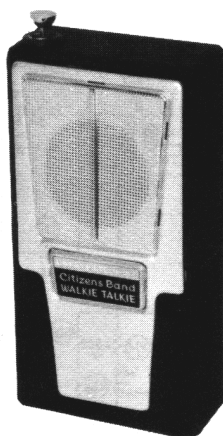


PHOTOFACT® Folder

with CIRCUITRACE®

LAFAYETTE
MODEL HE-29A



NOTICE

ONLY THOSE PERSONS PROPERLY LICENSED ARE PERMITTED TO MAKE REPAIRS OR ADJUSTMENTS WHICH MAY RESULT IN ILLEGAL OPERATION. (REFER TO FCC RULES & REGULATIONS PART 19, SUBPART D, SECTION 19.71.)

TRADE NAME Lafayette Model HE-29A
SUPPLIER Lafayette Radio, 165-08 Liberty Ave., Jamaica 33, N. Y.
TYPE SET Battery Operated 9 Transistor Portable Citizens Band Transmitter-Receiver
POWER SUPPLY 12 Volts DC RATING Receive: 9MA @12 Volts DC (No Signal, Min. Volume)
14MA @12 Volts DC (Signal, Normal Volume)
Transmit: 17MA @12 Volts DC
TUNING RANGE Any One of Citizens Band Channels 1 thru 22

ALIGNMENT INSTRUCTIONS

ALIGNMENT INSTRUCTIONS—READ CAREFULLY BEFORE ATTEMPTING ALIGNMENT

Best results will be obtained when adjusting A5, A7 and A8 if the antenna normally used is connected and the unit is as nearly in the cabinet as possible.

Suggested Alignment Tools: A1, A2, A3... GENERAL CEMENT #5000, 5003, 5066, 8276, 8290, 9087, 9089
WALSCO #2512, 2525, 2528
A4 thru A8... GENERAL CEMENT #8282, 8606, 8606-L, 9091
WALSCO #2526, 2541, 2542, 2543, 2544

RECEIVER ALIGNMENT

Connect DC VTVM across volume control.

	SIGNAL GENERATOR	CHANNEL	ADJUST	REMARKS
1.	Fashion loop of several turns of wire and radiate signal into loop of receiver. Tune to 455KC (Unmod.)	Any	A1, A2, A3	Adjust for maximum deflection.
2.	Fashion loop of several turns of wire and radiate signal into loop of receiver. Tune to channel frequency.	Highest Channel Used	A4	Adjust for maximum deflection. Rock A4 to each side of peak noting rate of dropoff. Set A4 just below peak on side of gradual dropoff.
3.	"	"	A5	Adjust for maximum deflection.

TRANSMITTER ALIGNMENT

ONLY THOSE PERSONS PROPERLY LICENSED ARE PERMITTED TO MAKE REPAIRS OR ADJUSTMENTS WHICH MAY RESULT IN ILLEGAL OPERATION. (REFER TO FCC RULES & REGULATIONS PART 19, SUBPART D, SECTION 19.71)

	SPECIAL INSTRUCTIONS	INDICATOR	ADJUST	REMARKS
1.	Connect dummy load or antenna to antenna receptacle.	Connect DC VTVM across R30.	A6	Key transmitter. Adjust A6 for maximum deflection. Rock A6 to each side of peak, noting rate of dropoff. Set A6 just below peak on side of gradual dropoff.
2.	"	"	A7	Key transmitter. Adjust A7 for MINIMUM deflection on VTVM and maximum indication of RF Wattmeter.
3.	"	RF Wattmeter or Field Strength Meter.	A8	Adjust for maximum indication.

