

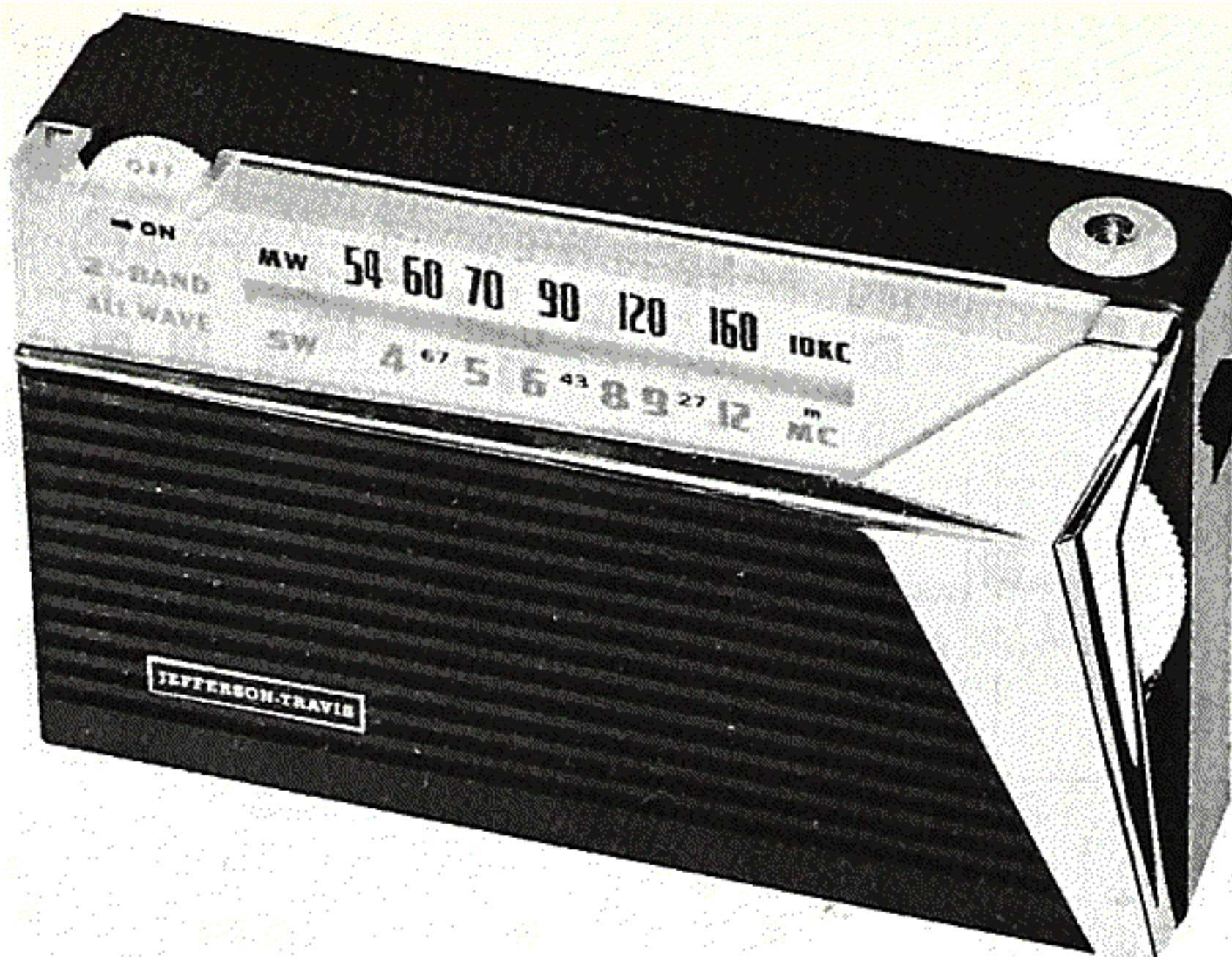
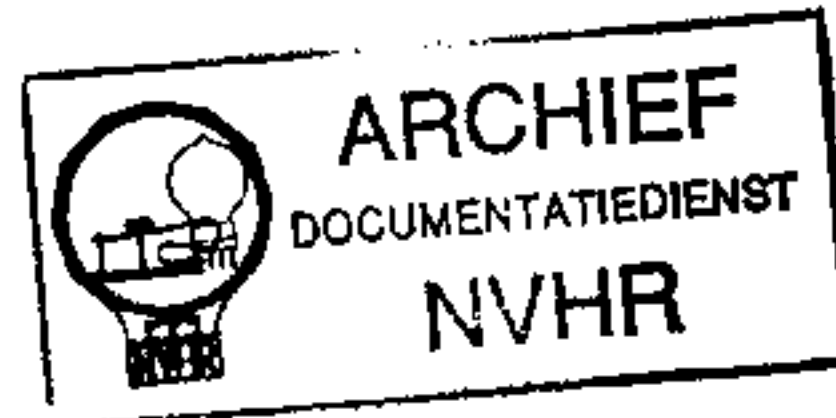
# PHOTOFACT® Folder

