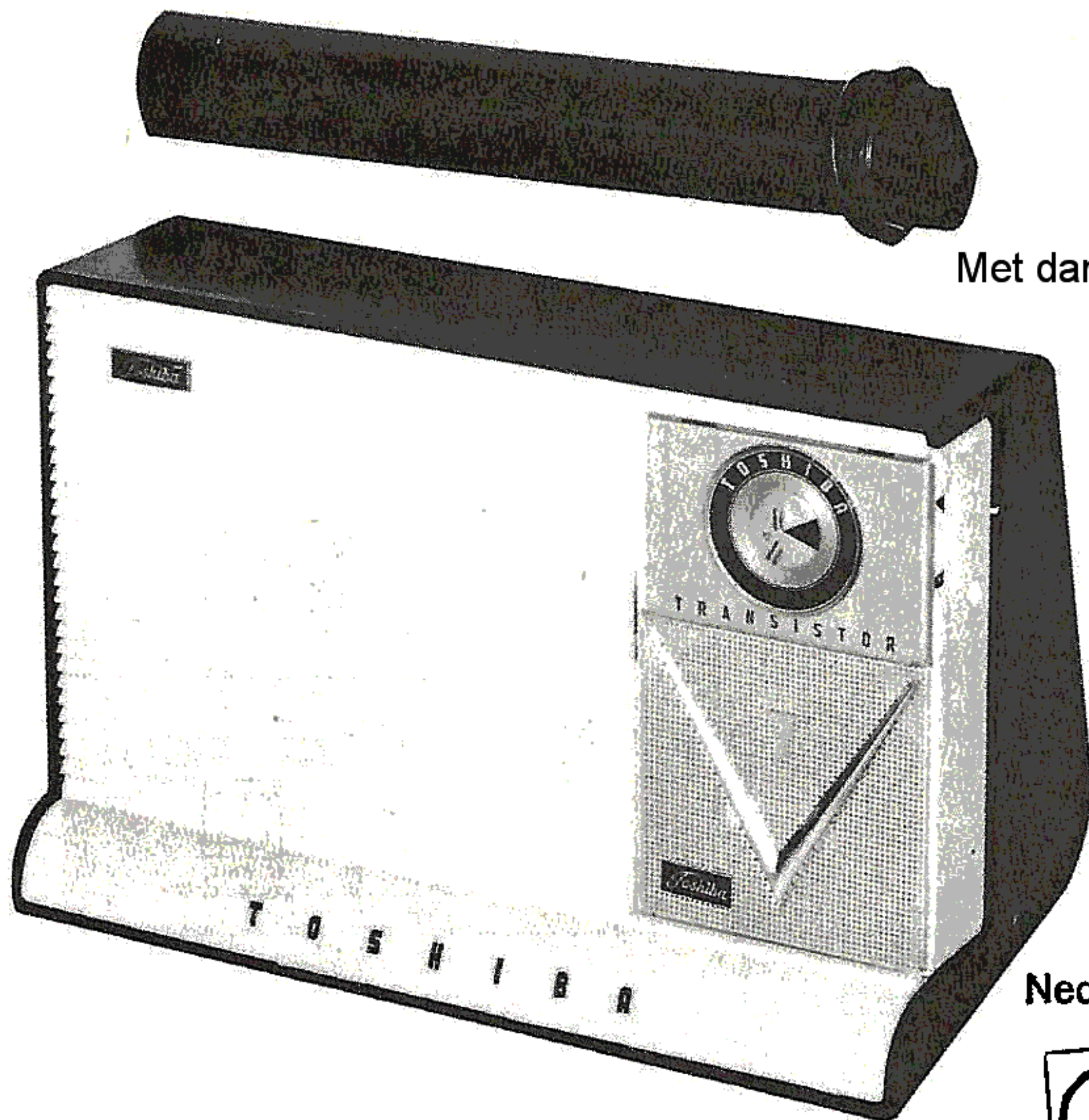


PHOTOFACT® Folder

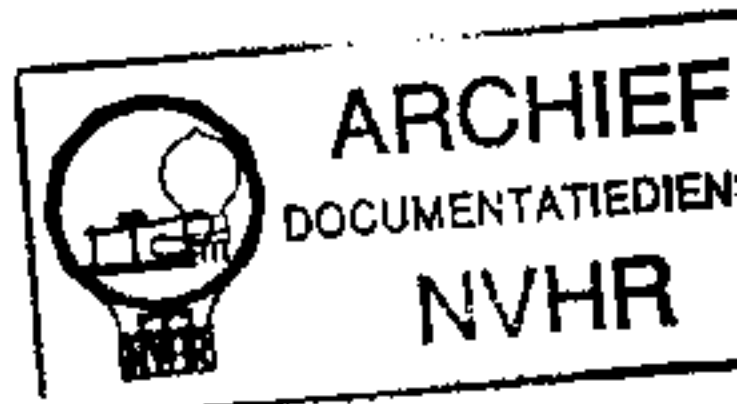
with CIRCUITRACE®

TOSHIBA MODELS
3WX, 7TP-303



Met dank aan Jef Bos

Ned. Ver. v. Historie



TRADE NAME	Toshiba Models 7TP-303, 3WX		
IMPORTER	Transistor World Corp., 52 Broadway, New York 4, N. Y.		
TYPE SET	Battery Operated Transistorized AM Receiver (Model 3WX is Speaker Cabinet)		
POWER SUPPLY	4.5 Volts DC	RATING	10MA@ 4.5 Volts DC (No Signal, Min. Volume)
