

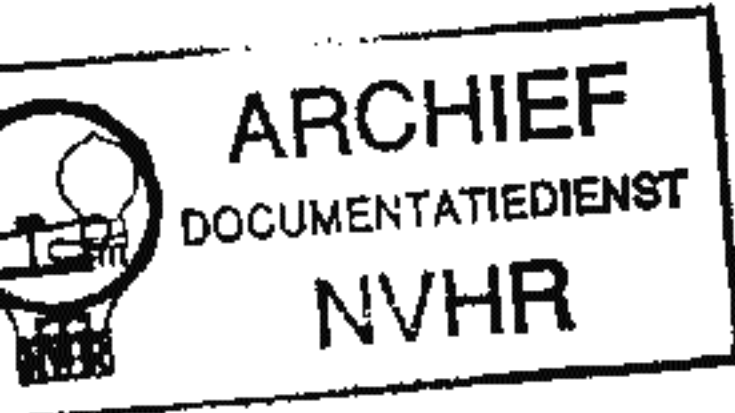
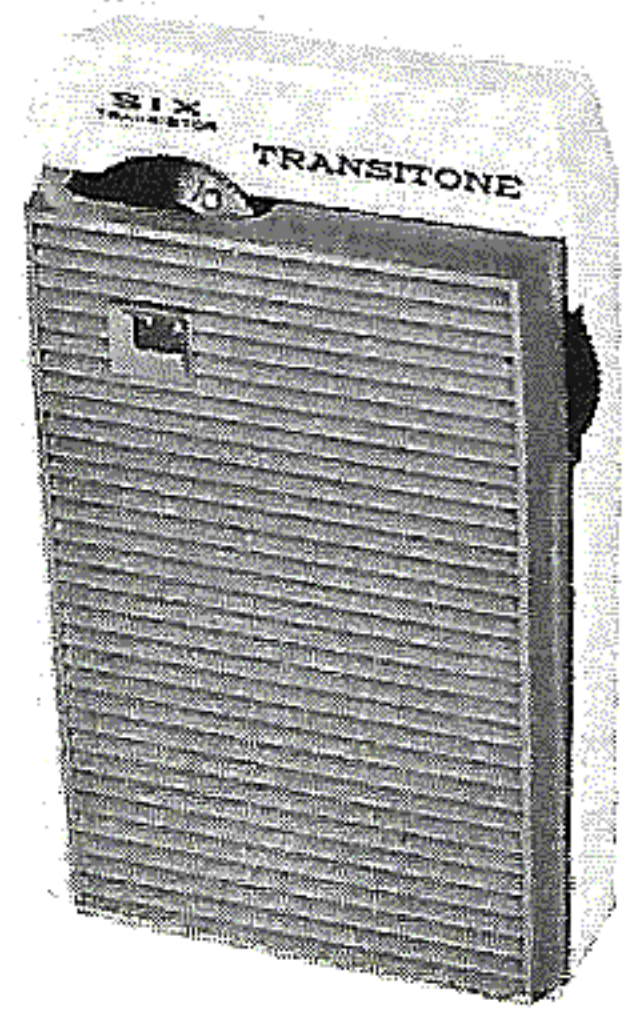


# PHOTOFACT<sup>®</sup> with

# CIRCUITRACE<sup>®</sup>

Met dank aan Jef Bos

TRADE NAME: Realtone or Transitone Model TR-1645  
 SUPPLIER: Realtone Electronics, 71 Fifth Ave.,  
 New York 3, N. Y.  
 TYPE SET: 6 Transistor AM Receiver  
 POWER SUPPLY: 9 Volts DC  
 RATING: 6 MA@9 VDC (No Signal, Min. Volume)  
 14 MA@9 VDC (Signal, Normal Volume)  
 TUNING RANGE: BROADCAST 535 - 1620KC  
 J. Ver. v. Historie v/d Radio

