RCA VICTOR MODEL 5U

Five-Tube, Two-Band, A-C, Radio—Phonograph

TECHNICAL INFORMATION

Electrical Specifications

FREQUENCY RANGES

"Standard broadcast" (A) ..... 530-1,900 kc
"Short wave" (C) ..... 5,800-21,600 kc

ALIGNMENT FREQUENCIES

"Standard broadcast" (A) .....
600 kc (osc.), 1,700 kc (osc., ant.)
"Short wave" (C) ..... 20,000 kc

Intermediate Frequency ..... 460 kc

RADIOTRON COMPLEMENT

(1) RCA-6A7 ..... First Det.—Oscillator
(2) RCA-6D6 ..... Intermediate Amplifier
(3) RCA-75 .. Second Det., A-F Amp. and A.V.C.
(4) RCA-42 ..... Audio Power Amplifier
(5) RCA-80 ..... Full-Wave Rectifier

Pilot Lamp (1) ..... Mazda No. 46, 6.3 volts, 0.25 ampere

POWER SUPPLY RATINGS

Rating A-6 ..... 105-125 volts, 60 cycles, 80 watts
Rating A-5 ..... 105-125 volts, 50 cycles, 80 watts
Rating B-2 ..... 105-125 volts, 25 cycles, 80 watts
Rating C-6 ..... 105-125/200-250 volts, 60 cycles, 80 watts
Rating C-5 ..... 105-125/200-250 volts, 50 cycles, 80 watts

POWER OUTPUT

Undistorted ..... 2.0 watts
Maximum ..... 4.5 watts

LOUDSPEAKER

Type ..... Electrodynamic
Impedance (v.c.) ..... 2.2 ohms at 400 cycles

PHONOGRAPH

Type ..... Manual
Turntable Speed ..... 78 r.p.m.

Type of Pickup ..... Low-impedance magnetic
Pickup Impedance ..... 96 ohms at 1,000 cycles

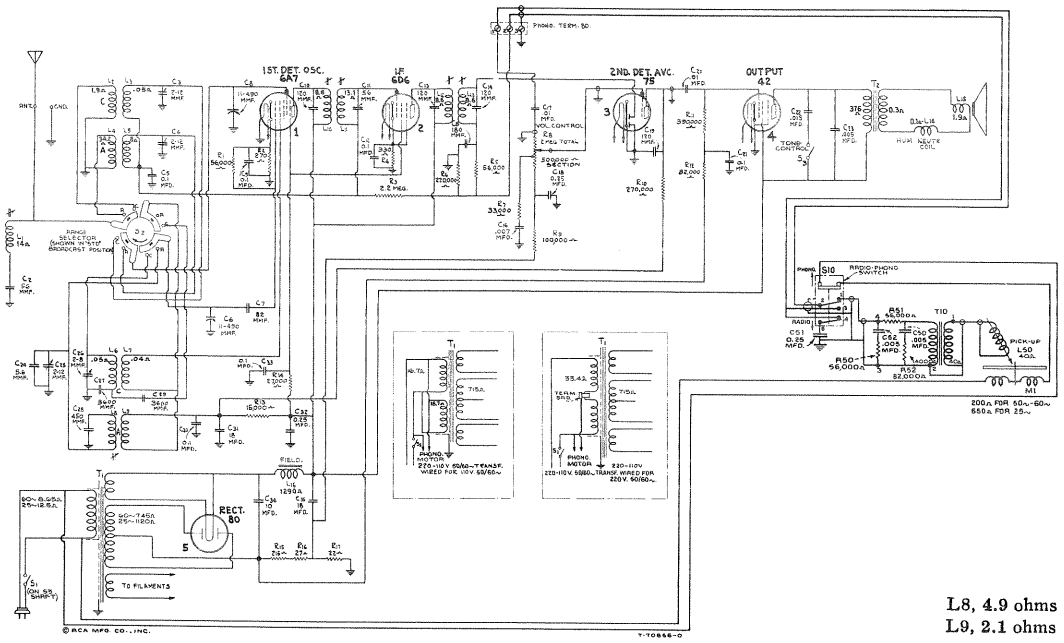
Mechanical Specifications

Height ..... 21 5/8 inches
Width ..... 16 3/8 inches
Depth ..... 14 1/16 inches
Weight (net) ..... 44 pounds
Weight (shipping) ..... 56 pounds
Chassis Base Dimensions ..... 12 inches x 7 inches x 3 inches
Over-all Chassis Height ..... 7 3/4 inches
Operating Control .. (1) Volume, (2) Tuning, (3) Range Selector, (4) Power Switch–Tone, (5) Radio–Phono
Tuning Drive Ratios ..... 10 to 1 and 50 to 1

General Features

The Model 5U combination instrument consists of a five-tube radio receiver and a manually-operated phonograph combined in one cabinet. Its design includes magnetite core adjusted i-f transformers and wave-trap, aural compensated volume control, tone control, resistance-coupled audio system, synchronous phonograph motor, and an 8-inch dust-proof electrodynamic loudspeaker.

