

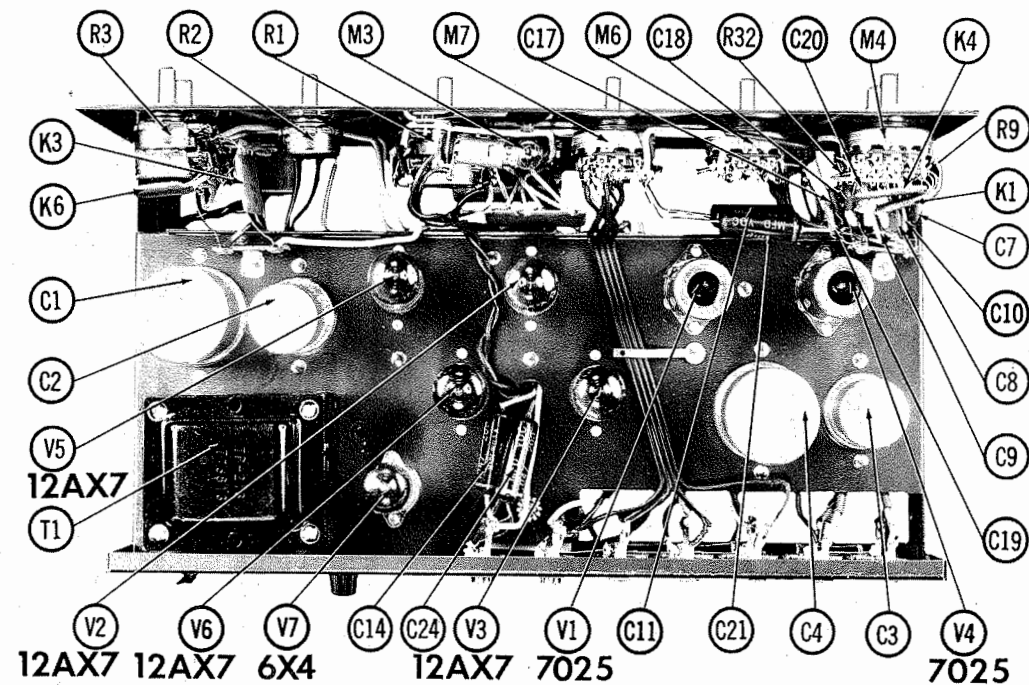


**GROMMES
MODEL 208**



**GROMMES
MODEL 208**

TRADE NAME	Grommes Model 208		
MANUFACTURER	Precision Electronics, Inc., 9101 King Ave., Franklin Park, Illinois		
TYPE SET	AC Operated Stereo Preamplifier		
TUBES	Seven		
POWER SUPPLY	110 - 120 Volts AC, 50-60 Cycles	RATING	31 Watts, .27 Amp. @ 117 Volts AC.



HOWARD W. SAMS & CO., INC. Indianapolis 6, Indiana

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DATE 2-59

SET 430 FOLDER 7

**GROMMES
MODEL 208**

SET 430 FOLDER 7

TUBES (GENERAL ELECTRIC, SYLVANIA)

PARTS LIST AND DESCRIPTIONS

ITEM No.	USE	TYPE	NOTES	ITEM No.	USE	TYPE	NOTES
V1	CH. A Pre Amp.	7025		V5	CH. B A.F. Amp.	12AX7	
V2	CH. A A.F. Amp.	12AX7		V6	CH. B A.F. Amp. -Cath.	12AX7	
V3	CH. A A.F. Amp. -Cath. Follower	12AX7		V7	Follower Rectifier	6X4	
V4	CH. B Pre Amp.	7025					

Note 1. Some versions may use 12AX7/ ECC83 in this application.

