

TS LIST AND DESCRIPTION

n ordering parts, state Model, Part Number, and Description.)

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.
C52	.002		GPD X5F202K	DM-202	JBX601YP202K	CCD-202	GP220	2SS-D20
C53	500		GPD X5F501K	DM-501	JBZ601YP501K	CCD-501	GP350	10TS-T50
C54	.001		GPD X5F102K	DM-102	JBX601YP102K	CCD-102	SM210	2SS-D10
C55	.02		TTP-02	CK-203	HOR101ZV203P	CCD-203	TA120	TG-S20
C56	.04			DD-403			GP140	
C57	.04			DD-403			GP140	

CONTROLS (All wattages 1/2 watt, or less, unless listed)

ITEM No.	FUNCTION	RESISTANCE	REPLACEMENT DATA					
			MFG. PART No.	CENTRALAB PART No.	CLAROSTAT PART No.	CTS-IRC PART No.	MALLORY PART No.	
R1	Volume	5000Ω		F2-5000, ① SSK014		Q13-114 ① or (BU1 ①, CF60, SS1, DC1) *	UA53A ①, SK1000 or (RU53A ①, SL35, SK1000) or (U12) ①	

① Enlarge Mounting Hole.

* "SNAPTROL".

RESISTORS (Power and Special)

ITEM No.	RATING	REPLACEMENT DATA		
		IRC PART No.	WORKMAN PART No.	MFG. PART No.
R50	220Ω (Cold) Thermistor		FS654	

ITEM No.	RATING	REPLACEMENT DATA		
		IRC PART No.	WORKMAN PART No.	MFG. PART No.

COILS (RF-IF)

ITEM No.	USE	REPLACEMENT DATA			
		PART No.	MEISSNER PART No.	MILLER PART No.	WORKMAN PART No.
L1	FM Antenna				
L2	FM RF				
L3	RF Choke				
L4	FM Oscillator				
L5	Loopstick			7790	
L6	AM Oscillator			2069	
L7	FM Input IF		16-9030	2070	
L8	FM Interstage IF		16-9031	2071	
L9	AM Input IF		16-9026	2066	
L10	FM Interstage IF		16-9032	2072	
L11	AM Interstage IF		16-9027	2067	
L12	Ratio Detector (Pri.)				
L13	Ratio Detector (Sec.)				
L14	AM Output IF		16-9028	2068	

TRANSFORMER (Power)

ITEM No.	RATING		REPLACEMENT DATA					NOTES
	PRI.	SEC. 1	MFG. PART No.	MERIT PART No.	STANCOR PART No.	THORDARSON PART No.	TRIAD PART No.	
T1	117VAC @ .019AAC	12.4VAC @ .090ADC	(PT-35C)					

TRANSFORMER (Driver)

ITEM No.	TURNS RATIO			REPLACEMENT DATA					NOTES
	PRI.	SEC. 1	SEC. 2	MFG. PART No.	MERIT PART No.	STANCOR PART No.	THORDARSON PART No.	TRIAD PART No.	
T2	1	1	1						

TRANSFORMER (Audio Output)

ITEM No.	IMPEDANCE		REPLACEMENT DATA					NOTES
	PRI.	SEC.	MFG. PART No.	MERIT PART No.	STANCOR PART No.	THORDARSON PART No.	TRIAD PART No.	
T3	200Ω	8Ω	(19CD)					

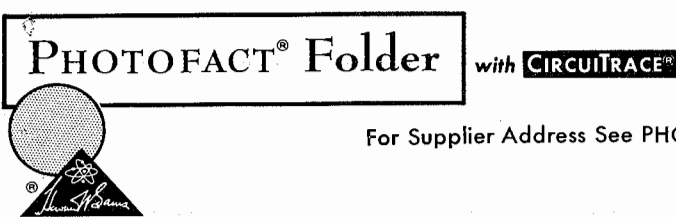
SPEAKER

ITEM No.	TYPE	REPLACEMENT DATA		NOTES
		MFG. PART No.	QUAM PART No.	
SP1	3 1/2" PM 8Ω		3A05RZ8	

MISCELLANEOUS

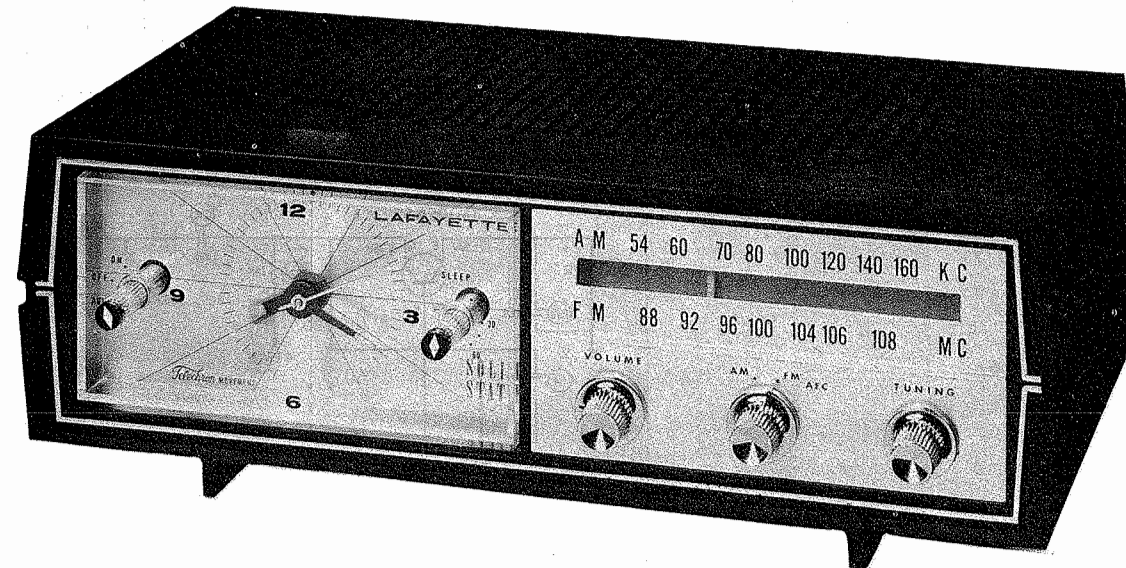
ITEM No.	PART NAME	PART No.	NOTES
M1	Clock Motor		
S1	Off-On Switch		Part of Clock Assembly
S2	Function Switch		

