

PHOTOFACT[®] with CIRCUITRACE[®]

For Supplier Address See PHOTOFACT Index

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 13-887

ALIGNMENT INSTRUCTIONS

Suggested Alignment Tools:	GC ELECTRONICS
L103, L104, L105, L106, L107.....	5000, 8290
L1.....	.9300
ALL others.....	.9440

MIDLAND MODEL 13-887

RECEIVER

Connect an AC VTVM or AF Wattmeter across speaker voice coil.
Adjustments made with 14-volt DC input.
Adjust volume control to obtain suitable reading.

SIGNAL GENERATOR	GEN FREQ	CHANNEL	ADJUST	REMARKS
High side thru .01uF to Anode of D112, low side to ground.	455kHz, 1000Hz @ 30% modulation.	Any	L105, L106, L107	Set generator output for a .5V reading on AC VTVM. Adjust for maximum.
High side thru .01uF to Antenna Jack, low side to ground.	27.115MHz, 1000Hz @ 30% modulation, output 1uV.	13	L101, L102, L103, L104	Adjust for maximum.

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

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SCY212

RECEIVER ADJUSTMENTS

Connect an AC VTVM or AF Wattmeter across speaker voice coil.
These adjustments made with 14-volt DC input.
Adjust volume control to obtain a suitable reading.

SIGNAL GENERATOR	GEN FREQ	CHANNEL	ADJUST	REMARKS
SQUELCH RANGE High side thru .01uF to Antenna Jack, low side to ground.	27.115Hz, 1000Hz @ 30% modulation, output 5,000uV.	13	RV101	Set squelch control fully clockwise. Adjust so that squelch just breaks.
"S" METER High side thru .01uF to Antenna Jack, low side to ground.	27.115MHz, 1000Hz @ 30% modulation, output 100uV.	13	RV102	Adjust for "S" 9 on Panel Meter.

TRANSMITTER

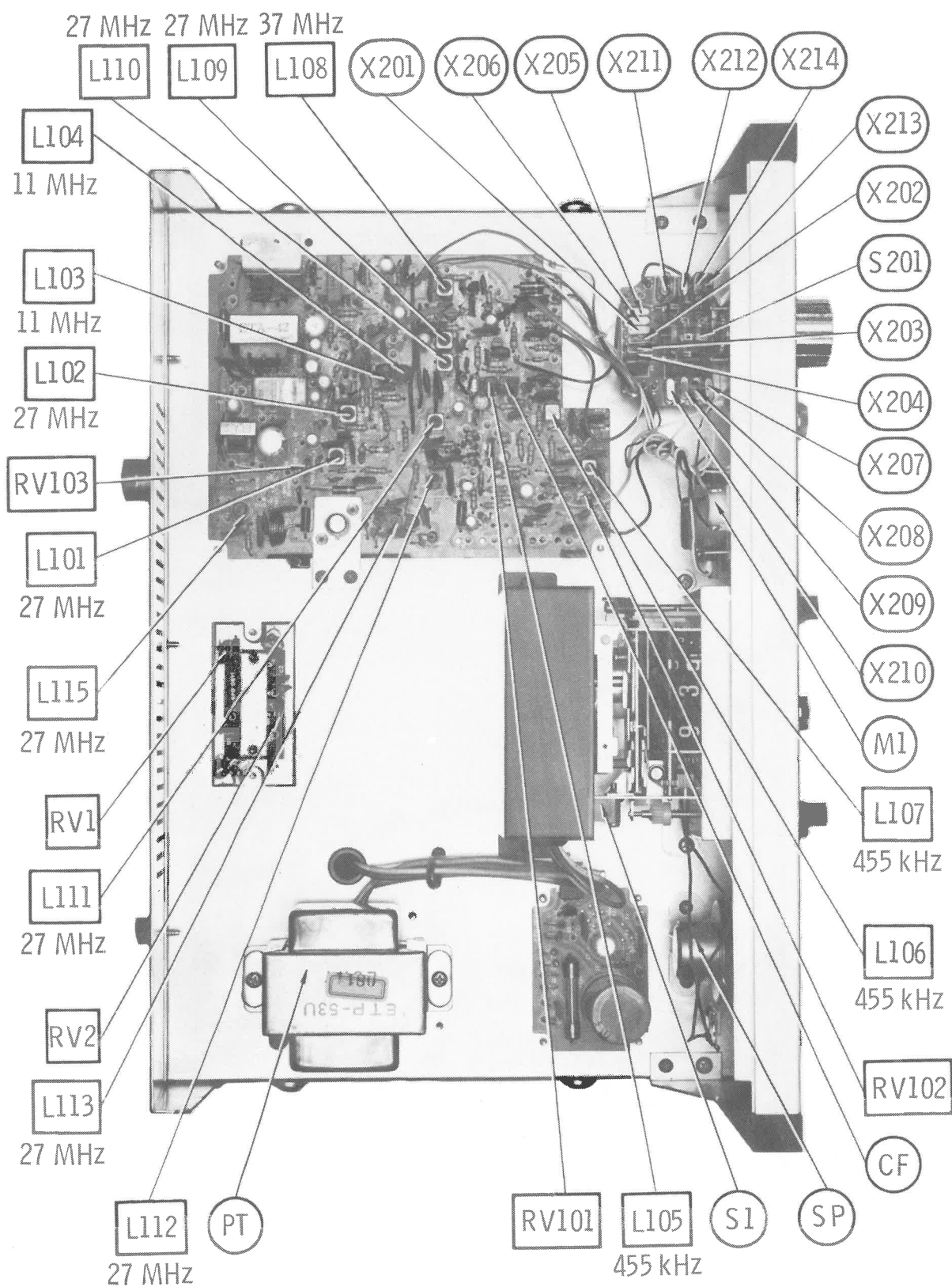
Connect an RF Wattmeter or 50-ohm, 25-watt dummy load to antenna connector.
Adjustments made with 14-volt DC input.

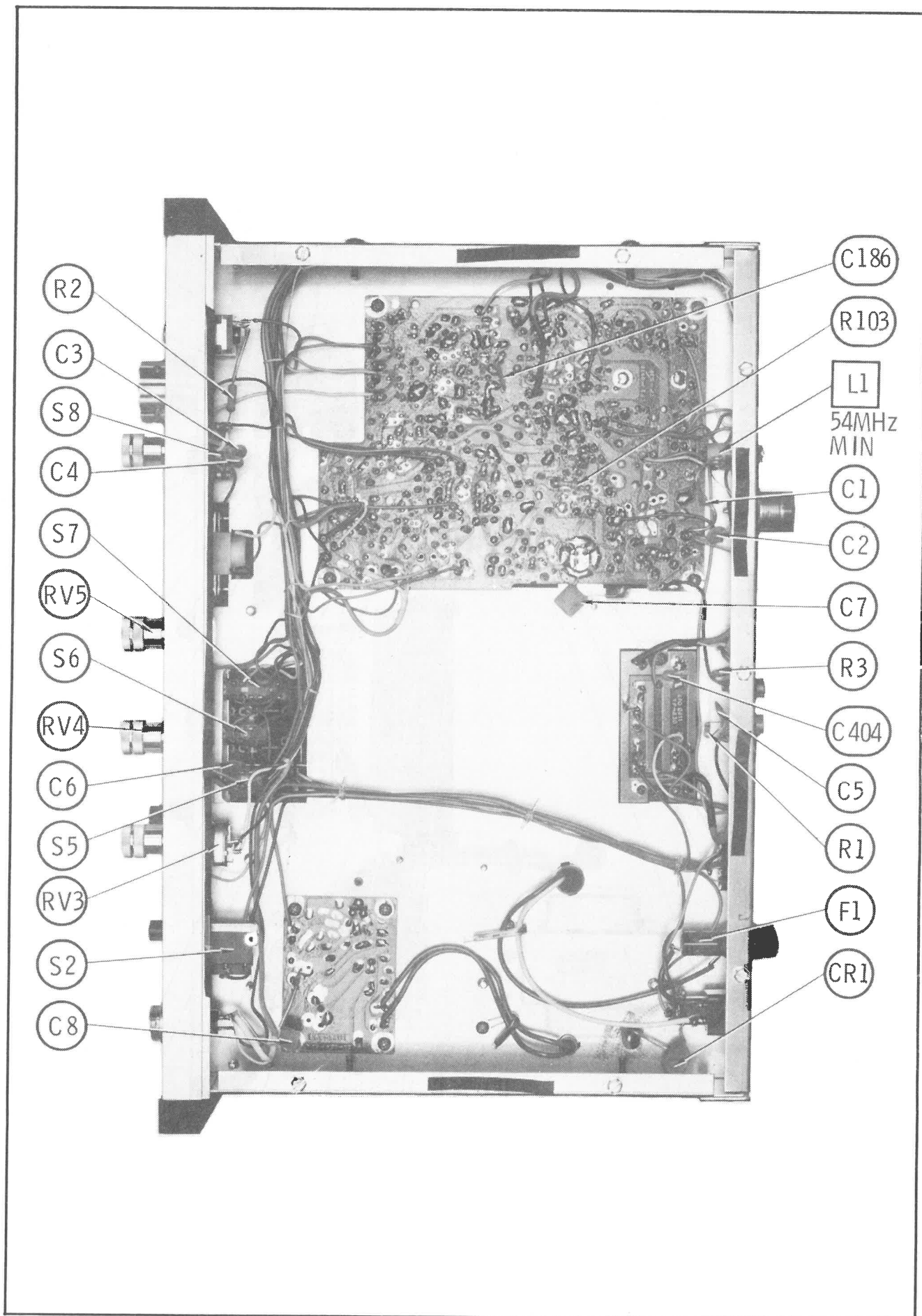
INDICATOR	ADJUST	REMARKS
OSCILLATOR, MIXER, BUFFER, DRIVER, FINAL RF Wattmeter	L108,L109, L110,L111, L112,L113	Channel selector to 13,Key transmitter. Adjust for maximum.
OUTPUT POWER RF Wattmeter	L114,L115	Key transmitter. Adjust for 4 watts output.
TVI TRAP TV (Ch 2)	L1	Key transmitter. Adjust for MINIMUM interference on TV.
FINAL INPUT POWER Remove jumper at TP and connect 0-1A DC milliammeter between RFC104 and R171.	L114	Adjust for 5 watts maximum.

