



# PHOTOFACT<sup>®</sup> with

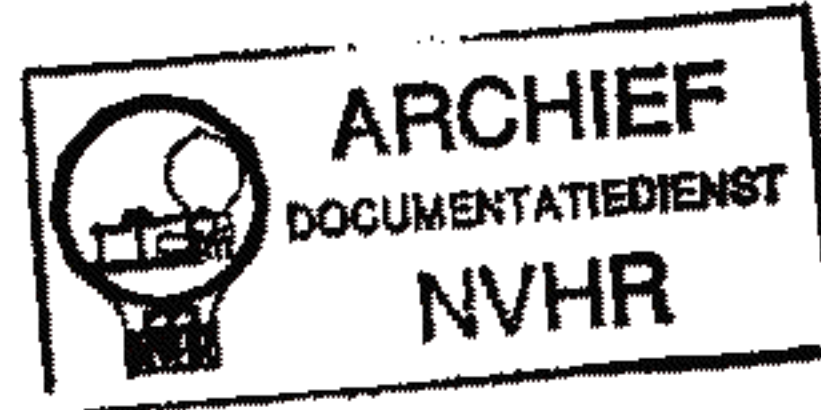
# CIRCUITRACE<sup>®</sup>



Met dank aan Jef Bos

TRADE NAME : Realtone Model TR-1946  
 SUPPLIER : Realtone Electronics  
 71 Fifth Ave., New York 3, N. Y.  
 TYPE SET : 9 Transistor AM Receiver  
 POWER SUPPLY : 9 Volts DC  
 RATING : 8MA@9VDC (No Signal, Min. Volume)  
 18MA@9VDC (Signal, Normal Volume)  
 TUNING RANGE: BROADCAST 535 - 1620KC

Ned. 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, A2, A3, A5.....GENERAL CEMENT #8282, 8606.....WALSCO #2526, 2543

A4, A6.....GENERAL CEMENT #5000, 5066, 8290..WALSCO #2512, 2525, 2526

	SIGNAL GENERATOR FREQUENCY	RADIO DIAL SETTING	INDICATOR	ADJUST	REMARKS
1.	455KC (400v 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

## 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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## TRANSISTORS

ITEM No.	ORIG. TYPE	USE	REPLACEMENT DATA			NOTES
			DELCO PART No.	GENERAL ELECTRIC PART No.	RCA PART No.	
X1	2SA285	Mixer	DS-25	GE-9		PNP
X2	2SA160	Osc.	DS-25	GE-9		PNP
X3	2SA156	1st IF Amp.	DS-25	GE-9		PNP
X4	2SA156	2nd IF Amp.	DS-25	GE-9		PNP
X5	2SB110	AGC Amp.			2N406	PNP
X6	2SB110	AF Amp.			2N406	PNP
X7	2SB113	Driver			2N406	PNP
X8	2SB116	Output			2N408	PNP
X9	2SB116	Output			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	5	6	V-5-6	CRE304A	NLW5-6	MT1-3			TE-1084
C2	.5	6	CA0.5R6	CRE300A	NLW1-6	MT1-1			TE-1080
C3	10	6	V-10-6	CRE307A	NLW10-6				TE-1087
C4	100	10	V-100-10						

## 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	.02		TTD-02	CK-203	H3		TA-120	TG-S20
C6	.02		TTD-02	CK-203	H3		TA-120	TG-S20
C7	.02		TTD-02	CK-203	H3		TA-120	TG-S20
C8	.005		TTD-005	CK-502	H1		TA-250	TG-D50
C9	.02		TTD-02	CK-203	H3		TA-120	TG-S20
C10	.02		TTD-02	CK-203	H3		TA-120	TG-S20
C11	.02		TTD-02	CK-203	H3		TA-120	TG-S20
C12	.01		TTD-01	CK-103	H2		TA-110	TG-S10
C13	.01		TTD-01	CK-103	H2		TA-110	TG-S10
C14	.02		TTD-02	CK-203	H3		TA-120	TG-S20
C15	.002			DM-202				
C16	.04		TTD-05	CK-503	H6		TA-150	TG-S50
C17	.02		TTD-02	CK-203	H3		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-046	B16-214 ①			

① Use Original Knob.



# DESCRIPTION

## 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-094					
L2	Osc.	HO-081					
L3	1st IF	HI-016	BC-569	2061	RTC-9262		
L4	2nd IF	HI-028	BC-570	2062	RTC-9263		
L5	3rd IF	HI-038	BC-571	2063	RTC-9264		

## TRANSFORMER (DRIVER)

ITEM No.	TURNS RATIO		REPLACEMENT DATA					NOTES
			REALTONE PART No.	MERIT PART No.	STANCOR PART No.	THORDARSON PART No.	TRIAD PART No.	
T1	PRI. 1.3	SEC. 1	LI-007					