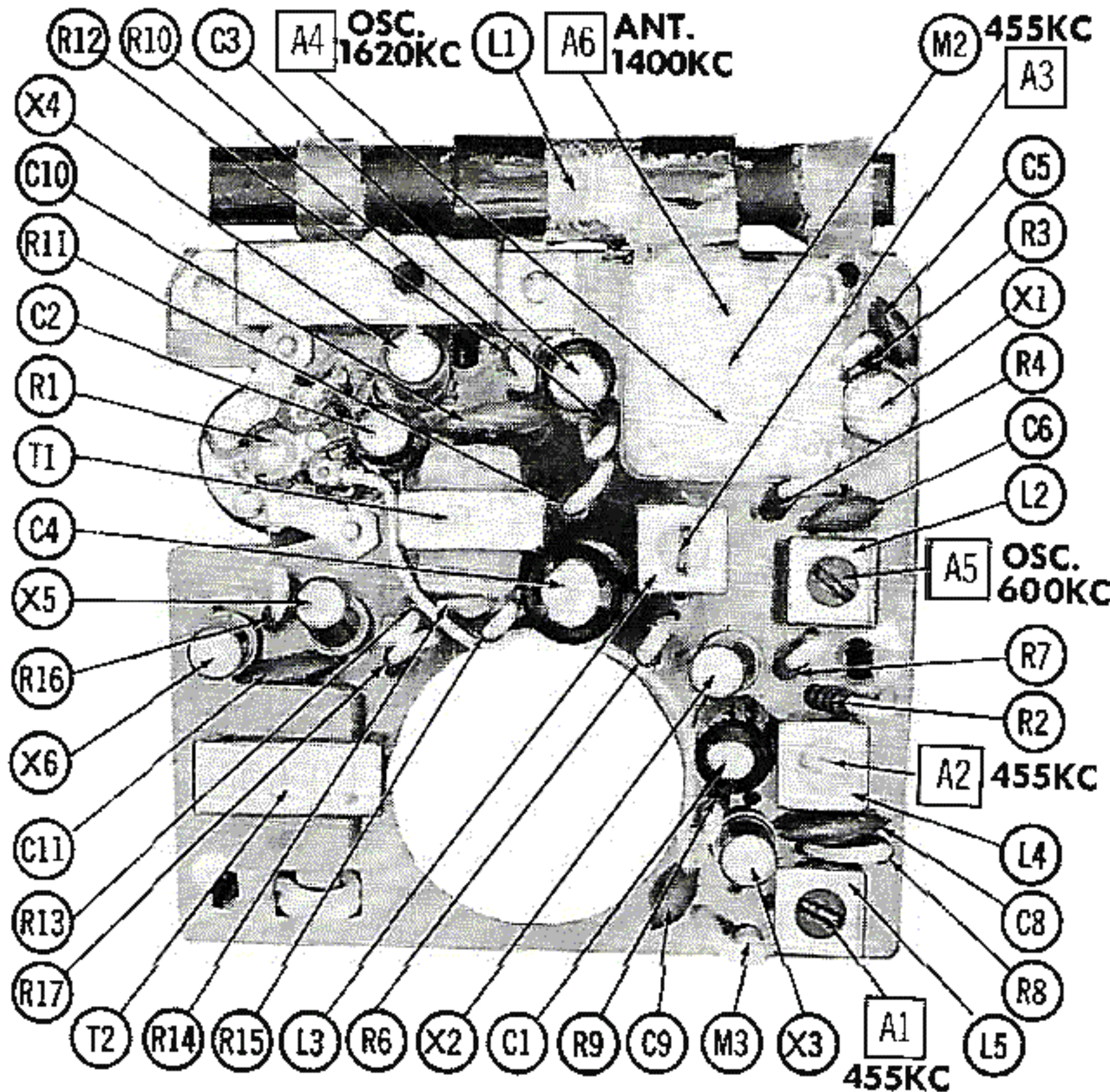


## ALIGNMENT INSTRUCTIONS

Check for specified source voltage.  
 Fashion loop of several turns of wire and connect generator across loop.  
 Adjust output of generator to radiate only enough signal into receiver to obtain a suitable indication.  
 Suggested Alignment Tools:

A1 thru A6..... GENERAL CEMENT #5000, 5066, 8290  
 WALSCO #2525

	SIGNAL GENERATOR FREQUENCY	RADIO DIAL SETTING	INDICATOR	ADJUST	REMARKS
1.	455KC (400% Mod.)	Tuning gang fully open.	Output Meter across voice coil.	A1, A2, A3	Adjust for maximum. Repeat as required.
2.	1620KC	"	"	A4	Adjust for maximum.
3.	600KC	Tune to Signal.	"	A5	Rock tuning gang and adjust for maximum. Repeat steps 2 and 3.
4.	1400KC	"	"	A6	Adjust for maximum.



