

DUMONT

First with the Finest in Television

SCHEMATIC DIAGRAM

for

TELESET MODEL

RA-109A

Winslow

Hanover

Sherbrooke

ALLEN B. DU MONT LABORATORIES, INC.

TELESET SERVICE CONTROL DEPT.

MARKET STREET, EAST PATERSON, NEW JERSEY

**NOT TO BE REPRODUCED WITHOUT THE CON-
SENT OF ALLEN B. DU MONT LABORATORIES, INC.**

AM TUNER PARTS LIST

Sherbrooke RA-109A

(Date of Issue April 24, 1950)

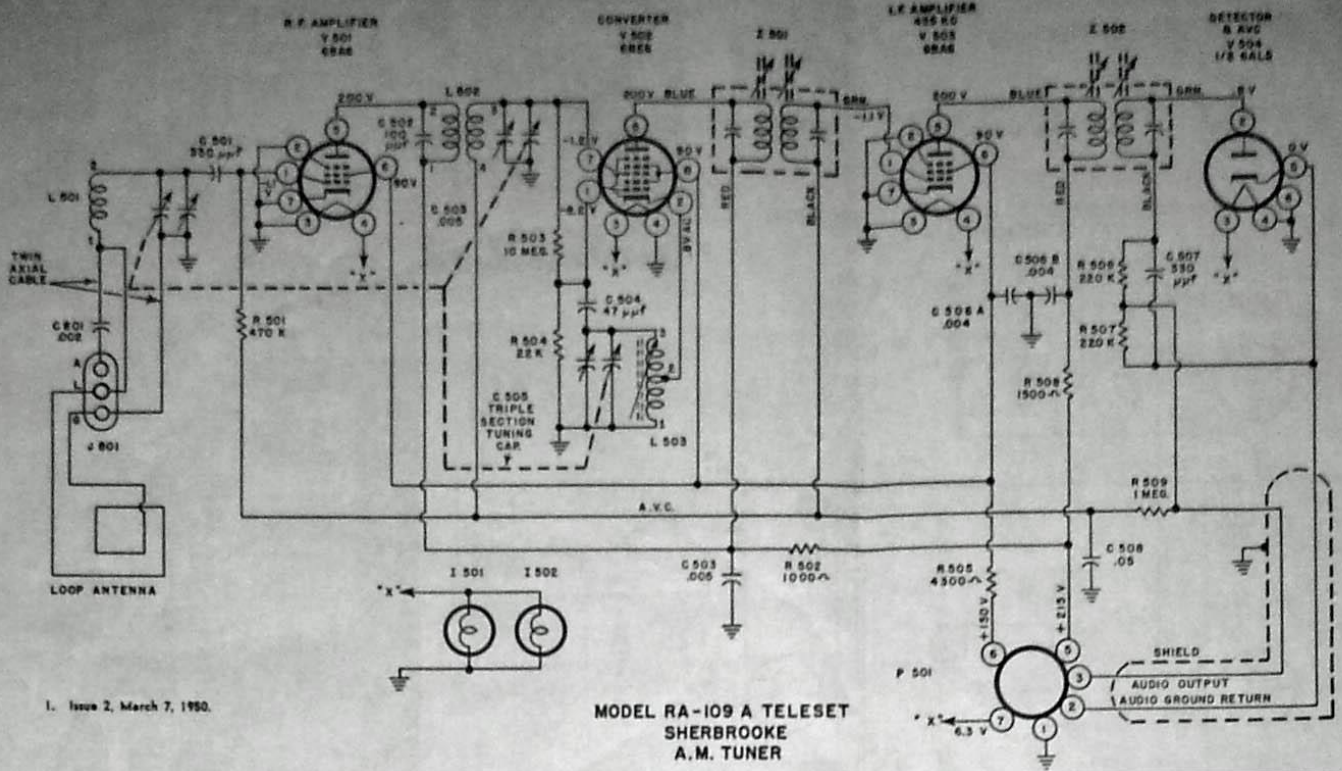
Symbol No.	Part No.	Description
C501	03014390	Cap Ce 230 mmf 20% 350V
C502	03014390	Cap Ce 100 mmf 20% 500V
C503	03015610	Cap Ce 5000 mmf 450V
C504	03012730	Cap Ce 47 mmf 10% 500V
C505	03016123	Cap V 3 gang
C506	03016112	Cap Ce 4000/4000 mmf
C507	03017790	Same as C501
C508	03009050	Cap Pa .85 mf 20% 200V
I 501	12091270	Lamp Inc .25 amp 7.5 V
I 502	Same as I501	
L501	21094923	Antenna Coil Assy
L502	21094931	Assy RF Coil
L503	21094931	Oscillator Coil Assy
R501	02042580	Res F C 470K 20% 1/2 W
	02042589	
R502	02042420	Res F C 1K 20% 1/2 W
	02042429	
R503	02042560	Res F C 10 meg 20% 1/2 W
	02042569	
R504	02042560	Res F C 22K 20% 1/2 W
	02042569	
R505	02036630	Res F C 4.3K 5% 2W
	02056639	
R506	02042560	Res F C 220K 20% 1/2 W
	02042569	
	02052569	
R507	Same as R506	
R508	02032430	Res F C 1.5K 20% 1/2 W
	02042439	
	02052439	
R509	02032500	Res F C 1 meg 20% 1/2 W
	02042509	
	02052509	
V501	25000240	Tube Elec 6BA6
V502	25000250	Tube Elec 6BE6
V503	Same as V501	
V504	25000020	Tube Elec 6AL5
Z501	20004644	Transformer IF
Z502	Same as Z501	
	09015471	Connector Assy
	12002794	Dial Light Assy
	20008601	Spring AM Tuner
	24001220	Socket Tube 7 prong
	25008381	Bracket Pointer
	36002281	Clip Glass Mtg
	35008371	Front Plate
	42008443	Spacer Dial Plate 1/2
	45002251	Pointer
	45001941	Dial AM

