

PHOTOFACT* Folder

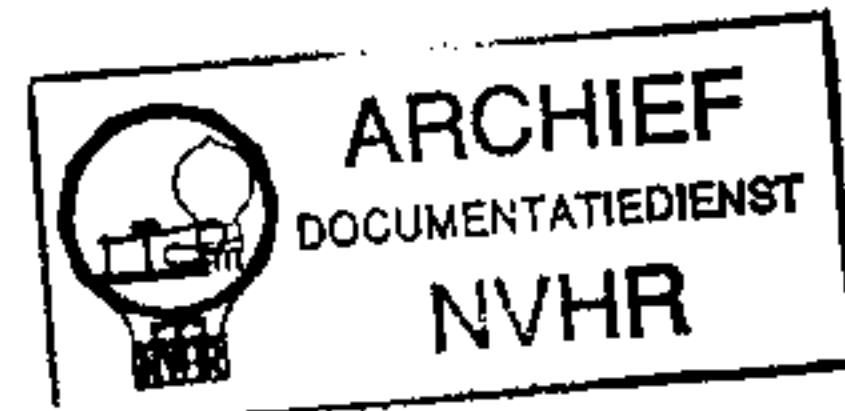


MOTOROLA MODELS
8X26E, S (Ch. HS-679)

with CIRCUITRACE*

Ned. Ver. v. Historie v/d P

Met dank aan Jef Bos



MODEL 8K26E

TRADE NAME	Motorola Model 8X26E, 8X26S (CH HS-679)		
MANUFACTURER	Motorola Inc., 4545 W. Augusta Blvd. Chicago 51, Illinois		
TYPE SET	Battery Operated Portable Transistorized AM Receiver		
POWER SUPPLY	6 Volts DC	RATING	18MA@9 Volts DC (No Signal, Min Volume)
TUNING RANGE—BROADCAST	535KC - 1620KC		20MA@9 Volts DC (Signal, Normal Volume)

ALIGNMENT INSTRUCTIONS

ALIGNMENT INSTRUCTIONS—READ CAREFULLY BEFORE ATTEMPTING ALIGNMENT

Volume control should be at maximum position. Output of signal generator should be no higher than necessary to obtain an output reading.

