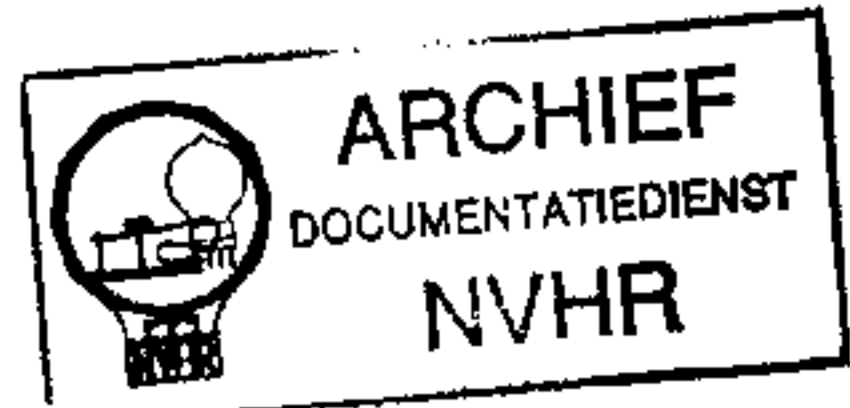


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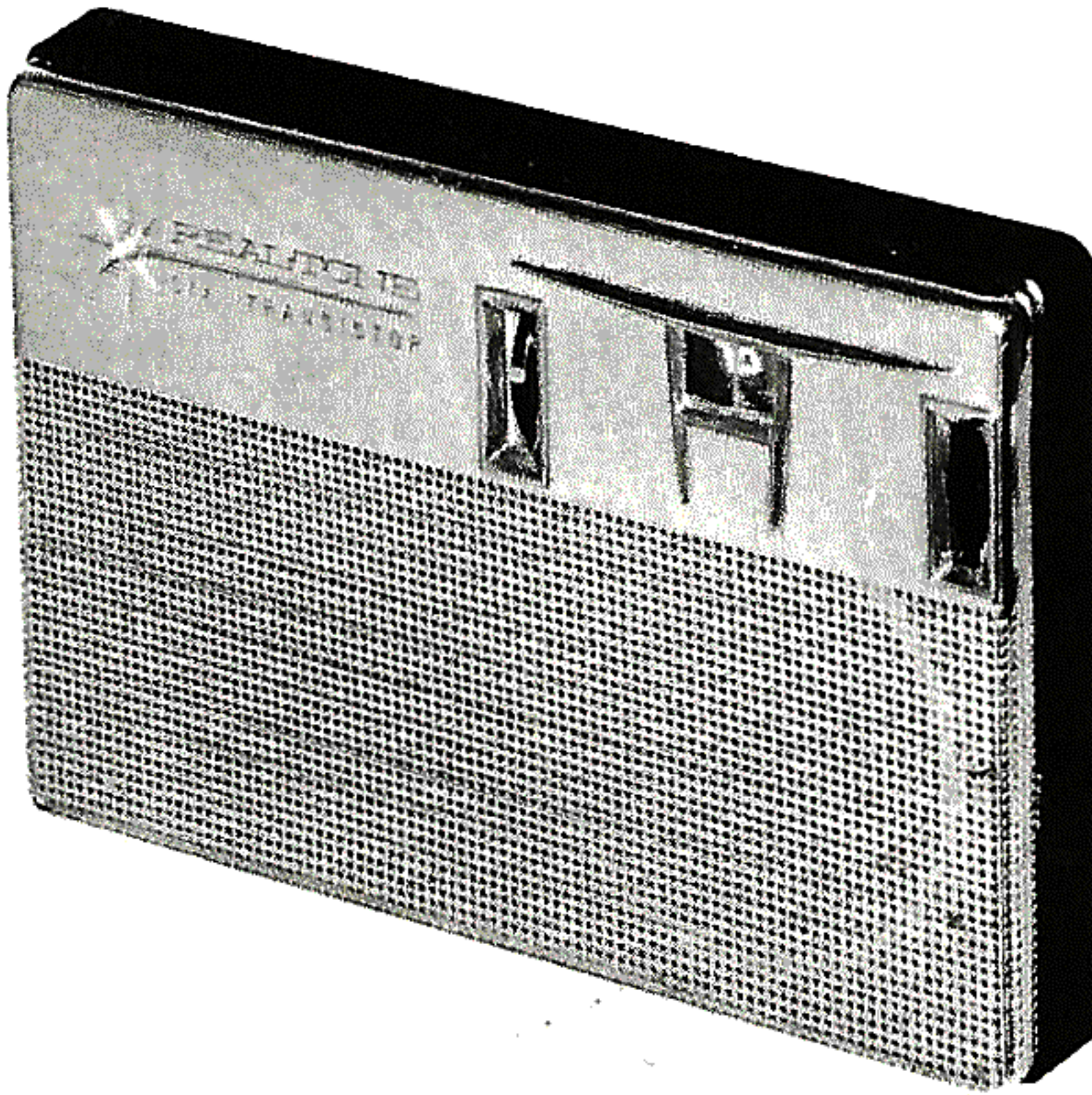
with CIRCUITRACE®

