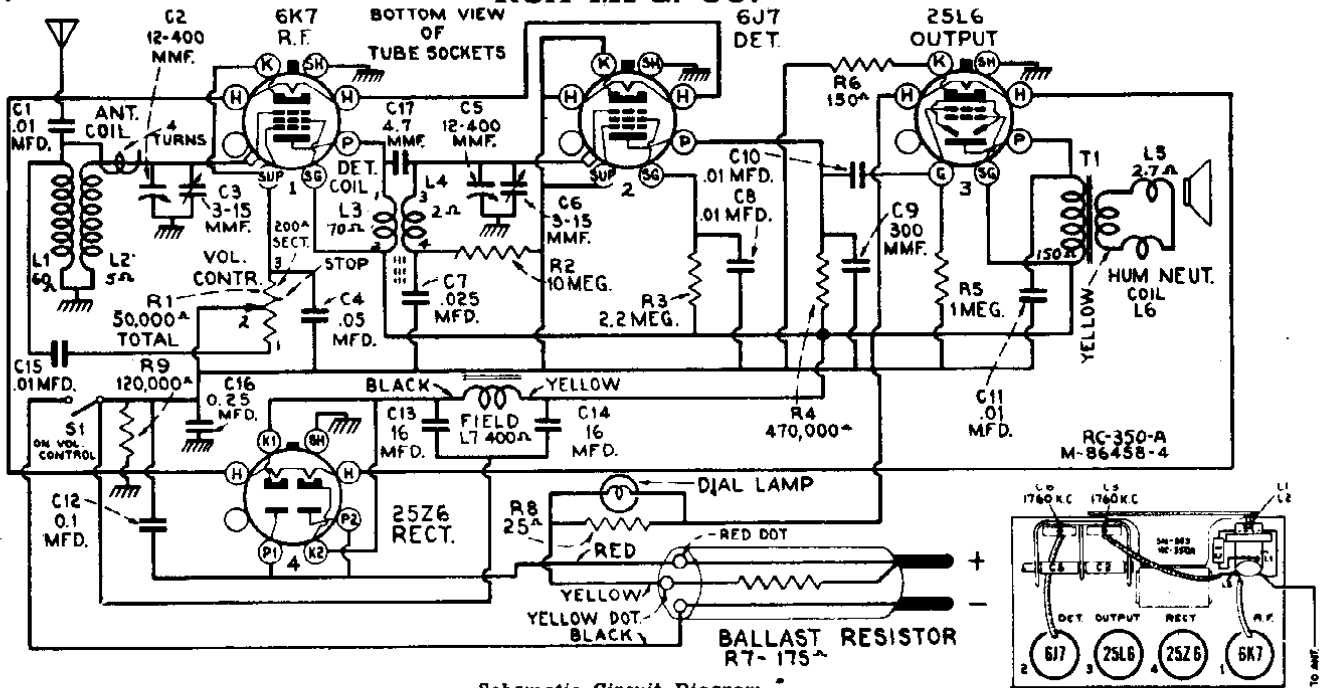




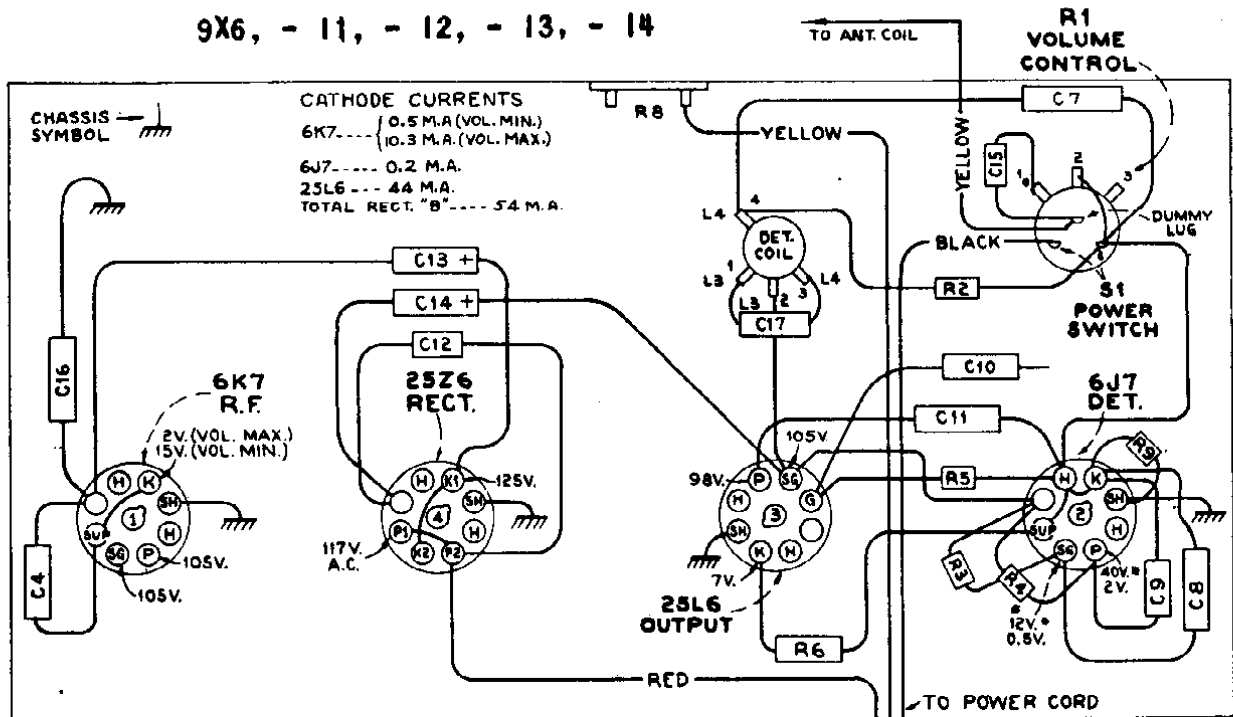
MODELS 9X6, 9X11, 9X12,  
9X13, 9X14

RCA MFG. CO.



Schematic Circuit Diagram

9X6, - 11, - 12, - 13, - 14



BOTTOM VIEW - REAR OF CHASSIS

R-F Wiring Diagram and Socket Voltages

\* Note: Values with (\*) are operating voltages.  
Values not starred are actual measured voltages.

Measurements made to common negative line, unless otherwise specified.

Measurements made with set tuned to quiet point, volume control at minimum, using 1,000-ohm-per-volt meter, having ranges of 10,

Precautionary Lead Dress

1. Dress green lead from antenna coil to gang up from speaker chassis.
2. Green lead from gang to grid of 6J7 must be dressed down and away from top of bracket, and centered in gang section.
3. Green lead from detector coil to gang must be dressed under pilot lamp bracket: Any excess wire should be pulled through to under side of chassis.
4. Pilot lamp leads must be dressed clear of gang rotor.
5. Magnetite core in detector coil must not be in contact with base or mounting screw.

50, and 250 volts. (Use nearest range above the specified measure voltage.)

Values should hold within approximately  $\pm 20\%$  for 117-volt 60-cycle a-c supply. On d-c, voltages are approximately 10% lower, except heaters, which remain the same.

