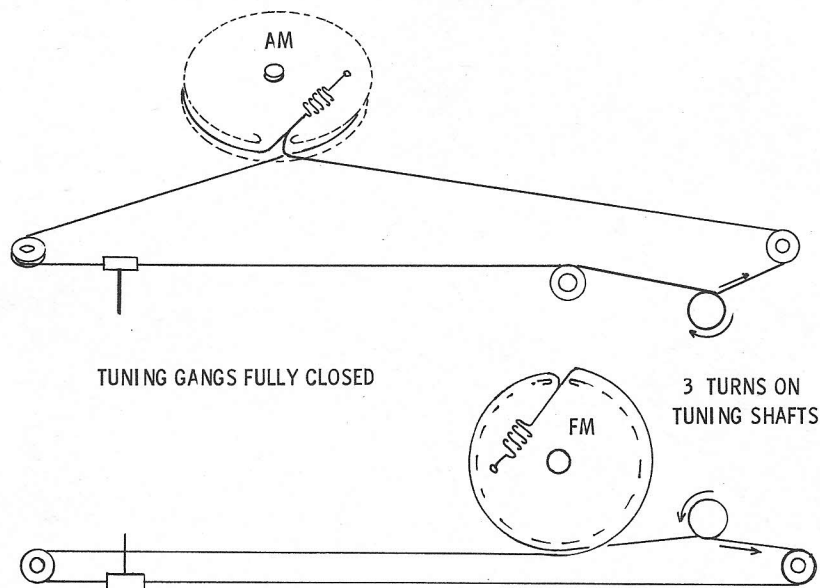


PHOTOFACT* Folder

LAFAYETTE MODEL
LT-99LAFAYETTE MODEL
LT-99

TRADE NAME	Lafayette Model LT-99		
MANUFACTURER	Lafayette Radio, 165-08 Liberty Ave., Jamaica 33, N. Y.		
TYPE SET	AC Operated 8 Tube FM-AM Tuner		
POWER SUPPLY	110 - 120 Volts AC, 60 Cycles	RATING	34 Watts, .365 Amp. @117 Volts AC
TUNING RANGE - BROADCAST	540 - 1650KC	FREQ. MOD.	88 - 108MC

DIAL CORD STRINGING



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 H954

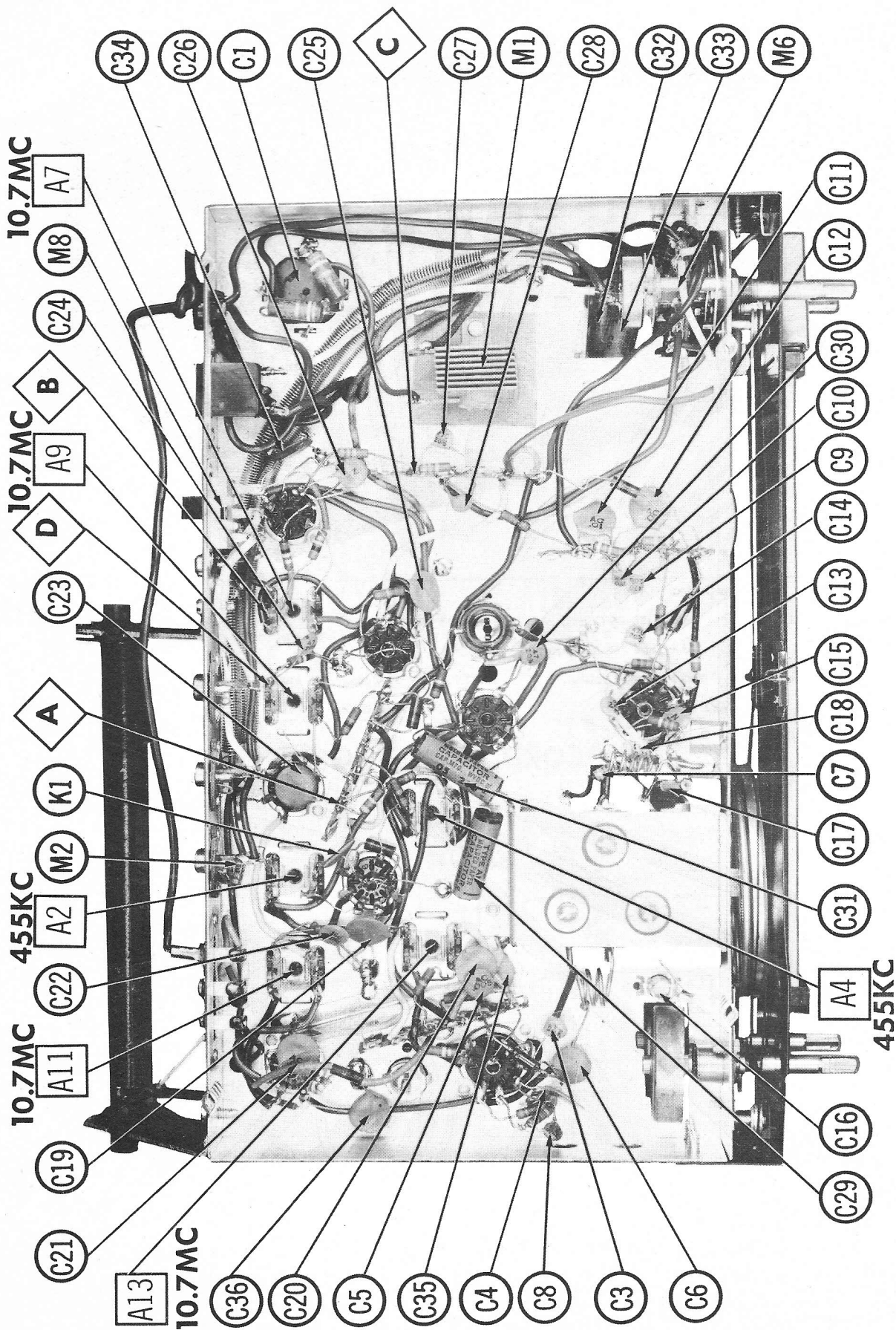
the particular type of replacement part listed. Reproduction or use, without express permission, of editorial or pictorial content, in any manner, is prohibited. No patent liability is assumed with respect to the use of the information contained herein. © 1959 Howard W. Sams & Co., Inc., Indianapolis 6, Indiana. Printed in U.S. of America