ELECTROLYTIC CAPACITORS

ITEM No.	RATING				REPLACEMENT DATA				
	CAP.	VOLT.	GROMMES PART No.	AEROVOX PART No.	CORNELL DUBILIER PART No.	MALLORY PART No.	PYRAMID PART No.	SANGAMO PART No.	SPRAGUE PART No.
C1A	▲ 40	400		AFH4-117-48	D0476			Q-250	R2246 *
B	■ 30	350			BR4045			MT-4510	
C	▲ 10	300							
D	▲ 20	25		AFH2-47	B0370	FP231	TMD-47	D-200	TVL-2750
C2A	■ 10	350							
B	▲ 10	350		AFH3-188-40	A0430	WP055		S-203	R2735 *
C3A	■ 10	250			EBR100-15	TC32		MTH-1510	
B	▲ 100	15			BR5002			D-023	TVL-2233
C4A	▲ 500	25							
B	▲ 500	25							

* Not normally in distributors stock. Available thru distributor on order to manufacturer.

FIXED CAPACITORS

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

ITEM No.	RATING		REPLACEMENT DATA						NOTES
	CAP.	VOLT	GROMMES PART No.	AEROVOX PART No.	CENTRALAB PART No.	CORNELL-DUBILIER PART No.	MALLORY PART No.	SPRAGUE PART No.	
C5	.047	400		P488N-047	DF-503	CUB4547	GEM-4147	4TM-S47	10% 10% 10% 10%
C6	.047	400		P488N-047	DF-503	CUB4547	GEM-4147	4TM-S47	
C7	1000						JL-210		
C8	1000						JL-210		
C9	3000								10% 10% 10% 10%
C10	2000	200		P288N-047	DF-503	CUB2547	JL-220	2TM-S47	
C11	.047	400		P488N-047	DF-503	CUB4547	GEM-4147	4TM-S47	
C12	.047	400		P488N-047	DF-503	CUB4547	GEM-4147	4TM-S47	
C13	.047	400		P488N-047	DF-503	CUB4547	GEM-4147	4TM-S47	10% 10% 10% 10%
C14	.047	200		P288N-047	DF-503	CUB2547	GEM-4147	2TM-S47	
C15	.047	400		P488N-047	DF-503	CUB4547	GEM-4147	4TM-S47	
C16	.047	400		P488N-047	DF-503	CUB4547	GEM-4147	4TM-S47	
C17	1000						JL-210		10% 10% 10% 10%
C18	1000						JL-210		
C19	3000			P288N-047	DF-503	CUB2547	JK-290	2TM-S47	
C20	2000	200		P488N-047	DF-503	CUB4547	GEM-4147	4TM-S47	
C21	.047	400		P488N-047	DF-503	CUB4547	GEM-4147	4TM-S47	10% 10% 10% 10%
C22	.047	400		P488N-047	DF-503	CUB4547	GEM-4147	4TM-S47	
C23	.047	400		P488N-047	DF-503	CUB4547	GEM-4147	4TM-S47	
C24	.047	200		P288N-047	DF-503	CUB2547	GEM-4147	2TM-S47	

CONTROLS

ITEM No.	REPLACEMENT DATA				MALLORY PART No.	INSTALLATION NOTES
	RATING RESIST. ANCE	WATTS	GROMMES PART No.	CENTRALAB PART No.		
R1A	500K		DL500K2T	AB-69 †	Q11-137	Volume, Tap@100K & 200K Volume, Tap@100K & 200K Level Adjust Treble Bass Bass
B	500K		MTC-1M	AK-9	RS-2	
R2A	Ineg		DTC-1M	BA-108 †	Q11-137	
B	Shaft			Not Req.	Q11-137	
R3A	Ineg		DTC-1M	BB-108 †	Q11-137	
B	Ineg			Not Req.	Q11-137	
R4A	Ineg					
B	Ineg					

† Use an extra mounting nut behind mounting surface.