REALTONE MODEL
TR-806-1 (ULTIMA)

Ned. Ver. v. Historie v/d Radio



Met dank aan Jef Bos



TRADE NAME	Realtone Model TR-806-1 (Ultima)		
IMPORTER	Realtone Electronics, 71 Fifth Ave., New York 3, N. Y.		
TYPE SET	Battery Operated 6 Transistor Portable AM Receiver		
POWER SUPPLY	9 Volts DC	RATING	7MA @ 9 Volts DC (No Signal, Min. Volume)
TUNING RANGE—BROADCAST	535 — 1805KC		12MA @ 9 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..... GENERAL CEMENT #8607, 9291, 9294
WALSCO #2520, 2522, 2523, 2524, 2534, 2537
- A4..... GENERAL CEMENT #8282, 8606, 8606-L, 9091
WALSCO #2526, 2541, 2542, 2543, 2544
- A5, A7..... GENERAL CEMENT #5000, 5003, 5066, 8276, 8290, 9087, 9089
WALSCO #2512, 2525, 2528

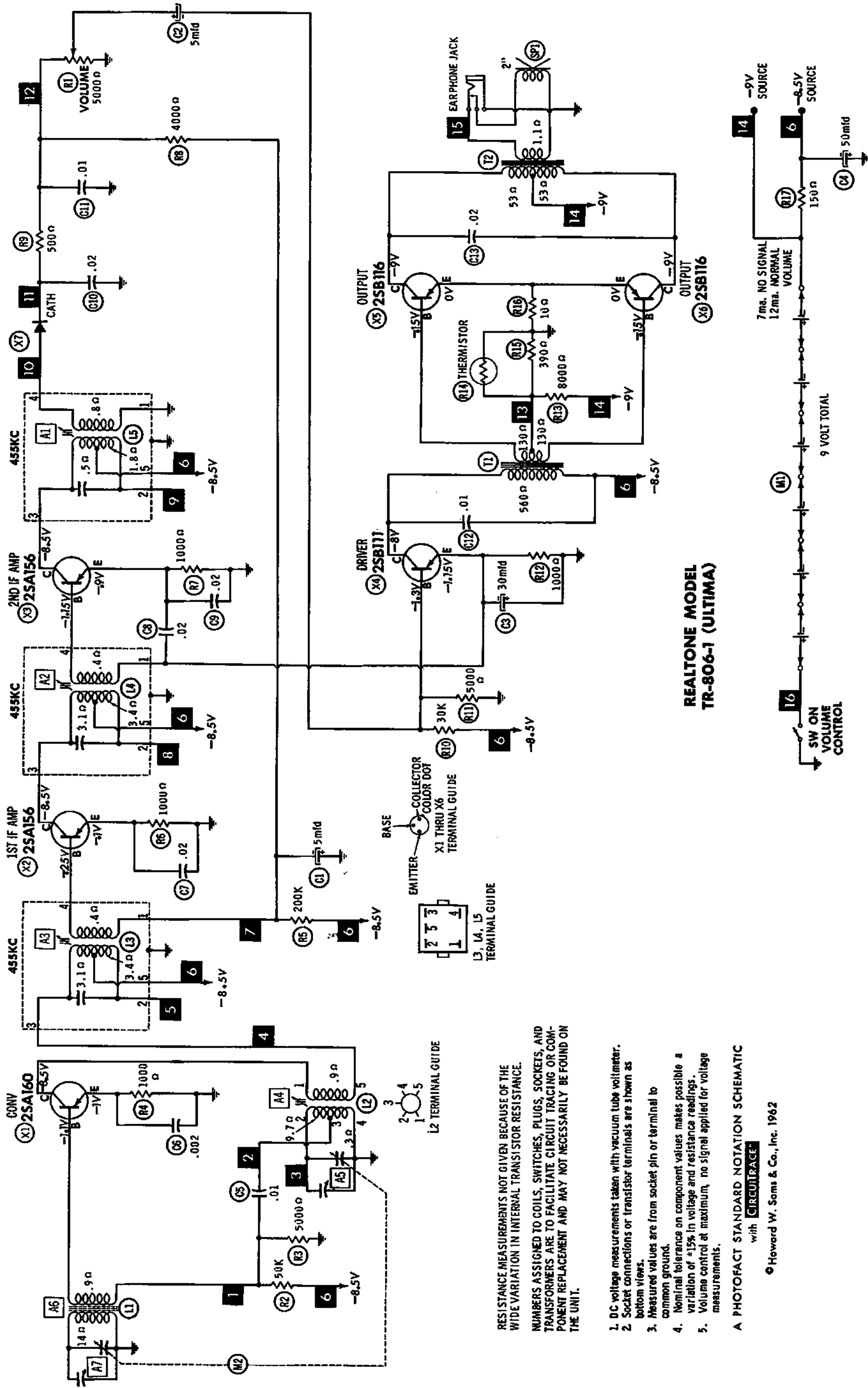
	SIGNAL GENERATOR COUPLING	SIGNAL GENERATOR FREQUENCY	RADIO DIAL SETTING	CONNECT VTVM	ADJUST	REMARKS
1.	High side thru .01mfd to Base of Converter, low side of chassis.	455KC (400% Mod.)	Tuning gang fully open.	Across volume control.	A1, A2, A3	Adjust for maximum deflection.
2.	Fashion loop of several turns of wire and radiate signal into loop of receiver.	535KC	535KC	"	A4	Adjust for maximum deflection while rocking tuning gang.
3.	"	1605KC	1605KC	"	A5	Adjust for maximum deflection.
4.	"	600KC	600KC	"	A6	Adjust for maximum output by moving antenna coil turns along ferrite core.
