

PHOTOFACT® Folder

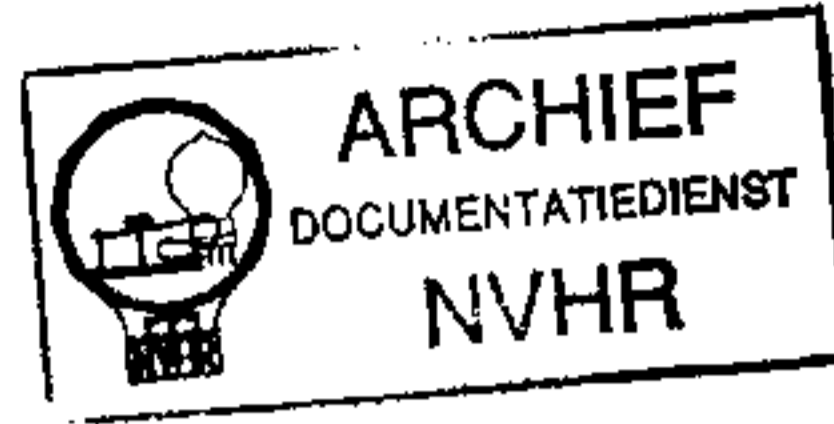
with CIRCUITRACE®

ARVIN MODELS 61R48,
61R49 (Ch. 1.62201)



MODEL 61R48

Ned. Ver. v. Historie v/d Radio



Met dank aan Jef Bos

TRADE NAME	Arvin Models 61R48, 61R49 (CH. 1.62201)		
MANUFACTURER	Arvin Industries, Inc., Columbus, Indiana		
TYPE SET	Battery Operated Transistorized Portable AM Receiver		
POWER SUPPLY	6 Volts DC	RATING	8MA @ 6 Volts DC (No Signal, Min. Volume)
TUNING RANGE—BROADCAST	540 — 1670KC		20MA @ 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:

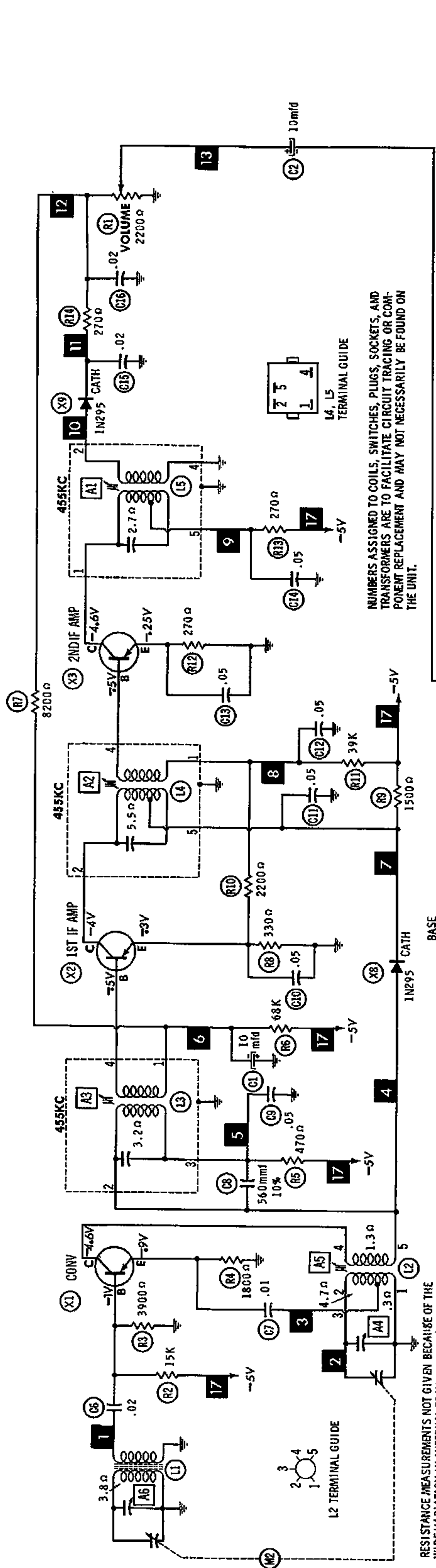
- A1, A2, A3..... GENERAL CEMENT #9440
- A4, A6..... GENERAL CEMENT #5009, 8195, 8274, 8275, 8728, 8729, 8987, 8988, 8989
WALSCO #2515, 2531, 2532
- A5..... GENERAL CEMENT #8282, 8606, 8606-L, 9295, 9440
WALSCO #2528, 2543, 2544, 2545

