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CIRCUITRACE[®]

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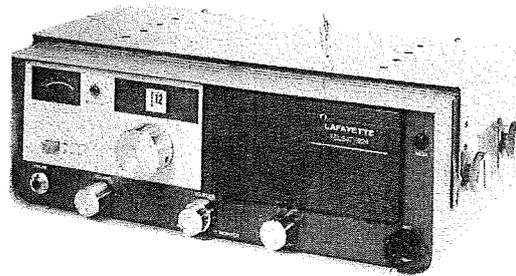
NOTE

ONLY THOSE PERSONS PROPERLY LICENSED ARE PERMITTED TO MAKE REPAIRS OR ADJUSTMENTS WHICH MAY RESULT IN ILLEGAL OPERATION. (REFER TO FCC RULES AND REGULATIONS PART 95, SUBPARTS C & D.)

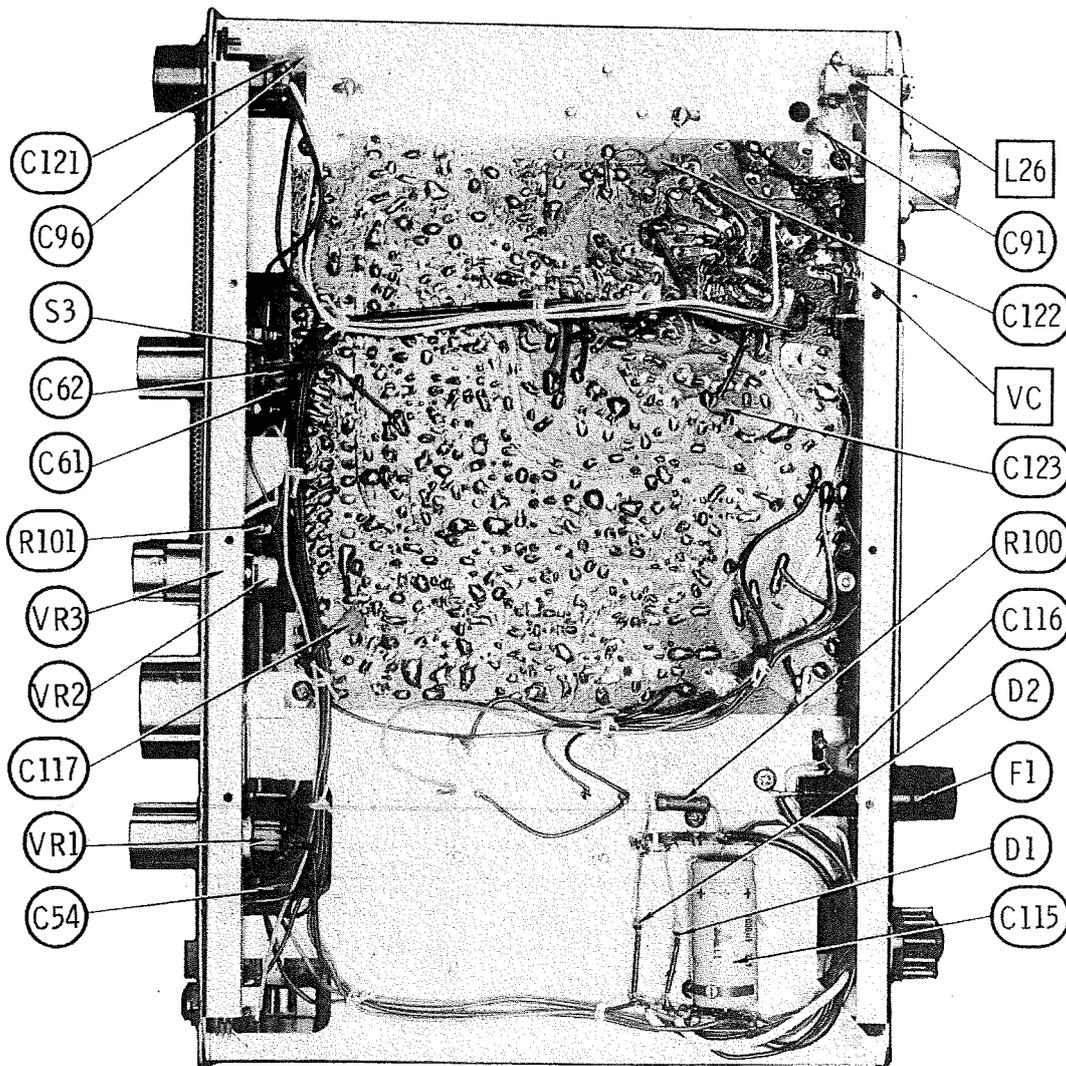
The frequency of the transmitter should be checked periodically with a secondary frequency standard to insure proper and legal operation.

Best results will be obtained when adjusting the final RF output circuit if the antenna normally used is connected and the chassis is as nearly in the cabinet as possible.

Connect either 50-ohm dummy load or the normally used antenna system.



MODEL TELSAT 924 (99-32435)



LAFAYETTE MODEL TELSAT 924

HOWARD W. SAMS & CO., INC. Indianapolis, Indiana 46206

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ALIGNMENT INSTRUCTIONS

Suggested Alignment Tools:

L25GC ELECTRONICS #8728
 L4 thru L7, L12, L14 thru L16, MF.....GC ELECTRONICS #8728
 L2, L3, L10, L11, L13, L17 thru L23, L26.....GC ELECTRONICS #9440

RECEIVER

Connect an AC VTVM across speaker terminals. Set MONITOR-NORM switch to NORM. Set Squelch control fully counterclockwise. Set Volume control to obtain a suitable meter reading.

SIGNAL GENERATOR	CHANNEL	ADJUST	REMARKS
High side thru .01mfd to anode of D9 (2nd Mixer), low side to ground. Set to 455KC (Mod.)	Any	L16, L15, L14, MF	Adjust for MAXIMUM.
High side thru .01mfd to antenna connector, low side to chassis. Set to 27.085MC (Mod.) (Ch. 11)	CH.11	L13, L12, L11, L10, L9, L8	Adjust for MAXIMUM.

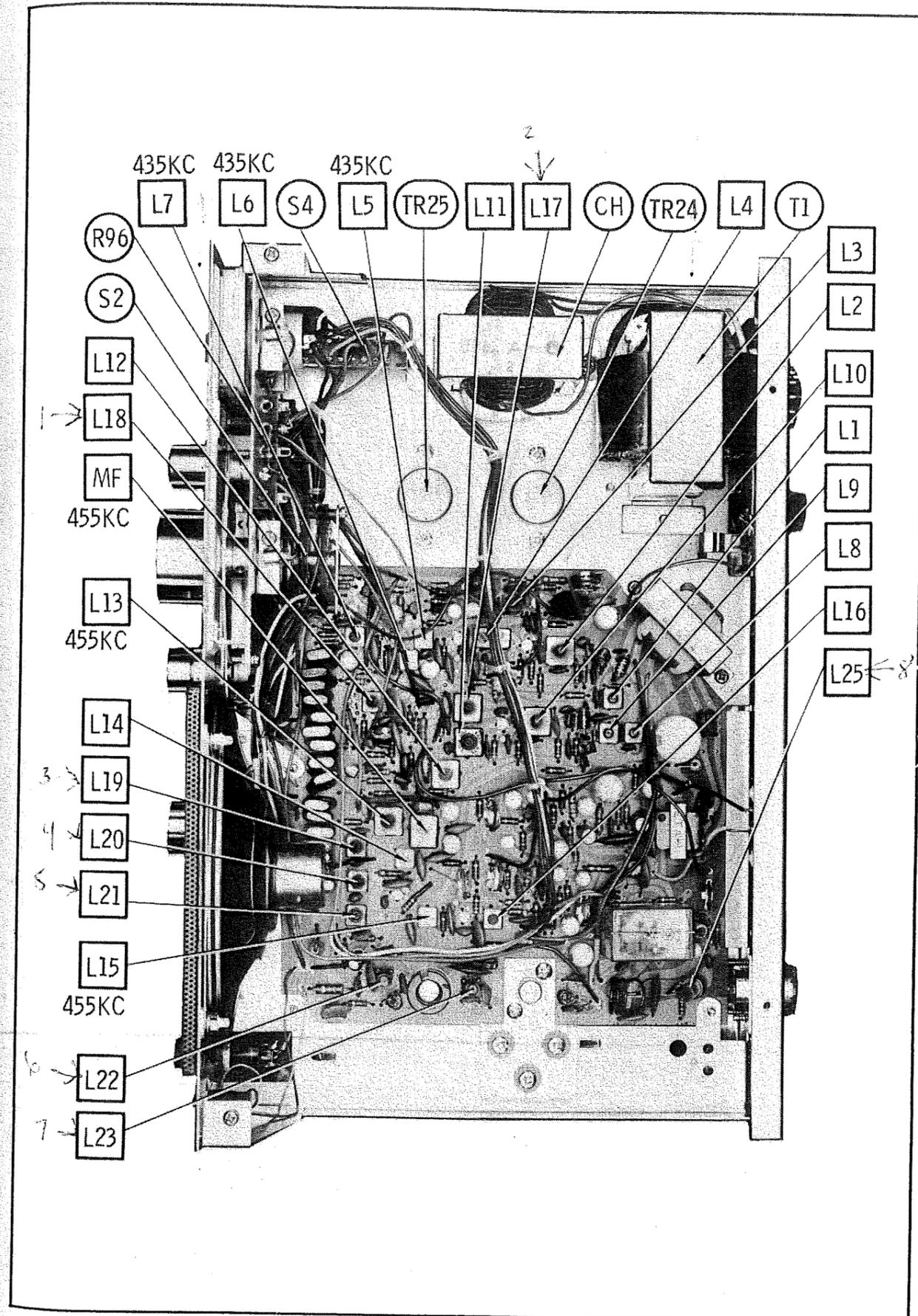
RECEIVER (MONITOR)