5.	"	1400KC	1400KC	"	A7	Adjust for maximum output. Repeat Steps 2 thru 5.

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 LF403

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





**REALTONE MODEL
TR-806-1 (ULTIMA)**

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.

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 ±15% in voltage and resistance readings.
5. Volume control at maximum, no signal applied for voltage measurements.

A PHOTOFAC STANDARD NOTATION SCHEMATIC with **CIRCUITRACE**

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PARTS LIST AND DESCRIPTIONS

TRANSISTORS

ITEM No.	ORIG. TYPE	USE	REPLACEMENT DATA		NOTES
			RCA PART No.	RAYTHEON PART No.	
X1	2SA160	Converter	2N412		PNP
X2	2SA156	1st IF Amplifier	2N410		PNP
X3	2SA156	2nd IF Amplifier	2N410		PNP
X4	2SB111	Driver	2N406		PNP
X5	2SB116	Output	2N408		PNP
X6	2SB116	Output	2N408		PNP

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.	
X7		806-1-D1			1N60	Detector (1N60 or SD-46)

ELECTROLYTIC CAPACITORS

ITEM No.	RATING		REPLACEMENT DATA						
	CAP.	VOLT.	REALTONE PART No.	AEROVOX PART No.	CORNELL-DUBILIER PART No.	GENERAL ELECTRIC PART No.	MALLORY PART No.	PYRAMID PART No.	SPRAGUE PART No.
C1	5	6	806-1-C3		NLW5-15	MT1-3	TT8X5	MLV5-6	TE-1084
C2	5	6	806-1-C9		NLW5-15	MT1-3	TT8X5	MLV5-8	TE-1084
C3	30	6	806-1-C10		NLW30-6	MT1-13	TT8X30	MLV30-6	TE-1092
C4	50	10	806-1-C13						