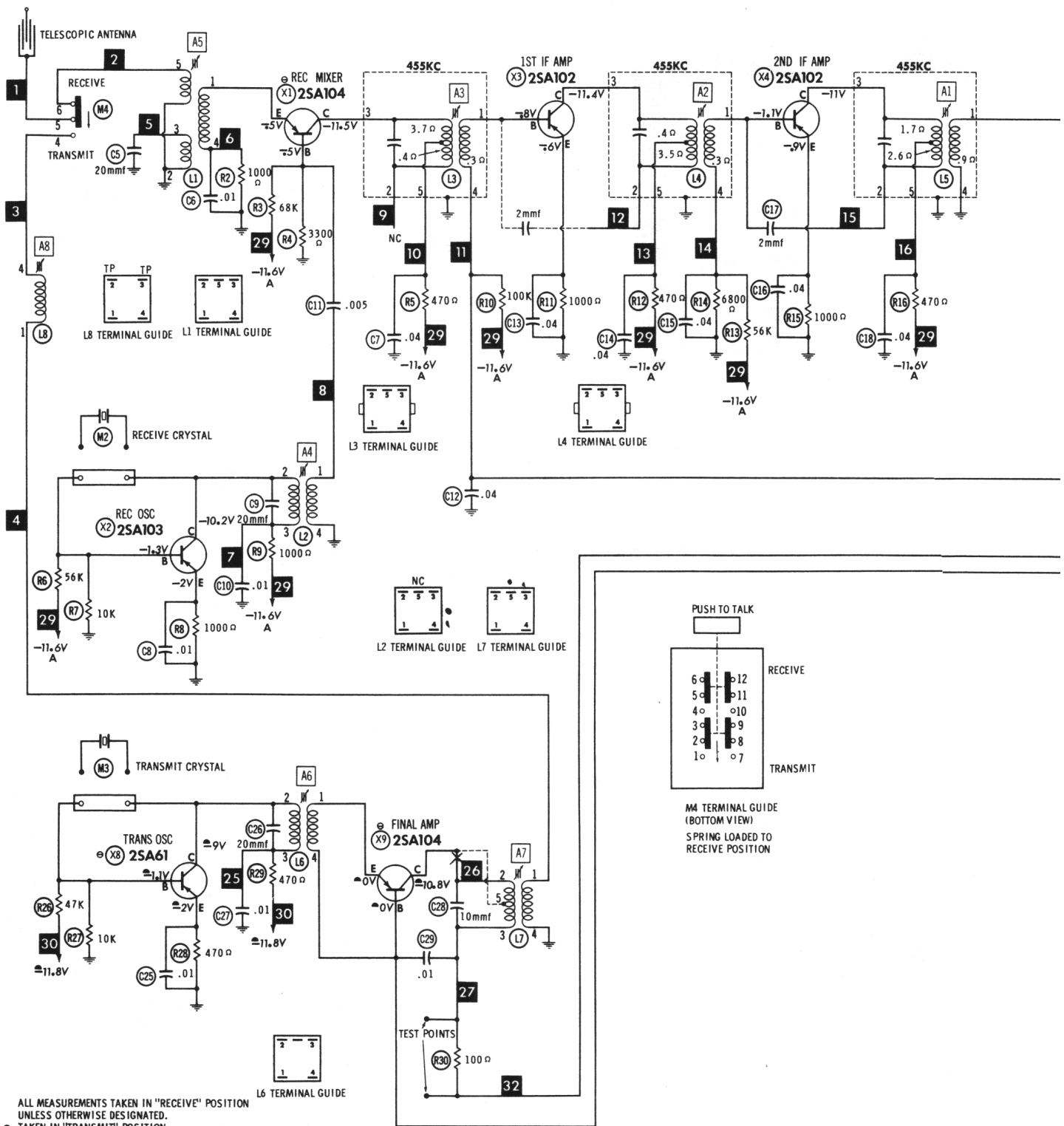
HOWARD W. SAMs & CO., INC. Indianapolis 6, Indiana