## TRANSFORMER (AUDIO OUTPUT)

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

## SPEAKER

ITEM No.	TYPE	REPLACEMENT DATA		NOTES
		REALTONE PART No.	QUAM PART No.	
SP1	2 1/4" PM 8-8Ω	AS-032		

## BATTERIES

ITEM No.	VOLTAGE	REALTONE PART No.	REPLACEMENT DATA			NOTES
			BURGESS	EVEREADY	MALLORY	
M1	9V		2U8 (or H146)	216 (or E146)	M-1604 (or MN1604, TR-146)	

## MISCELLANEOUS

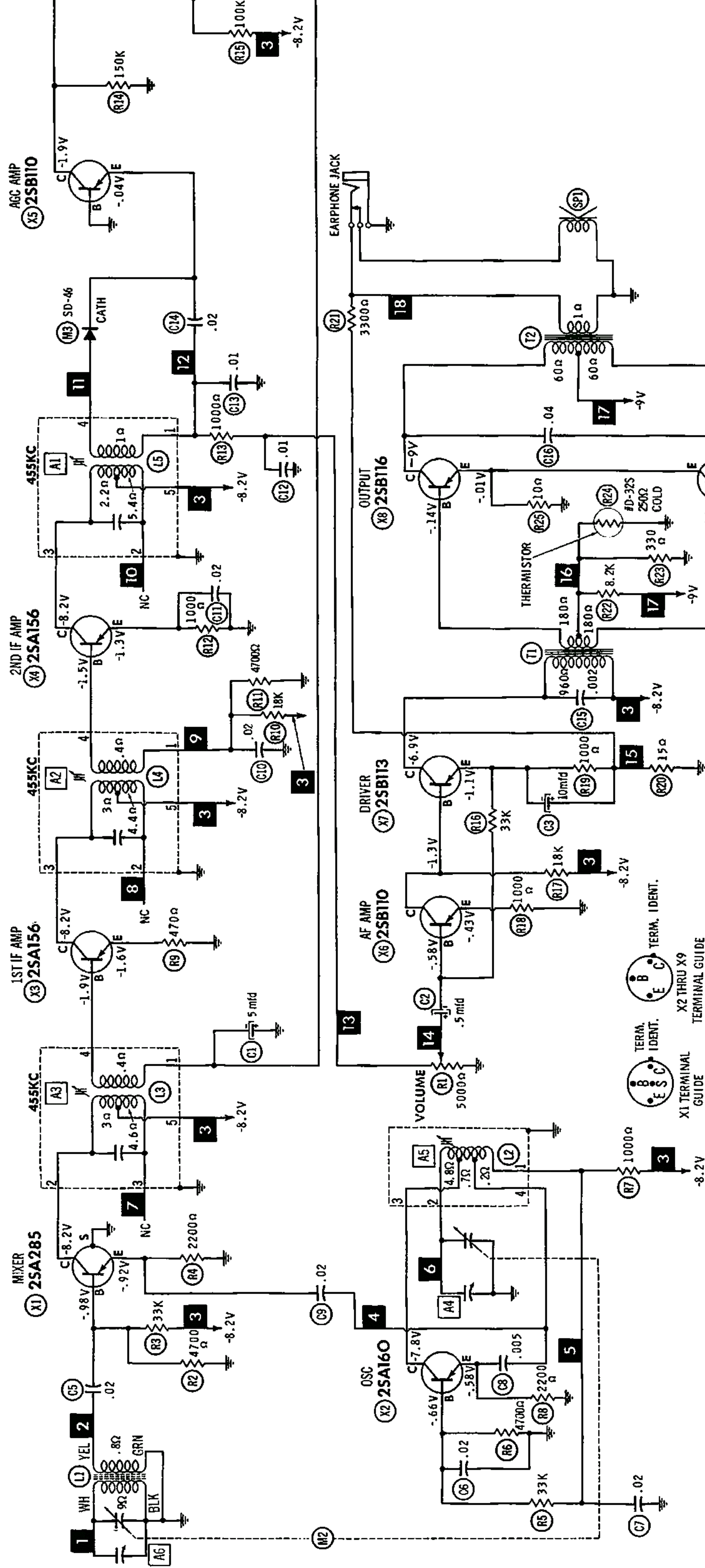
ITEM No.	PART NAME	REALTONE PART No.	NOTES
M2	Tuning Cap.	CV-046	
M3	Detector	SD-46	

