



RCA Victor

MODEL A-5

Six-Tube, Two-Band, AC, Superheterodyne Receiver

TECHNICAL INFORMATION AND SERVICE DATA

SERVICE DIVISION • RCA VICTOR COMPANY LIMITED • MONTREAL

Electrical Specifications

FREQUENCY RANGES

Standard Broadcast 540-1,720 kc
Short Wave 5.8-18 mc
INTERMEDIATE FREQUENCY 455 kc

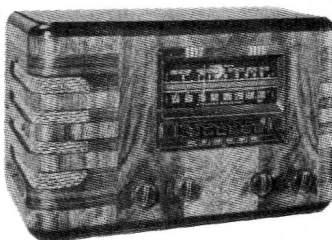
TUBE COMPLEMENT

- (1) Type-6SA7.. 1st Detector—Oscillator
- (2) Type-6SK7 I-F Amplifier
- (3) Type-6SQ7..... 2nd Detector, A.V.C.,
and A-F Amplifier
- (4) Type-6F6-G Power Output
- (5) Type-5Y4G Rectifier
- (6) Type-6U5 Tuning Indicator

PILOT LAMPS (2) Mazda No. 44, 6.3 volts,
0.25 amp.

POWER OUTPUT RATING

Undistorted 2.5 watts
Maximum 4.5 watts



LOUDSPEAKER (RL-79-1)

Type 8-inch Electrodynamic
V.C. Impedance... 3.4 ohms at 400 cycles

POWER SUPPLY RATINGS

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

Rating B..... 105-125 volts, 25-60 cycles,
80 watts

Push Button Adjustments

The push buttons should be adjusted for six favorite stations after the receiver has had a brief warm-up period.

Any standard broadcast stations may be chosen. The preferable arrangement is to adjust for stations in the order of frequency, from low to high.

Proceed as follows:—

1. Set the accessory tone knob to "Radio" and turn the range selector to "A" band position.

2. Remove the six push buttons by inserting a small screwdriver blade in the slot provided on the under side of the button. Press the screwdriver blade upwards at the same time pull the button forward.

3. Loosen the push arm adjusting screws accessible through the push button openings.

4. Press in the tuning knob and accurately tune in the first station.

5. With station accurately tuned in, press in the first push button and tighten screw.

6. Proceed in a similar manner to adjust the remainder of the push buttons.

7. Replace push buttons by inserting in the escutcheon openings, spring side down. Press button in as far as possible to securely lock button in escutcheon.

8. Place call letter tabs in openings provided.

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 tuning drum. 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 240° mark on the drum scale must be vertical and directly above the center of the shaft of the tuning drum 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.

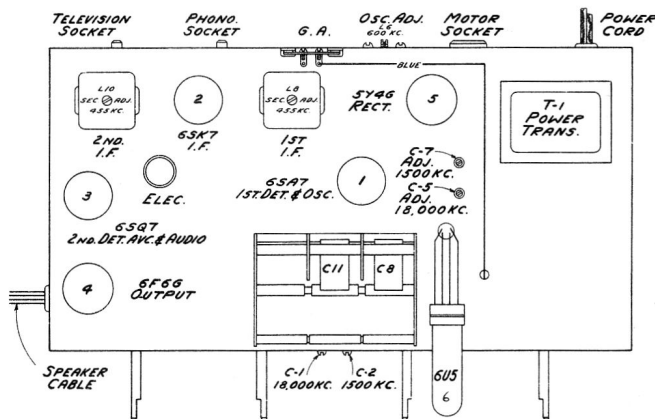
On the inner side of the tuning drum are two projections which serve as stops to prevent extreme rotation of the gang condenser. The tuning drum should be set so that the stop limiting clockwise movement of the drum takes effect just as the gang condenser plates are becoming fully meshed, thus preventing stress on the gang due to extreme rotation.