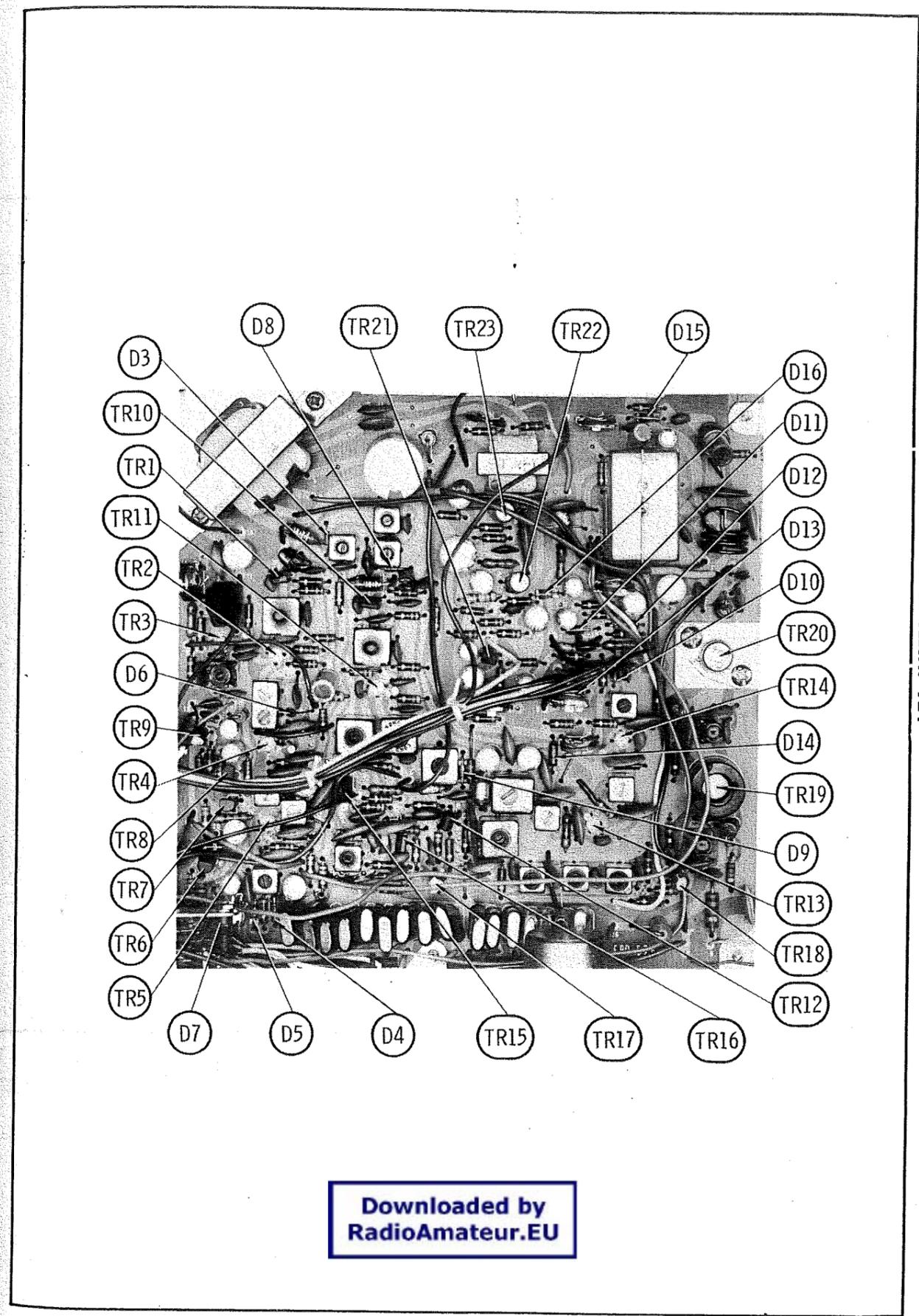
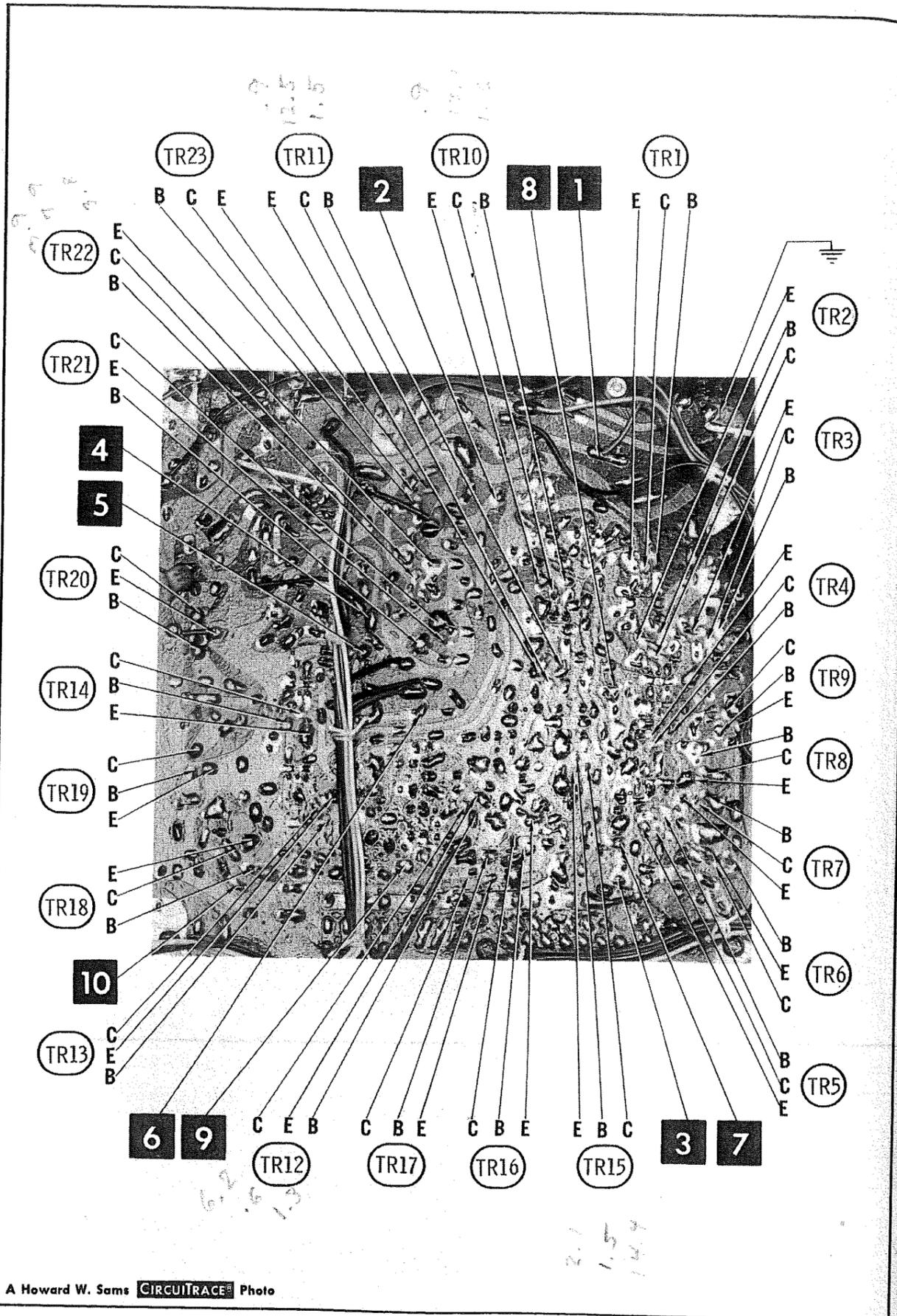
Set MONITOR-NORM switch to MONITOR. Set Monitor Squelch fully counterclockwise. All other settings remain same as above.

SIGNAL GENERATOR	CHANNEL	ADJUST	REMARKS
High side thru .01mfd to base of TR2 (Monitor Mixer), low side to ground. Set to 435KC (Mod.)	Any	L7, L6, L5, L4, Blue core, L4, Pink core.	Adjust for MAXIMUM.
High side thru .01mfd to antenna connector, low side to chassis. Set to 27.065MC (Mod.) (Ch.9).	Ch.9	L3, L2, L1	Adjust for MAXIMUM.

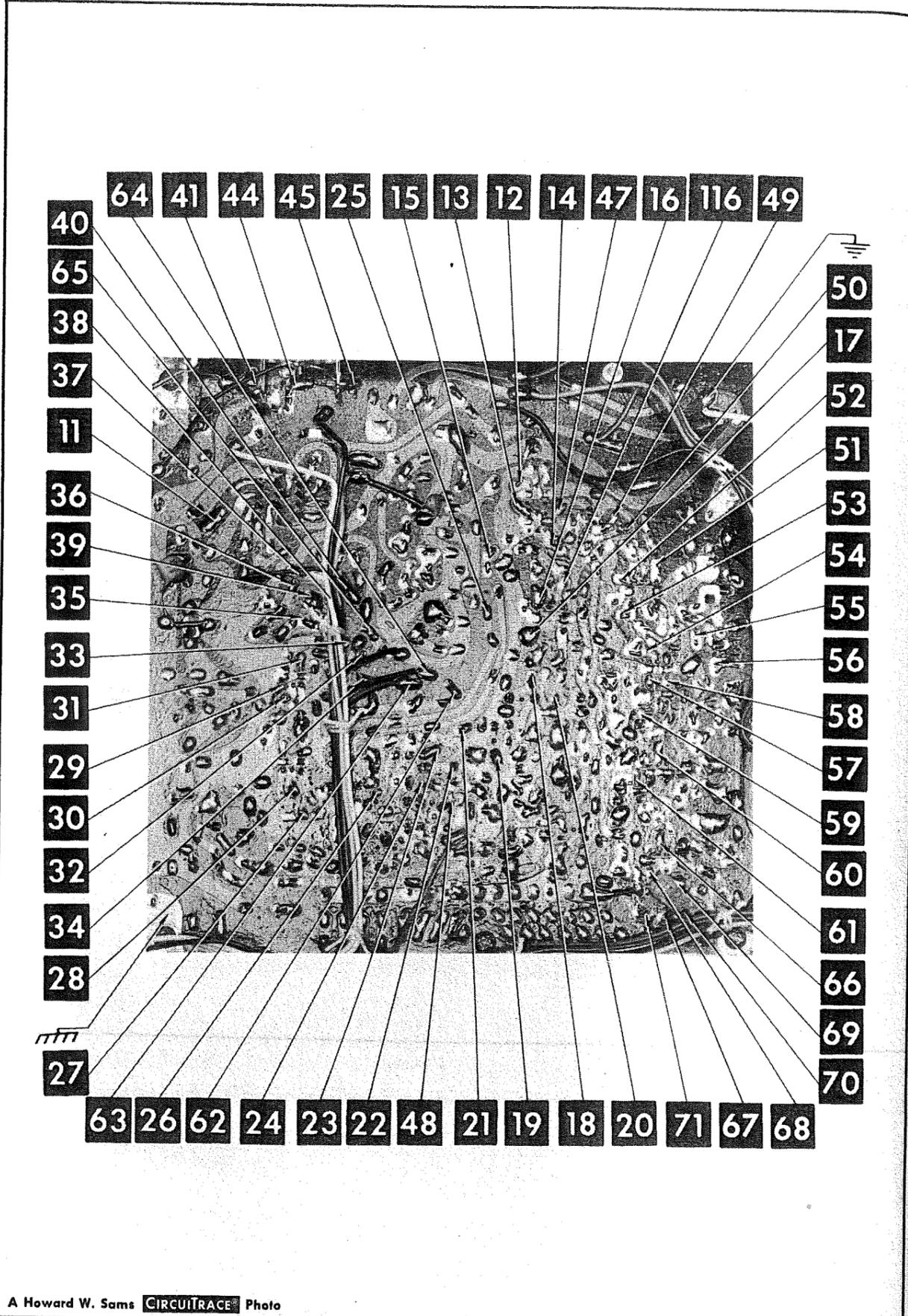
TRANSMITTER

INDICATOR	ADJUST	REMARKS
RF Wattmeter or Field Strength meter.	L18, L17, L19, L20, L21, L22, L23, L25, VC	Key transmitter and adjust for MAXIMUM.
0-500ma DC Ammeter	L25	Insert meter in collector circuit of TR2. (Final Amp.). Key transmitter and readjust L25 for 5 watts input.
Television (Ch.2)	L26	Adjust for MINIMUM interference.

