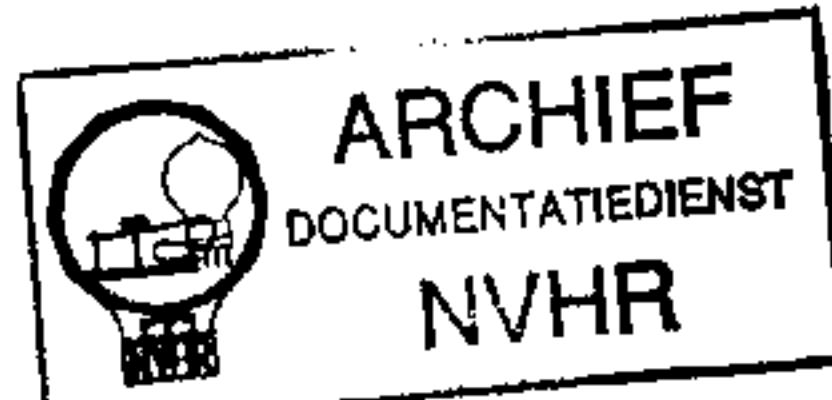
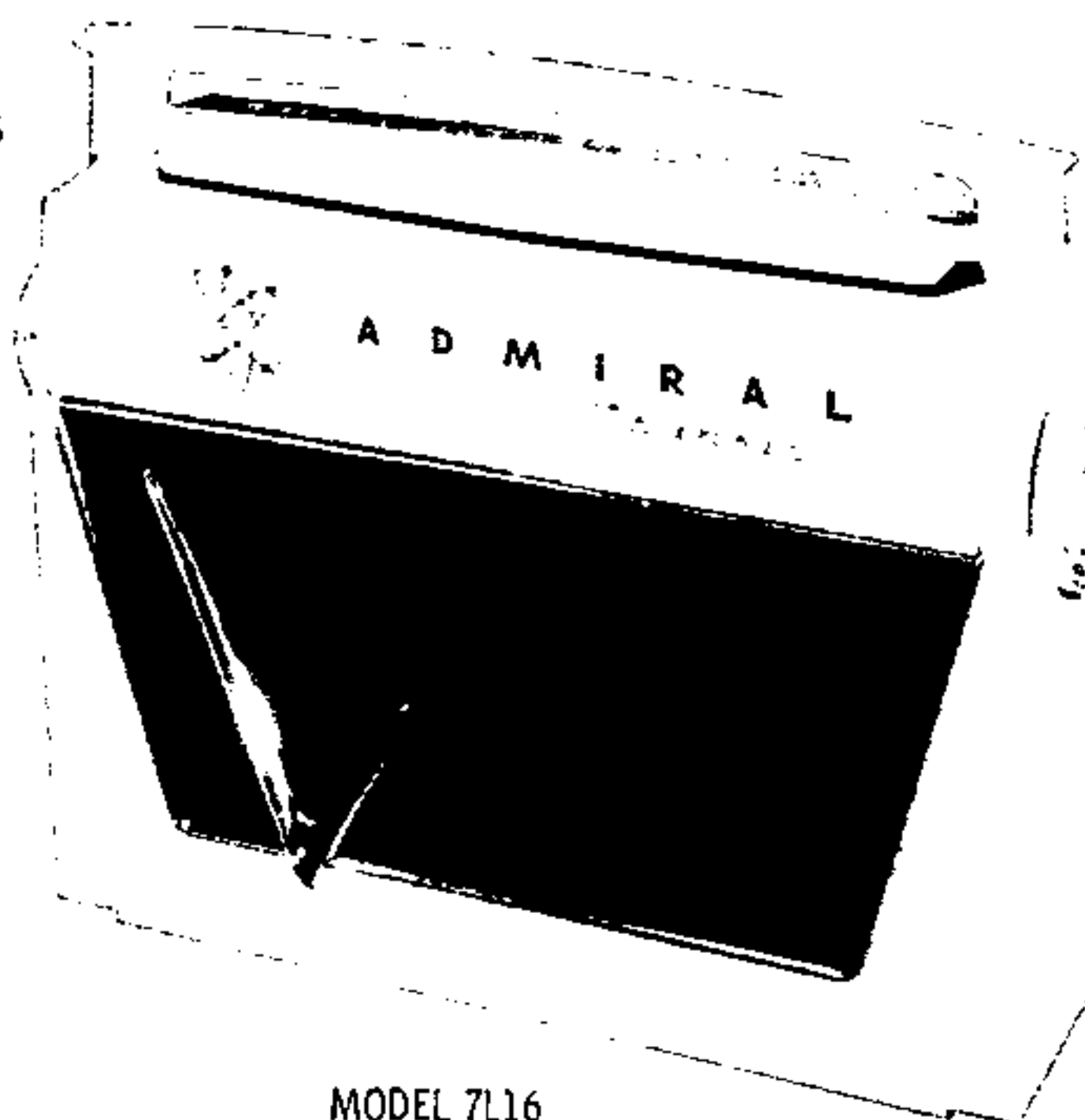




