

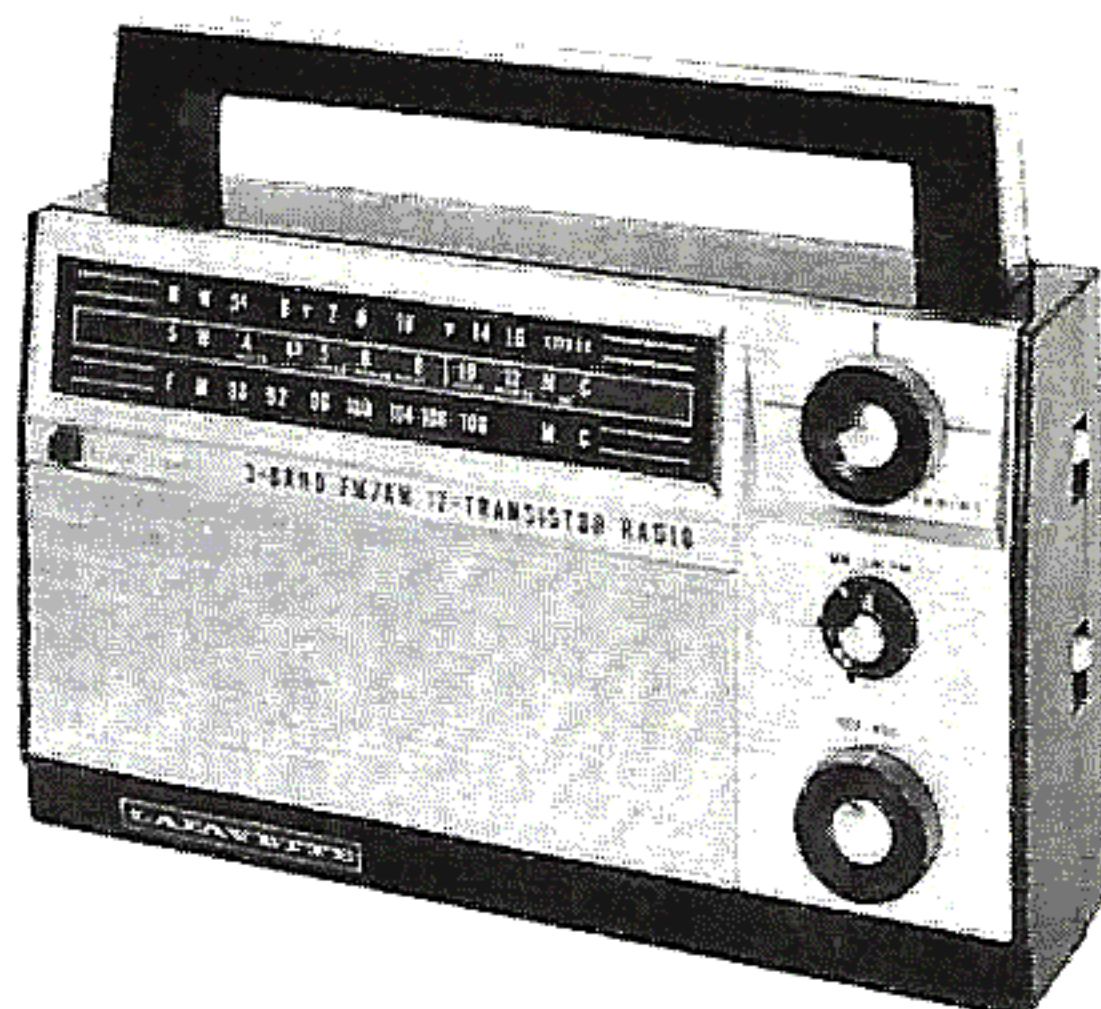


PHOTOFACT[®] with

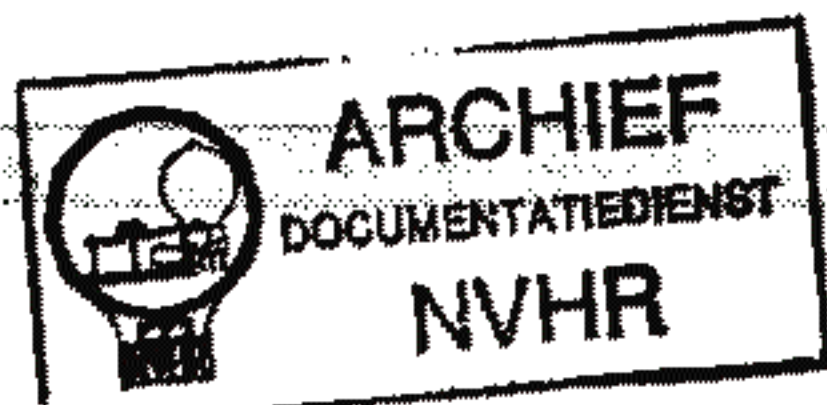
CIRCUITRACE[®]

Met dank aan Jef Bos

TRADE NAME: Lafayette Model FS-251
 SUPPLIER: Lafayette Radio Electronics Corp.
 111 Jericho Turnpike, Syosset, L. I., N. Y.
 TYPE SET: 13 Transistor BC-SW-FM Receiver
 POWER SUPPLY: 9 Volts DC
 RATING: 14MA @ 9VDC (No Signal, Min. Volume)
 35MA @ 9VDC (Signal, Normal Volume)
 TUNING RANGE: BROADCAST 535 - 1620KC
 FREQ. MOD. 88 - 108MC
 SHORT WAVE 4 - 12MC



Ned. Ver. v. Historie v/d Radio



ALIGNMENT INSTRUCTIONS

Check for specified source voltage.
 Fashion loop of several turns of wire and connect generator across loop.
 Adjust output of generator to radiate only enough signal into receiver to obtain a suitable indication.
 Suggested Alignment Tools:
 A1 thru A17, A19.....GENERAL CEMENT #5000, 5066, 8290
 WALSCO #2512, 2525, 2528

BC ALIGNMENT - SELECTOR IN MW POSITION

	SIGNAL GENERATOR FREQUENCY	RADIO DIAL SETTING	INDICATOR	ADJUST	REMARKS
1.	455KC (400% Mod.)	Tuning gang fully open.	Output Meter across voice coil.	A1, A2, A3	Adjust for maximum. Repeat as required.
2.	1620KC	"	"	A4	Adjust for maximum.
3.	600KC	Tune to Signal.	"	A5	Rock tuning gang and adjust for maximum. Repeat steps 2 and 3.
4.	1400KC	"	"	A6	Adjust for maximum.

