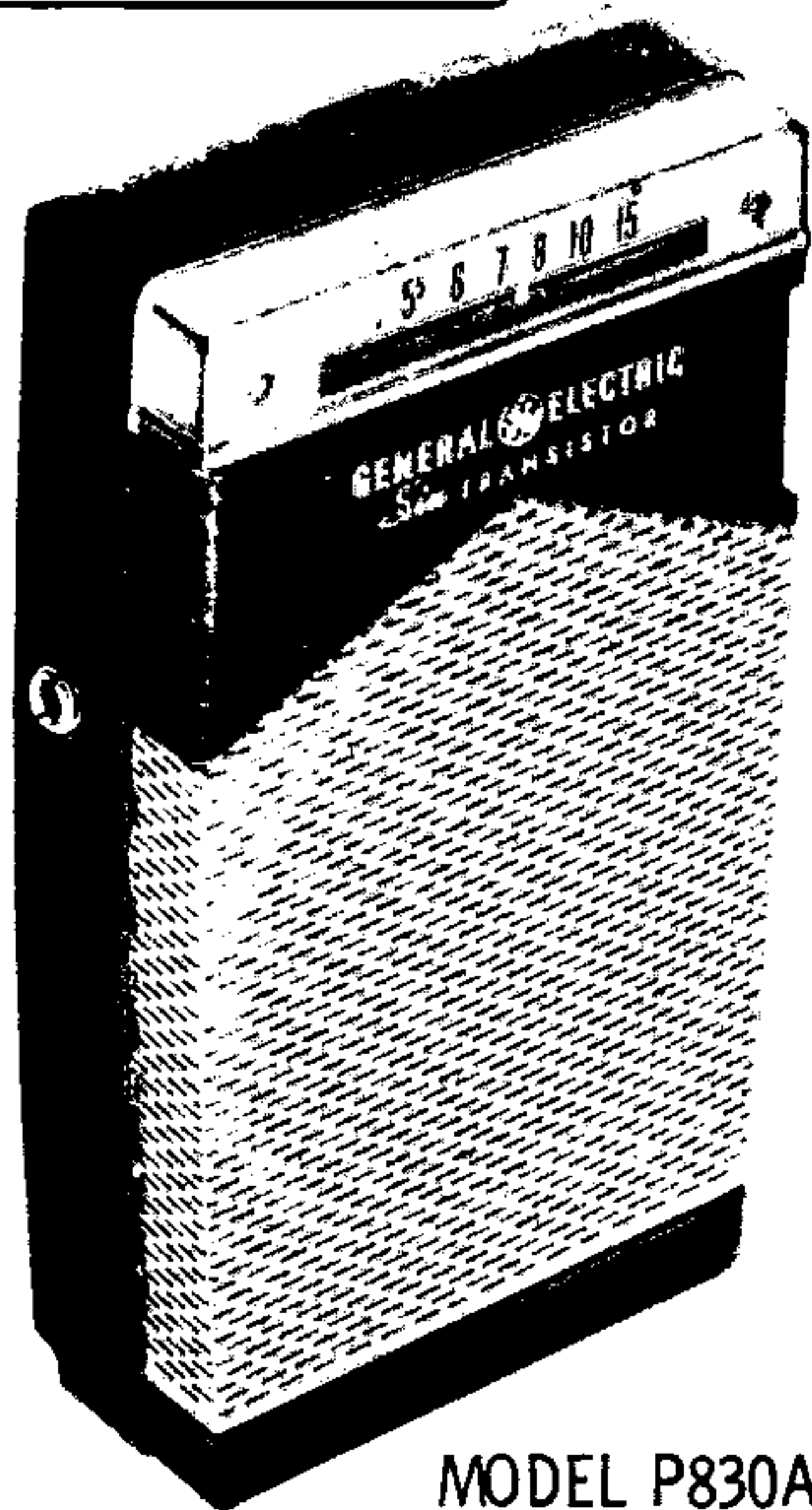
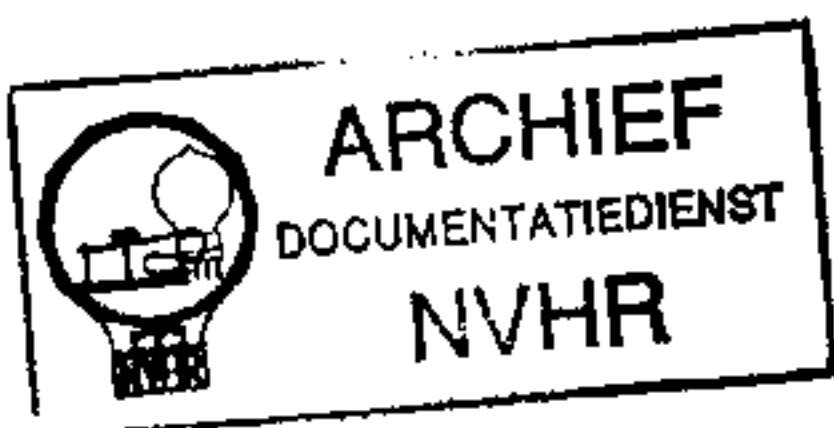