Tuning range includes the "Standard broadcast" (A) and "Short wave" (C) bands. The "Short wave" (C) position of this extensive range includes channels assigned for amateur, and international



L8, 4.9 ohms
L9, 2.1 ohms

Figure 1—Schematic Circuit Diagram

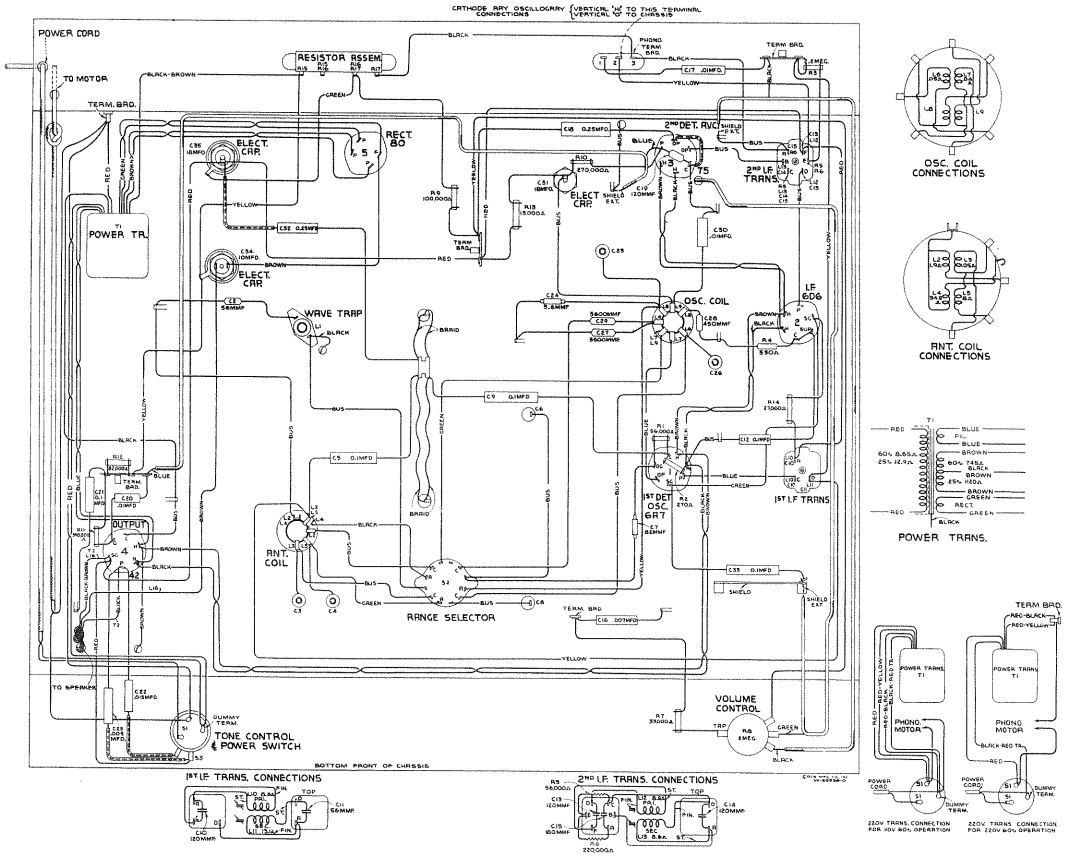


Figure 2—Chassis Wiring Diagram

short-wave broadcast on 49, 31, 25, 19, 16 and 13 meters. Trimming adjustments are located at accessible points. Their number is reduced to the least that is consistent with efficient operation. The tuning dial ratio of 10 to 1, with a 50 to 1 vernier, permits ease of tuning, especially in the "Short wave" band.

Circuit Arrangement

The first-detector and oscillator functions are accomplished in a single tube, an RCA-6A7. The input of this tube is coupled to the antenna through a tuned transformer. A shunt (magnetite core adjusted) wave-trap is connected across the primary of this transformer to prevent signals of intermediate frequency **(460 kc)** from being introduced into the first stage as interference. A two-section gang con-

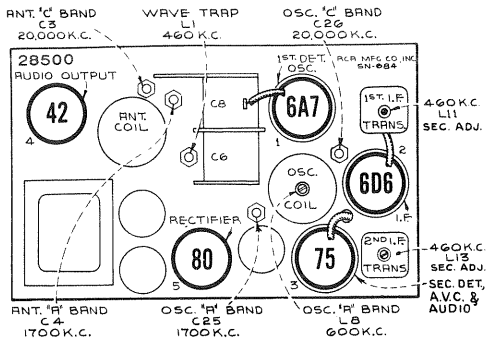


Figure 3—Radiotron, Coil, and Trimmer Locations

denser tunes the antenna transformer secondary and the heterodyne oscillator coils. These coils are shunted by improved plunger-type, air-dielectric, adjustable trimming capacitors, for obtaining exact alignment.

The intermediate frequency stage is coupled to the RCA-6A7 and to the RCA-75 by means of tuned transformers. These transformers resonate with fixed capacitors and are adjusted by molded magnetite cores to tune to **460 kc.**

The modulated signal as obtained from the output of the i-f system is detected by one of the diodes of the RCA-75 tube. Audio frequency secured by this process is passed on to the control grid of this same tube for amplification before final reproduction. The d-c voltage, which results from detection of the signal, is used for automatic volume control. This voltage, which develops across resistor R6, is applied as automatic control grid bias to the first-detector and i-f tubes through a suitable resistance filter.

A radio-phono switch S10 is provided to connect either the output of the second detector, or the output of the phonograph input transformer, to the first audio control grid through the coupling capacitor C17 and the acoustically-tapered potentiometer R8. Capacitor C51 is used to bypass any audio components in the second detector when S10 is thrown to "Phonograph" position. Transformer T10 serves to boost the electrical impulses generated in the phonograph pickup coil L50. A compensation filter is placed in shunt with the output of T10 to correct the frequency response of the reproducing system so as to compensate for phonograph recording characteristics. After amplification by the RCA-75, the audio signal is transmitted by resistance-capacitance coupling to the input of the RCA-42 power output stage, which, in turn, is transformer-coupled to the dynamic speaker. High-frequency tone control is provided by means of a shunt capacitor across the plate circuit of the output tube, which may be cut in or out of the circuit with a control switch S3.