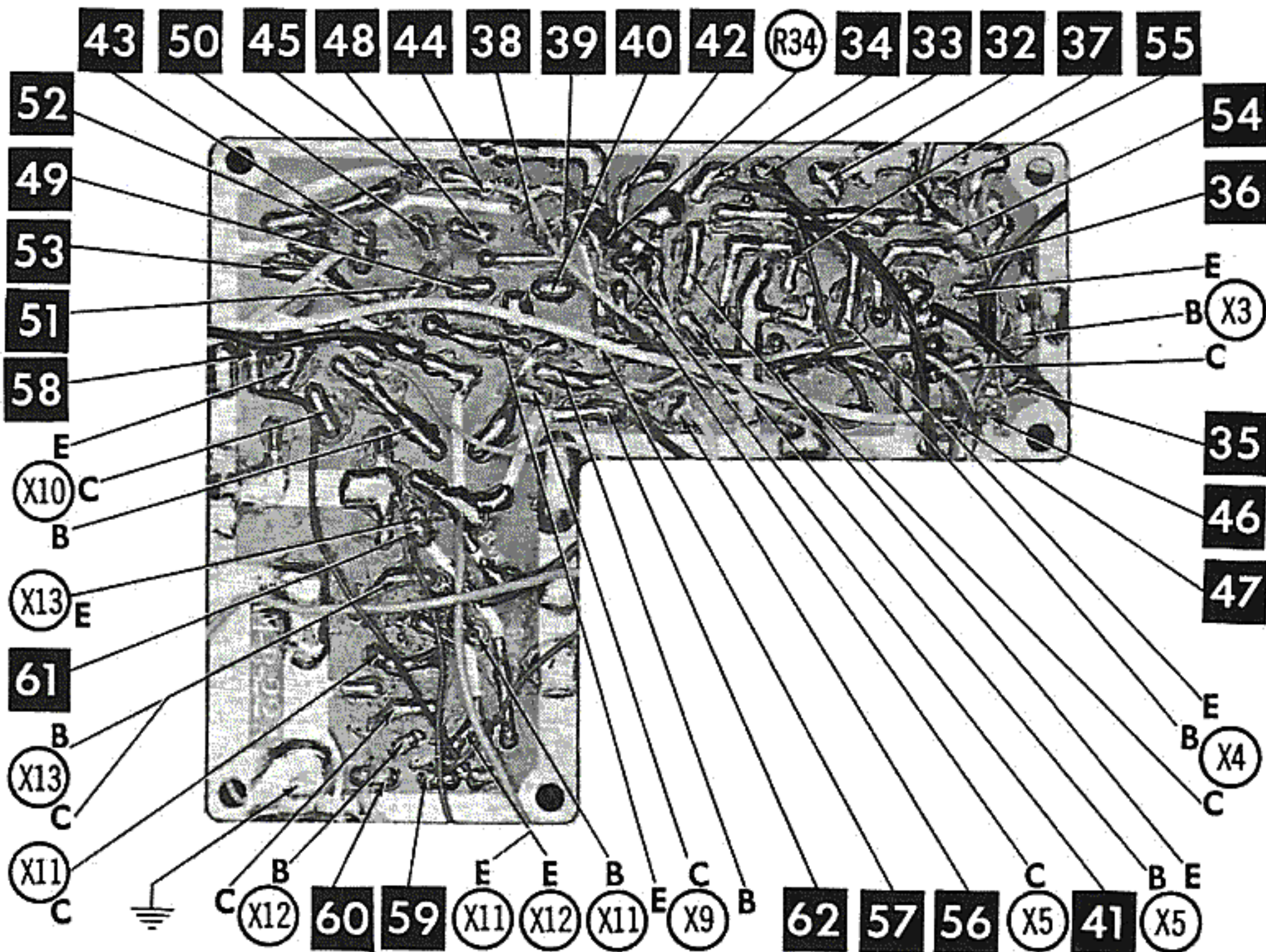
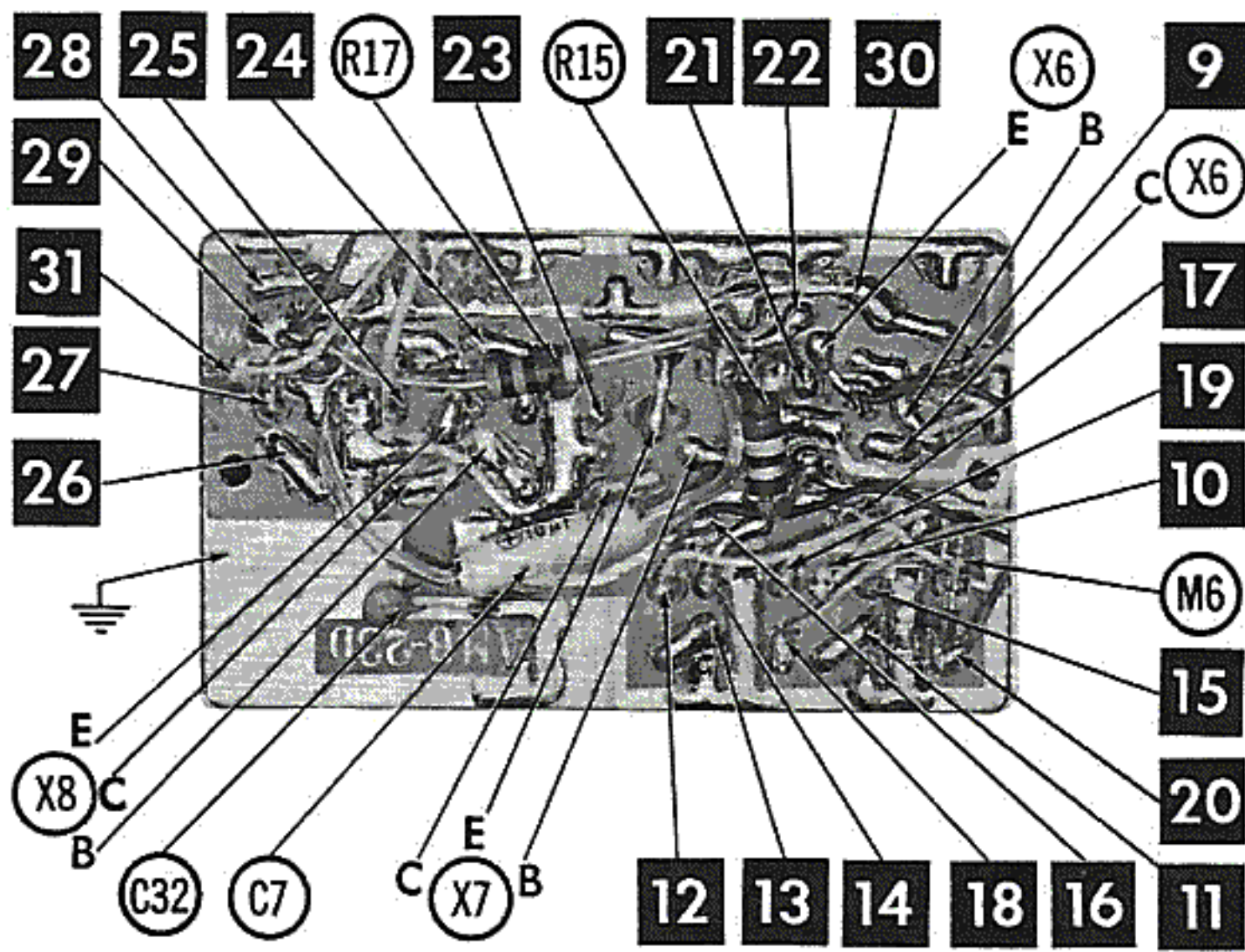
SHORT WAVE ALIGNMENT - SELECTOR IN SW POSITION