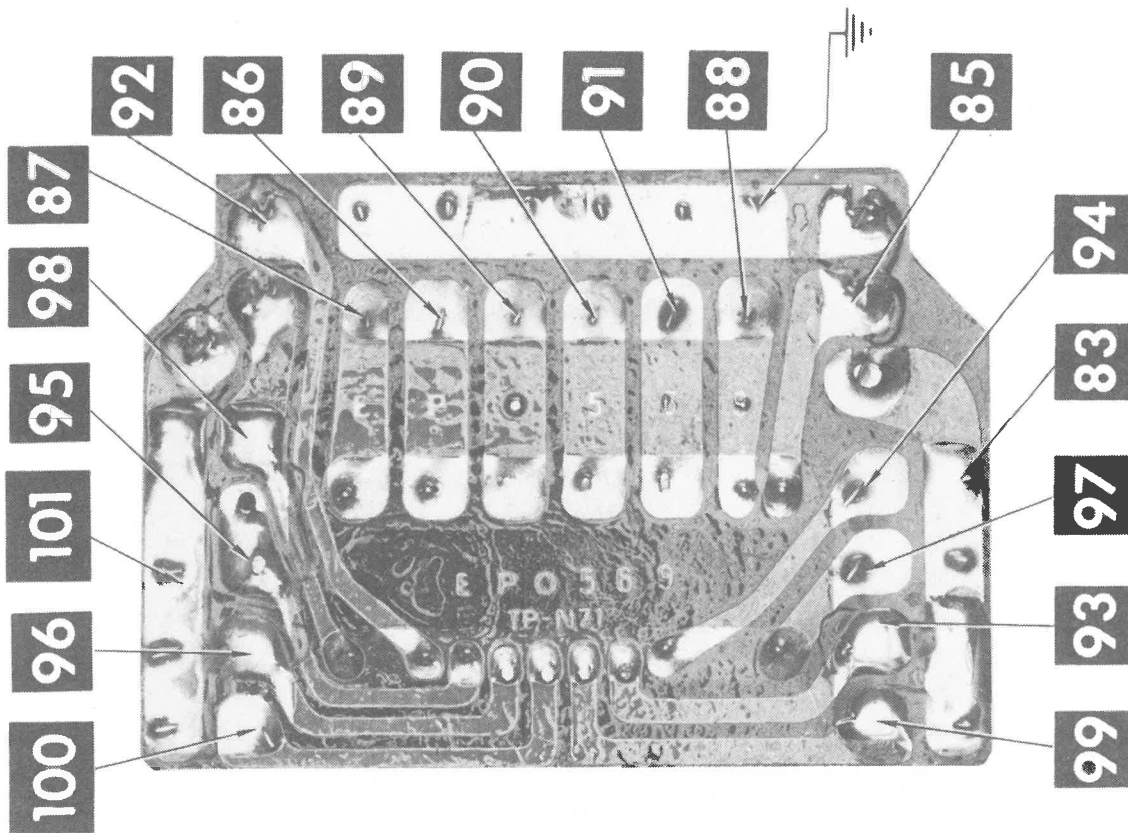
TRANSMITTER ADJUSTMENTS

Connect an RF Wattmeter or 50-ohm, 25-watt dummy load to antenna connector.
Adjustments made with 14-volt DC input.

INDICATOR	ADJUST	REMARKS
RF PANEL METER RF Wattmeter	RV402	Set RV3 fully counterclockwise. Key transmitter. Adjust so that panel RF meter agrees with RF wattmeter.
SWR PANEL METER Internal SWR Meter	RV3, RV401	Connect a 100W non-inductive resistor across Antenna Jack. Set SWR/CAL switch to CAL. Key Transmitter. Adjust RV3 to set meter to SET. Set SWR/CAL switch to SWR. Adjust RV401 for meter reading of "2" on SWR meter.