SIGNAL GENERATOR COUPLING	SIGNAL GENERATOR FREQUENCY	RADIO DIAL SETTING	CONNECT VTVM	ADJUST	REMARKS
1. Fashion loop of several turns of wire and radiate signal into loop of receiver.	455KC (Unmod.)	Tuning gang fully open.	DC probe to high side of Volume control, common to chassis.	A1, A2, A3	Adjust for maximum deflection.
2. "	1670KC	"	"	A4	"
3. "	540KC	Tuning gang fully closed.	"	A5	Adjust for maximum deflection while rocking tuning gang. Repeat steps 2 and 3.
4. "	1400KC	1400KC Signal.	"	A6	Adjust for maximum deflection.

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 LF261

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. ©1962 Howard W. Sams & Co., Inc., Indianapolis 6, Indiana. Printed in U.S. of America

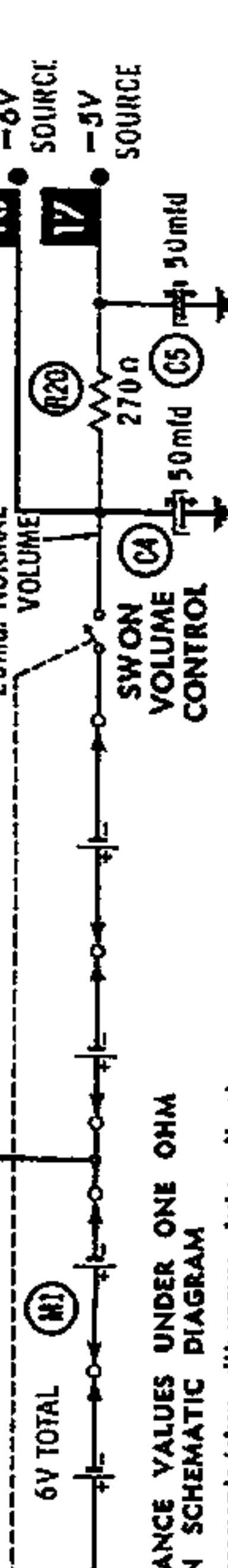
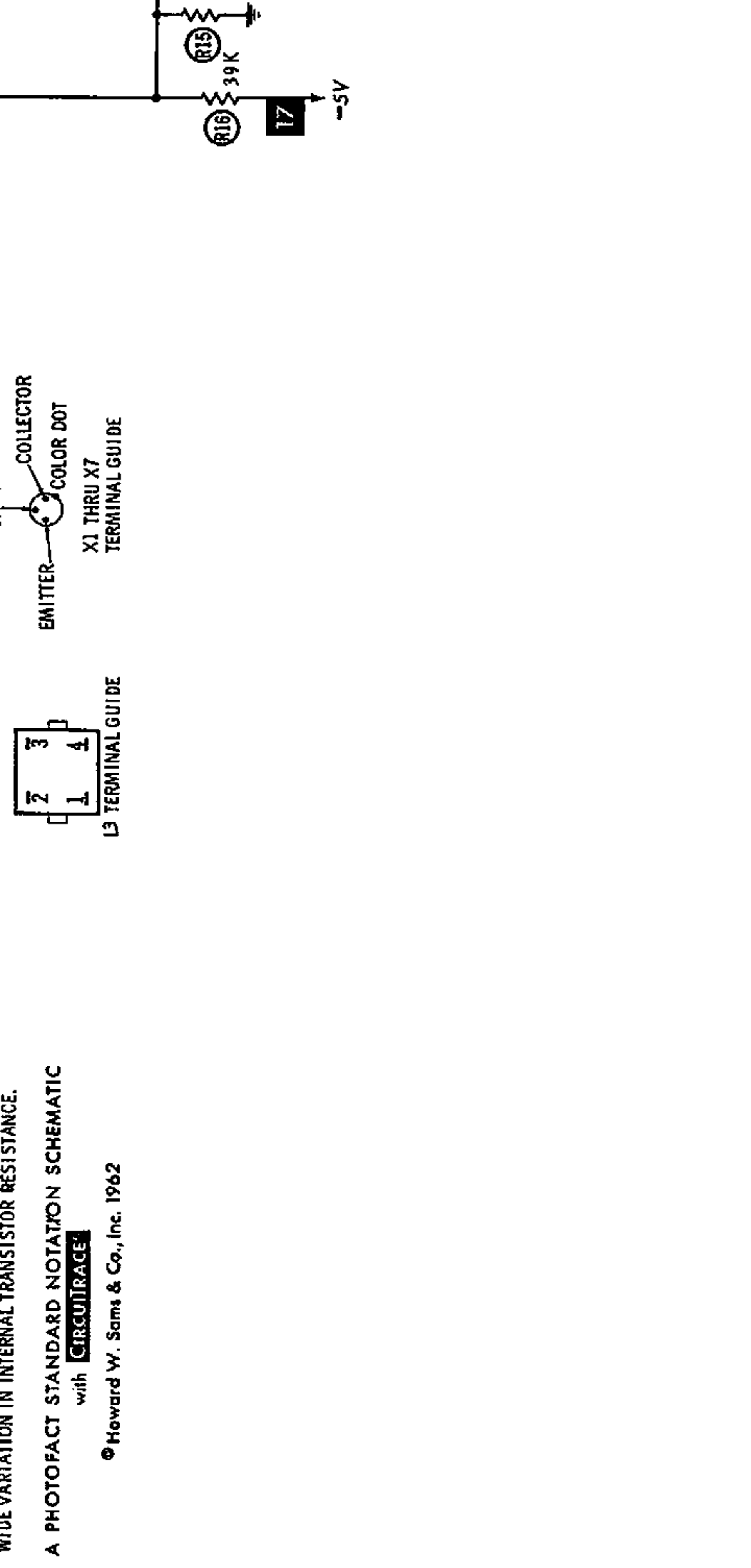


