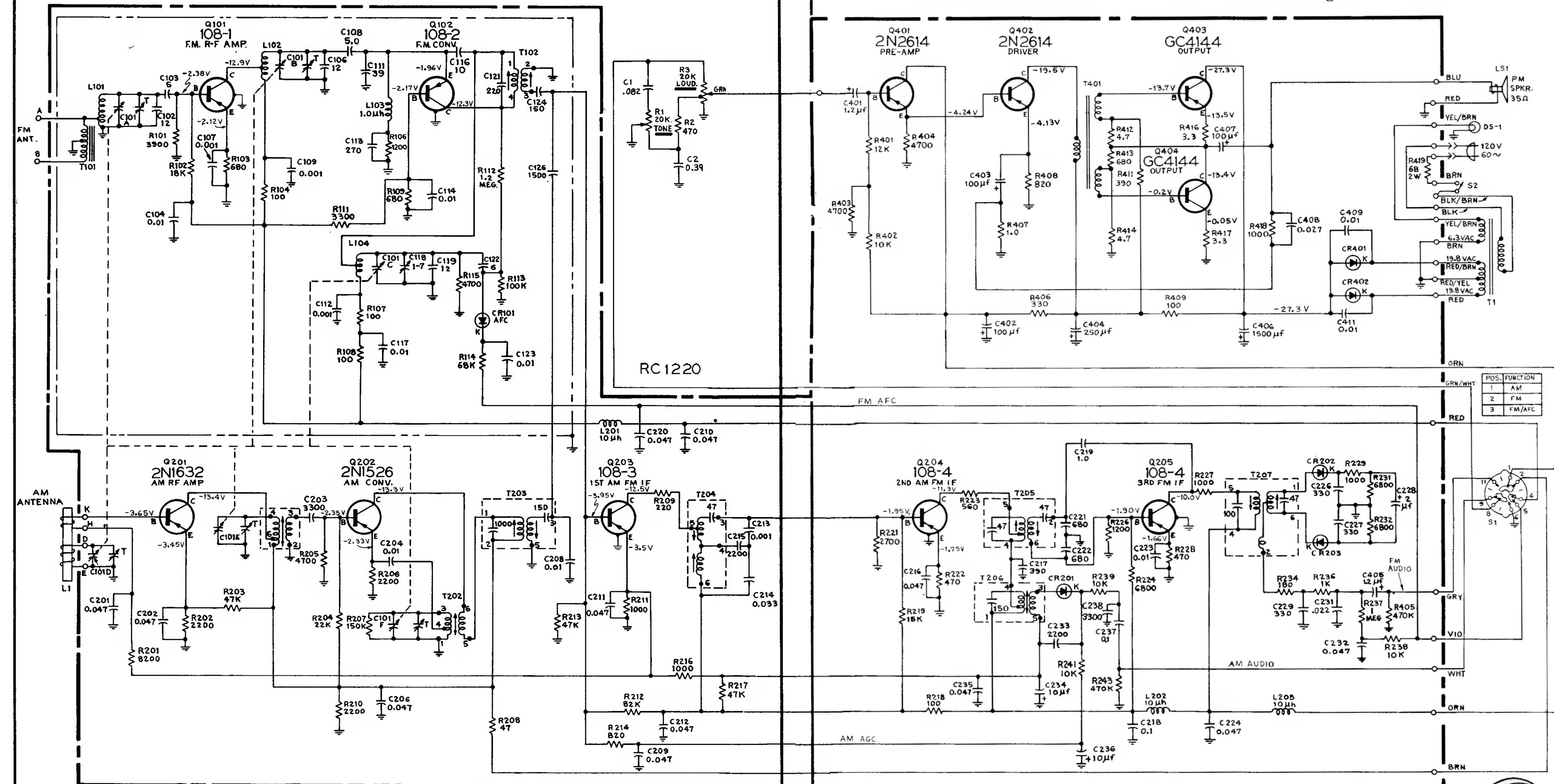


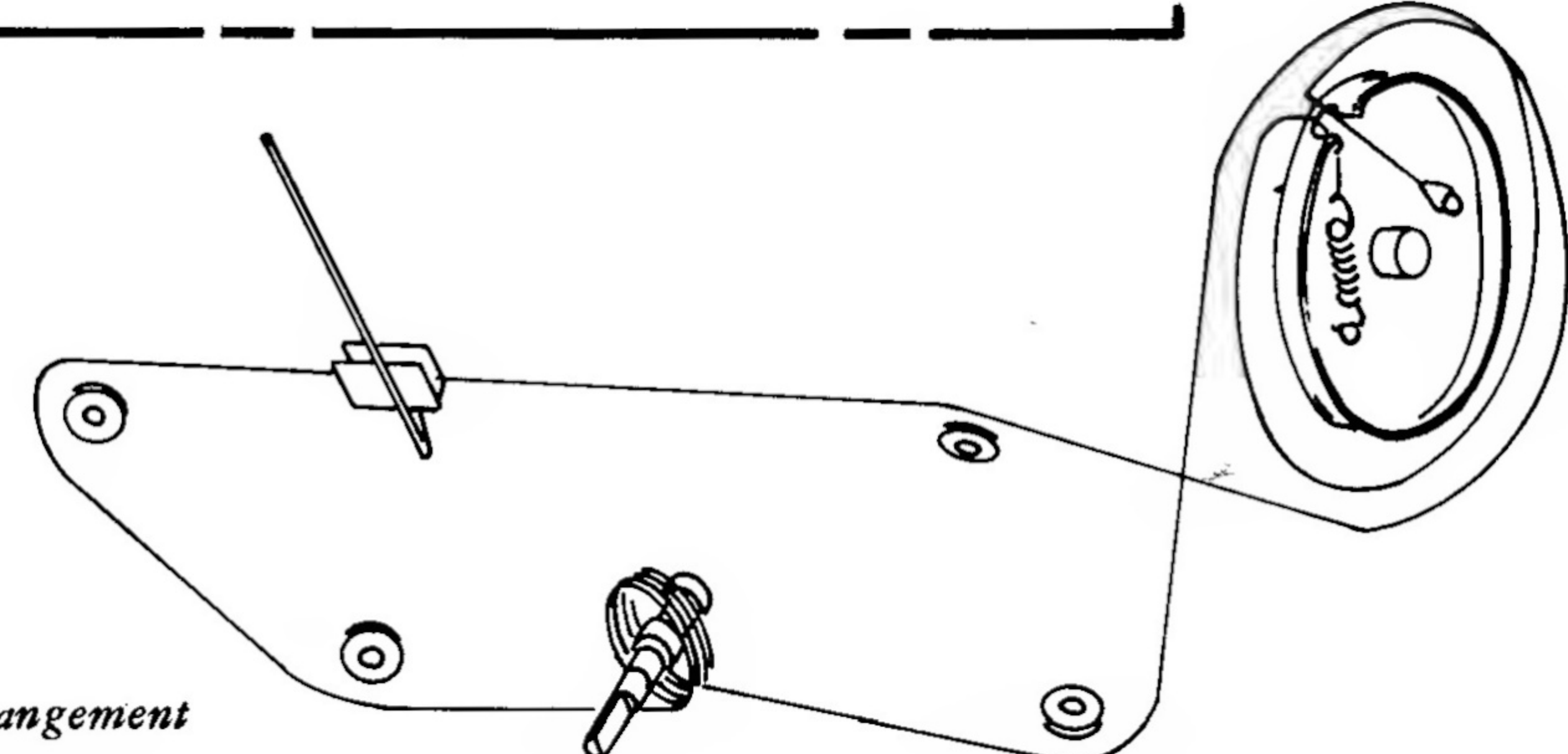
RCA Victor Chassis RC-1220A Schematic Diagram



SYMBOL NO.	STOCK NO.	DESCRIPTION
C118	115092	trimmer—1.8 pF—for C101C
C119	115658	ceramic—12 pF, ±5%, 500 v
C121	115660	mica—220 pF, ±5%, 100 v
C122	115656	ceramic—6 pF, ±10%, 500 v
C123	115091	ceramic—0.01 μF, ±20%, 100 v
C124	115661	mica—150 pF, ±5%, 100 v
C126		ceramic—1500 pF, ±10%, 500 v
C201		ceramic—0.047 μF, ±100—20%, 100 v
C202		ceramic—0.047 μF, ±100—20%, 100 v
C203		ceramic—3300 pF, ±20%, 100 v
C204		ceramic—0.01 μF, ±20%, 100 v
C206		ceramic—0.047 μF, ±100—20%, 100 v
C208		ceramic—0.01 μF, ±20%, 100 v
C209		ceramic—0.047 μF, ±100—20%, 100 v
C210		ceramic—0.047 μF, ±100—20%, 100 v
C211		ceramic—0.047 μF, ±100—20%, 100 v
C212		ceramic—0.047 μF, ±100—20%, 100 v
C213		ceramic—1000 pF, ±10%, 500 v
C214		ceramic—0.033 μF, ±20%, 100 v

