

**TOSHIBA MODEL 6P-15  
TRANCEL MODEL T-11**

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.

A PHOTOFACT STANDARD NOTATION SCHEMATIC  
with **CIRCUITACE**

© Howard W. Sams & Co., Inc. 1962

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

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.

SW ON VOLUME CONTROL

7ma. -NO SIGNAL  
12ma. -NORMAL VOLUME  
9V BATTERY

15 SOURCE

4 SOURCE

330 mfd

220  $\Omega$

9V BATTERY

SW ON VOLUME CONTROL

15 SOURCE

4 SOURCE

330 mfd

220  $\Omega$

9V BATTERY

# PARTS LIST AND DESCRIPTIONS

## WIRING DATA

General-use Unshielded Hook-up Wire ..... Use BELDEN No. 8530 (Solid 22AWG) Available in 12 Colors  
 8524 (Stranded 22AWG)  
 8570 (Stranded 26AWG)

### TRANSISTORS

ITEM No.	ORIG. TYPE	USE	REPLACEMENT DATA			NOTES
			GENERAL ELECTRIC PART No.	RCA PART No.	RAYTHEON PART No.	
X1	2SA73	Converter	GE-1		2N486	PNP
X2	2SA49	1st IF Amplifier	GE-1		2N483	PNP
X3	2SA53	2nd IF Amplifier	GE-1		2N483	PNP
X4	2SB54	Driver	GE-2	2N406	2N362	PNP
X5	2SB56	Output	GE-2	2N408	2N632	PNP
X6	2SB56	Output	GE-2	2N408	2N632	PNP

### POWER RECTIFIERS & SIGNAL DIODES

ITEM No.	CURRENT RATING (Measured)	ORIGINAL Part or Type No.	RECTIFIERS		DIODES	NOTES
			RCA PART No.	SARKES TARZIAN PART No.	RAYTHEON PART No.	
X7		1N60			1N60	Detector

### 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	SM10FA	PTT8	NLW10-6	MT1-5	TT9X10	MLV10-3	TE-1053
C2	10	3	SM10FA	PTT8	NLW10-6	MT1-5	TT9X10	MLV10-3	TE-1053
C3	20	3	SM20G	PTT8	NLW20-6	MT1-13	TT15X20	MLV25-3	TE-1025
C4	30	10	10MS0G	PTT43	NLW30-6	MT1-14	TT15X30	MLV35-15	TE-1158

### 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.
C5	.005		C80V502AM	DM-502	H-05D5	CCD-502	TA-250	TG-D50
C6	.005		C80V502AM	DM-502	H-05D5	CCD-502	TA-250	TG-D50
C7	.04		C80V503AM	DDA-503	H-05S5		TA-150	TG-S50
C8	3 +.25mmf		DI-3.3	DD-3R3	L10V33	CCTO-3R3	GP533	10TS-V33
C9	.01		C80V103AM	DM-103	H-05S1	CCD-103	TA-110	TG-S10
C10	.04		C80V503AM	DDA-503	H-05S5		TA-150	TG-S50
C11	2 +.25mmf		NPO-DI 2.2	DTZ-2R2	C10V2C	CCTO-2R2	CNO-522	10TCC-V22
C12	.01		C80V103AM	DM-103	H-05S1	CCD-103	TA-110	TG-S10
C13	.01		C80V103AM	DM-103	H-05S1	CCD-103	TA-110	TG-S10
C14	.02		C80V203AM	DM-203	H-05S2	CCD-203	TA-120	TG-S20

