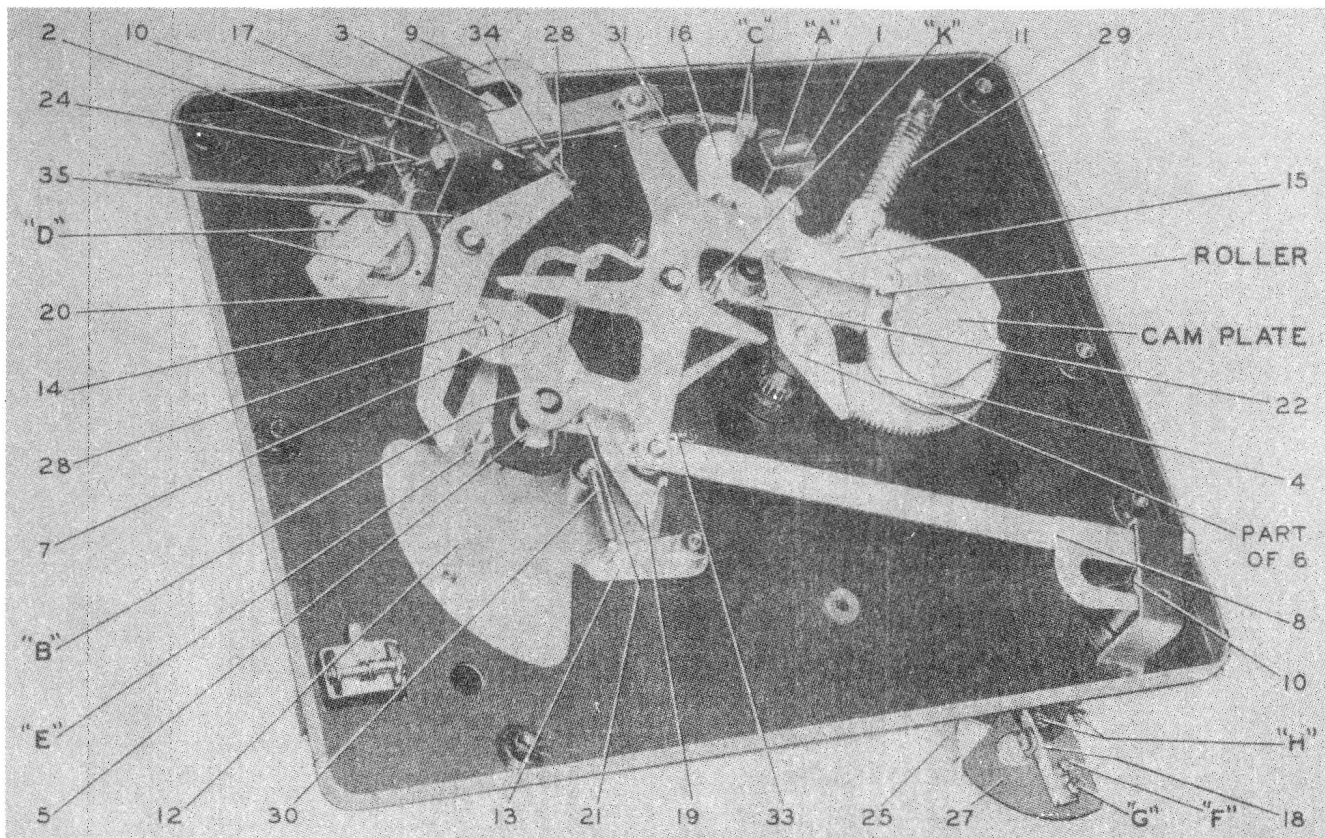
Top View of Automatic Record Changer



Details of Record Shelf Posts, and Locating Lever Assemblies



Motor Data and Coupling



Bottom View of Automatic Record Changer

NOTE: Numbers refer to parts—letters refer to adjustments.