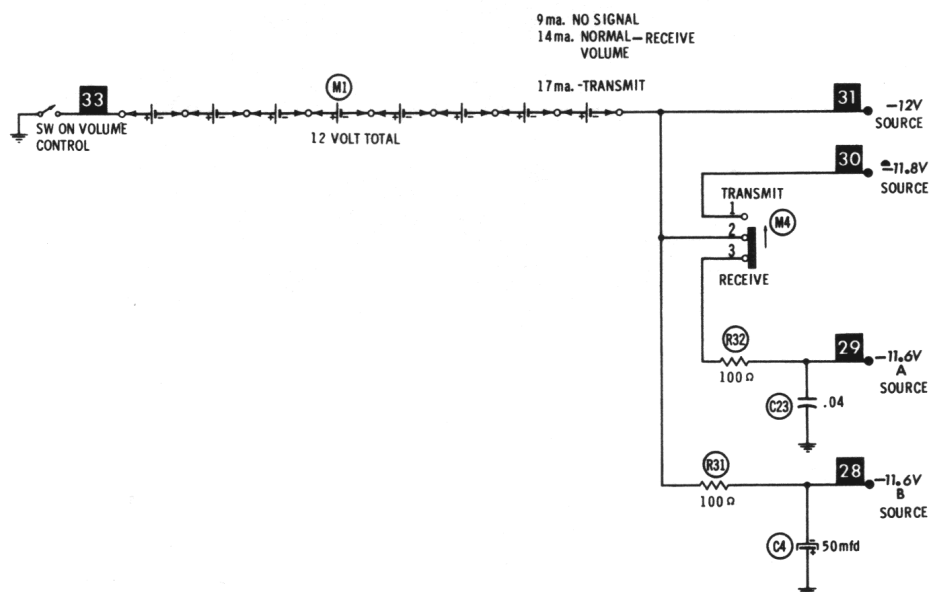
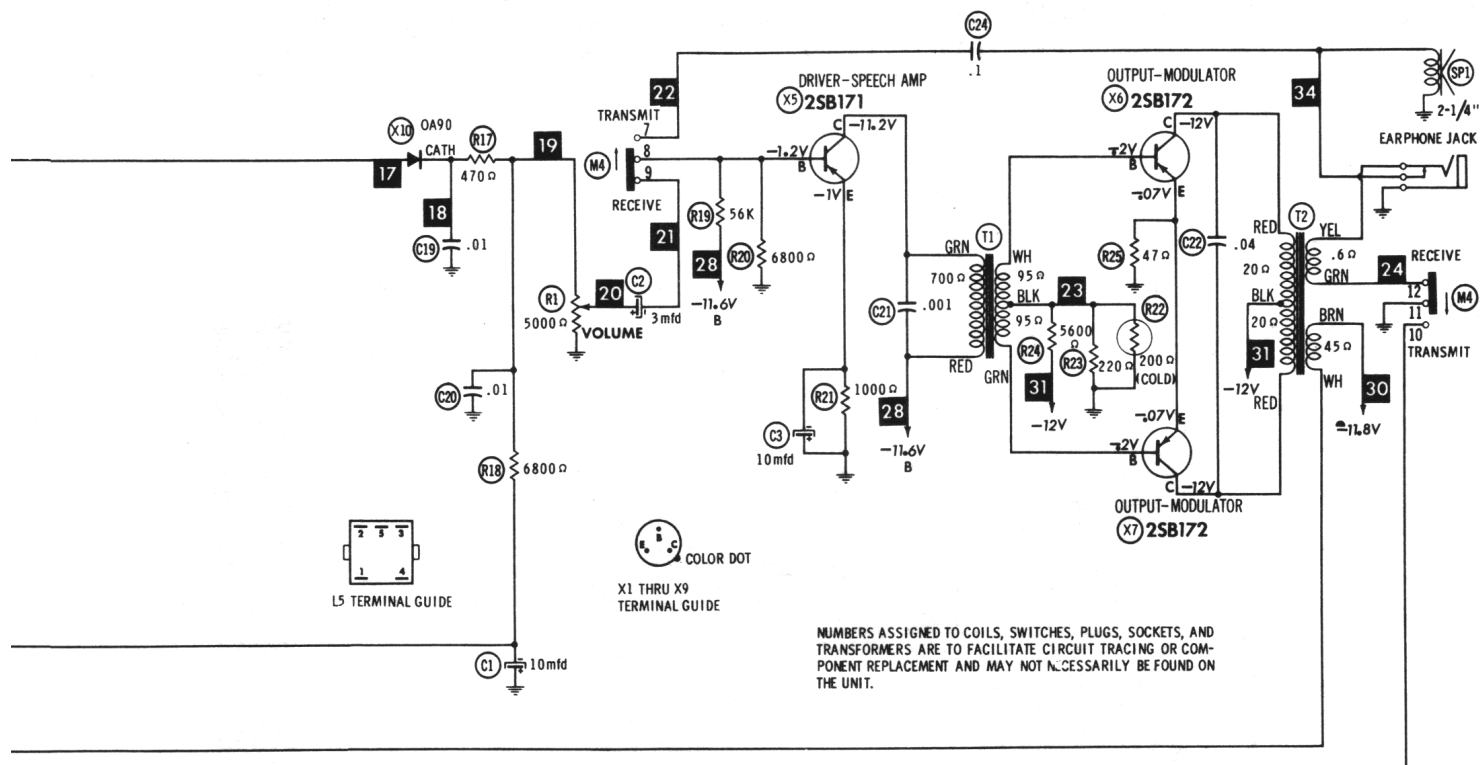
The listing of any available replacement part herein does not constitute in any case a recommendation, warranty or guaranty by Howard W. Sams & Co., Inc., as to the quality and suitability of such replacement part. The numbers of these parts have been compiled from information furnished to Howard W. Sams & Co., Inc., by the manufacturers of LF644

