

PHOTOFACT® Folder

with CIRCUITRACE

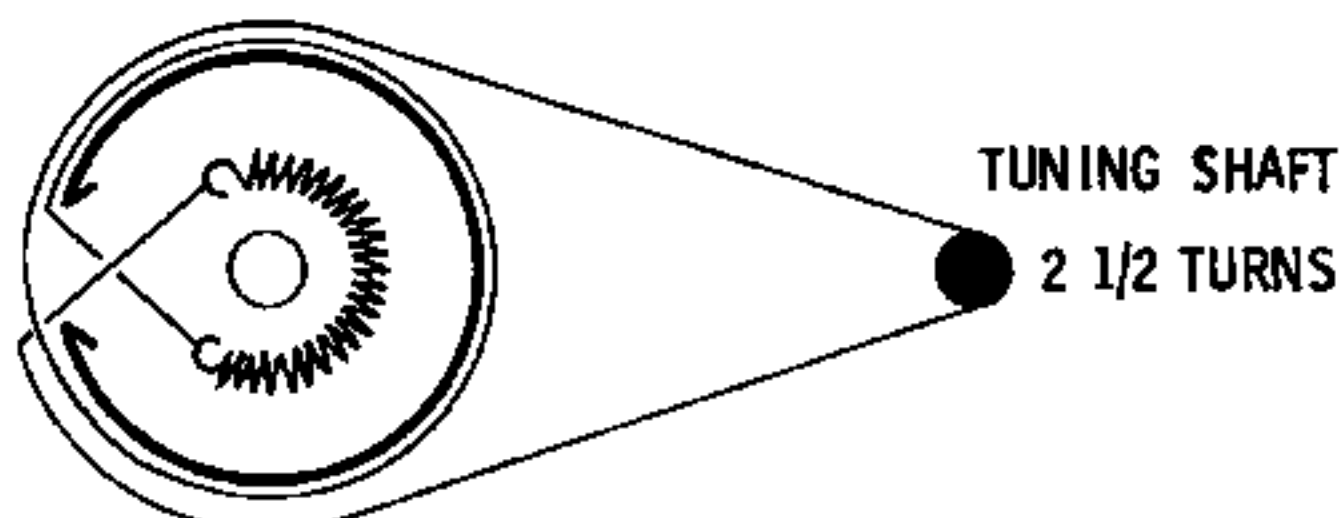
TOSHIBA
MODEL 6TP-314

Met dank aan Jef Bos

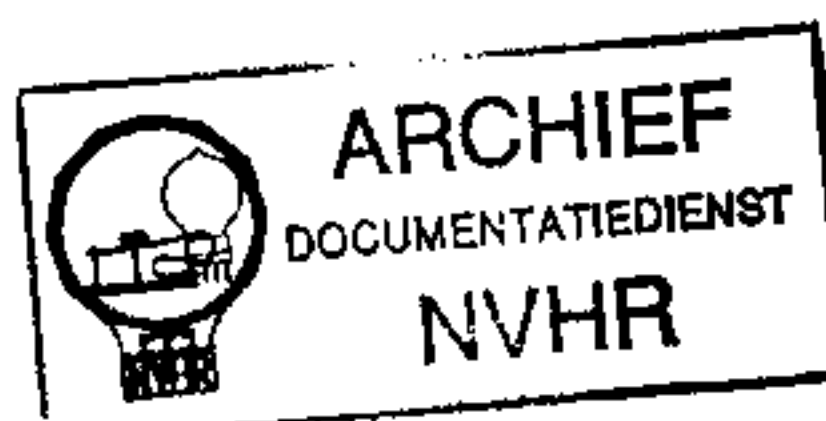


DIAL CORD STRINGING

TUNING GANG FULLY CLOSED



Ned. Ver. v. Historie v/d Radio



TRADE NAME	Toshiba Model 6TP-314		
IMPORTER	Transistor World Corp., 52 Broadway, New York 4, N. Y.		
TYPE SET	Battery Operated Transistorized Portable AM Receiver		
POWER SUPPLY	4.5 Volts DC	RATING	4.5MA @ 4.5 Volts DC (No Signal, Min. Volume) 7MA @ 4.5 Volts DC (Signal, Normal Volume)
TUNING RANGE—BROADCAST	530 — 1650KC		

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.

