

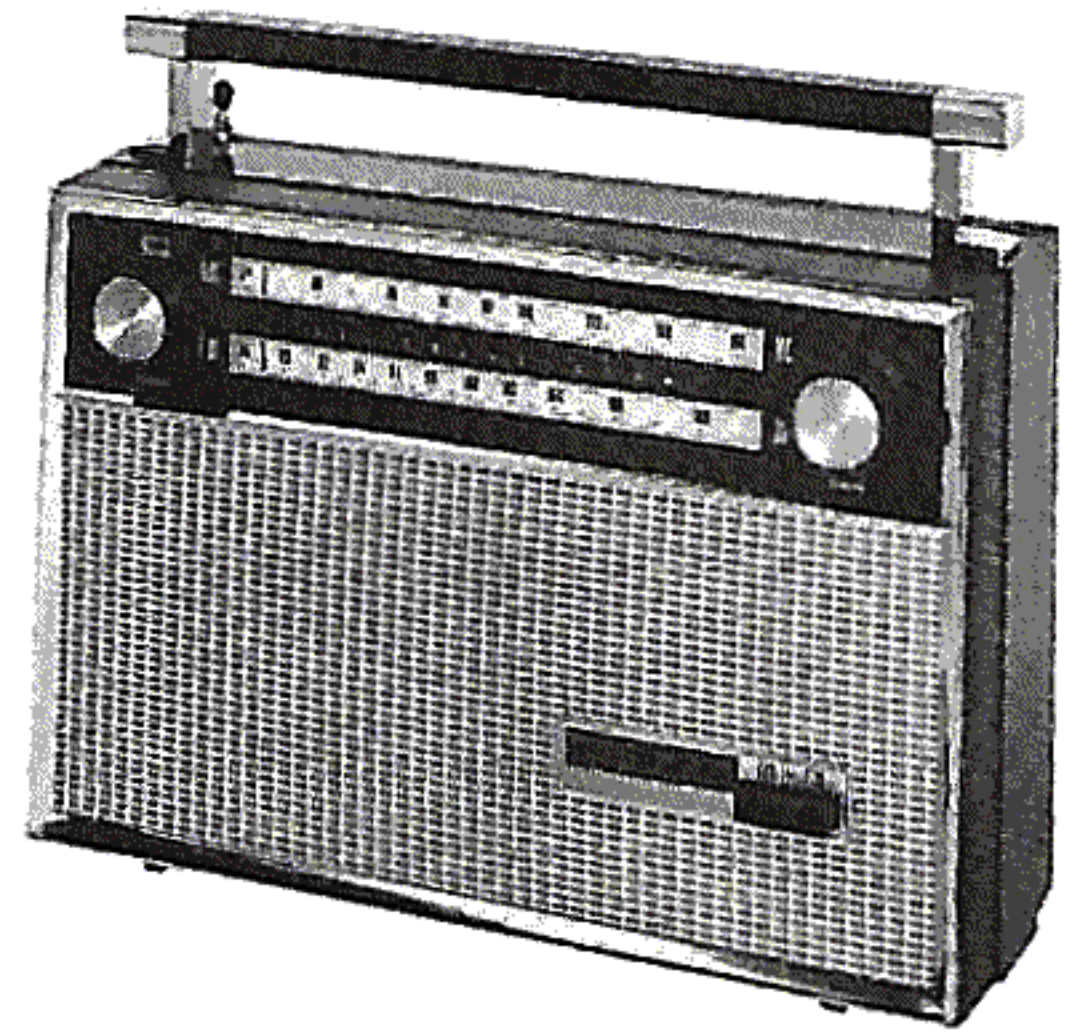


PHOTOFACT[®] with

CIRCUITRACE[®]

Met dank aan Jef Bos

TRADE NAME: Philco Model T-907
 SUPPLIER: Philco Corp., Subsidiary of Ford Motor Co.
 Tioga & "C" Streets, Philadelphia, Pa.
 TYPE SET: 9 Transistor AM-FM Receiver
 POWER SUPPLY: 9 Volts DC
 RATING: 28MA @ 9VDC (No Signal, Min. Volume)
 80MA @ 9VDC (Signal, Normal Volume)
 TUNING RANGE: BROADCAST 530-1620KC
 FREQ. MOD. 88-108MC



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, A2, A3, A4, A6, A8, A9, A10, A11, A12, A13, A14, A15, A17, A18
 GENERAL CEMENT #8605 ... WALSCO #2505
 A5, A7, A16, A19.. GENERAL CEMENT #5000, 5066, 8290
 WALSCO # 2512, 2525, 2528

