

# Lectrolab R600

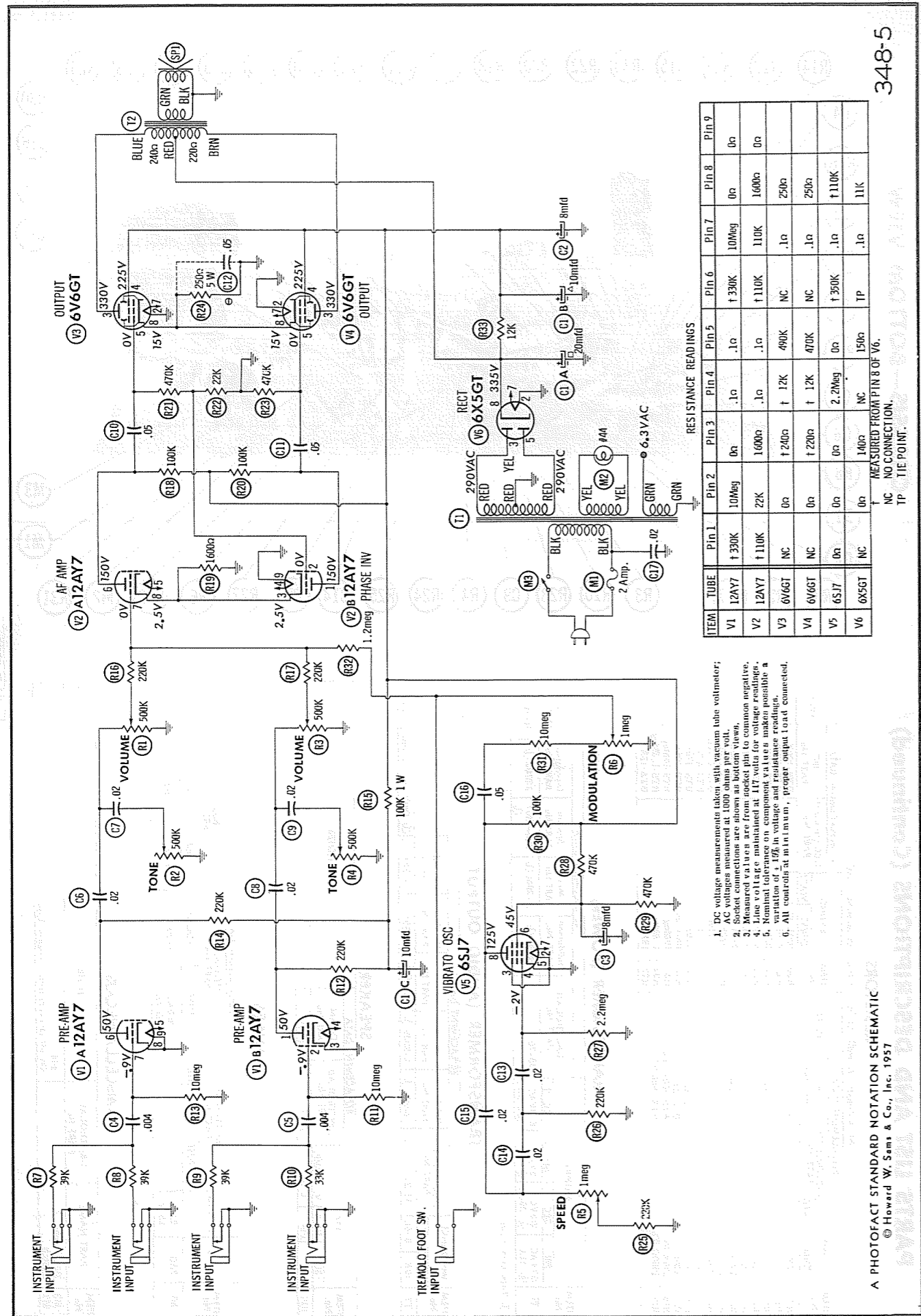
by "Sound Projects"  
(spiegel)

1. DC voltage measurements taken with vacuum tube voltmeter; AC voltages measured at 1000 ohms per volt.
2. Socket connections are shown as bottom views.
3. Measured values are from socket pin to common negative.
4. Line voltage maintained at 117 volts for voltage readings.
5. Nominal tolerance on component values makes possible a variation of  $\pm 15\%$  in voltage and resistance readings.
6. All controls at minimum, proper output load connected.