The power supply system consists of an RCA-80 rectifier tube, power transformer, and filter.

The phonograph mechanism is of the manually operated type, having a synchronous motor which rotates the turntable at a speed of 78 r.p.m. The 10-inch turntable will accommodate either the 10-inch or 12-inch phonograph records. The pickup mechanism and tone arm are combined as one unit. The instrument may be purchased with any one of five ratings as specified under Electrical Specifications. *It is important that a machine of any particular rating be operated at the frequency and voltage for which it is rated.* Attempts to operate at ratings other than specified for the particular instrument will result in improper reproduction from the phonograph and may result in damage to both the phonograph motor and radio receiver.

SERVICE DATA

The various diagrams of this booklet contain such information as will be needed to isolate causes for defective operation if such develops. The ratings of the resistors, capacitors, coils, etc., are indicated adjacent to the symbols signifying these parts on the diagrams. Identification titles, such as L1, C2, R1, etc., are provided for reference between the illustrations and the Replacement Parts List. The coils, reactors, and transformer windings are rated in terms of their d-c resistances only. Ratings of less than one ohm are generally omitted.

Alignment Procedure

There are five alignment trimmers provided in the antenna transformer and oscillator coil tuned circuits. The i-f transformer and wave-trap adjustments are made by means of screws attached to molded magnetite cores. All of these circuits have been accurately adjusted during manufacture and should remain properly aligned unless affected by abnormal conditions or altered during servicing. Loss of sensitivity, improper tone quality, and poor selectivity are the usual indications of improper alignment.

The correct performance of this receiver can only be obtained when the aligning has been done with adequate and reliable apparatus. The manufacturer of this receiver has available for sale, through its distributors and dealers, a complete assortment of such service equipment as may be needed for the alignment operation.

A test oscillator, such as the **RCA Stock No. 9595,** is required as a source of the specified alignment frequencies. Visual indication of receiver output during the adjustment is necessary and should be accomplished by the use of an indicator such as the **RCA Stock No. 4317 Neon Output Indicator.**

During alignment, the Radio–Phono control should be thrown to "Radio" position. The procedure outlined below should be followed in adjusting the various trimmer capacitors and molded cores:

I-F Adjustments

The four adjustment screws (attached to molded magnetite cores) of the two i-f transformers (one on top and one on bottom of each i-f transformer) are located as shown by figures 3 and 6. Each circuit must be aligned to a basic frequency of **460 kc.** To do this, attach the output indicator across the loudspeaker voice coil.

Connect the output of the test oscillator to the control grid of the RCA-6A7 through a **.001 mfd.** capacitor. Connect the test oscillator **"Gnd"** terminal

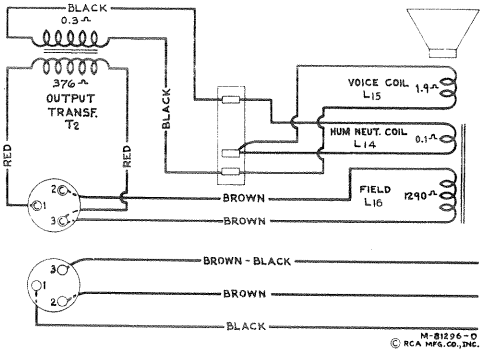


Figure 4—Loudspeaker Wiring

to the ground terminal of the receiver chassis. Tune the oscillator to **460 kc.** Advance the receiver volume

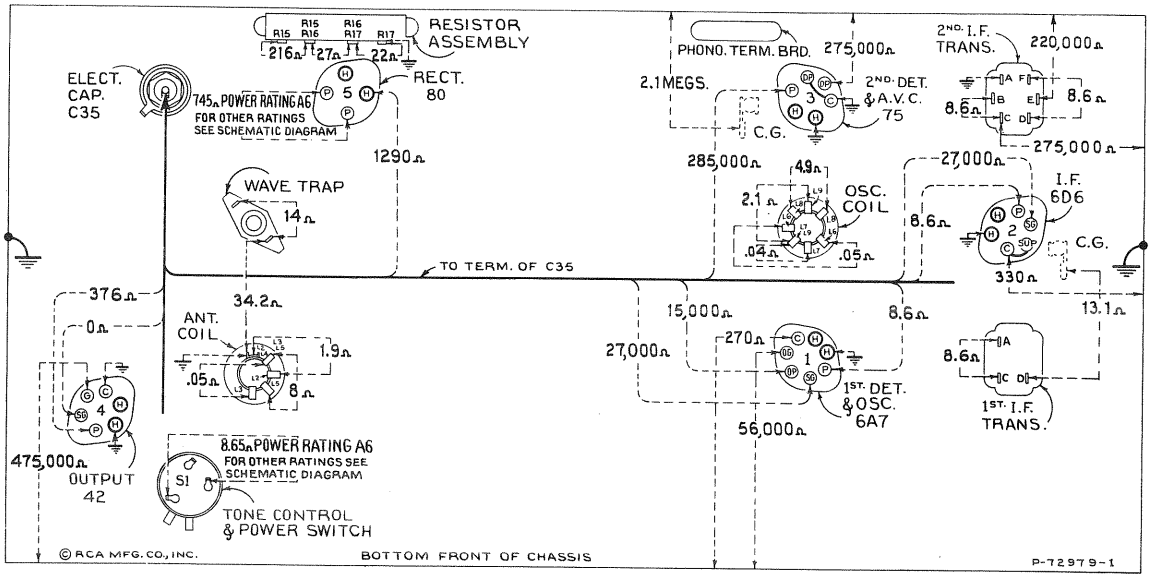


Figure 5—Resistance Diagram

Power supply disconnected—Radiotrons in sockets—Tuning condenser in full mesh—Range selector "Standard broadcast"—Radio–Phono "Radio"—Volume control maximum