SET 105 FOLDER 5

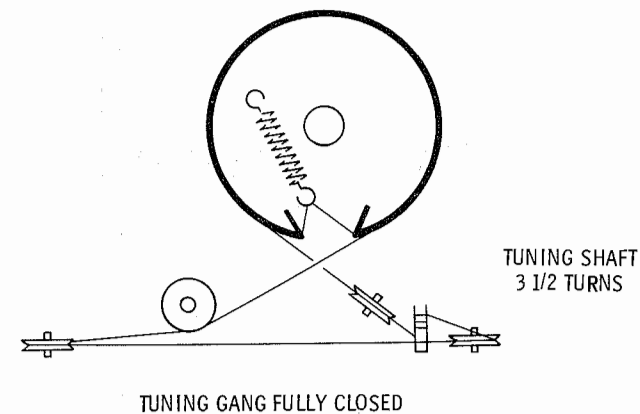


For Supplier Address See PHOTOFACT Index

LAFAYETTE
MODEL 17-0164W



DIAL CORD STRINGING



REMEMBER TO ASK— "What else needs fixing?"

HOWARD W. SAMS & CO., INC. Indianapolis, Indiana 46206



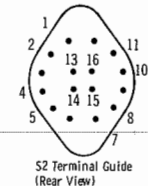
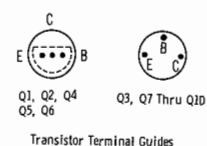
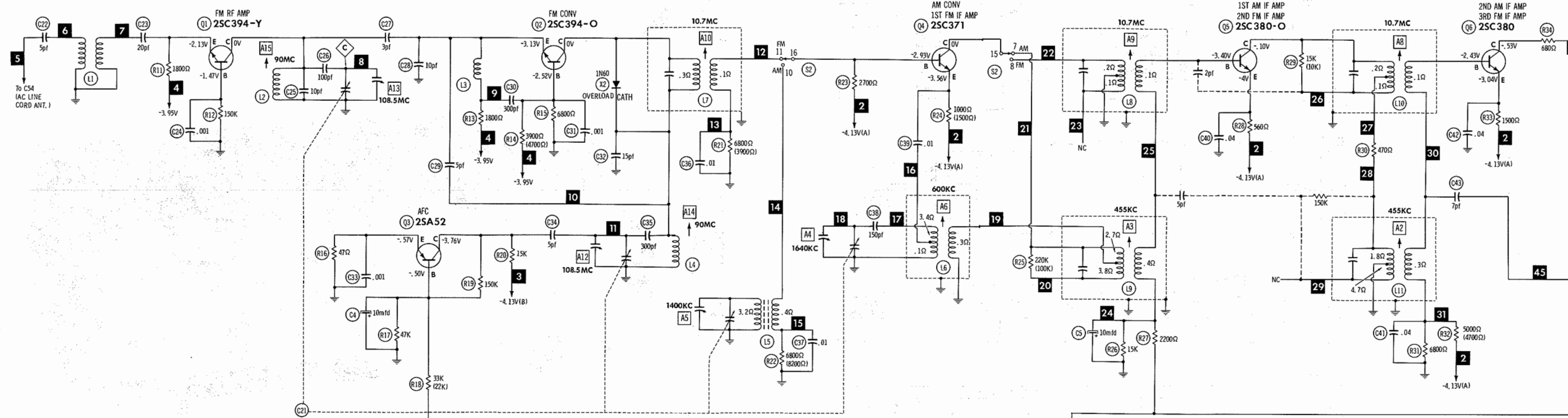
The listing of any available replacement part herein does not constitute in any case a recommendation, warranty or guaranty by Howard W. Sams & Co., Inc., as to the quality and suitability of such replacement part. The numbers of these parts have been compiled from information furnished to Howard W. Sams & Co., Inc., by the manufacturers of the particular type of replacement part listed. UK336

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DATE 9 -69 SET 1052 FOLDER 5

