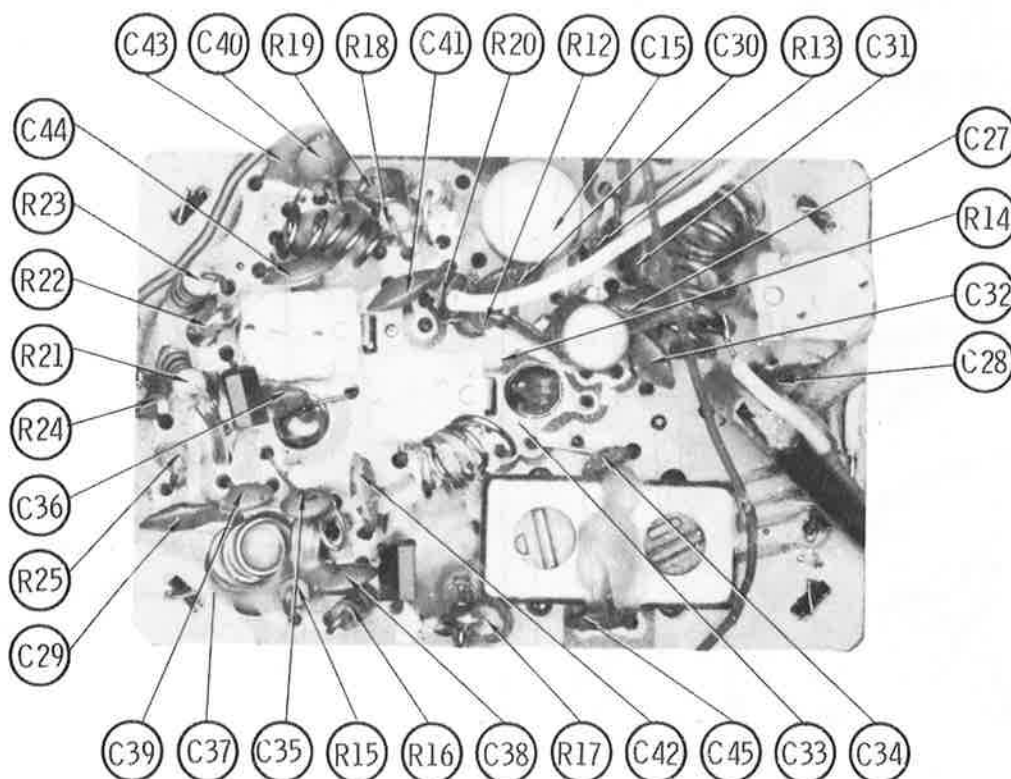


For Supplier Address See PHOTOFACT Index

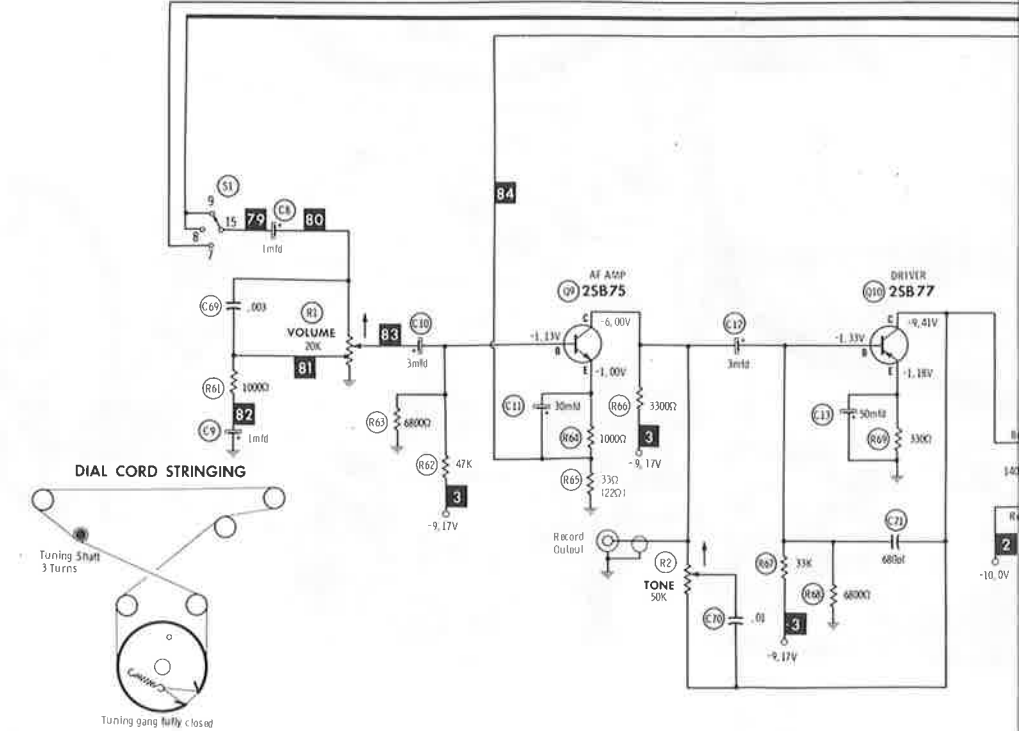
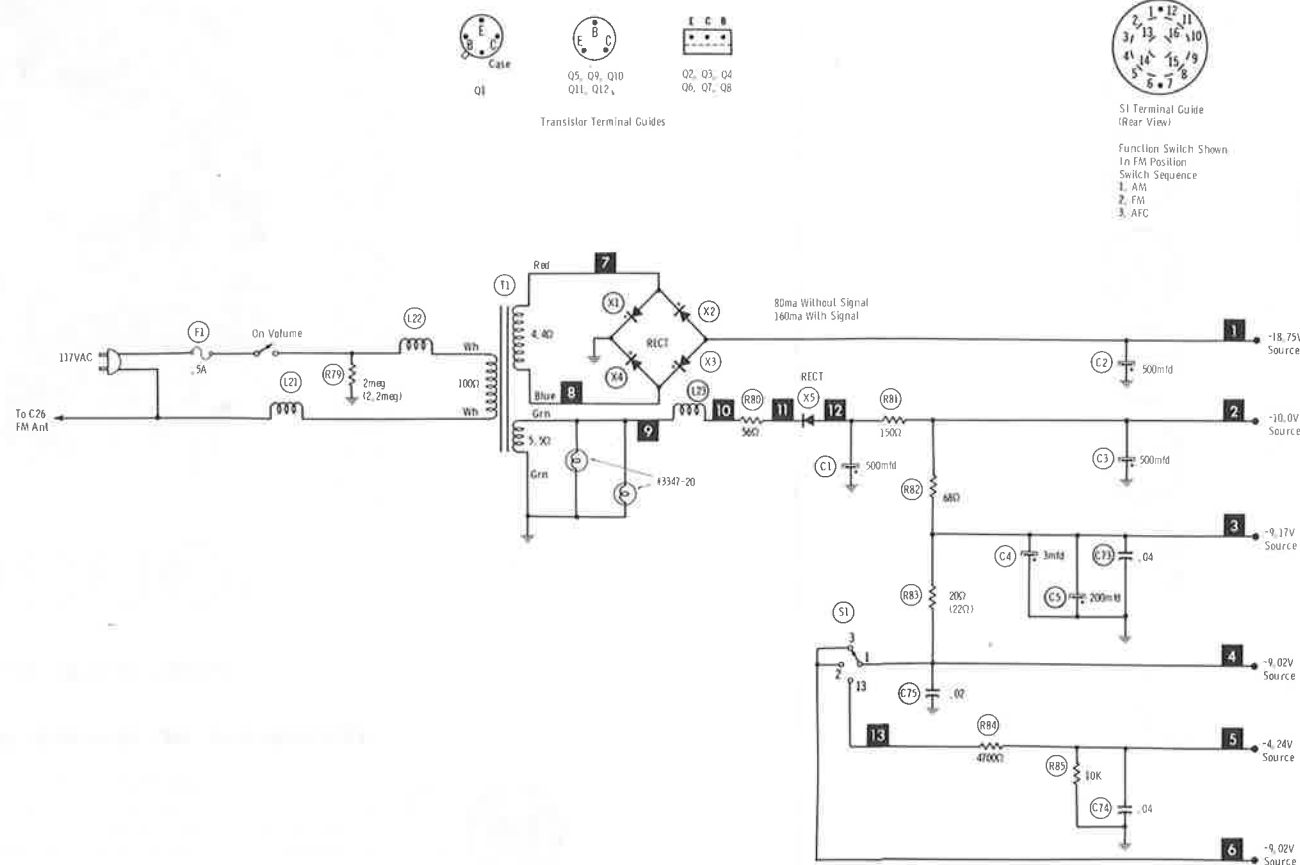
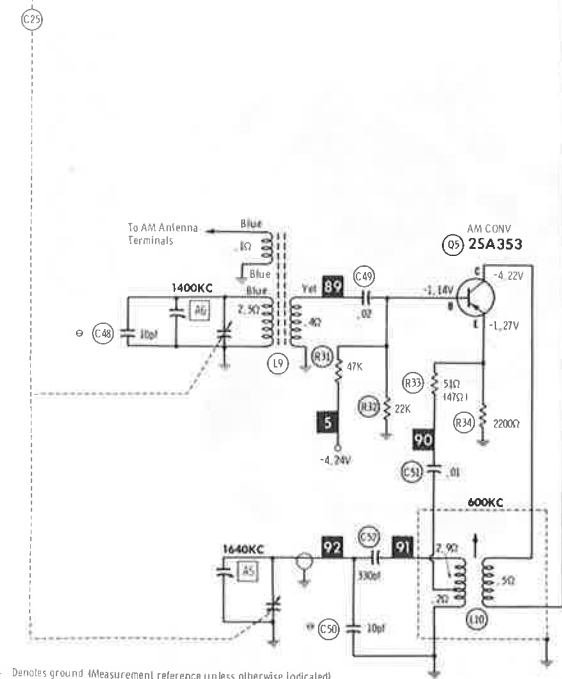
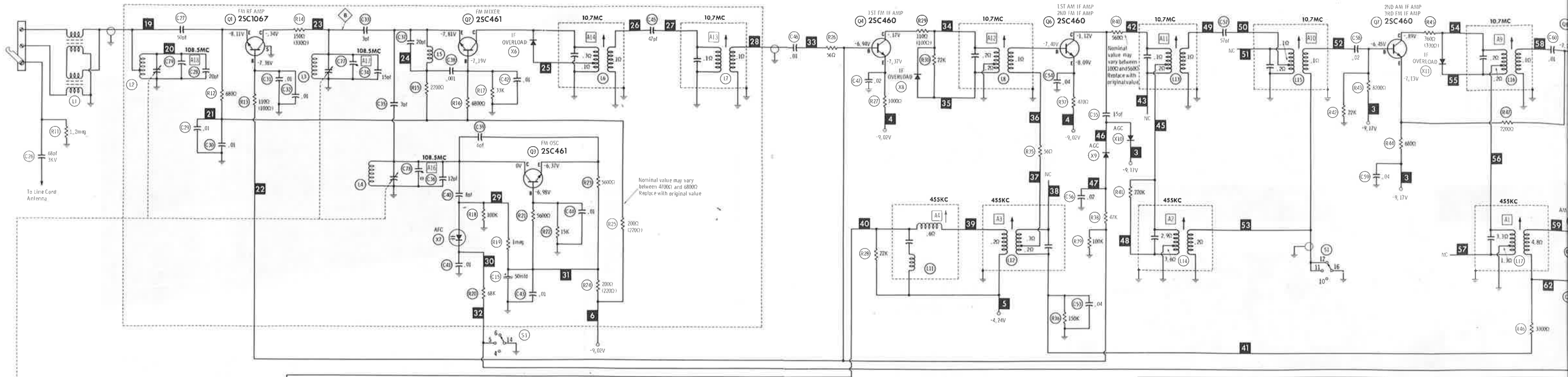
LAFAYETTE  
MODEL 99-3564LAFAYETTE  
MODEL 99-3564**REMEMBER TO ASK— “What else needs fixing?”****HOWARD W. SAMS & CO., INC.** Indianapolis, Indiana 46206

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. UK816

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DATE 11-70

SET 1139 FOLDER 4



⊕ Denotes ground (Measurement reference unless otherwise indicated)

— Indicates connection used in some versions.

⊗ Indicates connection not used in some versions.

\* Omitted in some versions.

⊙ See parts list.

Measurements taken with switching in position shown unless otherwise indicated.

▲ Measured with switching in "AM" position.

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.