Resistance Measurements

The resistance values shown between Radiotron socket contacts, grid caps, resistors, and terminals to receiver chassis-ground or other pertinent point on figure 5, permit a rapid continuity check of the circuits. The use of this diagram in conjunction with the Schematic Circuit Diagram, figure 1, and Wiring Diagram, figure 2, will permit the location of certain troubles which might otherwise be difficult to ascertain. Each value as specified should hold within ± 20%. Variations in excess of this limit will usually be indicative of trouble in circuit under test. When measuring the resistance between points of the circuit and ground, it will be necessary to connect the negative terminal of the resistance meter to chassis-ground. If the polarity of the resistance meter is not known, it may be readily ascertained by connecting a d-c voltmeter of indicated polarity across the terminals of the device.

control to its full-on position and adjust the receiver tuning control to a point, within its range, where no interference is encountered from local broadcast stations or from the local (heterodyne) oscillator. To eliminate signals from the local oscillator short stator of C6 to chassis-ground. Increase the output of the test oscillator until a slight indication is present on the output indicator. Adjust the two magnetite core screws of the second i-f transformer **L13** and **L12** to produce maximum (peak) indicated receiver output.

Radiotron Plate Current Readings

Measured with Milliammeter Connected at Tube Socket Plate Terminals Under Conditions Similar to Those of Voltage Measurements

(1) RCA-6A7—1st Det.—Osc.	11	ma.
(2) RCA-6D6—I. F. Amp.	10	ma.
(3) RCA-75—2nd Det., A.V.C. and A. F.	0.22	ma.
(4) RCA-42—Power Amp.	42	ma.
(5) RCA-80—Rectifier	63	ma.*

(*Cannot be measured at socket.)

Then adjust the two magnetite core screws **L11** and **L10** of the first i-f transformer for maximum (peak) receiver output as shown by the indicating device. During these adjustments, regulate the test oscillator output so that the indication is always as low as possible. By doing so, broadness of tuning due to a.v.c. action will be avoided. It is advisable to repeat the adjustment of all i-f magnetite core screws to assure that the interaction between them has not disturbed the original adjustment. Remove temporary chassis-ground jumper from stator of C6.

R-F Adjustments

Calibrate the tuning dial by adjusting the scale pointer to the extreme end calibration mark (beyond 55 on dial) while the two-gang tuning condenser plates are in full mesh.

Wave-Trap Adjustment

Attach the output of the test oscillator to the receiver "Antenna" terminal through a **200 mmfd. (important)** capacitor. The ground connections remain connected together. Leave the test oscillator tuned to **460 kc.** Adjust range selector to "Short wave" (C) position. Then adjust the wave-trap screw to the point which causes maximum suppression (minimum received) of the **460 kc** signal.

"Standard Broadcast" Band

(a) Adjust range selector to "Standard broadcast" (A) position. Reduce output of test oscillator to a minimum. Tune the test oscillator to **600 kc**

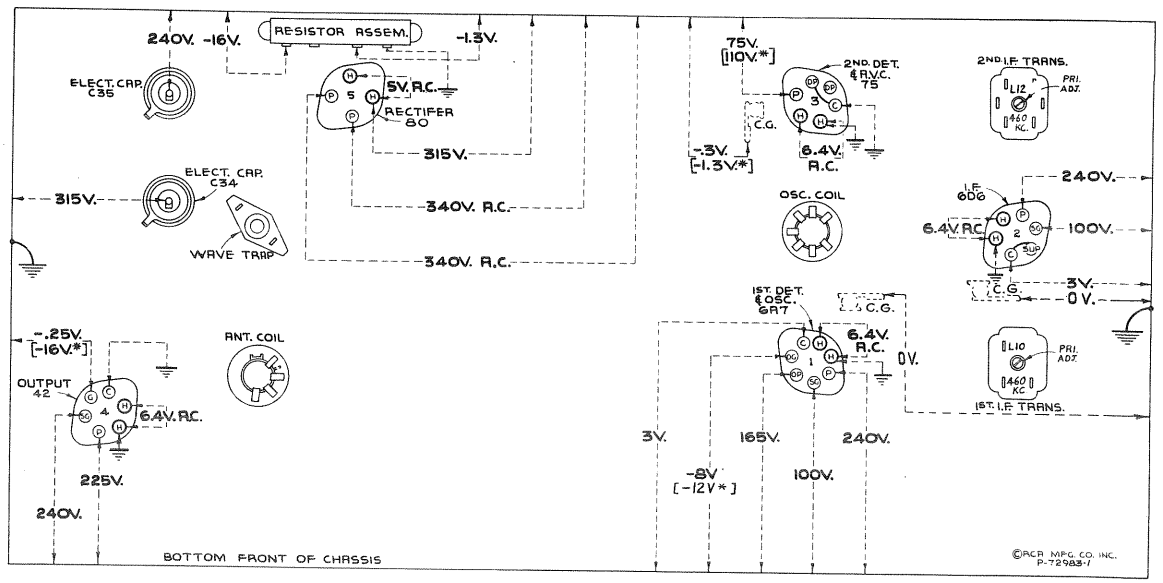


Figure 6—Radiotron Socket Voltages, Coil and Trimmer Locations.

