



EICO MODEL  
HF-85



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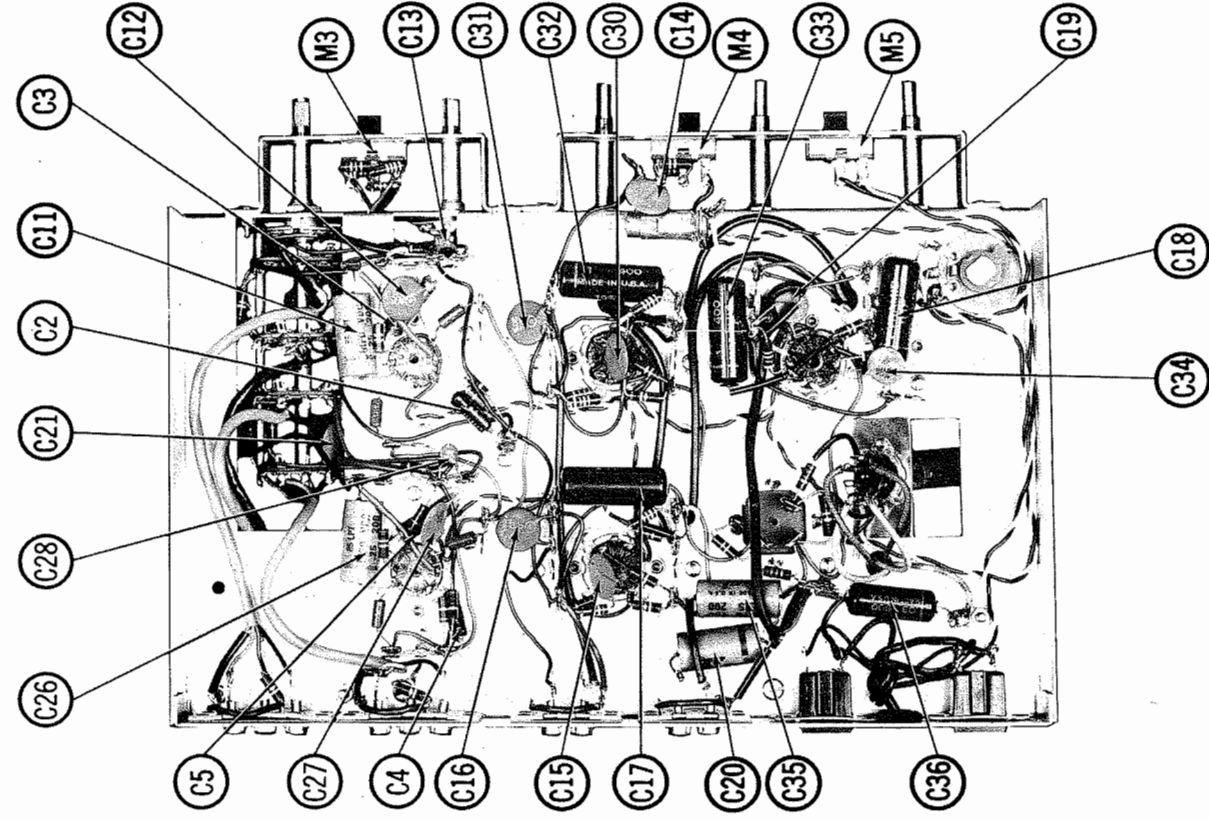
TRADE NAME	Eico Model HF-85
MANUFACTURER	Electronic Instrument Co., Inc., 33-00 Northern Blvd., Long Island City 1, N. Y.
TYPE SET	AC Operated 6 Tube Stereo Preamplifier
POWER SUPPLY	110-120 Volts AC, 60 Cycles    RATING    25 Watts, .23 Amp. @117 Volts AC

