

Instructions for RCA Victor RE-80 Radiola-Electrola

INSTALLATION

Preliminary—After unpacking the instrument, remove the unfinished wood shipping strip fastened across the rear of the receiver chassis. Remove the packing material from the Radiotrons. Refer to the tube location diagram on rear of receiver, and *make certain*:

- That all tubes are in the proper sockets and pressed down firmly. *Never apply power to the instrument unless all Radiotrons are in place.*
- That all shields are rigidly in place over the Radiotrons shown by double circles on the diagram.
- That the short flexible leads shown on the diagram are attached to the top grid contacts of the proper Radiotrons as indicated, and that the spring contact caps are pressed down firmly.

NOTE—For the RCA-55 Radiotron *only*, the grid lead must be enclosed by the cylindrical tube shield. A slot is provided at the bottom of this shield for entrance of the lead.

- That the lid is securely in place on the shield of the RCA-58 Radiotron designated by the heavy circle on the diagram.

Remove the packing material from the phonograph compartment. With the speed shifter (see Figure 3) set in the outward (78 R. P. M.) position, mount the turntable (packed in outfit package) on the motor spindle. Make sure that the drive pin engages the slot in the turntable hub. Insert the used-needle cup in the opening provided.

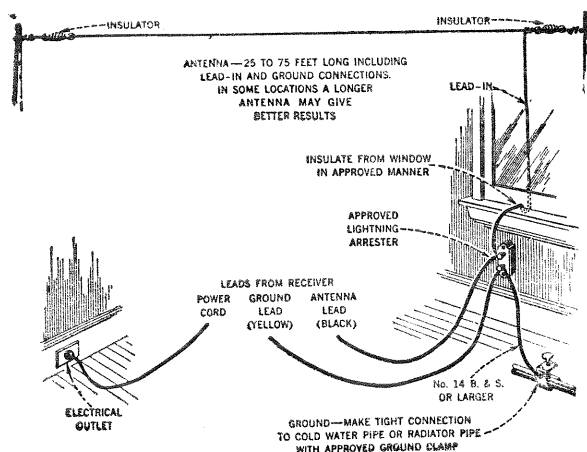


Figure 1

Important—Remove the two *red* hex-head bolts which pass through the motor board mounting rails, accessible from the rear of the cabinet. Then remove the two unfinished wood blocks from between the motor board and the mounting rails. The motor board should then float freely on its spring suspension.

Location—The instrument should be located close to the antenna lead-in and ground connections, and near an electrical outlet.

External Connections—Figure 1 shows the external connections and recommended antenna system. It is essential that a good ground connection be provided. Make connections to the antenna and ground as illustrated. Then connect the power cord to an electrical outlet supplying alternating current at the voltage and frequency (cycles) for which the instrument is rated (see rating label on rear of receiver).

RADIO OPERATION

The radio operating controls are shown in Figure 2. Proceed as follows:

- Set the radio-record transfer switch to "Radio" by turning the Record Volume Control to the extreme counter-clockwise position.

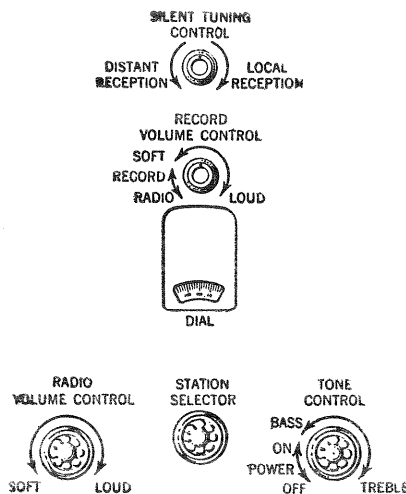


Figure 2

- Apply power by turning the Tone Control knob clockwise from the "off" position; set this control near the middle of its range. Several seconds are required for the Radiotrons to heat before satisfactory reception is possible.

- Set both the Radio Volume Control and the Silent Tuning Control to the extreme clockwise position. Turn the Station Selector to a point, near mid range, at which no station is heard within several scale divisions. Next turn the Silent Tuning Control counter-clockwise until background noise (static) is heard, then turn it slightly clockwise until the noise just disappears.

NOTE—The adjustment just described provides quiet tuning, that is, suppression of background noise between station settings, and permits reception of all stations whose signals are above the existing noise level.

4. Turn the Station Selector slowly in either direction until a station is heard. (The dial scale is calibrated in kilocycles for locating stations of known frequency assignment.)

NOTE—Should no station be heard at any point on the dial, it is an indication that there are no station signals above the prevailing level of background noise. In this case it may be possible to tune in distant or weak stations by turning the Silent Tuning Control counter-clockwise (in small steps) and continuing to rotate the Station Selector until signals are heard. When this is done, a higher level of background noise is of course to be expected.

5. After receiving a signal, turn the Radio Volume Control counter-clockwise until the volume is reduced to a low level. Now readjust the Station Selector accurately to the position mid-way between the points where the quality becomes poor or the signal disappears. *This setting minimizes the proportion of background noise and provides the fine quality of reproduction possible with this instrument.*

6. Adjust the Radio Volume Control to secure the desired volume.

NOTE—The *automatic volume control* maintains the volume substantially constant irrespective of normal fluctuations of signal strength (fading). Also, other stations with good signal strength may be received at approximately the same volume without readjustment of the volume control.