C215		ceramic—2200 pF, ±10%, 500 v
C216		ceramic—0.047 μF, ±100—20%, 100 v
C217	105310	ceramic—390 pF, ±10%, 500 v
C218	112969	ceramic—0.1 μF, ±20%, 50 v
C219	115666	headed lead—1 pF, ±5%, 500 v
C220		ceramic—0.047 μF, ±100—20%, 100 v
C221		ceramic—680 pF, ±10%, 500 v
C222		ceramic—680 pF, ±10%, 500 v
C223		ceramic—0.01 μF, ±100—20%, 100 v
C224		ceramic—0.047 μF, ±100—20%, 100 v
C226		ceramic—330 pF, ±10%, 500 v
C227		ceramic—330 pF, ±10%, 500 v
C228	111370	electrolytic—2 μF, ±250—10%, 50 v
C229		ceramic—330 pF, ±10%, 500 v
C231		ceramic—0.022 μF, ±20%, 100 v
C232		ceramic—0.047 μF, ±100—20%, 100 v
C233		ceramic—2200 pF, ±20%, 100 v
C234	115100	electrolytic—10 μF, ±100—10%, 10 v
C235		ceramic—0.047 μF, ±100—20%, 100 v
C236	115100	electrolytic—10 μF, ±100—10%, 10 v
C237		mylar—0.1 μF, ±20%, 100 v
C238		ceramic—3300 pF, ±20%, 100 v
C401	115180	electrolytic—1.2 μF, ±20%, 15 v
C402	115803	electrolytic—100 μF, ±100—10%, 15 v
C403	115617	electrolytic—100 μF, ±250—10%, 6 v

- NOTES:
- UNLESS OTHERWISE SPECIFIED
 - ALL CAPACITOR VALUES LESS THAN 1.0 ARE μF VALUES 1.0 & ABOVE ARE PF.
 - ALL RESISTORS 1/2 W & VALUES ARE IN OHMS. K=1000
 - ALL CONNECTORS SHOWN FROM WIRED SIDE.
 - CONNECTOR PIN NUMBERS FOR REF ONLY.
 - ALL SECTIONS OF SWITCH S1 ARE VIEWED FROM FRONT, WITH SWITCH IN EXTREME C.C.W. POSITION.
 - VOLTAGES MEASURED WITH "VOLTOHMYST" B SHOULD HOLD WITHIN ± 20% AT RATED LINE VOLTAGE. MEASURED TO CHASSIS GROUND "B" NO SIGNAL APPLIED.