Automatic Record Changer

GENERAL INFORMATION

Before servicing the automatic record changer, inspect the assembly to see that all levers, parts, gears, springs, etc. are in good order and are correctly assembled.

A bind or jam in the mechanism can usually be relieved by rotating the turntable in the reverse direction.

The changer can be conveniently rotated through its change cycle by pushing the index lever to "Reject" and revolving the turntable by hand. Six turntable revolutions are required for one change cycle.

The turntable, spindle, and pinion gear are assembled by means of a 3/32 inch straight pin. This pin may be removed by gently driving with a standard pin punch.

If the record changer or cabinet is not perfectly level, normal operation is likely to be affected.

The 10 and 12 inch records must be absolutely flat for smooth operation when using a mixture of the two sizes.

A shorting switch, located in the pickup head, operates due to pressure when the pickup is placed on the pickup rest.

ADJUSTMENTS

A. Main Lever.—This lever is basically important in that it interlinks the various individual mechanisms which control needle landing, tripping, record separation, etc. One adjustment is provided for the main lever. Rotate the turntable until the changer is out-of-cycle; and adjust rubber bumper bracket (A) so that the roller clears the nose of the cam plate by 1/16 inch.

B. Friction Clutch.—The motion of the tone arm toward the center of the record is transmitted to the trip pawl "22" by the trip lever "7" through a friction clutch "5." If the motion of the pickup is abruptly accelerated or becomes irregular due to swinging in the eccentric groove, the trip finger "7" moves the trip pawl "22" into engagement with the pawl on the main gear, and the change cycle is started. Proper adjustment of the friction clutch "5" occurs when movement of the tone arm causes positive movement of the trip pawl "22" without tendency of the clutch to slip. The friction should be just enough to prevent slippage, and is adjustable by means of screw "B." If adjustment is too tight, the needle will repeat grooves; if too loose, tripping will not occur at the end of the record.

C. Pickup Lift Cable Screw.—During the record change cycle, lever "16" is actuated by the main lever "15" so as to raise the tone arm clear of the record by means of the pickup lift cable. To adjust pickup for proper elevation, stop the changer "in-cycle" at the point where pickup is raised to the maximum height above turntable plate, and has not moved outward; at this point adjust locknuts "C" to obtain 1 inch spacing between needle point and turntable top surface.

D. & E. Needle Landing on Record.—The relation of coupling between the tone arm vertical shaft and lever "20" determines the landing position of the needle on a 10 inch record. Position of eccentric stud "E" governs the landing of the needle on a 12 inch record; this, however, is dependent on the proper 10 inch adjustment.

To adjust for needle landing, place 10 inch record on turntable; push index lever to reject position and return to the 10 inch position; see that pickup locating lever "17" is tilted fully toward turntable; rotate mechanism through cycle until needle is just ready to land on the record; then see that pin "V" on lever "14" is in contact with "Step T" on lever "17." The correct point of landing is 4-11/16 inches from the nearest side of the turntable spindle; loosen the two screws "D" and adjust horizontal position of tone arm to proper dimension, being careful not to disturb levers "14" and "17." Leave approximately 1/32 inch end play between hub of lever "20" and pickup base bearing, and tighten the blunt nose screw "D"; run mechanism through several cycles as a check, then tighten cone pointed screw "D".

After adjusting for needle landing on a 10 inch record, place 12 inch record on turntable; push index lever to reject and return to 12 inch position; rotate mechanism through cycle until needle is just ready to land on the record; the correct point of landing is 5-11/16 inches from nearest side of spindle. If the landing is incorrect, turn stud "E" until the eccentric end adjusts lever "14" to give correct needle landing. The eccentric end of the stud must always be toward the rear of the motor board, otherwise incorrect landing may occur with 10 inch records.

