

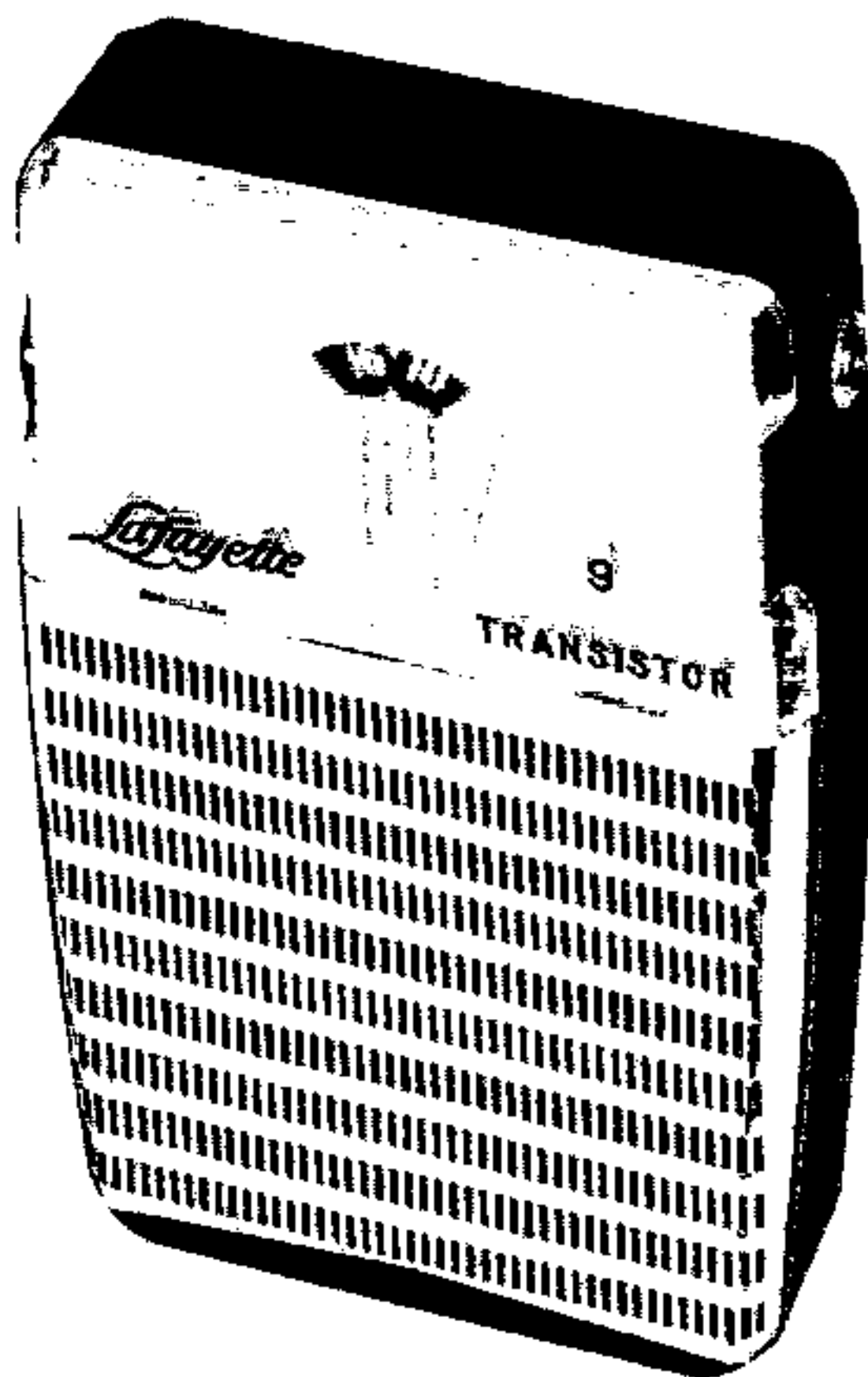
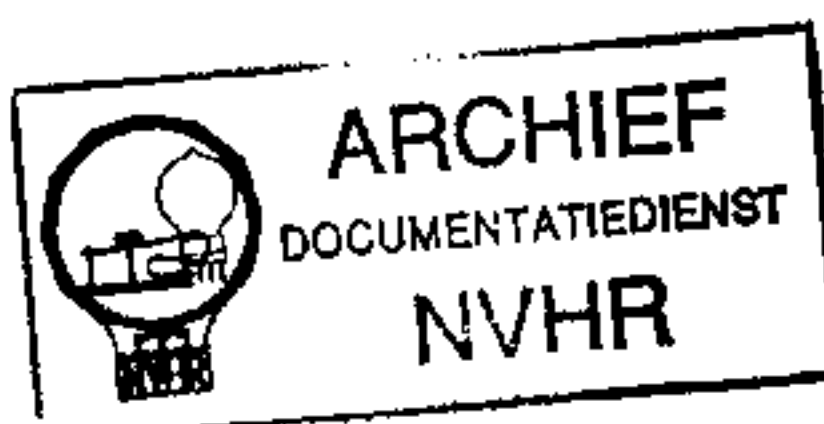
PHOTOFACT® Folder