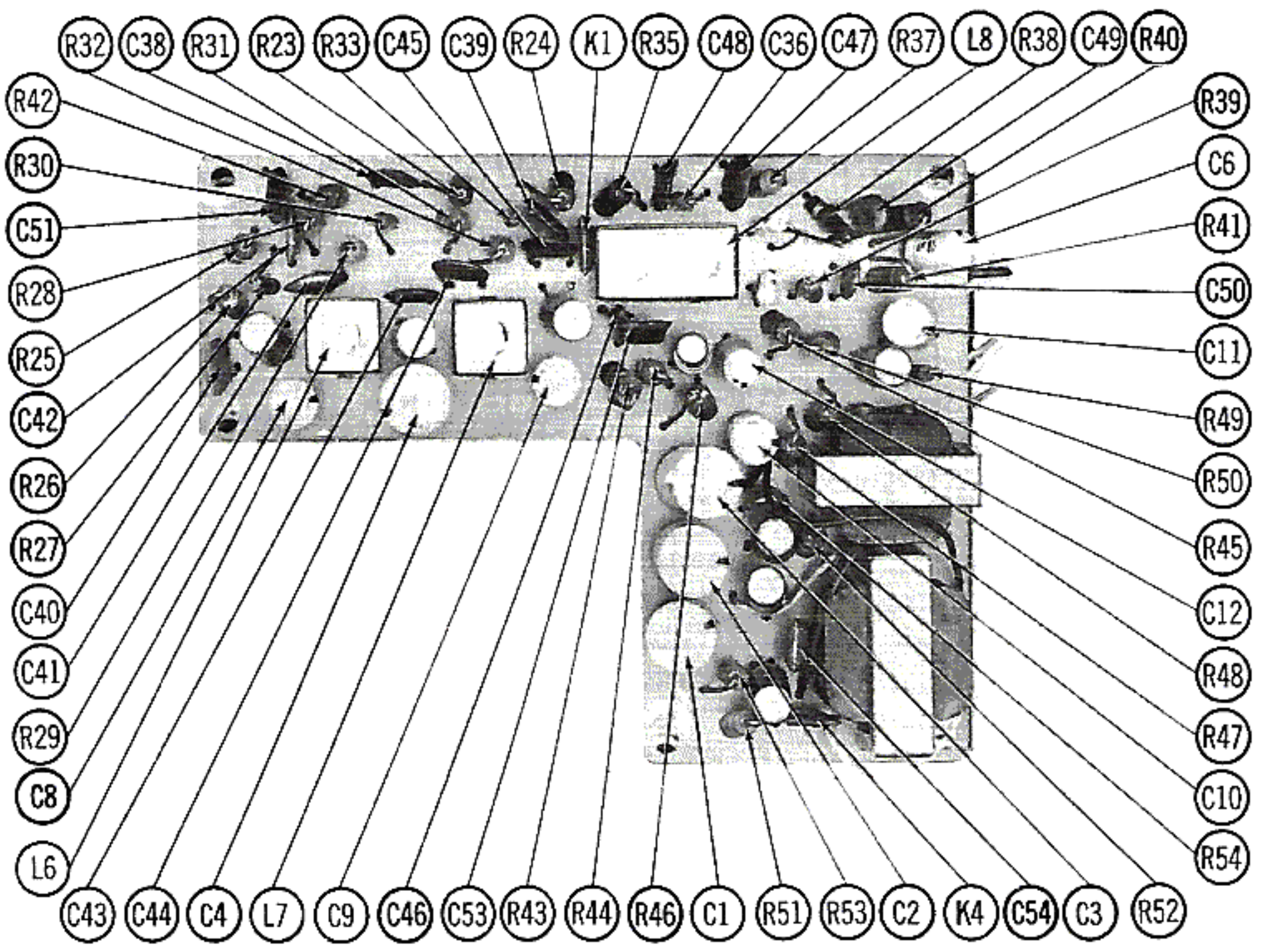
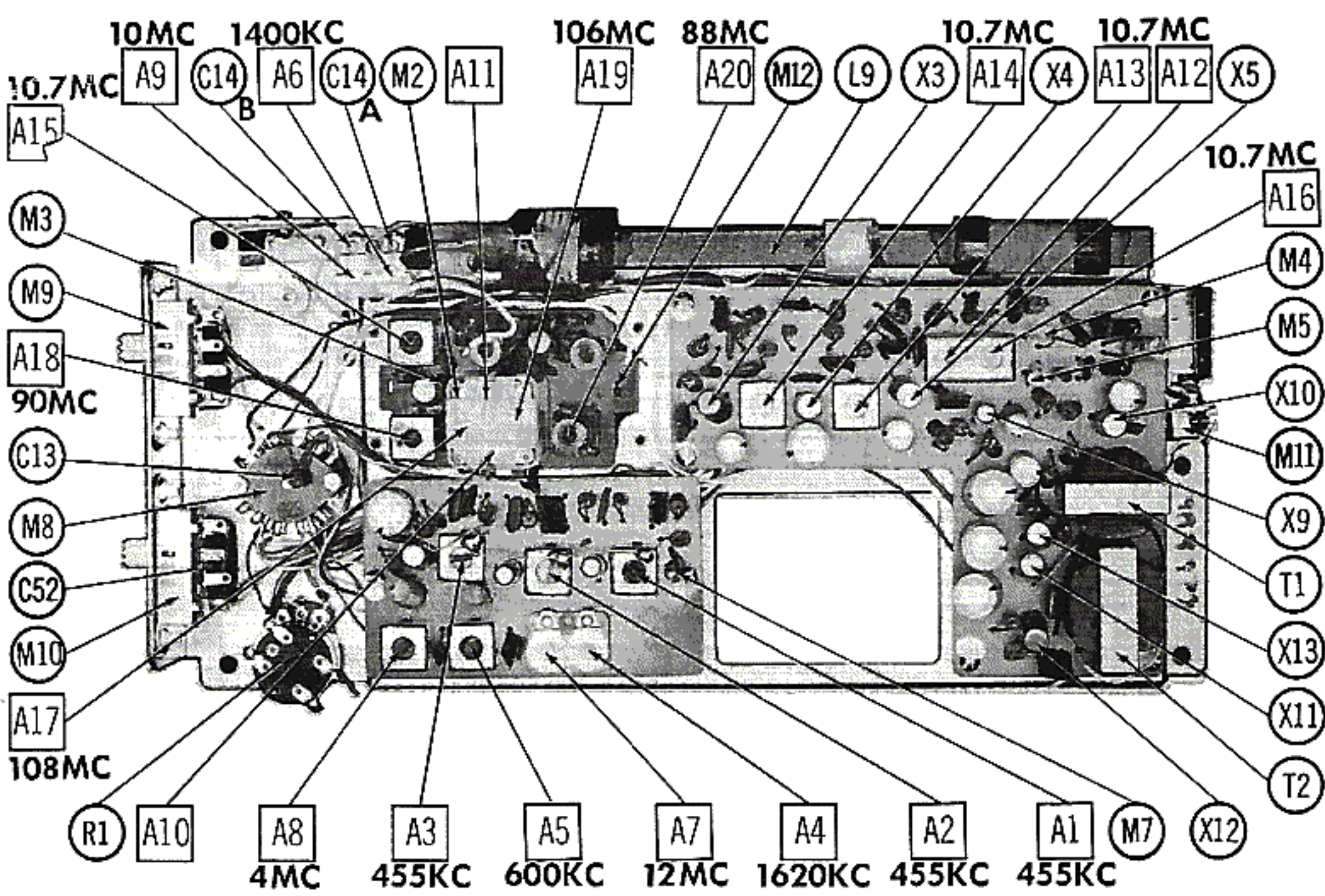
12MC	"	"	A7	"
4MC	4MC	"	A8	"
10MC	10MC	"	A9	"
			A10, A11	Adjust for Mid-range.

