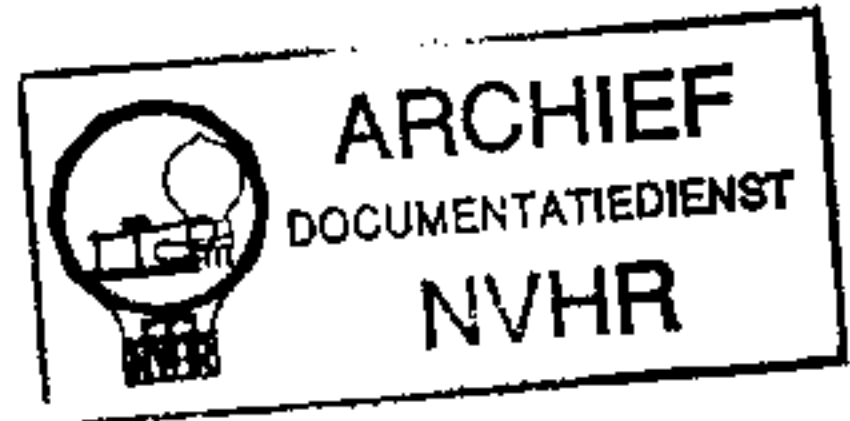


Met dank aan Jef Bos

Ned. Ver. v. Historie v/d

**TRADE NAME** Columbia Records Model TR-1000  
**MANUFACTURER** Columbia Records, 799 Seventh Ave., New York 19, N. Y.  
**TYPE SET** Battery Operated Portable Transistorized AM Receiver



**POWER SUPPLY** 9 Volts DC  
**TUNING RANGE—BROADCAST** 540 - 1600KC  
**RATING** 10.4MA @ 9 Volts DC (No signal, min. volume)  
 13MA @ 9 Volts DC (Signal, normal volume)

## 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. Use an insulated alignment screwdriver for adjusting.						
DUMMY ANTENNA	SIGNAL GENERATOR COUPLING	SIGNAL GENERATOR FREQUENCY	RADIO DIAL SETTING	OUTPUT METER	ADJUST	REMARKS
1.	Loop	455KC (400% Mod)	Tuning gang fully open	Across voice coil	A1, A2, A3	Fashion loop of several turns of wire and radlate signal into loop of receiver. Adjust for maximum output.
2.	"	1500KC	Tune to 1500KC signal	"	A4, A5	"
3.	"	600KC	Tune to 600KC signal	"	A6	Fashion loop of several turns of wire and radlate signal into loop of receiver. Adjust for maximum output. Repeat steps 2 and 3.

### HOWARD W. SAMS & CO., INC. • Indianapolis 5, 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 H471

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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	2N486		Note 1
X2	2N409	1st IF Amplifier		2N409	2N483		Note 2
X3	2N409	2nd IF Amplifier		2N409	2N483		Note 2
X4	2N405	AF Amplifier		2N405	CK872		Note 3
X5	2N407	Output		2N407	CK878		Note 3
X6	2N407	Output		2N407	CK878		Note 3

Note 1. Alternate type GT761

Note 2. Alternate type GT760

Note 3. Alternate type GT20

## ELECTROLYTIC CAPACITORS

ITEM No.	RATING		REPLACEMENT DATA						
	CAP.	VOLT.	Columbia Records PART No.	AEROVOX PART No.	CORNELL-DUBILIER PART No.	MALLORY PART No.	PYRAMID PART No.	SANGAMO PART No.	SPRAGUE PART No.
C1	100	15	11A720	SRE15V100	BBR100-15	TT15X100	TD-100-15		TE-1162
C2	3	5		XPP-6003	NL3-6	TT6X5	ML4-6		TE-1082
C3	2	50	11A717	PWE50002	NL5-50	TT12X2	ML2-15		TE-1301
C4	3	5		XPP-6003	NL3-6	TT6X5	ML4-6		TE-1082

① Some versions may use 10mfd (Part #11A719).

② Some versions may use a 10mfd (Part #11A718).

