

PHOTOFACT® Folder

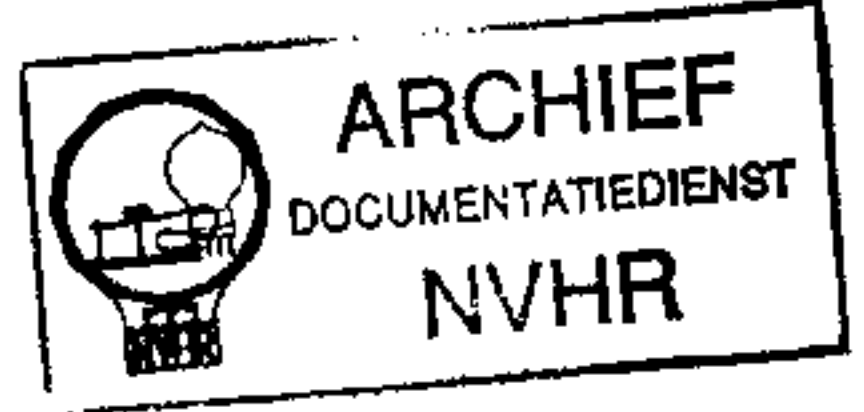
with CIRCUITRACE

TRUETONE  
MODEL DC3090



Met dank aan Jef Bos

Ned. Ver. v. Historie v/d Radi



TRADE NAME	Truetone Model DC3090
SUPPLIER	Western Auto Supply Co., 2107 Grand Ave., Kansas City 8, Mo.
TYPE SET	Battery Operated Transistorized Portable AM Receiver
POWER SUPPLY	9 Volts DC RATING IMA @ 9 Volts DC
TUNING RANGE-BROADCAST	535-1650KC

## 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 #5004, 5009, 8195, 8274, 8275, 8607, 8728, 8987, 8988, 8989, 9291

WALSCO #2515, 2520, 2522, 2523, 2531, 2532, 2534, 2537, 2538

A3, A5.....GENERAL CEMENT #5000, 5003, 5066, 8276, 8290, 9087, 9089  
WALSCO #2512, 2525, 2528

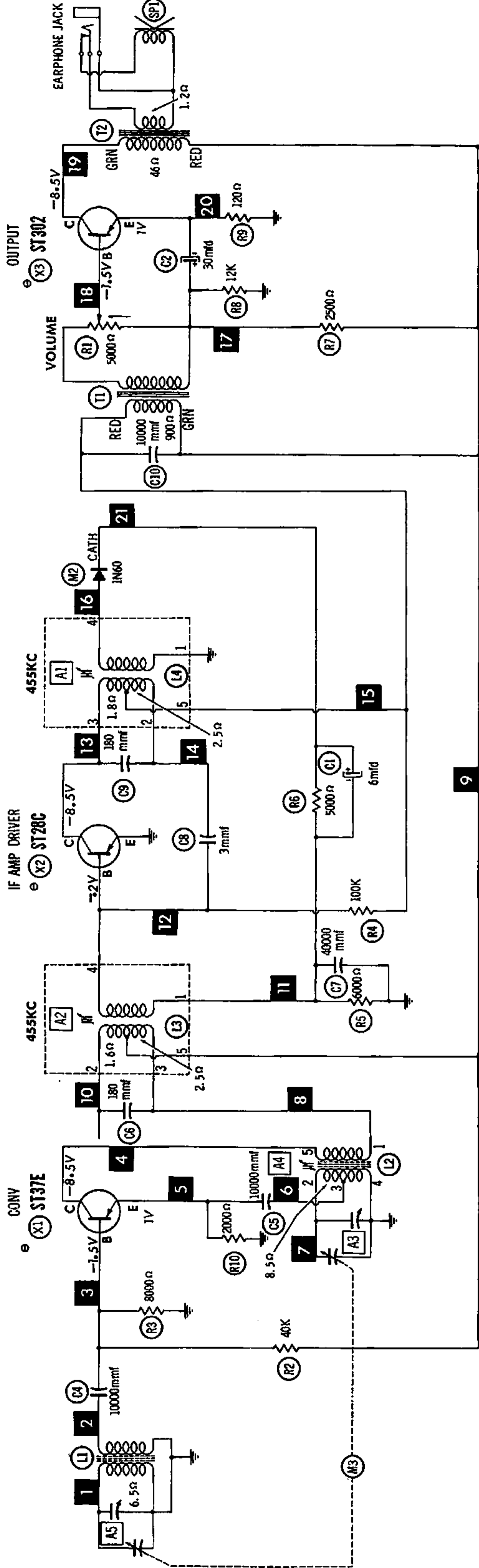
	SIGNAL GENERATOR COUPLING	SIGNAL GENERATOR FREQUENCY	RADIO DIAL SETTING	OUTPUT METER	ADJUST	REMARKS
1	Loop	455KC (400% mod.)	Tuning gang fully open	Across voice coil	A1, A2	Fashion loop of several turns of wire and radiate signal into loop of receiver. Adjust for maximum output.
2	"	1600KC	1600KC	"	A3	"
3	"	800KC	800KC	"	A4	Adjust for maximum output while rocking tuning gang.
4	"	1400KC	Tune to 1400KC signal	"	A5	"