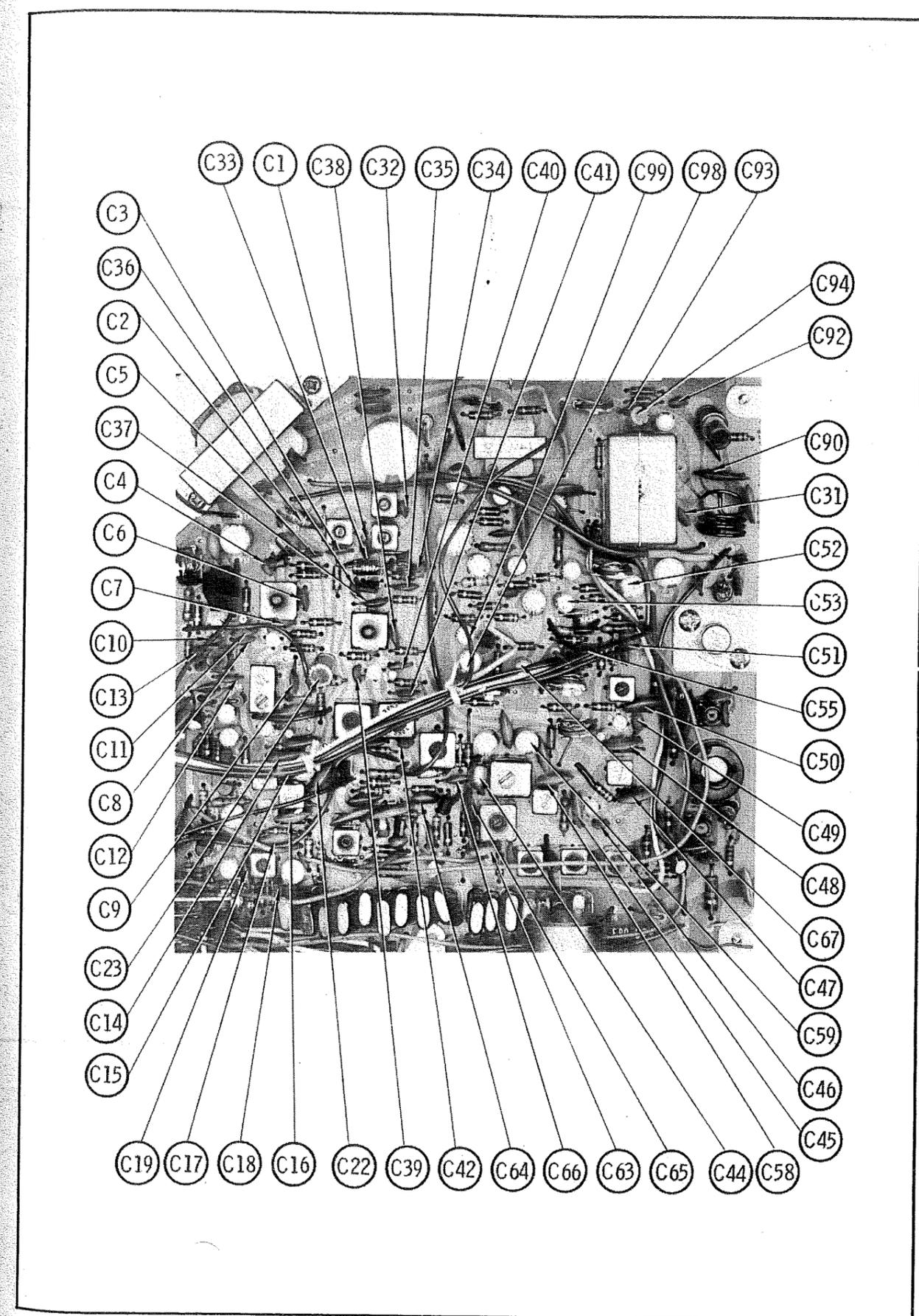




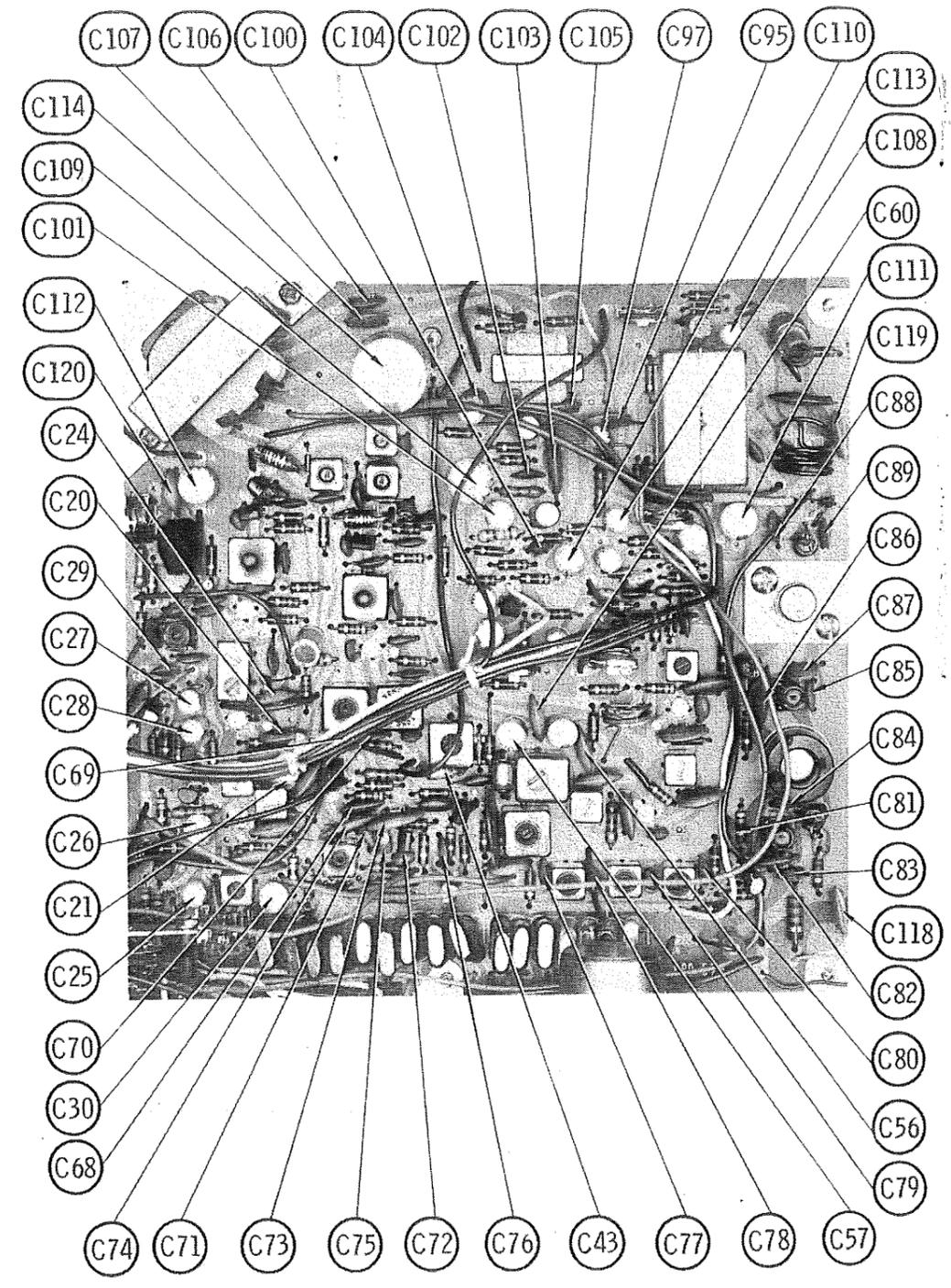
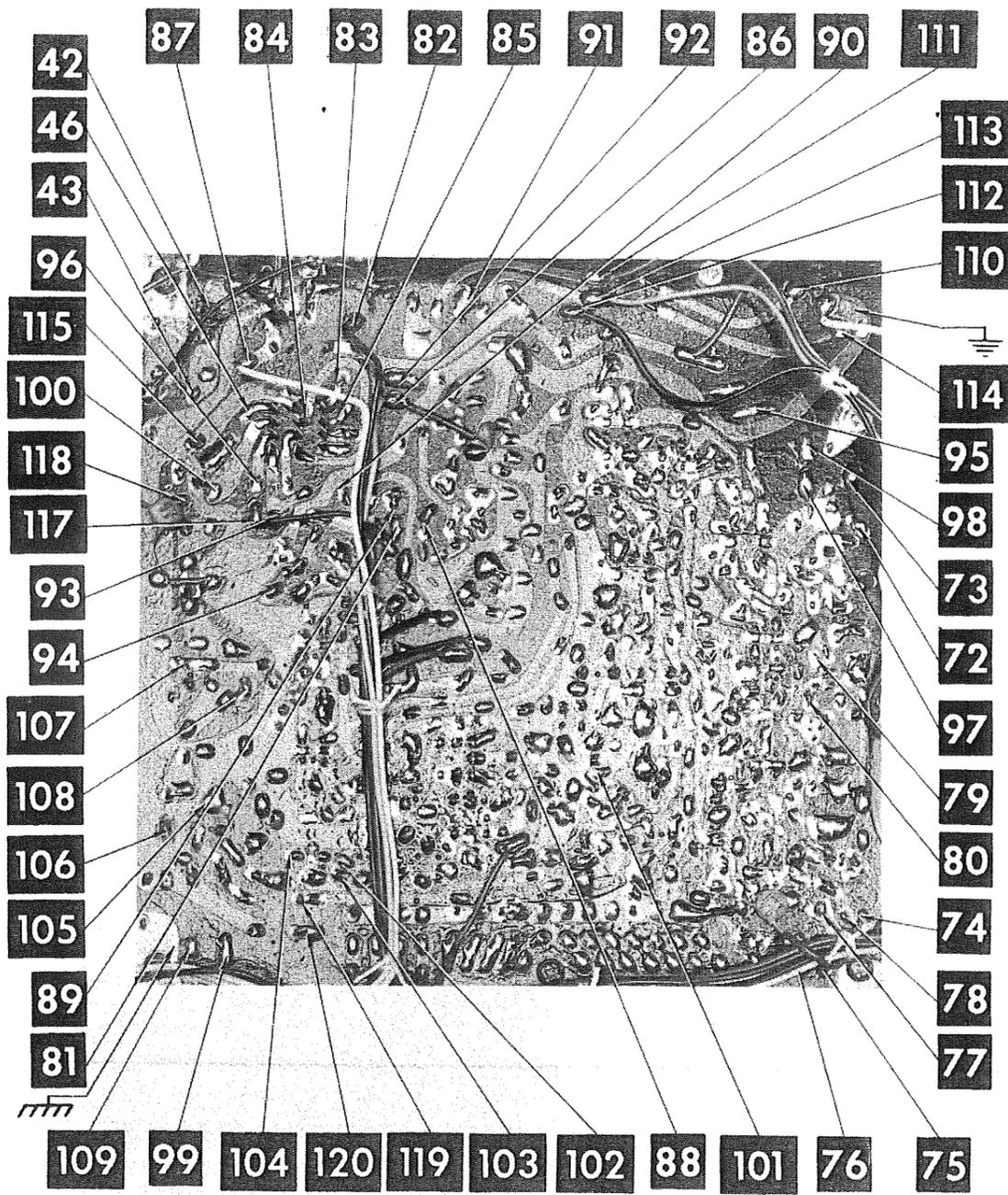
LAFAYETTE MODEL TELESAT 924



