

**CHANNEL MASTER
MODEL 6516**

SEE PARTS LIST FOR ALTERNATE VALUE OR APPLICATION

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

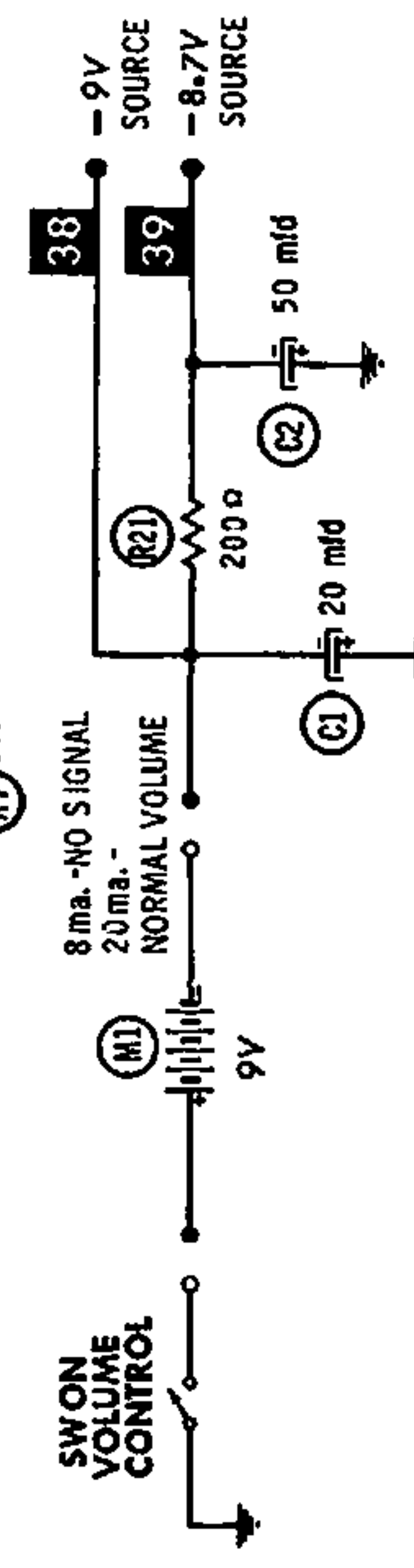
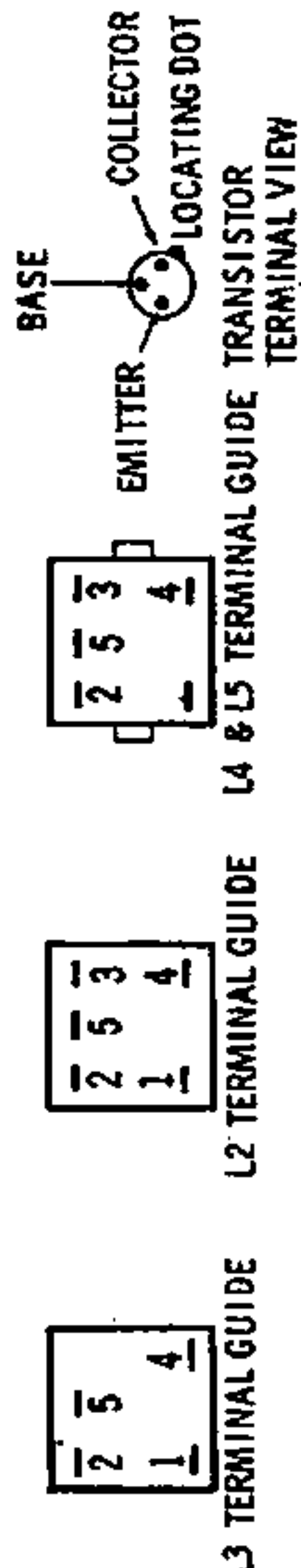
RESISTANCE MEASUREMENTS NOT GIVEN BECAUSE OF THE WIDE VARIATION IN INTERNAL TRANSISTOR RESISTANCE.

