

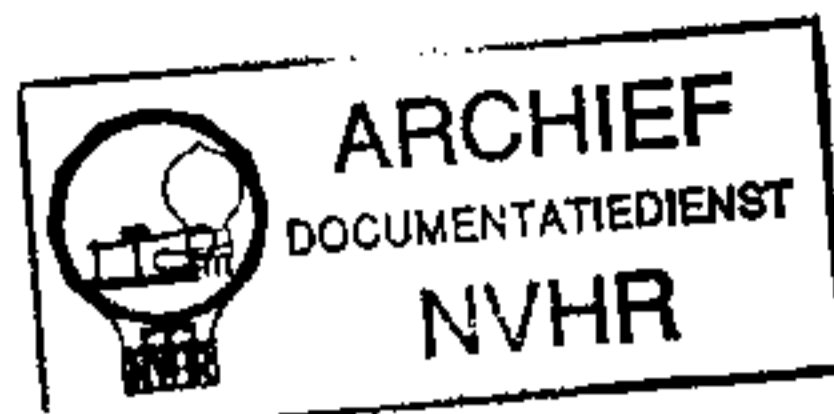
PHOTOFACT* Folder



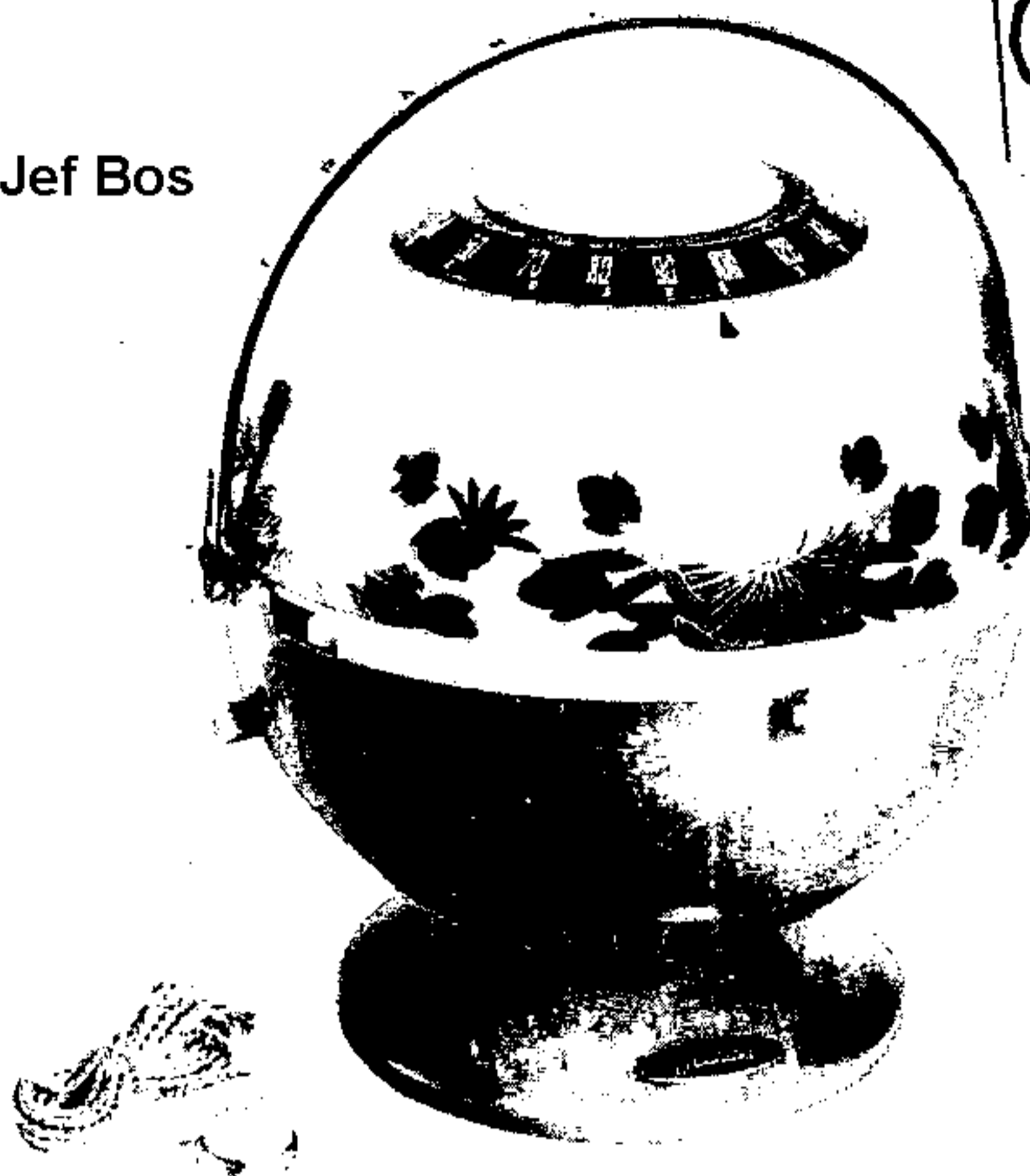
TOSHIBA
MODEL 6TR-92

with CIRCUITRACE*

Ned. Ver. v. Historie v/d



Met dank aan Jef Bos



TRADE NAME	Toshiba Model 6TR-92		RATING	17MA@9 Volts DC (No Signal, Min. Volume)
IMPORTER	Excel Corp. of America, 9 Rockefeller Plaza, New York 20, N. Y.			
TYPE SET	Battery Operated Transistorized AM Receiver			
POWER SUPPLY	9 Volts DC			
TUNING RANGE—BROADCAST	540-1600KC			23MA@9 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: A4 & A6 GENERAL CEMENT #5004, 5008, 5009
WALSCO #2520

	DUMMY ANTENNA	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.		"	1600KC	"	"	A4	"
3.		"	600KC	600KC	"	A5	Adjust for maximum output while rocking tuning gang. Repeat steps 2 & 3.
4.		"	1400KC	1400KC	"	A6	Adjust for maximum output.