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

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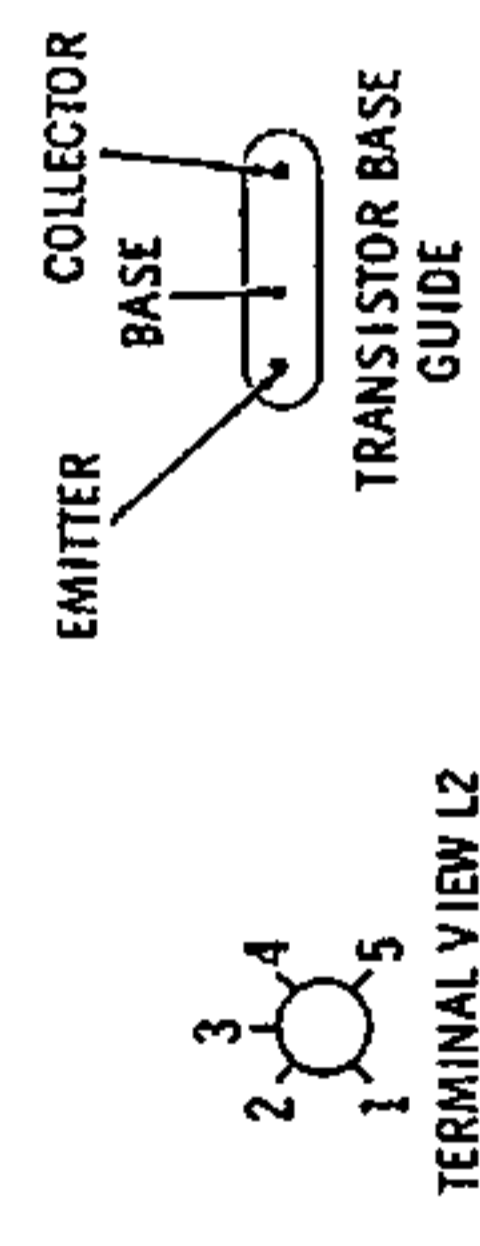
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1. DC voltage measurements taken with vacuum tube voltmeter.
2. Socket connections are shown as bottom views.
3. Measured values are from socket pin to common positive.
4. Nominal tolerance on component values makes possible a variation of ±15% in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

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.

### TRUETONE MODEL DC3090

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

# 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	ST-37E <sup>①</sup>	Converter		2N411	2N486	2N412	PNP
X2	ST-28C <sup>②</sup>	IF Amp - Driver		2N409	2N483	2N410	PNP
X3	ST-302 <sup>③</sup>	Output		2N407	2N633	2N408	PNP

- ① Alternate types 2S30, 2N411, 2N412 may be used.  
 ② Alternate types 2S31, 2N409, 2N410 may be used.  
 ③ Alternate types 2S33, 2N407, 2N408 may be used.