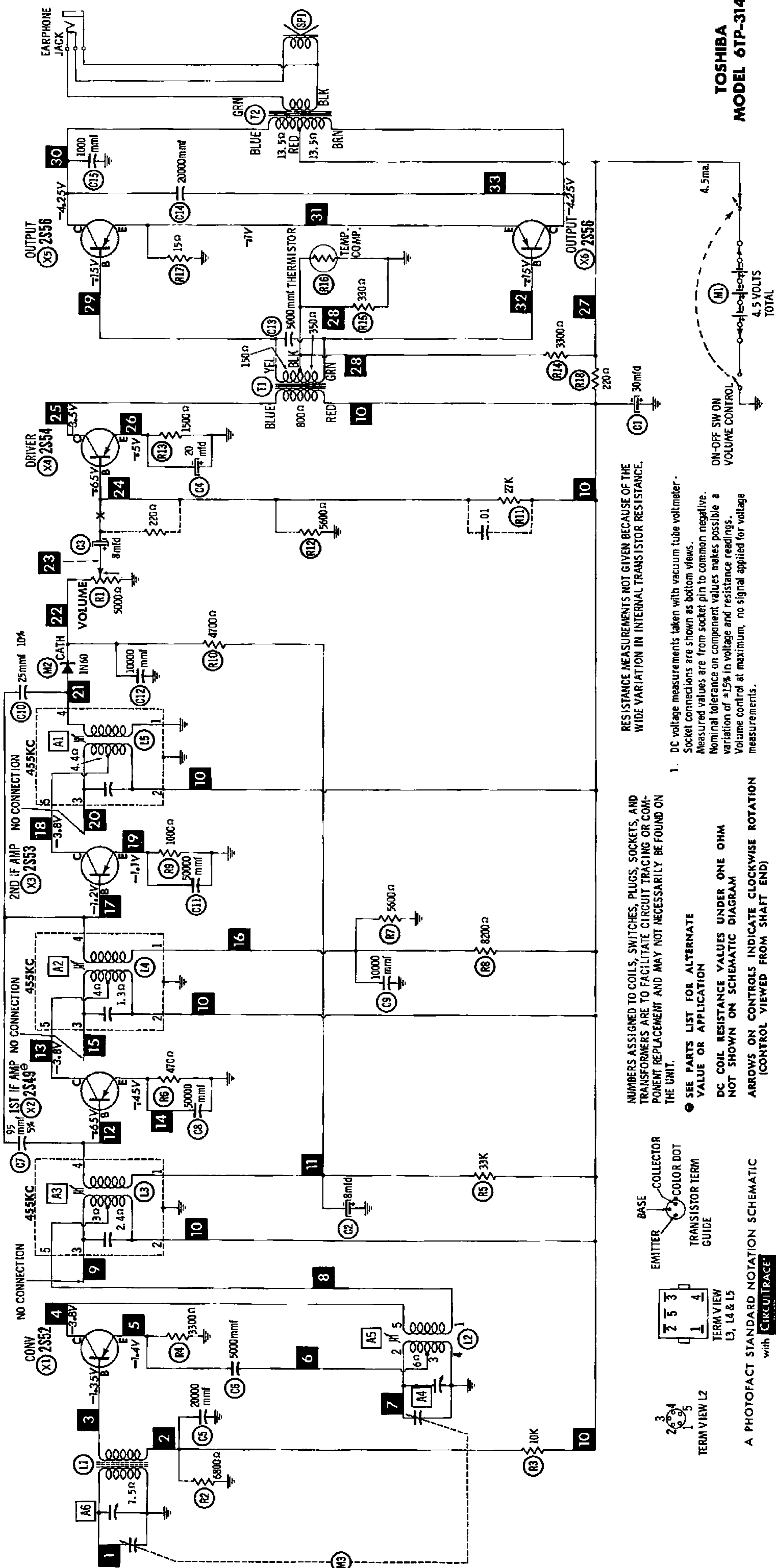
Suggested alignment tools: A1, A2, A3... GENERAL CEMENT #5009, 8195, 8274, 8275, 8728, 8729, 8987, 8988, 8989
WALSCO #2515, 2531, 2532
A4, A6..... GENERAL CEMENT #5000, 5003, 5066, 8276, 8290, 9087, 9089
WALSCO #2512, 2525, 2528