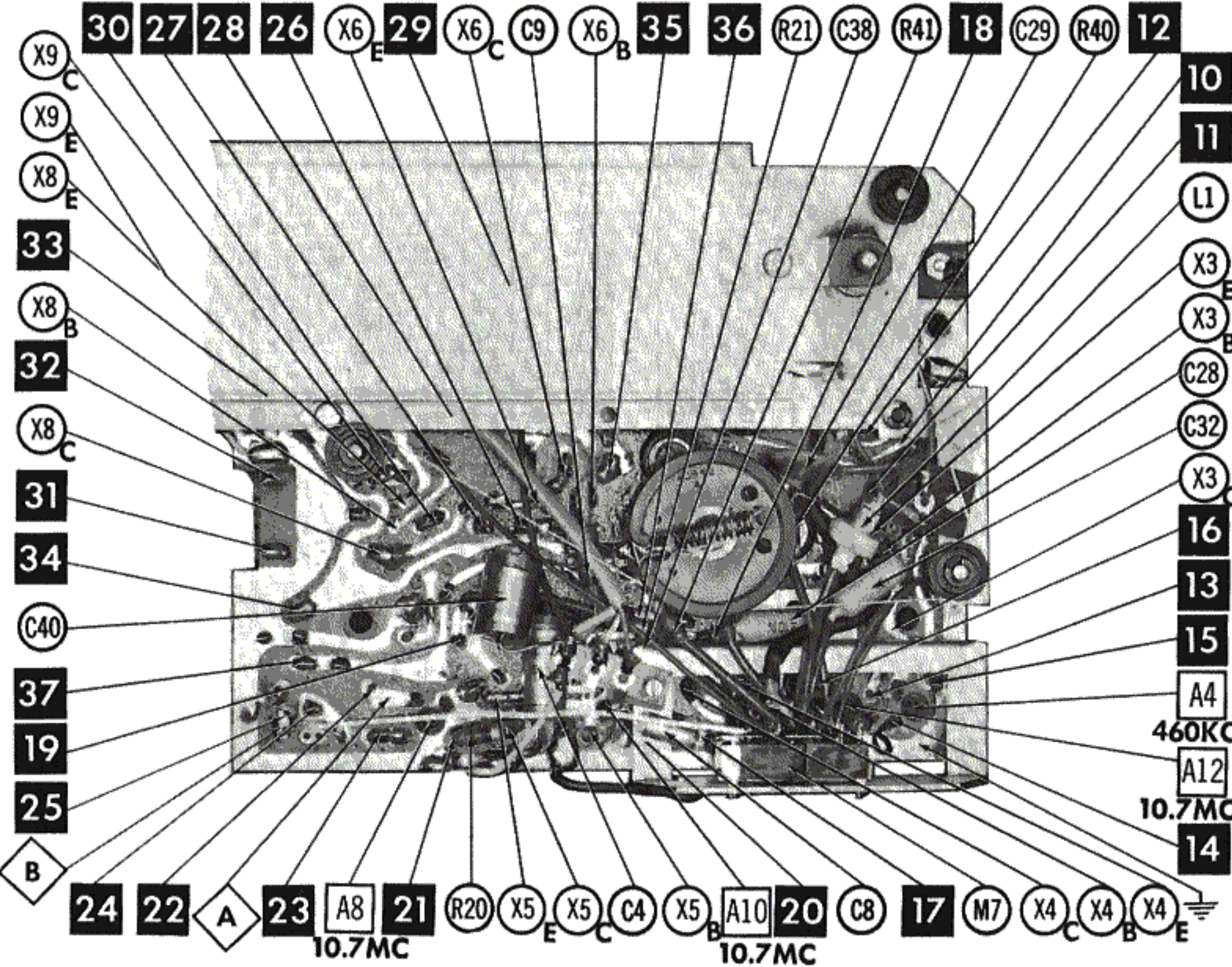
AM ALIGNMENT - SELECTOR IN AM POSITION

	SIGNAL GENERATOR FREQUENCY	RADIO DIAL SETTING	INDICATOR	ADJUST	REMARKS
1.	460 KC (400v Mod.)	Tuning gang fully open.	Output Meter across voice coil.	A1, A2, A3, A4	Adjust for maximum. Repeat as required.
2.	1620KC	"	"	A5	Adjust for maximum.
3.	600KC	Tune to Signal.	"	A6	Rock tuning gang and adjust for maximum. Repeat steps 2 and 3.
4.	1400KC	"	"	A7	Adjust for maximum.

FM ALIGNMENT - SELECTOR IN FM POSITION

5.	10.7MC	Tuning gang fully open	Connect DC probe to point $\diamond A$, common to ground.	A8, A9, A11, A12, A13, A14	Adjust for maximum.
6.	10.7MC	"	Connect DC probe to point $\diamond B$, common to ground.	A15	Adjust for zero reading. A positive and negative reading will be obtained on either side of the correct setting.
7.	108MC	Tune to Signal	Connect DC probe to point $\diamond A$, common to ground.	A16	Adjust for maximum.
8.	88MC	"	"	A17, A18	"
9.	106MC	"	"	A19	"

