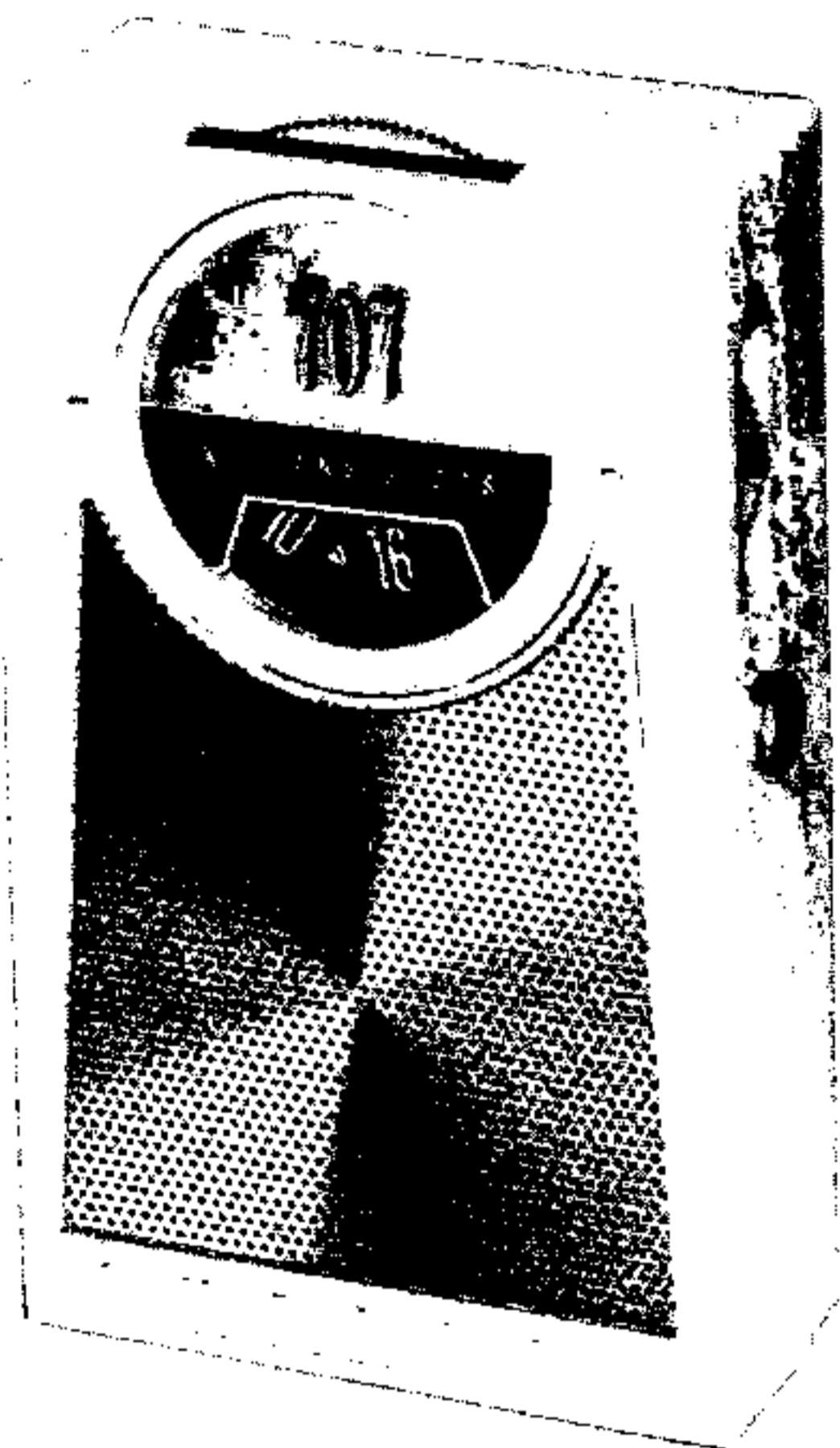
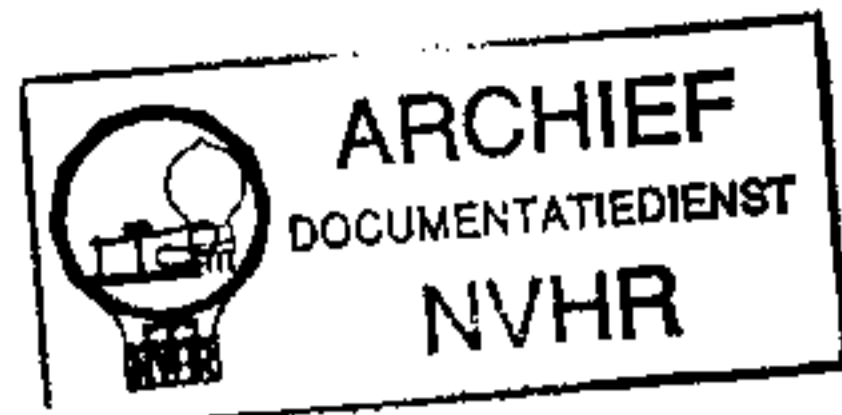




