



MC INTOSH
MODELS C-4, C-4P



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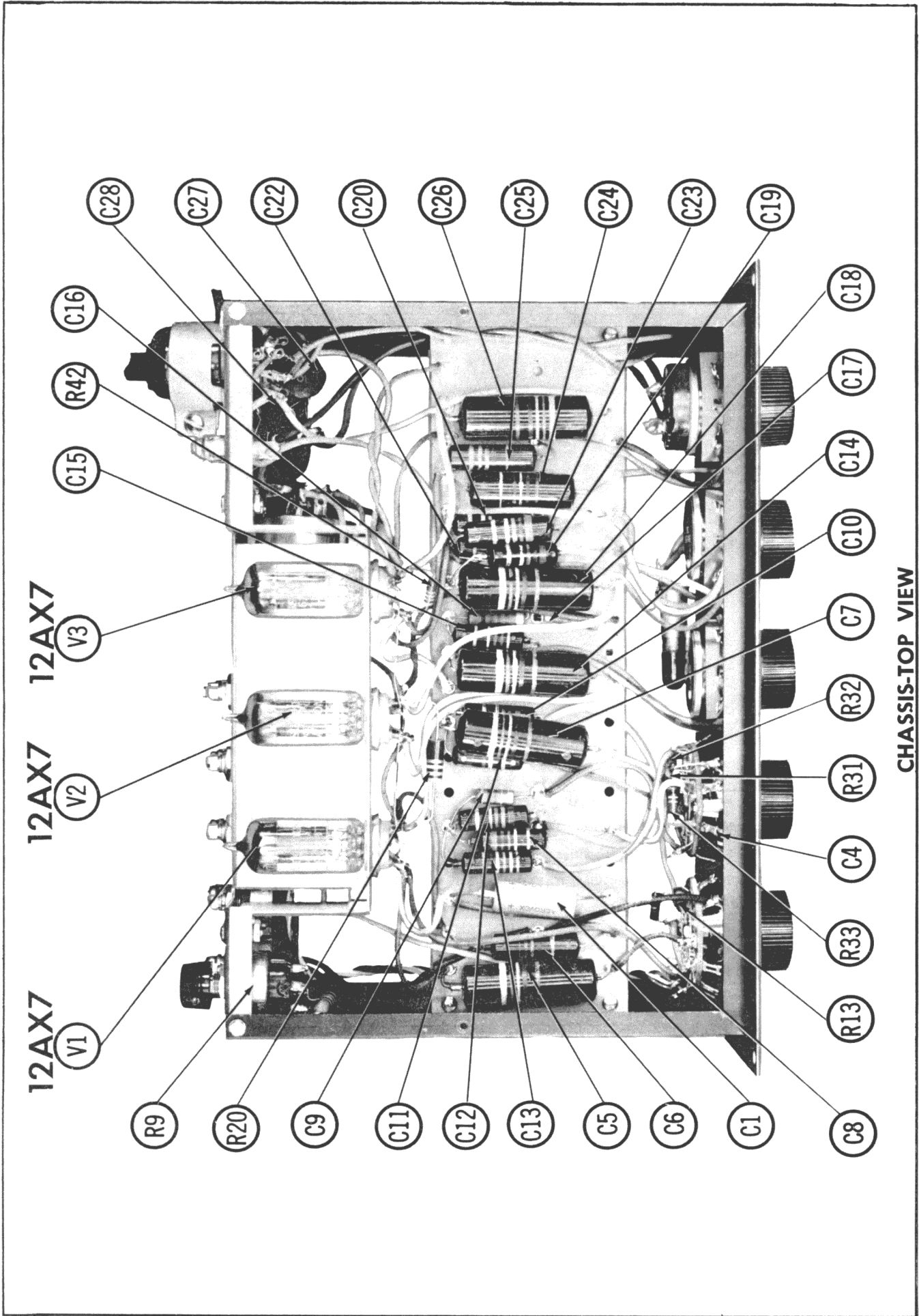
TRADE NAME	McIntosh Models C-4, C-4P
MANUFACTURER	McIntosh Laboratory, Inc., 320 Water St., Binghamton, N. Y.
TYPE SET	5 Channel Audio Preamplifier and Compensator
TUBES (Three)	Types 12AX7 Preamplifier, 12AX7 Cathode Follower, 12AX7 AF Amp. -Cathode Follower
POWER SUPPLY	300-400 Volts DC B+, 6.3 Volts Filament