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

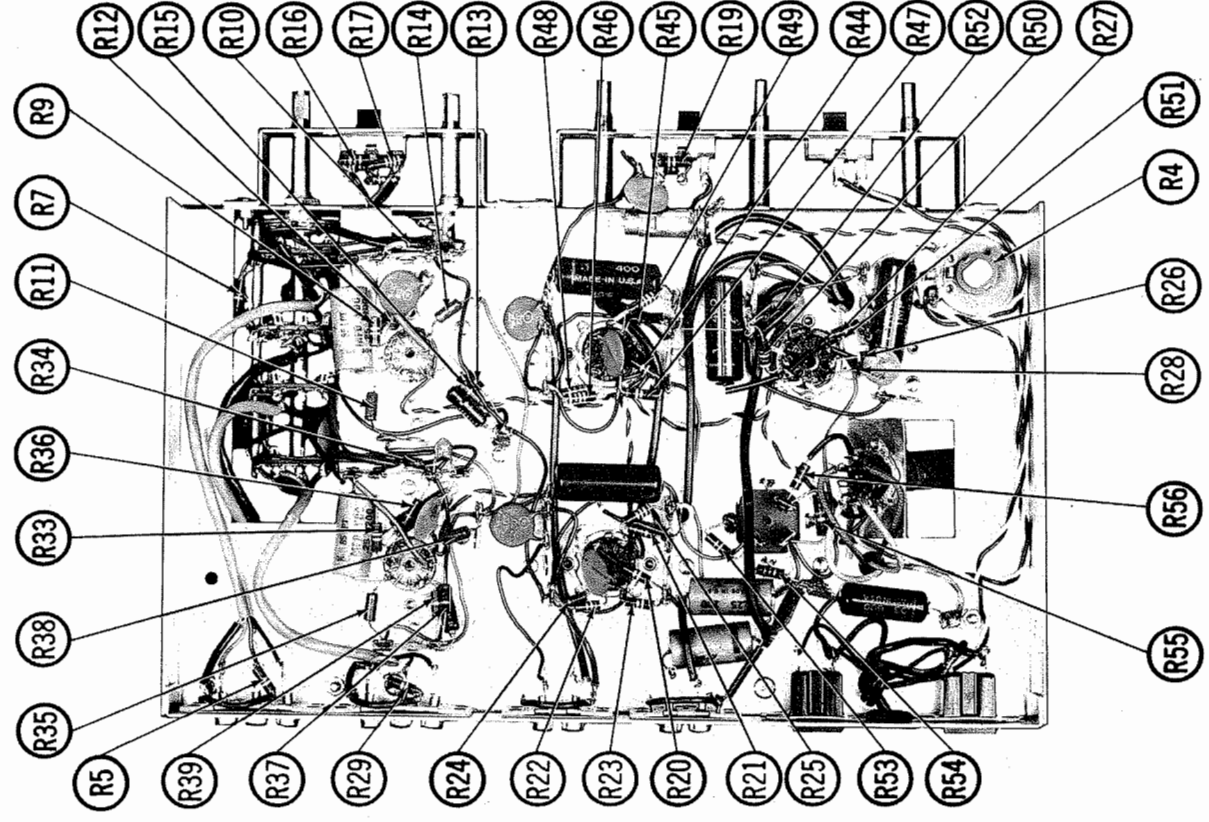


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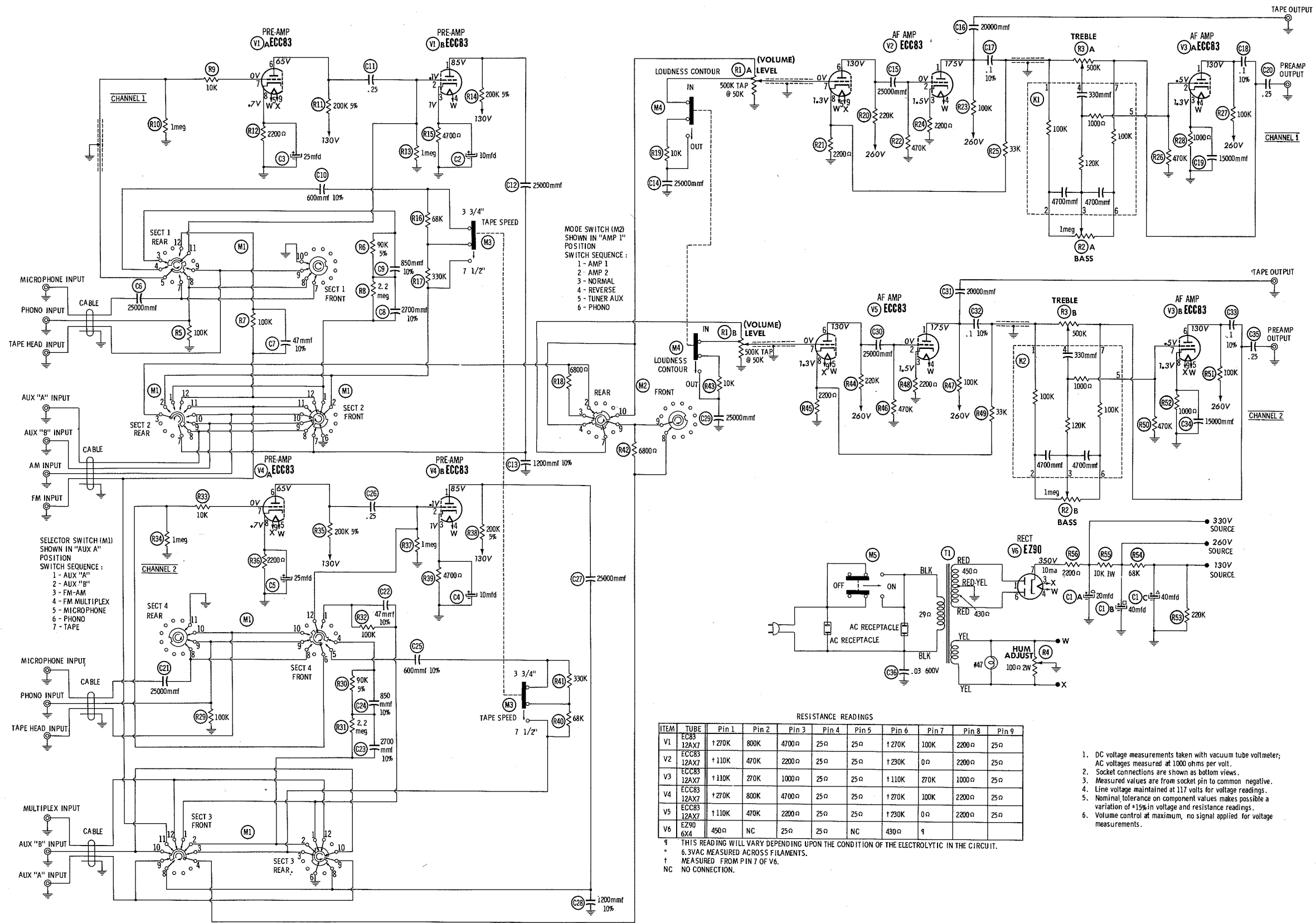
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CHASSIS BOTTOM VIEW -CAPACITOR & MISC. IDENT.



CHASSIS BOTTOM VIEW - RESISTOR IDENT.



MODE SWITCH (M2)  
SHOWN IN "AMP 1"  
POSITION  
SWITCH SEQUENCE:  
1 - AMP 1  
2 - AMP 2  
3 - NORMAL  
4 - REVERSE  
5 - TUNER AUX  
6 - PHONO

SELECTOR SWITCH (M1)  
SHOWN IN "AUX A"  
POSITION  
SWITCH SEQUENCE:  
1 - AUX "A"  
2 - AUX "B"  
3 - FM-AM  
4 - FM MULTIPLEX  
5 - MICROPHONE  
6 - PHONO  
7 - TAPE

RESISTANCE READINGS

ITEM	TUBE	Pin 1	Pin 2	Pin 3	Pin 4	Pin 5	Pin 6	Pin 7	Pin 8	Pin 9
V1	ECC83 12AX7	† 270K	800K	4700Ω	25Ω	25Ω	† 270K	100K	2200Ω	25Ω
V2	ECC83 12AX7	† 110K	470K	2200Ω	25Ω	25Ω	† 230K	0Ω	2200Ω	25Ω
V3	ECC83 12AX7	† 110K	270K	1000Ω	25Ω	25Ω	† 110K	270K	1000Ω	25Ω
V4	ECC83 12AX7	† 270K	800K	4700Ω	25Ω	25Ω	† 270K	100K	2200Ω	25Ω
V5	ECC83 12AX7	† 110K	470K	2200Ω	25Ω	25Ω	† 230K	0Ω	2200Ω	25Ω
V6	EZ90 6X4	450Ω	NC	25Ω	25Ω	NC	430Ω	1		