PHOTOFACT® Folder with **CIRCUITRACE®**

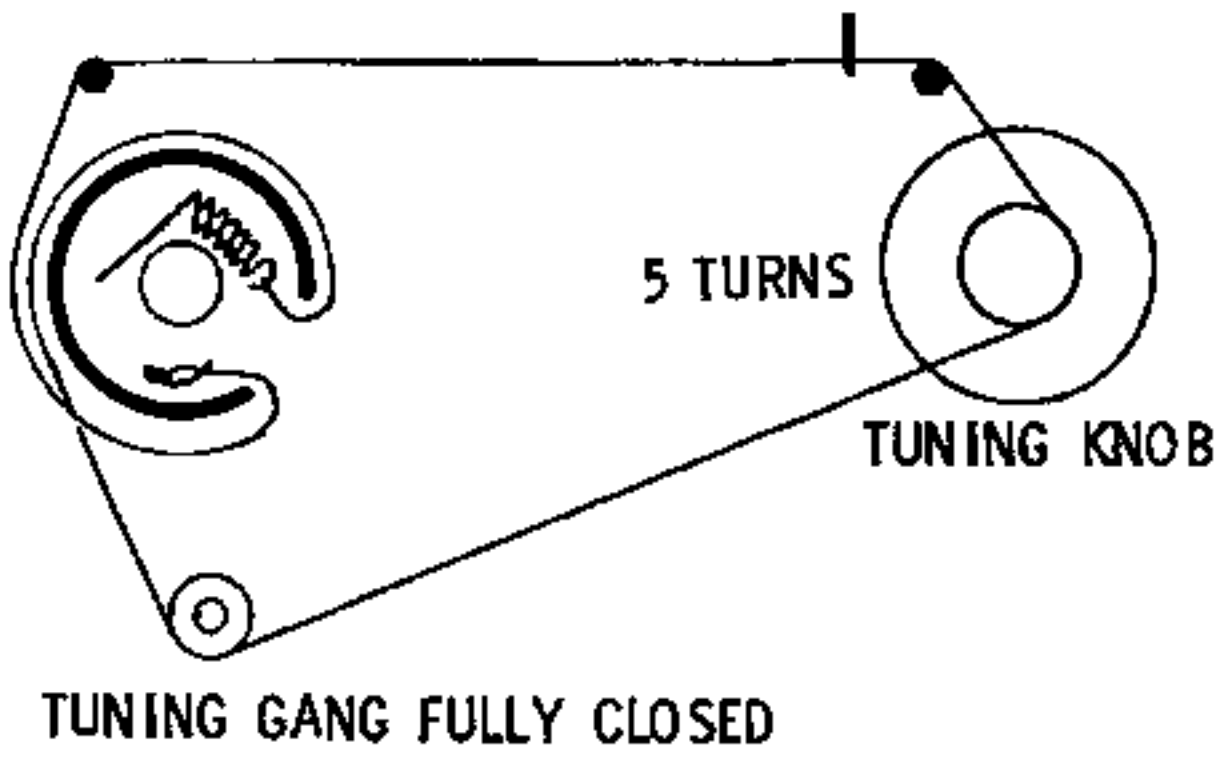
**GENERAL ELECTRIC
MODELS P830A, P831A**



