

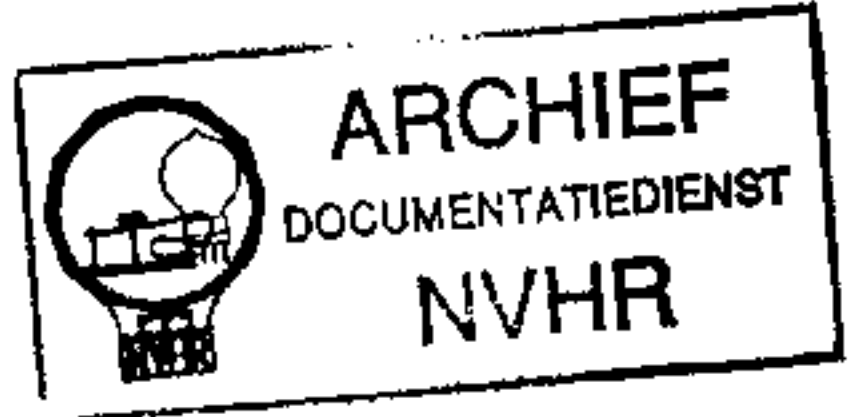
PHOTOFACT® Folder

with CIRCUITRACE™

**TOSHIBA
MODEL 9TM-40**



Ned. Ver. v. Historie v/d Radio



Met dank aan Jef Bos

TRADE NAME	Toshiba Model 9TM-40		
IMPORTER	Transistor World Corp., 52 Broadway, New York 4, N. Y.		
TYPE SET	Battery Operated Transistorized Portable AM Receiver		
POWER SUPPLY	6 Volts DC	RATING	9MA @ 6 Volts DC (No Signal, Min. Volume)
TUNING RANGE - BROADCAST	540 - 1600KC		25MA @ 6 Volts DC (Signal, Normal Volume)

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, A3, A5, A8. GENERAL CEMENT #5004, 5009, 8195, 8274, 8275, 8607, 8728, 8987, 8988, 8989, 9291
 A4, A6, A7. WALSCO #2515, 2520, 2522, 2523, 2531, 2532, 2534, 2537, 2538
 GENERAL CEMENT #5000, 5003, 5066, 8276, 8290, 9087, 9089
 WALSCO #2512, 2525, 2528