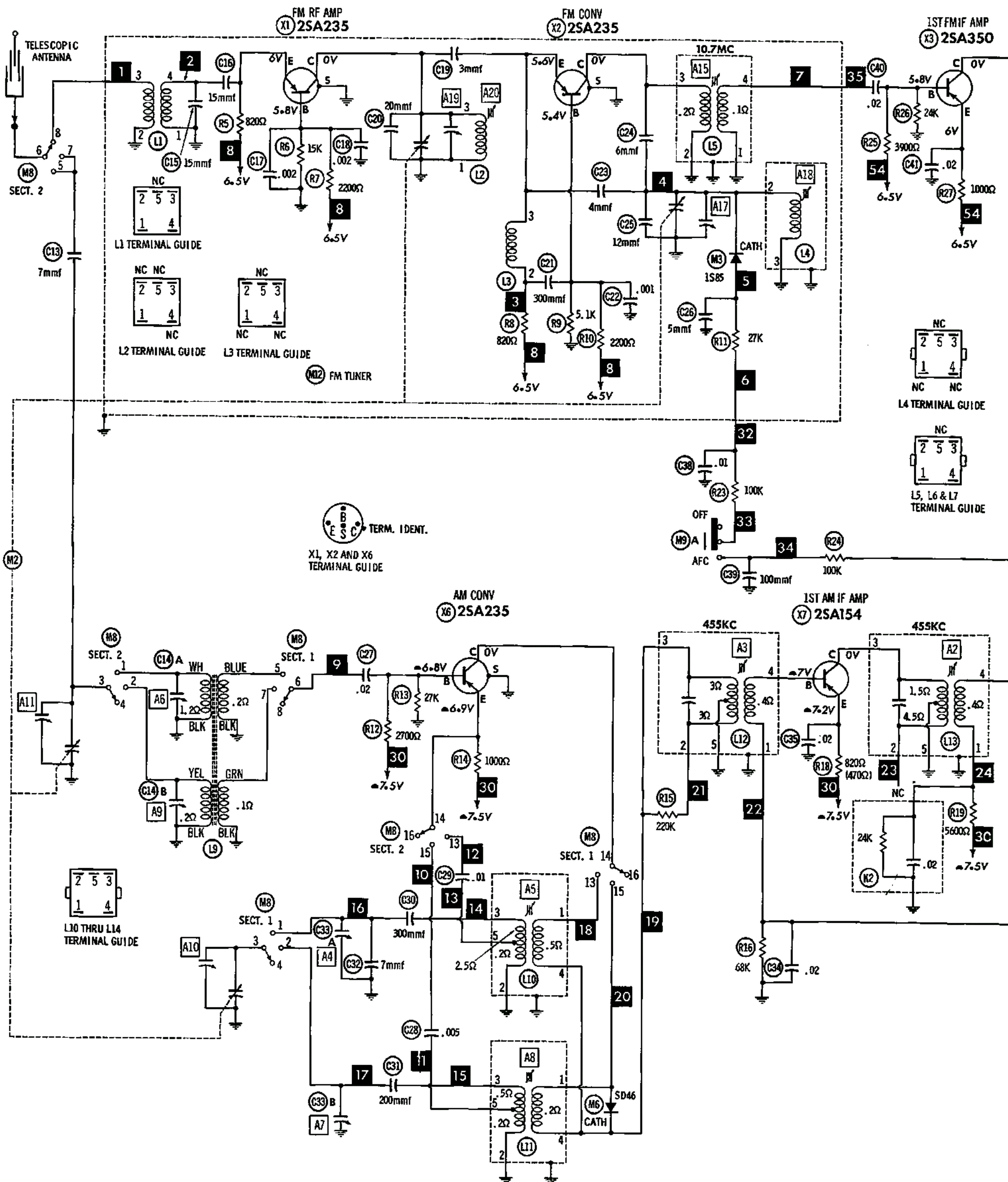
FM ALIGNMENT - SELECTOR IN FM POSITION

10.7MC	Tuning gang fully open.	DC probe to point \diamond A, common to ground.	A12, A13, A14, A15	Adjust for maximum.
10.7MC	"	DC probe to point \diamond B, common to ground.	A16	Adjust for zero reading. A positive and a negative reading will be obtained on either side of the correct setting.
108MC	108MC	DC probe to point \diamond A, common to ground.	A17	Adjust for maximum.
90MC	90MC	"	A18	"
106MC	106MC	"	A19	"
88MC	88MC	"	A20	"