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

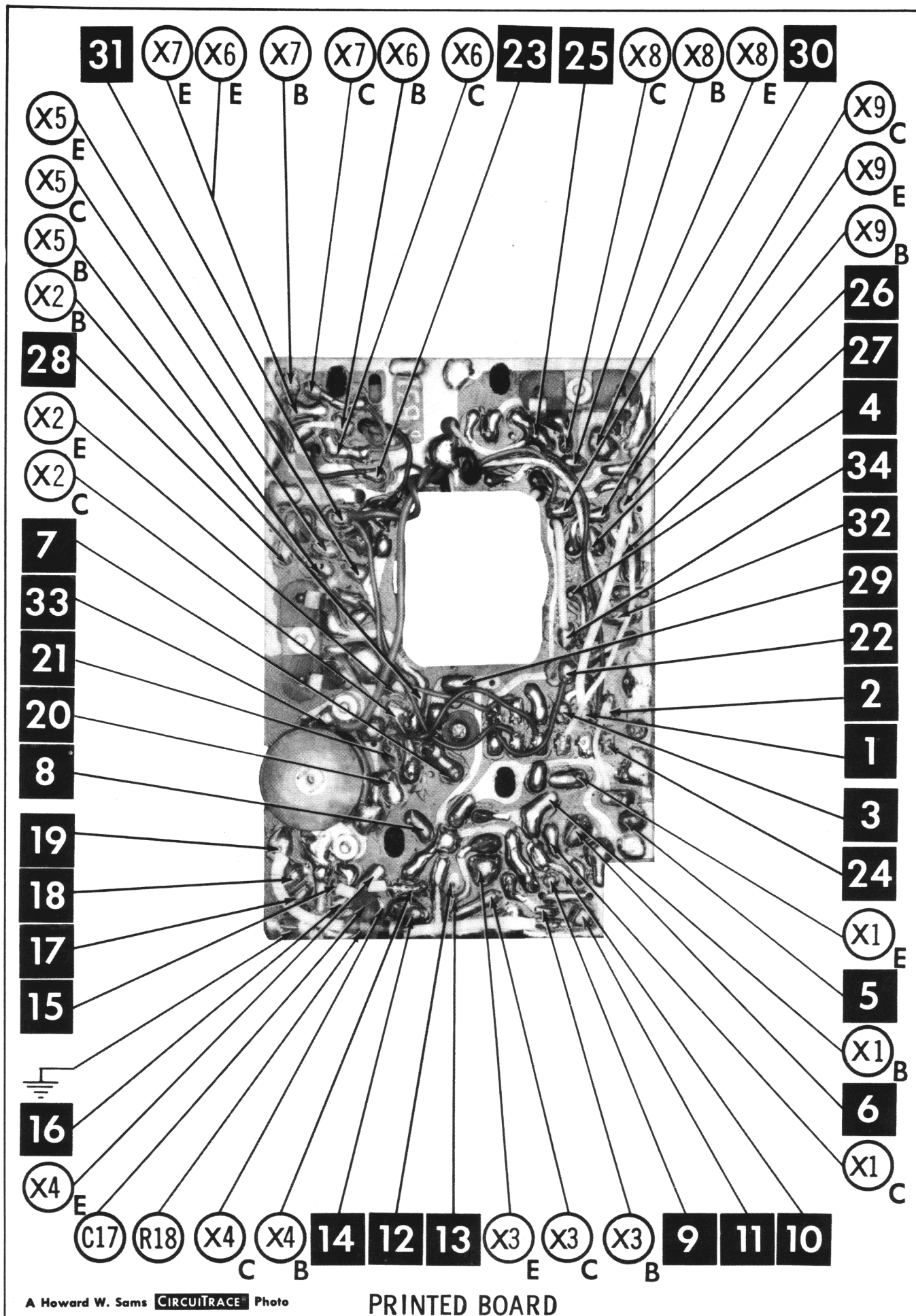
LAFAYETTE
MODEL HE-29A

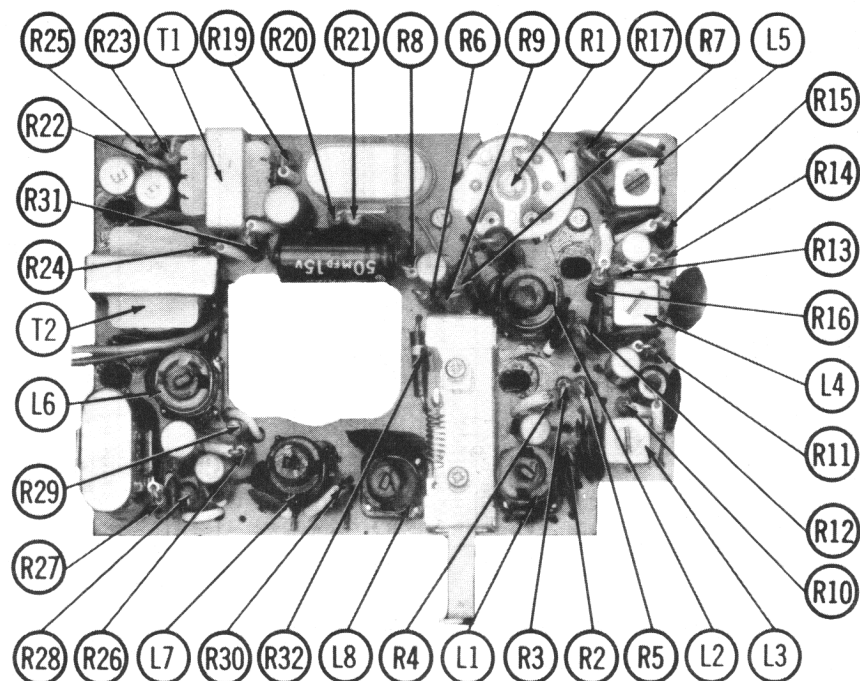




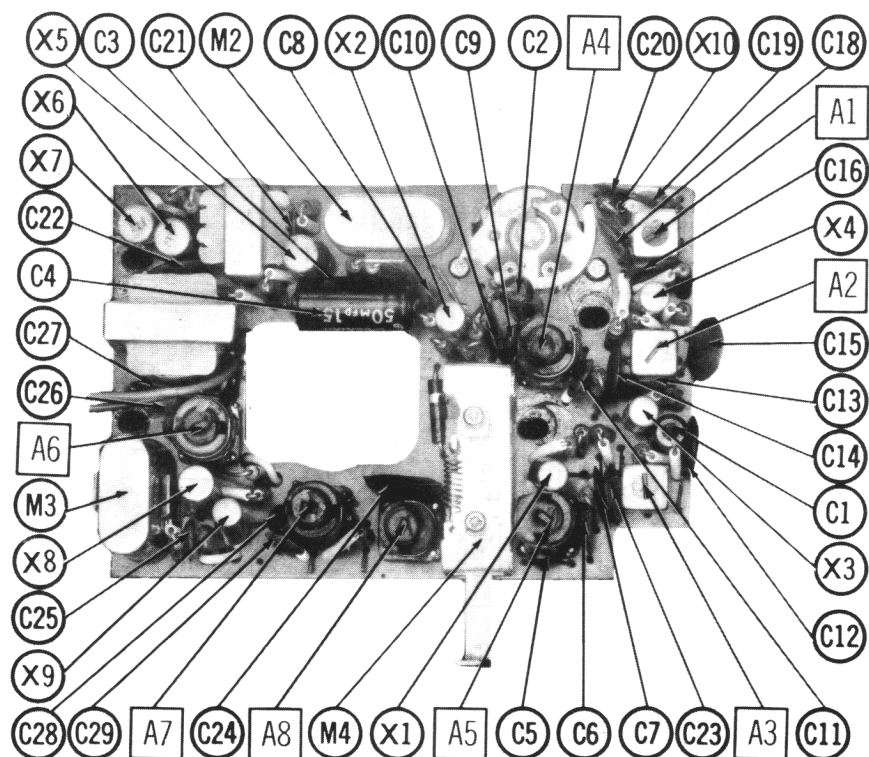


**LAFAYETTE
MODEL HE-29A**





**CHASSIS-TOP VIEW
RESISTOR & INDUCTOR IDENT.**



**CHASSIS-TOP VIEW
ALIGNMENT, CAPACITOR & MISC. IDENT.**

WIRING DATA

PARTS LIST AND DESCRIPTIONS

CONTROLS

General-use Unshielded Hook-up Wire Use BELDEN No. 8530 (Solid 22AWG) Available in 12 Colors
8524 (Stranded 22AWG)
8570 (Stranded 26AWG)

