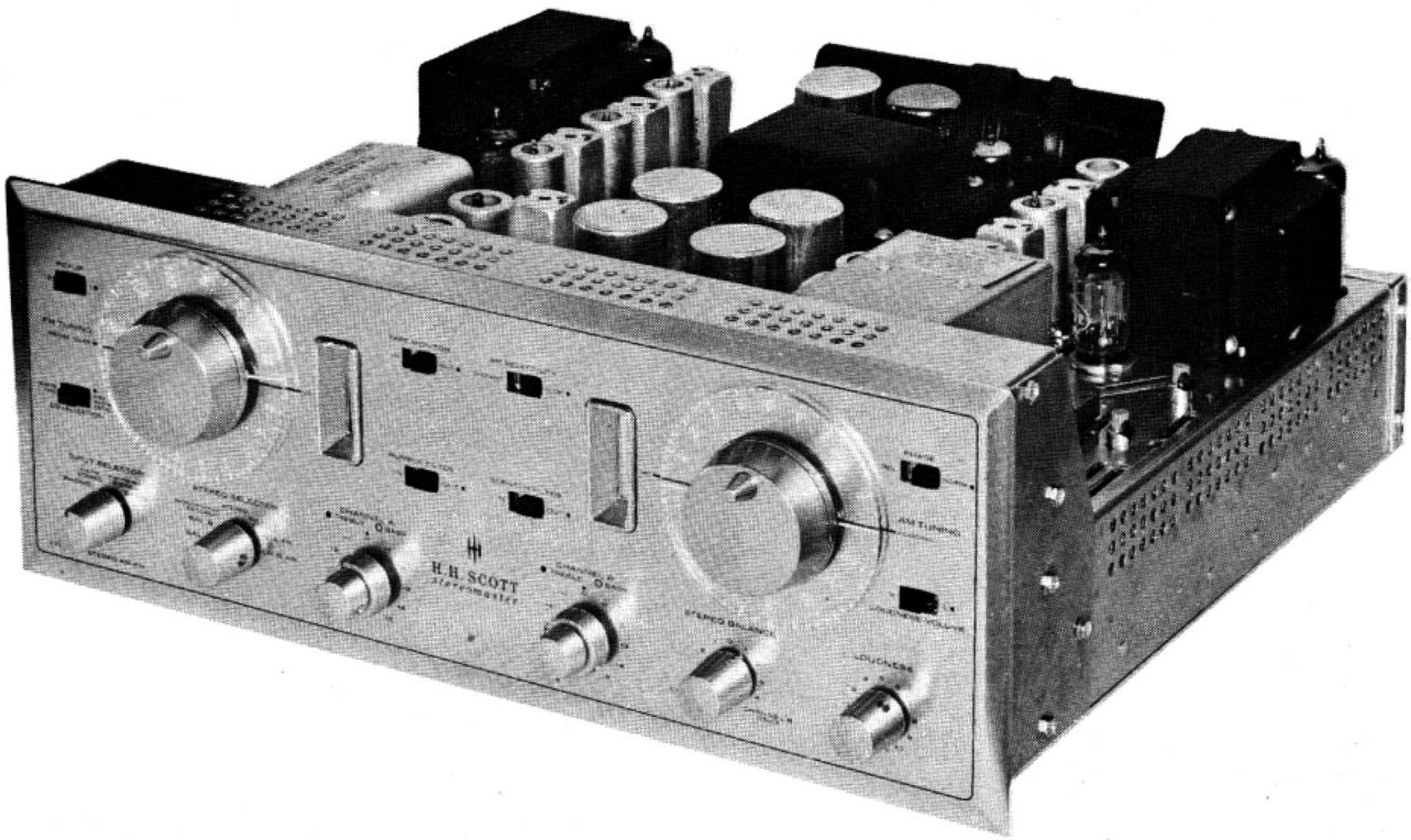
H. H. SCOTT
MODEL 399



TRADE NAME	H. H. Scott Model 399		
MANUFACTURER	Herman Hosmer Scott, Inc., 111 Powder Mill Road, Maynard, Mass.		
TYPE SET	AC Operated 23 Tube FM-AM Receiver With Stereo Amplifier		
POWER SUPPLY	105 – 125 Volts AC, 50-60 Cycles	RATING	175 Watts, 1.5 Amp. @117 Volts AC
TUNING RANGE–BROADCAST	540 – 1600KC	FREQ. MOD.	88 – 108MC

ALIGNMENT INSTRUCTIONS

ALIGNMENT INSTRUCTIONS—READ CAREFULLY BEFORE ATTEMPTING ALIGNMENT

Use only enough generator output to provide a usable indication.

Suggested Alignment Tools:

A1 Thru A6, A11 Thru A15, A17 Thru A22	GENERAL CEMENT #5097, 8727 WALSCO #2515
A7, A8, A9	GENERAL CEMENT #5004, 5008, 5009 WALSCO #2520
A10, A16, A23	GENERAL CEMENT #8282, 8606, 8606-L, 9295, 9440 WALSCO #2526, 2543, 2544, 2545
A24, A25, A26	GENERAL CEMENT #5003, 8271, 8275, 8276, 8609, 8721, 8722, 9150, 9298 WALSCO #2516, 2518, 2519

AM ALIGNMENT—SELECTOR IN AM POSITION

	SIGNAL GENERATOR COUPLING	SIGNAL GENERATOR FREQUENCY	RADIO DIAL SETTING	CONNECT VTVM	ADJUST	REMARKS
1.	High side thru .1mfd to pin 7 (grid) of AM Converter. Low side to chassis.	455KC (400∿ Mod.)	(AM) Tuning gang fully open.	AC probe to point Ⓐ. Common to chassis.	A1, A2, A3, A4, A5, A6	Adjust for maximum deflection.
2.	High side thru .01mfd to AM antenna terminal (disconnect shorting link). Low side to chassis.	1600KC	1600KC	"	A7, A8, A9	"
3.	"	600KC	600KC	"	A10, A11, A12, A13	"
4.	"	1400KC (10KC Mod.)	1400KC Signal	"	A14, R12	Adjust for MINIMUM deflection.
5.	"	455KC (400∿ Mod.)	1000KC	"	A15	"

FM IF ALIGNMENT USING AM SIGNAL GENERATOR AND VTVM—SELECTOR IN FM POSITION

Connect two matched 100K (± 1%) resistors in series from point Ⓑ to chassis. The junction of these two resistors is alignment point Ⓓ as shown on the schematic.

	SIGNAL GENERATOR COUPLING	SIGNAL GENERATOR FREQUENCY	RADIO DIAL SETTING	CONNECT VTVM	ADJUST	REMARKS
6.	High side thru .01mfd to pin 2 (grid) of FM Mixer. Low side to chassis.	10.7MC (Unmod.)	(FM) Point of non-interference.	DC probe to point Ⓑ. Common to chassis.	A16, A17, A18, A19, A20, A21, A22	Adjust for maximum deflection.
7.	"	"	"	DC probe to point Ⓒ. Common to point Ⓓ.	A23	Adjust for zero reading. A positive and negative reading will be obtained on either side of the correct setting.

FM IF ALIGNMENT USING FM SIGNAL GENERATOR AND OSCILLOSCOPE—SELECTOR IN FM POSITION

Use frequency modulated signal with 60∿ modulation and 450KC sweep. Use 120∿ sawtooth voltage in scope for horizontal deflection.

	SIGNAL GENERATOR COUPLING	SIGNAL GENERATOR FREQUENCY	RADIO DIAL SETTING	CONNECT SCOPE	ADJUST	REMARKS
6.	High side thru .01mfd to pin 2 (grid) of FM Mixer. Low side to chassis.	10.7MC (450KC Swp)	(FM) Point of non-interference.	Vert. amp. to point Ⓑ. Low side to chassis.	A16, A17, A18, A19, A20, A21, A22	Disconnect stabilizing capacitor C4D. Adjust for maximum gain and symmetry of response similar to Fig. 1 with markers as shown. Reconnect C4D.
7.	"	"	"	Vert. amp. to point Ⓒ. Low side to chassis.	A23	Adjust to place marker at the center of crossover lines similar to Fig. 2. SLIGHTLY retouch A16 for maximum amplitude and straightness of cross-over lines.

FM RF ALIGNMENT—SELECTOR IN FM POSITION

	SIGNAL GENERATOR COUPLING	SIGNAL GENERATOR FREQUENCY	RADIO DIAL SETTING	CONNECT VTVM	ADJUST	REMARKS
8.	High side thru 270Ω to FM antenna terminal. Low side to chassis.	108MC (Unmod.)	(FM) 108MC	DC probe to point Ⓑ. Common to chassis.	A24, A25, A26	Adjust for maximum deflection.
9.	"	90MC	90MC	"	L7, L6, L1	Adjust for maximum deflection by expanding or compressing coil turns.