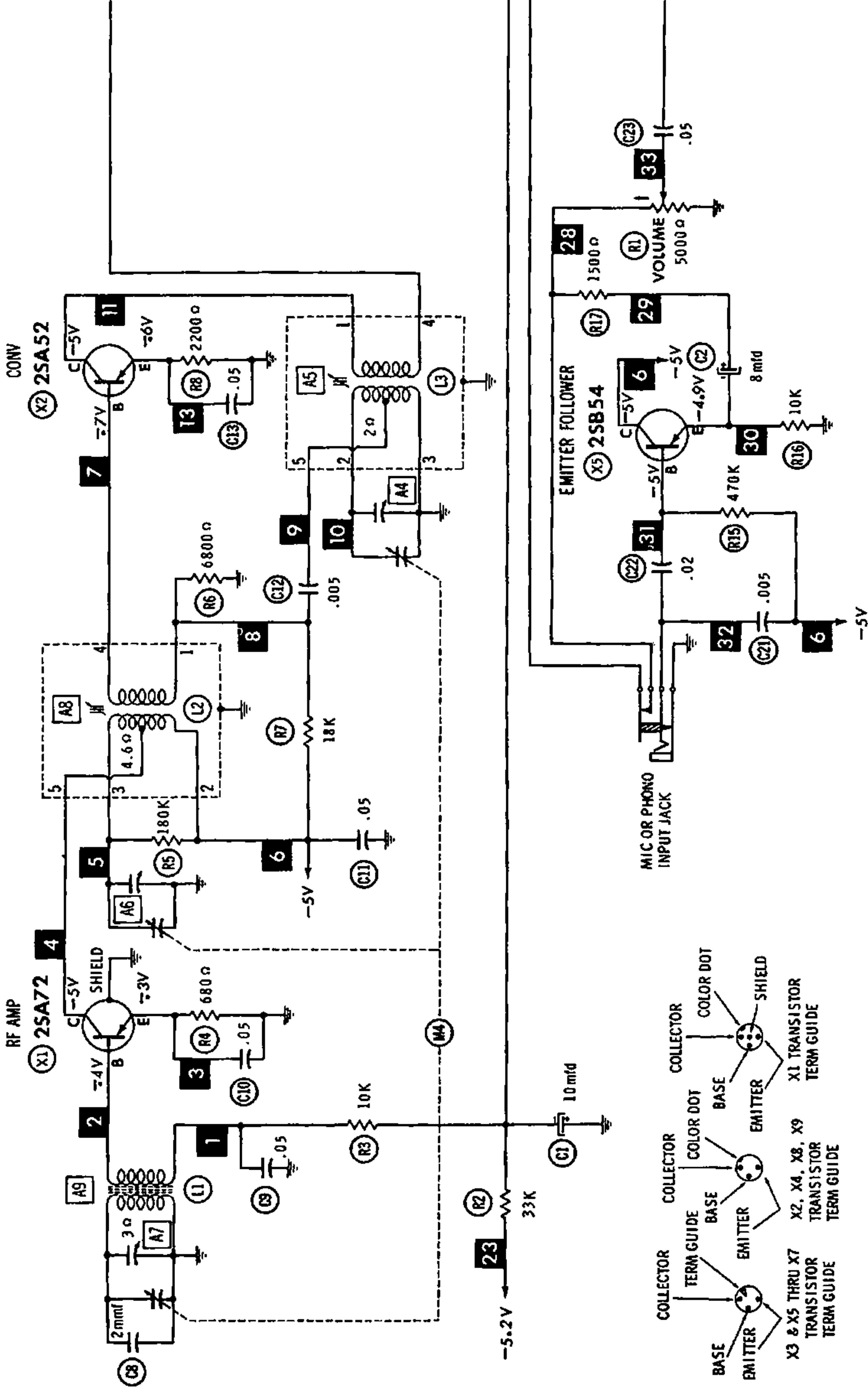
	SIGNAL GENERATOR COUPLING	SIGNAL GENERATOR FREQUENCY	RADIO DIAL SETTING	OUTPUT METER	ADJUST	REMARKS
1.	Fashion loop of several turns of wire and radiate signal into loop of receiver.	455KC (400% Mod.)	Tuning gang fully open.	Across voice coil	A1, A2, A3	Adjust for maximum output.
2.	"	1600KC	1600KC	"	A4	"
3.	"	600KC	600KC	"	A5	"
4.	"	1400KC	1400KC Signal.	"	A6, A7	"
5.	"	600KC	600KC Signal.	"	A8, A9	Adjust for maximum output. Adjust A9 by moving coil along ferrite core. 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 KF812