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

TRANSISTORS

ITEM No.	ORIG. TYPE	USE	REPLACEMENT DATA		NOTES
			GENERAL ELECTRIC PART No.	RCA PART No.	
X1	28A104	Receive Mixer	GE-1		PNP
X2	28A61	Receive Mixer	GE-1		PNP
X3	28A103	Receive Oscillator	GE-1		PNP
X4	28A102	1st IF Amplifier	GE-1		PNP
X5	28B171	2nd IF Amplifier	GE-2	2N406	PNP
X6	28B172	Driver-Speech Amp.	GE-2	2N408	PNP
X7	28B172	Output-Modulator	GE-2	2N408	PNP
X8	28A61	Transmit-Modulator	GE-1		PNP
X9	28A104	Transmit-Oscillator	GE-1		PNP
X10	28A61	Final Amplifier	GE-1		PNP

† Alternate Type

POWER RECTIFIERS & SIGNAL DIODES

ITEM No.	CURRENT RATING (Measured)	ORIGINAL Type No.	RECTIFIERS		NOTES
			RCA PART No.	SARKES TARZIAN PART No.	
X10		2B-505			Detector (OA80)

ELECTROLYTIC CAPACITORS

ITEM No.	RATING CAP.	VOLT.	REPLACEMENT DATA				
			Lafayette PART No.	AEROVOX PART No.	CORNELL-DUBILIER PART No.	GENERAL ELECTRIC PART No.	SPRAGUE PART No.
C1	10	6 *	29-525	PTT23	NLW10-6	MTI-5	MLV10-6
C2	3	3 *	29-523	PTT3	NLW3-25	MTI-3	TE-1087
C3	10	6 *	29-526	PTT23	NLW10-6	MTI-5	TE-1087
C4	50	15	29-527		NLW50-15	MTI-16	TE-1160

* May be 3 or 6 volt unit.