Ned. Ver. v. Historie v/d Radio



DIAL CORD STRINGING



FRONT VIEW

Met dank aan Jef Bos

MODEL P830A

TRADE NAME	General Electric Models P830A, P831A		
MANUFACTURER	General Electric Co., Product Service, Radio Receiver Dept., 869 Broad Street, Utica, N. Y.		
TYPE SET	Battery Operated Transistorized Portable AM Receiver		
POWER SUPPLY	9 Volts DC	RATING	7 MA@9 Volts DC (No Signal, Min. Volume)
TUNING RANGE—BROADCAST	535 - 1630KC		12 MA@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... GENERAL CEMENT #8607, 9291, 9294
 WALSCO #2520, 2522, 2523, 2524, 2534, 2537
 A5.....GENERAL CEMENT #5009, 8195, 8274, 8275, 8728, 8729, 8987, 8988, 8989
 WALSCO #2515, 2531, 2532
 A4, A6.....GENERAL CEMENT #5000, 5003, 5066, 8276, 8290, 9087, 9089
 WALSCO #2512, 2525, 2528

	SIGNAL GENERATOR COUPLING	SIGNAL GENERATOR FREQUENCY	RADIO DIAL SETTING	OUTPUT METER	ADJUST	REMARKS
1.	Loop	455KC (400v Mod.)	Tuning gang fully open.	Across voice coil.	A1, A2, A3	Fashion loop of several turns of wire and radiate signal into loop of receiver. Adjust for maximum output.
2.	"	1630KC	"	"	A4	"
3.	"	580KC	580KC Signal.	"	A5	Adjust for maximum output while rocking tuning gang.
4.	"	1400KC	1400KC Signal.	"	A6	"