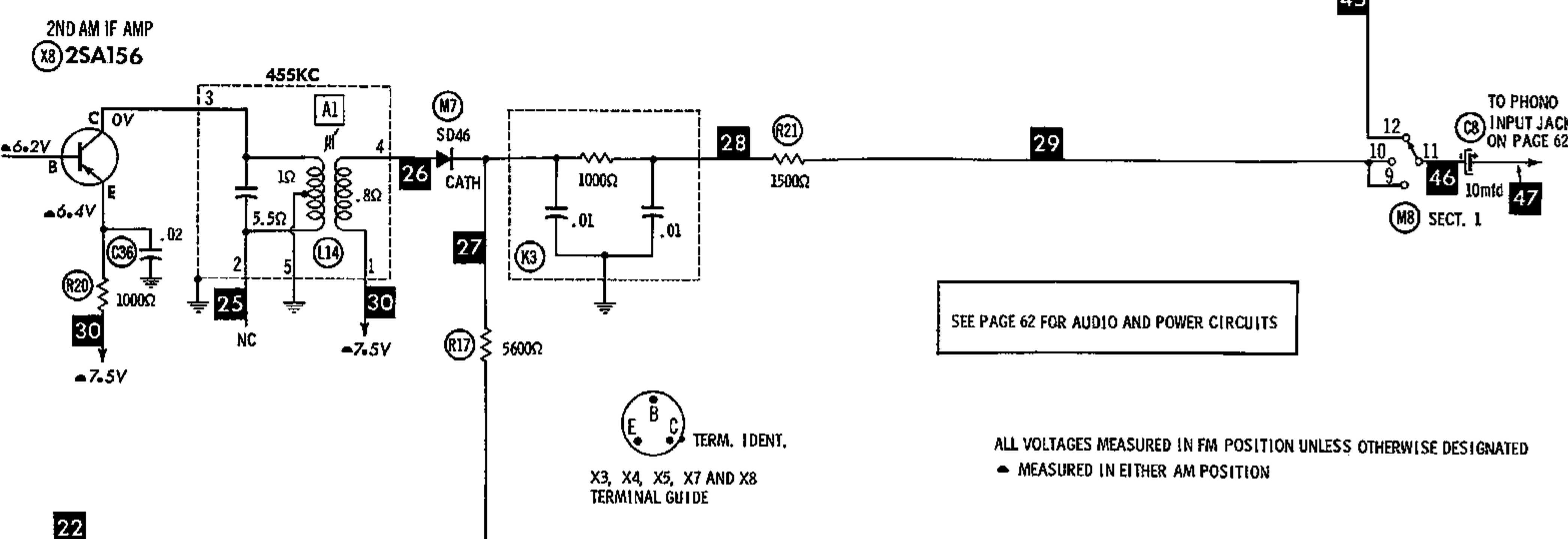
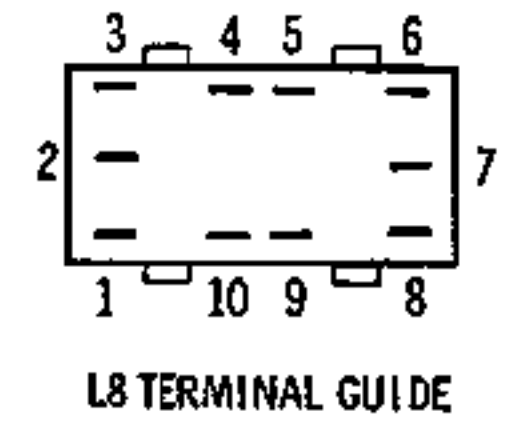
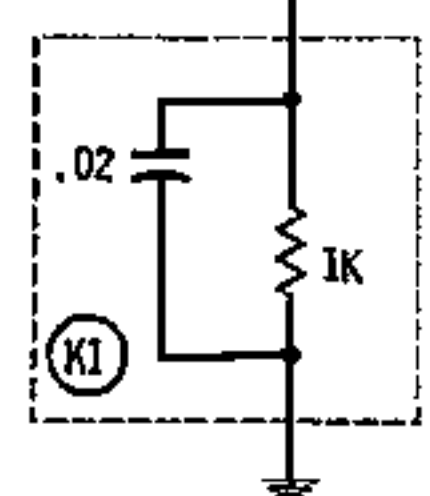
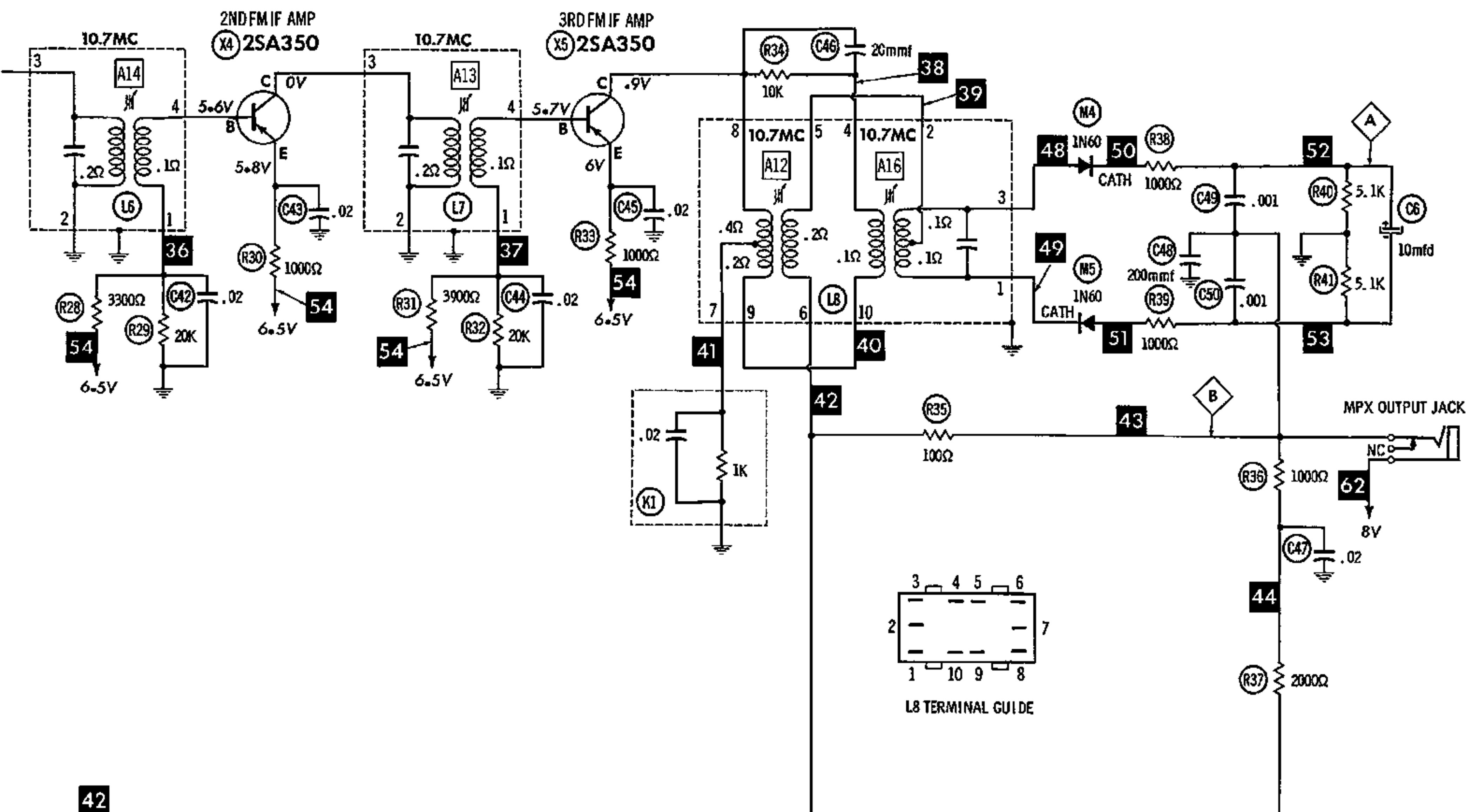
HOWARD W. SAMS & CO., INC. Indianapolis 6, Indiana







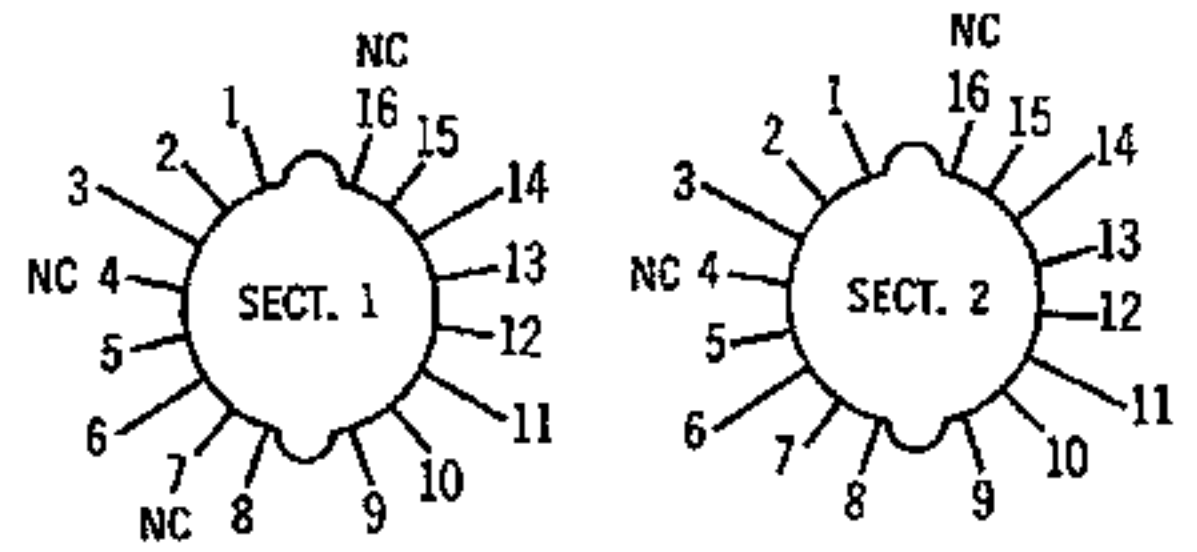
1. Voltage measurements taken with vacuum tube voltmeter.
2. All controls set for normal operation, no signal applied.
3. Measured values are from socket pin or terminal to common ground.
4. All terminals viewed from bottom unless otherwise designated.
5. Numbers assigned to terminals may not be found on the unit.
6. Supply voltage maintained at rated value for voltage readings.
7. Resistance measurements not given because of the wide variation in internal resistance of transistor.



