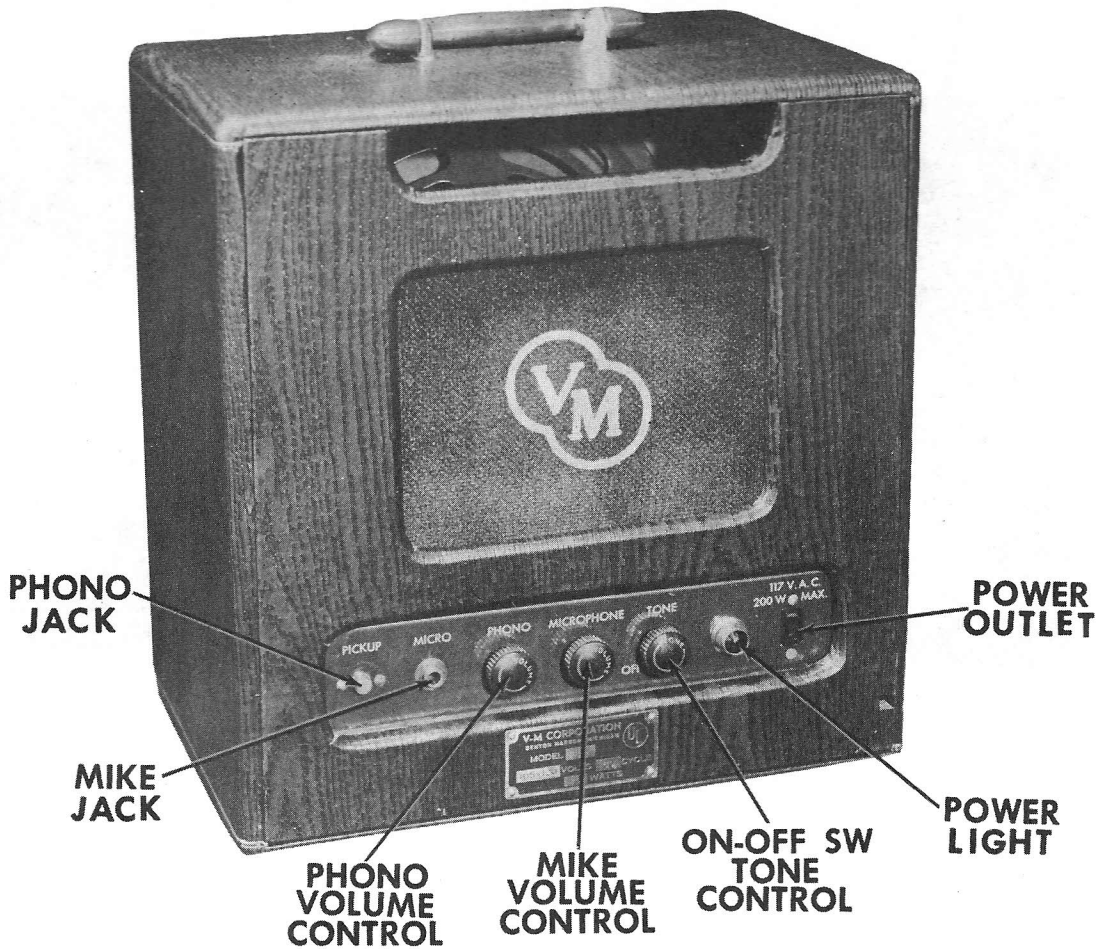




V-M MODEL 160



V-M MODEL 160

TRADE NAME	V-M Model 160		
MANUFACTURER	V-M Corp., Benton Harbor, Mich.		
TYPE SET	AC Operated Audio Amplifier		
TUBES (Five)	12AY7 Pre-Amp., 12AX7 AF Amp.-Phase Inv., 6V6GT Audio Output, 6V6GT Audio Output 5Y3GT Rectifier		
POWER SUPPLY	110-120 Volts - 60 Cycle	RATING	.74 Amp. @ 117 Volts AC

HOWARD W. SAMS & CO., INC. • Indianapolis 5, Indiana

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PARTS LIST AND DESCRIPTIONS

V-M
MODEL 160

CHASSIS—TOP VIEW

TUBES (SYLVANIA or Equivalent)