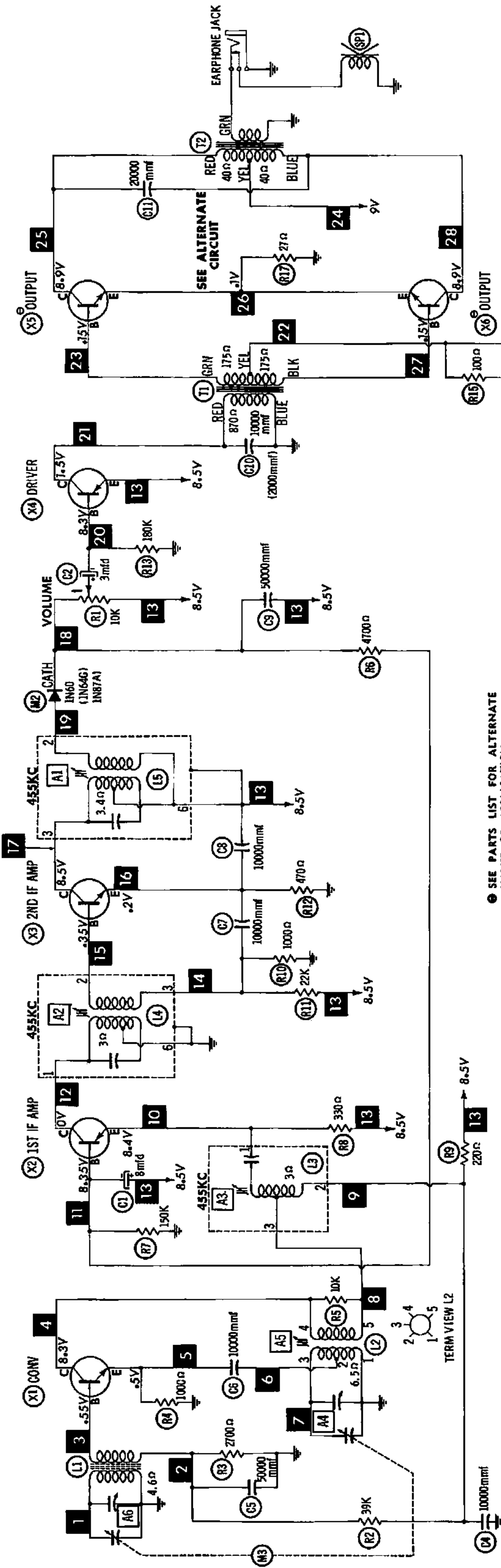
DISASSEMBLY

1. Remove cabinet back.
2. Remove screw near volume control.
3. Slide chassis toward cabinet bottom and remove from cabinet.

