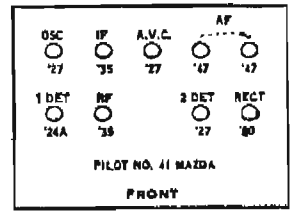


IF PEAK 175 KC.

This is a combination radio and electrola incorporating a new type automatic volume control that is quiet between stations. The new motor - board equipment has a synchronous motor using the R. C. A. - Victor Inertia tone arm. The motor is fitted with a speed reducing gear that allows for the playing of both standard and Program Transcription Records.

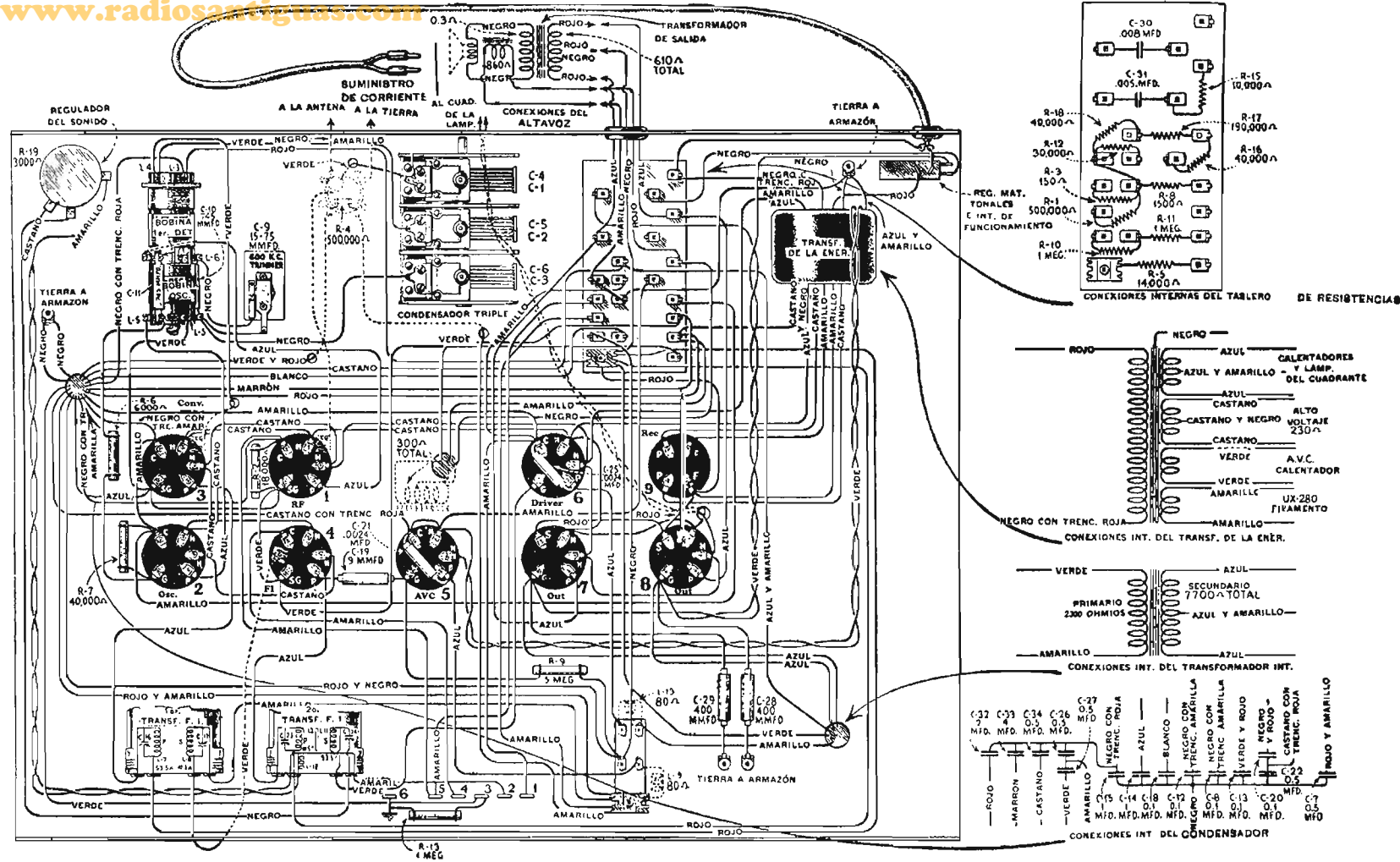
In many respects this receiver is similar to the R. C. A. - Victor Model R-11 and methods similar to those used in servicing the R-11 can be applied to this Model, noting, of course, that there are some differences.