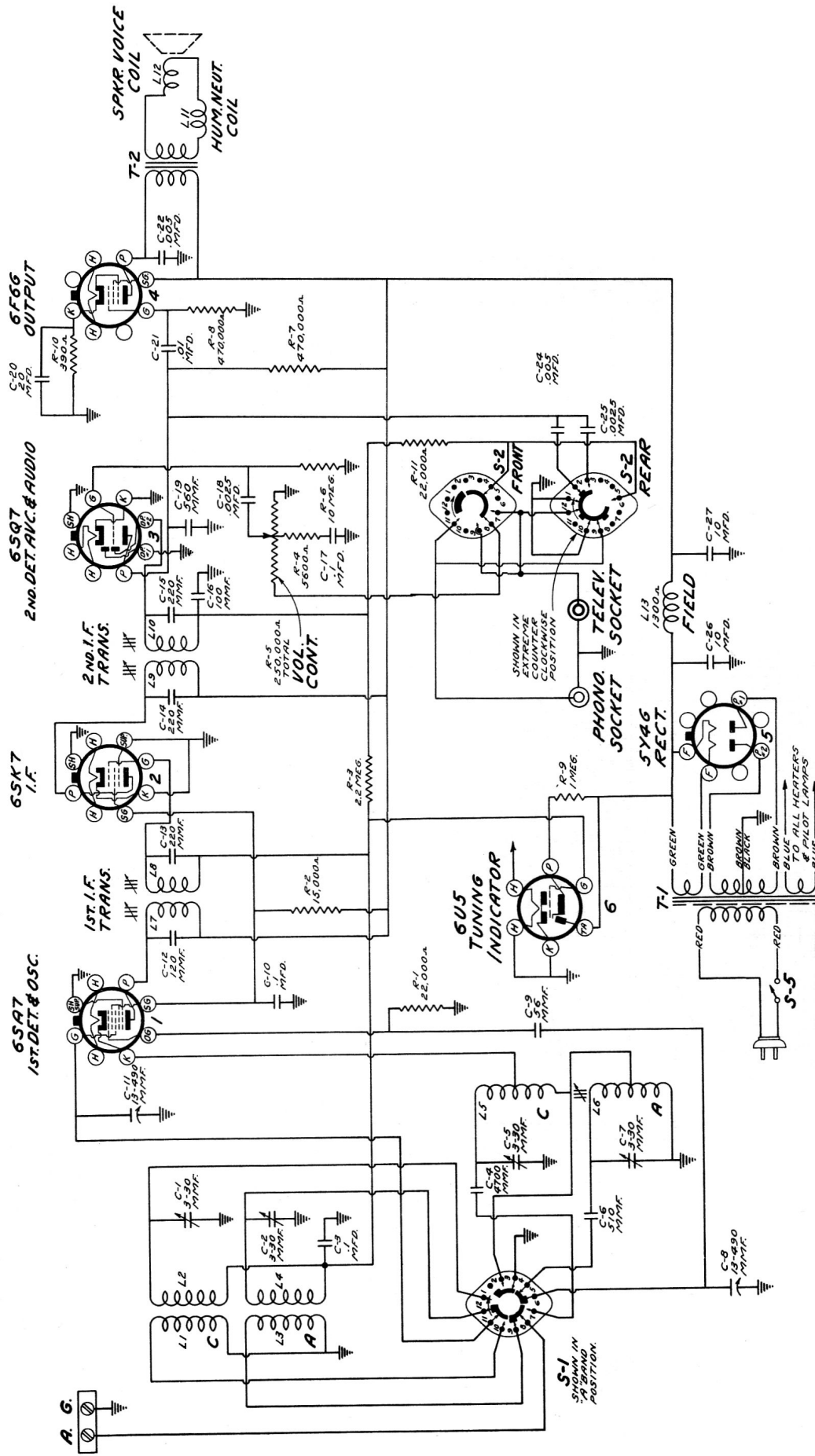
Pointer for Calibration Scale.—Improvise a pointer for the calibration scale by fastening a piece of wire to the chassis, and bend the wire so that it points to the 240° mark on the calibration scale when the plates are fully meshed.