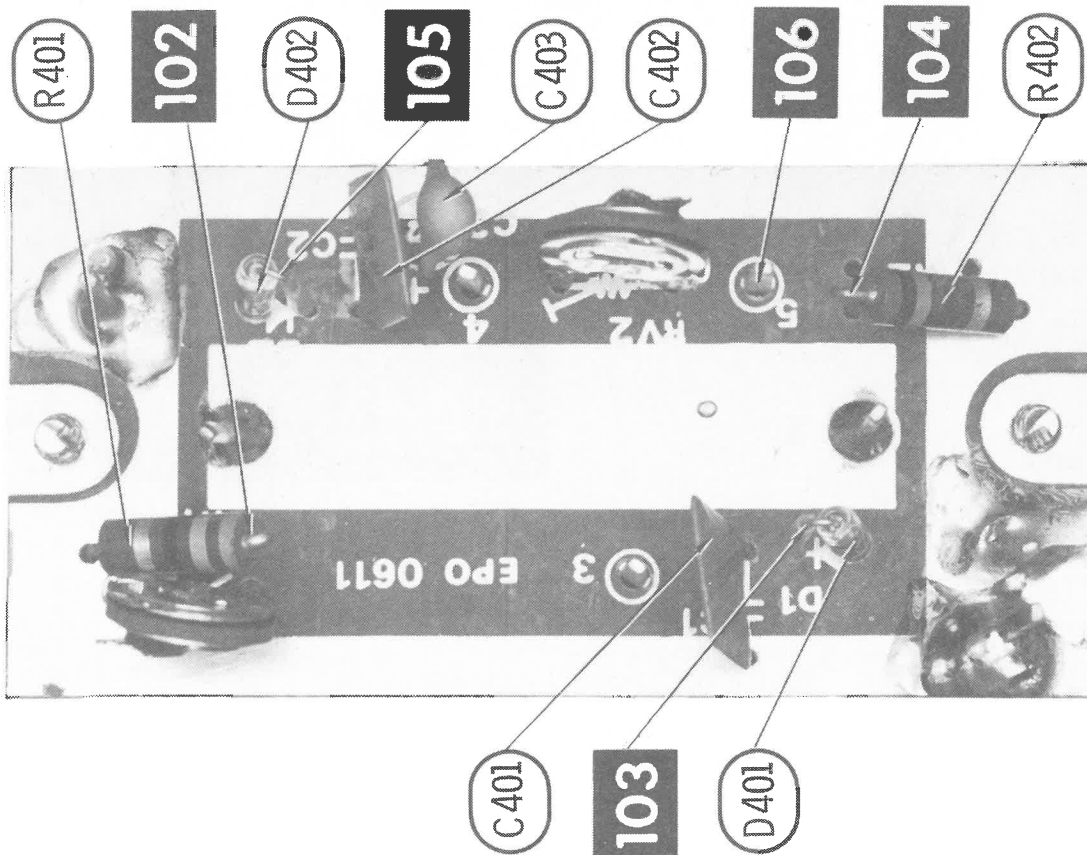




A Howard W. Sams **CIRCUITRACE®** Photo

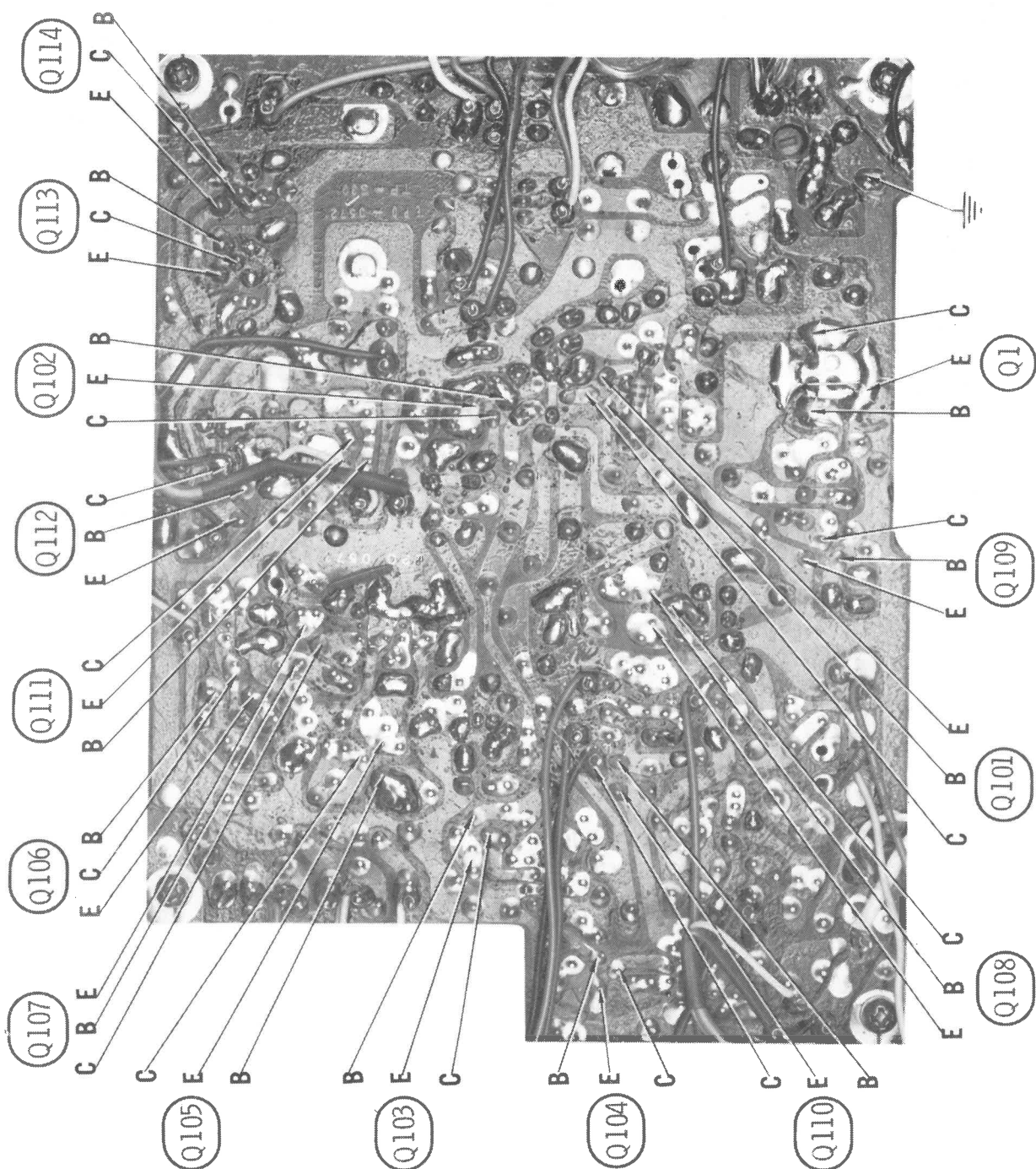
CRYSTAL-SWITCH BOARD

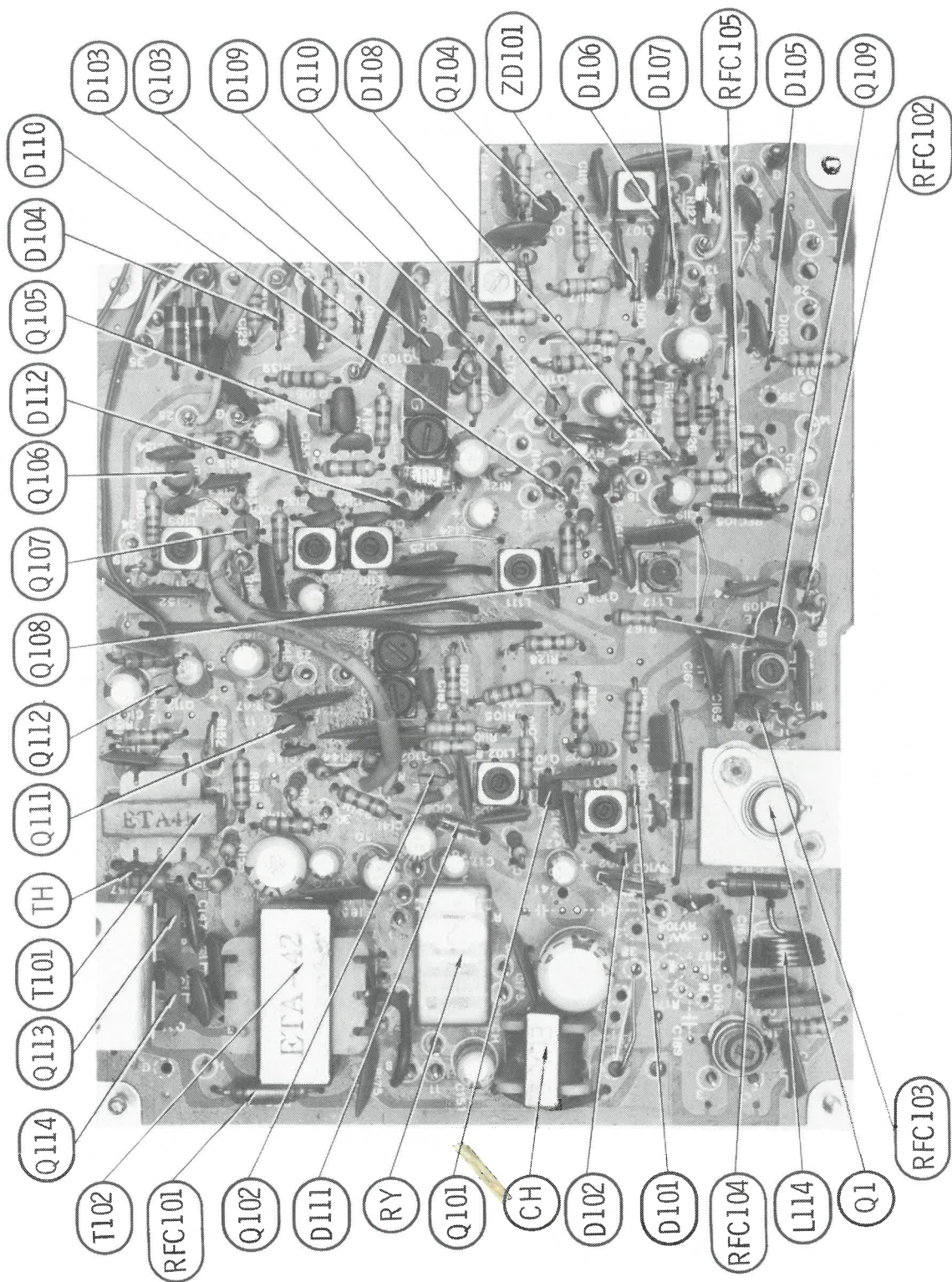