Ned. Ver. v. Historie v/

Met dank aan Jef Bos



MODEL 7L16

TRADE NAME	Admiral Models 7L12, 7L14, 7L16, 7L18 (Ch. 7L1)		
MANUFACTURER	Admiral Corp., 3800 W. Cortland St., Chicago 47, Illinois		
TYPE SET	Battery Operated Portable AM Transistorized Receiver		
POWER SUPPLY	9 Volts DC	RATING	7.5MA @ 9 Volts DC
TUNING RANGE—BROADCAST	535KC - 1620KC		

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. Loop should be maintained in the same relative position to chassis as when the receiver is in cabinet.

	DUMMY ANTENNA	SIGNAL GENERATOR COUPLING	SIGNAL GENERATOR FREQUENCY	RADIO DIAL SETTING	OUTPUT METER	ADJUST	REMARKS
1.		Loop	455KC (400v Mod)	Tuning gang fully open	Across voice coil	A1, A2, A3, A4, A5	Disconnect L2 (455KC Trap). Fashion loop of several turns of wire and radiate signal into loop of receiver. Adjust for maximum output. Repeat step 1 until no further increase is noted.
2.		"	"	"	"	A6	Reconnect L2. Adjust for MINIMUM output.
3.		"	1620KC	"	"	A7	Fashion loop of several turns of wire and radiate signal into loop of receiver. Adjust for maximum output.
4.		"	1400KC	Tune to 1400KC signal	"	A8	Fashion loop of several turns of wire and radiate signal into loop of receiver. Adjust for maximum output while rocking tuning gang.
The following steps are not necessary unless it is impossible to tune in 535KC. Preset oscillator trimmer (A7) 1/4 turn from tight position. Proceed with step 5.							
5.		Loop	535KC	Tuning gang fully closed	Across voice coil	A9	Fashion loop of several turns of wire and radiate signal into loop of receiver. Adjust for maximum output.
6.		"	1620KC	Tuning gang fully open	"	A7	Fashion loop of several turns of wire and radiate signal into loop of receiver. Adjust for maximum output. Repeat step 5 & 6 until oscillator covers range required. Step 6 should be the last adjustment.
7.		"	1400KC	Tune to 1400KC signal	"	A8	Fashion loop of several turns of wire and radiate signal into loop of receiver. Adjust for maximum output.

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 H58

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PARTS LIST AND DESCRIPTIONS

TRANSISTORS

ADM
MODEL 7

ITEM No.	ORIG. TYPE	USE	REPLACEMENT DATA			NOTES
			CBS PART No.	RAYTHEON PART No.	SYLVANIA PART No.	
X1	2N172	Converter				Alternate Type 2N147 Alternate Type 2N145
X2	2N146	1st. IF Amplifier				
X3	2N146	2nd. IF Amplifier				
X4	310	Driver		2N132		Alternate Type 352 Alternate Type 352
X5	2N185	Output		2N131		
X6	2N185	Output		2N131		