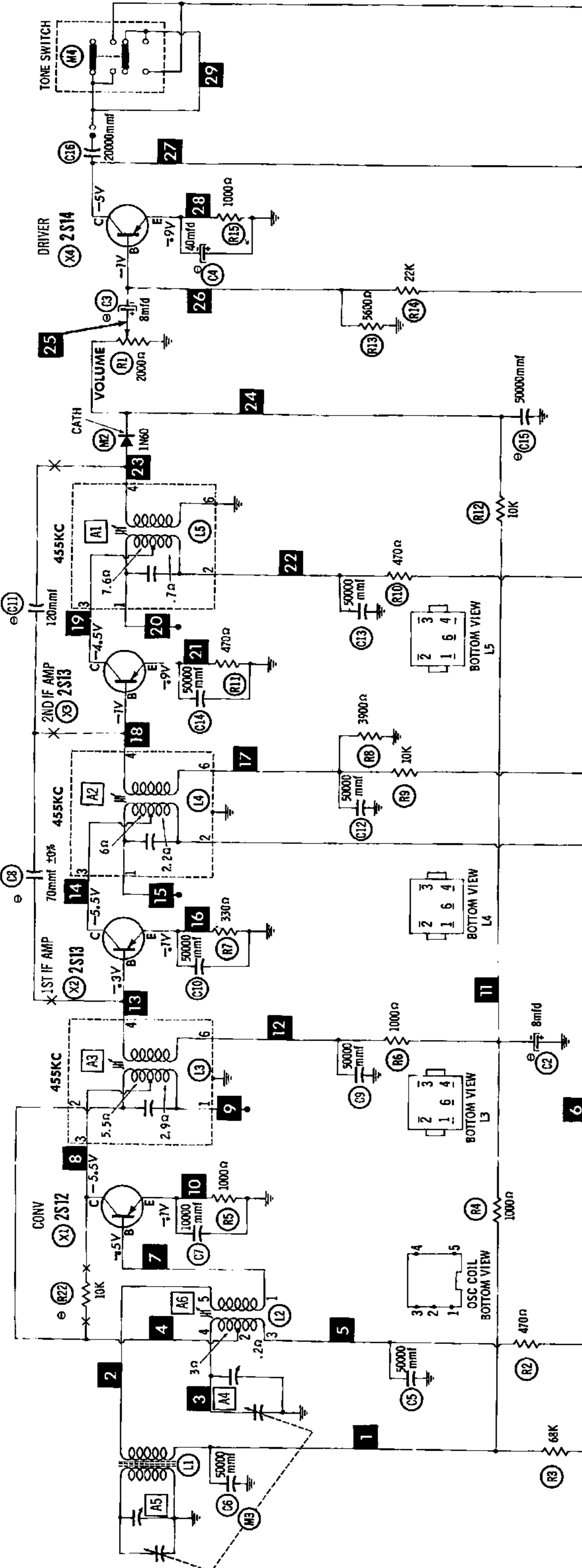
DISASSEMBLY

1. Loosen two thumb screws holding handle.
2. Lift top half of cabinet away.

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 JF95

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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.

1. DC voltage measurements taken with vacuum tube vo.
2. Socket connections are shown as bottom views.
3. Measured values are from socket pin to common negative.
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.