LAFAYETTE
MODEL 17-0164W

SET 1052 FOLDER 5

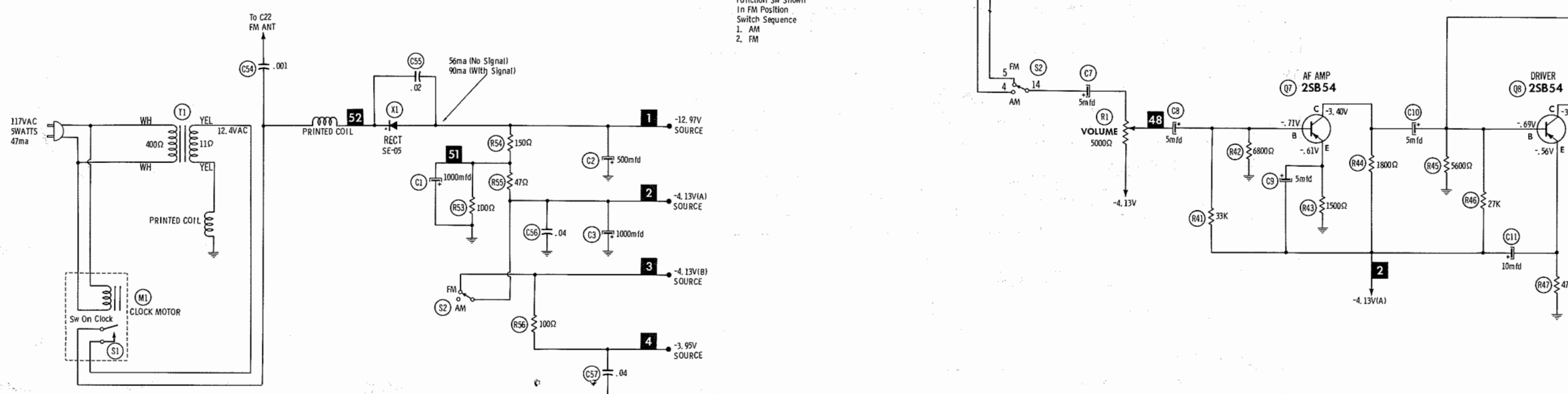


Function Sw Shown
In FM Position
Switch Sequence
1. AM
2. FM

Denotes ground
--- Indicates connection used in some versions.
-X- Indicates connection not used in some versions.
* Omitted in some versions.
e See parts list.
Measurements taken with switching in position shown unless otherwise indicated.
Values shown in () are used in some applications.
Resistors are 1/2W or less, 10% or 20%, unless otherwise indicated.
Supply voltage maintained at rated value for measurements.
Voltage and resistance measured with VTVM or equivalent meter, no signal applied and controls adjusted for normal operation.
Controls viewed from actuator end. Arrow indicates clockwise rotation.
Numbers assigned to terminals may not be found on the unit.
Transistor resistances vary widely. No resistance measurements taken.

A PHOTOFACT STANDARD NOTATION SCHEMATIC
with CIRCUITRACE®

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WIRING DATA

General-use Unshielded Hook-up Wire	Use BELDEN No. 8530 (Solid) Available in 12 Colors 8524 (Stranded) Available in 12 Colors
Power Cord	Use BELDEN No. 17106 (Plastic) or 17126 (Rubber) - 6 Ft. 17109 (Plastic) or 17129 (Rubber) - 9 Ft.

TRANSISTORS

ITEM No.	TYPE No.	FUNCTION	REPLACEMENT DATA						
			MFGR. PART No.	DELCO PART No.	GENERAL ELECTRIC PART No.	INTERNATIONAL RECTIFIER PART No.	MOTOROLA PART No.	RCA PART No.	SYLVANIA PART No.
Q1	2SC394-Y	FM RF Amp		DS-81	GE-17	TR-22	HEP50	SK3018	ECG 108
Q2	2SC394-O	FM Converter		DS-81	GE-17	TR-22	HEP50	SK3018	ECG 108
Q3	2SA52	AFC		DS-26	GE-2	TR-14	HEP639	SK3004	ECG 102
Q4	2SC371	AM Converter & 1st FM IF Amp		DS-74	GE-20	TR-21	HEP50	SK3018	ECG 108
Q5	2SC380-O	1st FM & 2nd FM IF Amp		DS-74	GE-20	TR-21	HEP56	SK3018	ECG 108
Q6	2SC380	2nd AM & 3rd FM IF Amp		DS-74	GE-20	TR-21	HEP56	SK3018	ECG 108
Q7	2SB54	AF Amp		DS-26	GE-2	TR-14	HEP633	SK3004	ECG 102
Q8	2SB54	Driver		DS-26	GE-2	TR-14	HEP633	SK3004	ECG 102
Q9	2SB56	Output			GE-2	TR-14	HEP632	SK3004	ECG 102
Q10	2SB56	Output			GE-2	TR-14	HEP632	SK3004	ECG 102