7. Adjust the Tone Control to obtain the desired tone quality, or turn it counter-clockwise to reduce noise interference (when tuned to a station).

8. When through operating, switch off the power by turning the Tone Control knob to the extreme counter-clockwise position.

Radiotrons—Improved results may sometimes be obtained by interchanging Radiotrons of the same type in their sockets. *The power should be switched off before removing any Radiotron from its socket.* Spare Radiotrons should be kept on hand.

PHONOGRAPH OPERATION

Electric phonograph facilities are provided in this instrument for playing either standard (78 R. P. M.) records or long playing (33½ R. P. M.) records. The pickup mechanism is designed to use *Chromium Needles for Long Playing Records* (identified by the orange shank) for the reproduction of either long playing or standard records. These needles with care should play 25 records. *Never re-insert a used Chromium needle after once removing from the pickup.*

Standard (78 R. P. M.) Records—Refer to Figures 2 and 3:

1. Turn the Record Volume Control clockwise from the "Radio" position, until the spot on the knob is upward.

2. Apply power by turning the Tone Control knob clockwise from the "off" position. Set this control at or near the extreme clockwise position. Several seconds will be required for the Radiotrons to heat before reproduction is possible.

3. Place a standard (78 R. P. M.) record on the turntable. Loosen the needle screw on the electric pickup. Insert a Chromium needle, or a full volume (full tone) steel or Tungstone needle, as far as it will go and tighten the needle screw. (Do not play more than one record with each steel needle.)

4. Pull the starting lever forward to start the turntable. Set the speed shifter outward for 78 R. P. M. Then place the needle on the smooth outer surface of the record and slide it into the first groove.

5. Adjust the Record Volume Control to obtain the desired volume.

6. The Record Tone Range Switch should normally be set toward the front of the cabinet, in which position most faithful reproduction over the entire musical range is obtained. To reduce needle scratch noise, particularly on old type records, this switch may be reset toward the rear of the cabinet.

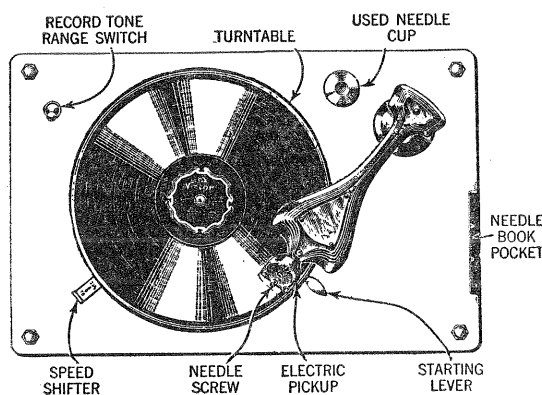


Figure 3

7. When the record has been played, lift the pickup and move it to the right so as to clear the turntable, thereby stopping the motor. (When through playing an eccentric groove record the motor will stop automatically.)

8. When through operating, switch off the power by turning the Tone Control knob to the extreme counter-clockwise position. The pickup should never be left with the needle resting on the record (or turntable) when not operating the phonograph.

Long Playing (33½ R. P. M.) Records—Refer to Figures 2 and 3. Repeat the procedure outlined under "Standard (78 R. P. M.) Records," with the following exceptions:

(1) Use only *Chromium Needles for Long Playing Records* (identified by the orange shank).

(2) Set the speed shifter inward, for 33½ R. P. M. This should be done while the turntable is rotating.

Lubrication—The motor should be lubricated with light oil once every six months. Two oil holes are accessible on top of the motor, when the turntable is removed. The ball bearing mechanism under the turntable should be lubricated once a year by prying off the cover and packing with vaseline or light motor grease, being careful to prevent any dirt particles from entering with the grease. Make sure that the speed shifter is in the outward (78 R. P. M.) position before replacing the turntable on the spindle.