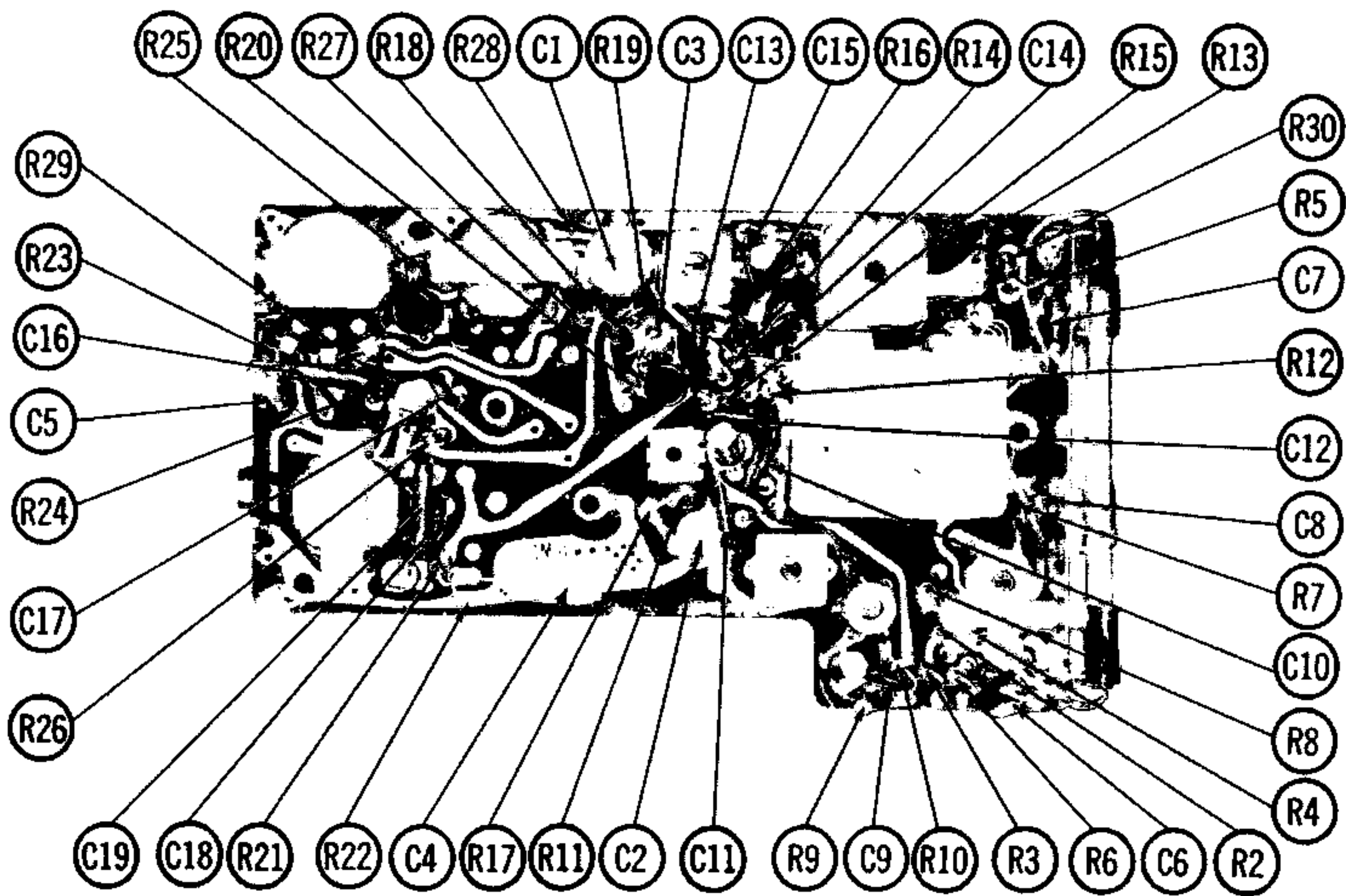
Suggested alignment tools: A1, A2, A3, A7, A8, A9..... GENERAL CEMENT #8282, 8606, 8606L, 9091
WALSCO #2528, 2541, 2543, 2544
A4, A5, A6..... GENERAL CEMENT #5004, 5008, 5009
WALSCO #2520

DUMMY ANTENNA	SIGNAL GENERATOR COUPLING	SIGNAL GENERATOR FREQUENCY	RADIO DIAL SETTING	OUTPUT METER	ADJUST	REMARKS
1. .1mfd	High side thru .1mfd to antenna lug of tuning gang. Low side to chassis.	455KC (400v Mod.)	Tuning gang fully open	Across voice coil	A1, A2, A3	Adjust for maximum output.
2.	Loop	1620KC	"	"	A4	Fashion loop of several turns of wire and radiate signal into loop of receiver. Adjust for maximum output.
3.	"	1400KC	Tune to 1400KC Signal	"	A5, A6	Adjust for maximum output.
4.	"	600KC	600KC	"	A7, A8, A9	Adjust for maximum output. Repeat Steps 2 & 3.