## 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		REPLACEMENT DATA						NOTES
	CAP.	VOLT	Columbia Records PART No.	AEROVOX PART No.	CENTRALAB PART No.	CORNELL-DUBILIER PART No.	MALLORY PART No.	SPRAGUE PART No.	
C5	10000			BPD-01	DD-103	BYA6S1	DC511	5HK-S1	①
C6	10000			BPD-01	DD-103	BYA6S1	DC511	5HK-S1	
C7	10000			BPD-01	DD-103	BYA6S1	DC511	5HK-S1	
C8	4.7			NPO-SI 4.7	TCZ-4R7	CTA6V47C	ZT-5547	5TCCB-V47	
C9A	10000			BPD-2X01	DD-103	BYD6DS1	DC511	5HK-2S1	
C9B	10000				DD-103		DC511		
C10	4.7			NPO-SI 4.7	TCZ-4R7		ZT-5547	5TCCB-V47	
C11A	10000			BPD-2X01	DD-103	BYD6DS1	DC511	5HK-2S1	
C11B	10000				DD-103		DC511		
C12	20000			BPD-02	DD-203	BYB6S2	DC522	5HK-S2	
C13	2000			BPD-002	DD-202	BYA10D2	DC522	5HK-D2	
C14	.05	200		P288N-05	DF-503	CUB2S5	GEM-415	2TM-S5	

① Some versions may use 20000mmf in this application.

## CONTROLS

ITEM No.	RATING		REPLACEMENT DATA					INSTALLATION NOTES
	RESISTANCE	WATTS	Columbia Records PART No.	CENTRALAB PART No.	CLAROSTAT PART No.	IRC PART No.	MALLORY PART No.	
R1	5000Ω	1/4	9A557					Volume & Switch

## RESISTORS

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

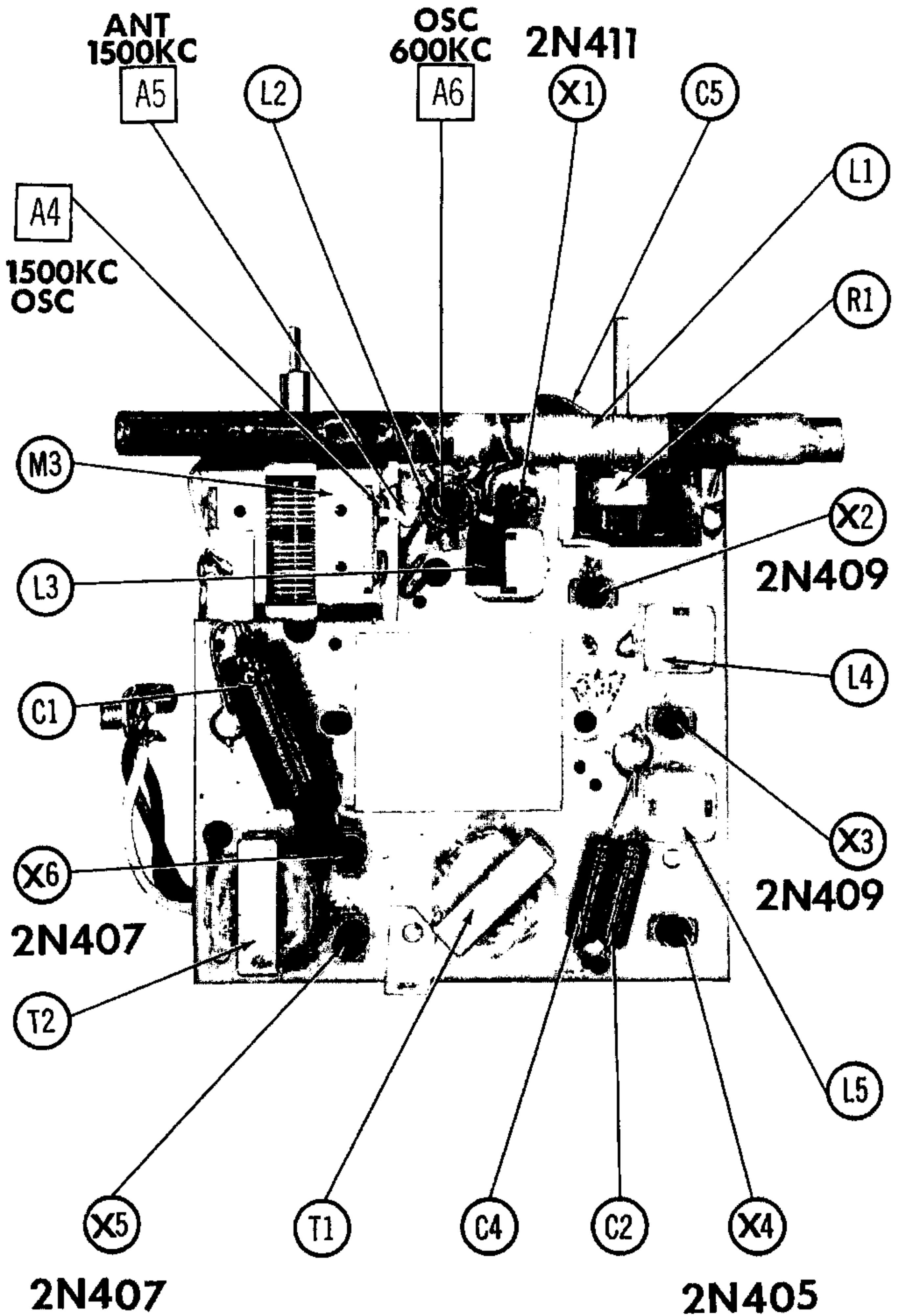
ITEM No.	RATING		Columbia Records PART No.	NOTES	ITEM No.	RATING		Columbia Records PART No.	NOTES
	OHMS	WATT				OHMS	WATT		
R2	33K	5%		①	R12	2200Ω	5%		③
R3	18K				R13	100K	5%		
R4	47Ω				R14	3300Ω			
R5	3900Ω				R15	6800Ω			
R6	2200Ω	5%			R16	33K	5%		
R7	4700Ω				R17	1200Ω			
R8	330Ω				R18	4700Ω			
R9	47K				R19	100Ω			
R10	22K				R20	12Ω			
R11	2200Ω	5%			R21	39K			