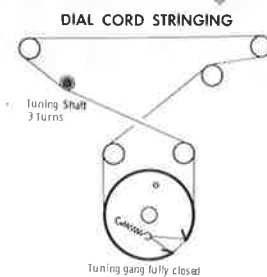
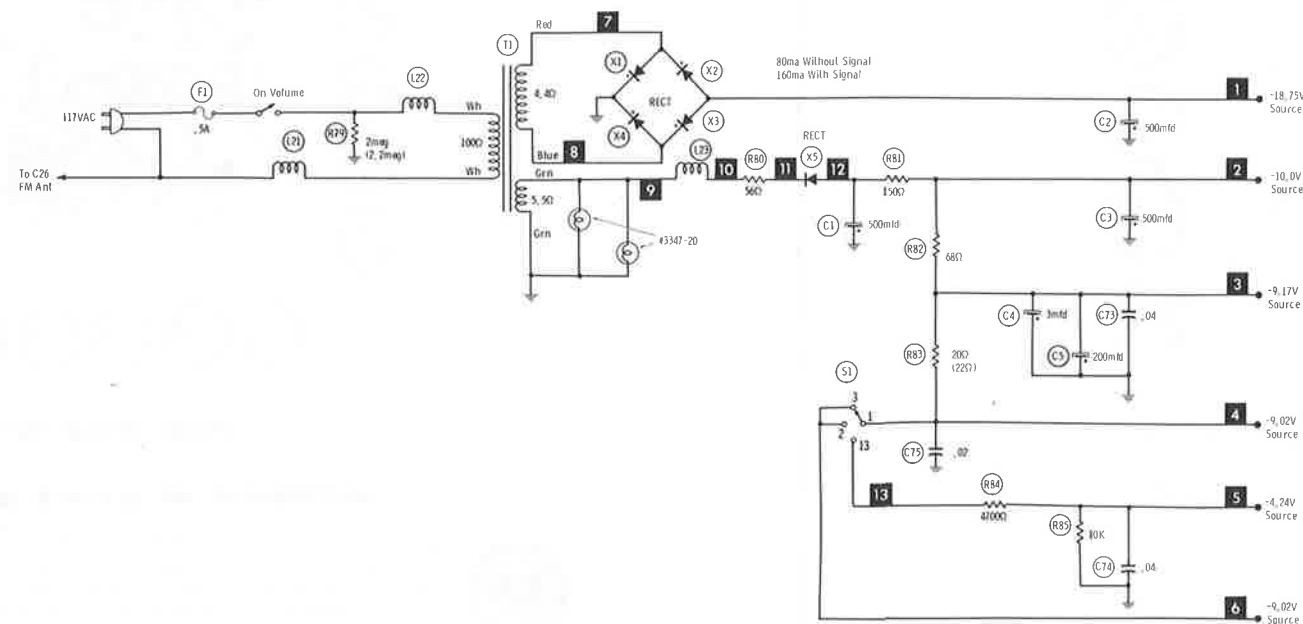
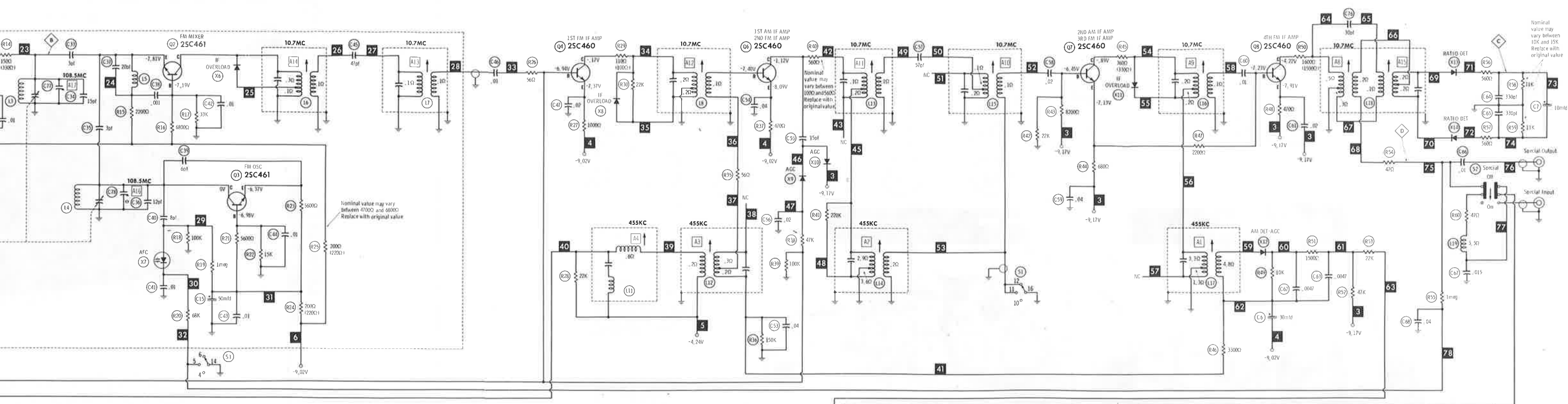
Numbers assigned to terminals may not be found on the unit.

Transistor resistances vary widely. No resistance measurements taken.