RESISTORS

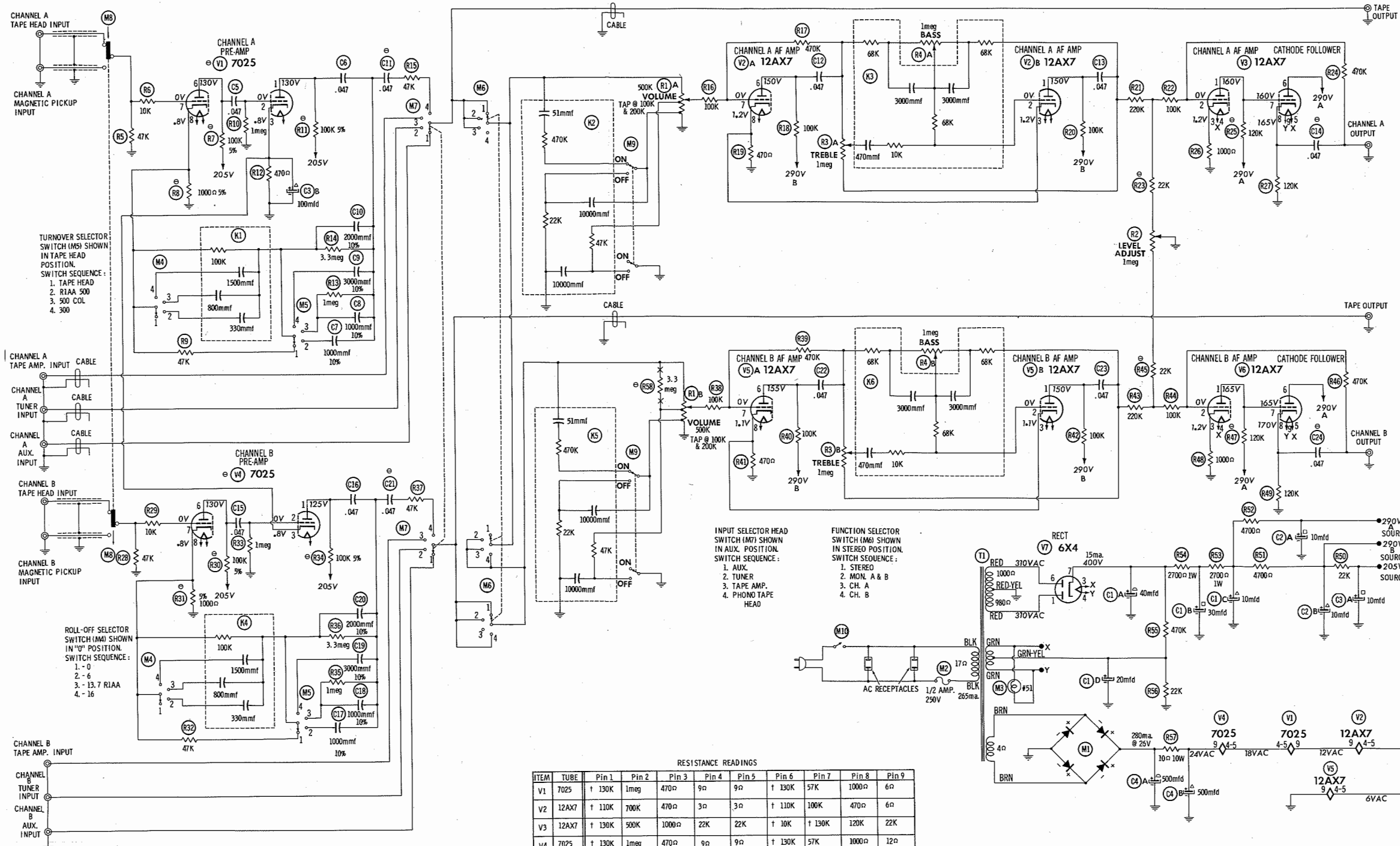
All wattages 1/2 watt, or less, unless otherwise listed.

