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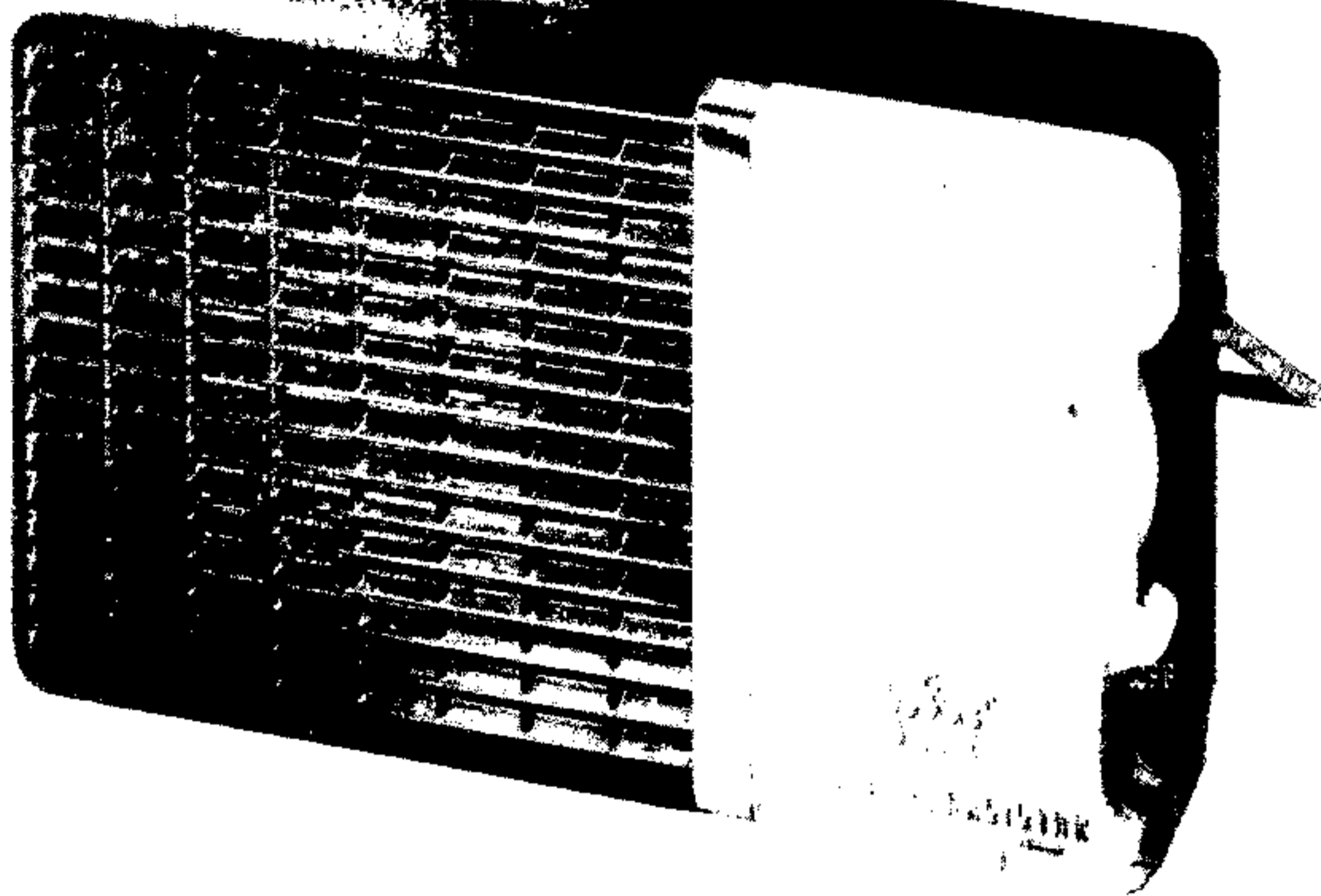
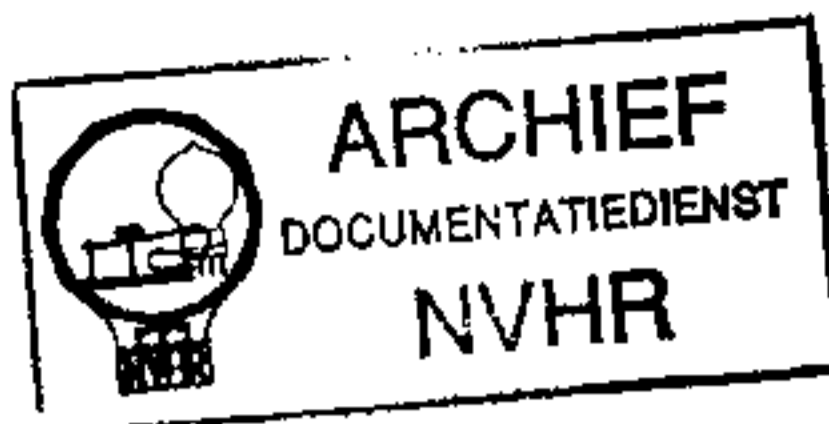
with **CIRCUITRACE®**