Met dank aan Jef Bos

Ned. Ver. v. Historie v/d P



TRADE NAME	Emerson Model 707 (Ch. 120598)		
MANUFACTURER	Emerson Radio Inc., 524 W. 23rd Street, New York 11, N. Y.		
TYPE SET	Battery Operated 8 Transistor Portable AM Receiver		
POWER SUPPLY	4 Volts DC	RATING	14MA @ 4 Volts DC (No Signal, Min. Volume)
TUNING RANGE—BROADCAST	540 — 1620KC		20MA @ 4 Volts DC (Signal, Normal Volume)

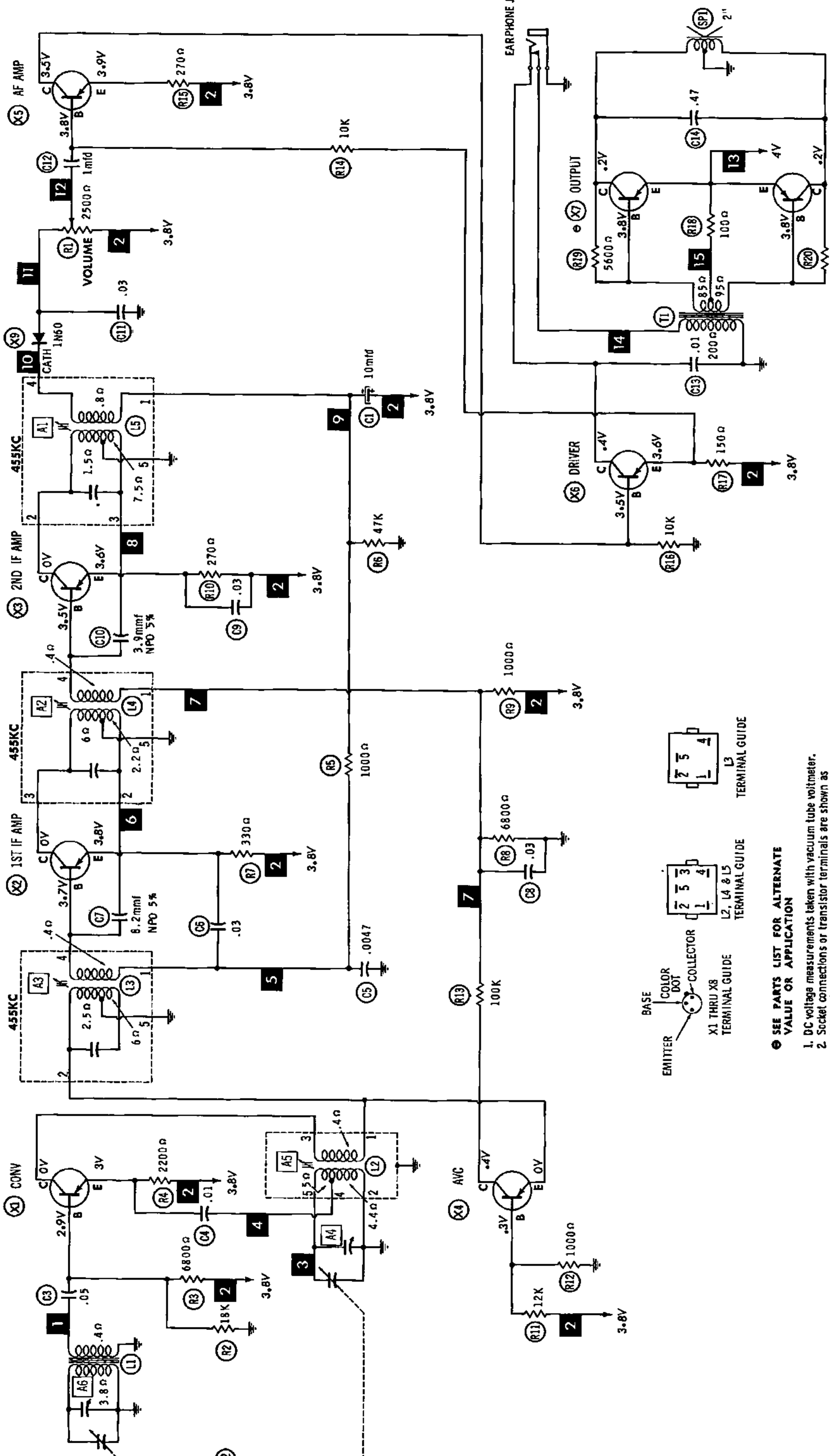
ALIGNMENT INSTRUCTIONS

ALIGNMENT INSTRUCTIONS—READ CAREFULLY BEFORE ATTEMPTING ALIGNMENT						
Use only enough generator output to provide a usable indication.						
Suggested Alignment Tools:						
A1, A2, A3, A5..... GENERAL CEMENT #5097, 8727 WALSCO #2515						
A4, A6..... GENERAL CEMENT #5000, 5003, 5066, 8276, 8290, 9087, 9089 WALSCO #2512, 2525, 2528						
	SIGNAL GENERATOR COUPLING	SIGNAL GENERATOR FREQUENCY	RADIO DIAL SETTING	INDICATOR	ADJUST	REMARKS