POWER RECTIFIERS & SIGNAL DIODES

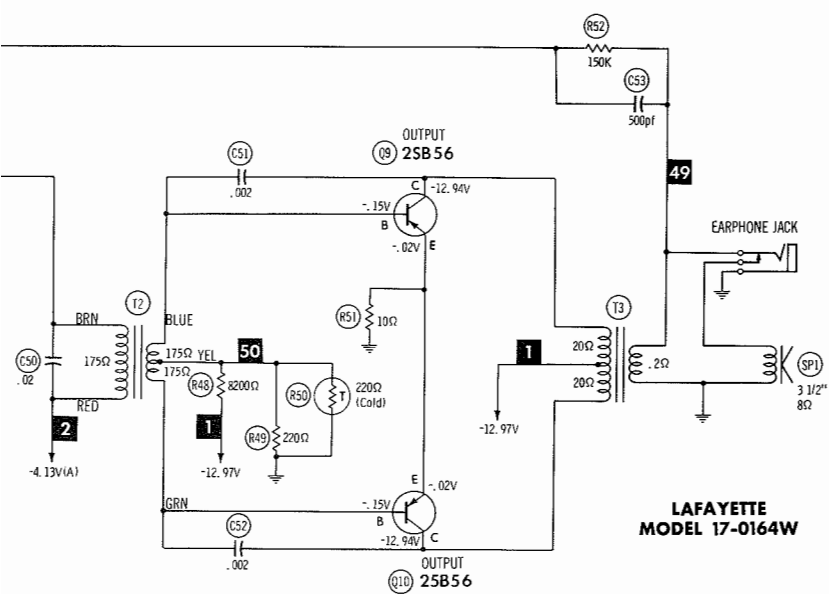
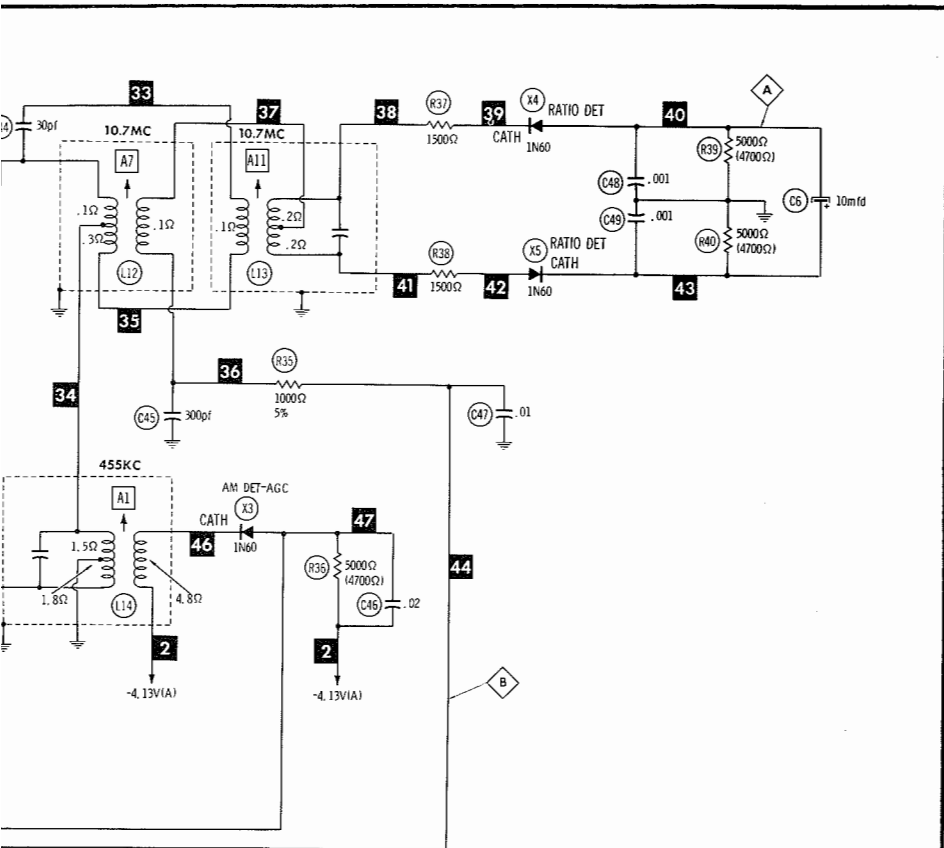
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		GENERAL ELECTRIC PART No.	INTERNATIONAL RECTIFIER PART No.	SYLVANIA PART No.	RCA PART No.	
X1	SE-05	GE-504A	8D4 or 5A4-D	ECG 116 or ECG 117	SK3030 or SK3031	④ Matched Pair.
X2	1N60	1N60	1N60	ECG 109		
X3	1N60	1N60	1N60	ECG 109		
X4	1N60	1N60	1N60	ECG 110 ④		
X5	1N60	1N60	1N60	ECG 110 ④		