† THIS READING WILL VARY DEPENDING UPON THE CONDITION OF THE ELECTROLYTIC IN THE CIRCUIT.  
\* 6.3VAC MEASURED ACROSS FILAMENTS.  
† MEASURED FROM PIN 7 OF V6.  
NC NO CONNECTION.

- 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.
- Volume control at maximum, no signal applied for voltage measurements.

## PARTS LIST AND DESCRIPTIONS TUBES

CBS		GENERAL ELECTRIC		RAYTHEON		SYLVANIA	
ITEM No.	USE	TYPE	ITEM No.	USE	TYPE	ITEM No.	TYPE
V1	Channel 1 Preamp.	ECC83/12AX7	V4	Channel 2 Preamp.	ECC83/12AX7		
V2	Channel 1 AF Amp.	ECC83/12AX7	V5	Channel 2 AF Amp.	ECC83/12AX7		
V3	Channel 1 AF Amp. - Rectifier	ECC83/12AX7	V6	Rectifier	EZ90/6X4		

### ELECTROLYTIC CAPACITORS

ITEM No.	RATING	REPLACEMENT DATA						REMARKS	RATING	REMARKS	SPRAGUE PART No.	NOTES
		CAP.	VOLT.	AEROVOX PART No.	CORNELL DUBILIER PART No.	MALORY PART No.	PYRAMID PART No.					
C1A	20	400	24005									
C1B	40	350										
C1C	40	350										
C2	10	6	23014	XLW10-6	TT6X10	ML10-6						
C3	25	6	23020	XLW25-6	TT6X25	TD-25-25						
C4	10	6	23014	XLW10-6	TT6X10	ML10-6						
C5	25	6	23020	XLW25-6	TT6X25	TD-25-25						

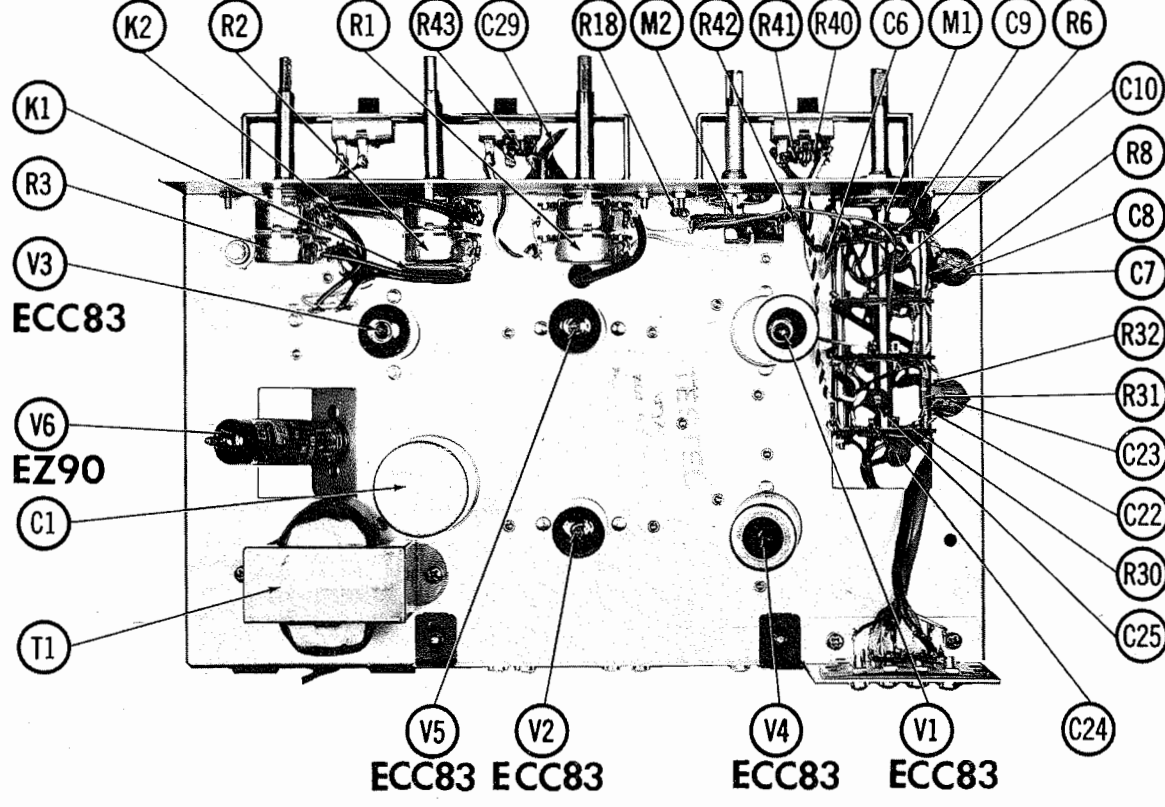
\* Not normally in distributor's stock. Available thru distributor on order to manufacturer.