RF TUNING ASSEMBLY PARTS LIST

(Date of Issue April 24, 1950)

89003002 Input Tuner Assembly

Symbol No.	Part No.	Description
C100	03017500	Cap V Ce 5/50 mmf 350V
C101	03015790	Cap F Ce 20 mmf 10%
C102	03012050	Cap F Ce 15 mmf 10%
	03012180	
C103	Same as C101	
C104	03016470	Cap F Ce 470 min 350V
C105	Same as C104	
C106	Same as C104	
C107	Same as C104	
C108	03016480	Cap F Ce 470 min 500V
C109	03016700	Cap F Ce 100 mmf 500V
C110	03016650	Cap V P .5/5 mmf 500V
C111	Same as C109	
C112	Same as C110	
C113	03018020	Cap F Mica 125 mmf
C114	Same as C109	
C115	03012150	Cap F C 1 mmf 500V
C116	03015610	Cap F Ce 5000 mmf 450V
C117	Same as C116	
C118	03016870	Cap V Ce 1.5/7 N300
C119	03014730	Cap F Ce 5 mmf NPO
C121	Same as C104	
C122	Same as C104	
C123	Same as C104	
C124	Same as C104	
C125	Same as C104	
L101	21095801	Coil Antenna
L103	21095721	Inductor End
L104	21095741	Coil Antenna
L105	21095731	Coil Bandpass Coupl
L106	21095421	Inductor Filter
L107	21095521	Inductor Bandwidth
L108	21095722	Inductor End
L109	21095131	Coil Shunt
L110	21095111	Inductor End Osc
L111	Same as L106	
L112	Same as L106	
L113	Same as L108	
R101	02031640	Res F 82 10% 1/2 W
R102	02032010	Res F 100K 10% 1/2 W
R103	02037890	Res F 16K 10% 2W
	02057890	
R104	Same as R102	
R107	02031900	Res F 12K 10% 1/2 W
	02041900	
R108	02032130	Res F 1 meg 10% 1/2 W
	02042130	
R109	02032030	Res F 150K 10% 1/2 W
	02042030	
R110	Same as R103	
R111	Same as R107	
T101	20004582	Ant Trans Assy
T202	20004951	IF Link Assy
V101	25000190	Tube 6J6
V102	25000180	Tube 6AK5
V103	25001760	Tube 6AB4
	09008730	Connector Male
	42001250	Shield Tube
	42002860	Shield Tube