## ELECTROLYTIC CAPACITORS

ITEM No.	RATING		REPLACEMENT DATA						NOTES
	CAP.	VOLT.	TRUETONE PART No.	AEROVOX PART No.	CORNELL-DUBILIER PART No.	MALLORY PART No.	PYRAMID PART No.	SPRAGUE PART No.	
C1	6	6			NLW231	TT6X5	ML0-0	TE-1085	
C2	30	10			NLW260	TT15X30		TE-1132	
C3	30	10			NLW260			TE-1132	

## 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		C80V103AM	DDM-103	H-0581		TA-110	TG-S10
C5	10000		C80V103AM	DDM-103	H-0581		TA-110	TG-S10
C6	180		DI-180	DD-181	L10T18	CCD-181	GP318	10TS-T18
C7	40000							
C8	3		NPO-D13.0	DTZ-3R3	C10V3C	CC70-3R3	CNO-3R3	10TCC-V33
C9	180		DI-180	DD-181	L10T18	CCD-181	GP318	10TS-T18
C10	10000		C80V103AM	DDM-103	H-0581		TA-110	TG-S10

## CONTROLS

ITEM No.	RATING		REPLACEMENT DATA					INSTALLATION NOTES
	RESISTANCE	WATTS	TRUETONE PART No.	CENTRALAB PART No.	CLAROSTAT PART No.	CTS-IRC PART No.	MALLORY PART No.	
R1	5000Ω	1/10		B16-214				Volume & Switch

## RESISTORS

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

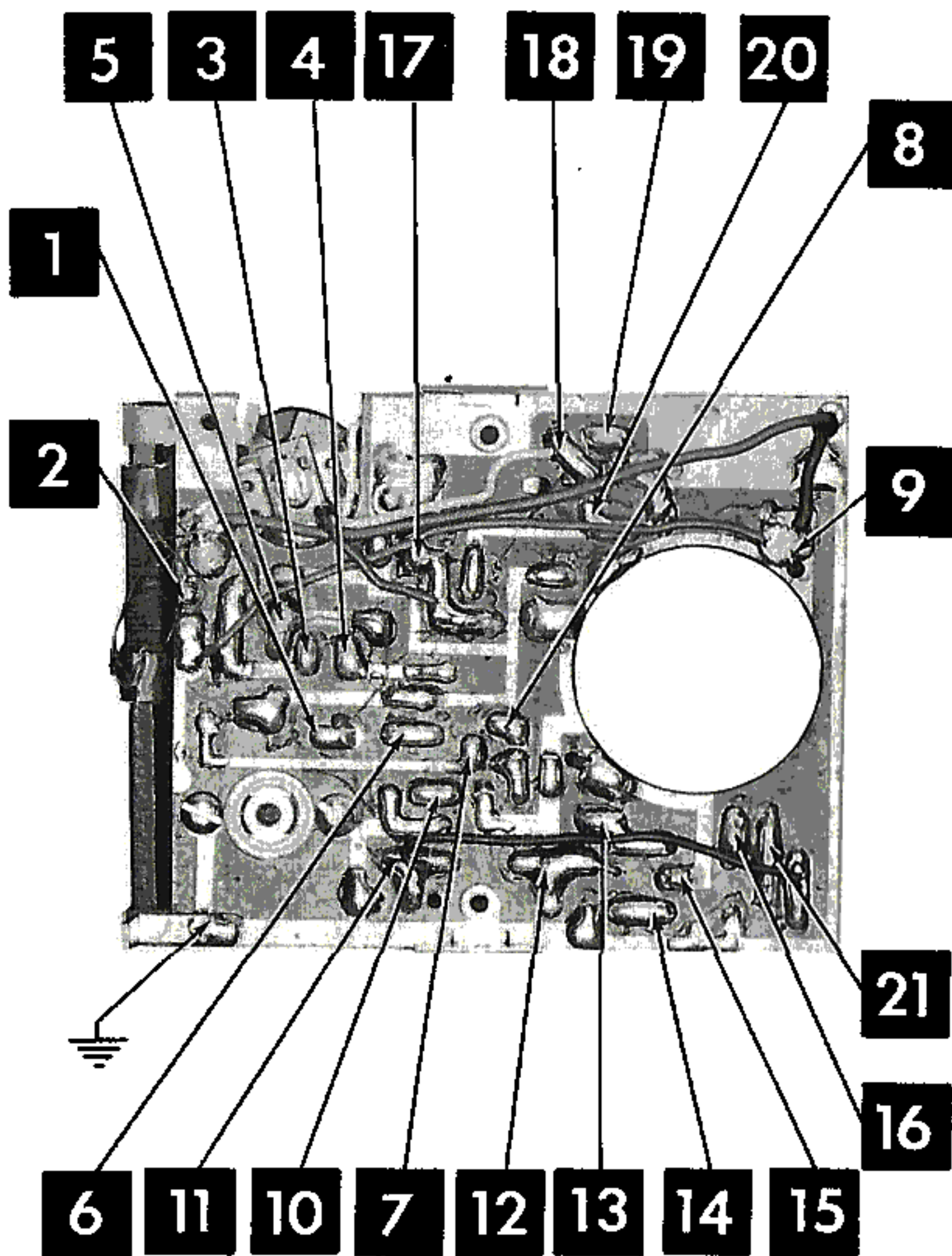
ITEM No.	RATING	REMARKS	ITEM No.	RATING	REMARKS	ITEM No.	RATING	REMARKS
R2	40K		R5	6000Ω		R8	12K	
R3	8000Ω		R6	5000Ω		R9	120Ω	
R4	100K		R7	2500Ω		R10	2000Ω	