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 JF985

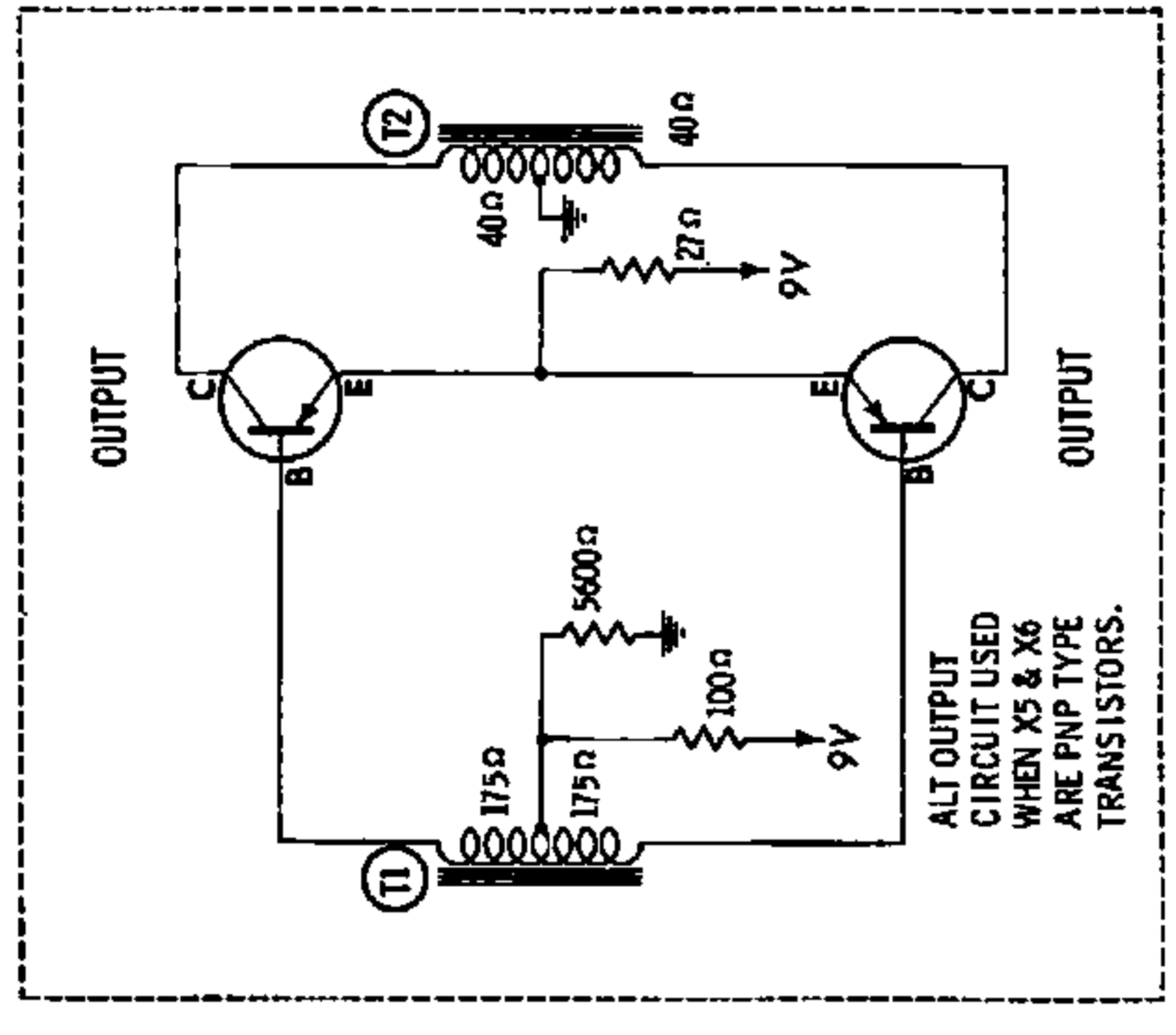
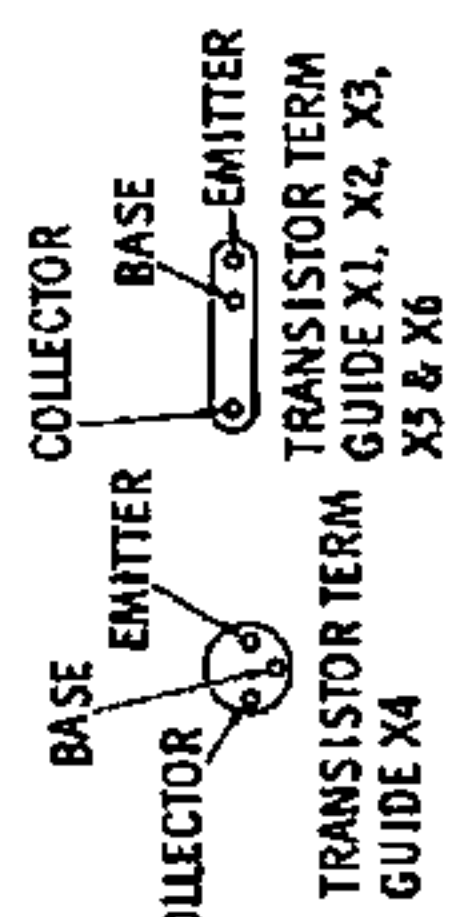
the particular type of replacement part listed. Reproduction or use, without express permission, of editorial or pictorial content, in any manner, is prohibited. No patent liability is assumed with respect to the use of the information contained herein. © 1960 Howard W. Sams & Co., Inc., Indianapolis 6, Indiana. Printed in U.S. of America