1. Issue 2, March 7, 1950.

TYPICAL RESISTANCE READINGS

Tuner plugged into main chassis
Service Selector switch in AM position
RCA Model 190A Volt-ohm-volt used in making these measurements
All readings in ohms unless otherwise stated.
M = Million K = Thousand

Tube	Pin						
	1	2	3	4	5	6	7
V501	1.5M	0	0	0.1	5K*	10.5K*	0
V502	22K	0.6	0.1	0	5K*	10.5K*	1.0M
V503	1.0M	0	0	0.1	5.5K*	10.5K*	0
V504	0	550K	0.1	0	0	0	0

* Readings at pins No. 5 and 6 were observed after the capacity in the circuit was changed.

MISCELLANEOUS PARTS LIST RA-109A

(Date of Issue April 26, 1950)

Winslow, Hanover, and Sherbrooke

Symbol No.	Part No.	Description
P401	0901480	
R468	02031740	Connector Male 7 Contact
	02041740	Res F C 569 ohm 10% 1/2 W
	02051740	
R469	Same as R468	
V215	25000870	Tube CRT 19AP4
	0-602709	Connector Male, 1 contact
	09007491	Connector Pin
	09002760	Connector Female 1 Contact
	15002791	Assembly Loudspeaker
	21004473	Magnet Ion Trap
	21094853	
L401	21005541	Yoke Deflection
L402	21005451	Focus Coil Assy
	30013881	Spring Contact Cab
	30014061	Spring Coil Support
	33008231	Mounting Defl Coil
	35008471	Plate AC Interlock
	35002141	Strap Bonding
	35002241	Plate CRT Rear Mtg.
	35008-83	Strap Support
	36000610	Clip Tube Contact
	36002121	Clip Spring
	37000641	Clamp Back Panel
	37001530	Clamp Cable 5/16
	37002241	Clamp CRT
	41001951	Sleeve Insulating
	42002091	Insulator Shield

