

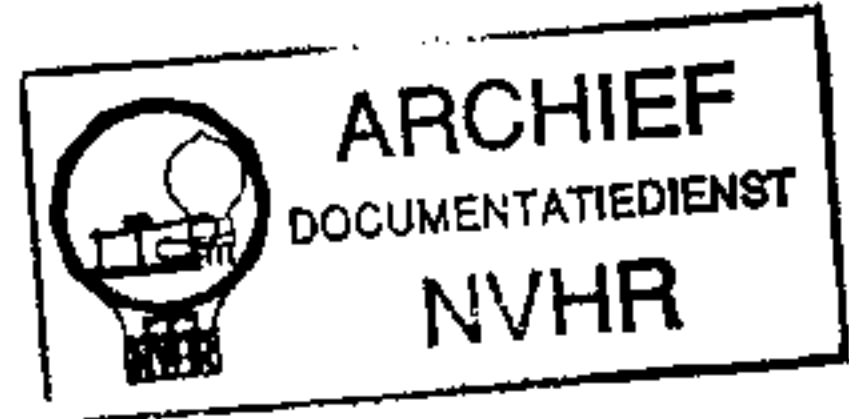
PHOTOFACT® Folder

with **CIRCUITRACE™**

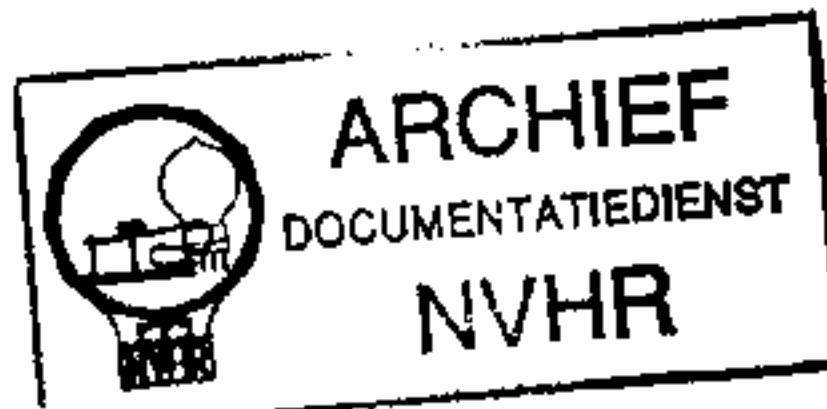
**CHANNEL MASTER
MODEL 6510**

Met dank aan Jef Bos

Ned. Ver. v. Historie v/d Radio



Ned. Ver. v. Historie v/d Radio



TRADE NAME	Channel Master
IMPORTER	Channel Master
TYPE SET	Battery Operated Transistorized Portable AM Receiver
POWER SUPPLY	6 Volts DC
TUNING RANGE—BROADCAST	540 — 1600KC
RATING	8MA @ 6 Volts DC (No Signal, Min. Volume) 15MA @ 6 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.