SEE PARTS LIST FOR ALTERNATE VALUE OR APPLICATION

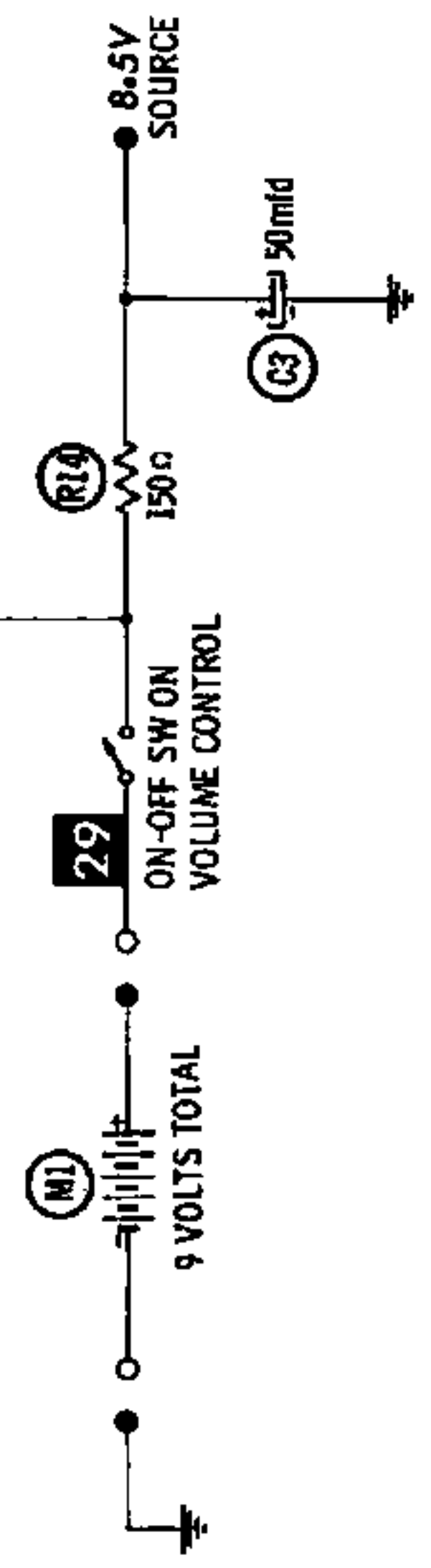
DC COIL RESISTANCE VALUES UNDER ONE OHM NOT SHOWN ON SCHEMATIC DIAGRAM
ARROWS ON CONTROLS INDICATE CLOCKWISE ROTATION (CONTROL VIEWED FROM SHAFT END)

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

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.



**GENERAL ELECTRIC
MODELS P830A, P831A**

PARTS LIST AND DESCRIPTIONS

TRANSISTORS

ITEM No.	MFGR. PART NO.	USE	REPLACEMENT DATA				NOTES
			CBS PART No.	RCA PART No.	RAYTHEON PART No.	SYLVANIA PART No.	
X1	RS-1531	Converter 1st IF Trans. 2nd IF Trans. Driver Output Output	2N377	2N406	2N1366	2N1058	NPN PNP NPN PNP NPN } Matched NPN } Pair
X2	RS-1550				2N483	SYL1608	
X3	RS-1536				2N1367		
X4	RS-1543				2N362	2N406	
X5	RS-1549 *				2N632	2N1054	
X6	RS-1549 *				2N632	2N1054	

* For PNP Type, Order Part #RS-1548.

ELECTROLYTIC CAPACITORS

ITEM No.	RATING		G. E. PART No.	AEROVOX PART No.	CORNELL-DUBILIER PART No.	MALLORY PART No.	PYRAMID PART No.	SPRAGUE PART No.	NOTES
	CAP.	VOLT.							
C1	8	12	RS-2285		NLW8-25				
C2	3	12	RS-2284	XPP-12003	NLW3-25	TT12X3	ML4-15	TE-1122	
C3	50	12	RS-2286						

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	REMARKS	REPLACEMENT DATA					
			AEROVOX PART No.	CENTRALAB PART No.	CORNELL-DUBILIER PART No.	ELMENCO PART No.	MALLORY PART No.	SPRAGUE PART No.
C4	10000	(2000) †	C80V103AM	DDM-103	H-05S1		TA-110	TG-S10
C6	50000		C80V503AM	DDA-503	H-05S5		TA-150	TG-S50
C8	10000		C80V103AM	DDM-103	H-05S1		TA-110	TG-S10
C7	10000		C80V103AM	DDM-103	H-05S1		TA-110	TG-S10
C8	10000		C80V103AM	DDM-103	H-05S1		TA-110	TG-S10
C9	50000		C80V503AM	DDA-503	H-05S5		TA-150	TG-S50
C10	10000		C80V103AM	DDM-103	H-05S1		TA-110	TG-S10
C11	20000		C80V203AM	DDM-203	H-05S2		TA-120	TG-S20

† Alternate Value.