DATE 5-59

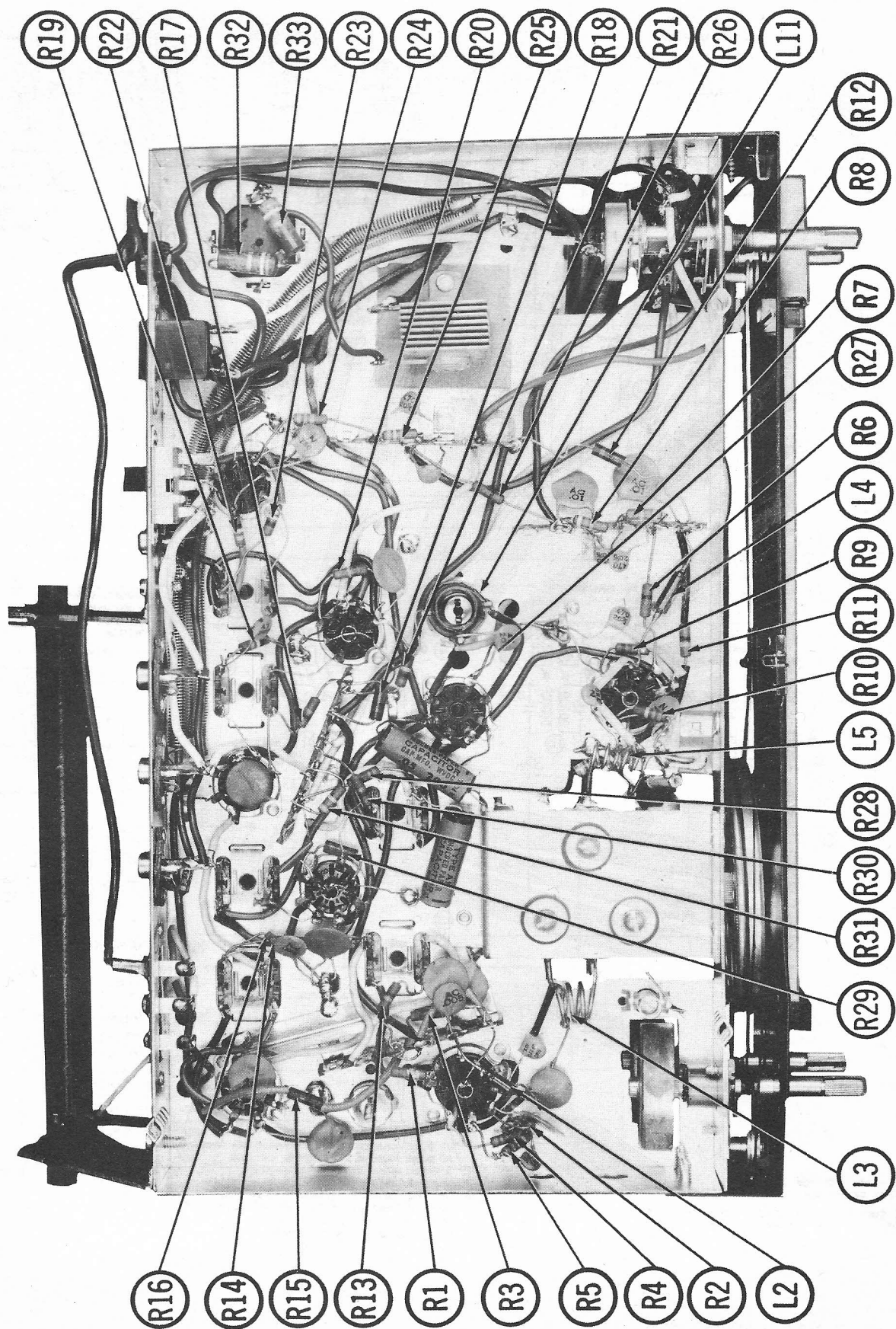
SET 443

FOLDER 8

LAFAYETTE MODEL
LT-99SET 443
FOLDER 8

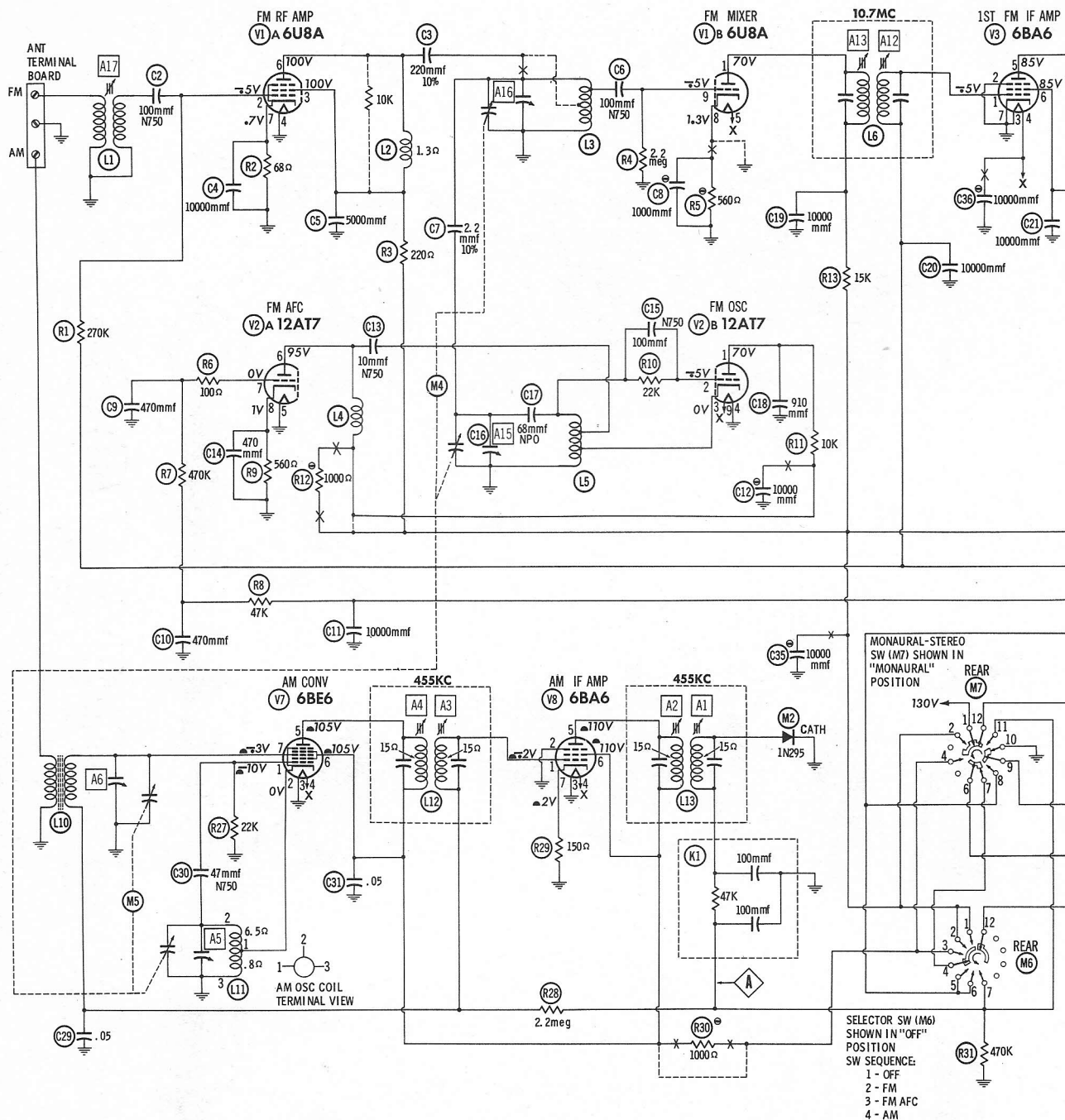