	SIGNAL GENERATOR COUPLING	SIGNAL GENERATOR FREQUENCY	RADIO DIAL SETTING	OUTPUT METER	ADJUST	REMARKS
1.	High side thru .1mf to base of Converter. Low side to chassis.	455KC (400v Mod.)	Tuning gang fully open.	Across voice coil.	A1, A2, A3	Adjust for maximum output.
2.	Loop	1650KC	"	"	A4	Fashion loop of several turns of wire and radiate signal into loop of receiver. Adjust for maximum output.
3.	"	600KC	Tune to 600KC signal.	"	A5	"
4.	"	1400KC	Tune to 1400KC signal.	"	A6	Adjust for maximum output while rocking tuning gang.

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 JF724

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

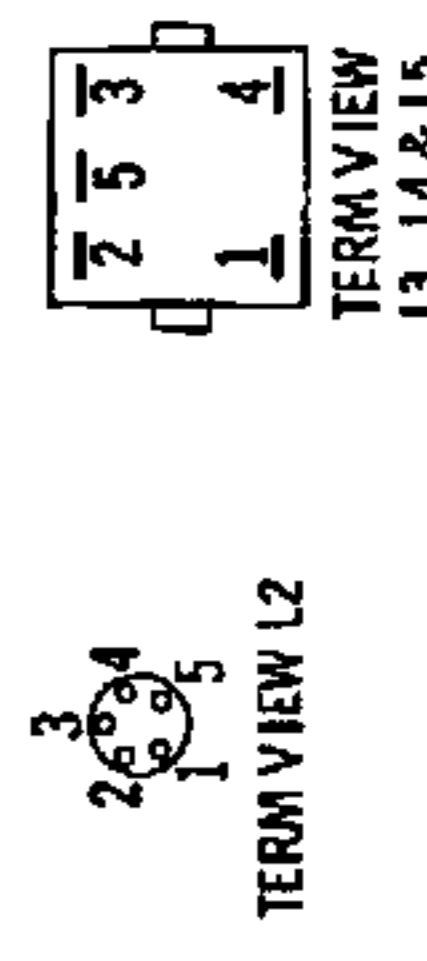
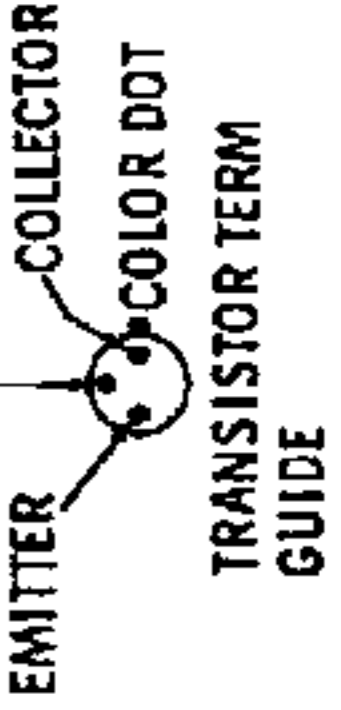
- DC voltage measurements taken with vacuum tube voltmeter. Socket connections are shown as bottom views. Measured values are from socket pin to common negative. Nominal tolerance on component values makes possible a variation of ±15% in voltage and resistance readings. Volume control at maximum, no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

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.