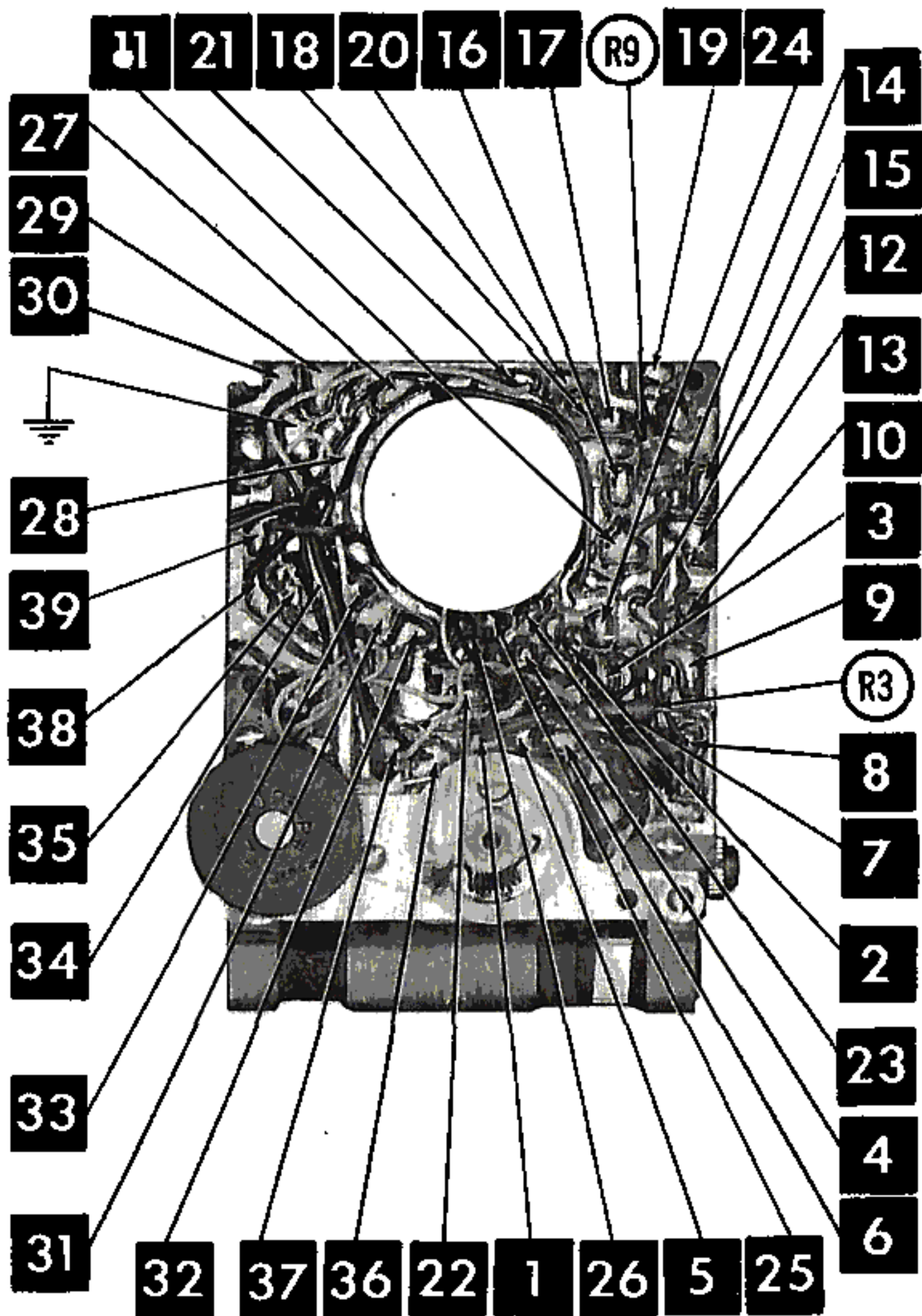
NUMBERS ASSIGNED TO COILS, SWITCHES, PLUGS, SOCKETS, AND TRANSFORMERS ARE TO FACILITATE CIRCUIT TRACING OR COMPONENT REPLACEMENT AND MAY NOT NECESSARILY BE FOUND ON THE UNIT.