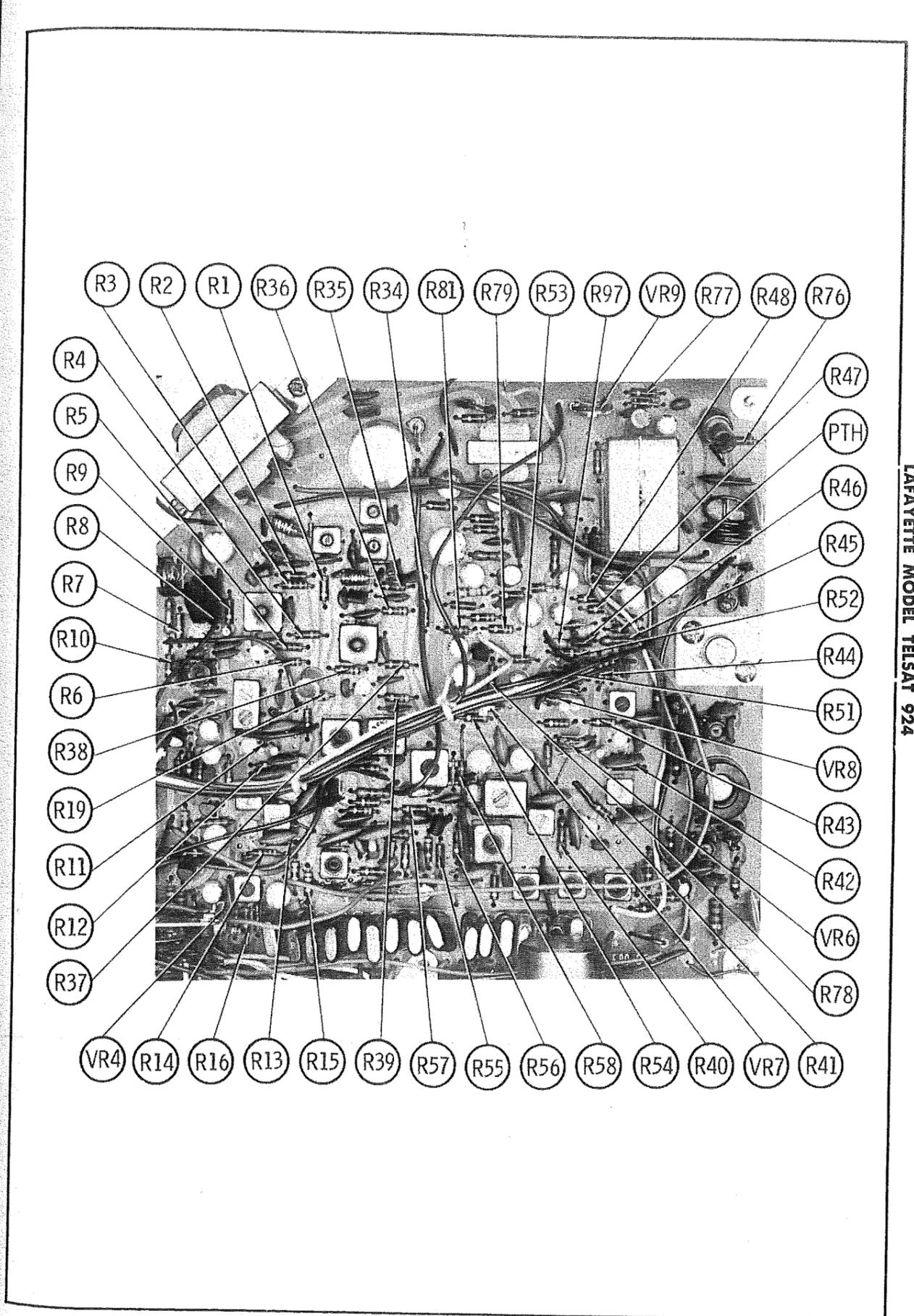
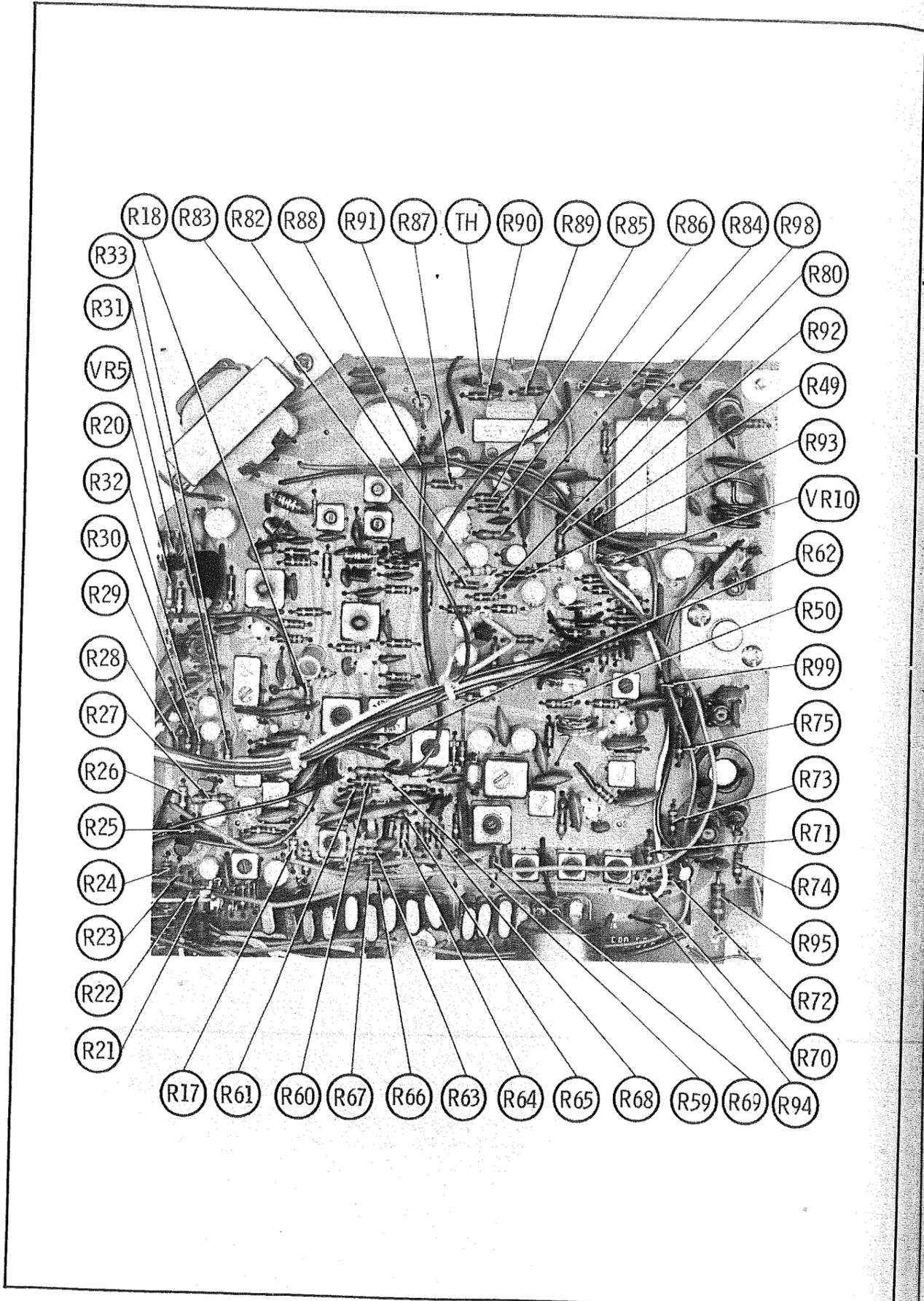
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LAFAYETTE MODEL TELSAT 924



LAFAYETTE MODEL TELSAT 924



LAFAYETTE MODEL TELSAT 924

PARTS LIST AND DESCRIPTION
(When ordering parts, state Model, Part Number, and Description.)

WIRING DATA

General-use Hook-up Wire	Use BELDEN No. 8530 (Solid) Available in 12 Colors 8524 (Stranded) Available in 12 Colors
Shielded Antenna Lead	Use BELDEN No. 8214 Lowest-loss (RG-8/U Type) 8237 Low-loss (RG-8/U) 8240 (Solid) Miniature (RG-58/U) 8259 (Stranded) Miniature (RG-58A/U)
Coiled Microphone Cable	Use BELDEN No. 8497 3-Conductor, 1 Shielded, for Press-to-Talk (Neoprene) 8496 3-Conductor, 1 Shielded, for Press-to-Talk (Vinyl)
Ignition Noise Suppression	Use BELDEN No. 7300-Series Spark-Plug Sets
Bonding Strap	Use BELDEN No. 8661 (3/8 In.)