Winslow and Hanover Only

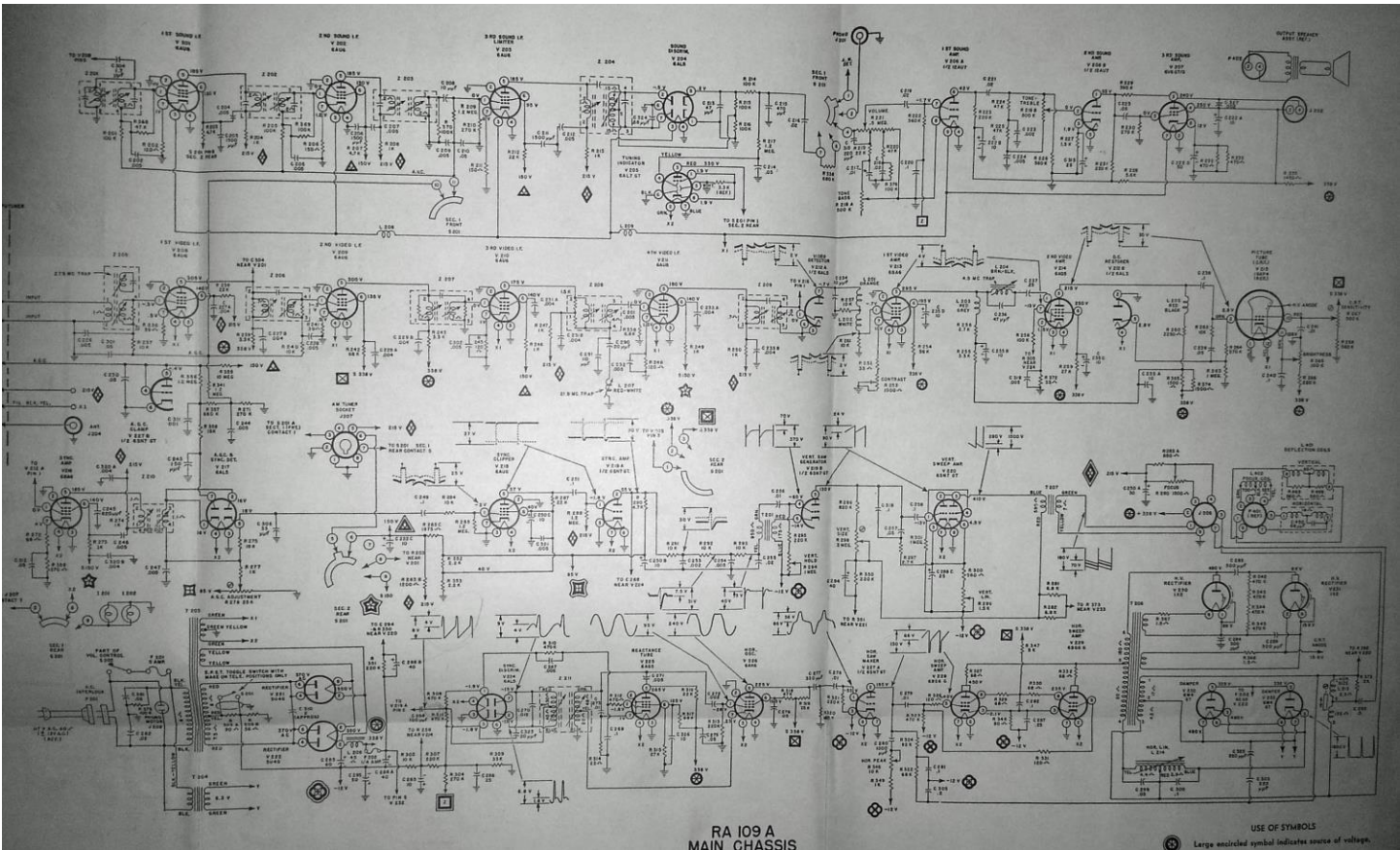
Symbol No.	Part No.	Description
	45001873	*Knob Control
	45001931	Knob Tone Control
	05004032	Lever, Tone Control
	45001371	*Knob Dial Vernier
	45001461	Window Safety Glass
	45001551	*Knob Tuning
	50002900	Cable Assy Power
	61001292	Mask, CRT 19
	35008431	Mounting Focus Coil
	33008621	Bracket Shield
	45001932	**Knob Tone Control
	45001876	**Knob Control
	45001372	**Knob Dial Vernier
	45001552	**Knob Tuning
	32000821	Back Panel
	45001381	*Dial Plate
	64002371	*Dial Bezel
	37001991	Clamp Bezel
	45002051	Plate Bezel
	35008611	Bracket AC Interlock
	61002372	**Dial Bezel
	45001382	**Dial Plate
	35000081	Plate Tele Ant Jack
	45001877	*Knob Control
	45001878	**Knob Control
	09003730	Connector Male, 1 contact

Sherbrooke Only

35008612	Bracket AC Interlock
35008461	Mounting Light Ind.
89003701	AM Tuner Assy
19004581	Reproducer Sound
45002241	*Knob AM
45002242	**Knob AM
45001872	*Knob Control
45001875	**Knob Control
64002781	*Bezel Dial
45001701	*Dial Plate
64002782	**Dial Bezel
45001702	**Dial Plate
40005881	Plate AM Antenna
12002720	Light Ind Cand DC
12002770	Lamp Inc Cand DC 6W
12003911	Lens Indicator Light
09003400	Connector Male 2 Contact
37001992	Clamp Bezel
35008411	Plate Bezel
09016423	Connector Assy Speaker
03014670	Cap Pa .002 25% 600V

C801

*Mahogany
**Blonde



RA 109 A
MAIN CHASSIS

USE OF SYMBOLS
 Large circled symbol indicates source of voltage.