CHASSIS BOTTOM VIEW - CAPACITOR, MISC & ALIGNMENT IDENTIFICATION



CHASSIS BOTTOM VIEW - RESISTOR & INDUCTOR IDENTIFICATION

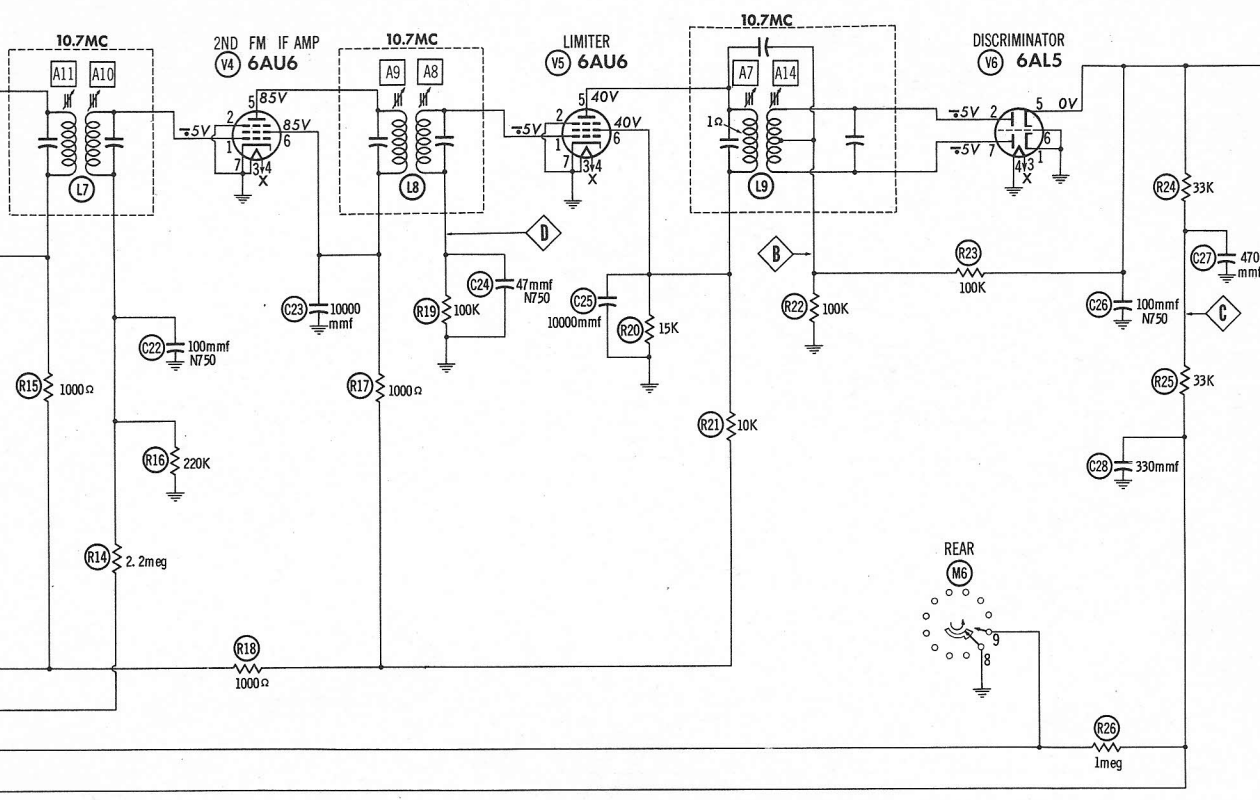
LAFAYETTE
MODEL LT-99



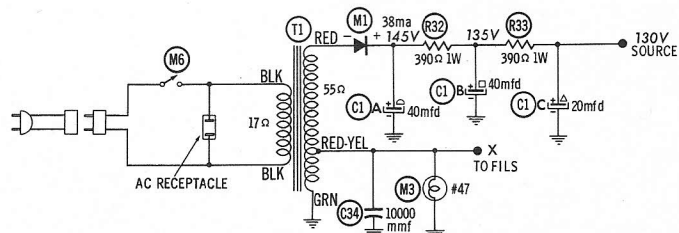
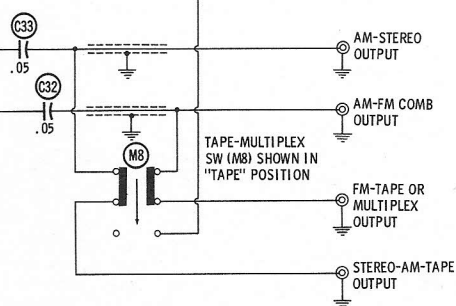
SEE PARTS LIST FOR ALTERNATE
VALUE OR APPLICATION