SEE PARTS LIST FOR ALTERNATE VALUE OR APPLICATION

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

ARROWS ON CONTROLS INDICATE CLOCKWISE ROTATION (CONTROL VIEWED FROM SHAFT END)



A PHOTOFACIT STANDARD NOTATION SCHEMATIC with **CIRCUITRACE**

PARTS LIST AND DESCRIPTIONS

TRANSISTORS

ITEM No.	ORIG. TYPE	USE	REPLACEMENT DATA				NOTES
			CBS PART No.	RCA PART No.	RAYTHEON PART No.	SYLVANIA PART No.	
X1	2852	Converter		2N412	2N486	2N412	PNP
X2	2849 *	1st IF Amplifier		2N410	2N483	2N410	PNP
X3	2853	2nd IF Amplifier		2N410	2N483	2N410	PNP
X4	2854	Driver		2N406	2N362	2N408	PNP
X5	2856	Output		2N408	2N632	2N408	PNP
X6	2856	Output		2N408	2N632	2N408	PNP } Matched Pair

* Alternate Type 2853 may be used 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	30	6	8M30E		NLW237			TE-1092	
C2	8	3	3M8E		NLW8-6	TT6X8	ML8-6	TE-1052.5	
C3	8	3	3M8E		NLW8-6	TT6X8	ML8-6	TE-1052.5	
C4	20	3	3M20E		NLW20-6		ML25-3	TE-1054	

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.	ELMENCO PART No.	MALLORY PART No.	SPRAGUE PART No.
C5	20000		C80V203AM	DDM-203	H-05S2		TA-120	TG-S20
C6	5000		C80V502AM	DDM-502	H-05D5		TA-250	TG-D50
C7	95 5%		1469-0001	DTZ-100	22R5T1	CM-19B-101J	MCE235	MS-31
C8	50000		C80V503AM	DDA-503	H-05S5		TA-150	TG-S50
C9	10000		C80V103AM	DDM-103	H-05S1		TA-110	TG-S10
C10	25 10%		1469-000025	DTZ-25	22R5Q25	CM-19B-270K	MCB220	MS-425
C11	50000		C80V503AM	DDA-503	H-05S5		TA-150	TG-S50
C12	10000		C80V103AM	DDM-103	H-05S1		TA-110	TG-S10
C13	5000		C80V502AM	DDM-502	H-05D5		TA-250	TG-D50
C14	20000		C80V203AM	DDM-203	H-05S2		TA-120	TG-S20
C15	1000		C80V102AM	DM-102	H-05D1		GP210	6HK-D10

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	40266	B16-214				Volume & Switch