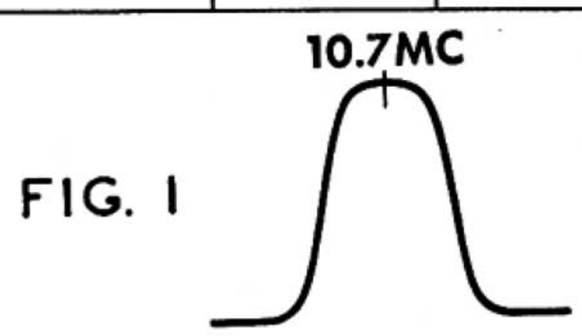


FIG. 1

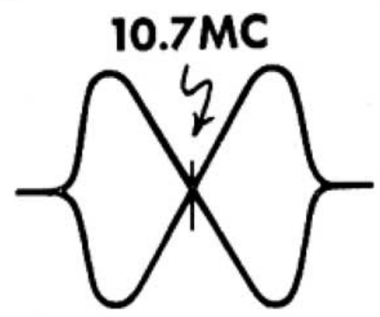
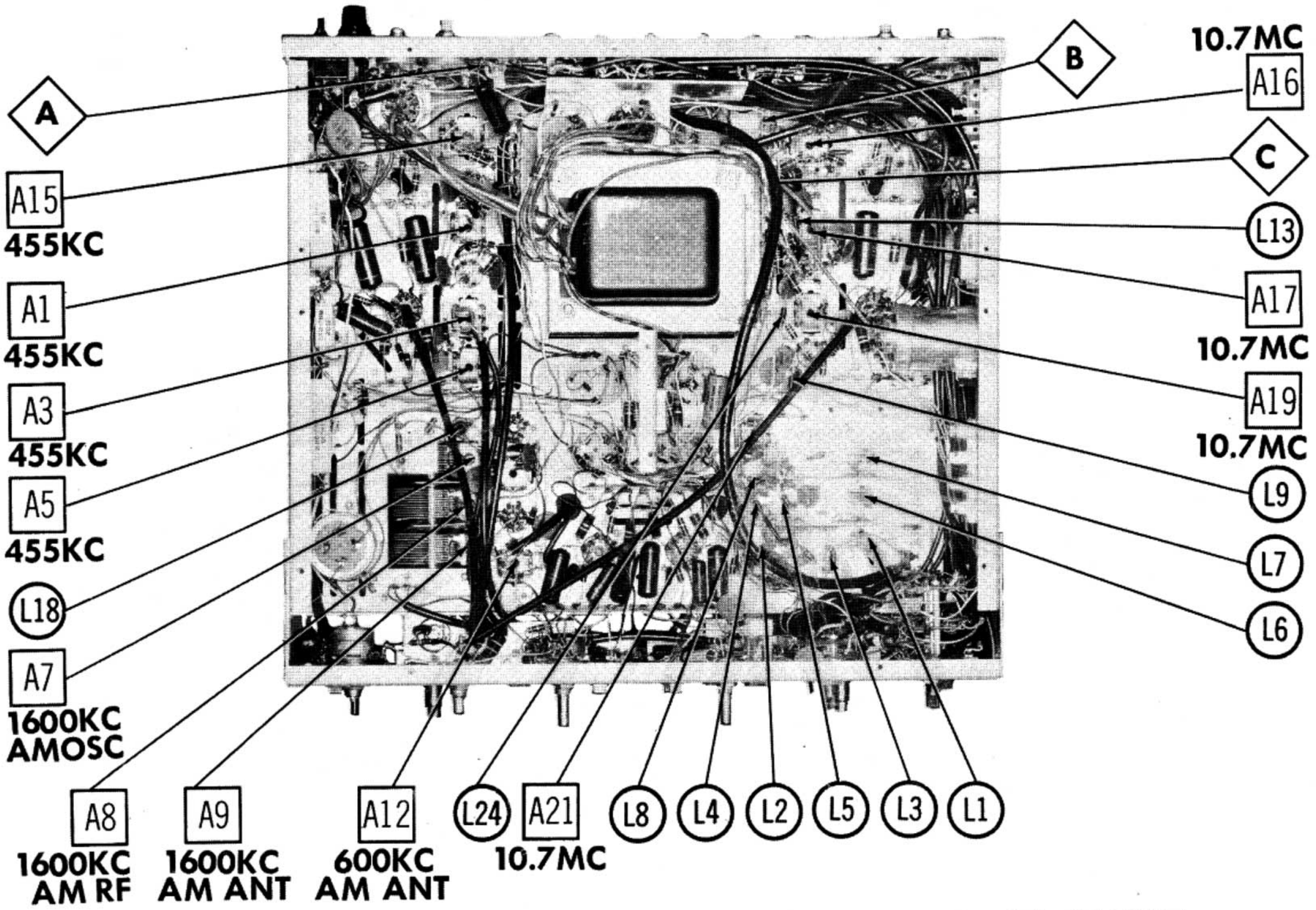
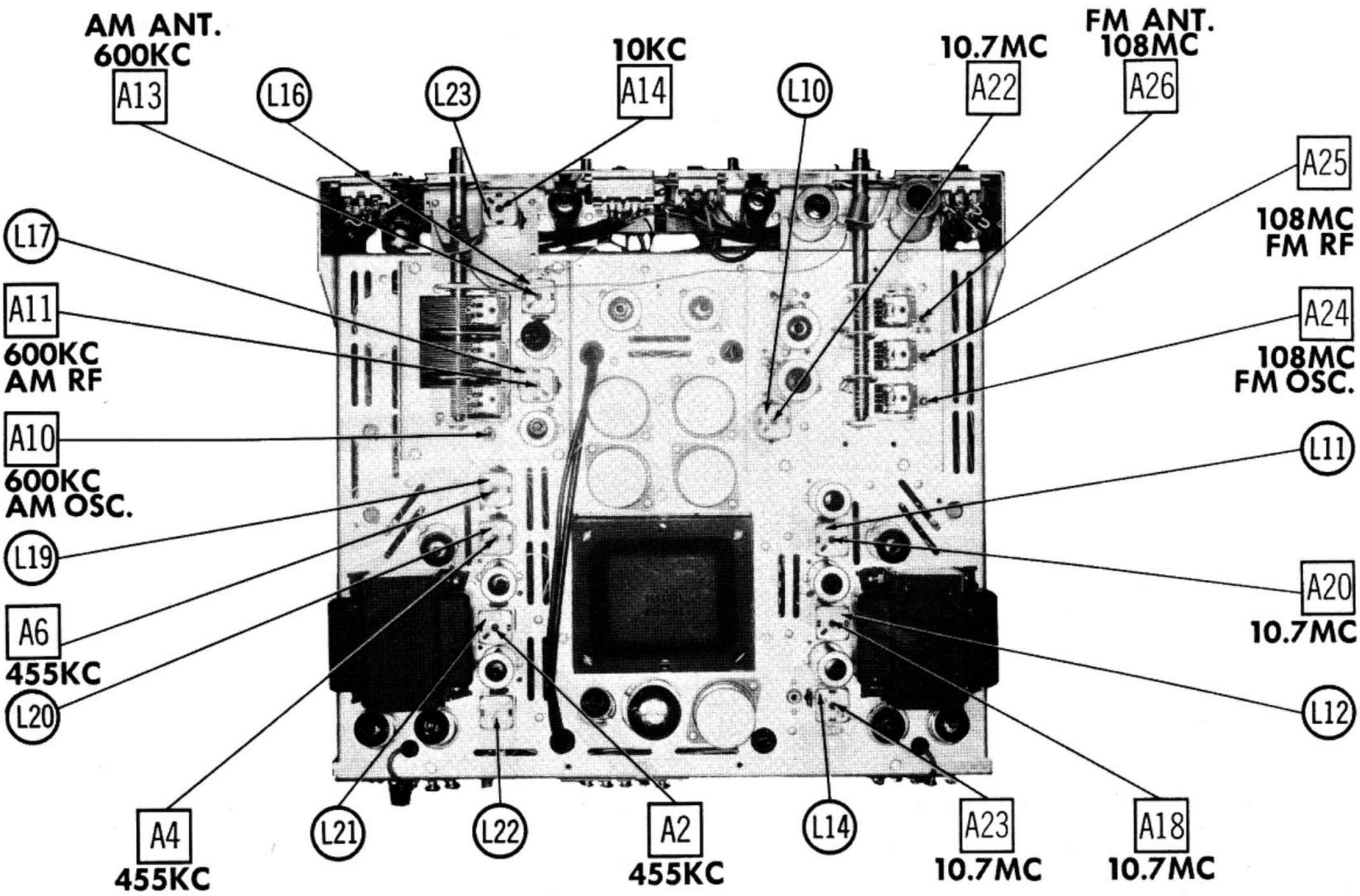