Models R-11, RE-18, RE-18A, RAE-26 (1931)



R. C. A. VICTOR CO., INC.

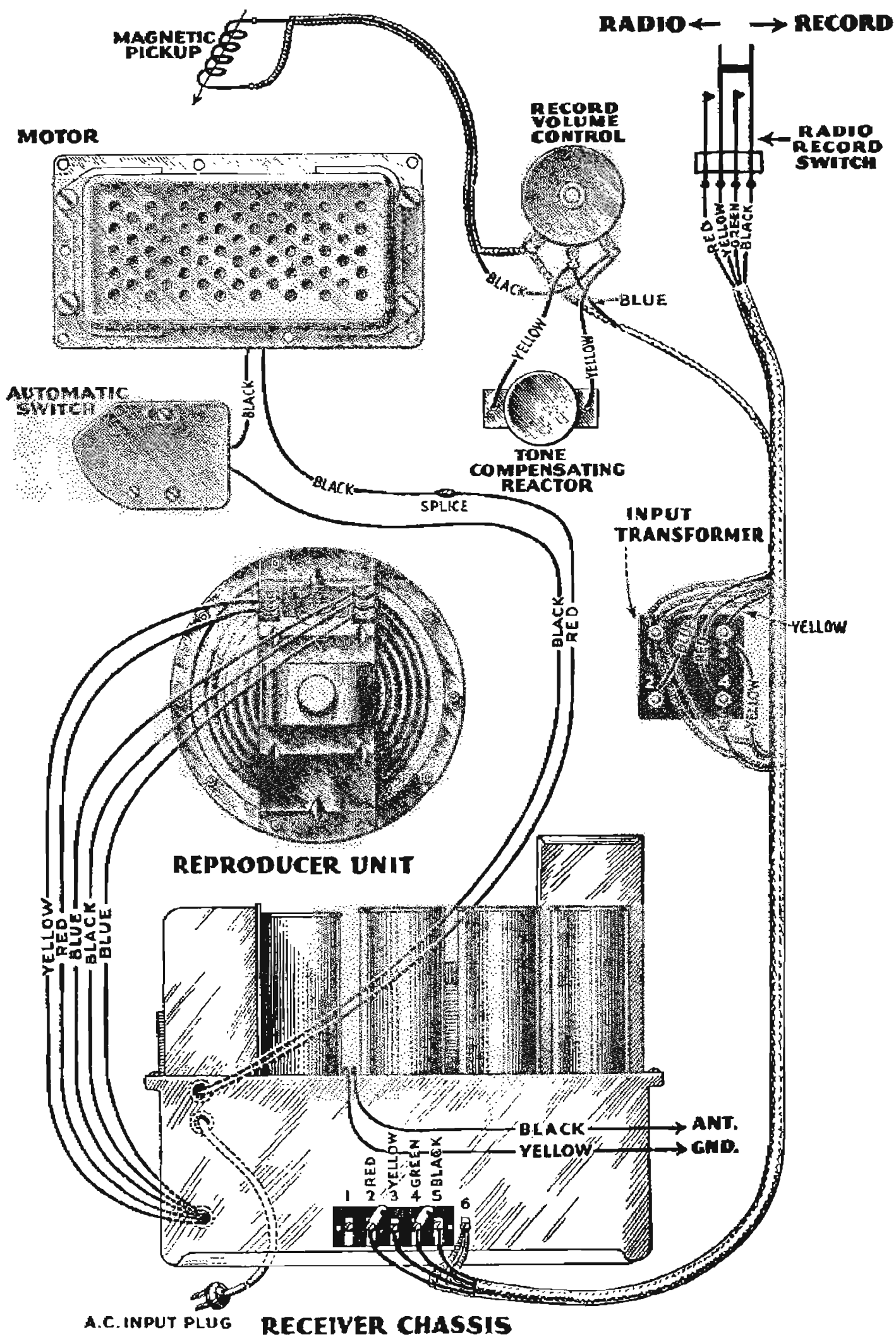
MODEL RE-18 Schematic



Vista gráfica del armazón de un receptor superheterodino americano. Obsérvese la disposición de las resistencias, condensadores y transformadores.

(Cortesía de la "R. C. A. Victor.")

DE-14

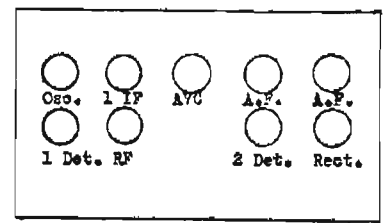


See Rf control grid
 2 Det Control Grid(Pickup Board Test²) 93.5 ohms
 2 Det Control Grid to V.C. Arm 3,093.5-10,093.5 ohms TC-2D Cg- YC Arm

All Tubes removed from sockets and AC plug disconnected from power supply line. All phonograph equipment disconnected from pick up terminal board and terminals 2 and 3 inter-connected. Also terminals 4 and 5 inter-connected. Field Coil disconnected

From Chassis To	Correct	Incorrect
Aerial to Ground post	40 ohms	
Chassis to		
RF Control Grid(early model)	1,000,005 ohms	BLC- in tuned circuit (.1 mfd) BC-AVC ohk-Y
RF Control Grid(late model)	1,500,005 ohms	BLC- in tuned circuit (.06 mfd) BC- 1 IF Tr. Sec -Y BC- rf K-Y (.1 mfd) BC- rf Sg-Y (1. mfd) BC- 47 Sg-Y (.6 mfd) BC-'80 P- Spkr div. tap BC- rf P-Y (1. mfd) See RF Screen Grid