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



30 27 28 26 X6_E 29 X6_C C9 X6_B 35 36 R21 C38 R41 18 C29 R40 12

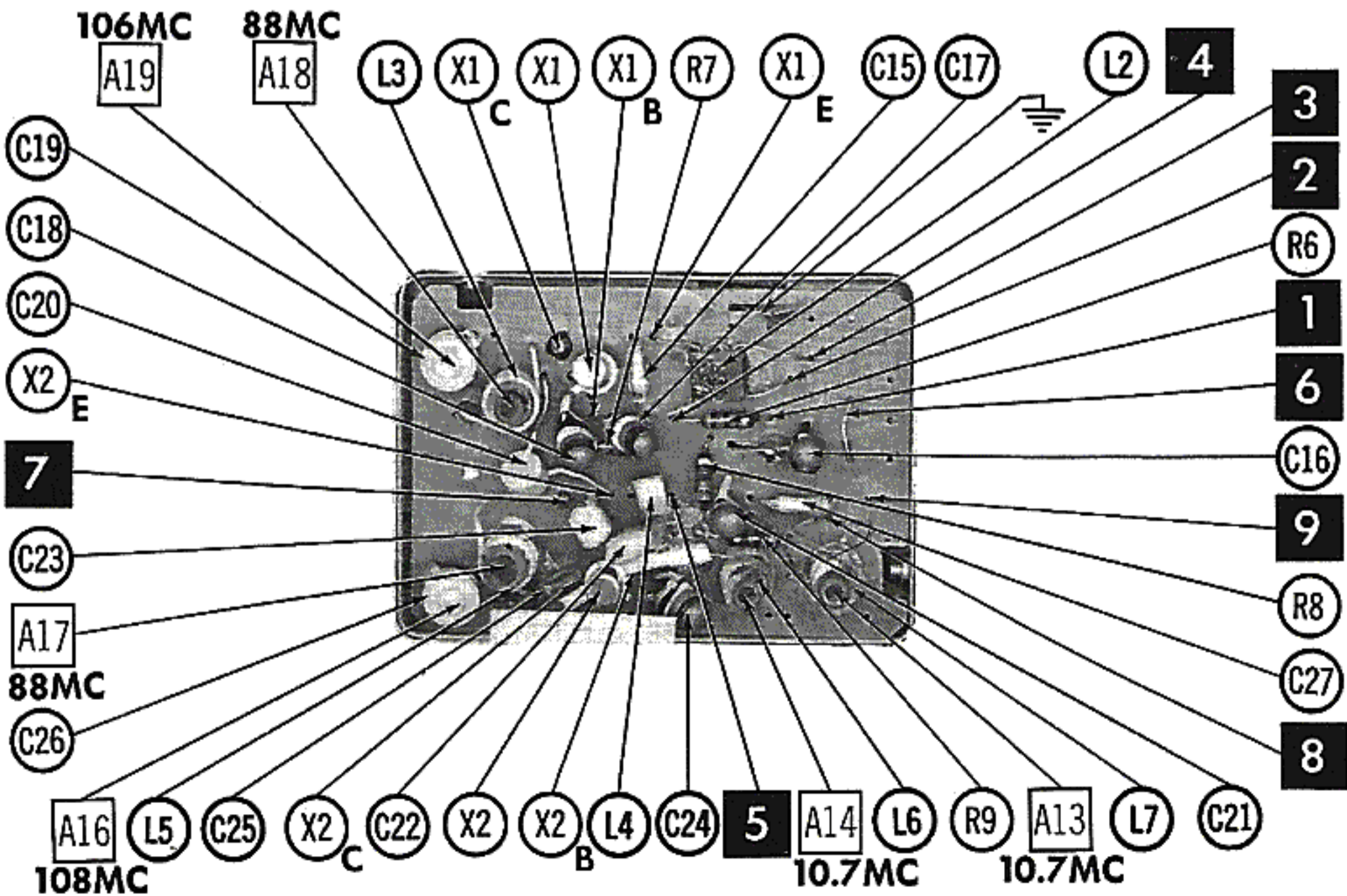
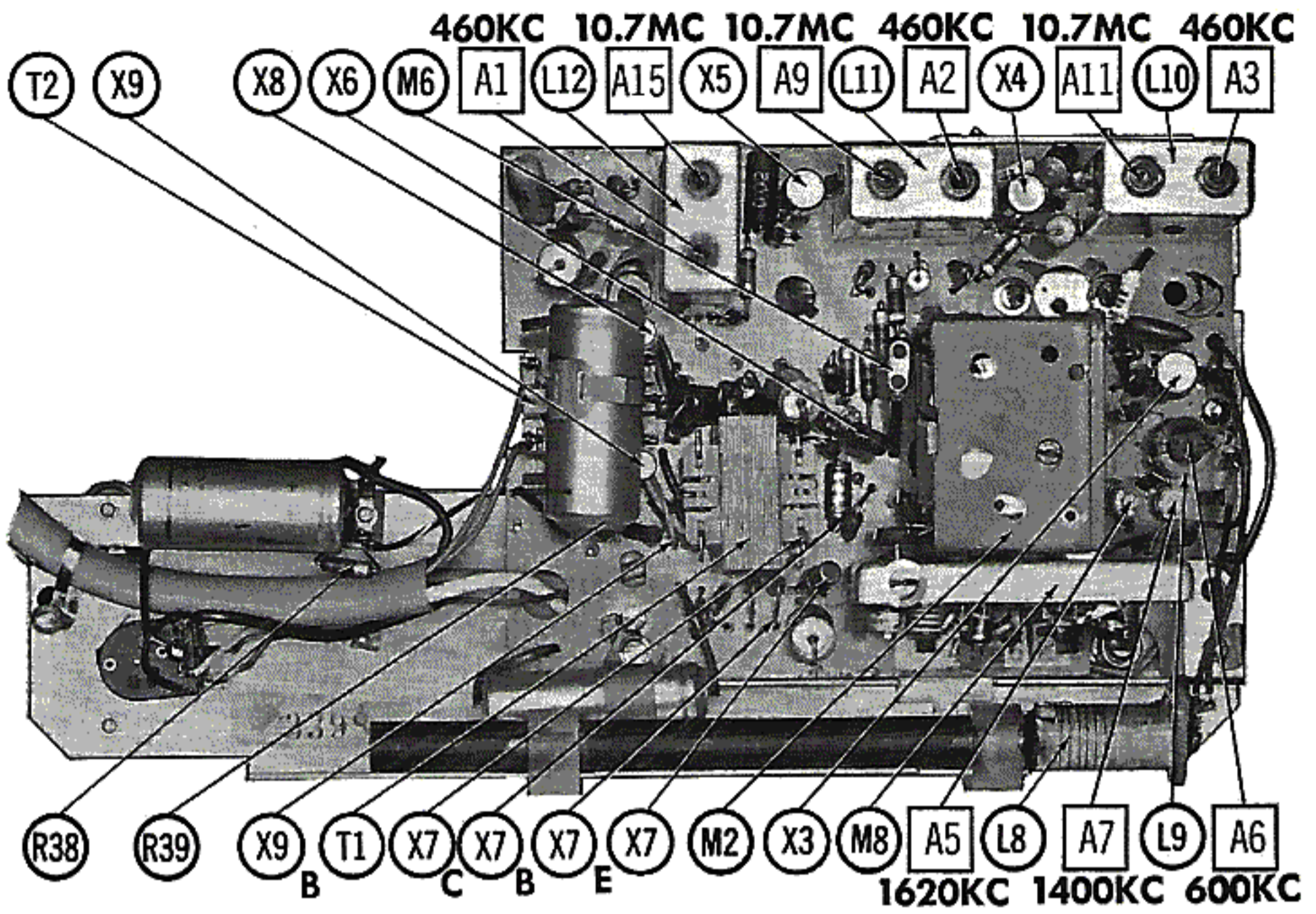
10
11
L1
X3_E
X3_B
C28
C32
X3_C
16
13
15
A4
460KC
A12
10.7MC
14