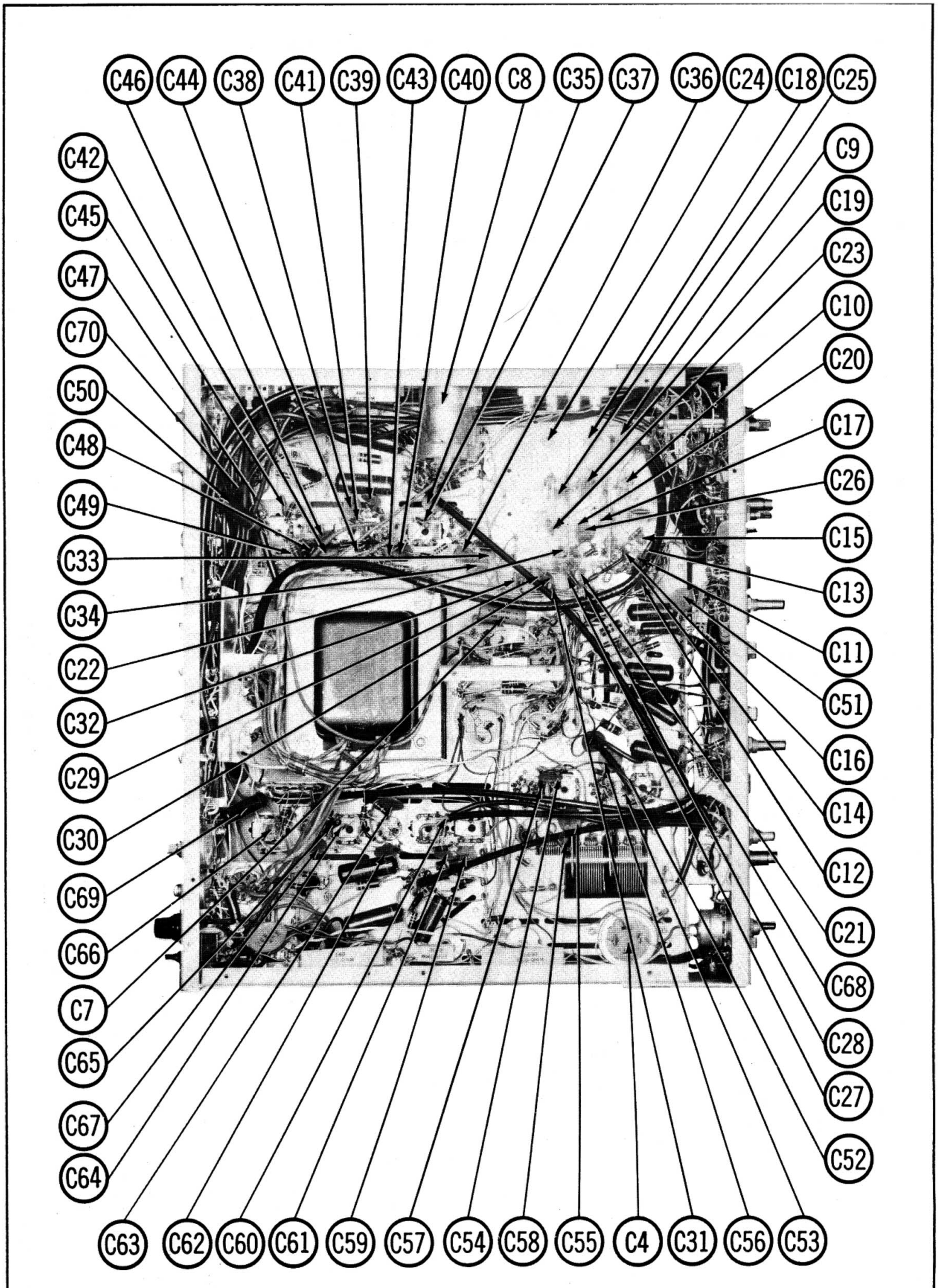
FIG. 2



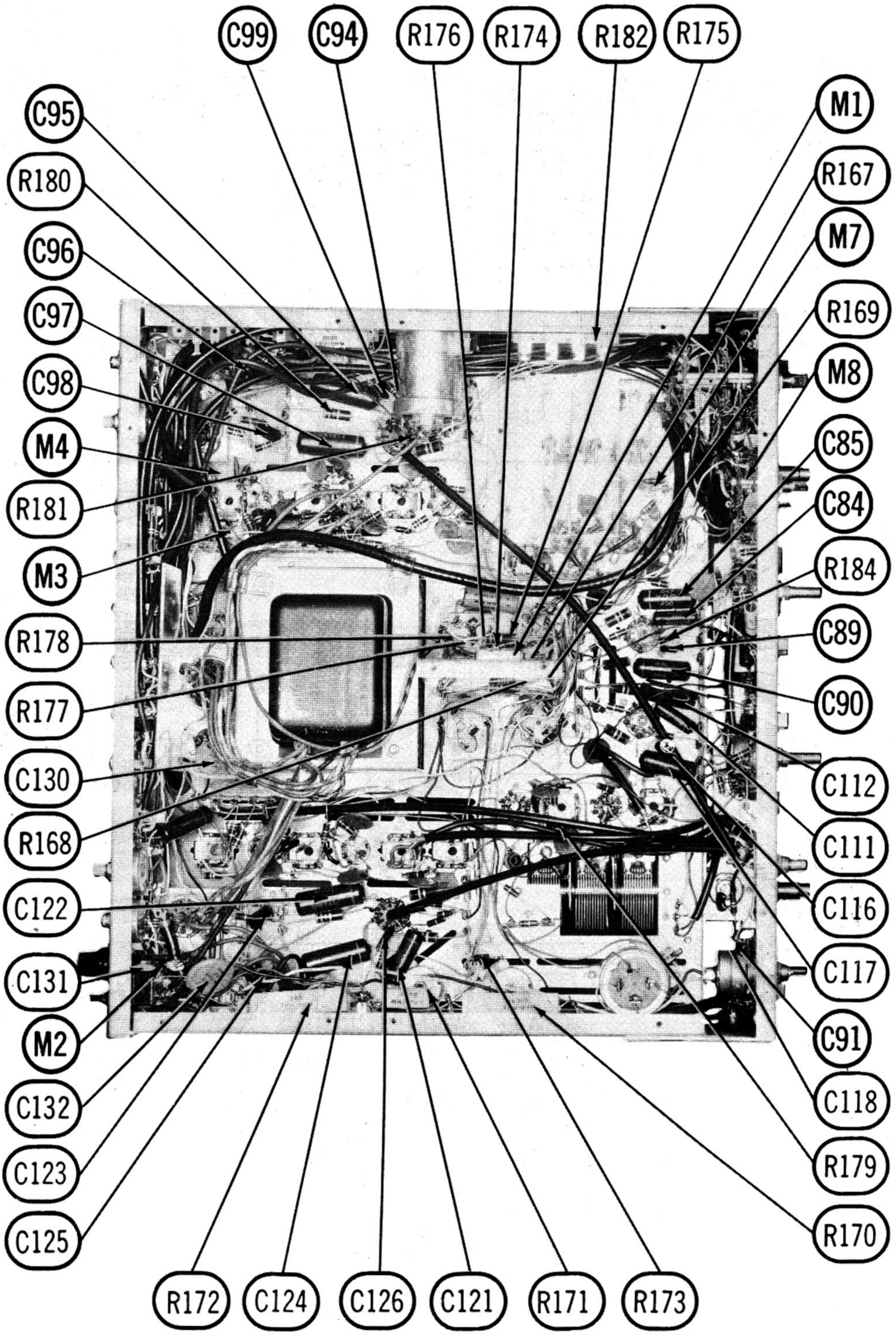
CHASSIS BOTTOM VIEW-ALIGNMENT & INDUCTOR IDENT.



CHASSIS TOP VIEW-ALIGNMENT & INDUCTOR IDENT.



CHASSIS-BOTTOM VIEW-CAPACITOR IDENTIFICATION



CHASSIS BOTTOM VIEW - CAPACITOR, RESISTOR & MISC IDENT.

PARTS LIST AND DESCRIPTIONS

TUBES

ITEM No.	USE	TYPE
V1	FM RF Amplifier	6BS8 (6BQ7) *
V2	FM Mixer - FM Osc.	6U8A
V3	1st FM IF Amplifier	6AU6A
V4	2nd FM IF Amplifier	6AU6A
V5	FM Limiter	6AU6A
V6	FM Tuning Indicator	EM84 (6FG6) *
V7	AM RF Amplifier	6BA6
V8	AM Converter	6BE6
V9	AM IF Amplifier	6AU6A
V10	AM Det. -AVC Clamper	6AL5
V11	AM Tuning Indicator	EM84 (6FG6) *
V12	Channel A Preamplifier	ECC83/12AX7
V13	Channel A AF Amplifier	ECC83/12AX7
V14	Channel A AF Amplifier - Phase Inverter	ECF80 (6BL8) *
V15	Channel A Output	7189
V16	Channel A Output	7189
V17	Channel B Preamplifier	ECC83/12AX7
V18	Channel B AF Amplifier	ECC83/12AX7
V19	Channel B AF Amplifier - Pase Inverter	ECF80 (6BL8) *
V20	Channel B Output	7189
V21	Channel B Output	7189
V22	Rectifier	GZ34/5AR4
V23	Rectifier	6X4

* Alternate

ELECTROLYTIC CAPACITORS

ITEM No.	RATING CAP.	RATING VOLT.	H.H. SCOTT PART No.	AEROVOX PART No.	CORNELL-DUBILIER PART No.	MALLORY PART No.	PYRAMID PART No.	SPRAGUE PART No.	NOTES
C1A	▲30	475	CEC-30-20-475	AFH2-69	B0487	FP284	TMD-61	TVL-2935	
B	■20	475							
C2A	▲30	475	CEC-30-20-475	AFH2-69	B0487	FP284	TMD-61	TVL-2935	
B	▲20	475							
C3A	▲20	450	CEC-2X20-2X25	AFH4-67	D0520	FP430.97	TMQ-73	TVL-4724.2	
B	■20	450							
C	▲25	25							
D	25	25							
C4A	▲4	250	CEC-3X4-25	AFH4-43	D0070	WP433.6	TMQ-9	TVL-4759.7	
B	▲4	250			BBR25-25	TC26	TD-25-25	TVA-1205	
C	■4	250							
D	25	25							
C5A	▲100	75	CEC-2X100-10CP					TVLPS-3360*	
B	■100	75							
C	▲10	75							
C6A	▲100	75	CEC-2X100-10CP						
B	■100	75							
C	▲10	75							
C7	10	25	CET-10/25	PRS1250	BBR10-25	TC22	TD-10-25	TVA-1204	
C8A	40	250	CEC-4X40-250			WP412.8	TMQ-116	TVLS-4581 *	
B	▲40	250							
C	■40	250							
D	▲40	250							

* 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	REMARKS	AEROVOX PART No.	CENTRALAB PART No.	CORNELL-DUBILIER PART No.	ELMENCO PART No.	MALLORY PART No.	SPRAGUE PART No.
C9	1-10			829-10				
C10	12 NPO 10%			TCZ-12	C10Q1C	CCTO-120	CNO-412	10TCC-Q12
C11	47		DI-47	DD-470	L10Q47	CCD-470	GP447	10TS-Q47
C12	4700		BPD-0047	DD-472	BYA10D47M	CCD-472	B-247	5HK-D47
C13	1000		BPD-001	DD-102	BYA10D1	CCD-102	B-210	5HK-D10
C14	1000		BPD-001	DD-102	BYA10D1	CCD-102	B-210	5HK-D10
C15	1000		BPD-001	DD-102	BYA10D1	CCD-102	B-210	5HK-D10
C16	1000		BPD-001	DD-102	BYA10D1	CCD-102	B-210	5HK-D10
C17	15 NPO 10%		NPO-DI 15	DTZ-15	C10Q15C	CCTO-150	CNO-415	10TCC-Q15
C18	1-10			829-10				

FIXED CAPACITORS (cont)