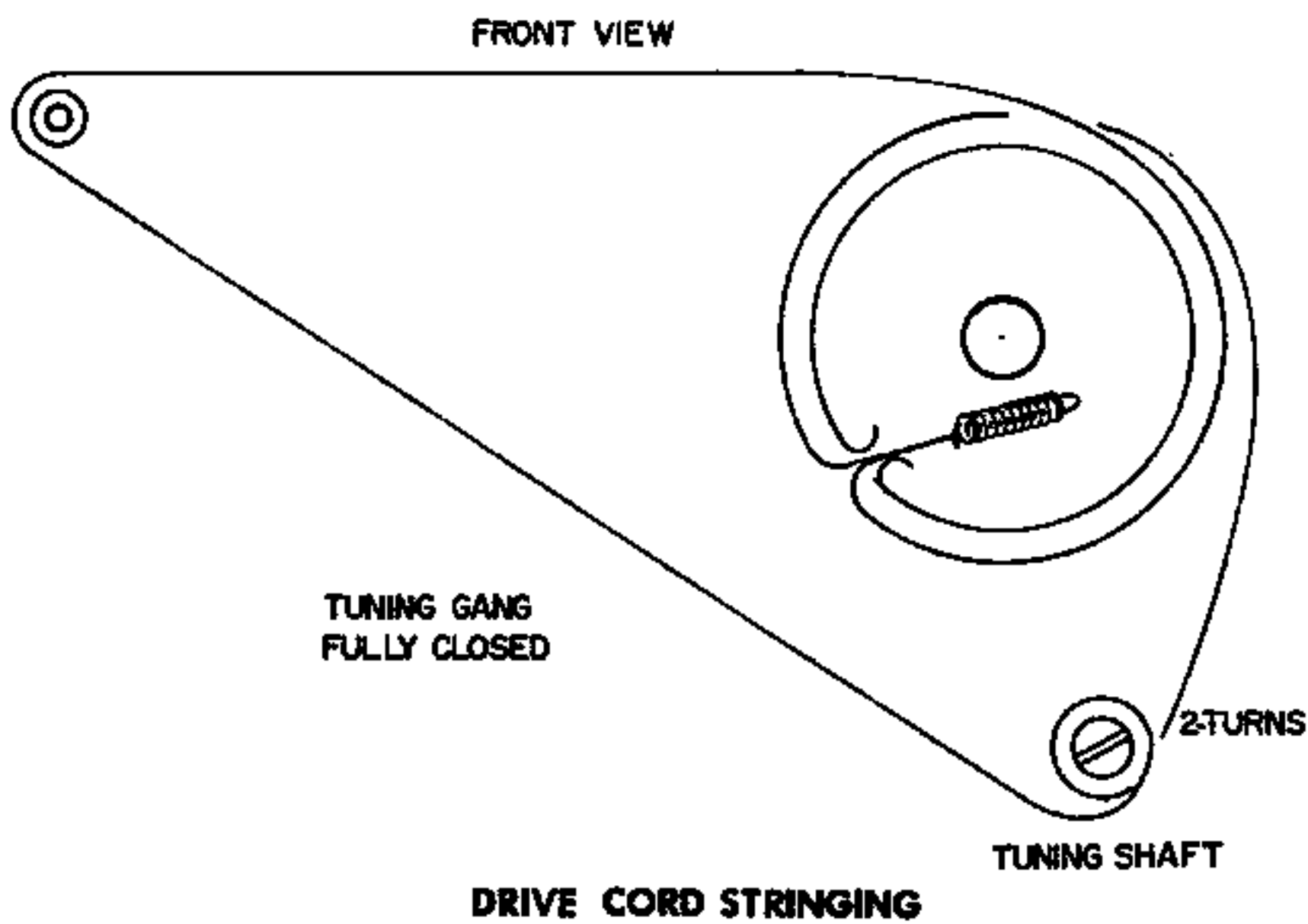
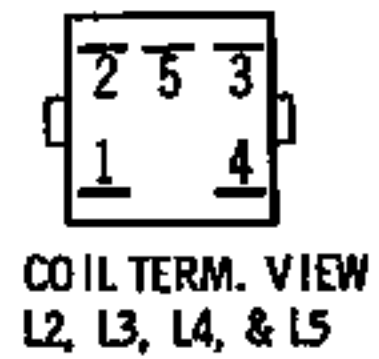
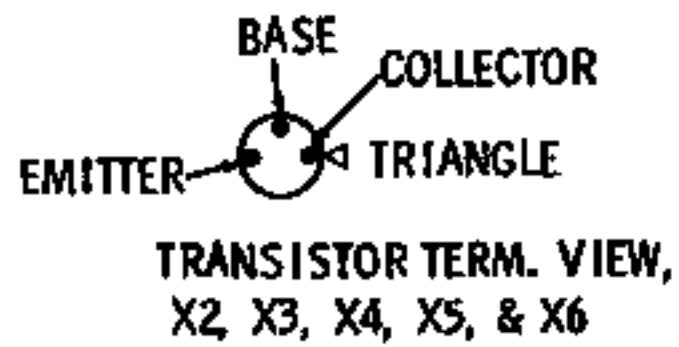
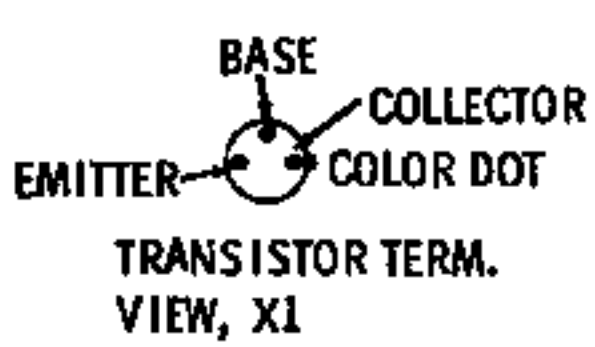
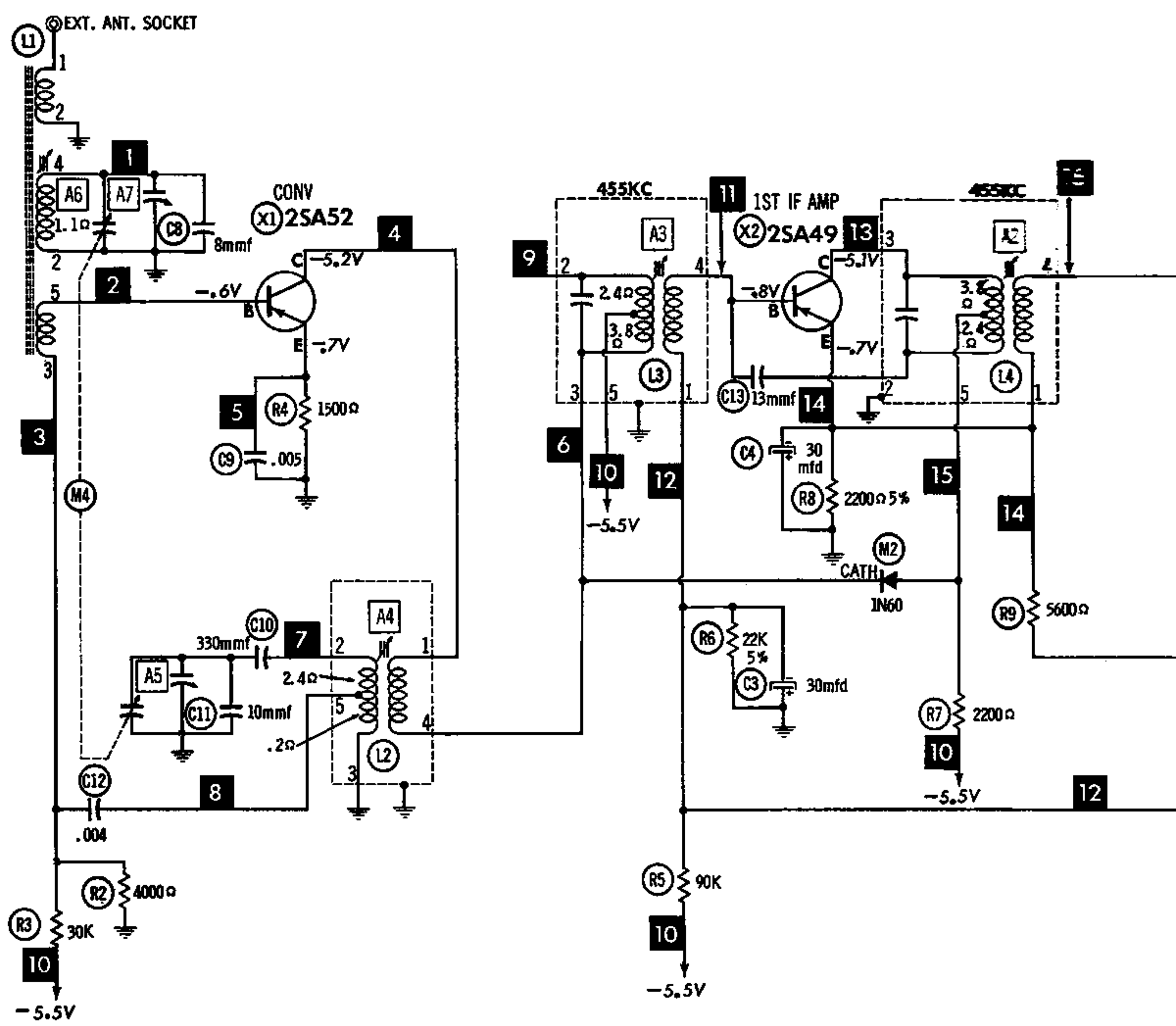
Suggested Alignment Tools: A1 thru A4... GENERAL CEMENT #8607, 9291, 9294
 WALSCO #2520, 2522, 2523, 2524, 2534, 2537
 A5, A7... GENERAL CEMENT #5004, 5009, 8195, 8274, 8275, 8607, 8728, 8987, 8988, 8989, 9291
 WALSCO #2515, 2520, 2522, 2523, 2531, 2532, 2534, 2537, 2538