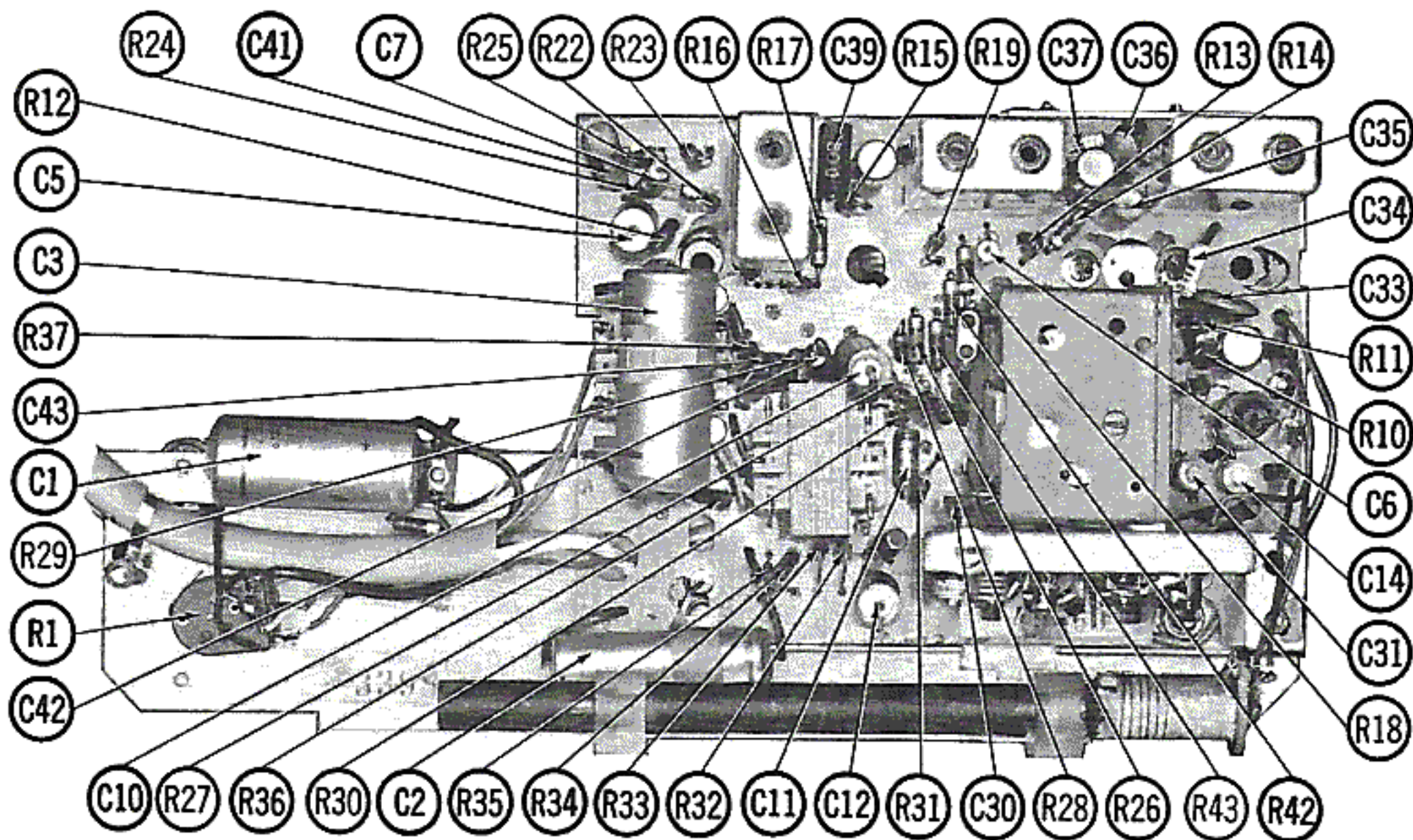
24 22 A 23 A8 21 R20 X5_E X5_C C4 X5_B A10 20 C8 17 M7 X4_C X4_B X4_E
10.7MC 10.7MC

X9_C
X9_E
X8_E
33
X8_B
32
X8_C
31
34
C40
37
19
25

B

A





PARTS LIST AND DESCRIPTION

TRANSISTORS

ITEM No.	ORIG. TYPE	USE	REPLACEMENT DATA			NOTES
			DELCO PART No.	GENERAL ELECTRIC PART No.	RCA PART No.	
X1	AF124	FM RF Amplifier	DS-25	GE-1		PNP
X2	AF124	FM Converter	DS-25	GE-1		PNP
X3	AF116	1st FM IF Amp. - AM Conv.	DS-25	GE-1		PNP
X4	AF116	2nd FM - 1st AM IF Amp.	DS-25	GE-1		PNP
X5	AF116	3rd FM - 2nd AM IF Amp.	DS-25	GE-1		PNP
X6	OC305-2	AF Amplifier	DS-26	GE-2	2N406	PNP
X7	OC304-1	Driver	DS-26	GE-2	2N406	PNP
X8	OC318	Output	DS-26	GE-2	2N408	PNP
X9	OC318	Output	DS-26	GE-2	2N408	PNP

ELECTROLYTIC CAPACITORS

ITEM No.	RATING		REPLACEMENT DATA						
	CAP.	VOLT.	PHILCO PART No.	AEROVOX PART No.	CORNELL-DUBILIER PART No.	GENERAL ELECTRIC PART No.	GENERAL INSTRUMENT PART No.	MALLORY PART No.	SPRAGUE PART No.
C1	1000	15	320-0079	PRS1230	BR1000-15	QT1-32	TD-1000-15	TC1501	TVA-1163
C2	400	15	320-0088	PRS1220	BR500-15	QT1-30	TD-500-15	TC1505	TVA-1162
C3	1000	15	320-0079	PRS1230	BR1000-15	QT1-32	TD-1000-15	TC1501	TVA-1163
C4	100	15	320-0078	CRE473A	NLW100-15	MT1-19	MLV100-15	TT15X100	TE-1162
C5	100	15	320-0078	CRE473A	NLW100-15	MT1-19	MLV100-15	TT15X100	TE-1162
C6	5	15	320-0077	CRE454A	NLW5-15	MT1-3	MLV5-15	TT25X5	TE-1152
C7	5	15	320-0077	CRE454A	NLW5-15	MT1-3	MLV5-15	TT25X5	TE-1152
C8	5	15	320-0077	CRE454A	NLW5-15	MT1-3	MLV5-15	TT25X5	TE-1152
C9	5	15	320-0077	CRE454A	NLW5-15	MT1-3	MLV5-15	TT25X5	TE-1152
C10	100	15	320-0078	CRE473A	NLW100-15	MT1-19	MLV100-15	TT15X100	TE-1162
C11	5	15	320-0077	CRE454A	NLW5-15	MT1-3	MLV5-15	TT25X5	TE-1152
C12	100	15	320-0078	CRE473A	NLW100-15	MT1-19	MLV100-15	TT15X100	TE-1162