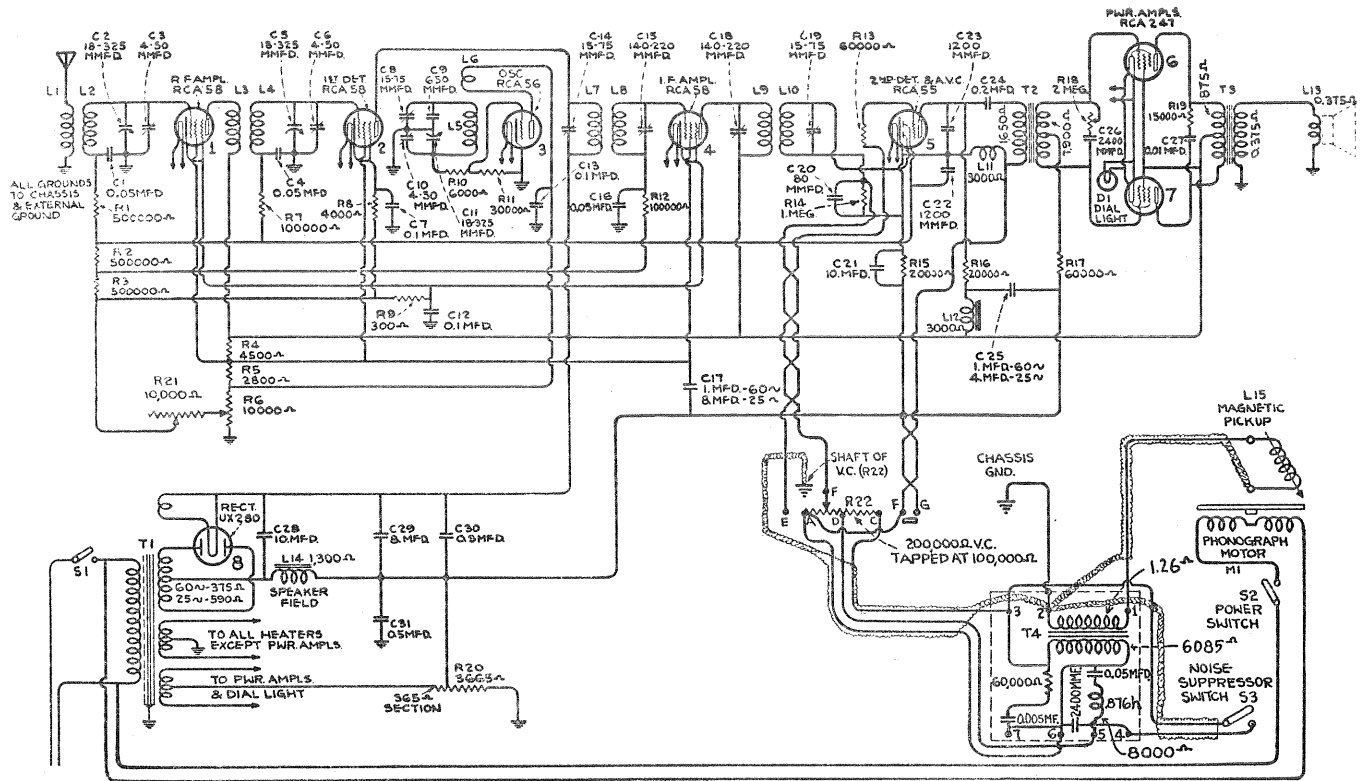


Figure A—Schematic Wiring Diagram

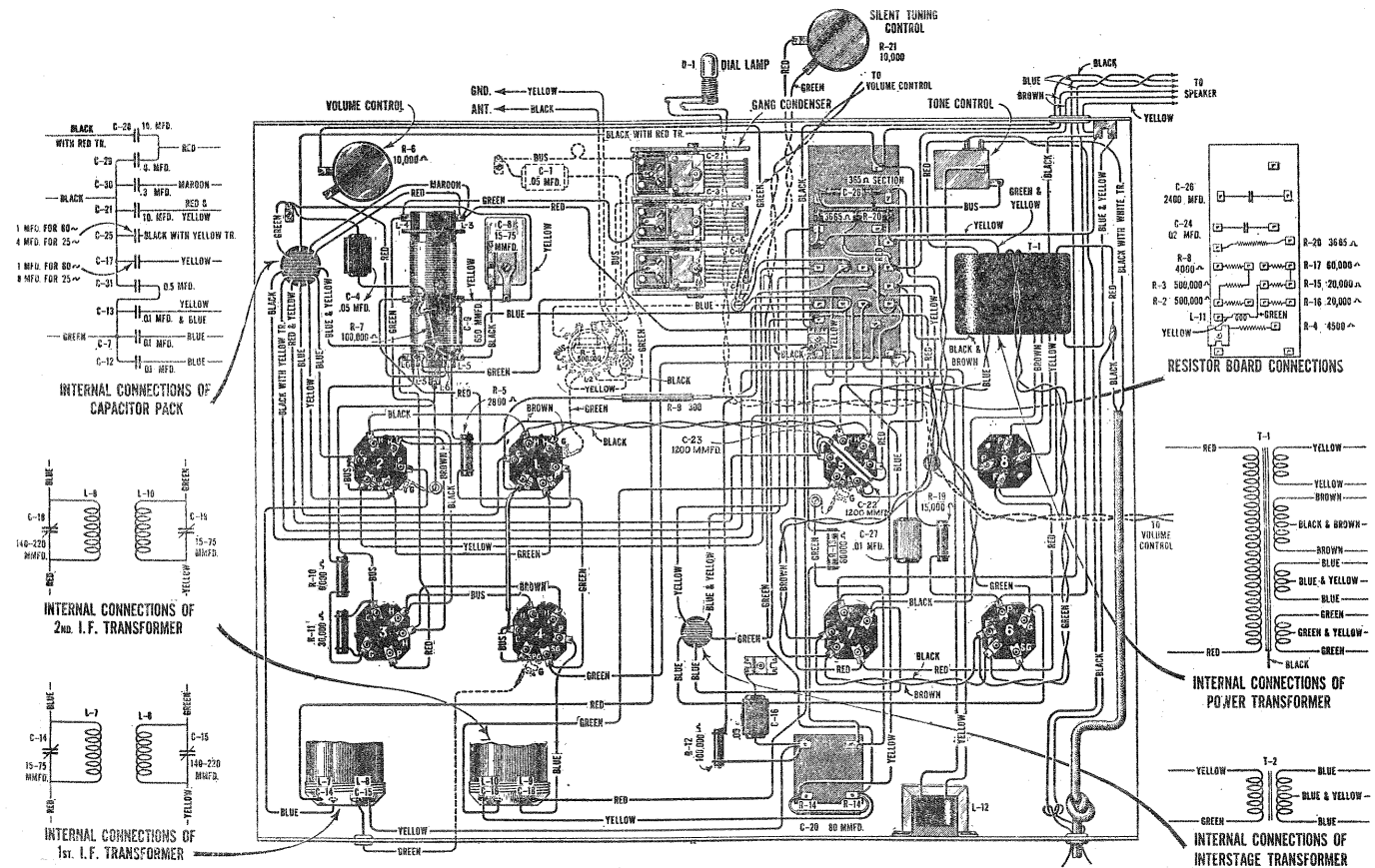


Figure B—Chassis Wiring Diagram

SERVICE DATA

Electrical Specifications

Voltage Rating	105-125 Volts
Power Consumption	120 Watts
Type and Number of Radiotrons	3 RCA-58, 1 RCA-56, 1 RCA-55, 2 RCA-247, 1 UX-280—Total, 8
Type of Circuit	Super-Heterodyne with A. V. C., tone control and push-pull Pentode Output
Undistorted Output	3 Watts
R. F. and Oscillator Alignment Frequency	600 K. C. and 1400 K. C.
Intermediate Frequency	175 K. C.
Type of Magnetic Pickup	Low Impedance with Inertia Type Tone Arm
Type of Turntable	Two Speed with Ball Race Reducer

This combination instrument uses an eight tube chassis incorporating automatic volume control, tone control, noise suppressor and push-pull Pentode output stage. Due to the excellent high frequency response of this receiver, a switch is provided for reducing the high frequency response when playing records having a high value of needle scratch. The radio-record switch and record volume control are one unit, accessible from the front. High and low frequency compensation is incorporated in the record audio system.

Service work will be found to be similar to that of other Super-Heterodyne receivers incorporating automatic volume control.

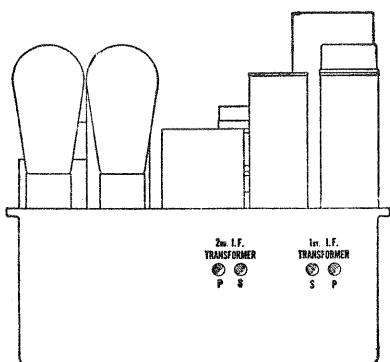


Figure C—I. F. Alignment Location

Line-Up Adjustments

I. F. Tuning Adjustments—Two transformers comprising four tuned circuits are used in the intermediate amplifier. These are tuned to 175 K. C. and the adjustment screws are accessible from the rear of the chassis. See Figure C for location of the adjustment screws and proceed as follows:

- Procure a modulated oscillator giving a signal at 175 K. C., a non-metallic screw driver such as Stock No. 7065 and an output meter.
- Remove the oscillator tube and connect a ground to the chassis.
- Connect the oscillator output between the 1st detector control grid and chassis ground. Connect the output

