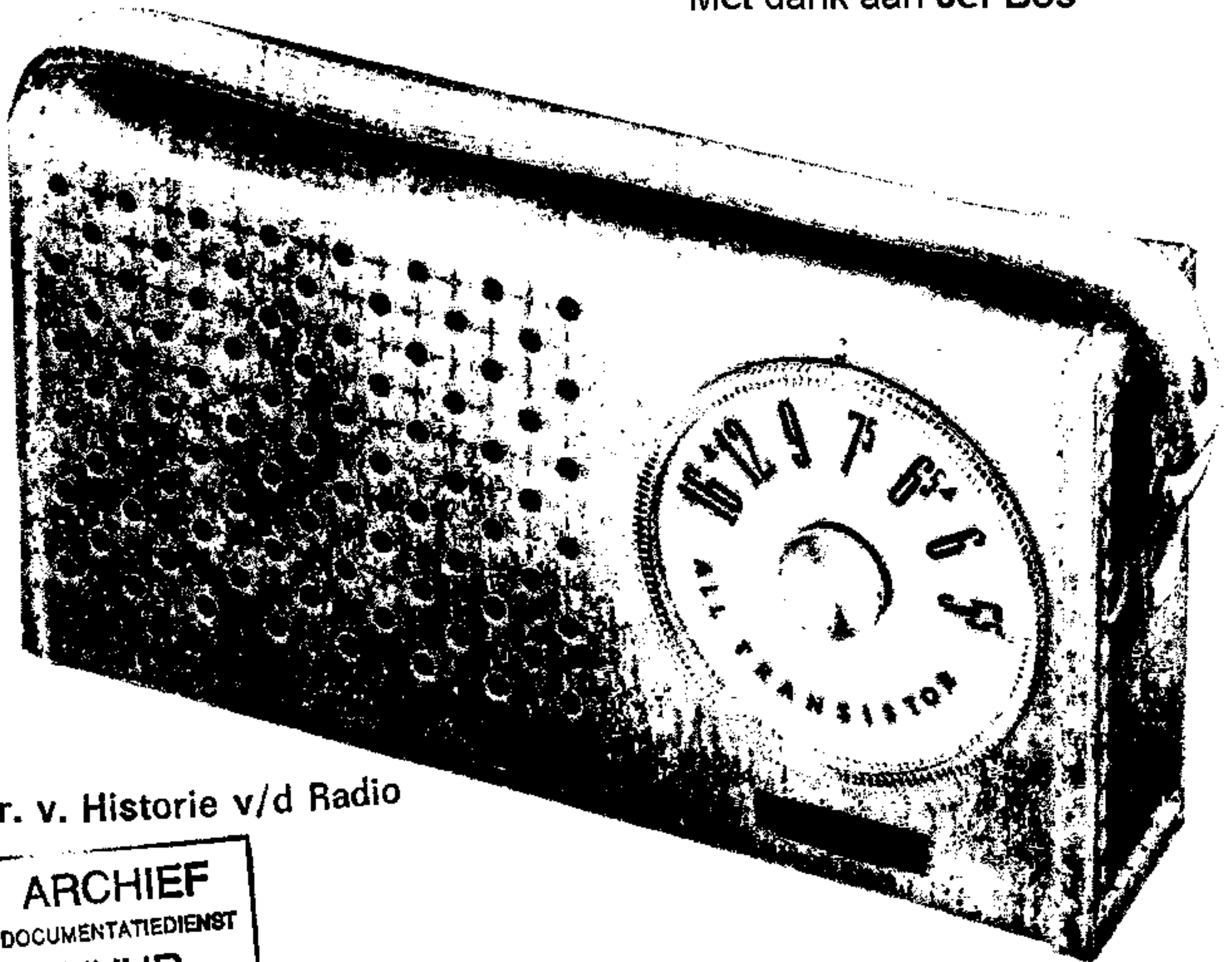
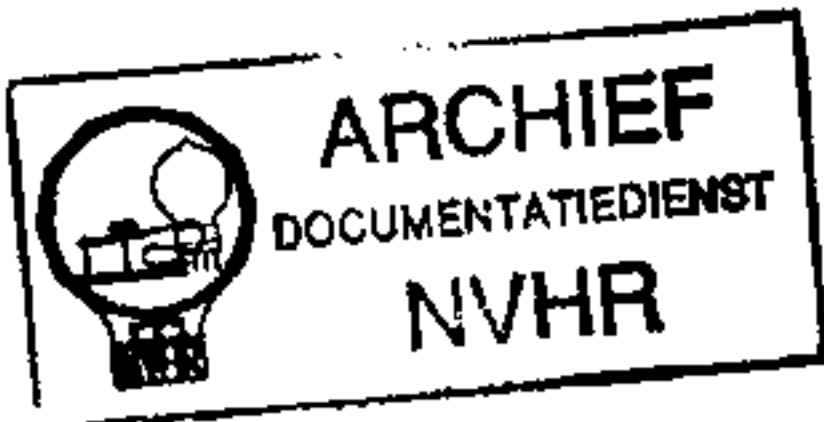