ITEM No.	RATING	REMARKS	AEROVOX PART No.	CENTRALAB PART No.	CORNELL-DUBILIER PART No.	ELMENCO PART No.	MALLORY PART No.	SPRAGUE PART No.
C19	5 NPO		NPO-DI 5.0	DTZ-4R7	C10V5C	CCTO-050	CNO-547	10TCC-V50
C20	15 NPO 10%		NPO-DI 15	DTZ-15	C10V15C	CCTO-150	CNO-415	10TCC-Q15
C21	1000		BPD-001	DD-102	BYA10D1	CCD-102	B-210	5HK-D10
C22	6.8 10%		NPO-SI 6.8	TCZ-6R8	C10V68C	CCTO-6R8	CNO-568	10TCC-V68
C23	15 N750 5%		N750-DI 15	DTN-15	C10Q15U	CCTN-150	CN7-415	10TCU-Q15
C24	1-10			829-10				
C25	10 NPO		NPO-DI 10	DTZ-10	C10Q1C	CCTO-150	CNO-410	10TCC-Q10
C26	4700		BPD-0047	DD-472	BYA10D47M	CCD-472	B-247	5HK-D47
C27	1000		BPD-001	DD-102	BYA10D1	CCD-102	B-210	5HK-D10
C28	1000		BPD-001	DD-102	BYA10D1	CCD-102	B-210	5HK-D10
C29	4.7 10%		NPO-SI 4.7	TCZ-4R7	C10V47C	CCTO-4R7	CNO-547	10TCC-V47
C30	1000		BPD-001	DD-102	BYA10D1	CCD-102	B-210	5HK-D10
C31	1000		BPD-001	DD-102	BYA10D1	CCD-102	B-210	5HK-D10
C32	.22 10%							
C33	10 NPO		NPO-DI 10	DTZ-10	C10Q1C	CCTO-100	CNO-410	10TCC-Q10
C34	20000		BPD-02	DD-203	BYB6S2	CCD-203	B-120	5HK-S20
C35	4700		BPD-0047	DD-472	BYA10D47M	CCD-472	B-247	5HK-D47
C36	4700		BPD-0047	DD-472	BYA10D47M	CCD-472	B-247	5HK-D47
C37	.1							
C38	4700		BPD-0047	DD-472	BYA10D47M	CCD-472	B-247	5HK-D47
C39	4700		BPD-0047	DD-472	BYA10D47M	CCD-472	B-247	5HK-D47
C40	4700		BPD-0047	DD-472	BYA10D47M	CCD-472	B-247	5HK-D47
C41	2.2 10%		NPO-SI 2.2	TCZ-2R2	C10V22C	CCTO-2R2	CNO-522	10TCC-V22
C42	47		DI-47	DD-470	L10Q47	CCD-470	GP447	10TS-Q47
C43	1000		BPD-001	DD-103	BYA10D1	CCD-102	B-210	5HK-D10
C44	1000		BPD-001	DD-102	BYA10D1	CCD-102	B-210	5HK-D10
C45	4700		BPD-0047	DD-472	BYA10D47M	CCD-472	B-247	5HK-D47
C46	4700		BPD-0047	DD-472	BYA10D47M	CCD-472	B-247	5HK-D47
C47	470 10%		1469-00047		5R5T47	CM-19B-471K	MCJ244	MS-347
C48	330 10%		1469-00033		5R5T33	CM-19B-331K	MCB241	MS-333
C49	4700		BPD-0047	DD-472	BYA10D47M	CCD-472	B-247	5HK-D47
C50	.022 400V		P488N-022	DD-203	CUB4S22	4DP-2-223	GEM-4122	4TM-S22
C51	20000	Note 1	BPD-02	DD-203	BYB6S2	CCD-203	B-120	5HK-S20
C52	10 NPO		NPO-DI 10	DTZ-10	C10Q1C	CCTO-100	CNO-410	10TCC-Q10
C53	1000		DI-1000	DD-102	BYA10D1	CCD-102	B-210	5HK-D10
C54	20000		BPD-02	DD-203	BYB6S2	CCD-203	B-120	5HK-S20
C55	20000		BPD-02	DD-203	BYB6S2	CCD-203	B-120	5HK-S20
C56	20000		BPD-02	DD-203	BYB6S2	CCD-203	B-120	5HK-S20
C57	47		1468-000047	DTZ-47	5W5Q47	CM-19B-470M *	CNO-447	1FM-447
C58	15 N2200							
C59	20000		BPD-02	DD-203	BYB6S2	CCD-203	B-120	5HK-S20
C60	2.2 10%		NPO-SI 2.2	TCZ-2R2	C10V22C	CCTO-2R2	CNO-522	10TCC-V22
C61	20000		BPD-02	DD-203	BYB6S2	CCD-203	B-120	5HK-S20
C62	20000		BPD-02	DD-203	BYB6S2	CCD-203	B-120	5HK-S20
C63	20000		BPD-02	DD-203	BYB6S2	CCD-203	B-120	5HK-S20
C64	10 NPO		NPO-DI 10	DTZ-10	C10Q1C	CCTO-100	CNO-410	10TCC-Q10
C65	22 10%		1469-000022	TCZ-22	C10Q22C	CM-19B-220K	CNO-422	MS-422
C66	1000		BPD-001	DD-102	BYA10D1	CCD-102	B-210	5HK-D10
C67	4700		BPD-0047	DD-472	BYA10D47M	CCD-472	B-247	5HK-D47
C68	.0082 400V 10%		P684CM-0082		DPMS6D82	6DP-2-822	GEM-16282	6PS-D82
C69	.022 400V		P488N-022	DD-203	CUB4S22	4DP-2-223	GEM-4122	4TM-S22
C70	4700	Note 1	BPD-0047	DD-472	BYA10D47M	CCD-472	B-247	5HK-D47
C71	82 10%		1469-000082	TCZ-82	22R5Q82	CM-19B-820K	CNO-482	MS-482
C72	220 10%		1469-00022	TCZ-220	5R5T22	CM-19B-220K	CNO-322	MS-322
C73	.022 400V		P488N-022	DD-203	CUB4S22	4DP-2-223	GEM-4122	4TM-S22
C74	20000		BPD-02	DD-203	BYB6S2	CCD-203	B-120	5HK-S20
C75	.047 400V		P488N-047	DD-503	CUB4S47	4DP-3-473	GEM-4147	4TM-S47
C76	150 10%		1469-00015	TCZ-150	22R5T15	CM-19B-151K	MCB236	MS-315
C77	560 10%		1469-00056		5R5T56	CM-19B-561K	MCJ247	MS-356
C78	180 10%		1469-00018	TCZ-180	22R5T18	CM-19B-180K	CNO-318	MS-318
C79	.0033 400V 10%		V84C4D33-10%		PM6D33	6DP-1-332	GEM-16233	6TM-D33
C80	33 10%		1469-000033	TCZ-33	22R5Q33	CM-19B-330K	CNO-433	MS-433
C81	180 10%		1469-00018	TCZ-180	22R5T18	CM-19B-181K	CNO-318	MS-318
C82	.22 10%							
C83	.0012 400V 10%		P684CM-0012	DD-122	DPMS6D12	6DP-1-122	GP212	6PS-D12

PARTS LIST AND DESCRIPTIONS (Continued)

FIXED CAPACITORS (cont)

ITEM No.	RATING	REMARKS	REPLACEMENT DATA: AEROVOX PART No.	CENTRALAB PART No.	CORNELL-DUBILIER PART No.	ELMENCO PART No.	MALLORY PART No.	SPRAGUE PART No.
C84	.0012 400V 10%		P684M-0012	DD-122	DPMS6D12	6DP-1-122	GP212	6PS-D12
C85	.047 400V		P488N-047	DD-503	CUB4S47	4DP-3-473	GEM-4147	4TM-S47
C86	220 10%		1469-00022	TCZ-220	5R5T22	CM-19B-221K	CNO-322	MS-322
C87	.0068 400V 10%		V84C4D68-10%		PM6D68	6DP-1-682	GEM-16268	6TM-D68
C88	.0068 400V 10%		V84C4D68-10%		PM6D68	6DP-1-682	GEM-16268	6TM-D68
C89	47 10%		1469-000047	TCZ-47	22R5Q47	CM-19B-470M	CNO-447	MS-447
C90	.047 400V		P488N-047	DD-503	CUB4S47	4DP-3-473	GEM-4147	4TM-S47
C91	100 10%		1469-0001	TCZ-100	22R5T1	CM-19B-101K	MCB235	MS-310
C92	.047 400V		P488N-047	DD-503	CUB4S47	4DP-3-473	GEM-4147	4TM-S47
C93	150 10%		1469-00015	TCZ-150	22R5T15	CM-19B-151K	MCB236	MS-315
C94	.022 400V		P488N-022	DD-203	CUB4S22	4DP-2-223	GEM-4122	4TM-S22
C95	.1 400V		P488N-1	DF-104	CUB4P1	4DP-3-104	GEM-401	4TM-P10
C96	470 10%		1469-00047		5R5T47	CM-19B-471K	MCJ244	MS-347
C97	.1 400V		P488N-1	DF-104	CUB4P1	4DP-3-104	GEM-401	4TM-P10
C98	470 10%		1469-00047		5R5T47	CM-19B-471K	MCJ244	MS-347
C99	220 10%		1469-00022	TCZ-220	22R5T22	CM-19B-221K	CNO-322	MS-322
C100	.022 400V		P488N-022	DD-203	CUB4S22	4DP-2-223	GEM-4122	4TM-S22
C101	.022 400V		P488N-022	DD-203	CUB4S22	4DP-2-223	GEM-4122	4TM-S22
C102	.047 400V		P488N-047	DD-503	CUB4S47	4DP-3-473	GEM-4147	4TM-S47
C103	150 10%		1469-00015	TCZ-150	22R5T15	CM-19B-151K	MCB236	MS-315
C104	560 10%		1469-00056		5R5T56	CM-19B-561K	MCJ247	MS-356
C105	180 10%		1469-00018	TCZ-180	22R5T18	CM-19B-181K	CNO-318	MS-318
C106	.0033 400V 10%		V84C4D33-10%		PM6D33	6DP-1-332	GEM-16233	6TM-D33
C107	33 10%		1469-000033	TCZ-33	22R5Q33	CM-19B-330K	CNO-433	MS-433
C108	180 10%		1469-00018	TCZ-180	22R5T18	CM-19B-181K	CNO-418	MS-318
C109	.22 10%							
C110	.0012 400V 10%		P684CM-0012	DD-122	DPMS6D12	6DP-1-122	GP212	6PS-D12
C111	.0012 400V 10%		P684CM-0012	DD-122	DPMS6D12	6DP-1-122	GP212	6PS-D12
C112	.047 400V		P488N-047	DD-503	CUB4S47	4DP-3-473	GEM-4147	4TM-S47
C113	220 10%		1469-00022	TCZ-220	22R5T22	CM-19B-221K	CNO-322	MS-322
C114	.0068 400V 10%		V84C4D68-10%		PM6D68	6DP-1-682	GEM-16268	6TM-D68
C115	.0068 400V 10%		V84C4D68-10%		PM6D68	6DP-1-682	GEM-16268	6TM-D68
C116	47 10%		1469-000047	TCZ-47	22R5Q47	CM-19B-470K	CNO-447	MS-447
C117	.047 400V		P488N-047	DD-503	CUB4S47	4DP-3-473	GEM-4147	4TM-S47
C118	100 10%		1469-0001	TCZ-100	22R5T1	CM-19B-101K	MCB235	MS-310
C119	.047 400V		P488N-047	DD-503	CUB4S47	4DP-3-473	GEM-4147	4TM-S47
C120	150 10%		1469-00015	TCZ-150	22R5T15	CM-19B-151K	MCB236	MS-315
C121	.022 400V		P488N-022	DD-203	CUB4S22	4DP-2-223	GEM-4122	4TM-S22
C122	.1 400V		P488N-1	DF-104	CUB4P1	4DP-3-104	GEM-401	4TM-P10
C123	470 10%		1469-00047		5R5T47	CM-19B-471K	MCJ244	MS-347
C124	.1 400V		P488N-1	DF-104	CUB4P1	4DP-3-104	GEM-401	4TM-P10
C125	470 10%		1469-00047		5R5T47	CM-19B-471K	MCJ244	MS-347
C126	220 10%		1469-00022	TCZ-220	22R5T22	CM-19B-221K	CNO-322	MS-322
C127	20000		BPD-02	DD-203	BYB6S2	CCD-203	B-120	5HK-S20
C128	20000		BPD-02	DD-203	BYB6S2	CCD-203	B-120	5HK-S20
C129	20000		BPD-02	DD-203	BYB6S2	CCD-203	B-120	5HK-S20
C130	20000 1400V	Note 1			CUBI6S2	16DP-4-203	GEM-1612	MB-S2
C131	20000 1400V	Note 1			CUBI6S2	16DP-4-203	GEM-1612	MB-S2
C132	20000 1400V	Note 1			CUBI6S2	16DP-4-203	GEM-1612	MB-S2