ITEM No.	USE	REPLACEMENT DATA			RMA BASE TYPE	NOTES
		V-M PART No.	STANDARD REPLACEMENT	12AX7		
V1	Pre Amplifier	12AX7	12AX7	9A		
V2	A.F. Amplifier	12AX7	12AX7	9A		
V3	Phase Inverter	6V6GT	6V6GT	7AC		
V4	Audio Output	6V6GT	6V6GT	7AC		
V5	Rectifier	5Y3GT	5Y3GT	5T		

CAPACITORS

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

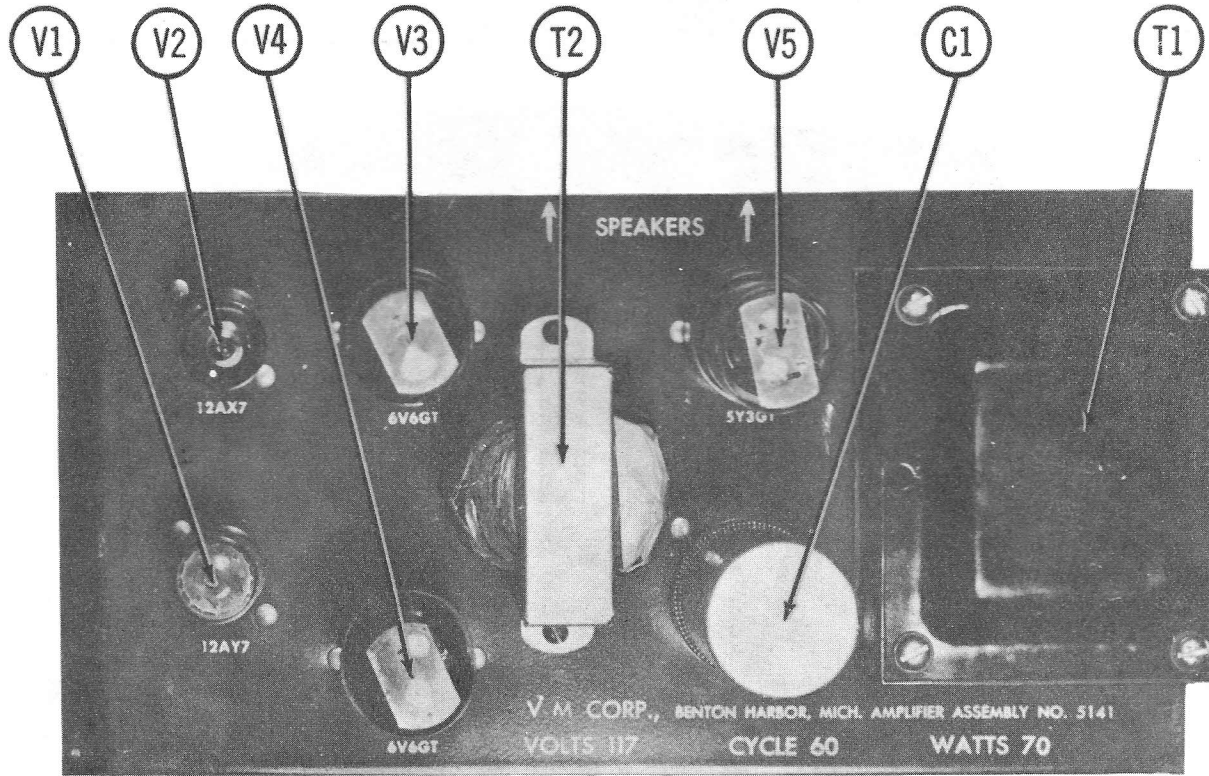
ITEM No.	RATING CAP. VOLT	REPLACEMENT DATA					NOTES	
		V-M PART No.	AEROVOX PART No.	CENTRALAB PART No.	CORNELL-DUBILIER PART No.	ERIE PART No.		MALLORY PART No.
C1A	20		AFH 4-14		3PT222245		FP444	TVL-4763
B	.20			PR825/10			TC22	TVL-1204
C	.47			P488-047	DF-503	BR102A	PT4147	4TM-547
D	.25			P488-003	DF-503	PT4847	PT4147	4TM-547
C2	10			P688-003	D6-302	PT66D3	PT623	6TM-D3
C3	.047			P688-003	D6-302	PT66D3	GP2-333-302	6TM-D3
C4	.003			P488-047	DF-503	PT4847	GP2-333-302	6TM-D3
C5	.003			P488-047	DF-503	PT4847	PT4147	4TM-547
C6	.047			P488-047	DF-503	PT4847	PT4147	4TM-547
C7	.047							
C8	.047							

