NOTE

Repair or adjustment of transmitter circuits must be under supervision of a person with first-or second-class radiotelephone license.
(Refer to FCC Rules and Regulations Part 95, Subpart 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.

MODELS TRC-30, TRC-30A (21-143)
(navaho)

ALIGNMENT INSTRUCTIONS

Suggested Alignment Tools:	GC ELECTRONICS
T301 thru T306	5000 or 8290
L912, L913, L914	9302
ALL other tunable coils and transformers	9440

RECEIVER

Connect an AC VTVM or AF Wattmeter across speaker voice coil.
Adjustments made with 120-volt AC input to power supply.
Adjust volume control to obtain suitable reading.

SIGNAL GENERATOR	GEN FREQ	CHANNEL	ADJUST	REMARKS
High side thru .01uF to base of Q302, low side to ground.	455kHz, 1000Hz @ 30% modulation, output 25uV	Any	T303, T304, T305, T306	Set Delta Tune to center Set Squelch fully counter-clockwise. Adjust for maximum.
High side thru .01uF to Antenna Jack, low side to ground.	27.115MHz, 1000Hz @ 30% modulation, output 5uV	13	L101, L102, T301, T302	Adjust for maximum.

HOWARD W. SAMS & CO., INC. Indianapolis, Indiana 46206
 Printed in U. S. of America 5CY265

RECEIVER ADJUSTMENTS

Connect an AC VTVM or AF Wattmeter across speaker voice coil.
These adjustments made with 120-volt AC input to power supply.
Adjust volume control to obtain a suitable reading.

SIGNAL GENERATOR	GEN FREQ	CHANNEL	ADJUST	REMARKS
AGC High side thru .01uF to Antenna Jack, low side to ground.	27.115MHz, 1000Hz @ 30% modulation, output 0.25 0.25uV.	13	VR1	Set Volume fully clockwise. Adjust for 2V across speaker voice coil.
SQUELCH RANGE High side thru .01uF to Antenna Jack, low side to ground.	27.115MHz, 1000Hz modulation, output 1000uV.	13	VR2	Set squelch control fully clockwise. Adjust so the squelch just breaks.
"S" METER High side thru .01uF to Antenna Jack, low side to ground.	27.115MHz, 1000Hz @ 30% modulation, output 100uV.	13	VR4 VR6	Adjust for zero on panel meter. Adjust for "S" 9 on panel meter.

TRANSMITTER

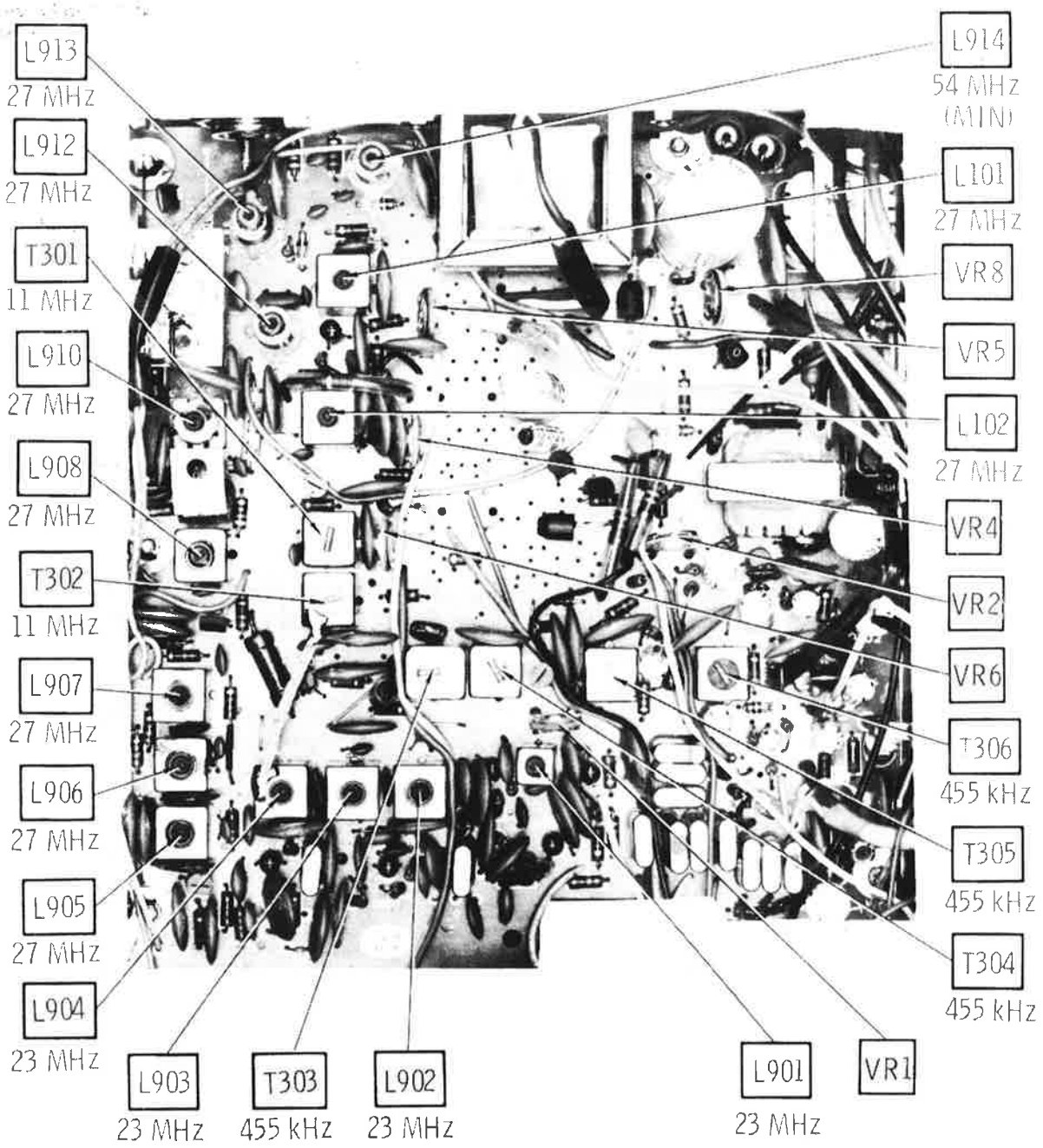
Connect an RF Wattmeter or 50-ohm, 25-watt dummy load to antenna connector.
Adjustments made with 120-volt AC input to power supply.

INDICATOR	ADJUST	REMARKS
OSCILLATOR, MIXER, BUFFER, DRIVER, FINAL RF Wattmeter	L901, L902, L903, L904, L905, L906, L907, L908, L910	Channel selector to CH 13. Key transmitter. Adjust for maximum.
TVI TRAP TV (Ch 2)	L914	Key transmitter. Adjust for MINIMUM interference on TV.
FINAL INPUT POWER Connect 0-1000DC milliammeter between collector of Q909 and cathode of D702.	L912, L913	Adjust for 5 watts.

TRANSMITTER ADJUSTMENTS

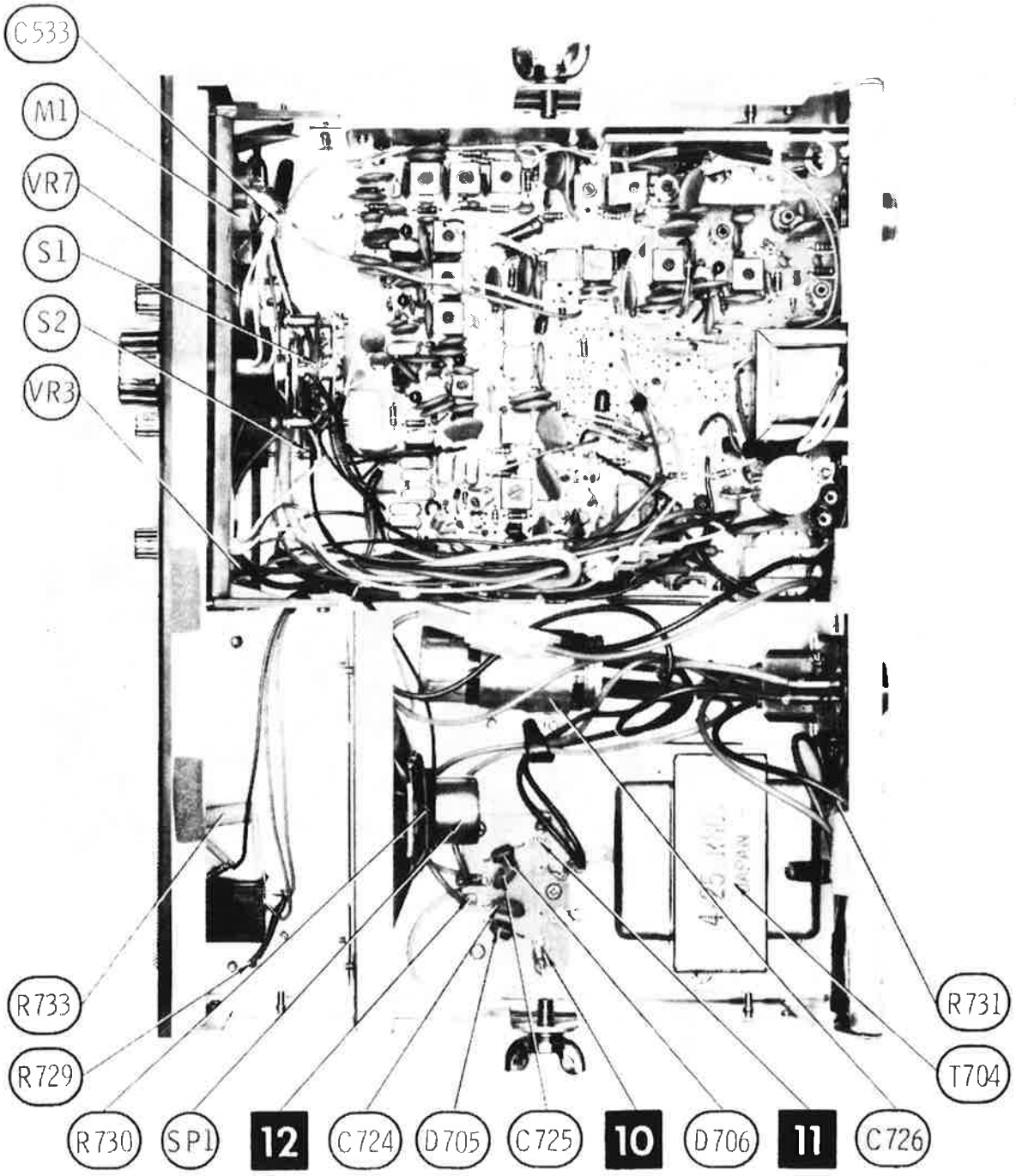
Connect an RF Wattmeter or 50-ohm, 25-watt dummy load to antenna connector.
Adjustments made with 120-volt AC input to power supply.