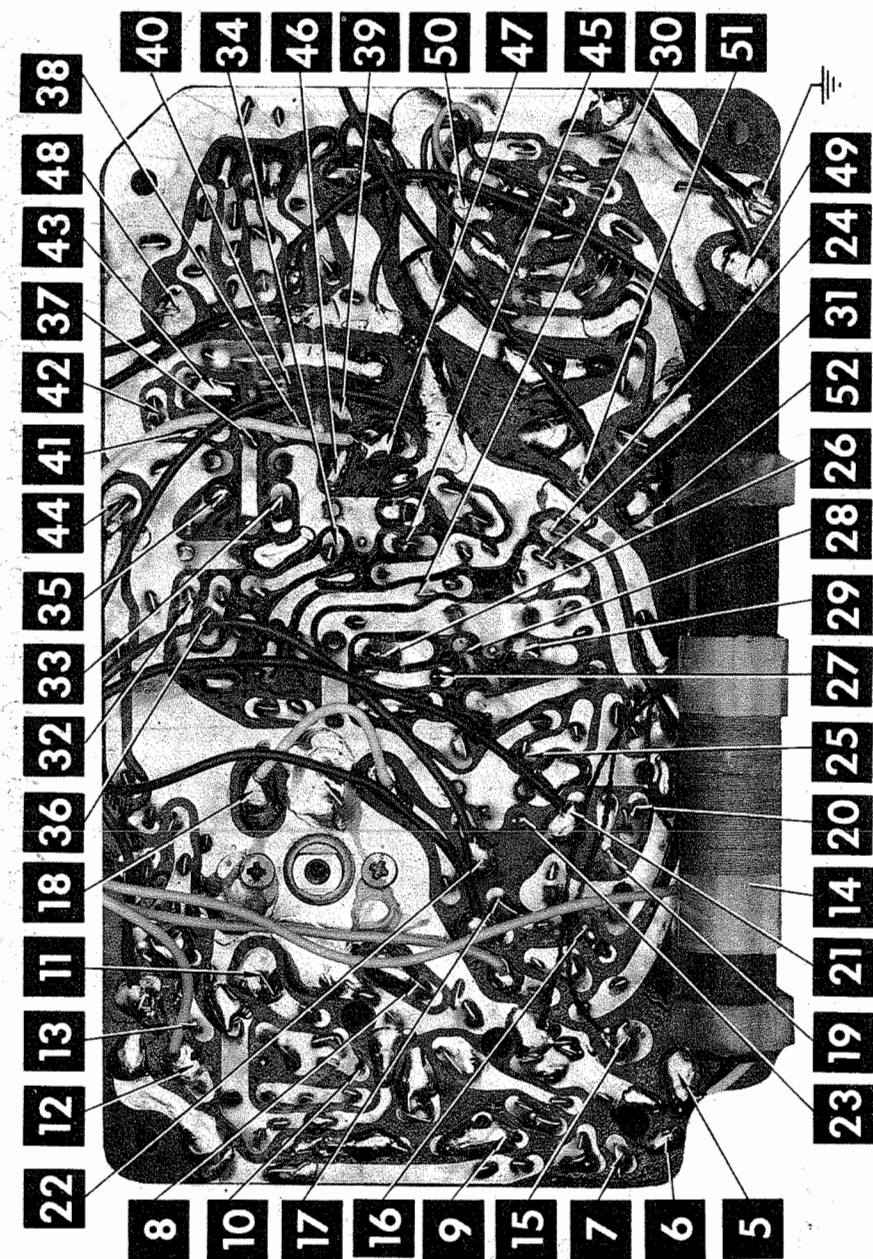
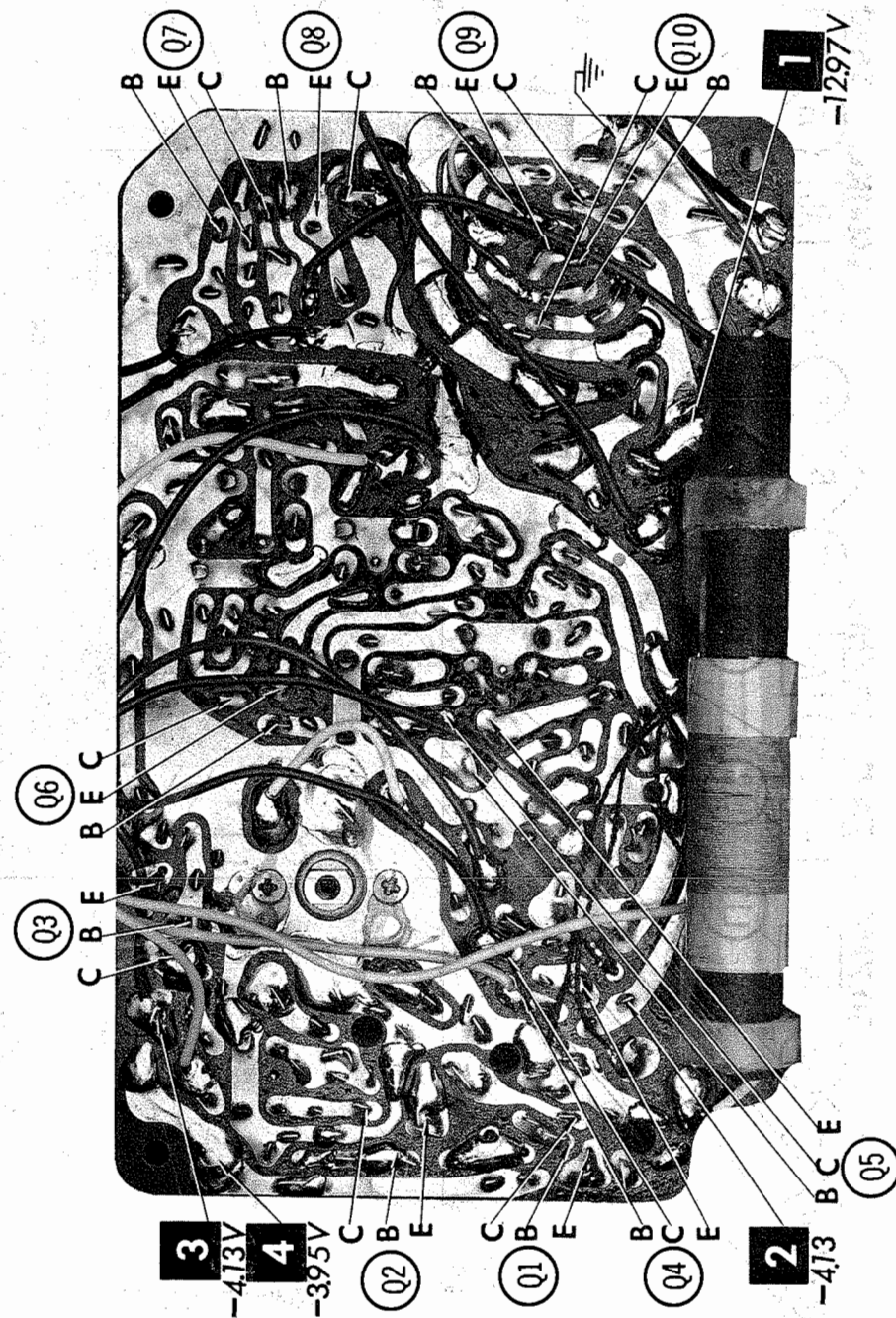