USE OF SYMBOLS

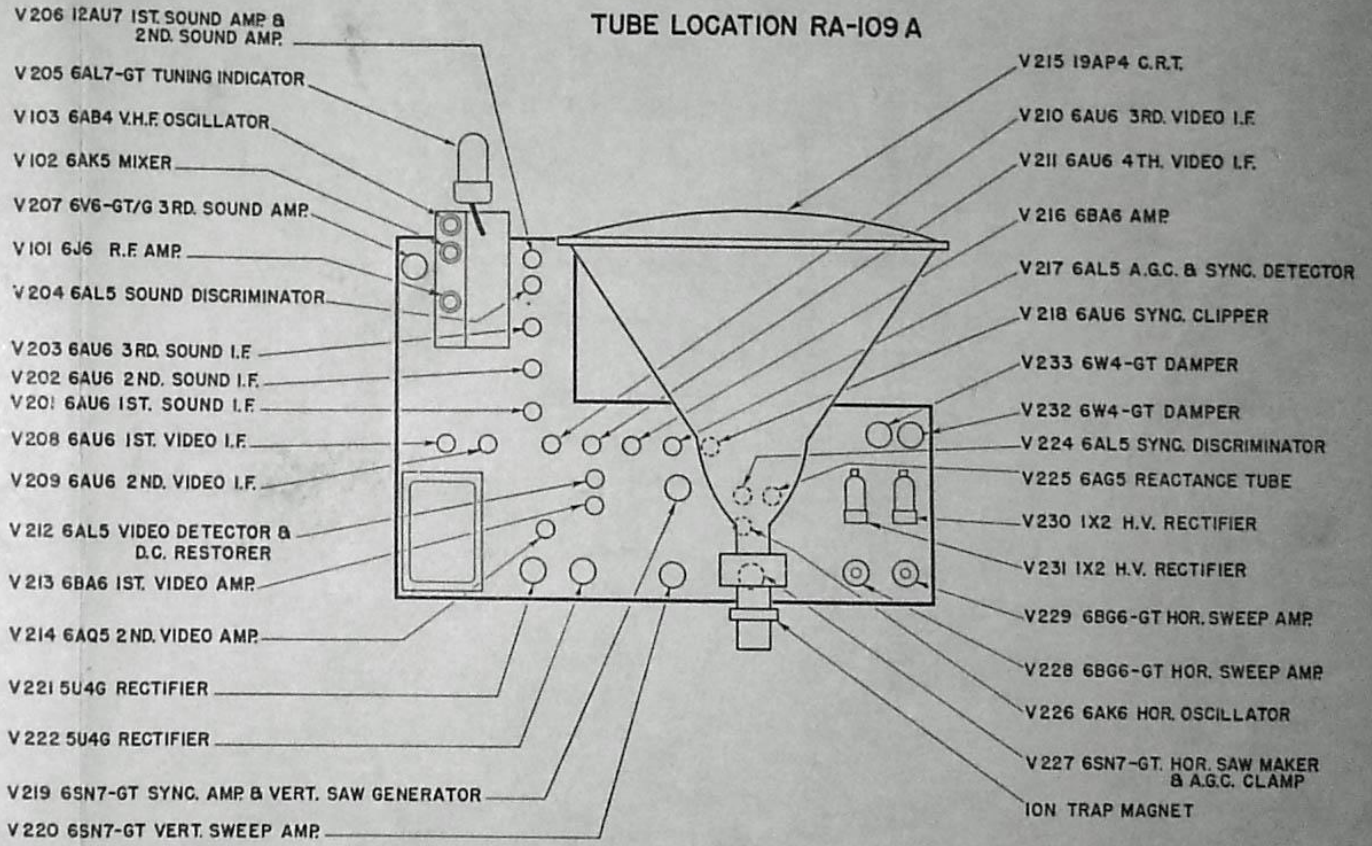


Large encircled symbol indicates source of voltage.



