

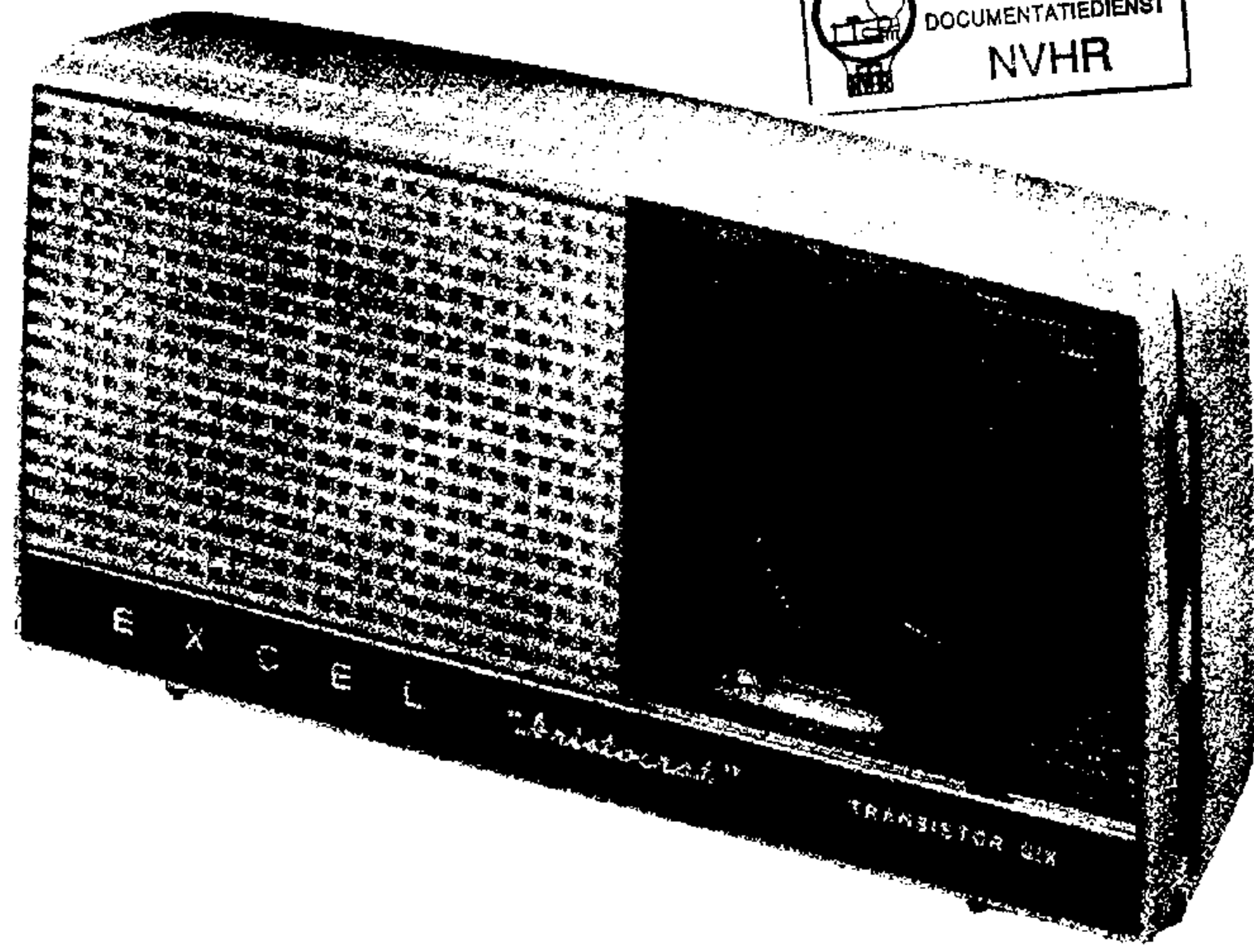
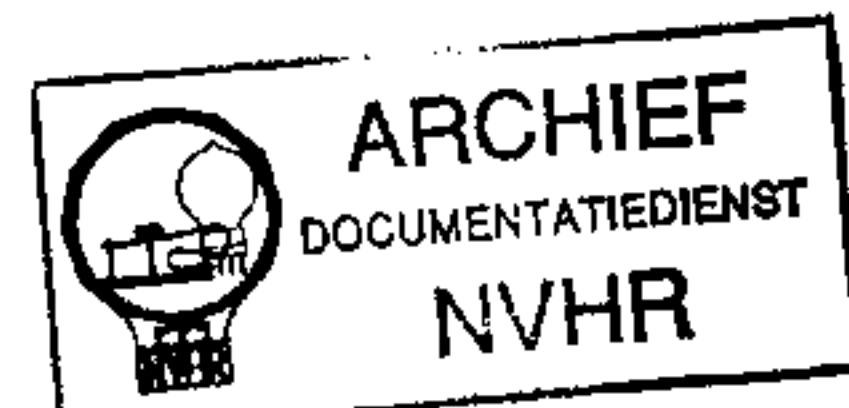
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EXCEL MODEL 6T-2