INDICATOR	ADJUST	REMARKS
AMC Modulation Meter connected to Antenna Jack.	VR8	Inject a 1000Hz 15mV audio signal to mic input. Key transmitter. Adjust for 100% modulation maximum.
RF PANEL METER RF Wattmeter	VR5	Key transmitter. Adjust so that panel RF meter agrees with RF wattmeter.

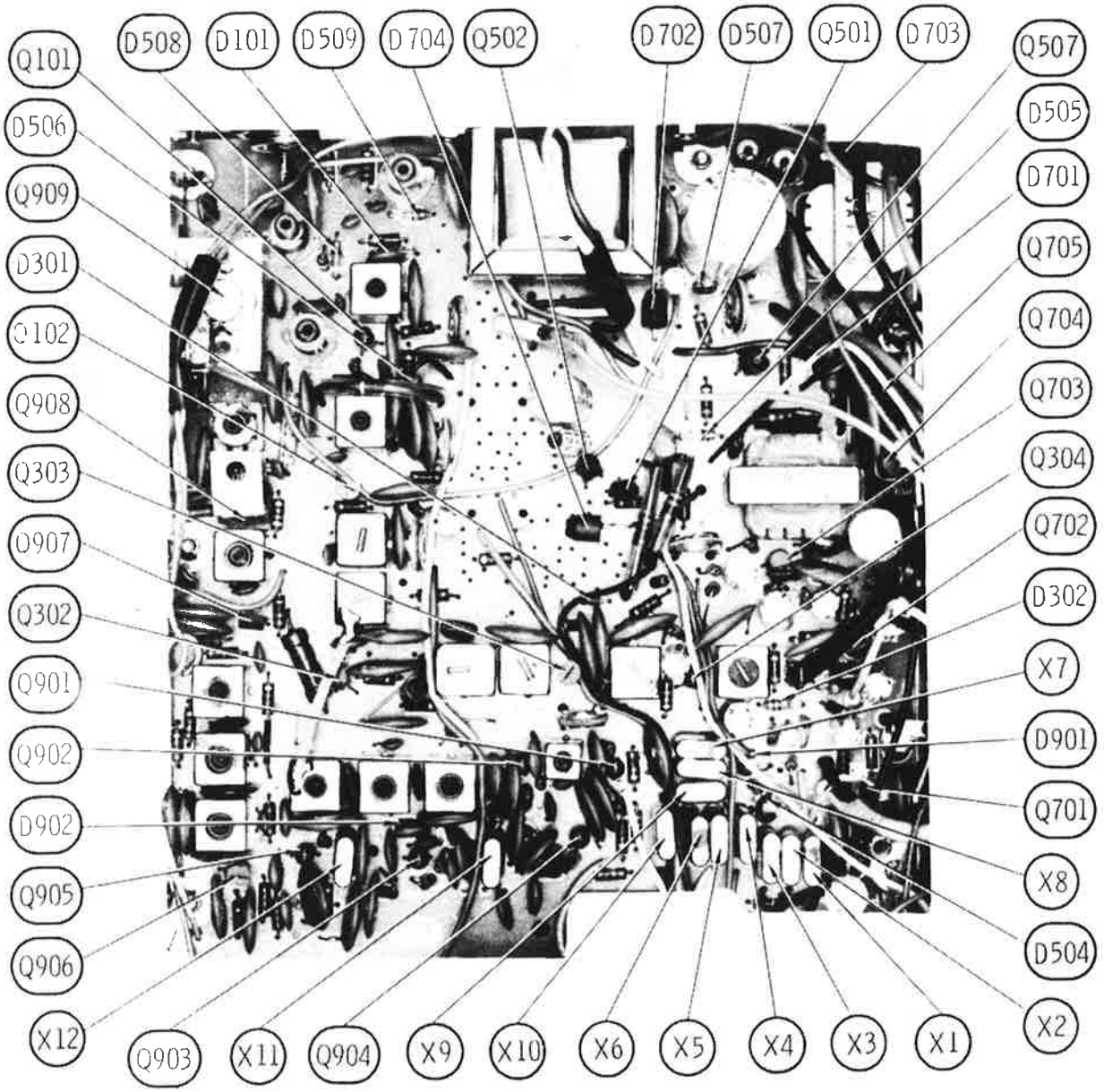

L913
27 MHz
L912
27 MHz
T301
11 MHz
L910
27 MHz
L908
27 MHz
T302
11 MHz
L907
27 MHz
L906
27 MHz
L905
27 MHz
L904
23 MHz
L903
23 MHz
T303
455 kHz
L902
23 MHz
L901
23 MHz
VR1
L914
54 MHz
(MIN)
L101
27 MHz
VR8
VR5
L102
27 MHz
VR4
VR2
VR6
T306
455 kHz
T305
455 kHz
T304
455 kHz