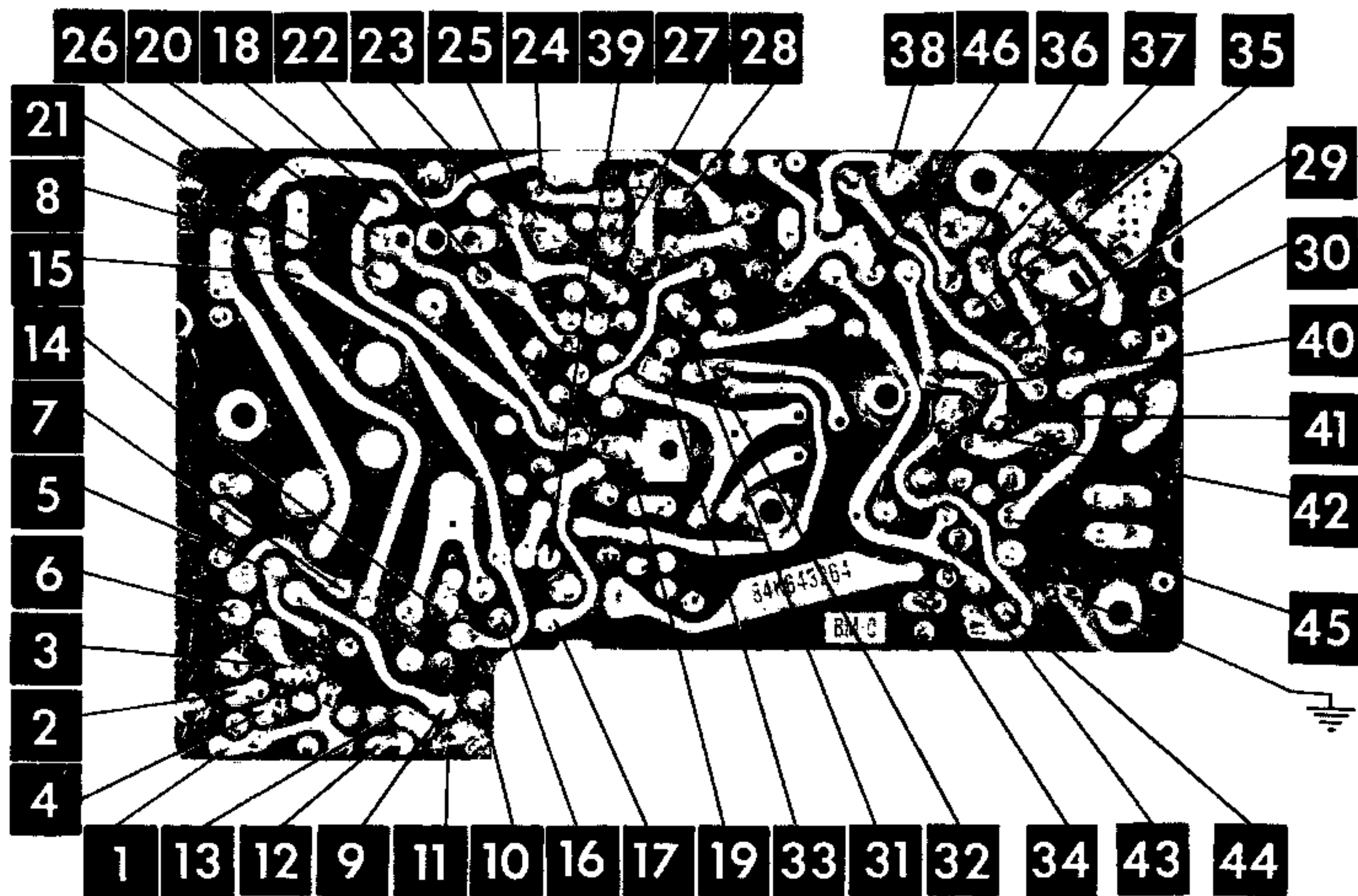
HOWARD W. SAMS & CO., INC. Indianapolis 6, Indiana