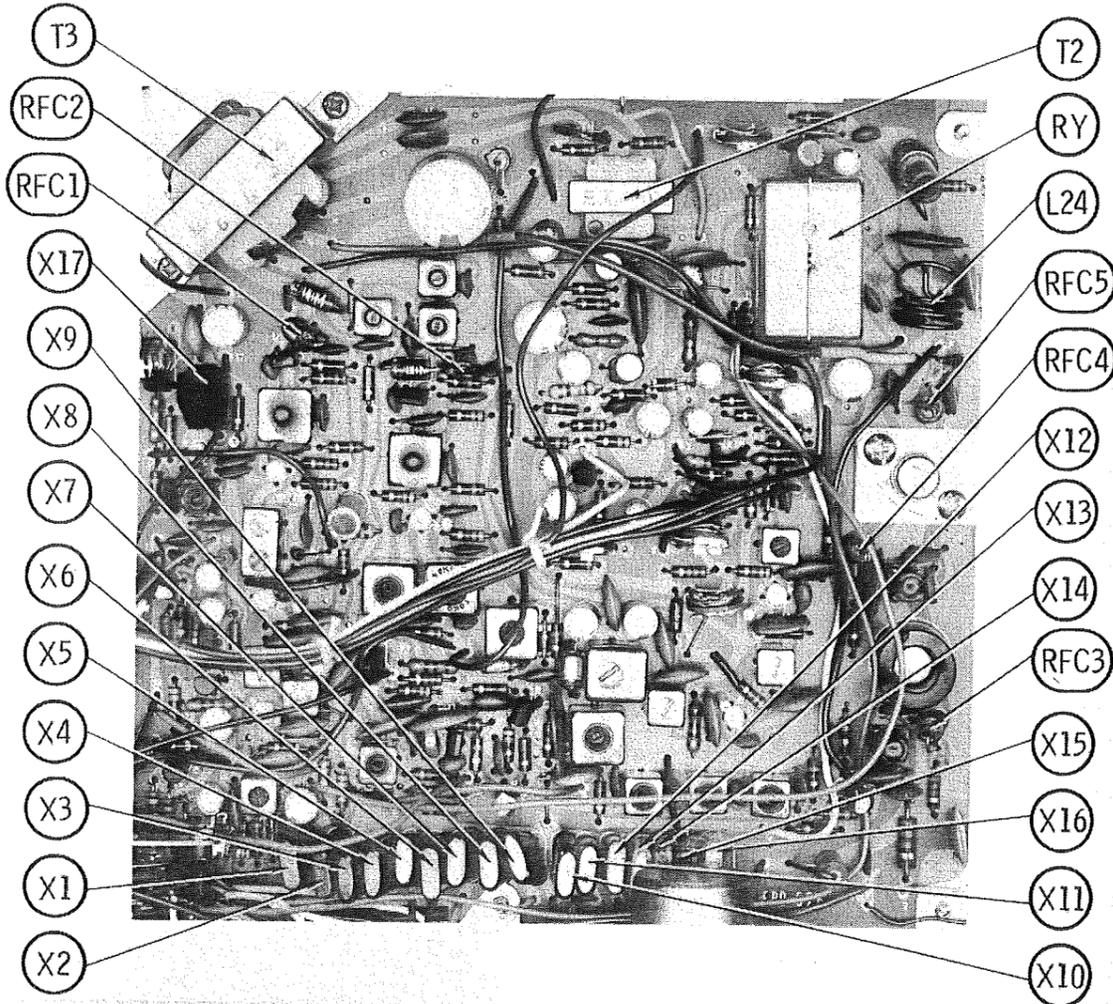
SEMICONDUCTORS

ITEM No.	TYPE / MFG. No. / PART No.	REPLACEMENT DATA						
		GENERAL ELECTRIC PART No.	INTERNATIONAL RECTIFIER PART No.	MALLORY PART No.	MOTOROLA PART No.	RCA PART No.	SPRAGUE PART No.	SYLVANIA PART No.
D1	V06C/1949-17	GE-504A (2)	8D4 (2) or 5A4D (2)	PTC201 (2) or PTC202(2)	HEPRO052 (2)	SK3030 (2) or SK3031 (2)	RT214 (2) or RT215 (2)	ECG 116 (2) or ECG 117 (2)
D2	V06C/1949-17							
D3	1S953/2066-17	GE-504A	8D4 or 5A4D	PTC201 or PTC202	HEPRO052	SK3100	RT213 or RT214	ECG 116 or ECG 117
D4	1N60/1000-17	1N60	1N60	PTC206	HEP135	SK3088		ECG 109
D5	1N60/1000-17	1N60	1N60	PTC206	HEP135	SK3088		ECG 109
D6	RD9A/1794-17 (10)	GEZD-9.1	Z1208	PTC505	HEP2513	SK3060		ECG 139
D7	SD46	1N34AS	1N34A	PTC207	HEP134	SK3087		ECG 109
D8	1S953/2066-17	GE-504A	8D4 or 5A4D	PTC201 or PTC202	HEP156 or HEP157	SK3100	RT213 or RT214	ECG 116 or ECG 117
D9	1N60/1000-17	1N60	1N60	PTC206	HEP135	SK3088		ECG 109
D10	1N60/1000-17	1N60	1N60	PTC206	HEP135	SK3088		ECG 109
D11	1N60/1000-17	1N60	1N60	PTC206	HEP135	SK3088		ECG 109
D12	1N60/1000-17	1N60	1N60	PTC206	HEP135	SK3088		ECG 109
D13	1N60/1000-17	1N60	1N60	PTC206	HEP135	SK3088		ECG 109
D14	RD9A/1794-17 (10)	GEZD-9.1	Z1208	PTC505	HEP2513	SK3060		ECG 139
D15	1N60/1000-17	1N60	1N60	PTC206	HEP135	SK3088		ECG 109
D16	1N60/1000-17	1N60	1N60	PTC206	HEP135	SK3088		ECG 109
TR1	2SC460/1373-17	GE-20	TR-21	PTC121	HEP53	SK3018	RT108	ECG 107
TR2	2SC184/1634-17	GE-20	TR-21	PTC132	HEP56	SK3018	RT113	ECG 108
TR3	2SC183/1210-17	GE-20	TR-21	PTC132	HEP56	SK3018	RT113	ECG 108
TR4	2SC183/1210-17	GE-20	TR-21	PTC132	HEP56	SK3018	RT113	ECG 108
TR5	2SC183/1210-17	GE-20	TR-21	PTC132	HEP56	SK3018	RT113	ECG 108
TR6	2SC945/2063-17	GE-20	TR-21	PTC121	HEP728	SK3018	RT102	ECG 123A
TR7	2SC945/2063-17	GE-20	TR-21	PTC121	HEP728	SK3018	RT102	ECG 123A
TR8	2SC945/2063-17	GE-20	TR-21	PTC121	HEP728	SK3018	RT102	ECG 123A
TR9	2SA564/1935-17	GE-21	TR-19	PTC127	HEP57	SK3114	RT115	ECG 159
TR10	2SC460A/1373-17	GE-20	TR-21	PTC121	HEP53	SK3018	RT108	ECG 107
TR11	2SC184/1634-17	GE-20	TR-21	PTC132	HEP56	SK3018	RT113	ECG 108
TR12	2SC460/1373-17	GE-20	TR-21	PTC121	HEP53	SK3018	RT108	ECG 107
TR13	2SC183/1210-17	GE-20	TR-21	PTC132	HEP56	SK3018	RT113	ECG 108
TR14	2SC183/1210-17	GE-20	TR-21	PTC132	HEP56	SK3018	RT113	ECG 108
TR15	2SC460/1373-17	GE-20	TR-21	PTC121	HEP53	SK3018	RT108	ECG 107
TR16	2SC460/1373-17	GE-20	TR-21	PTC121	HEP53	SK3018	RT108	ECG 107
TR17	GE-20	GE-20	TR-25	PTC121	HEP53	SK3018	RT108	ECG 107
TR18	2SC815/1879-17	GE-20	TR-25	PTC123	HEP736	SK3018	RT102	ECG 123A
TR19	SK3047 (2SC781)/1916-17	GE-18	IRTR-64	PTC125	HEP736	SK3018	RT102	ECG 123A
TR20	2SCF-8/1068-17					SK3049	RT114	ECG 128
TR21	2SC945/2063-17	GE-20	TR-21	PTC121	HEP728	SK3049	RT102	ECG 123A
TR22	2SD77/1906-17	GE-8	TR-08	PTC108	HEP641	SK3010	RT122	ECG 103A
TR23	2SB77/1060-17	GE-2	TR-05	PTC102	HEP632	SK3004	RT121	ECG 102A
TR24	2SB337/1559-17	GE-17 (7)	TR-01 (7)	PTC105 (7)	HEP232 (7)	SK3009 (7)	RT107 (7)	ECG 121MP (6)
TR25	2SB337/1559-17	GE-17 (7)	TR-01 (7)	PTC105 (7)	HEP232 (7)	SK3009 (7)	RT107 (7)	ECG 121MP (6)

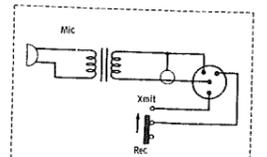
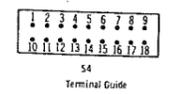
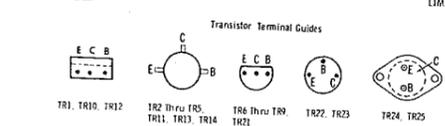
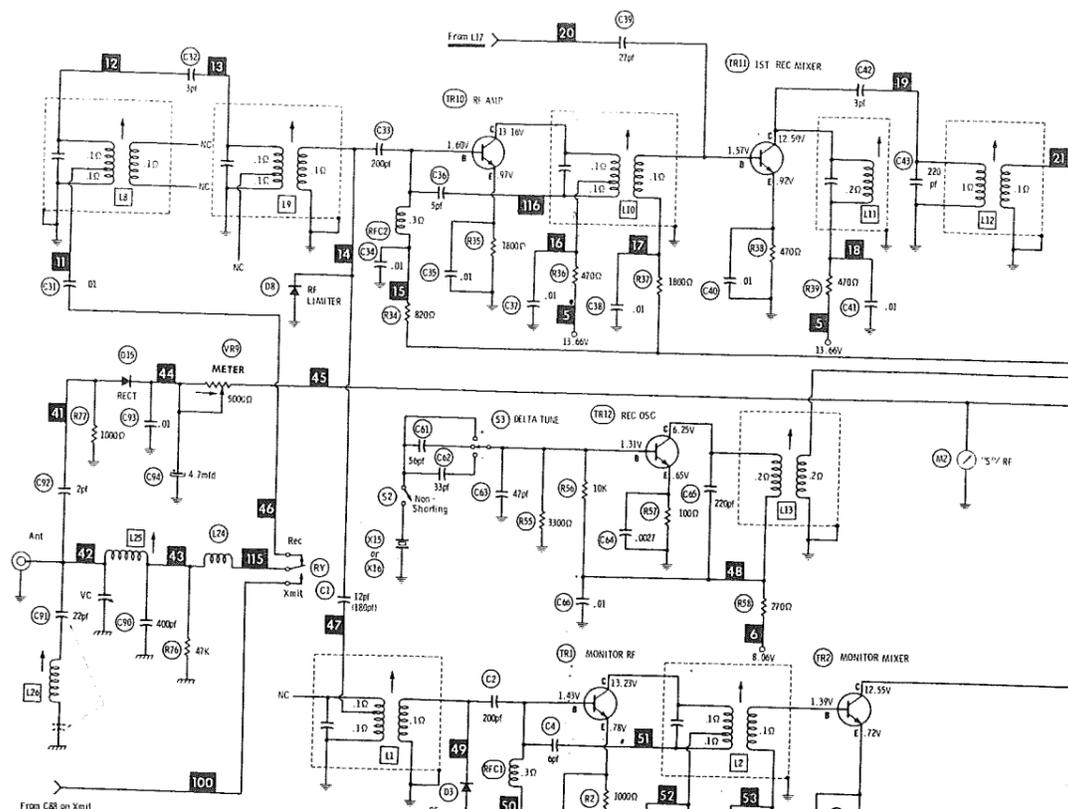
(10) Zener. (6) Matched Pair. (2) Two Required.
(7) Two required - select matched pair.

(CONTINUED ON PAGE 58)