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.
C5	.01		C80V103AM	DM-103	H-05S1		TA-110	TG-S10
C6	.002		BPD-002	DD-202	BYA10D2	CCD-202	B-220	5HK-D20
C7	.02		C80V203AM	DA-203	H-05S2		TA-120	TG-S20
C8	.02		C80V203AM	DA-203	H-05S2		TA-120	TG-S20
C9	.02		C80V203AM	DA-203	H-05S2		TA-120	TG-S20
C10	.02		C80V203AM	DA-203	H-05S2		TA-120	TG-S20
C11	.01		C80V103AM	DM-103	H-05S1		TA-110	TG-S10
C12	.01		C80V103AM	DM-103	H-05S1		TA-110	TG-S10
C13	.02		C80V203AM	DA-203	H-05S2		TA-120	TG-S20

CONTROLS

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

ITEM No.	USE	RESISTANCE	REPLACEMENT DATA				
			REALTONE PART No.	CENTRALAB PART No.	CLAROSTAT PART No.	CTS-IRC PART No.	MALLORY PART No.
R1	Volume & Switch	5000Ω	806-1-VR				

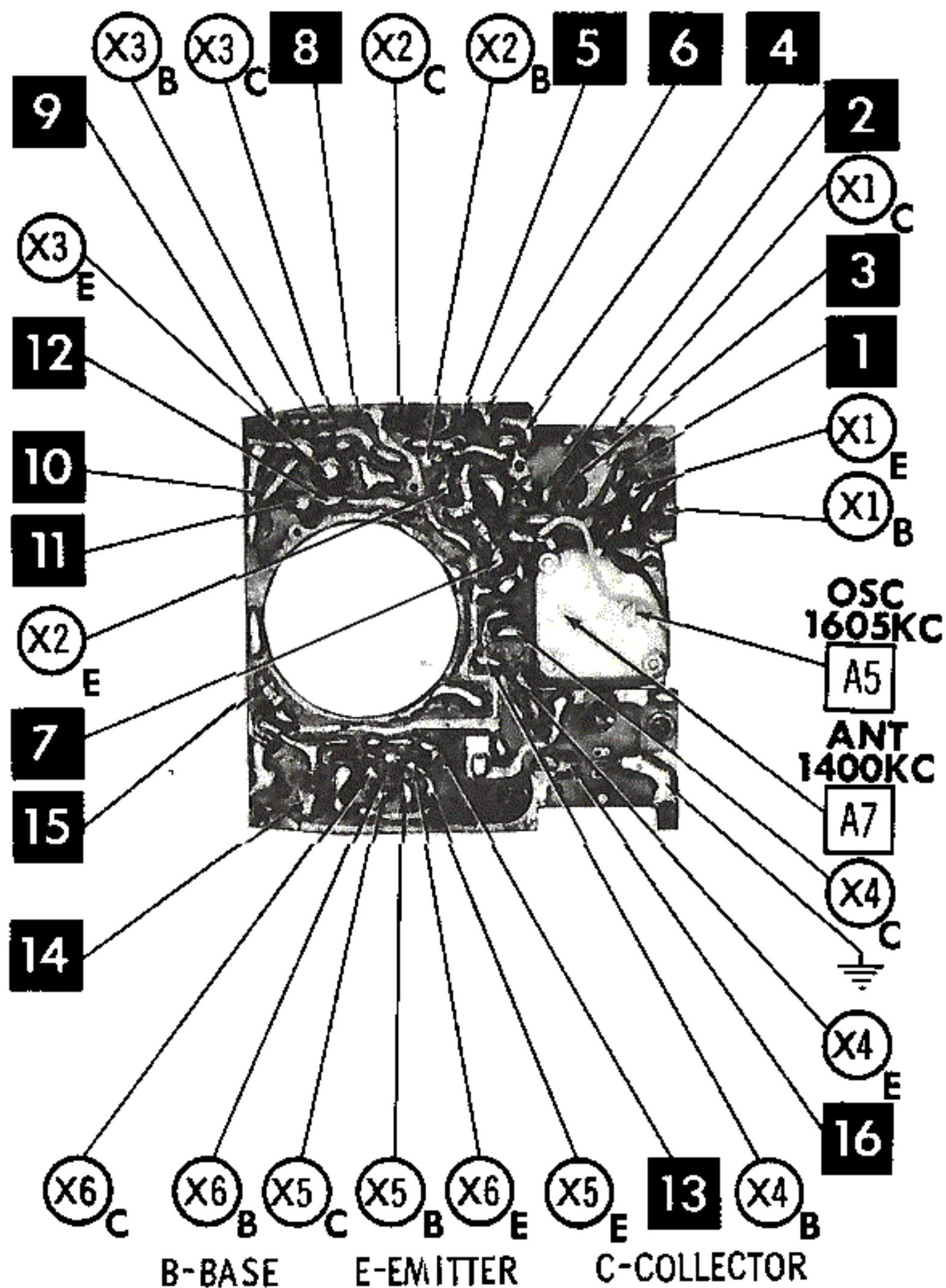
RESISTORS

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	50K				R10	30K			
R3	5000Ω				R11	5000Ω			
R4	1000Ω				R12	1000Ω			
R5	200K				R13	8000Ω			
R6	1000Ω				R14	Thermistor			
R7	1000Ω				R15	390Ω			
R8	4000Ω				R16	10Ω			
R9	500Ω				R17	150Ω			

PRINTED BOARD

A Howard W. Sams **CIRCUITRACE** Photo



PARTS LIST AND DESCRIPTIONS (Continued)

COILS (RF-IF)

ITEM No.	USE	REPLACEMENT DATA					NOTES
		REALTONE PART No.	Merit PART No.	Miller PART No.	Stancor PART No.	Workman PART No.	