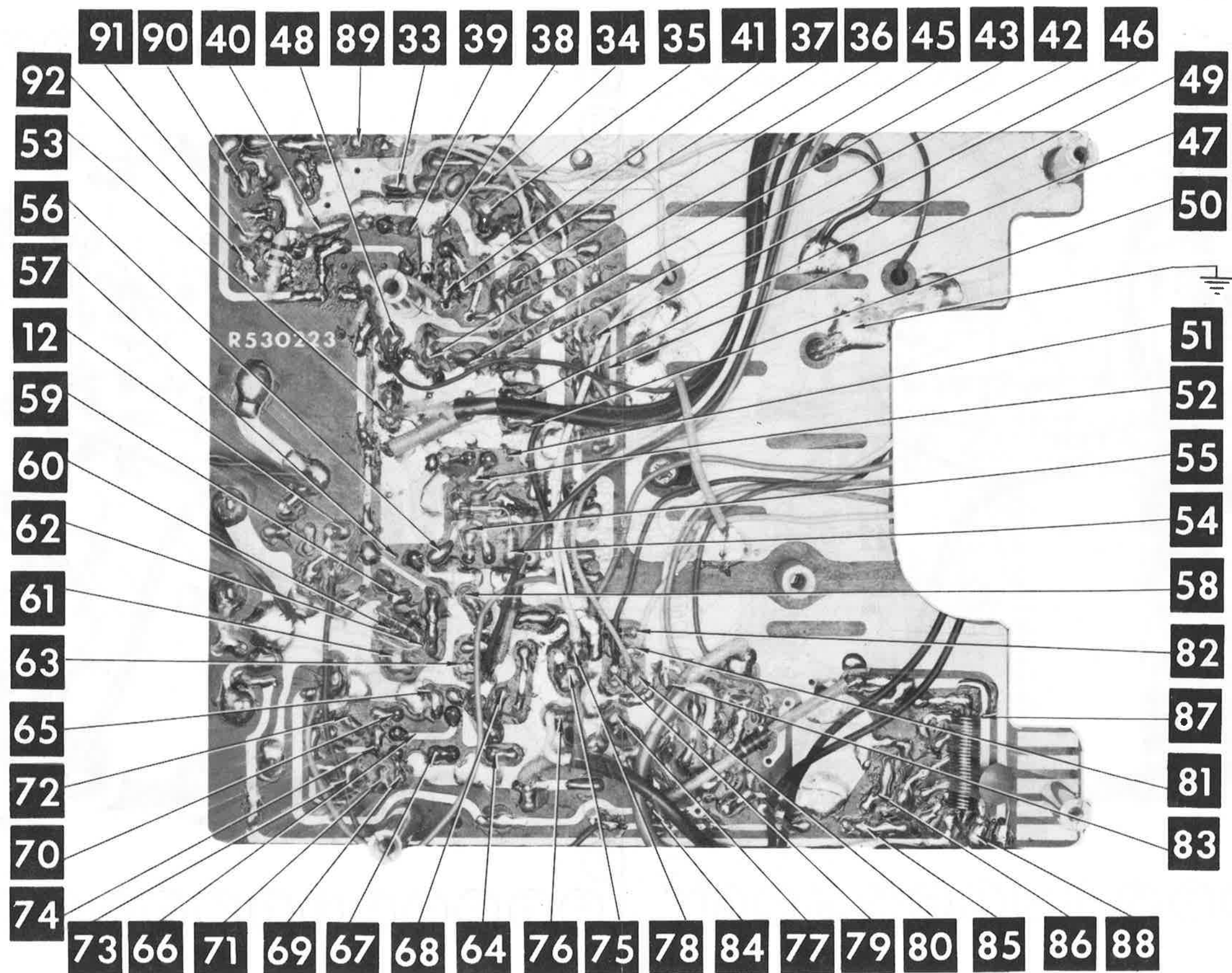
A PHOTOFACT STANDARD NOTATION SCHEMATIC

with **Circuitrace**

© Howard W. Sams & Co., Inc. 1970

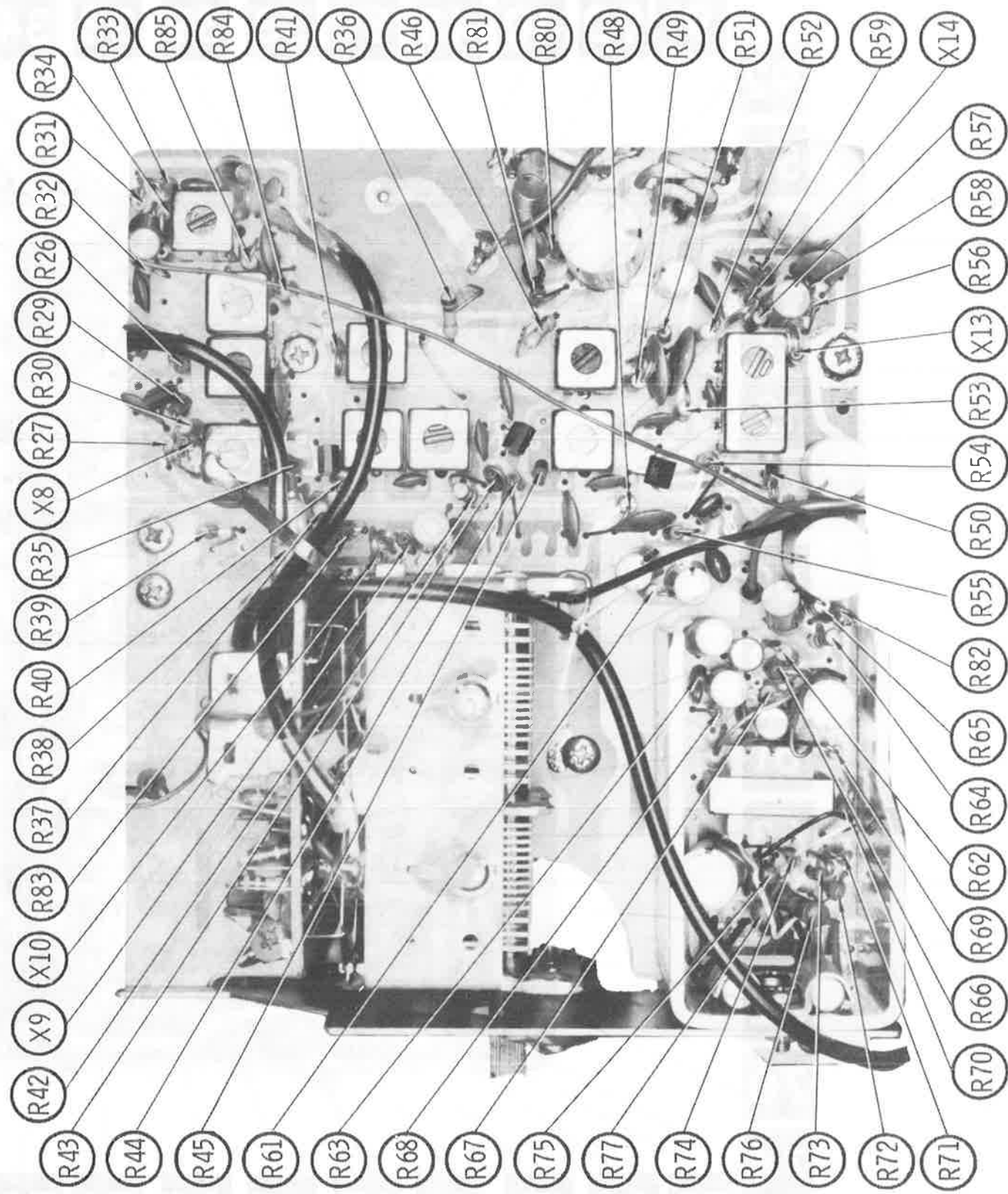
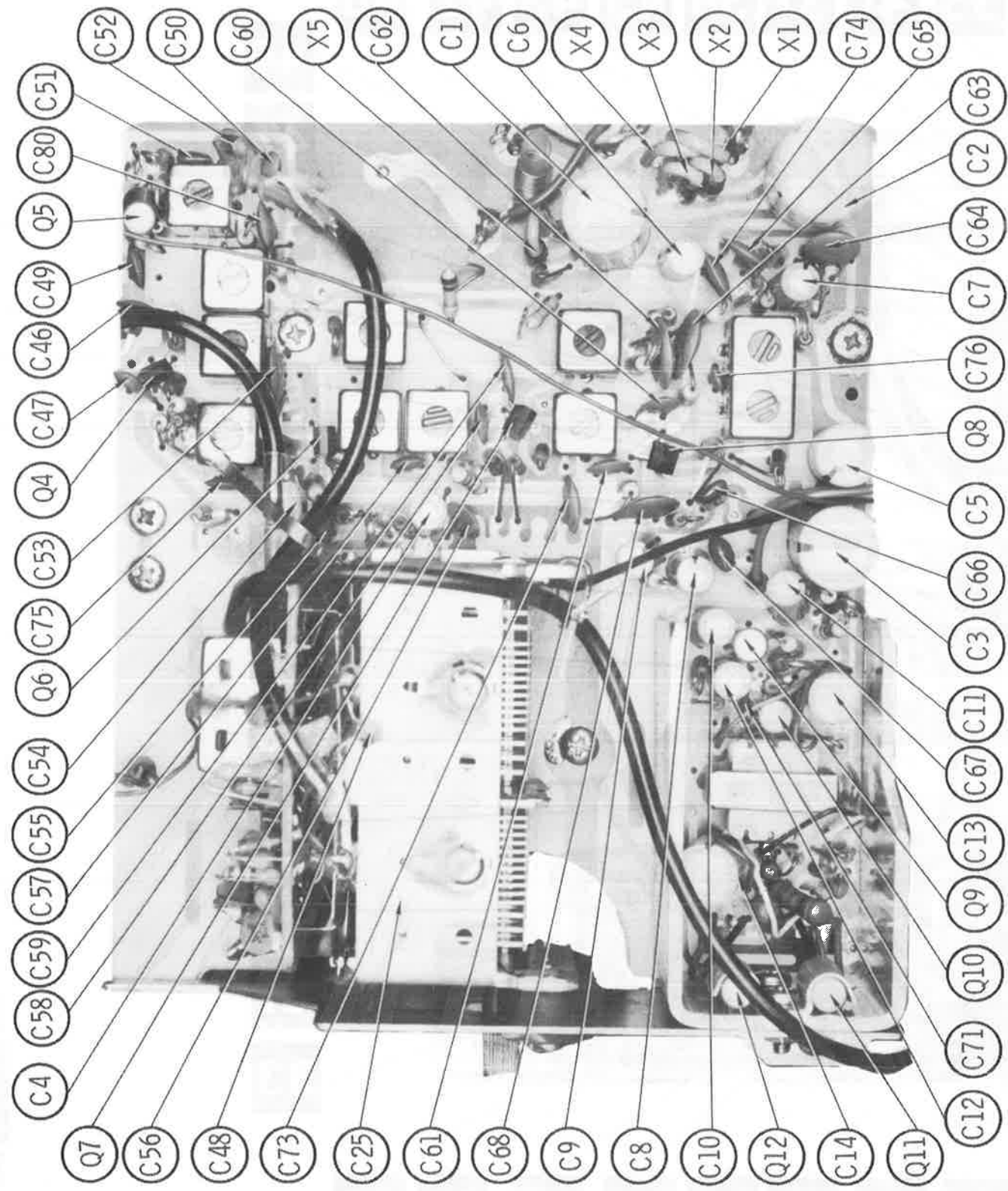