Note 1. Not used in some versions.
* Not normally in distributor's stock. Available thru distributor on order to manufacturer.

CONTROLS

ITEM No.	RATING: RESISTANCE	RATING: WATTS	REPLACEMENT DATA: H.H. SCOTT PART No.	CENTRALAB PART No.	CLAROSTAT PART No.	CTS-IRC PART No.	MALLORY PART No.	INSTALLATION NOTES
R1A	500K 100K Tap	½	RCVD-500KT	BT-66			FA55T15	Loudness, Channel A
B	500K 100K Tap	½		STR-66			RU55T15	Loudness, Channel B
C	Shaft			Not Req.			CS3500	
D	Switch			KR-1			US41	
R2A	1meg 500K Tap	½	RCV-1MST-3F	BT-71	A47F5-1meg	Q19-137X	UT-443	Stereo Balance
B	Shaft			Not Req.	FS-3	Not Req.	Not Req.	

CONTROLS (cont)

ITEM No.	RATING: RESISTANCE	RATING: WATTS	REPLACEMENT DATA: H. H. SCOTT PART No.	CENTRALAB PART No.	CLAROSTAT PART No.	CTS-IRC PART No.	MALLORY PART No.	INSTALLATION NOTES
R3A	1meg 500K Tap	½	RCVC-1MT	F1-56			■ UE4135	Bass, Channel B
B	1meg 500K Tap	½		R2-56			■ UE4135	Treble, Channel B
R4A	1meg 500K Tap	½	RCVC-1MT	F1-56				Bass, Channel A
B	1meg 500K Tap	½		R2-56				Treble, Channel A
R5A	100K	½	RCV-100K-S-2	BX-40	A47-100K-S	Q11-128	SU-41	DC Balance, Channel B
B	Shaft			Not Req.	FKS-1/4	Not Req.	Not Req.	
R6A	500K	½	RCV-500K-P	BX-59	A47-500K-S	Q11-133	SU-50	AM Level
B	Shaft			Not Req.	FKS-1/4	Not Req.	Not Req.	
R7A	500K	½	RCV-500K-P	BX-59	A47-500K-S	Q11-133	SU-50	FM Level
B	Shaft			Not Req.	FKS-1/4	Not Req.	Not Req.	
R8A	100K	½	RCV-100K-S-2	BX-40	A47-100K-S	Q11-128	SU-41	DC Balance, Channel A
B	Shaft			Not Req.	FKS-1/4	Not Req.	Not Req.	
R9A	100K	½	RCV-100K-P	BX-40	A47-100K-S	Q11-128	SU-41	AC Balance, Channel A
B	Shaft			Not Req.	FKS-1/4	Not Req.	Not Req.	
R10A	100K	½	RCV-100K-P	BX-40	A47-100K-S	Q11-128	SU-41	AC Balance, Channel B
B	Shaft			Not Req.	FKS-1/4	Not Req.	Not Req.	
R11A	5000Ω	½	RCV-5K-P	BX-10	A47-5000-S	Q11-114	SU-14	Bias Adjust
B	Shaft			Not Req.	FKS-1/4	Not Req.	Not Req.	
R12	1500Ω	2(WW)	RWV-1.5K		39-1500	112-1500	FL-1.5K	10KC Filter

■ "STA-LOC" equivalent: FB16T55, RU16T55, OS687, IS937.

RESISTORS (IRC or EQUIVALENT)

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

ITEM No.	RATING	REMARKS
R13	1meg	
R14	2700Ω 1W	
R15	390Ω	
R16	270Ω	
R17	1meg	
R18	68Ω	
R19	10K	
R20	10K	
R21	390Ω	
R22	220Ω	
R23	470K	
R24	33K	
R25	47K	
R26	47K	
R27	47K	
R28	220Ω	
R29	68Ω	
R30	1000Ω	
R31	220Ω	
R32	1500Ω 1W	
R33	22K 1W	
R34	22K	
R35	330Ω	
R36	270Ω	
R37	3900Ω	
R38	47K	
R39	470K	
R40	100K	
R41	3.3meg	
R42	1meg	Note 1
R43	470K	
R44	100K	
R45	1meg	
R46	10Ω	
R47	68Ω	
R48	1000Ω	

ITEM No.	RATING	REMARKS
R49	2200Ω	
R50	220K	
R51	22K	
R52	1meg	
R53	4.7meg	
R54	100K	
R55	680Ω	
R56	68Ω	
R57	2.2meg	
R58	22meg	
R59	270K	
R60	680K	
R61	6800Ω	
R62	2200Ω	
R63	470K	
R64	4000Ω 7W	IRC#PW10-4000Ω
R65	100K	
R66	3.3meg	
R67	470K	
R68	100K	
R69	100K	
R70	10meg	
R71	100K	
R72	560K	
R73	47K	
R74	10meg	
R75	270K	
R76	2700Ω	
R77	82K	
R78	2.2meg	
R79	2.2meg	
R80	10meg	
R81	270K	
R82	2700Ω	
R83	1meg	
R84	470K	

ITEM No.	RATING	REMARKS
R85	3.9meg	
R86	10meg	
R87	2.2meg	
R88	2.2meg	
R89	100K 1W	
R90	1500Ω	
R91	100K	
R92	100K	
R93	100K 1W	
R94	1500Ω	
R95	22K	
R96	220K	
R97	100K 1W	
R98	680Ω	
R99	10K	
R100	220K	
R101	2200Ω	
R102	150K	
R103	1000Ω	
R104	2.2meg	
R105	100K 1W	
R106	1500Ω	
R107	270K	
R108	2200Ω	
R109	150K	
R110	150K	
R111	150K	
R112	1000Ω	
R113	100K	
R114	100K	
R115	10meg	
R116	100K	
R117	560K	
R118	47K	
R119	270K	
R120	2700Ω	

PARTS LIST AND DESCRIPTIONS (Continued)

RESISTORS (IRC or EQUIVALENT) (cont)

ITEM No.	RATING	REMARKS
R121	2.2meg	
R122	82K	
R123	2.2meg	
R124	3.3meg	
R125	10meg	
R126	270K	
R127	2700Ω	
R128	100K	
R129	100K	
R130	1meg	
R131	470K	
R132	3.9meg	
R133	10meg	
R134	2.2meg	
R135	2.2meg	
R136	100K 1W	
R137	1500Ω	
R138	100K	
R139	1meg	
R140	100K	
R141	100K 1W	
R142	1500Ω	

ITEM No.	RATING	REMARKS
R143	22K	
R144	220K	
R145	100K 1W	
R146	680Ω	
R147	10K	
R148	220K	
R149	2200Ω	
R150	150K	
R151	1000Ω	
R152	100K 1W	
R153	1500Ω	
R154	2.2meg	
R155	270K	
R156	2200Ω	
R157	150K	
R158	150K	
R159	150K	
R160	1000Ω	
R161	1800Ω	
R162	18K	
R163	18K	
R164	47K	

ITEM No.	RATING	REMARKS
R165	56K 1W	
R166	47K 1W	
R167	10K 1W	
R168	3300Ω 1W	
R169	22K 1W	
R170	15K 10W	IRC#PW10-15K
R171	2000Ω 4W	IRC#PW5-2000Ω
R172	160Ω 2W	
R173	82K	
R174	10K	
R175	18Ω 1W	
R176	18Ω 1W	
R177	18Ω 1W	
R178	10Ω 2W	(33Ω) *
R179	3.3Ω 1W	
R180	3.3Ω 1W	Note 1
R181	100K	
R182A	250Ω	
B	250Ω	
C	250Ω	
R183	18Ω	
R184	1meg	

Note 1. Not used in some versions.
* Alternate Value.