RF Cathode	150 ohms	
RF Screen Grid	18,150 ohms	
RF Plate	32,508 ohms	
RF Plate to '80 Fil	58 ohms	
1 Detector Control Grid	5 ohms	TC-Y
1 Detector Cathode	1,500 ohms	BC-Y (.1 mfd)
1 Detector Screen	18,150 ohms	See R-F Screen
1 Detector Plate	32,541.5 ohms	See R-F Plate
1 Detector Plate to '80 Fil	93.5 ohms	TC- 1 IF Tr.
Oscillator Control Grid	41,500 ohms	BLC-Osc.Grid Cir.(0074) BC-Osc K-Y (.1 mfd) BC-Osc K-Y (.1 mfd) See R-F Screen
Oscillator Cathode	1,500 ohms	
Oscillator Plate	18,151 ohms	
Duo Plate and Det Screen	1 ohm	
IF Control Grid (all models)	500,041.5 ohms	BC-Y (.6 mfd)
IF Control Grid- AVC Plate (early)	121.5 ohms	TC-1 IF Tr Sec
IF Screen Grid	18,150 ohms	See RF Screen
IF Plate	32,491.5 ohms	See 1 Detector Plate
IF Plate - '80 Fil	41.5 ohms	TC-2 IF Tr.Pri
AVC Control Grid (early)	7,250,285 ohms	BLC- if P- AVC Cg(9 mfd) BC-5 meg = AVC R (.1 mfd) BC-1 meg- Y (.1 mfd) FC-'80 Anode -80 P(2 mfd) FC Filter ohk-80 P(4 mfd) BC-AVC K-Y (.6 mfd) BC-Spkr divides tap- Y BC-AVC K-AVC P(.0024 mfd) See early model
AVC Control Grid (late)	4,230,285 ohms	BC-AVC K-AVC P
AVC Cathode	270,000 ohms	BC-AVC K-Y