① Some versions may use 18Ω in this application.

② Some versions may use 33K in this application.

③ Some versions may use 1000Ω in this application.

# CHASSIS—TOP VIEW



# PARTS LIST AND DESCRIPTIONS (Continued)

## TRANSFORMER (DRIVER)

ITEM No.	TURNS RATIO		REPLACEMENT DATA					NOTES
			Columbia Records PART No.	Halldorson PART No.	Merit PART No.	Stancor PART No.	Thordarson PART No.	
	PRI.	SEC.						
T1	2.5	: 1	20A308					

## TRANSFORMER (AUDIO OUTPUT)

ITEM No.	IMPEDANCE		REPLACEMENT DATA					NOTES
			Columbia Records PART No.	Halldorson PART No.	Merit PART No.	Ram PART No.	Stancor PART No.	
	PRI.	SEC.						
T2	840Ω	3-4Ω	3A218					

## SPEAKER

ITEM No.	TYPE			REPLACEMENT DATA		NOTES
				Columbia Records PART No.	QUAM PART No.	
	SIZE	FIELD	V. C. IMP.			
SP1	4"	PM	3-4Ω	1A117		

## COILS (RF-IF)

ITEM No.	USE	REPLACEMENT DATA					NOTES
		Columbia Records PART No.	Meissner PART No.	Merit PART No.	Miller PART No.	Ram PART No.	
L1	Loop Stick	19A560					
L2	Osc. Coil	20A309	14-9014	BC-403	2022		
L3	1st IF	20A308	16-9003		9-C1		
L4	2nd IF	20A308	16-9003		9-C1		
L5	3rd IF	20A307	16-9004		9-C2		

## BATTERIES

ITEM No.	VOLTAGE	Columbia Records PART No.	REPLACEMENT DATA						NOTES		
			BURGESS		EVEREADY		MALLORY			RAY-O-VAC	
			"A"	"B"	"A"	"B"	"A"	"B"		"A"	"B"
M1	9V			Z		AA		2M9		7-R	6 used.

## CRYSTAL DIODES

ITEM No.	ORIG. TYPE	REPLACEMENT DATA			NOTES
		Columbia Records PART No.	CBS PART No.	SYLVANIA PART No.	
M2	1N60	20A310	1N60	1N295	Detector, Pigtail Leads

## MISCELLANEOUS

ITEM No.	PART NAME	Columbia Records PART No.	NOTES
M3	Tuning Cap.	14A103	2 Gang (Ant. 22-220mmf, Osc. 24-120mmf)