FIXED 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.
C13	47	N150 10%	#320-0076				*		10TCP-Q47
C14	4-20		#320-0067						
C15	100		(68) †		CPR-100J				
C16	.001				DM-102				
C17	.001				DM-102				
C18	.001				DM-102				
C19	4-20		#320-0067						
C20	3	N150 5%	#320-0068						10TCP-V30
C21	.001				DM-102				
C22	15			NPO-DI 15	DTZ-15	C10Q15C	CCTO-150	CNO-415	10TCC-Q15
C23	2			NPO-DI 2.2	DTZ-2R2	C10V22C	CCTO-2R2	CNO-522	10TCC-V22
C24	.001				DM-102				
C25	100		(68) †		CPR-100J				
C26	4-20		#320-0067						
C27	100		(68) †		CPR-100J				
C28	.022	125V 10%		BE2S22		WMF1S22	1DP-1-223	PVC1122	192P22392
C29	.22				UK20-204	HCC25224Z			HY-325
C30	150		#320-0075		CPR-150J				
C31	4-20		#320-0067						
C32	.01	125V 10%		BE2S1	CF-103	WMF1S1	1DP-1-103	PVC211	192P10392
C33	.22				UK20-204	HCC25224Z			HY-325
C34	15	N150 10%	#320-0070				*		10TCP-Q15
C35	.022	125V 10%		BE2S22		WMF1S22	1DP-2-223	PVC1122	192P22392
C36	.01	5%	#320-0072		CPR-1000J				
C37	15	N150 10%	#320-0070				*		10TCP-Q15
C38	15	N150 10%	#320-0070				*		10TCP-Q15
C39	.02	160V		BE2S2	DD-203	WMF1S22	1DP-1-203	PVC212	192P22392
C40	.47	160V		BE2P47		WMF1P47	1DP-4-474	PVC1047	2WF-P47
C41	.01	125V 10%		BE2S1	CF-103	WMF1S1	1DP-1-103	PVC211	192P10392

PARTS LIST AND DES

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.
C42	.047 150V		BE2847	DD-503	WMF1847	1DP-2-473	PVC1147	192P47392
C43	.22 125V		BE2P22		WMF1P22	1DP-3-224	PVC1022	292P22492

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

Philco Part Number

† Alternate Value

CONTROLS

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

ITEM No.	USE	RESISTANCE	REPLACEMENT DATA				
			PHILCO PART No.	CENTRALAB PART No.	CLAROSTAT PART No.	CTS-IRC PART No.	MALLORY PART No.
R1	Volume & Switch	25K	323-0102				

COILS (RF-IF)

ITEM No.	USE	REPLACEMENT DATA					NOTES
		PHILCO PART No.	MERIT PART No.	MILLER PART No.	STANCOR PART No.	WORKMAN PART No.	
L1	RF Choke (840uh)	322-0173	TV-207	6156	RTC-8588	T328	
L2	FM Ant. Matching	322-0165					
L3	FM RF	322-0166					
L4	RF Choke (5 turns)	322-0167					
L5	FM Osc.	322-0168					
L6	1st FM IF, Pri.	322-0169					
L7	1st FM IF, Sec.	322-0170					
L8	Loopstick	322-0171					
L9	AM Osc.	322-0172					
L10	2nd FM - 1st AM IF	322-0174					
L11	3rd FM - 2nd AM IF	322-0175					
L12	Ratio Detector - 3rd AM IF	322-0176					

TRANSFORMER (DRIVER)

ITEM No.	TURNS RATIO		REPLACEMENT DATA					NOTES
	PRI.	SEC.	PHILCO PART No.	MERIT PART No.	STANCOR PART No.	THORDARSON PART No.	TRIAD PART No.	
T1	1.8	1	322-0177					

TRANSFORMER (AUDIO OUTPUT)

ITEM No.	IMPEDANCE		REPLACEMENT DATA					NOTES
	PRI.	SEC.	PHILCO PART No.	MERIT PART No.	STANCOR PART No.	THORDARSON PART No.	TRIAD PART No.	
T2	72Ω	3-4Ω	322-0178					

SPEAKER

ITEM No.	TYPE	REPLACEMENT DATA		NOTES
		PHILCO PART No.	QUAM PART No.	
SP1	4" PM 3-4Ω	326-0019	4A1	

DIPTION (CONTINUED)

BATTERIES

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

MISCELLANEOUS

ITEM No.	PART NAME	PHILCO PART No.	NOTES
M2	Tuning Cap	320-0069	
M3	Ratio Det. (1N60)	34-8022	
M4	Ratio Det. (1N60)	34-8022	
M5	AM Detector (1N60)	34-8022	
M6	Bias (Varicap)	324-0036	
M7	Function Switch	422-0040	
M8	FM Tuner	328-0204	