F. & G. Record Separating Knife.—The upper plate (knife) "25" on each of the record posts serves to separate the lower record from the stack and to support the remaining records during the change cycle. It is essential that the spacing between the knife and the rotating record shelf "27" be accurately maintained. The spacing for the 10 inch record is nominally .058 inch, and for the 12 inch record is .075 inch.

To adjust, rotate the knife to the point of minimum

vertical separation from the record shelf and turn screw and locknut "F" to give .055—.061 inch separation. Screw "G" must not be depressed during this adjustment. After setting screw "F" adjust screw "G" so that when its tip is depressed flush with top of record shelf, the vertical spacing between the knife, in its lowest rotational position, and the shelf, is .072—.078 inch.

H. Record Support Shelf.—The record shelf revolves during the change cycle to allow the lower record to drop onto the turntable. Both posts are rotated simultaneously by a gear and rack coupled to the main lever "15," and it is necessary that adjustments be such that the record is released from both shelves at the same instant. To adjust, place a 12 inch record on the turntable, rotate mechanism into cycle to the point where tone arm is at maximum distance outward from turntable; lift record upward until it is in contact with both separating knives, then loosen screws "H" and shift record shelves so that the curved inner edges of the shelves are uniformly spaced at least 1/16 inch from record edge. Tighten the blunt nose screw "H," run mechanism through cycle several times to check action, then tighten cone pointed screw "H".

If record shelves or knives are bent, or not perfectly horizontal, improper operation and jamming of mechanism will occur.

J. Tone Arm Rest Support (not shown).—When the changer is out-of-cycle, the front lower edge of the pickup head should be 5/16 inch above surface of motor board. This may be adjusted by bending the tone arm support bracket, which is associated with the tone arm mounting base, in the required direction.

K. Trip Pawl Stop Pin.—The position of the trip pawl stop pin "K" in relation to the main lever "15" governs the point at which the roller enters the cam. By bending the pin support either toward or away from trip pawl bearing stud, the roller can be made to enter the cam later or earlier, respectively. This adjustment should be made so that the roller definitely clears the cam outer guide as well as the nose of the cam plate.

Lubrication.—Petrolatum or petroleum jelly should be applied to cam, main gear, spindle pinion gear, and gears of record posts.

Light machine oil should be used in the tone arm vertical bearing, record post bearings, and all other bearings of various levers on underside of motor board.

The felt washer between the turntable and spindle bearing should be soaked in light engine oil whenever the turntable is removed, or as required for proper operation.

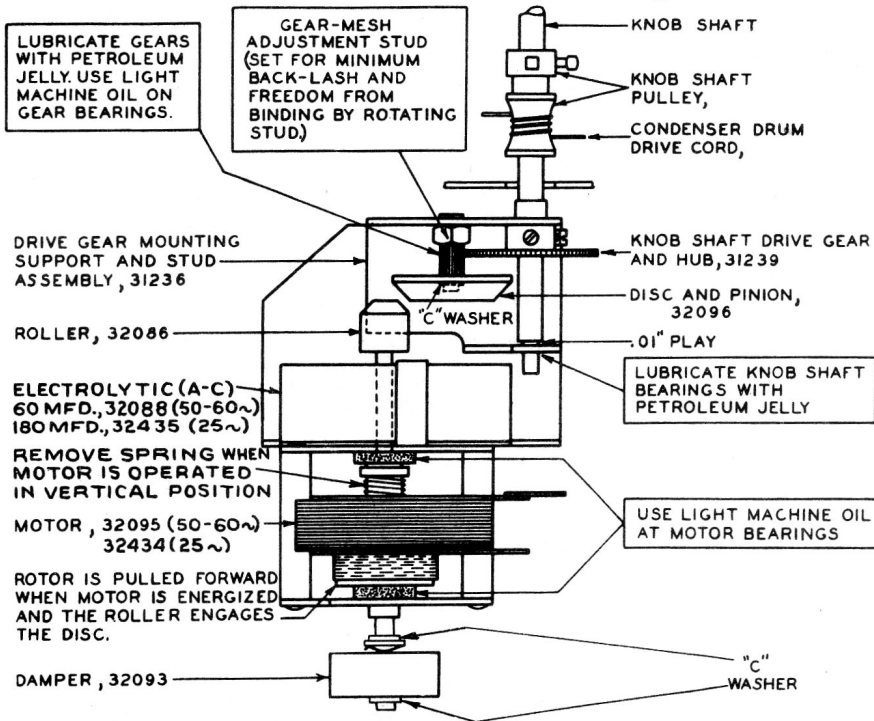
Do not allow oil or grease to come in contact with, rubber mounting of tone arm base, rubber bumper, or flexible coupling of drive motor.