## CABINETS & CABINET PARTS

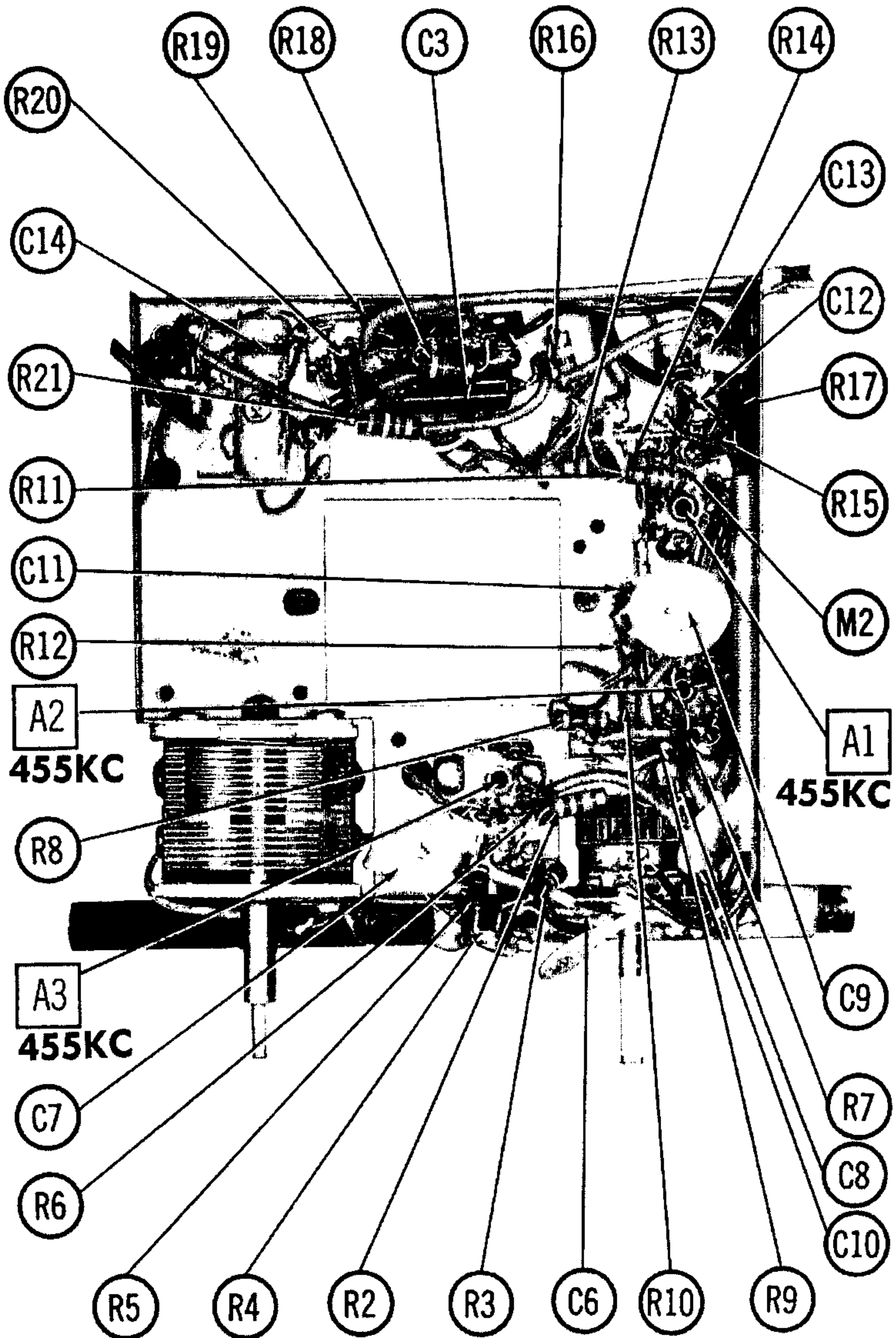
(When Ordering Cabinets & Cabinet Parts, Specify Model, Chassis & Color)

NAME	PART NO.	DESCRIPTION
Knob	8A459	Tuning
Knob	8A460	Volume
Knob	8A461	Calibrated
Cabinet	17A952	Saddletan, With Strap
Cabinet	17A953	Rawhide, With Strap
Cabinet	17A954	Cordovan, With Strap