CABINETS & CABINET PARTS

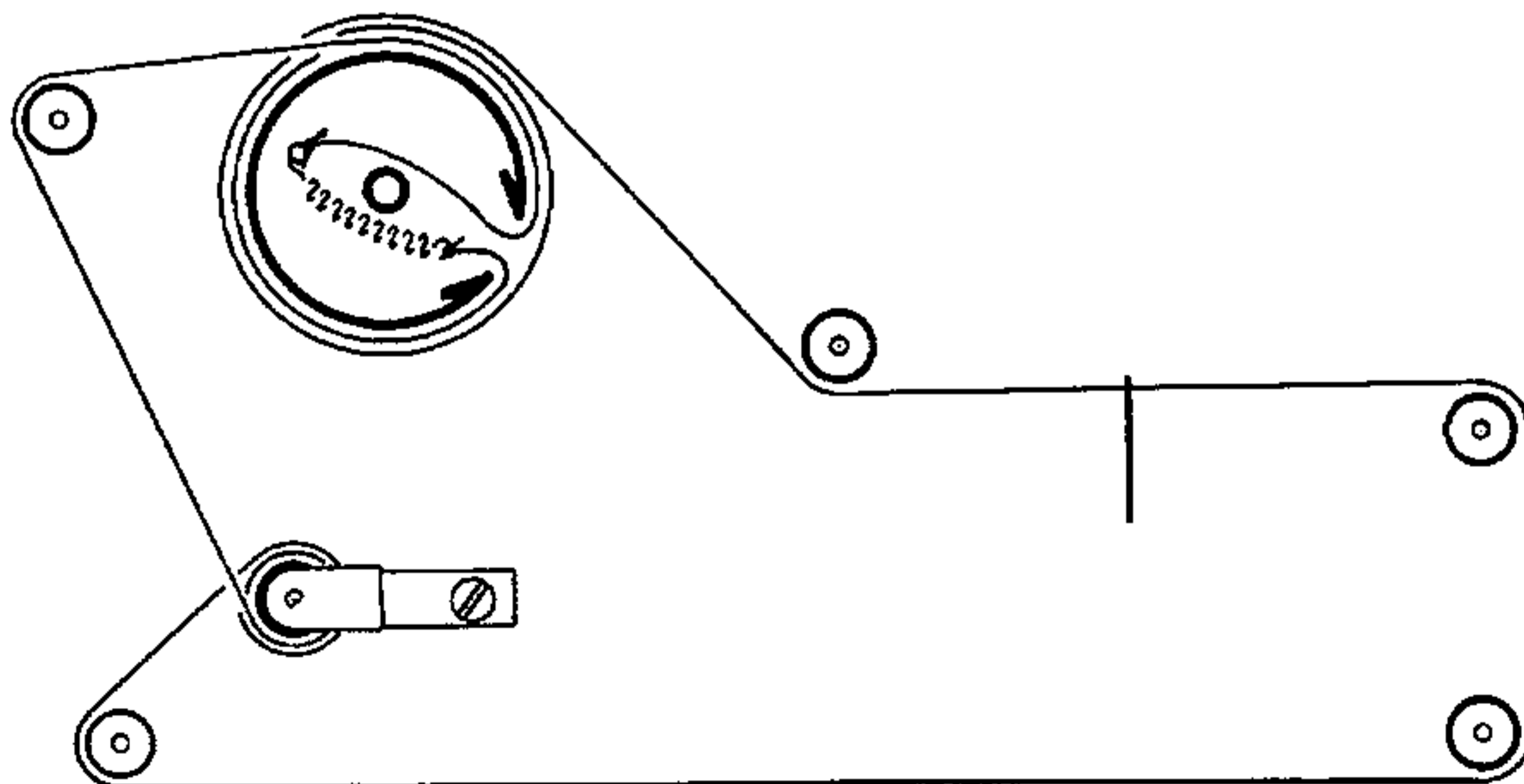
(When Ordering Specify Model, Chassis & Color)