### RESISTANCE READINGS

ITEM	TUBE	Pin 1	Pin 2	Pin 3	Pin 4	Pin 5	Pin 6	Pin 7	Pin 8	Pin 9
V1	12AY7	† 330K	10Meg	0Ω	.1Ω	.1Ω	† 330K	10Meg	0Ω	0Ω
V2	12AY7	† 110K	22K	1600Ω	.1Ω	.1Ω	† 110K	110K	1600Ω	0Ω
V3	6V6GT	NC	0Ω	† 240Ω	† 12K	490K	NC	.1Ω	250Ω	
V4	6V6GT	NC	0Ω	† 220Ω	† 12K	470K	NC	.1Ω	250Ω	
V5	6SJ7	0Ω	0Ω	0Ω	2.2Meg	0Ω	† 350K	.1Ω	† 110K	
V6	6X5GT	NC	0Ω	140Ω	NC	150Ω	TP	.1Ω	11K	

† MEASURED FROM PIN 8 OF V6.  
NC NO CONNECTION.  
TP TIE POINT.

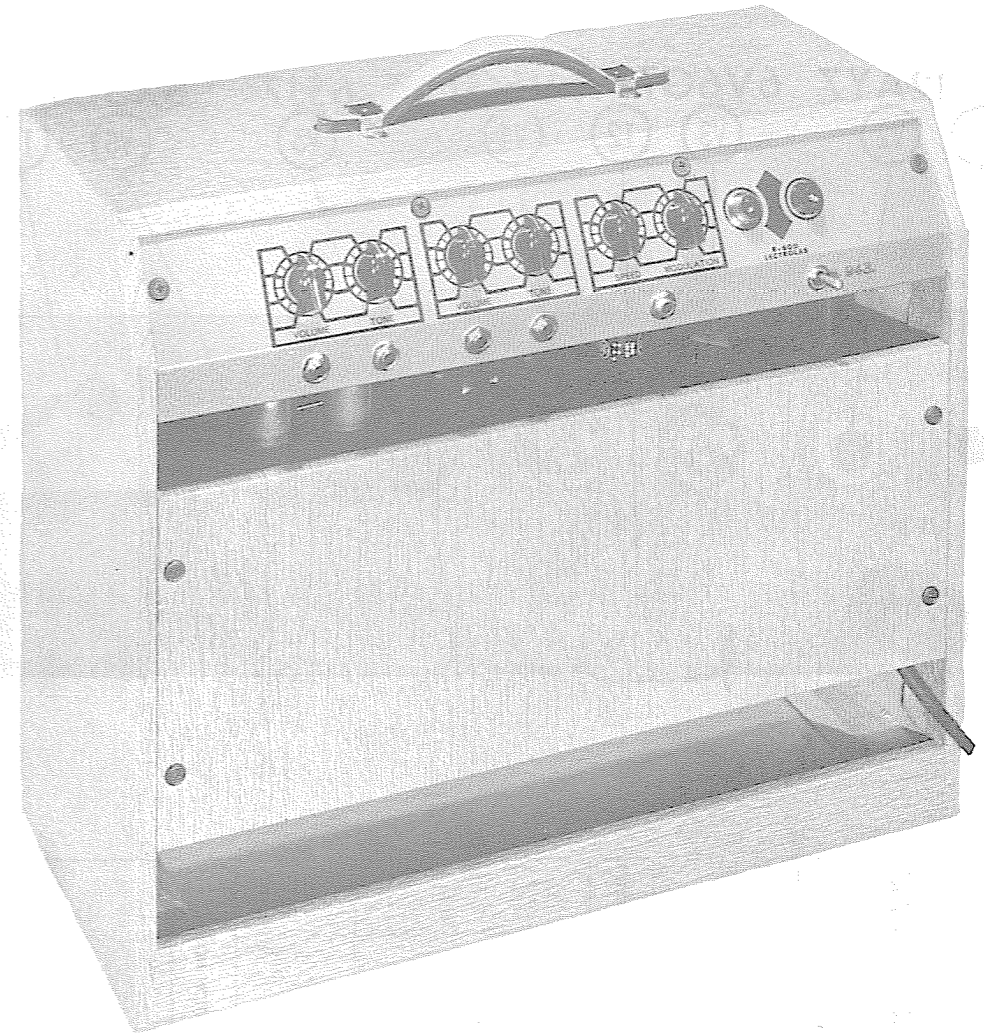


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A PHOTOFACT STANDARD NOTATION SCHEMATIC  
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1. DC voltage measurements taken with vacuum tube voltmeter;
2. AC voltages measured at 1000 ohms per volt.
3. Socket connections are shown as bottom views.
4. Measured values are from socket pin to common negative.
5. Line voltage maintained at 117 volts for all tests.
6. All controls at minimum, proper output load connected.