with **CIRCUITRACE**

Ned. Ver. v. Historie v/d Radio



TRADE NAME	Excel Model 6T-2
IMPORTER	Excel Corp. Of America, 9 Rockefeller Plaza, New York 20, N. Y.
TYPE SET	Battery Operated Portable Transistorized AM Receiver
POWER SUPPLY	9 Volts DC
TUNING RANGE—BROADCAST	530-1650KC
RATING	8.8MA@9 Volts DC

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, A5, GENERAL CEMENT #8202, 8606, 8606L, 9091
 WALSCO #2526, 2541, 2543, 2544
 A4, A6, GENERAL CEMENT #5000, 5003, 501-, 5015, 5016, 8276, 8290
 WALSCO #2512, 2516, 2522, 2523, 2525, 2537

DUMMY ANTENNA	SIGNAL GENERATOR COUPLING	SIGNAL GENERATOR FREQUENCY	RADIO DIAL SETTING	OUTPUT METER	ADJUST	REMARKS
1. .05mfd.	High side to antenna stator lug of tuning gang. Low side to B	455KC (400v Mod.)	Point of non-interference.	Across voice coil	A1, A2, A3	Adjust for maximum output.
2.	Loop	1650KC	Tuning gang fully open	"	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.	"	1500KC	Tune to 1500KC signal	"	A6	"

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

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DATE 5-59

SET 443

PARTS LIST AND DESCRIPTIONS (Continued)

COILS (RF-IF)

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

TRANSFORMER (DRIVER)

ITEM No.	TURNS RATIO		REPLACEMENT DATA					NOTES	
			EXCEL PART No.	Haldorson PART No.	Merit PART No.	Stancor PART No.	Thordorson PART No.		Triad PART No.
	PRL	SEC.							
T1	4	1	PTA1406	GHI09①			TR-13①	T-41X①	① Remove channel frame

TRANSFORMER (AUDIO OUTPUT)

ITEM No.	IMPEDANCE		REPLACEMENT DATA						NOTES
			EXCEL PART No.	Haldorson PART No.	Merit PART No.	Ram PART No.	Stancor PART No.	Thordorson PART No.	
	PRL	SEC.							
T2	30000 CT	8-80	PTO1006						

SPEAKER

ITEM No.	TYPE			REPLACEMENT DATA		NOTES
				EXCEL PART No.	QUAM PART No.	
	SIZE	FIELD	V. C. IMP.			
SP1	2 9/16"	PM	8-80	PBP-3006		

BATTERIES

ITEM No.	VOLTAGE	EXCEL PART No.	REPLACEMENT DATA				NOTES		
			BURGESS		EVEREADY			MALLORY	
			"A"	"B"	"A"	"B"		"A"	"B"
B0	9V	BL-M106		P6		226		M1600	

CRYSTAL DIODES

ITEM No.	ORIG. TYPE	REPLACEMENT DATA			NOTES
		EXCEL PART No.	CBS PART No.	SYLVANIA PART No.	
M2	2D46		1N80	1N296	Detector (Pigtail)