MAIN BOARD

A Howard W. Sams CIRCUITRACE Photo



CHASSIS - TOP


D508
D101
D509
D704
Q502
D702
D507
Q501
D703
Q101
D506
Q909
D301
Q102
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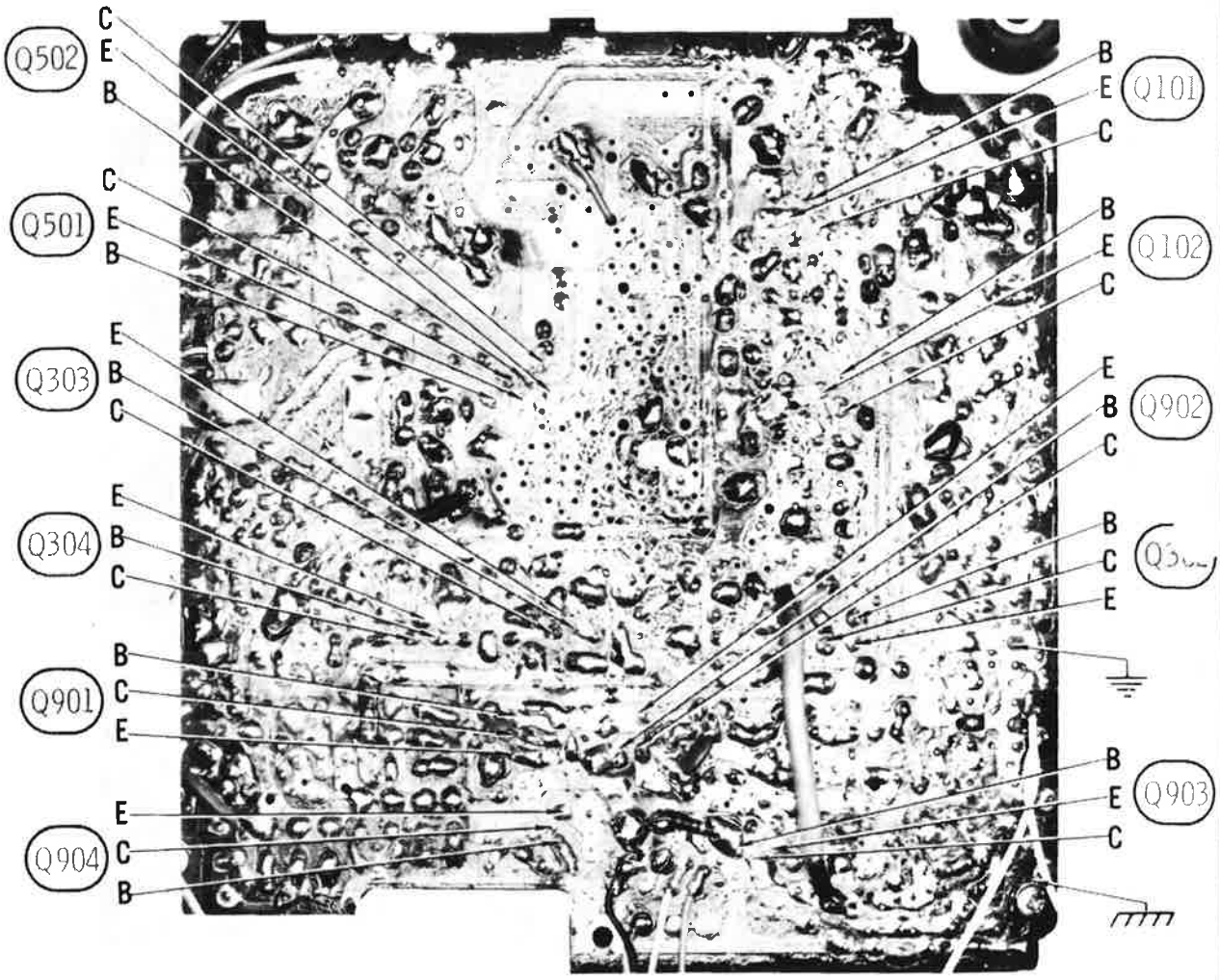
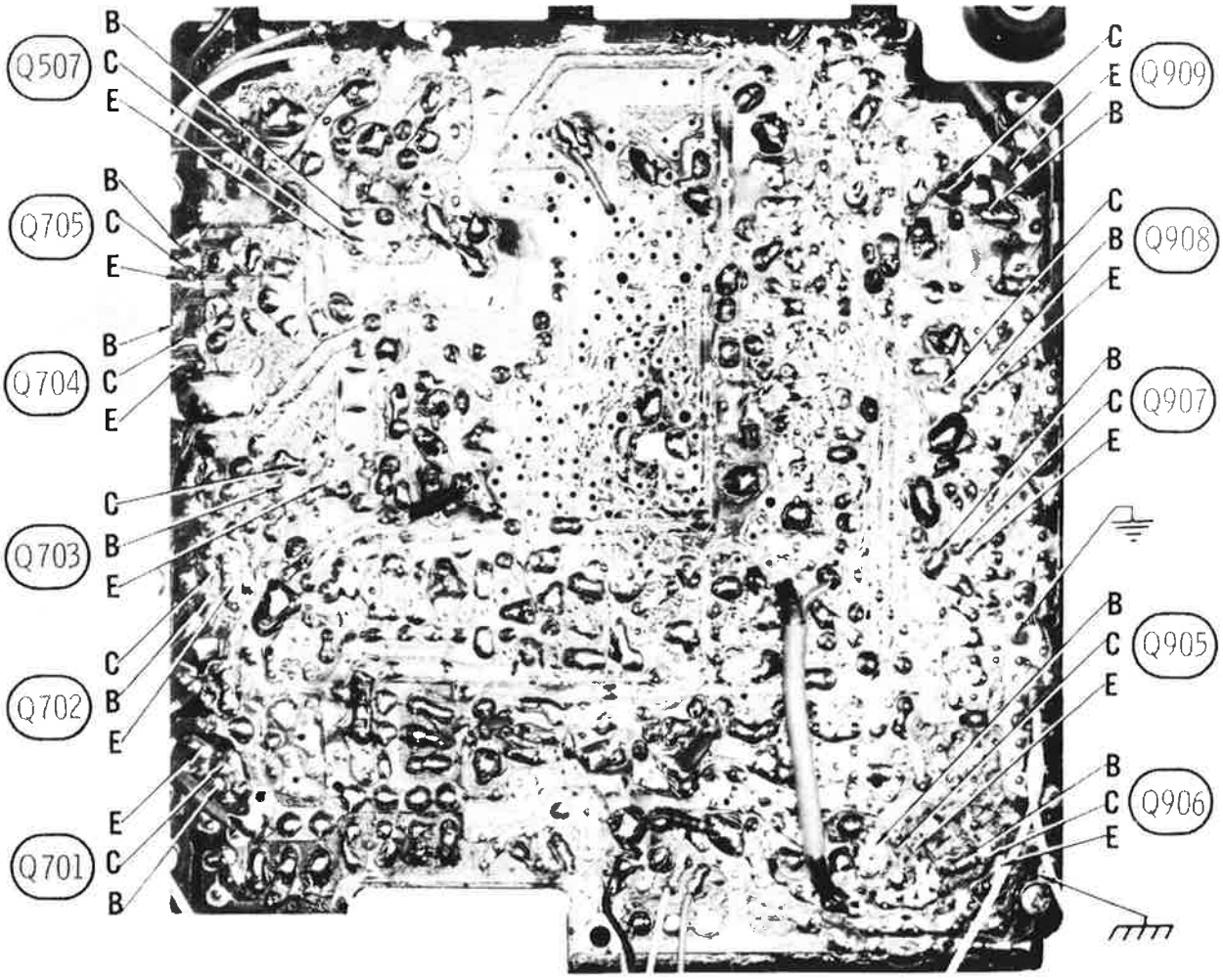
Q303
Q907
Q302
Q901
Q902
D902
Q905
Q906
X12
Q903
X11
Q904
X9
X10
X6
X5
X4
X3
X1
X2
D504
X8
Q701
D901
X7
D302
Q702
Q304
Q703
Q704
Q705
D701
D505
Q507

MAIN BOARD


Q502
C
E
B
Q501
C
E
B
Q303
E
B
C
Q304
E
B
C
Q901
B
C
E
Q904
E
C
B
Q101
B
E
C
Q102
B
E
C
Q902
E
B
C
B
C
E
Q903
B
E
C

MAIN BOARD


Q507
B
C
E
Q705
B
C
E
Q704
B
C
E
Q703
C
B
E
Q702
C
B
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Q701
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C
B
Q909
C
E
B
Q908
C
B
E
Q907
B
C
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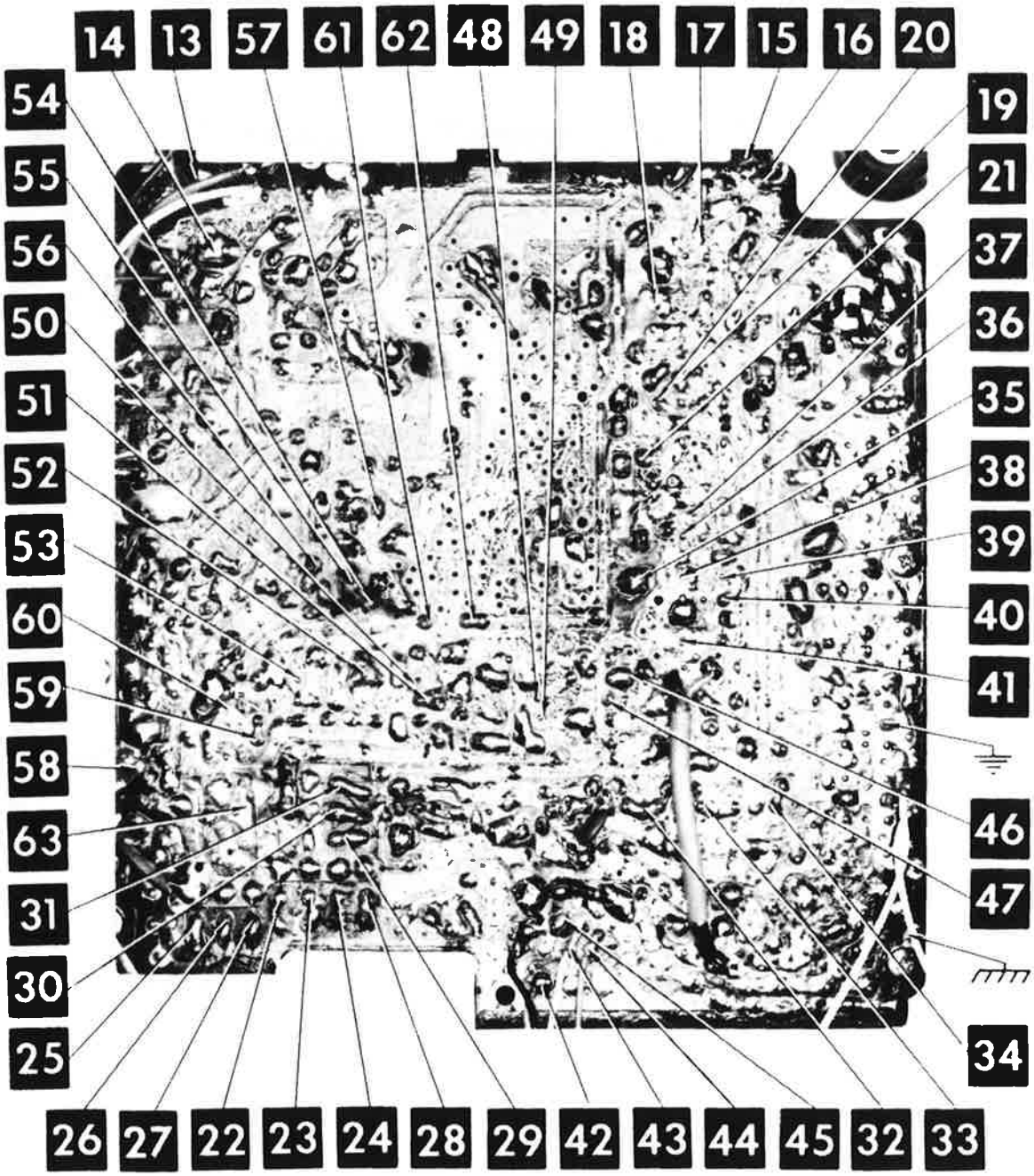
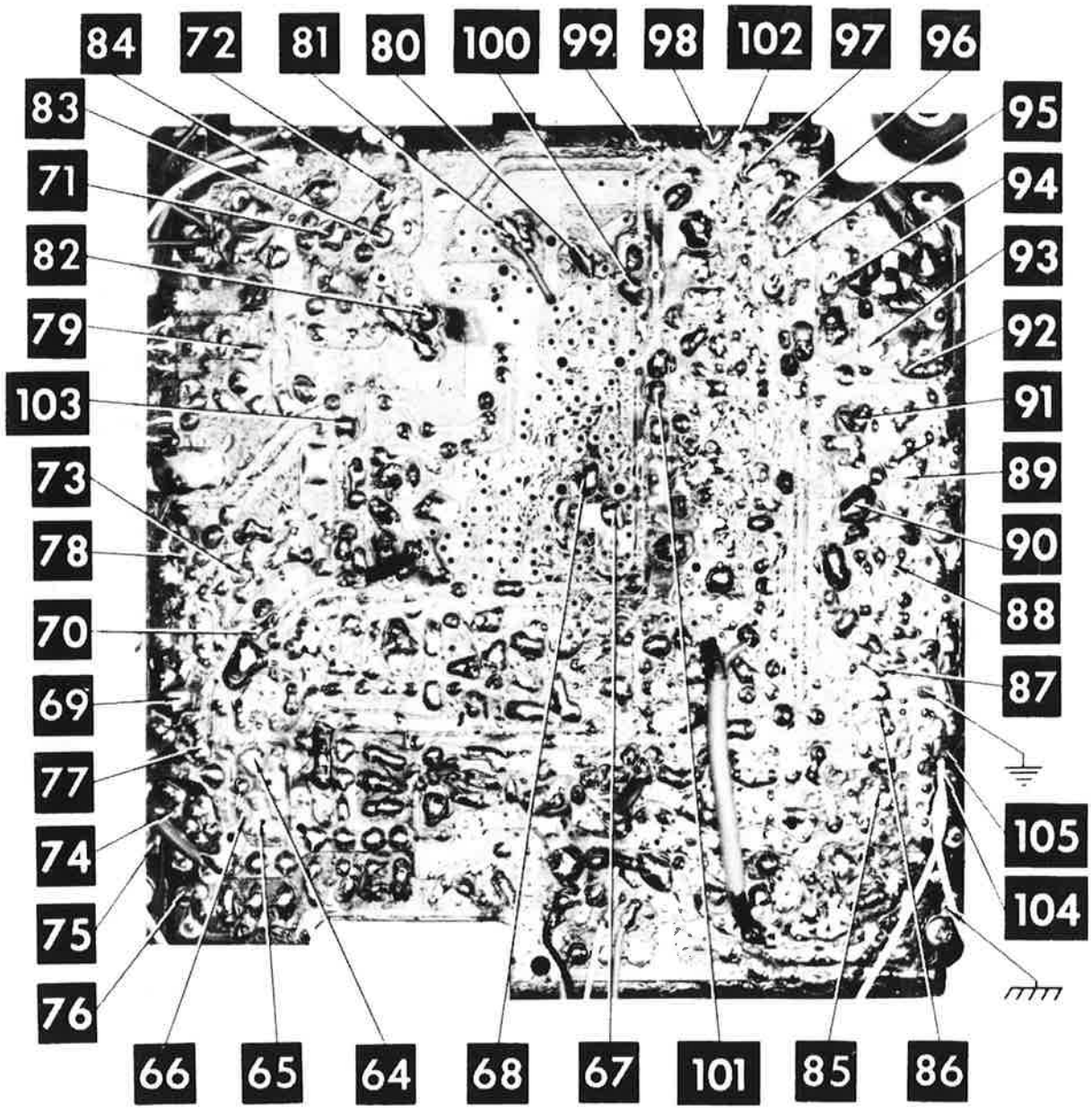
Q905
B
C
E
Q906
B
C
E