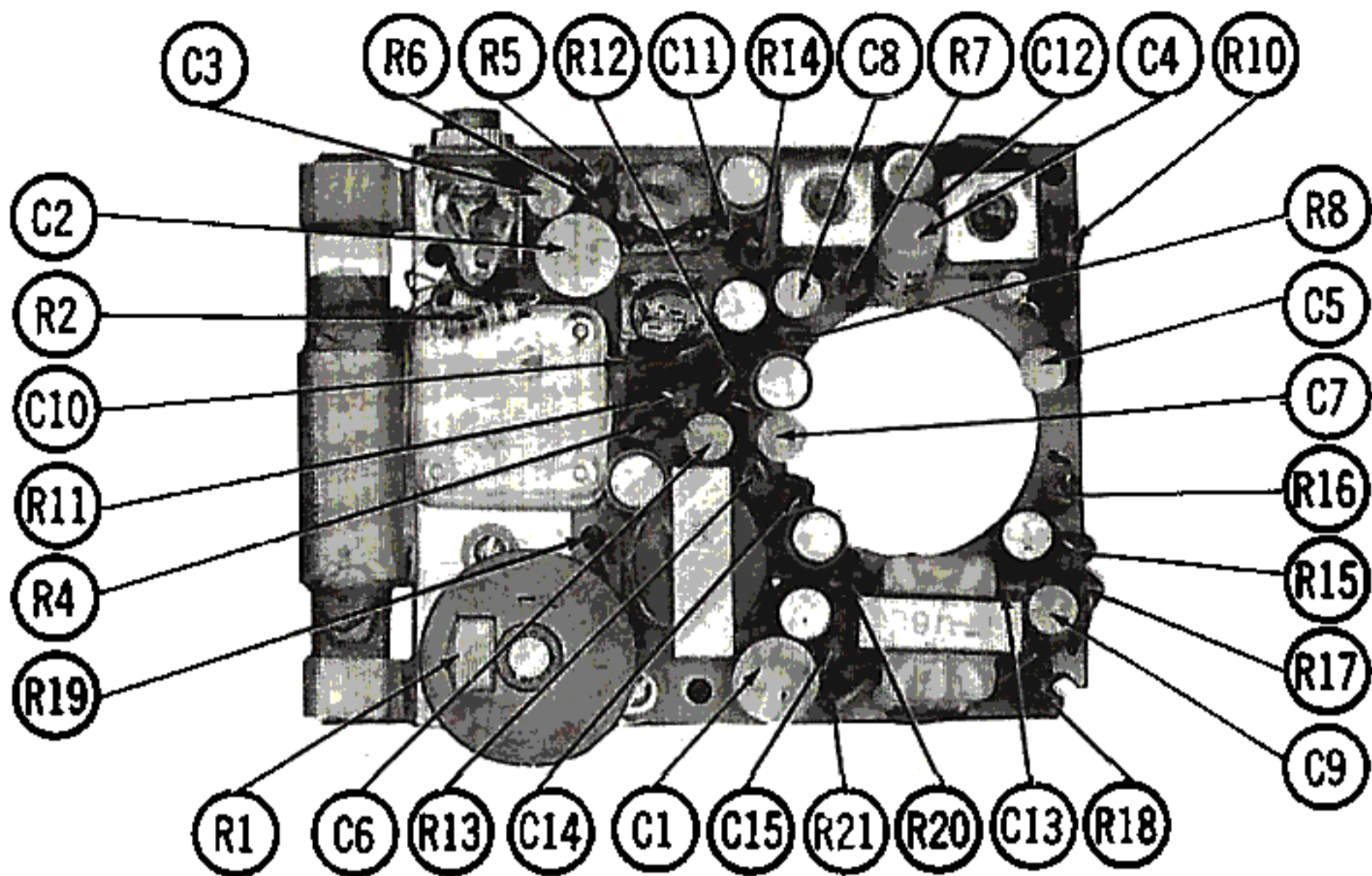
1. DC voltage measurements taken with vacuum tube voltmeter.
2. Socket connections or transistor terminals are shown as bottom views.
3. Measured values are from socket pin or terminal to common ground.
4. Nominal tolerance on component values makes possible a variation of ±15% in voltage and resistance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