1.	Fashion loop of several turns of wire and radiate signal into loop of receiver	455KC (Unmod.)	Tuning gang fully open.	DC VTVM across Volume control.	A1, A2, A3	Adjust for maximum deflection.
2.	"	1620KC	"	"	A4	"
3.	"	600KC	600KC Signal.	"	A5	Adjust for maximum deflection while rocking tuning gang. Repeat Steps 2 & 3.
4.	"	1400KC	1400KC Signal	"	A6	Adjust for maximum deflection.

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

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 LF563

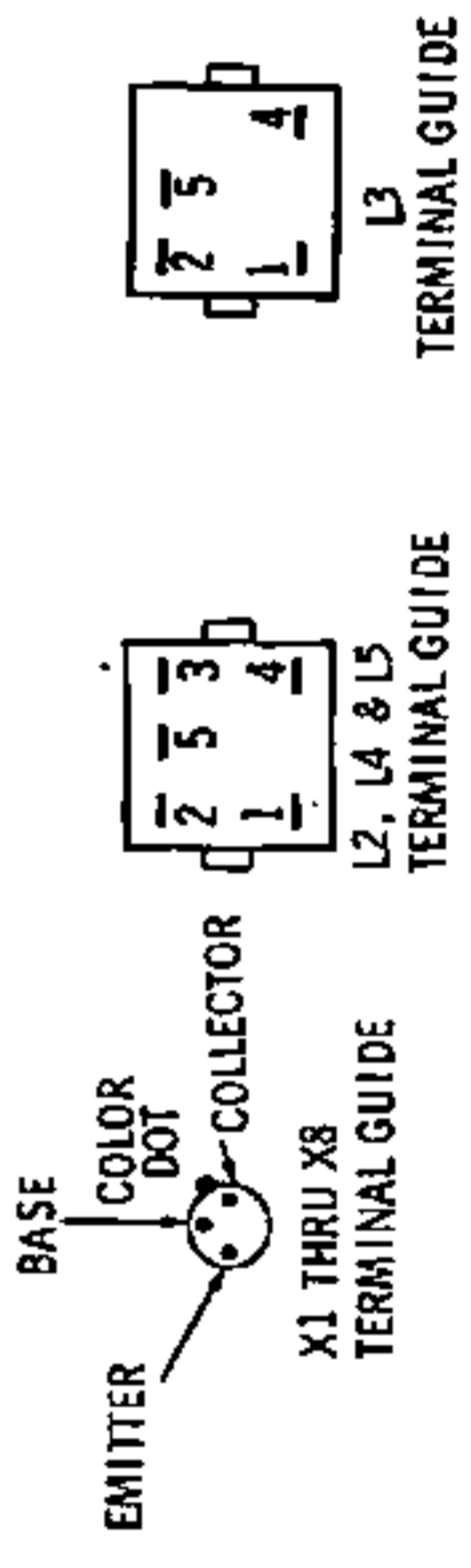
the particular type of replacement part listed. Reproduction or use, without express permission, of editorial or pictorial content, in any manner, is prohibited. No patent liability is assumed with respect to the use of the information contained herein. ©1962 Howard W. Sams & Co., Inc., Indianapolis 6, Indiana. Printed in U.S. of America



**EMERSON MODEL
707 (Ch.120598)**

RESISTANCE MEASUREMENTS NOT GIVEN BECAUSE OF THE WIDE VARIATION IN INTERNAL TRANSISTOR RESISTANCE.