MISCELLANEOUS SERVICE HINTS

Incorrect adjustment of a particular mechanism of the changer is generally exhibited in a specific mode of improper operation. The following relations between effects on operation and the usual mis-adjustments will enable ready adjustment in most cases.

1. For any irregularity of operation, the adjustment of the main lever "15" should be checked first as in "A".
2. Needle does not land properly on both 10 and 12 inch records—Make complete adjustments "D" and "E".
3. Needle does not land properly on 12 inch record but correct on 10 inch—Effect adjustment "E".
4. Failure to trip at end of record—Increase clutch "5" friction by means of screw "B". Also, see that levers "7" and "12" are free to move without touching each other.
5. Pickup strikes lower record of stack or drags across top record on turntable—Adjust lift cable per adjustment "C".
6. Needle does not track after landing—Friction clutch "5" adjustment "B" may be too tight; bind in tone arm vertical bearing; levers "7" and "12" fouled; or pickup output cable twisted.
7. Cycle commences before record is complete—Record is defective, or adjustment "B" of friction clutch "5" is too tight.
8. Wow in record reproduction—Record is defective; flexible coupling between motor and changer mechanism not correctly assembled; or instrument is not being operated at normal room temperature (65° F).
9. Record knives strike edge of records—Records warped; record edges are rough; or knife adjustments "F" and "G" are incorrect.
10. Record not released properly—Adjust record shelf assemblies in respect to shaft by means of adjustment "H".
11. Needle lands in 10 inch position on 12 inch record or misses record when playing both types mixed—Increase tension of pickup locating lever spring "34".

Electric Tuning Mechanism



When a station button is pushed in, it completes the 24-volt circuit through the corresponding station-setting contact and one-half of the brass selector disc, which is connected to one side of the motor field coil. This energizes the motor, and the rotor is pulled forward, engaging with the gear train that drives the tuning condenser and selector disc. The condenser and disc rotate until the insulation line comes under the particular station-setting contact, and the motor circuit is broken.

When the electric tuning mechanism is in action, the motor-supply voltage is fed into a diode rectifier circuit which applies a high bias to the first-audio amplifier. This prevents audio amplification and makes the set quiet or "mute" while the mechanism is operating.

The brass selector disc is fastened to the rear shaft of the tuning condenser by means of two set-screws. When the condenser is at maximum (plates fully meshed) the insulation line should be horizontal, with the operating-end at the left (viewed from rear). The operating-end has dark insulating material and the brass is beveled at this end.

The selector disc should be set so that the contact-tip plungers in the station-setting contacts project not more than 1/16-in. from the body of the contacts.

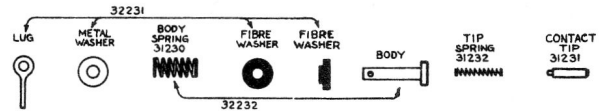
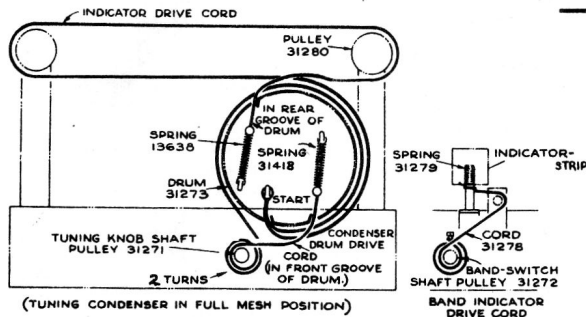
Lubrication

Motor bearings and gear bearings; use light machine oil.