Met dank aan Jef Bos



Ned. Ver. v. Historie v/d Radio

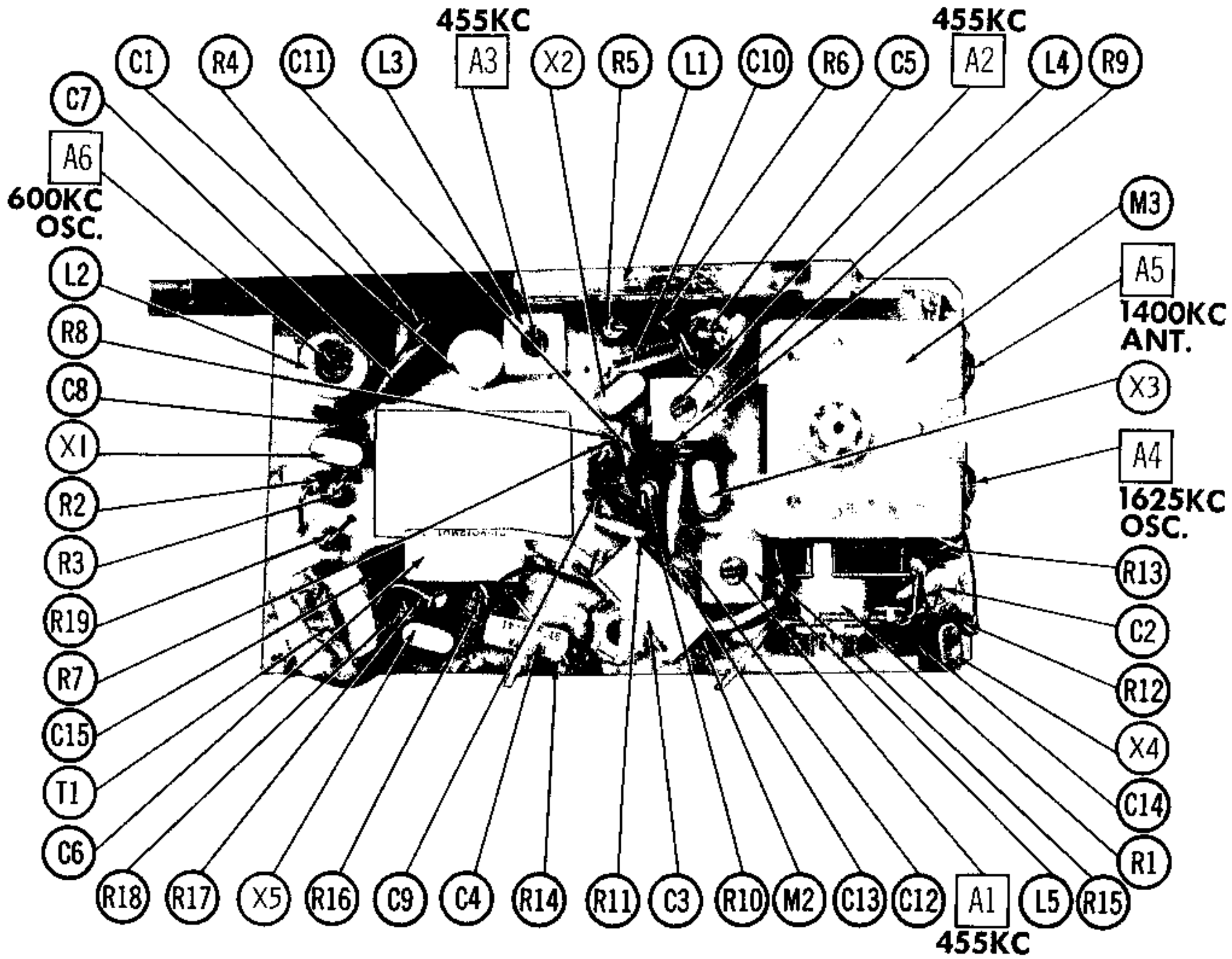


TRADE NAME	Airline Model GTM-1108A					
SUPPLIER	Montgomery Ward & Co., 619 Chicago Ave., Chicago, Illinois					
TYPE SET	Battery Operated Portable AM Transistorized Receiver					
POWER SUPPLY	9 Volts DC	RATING	17MA @ 9 Volts DC			
TUNING RANGE—BROADCAST	540KC to 1600KC					
ALIGNMENT INSTRUCTIONS—READ CAREFULLY BEFORE ATTEMPTING ALIGNMENT						
Remove speaker bracket assembly to perform step 1. 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 (40% Mod)	Tuning gang fully open	Across voice coil	A1, A2, A3	Fashion loop of several turns of wire and radiate signal into loop of receiver. Adjust for maximum output.
2.	"	1625KC	Tune to 1625KC signal	"	A4	"
3.	"	1400KC	Tune to 1400KC signal	"	A5	"
4.	"	600KC	Tune to 600KC	"	A6	Fashion loop of several turns of wire and radiate signal into loop of receiver. Adjust for maximum output. Repeat steps 2 & 3. Check receiver frequency range to insure reception of full broadcast band.

**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 H202

the particular type of replacement part listed. Reproduction or use, without express permission, of editorial or pictorial content, in any manner, is prohibited. No patent liability is assumed with respect to the use of the information contained herein. © 1957 Howard W. Sams & Co., Inc., Indianapolis 5, Indiana. Printed in U.S. of America



CHASSIS TOP VIEW

# PARTS LIST AND DESCRIPTIONS

## TRANSISTORS

ITEM No.	ORIG. TYPE	USE	REPLACEMENT DATA			NOTES
			CBS PART No.	RAYTHEON PART No.	SYLVANIA PART No.	