MAIN BOARD

A Howard W. Sams CIRCUITRACE® Photo



MAIN BOARD


84
72
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101
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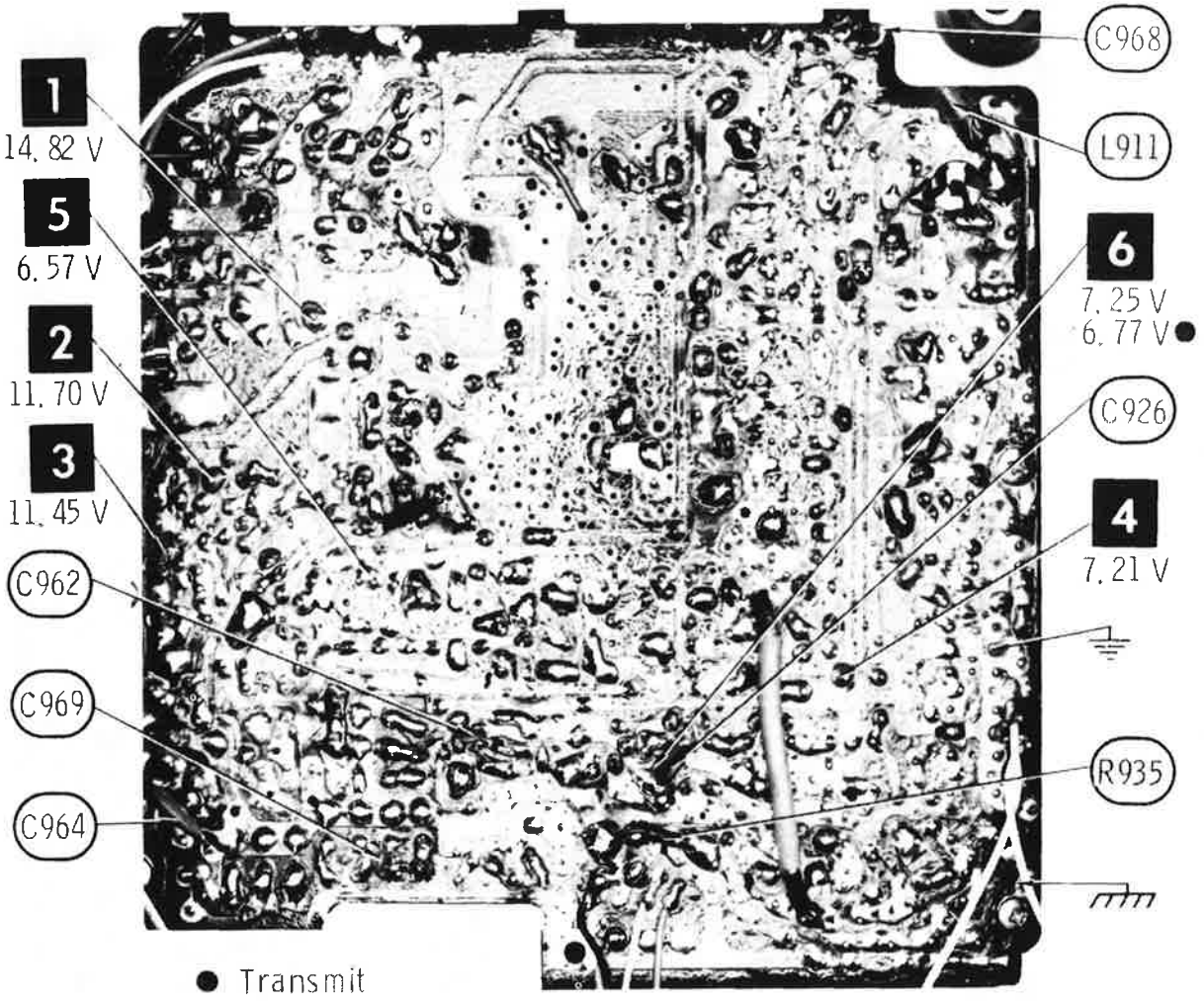
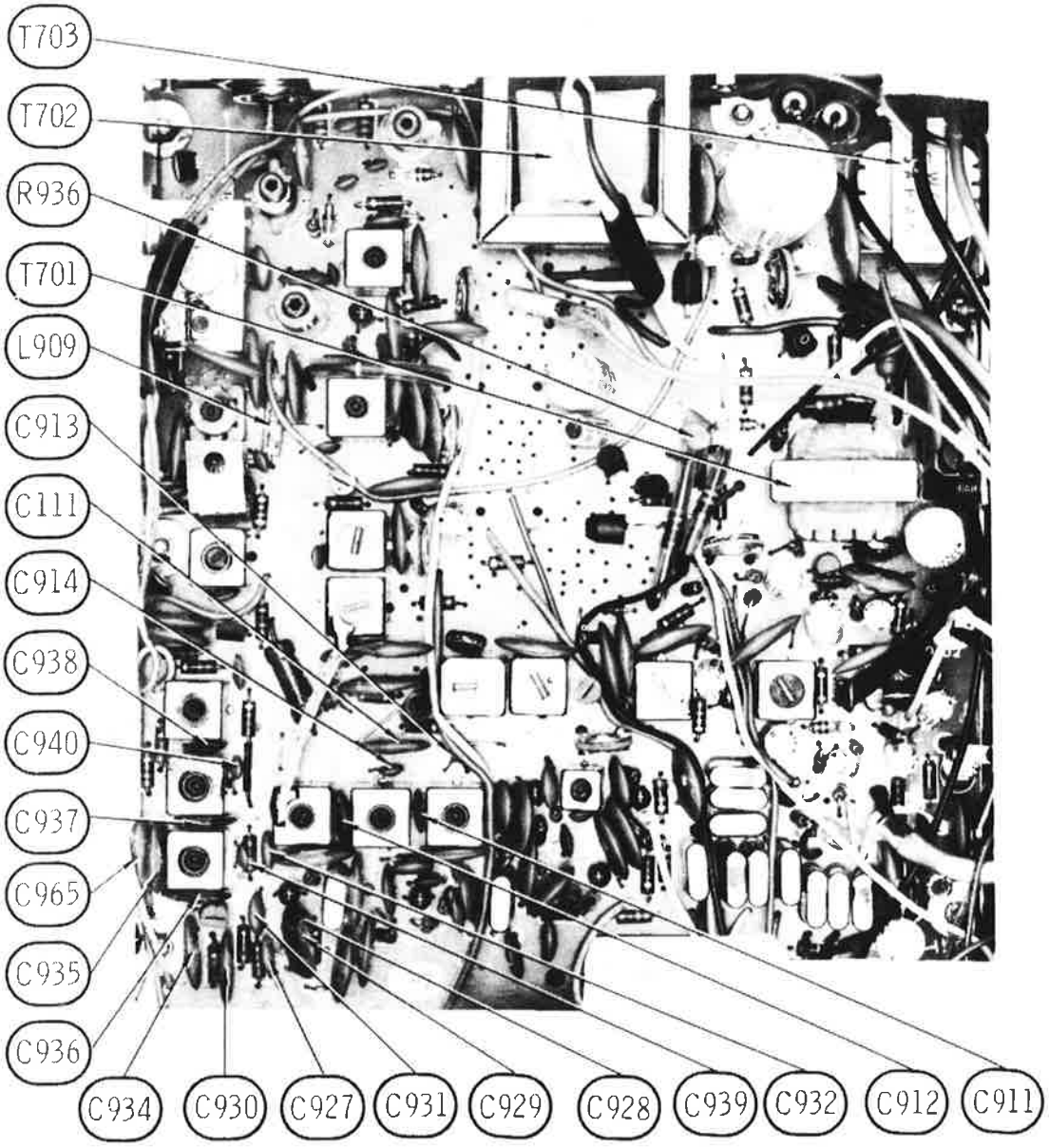
86