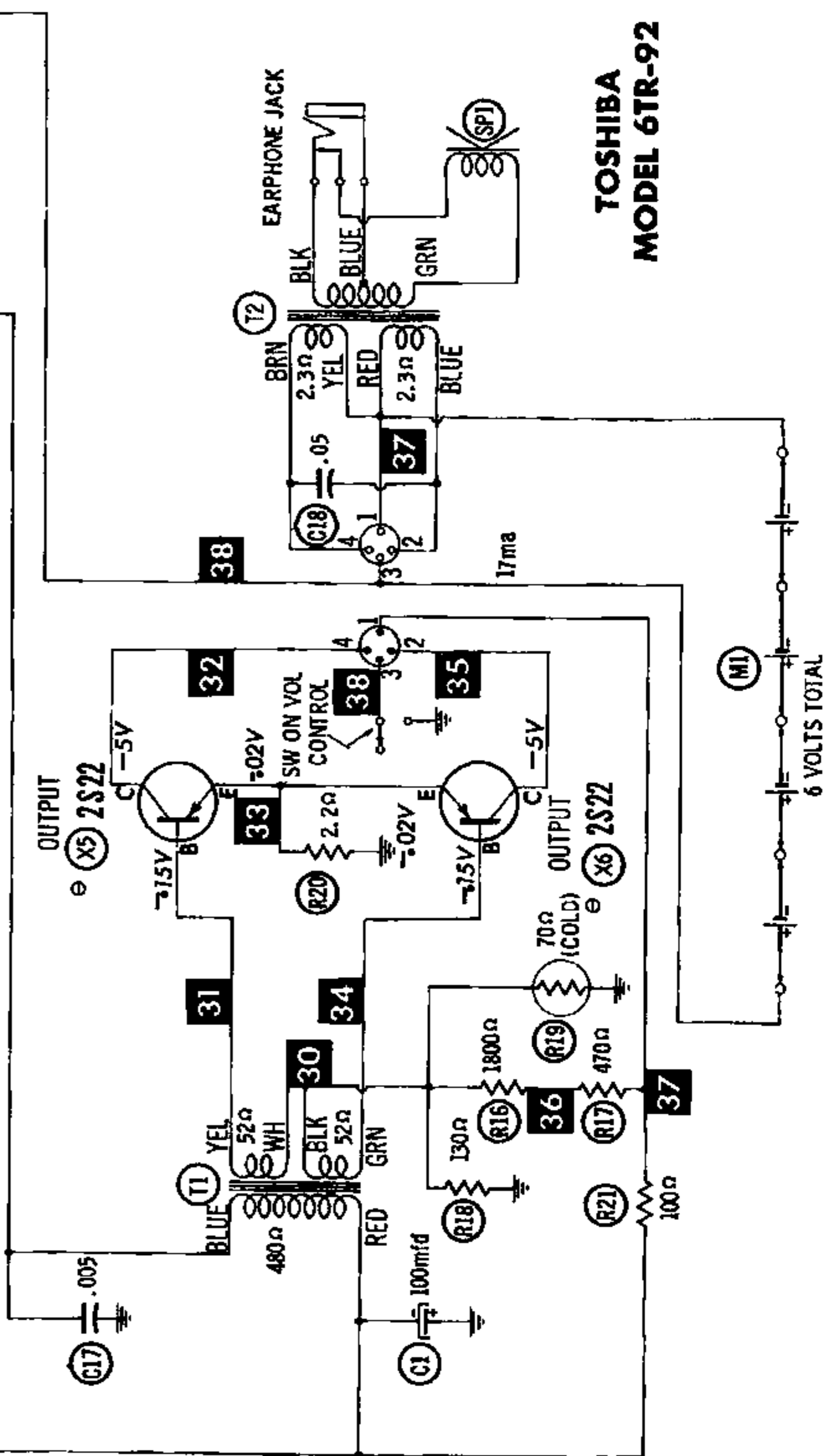
SEE PARTS LIST FOR ALTERNATE VALUE OR APPLICATION

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

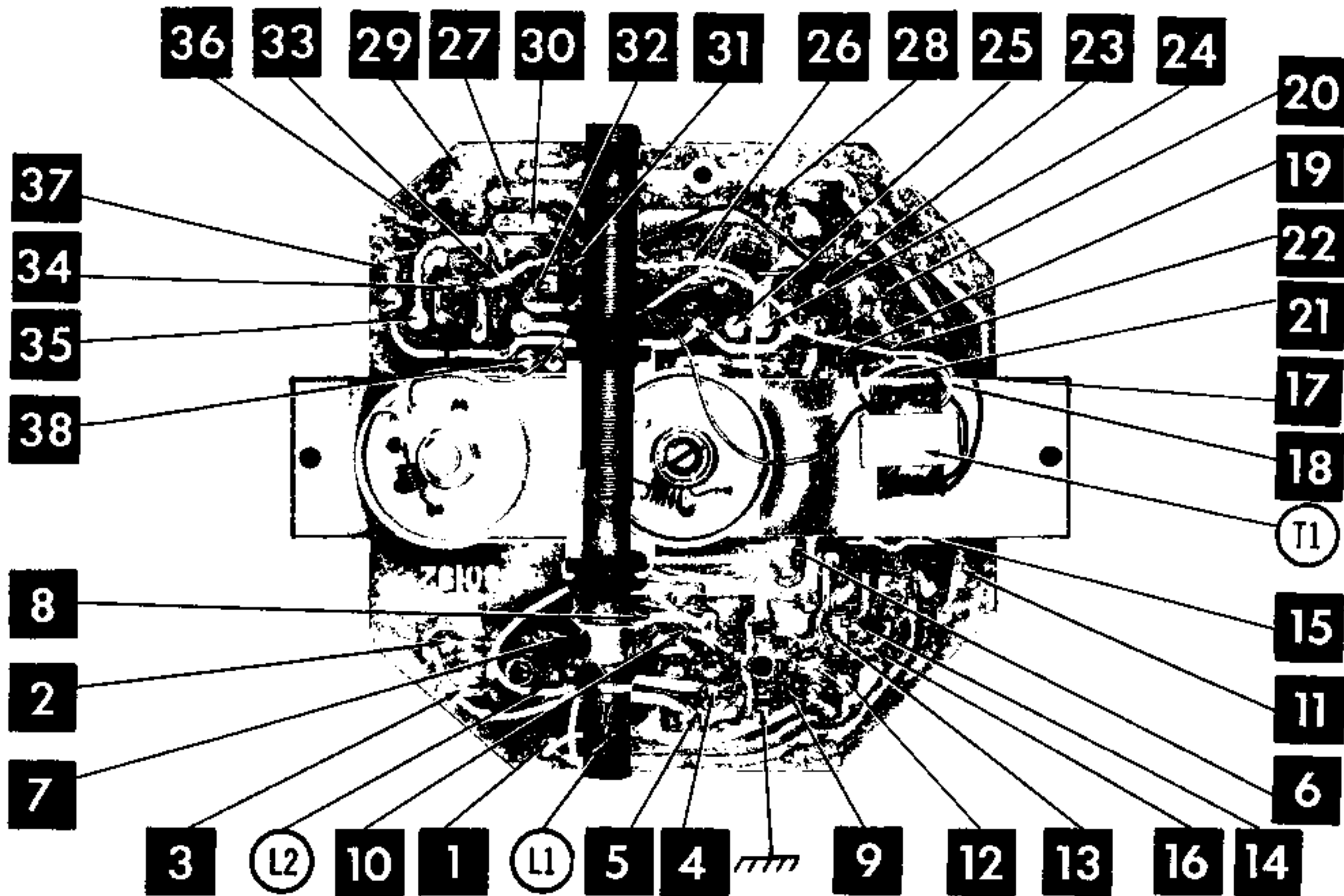
TRANSISTOR READINGS
BOTTOM VIEW

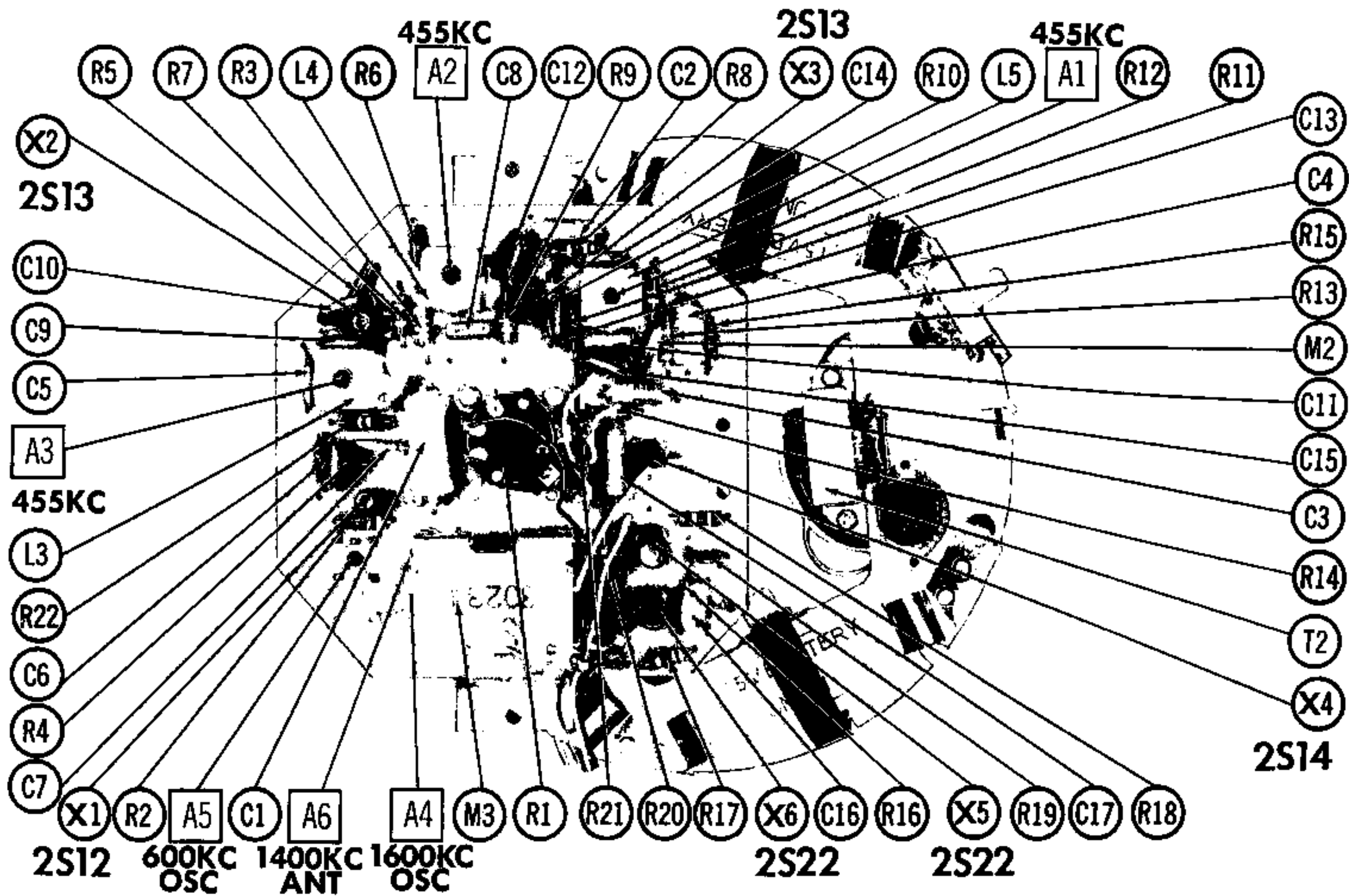
ITEM	TYPE	BASE	EMITTER	COLLECTOR
X1	2S12	13K	1000 Ω	1570 Ω
X2	2S13	13K	330 Ω	1100 Ω
X3	2S13	3300 Ω	470 Ω	1570 Ω