meter across the voice coil of the loudspeaker and adjust the oscillator output so that with the receiver volume control at maximum, a slight deflection is obtained in the output meter.

- Adjust the secondary and then the primary of the second and then the first I. F. transformers until a maximum deflection is obtained. Keep the oscillator output at a low value so that only a slight deflection is obtained on the output meter at all times. Go over these adjustments a second time as there is a slight interlocking of adjustments. This completes the I. F. Adjustments.

R. F. and Oscillator Adjustments—The three gang capacitor screws are accessible through the bottom cover and the 600 K. C. oscillator trimmer through the top of the chassis adjacent to the R. F. coil. Proceed as follows:

- Procure a modulated oscillator giving a signal at 1400 K. C. and 600 K. C., a non-metallic screw driver such as Stock No. 7065 and an output meter.

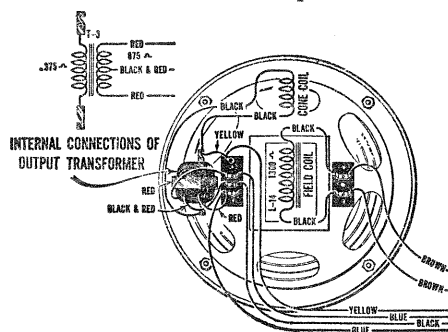


Figure D—Loudspeaker Wiring

- Connect the output of the oscillator to the antenna and ground lead of the receiver. Check the dial at the extreme maximum position of the tuning capacitor. The indicator should be at the short line on the dial. Then set the dial at 1400 K. C., the oscillator at 1400 K. C. and connect the output meter across the cone coil. Adjust the oscillator output so that a slight deflection is obtained when the receiver volume control is at maximum.
- Adjust the three line-up capacitors accessible at the bottom of the receiver until maximum deflection is obtained in the output meter.
- Shift the oscillator frequency to 600 K. C. and tune the signal. Then adjust the 600 K. C. capacitor, accessible through the top, until maximum deflection is obtained. The main tuning capacitor must be rocked back and forth while making this adjustment.
- Then realign at 1400 K. C. This completes the adjustments.