**Power-Supply Polarity.**—For operation on d-c, the power plug must be inserted in the outlet for correct polarity. If the set does not function, reverse the plug. On a-c, reversal of the plug may reduce hum.

**Antenna.**—The set is equipped with a 25-foot antenna. Do not connect the antenna to ground. If an outdoor antenna is used, it should not be longer than 100 feet, including lead-in. If it is longer, connect a 100 to 200 mmfd. capacitor in series with the lead-in.

25-Cycle Operation

For 25-cycle operation, connect a 16 mfd., 150-volt dry electrolytic capacitor (Stock No. 31323) in parallel to C13.





# RCA Victor

## MODELS 9X6, 9X11, 9X12, 9X13, and 9X14

Chassis No. RC-350A

Four-Tube, Single-Band, AC-DC, T-R-F Receiver

### TECHNICAL INFORMATION AND SERVICE DATA

— 1938 No. 16A —

SERVICE DIVISION • RCA MANUFACTURING COMPANY, INC. • CAMDEN, N. J., U. S. A.

*A Service of the Radio Corporation of America*

#### Electrical and Mechanical Specifications

Frequency Range..... 540-1,760 kc  
Alignment Frequency..... 1,760 kc (ant., det.)

##### RCA TUBE COMPLEMENT

- (1) RCA-6K7..... R-F Amp.
- (2) RCA-6J7..... Detector
- (3) RCA-25L6..... Output
- (4) RCA-25Z6..... Rectifier

Dial Lamp..... Mazda No. 40, 6.3 volts, .15 amps.