2 Det Cathode	30,000 ohms	BC-Test1-Test3 BC- 2 DK-'80 Fil
Pickup Board Terminal 2	1,000,000 ohms	BC-Test1-Test3 See RF Plate
2 Detector Plate	34,830 ohms	
2 Detector Plate-'80 Fil	2,380 ohms	
'47 Control Grid	43,860 ohms	BC- 47 Cg-Y See AVC Cathode Tone Control Cond Tone Control Resist See 2 Detector Plate
'47 Control Grid to Control Grid	7,700 ohms	
'47 Screen	32,460 ohms	
'47 Screen - '30 Fil	0 ohm	
'47 Plate	32,755 ohms	See 2 Detector Plate
'47 Plate to Plate	610 ohms	Harmonic condenser
80 Anode to chassis	230,400 ohms	See AVC Control Grid
80 Anode to Anode	230 ohms	
80 Fil to chassis	32,450 ohms	See RF Plate See RF Screen Grid
Across Speaker field	860 ohms	



Peak Frequency = 175 KC

115 VOLT A. C. LINE							
(All Resistor Control Settings Show Not Affect Voltages)							
Budimeter No.	Cathode to Heater Volts D. C.	Cathode or Filament to Control Grid Volts D. C.	Cathode or Filament to Screen Grid Volts D. C.	Cathode or Filament to Plate Volts D. C.	Plate Current M. A.	Screen Current M. A.	Heater or Filament Value A. C.
1	2	+0.1	-75	205	5.0	0.5	2.2
2	8	0	—	60	5.0	—	2.2
3	7	7.0	70	200	0.5	0.1	2.2
4	2	+0.1	75	205	5.0	0.5	2.2
5	0	0	—	25	0	—	2.2
6	20	+0.1	—	180	0.5	—	2.2
7	—	10	210	205	25	—	2.2
8	—	10	210	205	25	—	2.2

* Not true reading due to resistance in circuit.

R. C. A VICTOR CO., INC.

MODEL RF-18
Resistance Data

RCA Victor Radiola Electrola RE-18A is a nine-tube combination super-heterodyne radio receiver and electric phonograph. Except for the cabinet and tuning dial, the RE-18A is similar to the RE-18. A reference to the RE-18 service notes should be made for information relative the circuits and similar data. The replacement parts are listed below.

ELECTRICAL SPECIFICATIONS

- | | | | |
|---------------------------------------|--|--|--|
| Voltage Rating..... | 105-125 Volts | Type of Manual Volume Control..... | Potentiometer used to regulate input to second detector |
| Frequency Rating..... | 25, 30, 50 and 60 Cycles | Type of Tone Control.... | Variable resistance in series with capacitor connected across grids of output stage. Capacitor tunes transformer at "low" position |
| Power Consumption..... | 25, 30 and 50 Cycles
170 Watts, 60 Cycles 160 Watts | Number of Audio Stages (Radio)..... | 1 |
| Type of Circuit..... | Super-Heterodyne using Super-Control Radiotrons and Push-pull Pentode output stage. | Number of Audio Stages (Phonograph)..... | 2 |
| Type and Number of Radiotrons... | 2 RCA-235,
3 UY-227, 1 UY-224, 1 UX-280, 2 RCA-247—
Total, 9 | Type of Magnetic Pick-up..... | Low Impedance |
| Number of Radio Frequency Stages..... | 1 | Type of Tone Arm..... | Inertia |
| Type of First Detector.. | Tuned Input Grid Bias | Diameter of Turntable..... | 12 inches |
| Number of Intermediate Stages..... | 1 | Type of Rectifier..... | Full Wave |
| Type of Second Detector..... | Power Grid Bias | Type of Loudspeaker..... | 8" Electro-Dynamic |
| Type of Automatic Volume Control.... | UY-227
Controlled by signal voltage in turn controlling bias on R. F. and I. F. tubes | Undistorted Output..... | 4.0 Watts |