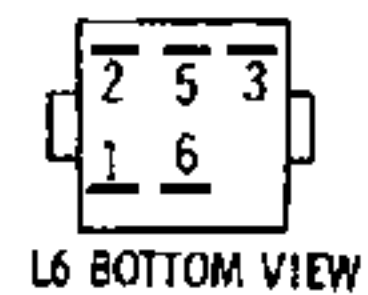
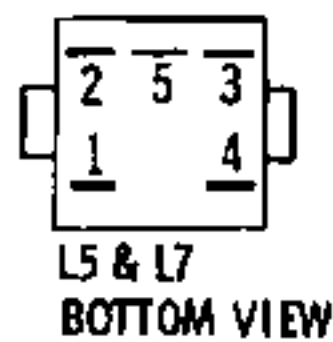
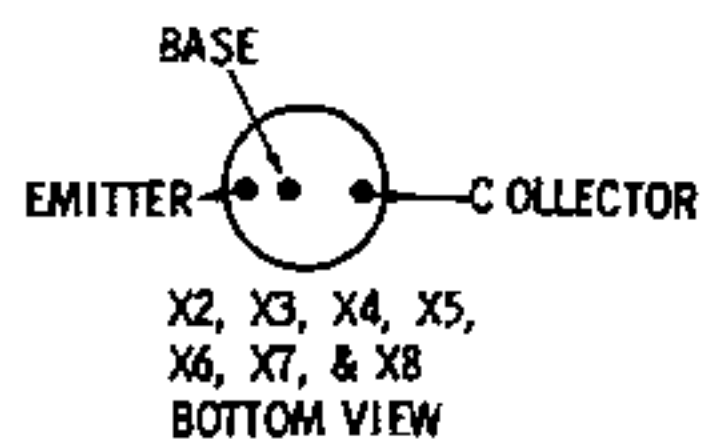
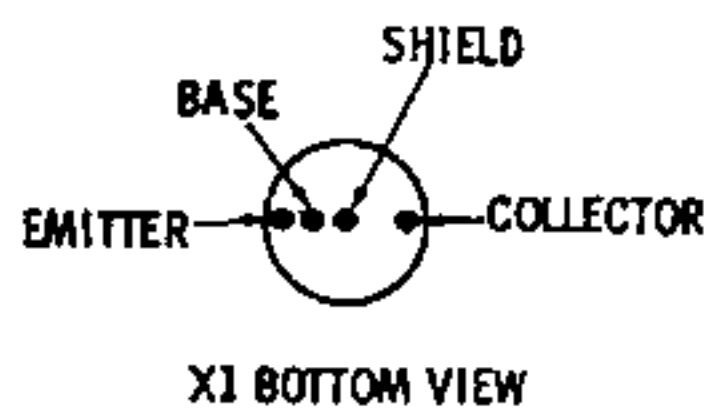
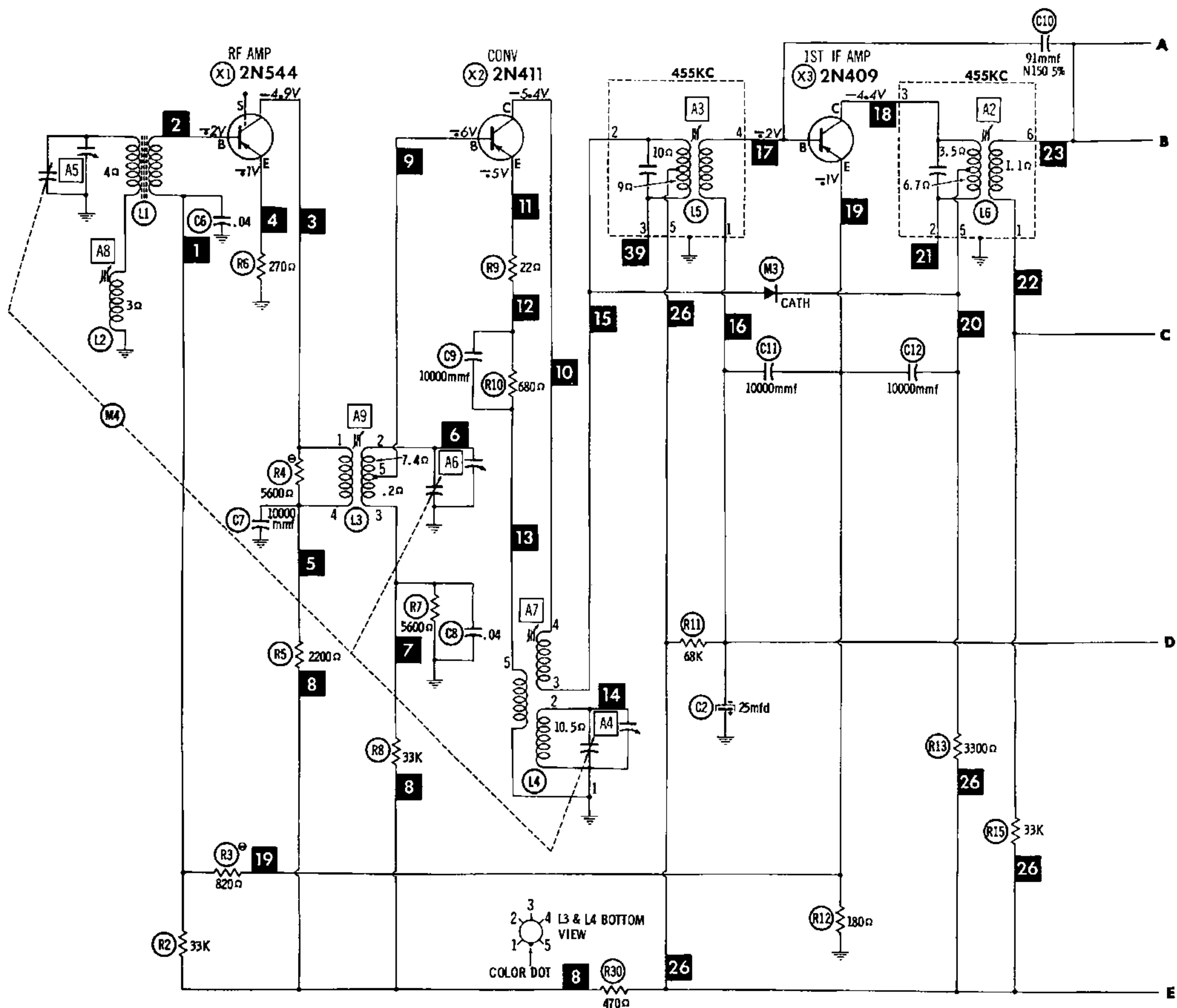
The listing of any available replacement part herein does not constitute in any case a recommendation, warranty or guaranty by Howard W. Sams & Co., Inc., as to the quality and suitability of such replacement part. The numbers of these parts have been compiled from information furnished to Howard W. Sams & Co., Inc., by the manufacturers of JF247