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.

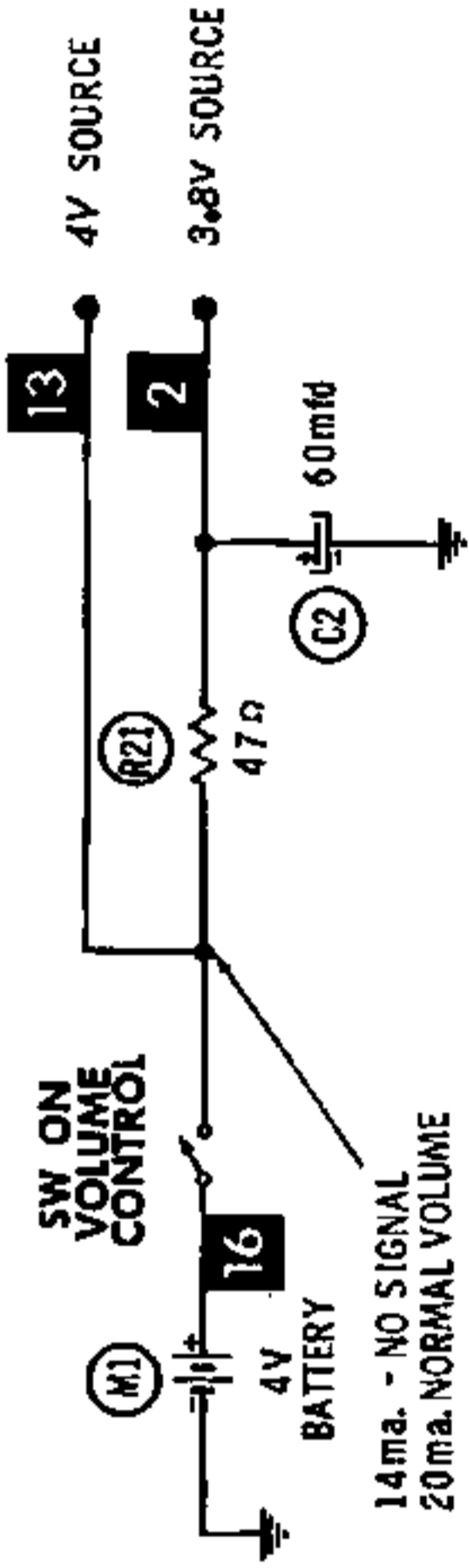


SEE PARTS LIST FOR ALTERNATE VALUE OR APPLICATION

1. DC voltage measurements taken with vacuum tube voltmeter.
2. Socket connections or transistor terminals are shown as bottom views.
3. Measured values are from socket pin or terminal to common ground.
4. Nominal tolerance on component values makes possible a variation of $\pm 15\%$ in voltage and resistance readings.
5. Volume control at maximum, no signal applied for voltage measurements.

A PHOTOFACT STANDARD NOTATION SCHEMATIC with CIRCUITRACE™

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14ma. - NO SIGNAL
20ma. NORMAL VOLUME

PARTS LIST AND DESCRIPTIONS

TRANSISTORS

ITEM No.	MFGR. PART No.	USE	REPLACEMENT DATA			NOTES
			GENERAL ELECTRIC PART No.	RCA PART No.	RAYTHEON PART No.	
X1	825065* 815066*	Converter	GE-1	2N412	2N485	PNP
X2	815103	1st IF Amplifier	GE-1	2N410	2N483	PNP
X3	815068	2nd IF Amplifier	GE-1	2N410	2N483	PNP
X4	815105	AVC	GE-1	2N406		PNP
X5	815104	AF Amplifier	GE-2	2N406	2N363	PNP
X6	815104	Driver	GE-2	2N406	2N363	PNP
X7	815070A* 815070B* 815070C* 815070D*	Output	GE-2	2N408	2N633	PNP
X8	815070A* 815070B* 815070C* 815070D*	Output	GE-2	2N408	2N633	PNP

* When X1 is 825065, X7 & X8 should be 815070A or 815070B.
When X1 is 815066, X7 & X8 should be 815070C or 815070D.