X1	2N252	Converter 1st IF Amplifier 2nd IF Amplifier Driver Output		2N415		
X2	2N253					
X3	2N254					
X4	2N238			2N362		
X5	2N291			2N380		

## ELECTROLYTIC CAPACITORS

ITEM No.	RATING		REPLACEMENT DATA						
	CAP.	VOLT.	AIRLINE PART No.	AEROVOX PART No.	CORNELL-DUBILIER PART No.	MALLORY PART No.	PYRAMID PART No.	SANGAMO PART No.	SPRAGUE PART No.
C1	10	3	218V012M11	XPP3010	NL10-3	TT3X10	ML10-6		TE-1053
C2	5	12	218V012M09	XPP12005	NL5-15	TT12X5	ML5-15		TE-1127
C3	40	10	218V012M01	XPP12040	NL50-10	TT10X50	ML40-15		R2329 *
C4	5	12	218V012M09	XPP12005	NL5-15	TT12X5	ML5-15		TE-1127
C5	40	12	218V012M01	XPP12040	NL50-10	TT10X50	ML40-15		R2329 *
C6	40	10	218V012M01	XPP12040	NL50-10	TT10X50	ML40-15		R2329 *

\* Non Catalog Item

## 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.	AIRLINE PART No.	AEROVOX PART No.	CENTRALAB PART No.	CORNELL-DUBILIER PART No.	ERIE PART No.	MALLORY PART No.	SPRAGUE PART No.	
C7	4700			BPD-0047	DD-472	BYA10D47	ED-0047	UC-5247	5GA-D47	
C8	1000		215V300M15	BPD-001	DD-102	BYA6D1	ED-1000	DC521	5HK-D1	
C9	10000		215V300M11	BPD-01	DD-103	BYA6S1	ED-01	DC511	5HK-S1	
C10	10000		215V300M12	BPD-01	DD-103	BYA6S1	ED-01	DC511	5HK-S1	
C11	2200			BPD-0022	DD-222	BYA10D22	ED-0022	UC-5222	5GA-D22	
C12	50000		215V303M03						TG-S50	
C13	20000		215V303M04						TG-S20	
C14	1000		215V300M15	BPD-001	DD-102	BYA6D1	ED-1000	DC521	5HK-D1	
C15	1000		215V300M15	BPD-001	DD-102	BYA6D1	ED-1000	DC521	5HK-D1	

## CONTROLS

ITEM No.	RATING		REPLACEMENT DATA					INSTALLATION NOTES
	RESISTANCE	WATTS	AIRLINE PART No.	CENTRALAB PART No.	CLAROSTAT PART No.	IRC PART No.	MALLORY PART No.	
R1	5000Ω	1/2	270V024M01					Volume & Switch