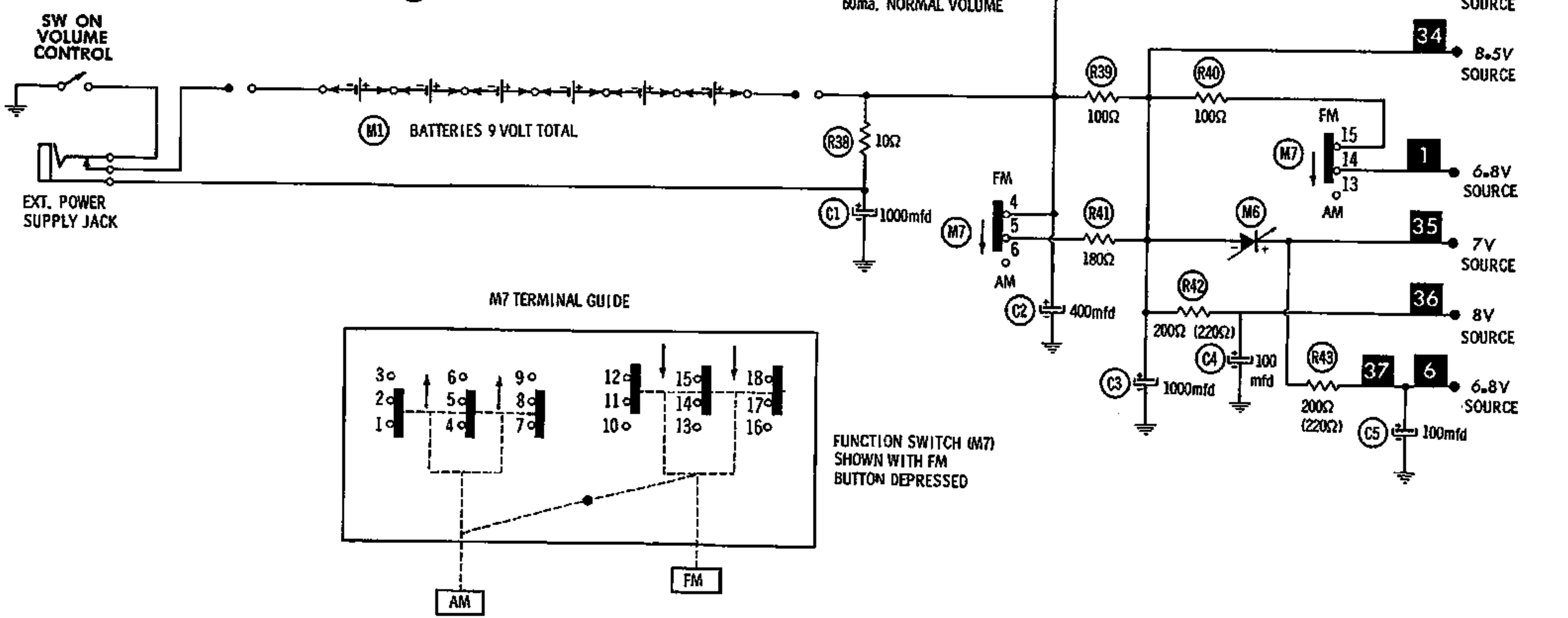
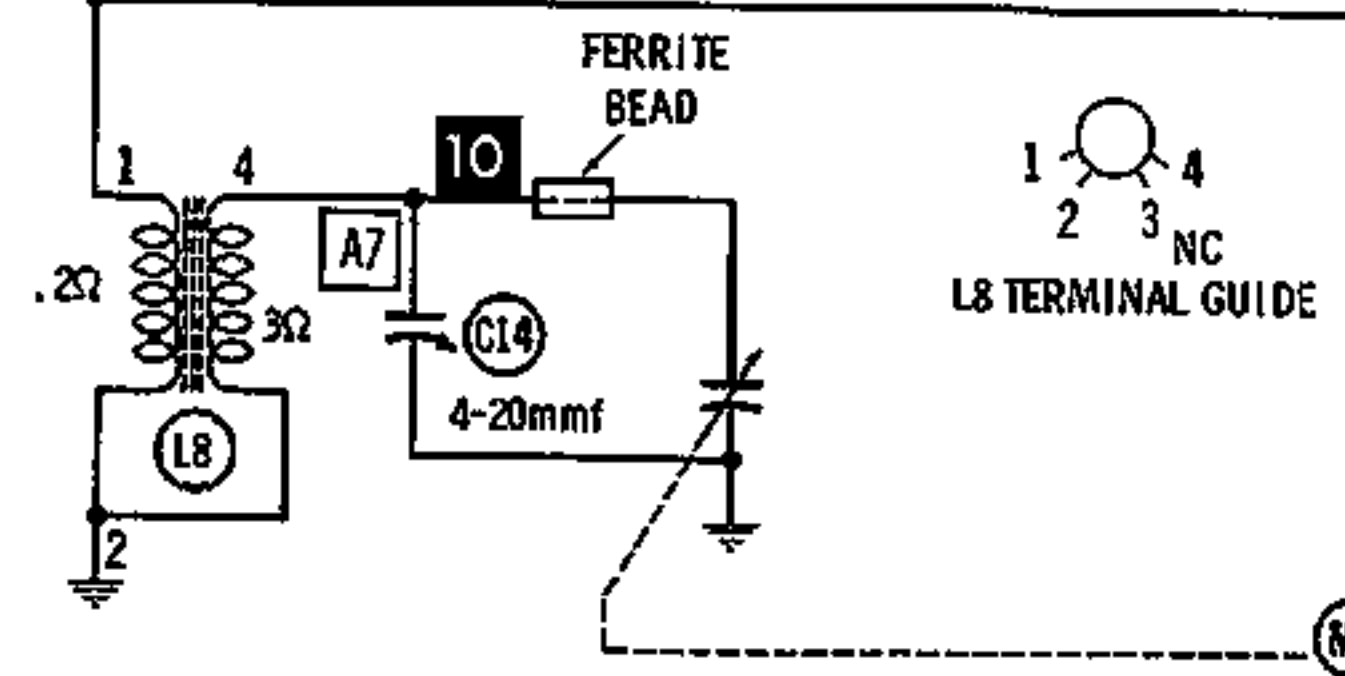
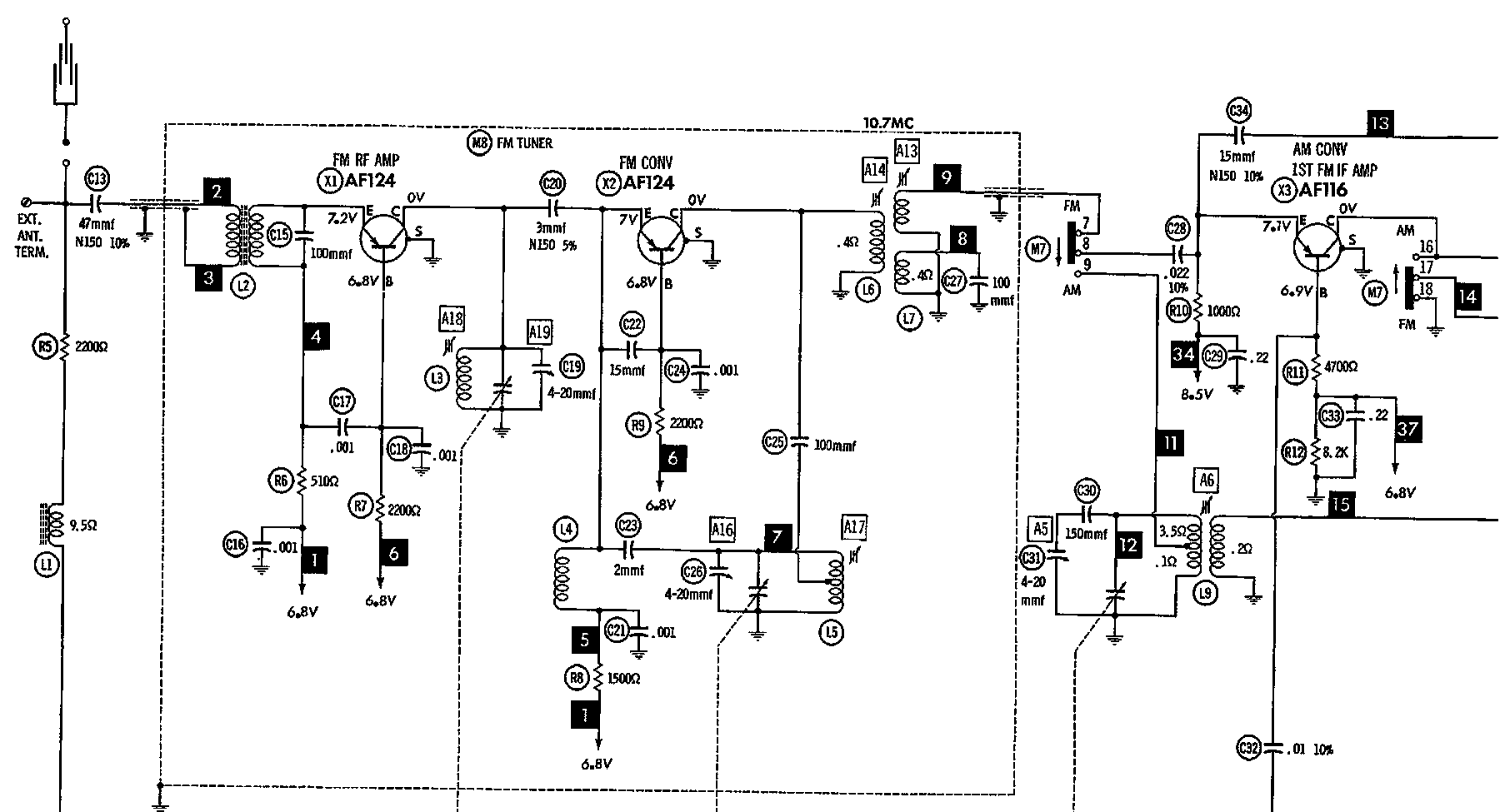
ITEM	PART No.	ITEM	PART No.
Knob, Tuning & Volume; Brown	227-0135	Cabinet, Front; Brown	227-0131
Knob, Tuning & Volume; Black	227-0127	Cabinet, Front; Black	227-0123
Knob, Pushbutton; Brown	227-0136	Cabinet, Back; Brown	227-0130
Knob, Pushbutton; Black	227-0128	Cabinet, Back; Black	227-0122