Measured at 115 volts, 60-cycle supply—Tuned to approximately 1,000 kc ("Standard broadcast")—Radio-Phono "Radio"—No signal being received—Volume control minimum

Radiotron Socket Voltages

Note: Two voltage values are shown for some readings. The value shown in parentheses with asterisk (*) indicates operating conditions without voltmeter loading. The other value (generally lower) is the actual measured voltage and differs from the value shown in parentheses because of the additional loading of the voltmeter through the high series circuit resistance.

The voltage values indicated from the Radiotron socket contacts, grid caps, resistors, and terminals to receiver chassis ground on figure 6 will assist in locating cause of faulty operation. Each value as specified should hold within ± 20% when the receiver is normally operative at its rated line voltage. Variations in excess of this limit will usually be indicative of trouble in the basic circuits. To duplicate the conditions under which the voltages were measured requires a 1,000-ohm-per-volt d-c meter, having ranges of 10, 50, 250, and 500 volts. Use the nearest range above the specified measured voltage. A-c voltages were measured with a corresponding a-c meter.

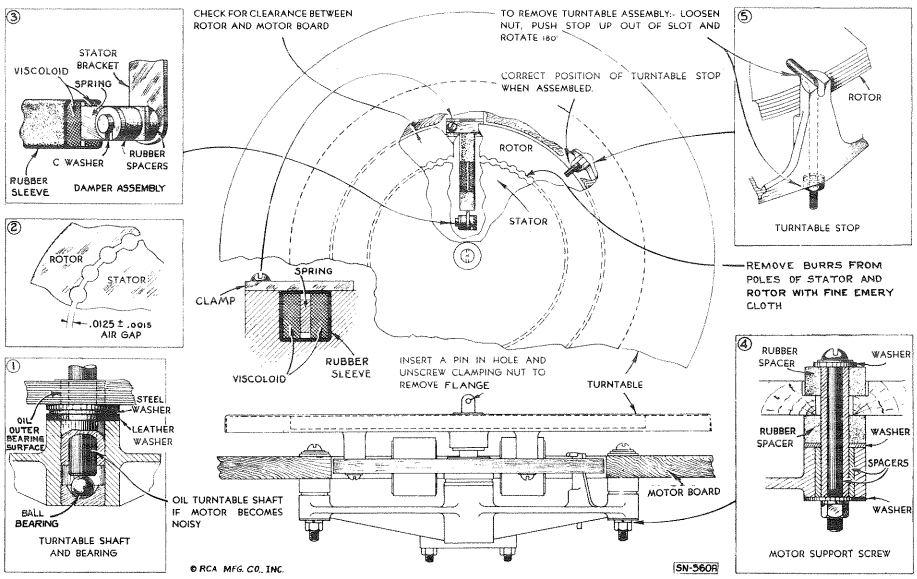


Figure 7—Details of Motor

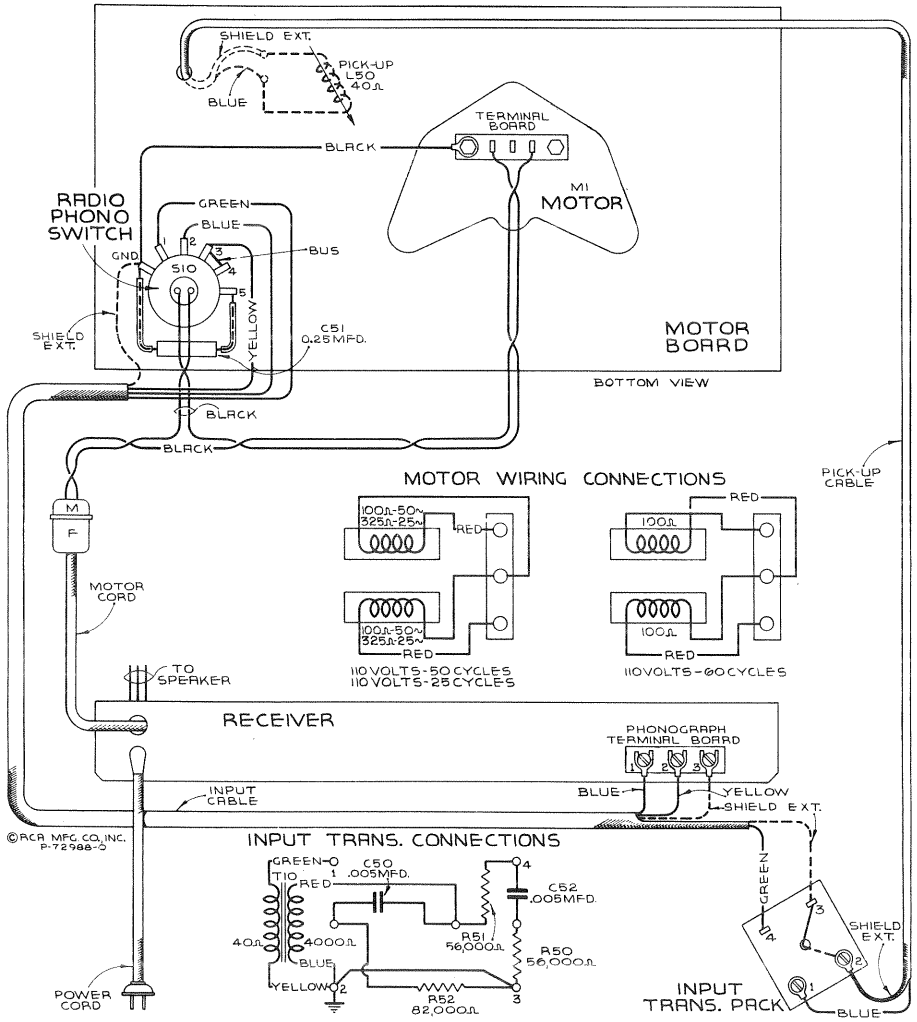


Figure 8—Assembly Wiring

If hum occurs during phonograph reproduction, a Stock No. 12037 should be connected between terminals 3 and 4 of input transformer.

and set receiver dial pointer to **600 kc.** Adjust output of test oscillator until a slight indication of output is visible.