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PRINTED BOARD - CAPACITOR & RESISTOR IDENT.

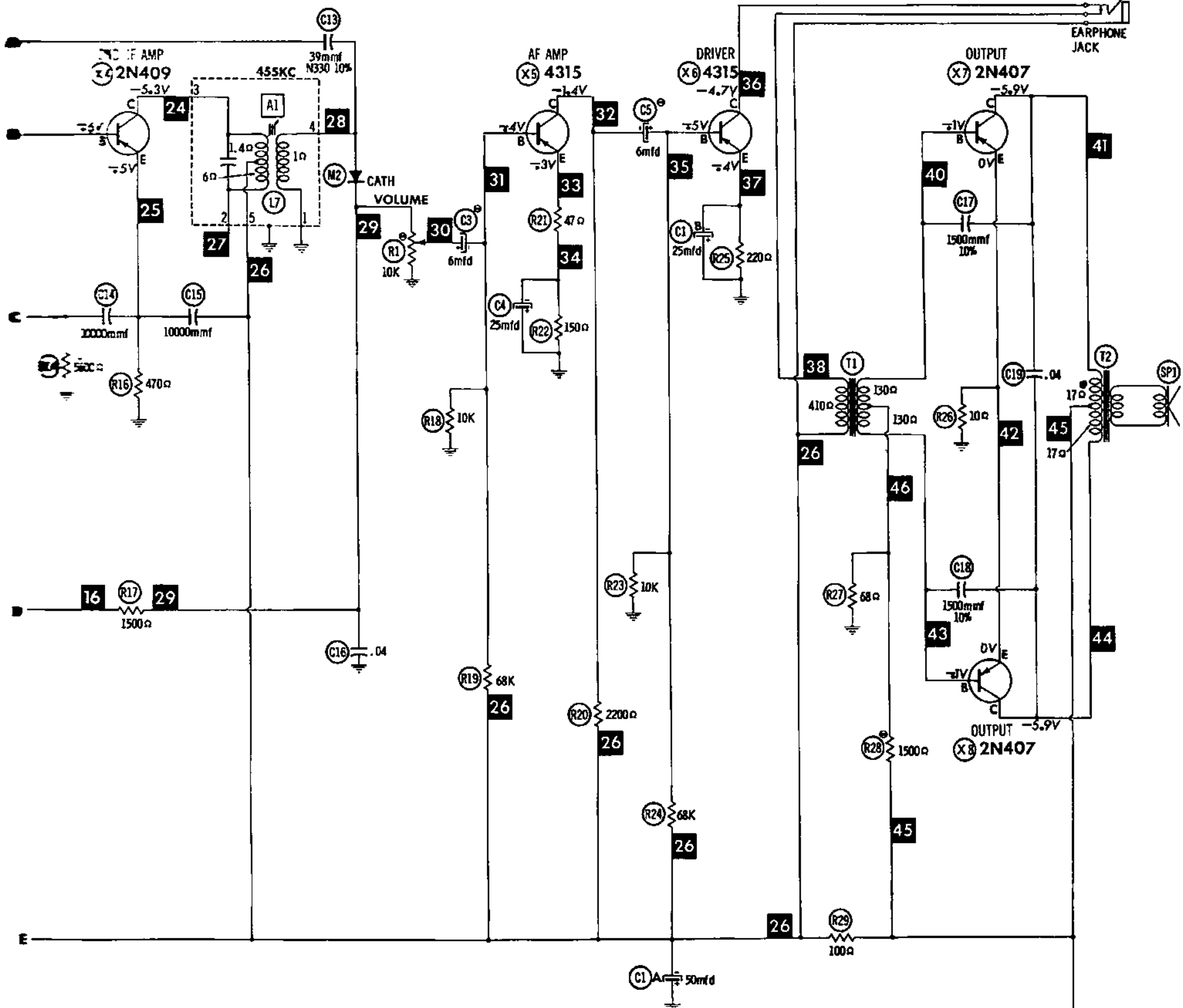




1. DC voltage measurements taken with vacuum tube voltmeter.
2. Socket connections are shown as bottom views.
3. Measured values are from socket pin to common negative.
4. Nominal tolerance on component values makes possible a variation of $\pm 15\%$ in voltage and resistance readings.
5. Volume control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

SEE PARTS LIST FOR ALTERNATE VALUE OR APPLICATION

DC COIL RESISTANCE VALUES UNDER ONE OHM NOT SHOWN ON SCHEMATIC DIAGRAM



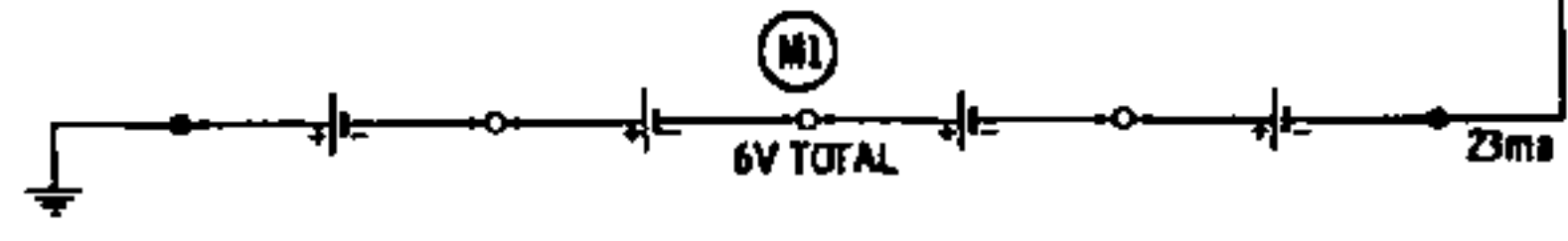
NUMBERS ASSIGNED TO COILS, SWITCHES, PLUGS, SOCKETS, AND TRANSFORMERS ARE TO FACILITATE CIRCUIT TRACING OR COMPONENT REPLACEMENT AND MAY NOT NECESSARILY BE FOUND ON THE UNIT.

RESISTANCE READINGS

ITEM	TYPE	BASE	EMITTER	COLLECTOR
X1	2N544	1000Ω	270Ω	†2800Ω
X2	2N411	4500Ω	700Ω	†100Ω
X3	2N409	2800Ω	180Ω	†1500Ω
X4	2N409	5000Ω	470Ω	†100Ω
X5	4315	9000Ω	200Ω	†2300Ω
X6	4315	9000Ω	220Ω	†510Ω
X7	2N407	200Ω	10Ω	†17Ω
X8	2N407	200Ω	10Ω	†17Ω

TRANSISTORS REMOVED FOR RESISTANCE MEASUREMENTS.
 † MEASURED FROM JUNCTION OF R28 AND R29.