##### POWER SUPPLY RATINGS

A-C Rating..... 105-125 volts, 50-60 cycles, 50 watts  
D-C Rating..... 105-125 volts, 50 watts

##### POWER OUTPUT (125-volt, 60-cycle supply)

Undistorted..... 1.0 watt  
Maximum..... 1.5 watts

##### LOUDSPEAKER

Type..... 3-inch Electrodynamic  
Voice-Coil Impedance..... 3 ohms at 400 cycles

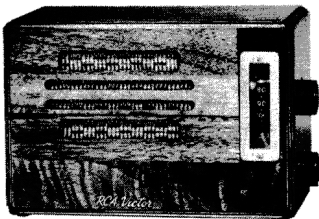
	Height	Width	Depth
Cabinet Dimensions.....	5 1/4 inches	7 1/2 inches	4-7/16 in.
Chassis Base.....	1 1/8 inches	5 1/2 inches	3 1/8 inches
Over-all Chassis Height.....			4 inches
Weight.....	4 1/2 lbs. (Net), 5 lbs. (Shipping)		
Operating Controls.....	(1) Power Switch—Volume; (2) Tuning		

#### Alignment Procedure

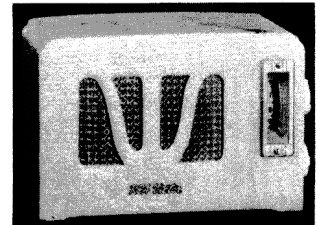
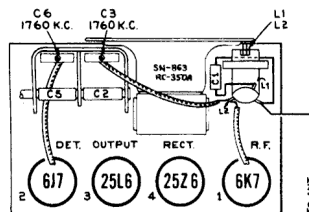
Reel up the antenna wire, and keep it away from chassis during alignment. Connect the high side of test-oscillator through an 80 mmfd. capacitor to the antenna terminal. Connect low side of oscillator to receiver chassis through a 0.1 mfd. capacitor. Turn gang condenser to minimum (full out), tune oscillator to 1,760 kc, connect an output meter across the voice coil, and turn volume control to maximum.

Adjust the two trimmers (C3 and C6) on side of gang condenser for maximum output, using lowest possible output from test-oscillator.

**Pre-setting Dial.**—With gang condenser rotor plates turned full in for maximum capacity, loosen dial-drum set-screw, and turn drum so that the top edge of dial (low-frequency end) is approximately 1/16-in. below level of gang frame, and tighten set-screw.