**CROWN
MODEL TR-400**



Met dank aan Jef Bos

Ned. Ver. v. Historie v/d Radio



TRADE NAME	Crown Model TR-400		
IMPORTER	Shriro, Inc., 276 Fourth Ave., New York 10, N. Y.		
TYPE SET	Battery Operated Transistorized Portable AM Receiver		
POWER SUPPLY	9 Volts DC	RATING	12 MA@9 Volts DC
TUNING RANGE—BROADCAST	525 - 1620KC		

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.....GENERAL CEMENT #8607, 9291, 9294
 WALSCO #2520, 2522, 2523, 2524, 2534, 2537

A3, A5.....GENERAL CEMENT #5004, 5009, 8195, 8274, 8275, 8607, 8728, 8987, 8988, 8989, 9291
 WALSCO #2515, 2520, 2522, 2523, 2532, 2534, 2537, 2538, 2531

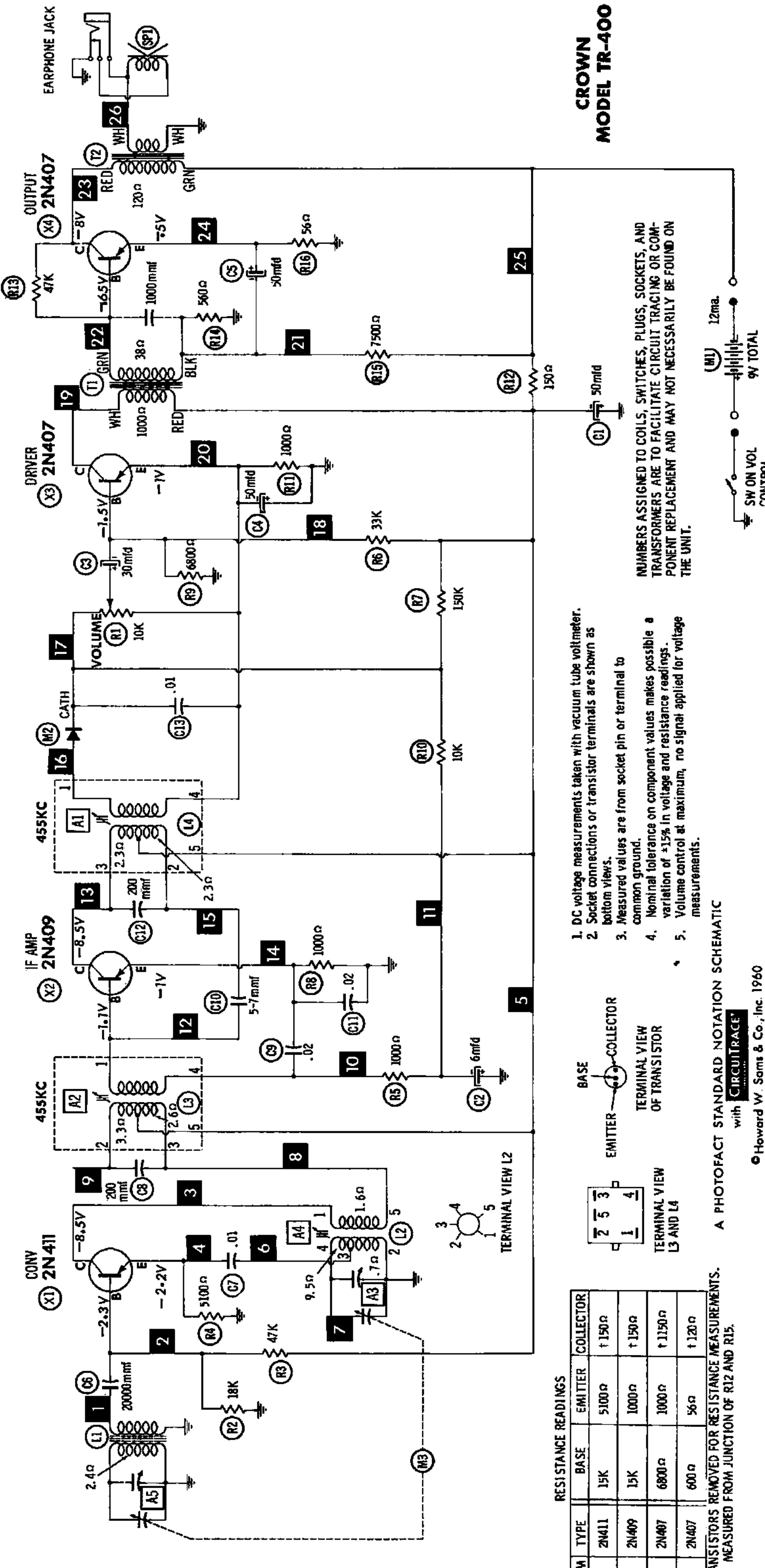
	SIGNAL GENERATOR COUPLING	SIGNAL GENERATOR FREQUENCY	RADIO DIAL SETTING	OUTPUT METER	ADJUST	REMARKS
1.	Loop	455KC (400v Mod.)	Tuning gang fully open.	Across voice coil.	A1, A2	Fashion loop of several turns of wire and radiate signal into loop of receiver. Adjust for maximum output.
2.	"	1620KC	"	"	A3	"
3.	"	600KC	600KC	"	A4	"
4.	"	1400KC	Tune to 1400KC Signal.	"	A5	Adjust for maximum output while rocking tuning gang.