COILS (RF-IF)

ITEM No.	USE	REPLACEMENT DATA: H. H. SCOTT PART No.	Merit PART No.	Miller PART No.	Stancor PART No.	NOTES
L1	FM Ant. Trans.					
L2	RF Choke			4586		.33uh
L3	Cathode Choke		BC-561	4602	RTC-8515	1.2uh
L4	Fil. Choke		BC-561	4602	RTC-8515	1uh
L5	RF Choke		BC-561	4602	RTC-8515	1uh
L6	FM RF Coil					
L7	FM Osc. Coil					
L8	Fil. Choke		BC-561	4602	RTC-8515	1uh
L9	Fil. Choke		BC-561	4602	RTC-8515	1uh
L10	1st FM IF Trans.		FM-254	1463	RTC-8599	
L11	2nd FM IF Trans.		FM-254	1463	RTC-8599	
L12	3rd FM IF Trans.		FM-254	1463	RTC-8599	
L13	Fil. Choke		BC-561	4602	RTC-8515	1uh
L14	Ratio Detector		FM-255	1465	RTC-8600	
L15	Loopstick		BC-419	705-A		
L16	AM Ant. Trans.		BC-386 *		RTC-8731 *	* Drill Mounting Hole
L17	AM RF Trans.		BC-388 *		RTC-8732 *	
L18	AM Osc. Coil		BC-394	70-OSC	RTC-8647	
L19	1st AM IF Trans.					
L20	2nd AM IF Trans.					
L21	3rd AM IF Trans.		BC-353	12-C2	RTC-8633	
L22	455KC IF Trap Coil					
L23	10KC Filter Coil					
L24	Fil. Choke		BC-561	4602	RTC-8515	1uh

TRANSFORMER (POWER)

ITEM No.	RATING: PRI.	SEC. 1	SEC. 2	REPLACEMENT DATA: H. H. SCOTT PART No.	Merit PART No.	Stancor PART No.	Thordarson PART No.	Triad PART No.	NOTES
T1	117V@ 1.5A	680VCT @.160A	350VCT @.070A	TR-12-9					
	SEC. 3	SEC. 4	SEC. 5						
	5V@ 1.9A	6.3V@ 3.9A	6.3V@ 4.7A						
	SEC. 6								
	50V@ .240A								

TRANSFORMER (AUDIO OUTPUT)

ITEM No.	IMPEDANCE: PRI.	SEC.	REPLACEMENT DATA: H. H. SCOTT PART No.	Merit PART No.	Stancor PART No.	Thordarson PART No.	Triad PART No.	NOTES
T2	6500Ω CT	16Ω Tap@ 8Ω, 4Ω	TRA-8-4					
T3	6500Ω CT	16Ω Tap@ 8Ω, 4Ω	TRA-8-4					

POWER RECTIFIERS

ITEM No.	RATING: CURRENT (Measured)	REPLACEMENT DATA: H. H. SCOTT PART No.	RCA PART No.	SARKES TARZIAN PART No.	SYLVANIA PART No.	NOTES
M1	.150A	*				* Selenium Type

FUSES

ITEM No.	TYPE	RATING	REPLACEMENT DATA: H. H. SCOTT PART No. FUSE	H. H. SCOTT PART No. HOLDER	LITTELFUSE PART No. FUSE	LITTELFUSE PART No. HOLDER	BUSS PART No. FUSE	BUSS PART No. HOLDER
M2	3AG	2½A 125V S/B			31302.5 (3AG 2½A 125V S/B)	342001	MDL 2½	HKP

SIGNAL DIODES

ITEM No.	ORIG. TYPE	REPLACEMENT DATA: H. H. SCOTT PART No.	GENERAL ELECTRIC PART No.	RAYTHEON PART No.	SYLVANIA PART No.	NOTES
M3	1N294			1N294	1N294	FM Detector(Pigtail)
M4	1N294			1N294	1N294	FM Detector (Pigtail)

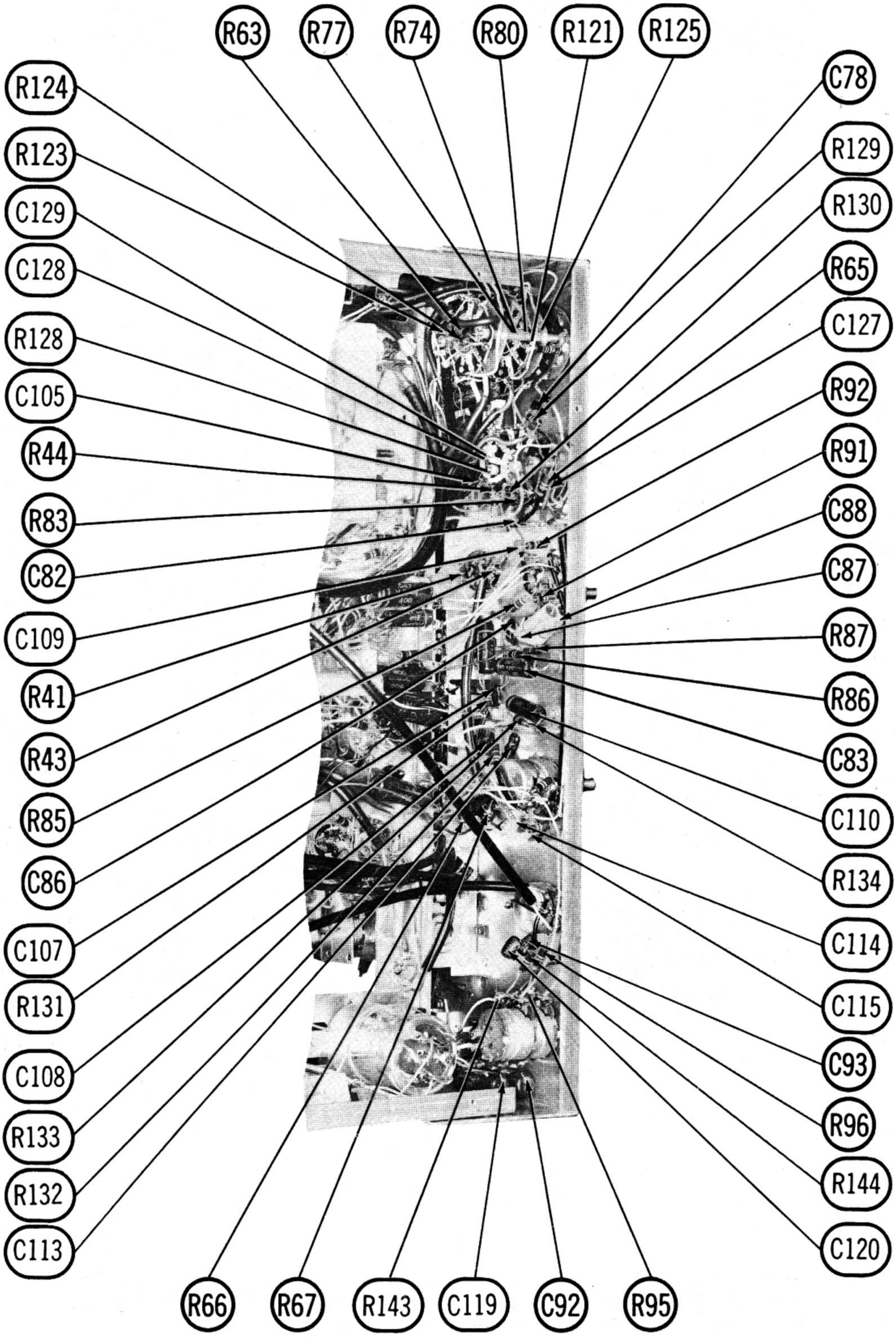
MISCELLANEOUS

ITEM No.	PART NAME	H. H. SCOTT PART No.	NOTES
M5	Tuning Cap.		FM, 3 Gang
M6	Tuning Cap.		AM, 3 Gang (Ant. 23—385mmf, RF 19—380mmf, Osc. 35—235mmf)
M7	Switch		Input Selector (Rotary Wafer Type)
M8	Switch		Stereo Selector (Rotary Wafer Type)
M9	Switch		Equalization (DPDT Slide Type)
M10	Switch		AM Selectivity (DPDT Slide Type)
M11	Switch		Tape Monitor (DPDT Slide Type)
M12	Switch		Pickup (DPDT Slide Type)
M13	Switch		Scratch Filter (DPDT Slide Type)
M14	Switch		Rumble Filter (DPDT Slide Type)
M15	Switch		Loudness,- Volume (DPDT Slide Type)
M16	Switch		Phase (DPDT Slide Type)