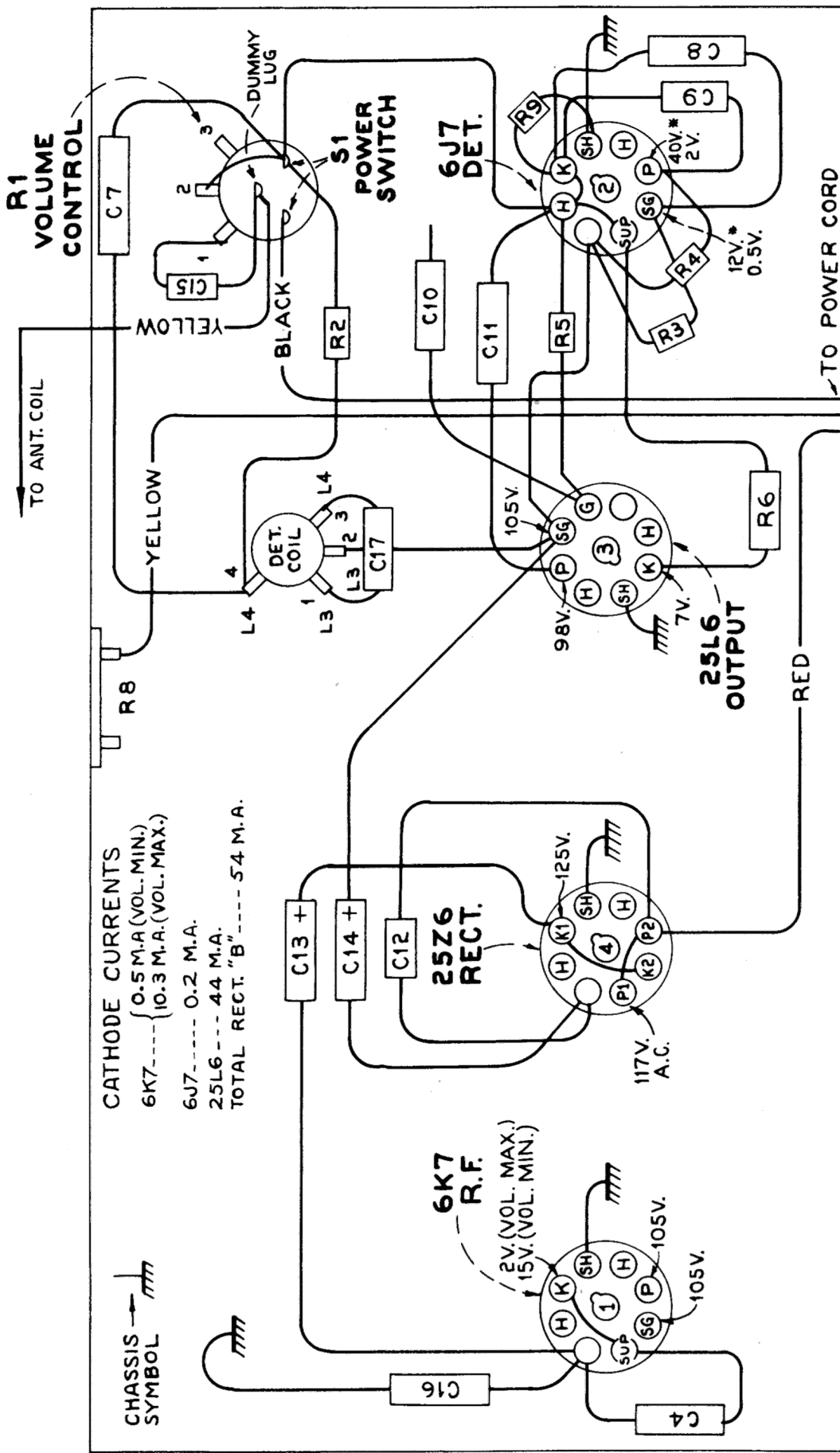
Model 9X6, wood, walnut.  
Model 9X11, catalin, Brazilian onyx, green.  
Model 9X12, catalin, jet black.  
Model 9X13, catalin, Arizona onyx, cream.  
Model 9X14, catalin, burl onyx, brown.



#### Replacement Parts

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

STOCK No.	DESCRIPTION	STOCK No.	DESCRIPTION
14392	Capacitor—4.7 mmfd. (C17).....	13601	Resistor—10 meg., 1/4 watt (R2).....
30883	Capacitor—300 mmfd. (C9).....	4387	Screw—No. 6-32 headless set screw for drum, Stock No. 31315.....
14393	Capacitor—.01 mfd. (C15).....	31318	Socket—Dial lamp socket.....
4870	Capacitor—.025 mfd. (C7).....	31319	Socket—Tube socket.....
30882	Capacitor—.05 mfd. (C4).....	32029	Transformer—Output transformer (T1).....
30899	Capacitor—.01 mfd. (C12).....	32026	Volume control and power switch (R1, S1).....
12484	Capacitor—.025 mfd. (C16).....		<b>SPEAKER ASSEMBLIES</b> (86309-2)
31323	Capacitor—16 mfd. (C13, C14).....	31325	Cone—Speaker cone and voice coil (L5).....
30875	Coil—Antenna coil (L1, L2).....	32025	Speaker complete.....
32027	Coil—R-f coil (L3, L4).....		<b>MISCELLANEOUS ASSEMBLIES</b>
31321	Condenser—2-gang variable tuning condenser (C2, C3, C5, C6).....	31326	Escutcheon—Station selector dial escutcheon—Model 9X6.....
32030	Cord—Resistance power cord (R7).....	31915	Escutcheon—Station selector dial escutcheon—Models 9X11, 9X12, 9X13 and 9X14 only.....
31314	Dial—Station selector dial scale.....	31914	Knob—Station selector or volume control knob—Models 9X12 and 9X13 only.....
31315	Drum—Station selector dial scale drum—less scale.....	31204	Knob—Station selector or volume control knob—Models 9X6, 9X11 and 9X14 only.....
4340	Lamp—Dial lamp.....	30900	Spring—Retaining spring for knobs.....
31193	Lead—Antenna lead—approximately 25 ft. long.....		
32028	Resistor—25 ohms, 3 watts, wire wound (R8).....		
13428	Resistor—150 ohms, 1/4 watt (R6).....		
13734	Resistor—120,000 ohms, 1/4 watt (R9).....		
12285	Resistor—470,000 ohms, 1/4 watt (R4).....		
13730	Resistor—1 meg., 1/4 watt (R5).....		
12679	Resistor—2.2 meg., 1/4 watt (R3).....		