with **CIRCUITRACE®**

**LAFAYETTE
MODEL FS-91**

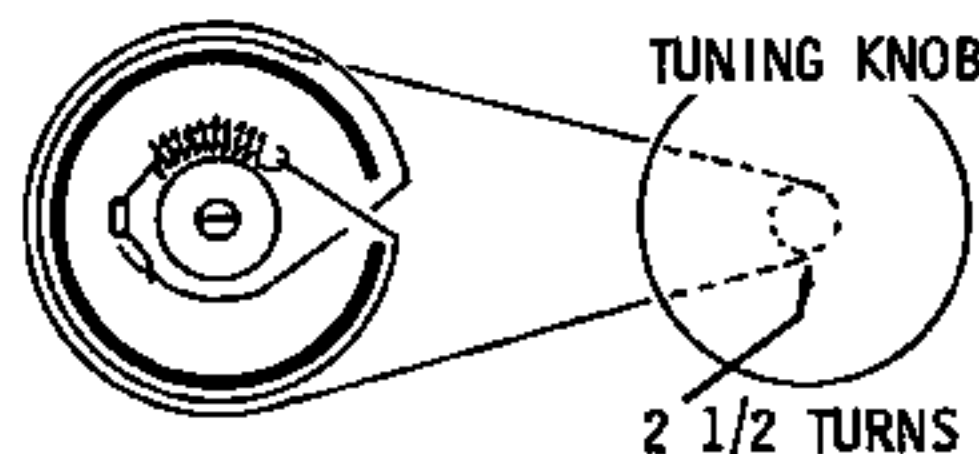
Met dank aan Jef Bos

Ned. Ver. v. Historie v/d Radio



DRIVE CORD STRINGING

TUNING GANG FULLY COUNTER CLOCKWISE



FRONT VIEW

TRADE NAME	LaFayette Model FS-91		
SUPPLIER	LaFayette Radio, 165 - 08 Liberty Ave., Jamaica 33, N. Y.		
TYPE SET	Battery Operated Transistorized Portable AM Receiver		
POWER SUPPLY	3 Volts DC	RATING	13MA @ 3 Volts DC (No Signal, Min. Volume)
TUNING RANGE—BROADCAST	540 - 1600KC		25MA @ 3 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.

Suggested Alignment Tools: A1, A2, A3..... GENERAL CEMENT #5004, 5009, 8195, 8274, 8275, 8607, 8728, 8987, 8988, 8989, 9291
 WALSCO #2515, 2520, 2522, 2523, 2531, 2532, 2534, 2537, 2538
 A4, A7..... GENERAL CEMENT #5000, 5003, 5066, 8276, 8290, 9087, 9089
 WALSCO #2512, 2525, 2528
 A5..... GENERAL CEMENT #5009, 8195, 8274, 8275, 8728, 8729, 8987, 8988, 8989
 WALSCO #2515, 2531, 2532