SEE PAGE 62 FOR AUDIO AND POWER CIRCUITS

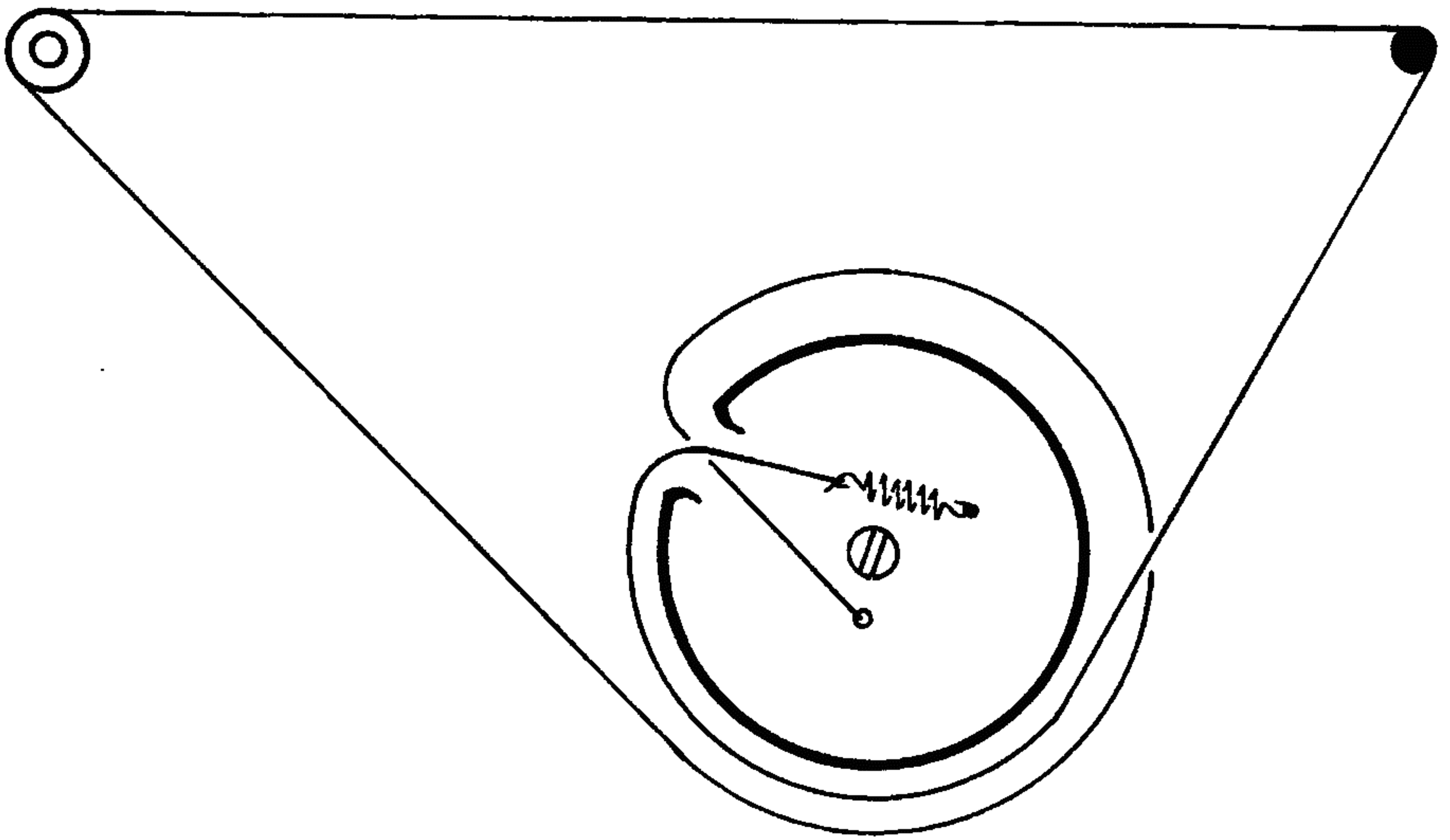


ALL VOLTAGES MEASURED IN FM POSITION UNLESS OTHERWISE DESIGNATED
 ▲ MEASURED IN EITHER AM POSITION

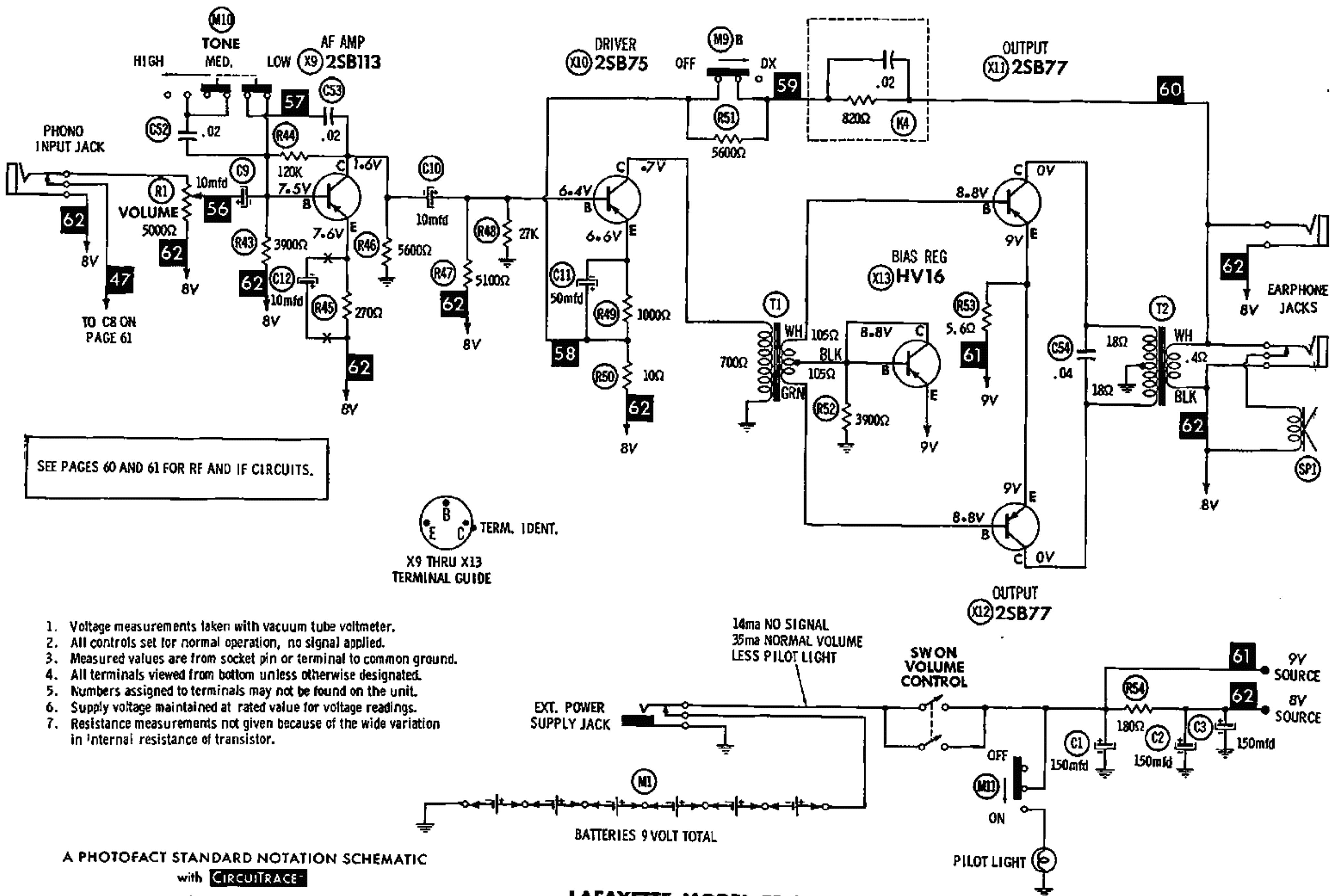


SHOWN IN FM POSITION.
 SWITCH SEQUENCE:
 POS. 1 FM
 POS. 2 SW
 POS. 3 MW (BC)