ELECTROLYTIC CAPACITORS

ITEM No.	RATING		REPLACEMENT DATA						NOTES
	CAP.	VOLT.	ADMIRAL PART No.	AEROVOX PART No.	CORNELL-DUBILIER PART No.	MALLORY PART No.	PYRAMID PART No.	SANGAMO PART No.	
C1	50	3	67B32-5	XPP3V50	NL50-3	TT6X50	ML50-3		TE-1100
C2	10	10	67B32-7	XPP10V10	NL10-10	TT12X10	ML10-15		TE-1114
C3	100	10	67B32-2	PWE10V100	NL100-10	TT10X100			R2418 *
C4	100	10	67B32-2	PWE10V100	NL100-10	TT10X100			R2418 *
C5	100	10	67B32-2	PWE10V100	NL100-10	TT10X100			R2418 *

* 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	ADMIRAL PART No.	AEROVOX PART No.	CENTRALAB PART No.	CORNELL-DUBILIER PART No.	ERIE PART No.	MALLORY PART No.	
C6	50000		65D10-116	BPD-05					5HK-S5
C7	250			1469-00025		22R5T25			MS-325
C8	10000		65D10-3	BPD-01	DD-103	BYA6S1	ED-01	DC511	5HK-S1
C9	8.2		65C6-117	NP0-SI 8.2	TCZ-8R2	CTA6V82C	TCO-8.2		5TCCB-V82
C10	50000		65D10-116	BPD-05					5HK-S5
C11	10		65C6-33	SI 10	D6-100	LT6Q1	GP-10	UC-541	5GA-Q1
C12	50000		65D10-116	BPD-05					5HK-S5
C13	50000		65D10-116	BPD-05					5HK-S5
C14	50000		65D10-116	BPD-05					5HK-S5
C15	10		65C6-33	SI 10	D6-100	LT6Q1	GP-10	UC-541	5GA-Q1
C16	50000		65D10-116	BPD-05					5HK-S5
C17	50000		65D10-116	BPD-05					5HK-S5
C18	8.2		65C6-117	NP0-SI 8.2	TCZ-8R2	CTA6V82C	TCO-8.2		5TCCB-V82
C19	4700		65D10-71	BPD-0047	DD-472	BYA10D47	ED-0047	UC-5247	5GA-D57
C20	50000		65D10-116	BPD-05					5HK-S5

CONTROLS

ITEM No.	RATING		REPLACEMENT DATA				INSTALLATION NOTES	
	RESISTANCE	WATTS	ADMIRAL PART No.	CENTRALAB PART No.	CLAROSTAT PART No.	IRC PART No.		MALLORY PART No.
R1	2500Ω	1/2	75C25-5					Volume & Switch

RESISTORS

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

ITEM No.	RATING		REPLACEMENT DATA		NOTES	ITEM No.	RATING		REPLACEMENT DATA		NOTES
	OHMS	WATT	ADMIRAL PART No.	IRC PART No.			OHMS	WATT	ADMIRAL PART No.	IRC PART No.	
R2	150K		60B8-154	BTS-150K		R13	220Ω		60B8-221	BTS-220	
R3	1500Ω		60B8-152	BTS-1500		R14	470Ω		60B8-471	BTS-470	
R4	560Ω		60B8-561	BTS-560		R15	2200Ω		60B8-222	BTS-2200	
R5	47K 5%		60B8-473	BTS-47K 5%		R16	15K		60B8-153	BTS-15K	
R6	1100Ω 5%		60B8-112	BTS-1100 5%		R17	1000Ω		60B8-102	BTS-1000	
R7	470Ω		60B8-471	BTS-470		R18	47Ω		60B8-470	BTS-47	
R8	3300Ω		60B8-332	BTS-3300		R19	15K		60B8-153	BTS-15K	
R9	1500Ω		60B8-152	BTS-1500		R20	15K		60B8-153	BTS-15K	
R10	2200Ω		60B8-222	BTS-2200		R21	10Ω		60B8-100	BTS-10	
R11	15K		60B8-153	BTS-15K		R22	10Ω		60B8-100	BTS-10	
R12	1100Ω 5%		60B8-112	BTS-1100 5%		R23	220Ω		60B8-221	BTS-220	