Small unencircled symbol indicates point to which voltage is applied.

TUBE LOCATION RA-109 A



RESISTANCE READINGS OF COILS

(All readings in ohms)

All coil readings shown were taken with coils disconnected.

Symbol	Reading
L201	1.8
L202	7.2
L203	7.5
L204	2.5
L205	3.6
L207	.1
L208	.02
L209	.02

RESISTANCE MEASUREMENTS — ALL READINGS TO GROUND RA-109A CHASSIS

TUBE	1	2	3	4	5	6	7	8
V201	1.7M	0	.1	0	7.4K	10K	120	
V202	1.7M	0	.1	0	7.4K	10K	150	
V203	270K	0	.1	0	7.4K	28K	150	
V204	0	100K	.1	0	200K	0	100K	
V205	3.3K	.1	7.5K	1.5M	0	0	0	3.3K
*V206	150K	130K	1.5K	0	0	260K	850K	0
V207	0	0	9K	8.5K	270K	.1	.1	235
V208	1.5M	0	0	.05	10.5K	28K	39	
V209	1.5M	0	0	.05	11K	75K	39	
V210	.7	0	0	.05	9K	6.5K	120	
V211	6.8K	0	0	.05	7.3K	6.3K	120	
V212	.5	0	0	.05	1M	0	5.2K	
V213	5.2K	0	0	.05	13.5K	70K	33—1.5K	
V214	110K	33	.05	0	10.5K	36K	110K	
**V215	0	1.3M						
V216	.5	0	0	.1	7.3K	6.4K	338	
V217	5.2K	5.2K	0	.1	24K	0	1M	
V218	1.2M	0	0	.1	24.2K	2.2K	0	
V219	1.2M	8.4K	0	220K—1.2M	1.2M—5.5M	220	.05	0
V220	1M	430K	1K—2.5K	1M	430K	1K—2.5K	.05	0
V221	N.C.	7.5K	N.C.	64	N.C.	64	N.C.	7.5K
V222	N.C.	7.5K	N.C.	64	N.C.	64	N.C.	7.5K
V224	1M	500K	0	.05	33K	0	500K	
V225	1.5M	22	0	.05	33K	27K	22	
V226	220K	0	.05	0	15K	55K	19	
V227	220K	550K	56	1.8M	1.8M	0	0	.05
*V228	N.C.	0	140	500K	500K	N.C.	.05	12.5K
**V229	N.C.	.05	140	12.5K	500K	500K	0	12.5K
†V230	INF.	N.C.	INF.	N.C.	N.C.	N.C.	N.C.	INF.
††V231	N.C.	INF.	N.C.	N.C.	N.C.	N.C.	INF.	INF.
V232	N.C.	N.C.	450K	N.C.	7.4K	N.C.	450K	450K
V233	N.C.	N.C.	450K	N.C.	7.4K	N.C.	450K	450K
	10	11	12		*V206	†V230	††V231	
**V215	8K-240K	70K	.1	Pin #9	.1	INF.	INF.	
				*V228	**V229	†V230	††V231	
				Cap	400K	400K	450K	INF.

Selector switch in 'Television light on' position.