P-84420  
RC-350-A

### BOTTOM VIEW - REAR OF CHASSIS

*R-F Wiring Diagram and Socket Voltages*

\* Note: Values with (\*) are operating voltages.  
Values not starred are actual measured voltages.

Measurements made to common negative line, unless otherwise specified.

Measurements made with set tuned to quiet point, volume control at minimum, using 1,000-ohm-per-volt meter, having ranges of 10, 50, and 250 volts. (Use nearest range above the specified measured voltage.)

Values should hold within approximately  $\pm 20\%$  for 117-volt 60-cycle a-c supply. On d-c, voltages are approximately 10% lower, except heaters, which remain the same.

# RCA MFG. CO.

**MODELS 9X6, 9X11, 9X12, 9X13, 9X14**  
**MODEL X-55**

## MODELS 9X6, - 11, - 12, - 13, - 14 (RC-350A) Replacement Parts

Dial Lamp..... Mazda No. 40, 6.3 volts, .15 amps.

### POWER SUPPLY RATINGS

A-C Rating..... 105-125 volts, 50-60 cycles, 50 watts  
 D-C Rating..... 105-125 volts, 50 watts

### POWER OUTPUT (125-volt, 60-cycle supply)

Undistorted..... 1.0 watt  
 Maximum..... 1.5 watts

### LOUDSPEAKER

Type..... 3-inch Electrodynamic  
 Voice-Coil Impedance..... 3 ohms at 400 cycles

STOCK No.	DESCRIPTION
<b>RECEIVER ASSEMBLIES</b>	
14392	Capacitor—4.7 mmfd. (C17)
30883	Capacitor—300 mmfd. (C9)
14393	Capacitor—.01 mfd. (C15)
4870	Capacitor—.025 mfd. (C7)
30882	Capacitor—.05 mfd. (C4)
30889	Capacitor—.01 mfd. (C12)
12484	Capacitor—.025 mfd. (C16)
31323	Capacitor—18 mfd. (C13, C14)
30875	Coil—Antenna coil (L1, L2)
32027	Coil—R-f coil (L3, L4)
31321	Condenser—2-gang variable tuning condenser (C2, C3, C5, C6)
32030	Cord—Resistance power cord (R7)
31314	Dial—Station selector dial scale
31315	Drum—Station selector dial scale drum—less scale
4340	Lamp—Dial lamp
31193	Lead—Antenna lead—approximately 25 ft. long
32028	Resistor—25 ohms, 3 watts, wire wound (R8)
13428	Resistor—150 ohms, ½ watt (R6)
13734	Resistor—120,000 ohms, ½ watt (R9)
12285	Resistor—470,000 ohms, ½ watt (R4)
13730	Resistor—1 meg., ½ watt (R5)
12679	Resistor—2.2 meg., ½ watt (R3)
13601	Resistor—10 meg., ½ watt (R2)
4387	Screw—No. 6-32 headless set screw for drum, Stock No. 31315
31318	Socket—Dial lamp socket
31319	Socket—Tube socket
32029	Transformer—Output transformer (T1)
32028	Volume control and power switch (R1, S1)

## Alignment Procedure

Reel up the antenna wire, and keep it away from chassis during alignment. Connect the high side of test-oscillator through an 80 mmfd. capacitor to the antenna terminal. Connect low side of oscillator to receiver chassis through a 0.1 mfd. capacitor. Turn gang condenser to minimum (full out), tune oscillator to 1,760 kc, connect an output meter across the voice coil, and turn volume control to maximum.

Adjust the two trimmers (C3 and C6) on side of gang condenser for maximum output, using lowest possible output from test-oscillator.

**Pre-setting Dial.**—With gang condenser rotor plates turned full in for maximum capacity, loosen dial-drum set-screw, and turn drum so that the top edge of dial (low-frequency end) is approximately 1/16-in. below level of gang frame, and tighten set-screw.