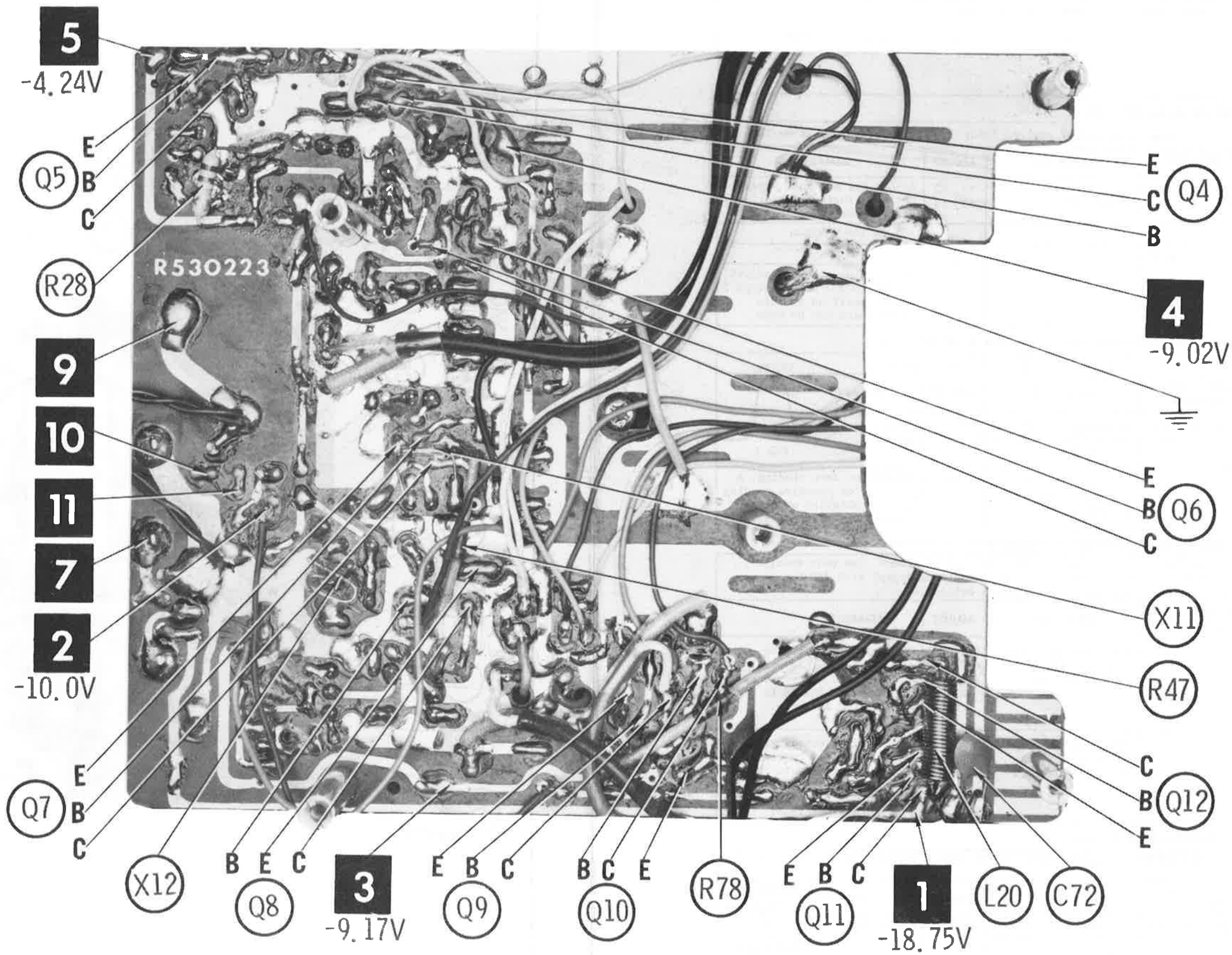
LAFAYETTE  
MODEL 99-3564



LAFAYETTE  
MODEL 99-3564









ALIGNMENT INSTRUCTIONS

CAUTION: Use isolation transformer or observe polarity when connecting test equipment.  
Maintain line voltage at 117VAC. Allow a 15-minute warm-up period.  
Use only enough generator output to obtain a suitable indication.  
Suggested Alignment Tools:  
A1 thru A18.....GENERAL CEMENT #8868, 8987, 9089.....WALSCO #2531-X, 2541, 2587

AM ALIGNMENT—SELECTOR IN AM POSITION

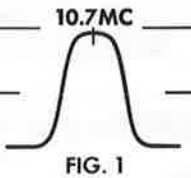
Connect generator across loop fashioned of several turns of wire. Set volume at maximum.

GENERATOR FREQUENCY	RADIO DIAL SETTING	INDICATOR	ADJUST	REMARKS
455KC 400 cycle modulation	Tuning gang fully open.	Output Meter across voice coil.	A1, A2 A3, A4	Adjust for maximum. Repeat until no further improvement can be made.
1640KC	"	"	A5	Adjust for maximum.
1400KC	Tune to signal	"	A6	"
600KC	"	"	A7	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 B, low side to ground.