Gear faces; use "Pure Oil No. 611" or petroleum jelly.

Dial-indicator pulleys and rails; use "Castorag" or petroleum jelly.

Selector disc; apply *thin* film of petroleum jelly.



Component Parts of Station Setting Contact

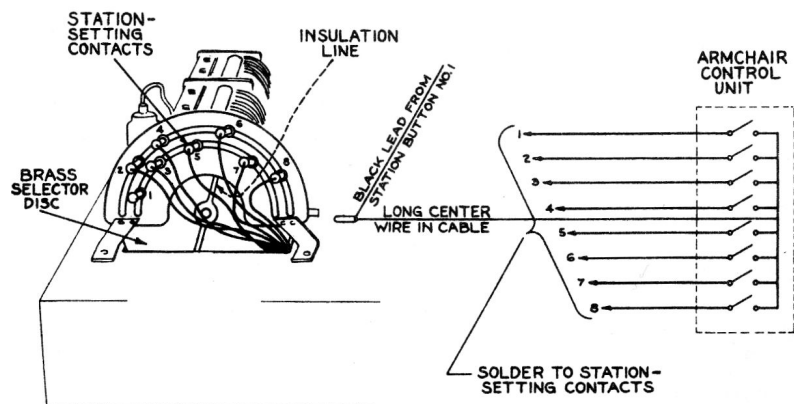
At left—Dial Mechanism

Armchair Control Unit

Station-Setting Contacts and Selector Disc

This illustration shows connections for a G8A Armchair Control Unit. This unit is not supplied with the receiver but may be added as an accessory.

Station Button	Color of Lead To Station-Setting Contact
No. 1	Black
No. 2	Brown
No. 3	Blue
No. 4	Green
No. 5	Red
No. 6	Red-black
No. 7	Brown-black
No. 8	Red-yellow



When a Model G8A Armchair Control is connected to the receiver it duplicates the action of the push-buttons on the front panel when No. 1 button is pressed down. The black lead from push-button No. 1 is unsoldered from No. 1 station-setting contact and soldered to a terminal board which is to be mounted on the frame of selector mechanism. If desired one of the other seven station buttons on the set may be used in place of No. 1 button.

This arrangement allows the use of only seven of the eight buttons when tuning in stations at the set, but allows the use of the entire eight buttons on the Armchair Control. In operating the G8A Armchair Control the push-button must be held down until the station has been tuned in. Care must be taken not to hold two of the station-buttons down at one time as both windings of the motor may be engaged instantaneously causing the motor to be inoperative and overheated.