X4	2S14	5000 Ω	1000 Ω	1580 Ω
X5	2S22	130 Ω	2.2 Ω	12.3 Ω
X6	2S22	130 Ω	2.2 Ω	12.3 Ω

TRANSISTORS REMOVED FOR RESISTANCE MEASUREMENTS. MEASURED FROM PIN 1 OF SPEAKER SOCKET.



A PHOTOFAC STANDARD NOTATION SCHEMATIC with CIRCUITRACE





CHASSIS TOP VIEW

PARTS LIST AND

TRANSISTORS

ITEM No.	ORIG. TYPE	USE	REPLACEMENT DATA				NOTES
			CBS PART No.	RCA PART No.	RAYTHEON PART No.	SYLVANIA PART No.	
X1	2S12	Converter			2N486		PNP PNP PNP PNP PNP PNP } Matched
X2	2S13	1st IF Amplifier			2N482		
X3	2S13	2nd IF Amplifier			2N482		
X4	2S14	Driver			2N362		
X5	2S22 *	Output			2N632		
X6	2S22 *	Output			2N632		

* Some versions may use 2S18 in this application.

ELECTROLYTIC CAPACITORS

ITEM No.	RATING		REPLACEMENT DATA						NOTES
	CAP.	VOLT.	TOSHIBA PART No.	AEROVOX PART No.	CORNELL-DUBILIER PART No.	MALLORY PART No.	PYRAMID PART No.	SPRAGUE PART No.	
C1	100	6		PWE6100	NLW100-6	TT6X100	ML100-6	TE-1102	
C2	8	3	①	PWE3008	EC8-6	TT6X8	ML8-6	TE-1052.5	
C3	8	3	①	PWE3008	EC8-6	TT6X8	ML8-6	TE-1052.5	
C4	40	3	②	PWE3040	EC40-3	TT3X40	ML40-6	TE-1057	

① Some versions may use 10mfd in this application.