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

1. DC voltage measurements taken with vacuum tube voltmeter; AC voltages measured at 1000 ohms per volt.
2. Socket connections are shown as bottom views.
3. Measured values are from socket pin to common negative.
4. Line voltage maintained at 117 volts for voltage readings.
5. Nominal tolerance on component values makes possible a variation of $\pm 15\%$ in voltage and resistance readings.
6. 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 READINGS

ITEM	TUBE	Pin 1	Pin 2	Pin 3	Pin 4	Pin 5	Pin 6	Pin 7	Pin 8	Pin 9
V1	6U8A	†16K	2.7meg	†1000Ω	0Ω	.1Ω	†1000Ω	68Ω	560Ω	2.2meg
V2	12AT7	†12K	22K	0Ω	0Ω	0Ω	†1800Ω	1.7meg	560Ω	.1Ω
V3	6BA6	2.4meg	0Ω	0Ω	.1Ω	†1800Ω	†1800Ω	0Ω		
V4	6AU6	220K	0Ω	0Ω	.1Ω	†2800Ω	†2800Ω	0Ω		
V5	6AU6	100K	0Ω	0Ω	.1Ω	†10K	†10K	0Ω		
V6	6AL5	0Ω	100K	.1Ω	0Ω	160K	0Ω	100K		
V7	6BE6	22K	.8Ω	0Ω	.1Ω	†1800Ω	†1800Ω	2.7meg		
V8	6BA6	2.7meg	0Ω	0Ω	.1Ω	†1800Ω	†1800Ω	150Ω		

† MEASURED FROM OUTPUT OF M1.
ALL MEASUREMENTS TAKEN IN "FM" POSITION UNLESS OTHERWISE DESIGNATED.
• MEASURED IN "AM" POSITION.
■ MEASURED IN "FM-AFC" POSITION.

LAFAYETTE MODEL
LT-99

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.
Stereo Switch at Monaural Position.
Suggested Alignment Tools.....A1 thru A4, A7 thru A14.....GENERAL CEMENT #5097, 8727
WALSCO #2515

A5, A6, A16.....GENERAL CEMENT #5000, 5003, 5009, 8290
WALSCO #2515, 2520, 2523, 2525, 2537
A15.....GENERAL CEMENT #5003, 8721, 8722
WALSCO #2512, 2519, 2525
A17.....GENERAL CEMENT #5009, 8271, 8275, 8276, 8721, 8722
WALSCO #2516, 2519

A M ALIGNMENT

DUMMY ANTENNA	SIGNAL GENERATOR COUPLING	SIGNAL GENERATOR FREQUENCY	BAND SWITCH POS.	RADIO DIAL SETTING	CONNECT VTVM	ADJUST	REMARKS
1. .01mfd.	High side to AM RF Stator lug on tuning gang. Low side to chassis.	455KC (400% Mod.)	AM	Point of non-interference	DC probe to point $\diamond$. Common to chassis.	A1, A2, A3, A4	Adjust for maximum deflection.
2.	Loop	1650KC	"	Tuning gang fully open	"	A5	Fashion loop of several turns of wire and radiate signal into loop of receiver. Adjust for maximum output.
3.	"	1400KC	"	Tune to 1400KC signal	"	A6	"

FM IF ALIGNMENT USING AM SIGNAL GENERATOR & VTVM

DUMMY ANTENNA	SIGNAL GENERATOR COUPLING	SIGNAL GENERATOR FREQUENCY	BAND SWITCH POS.	RADIO DIAL SETTING	OUTPUT METER	ADJUST	REMARKS
4. .01mfd.	High side to FM RF Stator lug of tuning gang. Low side to chassis.	10.7MC (Unmod.)	FM	Point of non-interference	DC probe thru lmeq to point $\diamond$. Low side to chassis.	A7, A8, A9, A10, A11, A12, A13	Adjust for maximum deflection.
5. "	"	"	"	"	DC probe thru lmeq to point $\diamond$. Low side to chassis.	A14	Adjust for zero reading. A positive and negative reading will be obtained on either side of the correct setting.