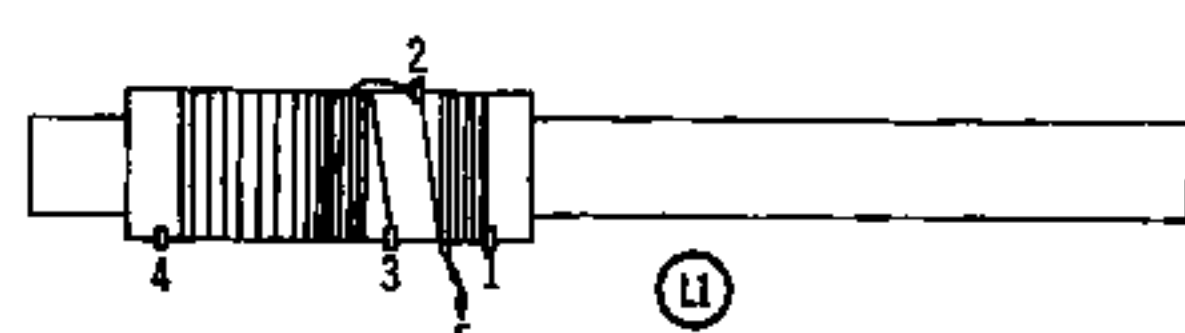
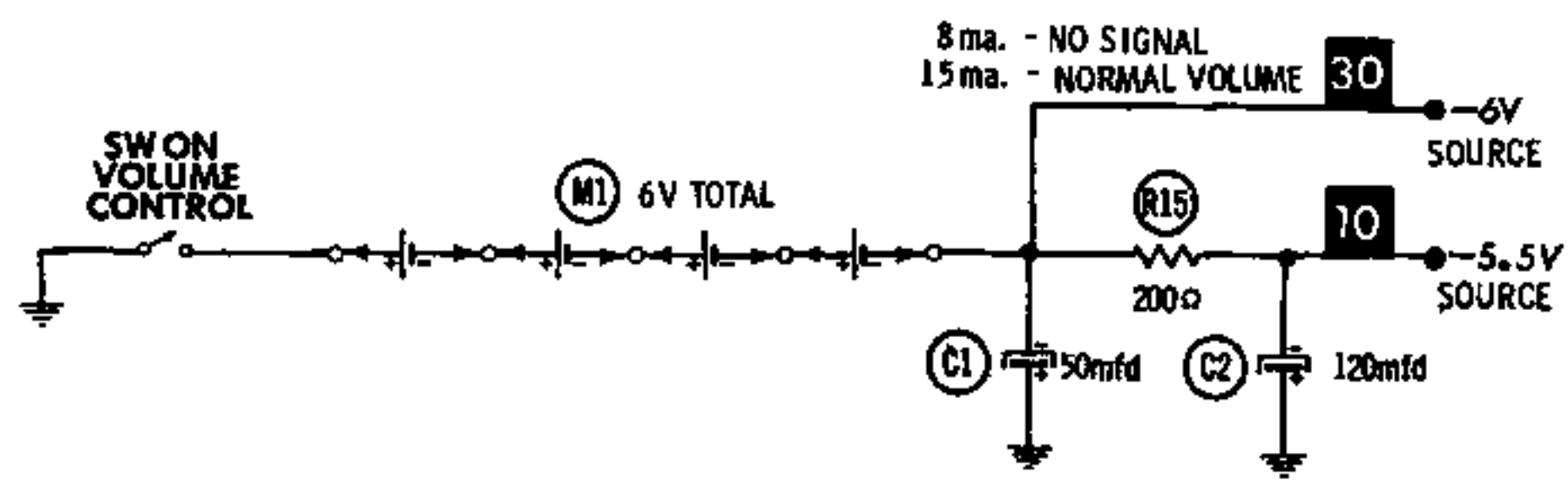
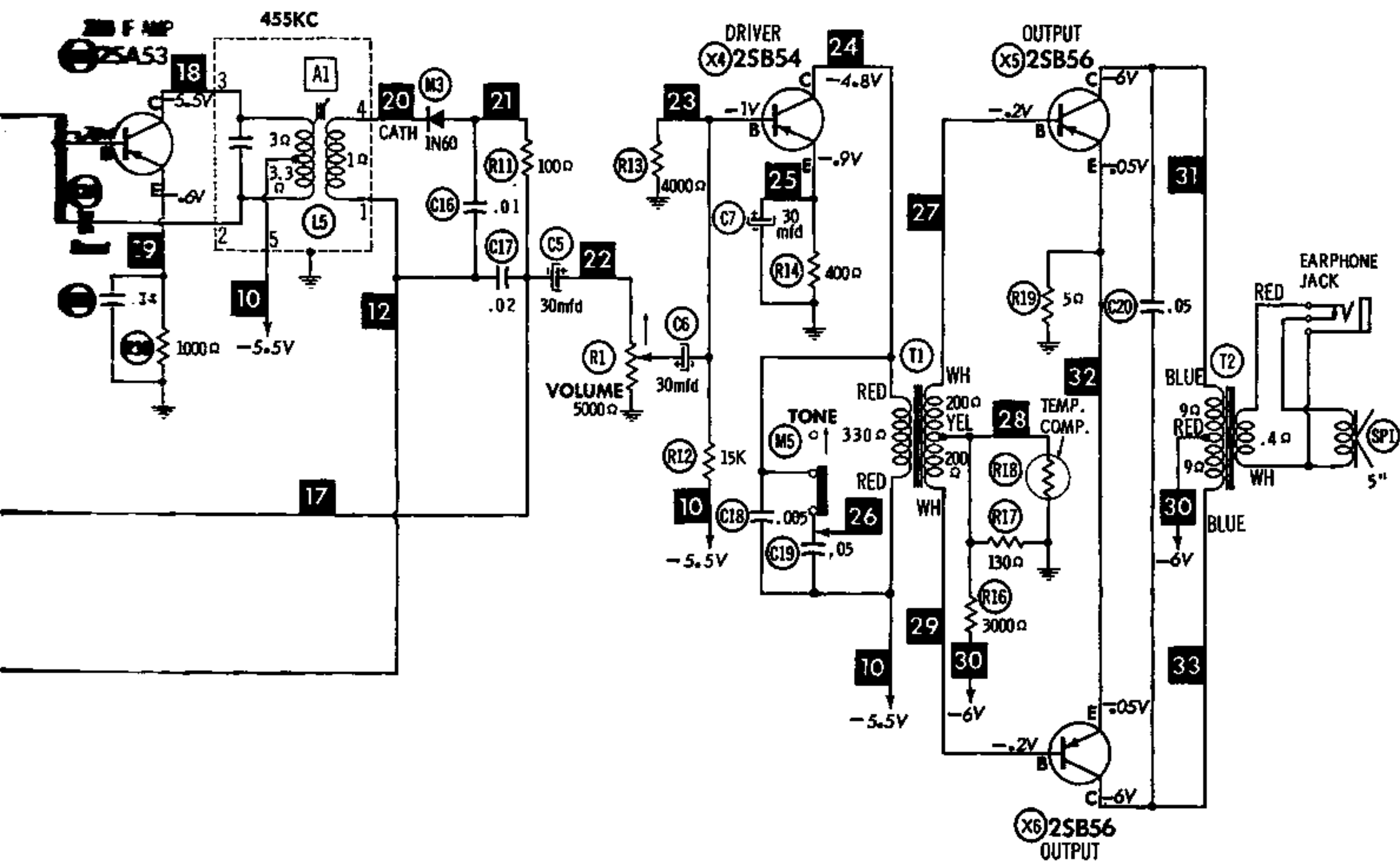
	SIGNAL GENERATOR COUPLING	SIGNAL GENERATOR FREQUENCY	RADIO DIAL SETTING	OUTPUT METER	ADJUST	REMARKS
1.	Fashion loop of several turns of wire and radiate signal into loop of receiver.	455KC (400% Mod.)	Tuning gang fully closed.	Across voice coil.	A1, A2, A3	Adjust for maximum output.
2.	"	530KC	"	"	A4	"
3.	"	1650KC	Tuning gang fully open.	"	A5	"
4.	"	600KC	600KC	"	A6	Adjust for maximum output. Repeat Steps 2 and 3.
5.	"	1400KC	1400KC	"	A7	Adjust for maximum output. Repeat Steps 4 and 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 EG730