LAFAYETTE MODEL TELSAT 924

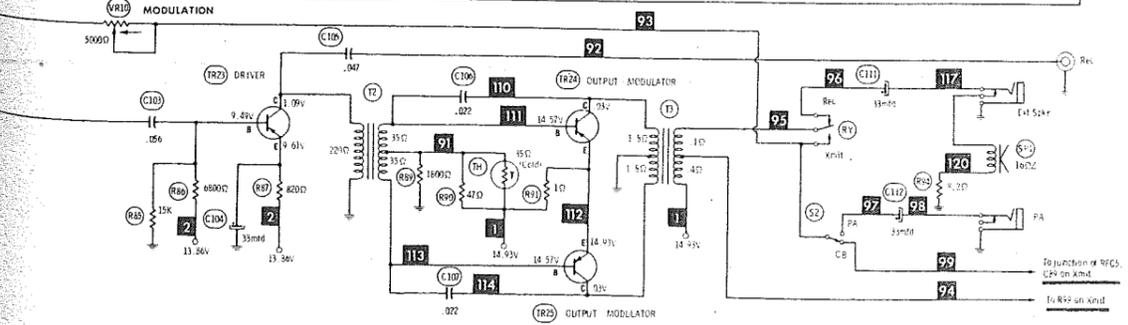
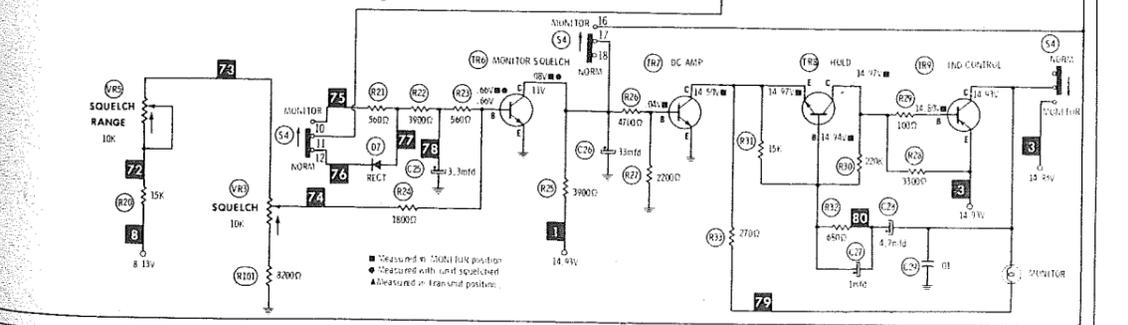
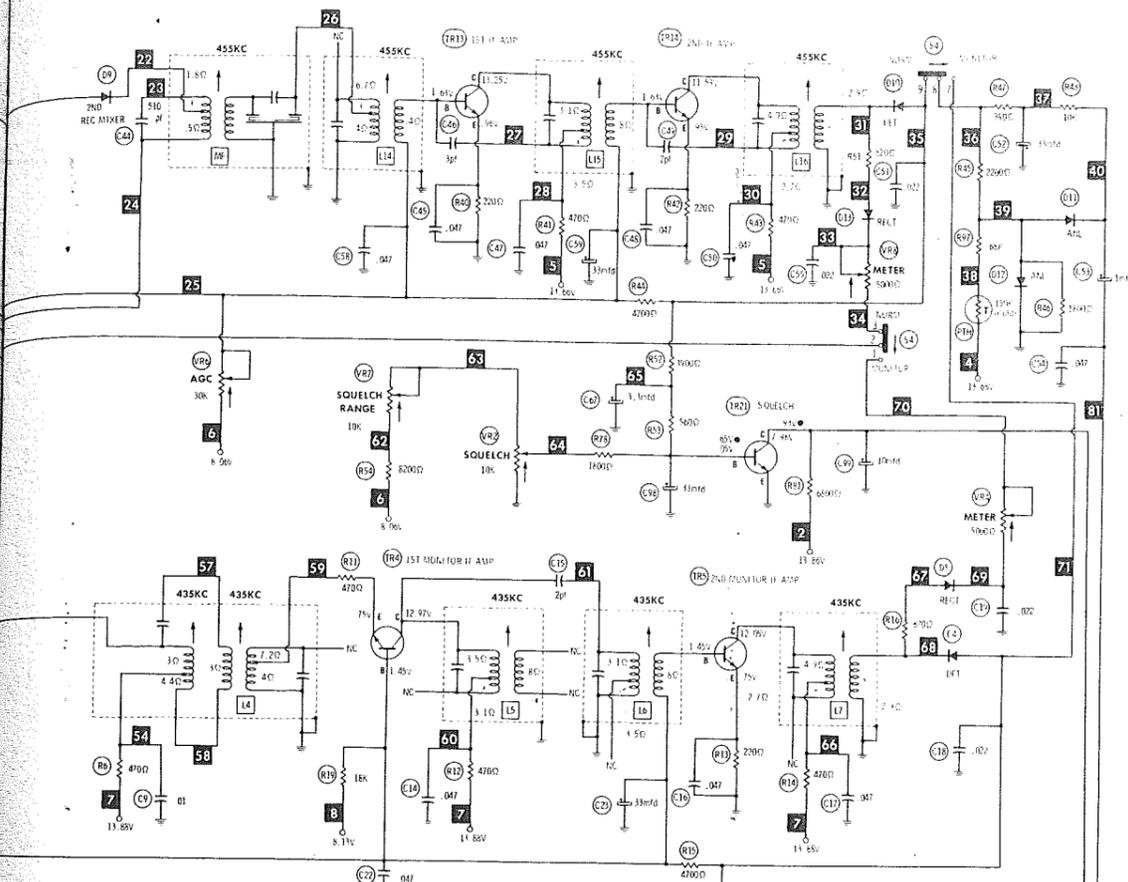


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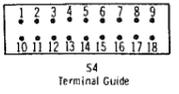
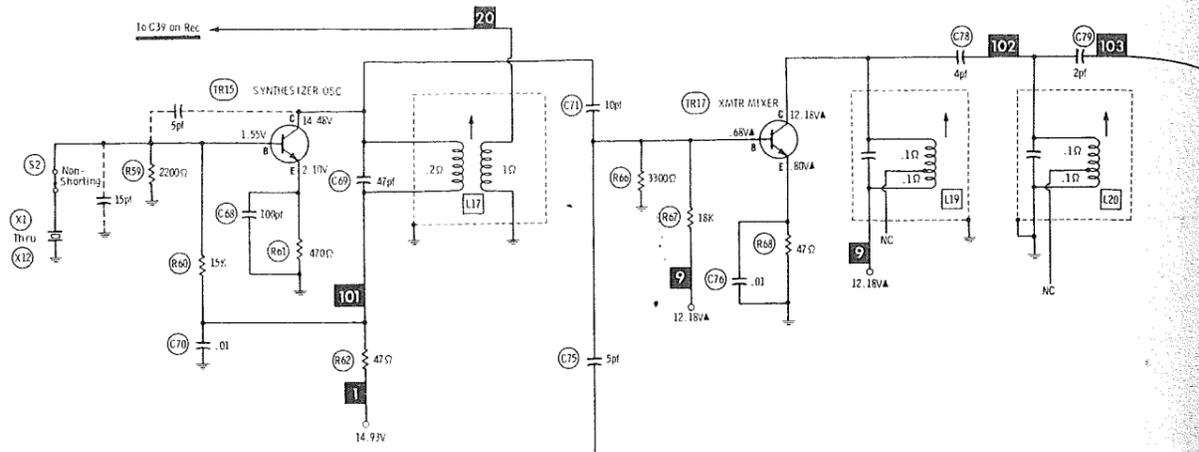


★ Value varies; replace with original value.
 ▲ Measured in "Transmit" position.
 □ Denotes chassis ground.
 ○ Denotes ground. Voltage reference unless otherwise indicated.
 --- Indicates connection used in some versions.
 * Indicates connection not used in some versions.
 ○ Omitted in some versions.
 □ See parts list.
 Measurements taken with switching in position shown unless otherwise indicated.
 Values shown in () are used in some applications.
 Resistors are 1/2W or less, 10% or 20%, unless otherwise indicated.
 Supply voltage maintained at rated value for measurement.
 Voltage and resistance measured with VTVM or equivalent meter, no signal applied and controls adjusted for normal operation.
 Arrow on control indicates direction of advance.
 Numbers assigned to terminals may not be found on the unit.
 Transistor resistances vary widely. No resistance measurements taken.

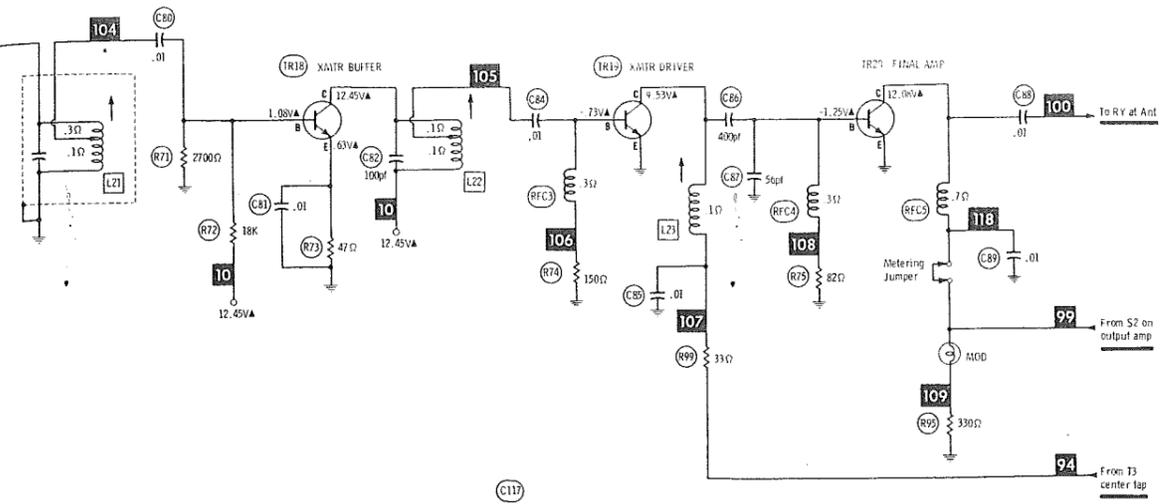
A PHOTOFAC STANDARD NOTATION SCHEMATIC with CIRCUITRACE
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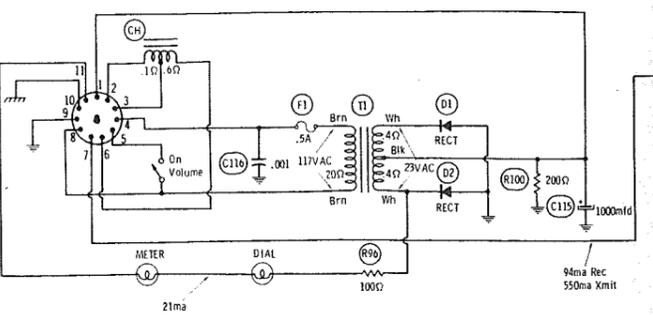
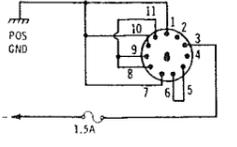
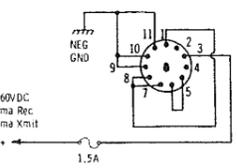
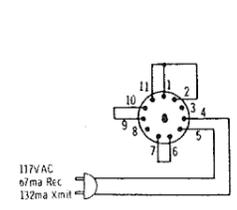


Chan	Crystal Complement						
1	X14, X16, X1	7	X13, X15, X3	13	X13, X15, X5	19	X14, X16, X11
2	X14, X16, X2	8	X13, X15, X4	14	X13, X15, X6	20	X14, X16, X12
3	X14, X16, X3	9	X14, X16, X5	15	X13, X15, X7	21	X13, X15, X9
4	X14, X16, X4	10	X14, X16, X6	16	X13, X15, X8	22	X13, X15, X10
5	X13, X15, X1	11	X14, X16, X7	17	X14, X16, X9		PA
6	X13, X15, X2	12	X14, X16, X8	18	X14, X16, X10	23	X3, X15, X12



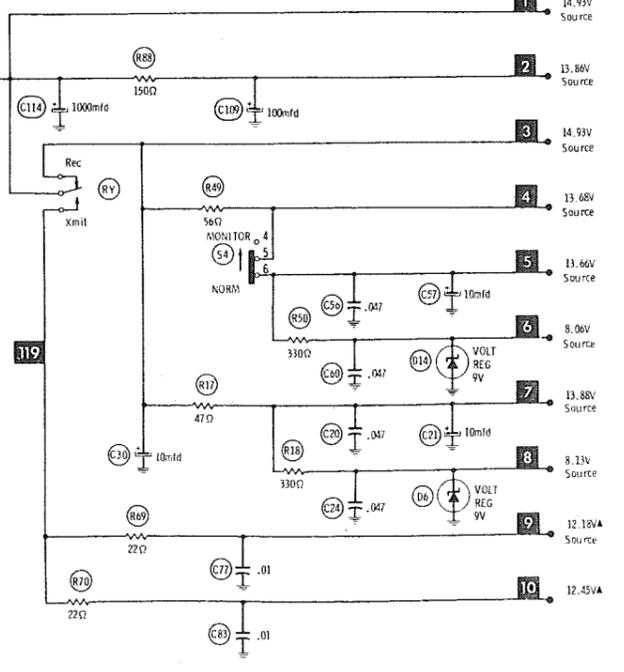
■ Measured in MONITOR position.
● Measured with unit squelched.
▲ Measured in TRANSMIT position.

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★ Value varies; replace with original value.
▲ Measured in "Transmit" position.
■ Denotes chassis.
⊕ Denotes ground. (Voltage reference unless otherwise indicated).
— Indicates connection used in some versions.
- - - Indicates connection not used in some versions.
* Omitted in some versions.
⊙ See parts list.
Measurements taken with switching in position shown unless otherwise indicated.
Values shown in μ are used in some applications.
Resistors are 1/2W or less, 10% or 20%, unless otherwise indicated.
Supply voltage maintained at rated value for measurements.
Voltage and resistance measured with VTVM or equivalent meter, no signal applied and controls adjusted for normal operation.
Arrow on control indicates direction of advance.
Numbers assigned to terminals may not be found on the unit.
Transistor resistances vary widely. No resistance measurements taken.

