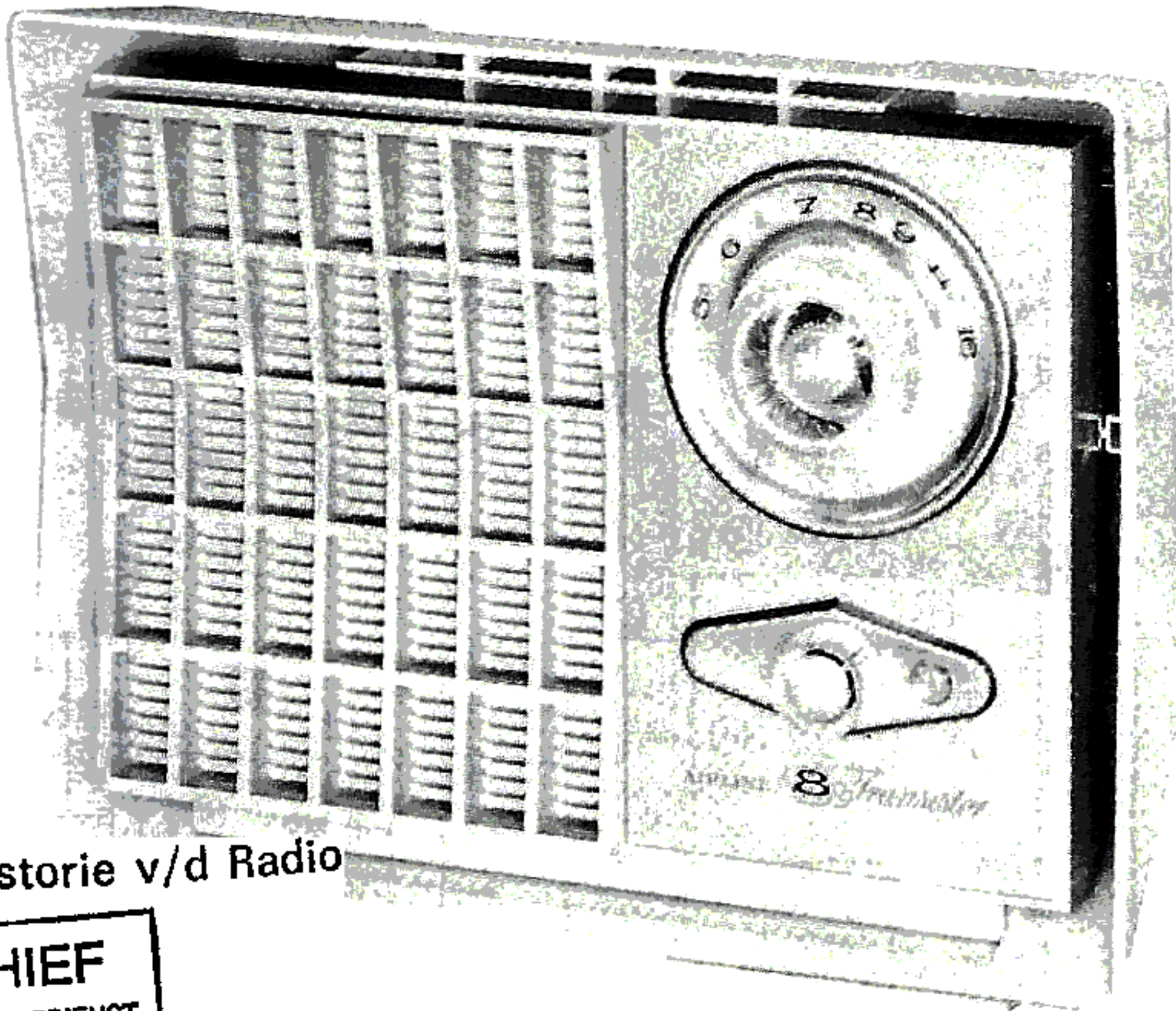
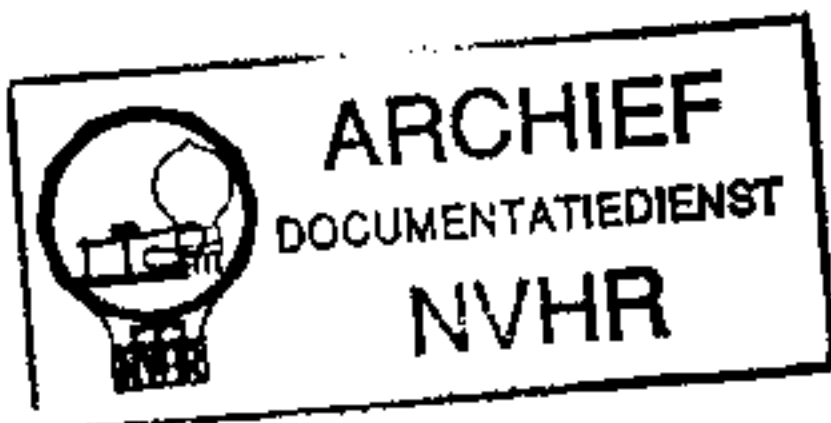