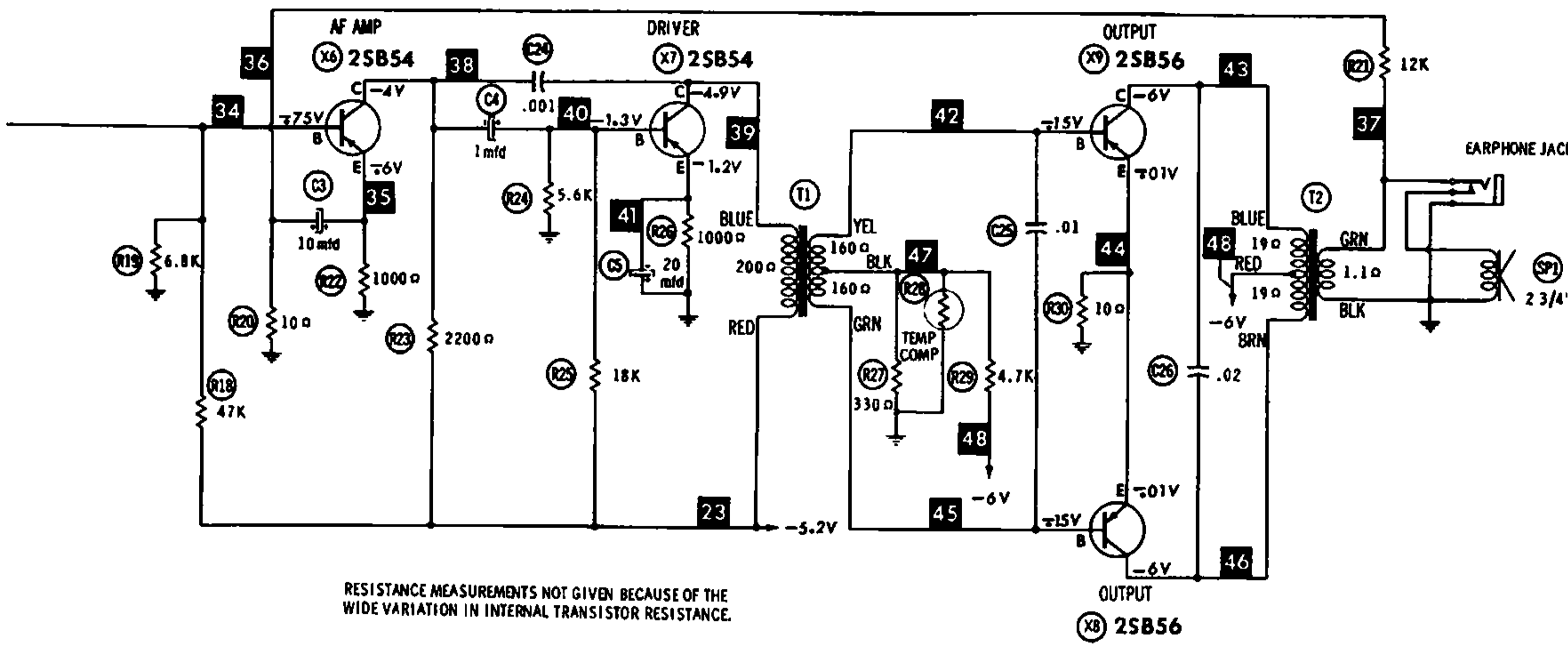
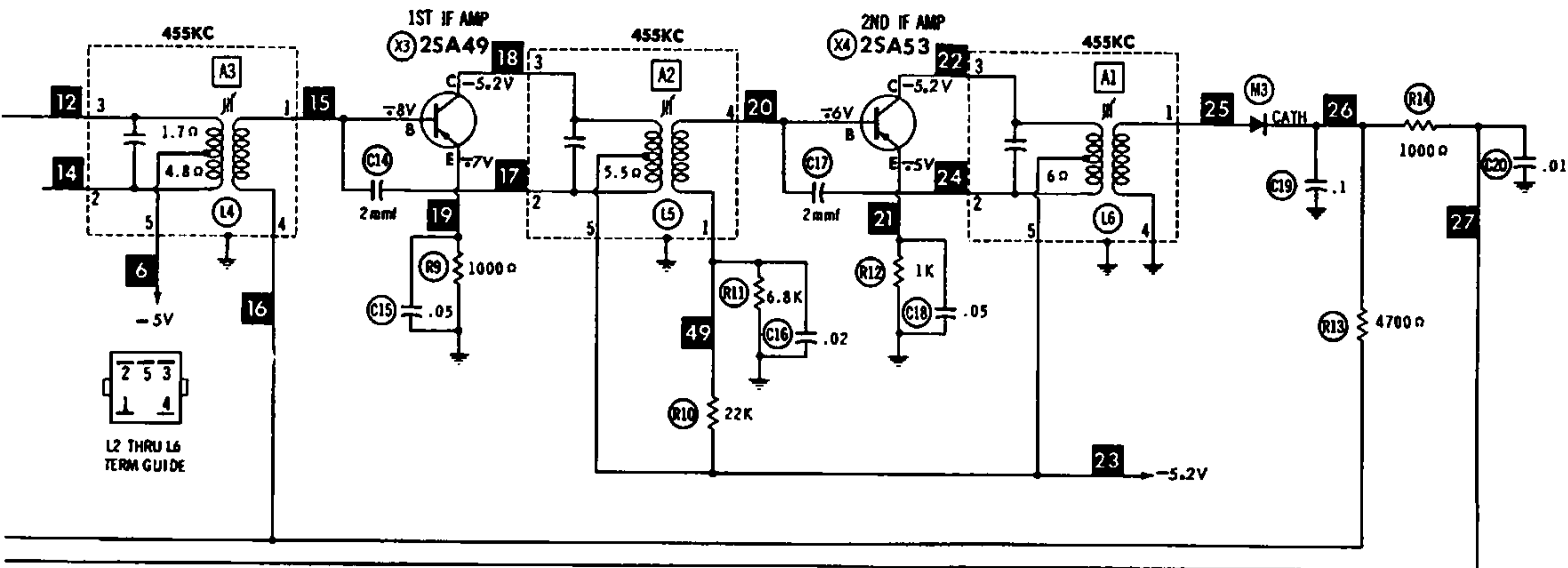
the particular type of replacement part listed. Reproduction or use, without express permission, of editorial or pictorial content, in any manner, is prohibited. No patent liability is assumed with respect to the use of the information contained herein. © 1961 Howard W. Sams & Co., Inc., Indianapolis 6, Indiana. Printed in U.S. of America