MODEL C-4P INCLUDES MODEL D-8 POWER SUPPLY UNIT. FOR SERVICE INFORMATION ON THE POWER SUPPLY UNIT, SEE PHOTOFACT SET 314-FOLDER 8.

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

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CHASSIS-TOP VIEW

PARTS LIST AND DESCRIPTIONS TUBES (GENERAL ELECTRIC, SYLVANIA)

ITEM No.	USE	TYPE	NOTES	ITEM No.	USE	TYPE	NOTES
V1	Pre-amplifier	12AX7		V3	AF Amplifier-Cathode Follower	12AX7	
V2	A.F. Amplifier	12AX7					

ELECTROLYTIC CAPACITORS

ITEM No.	RATING CAP.	VOLT.	REPLACEMENT DATA							
			MC INTOSH PART No.	AEROVOX PART No.	CORNELL-DUBILIER PART No.	MALLORY PART No.	PYRAMID PART No.	SANGAMO PART No.	SPRAGUE PART No.	
C1	50	6		SRE8V50	BBR50-6	TC29	TD-50-6		MMT-650 T-625 MTD-4510	TVA-1100 R2317 *
C2A	30	250								
C2B	30	300								
C2C	20	450								

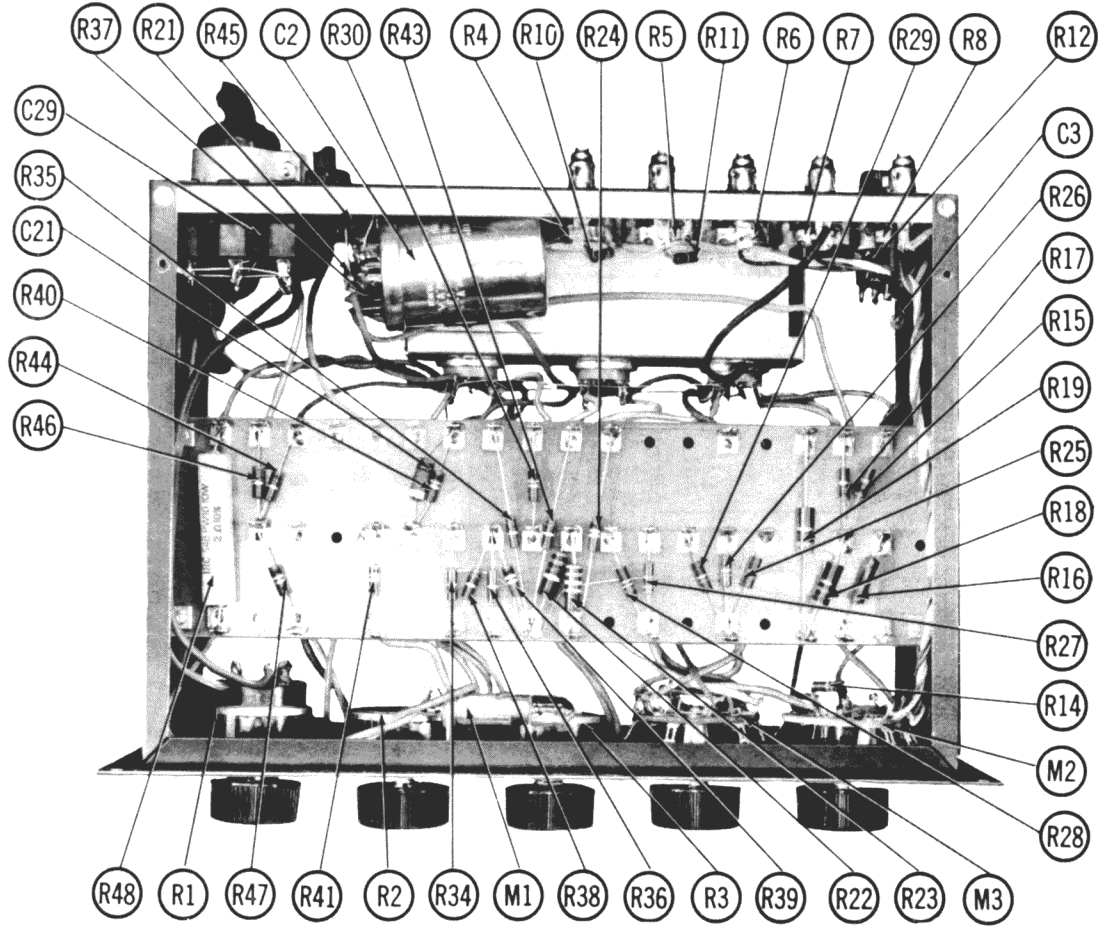
* Non-catalog item.