A PHOTOFACT STANDARD NOTATION SCHEMATIC
with CIRCUITRACER
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LAFAYETTE MODEL TELSAT 924

LAFAYETTE MODEL TELSAT 924

PARTS LIST AND DESCRIPTION (CONTINUED)

(When ordering parts, state Model, Part Number, and Description.)

ELECTROLYTIC CAPACITORS

ITEM No.	RATING	REPLACEMENT DATA						
		MFGR. PART No.	ARCO PART No.	CENTRALAB PART No.	CORNELL-DUBILIER PART No.	GENERAL ELECTRIC PART No.	MALLORY PART No.	SPRAGUE PART No.
C21	10 16V		RME-B-E-010	EP15-10	WBR10-25	MT1-5	MTV10CB50	EV-1222
C23	33 10V		ME-3-D-035	EP15-25	WBR35-50	MT1-13.5	MTV30CB25	EV-1125
C25	3.3 25V	3191-12	RME-A-H-003	EP30-5	WBR5-50	MT1-3	MTV3CB50	EV-1618
C26	33 10V		ME-3-D-035	EP15-25	WBR35-50	MT1-13.5	MTV30CB25	EV-1125
C27	1 50V		RME-A-J-001	EP50-2	WBR1-50	MT1-1	MTV1CB50	EV-1615
	1 25V	3084-12	RME-A-G-001	EP30-2	WBR1-50	MT1-1	MTV1CB50	EV-1315
C28	4.7 25V		RME-A-E-005	EP30-5	WBR5-50	MT1-3	MTV5CB50	EV-1319
	4.7 16V	2990-12	RME-A-E-005	EP30-5	WBR5-50	MT1-3	MTV5CB50	EV-1319
C30	10 16V	3102-12	RME-B-E-010	EP15-10	WBR10-25	MT1-5	MTV10CB50	EV-1222
C52	33 10V		ME-3-D-035	EP15-25	WBR35-50	MT1-13.5	MTV30CB25	EV-1125
C53	1 50V		RME-A-J-001	EP50-2	WBR1-50	MT1-1	MTV1CB50	EV-1615
	1 25V	3084-12	RME-A-G-001	EP30-2	WBR1-50	MT1-1	MTV1CB50	EV-1315
C57	10 16V		RME-B-E-010	EP15-10	WBR10-25	MT1-5	MTV10CB50	EV-1222
C59	33 10V		ME-3-D-035	EP15-25	WBR35-50	MT1-13.5	MTV30CB25	EV-1125
C67	3.3 25V	3191-12	RME-A-H-003	EP30-5	WBR5-50	MT1-3	MTV3CB50	EV-1618
C94	4.7 25V		RME-A-E-005	EP30-5	WBR5-50	MT1-3	MTV5CB50	EV-1319
	4.7 16V	2990-12	RME-A-E-005	EP30-5	WBR5-50	MT1-3	MTV5CB50	EV-1319
C97	1 50V		RME-A-J-001	EP50-2	WBR1-50	MT1-1	MTV1CB50	EV-1615
	1 25V	3084-12	RME-A-G-001	EP30-2	WBR1-50	MT1-1	MTV1CB50	EV-1315
C98	33 10V		ME-3-D-035	EP15-25	WBR35-50	MT1-13.5	MTV30CB25	EV-1125
C99	10 10V	3102-12	RME-A-D-010	EP15-10	WBR10-25	MT1-5	MTV10CB50	EV-1222
C101	33 10V		ME-3-D-035	EP15-25	WBR35-50	MT1-13.5	MTV30CB25	EV-1125
C104	33 10V		ME-3-D-035	EP15-25	WBR35-50	MT1-13.5	MTV30CB25	EV-1125
C108	1 50V		RME-A-J-001	EP50-2	WBR1-50	MT1-1	MTV1CB50	EV-1615
	1 25V	3084-12	RME-A-G-001	EP30-2	WBR1-50	MT1-1	MTV1CB50	EV-1315
C109	100 16V		RME-E-E-100	EP15-100	WBR100-16	MT1-19	MTV100CD15	EV-1230
C110	33 10V		ME-3-D-035	EP15-25	WBR35-50	MT1-13.5	MTV30CB25	EV-1125
C111	33 16V		ME-3-E-035	EP15-25	WBR35-50	MT1-13.5	MTV30CB25	EV-1325
C112	33 16V		ME-3-E-035	EP15-25	WBR35-50	MT1-13.5	MTV30CB25	EV-1325
C113	3.3 25	3191-12	RME-A-H-003	EP30-5	WBR5-50	MT1-3	MTV30CB25	EV-1618
C114	1000 16V	3055-12	RME-N-E-1000	EA15-1000	WBR1000-16	QT1-3	TC1501B	EV-1260
C115	1000 25V	1980-12	RME-P-G-1000	EA30-1000	WBR1000-25	QT1-32	MTA1000G25	EV-1360

CAPACITORS

ITEM No.	RATING	MFGR. PART No.	REPLACEMENT DATA				
			ARCO/ELMENCO PART No.	CENTRALAB PART No.	CORNELL-DUBILIER PART No.	MALLORY PART No.	SPRAGUE PART No.
C1	12 10%		CCD-120	DD-120	NPO12	GP412	10TS-012
C2	200 10%		DM-19-201J	CPR-200J	CD15FD201J03	SX320	424ME2000J501
C3	.01		CCD-103	CK-103	MGPO1	TA110	TG-S10
C4	.01			DD-060	NPO6		
C5	.01		CCD-103	CK-103	MGPO1	TA110	TG-S10
C6	.01		CCD-103	CK-103	MGPO1	TA110	TG-S10
C7	.001		CCD-103	CK-103	MGPO1	TA110	TG-S10
C8	.01		CCD-103	CK-103	MGPO1	TA110	TG-S10
C9	.01		CCD-103	CK-103	MGPO1	TA110	TG-S10
C10	5				NPO5		10TCC-V50
C11	47 10%		CCD-103	CK-103	MGPO1	TA110	TG-S10
C12	.01		CCD-103	CK-103	MGPO1	TA110	TG-S10
C13	47 10%		CCD-103	CK-103	MGPO1	TA110	TG-S10
C14	.047		CCD-503	CK-503	MGPO5	TA150	TG-S50
C15	2			DTZ-2R2	NPO2P2	CN0522	10TCC-V22
C16	.047		CCD-503	CK-503	MGPO5	TA150	TG-S50
C17	.047		CCD-503	CK-503	MGPO5	TA150	TG-S50
C18	.022		CCD-203	CK-203	MGPO2	TA120	TG-S20
C19	.022		CCD-203	CK-203	MGPO2	TA120	TG-S20
C20	.047		CCD-503	CK-503	MGPO5	TA150	TG-S50
C22	.047		CCD-503	CK-503	MGPO5	TA150	TG-S50
C24	.047		CCD-503	CK-503	MGPO5	TA150	TG-S50
C29	.01		CCD-103	CK-103	MGPO1	TA110	TG-S10
C31	.01		CCD-103	CK-103	MGPO1	TA110	TG-S10
C32	3						10TCC-V30
C33	200		DM-19-201J	CPR-200J	CD15FD201J03	SX320	424ME2000J501

PARTS LIST AND DESCRIPTION (CONTINUED)

(When ordering parts, state Model, Part Number, and Description.)

CAPACITORS (cont)

ITEM No.	RATING	MFGR. PART No.	REPLACEMENT DATA				
			ARCO/ELMENCO PART No.	CENTRALAB PART No.	CORNELL-DUBILIER PART No.	MALLORY PART No.	SPRAGUE PART No.
C34	.01		CCD-103	CK-103	MGPO1	TA110	TG-S10
C35	.01		CCD-103	CK-103	MGPO1	TA110	TG-S10
C36	5				NPO5		10TCC-V50
C37	.01		CCD-103	CK-103	MGPO1	TA110	TG-S10
C38	.01		CCD-103	CK-103	MGPO1	TA110	TG-S10
C39	27		CCD-103	CK-103	MGPO1	TA110	TG-S10
C40	.01		CCT0-270		NPO27	CN0427	10TCC-Q27
C41	.01		CCD-103	CK-103	MGPO1	TA110	TG-S10
C42	3		CCD-103	CK-103	MGPO1	TA110	TG-S10
C43	220						10TCC-V30
C44	510		DM-19-221J	CPR-220J	CD15FD221J03	SX322	424ME2200J501
C45	.047		DM-19-511J	CPR-510J	CD15FD11J03	SX351	424ME5100J501
C46	3		CCD-503	CK-503	MGPO5	TA150	TG-S50
C47	.047						10TCC-V30
C48	.047		CCD-503	CK-503	MGPO5	TA150	TG-S50
C49			CCD-503	CK-503	MGPO5	TA150	TG-S50
C50	.047			DTZ-2R2	NPO2P2	CN0522	10TCC-V22
C51	.022		CCD-503	CK-503	MGPO5	TA150	TG-S50
C54	.047		CCD-203	CK-203	MGPO2	TA120	TG-S20
C55	.022		CCD-503	CK-503	MGPO5	TA150	TG-S50
C56	.047		CCD-203	CK-203	MGPO2	TA120	TG-S20
C58	.047		CCD-503	CK-503	MGPO5	TA150	TG-S50
C60	.047	25V	CCD-503	CK-503	MGPO5	TA150	TG-S50
C61	56		CCD-560	CK-560	MGPO5	TA150	TG-S50
C62	33		DD-560				GP456
C63	47	10%	CCT0-330	DTZ-33	NPO33	CN0433	10TCC-Q33
C64	.0027	10%	CCT0-470	DTZ-47	NPO47	CN0447	10TCC-Q47
C65	220	10%	CCD-272	DD-272			10TS-D27
C66	.01	50V	CCD-221	DD-221			10TS-T22
C68	100	10%	CCD-103	CK-103	MGPO1	TA110	TG-S10
C69	47	10%	CCD-101	DTZ-100	NPO100	CN0310	10TCC-T10
C70	.01		CCT0-470	DTZ-47	NPO47	CN0447	10TCC-Q47
C71	10		CCD-103	CK-103	MGPO1	TA110	TG-S10
C72	2		CCD-101	DTZ-10	NPO10	CN0410	10TCC-Q10
C73	100	10%	CCD-101	DTZ-100	NPO100	CN0522	10TCC-V22
C74	150	10%	CCD-151	DTZ-150	NPO150	CN0310	10TCC-T10
C75	5			DD-151	GP150	GP315	10TS-T15
C76	.01		CCD-103	CK-103	MGPO1	TA110	10TCC-V50
C77	.01		CCD-103	CK-103	MGPO1	TA110	TG-S10
C78	4						TG-S10
C79	2				NPO3P9		10TCC-V39
C80	.01		CCD-103	CK-103	MGPO1	TA110	10TCC-V22
C81	.01		CCD-103	CK-103	MGPO1	TA110	TG-S10
C82	100	10%	CCT0-101	DTZ-100	NPO100	CN0310	TG-S10
C83	.01		CCD-103	CK-103	MGPO1	TA110	10TCC-T10
C84	.01		CCD-103	CK-103	MGPO1	TA110	TG-S10
C85	.01		CCD-103	CK-103	MGPO1	TA110	TG-S10
C86	400	10%	CCD-103	CK-103	MGPO1	TA110	TG-S10
C87	56	10%	CCD-401	DD-401			TG-S10
C88	.01						CN0456
C89	.01		CCD-103	CK-103	MGPO1	TA110	10TCC-Q56
C90	400	10%	CCD-103	CK-103	MGPO1	TA110	TG-S10
C91	22		CCD-401	DD-401			TG-S10
C92	2		CCD-220	DD-220			GP340
C93	.01			DTZ-2R2	NPO2P2	CN0522	10TS-Q22
C95	.047		CCD-103	CK-103	MGPO1	TA110	10TCC-V22
C96	.01		CCD-503	CK-503	MGPO5	TA150	TG-S10
C100	.001		CCD-103	CK-103	MGPO1	TA110	TG-S10
C102	.01		CCD-102	CK-103	MGPO1	TA110	TG-S10
C103	.056		CCD-103	DM-102	GP1000	SM210	2SS-D10
C105	.047		CCD-103	CK-103	MGPO1	TA110	TG-S10
C106	.022		10P-2-563				TA110
C107	.022		CCD-503	CK-503	MGPO5	TA150	225P56391WD3
C116	.001	150VAC	CCD-203	CK-203	MGPO2	TA120	TG-S20
C117	.01		CCD-203	CK-203	MGPO2	TA120	TG-S20
C118	.047		CCD-103	CK-103	MGPO1	TA110	125L-D10
C119	.047		CCD-503	CK-503	MGPO5	TA150	TG-S10
C120	.047		CCD-503	CK-503	MGPO5	TA150	TG-S50
C121	.01		CCD-103	CK-103	MGPO1	TA150	TG-S50
C122	.01		CCD-103	CK-103	MGPO1	TA110	TG-S10
C123	.001		CCD-102	DM-102	GP1000	SM210	TG-S10
VC		3291-12					2SS-D10

LAFAYETTE MODEL TELSAT 924

PARTS LIST AND DESCRIPTION (CONTINUED)

(When ordering parts, state Model, Part Number, and Description.)