TUNING RANGE	BROADCAST 540-1800KC		15MA@ 4.5 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 GENERAL CEMENT #5009, 8195, 8274, 8275, 8728, 8729, 8988, 8989
WALSCO #2515, 2531, 2532
A4, A6 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, A3	Fashion loop of several turns of wire and radiate signal into loop of receiver. Adjust for maximum output.
2.	"	1800KC	1800KC	"	A4	"
3.	"	600KC	600KC	"	A5	"
4.	"	1400KC	1400KC	"	A6	Adjust for maximum output. Repeat steps 2, 3 and 4.

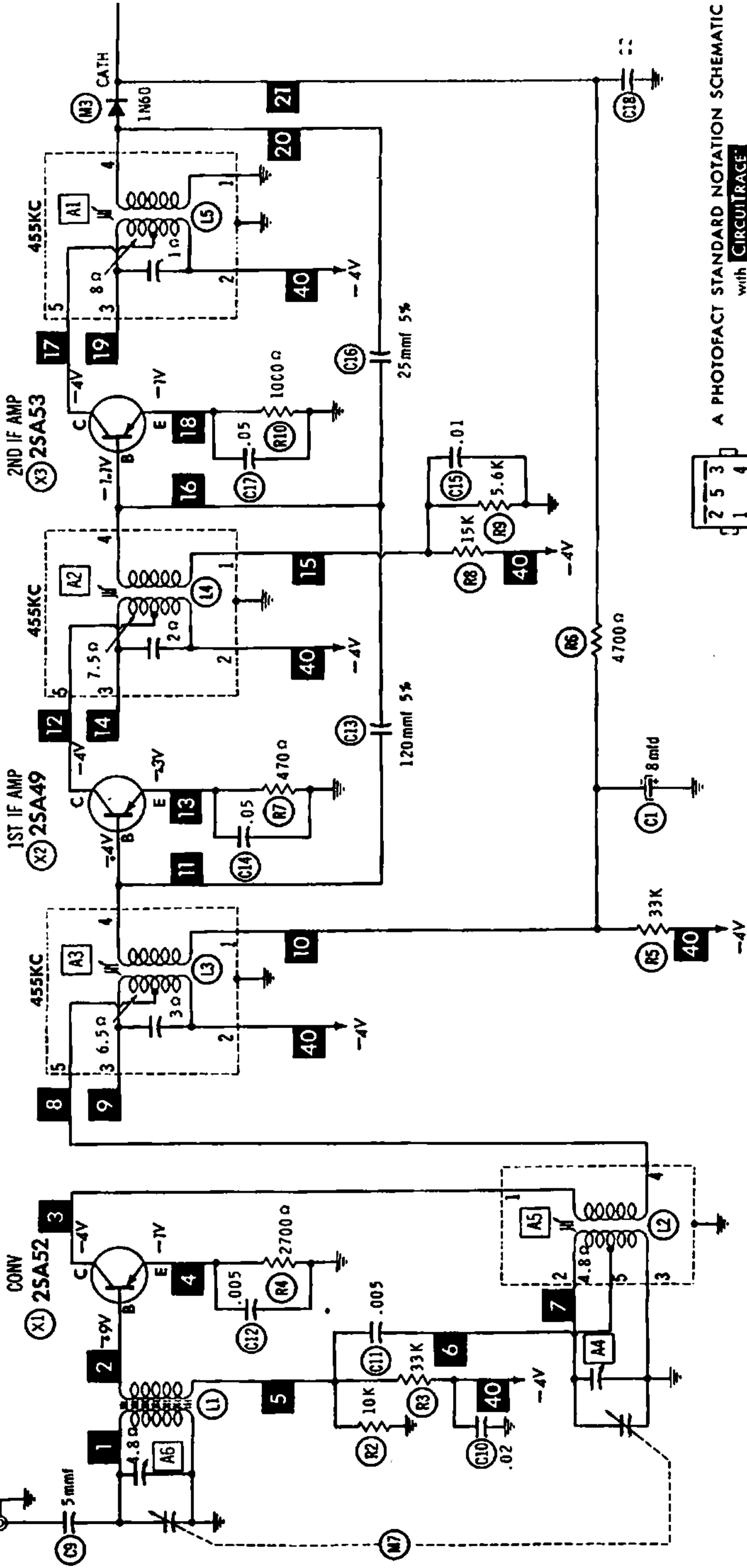
HOWARD W. SAMS & CO., INC. Indianapolis 6, Indiana