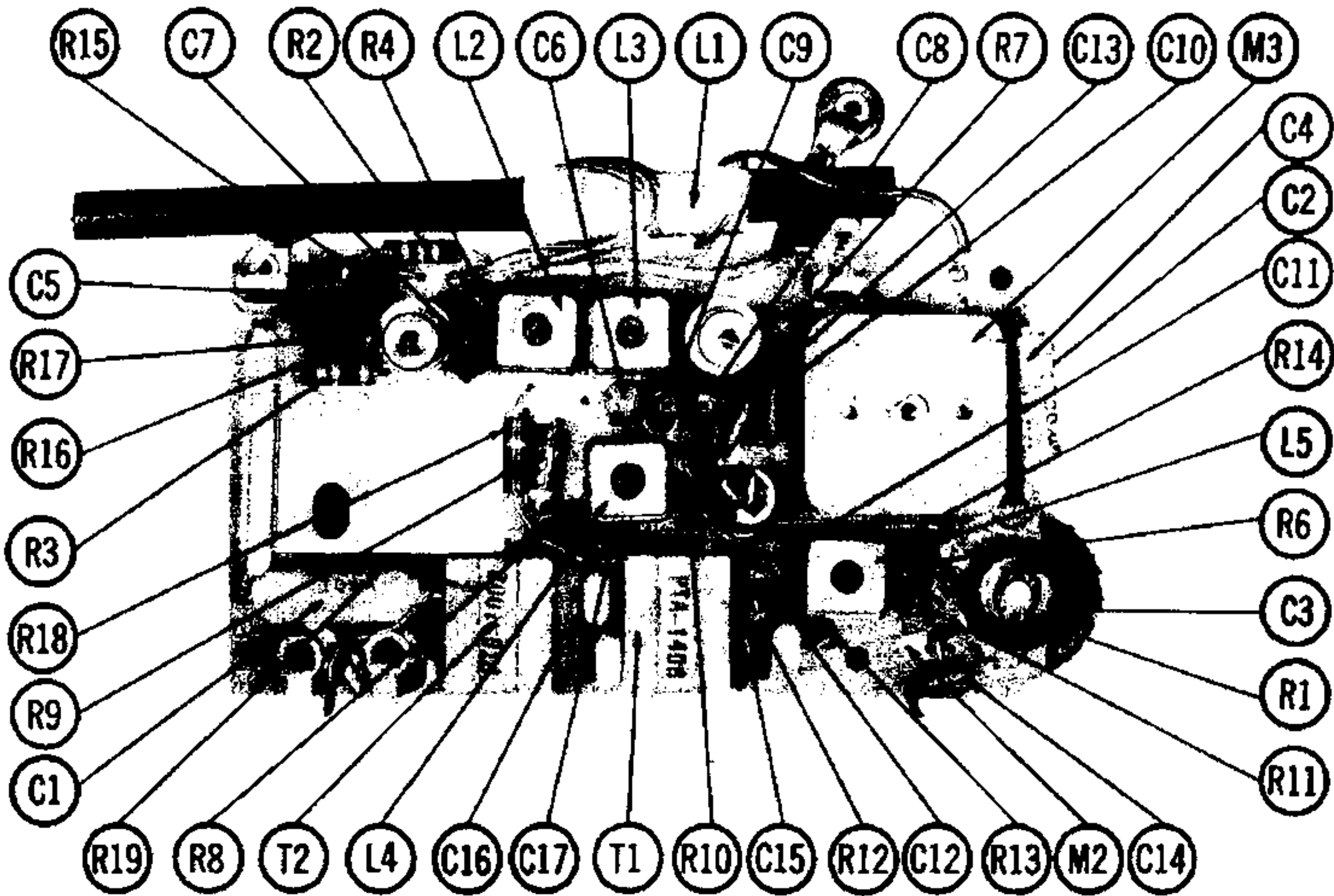
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