SW ON VOLUME CONTROL



PARTS LIST AND

TRANSISTORS

ITEM No.	ORIG. TYPE	USE	REPLACEMENT DATA				NOTES
			CBS PART No.	RCA PART No.	RAYTHEON PART No.	SYLVANIA PART No.	
X1	2N544	RF Amplifier		2N544		2N544	PNP
X2	2N411	Converter		2N411		2N411	PNP
X3	2N409	1st IF Amplifier		2N409		2N409	PNP
X4	2N409	2nd IF Amplifier		2N409		2N409	PNP
X5	4315	AF Amplifier		4315			PNP
X6	4315	Driver		4315			PNP
X7	2N407	Output		2N407		2N407	PNP Matched Pair
X8	2N407	Output		2N407		2N407	PNP

ELECTROLYTIC CAPACITORS

ITEM No.	RATING		REPLACEMENT DATA						NOTES
	CAP.	VOLT.	MOTOROLA PART No.	AEROVOX PART No.	CORNELL-DUBILIER PART No.	MALLORY PART No.	PYRAMID PART No.	SPRAGUE PART No.	
C1A	50	10	23B639917	BCD10X5030		PET2365		VLS-2245 *	
B	25	10							
C2	25	10	23K642709	PWE-10025	NLW25-10	TT10X25	ML20-15	TE-1118	
C3	6	10	23K642111 ①	XPP-10006	NLW6-25	TT12X5	ML6-15	TE-1127.1	
C4	25	10	23K642709	PWE-10025	NLW25-10	TT10X25	ML20-15	TE-1118	
C5	6	10	23K642111 ①	XPP-10006	NLW6-25	TT12X5	ML6-15	TE-1127.1	

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

① Alternate Part #23K636769.

FIXED CAPACITORS

Capacity values given in the rating column are in mfd. for Paper Capacitors, and in mmfd. for Mica and Ceramic Capacitors.

ITEM No.	RATING			REPLACEMENT DATA						NOTES
	CAP.	VOLT	TOL	MOTOROLA PART No.	AEROVOX PART No.	CENTRALAB PART No.	CORNELL-DUBILIER PART No.	MALLORY PART No.	SPRAGUE PART No.	
C6	.04	50		8R129358	P285N-04	DF-403	CUB6S4	GEM-414	4TM-S4	
C7	10000			21K636724	BPD-01	DD-103	BYA10S1	B-110	5HK-S1	
C8	.04	50		8R129358	P285N-04	DF-403	CUB6S4	GEM-414	4TM-S4	
C9	10000			21K636724	BPD-01	DD-103	BYA10S1	B-110	5HK-S1	
C10	91		N150 5%	21R128601						
C11	10000			21K640366	BPD-01	DD-103	BYA10S1	B-110	5HK-S1	
C12	10000			21K640366	BPD-01	DD-103	BYA10S1	B-110	5HK-S1	
C13	39		N330 10%	21R128600						
C14	10000			21K640366	BPD-01	DD-103	BYA10S1	B-110	5HK-S1	
C15	10000			21K640366	BPD-01	DD-103	BYA10S1	B-110	5HK-S1	
C16	.04	50		8R129358	P288N-04	DF-403	CUB6S4	GEM-414	4TM-S4	
C17	1500		10%	21K129402	DI 1500		PM6D15	JL-215	5GA-D15S 10%*	
C18	1500		10%	21K129402	DI 1500		PM6D15	JL-215	5GA-D15S 10%*	
C19	.04	50		8R129440	P288N-04	DF-403	CUB6S4	GEM-414	4TM-S4	

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

DESCRIPTIONS

CONTROLS

ITEM No.	RATING		REPLACEMENT DATA					INSTALLATION NOTES
	RESISTANCE	WATTS	MOTOROLA PART No.	CENTRALAB PART No.	CLAROSTAT PART No.	IRC PART No.	MALLORY PART No.	
R1	10K	$\frac{1}{2}$	18B641628					Volume & Switch Note 1

Note 1. Some versions may use Part #18B641627.