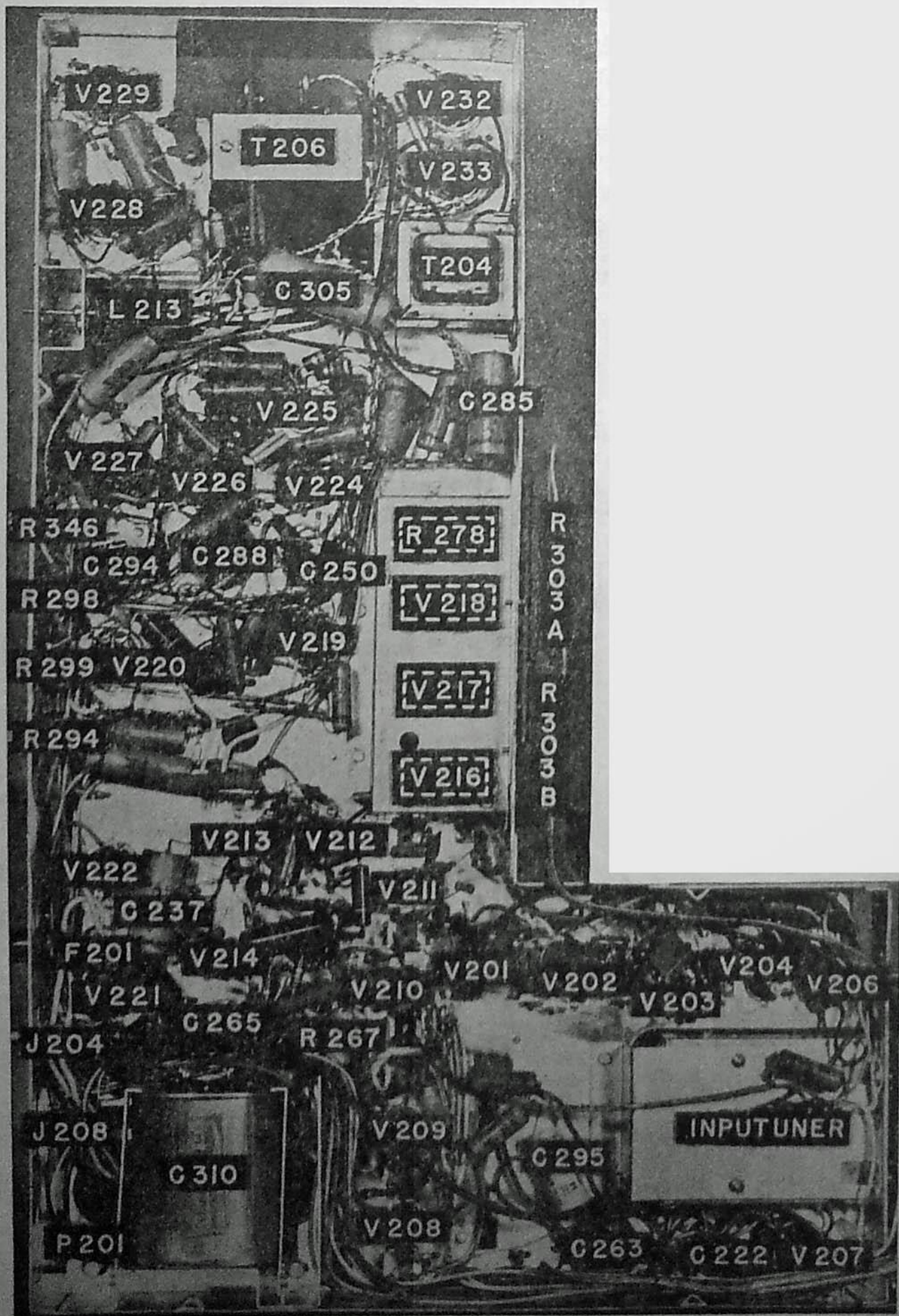
Instrument Used—RCA Model 195-A Volttohyst (for voltage and resistance)