RESISTANCE MEASUREMENTS NOT GIVEN BECAUSE OF THE WIDE VARIATION IN INTERNAL TRANSISTOR RESISTANCE.

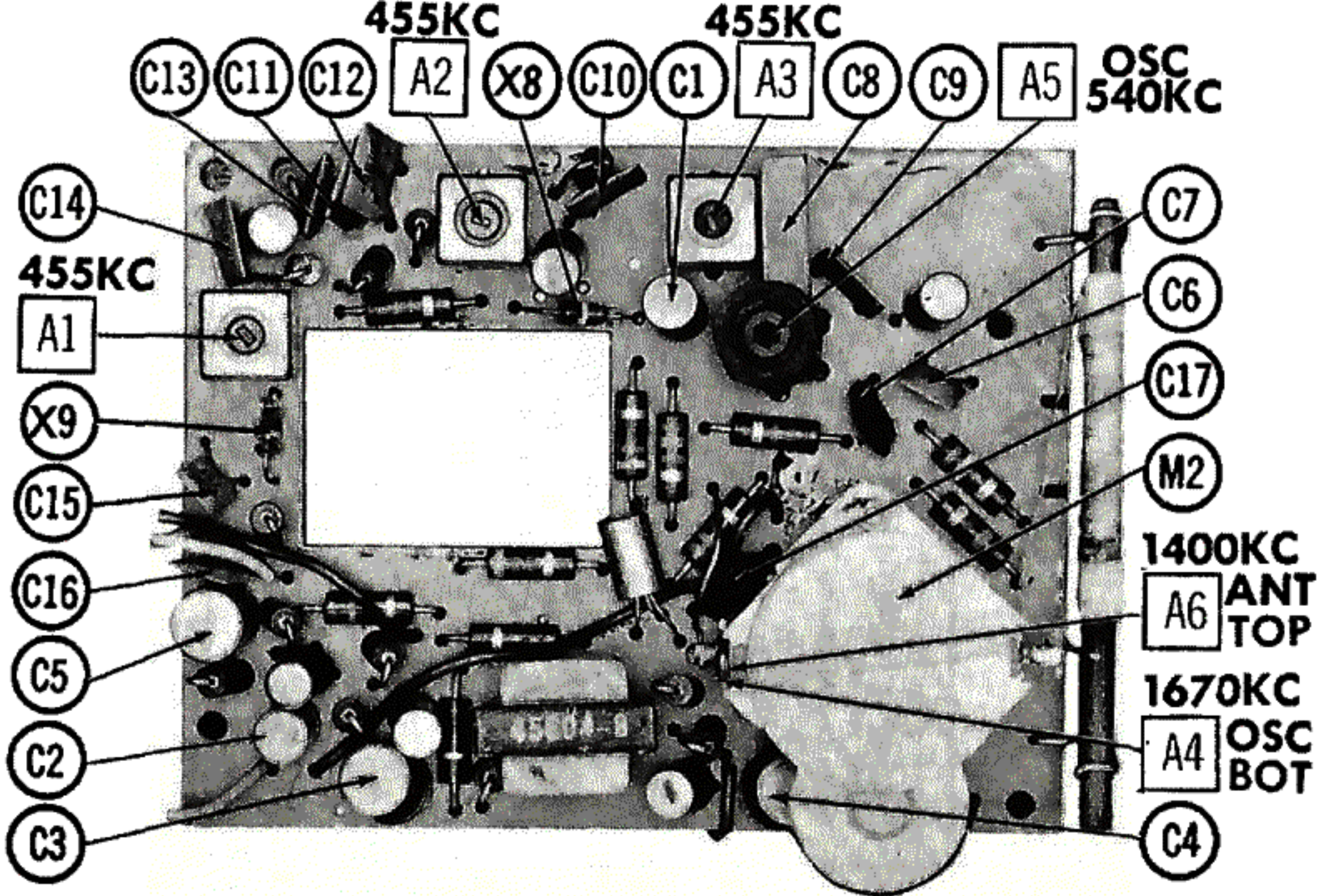
A PHOTOFACT STANDARD NOTATION SCHEMATIC with CIRCUITTRACE

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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.



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



PARTS LIST AND DESCRIPTIONS

WIRING DATA

General-use Unshielded Hook-up Wire One DICKSON No. 8030 (Model 80AW1) Available in
 8034 (Model 80AW1) In
 8070 (Model 80AW1) 14 Colors

TRANSISTORS

ITEM No.	MFGR. PART NO.	USE	REPLACEMENT DATA		NOTES
			RCA PART No.	RAYTHEON PART No.	
X1	S95101	Converter	2N1526		PNP
X2	S95103	1st IF Amplifier	2N1524		PNP
X3	S95102	2nd IF Amplifier	2N1524		PNP
X4	S95201	AF Amplifier	2N408	2N362	PNP
X5	S95202	Driver	2N649		NPN
X6	S95203	Output	2N408	2N360	PNP