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 KF721

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



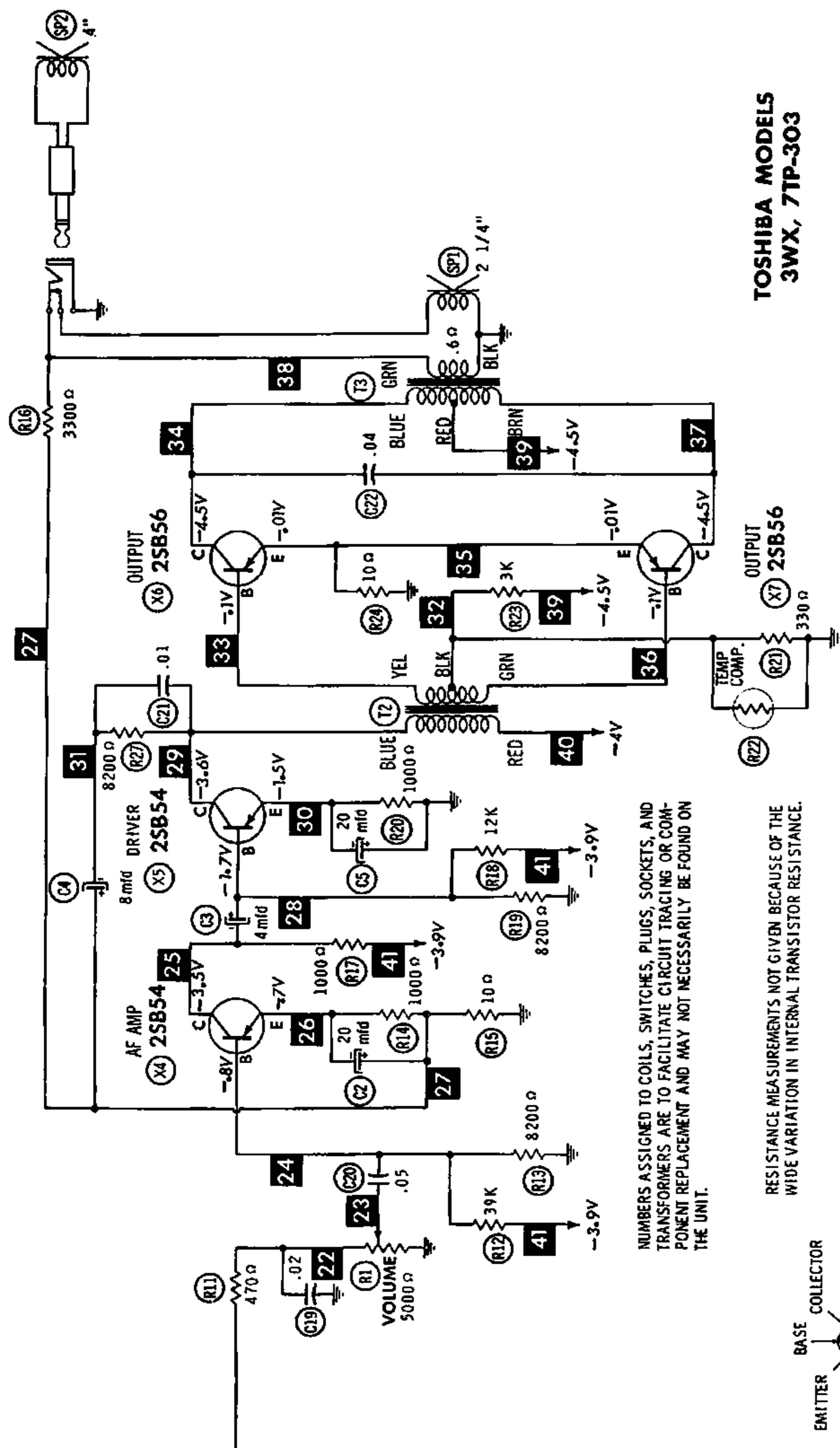
ANT. RECEPT.