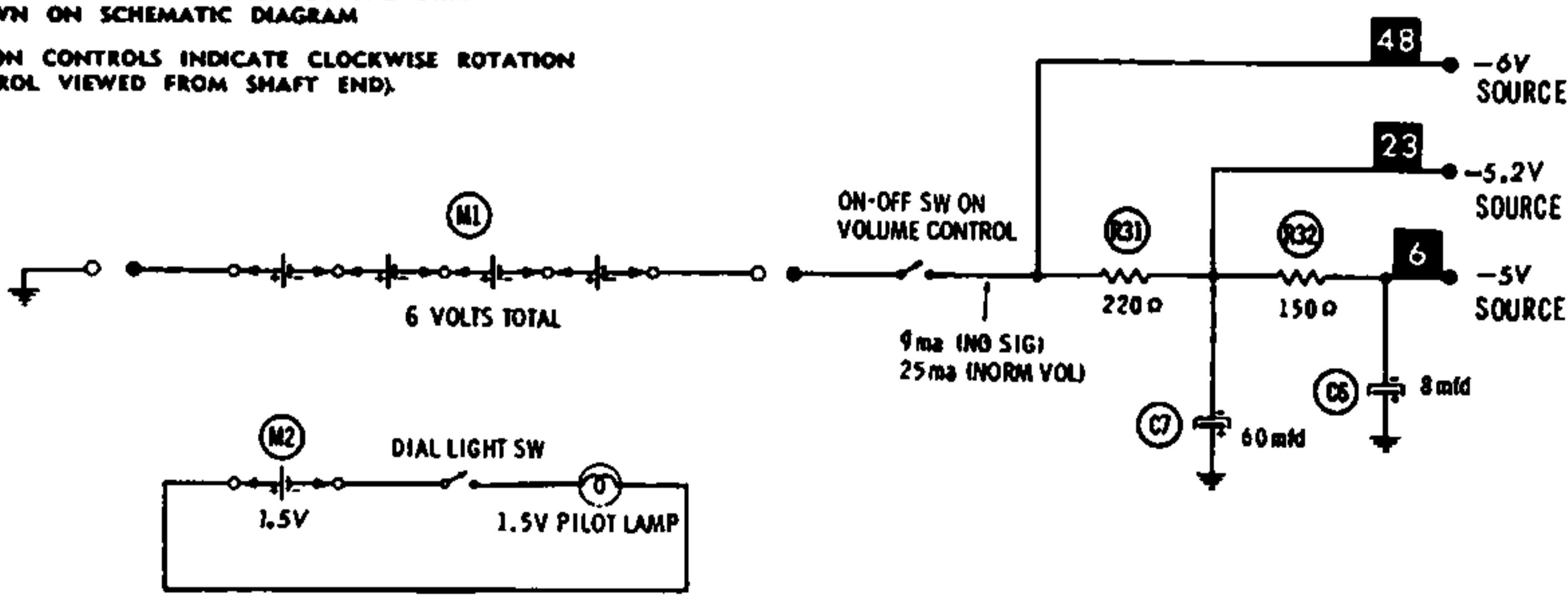
A PHOTOFACT STANDARD NOTATION SCHEMATIC

with **CIRCUITRACE**