When making both the I. F. and R. F. adjustments, the important point to remember is that the receiver volume control must be at its maximum position and the minimum input signal necessary from the oscillator must be used.

RADIOTRON SOCKET VOLTAGES

120 Volts, 60 Cycles, A. C. Line—V. C. at Maximum and No Signal

Radiotron No.	Control Grid to Filament or Cathode Volts	Screen Grid to Filament or Cathode Volts	Plate to Filament or Cathode Volts	Plate Current M. A.	Heater or Filament Volts
1. R. F. RCA-58	4.5	100	165	6.0	2.37
2. 1st Det. RCA-58	11.0	95	155	1.5	2.37
3. Oscillator RCA-56	—	—	70	4.5	2.37
4. I. F. RCA-58	4.5	100	165	6.0	2.37
5. 2nd Det. RCA-55 and A.V.C.	—	—	55	4.7	2.37
6. Power RCA-247	19.0	235	225	20.0	2.37
7. Power RCA-247	19.0	235	225	20.0	2.37

OTHER IMPORTANT VOLTAGES

2nd Detector and A. V. C. Cathode to Low Side of Field 105 Volts
Chassis to Low Side of Field 90 Volts

Voltage Across Field 120 Volts
Rectifier 370 Volts R.M.S. Each Plate—80 M.A. Each Plate