## RESISTORS

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

ITEM No.	RATING		REPLACEMENT DATA			ITEM No.	RATING		REPLACEMENT DATA		
	OHMS	WATT	AIRLINE PART No.	IRC PART No.	NOTES		OHMS	WATT	AIRLINE PART No.	IRC PART No.	NOTES
R2	39K			BTS-39K		R11	1500Ω			BTS-1500	
R3	8200Ω			BTS-8200		R12	22K			BTS-22K	
R4	4700Ω			BTS-4700		R13	3300Ω			BTS-3300	
R5	56K			BTS-56K		R14	2200Ω			BTS-2200	
R6	1000Ω			BTS-1000		R15	1000Ω			BTS-1000	
R7	100Ω			BTS-100		R16	12K			BTS-12K	
R8	1000Ω			BTS-1000		R17	1500Ω			BTS-1500	
R9	15K			BTS-15K		R18	39Ω			BTS-39	
R10	470Ω			BTS-470		R19	470Ω			BTS-470	

# PARTS LIST AND DESCRIPTIONS (Continued)

## TRANSFORMER (AUDIO OUTPUT)

ITEM No.	IMPEDANCE		REPLACEMENT DATA					NOTES
			AIRLINE PART No.	Haldorson PART No.	Merit PART No.	Stancor PART No.	Thordarson PART No.	
	PRI.	SEC.						
T1	510Ω	12Ω	430V034M01		A-2706		TR-19 ①	① Tape center tap on prim. and bend ears under.

## SPEAKER

ITEM No.	TYPE			REPLACEMENT DATA		NOTES
				AIRLINE PART No.	QUAM PART No.	
	SIZE	FIELD	V. C. IMP.			
SP1	2 3/4"	PM	12Ω	570V004M01		

## COILS (RF-IF)

ITEM No.	USE	REPLACEMENT DATA				NOTES
		AIRLINE PART No.	MEISSNER PART No.	MERIT PART No.	MILLER PART No.	
L1	Loop Stick	310V012M02			2005	① Disregard Tap ① Disregard Tap
L2	Osc. Coil	230V026M01			2022	
L3	1st IF	235V014M01			9-C1 ①	
L4	2nd IF	235V014M01			9-C1 ①	
L5	3rd IF	235V014M02			9-C2	

## BATTERIES

ITEM No.	VOLTAGE	AIRLINE PART No.	REPLACEMENT DATA								NOTES
			BURGESS		EVEREADY		MALLORY		RAY-O-VAC		
			"A"	"B"	"A"	"B"	"A"	"B"	"A"	"B"	
M1	9V	62-96	P6		226		M1600		1600		

## CRYSTAL DIODES

ITEM No.	ORIG. TYPE	REPLACEMENT DATA			NOTES
		AIRLINE PART No.	CBS PART No.	SYLVANIA PART No.	
M2	1N87G ①	296V002M01	1N80	1N80	Audio Detector

① Alternate Type 1N295

## MISCELLANEOUS

ITEM No.	PART NAME	AIRLINE PART No.	NOTES
M3	Tuning Cap.	390V005M01	2 Gang (Ant. 23-135MMF, Osc. 30-95MMF)