X7	S95203	Output	2N408	2N360	PNP

POWER RECTIFIERS & SIGNAL DIODES

ITEM No.	CURRENT RATING (Measured)	ORIGINAL Part or Type No.	RECTIFIERS		DIODES		NOTES
			RCA PART No.	SARKES TARZIAN PART No.	GENERAL ELECTRIC PART No.	RAYTHEON PART No.	
X8		48287				IN295	Overload (IN295) Detector (IN295)
X9		48287				IN295	

ELECTROLYTIC CAPACITORS

ITEM No.	RATING		REPLACEMENT DATA						
	CAP.	VOLT.	ARVIN PART No.	AEROVOX PART No.	CORNELL-DUBILIER PART No.	GENERAL ELECTRIC PART No.	MALLORY PART No.	PYRAMID PART No.	SPRAGUE PART No.
C1	10	10	49385-2	BCD10010	ECPB408	MT1-5	PET1340	MLV10-10	VL-1127
C2	10	10	49385-2	BCD10010	ECPB408	MT1-5	PET1340	MLV10-10	VL-1127
C3	50	10	49385-4	BCD10050	NLW50-10	MT1-16	TT10X50	MLV50-10	TE-1111
C4	50	10	49385-4	BCD10050	NLW50-10	MT1-16	TT10X50	MLV50-10	TE-1119
C5	50	10	49385-4	BCD10050	NLW50-10	MT1-16	TT10X50	MLV50-10	TE-1119