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

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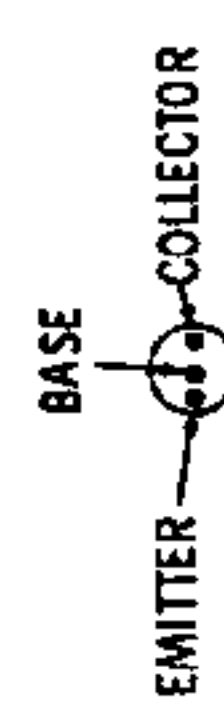
CROWN MODEL TR-400



RESISTANCE READINGS

ITEM	TYPE	BASE	EMITTER	COLLECTOR
X1	2N411	15K	5100Ω	† 150Ω
X2	2N409	15K	1000Ω	† 150Ω
X3	2N407	6800Ω	1000Ω	† 1150Ω
X4	2N407	600Ω	56Ω	† 120Ω

TRANSISTORS REMOVED FOR RESISTANCE MEASUREMENTS.
† MEASURED FROM JUNCTION OF R12 AND R15.



1. DC voltage measurements taken with vacuum tube volt meter.
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 ±15% in voltage and resistance readings.
5. Volume control at maximum, no signal applied for voltage measurements.

A PHOTOFAC T STANDARD NOTATION SCHEMATIC
with **CIRCUITAGE**

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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.