FM IF ALIGNMENT USING FM SIGNAL GENERATOR & OSCILLOSCOPE

DUMMY ANTENNA	SIGNAL GENERATOR COUPLING	SIGNAL GENERATOR FREQUENCY	BAND SWITCH POS.	RADIO DIAL SETTING	CONNECT SCOPE	ADJUST	REMARKS
4. .01mfd.	High side to FM RF Stator lug of tuning gang. Low side to chassis.	10.7MC (450KC Swp)	FM (No AFC)	Point of non-interference	Vert. amp. thru lmeq to point $\diamond$. Low side to chassis.	A7, A8, A9, A10, A11, A12, A13	Adjust for curve of maximum amplitude and symmetry similar to Fig. 1.
5. "	"	"	"	"	Vert. amp. thru 27K to point $\diamond$. Low side to chassis.	A14	Adjust so that 10.7MC occurs at center of crossover lines similar to Fig. 2. SLIGHTLY retouch A8 for maximum amplitude and straightness of crossover lines.

FM RF ALIGNMENT

DUMMY ANTENNA	SIGNAL GENERATOR COUPLING	SIGNAL GENERATOR FREQUENCY	BAND SWITCH POS.	RADIO DIAL SETTING	CONNECT VTVM	ADJUST	REMARKS
6. 270 Ω Carbon Resistor	Across FM antenna terminals with 270 Ω in high side.	108MC (Unmod.)	FM (No AFC)	108MC	DC probe to point $\diamond$. Low side to chassis.	A15	Adjust for maximum deflection.
7. "	"	106MC	"	Tune to 106MC signal	"	A16	Adjust for maximum deflection while rocking tuning gang.
8. "	"	90MC	"	Tune to 90MC signal	"	A17	Adjust for maximum deflection.

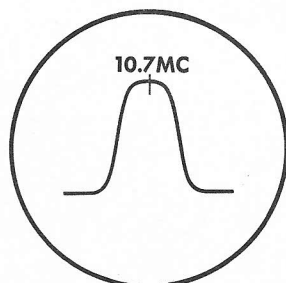


FIG. 1

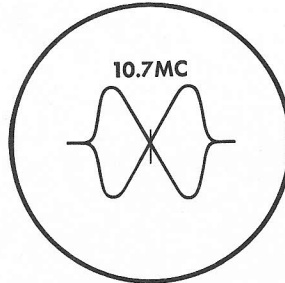


FIG. 2

PARTS LIST AND DESCRIPTIONS

TUBES (GENERAL ELECTRIC, SYLVANIA)

ITEM No.	USE	TYPE	NOTES
V1	FM RF Amp. - FM Mixer	6U8A	
V2	FM Osc. - FM AFC	12AT7	
V3	1st FM IF Amplifier	6BA6	
V4	2nd FM IF Amplifier	6AU6	

ELECTROLYTIC CAPACITORS

ITEM No.	RATING	REPLACEMENT DATA			
		Lafayette PART No.	AEROVOX PART No.	CORNELL-DUBILIER PART No.	NOTES
C1A	40	E-212-4	AFH3-94	C0150	
B	40			BR3025	
C	200				

* Not normally in distributor's stock. Available thru distributor on order to manufacturer.