L2 THRU L5
TERMINAL GUIDE

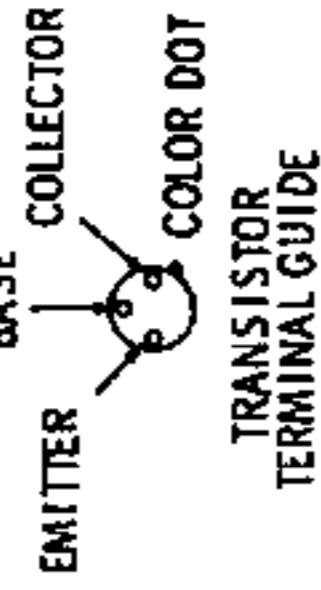
A PHOTOFAC T STANDARD NOTATION SCHEMATIC
with CIRCUITRACE

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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.

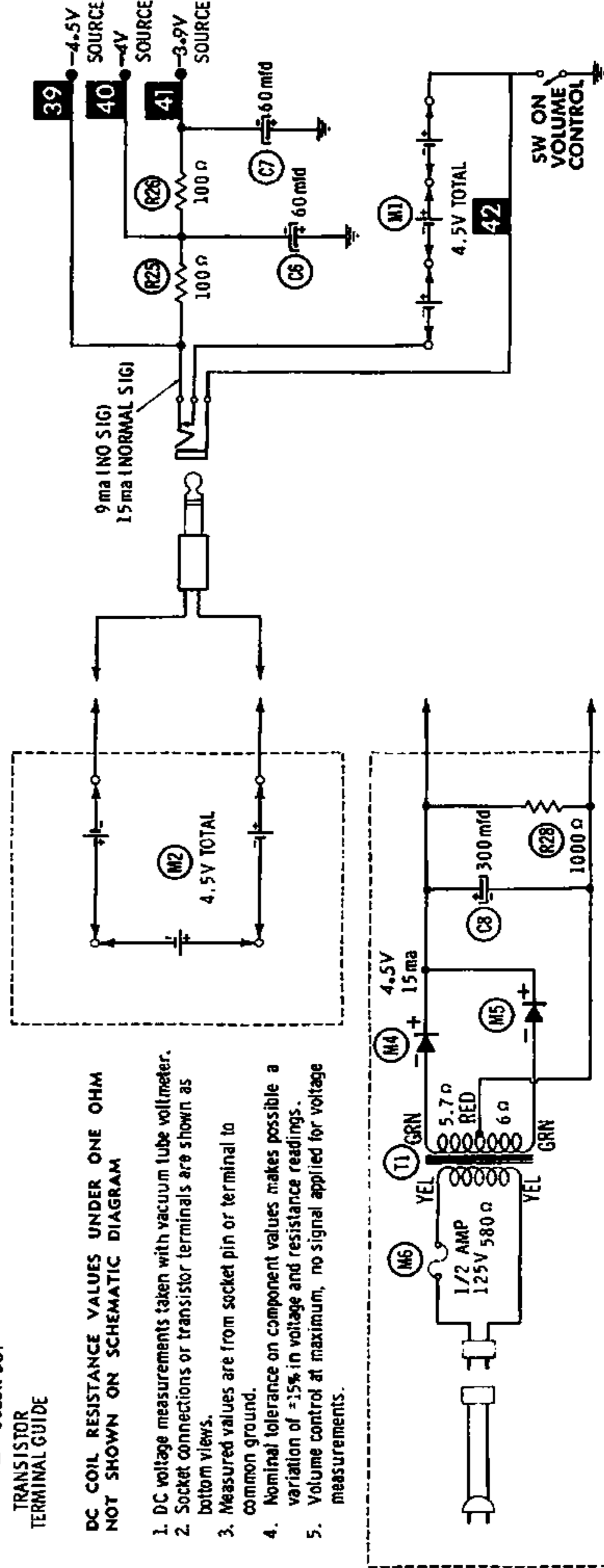
RESISTANCE MEASUREMENTS NOT GIVEN BECAUSE OF THE WIDE VARIATION IN INTERNAL TRANSISTOR RESISTANCE.