## CABINETS & CABINET PARTS

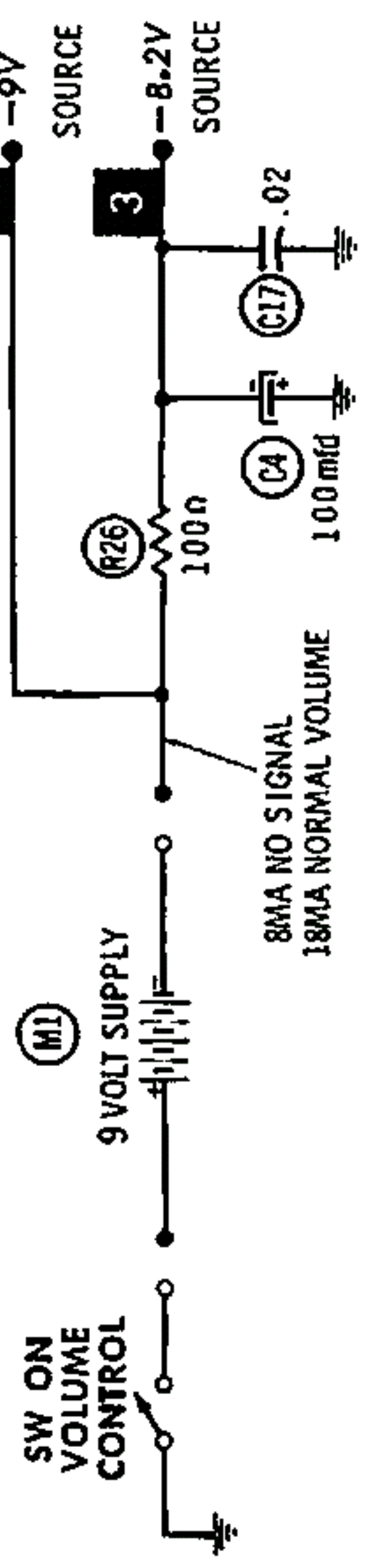
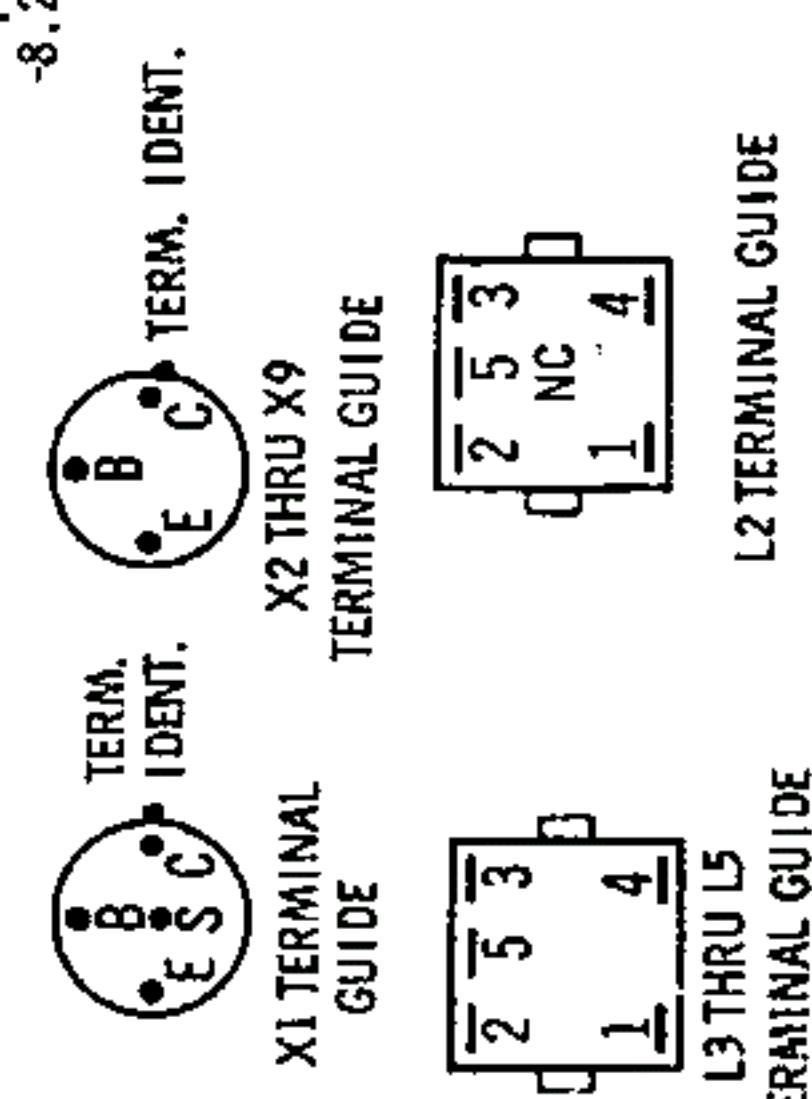
(When Ordering Specify Model, Chassis & Color)

ITEM	PART No.	ITEM	PART No.
Knob - Tuning	P1946-0003	Cabinet - Complete	P1946-0001
Knob - Volume	P661-0003		





1. Voltage measurements taken with vacuum tube voltmeter.
2. All controls set for normal operation, no signal applied.
3. Measured values are from socket pin or terminal to common ground.
4. All terminals viewed from bottom unless otherwise designated.
5. Numbers assigned to terminals may not be found on the unit.
6. Supply voltage maintained at rated value for voltage readings.
7. Resistance measurements not given because of the wide variation in internal resistance of transistor.



A PHOTOFACT STANDARD NOTATION SCHEMATIC  
with **CIRCUITRACE**  
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**REALTONE MODEL TR-1946**