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 CAP.	VOLT.	REPLACEMENT DATA								NOTES
			MC INTOSH PART No.	AEROVOX PART No.	CENTRALAB PART No.	CORNELL-DUBILIER PART No.	ERIE PART No.	MALLORY PART No.	SPRAGUE PART No.		
C3	100	.001		NP0-S1100	D6-101	IR5D1	TZ30	ED-100	MCB235	MS-31	5TCC-Q47
C4	.47	200		1464-001		IR5D1	IR5D1	ED-1000	MCB255	MS-21	MS-222
C5	.47	200		P288N-47	DF-303	CUB2P47	CUB2P47	ED-1000	PT4047	2TM-P47	4TM-P1
C6	.033	400		BPD-.03		CUB6S33	CUB6S33	ED-1500	PT6133	6TM-S33	6TM-S33
C7	.47	200		P288N-47		CUB2P47	CUB2P47	ED-1500	PT4047	2TM-P47	2TM-P47
C8	.0022	400		1464-0022		IR5D22	IR5D22	ED-1500	MS-222	MS-222	5HK-251
C9	.470	200		1464-00047		IR5T47	IR5T47	ED-1800	MS-347	MS-347	5HK-251
C10	.001	400		1464-001		IR5D1	IR5D1	ED-1000	MCB255	MS-21	
C11	.001	400		1464-001		IR5D1	IR5D1	ED-1000	MCB255	MS-21	
C12	.0018	400		1464-0018		IR5D18	IR5D18	ED-1800	MCB255	MS-21	
C13	.0033	400		1464-0033		IR5D33	IR5D33	ED-1800	MCB255	MS-21	
C14	.47	200		P288N-47		CUB2P47	CUB2P47	ED-1000	PT4047	2TM-P47	
C15	.0047	400		BPD-.0047	D6-472	CUB6D47	CUB6D47	ED-1500	PT6247	4TM-P47	
C16	1500			1464-0015		IR5D15	IR5D15	ED-1500	PT6247	4TM-P47	
C17	1500			P288N-47		IR5D15	IR5D15	ED-1500	PT6247	4TM-P47	
C18	.47	200		1464-0015		IR5D15	IR5D15	ED-1500	PT6247	4TM-P47	
C19	.001	400		P288N-47		IR5D1	IR5D1	ED-1000	MCB255	MS-21	
C20	.01	400		1464-001		IR5D1	IR5D1	ED-1000	MCB255	MS-21	
C21	.47	200		NP0-S147	D6-470	TZ22	TZ22	ED-47	ZT-5447	5TCC-Q47	
C22	.0022	400		1464-0022		IR5D22	IR5D22	ED-47	ZT-5447	MS-222	
C23	.022	400									
C24	.1	400		P488N-1	DF-104	CUB4P1	CUB4P1	ED-1000	PT401	4TM-P1	
C25	.033	400		BPD-.03	DF-303	CUB6S33	CUB6S33	ED-1500	PT6133	6TM-S33	
C26	.47	200		P288N-47		CUB2P47	CUB2P47	ED-1500	PT4047	2TM-P47	
C27A	10000			BPD-2X01	DD3-103	DK082	DK082	ED-.01	DC-511	5HK-251	
C27B	10000			BPD-2X01	DD3-103	DK082	DK082	ED-.01	DC-511	5HK-251	
C28A	10000			BPD-0047	DD3-103	DK079	DK079	ED-.01	DC-511	5HK-251	
C28B	10000			BPD-0047	DD-472	DK079	DK079	ED-.0047	UC-5247	5HK-DM7	