PARTS LIST AND DESCRIPTIONS

TRANSISTORS

ITEM No.	ORIG. TYPE	USE	REPLACEMENT DATA				NOTES
			CBS PART No.	RCA PART No.	RAYTHEON PART No.	SYLVANIA PART No.	
X1	2N411	Converter IF Amplifier Driver Output		2N411	2N486	2N411	PNP
X2	2N409			2N409	2N484	2N409	PNP
X3	2N407			2N407	2N362	2N383	PNP
X4	2N407			2N407	2N631	2N383	PNP

ELECTROLYTIC CAPACITORS

ITEM No.	RATING		REPLACEMENT DATA						NOTES
	CAP.	VOLT.	CROWN PART No.	AEROVOX PART No.	CORNELL-DUBILIER PART No.	MALLORY PART No.	PYRAMID PART No.	SPRAGUE PART No.	
C1	50	10		XPP-10050	NLW50-10	TT10X50	ML50-15	TE-1119	
C2	6	6		XPP-6006	NLW6-15	TT6X5	ML6-6	TE-1085	
C3	30	6		XPP-6030	NLW30-6	TT6X30	ML30-6	TE-1092	
C4	50	6		XPP-8050	NLW50-6	TT6X50	ML50-6	TE-1100	
C5	50	6		XPP-8050	NLW50-6	TT6X50	ML50-6	TE-1100	

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.
C6	20000		C80V203AM V84C2S1 SI 200 V84C2S22 V84C2S22 SI 200 V84CS1	DDM-203 DDM-103 DD-201 DDM-203 DDM-203 DD-201 DDM-103	H-05S2 H-05S1 L10T2 H-05S2 H-05S2 L10T2 H-05S1	CCD-201	TA-120 TA-110 GP320 TA-120	TG-S20 TG-S10 10TS-T20 TG-S20
C7	.01 50V							
C8	200							
C9	.02 500V							
C10	5-7							
C11	.02 50V							
C12	200	CCD-201				TA-120 GP320 TA-110	TG-S20 10TCC-T20 TG-S1	
C13	.01 50V							

CONTROLS

ITEM No.	RATING		REPLACEMENT DATA					INSTALLATION NOTES
	RESISTANCE	WATTS	CROWN PART No.	CENTRALAB PART No.	CLAROSTAT PART No.	CTS-IRC PART No.	MALLORY PART No.	
R1	10K	1/4	B16-216					Volume & Switch