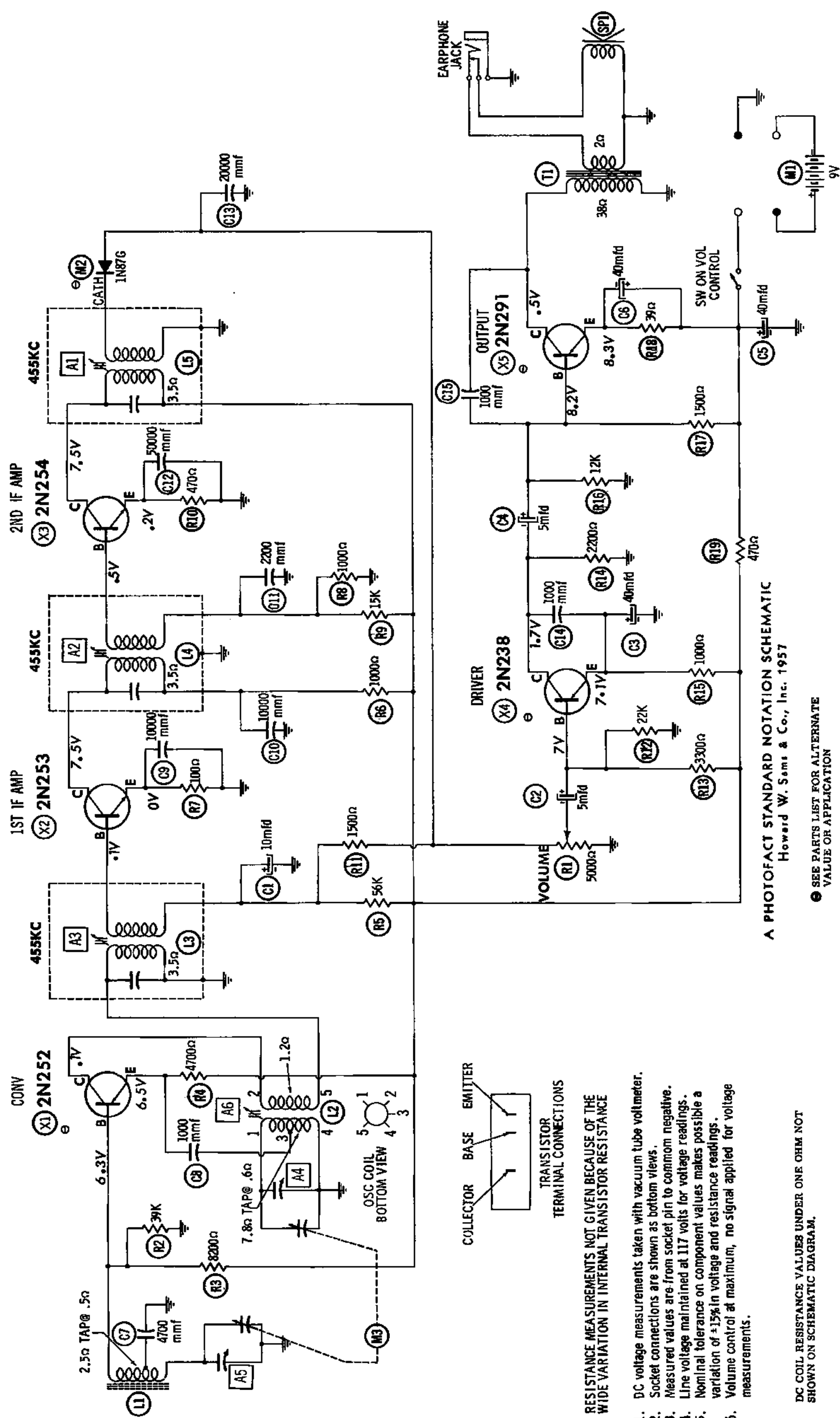
## CABINETS & CABINET PARTS

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

NAME	PART NO.	DESCRIPTION
Knob	550V033M02	Tuning
Knob	550V017M01	On-Off-Volume
Cabinet	613V014M01	
Screw	761V804M01	Dial Knob

## DISASSEMBLY

1. Remove screw from center of tuning dial. Remove dial.
2. Open rear cover. Remove battery.
3. Remove screw located at tuning gang end of printed board.
4. With open side of radio up, grip printed board and slide it toward the tuning gang end of the cabinet until speaker bracket is free of metal lip.
5. Raise end of printed board over metal lip and remove board from cabinet.



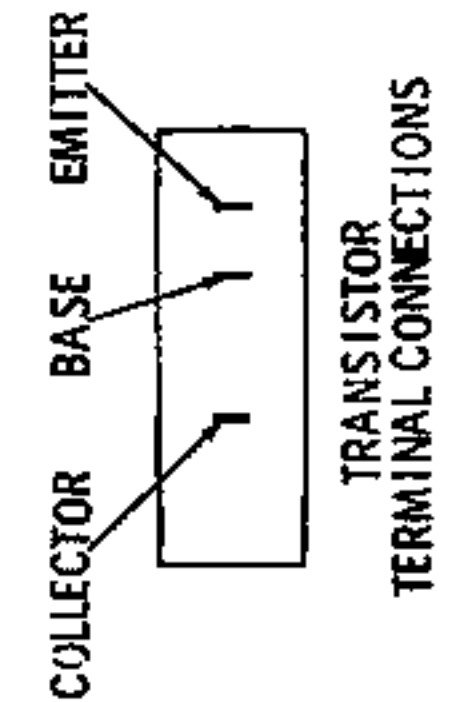
A PHOTOFACT STANDARD NOTATION SCHEMATIC  
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SEE PARTS LIST FOR ALTERNATE VALUE OR APPLICATION

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

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. Line voltage maintained at 117 volts for voltage readings.
5. Nominal tolerance on component values makes possible a variation of ±15% in voltage and resistance readings.
6. Volume control at maximum, no signal applied for voltage measurements.

DC COIL RESISTANCE VALUES UNDER ONE OHM NOT SHOWN ON SCHEMATIC DIAGRAM.



CONV

X1 2N252

1ST IF AMP

X2 2N253

2ND IF AMP

X3 2N254

DRIVER

X4 2N238

OUTPUT

X5 2N291

9V

SW ON VOL CONTROL

SP1

EARPHONE JACK

CATH 1N87G

M2

M1

M3

A6

A5