CHASSIS—BOTTOM VIEW



PARTS LIST AND DESCRIPTIONS (Continued)

PARTS LIST AND DESCRIPTIONS (Continued)

CONTROLS

ITEM No.	RESIST-ANCE	RATING		REPLACEMENT DATA				INSTALLATION NOTES	
		RESIST-ANCE	WATTS	MC INTOSH PART No.	CENTRALAB PART No.	CLAROSTAT PART No.	IRC PART No.		MALLORY PART No.
R1A	1Meg		$\frac{1}{2}$		AB-70	A47-1Meg-Z	QJ3-137	U53	Volume
B	Shaft				AK-4	KSS-3	Not Req.	Not Req.	Attach to R1A
C	Switch				KB-2	SWE-20	76-2	US-27	Attach to R2A
R2A	250K		$\frac{1}{2}$		AB-51	AK47-250K-Z	QJ3-130	U44	Treble
B	Shaft				AK-4	KSS-3	Not Req.	Not Req.	Attach to R2A
R3A	1Meg		$\frac{1}{2}$		AB-70	A47-1Meg-Z	QJ3-137	U53	Bass
B	Shaft				AK-4	KSS-3	Not Req.	Not Req.	Attach to R3A
R4A	100K		$\frac{1}{2}$		AB-41	A47-100K-Z	QJ3-128	U39	Level, tape
B	Shaft				AK-1	FKS-1/4	RQ	Not Req.	Attach to R4A
R5A	100K		$\frac{1}{2}$		AB-41	A47-100K-Z	QJ3-128	U39	Level, tuner
B	Shaft				AK-1	FKS-1/4	RQ	Not Req.	Attach to R5A
R6A	100K		$\frac{1}{2}$		AB-41	A47-100K-Z	QJ3-128	U39	Level, Mic input
B	Shaft				AK-1	FKS-1/4	RQ	Not Req.	Attach to R6A
R7A	100K		$\frac{1}{2}$		AB-41	A47-100K-Z	QJ3-128	U39	Level, Phono #1 input
B	Shaft				AK-1	FKS-1/4	RQ	Not Req.	Attach to R7A
R8A	100K		$\frac{1}{2}$		AB-41	A47-100K-Z	QJ3-128	U39	Level, Phono #2 input
B	Shaft				AK-1	FKS-1/4	RQ	Not Req.	Attach to R8A
R9A	100K		$\frac{1}{2}$		AB-40	A47-100 K-8	QJ1-128	U41	Lead, Phono #2
B	Shaft				AK-9	RS-2	PC	Not Req.	Attach to R9A
C	Switch				KB-2	SWE-20	76-2	US-27	Attach to R9A