## COILS (RF-IF)

ITEM No.	USE	REPLACEMENT DATA						NOTES
		TRUETONE PART No.	Gramer PART No.	Meissner PART No.	Merit PART No.	Miller PART No.	Ram 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
			TRUETONE PART No.	Halldorson PART No.	Merit PART No.	Stancor PART No.	Thordarson PART No.	Triad PART No.	
	PRI.	SEC.							
T1	3.5	1	R-12	TR-42				TR-42	

## TRANSFORMER (AUDIO OUTPUT)

ITEM No.	IMPEDANCE		REPLACEMENT DATA						NOTES
			TRUETONE PART No.	Halldorson PART No.	Merit PART No.	Ram PART No.	Stancor PART No.	Thordarson PART No.	
	PRI.	SEC.							
T2	750Ω	6-8Ω	KR-34					TA-25 ①	

① Tape and ignore primary CT; use 8Ω secondary tap.

## SPEAKER

ITEM No.	TYPE			REPLACEMENT DATA		NOTES
				TRUETONE PART No.	QUAM PART No.	
	SIZE	FIELD	V. C. IMP.			
SP1	2-1/4"	PM	6-8Ω		22A0828	

## BATTERIES

ITEM No.	VOLTAGE	TRUETONE PART No.	REPLACEMENT DATA						NOTES
			BURGESS		EVEREADY		MALLORY		
			"A"	"B"	"A"	"B"	"A"	"B"	
M1	9V			2U6		2I6		M-1604	

## CRYSTAL DIODES

ITEM No.	ORIG. TYPE	REPLACEMENT DATA				NOTES
		TRUETONE PART No.	CBS PART No.	RAYTHEON PART No.	SYLVANIA PART No.	
M2	1N60		1N60	1N60	1N60	Detector (Pigtail)

## MISCELLANEOUS

ITEM No.	PART NAME	TRUETONE PART No.	NOTES
M3	Tuning Cap		2 Gang

## WIRING DATA

General and Unshielded Hook up Wire ..... Use Belden No. 8530 (Solid) Available in Ten Colors  
8524 (Stranded) Available in Ten Colors

**CHASSIS—TOP VIEW**