FIXED 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.
C6	.02		C80V203AM	DA-203	H-05S2		TA-120	TG-S20
C7	.01		C80V103AM	DM-103	H-05S1		TA-110	TG-S10
C8	580 10%		1469-00056		5R5T56	CM-19B-561K	MCJ247	MS-356
C9	.05		C80V503AM	DA-503	H-05S5		TA-150	TG-S50
C10	.05		C80V503AM	DA-503	H-05S5		TA-150	TG-S50
C11	.05		C80V503AM	DA-503	H-05S5		TA-150	TG-S50
C12	.05		C80V503AM	DA-503	H-05S5		TA-150	TG-S50
C13	.05		C80V503AM	DA-503	H-05S5		TA-150	TG-S50
C14	.05		C80V503AM	DA-503	H-05S5		TA-150	TG-S50
C15	.02		C80V203AM	DA-203	H-05S2		TA-120	TG-S20
C16	.02		C80V203AM	DA-203	H-05S2		TA-120	TG-S20
C17	.0015		BPD-0015	DD-152	BYA10D15	CCD-152	B-215	5HK-D15

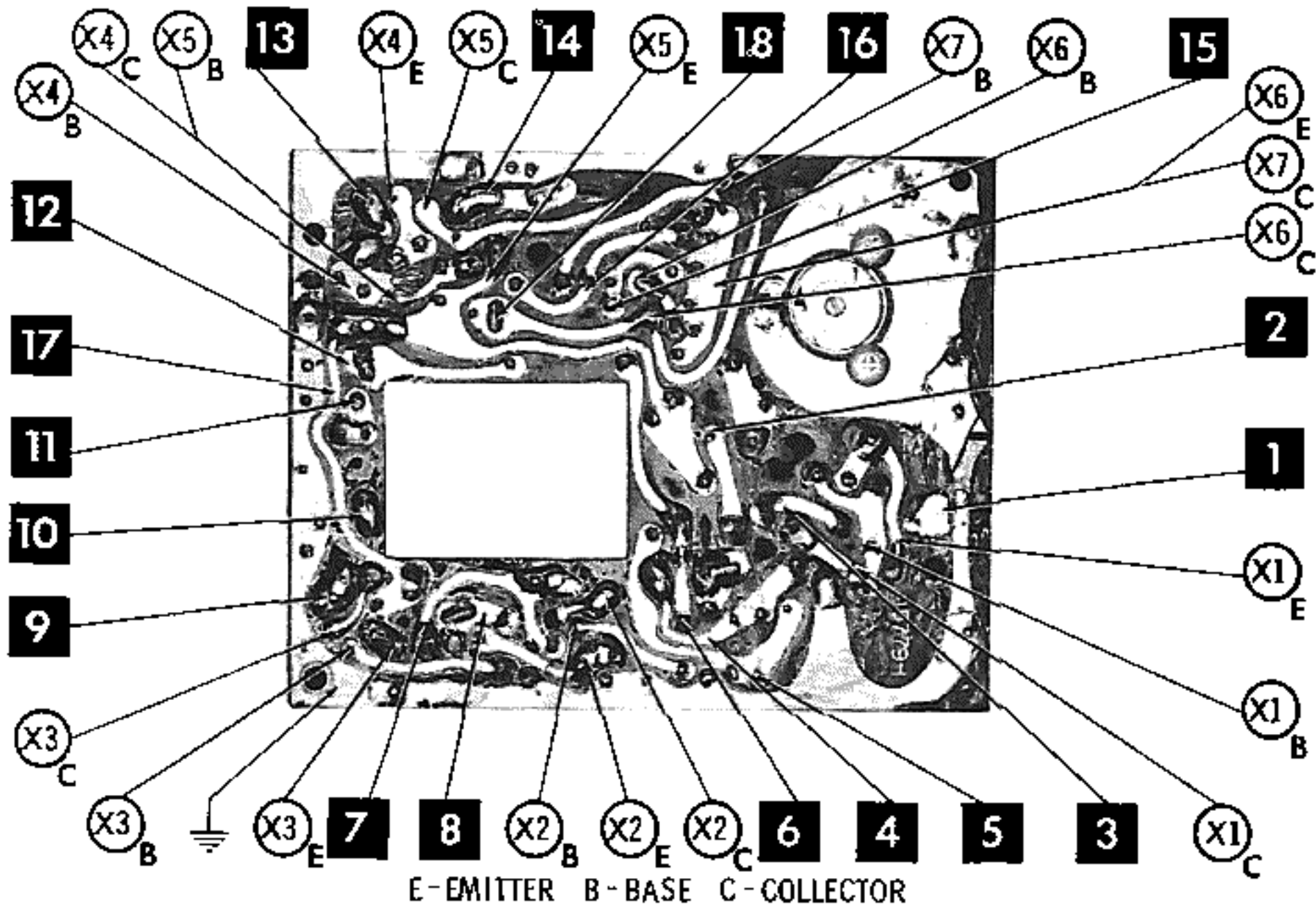
CONTROLS

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

ITEM No.	USE	RESISTANCE	REPLACEMENT DATA				
			ARVIN PART No.	CENTRALAB PART No.	CLAROSTAT PART No.	CTS-IRC PART No.	MALLORY PART No.
R1	Volume & Switch	2200Ω	49250-3				

PRINTED BOARD

A Howard W. Bessie J. [unclear] Photo



PARTS LIST AND DESCRIPTIONS (Continued)

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 PART No.	REMARKS			IRC PART No.	WORKMAN PART No.	REMARKS
R2	15K				R14	270Ω			
R3	3900Ω				R15	10K			
R4	1800Ω				R16	39K			
R5	470Ω				R17	100Ω			
R6	68K				R18	68K			
R7	8200Ω				R19	1000Ω			
R8	390Ω				R20	270Ω			