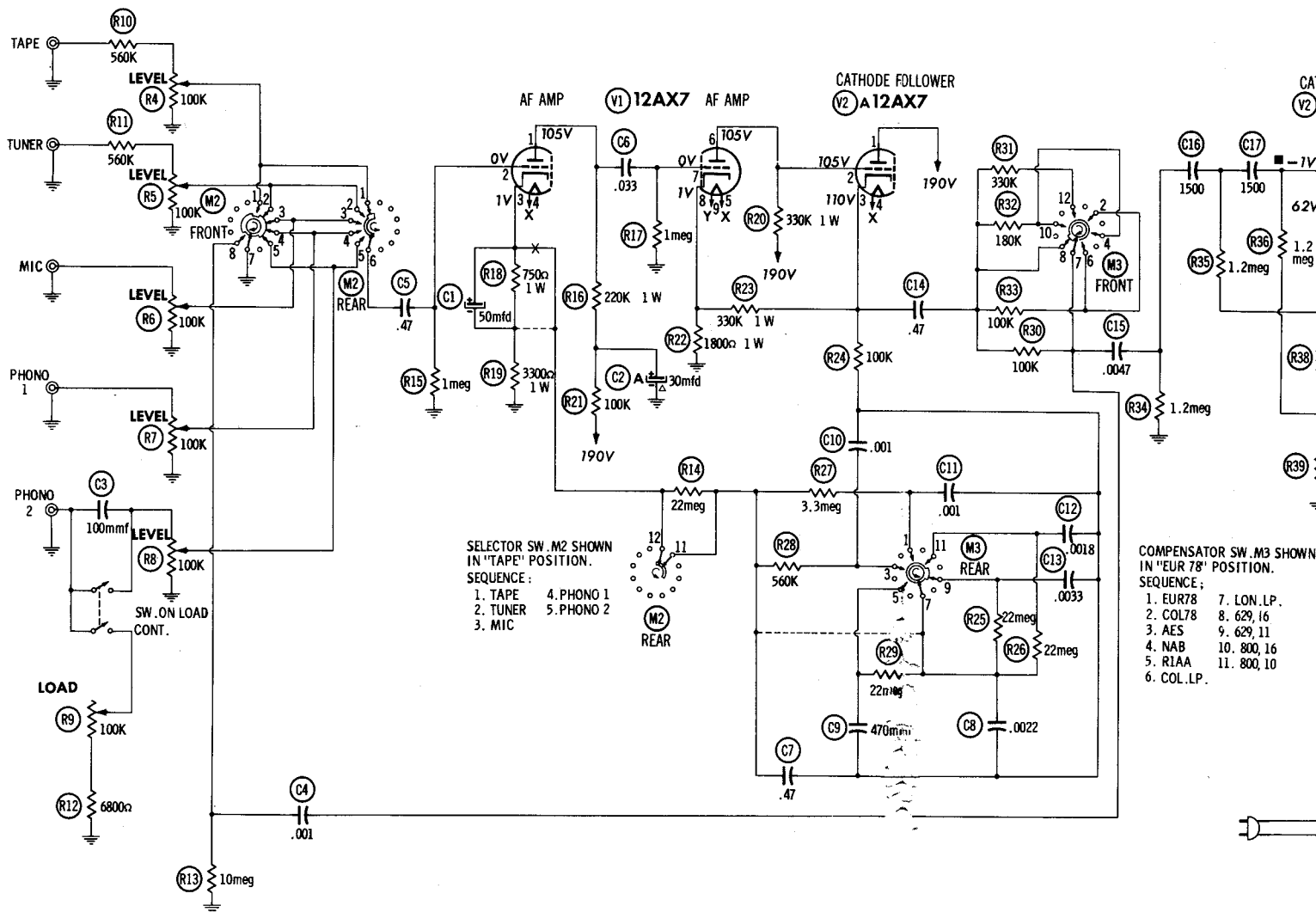
RESISTORS

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

ITEM No.	RATING		REPLACEMENT DATA		ITEM No.	RATING		REPLACEMENT DATA		NOTES
	OHMS	WATT	MC INTOSH PART No.	IRC PART No.		OHMS	WATT	MC INTOSH PART No.	IRC PART No.	
R10	560K			BTS-560K	R29	22Meg			BTS-22Meg	
R11	560K			BTS-560K	R30	100K			BTS-100K	
R12	6800Ω			BTS-6800	R31	330K			BTS-330K	
R13	10Meg			BTS-10Meg	R32	180K			BTS-180K	
R14	22Meg			BTS-22Meg	R33	100K			BTS-100K	
R15	1Meg			BTS-1Meg	R34	1.2Meg			BTS-1.2Meg	
R16	220K		1	BTA-220K	R35	1.2Meg			BTS-1.2Meg	
R17	1Meg		1	BTS-1Meg	R36	1.2Meg			BTS-1.2Meg	
R18	3300Ω		1	BTA-750Ω 5%	R37	100K			BTS-100K	
R19	3300Ω		1	BTA-330K	R38	1800Ω			AS-1800	
R20	330K		1	BTS-330K	R39	100K			BTS-100K	
R21	100K		1	BTS-100K	R40	10K			BTS-10K	
R22	1800Ω		1	BTA-1800	R41	330K			BTS-330K	
R23	330K		1	BTA-330K	R42	1800Ω			BTS-1800	
R24	100K		1	BTS-100K	R43	330K			BTS-330K	