(b) Adjust the oscillator magnetite core screw **L8** (top of oscillator coil) so that maximum (peak) indicated output results.

(c) Set receiver dial pointer to **1,700 kc.** Tune the test oscillator to **1,700 kc.** Carefully adjust the oscillator and antenna trimmers **C25** and **C4** respectively so that each brings about maximum (peak) indicated output.

(d) Tune the test oscillator to **600 kc.** Adjust the receiver to pick up this signal disregarding the dial reading at which it is best received. Adjust oscillator magnetite core screw **L8** (top of oscillator coil) for maximum (peak) output while rocking gang tuning condenser. After completing this adjustment, the trimmers **C25** and **C4** should be re-adjusted as in (c) to correct for any change in the oscillator high-frequency tuning which has been caused by the preceding adjustment.

"Short-Wave" Band

(e) Connect the "Ant." output of the test oscillator to the "Antenna" terminal through a **300-ohm** resistor, leaving the "Gnd." of the oscillator connected to the receiver chassis.

(f) Adjust range selector to its "Short wave" (C) position. Set receiver dial pointer to **20,000 kc.** Tune test oscillator to **20,000 kc.** Set oscillator trimmer **C26** to minimum capacity (plunger full out), and antenna trimmer **C3** to maximum capacity (plunger full in). Slowly push in oscillator trimmer **C26** until maximum (peak) output is reached. Two peaks may be found. Adjust **C26** to the peak with minimum capacity (plunger near out) for maximum indication. Tighten lock nut. Slowly pull out plunger of antenna trimmer **C3** until maximum (peak) indicated output is reached while slightly rocking the gang tuning condenser back and forth through the signal. Two peaks may be found with this circuit. The peak with maximum capacity (plunger near in) should be used. Tighten lock nut.

Phonograph Mechanism

The phonograph motor is of the synchronous type and designed to be simple and foolproof. Under normal operating conditions, service difficulties should be negligible. Occasionally, however, certain adjustments may be required. These adjustments are illustrated and explained in figure 7.

Magnetic Pickup

The pickup used in the phonograph unit is of an improved design. The horseshoe magnet is rigidly welded to the pole pieces and is irremovable. There is a centering spring attached to the armature to maintain proper adjustment and to provide a limiting effect on the movement of the armature. The frequency response is substantially uniform over a wide range. Service operations which may be necessary on the pickup are as follows:

Centering Armature

Refer to figure 9 showing the pickup inner structure. The armature is shown in its proper relation to the magnet pole pieces, i. e., exactly centered. Whenever this centering adjustment has been disturbed it will be necessary to remove the pickup mechanism from the tone arm by removing the needle holding screw and the two mounting screws from the front of the tone arm, holding the pickup assembly to keep it from dropping. Unsolder the two leads from the lugs on the terminal board at the rear of the pickup. Insert a small rod or nail into the armature needle hole and replace the needle holding screw, tightening

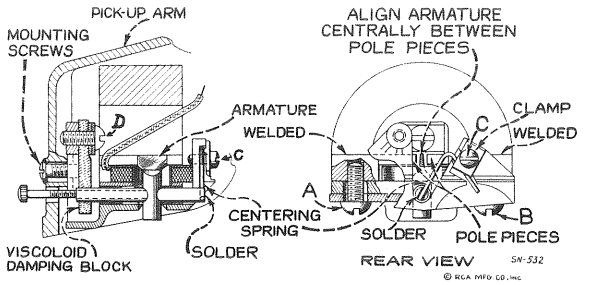


Figure 9—Details of Pickup

it to hold the rod securely. If the armature clamping screws A and B have not been disturbed, screw C should be loosened which will permit the armature to be moved from side to side, the rod acting as a lever to perform this operation. The proper adjustment is obtained when the armature is moved to the extreme position on each side (the movement being limited by the armature striking the pole pieces) and then brought to the mid position between these two extremes. Screw C should then be tightened. The armature position should then be central between the pole pieces and at right angles to them. With a little practice, the correct adjustment of the armature will be obtained. The air gap between the pole pieces and the armature should be kept free from dust, filings, and other foreign material which would obstruct the movement of the pickup armature.

Damping Block

The viscoloid damping block which is attached to the front end of the armature shank serves as a mechanical filter to eliminate undesirable resonances and to cause the frequency response to be uniform. Should it be necessary to replace this damping block, the pickup mechanism should be removed from the tone arm as explained above. Unsolder the pickup coil leads from the two lugs on the pickup terminal board and remove the terminal board mounting screw and the terminal board. Then remove screw D and the damping block from the pickup assembly. Make sure that the shaft of the armature which contacts the viscoloid is clean. Then insert the new damping block so that it occupies the same position as that of the original block, and is in correct vertical alignment with the armature. The hole in the block is somewhat smaller than the diameter of the armature in order to permit a snug fit. With the

damping block properly aligned on the armature, screw D with its washer should then be replaced. Heat should be applied to the armature (viscoloid side) so that the damping block will fuse at the point of contact and become rigidly attached to the

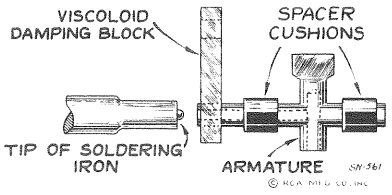


Figure 10—Special Soldering-Iron Tip

armature. A special-tip soldering iron, constructed as shown in figure 10, will be found very useful in performing this operation. The iron should be applied only long enough to slightly melt the block, causing a small bulge on both sides.