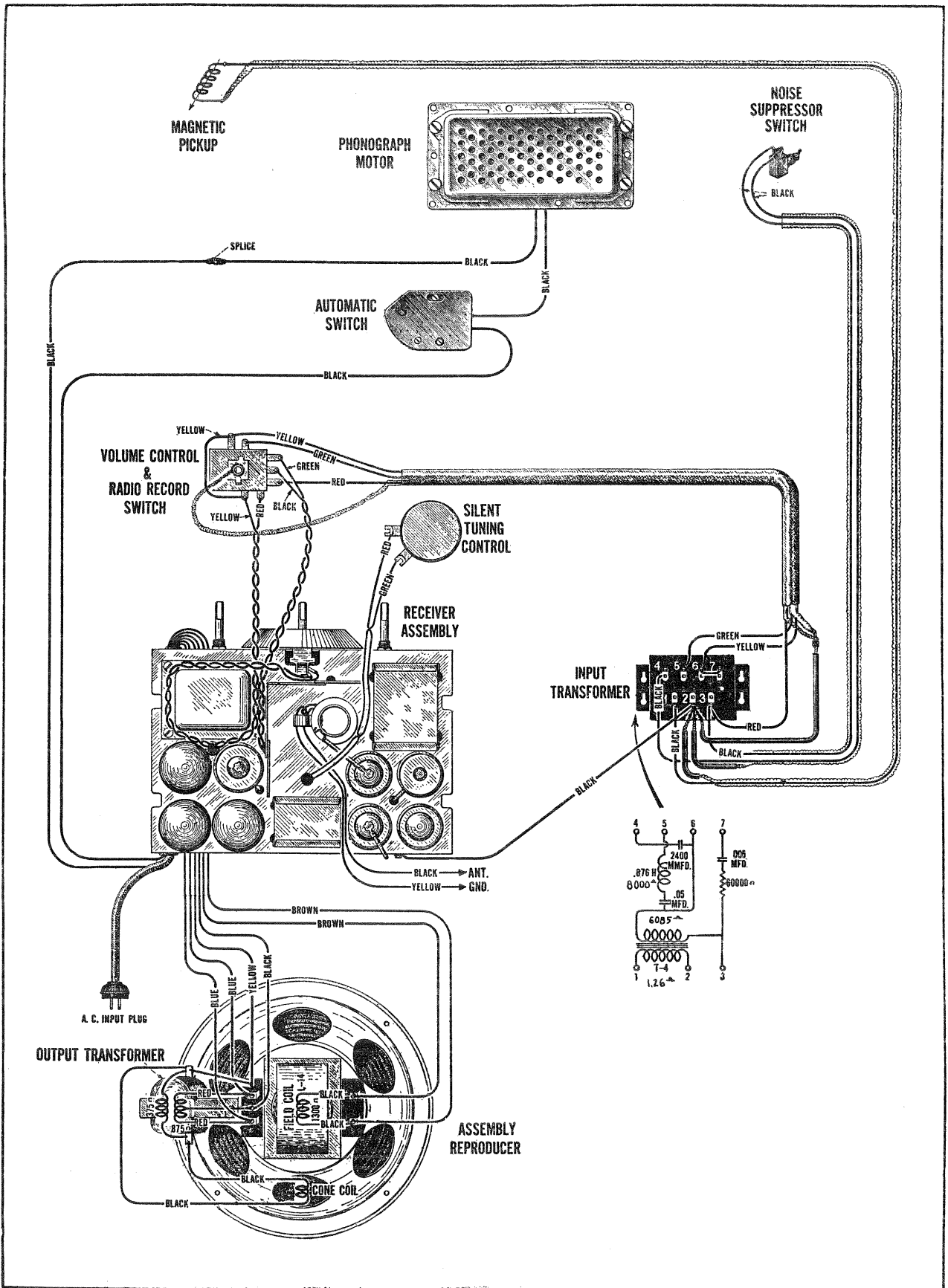


Figure E—Assembly Wiring Diagram

SERVICE DATA ON MAGNETIC PICKUP

The Magnetic Pickup used in this combination instrument is of a new design with an improved frequency range. While in physical appearance, it is similar to that of the older type, details of construction are considerably different. It consists of essentially a chromium steel magnet, two thin pole pieces, a mechanism support and bracket, a coil, and an armature that is damped by means of the viscoloid damping block.

The use of the viscoloid damping block, which vibrates as a whole on the low frequencies, yet absorbs the armature vibration at the higher frequencies, eliminates any bad peaks in the frequency range. This pickup output is substantially flat from 50 to 5000 cycles.

REPLACING MAGNET COIL, PIVOT RUBBERS, ARMATURE OR DAMPING BLOCK

In order to replace a defective magnet coil or hardened pivot rubbers, it is necessary to proceed as follows:

- (a) Remove the pickup cover by removing the center holding screw and needle screw.
- (b) Remove the pickup magnet and the magnet clamp by pulling them forward.
- (c) Unsolder the coil leads and remove the mechanism assembly from the back plate by releasing the two mounting screws.

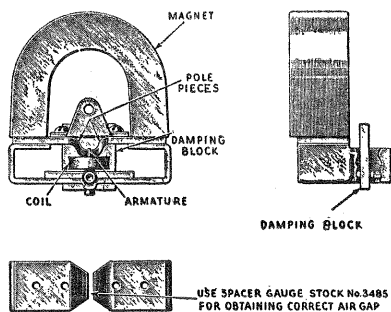


Figure F

- (d) Remove screws A and B, Figure G, and then remove the mechanism assembly from the pole pieces.
- (e) The coil or the front pivot rubber may now be removed and replaced. If it is desired to replace the rear pivot rubber, then the end of the armature soldered to the mechanism support must be unsoldered, being careful not to use too much heat as damage to the viscoloid damping block may result.
- (f) Before reassembling the pole pieces the air gap should be correctly set by use of a Spacer Gauge—Stock No. 3485. The mechanism should now be reassembled except for the magnet which must be magnetized. After being magnetized the mechanism—with the pole pieces upward, should be placed so that the magnet may be slid from the magnetizer onto the pole pieces without breaking physical contact. After placing the pole pieces on the magnet, the entire assembly should be remagnetized thoroughly, being careful not to change the polarity.
- (g) After reassembling to the mechanism, the entire assembly should be fastened to the back plate by means of the two screws provided, making sure support is down against pads on back. At the same time, the metal dust cover must be placed in position, making sure that the viscoloid damping block is entirely free from touching any parts, including the cover.
- (h) After remagnetizing, it is necessary to correctly center the armature. This may be done quite accurately by feeling its play after the needle is inserted. A little practice will quickly show which way an adjustment is

necessary to have the armature centered properly. The adjustment is made by loosening screws A and B (Figure G), and sliding the mechanism slightly in relation to the pole pieces.

- (i) The cover may be now replaced over the entire assembly, and the pickup returned to the tone arm.

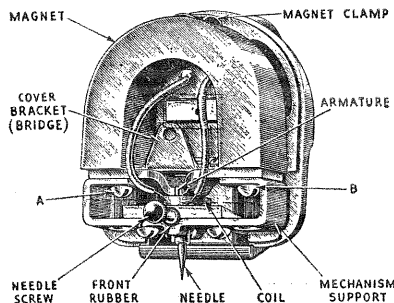


Figure G

In reassembling, it may be desirable to check the armature air gap by means of a small Feeler Gauge. This air gap should be nine mils on each side of the armature. However, a little practice with the needle in place will quickly disclose whether or not the armature is centered. If the air gap is previously checked by means of Space Gauge, Stock No. 3485, no difficulty will be had in properly centering the armature.

REPLACING THE VISCOLOID DAMPING BLOCK

If it is desired to replace the viscoloid damping block, it may be done in the following manner:

- (a) Disassemble the pickup as described under the preceding section.
- (b) Remove the armature entirely by unsoldering it at its joint with the mechanism frame.
- (c) Remove the damping block from the armature.
- (d) Insert the armature through the new block so that it occupies the same position as that of the old. Also ascertain that the block is in correct vertical alignment with the armature. It will be noted that the hole in the damping block is somewhat smaller than the diameter of the armature. This is done so that a snug fit will be obtained.
- (e) After properly locating the damping block, a soldering iron should be applied to the armature so that the block will melt slightly at its point of contact with the armature. A special tip, constructed as shown in Figure H, will prove desirable for fusing the viscoloid in place. The iron should be applied long enough to slightly melt the viscoloid and cause a small bulge on both sides, but should not be applied long enough to cause any bubbling of the viscoloid. The pickup should then be reassembled as described in the preceding section.