R25	22Meg			BTS-22Meg	R44	1Meg		2	BTS-1Meg	
R26	22Meg			BTS-22Meg	R45	12K			BTS-12K	
R27	3.3Meg			BTS-3.3Meg	R46	1200Ω			BTS-1200	
R28	560K			BTS-560K	R47	100K			BTS-100K	
					R48	2Ω		10	PW10-2	

MISCELLANEOUS

ITEM No.	PART NAME	MC INTOSH PART No.	NOTES
M1	Pilot Light Switch		
M2	Switch		
M3	Switch		
			#44
			Selector (Rotary, wafer type)
			Compensation (Rotary, wafer type)



SELECTOR SW. M2 SHOWN
IN "TAPE" POSITION.
SEQUENCE:
1. TAPE 4. PHONO 1
2. TUNER 5. PHONO 2
3. MIC

COMPENSATOR SW. M3 SHOWN
IN "EUR 78" POSITION.
SEQUENCE;
1. EUR78 7. LON. LP.
2. COL78 8. 629, 16
3. AES 9. 629, 11
4. NAB 10. 800, 16
5. RIAA 11. 800, 10
6. COL. LP.

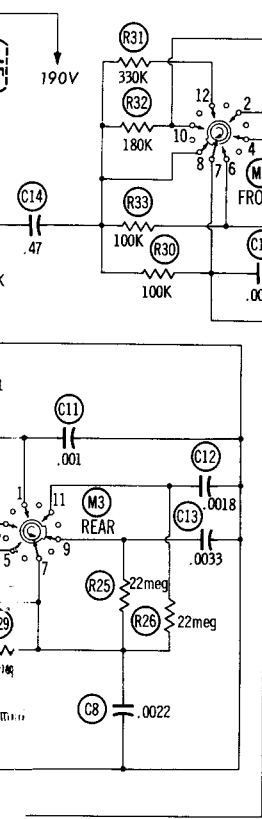
RESISTANCE READINGS

ITEM	TUBE	Pin 1	Pin 2	Pin 3	Pin 4	Pin 5	Pin 7	Pin 8	Pin 9
V1	12AX7	† 430K	1Meg	4000Ω	60Ω	60Ω	† 440K	1Meg	1800Ω
V2	12AX7	† 112K	† 440K	330K	60Ω	60Ω	† 112K	1.3Meg	100K
V3	12AX7	† 340K	10K	1800Ω	60Ω	60Ω	† 12K	1.1Meg	100K