MAIN BOARD

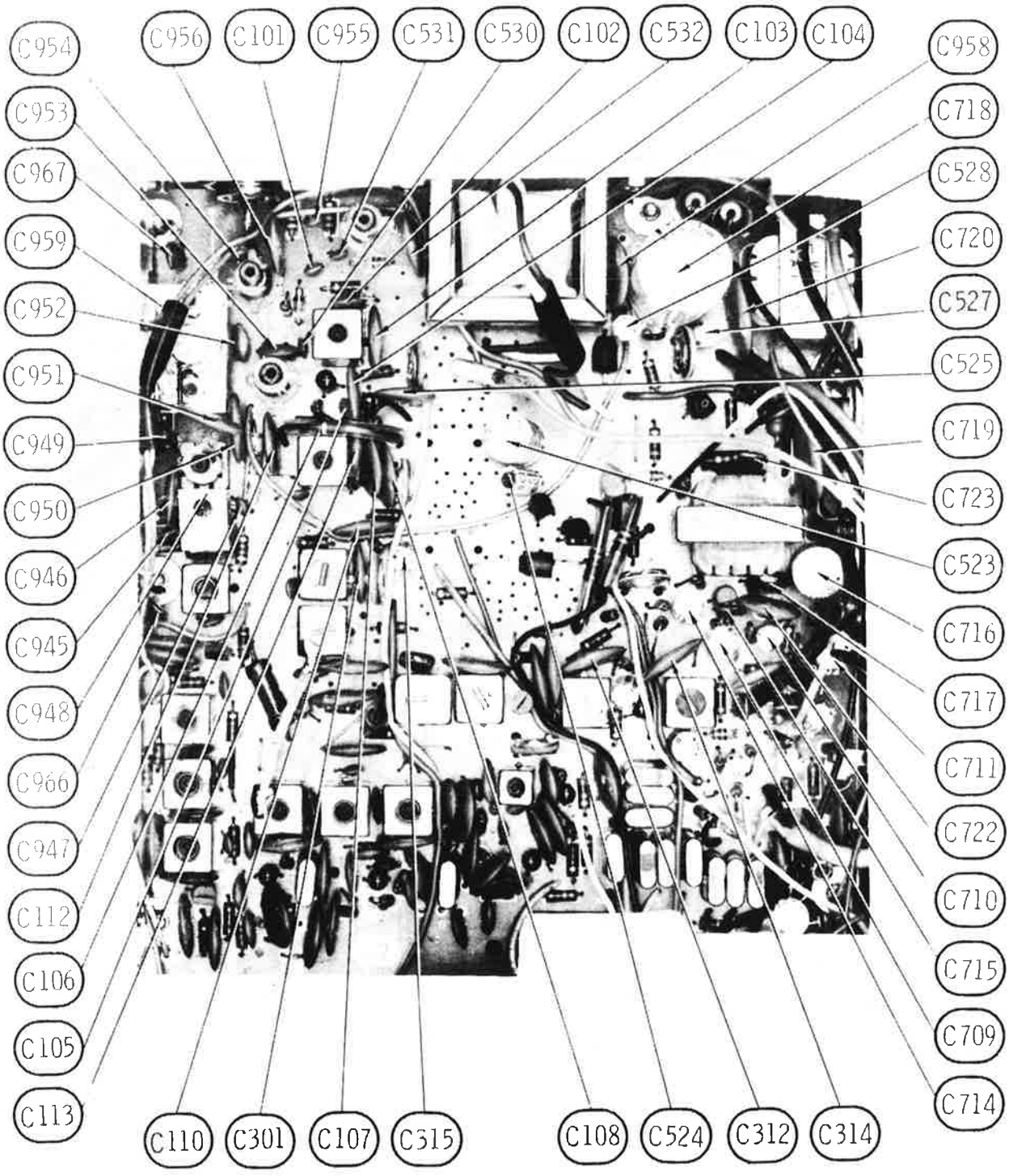
A Howard W. Sams CIRCUITRACE® Photo



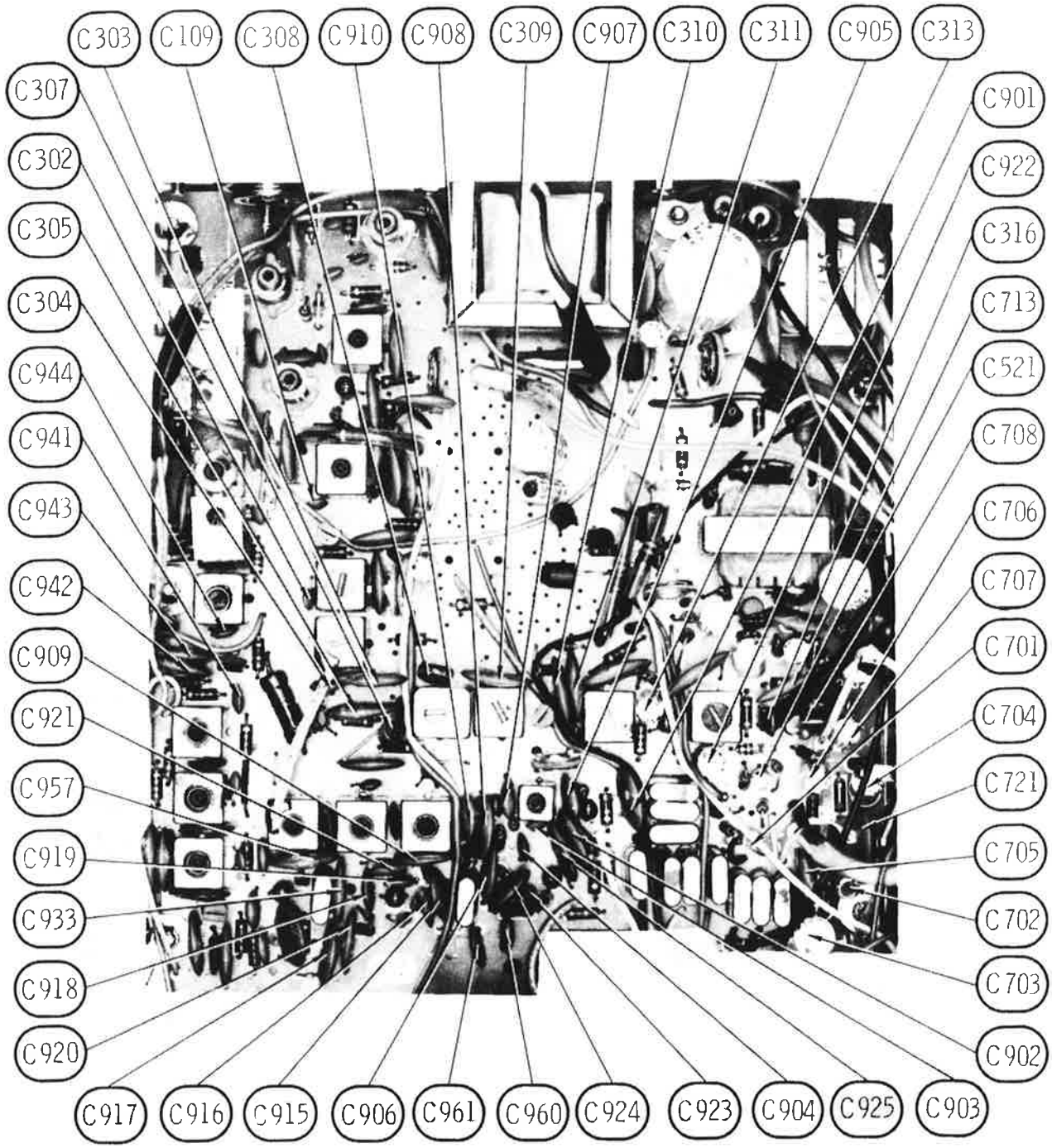
MAIN BOARD


T703
T702
R936
T701
L909
C913
C111
C914
C938
C940
C937
C965
C935
C936
C934
C930
C927
C931
C929
C928
C939
C932
C912
C911

MAIN BOARD


C954
C953
C967
C959
C952
C951
C949
C950
C946
C945
C948
C966
C947
C112
C106
C105
C113
C956
C101
C955
C531
C530
C102
C532
C103
C104
C958
C718
C528
C720
C527
C525
C719
C723
C523
C716
C717
C711
C722
C710
C715
C709
C714
C110
C301
C107
C315
C108
C524
C312
C314