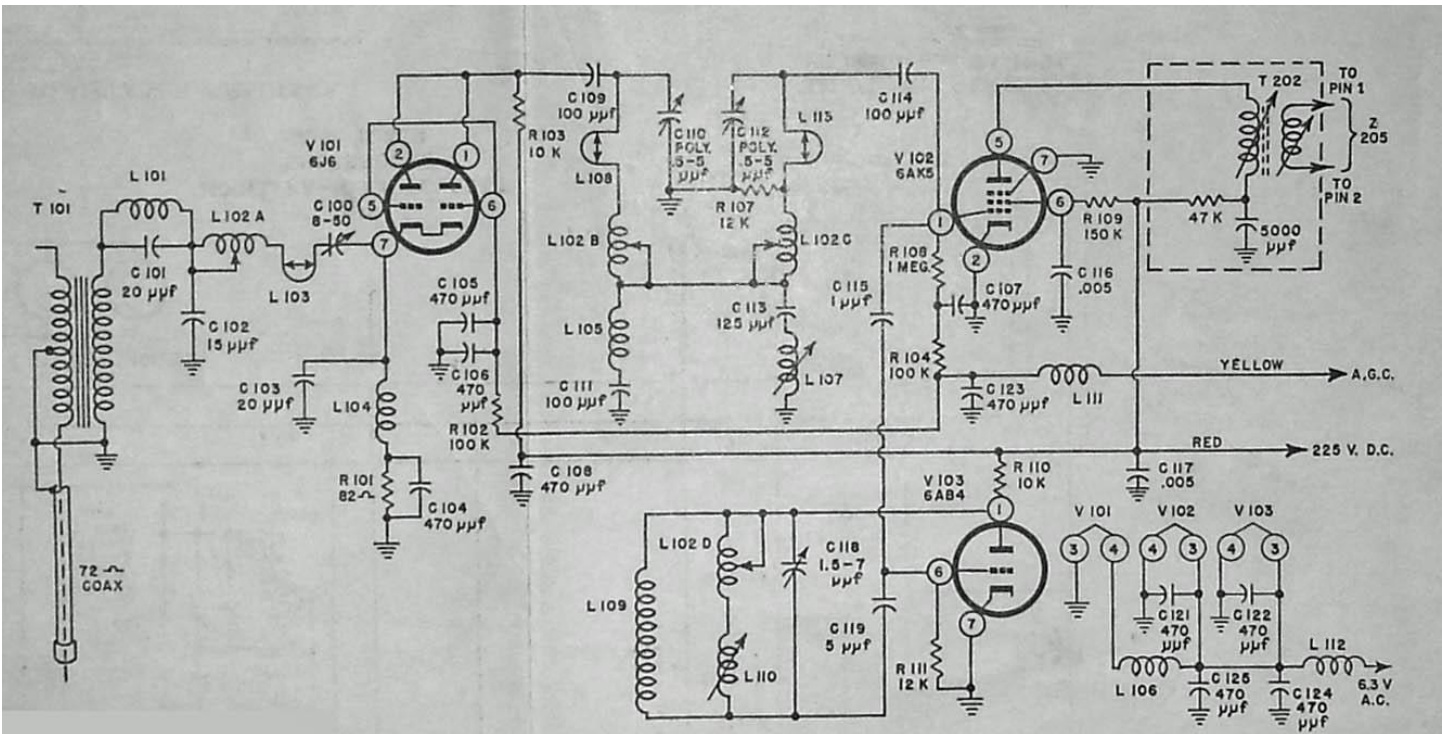
All readings in ohms K = thousand M = million

Two readings for a given point indicate an adjustable resistance is in the measured circuit.

NOTES

1. Issue No. 12 through P-108.
2. Voltage, resistance, and waveform measurements.
 - a. Instrument used—RCA Model 195-A Volttohyst (for voltage and resistance).
 - b. Voltage measurements taken to ground, no signal input.
 - c. Voltage measurements made with switch in TV position, lights on.
 - d. All coil readings were taken with coils disconnected.
 - e. Video waveforms measured with contrast set for 30 volts p-p at grid of CRT.
3. Switch sections viewed from front end of switch. Rotor in extreme CCW (AM) position. Switch positions: 1. A.M. 2. Phono. 3. F.M. 4. TV, light on. 5. TV, light off.





R.F. ASSEMBLY
(FOUR CIRCUIT BOTTOM COUPLED INPUTUNER)

NOTES

1. Issue 1, March 14, 1950.
2. Unless otherwise specified, all capacitors are ceramic.