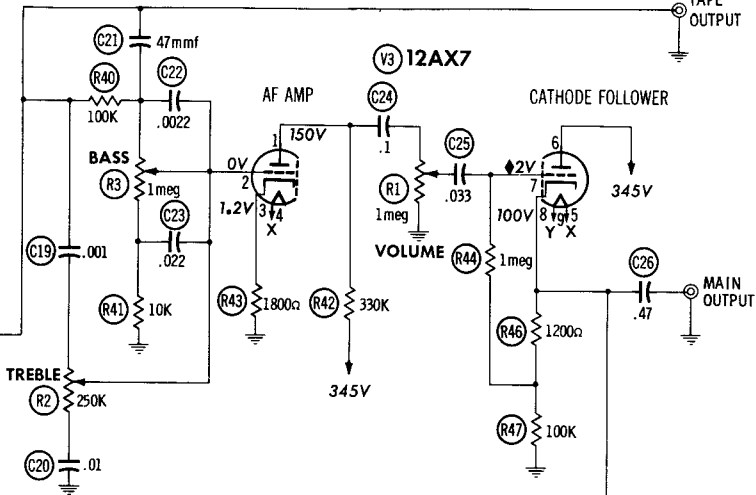
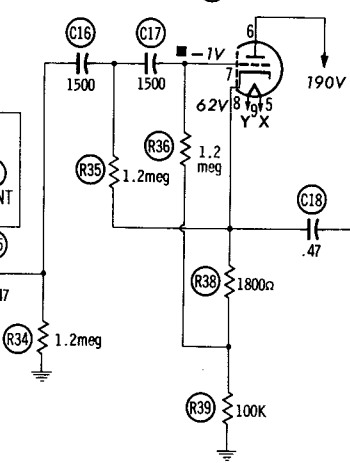
† MEASURED FROM PIN 4 OF POWER SOCKET.
 † MEASURED FROM PIN 8 OF V2.
 • MEASURED FROM PIN 8 OF V3.

1. DC voltage measure
 AC voltages measure
 2. Socket connections
 3. Measured values
 4. Line voltage mal
 5. Nominal tolerance
 variation of ± 15% in
 6. All controls at m

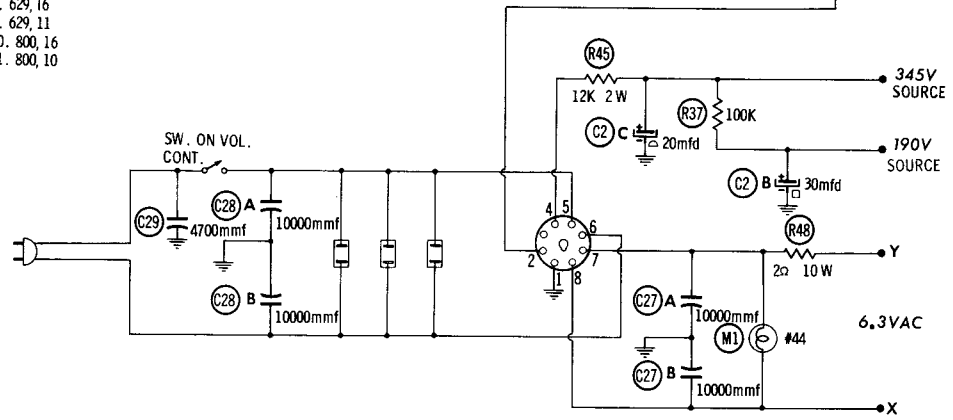
CATHODE FOLLOWER
V1 12AX7



CATHODE FOLLOWER
V2 12AX7



COMPENSATOR SW. M3 SHOWN
IN "EUR 78" POSITION.
SEQUENCE:
1. EUR78 7. LON. LP.
2. COL.78 8. 629, 16
3. AES 9. 629, 11
4. NAB 10. 800, 16
5. RIAA 11. 800, 10
6. COL. LP.



Pin 7	Pin 8	Pin 9
1Meg	1800Ω	60Ω
1.3Meg	100K	60Ω
1.1Meg	100K	60Ω

- 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 on component values makes possible a variation of ± 15% in voltage and resistance readings.
- All controls at minimum.