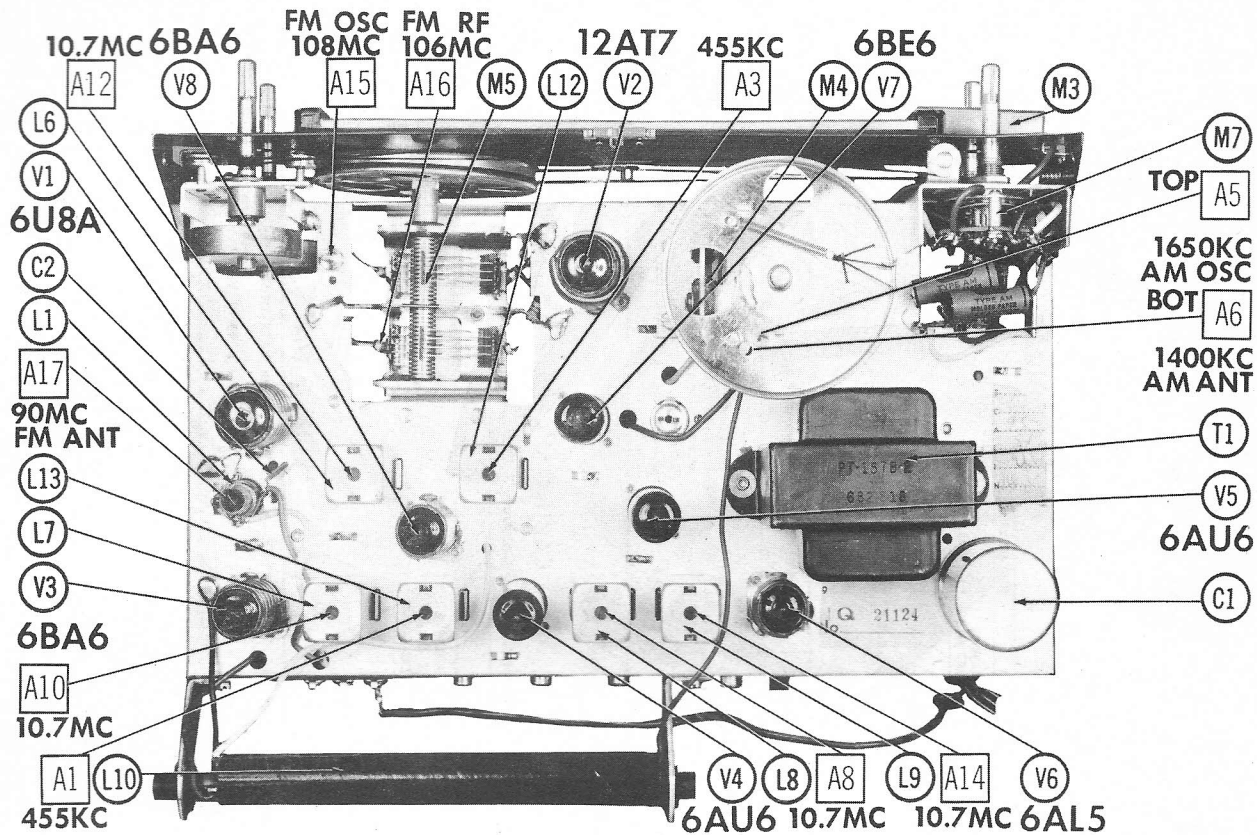
FIXED CAPACITORS

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	
	VOLT	TOL	Lafayette PART No.	AEROVOX PART No.	CENTRALAB PART No.	CORNELL-DUBILIER PART No.	MALLORY PART No.		SPRAGUE PART No.
C2	100	N750 10%		N750-DI 100	DTN-100	C10T1U	CNT-310	5TCU-T1	①
C3	220			N750-SI 220	MD-221	L10T21	JL-322	5GA-T225 10%*	
C4	10000			BPD-01	DD-103	BYA10S1	B-110	5GA-SI	
C5	5000			BPD-005	DTN-502	BYA10D5	B-250	5GA-D5	
C6	100			N750-DI 100	DTN-100	C10T1U	CNT-310	5TCU-T1	
C7	2.2	N750 10%		N750-SI 2.2	TCZ-2R2	C10V22C	CNO-322	5TCU-T1	①
C8	1000			BPD-001	DD-102	BYA10D1M	B-210	5GA-D1	
C9	470			BPD-00047	DD-471	BYA10T47	B-347	5GA-T47	
C10	470			BPD-00047	DD-471	BYA10T47	B-347	5GA-T47	
C11	10000			BPD-01	DD-103	BYA10S1	B-110	5GA-SI	
C12	10000			BPD-01	DD-103	C10Q1U	CNT-410	5TCU-Q1	①
C13	10	N750		N750-DI 10	DTN-10	C10Q1U	CNT-410	5TCU-Q1	
C14	470	N750		BPD-00047	DD-471	BYA10T47	B-347	5GA-T47	
C15	100	N750		N750-DI 100	DTN-100	C10T1U	CNT-310	5TCU-T1	
C16			TC-223-1						
C17	68	NPO		NPO-SI 68	TCZ-68	C10Q68C	CNO-468	5TCC-Q68	① ①
C18	910			BPD-01	DD-103	BYA10S1	B-110	5GA-SI	
C19	10000			BPD-01	DD-103	BYA10S1	B-110	5GA-SI	
C20	10000			BPD-01	DD-103	BYA10S1	CNT-310	5TCU-T1	
C21	10000	N750		N750-DI 100	DTN-100	C10T1U	B-110	5GA-SI	
C22	100			BPD-01	DD-103	BYA10S1	CNT-447	5TCU-Q47	
C23	10000	N750		N750-DI 47	DTN-47	C10Q47U	B-110	5GA-SI	
C24	47			BPD-01	DD-103	BYA10S1	CNT-310	5TCU-T1	
C25	10000	N750		N750-DI 100	DTN-100	C10T1U	B-347	5GA-T47	
C26	100			BPD-00047	DD-471	BYA10T47	B-333	5GA-T33	
C27	470			BPD-00033	DD-331	L10T33	GEM-415	2TM-S5	
C28	330			P288N-05	DF-503	CUB2S5	GEM-415	2TM-S5	
C29	.05	200		P288N-05	DF-503	CUB2S5	GEM-415	2TM-S5	
C30	47	200		N750-DI 47	DTN-47	C10Q47U	CNT-447	5TCU-Q47	
C31	.05	200		P288N-05	DF-503	CUB2S5	GEM-415	2TM-S5	
C32	.05	200		P288N-05	DF-503	CUB2S5	GEM-415	2TM-S5	
C33	.05	200		P288N-05	DF-503	CUB2S5	GEM-415	2TM-S5	
C34	10000			BPD-01	DD-103	BYA10S1	B-110	5GA-SI	
C35	10000			BPD-01	DD-103	BYA10S1	B-110	5GA-SI	
C36	10000			BPD-01	DD-103	BYA10S1	B-110	5GA-SI	

① Not used in some versions.
* Not normally in distributor's stock. Available thru distributor on order to manufacturer.