Met dank aan Jef Bos



Ned. Ver. v. Historie v/d Radio



TRADE NAME	Airline Models GEN-2030A, GEN-2030B		
SUPPLIER	Montgomery Ward & Co., 619 Chicago Ave., Chicago 7, Illinois		
TYPE SET	Battery Operated Transistorized AM Receiver		
POWER SUPPLY	9 Volts DC	RATING	12MA @ 9 Volts DC (No Signal, Min. Volume)
TUNING RANGE	BROADCAST 537-1600KC		15MA @ 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 a meter reading.

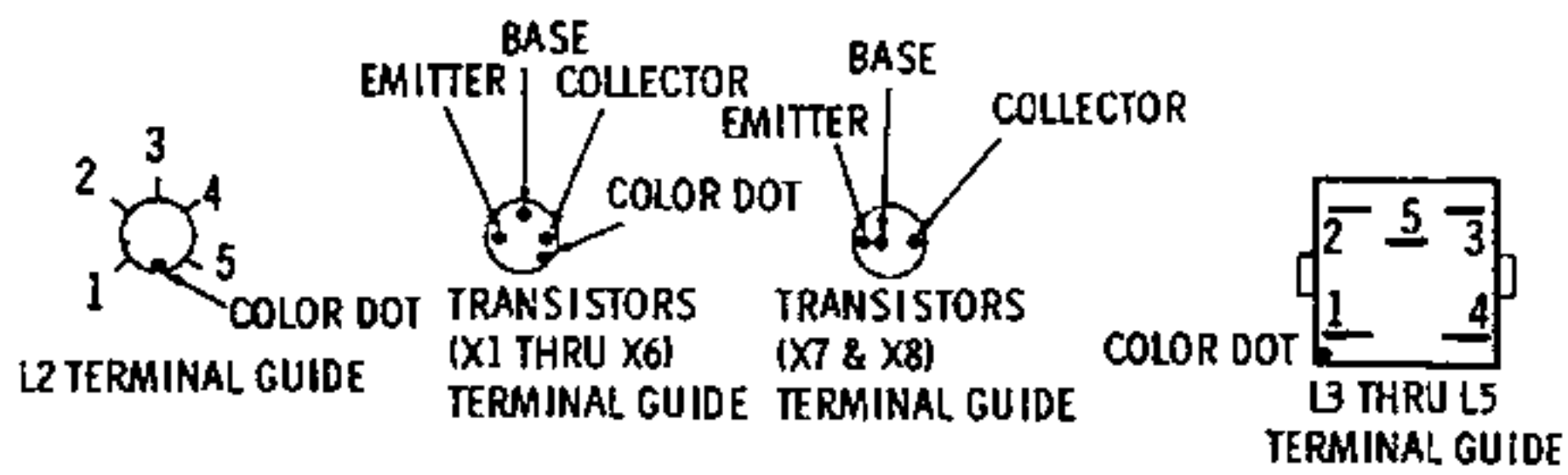
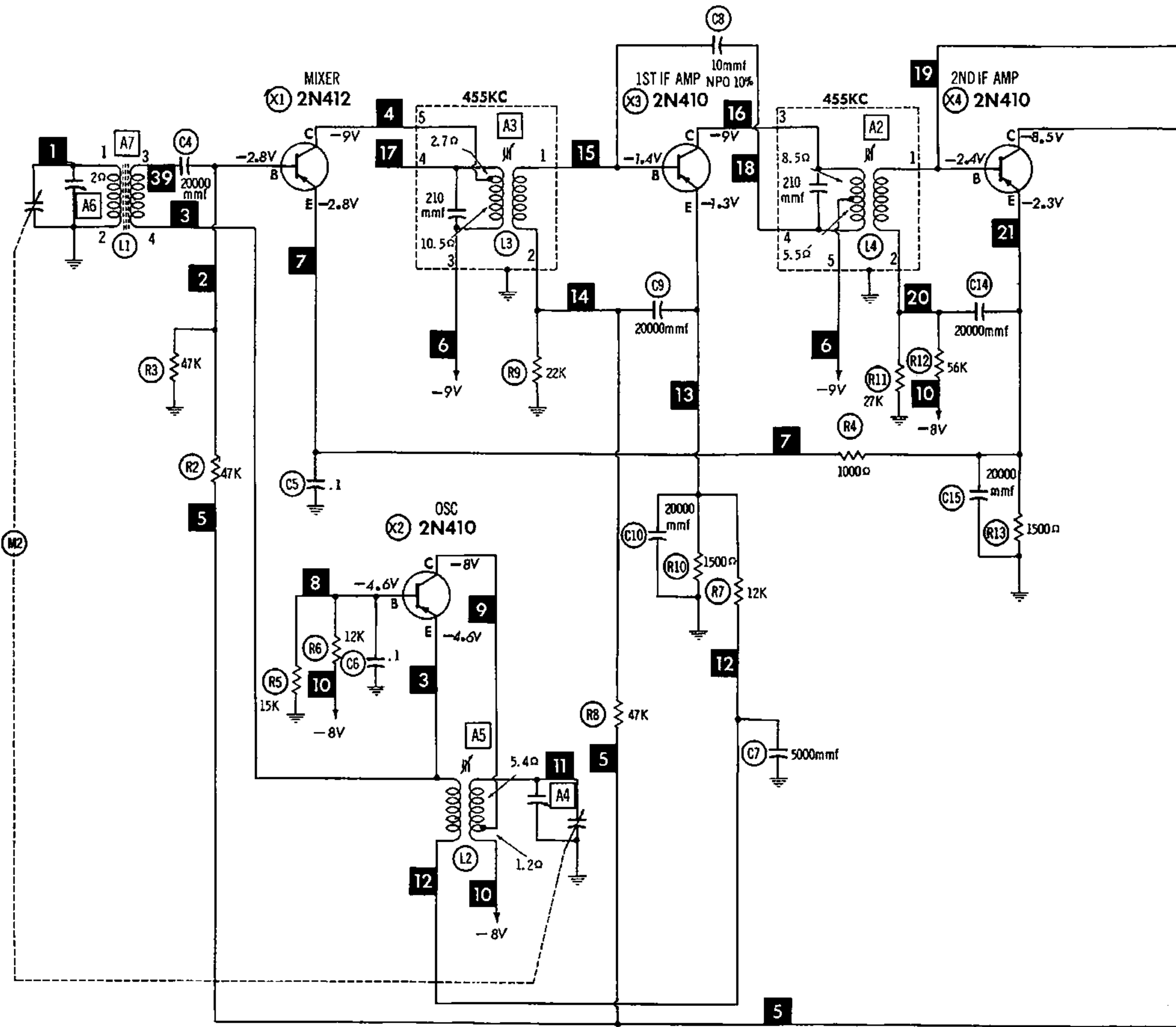
- Suggested Alignment Tools:
- A1, A2, A3 ... GENERAL CEMENT #5097, 8727  
WALSCO #2515
  - A4, A6 ..... GENERAL CEMENT #5004, 5009, 8195, 8274, 8275, 8607, 8728, 8987, 8988, 8989, 9291  
WALSCO #2515, 2520, 2522, 2523, 2531, 2532, 2534, 2537, 2538
  - A5 ..... GENERAL CEMENT #5009, 8195, 8274, 8275, 8728, 8729, 8987, 8988, 8989  
WALSCO #2515, 2531, 2532

SIGNAL GENERATOR COUPLING	SIGNAL GENERATOR FREQUENCY	RADIO DIAL SETTING	OUTPUT METER	ADJUST	REMARKS
Left side thru .05mfd to antenna stator lug of tuning gang. Low side to chassis	455KC (400% Mod.)	Tuning gang fully open	Across voice coil	A1, A2, A3	Adjust for maximum output.
Loop	1640KC	"	"	A4	Fashion loop of several turns of wire and radiate signal into loop of receiver. Adjust for maximum output.
	537KC	Tuning gang fully closed	"	A5	"
	1400KC	1400KC	"	A6	"
	600KC	600KC	"	A7	Adjust for maximum output. Repeat steps 2 thru 5.