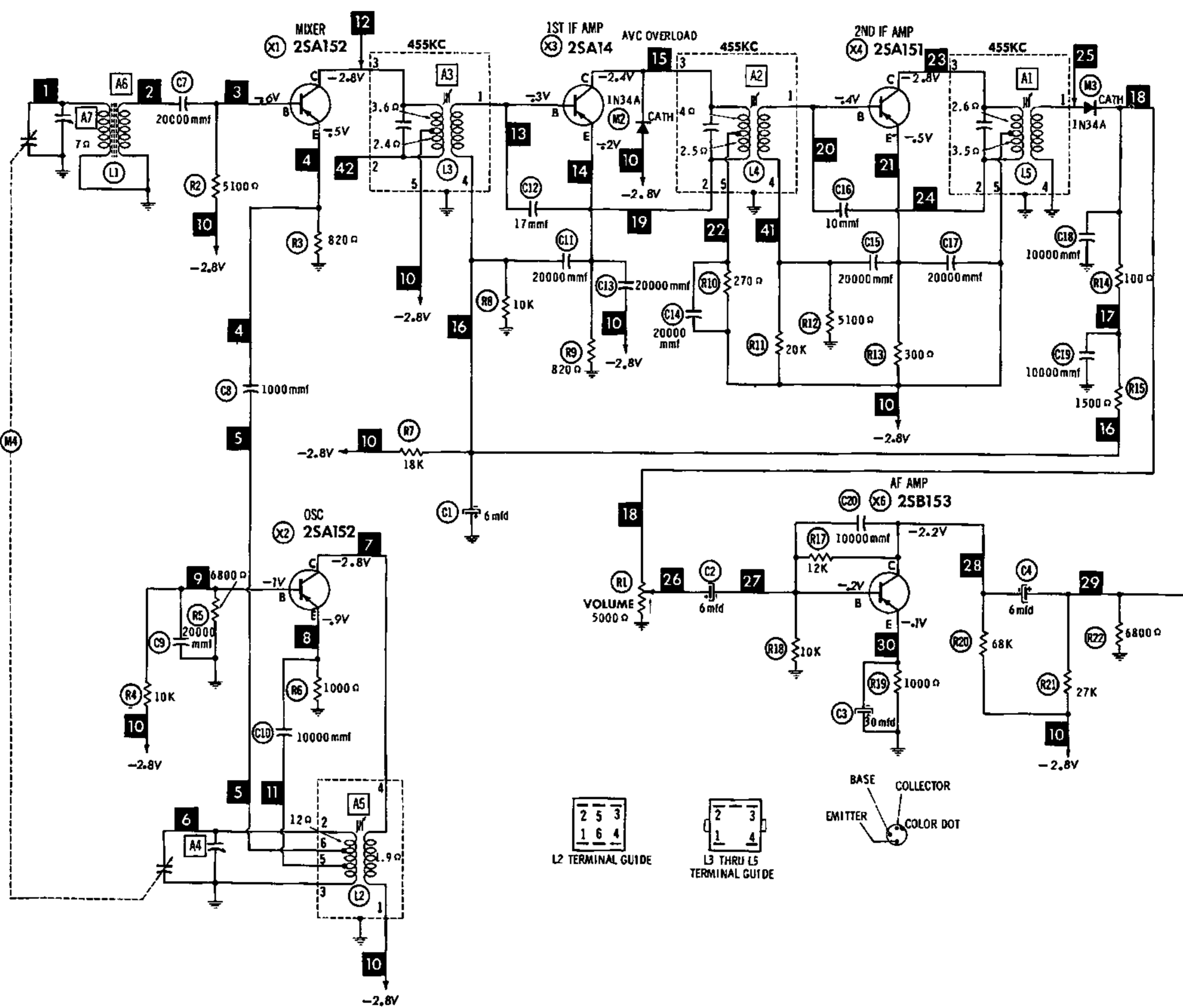
	SIGNAL GENERATOR COUPLING	SIGNAL GENERATOR FREQUENCY	RADIO DIAL SETTING	OUTPUT METER	ADJUST	REMARKS
1.	Loop	455KC (400% Mod.)	Tuning gang fully open.	Across voice coil.	A1, A2, A3	Fashion loop of several turns of wire and radiate signal into loop of receiver. Adjust for maximum output.
2.	"	1600KC	1600KC	"	A4	"
3.	"	600KC	600KC	"	A5, A6	"
4.	"	1400KC	1400KC Signal.	"	A7	Adjust for maximum output. Repeat Steps 2, 3 and 4.

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 KF467

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



1. DC voltage measurements taken with vacuum tube voltmeter.
2. Socket connections or transistor terminals are shown as bottom views.
3. Measured values are from socket pin or terminal to common ground.
4. Nominal tolerance on component values makes possible a variation of $\pm 15\%$ in voltage and resistance readings.
5. Volume control at maximum, no signal applied for voltage measurements.

NUMBERS ASSIGNED TO COILS, SWITCHES, PLUGS, SOCKETS, AND TRANSFORMERS ARE TO FACILITATE CIRCUIT TRACING OR COMPONENT REPLACEMENT AND MAY NOT NECESSARILY BE FOUND ON THE UNIT.