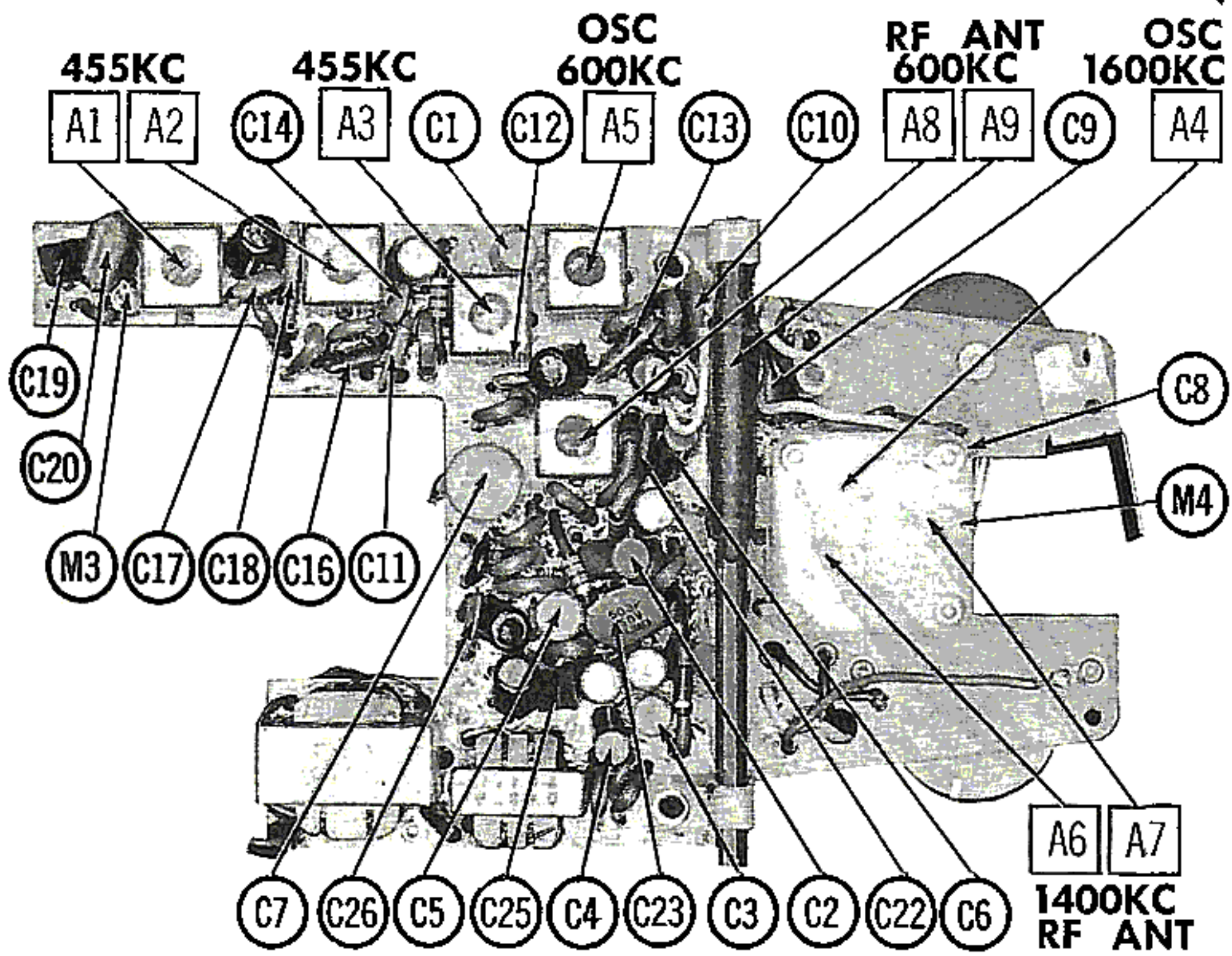
RESISTANCE MEASUREMENTS NOT GIVEN BECAUSE OF THE WIDE VARIATION IN INTERNAL TRANSISTOR RESISTANCE.