CHASSIS—TOP VIEW



LAFAYETTE MODEL
LT-99

FOLDER 8

PARTS LIST AND DESCRIPTIONS (Continued)

RESISTORS

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

ITEM No.	RATING		Lafayette PART No.	NOTES
	OHMS	WATT		
R1	270K			
R2	68K			
R3	220K			
R4	2.2meg			
R5	560K			
R6	100K			
R7	470K			
R8	47K			
R9	560K			
R10	22K			
R11	10K			
R12	100K			
R13	15K			
R14	2.2meg			
R15	100K			
R16	220K			
R17	100K			

Note 1. Not used in some versions.

COMPONENT COMBINATIONS

ITEM No.	USE	DESCRIPTION	Lafayette PART No.	REPLACEMENT DATA
K1	AM Diode RF Filter	100mmf, 100mmf, 47K		Aerovox Centralab Cornell-Dubilier Sprague DI

COILS (RF-IF)

ITEM No.	USE	REPLACEMENT DATA					NOTES
		Lafayette PART No.	Meissner PART No.	Merit PART No.	Miller PART No.	Rem PART No.	
L1	FM Ant. Coil	1102-3		SW-431			
L2	RF Choke	1104-4		SW-430	4606		4.7 Microhenries
L3	FM RF Coil	1100-3					2.7 Microhenries
L4	RF Choke	1104-3					
L5	FM Osc. Coil	0-156-3					
L6	1st FM IF Trans.	1038B-5	16-3487	FM-254	1463		
L7	2nd FM IF Trans.	1038B-5	16-3487	FM-254	1463		
L8	3rd FM IF Trans.	1038B-5	16-3487	FM-254	1463		
L9	Discriminator	1038B-2	17-3494	FM-253	1464		
L10	Loopstick	L-155B-7					
L11	AM Osc. Coil	1101C-5	16-6758	BC-353	12-C1	RF1	
L12	1st AM IF Trans.	I-110	16-6758	BC-352	12-C2	RF2	
L13	2nd AM IF Trans.	I-110					

TRANSFORMER (POWER)

ITEM No.	RATING		Lafayette PART No.	REPLACEMENT DATA				
	PRI.	SEC. 1		Holldorson PART No.	Merit PART No.	Ram PART No.	Stancor PART No.	Triad PART No.
T1	117V @ .365A	120V Tap @ .038A 6.3V Tap @ 2.3A						

SELENIUM RECTIFIER

ITEM No.	RATING CURRENT (Measured)	REPLACEMENT DATA			NOTES
		Lafayette PART No.	FEDERAL PART No.	SARKES PARZIAN PART No.	
M1	.038A	R837-2	1235AH	T100 SD-94 ① 100A K200 ① ②	① Silicon Type ② Add 10K Resistor in series

CRYSTAL DIODES

ITEM No.	ORIG. TYPE	REPLACEMENT DATA			NOTES
		Lafayette PART No.	CBS PART No.	SYLVANIA PART No.	
M2	1N295		1N60	1N295	AM Detector (Pigtail)

MISCELLANEOUS

ITEM No.	PART NAME	Lafayette PART No.	NOTES
M3	Lamp		
M4	Tuning Cap.	V222B-3	#47
M5	Tuning Cap.	V217-5	FM, 2 Gang
M6	Switch	8089-3	AM, 2 Gang (Ant. 11-241mmf, Osc. 8-108mmf)
M7	Switch	BS-836-2	Function Selector (4 Position Rotary, Water Type With Rotary, Snap Type, On-Off)
M8	Switch		Stereo-Monaural (Rotary, Water Type)

CABINETS & CABINET PARTS

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

NAME	PART NO.	DESCRIPTION
Knob	K-483-2	Tuning, 2 Used
Knob	K-482-1	Function Selector, Stereo-Monaural
Dial Scale	DG-804-3	

WIRING DATA

General-use Unshielded Hook-up Wire Use BELDEN No. 8530 (Solid) Available in Ten Colors
Power Cord Use BELDEN No. 8524 (Stranded) Available in Ten Colors
1725-K (7 1/2 Ft. Length)