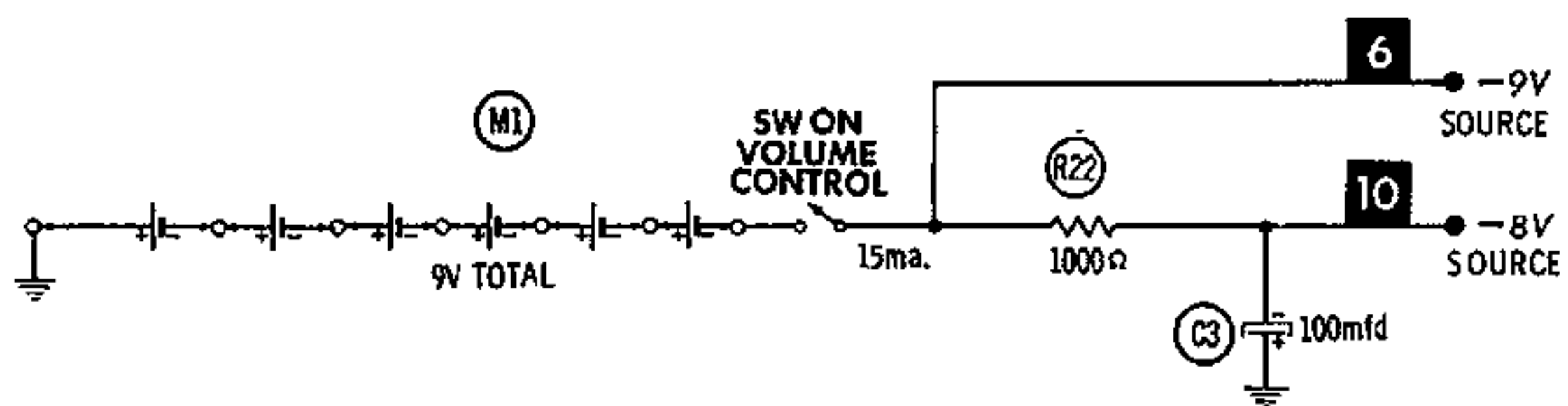
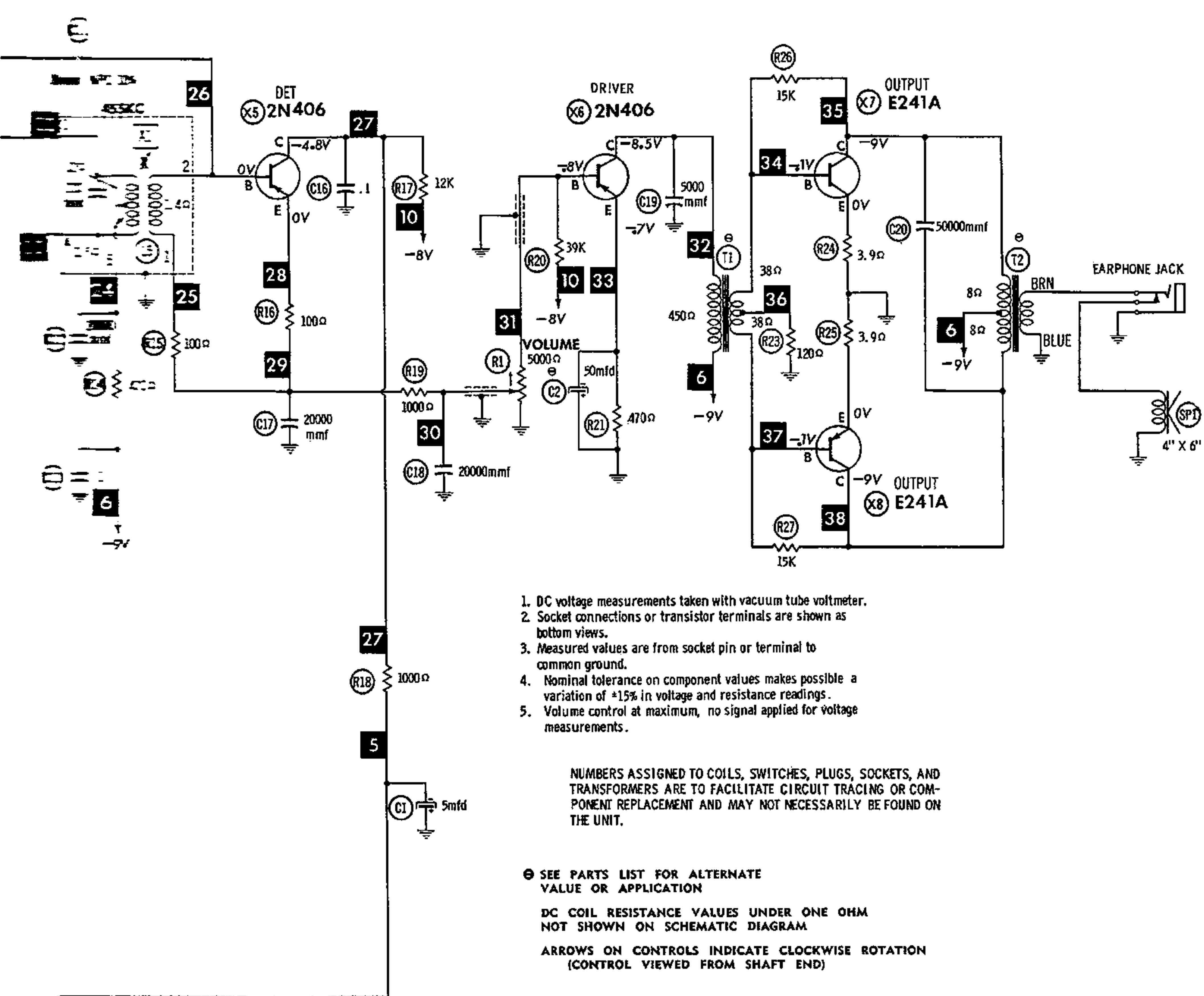
### HOWARD W. SAMS & CO., INC. Indianapolis 6, Indiana