Replacing Coil

Whenever there is defective operation due to an open or shorted pickup coil, this coil should be replaced. Remove the pickup mechanism and terminal board as described above. Remove screws A and B and the magnet assembly. Remove the bakelite coil support (with coil attached) and insert the new coil support assembly in its place, after which replace the magnet assembly and center the armature as described above, then re-assemble the remainder of the unit. Only rosin core solder should be used for soldering the coil leads and pickup leads to the pickup terminal board. This same type of solder should be used when necessary for soldering the centering spring to the armature.

Magnetizing

Loss of magnetization will not usually occur when the pickup has received normal care because the magnet and pole pieces are one unit and the magnetic circuit remains practically closed at all times. When the pickup has been mishandled, subjected to a strong a-c field, jolted, or dropped, there may be an appreciable loss of magnetic strength, in which case it will be necessary to remagnetize the entire structure. To do this, it will be necessary to first remove the pickup mechanism from the tone arm, and then remove the magnet assembly. Place the magnet assembly on the poles of a standard pickup magnetizer such as the **RCA Stock No. 9549 Pickup Magnetizer** and charging the magnet in accordance with the instructions accompanying the magnetizer. It is preferable to check the polarity of the pickup magnet and to remagnetize it so that the same polarity is maintained.

Loudspeaker

Centering of the loudspeaker voice coil is made in the usual manner with three narrow paper feelers after first removing the front paper dust cover. This may be removed by softening its cement with a very light application of acetone, using care not to allow the acetone to flow down into the air gap. The dust cover may be cemented back in place with ambroid upon completion of adjustment.

REPLACEMENT PARTS

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

Stock No.	DESCRIPTION	List Price
	RECEIVER ASSEMBLIES	
13216	Board—Antenna and ground terminal board	$0.25
12717	Board—Phonograph terminal board	.22
5237	Bushing—Variable condenser mounting bushing assembly—Package of 3	.43
12118	Cap—Grid contact cap—Package of 5	.15
12714	Capacitor—Adjustable trimmer (C3, C4, C25)	.38
12807	Capacitor—Adjustable trimmer (C26)	.35
12973	Capacitor—5.6 Mmfd. (C24)	.20
12723	Capacitor—56 Mmfd. (C2)	.20
12629	Capacitor—56 Mmfd. (C11)	.20
13394	Capacitor—82 Mmfd. (C7)	.20
12724	Capacitor—120 Mmfd. (C19)	.28
12404	Capacitor—120 Mmfd. (C10, C13, C14)	.26
12406	Capacitor—180 Mmfd. (C15)	.26
12812	Capacitor—450 Mmfd. (C28)	.25
12811	Capacitor—3,600 Mmfd. (C27, C29)	.35
4868	Capacitor—.005 Mfd. (C23)	.20
5148	Capacitor—.007 Mfd. (C16)	.20
11315	Capacitor—.015 Mfd. (C22)	.20
4858	Capacitor—.01 Mfd. (C17, C20, C30)	.25
4840	Capacitor—0.25 Mfd. (C18)	.30
5170	Capacitor—0.25 Mfd. (C32)	.25
4841	Capacitor—0.1 Mfd. (C5, C9, C12, C21, C33)	.22
11240	Capacitor—10 Mfd. (C34)	1.08
5212	Capacitor—18 Mfd. (C31, C35)	1.16
12797	Coil—Antenna coil and shield (L2, L3, L4, L5)	$1.30
12798	Coil—Oscillator coil and shield (L6, L7, L8, L9)	1.65
12701	Condenser—2-gang variable tuning condenser (C6, C8)	4.00
5119	Connector—3-contact female connector for speaker cable	.25
12006	Core—Adjustable core and stud for Stock Nos. 12653 and 12801	.22
12664	Core—Adjustable core and stud for Stock No. 12654	.22
13313	Dial—Station selector dial	.45
12702	Drive—Vernier drive for variable condenser	.68
13314	Indicator—Station selector indicator pointer	.15
5226	Lamp—Dial lamp, 6.3 volts—Package of 5	.70
13310	Resistor—Voltage divider comprising one 216-ohm, one 27-ohm and one 22-ohm sections (R15, R16, R17)	.55
6135	Resistor—270 ohms, carbon type, ¼ watt—Package of 5 (R2)	1.00
11296	Resistor—330 ohms, carbon type, ¼ watt—Package of 5 (R4)	1.00
12759	Resistor—15,000 ohms, carbon type, ½ watt—Package of 5 (R13)	1.00
12011	Resistor—27,000 ohms, carbon type, 1 watt—Package of 5 (R14)	1.10

The prices quoted above are subject to change without notice.