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

## TRANSISTORS

ITEM No.	ORIG. TYPE	USE	REPLACEMENT DATA			NOTES
			DELCO PART No.	GENERAL ELECTRIC PART No.	RCA PART No.	
X1	2SA285	Converter	DS-25	GE-1		PNP
X2	2SA156	1st IF Amplifier	DS-25	GE-1		PNP
X3	2SA156	2nd IF Amplifier	DS-25	GE-1		PNP
X4	2SB113	Driver	DS-26	GE-2	2N406	PNP
X5	2SB116	Output	DS-26	GE-2	2N408	PNP
X6	2SB116	Output	DS-26	GE-2	2N408	PNP

## ELECTROLYTIC CAPACITORS

ITEM No.	RATING		REPLACEMENT DATA						
	CAP.	VOLT.	REALTONE PART No.	AEROVOX PART No.	CORNELL-DUBILIER PART No.	GENERAL ELECTRIC PART No.	GENERAL INSTRUMENT PART No.	MALLORY PART No.	SPRAGUE PART No.
C1	10	6	V-10-6	CRE307	NLW10-6				TE-1087
C2	5	6	V-5-6	CRE304	NLW5-15	MT1-3			TE-1084
C3	30	6	V-30-6						
C4	50	10	V-50-10						

## 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	.01		TTD-01	CK-103	H05S1		TA-110	TG-S10
C6	.005		TTD-005	CK-502	H05D5		TA-250	TG-D50
C7	5		NPO-DI 5.0	DTZ-4R7	C10V5C	CC TO-050	CNO-547	10TCC-V50
C8	.02		TTD-02	CK-203	H05S2		TA-120	TG-S20
C9	.01		TTD-01	CK-103	H05S1		TA-110	TG-S10
C10	.04		TTD-05	CK-503	H05S5		TA-150	TG-S50
C11	.02		TTD-02	CK-203	H05S2		TA-120	TG-S20

## CONTROLS

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

ITEM No.	USE	RESISTANCE	REPLACEMENT DATA				
			REALTONE PART No.	CENTRALAB PART No.	CLAROSTAT PART No.	CTS-IRC PART No.	MALLORY PART No.
R1	Volume & Switch	5000Ω	RV-020				

## COILS (RF-IF)

ITEM No.	USE	REPLACEMENT DATA					NOTES
		REALTONE PART No.	MERIT PART No.	MILLER PART No.	STANCOR PART No.	WORKMAN PART No.	
L1	Loopstick	HA-083		2009			
L2	Oscillator	HO-091	BC-572	2060	RTC-9261		
L3	1st IF	III-042	BC-569	2061	RTC-9262		
L4	2nd IF	III-052	IC-570	2062	RTC-9263		
L5	3rd IF	III-062	IC-571	2063	RTC-9264		

# DESCRIPTION

## TRANSFORMER (DRIVER)

ITEM No.	TURNS RATIO		REPLACEMENT DATA					NOTES
			REALTONE PART No.	MERIT PART No.	STANCOR PART No.	THORDARSON PART No.	TRIAD PART No.	
	PRI.	SEC.						
T1	1.1	1	LI-004					

## TRANSFORMER (AUDIO OUTPUT)

ITEM No.	IMPEDANCE		REPLACEMENT DATA					NOTES
			REALTONE PART No.	MERIT PART No.	STANCOR PART No.	THORDARSON PART No.	TRIAD PART No.	
	PRI.	SEC.						
T2	400Ω CT	6-8Ω	LO-007					

## SPEAKER

ITEM No.	TYPE	REPLACEMENT DATA		NOTES
		REALTONE PART No.	QUAM PART No.	
SP1	2" PM 6-8Ω	AS-102		

## BATTERIES

ITEM No.	VOLTAGE	REALTONE PART No.	REPLACEMENT DATA			NOTES
			BURGESS	EVEREADY	MALLORY	
M1	9V		2U6 (or H146)	216	TR146 (or M-1604, MN-1604)	

## MISCELLANEOUS

ITEM No.	PART NAME	REALTONE PART No.	NOTES
M2 M3	Tuning Cap. Detector	CV-012 SD-46	