CONTROLS

ITEM No.	RATING RESIST-ANCE	WATTS	REPLACEMENT DATA					INSTALLATION NOTES
			V-M PART No.	IRC PART No.	CLAROSTAT PART No.	CENTRALAB PART No.	MALLORY PART No.	
R1A	500KΩ	1/2	11947	Q13-133X	AT-78	BTSK-66	UT-427	Phono Volume-Tap @ 95KΩ
B	500KΩ	1/2	Not Req.	KSS-3	KSS-3	Not Req.	Not Req.	Attach to R1A
R2A	500KΩ	1/2	11949	Q13-133	AG-60-Z	BSK-60	U-48	Mike Volume
B	500KΩ	1/2	Not Req.	KSS-3	Not Req.	Not Req.	Not Req.	Attach to R2A
R3A	1.5Meg	1/2	11950	Q11-138	AG-83-S	AB-75	U-155	Tone
B	1.5Meg	1/2	Not Req.	KSS-3	Not Req.	AK-4	Not Req.	Attach to R3A
R3A	Switch		Not Req.	76-1	SWB	KB-1	US-26	Attach to R3A

RESISTORS

ITEM No.	RATING OHMS	WATT	REPLACEMENT DATA			NOTES
			V-M PART No.	IRC PART No.	REPLACEMENT DATA	
R4	4.7Meg			BTS-4.7Meg		
R5	4700Ω			BTS-4700		
R6	100KΩ			BTS-100K		BTS-100K
R7	10Meg			BTS-10Meg		BTS-100K
R8	10KΩ			BTS-10K		BTS-470K
R9	47KΩ			BTS-47K		BTS-10K
R10	220KΩ			BTS-220K		1.3/1A-300
R11	10KΩ			BTS-10K		BTS-470K
R12	10KΩ			BTS-10K		BTS-10K
R13	1000Ω			BTS-1000		BTS-10K
R14	47Ω			BTS-470		BTS-470



PARTS LIST AND DESCRIPTIONS (Continued)

TRANSFORMER (POWER)

ITEM No.	RATING			REPLACEMENT DATA				
	PRI.	SEC. 1	SEC. 2	V-M PART No.	STANCOR PART No.	MERIT PART No.	CHICAGO PART No.	TRIAD PART No.
T1	117VAC @ .74A.	720VCT @ 2 A	5VAC CT @ 1.7A		PM- 8410	P-2953	PH-120B	R-14F

TRANSFORMER (AUDIO OUTPUT)

ITEM No.	RATING			REPLACEMENT DATA				NOTES
	IMPEDANCE	DC RES.	SEC.	V-M PART No.	STANCOR PART No.	MERIT PART No.	CHICAGO PART No.	
T2	8.6KΩ CT	8Ω	436Ω .48Ω					
			SEC. 2 11.2Ω					