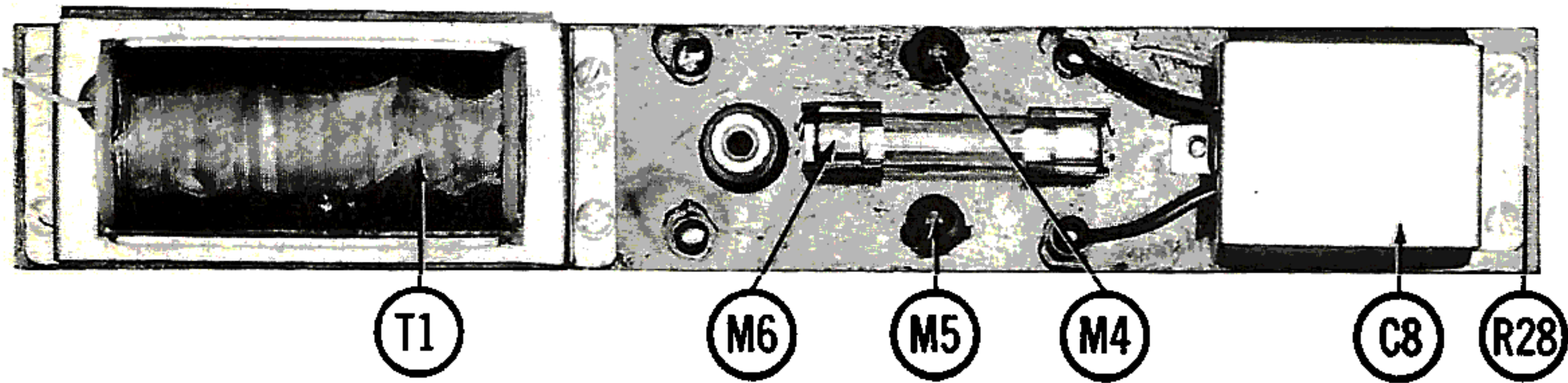
DC COIL RESISTANCE VALUES UNDER ONE OHM NOT SHOWN ON SCHEMATIC DIAGRAM

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.

TOSHIBA MODELS 3WX, 7TP-303

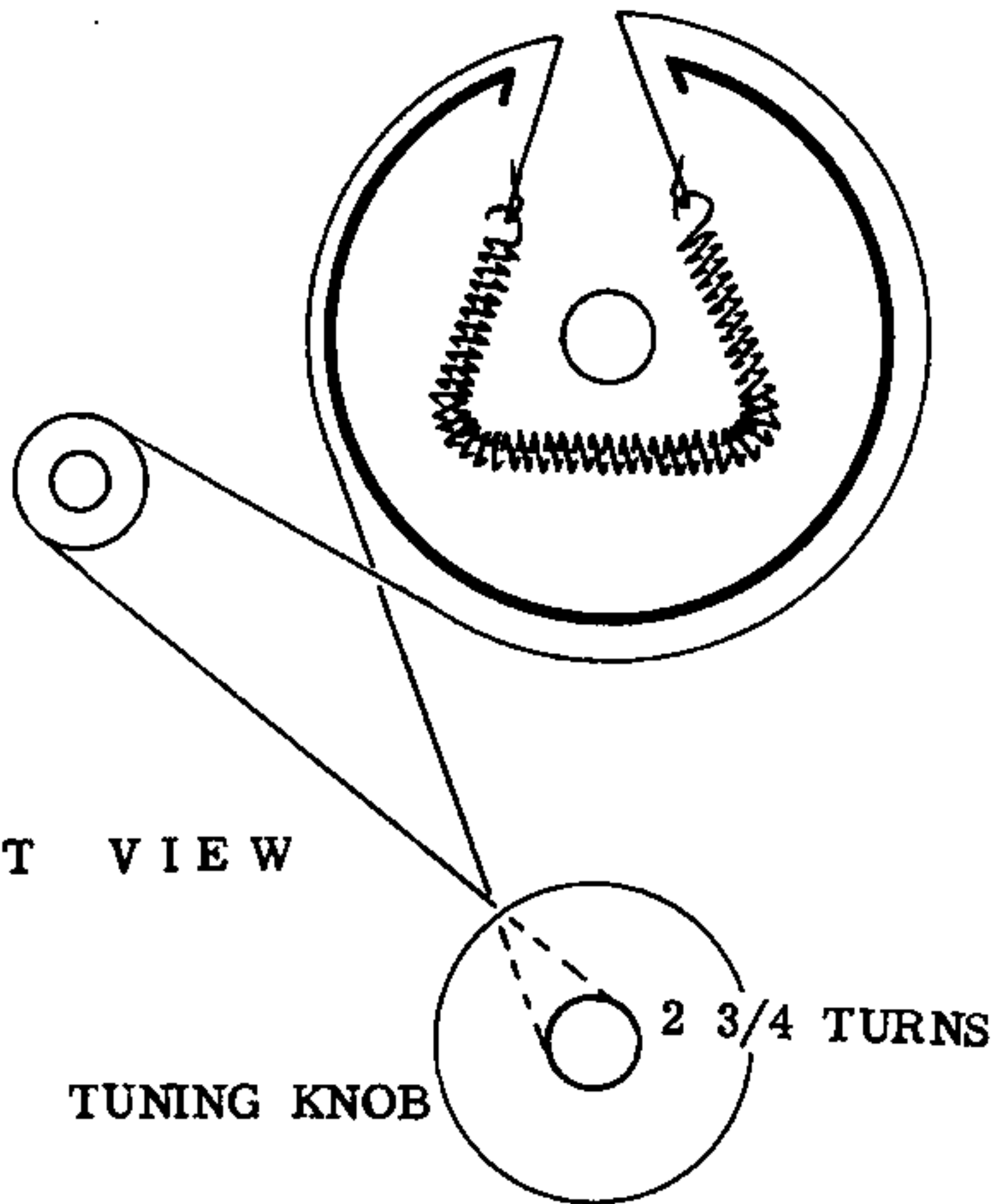


AC SUPPLY MAY BE USED.