Steps	Connect the high side of the test-osc. to—	Tune test osc. to—	Turn radio dial to—	Adjust the following for maximum peak output
1	6SK7 grid in series with .01 mfd.	455 kc	"A" Band Quiet Point between 550-750 kc	L9 and L10 (2nd I-F Trans.)
2	6SA7 grid in series with .01 mfd.			L7 and L8 (1st I-F Trans.)
3	Ant. terminal in series with 300 ohms	18 mc	18 mc (24°) "C" Band	C5 (osc.)* C1 (ant.)
4	Ant. terminal in series with 200 mmfd.	1,500 kc	1,500 kc (41.75°) "A" Band	C7 (osc.) C2 (ant.)
5		600 kc	600 kc (200.25°) "A" Band	L6 (osc.) Rock Gang
6	Repeat step 4.			

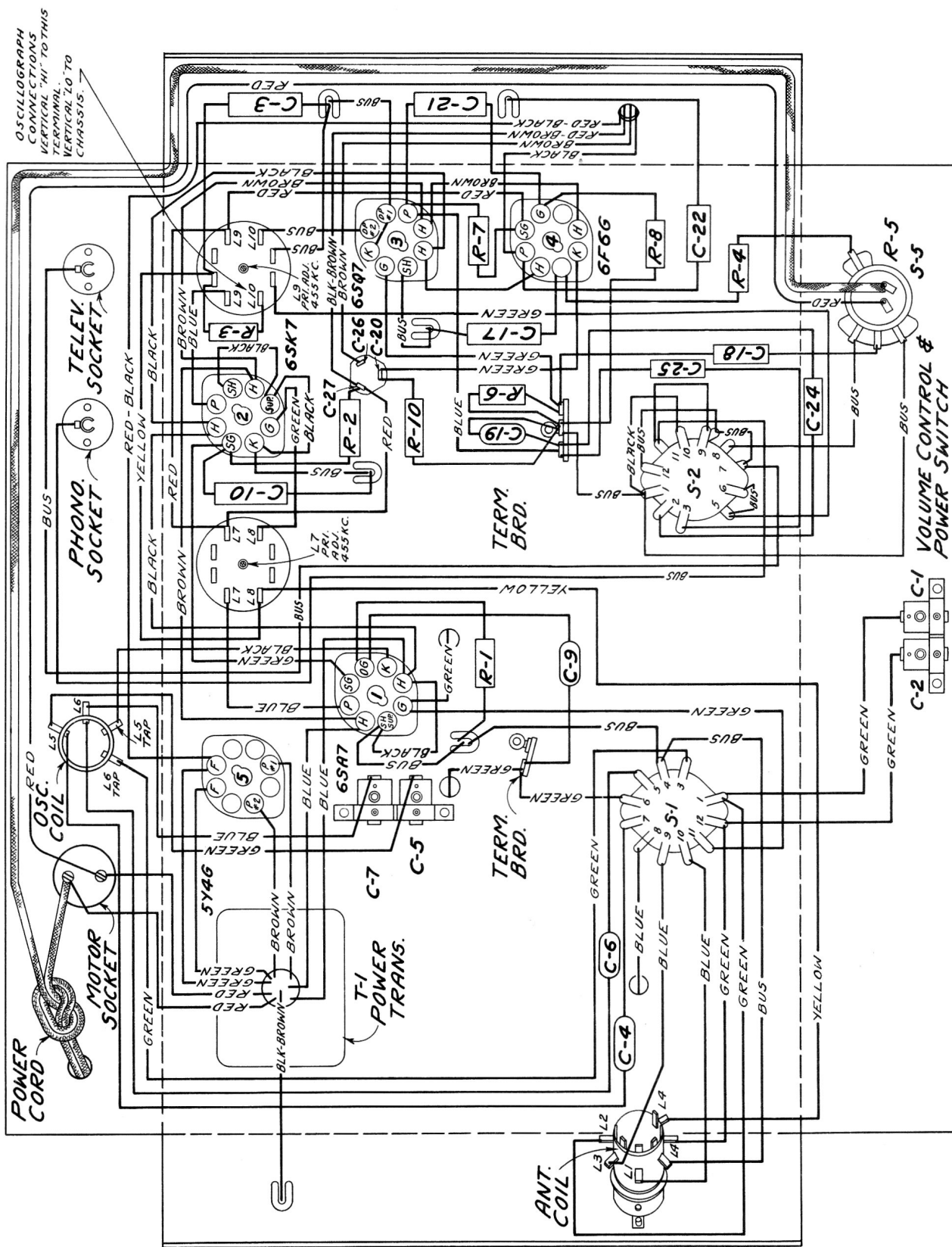
* Use minimum capacity peak if two can be obtained.