L1	Loopstick	806-1-A1					
L2	Osc.	806-1-O1					
L3	1st IF	806-1-IFT1					
L4	2nd IF	806-1-IFT2					
L5	3rd IF	806-1-IFT3					

TRANSFORMER (DRIVER)

ITEM No.	TURNS RATIO		REPLACEMENT DATA					NOTES
	PRI.	SEC.	REALTONE PART No.	Merit PART No.	Stancor PART No.	Thordarson PART No.	Triad PART No.	
T1	1.2	1	806-1-IT1					

TRANSFORMER (AUDIO OUTPUT)

ITEM No.	IMPEDANCE		REPLACEMENT DATA					NOTES
	PRI.	SEC.	REALTONE PART No.	Merit PART No.	Stancor PART No.	Thordarson PART No.	Triad PART No.	
T2	1200Ω CT	6-8Ω	806-1-OT1					

SPEAKER

ITEM No.	TYPE			REPLACEMENT DATA		NOTES
	SIZE	FIELD	V. C. IMP.	REALTONE PART No.	QUAM PART No.	
SP1	2"	PM	6-8Ω	806-1-SP1		

BATTERIES

ITEM No.	VOLTAGE	REALTONE PART No.	REPLACEMENT DATA						NOTES
			BURGESS		EVEREADY		MALLORY		
			"A"	"B"	"A"	"B"	"A"	"B"	
M1	1½V			930		1015		M-15R	6 Required

MISCELLANEOUS

ITEM No.	PART NAME	REALTONE PART No.	NOTES
M2	Tuning Cap.	806-1-VC	2 Gang (Osc. 5-58mmf, Ant. 5-128mmf)

CABINETS & CABINET PARTS

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

NAME	PART NO.	DESCRIPTION
Knob, Volume	806-1-104	
Knob, Dial	806-1-103	
Cabinet, Front	806-1-101	
Cabinet, Back	806-1-102	
Lens, Dial	806-1-105	
Metal Front	806-1-106	
Dial, Plastic	806-1-109	

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