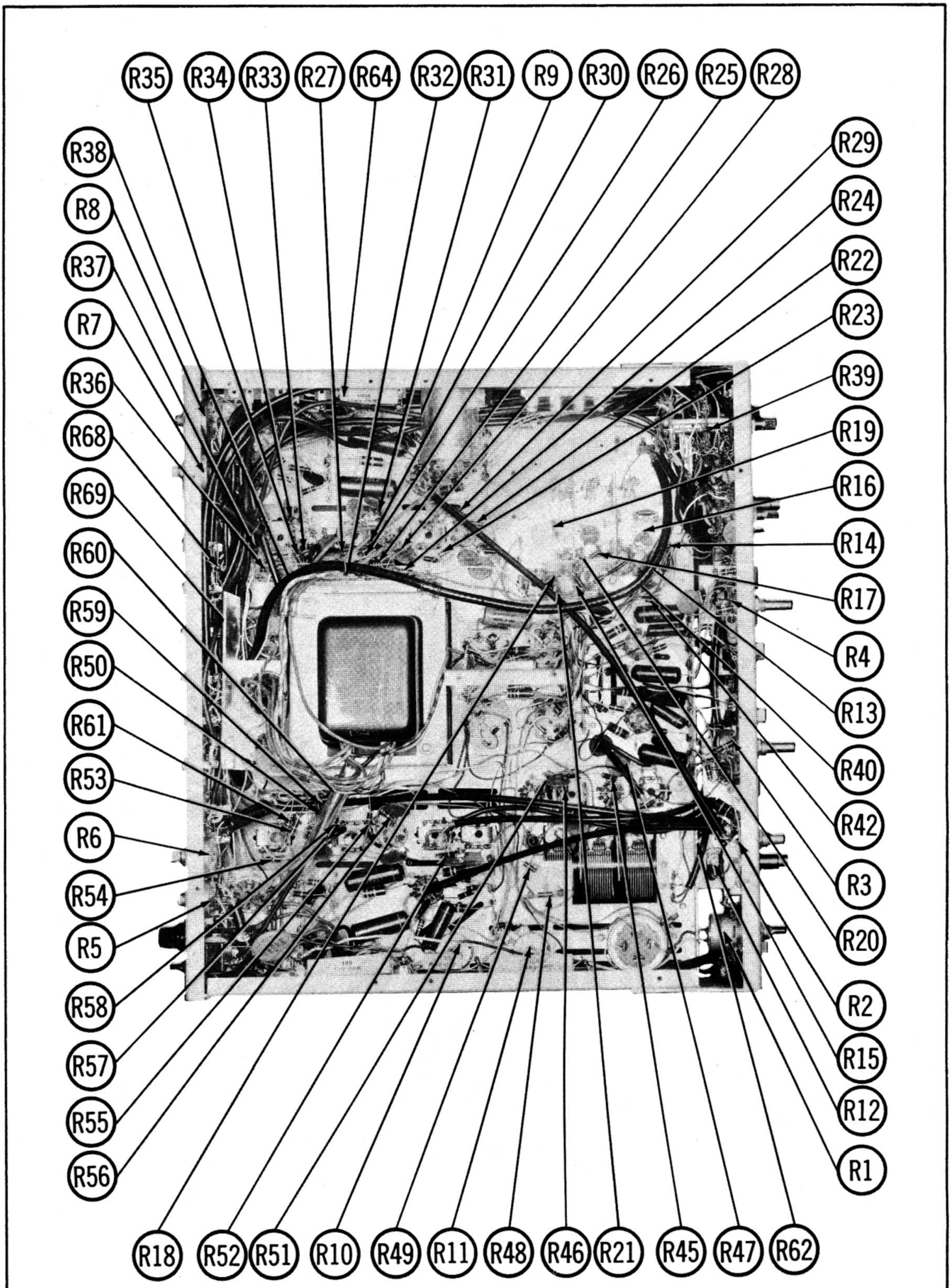
WIRING DATA

General-use Unshielded Hook-up Wire ..... Use BELDEN No. 8530 (Solid) Available in Ten Colors
8524 (Stranded) Available in Ten Colors

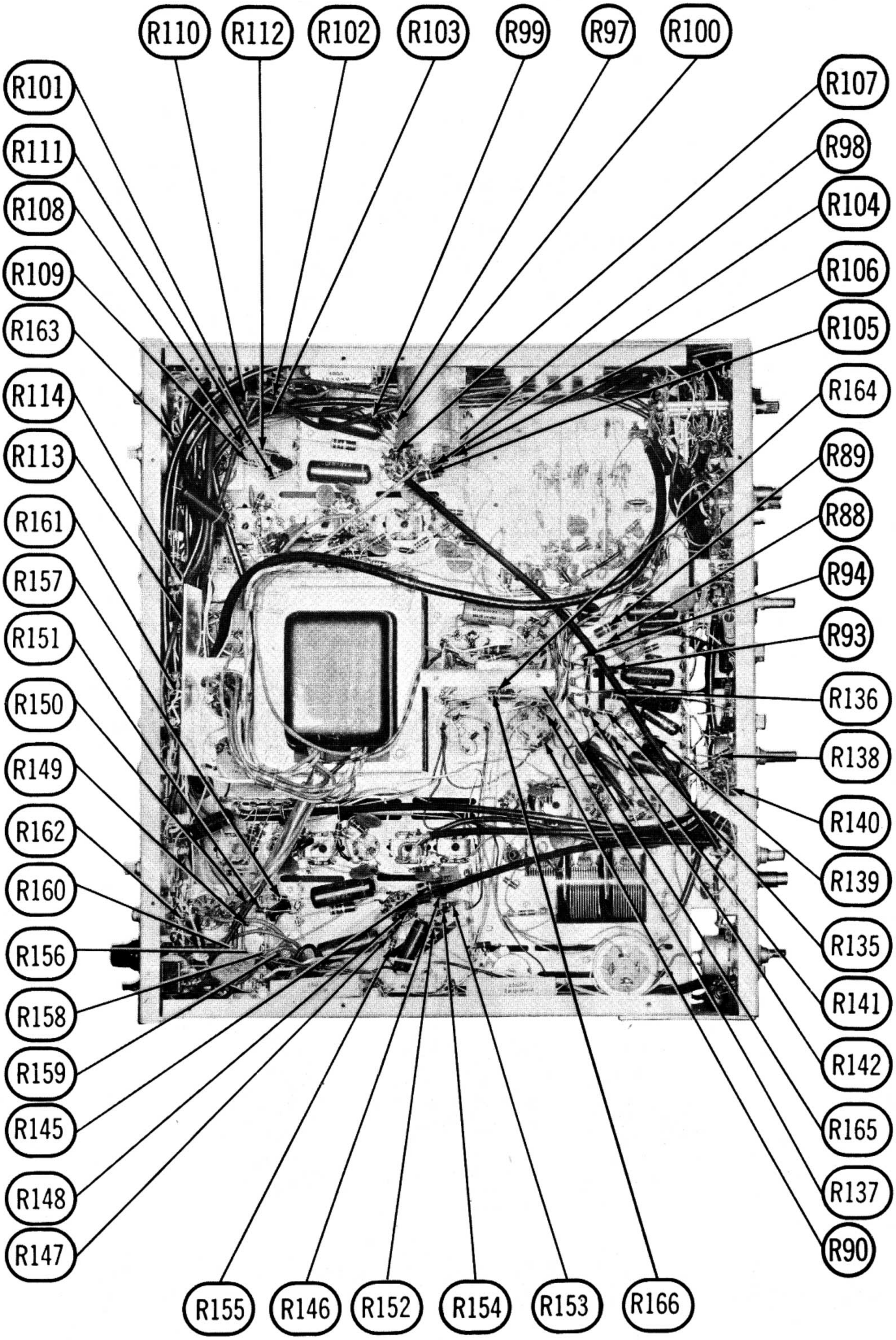
Power Cord ..... Use BELDEN No. 1765-B (6 Ft. Length)
1725-K (7½ Ft. Length)