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

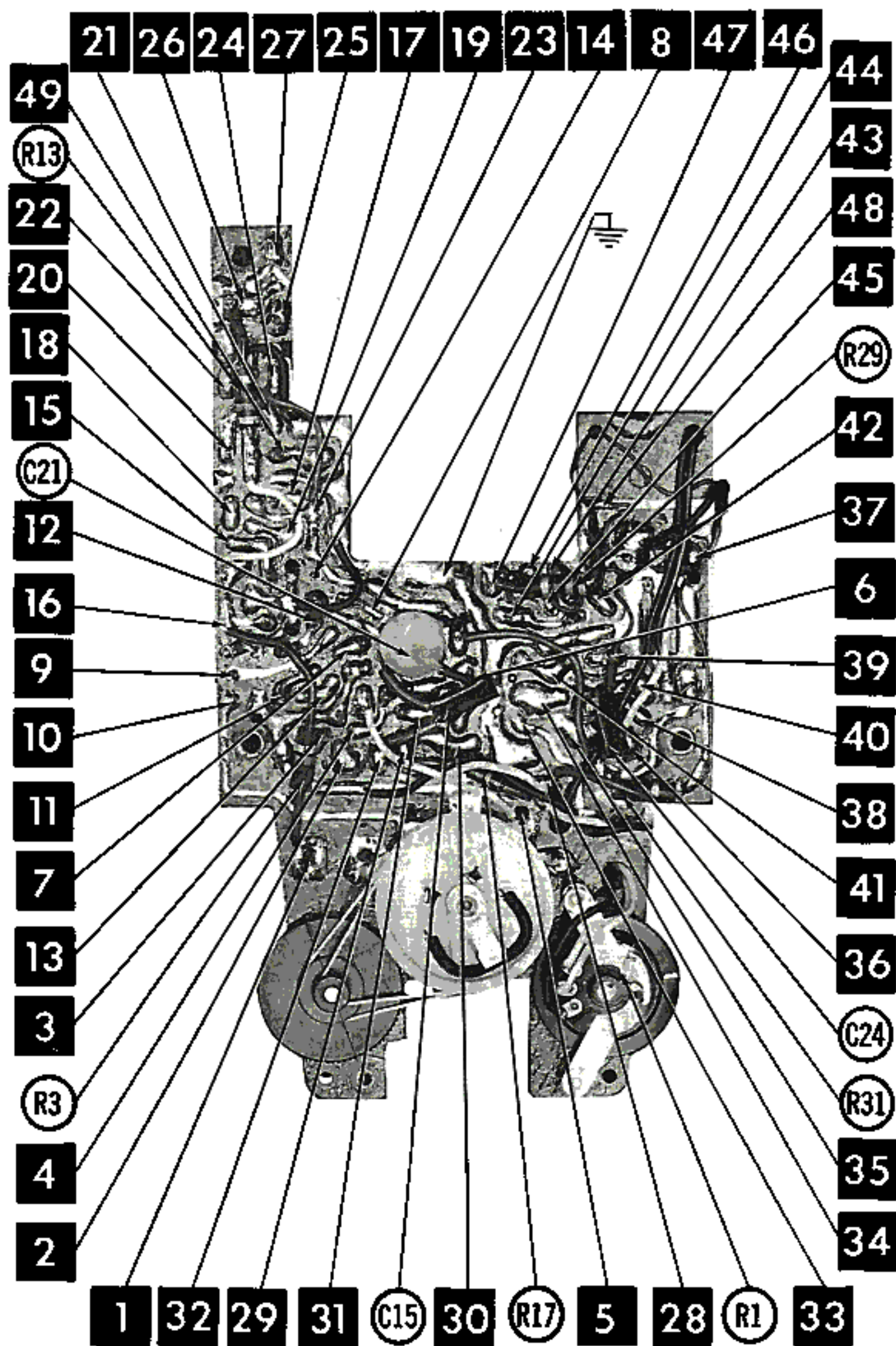


NUMBERS ASSIGNED TO COILS, SWITCHES, PLUGS, SOCKETS, AND TRANSFORMERS ARE TO FACILITATE CIRCUIT TRACING OR COMPONENT REPLACEMENT AND MAY NOT NECESSARILY BE FOUND ON THE UNIT.

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.



CHASSIS TOP VIEW-ALIGN., CAPACTOR & MISC. IDENT.



PARTS LIST A

TRANSISTORS

ITEM No.	ORIG. TYPE	USE	REPLACEMENT DATA		NOTES
			RCA PART No.	RAYTHEON PART No.	
X1	2SA72	RF Amplifier			PNP
X2	2SA52	Converter	2N412		PNP
X3	2SA49	1st IF Amplifier	2N410		PNP
X4	2SA53	2nd IF Amplifier	2N410		PNP
X5	2SA54	Mic Emitter Follower	2N406		PNP
X6	2SB54	AF Amplifier	2N406		PNP
X7	2SB54	Driver	2N406		PNP
X8	2SB56	Output	2N408		PNP
X9	2SB56	Output	2N408		PNP

ELECTROLYTIC CAPACITORS

ITEM No.	RATING		REPLACEMENT DATA						
	CAP.	VOLT.	TOSHIBA PART No.	AEROVOX PART No.	CORNELL-DUBILIER PART No.	GENERAL ELECTRIC PART No.	MALLORY PART No.	PYRAMID PART No.	SPRAGUE PART No.
C1	10	3		PTT6	NLW10-6	MT1-5	TT3X10	MLV10-3	TE-1053
C2	8	3		PTT5	NLW8-10	MT1-5	TT6X8	MLV10-3	TE-1052.5
C3	10	3		PTT6	NLW10-6	MT1-5	TT3X10	MLV10-3	TE-1053
C4	1	10		PTT34	NLW1-50	MT1-1	TT12X1	MLV2-12	TE-1120
C5	20	3		PTT8	NLW20-6	MT1-10	TT15X20	MLV20-12	TE-1054
C6	8	5		PTT22	NLW8-10	MT1-5	TT6X8	MLV10-6	TE-1086
C7	60	6		PTT29	NLW75-10	MT1-18	TT6X60	MLV50-6	TE-1101