PARTS LIST AND DESCRIPTIONS (Continued)

TRANSFORMER (DRIVER)

ITEM No.	Turn Ratio		REPLACEMENT DATA					NOTES	
	PRI.	SEC.	ADMIRAL PART No.	Haldorson PART No.	Merit PART No.	Stancor PART No.	Thordarson PART No.		Triad PART No.
T1	2.5:	1	70B67-1	TR-7 ①		TA-5 ①	TR-7 ①	TY-56X ①	① Fabricate mounting.

TRANSFORMER (AUDIO OUTPUT)

ITEM No.	IMPEDANCE		REPLACEMENT DATA					NOTES	
	PRI.	SEC.	ADMIRAL PART No.	Haldorson PART No.	Merit PART No.	Stancor PART No.	Thordarson PART No.		Triad PART No.
T2	675Ω CT	3-4Ω	79B68-1	GH6 ①			TR-29 ①	TY-44X ①	① Drill new mounting hole(s).

SPEAKER

ITEM No.	TYPE			REPLACEMENT DATA		NOTES
	SIZE	FIELD	V. C. IMP.	ADMIRAL PART No.	QUAM PART No.	
SP1	4"	PM	3-4Ω	78B121-1 ①	4A07	① Includes T2

COILS (RF-IF)

ITEM No.	USE	REPLACEMENT DATA				NOTES
		ADMIRAL PART No.	MEISSNER PART No.	MERIT PART No.	MILLER PART No.	
L1	Loop Stick	69B214-1				Includes C7 Includes M2
L2	IF Trap	69B216-1				
L3	Osc. Coil	69B213-1				
L4	1st. IF	72C174-2				
L5	2nd. IF	72C174-2				
L6	3rd. IF	72C174-1				

BATTERIES

ITEM No.	VOLTAGE	ADMIRAL PART No.	REPLACEMENT DATA								NOTES
			BURGESS		EVEREADY		MALLORY		RAY-O-VAC		
			"A"	"B"	"A"	"B"	"A"	"B"	"A"	"B"	
M1	1.5V		2R		950		M-13		2LP		Connect six in series

CRYSTAL DIODES

ITEM No.	ORIG. TYPE	REPLACEMENT DATA			NOTES
		ADMIRAL PART No.	CBS PART No.	SYLVANIA PART No.	
M2	1N295		1N60	1N60	Audio Det. (Part of L6) Limiter
M3	1N295		1N60	1N60	