with **CIRCUTRACE®**

## JEFFERSON-TRAVIS MODEL JT-G104

Met dank aan Jef Bos

Ned. Ver. v. Historie v/d Radio



TRADE NAME	Jefferson-Travis Model JT-G104		
SUPPLIER	Jefferson-Travis, Inc., Subsidiary of Emerson Radio & Phonograph Corp., 524 W. 23rd St. New York 11, N. Y.		
TYPE SET	Battery Operated Transistorized Portable BC-SW Receiver		
POWER SUPPLY	6 Volts DC	RATING	9MA @ 6 Volts DC (No Signal, Min. Volume)
TUNING RANGE—BROADCAST	540 - 1600KC		15MA @ 6 Volts DC (Signal, Normal Volume)
SHORT WAVE	3.9 - 12MC		

### 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 thru A4. . . . GENERAL CEMENT #8607, 9291, 9294  
 WALSCO #2520, 2522, 2523, 2524, 2537

A5, A7, A9, A11. . . GENERAL CEMENT #5000, 5003, 5066, 8271, 8272, 8276, 8277, 8290, 8609,  
 8722, 9150, 9298

WALSCO #2515, 2516, 2518, 2519, 2525, 2541

A8. . . . . GENERAL CEMENT #8282, 8606, 8606-L, 9091  
 WALSCO #2526, 2541, 2542, 2543, 2544

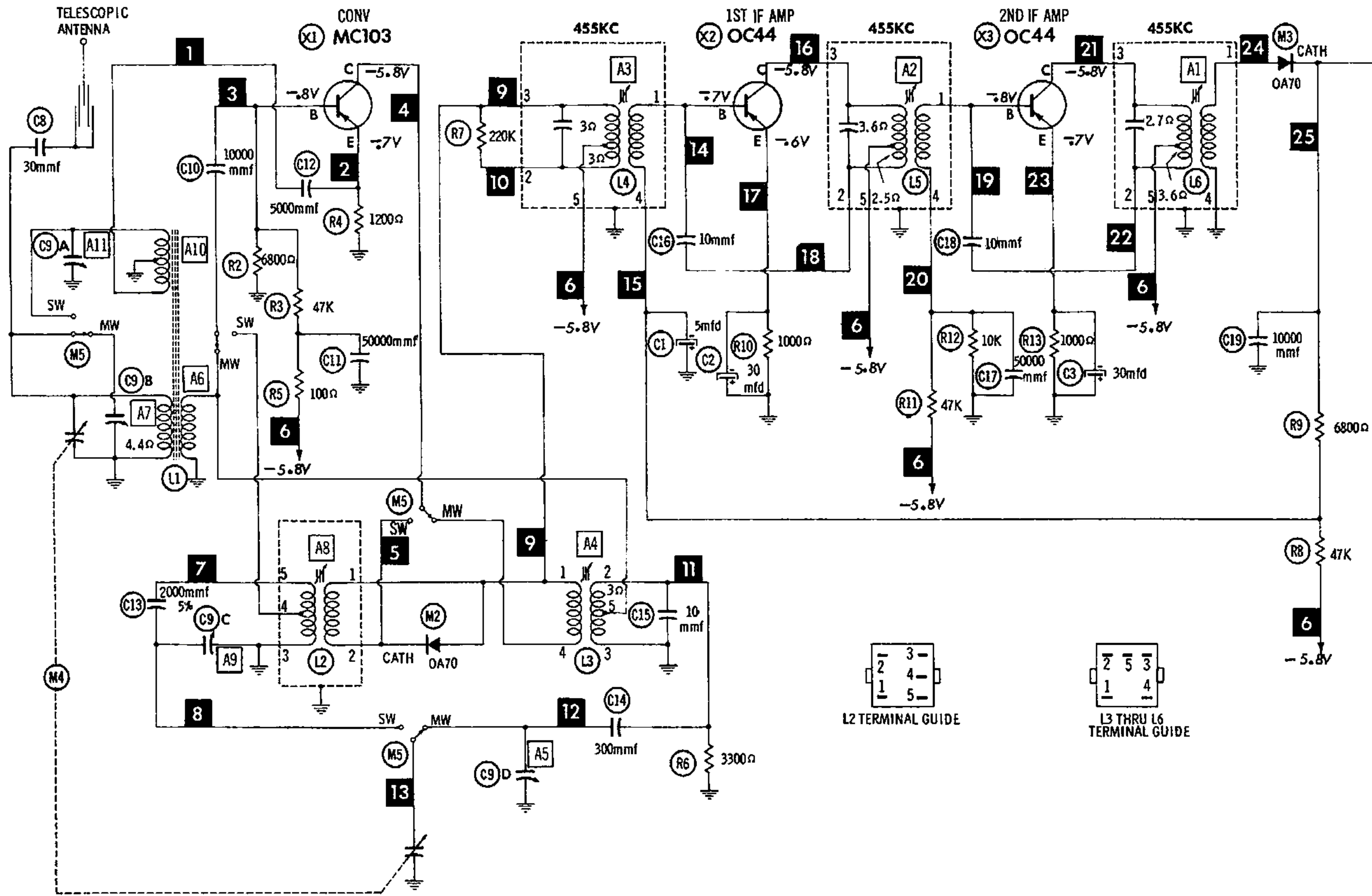
	SIGNAL GENERATOR COUPLING	SIGNAL GENERATOR FREQUENCY	RADIO DIAL SETTING	OUTPUT METER	ADJUST	REMARKS
1.	High side thru .1mfd to antenna stator lug of tuning gang. Low side to chassis.	455KC (400% Mod.)	(MW) Tuning gang fully open.	Across voice coil.	A1, A2, A3	Adjust for maximum output.
2.	High side thru 500K to external antenna. Low side to chassis.	530KC	Tuning gang fully closed.	"	A4	"
3.	"	1650KC	Tuning gang fully open.	"	A5	"
4.	"	630KC	630KC	"	A6	"
5.	"	1400KC	1400KC	"	A7	"
6.	"	3.85MC	(SW) 3.85MC	"	A8	"
7.	"	12.5MC	12.5MC	"	A9	"
8.	"	4MC	4MC	"	A10	"
9.	"	9MC	9MC	"	All	Adjust for maximum output. Repeat Repeat Steps 2 thru 9.