LAFAYETTE MODEL FS-251



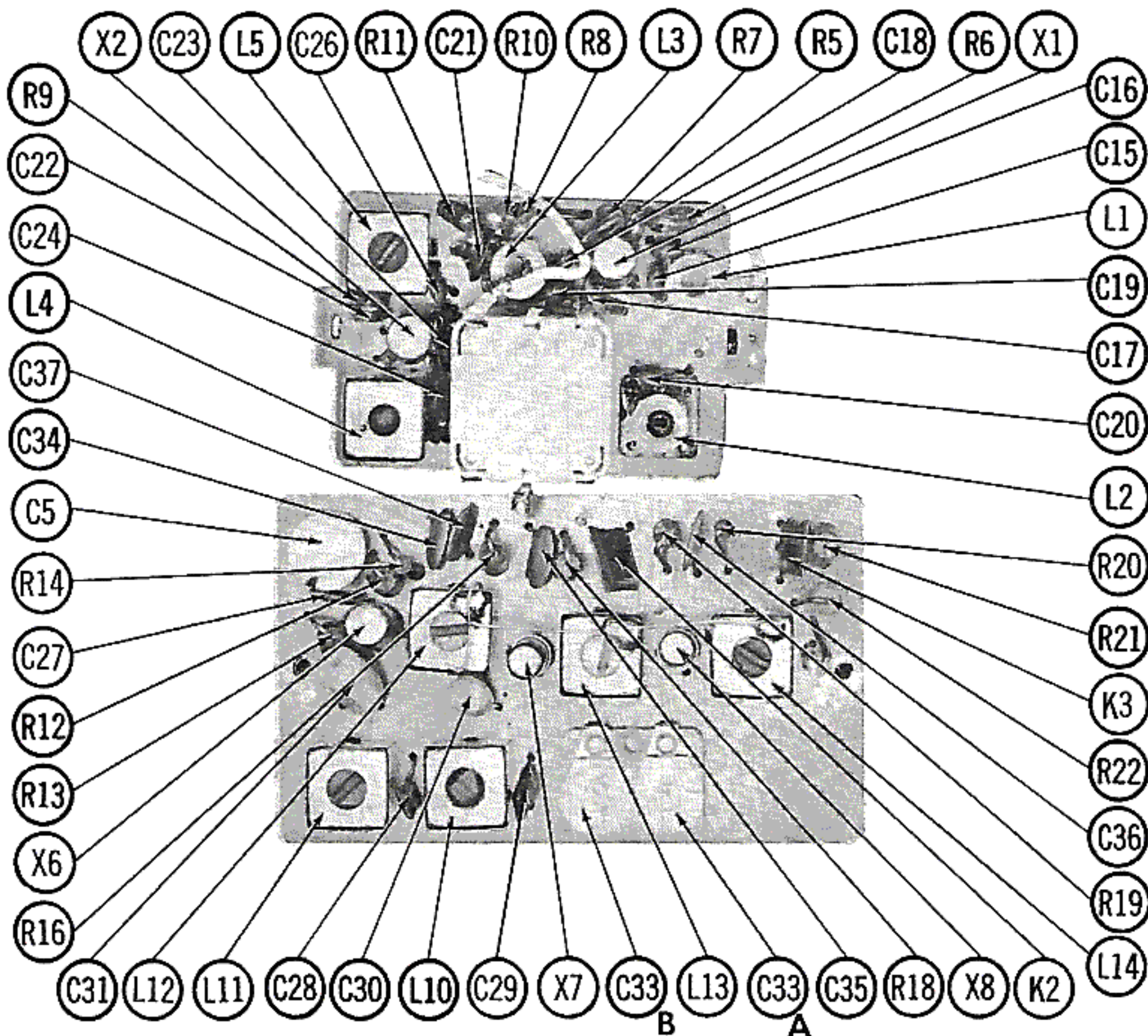
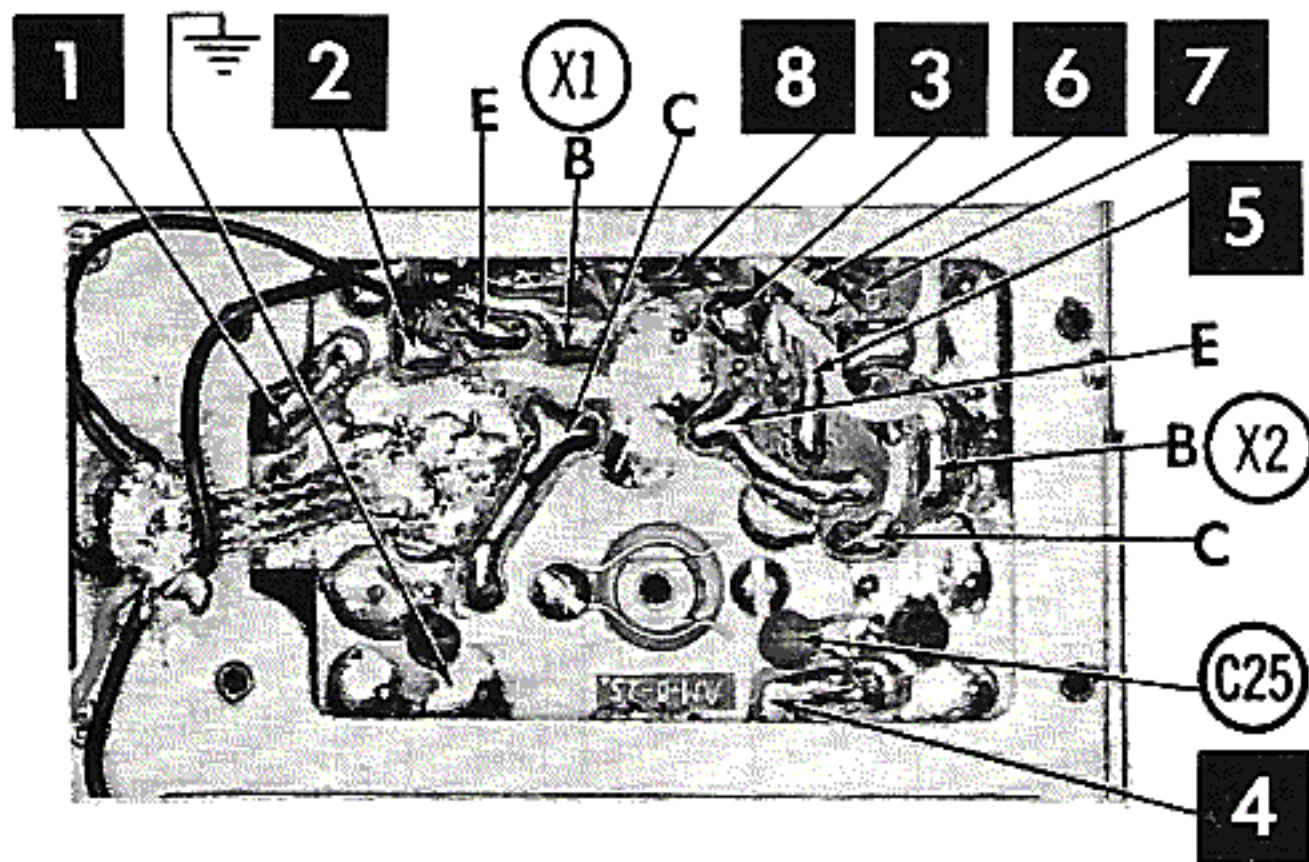
DIAL CORD STRINGING