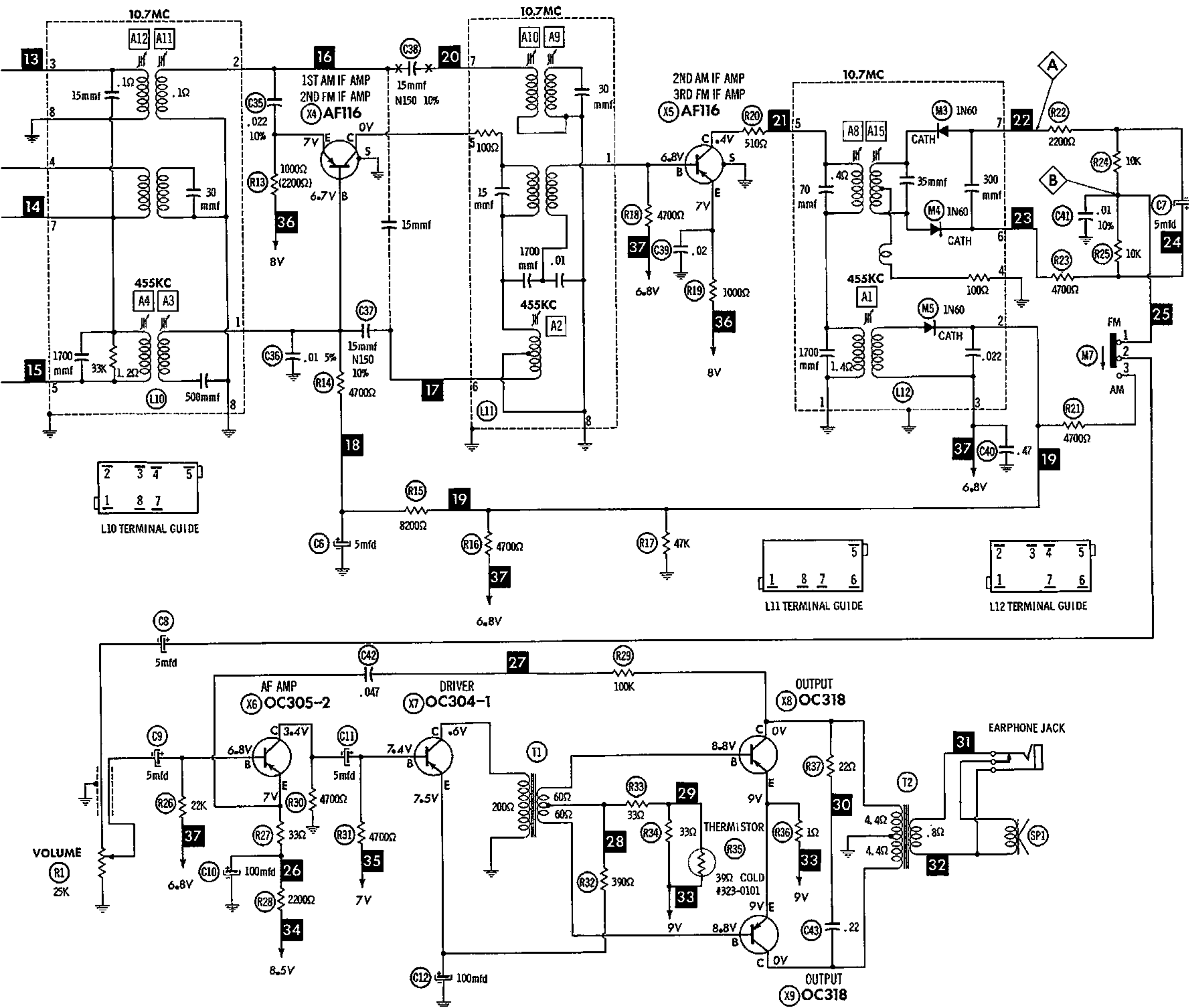
WIRING DATA

General-use Unshielded Hook-up Wire	Use BELDEN No. 8530 (Solid 22AWG)	Available
	8524 (Stranded 22AWG)	in
	8570 (Stranded 26AWG)	12 Colors

DIAL CORD STRINGING







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.

A PHOTOFAC STANDARD NOTATION SCHEMATIC
with **CIRCUITRACE**

PHILCO MODEL T-907