**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

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. © 1961 Howard W. Sams & Co., Inc., Indianapolis 6, Indiana. Printed in U.S. of America



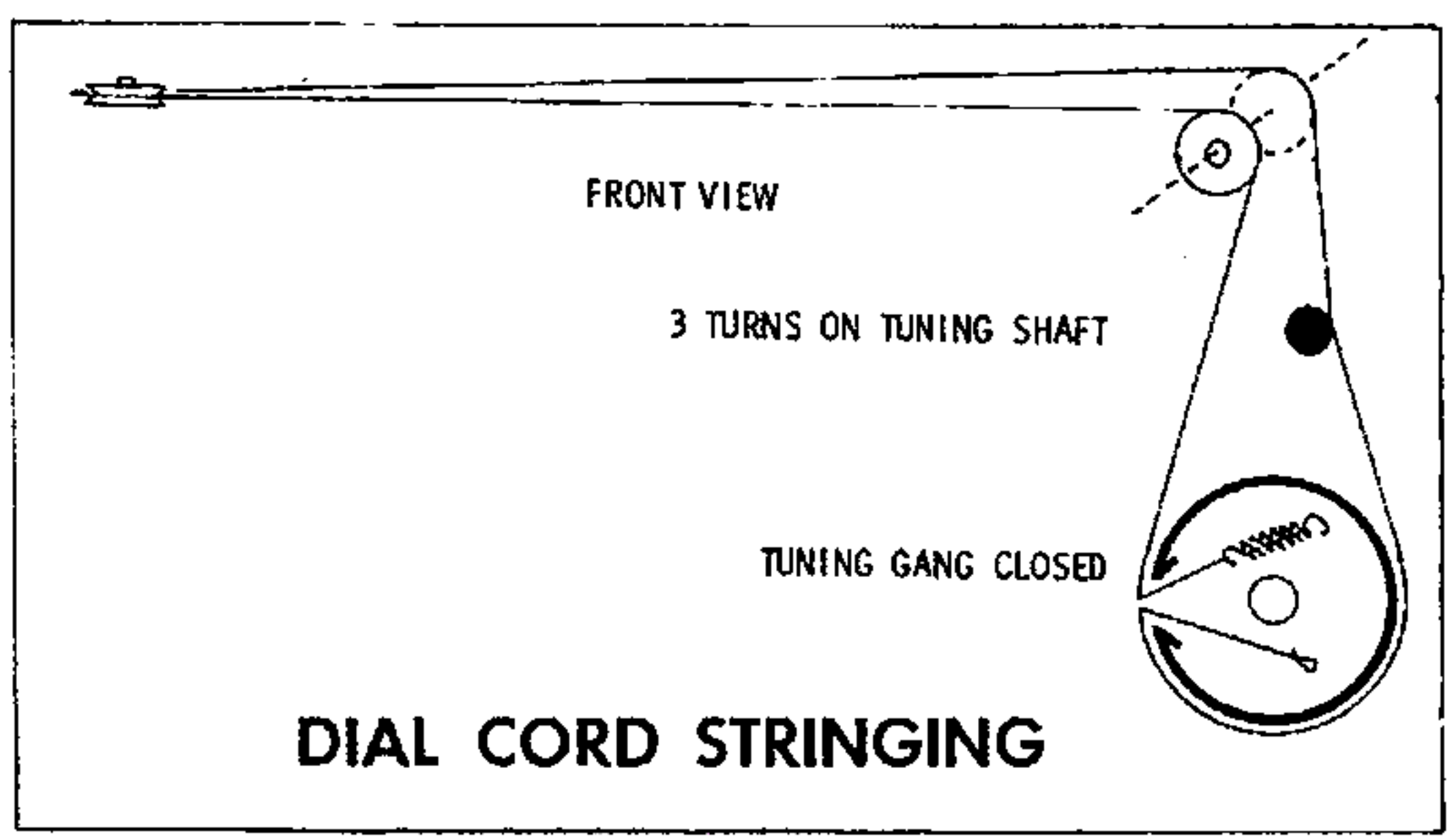


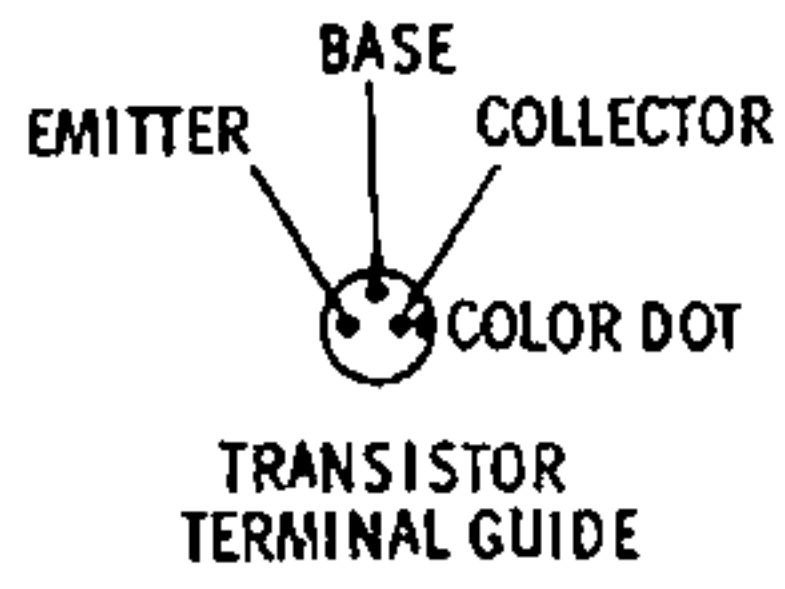
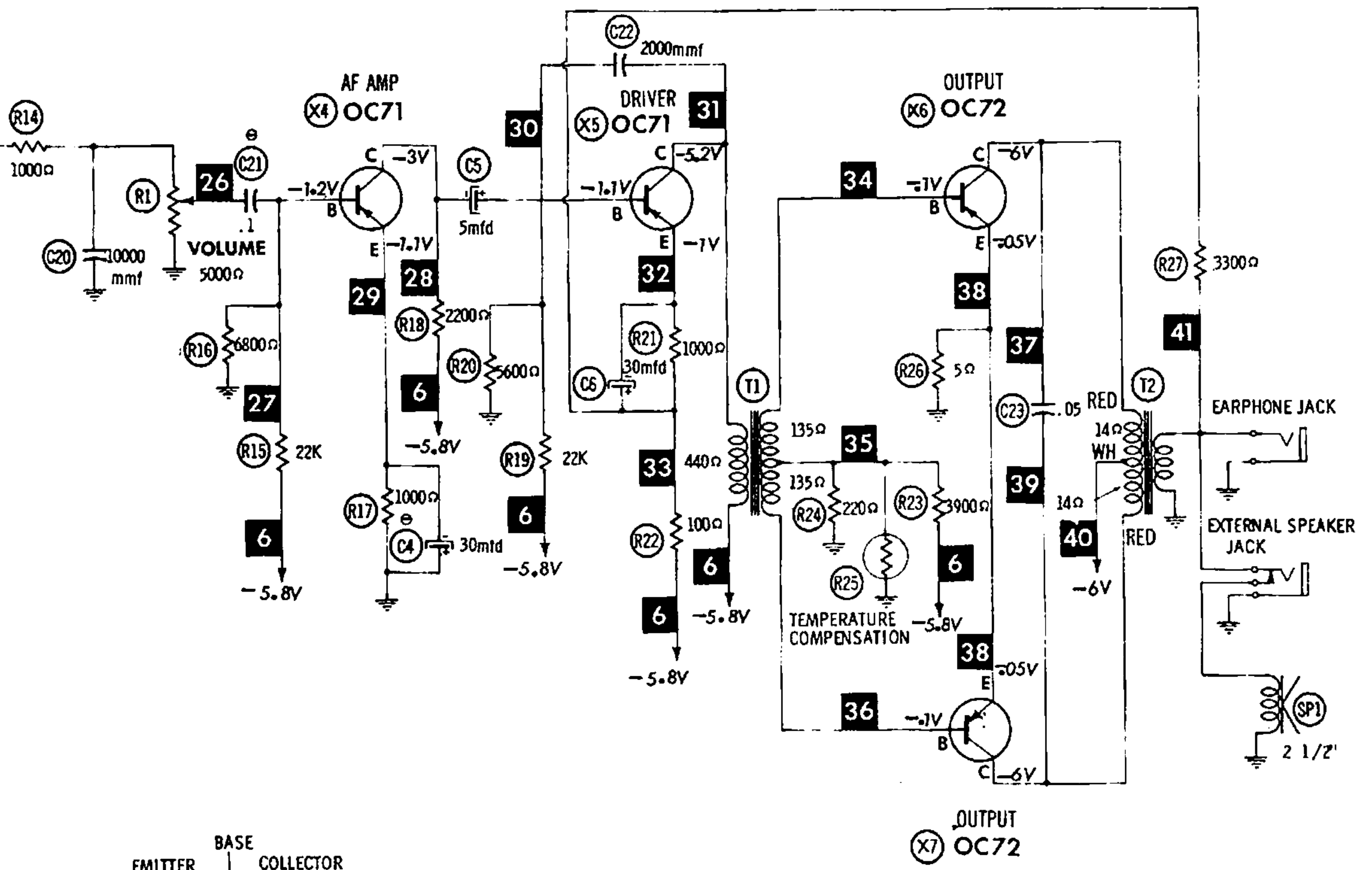
1. DC voltage measurements taken with vacuum tube voltmeter.
2. Socket connections or transistor terminals are shown as bottom views.
3. Measured values are from socket pin or terminal to common ground.
4. Nominal tolerance on component values makes possible a variation of  $\pm 15\%$  in voltage and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