MIDLAND MODEL 13-887

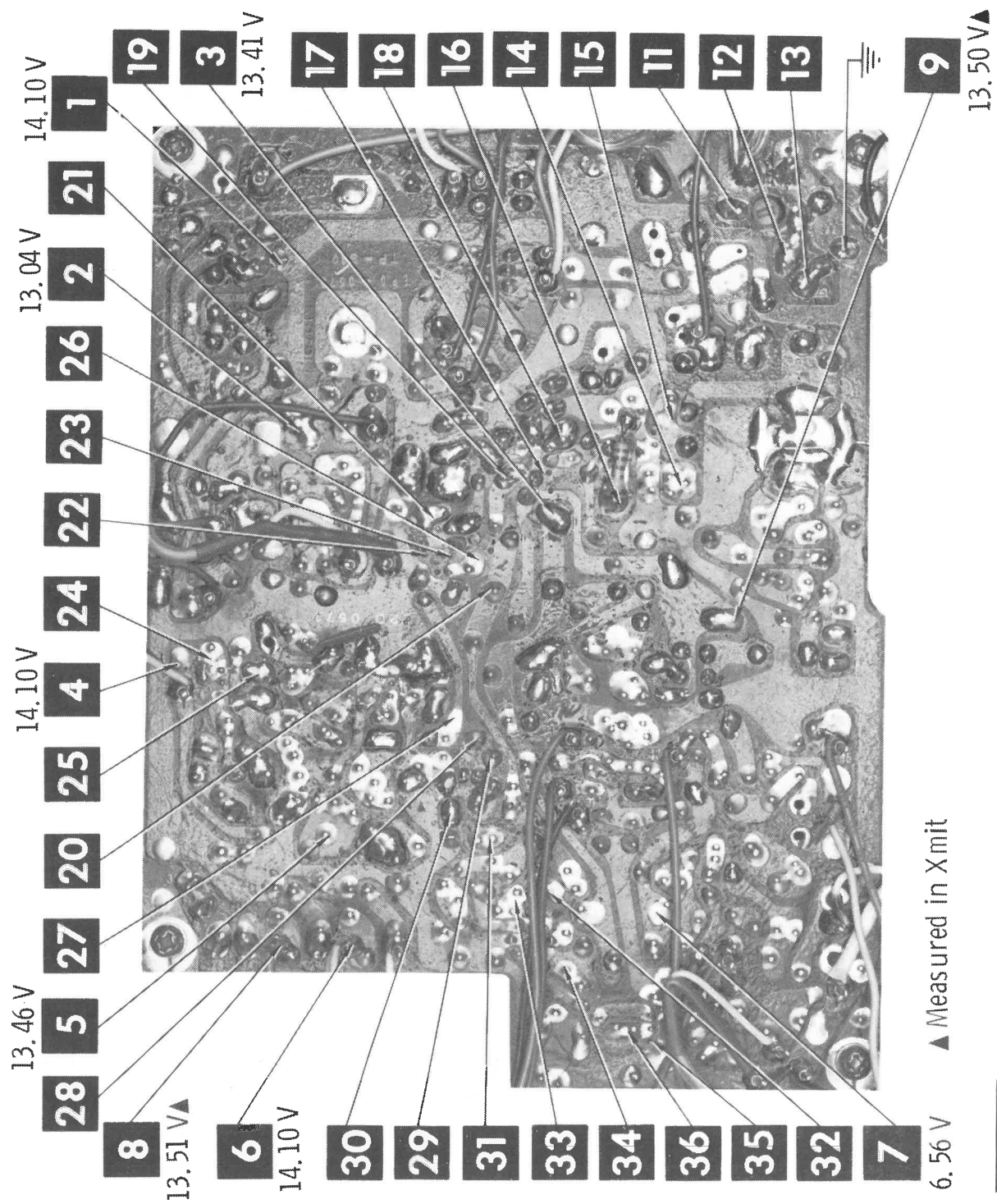


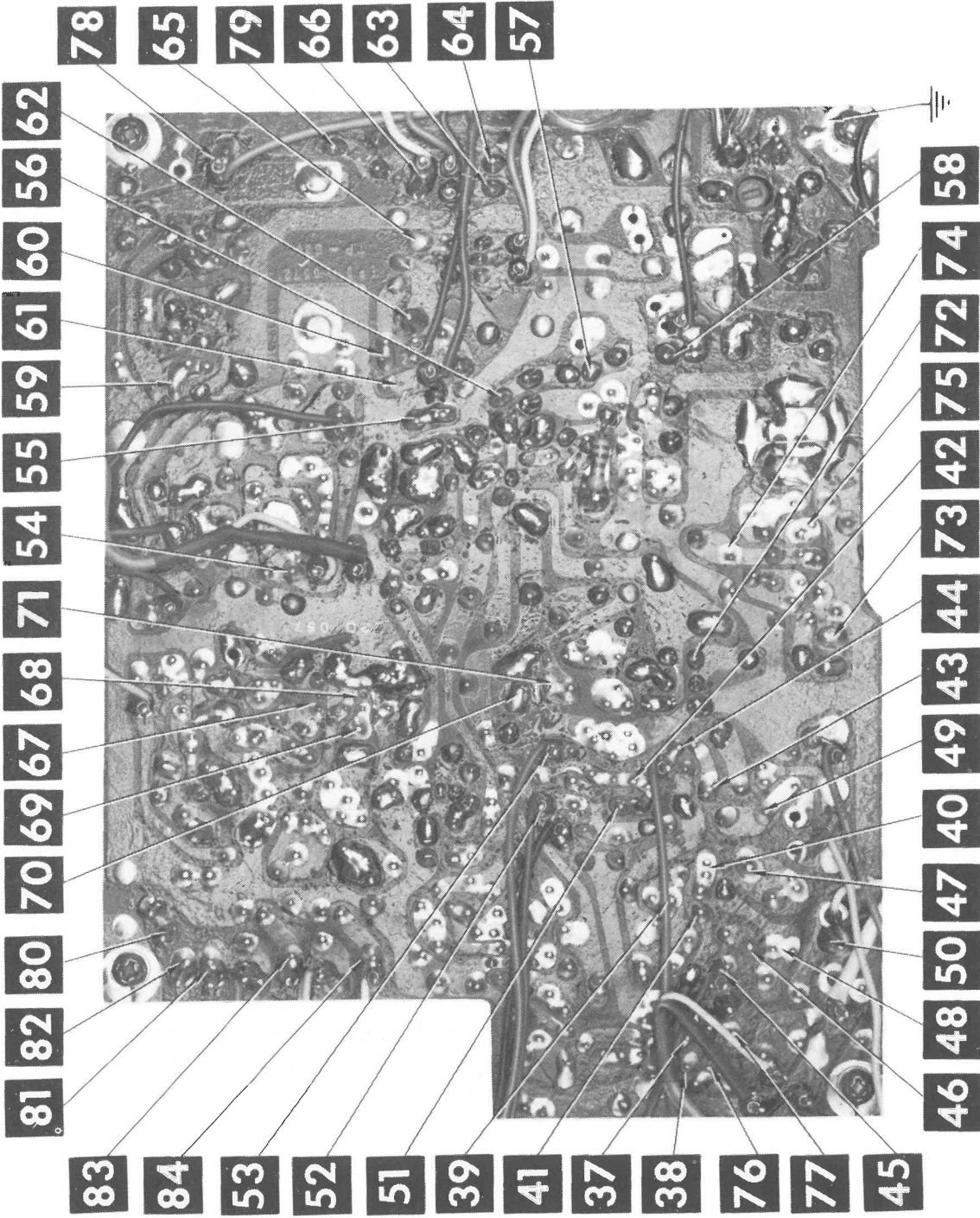
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SWR-CALIBRATION BOARD