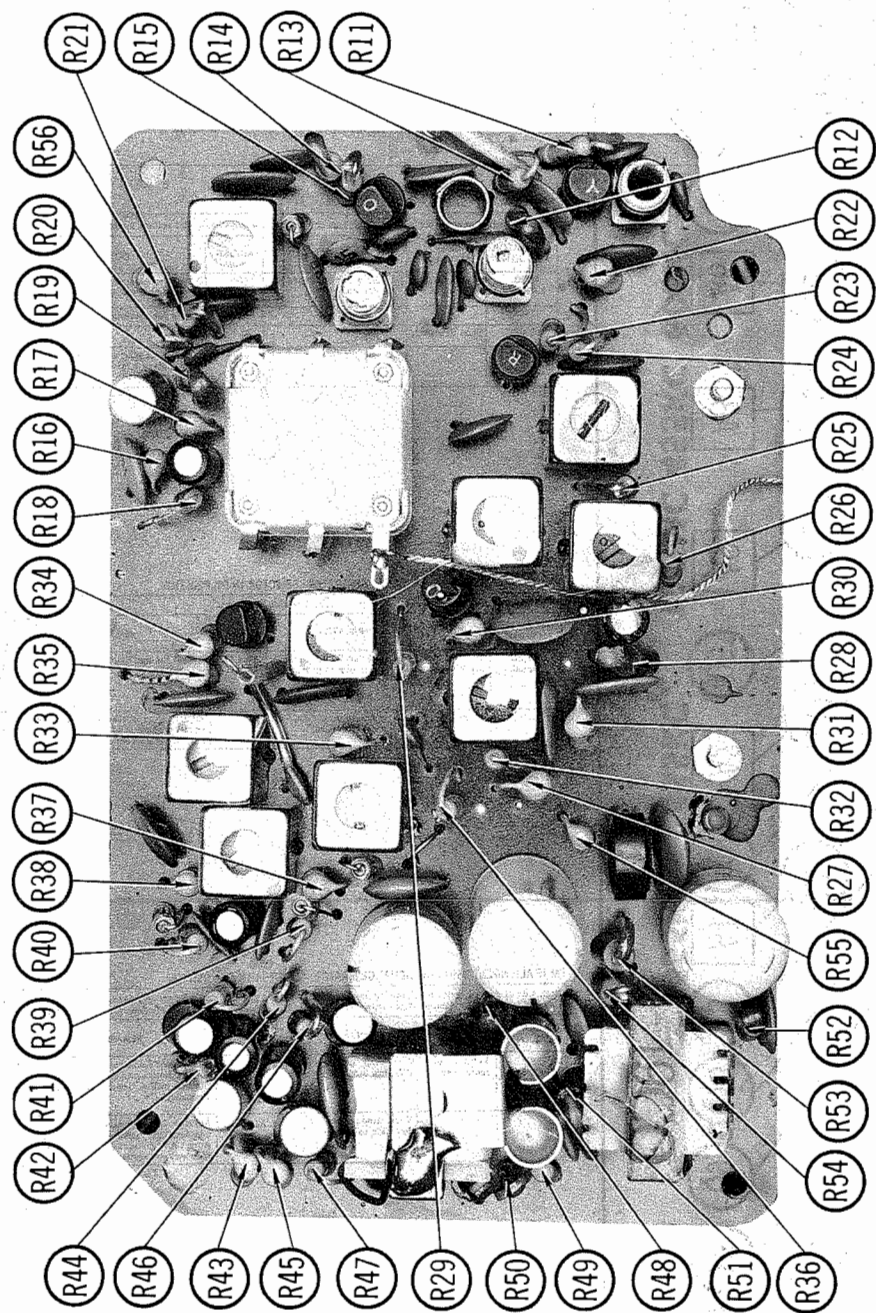
ELECTROLYTIC CAPACITORS