RESISTORS

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

ITEM No.	RATING	REMARKS
R2	18K	
R3	47K	
R4	5100Ω	
R5	1000Ω	
R6	33K	

ITEM No.	RATING	REMARKS
R7	150K	
R8	1000Ω	
R9	6800Ω	
R10	10K	
R11	1000Ω	

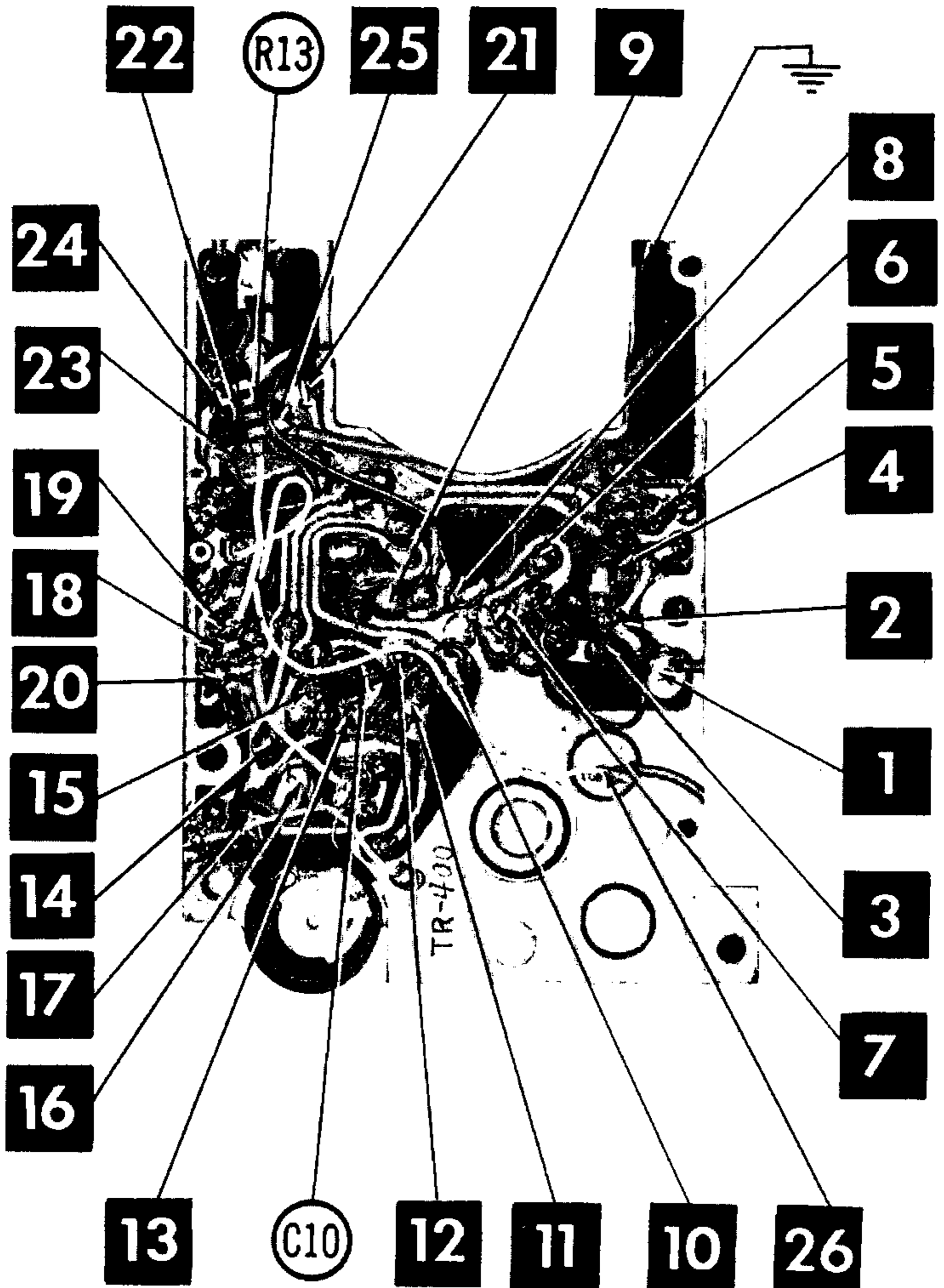
ITEM No.	RATING	REMARKS
R12	150Ω	
R13	47K	
R14	560Ω	
R15	7500Ω	
R16	56Ω	

COILS (RF-IF)

ITEM No.	USE	REPLACEMENT DATA						NOTES
		CROWN PART No.	Gramer PART No.	Meissner PART No.	Merit PART No.	Miller PART No.	Rom PART No.	
L1	Loopstick							
L2	Osc. Coil							
L3	1st IF Trans.							
L4	2nd IF Trans.							

PRINTED BOARD

A Howard W. Sams **CIRCUITRACE** Photo



PARTS LIST AND DESCRIPTIONS (Continued)

TRANSFORMER (DRIVER)

ITEM No.	TURNS RATIO		REPLACEMENT DATA						NOTES
			CROWN PART No.	Halldarson PART No.	Merit PART No.	Stancor PART No.	Thordarson PART No.	Triad PART No.	
	PRI.	SEC.							
T1	3	1	TRT-1						

TRANSFORMER (AUDIO OUTPUT)

ITEM No.	IMPEDANCE		REPLACEMENT DATA						NOTES
			CROWN PART No.	Halldarson PART No.	Merit PART No.	Ram PART No.	Stancor PART No.	Thordarson PART No.	
	PRI.	SEC.							
T2	580Ω	6-8Ω	TRT-6					TA-23	

SPEAKER

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

BATTERIES

ITEM No.	VOLTAGE	CROWN PART No.	REPLACEMENT DATA						NOTES
			BURGESS		EVEREADY		MALLORY		
			"A"	"B"	"A"	"B"	"A"	"B"	
M1	9V			P6M		226		M1600	

CRYSTAL DIODES

ITEM No.	ORIG. TYPE	REPLACEMENT DATA				NOTES
		CROWN PART No.	CBS PART No.	RAYTHEON PART No.	SYLVANIA PART No.	
M2	BD-46		1N60	1N60	1N60	Detector (Pigtall)

MISCELLANEOUS

ITEM No.	PART NAME	CROWN PART No.	NOTES
M3	Tuning Cap. Printed Board	TR-400	2 Gang

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