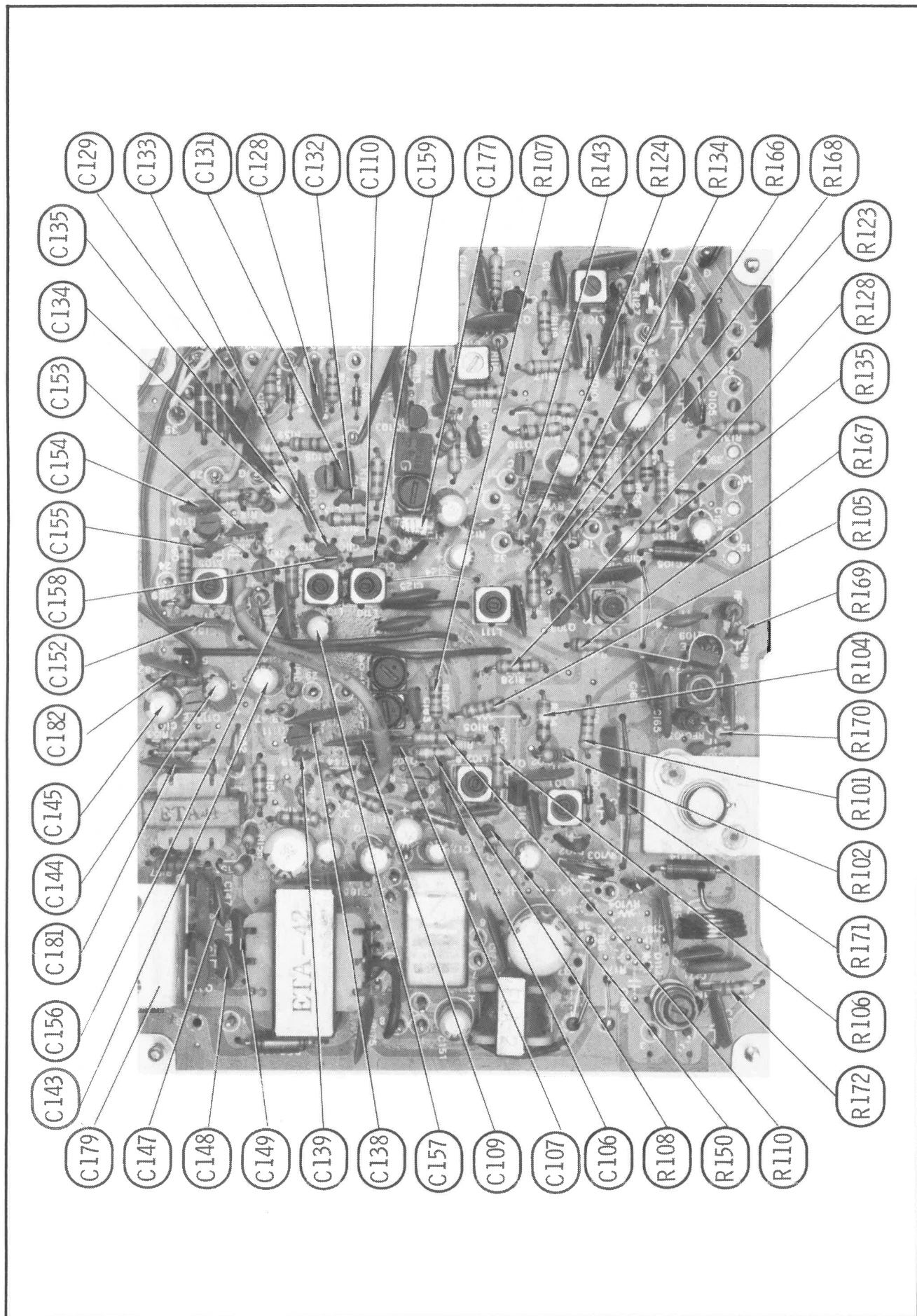


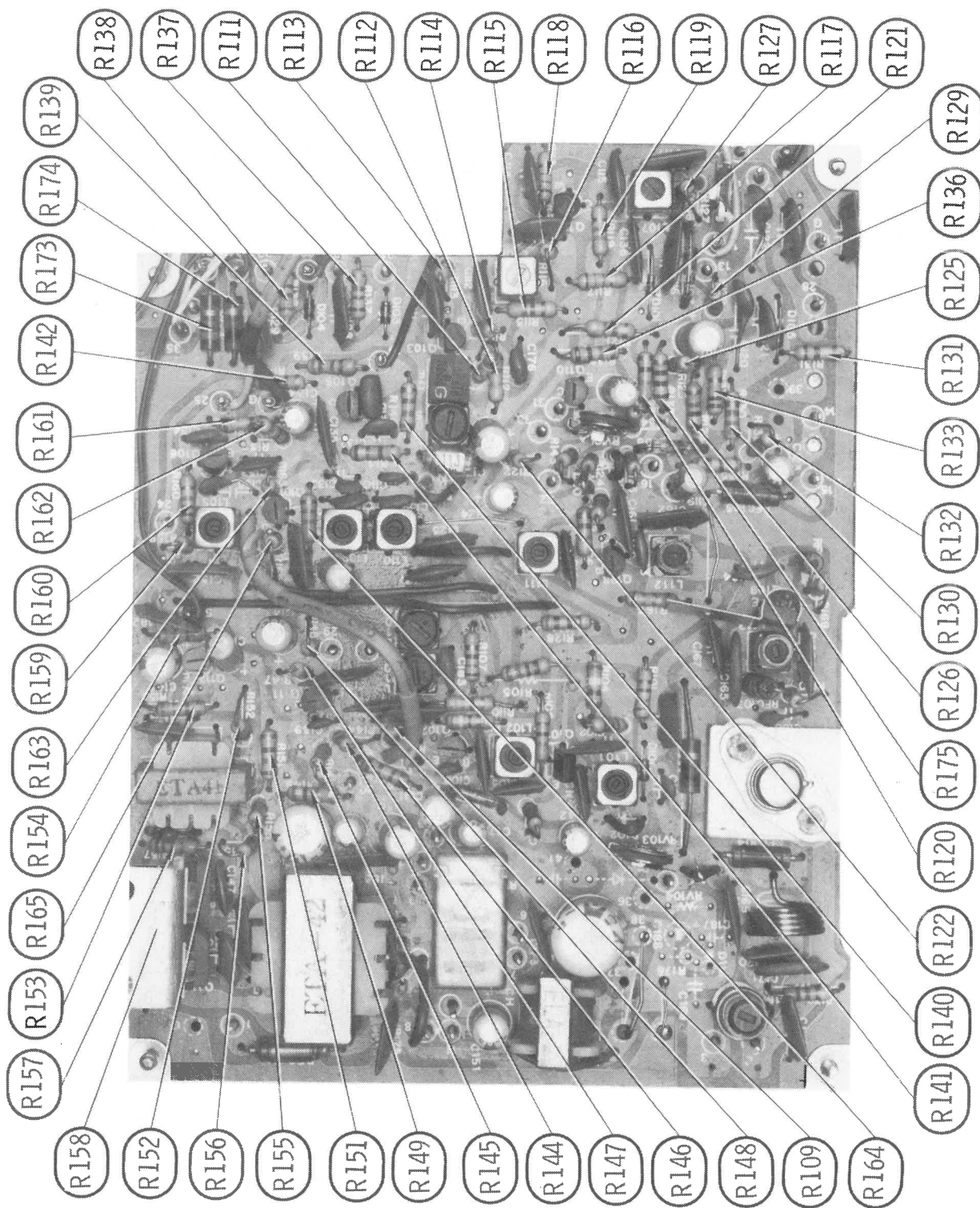


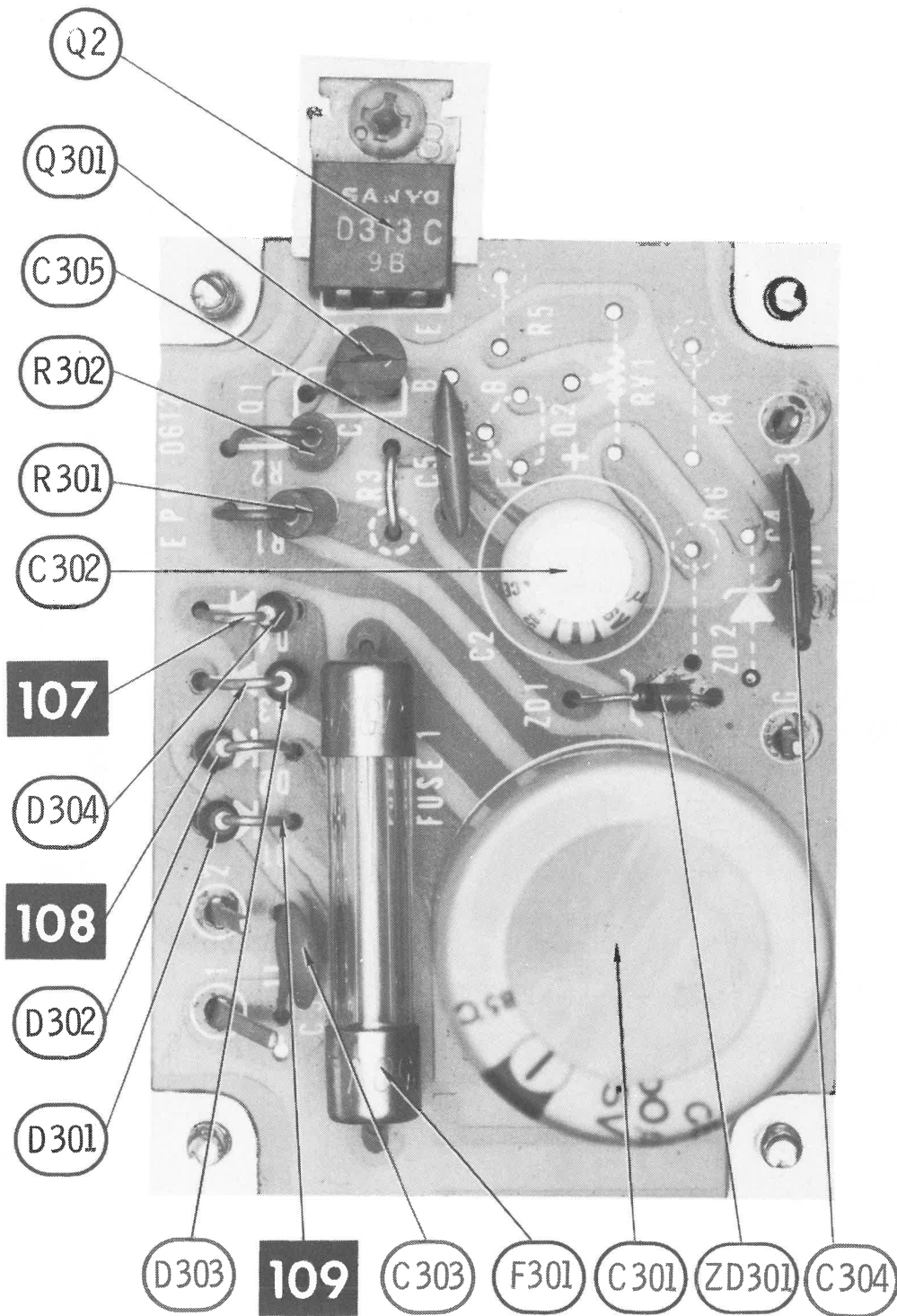


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MIDLAND MODEL 13-887

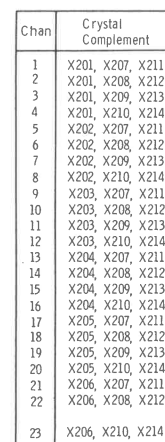






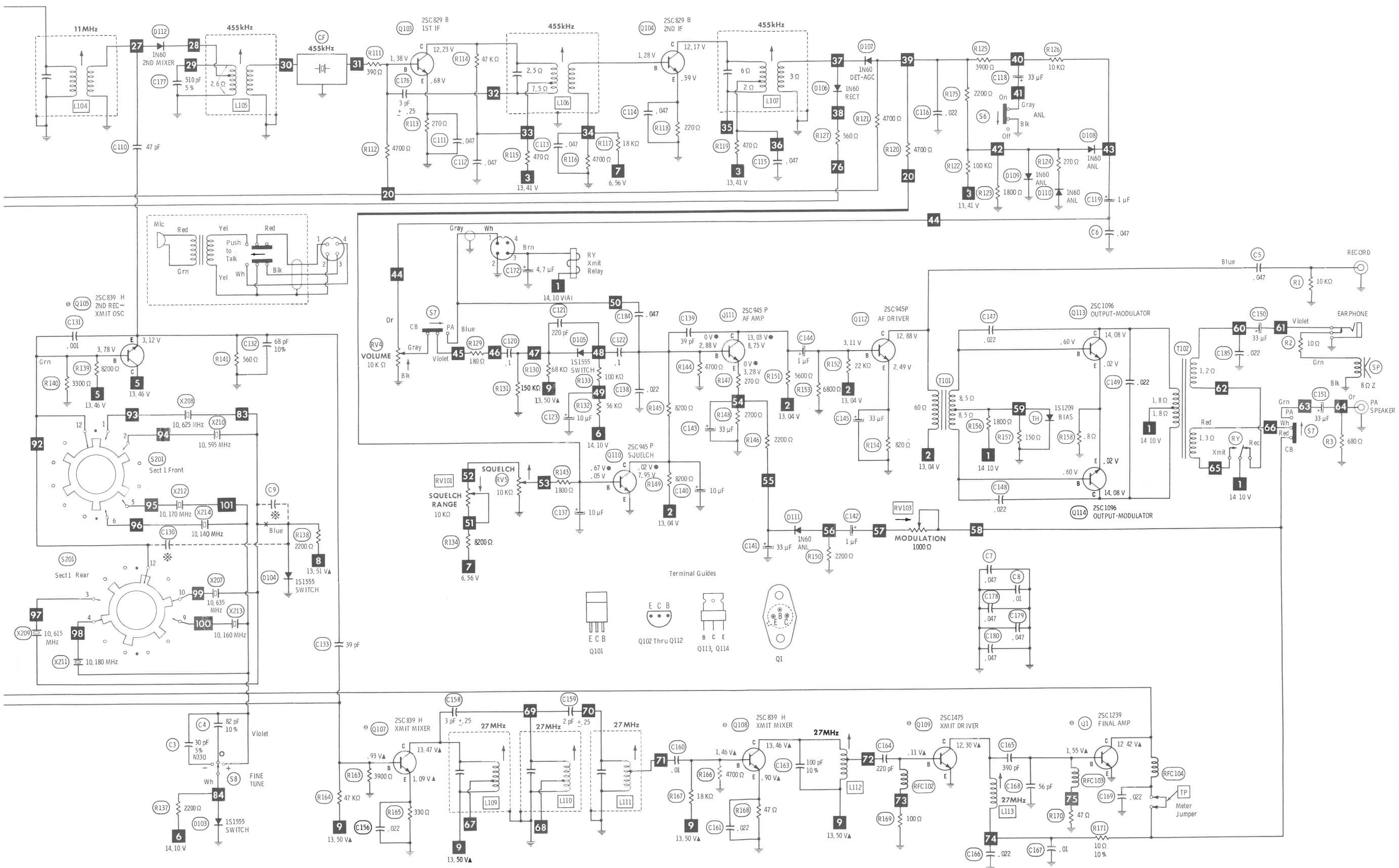
MIDLAND MODEL 13-887

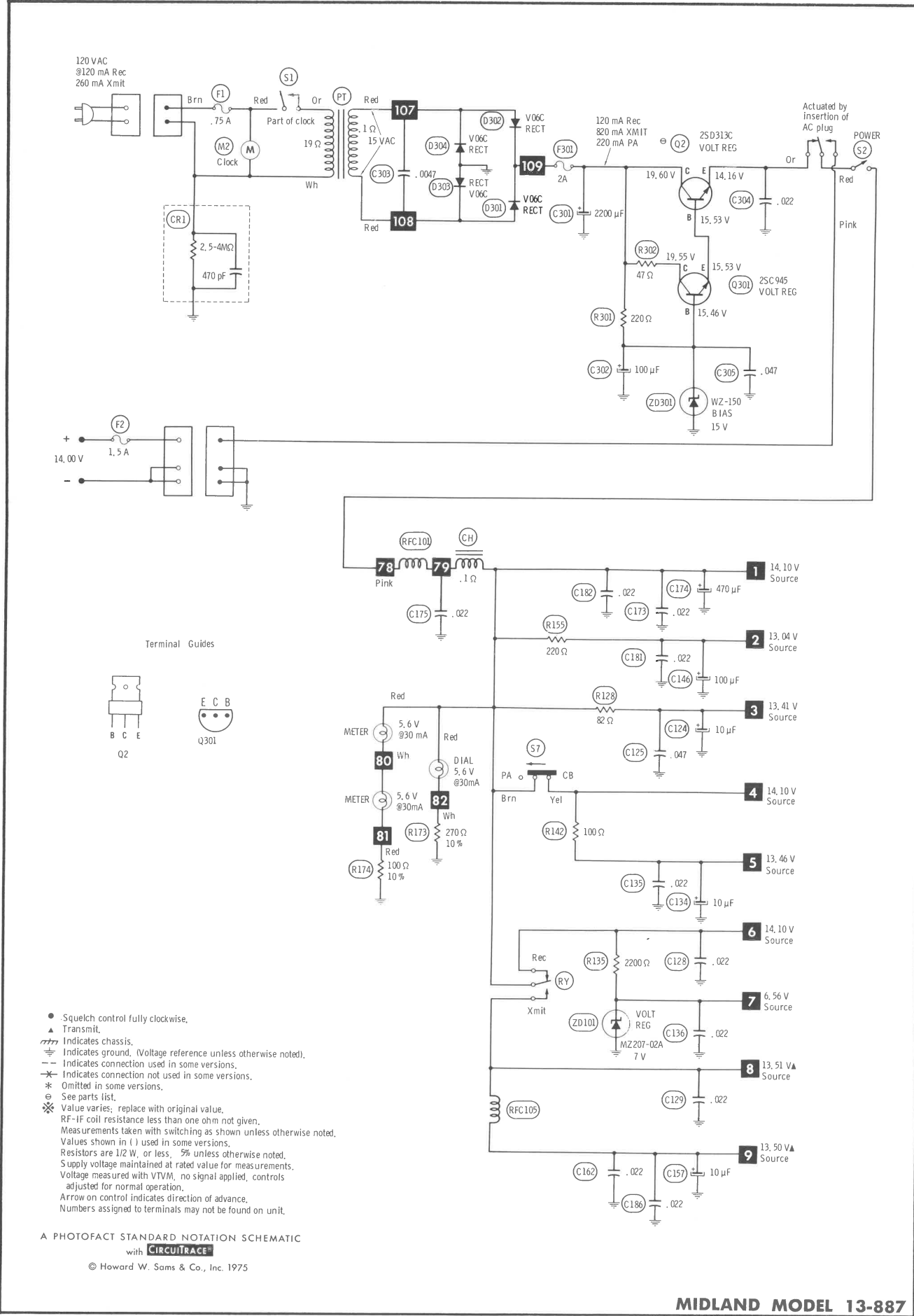
AC POWER SUPPLY BOARD



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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
Shielded Antenna Lead	8524 (Stranded) Available in 12 Colors
	8214 Lowest-loss (RG-8/U Type)
	8237 Low-loss (RG-8/U)
	8240 (Solid) Miniature (RG-58/U)
Coiled Microphone Cable	8259 (Stranded) Miniature (RG-58A/U)
	8497 3-Conductor (1 shielded for Press-to-Talk) Neoprene
Ignition Noise Suppression	8491 4-Conductor (2 shielded, 2 unshielded) Neoprene
Bonding Strap	Use BELDEN No. 7300-Series Spark-Plug Sets
	Use BELDEN No. 8661 (3/8 inch)

SEMICONDUCTORS (Select replacement transistor for best results)