### 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	REPLACEMENT DATA						REMARKS	RATING	REMARKS	MALLORY PART No.	SPRAGUE PART No.	NOTES
		CENTRALAB PART No.	AEROVOX PART No.	CORNELL DUBILIER PART No.	MALORY PART No.	ELMENCOR PART No.	SPRAGUE PART No.						
C6	25000		DL-47	ST6S25	DD-470	ST6S25				GEM-6125		5HK-S25	
C7	47 10%		DL-2700	LI0Q47	DD-470	LI0Q47				GP447		10TS-D27	
C8	2700 10%		DL-820	IR6T82	DD-821	IR6T82				GEM-1623		10TS-T82	
C9	850 10%		DL-680	IR6T68	DD-601	IR6T68				GP982		10TS-T80	
C10	600 10%		P268N-25	CUB2P25	DD-601	CUB2P25				GP980		2TM-P25	
C11	.25 200V			ST6S25	DD-4-254	ST6S25				GEM-2025		5HK-S25	
C12	25000		DL-1200	IR6D12	DD-122	IR6D12				GP212		10TS-D12	
C13	1200 10%			ST6S25	DD-203	ST6S25				GEM-6125		5HK-S25	
C14	25000			ST6S25	DD-203	ST6S25				GEM-6125		5HK-S25	
C15	25000			ST6S25	DD-203	ST6S25				GP120		4TM-P1	
C16	20000			ST6S25	DD-203	ST6S25				GP120		4TM-P1	
C17	1.1 400V 10%		V84C4P1-10%	BYA10S15	DD-153	BYA10S15				GP115		5HK-S15	
C18	1.1 400V 10%		V84C4P1-10%	BYA10S15	DD-153	BYA10S15				GEM-2025		2TM-P25	
C19	1500 200V		P268N-25	CUB2P25	DD-153	CUB2P25				GP447		10TS-Q47	
C20	25000			ST6S25	DD-470	ST6S25				GEM-1623		10TS-T82	
C21	47 10%		DL-47	LI0Q47	DD-470	LI0Q47				GP960		10TS-T80	
C22	2700 10%		DL-2700	IR6T82	DD-821	IR6T82				GEM-2025		5HK-S25	
C23	850 10%		DL-820	IR6T68	DD-601	IR6T68				GP212		10TS-D12	
C24	600 10%		DL-680	IR6T68	DD-601	IR6T68				GEM-6125		5HK-S25	
C25	600 10%		P268N-25	CUB2P25	DD-601	CUB2P25				GP120		5HK-S25	
C26	25 200V			ST6S25	DD-122	ST6S25				GP120		5HK-S25	
C27	25000		DL-1200	IR6D12	DD-122	IR6D12				GP150		4TM-P1	
C28	1200 10%			ST6S25	DD-203	ST6S25				GEM-2025		5HK-S15	
C29	25000			ST6S25	DD-203	ST6S25				GEM-613		6TM-S3	
C30	25000			ST6S25	DD-203	ST6S25				GEM-613		6TM-S3	
C31	20000			ST6S25	DD-203	ST6S25				GEM-613		6TM-S3	
C32	1.1 400V 10%		V84C4P1-10%	BYA10S15	DD-153	BYA10S15				GEM-613		6TM-S3	
C33	1.1 400V 10%		V84C4P1-10%	BYA10S15	DD-153	BYA10S15				GEM-613		6TM-S3	
C34	15000		P268N-25	CUB2P25	DD-153	CUB2P25				GEM-613		6TM-S3	
C35	.25 200V			ST6S25	DD-303	ST6S25				GEM-613		6TM-S3	
C36	.03 600V		P688N-03	CUB6S3	DD-303	CUB6S3				GEM-613		6TM-S3	