MAIN BOARD


C303
C109
C308
C910
C908
C309
C907
C310
C311
C905
C313
C307
C302
C305
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C944
C941
C943
C942
C909
C921
C957
C919
C933
C918
C920
C901
C922
C316
C713
C521
C708
C706
C707
C701
C704
C721
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C702
C703
C902
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C916
C915
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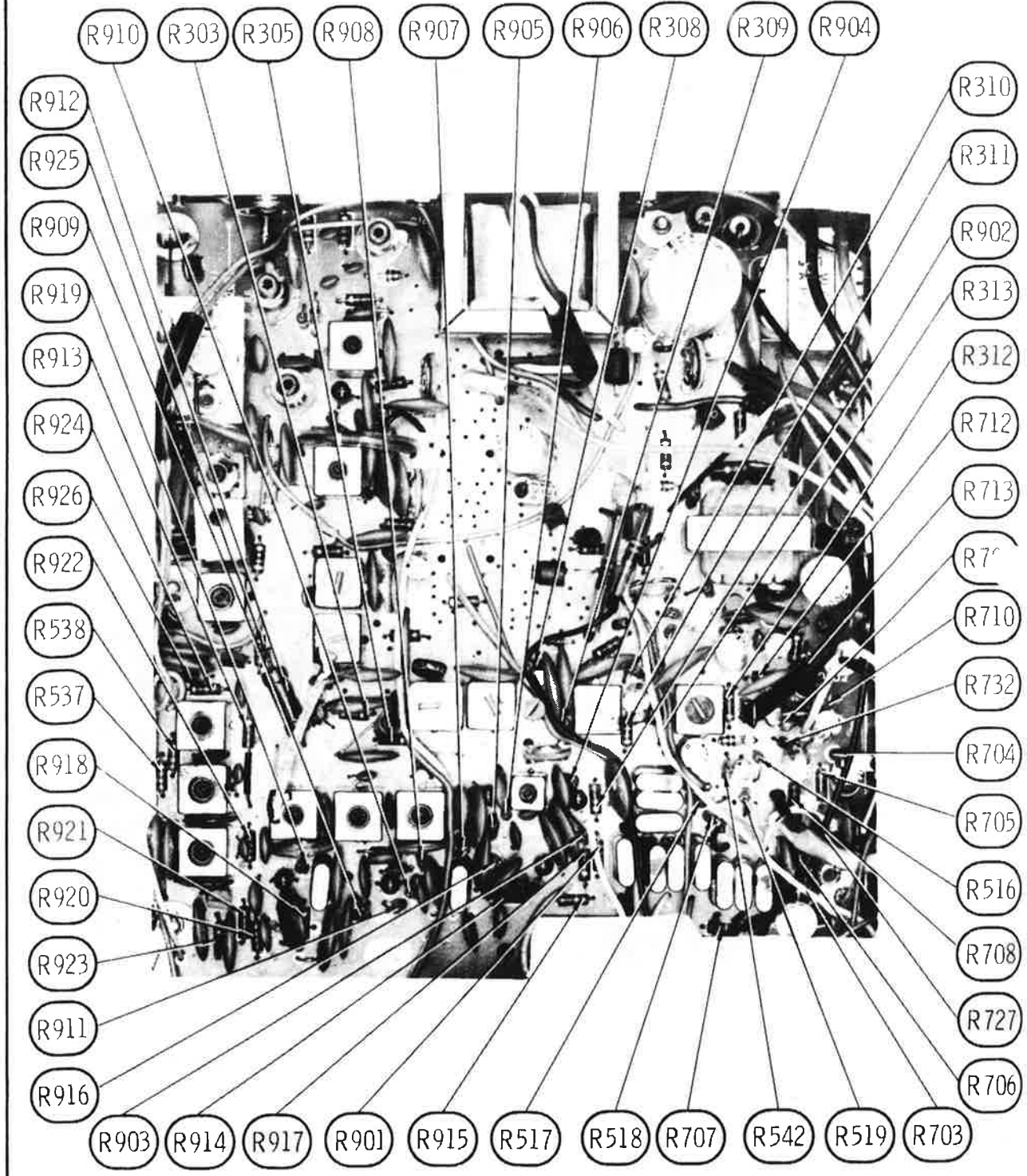
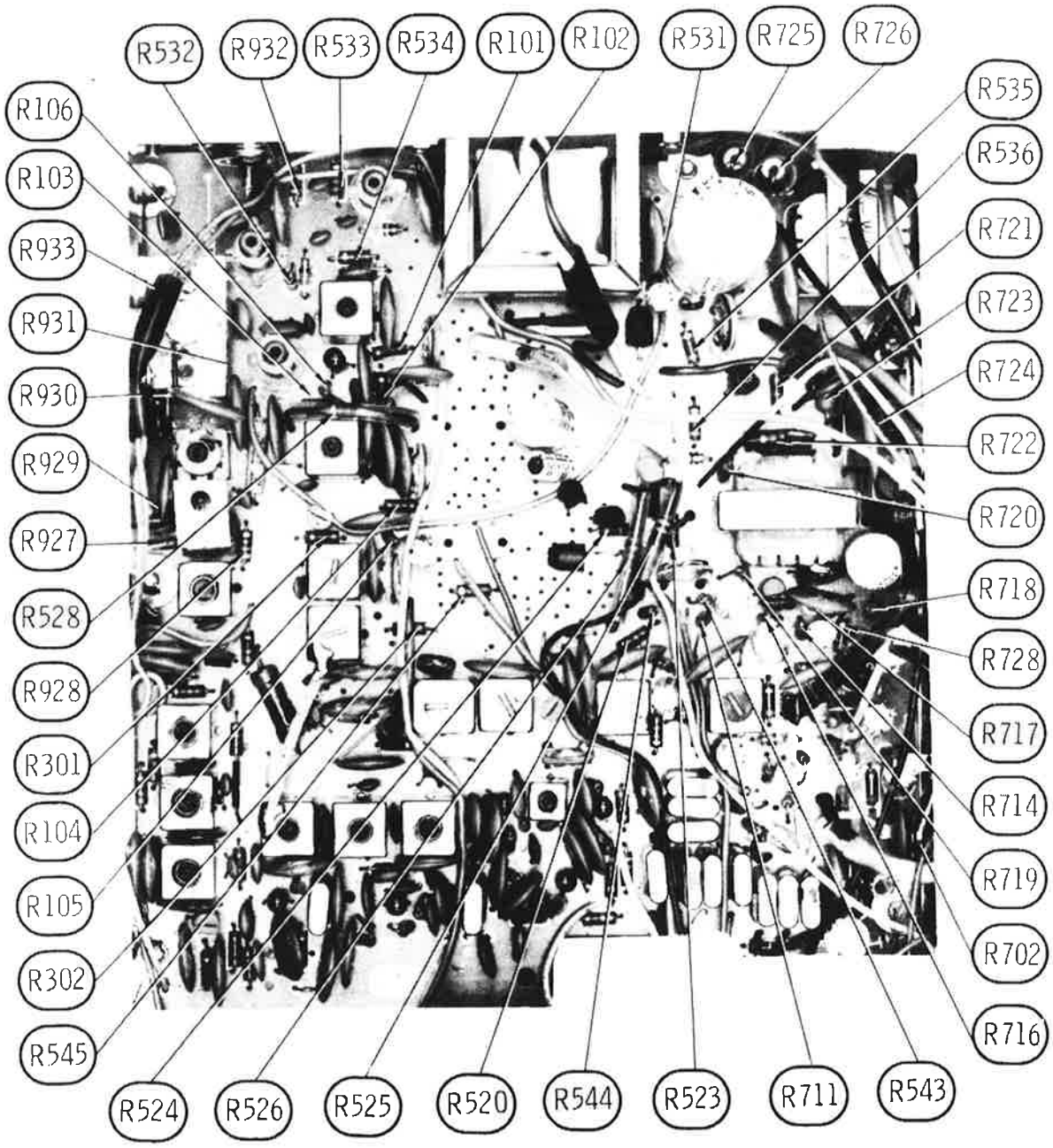
C961
C960
C924
C923
C904
C925
C903

MAIN BOARD


R910
R303
R305
R908
R907
R905
R906
R308
R309
R904
R912
R925
R909
R919
R913
R924
R926
R922
R538
R537
R918
R921
R920
R923
R911
R916
R903
R914
R917
R901
R915
R517
R518
R707
R542
R519
R703
R310
R311
R902
R313
R312
R712
R713
R710
R732
R704
R705
R516
R708
R727
R706