FIXED CAPACITORS

ITEM No.	RATING	REMARKS	REPLACEMENT DATA				
			AEROVOX PART No.	CENTRALAB PART No.	CORNELL-DUBILIER PART No.	ELMENDO PART No.	MALLORY PART No.
C5	20		TTD-01	DD-200	LIQ2	CCD-200	5GA-Q20
C6	.01			DM-103	H-05SI		TG-S10
C7	.04						
C8	.01			DM-103	H-05SI		
C9	20		TTD-01	DD-200	LIQ2	CCD-200	TG-S10
C10	.01		TTD-01	DM-103	H-05SI		5GA-Q20
C11	.005		TTD-005	DM-502	H-05D5	CCD-502	TG-S10
C12	.04						
C13	.04						
C14	.04						
C15	.04						
C16	.04						
C17	2						
C18	.04						
C19	.01		TTD-01	DM-103	H-05SI		TG-S10
C20	.01		TTD-01	DM-103	H-05SI		TG-S10
C21	.001			DM-102	H-05DI	CCD-102	5GA-Q10
C22	.04						
C23	.04						
C24	.1		TTD-1	DA-104	H-05PI		TG-S10
C25	.01		TTD-01	DM-103	H-05SI	CCD-200	5GA-Q20
C26	20			DM-103	LIQ2	CCD-200	TG-S10
C27	.01		TTD-01	DM-103	H-05SI		5GA-Q10
C28	10			DD-100	LIQ1	CCD-100	TG-S10
C29	.01		TTD-01	DM-103	H-05SI		

† Lafayette Part Number.

ITEM No.	USE	RESIST-ANCE	REPLACEMENT DATA			
			Lafayette PART No.	CENTRALAB PART No.	CLAROSTAT PART No.	MALLORY PART No.
R1	Volume & Switch	5000Ω	29-512			

RESISTORS (IRC, WORKMAN OR EQUIVALENT)

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

ITEM No.	RATING	ITEM No.	RATING	ITEM No.	RATING	ITEM No.	RATING	ITEM No.	RATING	ITEM No.	RATING
R2	1000Ω	R7	10K	R12	470Ω	R17	470Ω	R21	1000Ω	R25	47Ω
R3	49K	R8	1000Ω	R13	56K	R18	6800Ω	R22	200Ω Cold	R26	47K
R4	3300Ω	R9	1000Ω	R14	6800Ω	R19	56K	R23	220Ω	R27	10K
R5	410Ω	R10	100K	R15	1000Ω	R20	6800Ω	R24	5600Ω	R28	470Ω
R6	56K	R11	1000Ω	R16	470Ω					R29	470Ω

Lafayette Part #MT-25

COILS (RF-IF)

ITEM No.	USE	REPLACEMENT DATA					NOTES
		Lafayette PART No.	Merit PART No.	Miller PART No.	Stancor PART No.	Workman PART No.	
L1	Antenna	HP-66					
L2	Receive Osc.	HP-68					
L3	1st IF	MS-776					
L4	2nd IF	MS-777					
L5	3rd IF	MS-778					
L6	Trans. Osc.	HP-69					
L7	Final	HP-70					
L8	Ant. Load	HP-67					

TRANSFORMER (DRIVER)

ITEM No.	TURNS RATIO	REPLACEMENT DATA			NOTES
		Lafayette PART No.	Merit PART No.	THORDARSON PART No.	
T1	1.6 1	TR-118			

TRANSFORMER (AUDIO OUTPUT)

ITEM No.	IMPEDANCE	REPLACEMENT DATA			NOTES
		Lafayette PART No.	Merit PART No.	Thordarson PART No.	
T2	500Ω CT	TR-119			

SPEAKER

ITEM No.	TYPE	REPLACEMENT DATA		NOTES
		Lafayette PART No.	QUAM PART No.	
SPI	2 1/4" PM	29-539	22A06Z8	

BATTERIES

ITEM No.	VOLTAGE	Lafayette PART No.	REPLACEMENT DATA			NOTES
			BURCESS	EVEREADY	MALLORY	
M1	1 1/2V	BA-155	"A"	"B"	"A"	8 Required

MISCELLANEOUS

ITEM No.	PART NAME	Lafayette PART No.	NOTES
M2	Crystal		
M3	Crystal Switch	SW-102	Receive Transmitter Specify Channel
M4	Antenna	F-703	Receive-Transmit (Spring Loaded, Slide Type, Normally in Receive Position) Telescoping