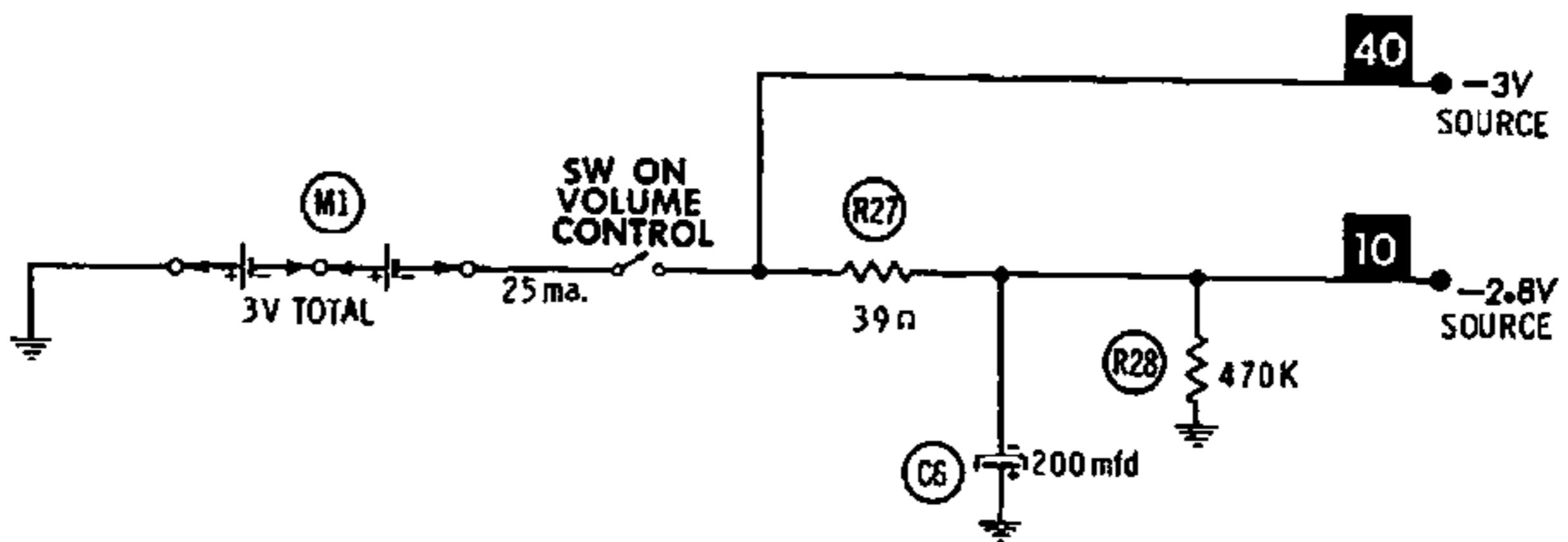
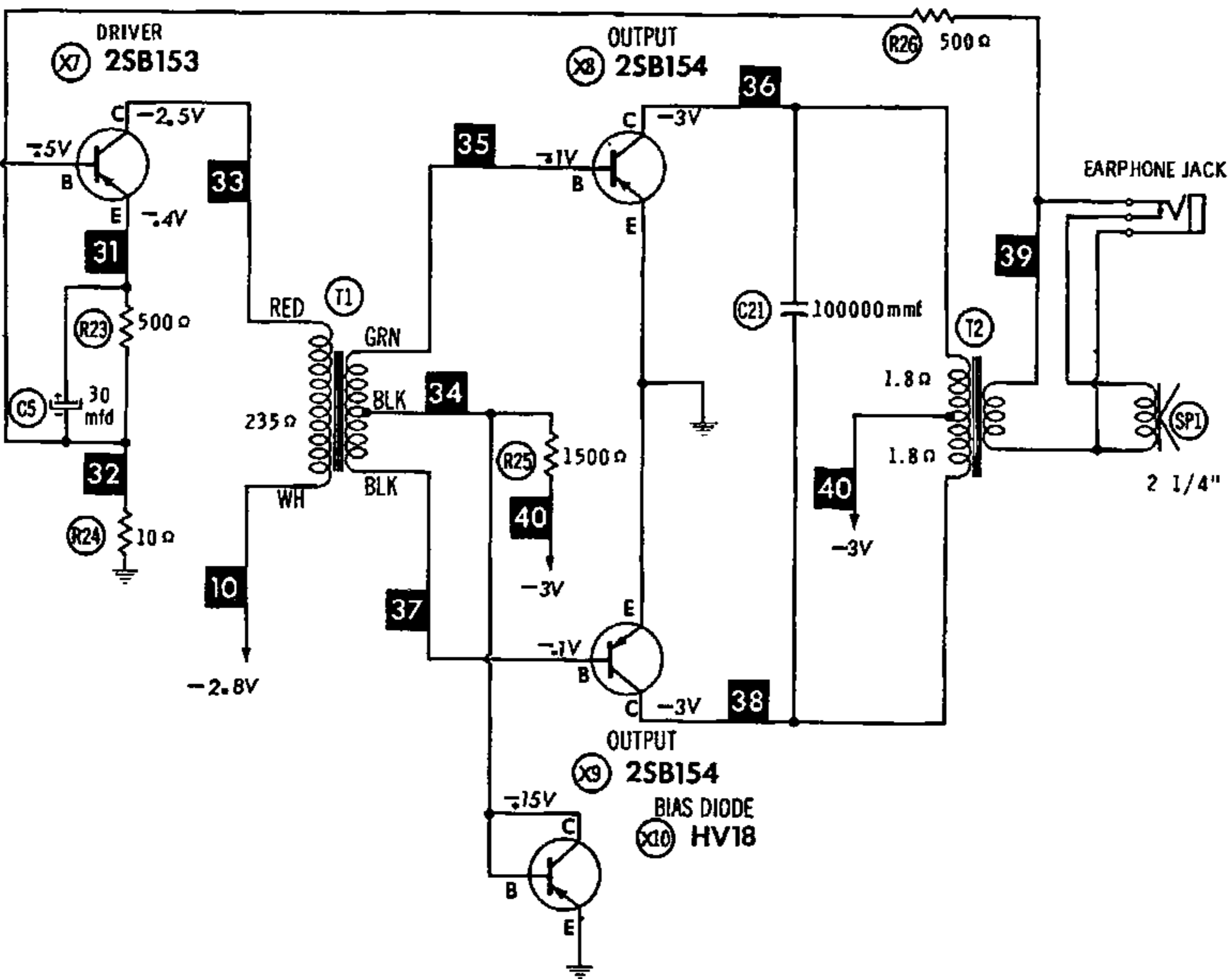
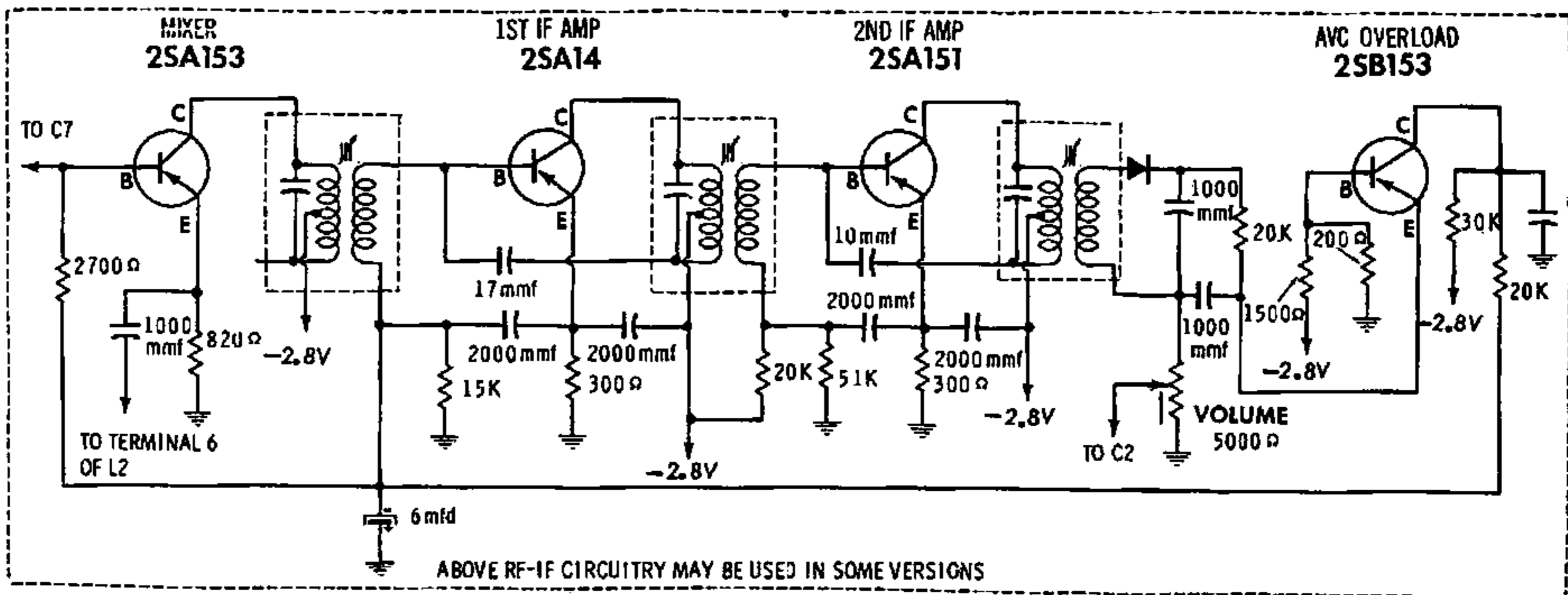
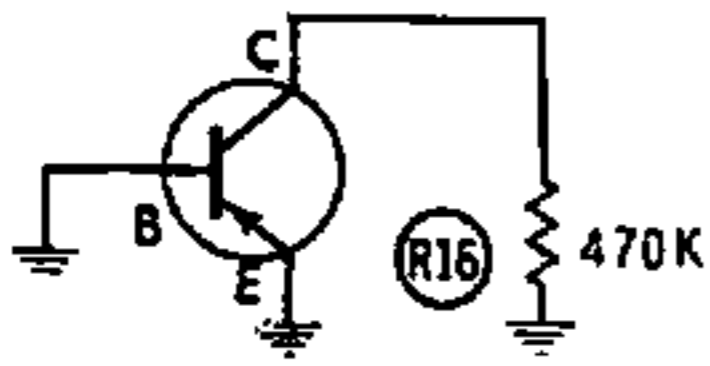
RESISTANCE MEASUREMENTS NOT GIVEN BECAUSE OF THE WIDE VARIATION IN INTERNAL TRANSISTOR RESISTANCE.