RESISTORS

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

ITEM No.	RATING	REMARKS	ITEM No.	RATING	REMARKS	ITEM No.	RATING	REMARKS
R2	33K	(15K) * (1500Ω) *	R12	180Ω		R22	150Ω	(Use 2700Ω)
R3	820Ω		R13	3300Ω		R23	10K	
R4	5600Ω		R14	5600Ω		R24	68K	
R5	2200Ω		R15	33K		R25	220Ω	
R6	270Ω		R16	470Ω		R26	10Ω	
R7	5600Ω		R17	1500Ω		R27	68Ω	
R8	33K		R18	10K		R28	1500Ω	
R9	22Ω		R19	68K		R29	100Ω	
R10	680Ω		R20	2200Ω		R30	470Ω	
R11	68K		R21	47Ω				

* Alternate.

COILS (RF-IF)

ITEM No.	USE	REPLACEMENT DATA						NOTES
		MOTOROLA PART No.	Gramer PART No.	Meissner PART No.	Merit PART No.	Miller PART No.	Ram PART No.	
L1	Loopstick	1V643294 †						
L2	Ant. Coil	24B642772						
L3	RF Coil	24C641780						
L4	Osc. Coil	24K641378						
L5	1st IF	24K643211						
L6	2nd IF	24D642133						
L7	3rd IF	24K641756						

† Includes Antenna Shields & Mtg. Clamps.

TRANSFORMER (DRIVER)

ITEM No.	TURNS RATIO		REPLACEMENT DATA					NOTES
	PRI.	SEC.	MOTOROLA PART No.	Halldorson PART No.	Merit PART No.	Stancor PART No.	Thordarson PART No.	
T1	1.5	1	25B641394					

PARTS LIST AND DESCRIPTIONS (Continued)

TRANSFORMER (AUDIO OUTPUT)

ITEM No.	IMPEDANCE		REPLACEMENT DATA						NOTES	
	PRI.	SEC.	MOTOROLA PART No.	Holldarson PART No.	Merit PART No.	Ram PART No.	Stancor PART No.	Thordarson PART No.		Triad PART No.
T2	275Ω CT	3-4Ω	25B641395						TY-57X ①	① Use Original Channel Frame

SPEAKER

ITEM No.	TYPE			REPLACEMENT DATA		NOTES
	SIZE	FIELD	V. C. IMP.	MOTOROLA PART No.	QUAM PART No.	
SP1	3½"	PM	3-4Ω	50B641629	3A07	

BATTERIES

ITEM No.	VOLTAGE	MOTOROLA PART No.	REPLACEMENT DATA						NOTES
			BURGESS		EVEREADY		MALLORY		
			"A"	"B"	"A"	"B"	"A"	"B"	
M1	6V			930 ①		1015 ① E9 ①②		M-15R ① ZM9 ①②	① 4 Used ② Mercury Type

CRYSTAL DIODES

ITEM No.	ORIG. TYPE	REPLACEMENT DATA				NOTES
		MOTOROLA PART No.	CBS PART No.	RAYTHEON PART No.	SYLVANIA PART No.	
M2 M3		48K640754 48K640754	1N60 1N60	1N60 1N60	1N60 1N60	Detector (Pigtail) Overload (Pigtail)

MISCELLANEOUS

ITEM No.	PART NAME	MOTOROLA PART No.	NOTES
M4	Tuning Cap Battery Holder Printed Board	19B641384 1V642777 84K643284	3 Gang (Ant. 22--330mmf, RF. 12--182mmf, Osc. 20--83mmf) Complete

CABINETS & CABINET PARTS

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

NAME	PART NO.	DESCRIPTION
Knob	36C641723	Tuning
Knob	36K641717	Volume-On-Off
Knob	52B641719	Pointer
Cabinet Front	16E641722	Charcoal, Model 8X26E
Cabinet Front	16K642686	Maple Sugar, Model 8X26S
Cabinet Back	1V642791	Charcoal, Model 8X26E
Cabinet Back	1V642792	Maple Sugar, Model 8X26S
Handle	55C641724	

CHASSIS—TOP VIEW