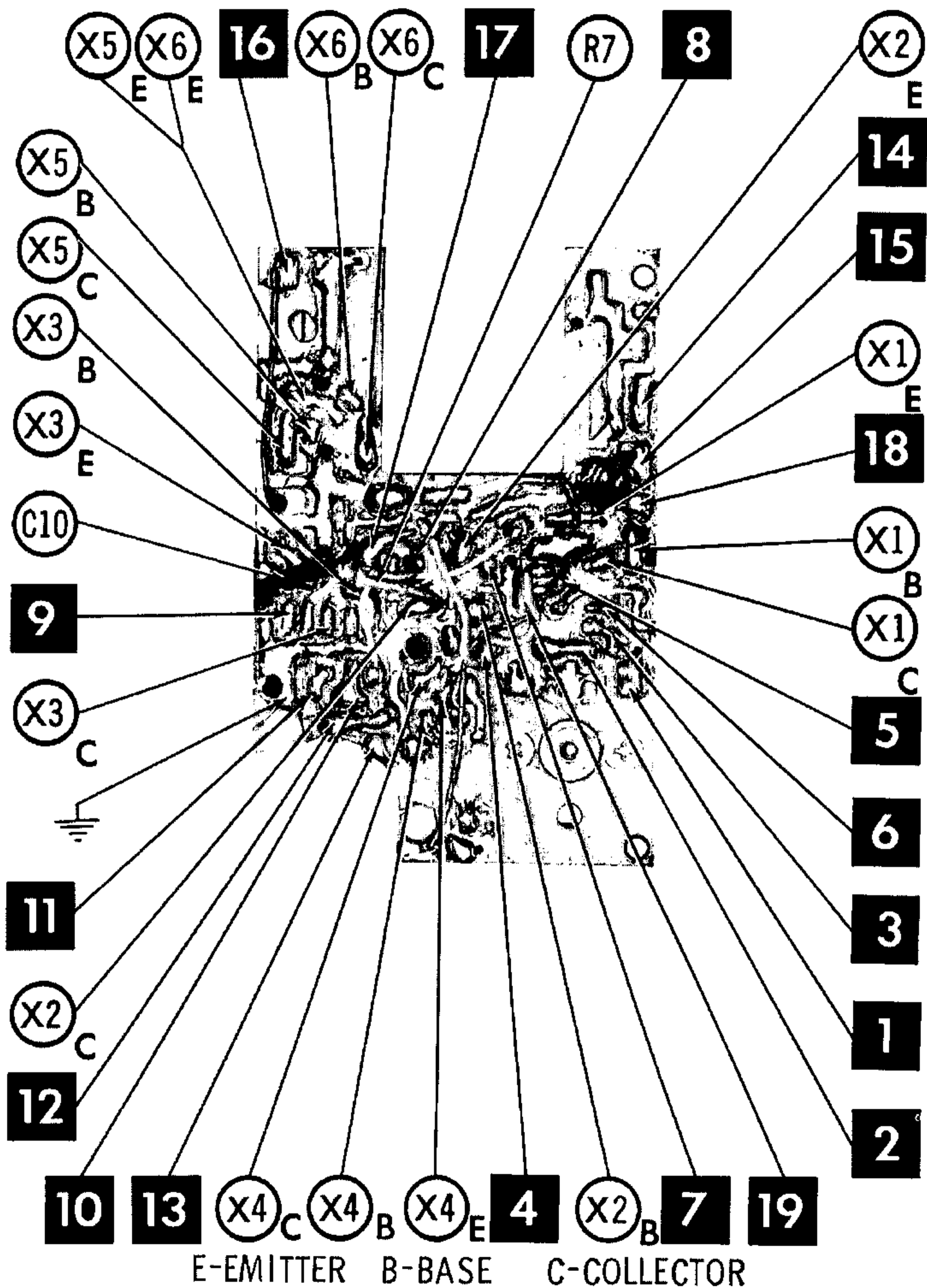
### CONTROLS

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

ITEM No.	USE	RESISTANCE	REPLACEMENT DATA				
			TOSHIBA PART No.	CENTRALAB PART No.	CLAROSTAT PART No.	CTS-IRC PART No.	MALLORY PART No.
R1	Volume & Switch	5000Ω	18T5KΩ				

# PRINTED BOARD

A Howard W. Sams **CIRCUITRACE™** Photo



# PARTS LIST AND DESCRIPTIONS (Continued)

## 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 PART No.	REMARKS			IRC PART No.	WORKMAN PART No.	REMARKS
R2	6800Ω				R12	2200Ω			
R3	22K				R13	5600Ω			
R4	3300Ω				R14	33K			
R5	100K				R15	1500Ω			
R6	4700Ω				R16	225Ω Cold			#M-8601
R7	120K				R17	6800Ω			
R8	470Ω				R18	330Ω			
R9	5600Ω				R19	15Ω			
R10	33K				R20	220Ω			
R11	1000Ω								

# Toshiba Part Number.

## COILS (RF-IF)

ITEM No.	USE	REPLACEMENT DATA					NOTES
		TOSHIBA PART No.	Merit PART No.	Miller PART No.	Stancor PART No.	Workman PART No.	
L1	Loopstick	LH-287					
L2	Osc.	LH-7009					
L3	1st IF	IT-0757					
L4	2nd IF	IT-07380	BC-570				
L5	3rd IF	IT-07370	BC-571				

## 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.	

## TRANSFORMER (AUDIO OUTPUT)

ITEM No.	IMPEDANCE		REPLACEMENT DATA					NOTES
	PRI.	SEC.	TOSHIBA PART No.	Merit PART No.	Stancor PART No.	Thordarson PART No.	Triad PART No.	

## SPEAKER

ITEM No.	TYPE			REPLACEMENT DATA		NOTES
	SIZE	FIELD	V. C. IMP.	TOSHIBA PART No.	QUAM PART No.	

## BATTERIES

ITEM No.	VOLTAGE	TOSHIBA PART No.	REPLACEMENT DATA						NOTES
			BURGESS		EVEREADY		MALLORY		
			"A"	"B"	"A"	"B"	"A"	"B"	
B1	9V	006P		2U8		216		M-1604	

## MISCELLANEOUS

ITEM No.	PART NAME	TOSHIBA PART No.	NOTES
M1	Tuning Cap	VC 2050	2 (100)

**CHASSIS—TOP VIEW**