GENERATOR FREQUENCY	RADIO DIAL SETTING	INDICATOR	ADJUST	REMARKS
10.7MC Unmodulated	Point of non-interference	DC probe of VTVM to point C, common to ground.	A8, A9 A10, A11 A12, A13 A14	Adjust for maximum.
"	"	DC probe of VTVM to point D, common to ground.	A15	Adjust for zero reading. A positive or negative reading will be obtained on either side of the correct setting.



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

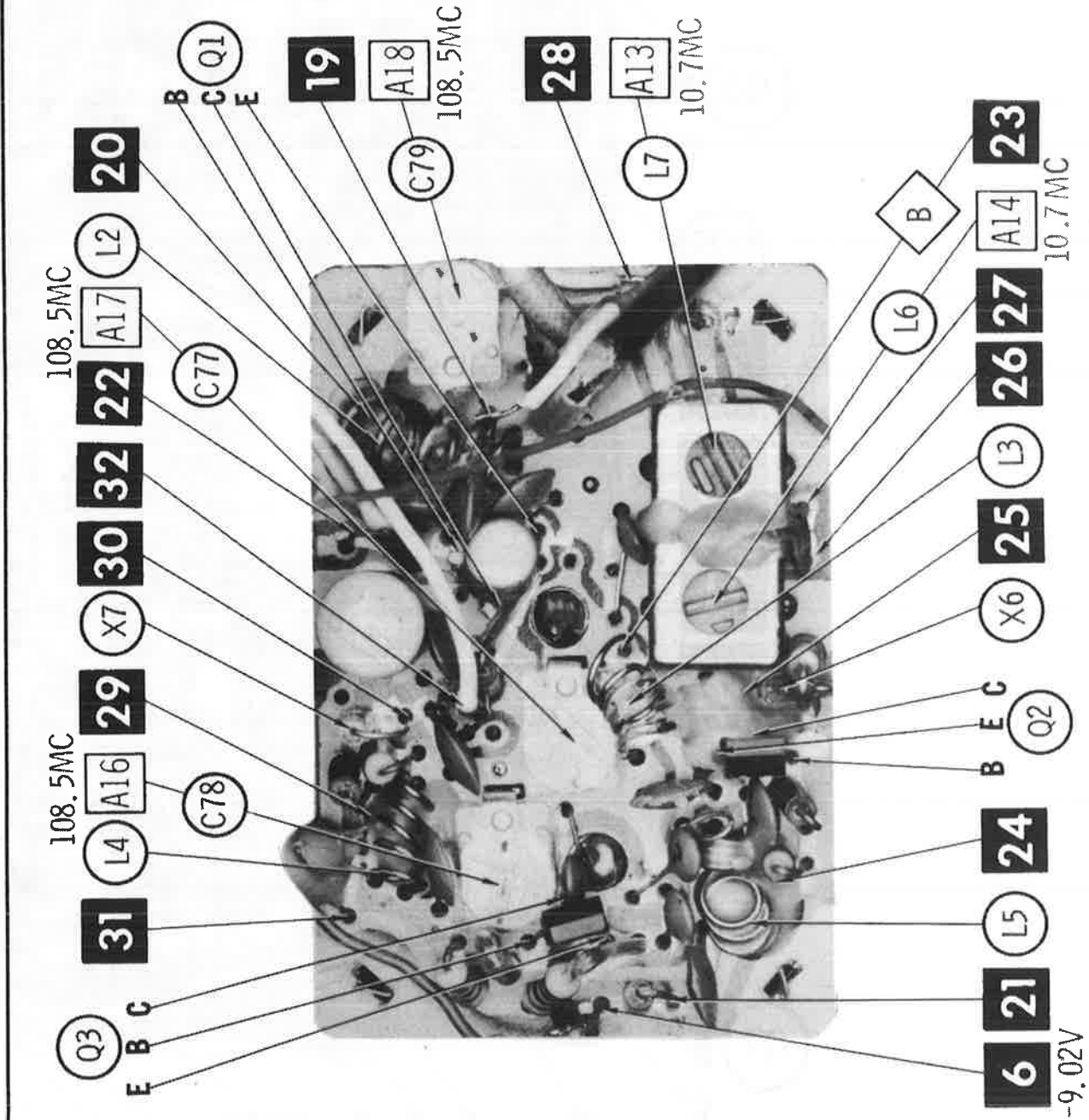
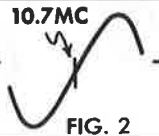
High side of generator thru .001mfd to point B, low side to ground. Use only enough marker signal for indication. Use 60 cycle frequency modulated signal with 450KC sweep. Use 60 cycle sawtooth voltage in scope for horizontal deflection.

GENERATOR FREQUENCY	RADIO DIAL SETTING	INDICATOR	ADJUST	REMARKS
10.7MC 450KC Sweep	Point of non-interference	Vert. amp of scope to point C, low side to ground.	A8, A9 A10, A11 A12, A13 A14	Disconnect stabilizing capacitor C7. Adjust for maximum gain and symmetry of response similar to Fig. 1 with marker as shown. Reconnect C7.
"	"	Vert. amp of scope to point D, low side to ground.	A15	Adjust A 15 (secondary) to place marker at center of "S" curve similar to Fig. 2. Readjust A 8 (primary) for maximum amplitude and straightness of line.

FM RF ALIGNMENT—SELECTOR IN FM POSITION

Connect generator across antenna terminals with 120-ohm carbon resistor in series with each lead.

GENERATOR FREQUENCY	RADIO DIAL SETTING	INDICATOR	ADJUST	REMARKS
108.5MC	High freq. end	DC probe of VTVM to point C, common to ground.	A16 A17 A18	Adjust for maximum.



PARTS LIST AND DESCRIPTION (CONTINUED)  
(When ordering parts, state Model, Part Number, and Description.)

SPEAKER

ITEM No.	TYPE	REPLACEMENT DATA		NOTES
		MFG. PART No.	QUAM PART No.	
SP1	4-1/2" PM, 8 ohms	1200-36 (PD1241A)		

FUSE DEVICES

ITEM No.	DESCRIPTION	REPLACEMENT DATA						
		PART No.		BUSS PART No.		LITTELFUSE PART No.		WORKMAN PART No.
		DEVICE	HOLDER	DEVICE	HOLDER	DEVICE	HOLDER	DEVICE
F1	.5A Quick Acting	3237-20	1805-19	AGC 1/2	4574	312.500	353001	

MISCELLANEOUS

ITEM No.	PART NAME	PART No.	NOTES
S1 S2	Switch Switch Printed Circuit Board Printed Circuit Board	1657-14 1658-14 1412-16 1413-16	Selector (AM-FM-AFC) Special (On-Off) Main (Complete) RF (Complete)

CABINETS & CABINET PARTS (When ordering specify model, chassis & color)

ITEM	PART No.	ITEM	PART No.
Knob, Volume, Bass, Treble Knob, Tuning	1666-18 1667-18	Dial Glass	3542-20

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 Feet 17109 (Plastic) or 17129 (Rubber) - 9 Feet
Low-loss Shielded Lead (Interconnecting)	Use BELDEN No. 8401 or 8421

PARTS LIST AND DESCRIPTION  
(When ordering parts, state Model, Part Number, and Description.)