MAIN BOARD


R532
R932
R533
R534
R101
R102
R531
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R726
R106
R103
R933
R931
R930
R929
R927
R528
R928
R301
R104
R105
R302
R545
R535
R536
R721
R723
R724
R722
R720
R718
R728
R717
R714
R719
R702
R716
R524
R526
R525
R520
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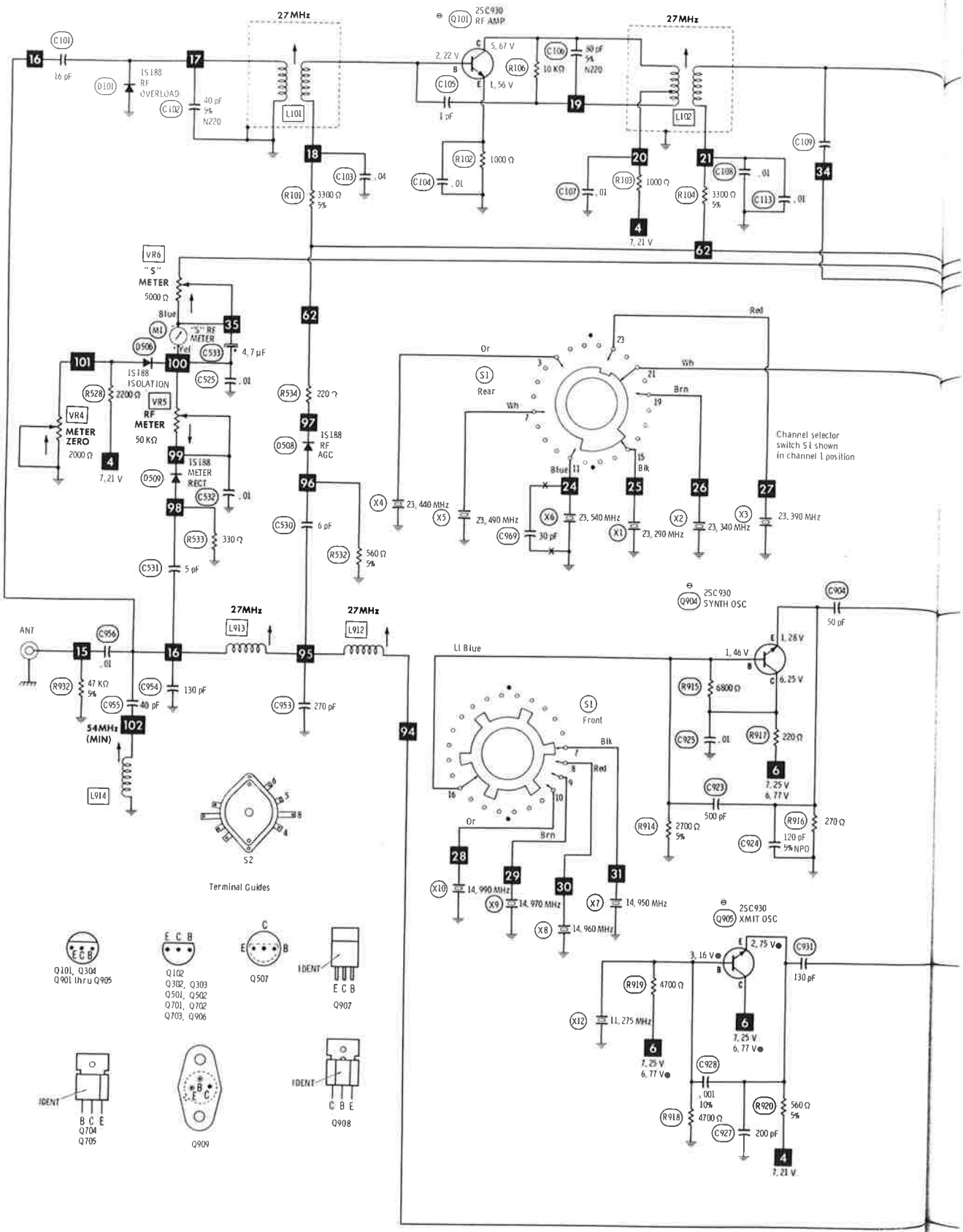
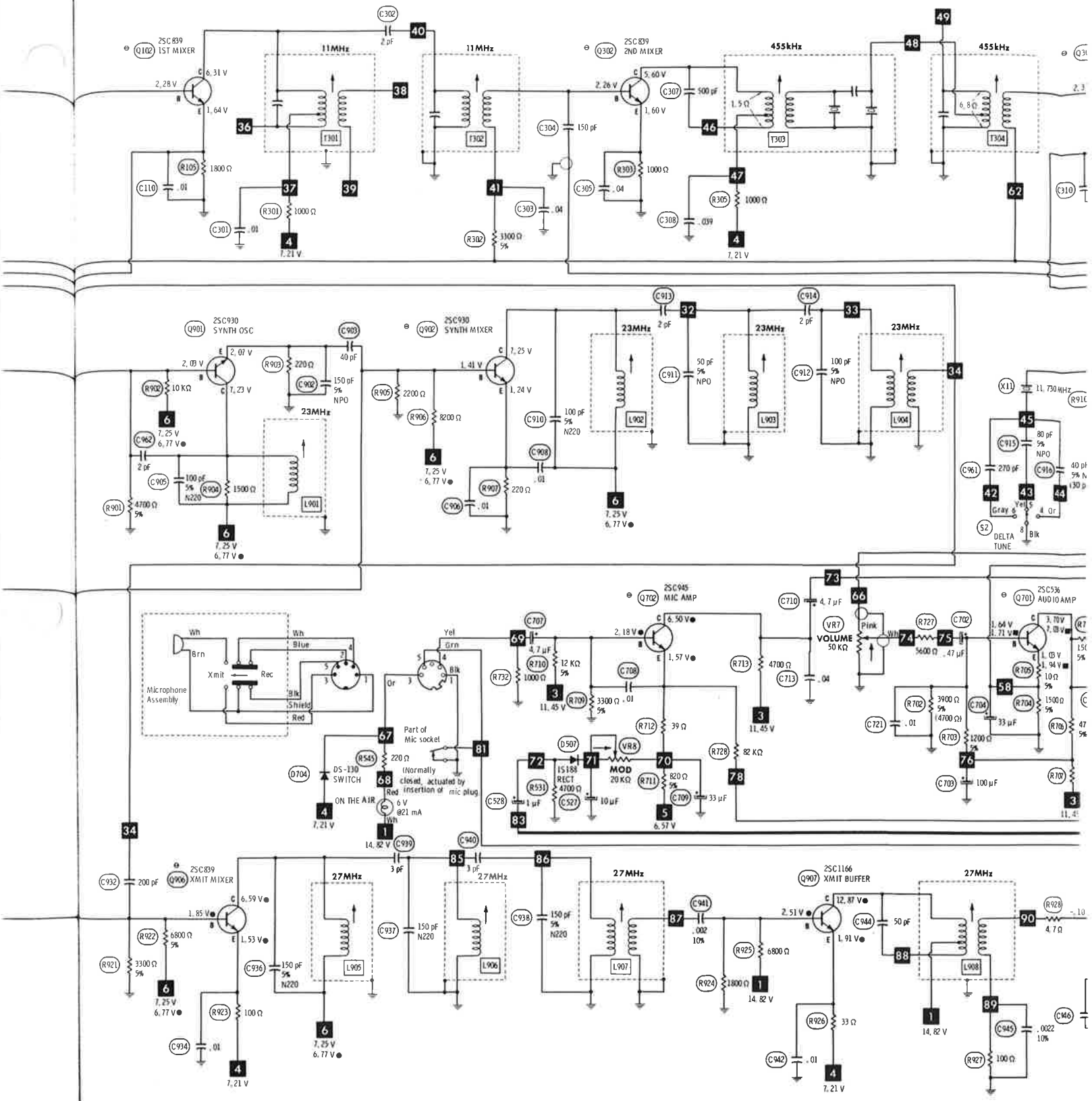
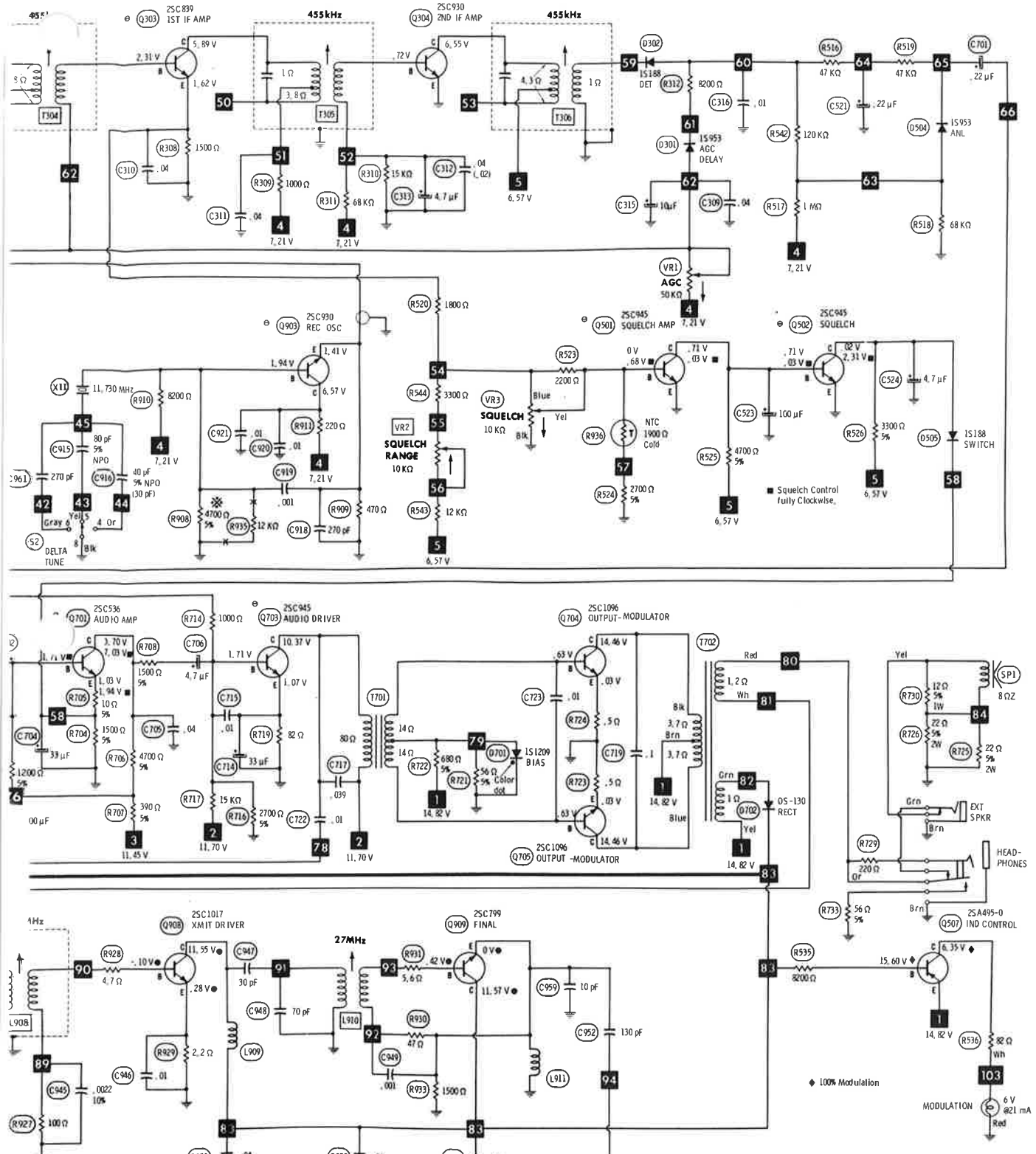
R523
R711
R543