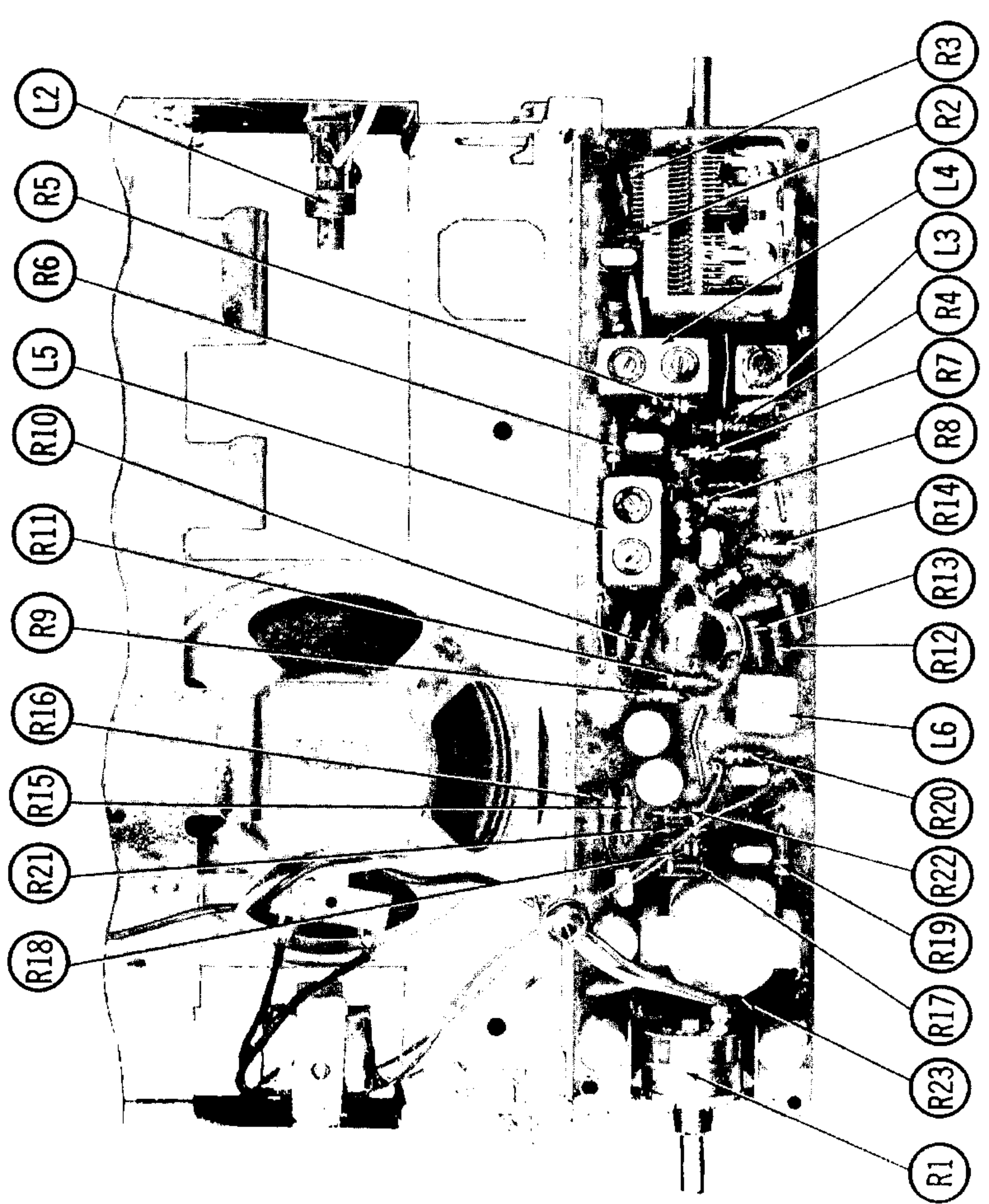
MISCELLANEOUS

ITEM No.	PART NAME	ADMIRAL PART No.	NOTES
M4	Tuning Cap.	68B66-1	2 Gang (Ant. 22-300MMF)