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.
C8	2		NPO-DI 2.0	DTZ-2R2	C10V2C	CCTO-2R2	CNO-522	10TCC-V22
C9	.05		C80V503AM	DA-503	H-05S5		TA-150	TG-S50
C10	.05		C80V503AM	DA-503	H-05S5		TA-150	TG-S50
C11	.05		C80V503AM	DA-503	H-05S5		TA-150	TG-S50
C12	.005		C80V602AM	DM-502	H-05D5	CCD-502	TA-250	TG-D50
C13	.05		C80V503AM	DA-503	H-05S5		TA-150	TG-S50
C14	2		NPO-DI 2.0	DTZ-2R2	C10V2C	CCTO-2R2	CNO-522	10TCC-V22
C15	.05		C80V503AM	DA-503	H-05S5		TA-150	TG-S50
C16	.02		C80V203AM	DA-203	H-05S2		TA-120	TG-S20
C17	2		NPO-DI 2.0	DTZ-2R2	C10V2C	CCTO-2R2	CNO-522	10TCC-V22
C18	.05		C80V503AM	DA-503	H-05S5		TA-150	TG-S50
C19	.1		C80V104AM	DA-104	H-05P1		TA-D10	TG-P10
C20	.01		C80V103AM	DA-103	H-05S1		TA-110	TG-S10
C21	.005		C80V502AM	DM-502	H-05D5	CCD-502	TA-250	TG-D50
C22	.02		C80V203AM	DA-203	H-05S2		TA-120	TG-S20
C23	.05		C80V503AM	DA-503	H-05S5		TA-150	TG-S50
C24	.001		C80V102AM	DM-102	H-05D1	CCD-102	B-210	5HK-D10
C25	.01		C80V103AM	DA-103	H-05S1		TA-110	TG-S10
C26	.02		C80V203AM	DA-203	H-05S2		TA-120	TG-S20

ID DESCRIPTIONS

CONTROLS

ITEM No.	RATING		REPLACEMENT DATA				INSTALLATION NOTES	
	RESISTANCE	WATTS	TOSHIBA PART No.	CENTRALAB PART No.	CLAROSTAT PART No.	CTS-IRC PART No.		MALLORY PART No.
R1	5000Ω	1/4						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	33K				R18	47K			
R3	10K				R19	6800Ω			
R4	680Ω				R20	10Ω			
R5	180K				R21	12K			
R6	6800Ω				R22	1000Ω			
R7	18K				R23	2200Ω			
R8	2200Ω				R24	5600Ω			
R9	1000Ω				R25	18K			
R10	22K				R26	1000Ω			
R11	6800Ω				R27	330Ω			
R12	1000Ω				R28	Temp. Comp.			
R13	4700Ω				R29	4700Ω			
R14	1000Ω				R30	10Ω			
R15	470K				R31	220Ω			
R16	10K				R32	150Ω			
R17	1500Ω								

COILS (RF-IF)

ITEM No.	USE	REPLACEMENT DATA					NOTES
		TOSHIBA PART No.	Merit PART No.	Miller PART No.	Stancor PART No.	Workman TV PART No.	
L1	Loopstick						
L2	RF						
L3	Osc.						
L4	1st IF						
L5	2nd IF						
L6	3rd IF						

TRANSFORMER (DRIVER)

ITEM No.	TURNS RATIO		REPLACEMENT DATA					NOTES
	PRI.	SEC.	TOSHIBA PART No.	Merit PART No.	Stancor PART No.	Thordarson PART No.	Triad PART No.	
T1	1.2	1	0435A					

PARTS LIST AND DESCRIPTIONS (Continued)

TRANSFORMER (AUDIO OUTPUT)

ITEM No.	IMPEDANCE		REPLACEMENT DATA					NOTES
			TOSHIBA PART No.	Merit PART No.	Stancor PART No.	Thordarson PART No.	Triad PART No.	
	PRI.	SEC.						
T2	300Ω CT	10-12Ω	0799A					

SPEAKER

ITEM No.	TYPE			REPLACEMENT DATA		NOTES
				TOSHIBA PART No.	QUAM PART No.	
	SIZE	FIELD	V. C. IMP.			
SP1	2 3/4"	PM	10-12Ω	50156	27A06Z12	