CONTROLS

ITEM No.	RATING		G. E. PART No.	CENTRALAB PART No.	CLAROSTAT PART No.	CTS-IRC PART No.	MALLORY PART No.	INSTALLATION NOTES
	RESISTANCE	WATTS						
R1	10K	1/4	RS-2280					Volume & Switch

RESISTORS (IRC or EQUIVALENT)

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

ITEM No.	RATING	REMARKS	ITEM No.	RATING	REMARKS	ITEM No.	RATING	REMARKS
R2	39K		R8	330Ω		R14	150Ω	
R3	2700Ω		R9	220Ω		R15	100Ω	
R4	1000Ω		R10	1000Ω		R16	5600Ω	
R5	10K		R11	22K		R17	27Ω	
R6	4700Ω		R12	470Ω				
R7	150K		R13	180K				

COILS (RF-IF)

ITEM No.	USE	REPLACEMENT DATA				NOTES
		G. E. PART No.	Merit PART No.	Miller PART No.	Ram PART No.	
L1	Loopstick	RS-2281				
L2	Osc. Coil	RS-2277				
L3	1st IF Trans.	RS-2274				
L4	2nd IF Trans.	RS-2275				
L5	3rd IF Trans.	RS-2276				

PARTS LIST AND DESCRIPTIONS (Continued)

TRANSFORMER (DRIVER)

ITEM No.	TURNS RATIO		REPLACEMENT DATA					NOTES
			G. E. PART No.	Merit PART No.	Stancor PART No.	Thordarson PART No.	Triad PART No.	
	PRI.	SEC.						
T1	1.2	1	RS-2273					

TRANSFORMER (AUDIO OUTPUT)

ITEM No.	IMPEDANCE		REPLACEMENT DATA					NOTES
			G. E. PART No.	Merit PART No.	Ram PART No.	Stancor PART No.	Thordarson PART No.	
	PRI.	SEC.						
T2	800Ω CT	6-8Ω	RS-2272					

SPEAKER

ITEM No.	TYPE			REPLACEMENT DATA		NOTES
				G. E. PART No.	QUAM PART No.	
	SIZE	FIELD	V. C. IMP.			
SP1	2½"	PM	6-8Ω	RB-1133		

BATTERIES

ITEM No.	VOLTAGE	G. E. PART No.	REPLACEMENT DATA						NOTES
			BURGESS		EVEREADY		MALLORY		
			"A"	"B"	"A"	"B"	"A"	"B"	
M1	9V			226		P-6		M-1600	

CRYSTAL DIODES

ITEM No.	ORIG. TYPE	REPLACEMENT DATA				NOTES
		G. E. PART No.	CBS PART No.	RAYTHEON PART No.	SYLVANIA PART No.	
M2	1N60 *	RS-1811	1N60	1N60	1N60	Detector (Pigtail)

* Alternate Types 1N64G, 1N87A.

MISCELLANEOUS

ITEM No.	PART NAME	G. E. PART No.	NOTES
M3	Tuning Cap.	RS-2279	2 Gang.

CABINETS & CABINET PARTS

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

NAME	PART NO.	DESCRIPTION
Knob	RS-2260	Tuning
Knob	RS-2261	Volume
Pointer	RS-2265	
Dial Crystal	RS-2322	
Cabinet Front	RB-1129	Charcoal, P830A
Cabinet Front	RB-1130	Blue, P831A
Cabinet Back	RS-1131	Charcoal, P830A
Cabinet Back	RS-1132	Blue, P831A

WIRING DATA

General-use Unshielded Hook-up Wire Use BELDEN No. 8530 (Solid) Available in Ten Colors
8524 (Stranded) Available in Ten Colors

CHASSIS—TOP VIEW