Note: Oscillator tracks above signal on all bands.





Schematic Circuit Diagram



Chassis Wiring Diagram

REPLACEMENT PARTS FOR MODEL A5

SIX-TUBE, TWO BAND

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			
14517	Board-Antenna-ground terminal board...	33761	Transformer-2nd I.F. transformer (L9,L10,C14,C15).....
14394	Cable-Tuning tube cable & socket (R9)..	S-2476	Transformer-Power transformer 105-125 volt 60 cycle (T1).....
30766	Cap-Tuning tube cap.....	S-2535	Transformer-Power transformer 105-125 volts 25/60 cycle (T1)....
31292	Capacitor-Dial trimmer capacitor 3-30 mmfd. (C1,C2,C5,C7).....	S-2536	Volume control & power switch (R5, S5).....
12723	Capacitor-56 Mmfd. (C9).....	REPRODUCER ASSEMBLIES (RL79-1)	
30433	Capacitor-510 mmfd.(C6).....	32906	Coil-Hum neutralizing coil (L11)...
12537	Capacitor-560 mmfd.(C19).....	31647	Coil-Field Coil (L13).....
12897	Capacitor-4700 mmfd. (C4).....	32934	Cone-Reproducer cone and voice coil (L12).....
3932	Capacitor-.0025 mfd.(C25,C18).....	31302	Plug-4 prong male plug.....
4838	Capacitor-.005 mfd. (C24,C22).....	33078	Reproducer complete.....
4937	Capacitor-.01 mfd. (C21).....	32905	Transformer-Output transformer (T2).....
4839	Capacitor-0.1 mfd. (C10,C3,C16,C17)..	MISCELLANEOUS ASSEMBLIES	
32240	Capacitor-Electrolytic capacitor consisting of two 10 mfd. and one 20 mfd. sections (C20,C26,C27).....	32907	Cap-Dust cap for cone centre(Pkg.5) .
S-2527	Coil-Antenna coil (L1,L2,L3,L4).....	S-2537	Button-Push button.....
S-2528	Coil-Oscillator coil (L5,L6).....	S-2538	Dial-Station selector glass dial scale.....
S-2529	Cord-Indicator pointer drive cord.....	S-2539	Escutcheon-Dial escutcheon less push buttons.....
34267	Drum-Variable condenser drive drum....	S-2540	Knob-Range,tuning,tone or volume control knob.....
S-2531	Indicator-Pointer & carriage assembly.	S-2541	Marker-Station call letter markers (1 set).....
11891	Lamp-Pilot lamp.....	14270	Spring-Knob retaining spring (Pkg.10).....
5040	Plug-4 contact female plug for speaker cable.....	S-2542	Tool-Push button adjusting tool....
31388	Resistor-390 ohm, 1 watt (R10).....	S-2543	Spring-Push button retaining spring (Pkg.3).....
S-1894	Resistor-5,600 ohm, 1/4 watt (R4).....		
33489	Resistor-15,000 ohm 2.5 watts (R2)....		
13998	Resistor-22,000 ohm, 1/4 watt(R1,R11).		
S-1690	Resistor-470,000 ohm,1/4 watt(R7,R8)..		
12679	Resistor-2.2 meg. 1/4 watt (R3).....		
13601	Resistor-10 meg. 1/4 watt (R6).....		
S-2446	Retainer-AC power socket retainer (Pkg.3).....		
32086	Roller-Drive Shaft rubber roller.....		
S-2447	Socket-AC power socket.....		
31364	Socket-Pilot light socket.....		
33514	Socket-Phono & Television receptacle..		
31251	Socket-Radiotron socket.....		
31418	Spring-Drive cord tension spring(Pkg.2)		
S-2533	Switch-Range switch (S1).....		
33424	Switch-Tone-Phono-Telev.Switch (S2)...		
S-2534	Transformer-1st I.F. transformer (L7,L8,C12,C13).....		