REPLACEMENT PARTS FOR MODEL VR-8

11 TUBE AUTOMATIC VICTROLA

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

STOCK NO.	DESCRIPTION	STOCK NO.	DESCRIPTION
RECEIVER ASSEMBLIES			
31531	Board-Antenna and ground terminal board.....	14284	Resistor-22,000 ohm 1/10 Watt , R28).....
12714	Capacitor-Adjustable trimmer, 2-12 mmfd. (C39).....	11300	Resistor-33,000 ohm 1/10 Watt (R17).....
12884	Capacitor-Adjustable trimmer-2-20 mmfd. (C4,C10).....	11291	Resistor-100,000 ohm 1/10 Watt (R30).....
31252	Capacitor-Adjustable trimmer, 5-80 mmfd. (C1).....	11398	Resistor-220,000 ohm 1/10 Watt (R12, R15).....
31353	Capacitor-15 mmfd. (C43).....	12264	Resistor-220,000 ohm 1/4 Watt(R5,R42).....
12896	Capacitor-15 mmfd. (C51).....	11453	Resistor-270,000 ohm 1/10 Watt (R13,R16).....
31350	Capacitor-18 mmfd. (C38).....	11452	Resistor-470,000 ohm 1/10 Watt (R29).....
31354	Capacitor-33 mmfd. (C48).....	12013	Resistor-1 meg., 1/10 Watt (R2).....
12723	Capacitor-56 mmfd. (C47).....	13730	Resistor-1 meg., 1/4 Watt (R23,R1).....
31349	Capacitor-62 mmfd. (C37).....	31056	Resistor-1.2 meg., 1/10 Watt (R27).....
31352	Capacitor-100 mmfd. (C42).....	30208	Resistor-1.2 meg., 1/4 Watt (R45).....
12720	Capacitor-100 mmfd. (C23).....	5131	Resistor-2.2 meg. 1/10 Watt (R6).....
12724	Capacitor-120 mmfd. (C13,C41).....	31364	Socket-Dial lamp socket.....
12725	Capacitor-150 mmfd. (C18).....	13871	Socket-Magic Eye Socket.....
31351	Capacitor-190 mmfd. (C40).....	31251	Socket-Radiotron socket.....
31348	Capacitor-510 mmfd. (C34).....	31365	Socket-Tuning indicator lamp insulated socket.....
5107	Capacitor-.0025 mfd. (C53).....	31247	Switch-Range Switch (S1,S2,S3,S4).....
30303	Capacitor-.0035 mfd. (C45).....	31248	Tone Control-H.F. tone control and power switch (R11,S5).....
4838	Capacitor-.005 mfd. (C19,C24).....	32068	Transformer-First I.F. transformer (L14,L15,C14,C15).....
14393	Capacitor-.01 mfd. (C5,C12,C25,C26, C44,C49,C50).....	14283	Transformer-Second I.F. transformer (L16,L17,C17,C20).....
4858	Capacitor-.01 mfd. (C9,C33).....	31226	Transformer-Power transformer 110 Volt 25-60 cycle (T1).....
4886	Capacitor-.05 mfd. (C30).....	31225	Transformer-Power transformer 110 Volt 50-60 cycle (T1).....
4839	Capacitor-0.1 mfd. (C6,C16).....	31249	Volume Control (R9).....
12484	Capacitor-0.25 mfd. (C33,C46).....	TUNING MOTOR ASSEMBLIES	
30867	Capacitor-0.5 mfd. (C22).....	31229	Body-Station-setting contact body, less contact tip and tip spring...
S-2441	Capacitor-16 mfd. (C32).....	32093	Damper-Variable condenser tuning motor damper.....
S-2442	Capacitor-20 mfd. (C31).....	32096	Disc-Friction disc engaging roller on motor shaft.....
32088	Capacitor-60 mfd. (C60) (60 cyc. only).....	31239	Gear-Knob shaft drive gear and hub..
32435	Capacitor-180 mfd. (C60) (25 cyc. only).....	32434	Motor-Tuning drive Motor (MI) 25 cycle).....
31263	Coil-"A" band antenna coil (L5,L7).....	32095	Motor-Tuning drive Motor (MI) 60 cycle).....
31257	Coil-- "A" band oscillator coil (L25).....	31228	Plate-Station setting contact plate.....
31265	Coil - "A" band detector coil (L12, L13).....	31231	Plunger-Station setting contact plunger (Pkg.2).....
31264	Coil - 19,25,31 and 49 meter band-spread antenna coil (L1,L2,L3,L4, L6).....	32086	Roller-Friction roller mounted on tuning motor shaft.....
31266	Coil-19,25,31 and 49 meter band-spread detector coil (L8,L9,L10, L11).....	31233	Rotor-Selector rotor disc-mounts on rear of condenser shaft.....
31258	Coil-19 meter band oscillator coil (L20,L21).....	14350	Screw-8/32 square head set screw for selector disc Stock #31233 (Pkg.of 10).....
31254	Coil-25 meter band oscillator coil (L22).....	31232	Spring-Station setting contact tip spring (Pkg.of 10).....
31255	Coil-31 meter band oscillator coil (L23).....	31230	Spring-Station setting contact body spring (Pkg.10).....
31256	Coil-49 meter band oscillator coil (L24).....	32094	Washer-Spring tension washer for motor damper.....
31234	Condenser-3 gang variable condenser (C2,C3,C7,C8,C35).....	REPRODUCER ASSEMBLIES	
31273	Drum-Indicator drive cord drum.....	RL70H-4	
S-2440	Escutcheon-Station selector dial escutcheon - Less dial scale & buttons.....	13866	Cap-Dust cap for cone center (Pkg. of 5).....
31717	Indicator-Station selector indicator pointer.....	11234	Coil-Field coil (L26).....
11891	Lamp-Dial lamp.....	11469	Coil-Neutralizing Coil (L18).....
31480	Lamp-Electric tuning adjustment indicator lamp.....	31275	Cone-Reproducer cone and voice coil (L19).....
12493	Plug-5 contact female plug for speaker cable.....		
31272	Pulley-Range switch pulley.....		
31250	Resistor-Voltage divider comprising one 1,500 ohm, one 2,950 ohm, one 3,400 ohm one 12 ohm, and one 180 ohm sections (R18,R19,R20,R25,R26).....		