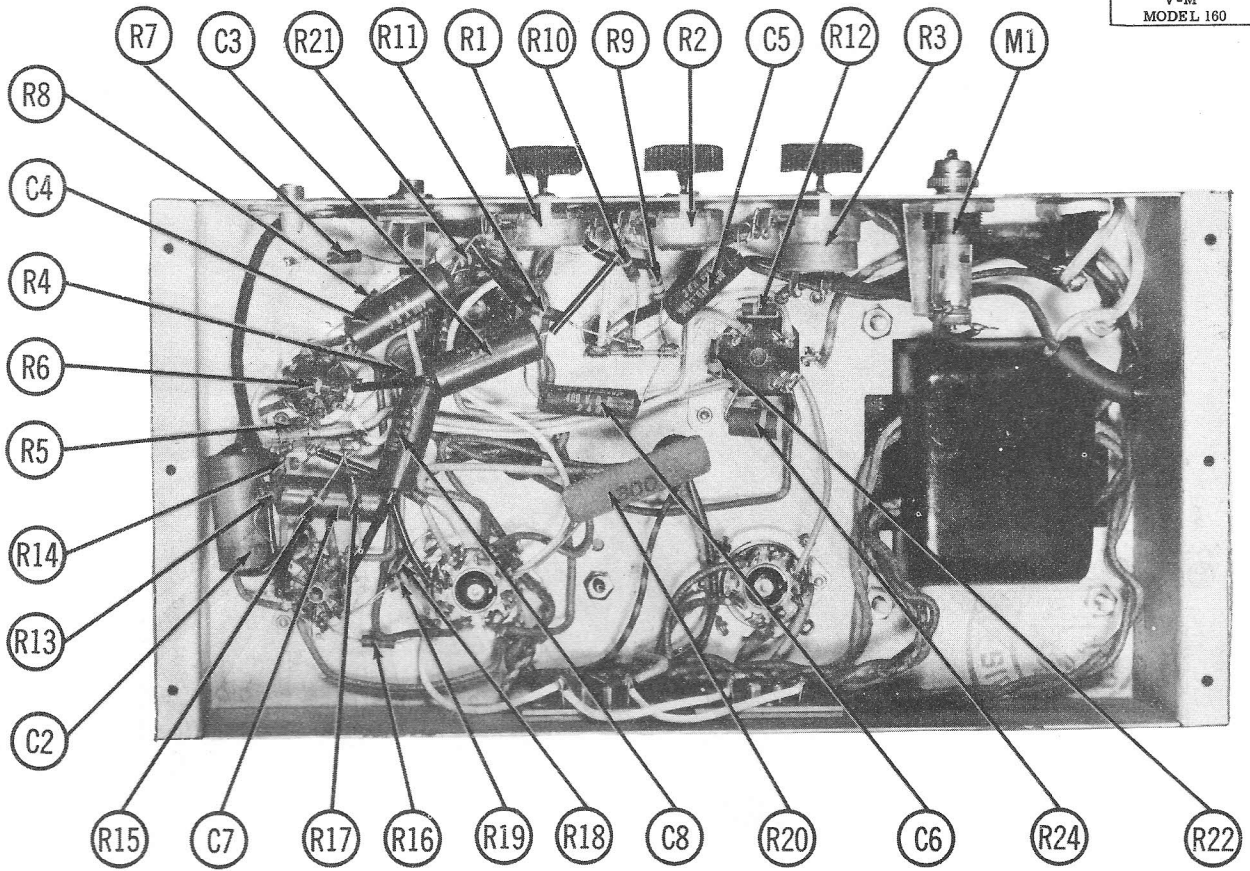
SPEAKER

ITEM No.	RATINGS		REPLACEMENT DATA		NOTES
	SIZE	FIELD	V-M PART No.	JENSEN PART No.	
SP1	10"	PM 8Ω	ST-120 Mod. P10-S	QUAM 10A4	