ITEM No.	RATING	REPLACEMENT DATA						
		LAFAYETTE PART No.	AEROVOX PART No.	CENTRALAB PART No.	CORNELL-DUBILIER PART No.	GENERAL ELECTRIC PART No.	MALLORY PART No.	SPRAGUE PART No.
C1	1000 10V		PRS1180	EA15-1000	BR1000-15	QT1-32	TC1501A	TL-1142
C2	500 15V		BCD15500	EA15-500	BR500-15	QT1-30	MTV500DN15	TL-1166
C3	1000 10V		PRS1180	EA15-1000	BR1000-15	QT1-32	TC1501A	TL-1142
C4	10 6V		BCD25010	EP6-10	NLW10-6	MT1-5	MTV10CB50	TE-1087
C5	10 6V		BCD25010	EP6-10	NLW10-6	MT1-5	MTV10CB50	TE-1087
C6	10 6V		BCD25010	EP6-10	NLW10-6	MT1-5	MTV10CB50	TE-1087
C7	5 6V		BCD25005	EP6-5	NLW5-15	MT1-3	MTV5CB50	TL-1084
C8	5 6V		BCD25005	EP6-5	NLW5-15	MT1-3	MTV5CB50	TL-1084
C9	10 6V		BCD25010	EP6-10	NLW10-6	MT1-5	MTV10CB50	TE-1087
C10	5 6V		BCD25005	EP6-5	NLW5-15	MT1-3	MTV5CB50	TL-1084
C11	10 6V		BCD25010	EP6-10	NLW10-6	MT1-5	MTV10CB50	TE-1087