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





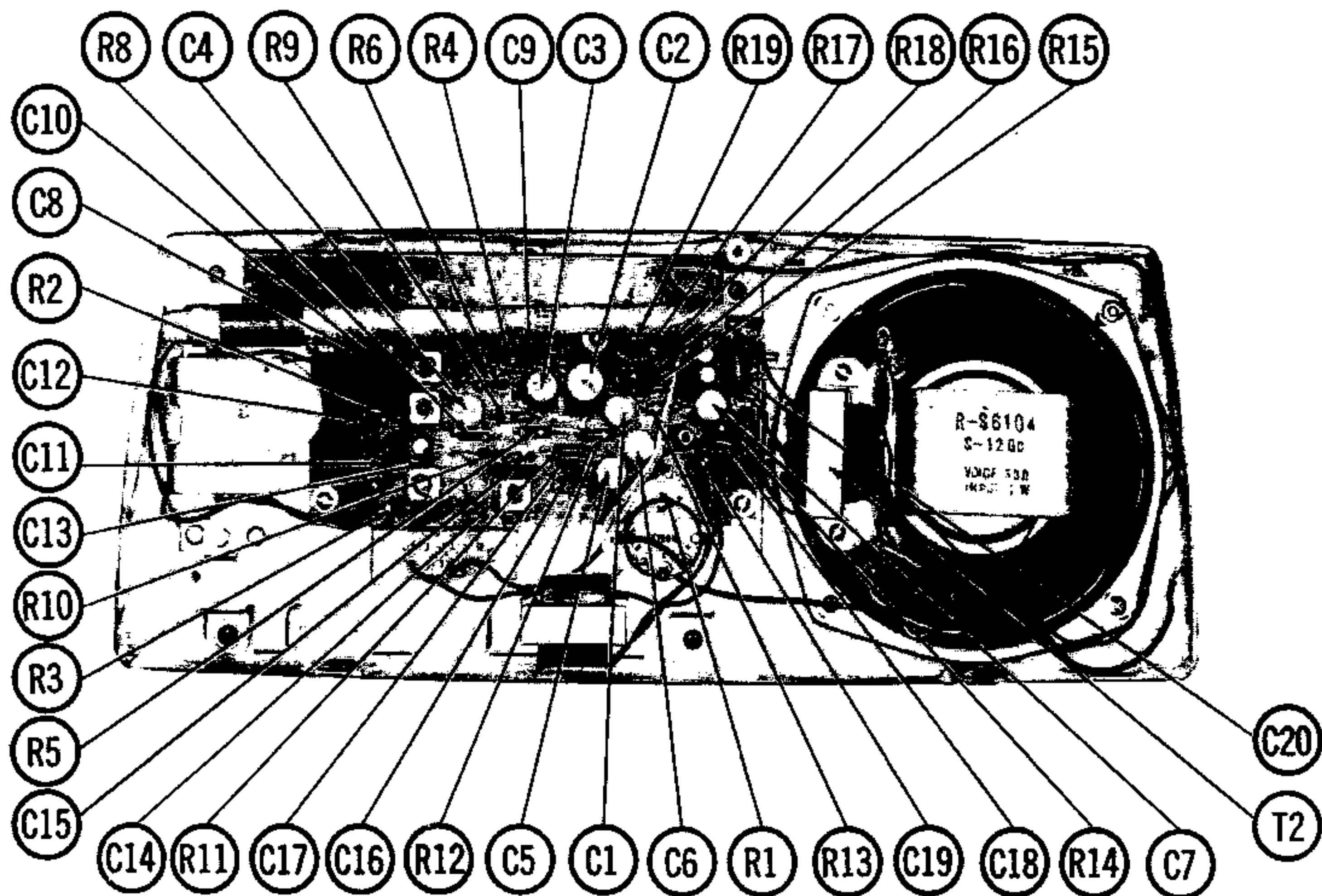
LOOPSTICK TERM. VIEW

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

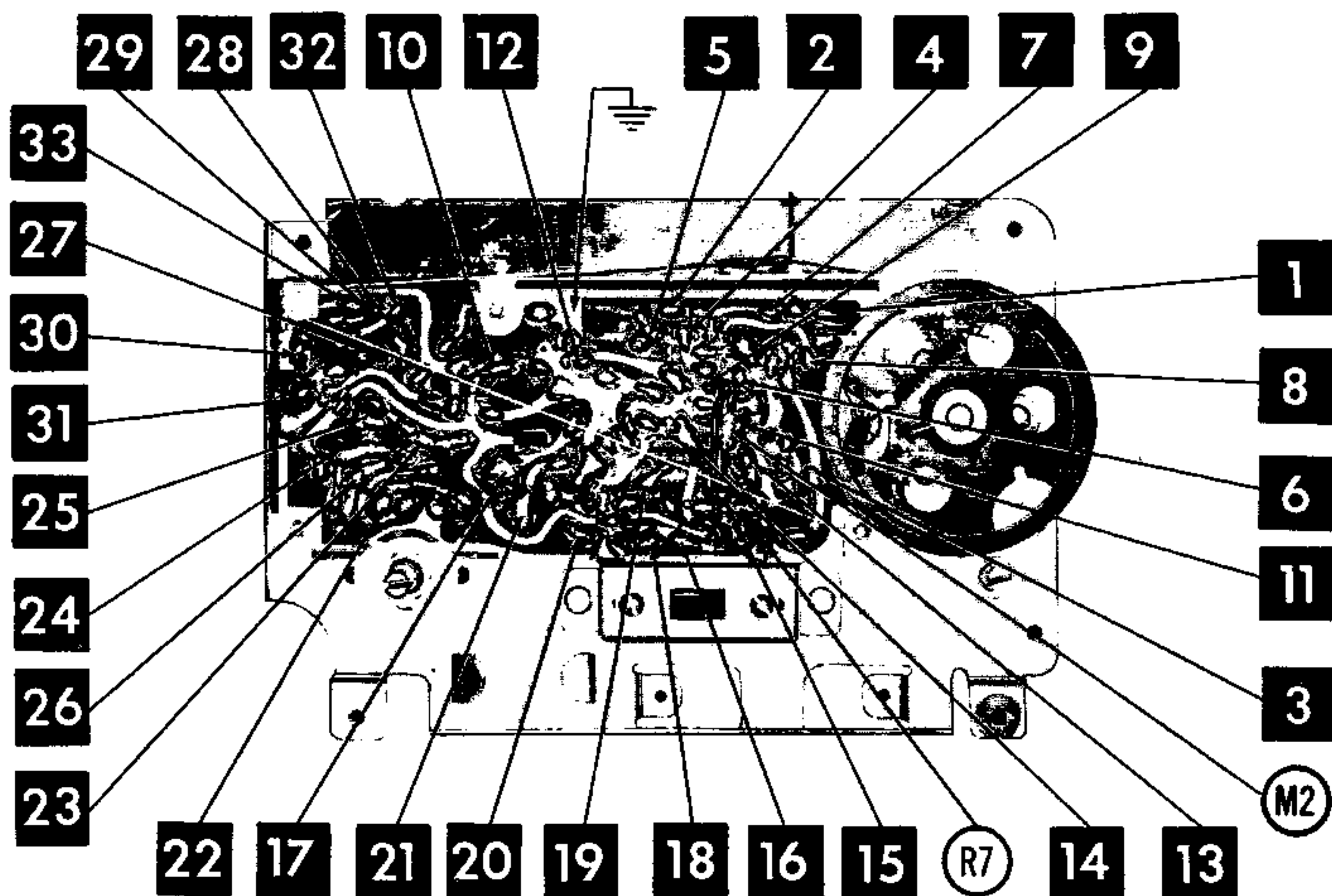
RESISTANCE MEASUREMENTS NOT GIVEN BECAUSE OF THE WIDE VARIATION IN INTERNAL TRANSISTOR RESISTANCE

DC COIL RESISTANCE VALUES UNDER ONE OHM NOT SHOWN ON SCHEMATIC DIAGRAM
 ARROWS ON CONTROLS INDICATE CLOCKWISE ROTATION (CONTROL VIEWED FROM SHAFT END)

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 ±15% in voltage and resistance readings.
5. Volume control at maximum, no signal applied for voltage measurements.



CHASSIS TOP VIEW-CAPACITOR & RESISTOR IDENT.



PARTS LIST A

TRANSISTORS

ITEM No.	ORIG. TYPE	USE	REPLACEMENT DATA			NOTES
			RCA PART No.	RAYTHEON PART No.	SYLVANIA PART No.	