ITEM No.	RATING		GROMMES PART No.	NOTES	ITEM No.	RATING		GROMMES PART No.	NOTES
	OHMS	WATT				OHMS	WATT		
R5	47K				R32	47K			
R6	10K				R33	Ineg			
R7	100K	5%		Note 1	R34	100K	5%		Note 1
R8	1000Ω	5%		Note 1	R35	Ineg			
R9	47K				R36	3.3meg			
R10	Ineg				R37	47K			
R11	100K	5%		Note 1	R38	100K			
R12	470Ω				R39	470K			
R13	Ineg				R40	100K			
R14	3.3meg				R41	470Ω			
R15	47K				R42	100K			
R16	100K				R43	220K			
R17	470K				R44	100K			
R18	100K				R45	22K			
R19	470Ω				R46	470K			Note 2
R20	100K				R47	120K			Note 2
R21	220K				R48	1000Ω			
R22	100K				R49	120K			
R23	22K			Note 2	R50	22K			
R24	470K				R51	470Ω			
R25	120K			Note 2	R52	4700Ω			
R26	1000Ω				R53	2700Ω			
R27	120K				R54	2700Ω			
R28	47K				R55	470K			
R29	10K				R56	22K			
R30	100K	5%		Note 1	R57	10K			
R31	1000Ω	5%		Note 1	R58	3.3meg			Note 3.

Note 1. Low noise type.
Note 2. Some versions may use 100K in this application.
Note 3. Not used in some versions.

TRANSFORMER (POWER)

ITEM No.	RATING				REPLACEMENT DATA			
	PRI	SEC. 1	SEC. 2		GROMMES PART No.	Holidarson PART No.	Stanco PART No.	Triad PART No.
T1	HTV @. 285A	620VCT @. 015A	6.3VCT @1.1A		TF-213			
	SEC. 3	SEC. 4	SEC. 5					
	20V							
	@. 28A							



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

SEE PARTS LIST FOR ALTERNATE VALUE OR APPLICATION

DC COIL RESISTANCE VALUES UNDER ONE OHM NOT SHOWN ON SCHEMATIC DIAGRAM

A PHOTOFAC STANDARD NOTATION SCHEMATIC
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GROMMES
 MODEL 208

PARTS LIST AND DESCRIPTIONS (Continued)

COMPONENT COMBINATIONS

ITEM No.	USE	DESCRIPTION	GROMMES PART No.	REPLACEMENT DATA
K1	Tone Compensation	330mmf, 800mmf, 1500mmf, 100K		
K2	Tone Compensation	51mmf, 10000mmf, 10000mmf, 22K, 47K, 470K		
K3	Tone Compensation	300mmf, 470mmf, 3000mmf, 10K, 68K, 68K, 68K		
K4	Tone Compensation	330mmf, 800mmf, 1500mmf, 100K		
K5	Tone Compensation	51mmf, 10000mmf, 10000mmf, 22K, 47K, 470K		
K6	Tone Compensation	3000mmf, 470mmf, 3000mmf, 10K, 68K, 68K, 68K		

SELENIUM RECTIFIER

ITEM No.	RATING CURRENT (Measured)	REPLACEMENT DATA	NOTES
		FEDERAL INTERNATIONAL	SARKES TARZIAN
M1	.280A	179802 1016 B1B 304B	

FUSES

ITEM No.	TYPE	RATING	REPLACEMENT DATA							
			GROMMES PART No.		LITELFUSE PART No.		BUSS PART No.			
			FUSE	HOLDER	FUSE	HOLDER	FUSE	HOLDER		
M2	3AG	1/4 250V			312 500 (3AG 1/4 250V)	342001	AGC ₁	HKP		

MISCELLANEOUS

ITEM No.	PART NAME	GROMMES PART No.	NOTES
M3	Lamp		
M4	Switch		
M5	Switch		
M6	Switch		
M7	Switch		
M8	Switch		
M9	Switch		
M10	Switch		