TRANSISTORS

ITEM No.	TYPE No.	FUNCTION	REPLACEMENT DATA					
			MFG. PART No.	GENERAL ELECTRIC PART No.	INTERNATIONAL RECTIFIER PART No.	MOTOROLA PART No.	RCA PART No.	SYLVANIA PART No.
Q1	2SC1067	FM RF Amp	1952-17	GE-20	TR-21	HEP54	SK3018	ECG 123A
Q2	2SC461A	FM Mixer		GE-17	TR-22	HEP53	SK3018	ECG 108
Q3	2SC461B	FM Oscillator		GE-17	TR-22	HEP53	SK3018	ECG 108
Q4	2SC460B	1st FM IF Amp		GE-17	TR-21	HEP53	SK3018	ECG 128
Q5	2SA353C	AM Converter	1951-17	GE-9A	TR-17	HEP639	SK3007	ECG 126
Q6	2SC460B	1st AM-2nd FM IF Amp		GE-17	TR-21	HEP53	SK3018	ECG 128
Q7	2SC460B	2nd AM-3rd FM IF Amp		GE-17	TR-21	HEP53	SK3018	ECG 128
Q8	2SC460A	4th FM IF Amp		GE-17	TR-21	HEP53	SK3018	ECG 128
Q9	2SB75B	AF Amp	1059-17	GE-2	TR-14	HEP250	SK3004	ECG 102A
Q10	2SB77B	Driver		GE-2	TR-14	HEP633	SK3004	ECG 102A
Q11	2SB156C	Output	1827-17	GE-2	TR-14	HEP253	SK3004	ECG 102A
Q12	2SB156C	Output	1827-17	GE-2	TR-14	HEP253	SK3004	ECG 102A

POWER RECTIFIERS & SIGNAL DIODES

ITEM No.	MFG. PART OR TYPE No.	REPLACEMENT DATA				NOTES
		GENERAL ELECTRIC PART No.	INTERNATIONAL RECTIFIER PART No.	RCA PART No.	SYLVANIA PART No.	
X1		GE-504A	18DB2A (2)	SK3030 or SK3031	ECG 166 (2)	(2) A single unit replacement for all four bridge circuit rectifiers.
X2		GE-504A		SK3030 or SK3031		
X3		GE-504A		SK3030 or SK3031		
X4		GE-504A		SK3030 or SK3031		
X5		GE-504A	8D4 or 5A4-D	SK3030 or SK3031	ECG 116 or ECG 117	Varactor
X6	2302-13(1S351)	1N60	1N60	1N60	ECG 109	
X7		1N60	1N60	1N60	ECG 109	
X8		1N60	1N60	1N60	ECG 109	
X9		1N60	1N60	1N60	ECG 109	
X10		1N60	1N60	1N60	ECG 109	
X11		1N60	1N60	1N60	ECG 109	
X12		1N60	1N60	1N60	ECG 109	
X13		1N60	1N60	1N60	ECG 110 (4)	
X14		1N60	1N60	1N60		
						(4) Matched pair.

LAFAYETTE  
MODEL 99-3564

ELECTROLYTIC CAPACITORS

ITEM No.	RATING	REPLACEMENT DATA						
		PART No.	AEROVOX PART No.	CENTRALAB PART No.	CORNELL-DUBILIER PART No.	GENERAL ELECTRIC PART No.	MALLORY PART No.	SPRAGUE PART No.
C1	500 15V	1478-12	PRS1220	EA15-200	PC500-16	QT1-30A	MTV500DN15	TL-1166
C2	500 25V	1568-12	PRS1290	EA30-500	WBR500-35	QT1-30A	TC2505B	TL-1217
C3	500 15V	1478-12	PRS1220	EA15-200	PC500-16	QT1-30A	MTV500DN15	TL-1166
C4	3 15V		MCD-40	EP30-2	PC5-100	MT1-3	MTV3CB50	TL-1302
	3 6V	1135-12						
C5	200 15V	1494-12	PTT108	EA15-250	PC200-16	MT1-23	MTV200CK15	TE-1164
C6	30 6V	1149-12	MCD-110	EP6-25	PC30-35	MT1-13	MTV30CB25	TE-1132.1
C7	10 10V		MCD-70	EP15-10	PC10-50	MT1-5	MTV10CB50	TE-1128
	10 6V	2928-12						
C8	1 10V	2927-12	MCD-10		PC1-100	MT1-1	MTV1CB50	TE-1120
C9	1 10V	2927-12	MCD-10		PC1-100	MT1-1	MTV1CB50	TE-1120
C10	3 15V		MCD-40	EP30-2	PC5-100	MT1-3	MTV3CB50	TL-1302
	3 6V	1135-12						
C11	30 6V	1149-12	MCD-110	EP6-25	PC30-35	MT1-13	MTV30CB25	TE-1132.1
C12	3 15V		MCD-40	EP30-2	PC5-100	MT1-3	MTV3CB50	TL-1302
	3 6V	1135-12						
C13	50 10V	2590-12	MCD-130	EP15-50	PC50-16	MT1-16	MTV50CB15	TE-1133
C14	200 10V	2444-12	PTT47	EA15-250	PC200-16	MT1-23	MTV200CK10	TL-1137
C15	50 10V	2590-12	MCD-130	EP15-50	PC50-16	MT1-16	MTV50CB15	TE-1133

FOLDER 4



PARTS LIST AND DESCRIPTION (CONTINUED)

(When ordering parts, state Model, Part Number, and Description.)