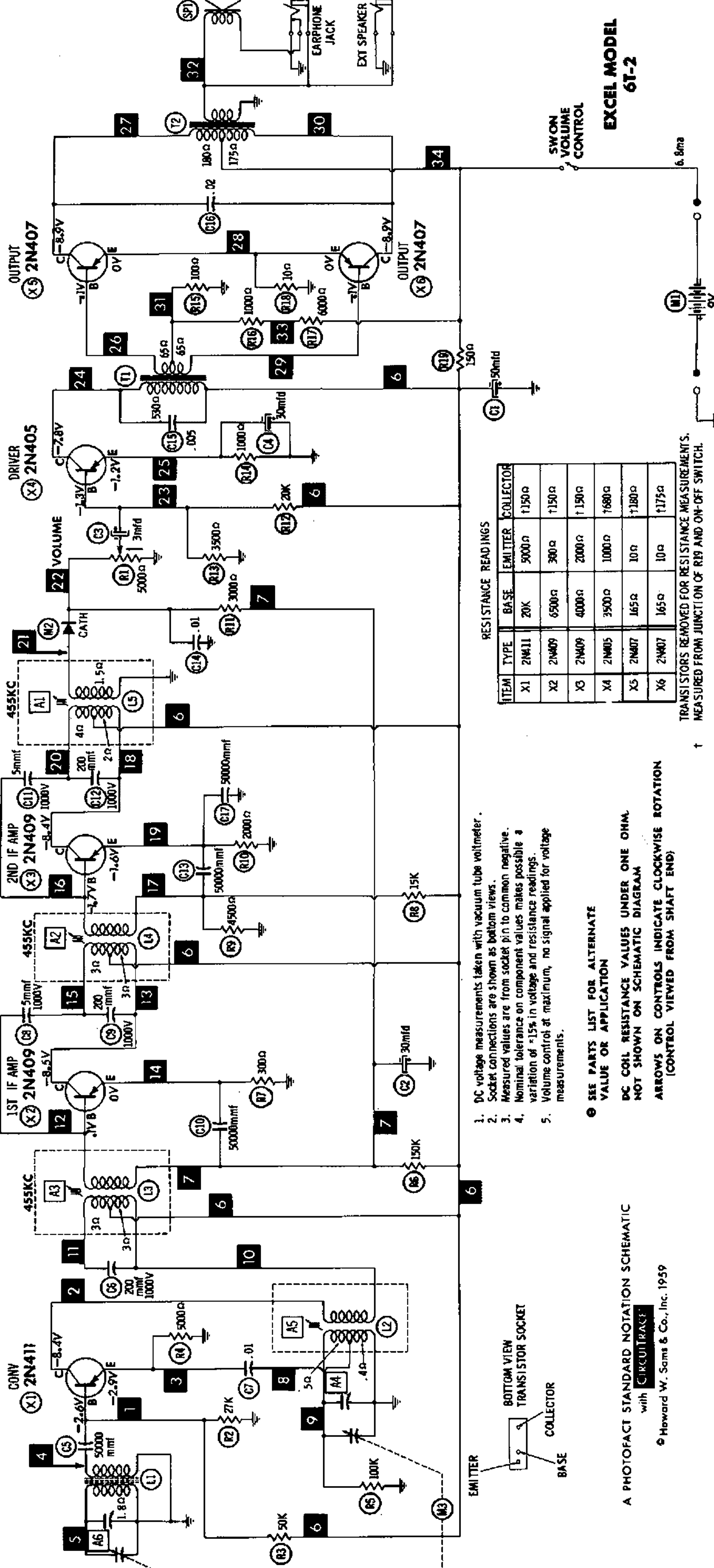
ITEM No.	PART NAME	EXCEL PART No.	NOTES
M3	Tuning Cap. Printed Board	GT-2A	2 Gang