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

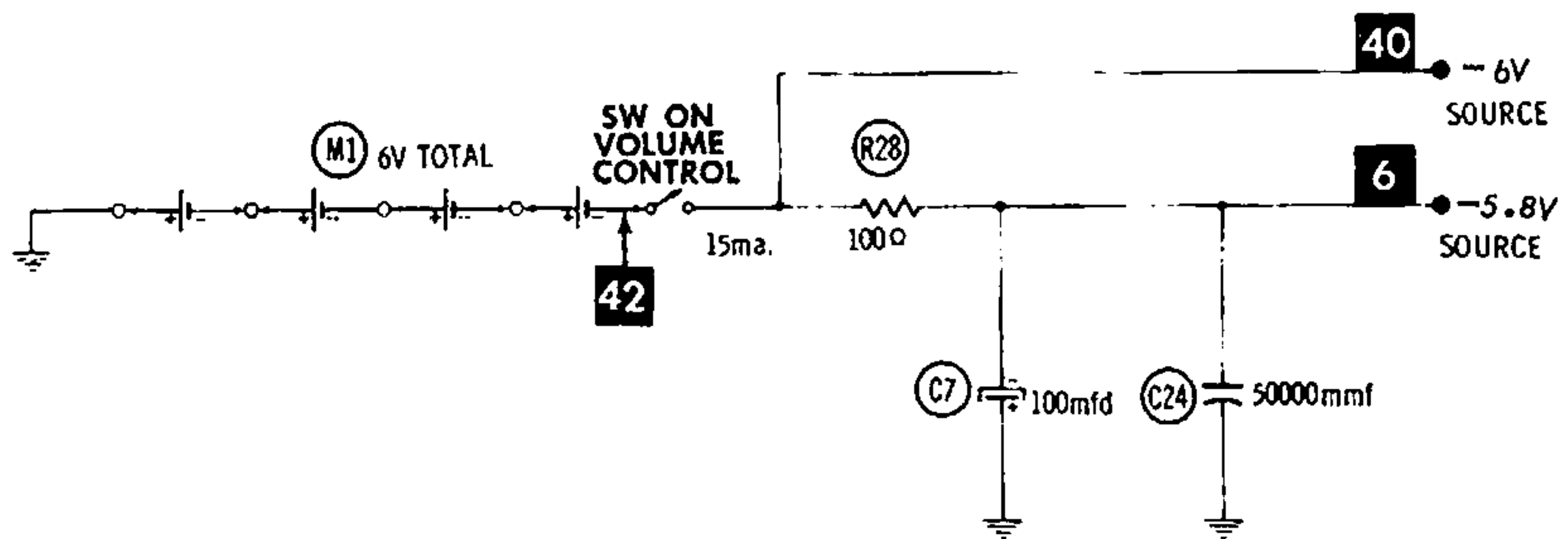
SEE PARTS LIST FOR ALTERNATE VALUE OR APPLICATION

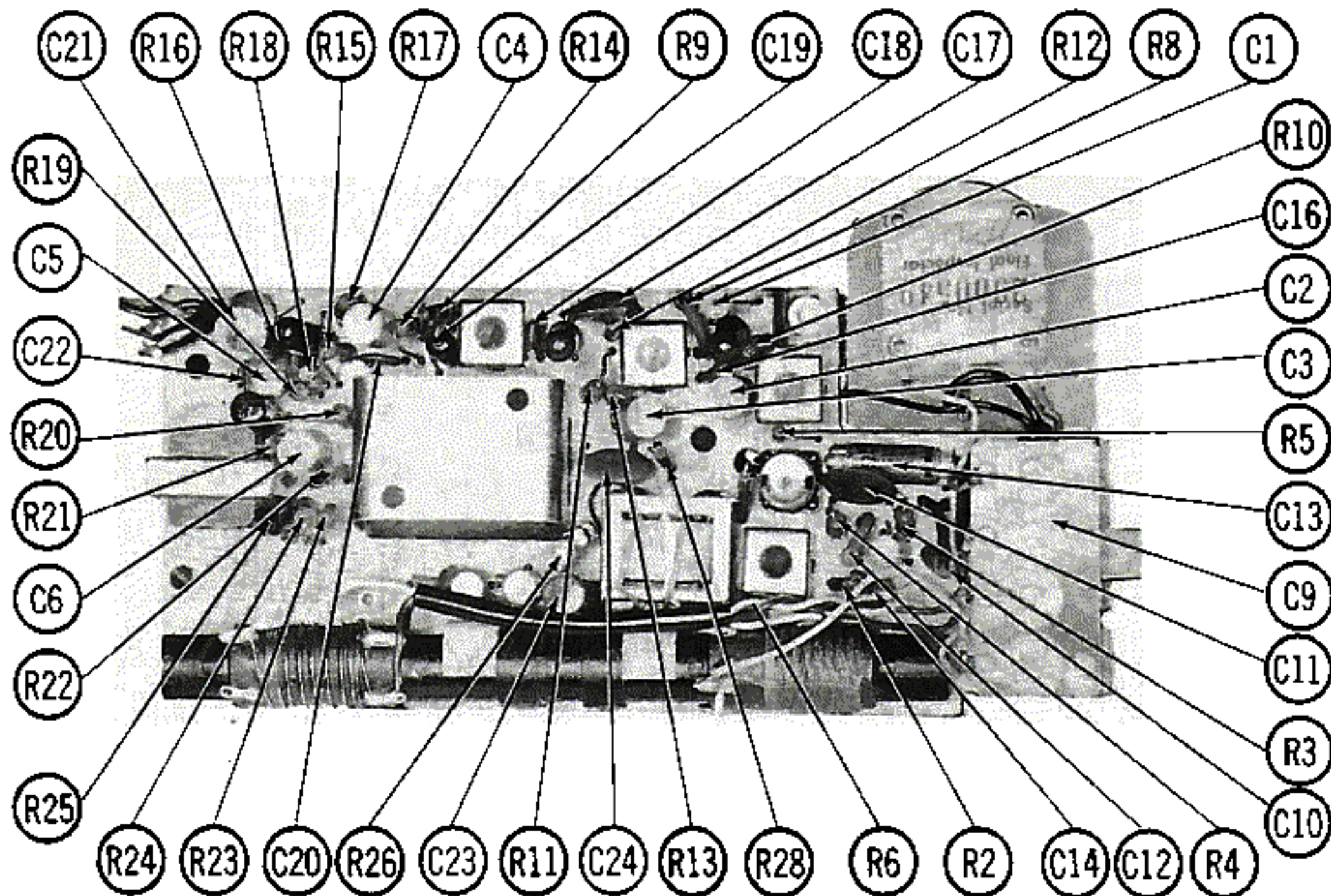
DC COIL RESISTANCE VALUES UNDER ONE OHM NOT SHOWN ON SCHEMATIC DIAGRAM



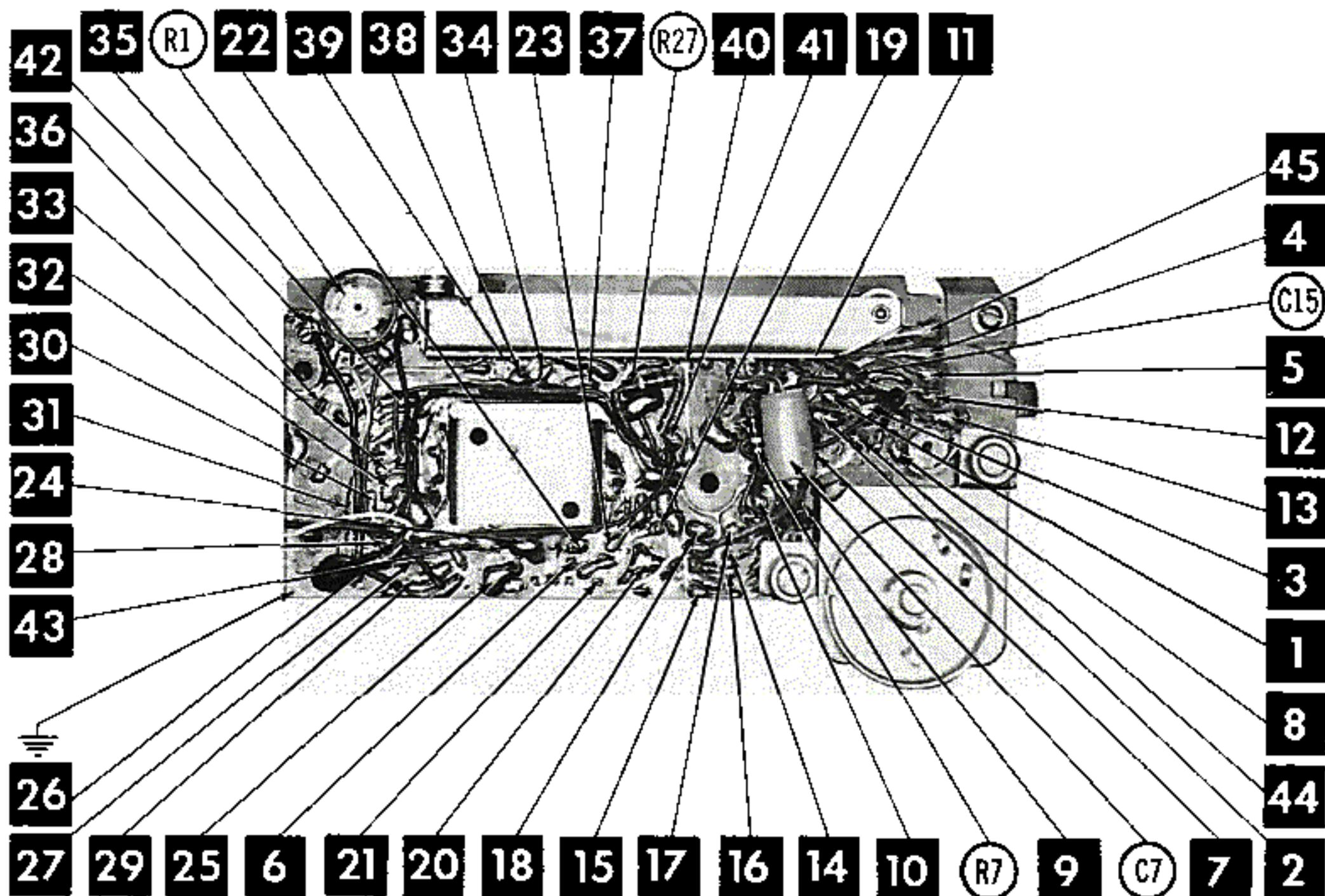


NUMBERS ASSIGNED TO COILS, SWITCHES, PLUGS, SOCKETS, AND TRANSFORMERS ARE TO FACILITATE CIRCUIT TRACING OR COMPONENT REPLACEMENT AND MAY NOT NECESSARILY BE FOUND ON THE UNIT.





CHASSIS TOP VIEW-CAPACITOR & RESISTOR IDENT.



## TRANSISTORS

ITEM No.	ORIG. TYPE	USE	REPLACEMENT DATA			NOTES