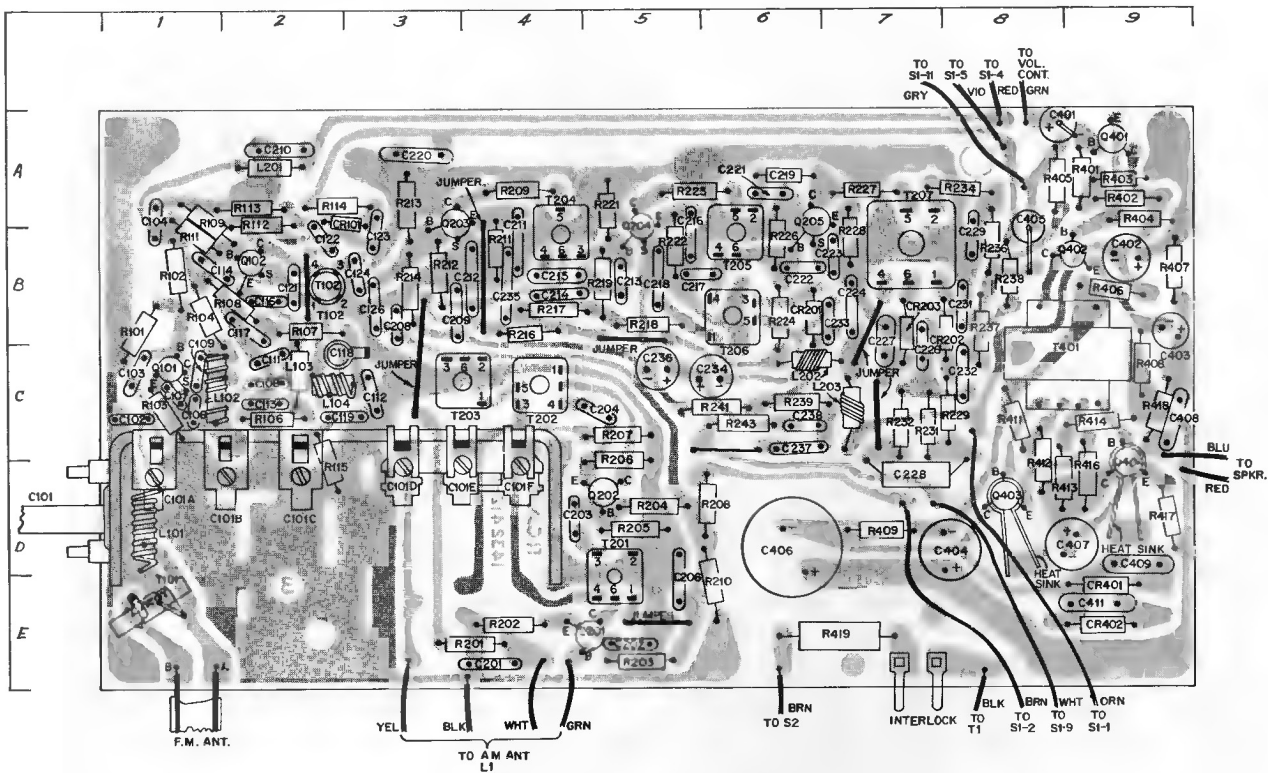


RCA VICTOR

Models RHC-29W, RHC-33W, RHC-37L, RHC-41W, RHC-45F, RHC-49S

Chassis RC-1220A

Data on these sets presented below and on the next three pages. Alignment is on the next page at right. Circuit diagram and other service material are on the two pages following.



Chassis Layout—Component View

C101... D1	C126... B3	C228... D7	CR401... E9	R102... B1	R214... B3	R404... A9
C101A... D1		C229... B8	CR402... E9	R103... C1	R216... B4	R405... A8
C101B... D2	C201... E4	C231... B8		R104... B1	R217... B4	R406... B9
C101C... D2	C202... E5	C232... CB	L101... D1	R106... C2	R218... B5	R407... B9
C101D... D3	C203... D4	C233... B7	L102... C1	R107... B2	R219... B5	R408... C9
C101E... D4	C204... C5	C234... C6	L103... C2	R108... B2	R221... A5	R409... D7
C101F... D4	C206... E5	C235... B4	L104... C2	R109... A1	R222... B5	R411... C8
C102... C1	C208... B3	C236... C5		R111... B1	R223... A5	R412... D8
C103... C1	C209... B3	C237... C6	L201... A2	R112... A2	R224... B6	R413... D9
C104... A1	C210... A2	C238... C6	L202... C6	R113... A2	R226... B6	R414... C9
C106... C1	C211... A4	C401... A8	L203... C7	R114... A2	R227... A7	R416... D9
C107... C1	C212... B4	C402... B9		R115... D2	R228... B7	R417... D9
C108... C2	C213... B5	C403... B9	Q101... C1		R229... CB	R418... C9
C109... C1	C214... B4	C404... D8	Q102... B2	R201... E4	R231... C7	R419... E7
C111... C2	C215... B4	C405... AB	Q201... E5	R202... E4	R232... C7	
C112... C3	C216... A5	C406... D6	Q202... D5	R203... E5	R234... A8	T101... E1
C113... C2	C217... B5	C407... D9	Q203... A3	R204... D5	R236... BB	T102... B2
C114... B1	C218... B5	C408... C9	Q204... A5	R205... D5	R237... BB	
C116... B2	C219... A6	C409... D9	Q205... A6	R206... C5	R238... B8	T201... D5
C117... B2	C220... A3	C411... E9		R207... C5	R239... C6	T202... C4
C118... C2	C221... A6		Q401... A9	R208... D6	R241... C6	T203... C3
C119... C2	C222... B6		Q402... B9	R209... A4	R243... C6	T205... B6
C121... B2	C223... B7	CR101... A3	Q403... DB	R210... E6		T206... B6
C122... B2	C224... B7	CR201... B6	Q404... D9	R211... B4	R401... A9	T207... A7
C123... B3	C226... C7	CR202... BB		R212... B3	R402... A9	
C124... B3	C227... B7	CR203... B7	R101... B1	R213... A3	R403... A9	T401... C8