② Some versions may use 50mfd in this application.

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			REPLACEMENT DATA						NOTES	
	CAP.	VOLT	TOL	TOSHIBA PART No.	AEROVOX PART No.	CENTRALAB PART No.	CORNELL-DUBILIER PART No.	MALLORY PART No.	SPRAGUE PART No.		
C5	50000		10%		BPD-05	DF-503	H-05S5	TA-150	TG-S50	①	
C6	50000				BPD-05	DF-503	H-05S5	TA-150	TG-S50		
C7	10000				BPD-01	DD-103	H-05S1	TA-110	TG-S10		
C8	70										
C9	50000					BPD-05	DF-503	H-05S5	TA-150	TG-S50	①
C10	50000					BPD-05	DF-503	H-05S5	TA-150	TG-S50	
C11	120					1469-00012	TCZ-120	22R5T12		MS-312	①
C12	50000					BPD-05	DF-503	H-05S5	TA-150	TG-S50	②
C13	50000					BPD-05	DF-503	H-05S5	TA-150	TG-S50	
C14	50000					BPD-05	DF-503	H-05S5	TA-150	TG-S50	
C15	50000					BPD-05	DF-503	H-05S5	TA-150	TG-S50	
C16	20000					BPD-02	DD-203	H-05S2	TA-120	TG-S20	
C17	.005	200				P285N-005	DD-502	BYA10D5	GTM-2247	65P51253	
C18	.05	200				P285N-05	DF-503	CUB285	GTM-2147	65P47352	

Note 1. Not used in some versions.

Note 2. Some versions may use 10000mmf in this application.

CONTROLS

ITEM No.	RATING		REPLACEMENT DATA					INSTALLATION NOTES
	RESISTANCE	WATTS	TOSHIBA PART No.	CENTRALAB PART No.	CLAROSTAT PART No.	IRC PART No.	MALLORY PART No.	
R1	2000Ω	½	33.03					Volume & Switch

DESCRIPTIONS

RESISTORS

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

ITEM No.	RATING		TOSHIBA PART No.	NOTES
	OHMS	WATT		
R2	470Ω			
R3	68K			
R4	1000Ω			
R5	1000Ω			
R6	1000Ω			
R7	330Ω			
R8	3900Ω			
R9	10K			
R10	470Ω			
R11	470Ω			
R12	10K			

ITEM No.	RATING		TOSHIBA PART No.	NOTES
	OHMS	WATT		
R13	5600Ω			
R14	22K			
R15	1000Ω			
R16	1800Ω			
R17	470Ω			
R18	130Ω			
R19	70Ω (Cold)			
R20	2.2Ω			
R21	100Ω			
R22	10K			①

① Not used in some versions.

COILS (RF-IF)

ITEM No.	USE	REPLACEMENT DATA					NOTES
		TOSHIBA PART No.	Gramer PART No.	Meissner PART No.	Merit PART No.	Miller PART No.	
L1	Loopstick						
L2	Osc. Coil						
L3	1st IF Trans.						
L4	2nd IF Trans.						
L5	3rd IF Trans.						

TRANSFORMER (DRIVER)

ITEM No.	TURNS RATIO		REPLACEMENT DATA					NOTES	
			TOSHIBA PART No.	Halldorson PART No.	Merit PART No.	Stancor PART No.	Thordarson PART No.		Triad PART No.
	PRI.	SEC. 1							
T1	5	1	20168						
		SEC. 2							
	5	1							

TRANSFORMER (AUDIO OUTPUT)

ITEM No.	IMPEDANCE		REPLACEMENT DATA					NOTES	
			TOSHIBA PART No.	Halldorson PART No.	Merit PART No.	Ram PART No.	Stancor PART No.		Thordarson PART No.
	PRI. 1	SEC.							
T2	32Ω	3.2Ω	20167						
		Tap@							
	PRI. 2	3Ω							
	32Ω								