			RCA PART No.	RAYTHEON PART No.	SYLVANIA PART No.	
X1	2S30	Converter	2N412	2N486		PNP
X2	2S31	1st IF Amplifier	2N410	2N483		PNP
X3	2S31	2nd IF Amplifier	2N410	2N483		PNP
X4	2S32	Overload & AVC	2N406	2N363		PNP
X5	2S32	AF Amplifier	2N406	2N363		PNP
X6	2S32	Driver	2N406	2N363		PNP
X7	2S33	Output	2N408	2N632		PNP
X8	2S33	Output	2N408	2N632		PNP
X9	KV-1	Bias Regulator				PNP

## ELECTROLYTIC CAPACITORS

ITEM No.	RATING		REPLACEMENT DATA						NOTES
	CAP.	VOLT.	Jefferson-Travis PART No.	AEROVOX PART No.	CORNELL-DUBILIER PART No.	MALLORY PART No.	PYRAMID PART No.	SPRAGUE PART No.	
C1	5	6	CD-231B	XPP-6005	NLW5-6	TT6X5	ML5-6	TE-1084	
C2	5	6	CD-231B	XPP-6005	NLW5-6	TT6X5	ML5-6	TE-1084	
C3	5	6	CD-231B	XPP-6005	NLW5-6	TT6X5	ML5-6	TE-1084	
C4	5	6	CD-231B	XPP-6005	NLW5-6	TT6X5	ML5-6	TE-1084	
C5	30	3	CD-232B	PTT3030	ECPB12	TT6X30	ML30-6	TE-1092	
C6	5	6	CD-231B	XPP-6005	NLW5-6	TT6X5	ML5-6	TE-1084	
C7	30	3	CD-232B	PTT3030	ECPB12	TT6X30	ML30-6	TE-1092	
C8	100	6	CD-225 ①	PTT6100	NLW100-6	TT6X100	ML100-6	TE-1102	
C9	20	10	②	BCD12020	ECPB410	PET1570	MLV20-12	VL-1129	

① Not used in some versions.

② Some versions may use 100mfd in this application (Part #CD-225).