CONTROLS (All wattages 1/2 watt, or less, unless listed)

ITEM No.	FUNCTION	RESISTANCE	REPLACEMENT DATA				
			MFGR. PART No.	CENTRALAB PART No.	CLAROSTAT PART No.	CTS-IRC PART No.	MALLORY PART No.
VR1	Volume/Switch	10K	1601-11 (ERV-14)	F2-10K (1), SSK010, KR-1	A47-10K-Z (1), KSS-3, SWE-12 or [NP-10K-Z (1), UP-C-400, NWE-12]	Q13-116 (1), 76-1 or [BU1 (1), CF61, SST, GC]*	RUI14A, SL36, SL1500, US41 or [UA14A (1), SK750, US41] or [U18 (1), US26]
VR3	Squelch - (Monitor)	10K	1602-11 (ERV-38)				
VR2	Squelch - (Normal)	10K					
VR4	Meter Adjust	5000		TSV-5K (2) or [T-5000 (2)]	C-502 (2)	X201R502B (2)	MTC53L1 (2)
VR5	Squelch Range	10K		TSV-10K (2) or [T-10K (2)]	C-103 (2)	X201R103B (2)	MTC14L1 (2)
VR6	AGC	30K		TSV-50K (2) or [T-50K (2)]	C-503 (2)	X201R503B (2)	MTC54L1 (2)
VR7	Squelch Range	10K		TSV-10K (2) or [T-10K (2)]	C-103 (2)	X201R103B (2)	MTC14L1 (2)
VR8	Meter Adjust	5000		TSV-5K (2) or [T-5000 (2)]	C-502 (2)	X201R502B (2)	MTC53L1 (2)
VR9	Meter Adjust	5000		TSV-5K (2) or [T-5000 (2)]	C-502 (2)	X201R502B (2)	MTC53L1 (2)
VR10	Modulation	5000		TSV-5K (2) or [T-5000 (2)]	C-502 (2)	X201R502B (2)	MTC53L1 (2)

(1) Enlarge mounting hole. (2) Cut off one of the end terminals and bend to fit "PC" board.

RESISTORS (Power and Special)

ITEM No.	RATING	REPLACEMENT DATA	
		WORKMAN PART No.	MFGR. PART No.
PTH R100	150K (Cold) 200 2 Watt		2305-13 (EDP-1) 2491-13

ITEM No.	RATING	REPLACEMENT DATA	
		WORKMAN PART No.	MFGR. PART No.
TH	35 (Cold)		2035-17 (14D47)

COILS (RF-IF)

ITEM No.	USE	REPLACEMENT DATA			
		PART No.	MEISSNER PART No.	MILLER PART No.	WORKMAN PART No.
L1	Monitor RF Input	2032-23			
L2	Monitor Interstage RF	2229-23			
L3	Monitor Oscillator	2234-23			
L4	Monitor Mixer Output/IF Input	2003-24			
L5	RF Choke	1943-24			
L6	Monitor Interstage IF	1943-24			
L7	Monitor Output IF	1944-24			
L8	Antenna Matching	2032-23			
L9	Input RF	2032-23			
L10	Interstage RF	2229-23			
L11	RF Choke	2002-24			
L12	Input IF	1946-24			
L13	Rec. Oscillator	2230-23			
L14	Interstage IF	1942-24			
L15	Interstage IF	1943-24			
L16	Output IF	1944-24			
L17	Synthesizer Oscillator	2355-23			
L18	XMTR. Oscillator	2356-23			
L20	Bandpass Filter	2354-23			
L21	Bandpass Filter	2353-23			
L22	Buffer Output	2225-23			
L23	Driver Output	2226-23			
L24	RF Choke (4 turns)	2227-23			
L25	Antenna Peaking	2215-23			
L26	TVI Trap				
MF	Input IF	1950-24			
RFC1	RF Choke (2.75uh)			74F276AP	T814
RFC2	RF Choke (2.75uh)			74F276AP	T814
RFC3	RF Choke (2.75uh)			74F276AP	T814
RFC4	RF Choke (2.75uh)			74F276AP	T814
RFC5	RF Choke (.5uh)				

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PARTS LIST AND DESCRIPTION (CONTINUED)

(When ordering parts, state Model, Part Number, and Description.)

FILTER CHOKE

ITEM No.	RATINGS			REPLACEMENT DATA				NOTES
	CURRENT (Measured)	DC RES.	INDUCTANCE (0 CURRENT 1000~)	MFGR. PART No.	STANCOR PART No.	THORDARSON PART No.	TRIAD PART No.	
CH	67ma 132ma (1)	.7 ohm	55mh Tapped @ 43mh & 1mh	1662-15				(1) Transmit

TRANSFORMER (Power)

ITEM No.	RATING		REPLACEMENT DATA				NOTES
	PRI.	SEC. 1	MFGR. PART No.	STANCOR PART No.	THORDARSON PART No.	TRIAD PART No.	
T1	117VAC	23VAC CT	1661-15				

TRANSFORMER (Driver)

ITEM No.	TURNS RATIO			REPLACEMENT DATA				NOTES
	PRI.	SEC. 1	SEC. 2	MFGR. PART No.	STANCOR PART No.	THORDARSON PART No.	TRIAD Part No.	
T2	2	1CT		1596-15				

TRANSFORMER (Audio Output)

ITEM No.	IMPEDANCE		REPLACEMENT DATA				NOTES
	PRI.	SEC.	MFGR. PART No.	STANCOR PART No.	THORDARSON PART No.	TRIAD PART No.	
T3	56CT	16 ohm Tapped @ .4 ohm DC Resistance	1072-15				

SPEAKER

ITEM No.	TYPE	REPLACEMENT DATA		NOTES
		MFGR. PART No.	QUAM PART No.	
SP1	3" x 5" PM 16 ohms	1226-36	35A2CZ16	

LAFAYETTE MODEL TELSAT 924

PARTS LIST AND DESCRIPTION (CONTINUED)

(When ordering parts, state Model, Part Number, and Description.)

FUSE DEVICES

ITEM No.	DESCRIPTION	REPLACEMENT DATA						
		PART No.		BUSS PART No.		LITTELFUSE PART No.		WORKMAN PART No.
		DEVICE	HOLDER	DEVICE	HOLDER	DEVICE	HOLDER	DEVICE
F1	3AG .5 Amp	3827-20	1945-19	AGC 1/2	HKP	312.500	342012A	

MISCELLANEOUS

ITEM No.	PART NAME	PART No.	NOTES
M2	Meter	1160-27	"S"/RF
RY1	Relay	1052-37	Receive-Transmit
S2	Switch		Channel Selector
S3	Switch		Fine Tuning
S4	Switch	1763-14	Normal-Monitor
X1	Crystal	1226-35	38.275MC
X2	Crystal	1227-35	38.285MC
X3	Crystal	1228-35	38.295MC
X4	Crystal	1229-35	38.315MC
X5	Crystal	1230-35	38.375MC
X6	Crystal	1231-35	38.385MC
X7	Crystal	1232-35	38.395MC
X8	Crystal	1233-35	38.415MC
X9	Crystal	1234-35	38.475MC
X10	Crystal	1235-35	38.485MC
X11	Crystal	1236-35	38.495MC
X12	Crystal	1237-35	38.515MC
X13	Crystal	1238-35	11.260MC
X14	Crystal	1239-35	11.310MC
X15	Crystal	1240-35	11.715MC
X16	Crystal	1241-35	11.765MC

CABINETS & CABINET PARTS (When ordering specify model, chassis & color)

ITEM	PART No.	ITEM	PART No.
Knob, Tuning (Channel Selector)	1760-18	Knob, Squelch (Large)	1763-18
Knob, Volume	1761-18	Button, Monitor-Norm	1759-18
Knob, Squelch (Small)	1762-18		

ACCESSORIES

ITEM	MFGR. PART No.	REMARKS
AC Cord	1221-38	
DC Cord	1222-38	
Microphone	1077-34	

Known Models: Lafayette HB-23A, Micro 23, Telsat 150, Telsat 924
 Pearce-Simpson Tiger 23

	Both RX & TX "A"	RX Only "B"	TX Only "C"		Both RX & TX "A"	RX Only "B"	TX Only "C"
Ch. 1 (26.965)	38.275	11.765	11.310	Ch.13 (27.115)	38.375	11.715	11.260
Ch. 2 (26.975)	38.285	"	"	Ch.14 (27.125)	38.385	"	"
Ch. 3 (26.985)	38.295	"	"	Ch.15 (27.135)	38.395	"	"
Ch. 4 (27.005)	38.315	"	"	Ch.16 (27.155)	38.415	"	"
Ch. 5 (27.015)	38.275	11.715	11.260	Ch.17 (27.165)	38.475	11.765	11.310
Ch. 6 (27.025)	38.285	"	"	Ch.18 (27.175)	38.485	"	"
Ch. 7 (27.035)	38.295	"	"	Ch.19 (27.185)	38.495	"	"
Ch. 8 (27.055)	38.315	"	"	Ch.20 (27.205)	38.515	"	"
Ch. 9 (27.065)	38.375	11.765	11.310	Ch.21 (27.215)	38.475	11.715	11.260
Ch.10 (27.075)	38.385	"	"	Ch.22 (27.225)	38.485	"	"
Ch.11 (27.085)	38.395	"	"	Ch.23 (27.255)	38.515	"	"
Ch.12 (27.105)	38.415	"	"				

Synthesis: A" - "C" = direct on-channel TX frequency;
 A" - "B" = RX frequency (offset lower by 455 KHz)

Example: For Ch.1, 38.275 MHz - 11.310 MHz = 26.965 MHz, the on-channel TX frequency. During RX, the 11.765 MHz crystal is used, which is exactly 455 KHz higher than 11.310 MHz. This produces the second IF for the receiver. This particular scheme has no fixed high IF, since it must pass a *band* of frequencies; only the 455 KHz second IF is constant.

Compliments of:

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