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





**EXCEL MODEL
6T-2**

SW ON
VOLUME
CONTROL

RESISTANCE READINGS

ITEM	TYPE	BASE	EMITTER	COLLECTOR
X1	2N4111	20K	5000Ω	1150Ω
X2	2N409	6500Ω	380Ω	1150Ω
X3	2N409	4000Ω	2000Ω	1150Ω
X4	2N405	3500Ω	1000Ω	7680Ω
X5	2N407	165Ω	10Ω	1180Ω
X6	2N407	165Ω	10Ω	1175Ω

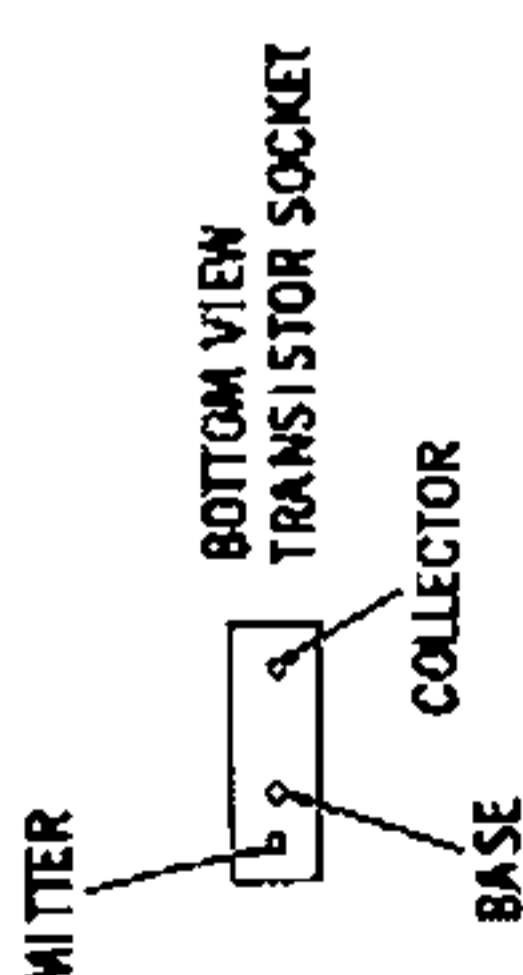
† TRANSISTORS REMOVED FOR RESISTANCE MEASUREMENTS.
‡ MEASURED FROM JUNCTION OF R19 AND ON-OFF SWITCH.

1. DC voltage measurements taken with vacuum tube voltmeter.
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 ±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

ARROWS ON CONTROLS INDICATE CLOCKWISE ROTATION [CONTROL VIEWED FROM SHAFT END]



A PHOTOFAC STANDARD NOTATION SCHEMATIC with CIRCUITRASE

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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	2N411	Converter		2N411	2N488	2N411	PNP
X2	2N409	1st IF Amplifier		2N409	2N483	2N409	PNP
X3	2N409	2nd IF Amplifier		2N409	2N482	2N409	PNP
X4	2N405	Driver		2N405	2N362	2N405	PNP
X5	2N407	Output		2N407	2N632	2N407	PNP
X6	2N407	Output		2N407	2N632	2N407	PNP

ELECTROLYTIC CAPACITORS

ITEM No.	RATING		EXCEL PART No.	AEROVOX PART No.	CORNELL-DUBILIER PART No.	MALLORY PART No.	PYRAMID PART No.	SPRAGUE PART No.	NOTES
	CAP.	VOLT.							
C1	50	10		PWE10050	NL50-10	TT10X50	ML50-15	TE-1119	
C2	30	6		PWE6030	NL25-6	TT6X25	ML30-6	TE-1092	
C3	3	6		PWE6003	NL3-6	TT12X3	ML4-6	TE-1082	
C4	30	6		PWE6030	NL25-6	TT6X25	ML30-6	TE-1092	

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			EXCEL PART No.	AEROVOX PART No.	CENTRALAB PART No.	CORNELL-DUBILIER PART No.	MALLORY PART No.	SPRAGUE PART No.	NOTES
	CAP.	VOLT	TOL							
C5	50000				BPD-05	DF-503			5HK-S5	
C6	200	1000			1468LS-HV-0002	DD-201	5P15T2	MCL320		
C7	.01	200			P288N-01	DD-103	BYA10S1	B-110	2WF-S1	
C8	5	1000				DD-050	L10V5	CNO-547	5GA-V5	
C9	200	1000			1468LS-HV-0002	DD-201	5P15T2	MCL320		
C10	50000				BPD-05	DF-503			5HK-S5	
C11	5	1000				DD-050	L10V5	CNO-547	5GA-V5	
C12	200	1000			1468LS-HV-0002	DD-201	5P15T2	MCL320		
C13	50000				BPD-05	DF-503			5HK-S5	
C14	.01	200			P285N-01	DD-103	BYA10S1	B-110	2WF-S1	
C15	.005	200			P285N-005	DD-502	BYA10D5	B-250	2EP-D50	
C16	.02	200			P285N-02	DD-203	BYB6S2	B-120	2WF-S22	
C17	50000				BPD-05	DF-503			5HK-S5	

CONTROLS

ITEM No.	RATING		EXCEL PART No.	CENTRALAB PART No.	CLAROSTAT PART No.	IRC PART No.	MALLORY PART No.	INSTALLATION NOTES
	RESISTANCE	WATTS						
R1	5000Ω	1/2	A02582					Volume & Switch