PHOTOFACT STANDARD NOTATION SCHEMATIC with CIRCUITRACE

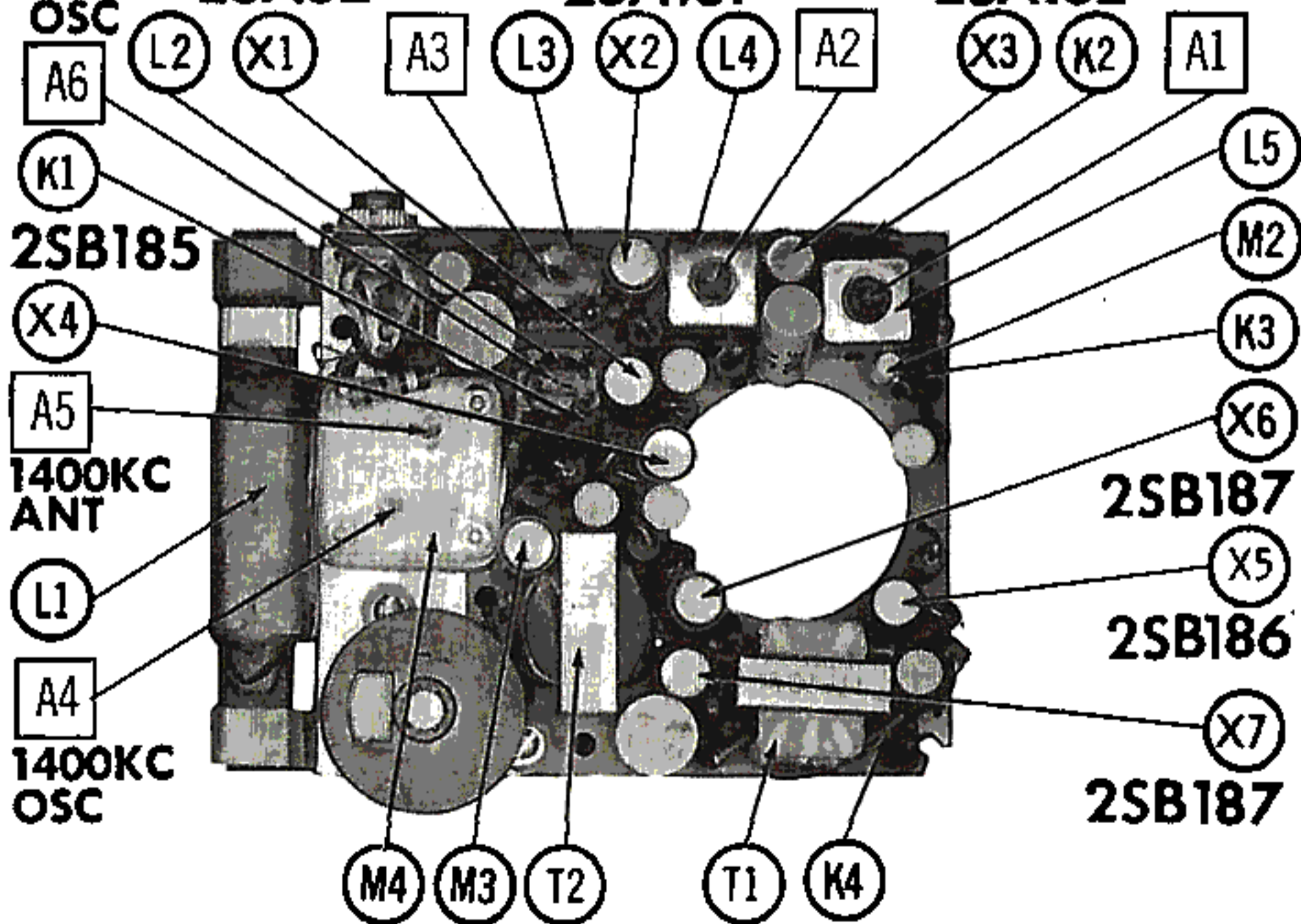
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600KC OSC 2SA52 455KC 2SA181 455KC 2SA182 455KC



PRINTED BOARD-TOP VIEW

PARTS LIST AN

TRANSISTORS

ITEM No.	ORIG. TYPE	USE	REPLACEMENT DATA		NOTES
			RCA PART No.	RAYTHEON PART No.	
X1	2SA52	Converter	2N412	2N486	PNP
X2	2SA180	1st IF Amplifier			PNP
X3	2SA182	2nd IF Amplifier			PNP
X4	2SB185	AF Amplifier			PNP
X5	2SB186	Driver			PNP
X6	2SB187	Output			PNP
X7	2SB187	Output			PNP

ELECTROLYTIC CAPACITORS

ITEM No.	RATING		REPLACEMENT DATA						
	CAP.	VOLT.	Channel Master PART No.	AEROVOX PART No.	CORNELL-DUBILIER PART No.	GENERAL ELECTRIC PART No.	MALLORY PART No.	PYRAMID PART No.	SPRAGUE PART No.
C1	20	9	A011	BCDI2020	MLW20-15	MT1-10	TT15X20	MLV20-12	TE-1130
C2	50	9	A031		NLW50-15	MT1-16	TT10X50	MLV50-10	TE-1119
C3	10	9	A038		NLW10-6	MT1-5	TT3X10	MLV10-3	TE-1053
C4	30	3	A046		NLW30-6	MT1-13	TT6X30	MLV30-6	TE-1082
C5	5	6	A010		NLW5-15	MT1-3	TT6X5	MLV5-6	TE-1084
C6	10	3	A038		NLW10-6	MT1-5	TT3X10	MLV10-3	TE-1053
C7	10	3	A038		NLW10-6	MT1-5	TT3X10	MLV10-3	TE-1053
C8	5	6	A010 ①		NLW5-15	MT1-3	TT6X5	MLV5-6	TE-1084
C9	10	3	A038		NLW10-6	MT1-5	TT3X10	MLV10-3	TE-1053

① Some versions may use 3 volt unit in this application (Part #A063).