POWER CHASSIS

TUNING DRUM FULLY COUNTER CLOCKWISE

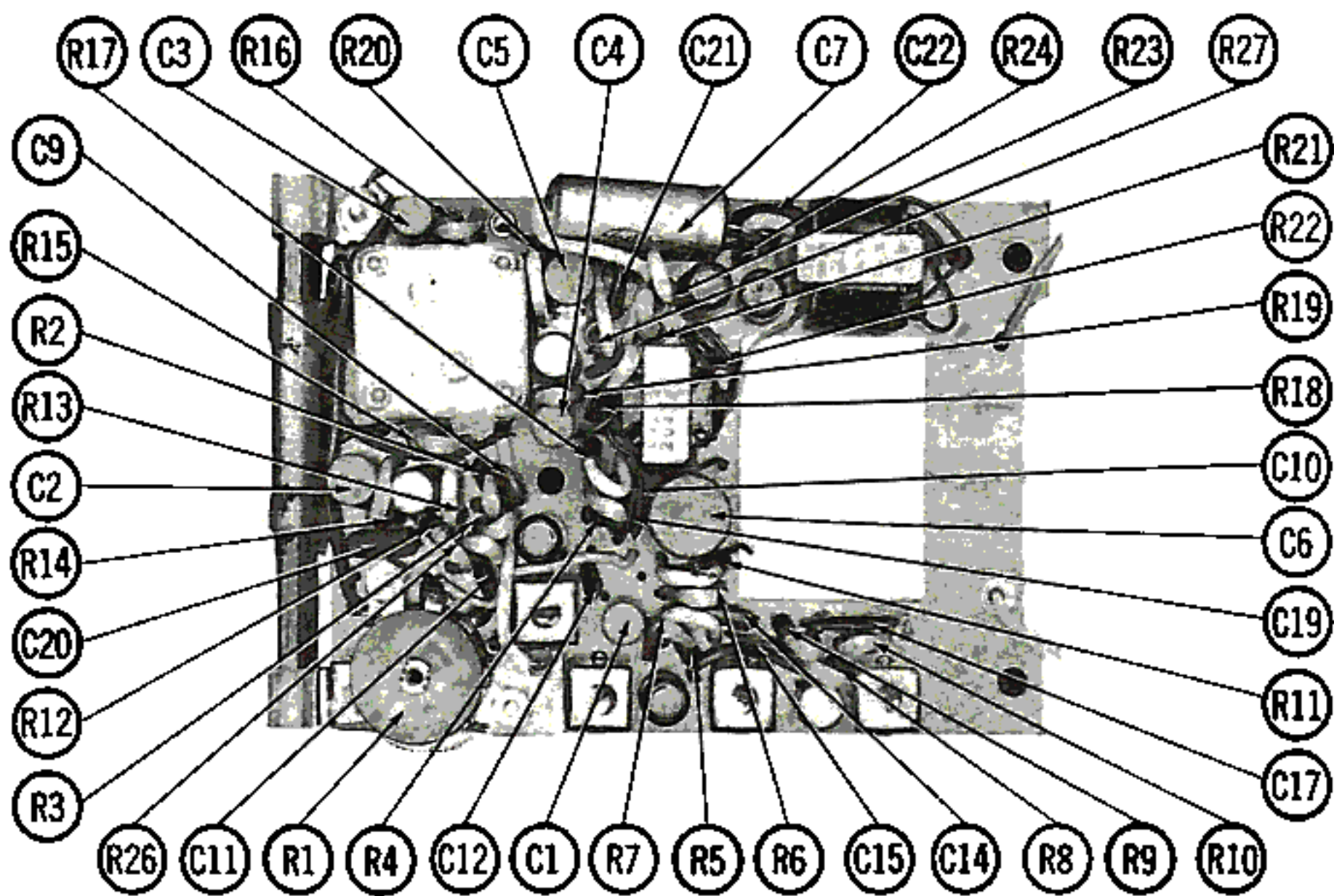


FRONT VIEW

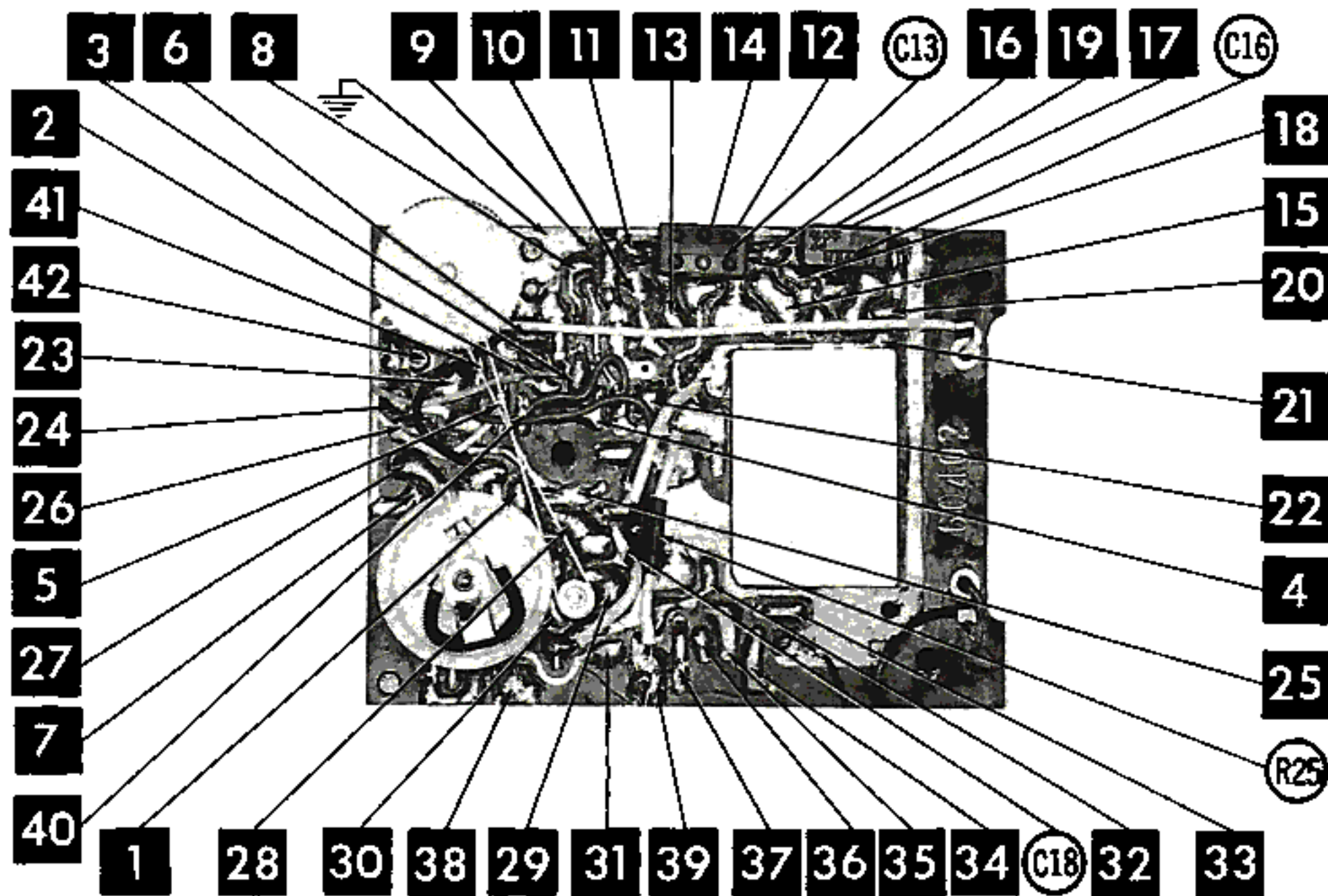
TUNING KNOB

2 3/4 TURNS

DRIVE CORD STRINGING



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	2SA52	Converter				PNP
X2	2SA49	1st IF Amplifier				PNP
X3	2SA53	2nd IF Amplifier				PNP
X4	2SB54	AF Amplifier	2N406			PNP
X5	2SB54	Driver	2N406			PNP
X6	2SB56	Output	2N408			PNP
X7	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	8	5		PTT22	NLW8-10	MT1-5	TT6X8	MLV10-6	TE-1088
C2	20	3		PTT8	NLW20-6	MT1-10	TT15X20	MLV20-12	TE-1054
C3	4	10		PTT37	NLW4-15	MT1-3	TT12X5	MLV5-12	TE-1123
C4	8	5		PTT22	NLW8-10	MT1-5	TT6X8	MLV10-6	TE-1088
C5	20	3		PTT8	NLW20-6	MT1-10	TT15X20	MLV20-12	TE-1054
C6	60	6		BCD6050	NLW75-10	MT1-18	TT6X60	MLV50-6	TE-1101
C7	60	6		PTT29	NLW75-10	MT1-18	TT6X60	MLV50-6	TE-1101
C8	300	6		PTT33	NLW300-8	MT1-24	TC1502	MLV200-8	TE-1106