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

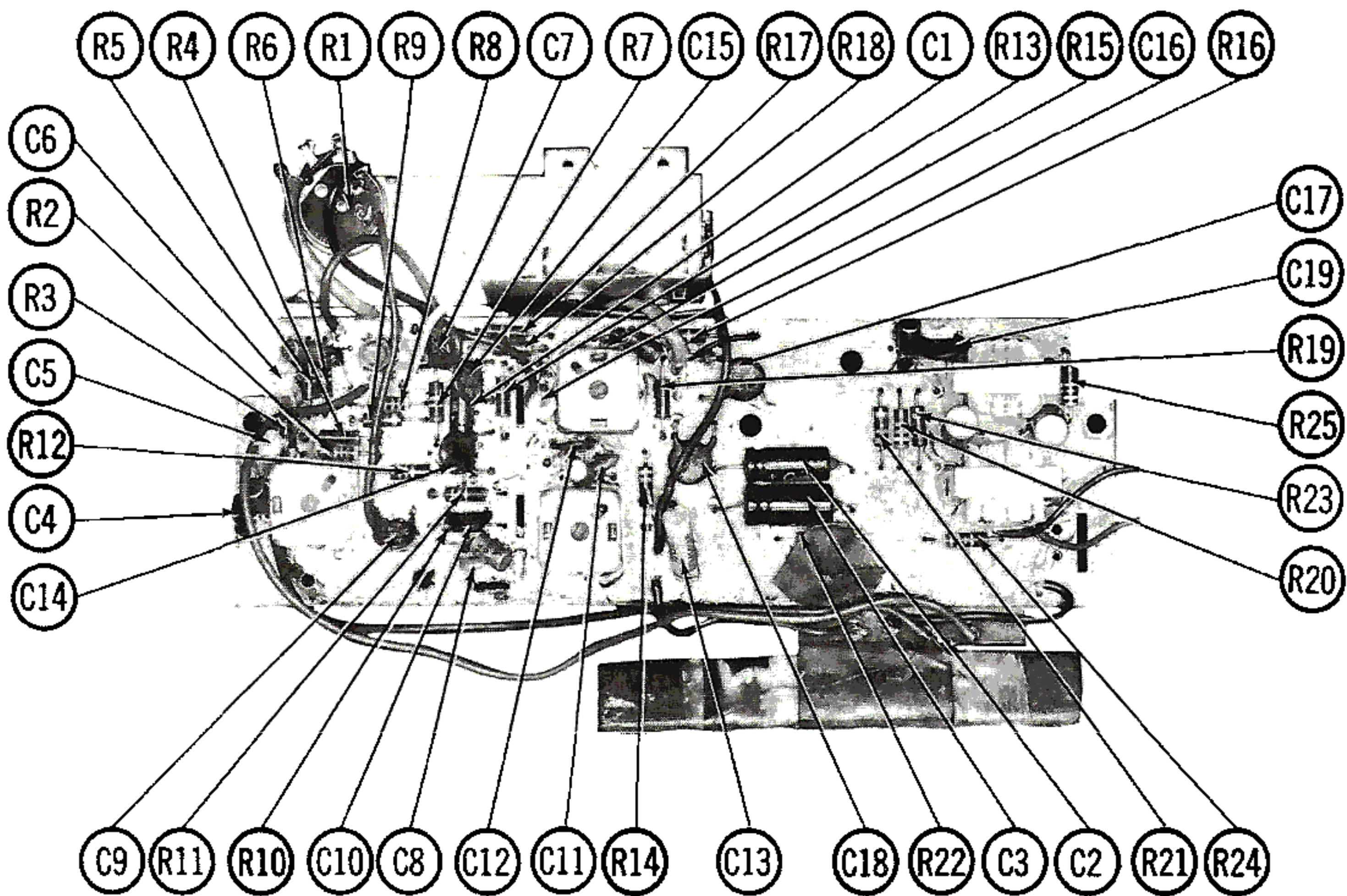
the particular type of replacement part listed. Reproduction or use, without express permission, of editorial or pictorial content, in any manner, is prohibited. No patent liability is assumed with respect to the use of the information contained herein. © 1961 Howard W. Sams & Co., Inc., Indianapolis 6, Indiana. Printed in U.S. of America