LECTROLAB  
MODEL R-600



TRADE NAME	Lectrolab Model R-600	
SUPPLIER	Spiegel Inc., 1061 W. 35th. St., Chicago 9, Illinois	
TYPE SET	AC Operated 4 Channel Audio Amplifier	
TUBES (Six)	Types 12AY7 AF Amplifier, 12AY7 AF Amp. -Phase Inv., (2) 6V6GT Output, 6SJ7 Vibrato Osc., 6X5GT Rectifier	
POWER SUPPLY	110-120 Volts AC 50/60 Cycle	RATING .51 Amp. @ 117 Volts AC

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LECTROLAB  
MODEL R-600

**PARTS LIST AND DESCRIPTIONS  
TUBES ( GENERAL ELECTRIC, SYLVANIA )**

LECTROLAB  
MODEL R-600

ITEM No.	USE	TYPE	NOTES	ITEM No.	USE	TYPE	NOTES
V1	1st. AF Amplifier	12AY7		V4	Output Vibrate Osc.	6V6GT	
V2	2nd. AF Amp. - Phase Inv.	12AY7		V5	Rectifier	6SJ7	
V3	Output	6V6GT		V6		6X5GT	

**ELECTROLYTIC CAPACITORS**

ITEM No.	RATING		LECTROLAB PART No.	REPLACEMENT DATA				NOTES
	CAP.	VOLT.		AEROVOX PART No.	CORNELL-DUBILIER PART No.	MALLORY PART No.	SPRAGUE PART No.	
C1A	#20	450		FD376.3	FD376.3	T-135	TVA-1603	
C2	10	450		TC61	TC61	FM-3508	TVA-1603	
C3	8	300		BR635	BR635	FM-3508		

**FIXED CAPACITORS**

Capacity values given in the rating column are in mfd. for Paper Capacitors, and in mmfd. for Mica and Ceramic Capacitors.