BATTERIES

ITEM No.	VOLTAGE	TOSHIBA PART No.	REPLACEMENT DATA						NOTES
			BURGESS		EVEREADY		MALLORY		
			"A"	"B"	"A"	"B"	"A"	"B"	
M1	1.5V			930		1016		M-15R	4 Required (Radio) 1 Required (Pilot Lite)
M2	1.5V		930		1015		M-15R		

SIGNAL DIODES

ITEM No.	ORIG. TYPE	REPLACEMENT DATA			NOTES
		TOSHIBA PART No.	GENERAL ELECTRIC PART No.	RAYTHEON PART No.	
M3	1S50			1N60	Detector (Pigtail)

MISCELLANEOUS

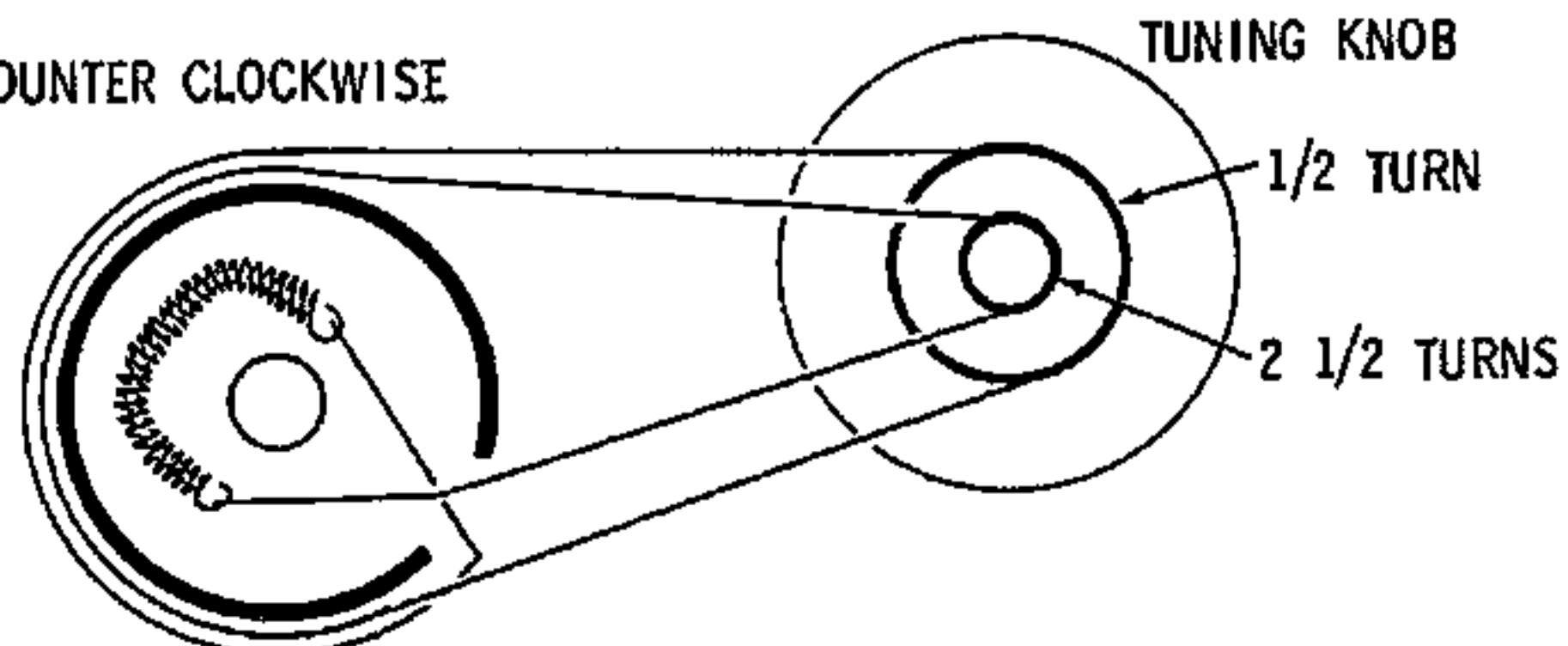
ITEM No.	PART NAME	TOSHIBA PART No.	NOTES
M4	Tuning Cap.		2 Gang

WIRING DATA

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

DRIVE CORD STRINGING

DRUM FULLY COUNTER CLOCKWISE



FRONT VIEW

CHASSIS—TOP VIEW