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.
D101	1S1555/09-306154	GE-300	D200	PTC214	HEPR0602	SK3100	RT218	ECG 177
D102	1S1555/09-306154	GE-300	D200	PTC214	HEPR0602	SK3100	RT218	ECG 177
D103	1S1555/09-306154	GE-300	D200	PTC214	HEPR0602	SK3100	RT218	ECG 177
D104	1S1555/09-306154	GE-300	D200	PTC214	HEPR0602	SK3100	RT218	ECG 177
D105	1S1555/09-306154	GE-300	D200	PTC214	HEPR0602	SK3100	RT218	ECG 177
D106	1N60/09-306336	1N60	1N60	PTC206	HEP135	SK3088		ECG 109
D107	1N60/09-306336	1N60	1N60	PTC206	HEP135	SK3088		ECG 109
D108	1N60/09-306336	1N60	1N60	PTC206	HEP135	SK3088		ECG 109
D109	1N60/09-306336	1N60	1N60	PTC206	HEP135	SK3088		ECG 109
D110	1N60/09-306336	1N60	1N60	PTC206	HEP135	SK3088		ECG 109
D111	1N60/09-306336	1N60	1N60	PTC206	HEP135	SK3088		ECG 109
D112	1N60/09-306336	1N60	1N60	PTC206	HEP135	SK3088		ECG 109
D301	V06C/09-306366	GE-504A	8D4 or 5A4D	PTC201 or PTC202	HEPR0052	SK3030 or SK3031	RT213 or RT214	ECG 116 or ECG 117
D302	V06C/09-306366	GE-504A	8D4 or 5A4D	PTC201 or PTC202	HEPR0052	SK3030 or SK3031	RT213 or RT214	ECG 116 or ECG 117
D303	V06C/09-306366	GE-504A	8D4 or 5A4D	PTC201 or PTC202	HEPR0052	SK3030 or SK3031	RT213 or RT214	ECG 116 or ECG 117
D304	V06C/09-306366	GE-504A	8D4 or 5A4D	PTC201 or PTC202	HEPR0052	SK3030 or SK3031	RT213 or RT214	ECG 116 or ECG 117
D401	1N60P	1N60	1N60	PTC206	HEP135	SK3088		ECG 109
D402	1N60P	1N60	1N60	PTC206	HEP135	SK3088		ECG 109
Q1	2SC1239/09-302169	(1)				SK3049		ECG 237
Q2	2SCF8 (3)	GE-66	TR-76	PTC154	HEP245	SK3048 or SK3054	RT154	ECG 224 or ECG 196
Q101	2SD234 (3)	GE-28	TR-76	PTC110		SK3054	RT154	ECG 152
	2SC460(A)/09-302004	GE-17	TR-24	PTC101	HEP720	SK3039	RT107	ECG 108
	2SC930 (3)	GE-60	TR-24	PTC132	HEP56	SK3018	RT108	ECG 199
	2SC829 (3)	GE-20	TR-24	PTC121	HEP54	SK3122	RT100	ECG 123A
Q102	2SC839(H)/09-302124	GE-20	TR-24	PTC121	HEP728	SK3018	RT102	ECG 123A
Q103	2SC829(B)/09-302033	GE-20	(IR)2SC829B	PTC132	HEP50	SK3018	RT108	ECG 107
Q104	2SC829(B)/09-302033	GE-20	(IR)2SC829B	PTC132	HEP50	SK3018	RT108	ECG 107
Q105	2SC839(H)/09-302124	GE-20	TR-24	PTC121	HEP728	SK3018	RT102	ECG 123A
Q106	2SC829 (3)	GE-20	TR-24	PTC121	HEP54	SK3122	RT100	ECG 123A
Q107	2SC839(H)/09-302124	GE-20	TR-24	PTC121	HEP728	SK3018	RT102	ECG 123A
Q108	2SC829 (3)	GE-20	TR-24	PTC121	HEP54	SK3122	RT100	ECG 123A
Q109	2SC839(H)/09-302124	GE-20	TR-24	PTC121	HEP728	SK3018	RT102	ECG 123A
Q110	2SC829 (3)	GE-20	TR-24	PTC121	HEP54	SK3122	RT100	ECG 123A
Q111	2SC1475/09-305124	GE-45	TR-54	PTC143	HEP243	SK3048	RT100	ECG 195
Q112	2SC945(P)/09-302125	GE-20	TR-21	PTC136	HEP728	SK3124	RT102	ECG 123A
Q113	2SC945(P)/09-302125	GE-20	TR-21	PTC136	HEP728	SK3124	RT102	ECG 123A
Q114	2SC1096(L) (5)	GE-28	TR-55	PTC110	HEPS5003	SK3054	RT154	ECG 186
Q115	2SC1096(L) (5)	GE-28	TR-55	PTC110	HEPS5003	SK3054	RT154	ECG 186
Q301	2SC945(P)/09-302125	GE-20	TR-21	PTC136	HEP728	SK3124	RT102	ECG 123A
TH	1S1209/09-306129	GE-504A	8D4	PTC201	HEPR0052	SK3030	RT213	ECG 109
ZD101	MZ207-02A/09-306325	GEZD-7.5	Z-1206	ZB6.8	HEPZ0409	SK3058	RT238	ECG 5071
ZD301	MZ-150/09-306367	GEZD-15	Z-1214	PTC509	HEPZ0418	SK3063	RT245	ECG 145

(1) Rating 12 watts @ 4 amps. (2) Rating 30 watts @ 3 amps. (3) Used in some versions. (4) Use appropriate heat sink. (5) Rating 10 watts @ 2 amps.

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.	MALLORY PART No.	SPRAGUE PART No.
C118	33 6.3V	77-335336	ME-2-B-035	EP6-25	PC30-25	VTT33A10	EV-1125
C119	1 50V	77-333105	RME-A-J-001	EP50-1	PC1-50	MTV1CB50	EV-1615
C123	10 16V	77-337106	RME-B-E-010	EP15-10	PC10-25	VTT10A25	EV-1222
C124	10 16V	77-337106	RME-B-E-010	EP15-10	PC10-25	VTT10A25	EV-1222
C126	33 10V	77-336336	ME-3-D-035	EP15-25	PC30-25	VTT33A10	EV-1125
C134	10 16V	77-337106	RME-B-E-010	EP15-10	PC10-25	VTT10A25	EV-1222
C137	10 16V	77-337106	RME-B-E-010	EP15-10	PC10-25	VTT10A25	EV-1222
C140	10 16V	77-337106	RME-B-E-010	EP15-10	PC10-25	VTT10A25	EV-1222
C141	33 10V	77-336336	ME-3-D-035	EP15-25	PC30-25	VTT33A10	EV-1125
C142	1 50V	77-333105	RME-A-J-001	EP50-1	PC1-50	MTV1CB50	EV-1615
C143	33 16V	77-337336	ME-3-E-035	EP15-25	PC30-25	MTV30CB25	EV-1325
C144	1 50V	77-333105	RME-A-J-001	EP50-1	PC1-50	MTV1CB50	EV-1615
C145	33 6.3V	77-335336	ME-2-B-035	EP6-25	PC30-25	VTT33A10	EV-1125
C146	100 16V	77-337107	RME-E-E-100	EP15-100	PC100-16	MTV100CD15	EV-1230
C150	33 16V	77-337336	ME-3-E-035	EP15-25	PC30-25	MTV30CB25	EV-1325
C151	33 16V	77-337336	ME-3-E-035	EP15-25	PC30-25	MTV30CB25	EV-1325
C157	10 16V	77-337106	RME-B-E-010	EP15-10	PC10-25	VTT10A25	EV-1222
C172	4.7 25V	77-337475	RME-A-G-005	EP30-5	PC5-50	VTT4R7A50	EV-1319
C174	470 16V	77-337477	RME-L-E-500	EP15-500	PC500-16	MTV500DN15	EV-1250
C301	2200 25V	77-339228	ME-G2000		WBR2000-25	TC2520A	TVA-1213.5
C302	100 16V	77-337107	RME-E-E-100	EP15-100	PC100-16	MTV100CD15	EV-1230

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	22		CCT0-220	DTZ-22	NP022	CN0422	10TCC-Q22
C2	180		CCD-181	DD-181		GP318	10TS-T18
C3	30 5% N330		*			*	
C4	82 10%		CCD-820	DD-820		GP482	10TS-Q82
C5	.047		CCD-503	DC-503	MGP05	MAG5015	TGL-S50
C6	.047		CCD-503	DC-503	MGP05	MAG5015	TGL-S50
C7	.047		CCD-503	DC-503	MGP05	MAG5015	TGL-S50
C8	.01		CCD-103	DC-103	GP10000	MAG5011	2SS-S10
C101	39		CCT0-390			CN0439	10TCC-Q39
C102	.01		CCD-103	DC-103	GP10000	MAG5011	2SS-S10
C103	.01		CCD-103	DC-103	GP10000	MAG5011	2SS-S10
C104	.01		CCD-103	DC-103	GP10000	MAG5011	2SS-S10
C105	.01		CCD-103	DC-103	GP10000	MAG5011	2SS-S10
C106	.022		CCD-203			GP120	5GA-S20
C107	.022		CCD-203			GP120	5GA-S20
C108	22		CCT0-220	DTZ-22	NP022	CN0422	10TCC-Q22
C109	.022		CCD-203			GP120	5GA-S20
C110	47		CCT0-470	DTZ-47	NP047	CN0447	10TCC-Q47
C111	.047		CCD-503	DC-503	MGP05	MAG5015	TGL-S50
C112	.047		CCD-503	DC-503	MGP05	MAG5015	TGL-S50
C113	.047		CCD-503	DC-503	MGP05	MAG5015	TGL-S50
C114	.047		CCD-503	DC-503	MGP05	MAG5015	TGL-S50
C115	.047		CCD-503	DC-503	MGP05	MAG5015	TGL-S50
C116	.022		CCD-203			GP120	5GA-S20
C117	.002		CCD-203			GP120	5GA-S20
C120	.1			DC-104	MGP1	MAG5001	TG-P10
C121	220		CCD-221	DD-221		GP322	10TS-T22
C122	.1			DC-104	MGP1	MAG5001	TG-P10
C125	.047		CCD-503	DC-503	MGP05	MAG5015	TGL-S50
C127	.047		CCD-503	DC-503	MGP05	MAG5015	TGL-S50
C128	.022		CCD-203			GP120	5GA-S20
C129	.022		CCD-203			GP120	5GA-S20
C131	.001		DM19-102J	CPR-1000J	CD19FD102J03	SX210	424ME1001J501
C132	68 10%		CCD-680	DD-680	GP68	GP468	10TS-Q68
C133	39		CCT0-390			CN0439	10TCC-Q39
C135	.022		CCD-203			GP120	5GA-S20
C136	.022		CCD-203			GP120	5GA-S20
C138	.022		CCD-203			GP120	5GA-S20
C139	39		CCT0-390			CN0439	10TCC-Q39
C147	.022		CCD-203			GP120	5GA-S20
C148	.022		CCD-203			GP120	5GA-S20
C149	.022		CCD-203			GP120	5GA-S20
C152	.022		CCD-203			GP120	5GA-S20
C153	150 10%		CCD-151	DD-151		CN0315	10TCC-T15
C154	3 ±.25		CCT0-3R3	DTZ-3R3	NP03P3	CN0533	10TCC-V33
C155	27		CCT0-270			CN0427	10TCC-Q27
C156	.022		CCD-203			GP120	5GA-S20
C158	2 ±.25		CCT0-2R2	DTZ-2R2	NP02P2	CN0522	10TCC-V22
C159	2 ±.25		CCT0-2R2	DTZ-2R2	NP02P2	CN0522	10TCC-V22
C160	.01		CCD-103	DC-103	GP10000	MAG5011	2SS-S10
C161	.022		CCD-203			GP120	5GA-S20
C162	.022		CCD-203			GP120	5GA-S20
C163	100 10%		CCT0-101	DTZ-100	NP0100	CN0310	10TCC-T10
C164	220		CCD-221	DD-221		GP322	10TS-T22
C165	39		CCT0-390			CN0439	10TCC-Q39
C166	.022		CCD-203			GP120	5GA-S20
C167	.01		CCD-103	DC-103	GP10000	MAG5011	2SS-S10
C168	56		DM10-560J	CPR-56J	CD6ED560J03	SX456	424MC56R0J501