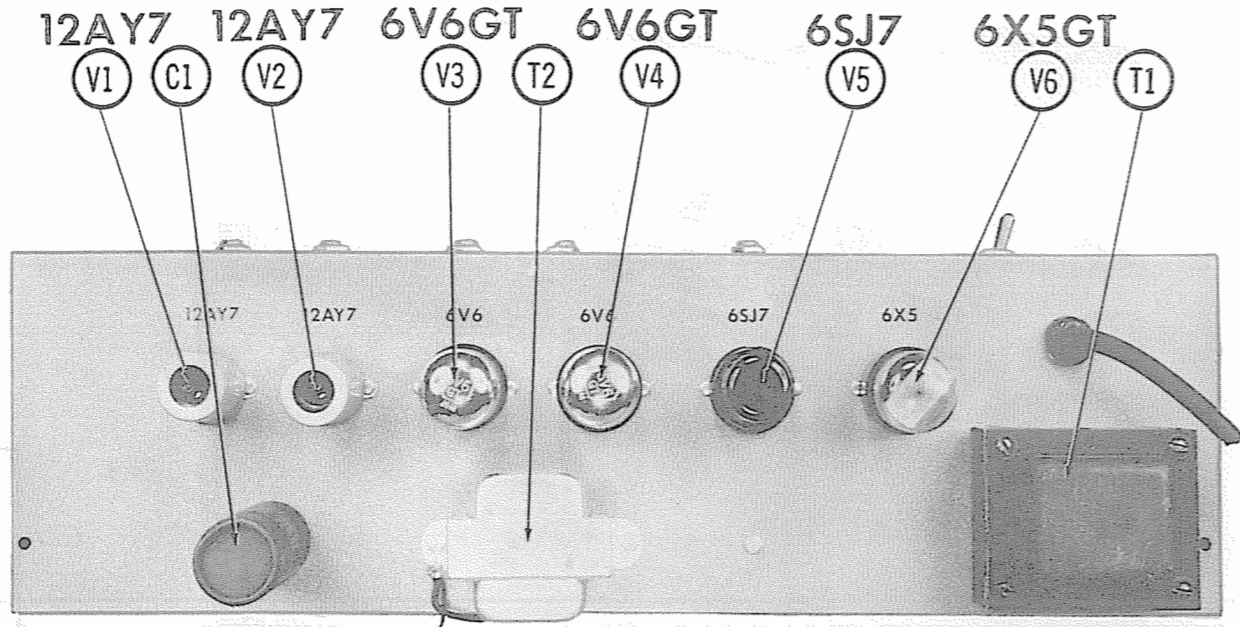
ITEM No.	RATING		LECTROLAB PART No.	REPLACEMENT DATA				NOTES
	CAP.	VOLT.		AEROVOX PART No.	CORNELL-DUBILIER PART No.	MALLORY PART No.	SPRAGUE PART No.	
C4	.004	400		DP2-333-002	DP2-333-002	PT924	6TM-D4	
C5	.004	400		DP2-333-002	DP2-333-002	PT924	6TM-D4	
C6	.02	400		DP2-333-002	DP2-333-002	PT924	6TM-D4	
C7	.02	400		DP2-333-002	DP2-333-002	PT924	6TM-D4	
C8	.02	400		DP2-333-002	DP2-333-002	PT924	6TM-D4	
C9	.02	400		DP2-333-002	DP2-333-002	PT924	6TM-D4	
C10	.05	400		DP2-333-002	DP2-333-002	PT924	6TM-D4	
C11	.05	400		DP2-333-002	DP2-333-002	PT924	6TM-D4	
C12	.02	400		DP2-333-002	DP2-333-002	PT924	6TM-D4	
C13	.02	400		DP2-333-002	DP2-333-002	PT924	6TM-D4	
C14	.02	400		DP2-333-002	DP2-333-002	PT924	6TM-D4	
C15	.02	400		DP2-333-002	DP2-333-002	PT924	6TM-D4	
C16	.05	400		DP2-333-002	DP2-333-002	PT924	6TM-D4	
C17	.02	600		DP2-333-002	DP2-333-002	PT924	6TM-D4	

Note 1. Not used in some versions.

**CONTROLS**

ITEM No.	RATING		LECTROLAB PART No.	REPLACEMENT DATA				INSTALLATION NOTES
	RESISTANCE	WATTS		CENTRALAB PART No.	CLARISTAT PART No.	IRC PART No.	MALLORY PART No.	
R1A	500K	1/2		AB-60	A17-500K-Z	Q13-133	U48	Volume
R2A	500K	1/2		AK-4	A17-500K-Z	Q13-133	U48	Tone
R3A	500K	1/2		AK-4	A17-500K-Z	Q13-133	U48	Volume
R4A	500K	1/2		AK-4	A17-500K-Z	Q13-133	U48	Tone
R5A	1Meg	1/2		AK-4	A17-1Meg-S	Q11-137	U54	Speed
R6A	1Meg	1/2		AK-4	A17-1Meg-S	Q11-137	U54	Modulation

**CHASSIS—TOP VIEW**



**PARTS LIST AND DESCRIPTIONS (Continued)**

**RESISTORS**

All wattages 1/2 watt, or less, unless otherwise listed.

ITEM No.	RATING		LECTROLAB PART No.	NOTES	LECTROLAB PART No.	RATING		LECTROLAB PART No.	NOTES
	OHMS	WATT				OHMS	WATT		
R7	30K				R20	100K 5%			
R8	30K				R21	470K			
R9	30K				R22	22K			
R10	33K				R23	470K			
R11	10M				R24	2500			
R12	220K				R25	220K			
R13	10M				R26	2.2Meg			
R14	220K				R27	470K			
R15	100K				R28	100K 5%			
R16	220K				R29	10Meg			
R17	220K				R30	1.2Meg			
R18	100K 5%				R31	12K			
R19	10000 5%				R32				
R20	10000 5%				R33				

**TRANSFORMER (POWER)**

ITEM No.	RATING			LECTROLAB PART No.	REPLACEMENT DATA			Triad PART No.
	SEC. 1	SEC. 2	SEC. 3		Holderson PART No.	Merit PART No.	Stancor PART No.	
T1	117VAC	615VCT	5VAC	46-70	P9303	P-2051	PM-9407	22R102

① Taper center tap.