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.
C10	.002		BPD-002	DM-202	BYA10D2	CCD-202	GP220	5HK-D20
C11	10		DI-10	DD-100	L10Q1	CCD-100	GP410	10TS-Q10
C12	7		DI-8, 8	DD-6R8	L10V7	CCTO-6R8	GP568	10TS-V68
C13	.005		BPD-005	DM-502	H-05D5	CCD-502	TA-250	TG-D50
C14	.005		BPD-005	DM-502	H-05D5	CCD-502	TA-250	TG-D50
C15	.005		BPD-005	DM-502	H-05D5	CCD-502	TA-250	TG-D50

CONTROLS

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

ITEM No.	USE	RESISTANCE	REPLACEMENT DATA				
			Channel Master PART No.	CENTRALAB PART No.	CLAROSTAT PART No.	CTS-IRC PART No.	MALLORY PART No.
R1	Volume & Switch	5000Ω	E008				

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 TV PART No.	REMARKS			IRC PART No.	WORKMAN TV PART No.	REMARKS
R2	330K				R12	100Ω			
R3	40K				R13	1000Ω			
R4	3500Ω				R14	2500Ω			
R5	90K				R15	28K			
R6	17K				R16	4000Ω			
R7	2200Ω				R17	1000Ω			
R8	4000Ω				R18	15Ω			
R9	5600Ω				R19	4000Ω			
R10	40K				R20	10Ω			
R11	5600Ω				R21	200Ω			

COILS (RF-IF)

ITEM No.	USE	REPLACEMENT DATA					NOTES
		Channel Master PART No.	Merit PART No.	Miller PART No.	Stancor PART No.	Workman TV PART No.	
L1	Loopstick	E028					
L2	Osc.	F198					
L3	1st IF	C052					
L4	2nd IF	C053					
L5	3rd IF	C054					

DESCRIPTIONS

TRANSFORMER (DRIVER)

ITEM No.	TURNS RATIO		REPLACEMENT DATA					NOTES
	PRI.	SEC.	Channel Master PART No.	Merit PART No.	Stancor PART No.	Thordarson PART No.	Triad PART No.	
T1	1.2	1	C050					

TRANSFORMER (AUDIO OUTPUT)

ITEM No.	IMPEDANCE		REPLACEMENT DATA					NOTES
	PRI.	SEC.	Channel Master PART No.	Merit PART No.	Stancor PART No.	Thordarson PART No.	Triad PART No.	
T2	500Ω CT	6-8Ω	C051				TR-102	

SPEAKER

ITEM No.	TYPE			REPLACEMENT DATA		NOTES
	SIZE	FIELD	V. C. IMP.	Channel Master PART No.	QUAM PART No.	
SP1	2 1/4"	PM	6-8Ω	G098	22A06Z8	

COMPONENT COMBINATIONS

ITEM No.	USE	DESCRIPTION	Channel Master PART No.	REPLACEMENT DATA
K1	Converter Emitter		A064	
K2	2nd IF Emitter		A065	
K3	Diode Filter		A066	
K4	Feedback		A067	

BATTERIES

ITEM No.	VOLTAGE	Channel Master PART No.	REPLACEMENT DATA						NOTES
			BURGESS		EVEREADY		MALLORY		
			"A"	"B"	"A"	"B"	"A"	"B"	
M1	9V	006P		2U8		216		M-1604	

SIGNAL DIODES

ITEM No.	ORIG. TYPE	REPLACEMENT DATA			NOTES
		Channel Master PART No.	GENERAL ELECTRIC PART No.	RAYTHEON PART No.	
M2	1N60	F136		1N60	Detector Output Bias
M3	F199				

MISCELLANEOUS

ITEM No.	PART NAME	Channel Master PART No.	NOTES
M4	Tuning Cap. Earphone	A044 E003	2 Gang

CABINETS & CABINET PARTS

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

NAME	PART NO.	DESCRIPTION
Knob	F039	Tuning
Knob	F040	Volume
Cabinet	G023	Black
Cabinet	G024	Red
Case	F073	Leather Carrying, With Strap
Case	F074	Leather, Earphone

WIRING DATA

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