REPLACEMENT PARTS

Stock No.	DESCRIPTION	List Price	Stock No.	DESCRIPTION	List Price
RECEIVER ASSEMBLY					
2563	Resistor—6,000 ohms—Carbon type—1 watt—Package of 5.....	\$3.00	3056	Shield—Radiotron shield—6 used—Package of 2....	\$0.50
2730	Resistor—18,000 ohms—Carbon type—1 watt—Package of 5.....	2.00	3076	Resistor—1 megohm—Carbon type— $\frac{1}{2}$ watt—Package of 5.....	2.50
2734	Capacitor—745 mmfd.—Package of 5.....	2.20	3077	Resistor—30,000 ohms—Carbon type— $\frac{1}{2}$ watt—Package of 5.....	2.50
2746	Socket—Dial lamp socket.....	.50	3078	Resistor—10,000 ohms—Carbon type— $\frac{1}{2}$ watt—Package of 5.....	2.50
2747	Cap—Grid contactor cap—Package of 5.....	.50	3079	Resistor—40,000 ohms—Carbon type— $\frac{1}{2}$ watt—Package of 5.....	2.50
2749	Capacitor—2400 mmfd.....	1.50	3085	Capacitor—400 mmfd.....	.60
2875	Knob—Tuning control, volume control or tone control knob—Package of 5.....	1.50	3089	Board—Terminal board complete with 5 terminals.....	.50
2882	Socket—Five contact Radiotron socket complete with insulator—8 used.....	.50	3091	Board—Resistor board complete less resistors and capacitors.....	1.00
2963	Resistor—8,000 ohms—Carbon type—1 watt—Package of 5.....	2.50	3092	Volume control—Volume control complete with mounting nut.....	1.50
2968	Socket—Four contact Radiotron socket complete with insulator—1 used.....	.50	3093	Tone control—Tone control complete with mounting nut.....	1.90
3024	Capacitor—9 mmfd.—Package of 2.....	.50	3095	Coil—R. F. coil.....	1.90
3046	Resistor—190,000 ohms—Carbon type— $\frac{1}{2}$ watt—Package of 5.....	2.50	3096	Coil—1st detector and oscillator coil complete with mounting bracket.....	3.55
3047	Resistor—1,500 ohms—Carbon type— $\frac{1}{2}$ watt—Package of 5.....	2.50	3098	Capacitor—0.008 mfd.....	.50
3048	Resistor—500,000 ohms—Carbon type— $\frac{1}{2}$ watt—Package of 5.....	2.50	3099	Capacitor—0.005 mfd.....	.75
3049	Resistor—150 ohms—Carbon type— $\frac{1}{2}$ watt—Package of 5.....	2.50	6179	Terminal—Single ground terminal with screw complete with mounting rivet—Package of 5.....	.50
3050	Resistor—14,000 ohms—Carbon type—3 watt.....	.60	6188	Resistor—2 megohm—Carbon type— $\frac{1}{2}$ watt—Package of 5.....	2.00
3055	Cushion—Receiver chassis sponge rubber cushion—Package of 4.....	.50	6189	Bracket—Dial lamp bracket and indicator—Package of 2.....	.65
			6190	Shaft—Tuning dial shaft complete with 3 washers—Package of 5.....	.85