DIAL LIGHTS

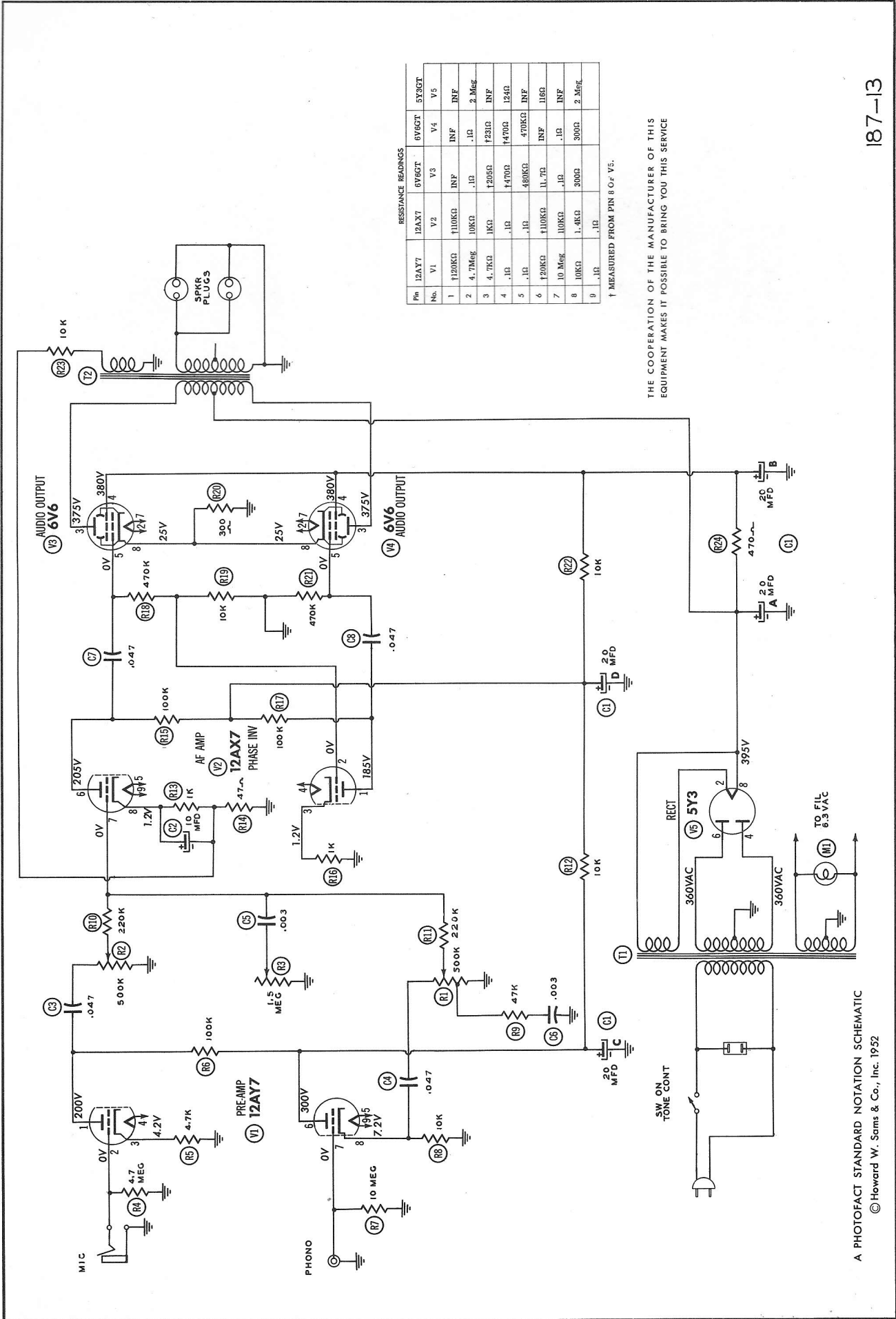
ITEM No.	BASE TYPE	VOLTS	AMPS.	BEAD COLOR	REPLACEMENT DATA		NOTES
					V-M PART No.	Type #47	
M1	Bayonet	6-8	.15	Brown			

CHASSIS—BOTTOM VIEW



V-M
MODEL 160

091 T3C0M
MODEL 160
V-M-A



RESISTANCE READINGS

Pin	12AY7	12AX7	6V6CT	6V6CT	5Y3GT
No.	V1	V2	V3	V4	V5
1	1120KΩ	1100KΩ	INF	INF	INF
2	4.7Meg	10KΩ	.1Ω	.1Ω	2 Meg
3	4.7KΩ	1KΩ	1205Ω	1231Ω	INF
4	.1Ω	.1Ω	1470Ω	1470Ω	124Ω
5	.1Ω	.1Ω	480KΩ	470KΩ	INF
6	120KΩ	1100KΩ	11.7Ω	INF	116Ω
7	10 Meg	10KΩ	.1Ω	.1Ω	INF
8	10KΩ	1.4KΩ	300Ω	300Ω	2 Meg
9	.1Ω	.1Ω			

† MEASURED FROM PIN 8 OF V5.

THE COOPERATION OF THE MANUFACTURER OF THIS EQUIPMENT MAKES IT POSSIBLE TO BRING YOU THIS SERVICE

A PHOTOFACT STANDARD NOTATION SCHEMATIC
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- 1 - DC Voltage measurements are at 20,000 ohms per volt; 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 ±1% in voltage and resistance readings.
- 6 - All controls at minimum, proper output load connected.