X1	2SA52	Converter				PNP PNP PNP PNP PNP } Matched PNP } Pair
X2	2SA49	1st IF Amplifier				
X3	2SA53	2nd IF Amplifier				
X4	2SB54	Driver	2N406			
X5	2SB56	Output	2N408			
X6	2SB56	Output	2N408			

ELECTROLYTIC CAPACITORS

ITEM No.	RATING		Channel Master PART No.	REPLACEMENT DATA					NOTES
	CAP.	VOLT.		AEROVOX PART No.	CORNELL-DUBILIER PART No.	MALLORY PART No.	PYRAMID PART No.	SPRAGUE PART No.	
C1	50	9	A031	BCD10050	ECPB415	PET1575	MLV50-10	VL-1134	
C2	120	10	A023	BCD12150	ECPB418	PET1400	MLV150-12	VL-1144	
C3	30	6	A009	BCD6035	ECPB412	TT6X30	MLV30-6	VL-1092	
C4	30	6	A009	BCD6035	ECPB412	TT6X30	MLV30-6	VL-1092	
C5	30	6	A009	BCD6035	ECPB412	TT6X30	MLV30-6	VL-1092	
C6	30	6	A009	BCD6035	ECPB412	TT6X30	MLV30-6	VL-1092	
C7	30	6	A009	BCD6035	ECPB412	TT6X30	MLV30-6	VL-1092	