R9	1500Ω				R21	1500Ω			
R10	2200Ω				R22	100Ω			
R11	39K				R23	1500Ω			
R12	270Ω				R24	100Ω			
R13	270Ω				R25	680Ω			

COILS (RF-IF)

ITEM No.	USE	REPLACEMENT DATA					NOTES
		ARVIN PART No.	Merit PART No.	Miller PART No.	Stancor PART No.	Workman PART No.	
L1	Loopstick	44511-12					
L2	Osc.	45783-20					
L3	1st IF	49388-11					
L4	2nd IF	49388-21					
L5	3rd IF	49388-31					

TRANSFORMER (DRIVER)

ITEM No.	TURNS RATIO		REPLACEMENT DATA					NOTES
			ARVIN PART No.	Merit PART No.	Stancor PART No.	Thordarson PART No.	Triad PART No.	
	PRI.	SEC.1						
T1	3.8	1	45604-8					
		SEC.2						
		1						

SPEAKER

ITEM No.	TYPE			REPLACEMENT DATA		NOTES
				ARVIN PART No.	QUAM PART No.	
	SIZE	FIELD	V. C. IMP.			
SP1	2 3/4"	PM	40-50Ω	49741-3	27A06Z45	

BATTERIES

ITEM No.	VOLTAGE	ARVIN PART No.	REPLACEMENT DATA						NOTES
			BURGESS		EVEREADY		MALLORY		
			"A"	"B"	"A"	"B"	"A"	"B"	
M1	1 1/2V			930		1015		M-15R	4 Required

MISCELLANEOUS

ITEM No.	PART NAME	ARVIN PART No.	NOTES
M2	Tuning Cap.	49781	2 Gang

CABINETS & CABINET PARTS

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

NAME	PART NO.	DESCRIPTION
Knob, Indicator	49798	
Knob, Volume	49797	
Cabinet	95835-8	Model 61R48
Cabinet	95835-9	Model 61R49
Strap, Carrying	49796	
Front Flap	49795	Front

CHASSIS—TOP VIEW