REPLACEMENT PARTS FOR MODEL VR-8 CONTINUED

11 TUBE AUTOMATIC VICTROLA

STOCK NO.	DESCRIPTION	STOCK NO.	DESCRIPTION
31539	Plug-5 contact male plug for re-producer.....	31139	Turntable assembly-less spindle..
31538	Reproducer Complete.....	31128	Washers-"C" washers for top of record post (Pkg. 5).....
14534	Transformer-Output transformer (T2)..	31143	Washers-Turntable thrust washers (1 steel,1 bronze,1 felt).....
14357	Washer-Spring washer for field coil (Pkg.5).....		
	OPERATING MECHANISM		PICKUP AND ARM ASSEMBLIES
31134	Bracket-Pickup locating lever mounting bracket (3).....	31162	Cable-Pickup arm lift cable.....
32878	Cam-Cam and gear assembly (4).....	33119	Cable-Shielded cable and plug....
6808	Clutch-Trip lever friction clutch assembly (5).....	31156	Crystal-Pickup crystal cartridge and needle screw.....
31146	Coupling-Motor coupling complete with turntable, drive gear, rubber strips, motor coupling and drive arm (6).....	31159	Pickup and arm complete.....
31129	Cover-Cap for top of record post....	31160	Screw-Pickup needle screw.....
31116	Finger-Trip lever friction finger assembly (7).....	31161	Shaft-Pickup pivot arm and shaft assembly.....
31119	Gear-Long arm and rack gear for front left-hand record post (8).....		MOTOR BOARD ASSEMBLIES
31120	Gear-Short arm and rack gear for rear right hand record post (9).....	31149	Base-Pickup arm mounting base....
31121	Gear-Record post gear (10).....	14209	Bumper-Main lever rubber bumper (Pkg.2).....
31123	Guide-Main Lever spring guide (11)...	9848	Cup-Used needle cup, rest and lid complete.....
31114	Lever-Index lever assembly (12).....	31148	Escutcheon-Index escutcheon.....
31137	Lever-Index lever tension spring lever (13).....	31155	Spring-Needle cup lid tension spring (Pkg.5).....
31138	Lever-Locating lever and pawl assembly (14).....		MOTOR ASSEMBLIES
31113	Lever-Main lever assembly (15).....	31623	Governor-Motor Governor 60 cycle.
31140	Lever-Pickup lift cable lever and spring assembly (16).....	31624	Governor-Motor governor 25 cycle.
31135	Lever-Pickup locating lever assembly (17).....	31157	Motor-105-125 volts 60 cycle(M1).
31130	Lever-Record separator elevating lever and adjustment screws (18)...	31448	Motor-105-125 volts 25 cycle(M1).
31132	Lever-Trip detaining lever (19).....	30870	Plug-2 contact male plug for motor cable.....
31115	Lever-Trip lever assembly (20).....	31447	Screw-Complete set of motor mounting screws, washers and spacers 25 cycle.....
31131	Lever-Trip regulator lever (21).....	31158	Screw-Complete set of motor mounting screws, washers and spacers 60 cycle.....
31133	Pawl-Trip pawl assembly (22).....	31634	Shaft-Turntable shaft and gear 60 cycle.....