REPLACEMENT PARTS—Continued

Stock No.	DESCRIPTION	List Price	Stock No.	DESCRIPTION	List Price			
RECEIVER ASSEMBLY—Continued								
6191	Cord—Condenser drum drive cord—Package of 5	\$0.55	6119	Stud—Motor hanging stud—Package of 6	\$0.50			
6192	Spring—Condenser drum drive cord tension spring—Package of 10	.50	6120	Screw—For holding turntable spindle bearing and grease cap—Package of 10	.50			
7054	Cord—Power cord	1.00	6121	Bearing—Turntable spindle bearing and grease cap	1.10			
7062	Capacitor—Adjustable capacitor—15-70 mmfd.	1.00	6215	Escutcheon—Shift lever speed escutcheon plate with mounting screws—Package of 2	.70			
7266	Transformer—1st intermediate transformer	3.00	6216	Rod—Automatic brake trip rod with nut—Package of 5	.50			
7267	Transformer—2nd intermediate transformer	3.00	6221	Cover—Pickup cover	.75			
7268	Coil—Detector choke coil complete with mounting rivet	.60	6222	Pickup—Pickup unit complete	12.50			
7269	Capacitor—Comprising one 2.0 mfd., one 4.0 mfd., four 0.5 mfd., two 1.0 mfd., five 0.1 mfd. and one 0.05 mfd. capacitor in metal container	7.25	6224	Receptacle—Tungstone needle box holder	.75			
7270	Reactor—Filter reactor	4.00	6232	Box—Needle box with lid—Package of 2	.90			
7271	Transformer—Interstage transformer	4.25	6237	Holder—Twin needle holder with mounting screws	.75			
7272	Transformer—Power transformer—105-125 volts, 50-60 cycles	12.00	6238	Transformer—Input transformer	\$1.10			
7273	Capacitor—Comprising one 4.0 mfd., one 6.0 mfd., four 0.5 mfd., two 1.0 mfd., five 0.1 mfd., and one 0.05 mfd. capacitors in metal container	10.00	7084	Cover—Turntable cover	.50			
7274	Transformer—Power transformer—105-125 volts—25-40 cycles	15.00	7151	Back—Pickup housing back	.50			
7275	Transformer—Power transformer—220 volts—50-60 cycles	19.00	7305	Gear—Gear reducing unit complete	4.50			
7438	Capacitor—Variable tuning capacitor	5.20	7332	Cable—Main cable from receiver to input transformer, volume control and radio record switch	2.30			
7439	Drum—Tuning condenser drive drum with set screw—Complete with 3 dial scale mounting nuts	.50	7387	Reactor—Tone compensating reactor with bracket	.85			
7440	Scale—Dial and dial axle	.75	7388	Spindle—Turntable spindle with fibre gear—110 volts or 220 volts—60 cycles	6.00			
8271	Support—Receiver chassis metal mounting support—Package of 4	.75	7389	Rotor and shaft—110 volts or 220 volts—60 cycles	9.00			
LOUDSPEAKER ASSEMBLY								
3237	Speaker mounting screw assembly—Comprising 4 screws, 3 washers, 8 nuts and 4 eyelets—Package of 1 set	.50	7390	Motor mounting washer and springs—Comprising 3 "C" washers, 9 cup washers and 6 springs—Package of 1 set	.75			
7257	Coil assembly—Comprising field coil, cone bracket and magnet	6.00	7391	Volume control—Record volume control complete with mounting nut and washer	1.35			
8559	Ring—Cone retaining ring	.80	7393	Block—Pickup connector block and wire	.90			
8601	Cone—Speaker paper cone—Package of 5	15.00	7400	Spindle—Turntable spindle with fibre gear—25 cycles	3.00			
MOTOR BOARD ASSEMBLY								
X-13	Board—Motor board less equipment	5.85	7401	Rotor and shaft—25 cycles	10.00			
2614	Switch—Automatic brake switch	1.40	7402	Spindle—Turntable spindle with fibre gear—30 cycles	8.00			
2620	Cushion—Pickup rubber cushions—Comprising 1 damper and two pivot cushions—Package of 5 sets	1.25	7403	Rotor and shaft—30 cycles	10.00			
2767	Spring—Pickup magnet retaining spring—Package of 10	.50	7443	Rotor and shaft—110 volts or 220 volts—50 cycles	9.00			