RESISTORS

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

ITEM No.	RATING	REMARKS
R2	6800Ω	
R3	10K	
R4	3300Ω	
R5	33K	
R6	470Ω	
R7	5600Ω	

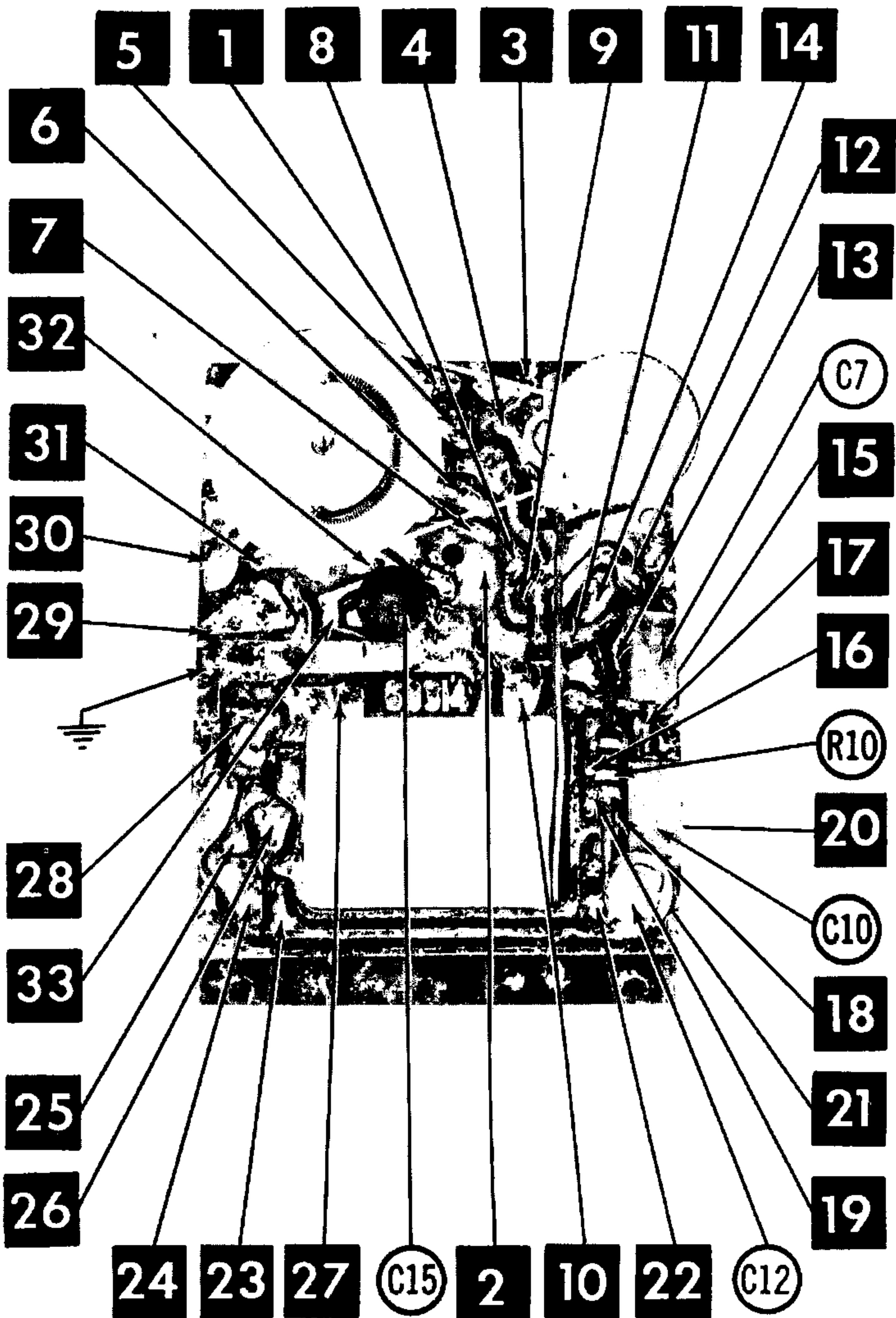
ITEM No.	RATING	REMARKS
R8	8200Ω	
R9	1000Ω	
R10	4700Ω	
R11	27K	
R12	5600Ω	
R13	1500Ω	

ITEM No.	RATING	REMARKS
R14	3300Ω	
R15	330Ω	
R16	Temp. Comp.	#M-8601
R17	15Ω	
R18	220Ω	

Toshiba Part Number.

PRINTED BOARD

A Howard W. Sams **CIRCUITRACE** Photo



PARTS LIST AND DESCRIPTIONS (Continued)

COILS (RF-IF)

ITEM No.	USE	REPLACEMENT DATA						NOTES
		TOSHIBA PART No.	Gramer PART No.	Meissner PART No.	Merit PART No.	Miller PART No.	Ram PART No.	
L1	Loopstick	LH-202						
L2	Osc. Coll	LH-150						
L3	1st IF Trans.	IT-0735						
L4	2nd IF Trans.	IT-0736						
L5	3rd IF Trans.	IT-0737						

TRANSFORMER (DRIVER)

ITEM No.	TURNS RATIO		REPLACEMENT DATA					NOTES
			TOSHIBA PART No.	Halldorson PART No.	Merit PART No.	Stancor PART No.	Thordarson PART No.	
	PRI.	SEC.						
T1	.7	1	DT-0312A					

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.	SEC.							
T2	340Ω	6-8Ω	MT-0473A						

SPEAKER

ITEM No.	TYPE			REPLACEMENT DATA		NOTES
				TOSHIBA PART No.	QUAM PART No.	
	SIZE	FIELD	V. C. IMP.			
SPI	2 1/4"	PM	6-8Ω	SP-2301A	22A06Z8	

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

CRYSTAL DIODES

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

MISCELLANEOUS

ITEM No.	PART NAME	TOSHIBA PART No.	NOTES
M3	Tuning Cap.	VC-2029	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

CHASSIS—TOP VIEW