31124	Pin-Record post drive pin (23) (Pkg. 5).....	31636	Shaft-Turntable shaft and gear 25 cycle.....
14195	Screw-Set screw for flexible coupling (Pkg.2).....	32912	Weight-Governor weight and spring 60 cycle.....
31117	Screw-Special screw to adjust clutch tension (Pkg. 5).....	32913	Weight-Governor weight and spring 25 cycle.....
31126	Separator-Record separator Knife (25)		MISCELLANEOUS ASSEMBLIES
31122	Shaft-Record separator post shaft (26)	S-2438	Button-Station selector push button.....
31125	Shelf-Record post shelf assembly (27)	13103	Cap-Pilot lamp cap.....
31141	Spindle-Turntable spindle shaft.....	31345	Contact-Push button switch contacts comprising 10 contacts riveted to an insulating strip.
3676	Spring-Cam pawl tension spring on main gear (Pkg.5).....	31344	Contact-Push button switch contacts comprising 13 contacts riveted to an insulating strip.
14190	Spring-Pickup locating lever short spring or locating lever pawl tension spring (28).....	31278	Cord-Band indicator drive cord...
31145	Spring-Main lever tension spring (29) (Pkg.2).....	31281	Cord-Indicator pointer drive cord
31136	Spring-Index lever tension spring (30) (Pkg.2).....	31283	Cord-Variable condenser drum drive cord.....
3666	Spring-Pickup cable tension spring (31) (Pkg.4).....	S-2209	Fuse-3 Amp. motor fuse (F1).....
31127	Spring-Record separator pressure spring (32) (Pkg.10).....		
14191	Spring-Trip detaining lever tension spring (33) (Pkg. 5).....		
31875	Spring-Pickup locating lever tension spring (34) (Pkg.5).....		
32436	Spring-Locating lever tension spring (35) (Pkg.2).....		
31147	Strip-complete set of rubber strips for flexible coupling.....		

REPLACEMENT PARTS FOR MODEL VR-8 CONTINUED

11 TUBE AUTOMATIC VICTROLA

STOCK NO.	DESCRIPTION	STOCK NO.	DESCRIPTION
31555	Indicator-Band indicator strip.....	13638	Spring-Indicator pointer drive cord tension spring (Pkg.5).....
31355	Knob-Station selector,volume control, tone control or range switch knob.	31418	Spring-Variable condenser drive cord tension spring (Pkg.3).....
S-2183	Marker-Station call letter markers..	31279	Spring-Tension spring for band indicator (Pkg.10).....
31459	Marker-"Victrola" push button marker (Pkg.10).....	31313	Spring-Tension spring for switch latch bar (Pkg.5).....
S-2437	Marker-"Dial Tuning" push button marker (Pkg.10).....	14270	Spring-Retaining spring for knob (Pkg.10).....
31280	Pulley-Indicator pointer drive cord pulley.....	31360	Switch-Pickup switch for mounting on push button switch assembly.....
14887	Retainer-Indicator pointer drive cord pulley retainer (Pkg.20).....	31312	Switch-Push button switch and bracket assembly complete.....
31559	Screen-Dial color screen and light diffuser.....		
31347	Socket-Pickup socket and bracket....		