FIXED CAPACITORS

ITEM No.	RATING	REMARKS	REPLACEMENT DATA					SPRAGUE PART No.
			AEROVOX PART No.	CENTRALAB PART No.	CORNELL-DUBILIER PART No.	ELMENCO PART No.	MALLORY PART No.	
C8	8	#A015	NPO-DI 8.2		C10V82C			10TCC-V82
C9	.005 150V		V84C685	DD-502	DPMS6D5	6DP-1-502	GEM-625	6TM-D50
C10	330		SI 330	D6-331	L10T33	CCD-331	GP333	10TS-T33
C11	10		NPO-DI 10	DTZ-10	L10Q10	CCD-100	GP410	10TS-Q10
C12	.004		SI 4000	D6-402	BYA10D4	CCD-402	B-240	5HK-D40
C13	13			TCZ-12	C10Q13C	CCTO-120	CNO-412	10TCC-Q10
C14	8				C10V82C			10TCC-V82
C15	.04			DD-403	BYB684	IDP-1-403	GP140	
C16	.01			DD-103	BYA10S1	CCD-103	B-110	5HK-S10
C17	.02			DD-203	BYB682	CCD-203	B-120	5HK-S20
C18	.005			DD-502	BYA10D5	CCD-502	B-250	5HK-D50
C19	.05 100V			DD-503	CUB285	IDP-2-503	GEM-415	2TM-S50
C20	.05 100V			DD-503	CUB285	IDP-2-503	GEM-415	2TM-S50

Channel Master Part Number.

DESCRIPTIONS

CONTROLS

ITEM No.	RATING		REPLACEMENT DATA				INSTALLATION NOTES	
	RESISTANCE	WATTS	Channel Master PART No.	CENTRALAB PART No.	CLAROSTAT PART No.	CTS-IRC PART No.		MALLORY PART No.
R1	5000Ω	½	E022					Volume & Switch

RESISTORS

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

ITEM No.	RATING	REPLACEMENT DATA			ITEM No.	RATING	REPLACEMENT DATA		
		IRC PART No.	WORKMAN TV PART No.	REMARKS			IRC PART No.	WORKMAN TV PART No.	REMARKS
R2	4000Ω				R11	100Ω			
R3	30K				R12	15K			
R4	1500Ω				R13	4000Ω			
R5	90K				R14	400Ω			
R6	22K 5%				R15	200Ω			
R7	2200Ω				R16	3000Ω			
R8	2200Ω 5%				R17	130Ω			
R9	5600Ω				R18	Temp. Comp.			Pt. #F150
R10	1000Ω								

COILS (RF-IF)

ITEM No.	USE	REPLACEMENT DATA					NOTES
		Channel Master PART No.	Merit PART No.	Miller PART No.	Stancor PART No.	Workman TV PART No.	
L1	Loopstick	E024	BC-419	705-A		T532	
L2	Osc.	F189					
L3	1st IF	C037					
L4	2nd IF	C038					
L5	3rd IF	C039					

TRANSFORMER (DRIVER)

ITEM No.	TURNS RATIO		REPLACEMENT DATA					NOTES
	PRI	SEC.	Channel Master PART No.	Merit PART No.	Stancor PART No.	Thordarson PART No.	Triad PART No.	
T1	1.2	1	C085					

PARTS LIST AND DESCRIPTIONS (Continued)

TRANSFORMER (AUDIO OUTPUT)

ITEM No.	IMPEDANCE		REPLACEMENT DATA					NOTES
			Channel Master PART No.	Merit PART No.	Stancor PART No.	Thordarson PART No.	Triad PART No.	
	PRI.	SEC.						
T2	250Ω CT	3-4Ω	C036					

SPEAKER

ITEM No.	TYPE			REPLACEMENT DATA		NOTES
				Channel Master PART No.	QUAM PART No.	
	SIZE	FIELD	V. C. IMP.			
SPI	5"	PM	3-4Ω	G096	5A15	

BATTERIES

ITEM No.	VOLTAGE	Channel Master PART No.	REPLACEMENT DATA						NOTES
			BURGESS		EVEREADY		MALLORY		
			"A"	"B"	"A"	"B"	"A"	"B"	
M1	1.5V			130 *		635 *		M-14R*	* 4 Required

SIGNAL DIODES

ITEM No.	ORIG. TYPE	REPLACEMENT DATA				NOTES
		Channel Master PART No.	GENERAL ELECTRIC PART No.	RAYTHEON PART No.	SYLVANIA PART No.	
M2	1N80	F136		1N80	1N60	Overload (Pigtail) Detector (Pigtail)
M3	1N80	F136		1N80	1N60	

MISCELLANEOUS

ITEM No.	PART NAME	Channel Master PART No.	NOTES
M4 M5	Tuning Cap. Switch	A053 E012	2 Gang Tone (SPDT Slide Type)

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