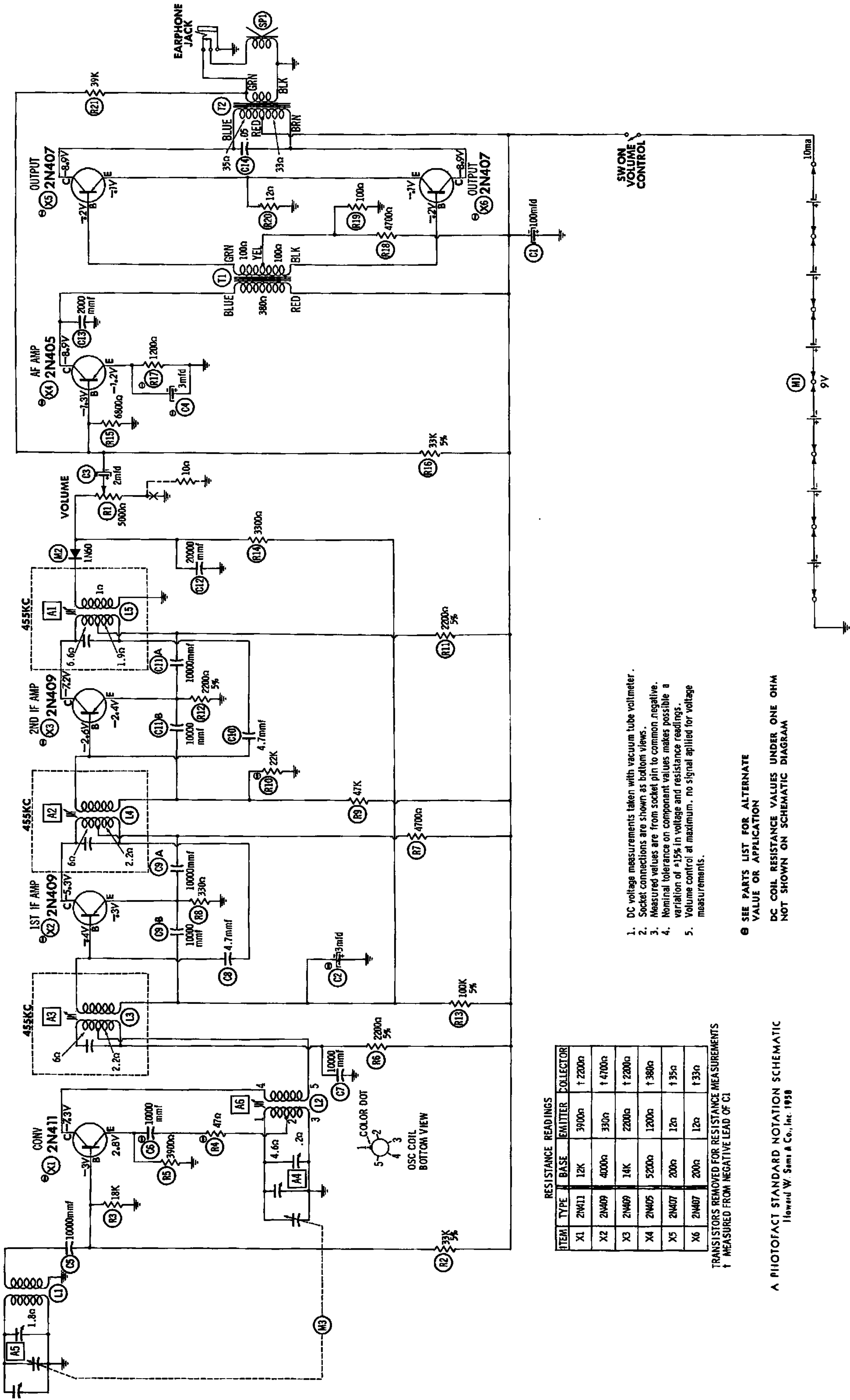
## WIRING DATA

General-use Unshielded Hook-up Wire ..... Use BELDEN No. 8530 (Solid) Available in Ten Colors  
8524 (Stranded) Available in Ten Colors

# CHASSIS—BOTTOM VIEW







RESISTANCE READINGS

ITEM	TYPE	BASE	EMITTER	COLLECTOR
X1	2N411	12K	3900Ω	† 2200Ω
X2	2N409	4000Ω	330Ω	† 4700Ω
X3	2N409	14K	2200Ω	† 2200Ω
X4	2N405	5200Ω	1200Ω	† 380Ω
X5	2N407	200Ω	12Ω	† 35Ω
X6	2N407	200Ω	12Ω	† 35Ω

TRANSISTORS REMOVED FOR RESISTANCE MEASUREMENTS  
 † MEASURED FROM NEGATIVE LEAD OF C1

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

A PHOTOFAC STANDARD NOTATION SCHEMATIC  
 Howard W. Sams & Co., Inc. 1958