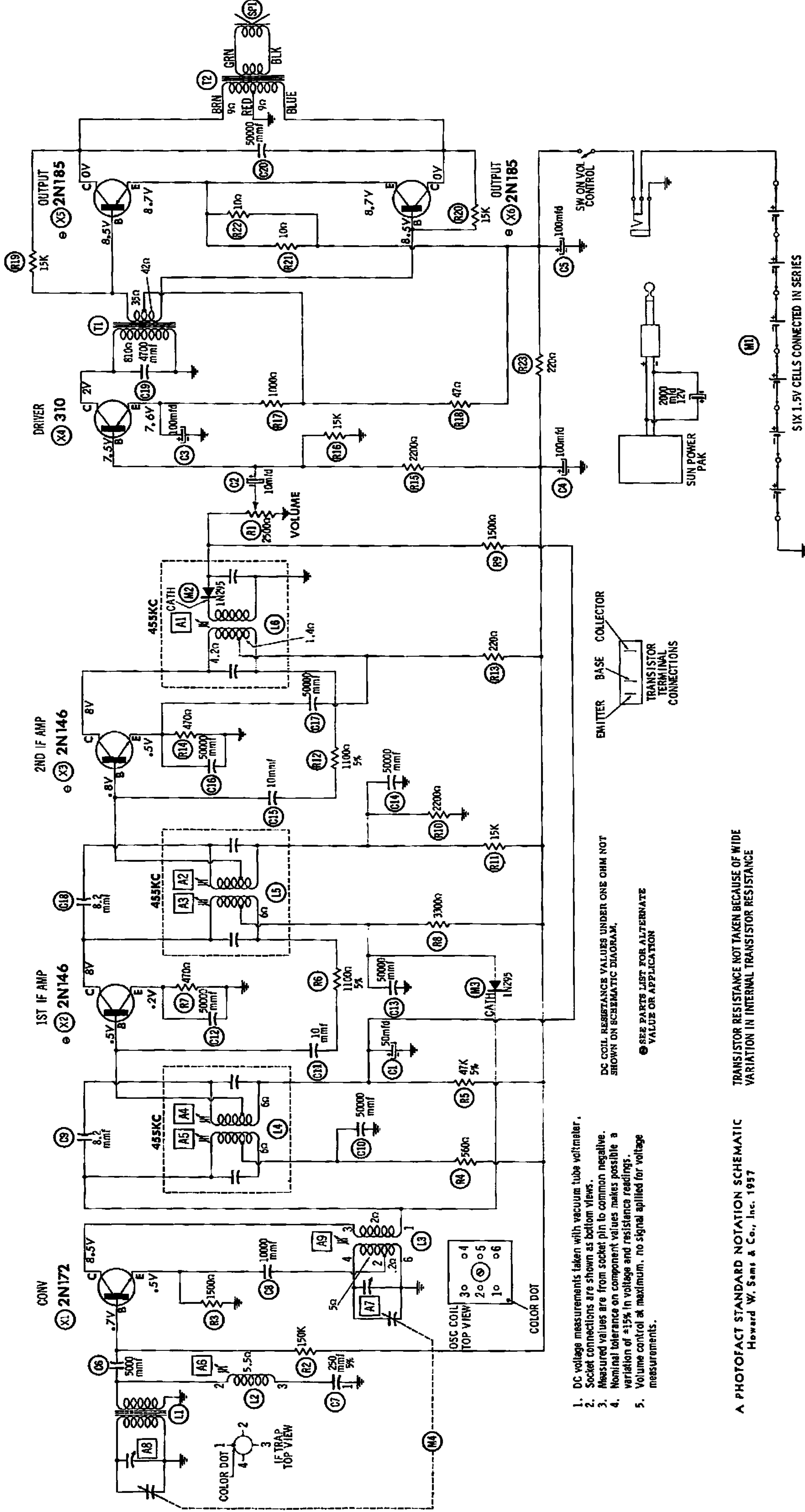
CABINETS & CABINET PARTS

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

NAME	PART NO.	DESCRIPTION
Printed Panel	14E186	
Knob	33C183-4	Tuning, Red, Model 7L12
Knob	33C183-6	Tuning, Tan, Model 7L14
Knob	33C183-12	Tuning, Yellow, Model 7L16
Knob	33C183-8	Tuning, Turquoise, Model 7L18
Knob	33C183-3	On-Off-Volume, Red, Model 7L12
Knob	33C183-5	On-Off-Volume, Tan, Model 7L14
Knob	33C183-11	On-Off-Volume, Yellow, Model 7L16
Knob	33C183-7	On-Off-Volume, Turquoise, Model 7L18



CHASSIS—TOP VIEW



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

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

SEE PARTS LIST FOR ALTERNATE VALUE OR APPLICATION

TRANSISTOR RESISTANCE NOT TAKEN BECAUSE OF WIDE VARIATION IN INTERNAL TRANSISTOR RESISTANCE

A PHOTOFAC STANDARD NOTATION SCHEMATIC
Howard W. Sams & Co., Inc. 1957

SIX 1.5V CELLS CONNECTED IN SERIES

(M1)

EMITTER BASE COLLECTOR
TRANSISTOR
TERMINAL
CONNECTIONS