**TRANSFORMER (AUDIO OUTPUT)**

ITEM No.	IMPEDANCE	PRI. SEC.	LECTROLAB PART No.	REPLACEMENT DATA			NOTES
				Holderson PART No.	Merit PART No.	Triad PART No.	
T2	10K	6-8Ω	34-27	Z1006	A-2936	A-3870	22S56

**SPEAKER**

ITEM No.	TYPE	REPLACEMENT DATA		NOTES
		LECTROLAB PART No.	QUAM PART No.	
SP1	12"	6-8Ω	12A1	

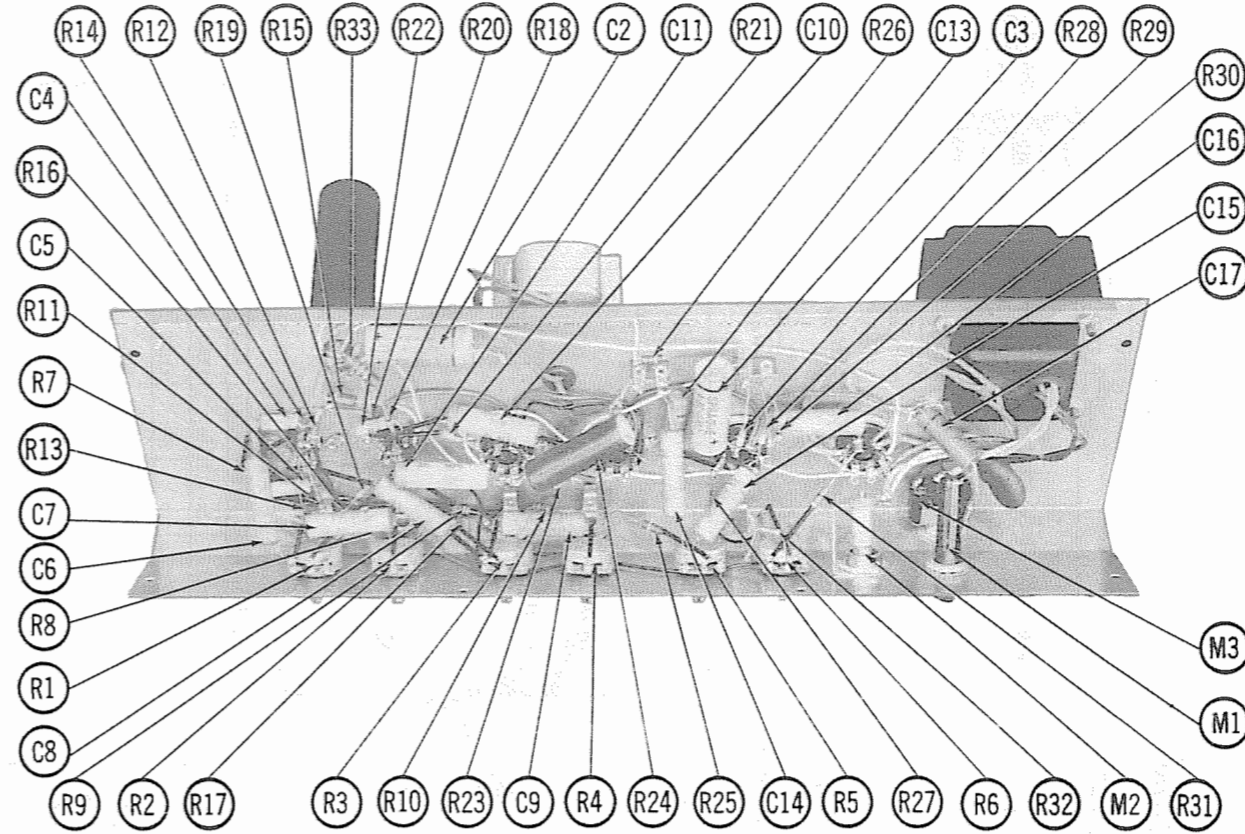
**FUSES**

ITEM No.	TYPE	RATING	REPLACEMENT DATA		
			LECTROLAB PART No.	LITTELFUSE PART No.	BUSS PART No.
M1	3AG	2A 250V		3L2002	342001

**MISCELLANEOUS**

ITEM No.	PART NAME	LECTROLAB PART No.	NOTES
M3			On-off (Power) Switch - Toggle Type

**CHASSIS—BOTTOM VIEW**



LECTROLAB  
MODEL R-600