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.
C9	5		NPO-DI 5.0	DTZ-4R7	C10V5C	CCTO-050	CNO-547	10TCC-V50
C10	.02		C80V203AM	DA-203	H-05S2		TA-120	TG-S20
C11	.005		C80V502AM	DM-502	H-05D5	CCD-502	TA-250	TG-D50
C12	.005		C80V502AM	DM-502	H-05D5	CCD-502	TA-250	TG-D50
C13	120	5%	1469-00012	TCZ-120	22R-5T12	CM-19B-121J	CNO-312	MS-312
C14	.05		C80V503AM	DA-503	H-05S5		TA-150	TG-S50
C15	.01		C80V103AM	DM-103	H-05S1		TA-110	TG-S10
C16	25	5%	1469-000025	TCZ-25	22R5Q25	CM-19B-250J	CNO-425	MS-425
C17	.05		C80V503AM	DA-503	H-05S5		TA-150	TG-S50
C18	.02		C80V203AM	DA-203	H-05S2		TA-120	TG-S20
C19	.02		C80V203AM	DA-203	H-05S2		TA-120	TG-S20
C20	.05		C80V503AM	DA-503	H-05S5		TA-150	TG-S50
C21	.01		C80V103AM	DM-103	H-05S1		TA-110	TG-S10
C22	.04							

ND 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 and 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	10K				R16	3300Ω			
R3	33K				R17	1000Ω			
R4	2700Ω				R18	12K			
R5	33K				R19	8200Ω			
R6	4700Ω				R20	1000Ω			
R7	470Ω				R21	330Ω			
R8	15K				R22	Temp. Comp			
R9	5800Ω				R23	3000Ω			
R10	1000Ω				R24	10Ω			
R11	470Ω				R25	100Ω			
R12	39K				R26	100Ω			
R13	8200Ω				R27	8200Ω			
R14	1000Ω				R28	1000Ω			
R15	10Ω								

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	Osc.						
L3	1st IF						
L4	2nd IF						
L5	3rd IF						

TRANSFORMER (POWER)

ITEM No.	RATING			REPLACEMENT DATA					NOTES
	PRI.	SEC. 1	SEC. 2	TOSHIBA PART No.	Merit PART No.	Stancor PART No.	Thordarson PART No.	Triad PART No.	
T1	117V Ⓢ .010A	8VCT Ⓢ .015A DC							

PARTS LIST AND DESCRIPTIONS (Continued)

TRANSFORMER (DRIVER)

ITEM No.	TURNS RATIO		REPLACEMENT DATA					NOTES
			TOSHIBA PART No.	Merit PART No.	Stancor PART No.	Thordarson PART No.	Triad PART No.	
	PRI.	SEC.						
T2	1.2	1	0428B					

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.						
T3	250Ω CT	6-8Ω	0498A					

SPEAKER

ITEM No.	TYPE			REPLACEMENT DATA		NOTES
				TOSHIBA PART No.	QUAM PART No.	
	SIZE	FIELD	V. C. IMP.			
SP1	2 1/4"	PM	6-8Ω	2304B	22A06Z8	* Used in Speaker Box.
SP2	4"	PM	3-4Ω	50140 *	4A1	

BATTERIES

ITEM No.	VOLTAGE	TOSHIBA PART No.	REPLACEMENT DATA						NOTES
			BURGESS		EVEREADY		MALLORY		
			"A"	"B"	"A"	"B"	"A"	"B"	
M1	1.5V	UM-3		930		1015		M-15R	3 Required 3 Required (Part of Aux Speaker)
M2	1.5V	UM-1		130		635		M-14R	

SIGNAL DIODES

ITEM No.	ORIG. TYPE	REPLACEMENT DATA				NOTES
		TOSHIBA PART No.	GENERAL ELECTRIC PART No.	RAYTHEON PART No.	SYLVANIA PART No.	
M3	1N60			1N60	1N60	Detector

POWER RECTIFIERS

ITEM No.	RATING	REPLACEMENT DATA				NOTES
	CURRENT (Measured)	TOSHIBA PART No.	RCA PART No.	SARKES TARZIAN PART No.	SYLVANIA PART No.	
M4	.015A		1N1763	2F4	SR200	
M5	.015A		1N1763	2F4	SR200	

FUSES

ITEM No.	TYPE	RATING	REPLACEMENT DATA						
			TOSHIBA PART No.		LITTELFUSE PART No.		BUSS PART No.		
			FUSE	HOLDER	FUSE	HOLDER	FUSE	HOLDER	
M6	3AG	1/2A 125V			312.500 (3AG 1/2A 125V)			AGC 1/2	

MISCELLANEOUS

ITEM No.	PART NAME	TOSHIBA PART No.	NOTES
M7	Tuning Cap		2 Gang

WIRING DATA

General-use Unshielded Hook-up Wire Use BFLDKN No. 8630 (Solid) Available in Ten Colors
8634 (Stranded) Available in Ten Colors

CHASSIS—TOP VIEW