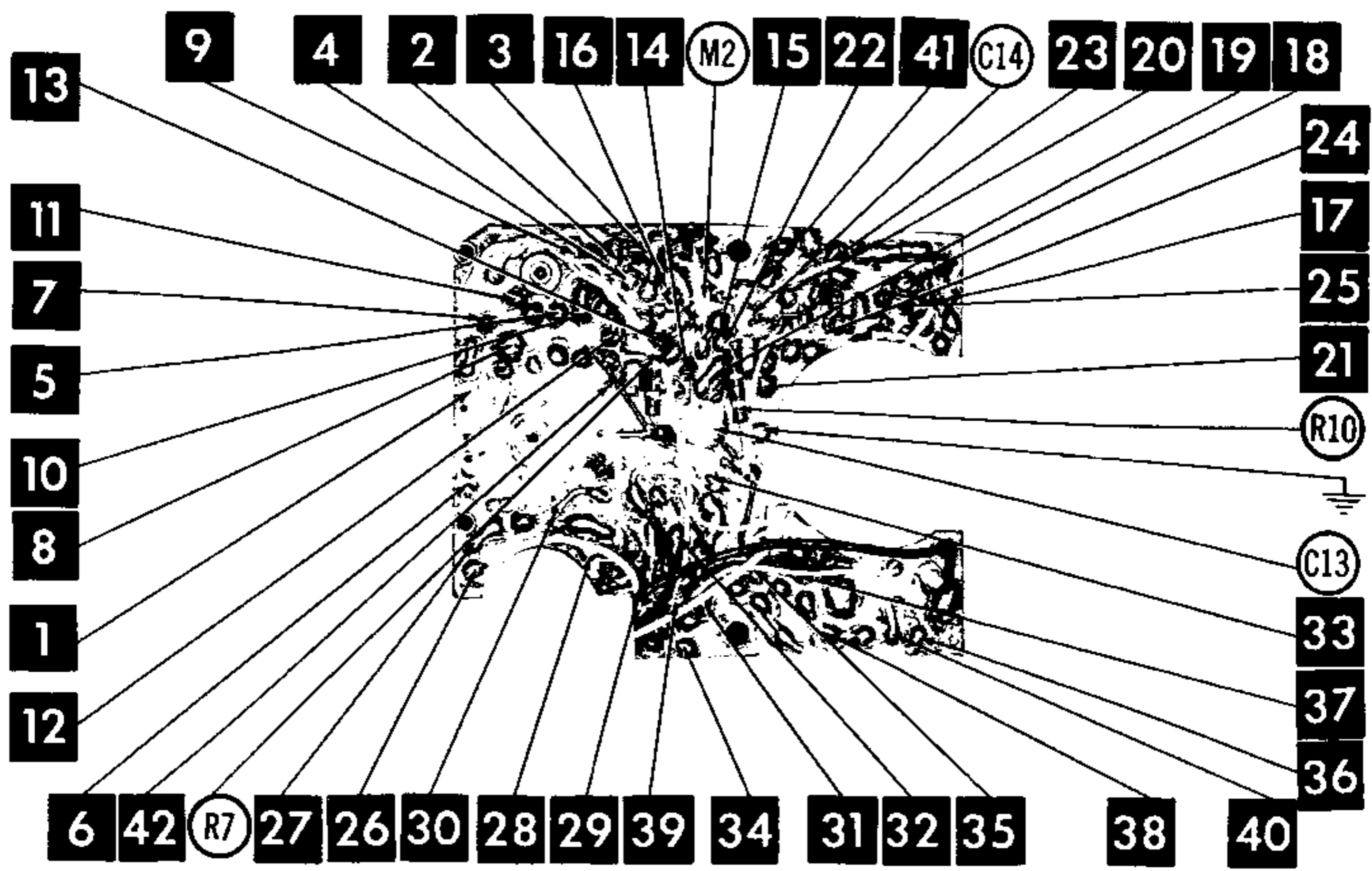
DC COIL RESISTANCE VALUES UNDER ONE OHM NOT SHOWN ON SCHEMATIC DIAGRAM

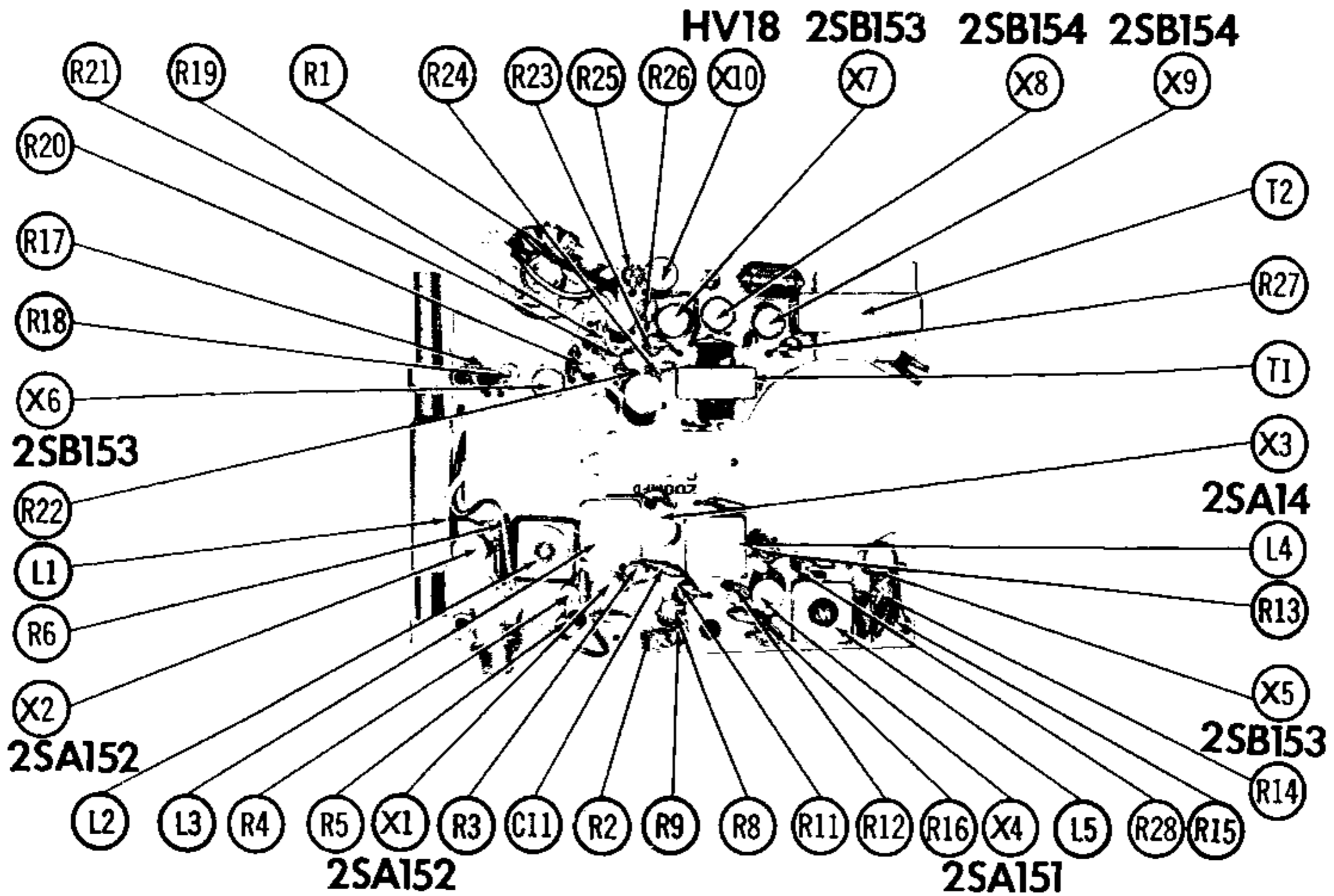
ARROWS ON CONTROLS INDICATE CLOCKWISE ROTATION (CONTROL VIEWED FROM SHAFT END)

CIRCUIT NOT IN THIS VERSION
(SEE ALTERNATE RF-IF WIRING)

(X5) 2SB153







CHASSIS TOP VIEW-RESISTOR, INDUCTOR & TRANSISTOR IDENT.