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.
C25		#2924-12	HVD-3068	DD30-680	HV3-68	3CCD-680		30GA-Q68
C26	68 3KV		GPD X5F560K	DD-560		CCD-560	GP456	10TS-Q56
C27	50			DD-200	NP020	CCD-200	GP420	10TS-Q20
C28	20			DD-103	GP10000	CCD-103	JF110	10TS-S10
C29	.01		GPD X5S103K	DD-103	GP10000	CCD-103	JF110	10TS-S10
C30	.01		GPD X5S103K	DD-103	GP10000	CCD-103	JF110	10TS-S10
C31	.01		GPD X5S103K	DD-103	GP10000	CCD-103	JF110	10TS-S10
C32	.01		GPD X5S103K	DD-103	GP10000	CCD-103	JF110	10TS-S10
C33	3		GPDC0J3R3K	DD-3R3	NP03P3	CCTO-3R3	GP533	10TS-V33
C34	15			DD-150	NP015	CCD-150	GP415	10TS-Q15
C35	3		GPDC0J3R3K	DD-3R3	NP03P3	CCTO-3R3	GP533	10TS-V33
C36	12			DD-120	NP012	CCD		
C37	20			DD-200	NP020	CCD-200	GP420	10TS-Q20
C38	.001		GPD X5F102K	DD-102	GP1000	CCD-102	GP210	10TS-D10
C39	6			DD-060	NP06			10TCC-V5
C40	8			DD-080	NP08		GP580	
C41	.01		GPD X5S103K	DD-103	GP10000	CCD-103	JF110	10TS-S10
C42	.01		GPD X5S103K	DD-103	GP10000	CCD-103	JF110	10TS-S10
C43	.01		GPD X5S103K	DD-103	GP10000	CCD-103	JF110	10TS-S10
C44	.01		GPD X5S103K	DD-103	GP10000	CCD-103	JF110	10TS-S10
C45	.47		GPD X5F470K	DD-470	NP047	CCD-470	GP447	10TS-Q47
C46	.01		GPD X5S103K	DD-103	GP10000	CCD-103	JF110	10TS-S10
C47	.02		GPD Z5U203P	DD-203		CCD-203	GP120	10TS-S20
C48	10		GPDC0H100K	DD-100	NP010	CCD-100	GP410	10TS-Q10
C49	.02		GPD Z5U203P	DD-203		CCD-203	GP120	10TS-S20
C50	10		GPDC0H100K	DD-100	NP010	CCD-100	GP410	10TS-Q10
C51	.01		V1614S1	CPR-10000J	DPMS6S1	4DP-1-103	PVC411	4PS-S10
C52	330		ADM-15-331	CPR-330J	CD15F331J500	DM-15-331	SX333	MS-333
C53	.04			DD-403			GP140	
C54	.04			DD-403			GP140	
C55	15			DD-150	NP015	CCD-150	GP415	10TS-Q15
C56	.02		GPD Z5U203P	DD-203		CCD-203	GP120	10TS-S20
C57	57		GPD X5F560K	DD-560		CCD-560	GP456	10TS-Q56
C58	.02		GPD Z5U203P	DD-203		CCD-203	GP120	10TS-S20
C59	.04			DD-403			GP140	
C60	.01		GPD X5S103K	DD-103	GP10000	CCD-103	JF110	10TS-S10
C61	.02		GPD Z5U203P	DD-203		CCD-203	GP120	10TS-S20
C62	.0047		GPD X5R472K	DD-472G	GP4700	CCD-472	JF247	10TS-D47
C63	.0047		GPD X5R472K	DD-472G	GP4700	CCD-472	JF247	10TS-D47
C64	330		GPD X5F331K	DD-331	GP330	CCD-331	GP333	10TS-T33
C65	330		GPD X5F331K	DD-331	GP330	CCD-331	GP333	10TS-T33
C66	.01		V1614S1	CPR-10000J	DPMS6S1	4DP-1-103	PVC411	4PS-S10
C67	.015		DBE6S15		DPMS6S15	4DP-1-153	PVC6115	4PS-S15
C68	.04			DD-403			GP140	
C69	.003		GPD X5R302K	DD-302	GP3000	CCD-302		10TS-D30
C70	.01		V1612S1	CPR-10000J	DPMS6S1	1DP-1-103	PVC211	225P10391WD3
C71	680		GPD X5F681K	DD-681	GP680	CCD-681	GP368	10TS-T68
C72	.02		GPD Z5U203P	DD-203		CCD-203	GP120	10TS-S20
C73	.04			DD-403			GP140	
C74	.04			DD-403			GP140	
C75	.02		GPD Z5U203P	DD-203		CCD-203	GP120	10TS-S20
C76	30			DD-300		CCD-300	GP430	10TS-Q30
C77		#2925-12						
C78								
C79								
C80	.04			DD-403			GP140	

# Lafayette Part Number.

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

ITEM No.	FUNCTION	RESIST-ANCE	REPLACEMENT DATA				
			MFGR. PART No.	CENTRALAB PART No.	CLAROSTAT PART No.	CTS-IRC PART No.	MALLORY PART No.
R1	Volume/Switch	20K tap @ 10K	1540-11	F16-25K (1), SSK104, KR-1	NPF1-30K (1), UP-C-400, NWE-12	B19-119X, SK1(1), 76-1 or [BU1 (1), CF103TT (2), SS1, GC]*	RU24T14, SL36,SL3250, US41
R2	Tone	50K	1541-11				

\* "Snaptrol"  
(1) Enlarge mounting hole.  
(2) Disregard 5K tap.

PARTS LIST AND DESCRIPTION (CONTINUED)

(When ordering parts, state Model, Part Number, and Description.)

RESISTORS (Power and Special)

ITEM No.	RATING	REPLACEMENT DATA	
		WORKMAN PART No.	MFGR. PART No.
R72	Thermistor 50 Cold		1953-17
R75	Thermistor 50 Cold		1953-17

ITEM No.	RATING	REPLACEMENT DATA	
		WORKMAN PART No.	MFGR. PART No.
R76	.7 1W	WS-.68	
R77	.7 1W	WS-.68	

COILS (RF-IF)

ITEM No.	USE	REPLACEMENT DATA			
		PART No.	MEISSNER PART No.	MILLER PART No.	WORKMAN PART No.
L1	FM Antenna	2203-23			
L2	FM RF	2204-23			
L3	FM RF	2207-23			
L4	FM Oscillator	2205-23			
L5	FM Trap	2206-23			
L6	FM Input	1938-24			
L7	FM Interstage		16-9030	2070	
L8	FM Interstage	1939-24	16-9031	2071	
L9	Loopstick	1155-39			
L10	AM Oscillator	2210-23			
L11	AM Input	1934-24			
L12	AM Interstage	1935-24	16-9026	8517	
L13	FM Interstage	1940-24	16-9031	2071	
L14	AM Interstage	1936-24	16-9027	2067	
L15	FM Interstage	1940-24	16-9031	2071	
L16	FM Output	1941-24	16-9032	2072	
L17	AM Output	1937-24	16-9028	8518	
L18	Ratio Detector				
L19	RF Choke (470uh)				T323
L20	RF Choke (25 Turns)				
L21	Line Choke (15 Turns)	2208-23			
L22	Line Choke (15 Turns)	2209-23			
L23	Filter Choke (11 Turns)				

TRANSFORMER (Power)

ITEM No.	RATING			REPLACEMENT DATA				NOTES
	PRI.	SEC. 1	SEC. 2	MFGR. PART No.	STANCOR PART No.	THORDARSON PART No.	TRIAD PART No.	
T1	117VAC @ .025A AC	14VAC @.16ADC Max	14VAC @.10AAC	1591-15 (R110061)				

TRANSFORMER (Driver)

ITEM No.	TURNS RATIO			REPLACEMENT DATA				NOTES
	PRI.	SEC. 1	SEC. 2	MFGR. PART No.	STANCOR PART No.	THORDARSON PART No.	TRIAD Part No.	
T2	2.5	1	1	1592-15 (G12324)				