POWER RECTIFIERS & SIGNAL DIODES

ITEM No.	CURRENT RATING (Measured)	ORIGINAL Part or Type No.	RECTIFIERS		DIODES	NOTES
			RCA PART No.	SARKES TARZIAN PART No.	RAYTHEON PART No.	
X9		817091			1N60	Detector (1N60)

ELECTROLYTIC CAPACITORS

ITEM No.	RATING		REPLACEMENT DATA						
	CAP.	VOLT.	EMERSON PART No.	AEROVOX PART No.	CORNELL-DUBILIER PART No.	GENERAL ELECTRIC PART No.	MALLORY PART No.	PYRAMID PART No.	SPRAGUE PART No.
C1	10	6	925559	BCD6010	ECPB408	MTI-5	PET1340		
C2	60	6	925558						

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.
C3	.05 10V		C80V603AM	DA-503	H-05S5		TA-150	TG-S50
C4	.01		C80V103AM	DM-103	H-05S1	CCD-103	TA-110	TG-S10
C5	.0047		C80V502AM	DM-502	H-05D5	CCD-472	TA-250	TG-D50
C6	.03			DF-303	BYB6S3	CCD-303	TA-125	TG-S30
C7	8.2 NPO 5%		NPO-DI 8.2		C10V82C			10TCC-V82
C8	.03			DF-303	BYB6S3	CCD-303	TA-125	TG-S30
C9	.03			DF-303	BYB6S3	CCD-303	TA-125	TG-S30
C10	3.9 NPO 5%				C10V4C			10TCC-V39
C11	.03			DF-303	BYB6S3	CCD-303	TA-125	TG-S30
C12	1.0mfd			UK-105				HY-135
C13	.01		C80V103AM	DM-103	H-05S1	CCD-103	TA-110	TG-S10
C14	.47			UK-474				HY-130

CONTROLS

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

ITEM No.	USE	RESISTANCE	REPLACEMENT DATA				
			EMERSON PART No.	CENTRALAB PART No.	CLAROSTAT PART No.	CTS-IRC PART No.	MALLORY PART No.
R1	Volume & Switch	2500Ω	390697				

PARTS LIST AND DESCRIPTIONS (Continued)

RESISTORS

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

ITEM No.	RATING	REPLACEMENT DATA			ITEM No.	RATING	REPLACEMENT DATA		
		IRC PART No.	WORKMAN PART No.	REMARKS			IRC PART No.	WORKMAN PART No.	REMARKS
R2	18K				R12	1000Ω			
R3	6800Ω				R13	100K			
R4	2200Ω				R14	10K			
R5	1000Ω				R15	270Ω			
R6	47K				R16	10K			
R7	330Ω				R17	150Ω			
R8	6800Ω				R18	100Ω			
R9	1000Ω				R19	5000Ω			
R10	270Ω				R20	5600Ω			
R11	12K				R21	47Ω			

COILS (RF-IF)

ITEM No.	USE	REPLACEMENT DATA					NOTES
		EMERSON PART No.	Merit PART No.	Miller PART No.	Stancor PART No.	Workman PART No.	
L1	Loopstick	700178					
L2	Oscillator	716143					
L3	1st IF	720416					
L4	2nd IF	720417					
L5	3rd IF	720418	BC-571				

TRANSFORMER (DRIVER)

ITEM No.	TURNS RATIO		REPLACEMENT DATA					NOTES
			EMERSON PART No.	MERIT PART No.	STANCOR PART No.	THORDARSON PART No.	TRIAD PART No.	
	PRI.	SEC.						
T1	1.4	1	734199					

SPEAKER

ITEM No.	TYPE			REPLACEMENT DATA		NOTES
				EMERSON PART No.	QUAM PART No.	
	SIZE	FIELD	V. C. IMP.			
SP1	2"	PM	90-100Ω CT	180264		

BATTERIES

ITEM No.	VOLTAGE	EMERSON PART No.	REPLACEMENT DATA						NOTES
			BURGESS		EVEREADY		MALLORY		
			"A"	"B"	"A"	"B"	"A"	"B"	
M1	4V	818129		H133R		E133		TR-133R	

MISCELLANEOUS

ITEM No.	PART NAME	EMERSON PART No.	NOTES
M2	Tuning Cap.	900308	2 Gang

CABINETS & CABINET PARTS

(When Ordering Cabinets & Cabinet Parts, Specify Model, Chassis & Color)

NAME	PART NO.	DESCRIPTION
Knob	461510	Volume Tuning
Knob	461509	
Dial Crystal	461536	

WIRING DATA

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

CHASSIS—TOP VIEW