RCA Victor Chassis RC-1220A, Continued

AM-FM ALIGNMENT PROCEDURE

INSTRUMENTS REQUIRED

Signal Sources

1. RF Signal Generator (RCA WR-50A or equivalent)
2. TV/FM Sweep Generator (RCA WR-69A or equivalent)
3. Marker Generator (RCA WR-99A or equivalent)

Output Indicators

4. Vacuum-Tube Voltmeter (RCA WV-98B or equivalent)
5. Oscilloscope (RCA WO-91A or equivalent)

Tools

6. Hex head alignment tool
7. Thin fibre shaft alignment tool

GENERAL ALIGNMENT CONDITIONS

1. Connect low side of signal source and output indicator to chassis ground as close as possible to high side connection unless otherwise specified.
2. Signal input must be kept as low as possible to avoid AVC action. (Set output indicator to highest sensitivity.)
3. Markers must be accurate. (Crystal controlled or checked against a crystal calibrator.) The 10.7 mc marker used in each section of the FM alignment must be the same. (Generator dial should not be moved.)
4. Marker insertion and amplitude must not distort the oscilloscope trace.
5. Standard modulation is 400 cycle at 30% amplitude.

STEP	Signal Source— Connected to—	Set Signal to—	Set Radio Dial to—	Output Indicator— Connected to—	Adjust	Adjust for—	STEP
1	Set Radio Function Switch on "AM"						1
2	RF Generator— Q202 Base through a 0.01 μ f capacitor	455 kc (modulated)	Quiet point on band near 1600 kc	V.T.V.M.— Across speaker voice coil	T206 (3rd AM IF)	Maximum	2
3					T204 Tap (2nd AM IF)		3
4					T203 Top & Bottom (1st AM IF)		4
5	RF Generator— A standard radiating loop or short piece of wire placed near AM antenna	1620 kc (modulated)	gang fully open	V.T.V.M.— Across speaker voice coil	C101F-T (Oscillator Trim)	Maximum	5
6		1400 kc (modulated)	1400 kc		C101D-T (Antenna Trim)		6
7					C101E-T (RF Trimmer)		7
8		600 kc (modulated)	600 kc (rack gang)		T201 (RF Trans.)		8
9					T202 (Oscillator Coil)		9
10	Repeat steps 2 through 4 and steps 5 through 9 as necessary to obtain maximum sensitivity on stations						10
11	Set Radio Function Switch on "FM"						11
12	RF Generator— Q205 Base through a 0.01 μ f capacitor	10.7 mc (unmodulated)	Quiet point on band	V.T.V.M.— Across R232	T207 Bottom core (Pri.) (Ratio Detector)	Maximum	12
13				V.T.V.M.— (Set to center zero) Junction of C231, R236, R237	T207 Tap core (Sec.) (Ratio Detector)	Zero Voltage (cross-over)	13
14	Repeat steps 12 and 13 as necessary to obtain a balanced "S" curve with ± 200 kc linearity						14
15	TV/FM Sweep Gen.— Q204 Base through a 0.01 μ f capacitor	240 kc Sweep centered at 10.7 mc with markers at 10.6, 10.7 & 10.8 mc	Quiet point on band	Oscilloscope— with signal Tracing Probe (RCA WG-302A) Q205 Base (adjust signal input to obtain a 30 mv P-P reading on oscilloscope)	*Detune T204 Bottom	Maximum symmetrical response centered at 10.7 mc with 10.6 and 10.8 mc at equal heights within 10% and approx. 40% down slope (limits between 30% - 60%)	15
16	T205 Top & Bottom (3rd FM IF)				16		
17	TV/FM Sweep Gen.— Q203 Base through a 0.01 μ f capacitor				*Detune T102 Top		17
18	T204 Bottom (2nd FM IF)				18		
19	TV/FM Sweep Gen.— One FM antenna terminal				T102 Top & Bottom (1st FM IF-in tuner)		19
20	Repeat steps 15 thru 19 as necessary to obtain specified response						20
21	Marker Generator— across FM antenna terminals through a matching network if necessary	108.5 mc	gang fully open	V.T.V.M.— Across speaker voice coil	C118 (Oscillator Trimmer)	Maximum	21
22					C101B-T (RF-Trimmer)		22
23					C101A-T (Antenna Trimmer)		23
24	Repeat steps 21, 22 and 23 as necessary to obtain maximum sensitivity on stations						24

* When detuning T204 & T102, the specified core should be adjusted until no action appears in the trace with further adjustment of the core (2 or more turns). Opposite core will have little or no effect after specified core is fully detuned.