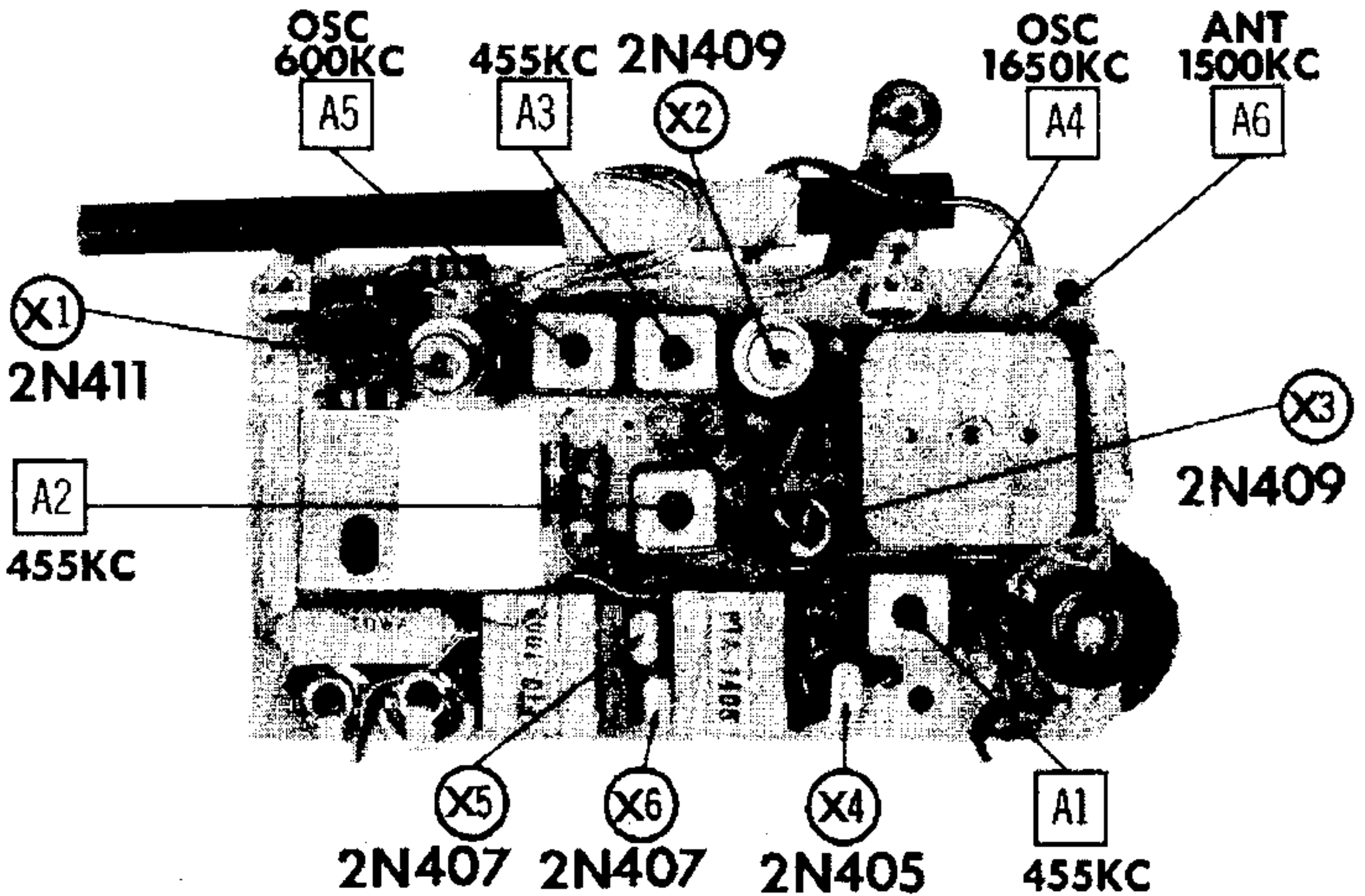
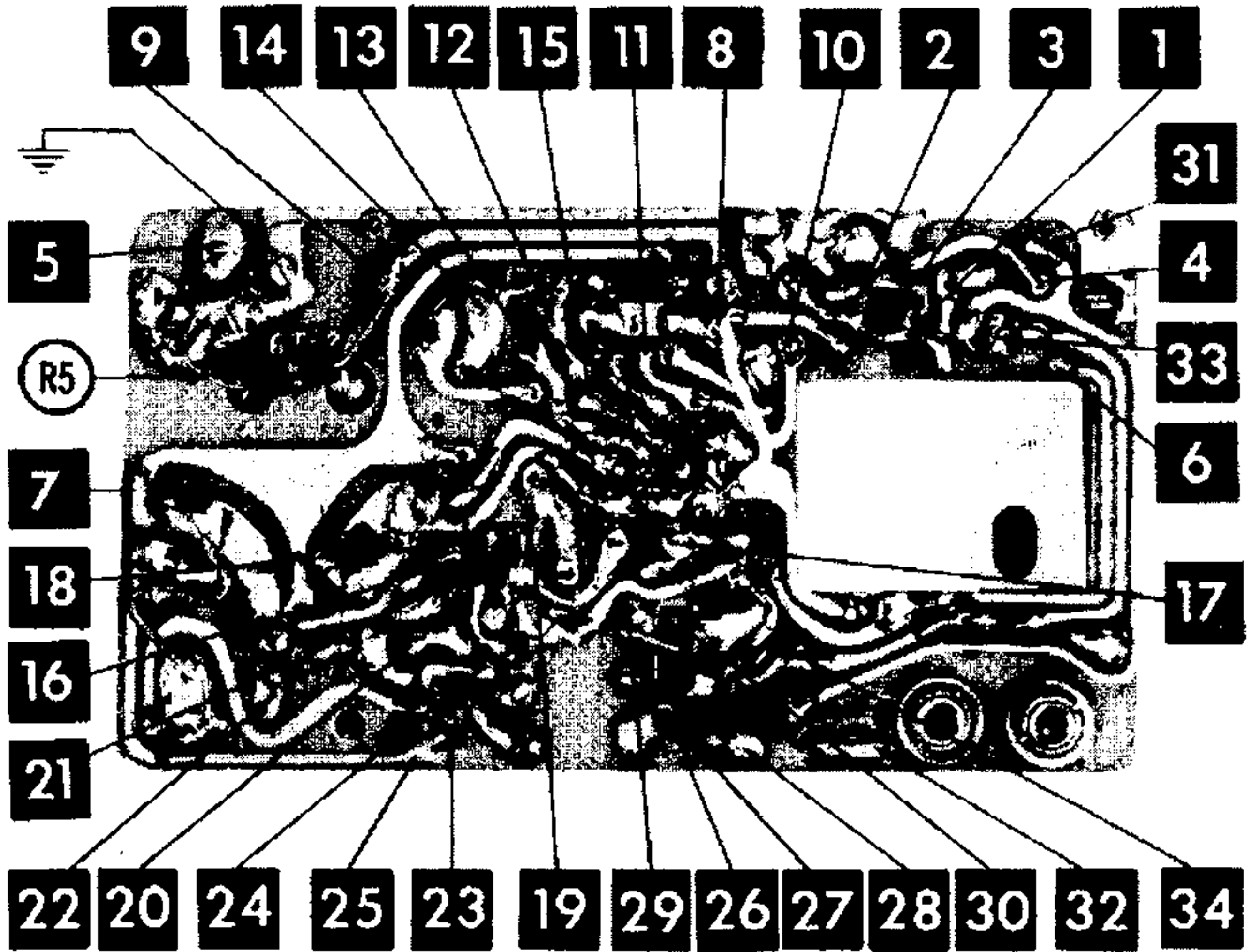
RESISTORS

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

ITEM No.	RATING		EXCEL PART No.	NOTES	ITEM No.	RATING		EXCEL PART No.	NOTES
	OHMS	WATT				OHMS	WATT		
R2	27K				R11	3000Ω			
R3	50K				R12	20K			
R4	5000Ω				R13	3500Ω			
R5	100K				R14	1000Ω			
R6	150K				R15	100Ω			
R7	300Ω				R16	1000Ω			
R8	15K				R17	8000Ω			
R9	4500Ω				R18	10Ω			
R10	2000Ω				R19	150Ω			

PRINTED BOARD

A Howard W. Sams **CIRCUITRACE** Photo



CHASSIS—TOP VIEW