SPEAKER

ITEM No.	TYPE			REPLACEMENT DATA		NOTES
				TOSHIBA PART No.	QUAM PART No.	
	SIZE	FIELD	V. C. IMP.			
SP1	4"	PM	3-4Ω	SP-4001A	4A15	

PARTS LIST AND DESCRIPTIONS (Continued)

BATTERIES

ITEM No.	VOLTAGE	TOSHIBA PART No.	REPLACEMENT DATA				NOTES
			BURGESS	EVEREADY	MALLORY		
M1	6V	UM-1 *	"A"	"B"	"A"	"B"	① 4 Used ② Mercury Type, 4 Used
			2R①	A100①		M-13R① RM-42R②	

* Alternate Part #6UM-1

CRYSTAL DIODES

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

MISCELLANEOUS

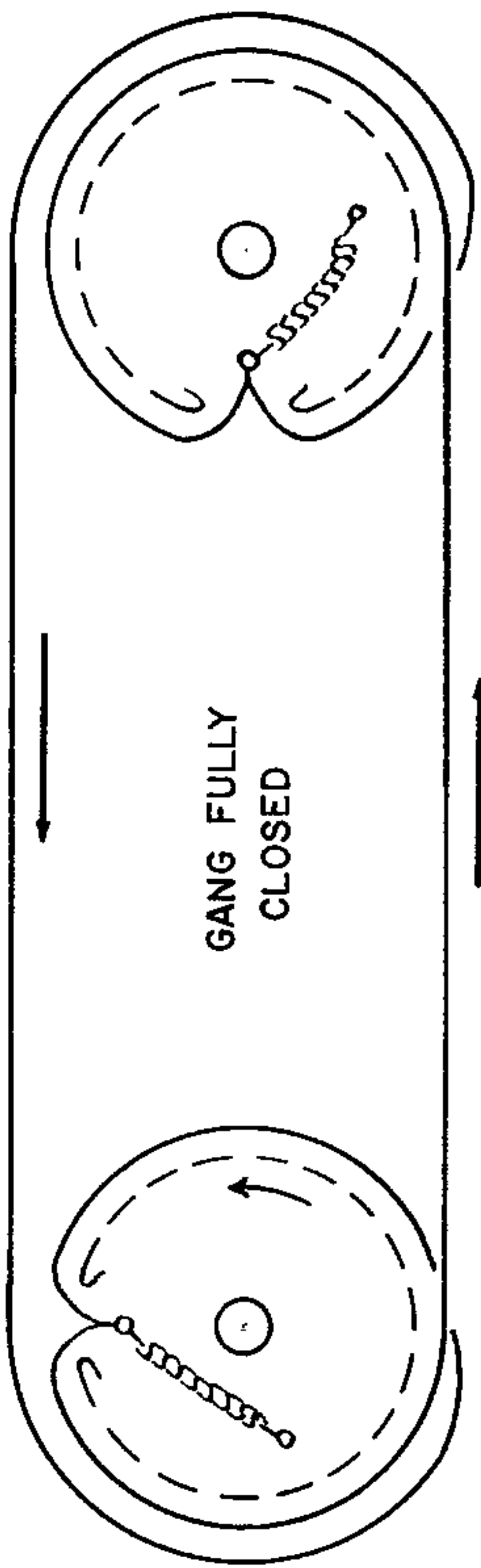
ITEM No.	PART NAME	TOSHIBA PART No.	NOTES
M3	Tuning Cap.		2 Gang, Ant. 10-170mmf, Osc. 9-88mmf
M4	Switch Printed Board	60192	Tone (SPST, Slide Type)

CABINETS & CABINET PARTS

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

WIRING DATA

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



DIAL CORD DRIVE