A PHOTOFACIT STANDARD NOTATION SCHEMATIC
with CIRCUITRACE

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LAFAYETTE MODEL FS-251



PARTS LIST AND DESCRIPTION (CONTINUED)

CONTROLS

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

ITEM No.	USE	RESIST-ANCE	REPLACEMENT DATA				
			Lafayette PART No.	CENTRALAB PART No.	CLAROSTAT PART No.	CTS-IRC PART No.	MALLORY PART No.
R1	Volume & Switch	5000Ω		F2-5000, KR-2, SU204 or (B11, KR-2)		Q13-114, 76-2	UA53A, US42 or (RU53A, SL38, US42, SK1000) or (U12, US27)

COILS (RF-IF)

ITEM No.	USE	REPLACEMENT DATA					NOTES
		Lafayette PART No.	MERIT PART No.	MILLER PART No.	STANCOR PART No.	WORKMAN PART No.	
L1	FM Ant.						
L2	FM RF						
L3	Trap						
L4	FM Osc.						
L5	1st FM IF						
L6	2nd FM IF						
L7	3rd FM IF						
L8	Ratio Detector						
L9	Loopstick						
L10	MW Osc.						
L11	SW Osc.						
L12	1st AM IF		BC-574	2066	RTC-9266		
L13	2nd AM IF		BC-575	2067	RTC-9267		
L14	3rd AM IF		BC-576	2068	RTC-9268		

TRANSFORMER (DRIVER)

ITEM No.	TURNS RATIO		REPLACEMENT DATA					NOTES
			Lafayette PART No.	MERIT PART No.	STANCOR PART No.	THORDARSON PART No.	TRIAD PART No.	
	PRI.	SEC.						
T1	2	1						

TRANSFORMER (AUDIO OUTPUT)

ITEM No.	IMPEDANCE		REPLACEMENT DATA					NOTES
			Lafayette PART No.	MERIT PART No.	STANCOR PART No.	THORDARSON PART No.	TRIAD PART No.	
	PRI.	SEC.						
T2	400Ω CT	3-4Ω						

SPEAKER

ITEM No.	TYPE	REPLACEMENT DATA		NOTES
		Lafayette PART No.	QUAM PART No.	
SP1	3" x 5" PM 3-4Ω.			

COMPONENT COMBINATIONS

ITEM No.	USE	DESCRIPTION	Lafayette PART No.	REPLACEMENT DATA
K1	3rd FM IF Pri	.02mfd, 1000Ω	2102P	
K2	2nd AM IF Sec.	.02mfd, 24K	2243P	
K3	AM Diode Filter	.01mfd, .01mfd, 1000Ω	1102P	
K4	Feedback	.02mfd, 820Ω	2821P	

BATTERIES

ITEM No.	VOLTAGE	Lafayette PART No.	REPLACEMENT DATA			NOTES
			BURGESS	EVEREADY	MALLORY	
M1	9		130 (or AL-1)	635 (or E93)	M-14R (or MN1400)	6 Required

MISCELLANEOUS

ITEM No.	PART NAME	Lafayette PART No.	NOTES
M2	Tuning Cap.		
M3	FM AFC (1S85)		
M4	Ratio Det. (1N60)		
M5	Ratio Det. (1N60)		
M6	Overload (SD46)		
M7	AM Detector (SD46)		
M8	Function Switch		
M9	DX-AFC Switch		
M10	Tone Switch		
M11	Dial Lite Switch		
M12	FM Tuner	FMT-22	

PARTS LIST AND DESCRIPTION (CONTINUED)

CONTROLS

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

ITEM No.	USE	RESIST- ANCE	REPLACEMENT DATA					
			Lafayette PART No.	CENTRALAB PART No.	CLAROSTAT PART No.	CTS-IRC PART No.	MALLORY PART No.	
R1	Volume & Switch	5000Ω		F2-5000, KR-2, SU204 or (B11, KR-2)			Q13-114, 76-2	UA55A, US42 or (RU53A, SL38, US42, SK1000) or (U12, US27)

COILS (RF-IF)

ITEM No.	USE	REPLACEMENT DATA					NOTES
		Lafayette PART No.	MERIT PART No.	MILLER PART No.	STANCOR PART No.	WORKMAN PART No.	
L1	FM Ant.						
L2	FM RF						
L3	Trap						
L4	FM Osc.						
L5	1st FM IF						
L6	2nd FM IF						
L7	3rd FM IF						
L8	Ratio Detector						
L9	Loopstick						
L10	MW Osc.						
L11	SW Osc.						
L12	1st AM IF		BC-574	2066		RTC-9266	
L13	2nd AM IF		BC-575	2067		RTC-9267	
L14	3rd AM IF		BC-576	2068		RTC-9268	

TRANSFORMER (DRIVER)

ITEM No.	TURNS RATIO		REPLACEMENT DATA					NOTES
			Lafayette PART No.	MERIT PART No.	STANCOR PART No.	THORDARSON PART No.	TRIAD PART No.	
	PRI.	SEC.						
T1	2	1						

TRANSFORMER (AUDIO OUTPUT)

ITEM No.	IMPEDANCE		REPLACEMENT DATA					NOTES
			Lafayette PART No.	MERIT PART No.	STANCOR PART No.	THORDARSON PART No.	TRIAD PART No.	
	PRI.	SEC.						
T2	400Ω CT	3-4Ω						

SPEAKER

ITEM No.	TYPE	REPLACEMENT DATA		NOTES
		Lafayette PART No.	QUAM PART No.	
SP1	3" x 5" PM 3-4Ω.			

COMPONENT COMBINATIONS

ITEM No.	USE	DESCRIPTION	Lafayette PART No.	REPLACEMENT DATA
K1	3rd FM IF Pri	.02mfd, 1000Ω		2102P
K2	2nd AM IF Sec.	.02mfd, 24K		2243P
K3	AM Diode Filter	.01mfd, .01mfd, 1000Ω		1102P
K4	Feedback	.02mfd, 820Ω		2821P

BATTERIES

ITEM No.	VOLTAGE	Lafayette PART No.	REPLACEMENT DATA			NOTES
			BURGESS	EVEREADY	MALLORY	
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M5	Ratio Det. (1N60)		
M6	Overload (SD46)		
M7	AM Detector (SD46)		
M8	Function Switch		
M9	DX-AFC Switch		
M10	Tone Switch		
M11	Dial Lite Switch		
M12	FM Tuner	FMT-22	