### SPEAKER ASSEMBLIES (86309-2)

31325 Cone—Speaker cone and voice coil (L5).....  
 32025 Speaker complete.....

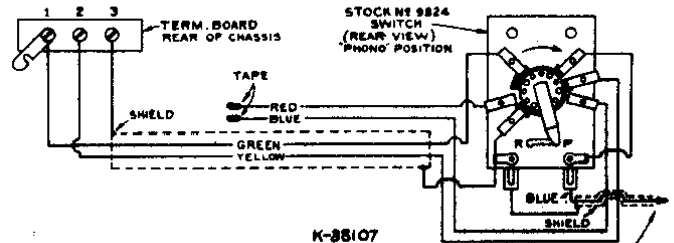
### MISCELLANEOUS ASSEMBLIES

31326 Escutcheon—Station selector dial escutcheon—Model 9X6.....  
 31915 Escutcheon—Station selector dial escutcheon—Models 9X11, 9X12, 9X13 and 9X14 only.....  
 31914 Knob—Station selector or volume control knob—Models 9X12 and 9X13 only.....  
 31204 Knob—Station selector or volume control knob—Models 9X6, 9X11 and 9X14 only.....  
 30900 Spring—Retaining spring for knobs.....

## Adjustments for Push-Button Tuning MODEL X-55

The push-buttons should be adjusted for six favorite stations after the receiver has been operating for a brief warm-up period. Each button may be set up to any standard broadcast station. The preferable arrangement is to adjust for stations in the order of frequency, from low to high. Proceed as follows:

1. Pull off the push-buttons and loosen the push-button rods with a small screwdriver.
2. Turn the accessory switch to "Radio" position and accurately tune in the station for which the first button is to be set.
3. Press in push-button rod No. 1 (left) with the screwdriver, as far as it will go without undue pressure, hold in, retune station with manual control if necessary for best reception, and then carefully tighten up the rod. Do not tighten more than ¼ turn after the rod begins to grip or damage to the mechanism may result.
4. Replace the push-button on its shaft.
5. Proceed in a similar manner for the remainder of the push-buttons.



Record Player Connections, Using a No. 9824 Switch

STOCK No.	DESCRIPTION	STOCK No.	DESCRIPTION
<b>CHASSIS ASSEMBLY (RC-473A)</b>			
33719	Belt—Push button arm adjustment belt and rivets	12285	Resistor—470,000 ohms, ½ W.
34024	Board—"Antenna-Ground" board	30271	Resistor—4.7 megohm, ½ W.
34025	Board—"Radio-Phono" board	13601	Resistor—10 megohm, ½ W.
33731	Button—Push button	33735	Screw—Push arm lock screw
12720	Capacitor—100 mmfd., moulded mica	33725	Shaft—Tuning condenser drive shaft and retainer
12725	Capacitor—150 mmfd., moulded mica	31365	Socket—Lamp socket
34213	Capacitor—430 mmfd., mica	31319	Socket—Tube socket
30433	Capacitor—470 mmfd., moulded mica	33720	Spring—Push button arm return spring
14393	Capacitor—.01 mfd., 300 volt	31418	Spring—Tuning condenser drive cord spring
11315	Capacitor—.015 mfd., 400 volt	33722	Transformer—1st i.f. transformer
32787	Capacitor—.05 mfd., 400 volt	34026	Transformer—2nd i.f. transformer
4839	Capacitor—.01 mfd., 400 volt	33726	Washer—"C" washer for drive shaft
34505	Capacitor—.02 mfd., 300 volt	<b>SPEAKER ASSEMBLIES (RL 85-2)</b>	
34212	Capacitor—Electrolytic comprising 2 sections of 50 mfd. each, 150 volts	32907	Cap—Cone center dust cap
33724	Coil—Oscillator coil (L1)	34554	Cone—Speaker cone and voice coil
33728	Condenser—Tuning condenser and drum assembly	34802	Speaker—5-inch permanent magnet—less transformer
33631	Control—Volume control and power switch (S1)	34803	Transformer—Output transformer
32634	Cord—Tuning condenser drive cord	<b>MISCELLANEOUS ASSEMBLIES</b>	
33633	Indicator—Station selector pointer	31456	Cover—8 protective covers for push-button markers
11765	Lamp—Pilot lamp—Mazda No. 51	33729	Dial—Glass dial scale
33721	Loop—Antenna loop	33637	Escutcheon—Dial and button escutcheon
33727	Plate—Dial plate frame	30863	Knob—Tuning, volume control, or power switch knob
30880	Resistor—150 ohm, ½ W.	30900	Spring—Retaining spring for knob or button
30152	Resistor—1,000 ohms, 1 W.	33973	Marker—1 set push-button marker
12454	Resistor—33,000 ohms, ½ W.		
12412	Resistor—47,000 ohm, ½ W.		
12664	Resistor—230,000 ohms, ½ W.		