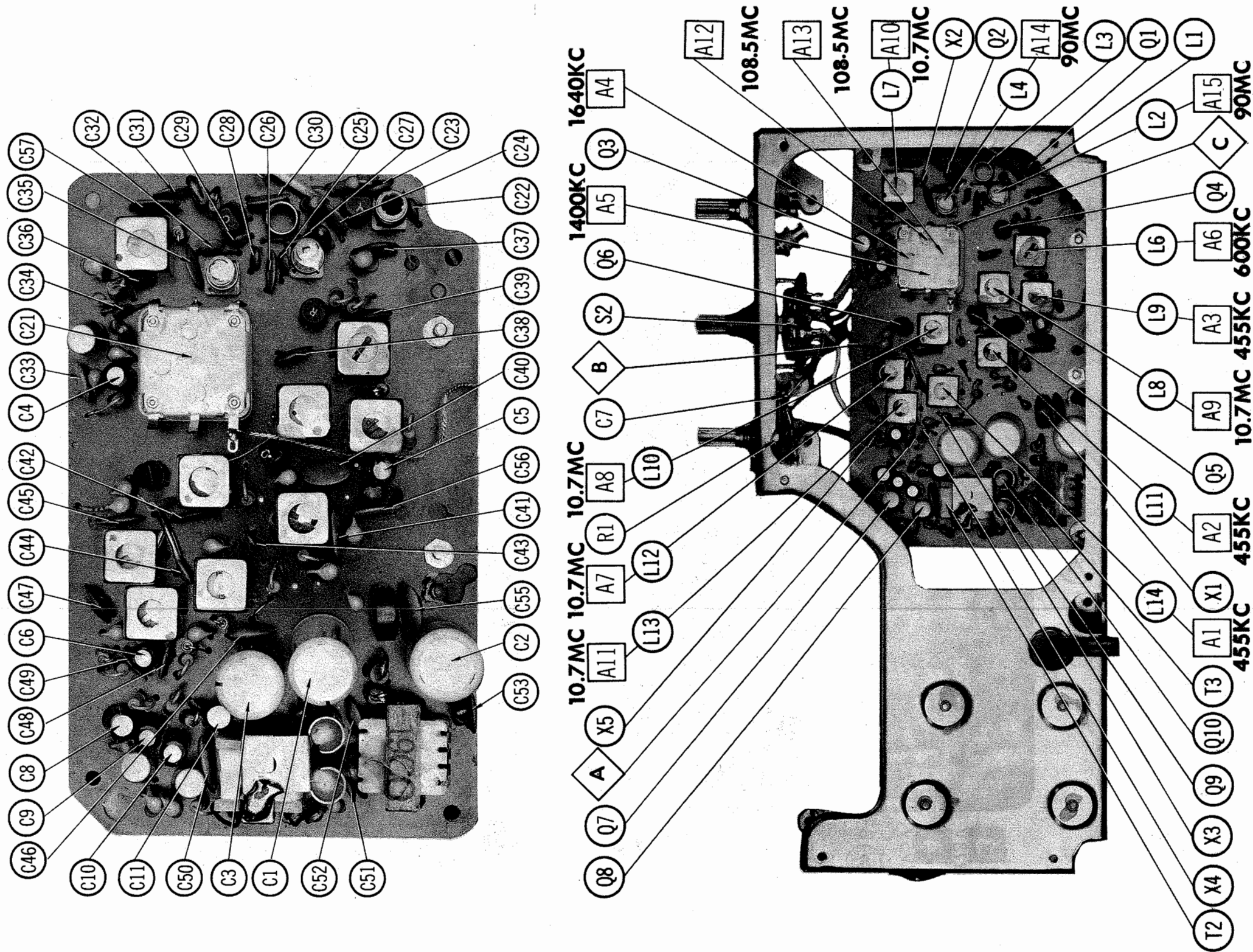
CAPACITORS

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.
C21			NPO-DI 5.0		CZ601CH5R0D			10TCC-V50
C22	5		NPO-DI 20	DTZ-20				10TCC-Q20
C23	20		GPD X5F102K	DM-102	JBS601YP102K	CCTO-200	CNO420	2SS-D10
C24	.001		NPO-DI 10	DTZ-10	CZ601CG100J	CCTO-100	SM210	10TCC-Q10
C25	10		NPO-DI 100	DTZ-100	CV601CG101K	CCTO-101	CNO410	10TCC-T10
C26	100		NPO-DI 3.0				CNO310	10TCC-V30
C27	3		NPO-DI 10	DTZ-10	CZ601CG100J	CCTO-100		10TCC-Q10
C28	10		NPO-DI 5.0		CZ601CH5R0D		CNO410	10TCC-V50
C29	5		GPD X5F301K	DM-301	JBZ601YP331K	CCD-301	GP330	10TS-T30
C30	300		GPD X5F102K	DM-102	JBS601YP102K	CCD-102	SM210	2SS-D10
C31	.001		NPO-DI 15	DTZ-15	CZ601CG150J	CCTO-150	CNO415	10TCC-Q15
C32	15		GPD X5F102K	DM-102	JBS601YP102K	CCD-102	SM210	10TCC-Q15
C33	.001		NPO-DI 5.0		CZ601CH5R0D			2SS-D10
C34	5		GPD X5F301K	DM-301	JBZ601YP331K	CCD-301	GP330	10TCC-V50
C35	300		TTP-01	CK-103	HOY101ZV103P	CCD-103	TA110	10TS-T30
C36	.01		TTP-01	CK-103	HOY101ZV103P	CCD-103	TA110	TG-S10
C37	.01		GPD X5F151K	DD-151	HOY101ZV103P	CCD-103	GP315	TG-S10
C38	150		TTP-01	CK-103	HOY101ZV103P	CCD-103	TA110	10TS-T15
C39	.01			DD-403			GP140	TG-S10
C40	.04			DD-403			GP140	
C41	.04			DD-403			GP140	
C42	.04			DD-403			GP140	
C43	7		NPO-DI 6.8	DTZ-6R8	CZ601CH6R8D		CNO568	10TCC-V68
C44	30		TCZ-30			CCTO-300		
C45	300		GPD X5F301K	DM-301	JBZ601YP331K	CCD-301	GP330	10TS-T30
C46	.02		TTP-02	CK-203	HOR101ZV203P	CCD-203	TA120	TG-S20
C47	.01		TTP-01	CK-103	HOY101ZV103P	CCD-103	TA110	TG-S10
C48	.001		GPD X5F102K	DM-102	JBS601YP102K	CCD-102	SM210	2SS-D10
C49	.001		GPD X5F102K	DM-102	JBS601YP102K	CCD-102	SM210	2SS-D10
C50	.02		TTP-02	CK-203	HOR101ZV203P	CCD-203	TA120	TG-S20
C51	.002		GPD X5F202K	DM-202	JBX601YP202K	CCD-202	GP220	2SS-D20





A Howard W. Sams CIRCUITRACE® Photo



ALIGNMENT INSTRUCTIONS

Maintain line voltage at 117 volts. Use only enough generator output to obtain a suitable indication. Allow a 15 minute warmup for receiver and equipment. CAUTION: Use isolation transformer, if available. If not, observe polarity when connecting test equipment. Suggested Alignment Tools: A1 thru A15 GENERAL CEMENT #888, 8887, 9089 WALSCO #2531-X, 2541, 2587 A14, A15 GENERAL CEMENT #9440 WALSCO #2591

AM ALIGNMENT - SELECTOR IN AM POSITION

Fashion loop of several turns of wire and connect generator across loop. Set volume control at maximum.

GENERATOR FREQUENCY	DIAL SETTING	INDICATOR	ADJUST	REMARKS
455KC (400v. Mod.)	Tuning gang fully open.	Output meter across voice coil.	A1, A2 A3	Adjust for maximum. Repeat until no further improvement can be made.
1640KC	"	"	A4	Adjust for maximum.
1400KC	Tune to signal.	"	A5	"
600KC	"	"	A6	Rock tuning gang and adjust for maximum. Repeat steps 2 thru 4 until no further improvement can be made.

FM IF ALIGNMENT USING AM SIGNAL GENERATOR - SELECTOR IN FM POSITION

High side of generator thru .001mfd to point \odot , low side to ground.

GENERATOR FREQUENCY	DIAL SETTING	INDICATOR	ADJUST	REMARKS
10.7MC (Unmod.)	Point of non-interference.	DC probe of VTVM to point \odot , common to ground.	A7, A8 A9, A10	Adjust for maximum.
"	"	DC probe to point \odot , common to ground.	A11	Adjust for zero reading. A positive or negative reading will be obtained on either side of the correct setting.

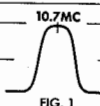


FIG. 1

FM IF ALIGNMENT USING FM SIGNAL GENERATOR - SELECTOR IN FM POSITION

High side of generator thru .001mfd to point \odot , low side to ground. Use only enough marker signal for indication. Use 60% frequency modulated signal with 450KC sweep. Use 60v sawtooth voltage in scope for horizontal deflection.

GENERATOR FREQUENCY	DIAL SETTING	INDICATOR	ADJUST	REMARKS
10.7MC (450KC Swp.)	Point of non-interference.	Vert. amp. of scope to point \odot , low side to ground.	A7, A8 A9, A10	Disconnect stabilizing capacitor C8. Adjust for maximum gain and symmetry of response similar to Fig. 1 with marker as shown. Reconnect C8.
"	"	Vert. amp. to point \odot , low side to ground.	A11	Adjust A11 (secondary) to place marker at center of "S" curve similar to Fig. 2. Adjust A7 (primary) for maximum amplitude and straightness of line.

FM RF ALIGNMENT - SELECTOR IN FM POSITION

Connect generator across antenna terminals with 1200 carbon resistors in series with each lead.

GENERATOR FREQUENCY	DIAL SETTING	INDICATOR	ADJUST	REMARKS
108.5MC	Set at high end.	DC probe of VTVM to point \odot , common to ground.	A12, A13	Adjust for maximum.
90MC	Tune to signal.	"	A14 A15	Rock tuning and adjust for maximum. Repeat steps 7 and 8 until no further improvement can be made.

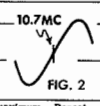


FIG. 2

LAFAYETTE
MODEL 17-0164W

FOLDER 5