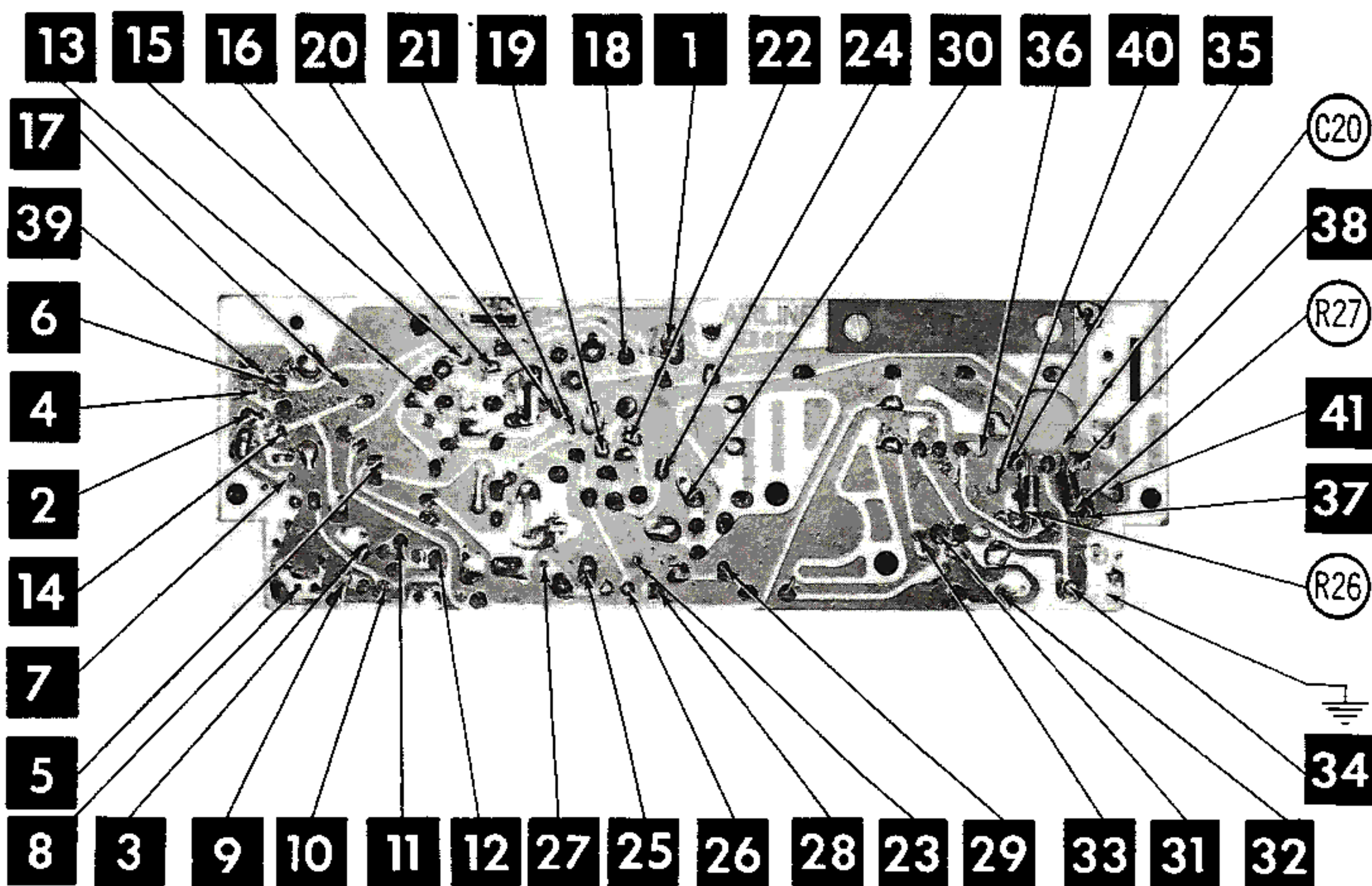








PRINTED BOARD-CAPACITOR AND RESISTOR IDENTIFICATION



PRINTED BOARD



## TRANSISTORS

ITEM No.	ORIG. TYPE	USE	REPLACEMENT DATA			NOTES
			RCA PART No.	RAYTHEON PART No.	SYLVANIA PART No.	
X1	2N412	Mixer	2N412	2N487	2N412	PNP
X2	2N410	Oscillator	2N410	2N482	2N410	PNP
X3	2N410	1st IF Amplifier	2N410	2N482	2N410	PNP
X4	2N410	2nd IF Amplifier	2N410	2N482	2N410	PNP
X5	2N406	Detector	2N406	2N633	2N406	PNP
X6	2N406	Driver	2N406	2N633	2N406	PNP
X7	E241A	Output	2N270			PNP
X8	E241A	Output	2N270			PNP

Matched  
Pair

## ELECTROLYTIC CAPACITORS

ITEM No.	RATING		REPLACEMENT DATA						NOTES
	CAP.	VOLT.	AIRLINE PART No.	AEROVOX PART No.	CORNELL-DUBILIER PART No.	MALLORY PART No.	PYRAMID PART No.	SPRAGUE PART No.	
C1	5	10	E3227	XPP-10005	NLW5-15	TT12X5	ML5-15	TE-1127	Note 1
C2	50	10		XPP-10050	NLW50-10	TT10X50	ML50-12	TE-1119	
C3	100	10	E3215	PWE10100	NLW100-10	TT15X100	ML100-12	TE-1119.3	

Note 1. Some versions may use 50mfd @ 3V in this application (Part #E3226).