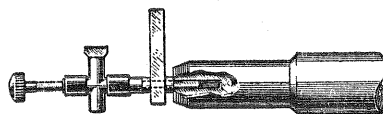


Figure H

Only rosin core solder should be used for any soldering in conjunction with the pickup. However if great care to wipe clean and use as small amount as possible is exercised paste or liquid flux may be used for soldering the end of the spring.

REPLACEMENT PARTS

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

Stock No.	DESCRIPTION	List Price	Stock No.	DESCRIPTION	List Price
RECEIVER ASSEMBLIES					
2746	Socket—Dial lamp socket.....	\$0.20	3430	Box—Needle box with lid—Package of 2.....	\$0.90
2747	Cap—Contact cap—Package of 5.....	.50	10174	Springs—Automatic brake springs—One set of 4 springs— Package of 2 sets.....	.50
2749	Capacitor—2,400 mmfd. capacitor.....	.35	10184	Plate—Automatic brake latch trip plate with mounting screws—Package of 5.....	.40
3003	Cushion—Sponge rubber chassis support cushions—Pack- age of 4.....	.30	10635	Switch—Scratch filter switch—Toggle type.....	.90
3048	Resistor—500,000 ohms—Carbon type— $\frac{1}{2}$ watt—Pack- age of 5.....	1.00	PICKUP, PICKUP ARM ASSEMBLIES		
3076	Resistor—1 megohm—Carbon type— $\frac{1}{2}$ watt—Package of 5.....	1.00	3385	Coil—Pickup coil.....	.50
3077	Resistor—30,000 ohms— $\frac{1}{2}$ watt—Carbon type—Package of 5.....	1.00	3386	Cover—Pickup cover.....	.56
3252	Resistor—100,000 ohms— $\frac{1}{2}$ watt—Carbon type—Pack- age of 5.....	1.00	3387	Screw assembly—Pickup mounting screw assembly com- prising one screw, one nut and one washer—Package of 10 sets.....	.40
3369	Resistor—4,500 ohms—Porcelain type—20 watt.....	.85	3388	Screw—Pickup needle holding screw—Package of 10.....	.60
3449	Coil—Choke coil mounted on resistor board.....	1.12	3389	Rod—Automatic brake trip rod with lock nut—Package of 5.....	.40
3450	Capacitor—0.2 mfd. mounted on resistor board.....	.46	3390	Escutcheon—Pickup arm escutcheon complete with mount- ing rivets.....	.46
3451	Bracket—Dial lamp bracket and indicator—Package of 2.....	.38	3417	Armature—Pickup armature.....	.72
3455	Capacitor—0.01 mfd.....	.44	3418	Cushions—Pickup rubber cushions—Comprising one damper and two spacer cushions and one damper bush- ing—Package of 5 sets.....	1.10
3456	Capacitor—0.05 mfd.....	.44	3419	Screw—Pickup cover mounting screw—Package of 10.....	.50
3457	Resistor—Porcelain type—3,665 ohms—Tapped at 365 ohms.....	.78	3485	Tool—Pickup spacing tool.....	2.00
3458	Resistor—2,800 ohms—Carbon type— $\frac{1}{2}$ watt—Package of 5.....	1.00	3516	Damper and bushing assembly—Located in bottom of pickup arm base.....	.14
3459	Capacitor—80 mmfd. capacitor.....	.44	3521	Cover—Magnetic pickup back cover.....	.18
3460	Capacitor—1,200 mmfd. capacitor.....	.30	6335	Pickup—Pickup unit complete.....	4.00
3468	Resistor—300 ohms—Flexible type—Package of 5.....	1.00	6346	Back—Pickup housing back.....	.45
6142	Resistor—6,000 ohms— $\frac{1}{2}$ watt—Carbon type—Package of 5.....	1.00	7579	Arm—Pickup arm complete less escutcheon, pickup, pickup mounting screw, nut and washer.....	4.00
6192	Spring—3-gang tuning capacitor drive cord tension spring —Package of 10.....	.30	TURNTABLE ASSEMBLIES		
6279	Resistor—15,000 ohms— $\frac{1}{2}$ watt—Carbon type—Package of 5.....	1.00	3261	Bushing—Rubber bushing used on turntable spindle for long-playing Records—Package of 5.....	.40
6282	Resistor—60,000 ohms—Carbon type— $\frac{1}{2}$ watt—Package of 5.....	1.00	3338	Ring—Clamp ring assembly—Comprising spring, latch lever and stud.....	.50
6288	Knob—Station selector, tone control or volume control knob—Package of 5.....	1.00	3340	Washer—Thrust washer—Package of 2.....	.56
6298	Cord—3-gang variable tuning capacitor drive cord—Pack- age of 5.....	.60	3341	Pin—Groove-Pin—Package of 2.....	.56
6300	Socket—4-contact Radiotron socket.....	.35	3342	Spring—Latch spring—Located on clamping ring—Pack- age of 2.....	.56
6301	Reactor—Filter reactor.....	1.40	3343	Sleeve—Sleeve complete with ball race.....	2.86