REPLACEMENT PARTS (Continued)

Stock No.	DESCRIPTION	List Price
11364	Resistor—33,000 ohms, carbon type, ¼ watt—Package of 5 (R7)	$1.00
5029	Resistor—56,000 ohms, carbon type, ¼ watt—Package of 5 (R1)	1.00
11282	Resistor—56,000 ohms, carbon type, 1/10 watt—Package of 5 (R5)	.75
11365	Resistor—82,000 ohms, carbon type, ¼ watt—Package of 5 (R12)	1.00
5145	Resistor—100,000 ohms, carbon type, ¼ watt—Package of 5 (R9)	1.00
11398	Resistor—220,000 ohms, carbon type, 1/10 watt—Package of 5 (R6)	.75
11323	Resistor—270,000 ohms, carbon type, ¼ watt—Package of 5 (R10)	1.00
11847	Resistor—390,000 ohms, carbon type, ¼ watt—Package of 5 (R11)	1.00
11626	Resistor—2.2 meg., carbon type, ¼ watt—Package of 5 (R3)	1.00
12651	Shield—Antenna coil shield	.22
13311	Shield—Chassis end shield and rubber mounting foot assembly—Package of 2	.80
12607	Shield—First I. F. transformer shield top	.30
12008	Shield—I. F. transformer shield	.28
12799	Shield—Oscillator coil shield	.15
12581	Shield—Second I. F. transformer shield top	.36
3682	Shield—6A7 or 75 Radiotron shield	.22
3950	Shield—6D6 Radiotron shield	.26
4794	Socket—4-contact 80 Radiotron socket	.15
4786	Socket—6-contact 6D6, 42 or 75 Radiotron socket	.15
4787	Socket—7-contact 6A7 Radiotron socket	.15
11199	Socket—Dial lamp socket	.14
12007	Spring—Retaining spring for Stock Nos. 12006 and 12664—Package of 10	.36
12796	Switch—Range switch (S2)	1.00
13309	Switch—Tone control and power switch (S1, S3)	.55
12801	Transformer—First I. F. transformer complete (L10, L11, C10, C11)	1.70
12653	Transformer—Second I. F. transformer complete (L12, L13, C13, C14, C15, R5, R6)	2.06
13392	Transformer—Power transformer, 105-125 volts, 50-60 cycles (T1)	4.95
13566	Transformer—Power transformer, 105-125 volts, 25-50 cycles (T1)	4.80
13393	Transformer—Power transformer, 110 and 220 volts, 50-60 cycles (T1)	4.95
12654	Trap—Wave-trap complete (L1)	.75
13144	Volume control (R8)	1.00
	MOTOR ASSEMBLIES	
10194	Ball—Steel ball bearing—Package of 20	.25
11740	Base—Motor base and bearing assembly	1.45
11733	Coil—Stator assembly, comprising coil and laminations, 105-125-volt, 60-cycle operation	2.96
11734	Coil—Stator assembly, comprising coil and laminations, 105-125-volt, 50-cycle operation	3.08
11735	Coil—Stator assembly, comprising coil and laminations, 105-125-volt, 25-cycle operation	3.08
13081	Coil—Stator coil assembly, comprising coil and laminations, 200-250-volt, 50-cycle operation	4.60
11748	Damper—Motor damper assembly, comprising one damper, one damper plate, one screw, two rubber washers and one "C" washer	.20
12082	Motor—105-125-volt, 60-cycle motor (M1)	11.10
12083	Motor—105-125-volt, 50-cycle motor (M1)	$11.10
9733	Motor—105-125-volt, 25-cycle motor (M1)	11.00
9734	Motor—200-250-volt, 50-cycle motor (M1)	10.50
4456	Motor accessories—Comprising three nuts, one shield and one screw	.10
12048	Turntable—Turntable assembly complete with rotor laminations, 60-cycle operation	4.80
13084	Turntable—Turntable assembly complete with rotor laminations—25-cycle operation	5.45
12049	Turntable—Turntable assembly compelte with rotor laminations, 50-cycle operation	4.80
4083	Washer—Leather washer—Package of 10	.20
4084	Washer—Metal washer—Package of 10	.26
	PICKUP AND ARM ASSEMBLIES	
3812	Armature—Pickup armature (L50)	.32
13568	Coil—Pickup coil	.60
4543	Damper—Damper block complete with damper clamp, washer	.10
13567	Pickup and arm assembly complete	7.10
3811	Screw—Needle holding screw—Package of 10	.46
	REPRODUCER ASSEMBLIES	
12641	Board—3-contact reproducer terminal board	.15
12640	Bracket—Output transformer mounting bracket	.18
12012	Coil—Field coil (L16)	1.85
11469	Coil—Neutralizing coil (L14)	.20
12642	Cone—Reproducer cone and dust cap (L15)	.94
5118	Connector—3-contact male speaker cable connector	.25
9699	Reproducer—Complete	6.38
11253	Transformer—Output transformer (T2)	1.56
11886	Washer—Spring washer to hold field coil securely—Package of 5	.20
	MISCELLANEOUS ASSEMBLIES	
13564	Cable—3-conductor shielded input cable, approximately 32½ inches long, connects receiver to radio-record switch	.50
4840	Capacitor—0.25 Mfd. (C51)	.30
12785	Crystal—Station selector escutcheon and crystal	1.00
12699	Knob—Large station selector knob—Package of 5	.68
12700	Knob—Small (vernier) station selector knob—Package of 5	.58
11347	Knob—Volume control, tone control, range switch or radio-record switch knob—Package of 5	.75
11377	Screw—Chassis mounting screw assembly, comprising one screw, one washer and one lockwasher—Package of 4	.12
11869	Screw—Motor mounting screw assembly, comprising one screw, three metal washers, two rubber washers, one lockwasher, two spacers and one nut—Package of 3	.32
11349	Spring—Retaining spring for knob, Stock Nos. 11347 and 12700—Package of 5	.25
4982	Spring—Retaining spring for knob, Stock No. 12699—Package of 10	.50
13563	Switch—Radio-record switch (S10)	1.05
13565	Transformer—Phonograph input transformer (T10, C50, C52, R50, R51, R52)	2.95

Prices quoted above are subject to change without notice.