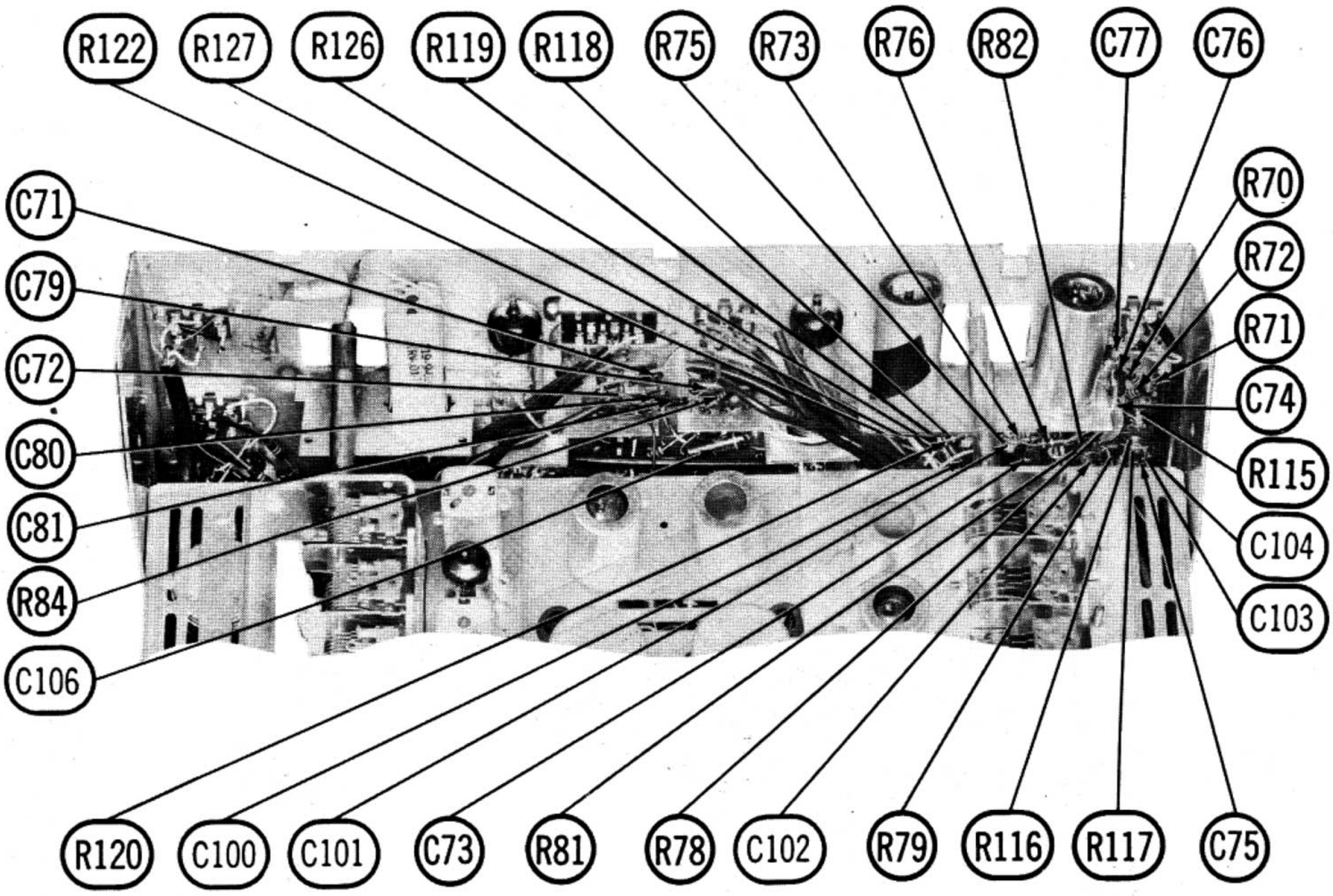
CONTROL PANEL-BOTTOM REAR VIEW



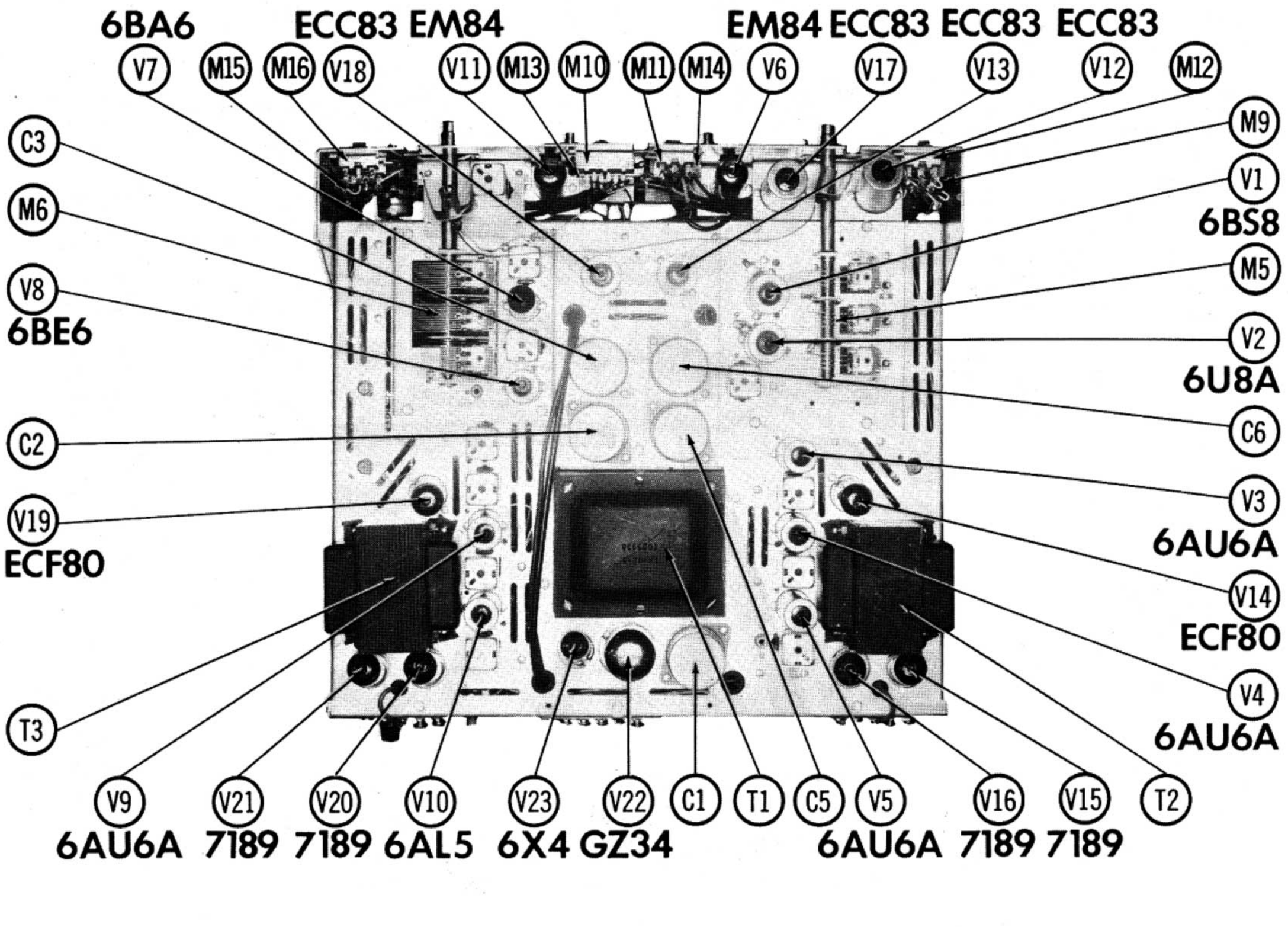
CHASSIS-BOTTOM VIEW-RESISTOR IDENTIFICATION



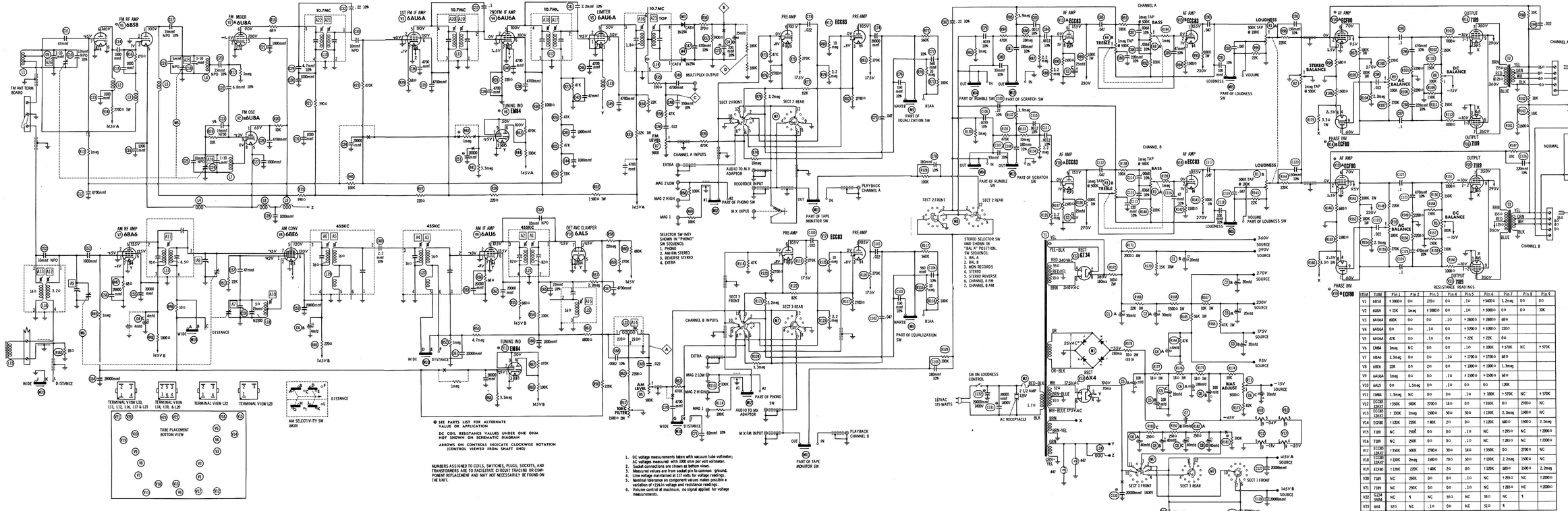
CHASSIS BOTTOM VIEW-RESISTOR IDENTIFICATION



CONTROL PANEL-TOP REAR VIEW



CHASSIS-TOP VIEW



STEM	TUBE	Pin 1	Pin 2	Pin 3	Pin 4	Pin 5	Pin 6	Pin 7	Pin 8	Pin 9
V1	6BS8	†3000Ω	0Ω	250Ω	0Ω	.1Ω	†3400Ω	1.2meg	0Ω	0Ω
V2	6U8A	†13K	1meg	†3000Ω	0Ω	.1Ω	†3000Ω	0Ω	0Ω	10K
V3	6AU6A	600K	0Ω	0Ω	.1Ω	†2600Ω	†2600Ω	68Ω		
V4	6AU6A	0Ω	0Ω	.1Ω	0Ω	†3200Ω	†3200Ω	220Ω		
V5	6AU6A	47K	0Ω	0Ω	.1Ω	†22K	†22K	0Ω		
V6	6AU6A	1meg	NC	0Ω	0Ω	.1Ω	†100K	†470K	NC	†470K
V7	6BH6	2.3meg	0Ω	0Ω	0Ω	.1Ω	†1700Ω	†1700Ω	68Ω	
V8	6BE6	22K	0Ω	20	0Ω	†1000Ω	†1000Ω	1.3meg		
V9	6AU6A	1meg	0Ω	0Ω	.1Ω	†1500Ω	†1500Ω	68Ω		
V10	6AL5	0Ω	1.5meg	0Ω	0Ω	.1Ω	0Ω	0Ω	120K	
V11	EM84	1.3meg	NC	0Ω	0Ω	.1Ω	†100K	†470K	NC	†470K
V12	ECC83	†350K	500K	2700Ω	14Ω	0Ω	†350K	0Ω	2700Ω	NC
V13	ECC83	†130K	2meg	1500Ω	50Ω	30Ω	†130K	2.2meg	1500Ω	NC
V14	ECF80	†135K	220K	†40K	2Ω	0Ω	†135K	68Ω	1500Ω	2.2meg
V15	7189	NC	250K	0Ω	0Ω	.1Ω	NC	†295Ω	NC	†2000Ω
V16	7189	NC	250K	0Ω	0Ω	.1Ω	NC	†285Ω	NC	†2000Ω
V17	ECC83	†350K	500K	2700Ω	30Ω	14Ω	†350K	0Ω	2700Ω	NC
V18	ECC83	†130K	2meg	1500Ω	70Ω	50Ω	†130K	2.2meg	1500Ω	NC
V19	ECF80	†135K	220K	†40K	2Ω	0Ω	†135K	68Ω	1500Ω	2.2meg
V20	7189	NC	250K	0Ω	0Ω	.1Ω	NC	†295Ω	NC	†2000Ω
V21	7189	NC	250K	0Ω	0Ω	.1Ω	NC	†285Ω	NC	†2000Ω
V22	GZ34	NC	¶	NC	55Ω	55Ω	NC	¶		
V23	6X4	52Ω	NC	.1Ω	0Ω	NC	51Ω	¶		

ALL MEASUREMENTS MADE IN "AM-FM STEREO" POSITION.
¶ THIS READING WILL VARY DEPENDING UPON THE CONDITION OF THE ELECTROLYTIC IN THE CIRCUIT.
† MEASURED FROM PIN 8 OF V22.
† MEASURED FROM PIN 7 OF V23.
NC NO CONNECTION

● SEE PARTS LIST FOR ALTERNATE VALUE OR APPLICATION

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

ARROWS ON CONTROLS INDICATE CLOCKWISE ROTATION (CONTROL VIEWED FROM SHAFT END)

NUMBERS ASSIGNED TO COILS, SWITCHES, PLUGS, SOCKETS, AND TRANSFORMERS ARE TO FACILITATE CIRCUIT TRACING OR COMPONENT REPLACEMENT AND MAY NOT NECESSARILY BE FOUND ON THE UNIT.

1. DC voltage measurements taken with vacuum tube voltmeter; AC voltages measured with 1000 ohm per volt voltmeter.
2. Socket connections are shown as bottom views.
3. Measured values are from socket pin to common ground.
4. Line voltage maintained at 117 volts for voltage readings.
5. Nominal tolerance on component values makes possible a variation of +15% in voltage and resistance readings.
6. Volume control at maximum, no signal applied for voltage measurements.

H. H. SCOTT MODEL 399