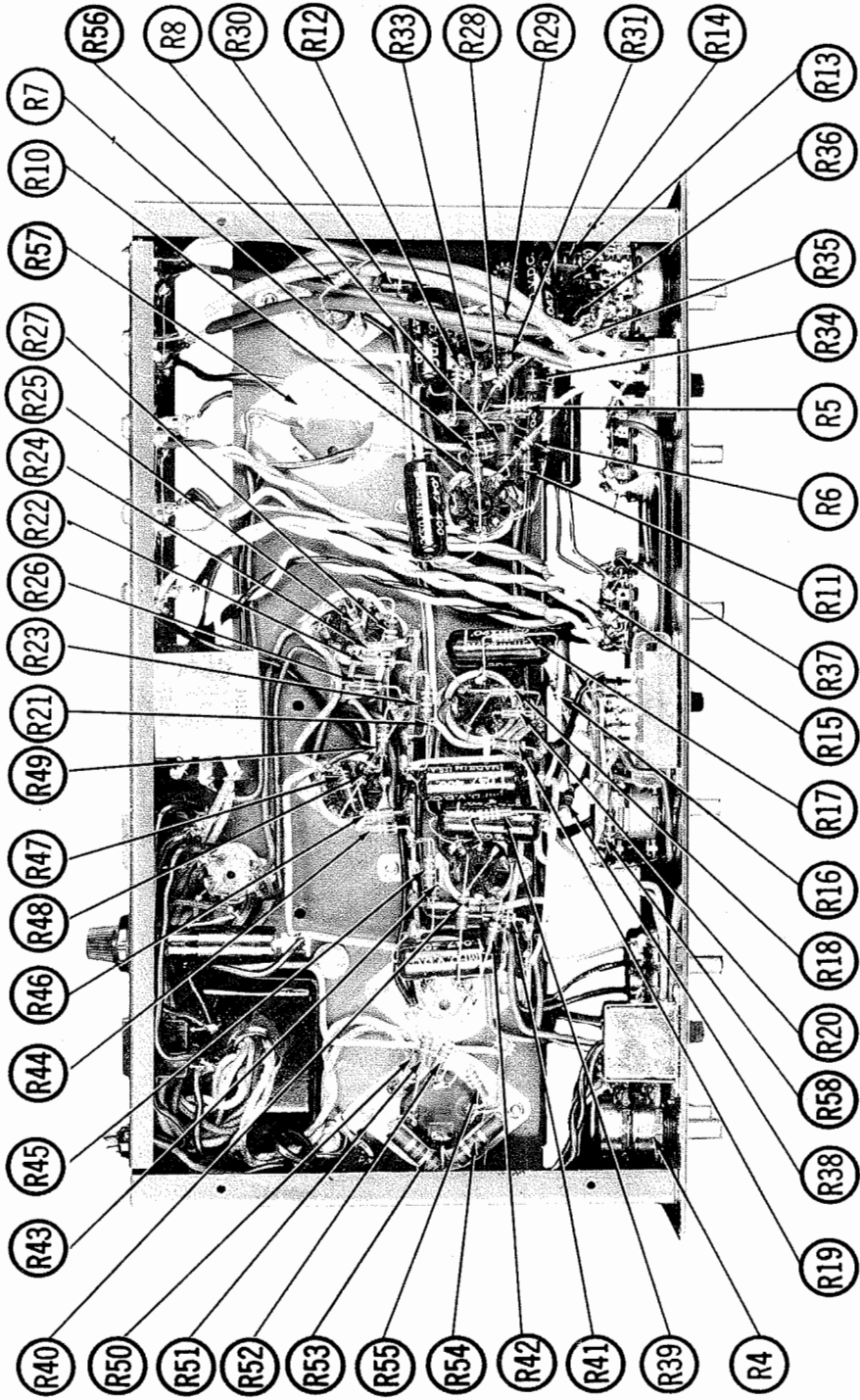
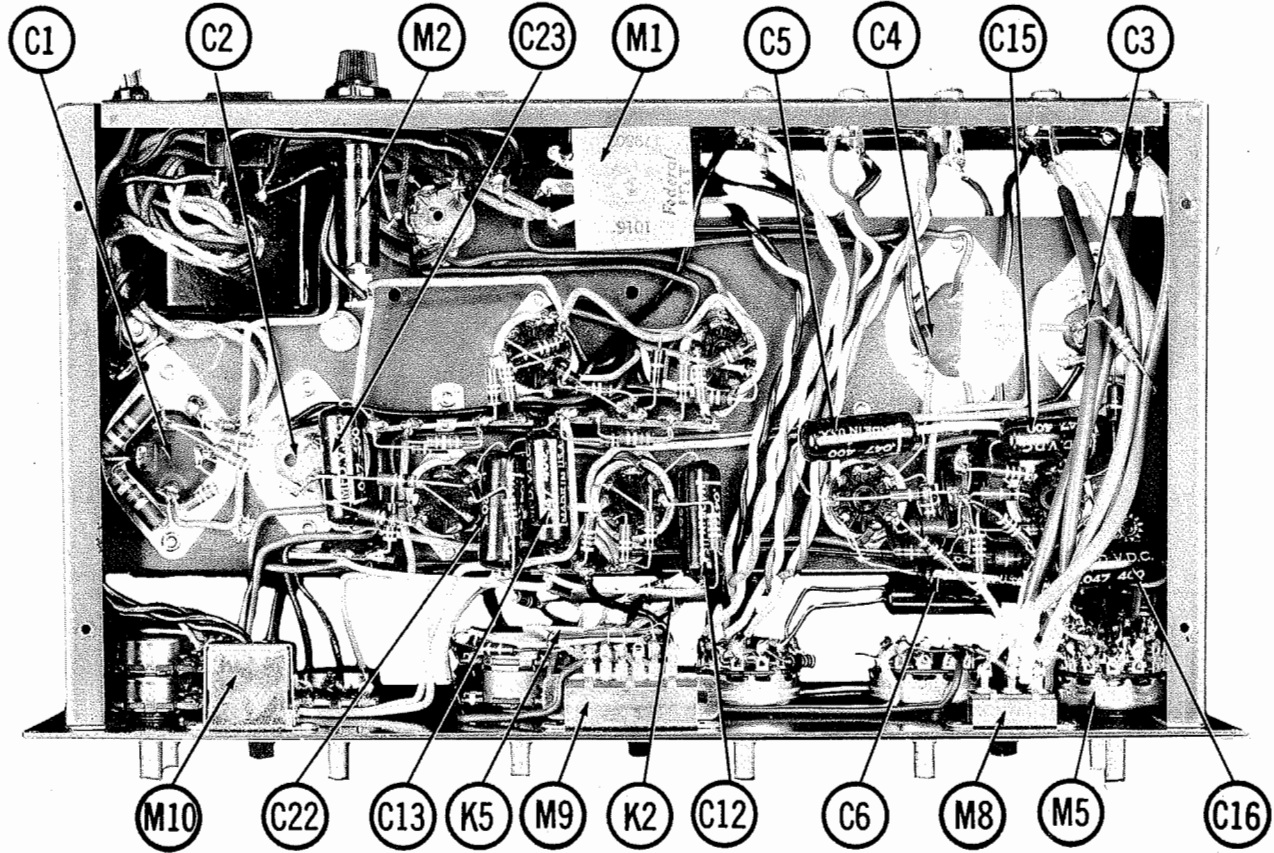
CABINETS & CABINET PARTS

(When Ordering Cabinets & Cabinet Parts, Specify Model, Chassis & Color)

WIRING DATA

General-use Unshielded Hook-up Wire Use BELDEN No. 8530 (Solid) Available in Ten Colors
Power Cord Use BELDEN No. 8524 (Stranded) Available in Ten Colors
 Use BELDEN No. 1765-B (6 Ft. Length)
 Use BELDEN No. 1725-K (7 1/2 Ft. Length)

CHASSIS—BOTTOM VIEW



CHASSIS BOTTOM VIEW-RESISTOR IDENTIFICATION