6303	Resistor—20,000 ohms— $\frac{1}{2}$ watt—Carbon type—Package of 5.....	1.00	3344	Cover—Grease retainer cover—Package of 2.....	.70
6308	Coil—R. F. coil complete with mounting bracket.....	1.36	3346	Bushing—Speed shifter lever bushing—Package of 4.....	.66
6323	Shaft—Tuning condenser drive shaft with one flat washer and two "C" washers—Package of 2.....	.20	3347	Spring—Speed shifter lever spring—Package of 2.....	.30
6367	Transformer—First intermediate frequency transformer.....	2.14	3399	Lever—Speed shifter lever with mounting screws.....	.50
6368	Transformer—Second intermediate frequency transformer.....	2.14	8948	Turntable—Complete.....	5.50
6369	Volume control or silent tuning control—Complete with mounting nut.....	1.16	MOTOR ASSEMBLIES		
6370	Tone control—Complete with mounting nut.....	1.34	3398	Motor mounting washer assembly—Comprising 2 cup washers, 4 springs and 1 "C" washer.....	.48
7054	Cord—Power Cord.....	.60	8939	Motor—Motor complete 105-125 volts—60 cycle.....	15.92
7062	Capacitor—Adjustable trimming capacitor—Capacity 15 to 70 mmfd.....	.50	8940	Motor—Motor complete 105-125 volts—50 cycle.....	20.20
7065	Screw driver—Micarta screw driver for I. F., R. F. and oscillator condensers.....	.80	8941	Motor—Motor complete 105-125 volts—25 cycle.....	24.64
7439	Drum—Dial drum with three dial mounting nuts.....	.35	8942	Rotor and shaft for 105-125 volts, 60 cycle motor.....	7.00
7440	Scale—Dial and dial scale.....	.50	8943	Rotor and shaft for 105-125 volts, 50 cycle motor.....	7.00
7481	Coil—Detector and oscillator coil complete with mounting bracket.....	2.20	8944	Rotor and shaft for 105-125 volts, 25 cycle motor.....	9.00
7484	Socket—UY type Radiotron socket.....	.35	8945	Spindle—Turntable spindle with fibre gear for 60 cycle motor.....	4.68
7485	Socket—6-contact Radiotron socket.....	.40	8946	Spindle—Turntable spindle with fibre gear for 50 cycle motor.....	4.68
7501	Capacitor—3-gang variable tuning capacitor complete with mounting screws and washers.....	4.20	8947	Spindle—Turntable spindle with fibre gear for 25 cycle motor.....	4.68
7510	Shield—Radiotron tube shield—Maroon finish.....	.30	REPRODUCER ASSEMBLIES		
7511	Shield—Radiotron tube shield top—Maroon finish.....	.25	3237	Screw assembly—Comprising 4 screws, 8 nuts, 4 washers, and 4 eyelets—1 set.....	.50
7549	Transformer—Interstage audio transformer.....	2.48	6184	Board—Terminal board complete with 3 terminals—Pack- age of 5.....	.50
7550	Capacitor pack—Comprising two 10.0 mfd., one 8.0 mfd., one 0.3 mfd., two 1.0 mfd., one 0.5 mfd., and three 0.1 mfd. capacitors in metal container—For 60 cycle opera- tion.....	7.40	6371	Transformer—Output transformer.....	1.90
7551	Transformer—Power transformer—105-125 volts—50-60 cycles.....	6.40	8920	Ring—Cone retaining ring.....	.35
7556	Transformer—Power transformer—105-125 volts—25-50 cycles.....	8.50	8969	Cone—Reproducer cone complete with voice coil—Pack- age of 5.....	6.35
7564	Capacitor pack—Comprising two 10.0 mfd., two 8.0 mfd., one 0.3 mfd., one 4.0 mfd., one 0.5 mfd. and three 0.1 mfd. capacitors in metal container—For 25 cycle opera- tion.....	7.24	9421	Coil assembly—Comprising field coil, magnet and cone support.....	4.32
MOTOR BOARD ASSEMBLIES					
2947	Leather—Friction leather—Package of 20.....	.50	3437	Knob—Selector switch and volume control knob.....	.60
3322	Switch—Automatic brake switch with mounting screws.....	.75	6385	Volume control—Phonograph volume control and selector switch.....	2.02
3391	Suspension spring and washer assembly for motor board— Comprising 1 bolt, 1 top spring, 1 bottom spring, 1 "C" washer, 2 cup washers and 1 nut—1 set.....	.50	6386	Cable—3 conductor shielded cable—From phonograph to volume control and input transformer pack.....	.70
3396	Receptacle—Needle receptacle with mounting screws.....	.52	7572	Transformer pack—Comprising input transformer, reactor, capacitors and resistor in metal container.....	4.42
MISCELLANEOUS PARTS					



RCA Victor Company, Inc.
Camden, New Jersey, U. S. A.