MIDLAND MODEL 13-887

PARTS LIST AND DESCRIPTION (CONTINUED)

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

CAPACITORS(cont)

ITEM No.	RATING	MFR. PART No.	REPLACEMENT DATA				
			ARCO/ELMENCO PART No.	CENTRALAB PART No.	CORNELL-DUBILIER PART No.	MALLORY PART No.	SPRAGUE PART No.
C169	.022		CCD-203			GP120	5GA-S20
C170	.01		CCD-103	DC-103	GP10000	MAG5011	2SS-S10
C171	330		CCD-331	DD-331	GP330	GP333	10TS-T33
C173	.022		CCD-103	DC-103	GP10000	MAG5011	2SS-S10
C175	.022		CCD-103	DC-103	GP10000	MAG5011	2SS-S10
C176	3 +.25		CCT0-3R3	DTZ-3R3	NP03P3	CN0533	10TCC-V33
C177	510 5%		DM15-511J	CPR-510J	CD15FD511J03	SX351	424ME5100J501
C178	.047		CCD-503	DC-503	MGP05	MAG5015	TGL-S50
C179	.047		CCD-503	DC-503	MGP05	MAG5015	TGL-S50
C180	.047		CCD-503	DC-503	MGP05	MAG5015	TGL-S50
C181	.022		CCD-203			GP120	5GA-S20
C182	.022		CCD-203			GP120	5GA-S20
C183	2 +.25		CCT0-2R2	DTZ-2R2	NP02P2	CN0522	10TCC-V22
C184	.047		CCD-503	DC-503	MGP05	MAG5015	TGL-S50
C185	.022		CCD-203			GP120	5GA-S20
C186	.022		CCD-203			GP120	5GA-S20
C303	.0047		CCD-472				10TS-D47
C304	.022		CCD-203			GP120	5GA-S20
C305	.047		CCD-503	DC-503	MGP05	MAG5015	TGL-S50
C401	.01		CCD-103	DC-103	GP10000	MAG5011	2SS-S10
C402	.1			DC-104	MGP1	MAG5001	TG-P10
C403	.05		CCD-503	DC-503	MGP05	MAG5015	TGL-S50
C404	.2		CCT0-120			CN0412	10TCC-Q12

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

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

ITEM No.	FUNCTION	RESIST-ANCE	REPLACEMENT DATA				
			MFR. PART No.	CENTRALAB PART No.	CLAROSTAT PART No.	MALLORY PART No.	TRW PART No.
RV1	SWR	500	13-164093	TSV-500 (2) or T-500 (2)	C-501 (2)	MTC52L1 (2)	X201R501B (2)
RV2	RF Power	10K	13-164103	TSV-10K (2) or T-10K (2)	C-103 (2)	MTC14L1 (2)	X201R103B (2)
RV3	SWR Calibrate/Switch	5000	13-161001				
RV4	Volume	10K	13-160104				
RV5	Squelch	10K	13-166054				
RV101	Squelch Range	10K	13-164103	TSV-10K (2) or T-10K (2)	C-103 (2)	MTC14L1 (2)	X201R103B (2)
RV102	"S"	10K	13-164103	TSV-10K (2) or T-10K (2)	C-103 (2)	MTC14L1 (2)	X201R103B (2)
RV103	Modulation	1000	13-164113	TSV-1K (2) or T-1000 (2)	C-102 (2)	MTC13L1 (2)	X201R102B (2)

(2) Cut off one of the end terminals and bend to fit PC board.

COILS (RF-IF)

ITEM No.	FUNCTION	REPLACEMENT DATA			REMARKS
		PART No.	OTHER IDENTIFICATION	MILLER PART No.	
L1	TVI Trap (54MHz)	13-094159			
L101	Rec.Ant (27MHz)	13-176425			
L102	Rec.RF (27MHz)	13-090306	ETR-194-422J ETR-104-421E		
L103	1st Mixer (11MHz)	13-090307			
L104	1st Mixer (11MHz)	13-090307			
L105	Input IF (455kHz)	13-090308			
L106	Interstage IF (455kHz)	13-090309	ETI-17-393F ETI-18-4115 ETI-196-422E		
L107	Output IF (455kHz)	13-090310			
L108	Rec.Osc (37MHz)	13-090311			
L109	Xmit. Mixer (27MHz)	13-090312			
L110	Xmit. Mixer (27MHz)	13-090312	R-30-422J R-31-443E E-TA-22		
L111	Xmit. Mixer (27MHz)	13-090313			
L112	Xmit. Buffer (27MHz)	13-094014			
L113	Xmit. Driver (27MHz)	13-090314			
L114	Final Tank (27MHz)	13-090315			
L115	Pi Network (27MHz)	13-090316			
RFC1	RF Choke	13-178136			
RFC2	RF Choke	13-178136			
RFC3	RF Choke	13-178136			
RFC4	RF Choke	13-178136			
RFC5	RF Choke	13-178136			
RFC101	RF Choke	13-178182			

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	110mA	.1	.21mH	13-178181 (ELA-2)				

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.	
T101	2	1		13-096164 (ETA-41)				

TRANSFORMER (Audio Output)

ITEM No.	IMPEDANCE		REPLACEMENT DATA				NOTES
	PRI.	SEC.	MFGR. PART No.	STANCOR PART No.	THORDARSON PART No.	TRIAD PART No.	
T102	18	8	13-096165 (ETA-42)				

TRANSFORMER (Power)

ITEM No.	RATING		REPLACEMENT DATA				NOTES
	PRI.	SEC. 1	MFGR. PART No.	STANCOR PART No.	THORDARSON PART No.	TRIAD PART No.	
PT	120V AC @ 320mA AC	15V AC @ 1800mA AC	13-098019 (ETP-53U)				

SPEAKER

ITEM No.	TYPE	REPLACEMENT DATA		NOTES
		MFGR. PART No.	QUAM PART No.	
SP	3" PM 8 ohms	13-060096	30A05RZ8	

MIDLAND MODEL 13-887

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	.75A Quick Acting		13-158317	AGC3/4	HKP	312.750	342001AL	
F2	1.5 Quick Acting			AGC1 1/2	HDJ	31201.5	150145	FG1 1/2-2

MISCELLANEOUS

ITEM No.	PART NAME	PART No.	NOTES
CF	Filter, Ceramic	13-179045	(455kHz)
CR1	Component Combination	13-144001	
M1	Meter	13-200053	RF/Power/SWR
M2	Clock Assembly	13-079005	
RY	Relay	13-105021	(MTS-2)
S1	Switch		Clock Function (Off-On-Auto-Alarm) (Part of Clock Assembly)
S2	Switch	13-183186	Power
S5	Switch	13-183187	SWR
S6	Switch	13-183187	ANL
S7	Switch	13-183187	PA
S8	Switch	13-183188	Fine Tune
S201	Switch	13-183189	Channel Selector
X201	Crystal	13-128302	37.600MHz
X202	Crystal	13-128383	37.650MHz
X203	Crystal	13-128304	37.700MHz
X204	Crystal	13-128305	37.750MHz
X205	Crystal	13-128306	37.800MHz
X206	Crystal	13-128307	37.850MHz
X207	Crystal	13-128308	10.635MHz
X208	Crystal	13-128309	10.625MHz
X209	Crystal	13-128310	10.610MHz
X210	Crystal	13-128311	10.595MHz
X211	Crystal	13-128312	10.180MHz
X212	Crystal	13-128313	10.170MHz
X213	Crystal	13-128314	10.160MHz
X214	Crystal	13-128315	10.140MHz

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

ITEM	PART No.	ITEM	PART No.
Cabinet	13-010238	Knob, Control	13-115098
Chassis	13-015046	Knob, Time/Alarm	13-115099
Rear Cover	13-013106	Knob, Clock Function	13-115100
Bottom Plate	13-020561	Knob, SWR/PA/ANL	13-110161
Escutcheon	13-020566	Knob, Power Switch	13-110142
Knob, Channel	13-115097		

ACCESSORIES

ITEM	MFGR. PART No.	REMARKS
Microphone	13-038050	
AC Cord Assembly	13-034059	
DC Cord Assembly	13-034067	