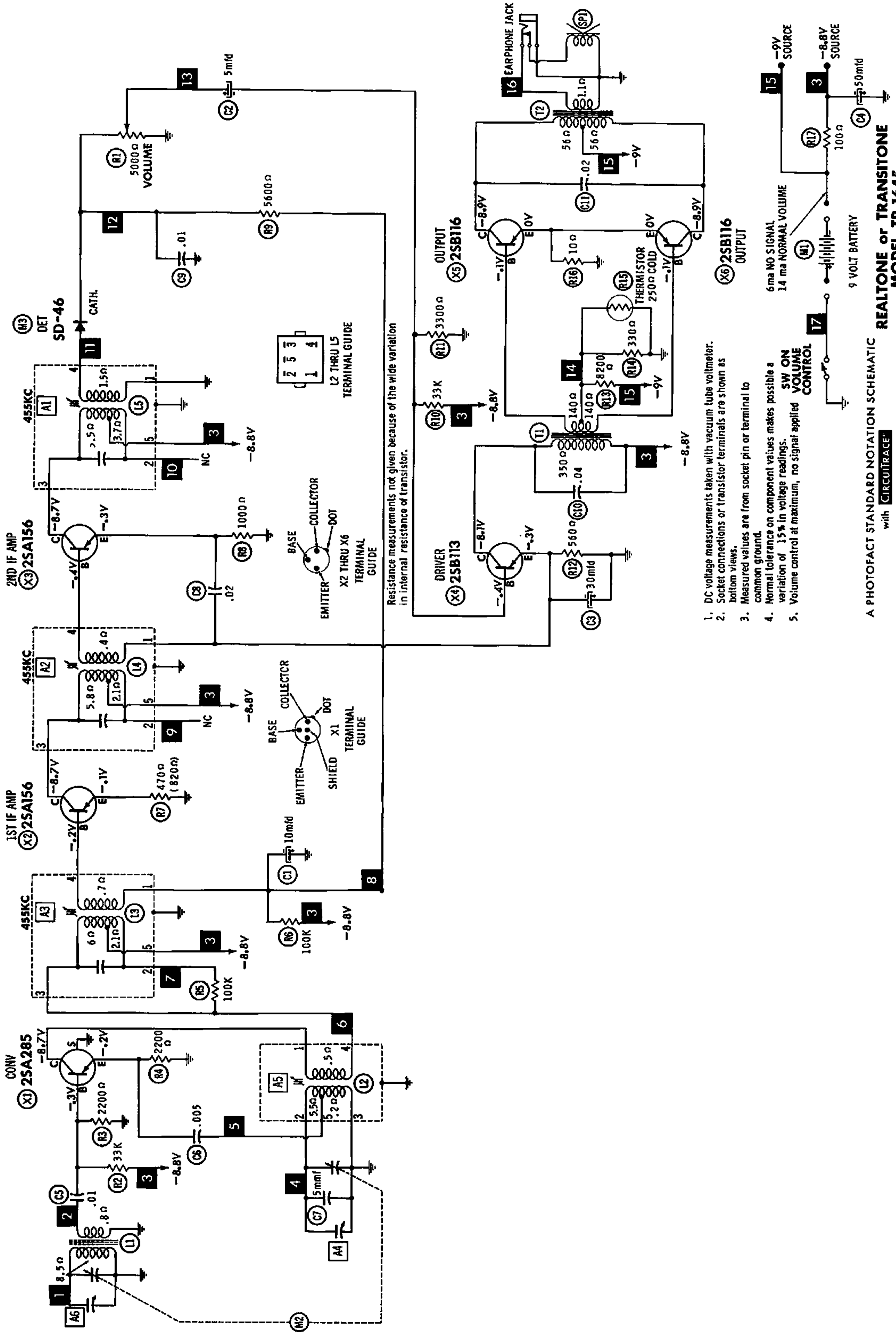
## CABINETS & CABINET PARTS

(When Ordering Specify Model, Chassis & Color)

ITEM	PART No.	ITEM	PART No.
Knob - Tuning Knob - Volume	P68-0004 P68-0005	Cabinet	C-1645

## WIRING DATA

General-use Unshielded Hook-up Wire .....	Use BELDEN No. 8530 (Solid 22AWG) 8524 (Stranded 22AWG) 8570 (Stranded 26AWG)	Available in 12 Colors
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Resistance measurements not given because of the wide variation in internal resistance of transistor.

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. Normal tolerance on component values makes possible a variation of 15% in voltage readings.
5. Volume control at maximum, no signal applied SW ON VOLUME CONTROL

A PHOTOFAC STANDARD NOTATION SCHEMATIC with CIRCUITRACE

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**REALTONE OF TRANSITONE MODEL TR-1645**