## CHASSIS—TOP VIEW



## PARTS LIST AND DESCRIPTIONS

### COMPONENT COMBINATIONS

ITEM No.	USE	DESCRIPTION	EICO PART No.	REPLACEMENT DATA
K1	Tone Comp.	(3) 300mmf, 1000mmf, 68K, 1000K, 1500K, (2) 8800K, 68K	28751	Aerovox Centralab Centralab
K2	Tone Comp.	(3) 300mmf, 1000mmf, 68K, 1000K, 1500K, (2) 8800K, 68K	28751	PA-694 FC-342 FC-342

### MISCELLANEOUS

ITEM No.	PART NAME	EICO PART No.	NOTES
M1	Switch	60057	Input Selector
M2	Switch	60065	Mode Selector
M3	Switch	62000	Tape Speed (DPDT, Slide Type)
M4	Switch	62000	Loudness Control (DPDT, Slide Type)
M5	Switch	62001	Off-On (SPST, Slide Type)

### CABINETS & CABINET PARTS (When Ordering Cabinets & Cabinet Parts, Specify Model, Chassis & Color)

NAME	PART NO.	DESCRIPTION
Knob	53016	Amp. 1 Level, Amp. 1 Bass, Amp. 1 Treble
Knob	53022	Amp. 2 Level, Amp. 2 Bass, Amp. 2 Treble
Knob	53018	Function Selector, Mode Selector

### TRANSFORMER (POWER)

ITEM No.	RATING		REPLACEMENT DATA				
	PRI.	SEC. 1	SEC. 2	EICO PART No.	Ham PART No.	Thorderson PART No.	Tried PART No.
T1	580 VCT @ .010A	6.3V@ 2.2A		30027			

### WIRING DATA

General-use Unshielded Hook-up Wire ..... Use BELDEN No. 8550 (Solid) Available in Ten Colors  
8524 (Stranded) Available in Ten Colors  
Power Cord ..... Use BELDEN No. 1765-B (6 Ft. Length)  
1725-K (7½ Ft. Length)

### CONTROLS

ITEM No.	RATING	REPLACEMENT DATA				INSTALLATION NOTES
		CENTRALAB PART No.	CLAROSTAT PART No.	CTS-IRC PART No.	MALLORY PART No.	
R1A	500K 50K Tap					Level, Channel 1
B	500K 50K Tap					Level, Channel 2
R2A	1meg					Bass, Channel 1
R3A	500K					Treble, Channel 1
R4A	100K Shaft	WN-101 Not Req.	A43-100 FK3 1/4	W11-084 SK5	RI00L Not Req.	Hum Adjust

### RESISTORS

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

ITEM No.	RATING	REMARKS	RATING		REMARKS
			ITEM No.	RATING	
R5	100K		R41	330K	
R6	90K 5%		R42	6800K	
R7	100K		R43	10K	
R8	2.2meg		R44	220K	
R9	10K		R45	2200K	
R10	1meg		R46	470K	
R11	200K 5%		R47	100K	
R12	2200K		R48	2200K	
R13	1meg		R49	33K	
R14	200K 5%		R50	470K	
R15	4700K		R51	100K	
R16	68K		R52	1000K	
R17	350K		R53	220K	
R18	5000K		R54	68K	
R19	200K		R55	10K 1W	
R20	2200K		R56	2200K	
R21	2200K				
R22	470K				