## 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		REMARKS	REPLACEMENT DATA					
				AEROVOX PART No.	CENTRALAB PART No.	CORNELL-DUBILIER PART No.	ELMENCO PART No.	MALLORY PART No.	SPRAGUE PART No.
C4	20000	50V		BPD-02	DDM-203	H-05S2	CCD-203	GP120	5HK-S20
C5	.1	100V		P285N-1		WMF1P1E	1DP-2-104	GEM-201	2WF-P10
C6	.1	100V		P285N-1		WMF1P1E	1DP-2-104	GEM-201	2WF-P10
C7	5000			BPD-005	DDM-502	H-05D5	CCD-502	GP250	5HK-D50
C8	10	NPO 10%		NPO-DI 10	DTZ-10	C10Q1C	CCTO-100	CNO-410	10TCC-Q10
C9	20000	50V		BPD-02	DDM-203	H-05S2	CCD-203	GP120	5HK-S20
C10	20000	50V		BPD-02	DDM-203	H-05S2	CCD-203	GP120	5HK-S20
C11	18	NPO 10%			TCZ-18	C10Q18C	CCTO-180	CNO-418	10TCC-Q18
C12	20000	50V		BPD-02	DDM-203	H-05S2	CCD-203	GP120	5HK-S20
C13	.1	100V		P285N-1		WMF1P1E	1DP-2-104	GEM-201	2WF-P10
C14	20000	50V		BPD-02	DDM-203	H-05S2	CCD-203	GP-120	5HK-S20
C15	20000	50V		BPD-02	DDM-203	H-05S2	CCD-203	GP-120	5HK-S20
C16	.1	100V		P285N-1		WMF1P1E	1DP-2-104	GEM-201	2WF-P10
C17	20000	50V		BPD-02	DDM-203	H-05S2	CCD-203	GP120	5HK-S20
C18	20000	50V		BPD-02	DDM-203	H-05S2	CCD-203	GP120	5HK-S20
C19	5000			BPD-005	DDM-502	H-05D5	CCD-502	GP250	5HK-D50
C20	50000	50V		BPD-05	DDA-503	H-05S5		GP150	5HK-S20