TRANSISTORS

ITEM No.	ORIG. TYPE	USE	REPLACEMENT DATA			NOTES
			RCA PART No.	RAYTHEON PART No.	SYLVANIA PART No.	
X1	2SA152	Mixer	2N412			PNP
X2	2SA152	Oscillator	2N412			PNP
X3	2SA14	1st IF Amplifier	2N410			PNP
X4	2SA151	2nd IF Amplifier	2N410			PNP
X5	2SB153	Not Used (Note 1)	2N408			PNP
X6	2SB153	AF Amplifier	2N408			PNP
X7	2SB153	Driver	2N408			PNP
X8	2SB154	Output	2N408			PNP
X9	2SB154	Output	2N408			PNP
X10	HV-18	Bias Diode	1N2926			PNP

Note 1. In some versions, X5 is connected for AVC-Overload.

ELECTROLYTIC CAPACITORS

ITEM No.	RATING		REPLACEMENT DATA						NOTES
	CAP.	VOLT.	LAFAYETTE PART No.	AEROVOX PART No.	CORNELL-DUBILIER PART No.	MALLORY PART No.	PYRAMID PART No.	SPRAGUE PART No.	
C1	6	3		XPP-3006	NLW6-15	TT10X6	MLV5-3	TE-1052.3	
C2	6	3		XPP-3006	NLW6-15	TT10X6	MLV5-3	TE-1052.3	
C3	30	3		PTT-3030	NLW30-6		MLV30-6	TE-1092	
C4	6	3		XPP-3006	NLW6-15	TT10X6	MLV5-3	TE-1052.3	
C5	30	3		PTT-3030	NLW30-6		MLV30-6	TE-1092	
C6	200	6		PTT-6200			MLV-150-6		

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.
C7	20000		C80V203AM	DA-203	H-05S2		TA-120	TG-S20
C8	1000		C80V102AM	DM-102	H-05D1	CCD-102	B-210	6HK-D10
C9	20000		C80V203AM	DA-203	H-05S2		TA-120	TG-S20
C10	10000		C80V103AM	DM-103	H-05S1		TA-110	TG-S10
C11	20000		C80V203AM	DA-203	H-05S2		TA-120	TG-S20
C12	17		NPO-DI 20	TCZ-18	C10Q18C	CCTO-180	CNO-418	10TCC-Q18
C13	20000		C80V203AM	DA-203	H-05S20		TA-120	TG-S20

PARTS LIST AND DESCRIPTIONS (Continued)

COILS (RF-IF)

ITEM No.	USE	REPLACEMENT DATA					NOTES
		LAFAYETTE PART No.	Merit PART No.	Miller PART No.	Stancor PART No.	Workman TV PART No.	
L1	Loopstick						
L2	Osc.						
L3	1st IF						
L4	2nd IF						
L5	3rd IF						

TRANSFORMER (DRIVER)

ITEM No.	TURNS RATIO		REPLACEMENT DATA					NOTES
	PRI.	SEC.	LAFAYETTE PART No.	Merit PART No.	Stancor PART No.	Thordarson PART No.	Triad PART No.	
T1	1.6	1						

TRANSFORMER (AUDIO OUTPUT)

ITEM No.	IMPEDANCE		REPLACEMENT DATA					NOTES
	PRI.	SEC.	LAFAYETTE PART No.	Merit PART No.	Stancor PART No.	Thordarson PART No.	Triad PART No.	
T2	100Ω CT	8-8Ω						

SPEAKER

ITEM No.	TYPE			REPLACEMENT DATA		NOTES
	SIZE	FIELD	V. C. IMP.	LAFAYETTE PART No.	QUAM PART No.	
SP1	2 1/4"	PM	8-8Ω		22A06Z8 *	* Fabricate Mounting Brackets.

BATTERIES

ITEM No.	VOLTAGE	LAFAYETTE PART No.	REPLACEMENT DATA						NOTES
			BURGESS		EVEREADY		MALLORY		
			"A"	"B"	"A"	"B"	"A"	"B"	
M1	1.5V	UM-3A		930		1015		M-15R	2 Required

SIGNAL DIODES

ITEM No.	ORIG. TYPE	REPLACEMENT DATA				NOTES
		LAFAYETTE PART No.	GENERAL ELECTRIC PART No.	RAYTHEON PART No.	SYLVANIA PART No.	
M2	1N34A			1N34A	1N34A	Overload Detector-AVC
M3	1N34A			1N34A	1N34A	

MISCELLANEOUS

ITEM No.	PART NAME	LAFAYETTE PART No.	NOTES
M4	Tuning Cap		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