## 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.	ELMENC0 PART No.	MALLORY PART No.	SPRAGUE PART No.
C10	10		C80V100AM	DD-100	L10Q1	CCD-100	GP410	10TS-Q10
C11	5000		C80V502AM	DM-502	H-05D5	CCD-502	TA-250	TG-D50
C12	10		C80V100AM	DD-100	L10Q1	CCD-100	GP410	10TS-Q10
C13	5		DI-5	DD-050	L10V5	CCD-050	GP550	10TS-V50
C14	50000		C80V503AM	DA-503	H-05S5		TA-150	TG-S50
C15	10000		C80V103AM	DM-103	H-05S1		TA-110	TG-S10
C16	10000		C80V103AM	DM-103	H-05S1		TA-110	TG-S10
C17	1000	Note 1	C80V102AM	DM-102	H-05D1	CCD-102	B-210	10TS-D10

# ND DESCRIPTIONS

## FIXED CAPACITORS (cont)

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.
C18	2000		BPD-002	DM-202	BYA10D2	CCD-202	B-220	10TS-D20
C19	2000		BPD-002	DM-202	BYA10D2	CCD-202	B-220	10TS-D20
C20	20000		C80V203AM	DDM-203	H-05S2		TA-120	TG-S20

Note 1. Not used in some versions.

## CONTROLS

ITEM No.	RATING		REPLACEMENT DATA				INSTALLATION NOTES	
	RESISTANCE	WATTS	Jefferson-Travis PART No.	CENTRALAB PART No.	CLAROSTAT PART No.	CTS-IRC PART No.		MALLORY PART No.
R1	5000Ω	1/4	RD-118-2A	BI6-214				Volume & Switch

## 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	47K				R13	56K			
R3	10K				R14	2200Ω			
R4	2200Ω				R15	1200Ω			
R5	220K				R16	2200Ω			
R6	150K				R17	47K			
R7	22K				R18	10K			
R8	270Ω				R19	1200Ω			
R9	47K				R20	3300Ω			
R10	10K				R21	5.0Ω			
R11	560Ω				R22	100Ω			
R12	820Ω				R23	220K			Note 1

Note 1. Not used in some versions.

## COILS (RF-IF)

ITEM No.	USE	REPLACEMENT DATA				NOTES
		Jefferson - Travis PART No.	Merit PART No.	Miller PART No.	Stancor PART No.	
L1	Loopstick	LT-153K				
L2	Osc. Coil	LT-230				
L3	1st IF Trans.	LT-328A				
L4	2nd IF Trans.	LT-328B				
L5	3rd IF Trans.	LT-328C				

# PARTS LIST AND DESCRIPTIONS (Continued)

## COILS (RF-IF)

ITEM No.	USE	REPLACEMENT DATA				NOTES
		Jefferson-Travis PART No.	Merit PART No.	Miller PART No.	Stancor PART No.	
L1A B	SW Loopstick BC Loopstick	} LT-162K  LT-227 LT-224 LT-324 LT-321 LT-322				
L2	SW Osc.					
L3	BC Osc.					
L4	1st IF					
L5	2nd IF					
L6	3rd IF					

## TRANSFORMER (DRIVER)

ITEM No.	TURNS RATIO	REPLACEMENT DATA					NOTES
		Jefferson-Travis PART No.	Merit PART No.	Stancor PART No.	Thordarson PART No.	Triad PART No.	
	PRI. SEC.						
T1	2 1	LT-511		TA-36			

## TRANSFORMER (AUDIO OUTPUT)

ITEM No.	IMPEDANCE		REPLACEMENT DATA					NOTES
	PRI.	SEC.	Jefferson-Travis PART No.	Merit PART No.	Stancor PART No.	Thordarson PART No.	Triad PART No.	
T2	400Ω CT	6-8Ω	LT-438B		TA-21			

## SPEAKER

ITEM No.	TYPE			REPLACEMENT DATA		NOTES
	SIZE	FIELD	V. C. IMP.	Jefferson-Travis PART No.	QUAM PART No.	
SP1	2½"	PM	6-8Ω	SP6.5-03		

## BATTERIES

ITEM No.	VOLTAGE	Jefferson-Travis PART No.	REPLACEMENT DATA						NOTES
			BURGESS		EVEREADY		MALLORY		
			"A"	"B"	"A"	"B"	"A"	"B"	
M1	1.5V	*		930 *		1015 *		M-15R*	* 4 Required

## SIGNAL DIODES

ITEM No.	ORIG. TYPE	REPLACEMENT DATA				NOTES
		Jefferson-Travis PART No.	GENERAL ELECTRIC PART No.	RAYTHEON PART No.	SYLVANIA PART No.	
M2	OA70	OA70		1N60	1N60	SW Osc. Comp. (Pigtail) Detector (Pigtail)
M3	OA70	OA70		1N60	1N60	

## MISCELLANEOUS

ITEM No.	PART NAME	Jefferson-Travis PART No.	NOTES
M4 M5	Tuning Cap. Switch	CD-141 SD-116	2 Gang Band Selector (Slide Type)

## CABINETS & CABINET PARTS

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

NAME	PART NO.	DESCRIPTION
Cabinet	MD-2100B	