# ID DESCRIPTIONS

## CONTROLS

ITEM No.	RATING		REPLACEMENT DATA					INSTALLATION NOTES
	RESIST-ANCE	WATTS	AIRLINE PART No.	CENTRALAB PART No.	CLAROSTAT PART No.	CTS-IRC PART No.	MALLORY PART No.	
RIA B C	5000Ω Shaft Switch	1/2	E2543	B-II Not Req. KR-1	A47-5000-S FS-3 SWE-12	Q13-114 Not Req. 76-1	U12 Not Req. US-26	Volume  Power Off-On

## RESISTORS (IRC or EQUIVALENT)

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

ITEM No.	RATING	REMARKS	ITEM No.	RATING	REMARKS	ITEM No.	RATING	REMARKS
R2	47K		R11	27K		R20	39K	
R3	47K		R12	56K		R21	470Ω	
R4	1000Ω		R13	1500Ω		R22	1000Ω	
R5	15K		R14	470Ω		R23	120Ω	
R6	12K		R15	100Ω		R24	3.9Ω	
R7	12K		R16	100Ω		R25	3.9Ω	
R8	47K		R17	12K		R26	15K	
R9	22K		R18	1000Ω		R27	15K	
R10	1500Ω		R19	1000Ω				

## COILS (RF-IF)

ITEM No.	USE	REPLACEMENT DATA				NOTES
		AIRLINE PART No.	Merit PART No.	Miller PART No.	Stancor PART No.	
L1	Loopstick	E6028				
L2	Osc. Coil	E6138				
L3	1st IF Trans.	E6221				
L4	2nd IF Trans.	E6222				
L5	3rd IF Trans.	E6223				

## TRANSFORMER (DRIVER)

ITEM No.	TURNS RATIO		REPLACEMENT DATA					NOTES
	PRI.	SEC.	AIRLINE PART No.	Merit PART No.	Stancor PART No.	Thordarson PART No.	Triad PART No.	
TI	2.5	1	E1122B3 ①					① Alternate Part #E1122.

# PARTS LIST AND DESCRIPTIONS (Continued)

## TRANSFORMER (AUDIO OUTPUT)

ITEM No.	IMPEDANCE		REPLACEMENT DATA					NOTES
			AIRLINE PART No.	Merit PART No.	Stancor PART No.	Thordarson PART No.	Triad PART No.	
	PRI.	SEC.						
T2	500Ω CT	3-4Ω	E1128B2 ①					① Alternate Part #E1128.

## SPEAKER

ITEM No.	TYPE			REPLACEMENT DATA		NOTES
				AIRLINE PART No.	QUAM PART No.	
	SIZE	FIELD	V. C. IMP.			
SP1	4" x 6"	PM	3-4Ω	E1049		

## BATTERIES

ITEM No.	VOLTAGE	AIRLINE PART No.	REPLACEMENT DATA						NOTES
			BURGESS		EVEREADY		MALLORY		
			"A"	"B"	"A"	"B"	"A"	"B"	
MI	1.5V	62-63 *		230 *		A-100 *		M-13R *	* 6 Required.

## MISCELLANEOUS

ITEM No.	PART NAME	AIRLINE PART No.	NOTES
M2	Tuning Cap. Printed Board	E3524 E5628	2 Gang Ant. 22-243mmf, Osc. 11-107mmf

## CABINETS & CABINET PARTS

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

NAME	PART NO.	DESCRIPTION
Knob	E5098	Tuning
Knob	E5097	Volume
Cabinet	E7060	Outer Case, Oyster White
Cabinet	E7061	Front, With Lens, Oyster White

## 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**