2768	Armature—Pickup armature	.50	7444	Spindle—Turntable spindle with fibre gear—110 volts or 220 volts—50 cycles	6.00			
2770	Plate—Pickup damper plate—Package of 5	.50	8795	Motor—Motor complete—110 volts—60 cycles	19.85			
2771	Screw—Pickup damper plate mounting screw—Package of 10	.50	8800	Motor—Motor complete—110 volts—25 cycles	24.65			
2875	Knob—Volume control and record-radio switch knob—Package of 5	1.50	8801	Motor—Motor complete—110 volts—30 cycles	24.65			
2908	Spring—Pawl carrier spring—Package of 10	.50	8856	Motor—Motor complete—110 volts—50 cycles	19.85			
3052	Screw assembly—Pickup pole shoe mounting screw assembly—Comprising screw, nut and washer—Package of 10 sets	.50	8872	Lever—Shift lever complete with mounting screws	1.60			
3157	Gear—Driving gear—Located on turntable spindle above top plate	1.00	8873	Brake—Automatic brake complete with mounting screws and washers	3.50			
3159	Friction brake—Gear reducing friction brake spring with pad—Complete with mounting clip—Package of 4	2.00	8876	Support—Lid support	2.00			
3161	Spring—Shift lever spring—Package of 5	1.20	8877	Turntable—Turntable with cover	4.60			
3167	Magnet—Pickup magnet	2.50	8880	Arm—Pickup arm complete less pickup nut	6.00			
3169	Pole shoe—Pickup pole shoe—R. H.	1.45	8887	Motor—Motor complete—220 volts—60 cycles	19.85			
3170	Pole shoe—Pickup pole shoe—L. H.	1.45	8888	Motor—Motor complete—220 volts—50 cycles	19.85			
3205	Screw—Pickup needle holding screw—Package of 10	.80	10174	Spring—Automatic brake springs—Set of 4 springs—Package of 2 sets	.50			
3207	Screw—Pickup cover mounting screw—Package of 10	.50	10184	Plate—Automatic brake trip plate complete with screws—Package of 5	.50			
3208	Screw assembly—Pickup mounting screw assembly—Comprising screw, nut and washer—Package of 10	.60	CABINET ASSEMBLY					
3211	Washer—Turntable spindle leather washer—Package of 10	.50	X-14	Board—Baffle board and grille cloth	1.30			
3224	Switch—Record-Radio switch complete with mounting nut and washer	1.35	X-16	Stretchers	4.70			
3278	Bearing—Rotor shaft fibre thrust bearing and cork button—Package of 10	.50	X-17	Foot	1.00			
3279	Screw and nut—Rotor shaft thrust bearing adjusting screw and nut—Package of 10	.50	X-18	Leg	3.55			
3280	Washer—Metal washer—Located on turntable spindle underneath gear reducing unit—Package of 20	.50	X-19	Lid	12.00			
3281	Pawl—Gear reducing pawl with mounting stud	.50	X-21	Overlay—Front top rail end overlay—R. H. or L. H.	1.25			
			X-22	Overlay—Front top rail center overlay	2.65			
			X-23	Mouldings—Control panel mouldings—Package of 1 set	1.60			
			X-25	Escutcheon—Tuning dial escutcheon	1.15			
			X-26	Panel—Control panel	6.90			
			X-27	Doors—R. H. and L. H. doors complete less door pulls and hinges—Package of 1 set	8.00			
			X-28	Mouldings—Door mouldings for R. H. and L. H. doors—Package of 1 set	3.00			
			2776	Catch—Door catch and strike with nail—Package of 2 sets	.50			
			3156	Label—Metal trade mark label—Package of 5	2.50			
			6210	Hinge assembly—Door hinge assembly—Comprising 4 hinges and 16 mounting screws—Package of 1 set	.90			
			6211	Pull—Door pull with mounting screw—Package of 4	1.20			
			6219	Rings—Cabinet lid hinge complete with mounting screws—Package of 2	.50			
			6236	Support—Metal screen support	.50			
			9110	Cabinet—Cabinet complete less equipment	83.00			
			10991	Spring—Lid support spring—Package of 2	.50			