MAIN BOARD

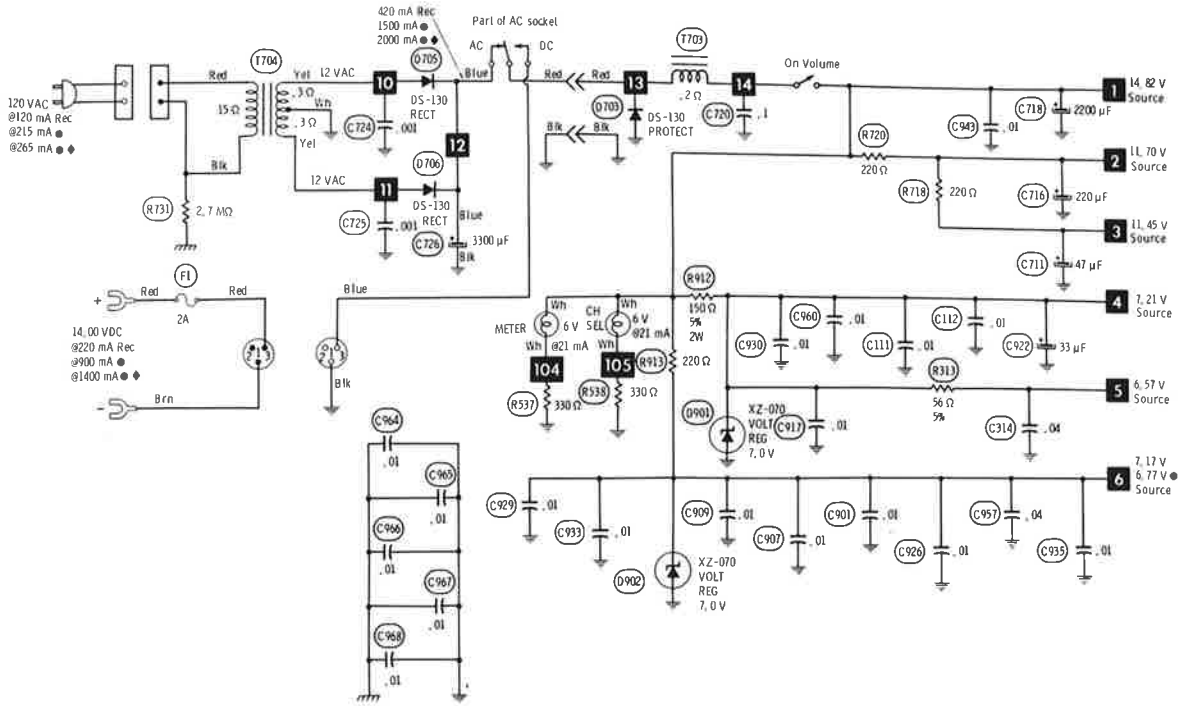


A PHOTOFACT STANDARD NOTATION SCHEMATIC WITH CIRCUITRACE


Q102 2SC839 1ST MIXER
11MHz
11MHz
Q302 2SC839 2ND MIXER
455kHz
455kHz
T301
T302
T303
T304
Q901 2SC930 SYNTH OSC
Q902 2SC930 SYNTH MIXER
23MHz
23MHz
23MHz
L901
L902
L903
L904
X11 11.730MHz
S2 DELTA TUNE
Mic rophone Assembly
Xmit
Rec
Part of Mic socket
(Normally closed, actuated by insertion of mic plug
DS-130 SWITCH
ON THE AIR
6 V @21 mA
Q702 2SC945 MIC AMP
VOLUME 50 KΩ
Q701 2SC536 AUDIO AMP
MOD 20 KΩ
Q906 2SC839 XMIT MIXER
27MHz
27MHz
27MHz
L905
L906
L907
Q907 2SC1166 XMIT BUFFER
27MHz
L908



Circuitry not use
Circuitry used in
⊖ See parts list
※ Nominal value
⏚ Ground
Chassis
Common tie poin
Measurements with s
■ Squelch fully clo
● Transmit
Supply voltage main
Voltages measured
Controls adjusted fo
Arrow at control ind
Terminal identificatic
Resistors are 1/2W
Value in ( ) used in s



—✖— Circuitry not used in some versions

– – – Circuitry used in some versions

⊖ See parts list

❋ Nominal value

⏚ Ground

Chassis

▽ Common tie point

Measurements with switching as shown unless noted:

■ Squelch fully clockwise

● Transmit

Supply voltage maintained as shown at input.

Voltages measured with digital meter, no signal.

Controls adjusted for normal operation.

Arrow at control indicates direction of advance.

Terminal identification may not be found on unit.

Resistors are 1/2W or less, 5% unless noted.

Value in ( ) used in some versions.

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

PARTS LIST AND DESCRIPTION

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

SEMICONDUCTORS (Select replacement transistor for best results)

ITEM No.	TYPE No.	MFGR. PART No.	REPLACEMENT DATA							
			GENERAL ELECTRIC PART No.	INTERNATIONAL RECTIFIER PART No.	MALLORY PART No.	MOTOROLA PART No.	RAYTHEON PART No.	RCA PART No.	SPRAGUE PART No.	SYLVANIA PART No.
D101	1S138		1N60	1N60	PTC206	HEPR9135	RE 47	SK3088	RT-263	ECG109
D301	1S953		GE-300	D200	PTC214	HEPR0602	RE 52	SK3100	RT-218	ECG177
D302	1S188		1N60	1N60	PTC206	HEPR9135	RE 47	SK3088	RT-263	ECG109
D504	1S953		GE-300	D200	PTC214	HEPR0602	RE 52	SK3100	RT-218	ECG177
D505	1S188		1N60	1N60	PTC206	HEPR9135	RE 47	SK3088	RT-263	ECG109
D506	1S188		1N60	1N60	PTC206	HEPR9135	RE 47	SK3088	RT-263	ECG109
D507	1S188		1N60	1N60	PTC206	HEPR9135	RE 47	SK3088	RT-263	ECG109
D508	1S188		1N60	1N60	PTC206	HEPR9135	RE 47	SK3088	RT-263	ECG109
D509	1S188		1N60	1N60	PTC206	HEPR9135	RE 47	SK3088	RT-263	ECG109
D701	1S1209		GE-504A	8D4	PTC201	HEPR0052	RE 49	SK3030	RT-213	ECG116
D702	DS130		GE-504A	8D4	PTC201	HEPR0052	RE 49	SK3030	RT-213	ECG116
D703	DS130		GE-504A	8D4	PTC201	HEPR0052	RE 49	SK3030	RT-213	ECG116
D704	DS130		GE-504A	8D4	PTC201	HEPR0052	RE 49	SK3030	RT-213	ECG116
D705	DS130		GE-504A	8D4	PTC201	HEPR0052	RE 49	SK3030	RT-213	ECG116
D706	DS130		GE-504A	8D4	PTC201	HEPR0052	RE 49	SK3030	RT-213	ECG116
D901	XZ070 7V Zener		GEZD-6.8	Z1206	ZB6.8	HEPZ0409	RE 110	SK3058	RT-238	ECG5071
D902	XZ070 7V Zener		GEZD-6.8	Z1206	ZB6.8	HEPZ0409	RE 110	SK3058	RT-238	ECG5071
Q101	2SC930		GE-60	(IR)2SC772	PTC132	HEPS0016	RE 9	SK3018	RT-108	ECG229
	2SC839(1)		GE-20	(IR)2SC644	PTC121	HEPS0015	RE 13	SK3018	RT-107A	ECG123A
Q102	2SC839		GE-20	(IR)2SC644	PTC121	HEPS0015	RE 13	SK3018	RT-107A	ECG123A
	2SC930(1)		GE-60	(IR)2SC772	PTC132	HEPS0016	RE 9	SK3018	RT-108	ECG229
Q302	2SC839		GE-20	(IR)2SC644	PTC121	HEPS0015	RE 13	SK3018	RT-107A	ECG123A
	2SC930(1)		GE-60	(IR)2SC772	PTC132	HEPS0016	RE 9	SK3018	RT-108	ECG229
Q303	2SC839		GE-20	(IR)2SC644	PTC121	HEPS0015	RE 13	SK3018	RT-107A	ECG123A
	2SC930(1)		GE-60	(IR)2SC772	PTC132	HEPS0016	RE 9	SK3018	RT-108	ECG229
Q304	2SC930		GE-60	(IR)2SC772	PTC132	HEPS0016	RE 9	SK3018	RT-108	ECG229
Q501	2SC945		GE-18	(IR)2SC945	PTC121	HEPS0015	RE 13	SK3124	RT-107A	ECG199
	2SC372(1)		GE-20	(IR)2SC372	PTC121	HEPS0015	RE 13	SK3018	RT-105	ECG123A
Q502	2SC945		GE-18	(IR)2SC945	PTC121	HEPS0015	RE 13	SK3124	RT-107A	ECG199
	2SC372(1)		GE-20	(IR)2SC372	PTC121	HEPS0015	RE 13	SK3018	RT-105	ECG123A
Q507	2SA495-O		GE-21	TR-30	PTC103	HEPS0013	RE 26	SK3114	RT-106	ECG159
Q701	2SC536		GE-62	(IR)2SC536	PTC121	HEPS0016	RE 64	SK3124	RT-107A	ECG199
	2SC372(1)		GE-20	(IR)2SC372	PTC121	HEPS0015	RE 13	SK3018	RT-105	ECG123A
	2SC945(1)		GE-18	(IR)2SC945	PTC121	HEPS0015	RE 13	SK3124	RT-107A	ECG199
Q702	2SC945		GE-18	(IR)2SC945	PTC121	HEPS0015	RE 13	SK3124	RT-107A	ECG199
	2SC372(1)		GE-20	(IR)2SC372	PTC121	HEPS0015	RE 13	SK3018	RT-105	ECG123A
Q703	2SC945		GE-18	(IR)2SC945	PTC121	HEPS0015	RE 13	SK3124	RT-107A	ECG199
	2SC372(1)		GE-20	(IR)2SC372	PTC121	HEPS0015	RE 13	SK3018	RT-105	ECG123A
Q704	2SC1096 (2)		GE-28	TR-55	PTC110	HEPS5000	RE 42	SK3054	RT-197	ECG186
Q705	2SC1096 (2)		GE-28	TR-55	PTC110	HEPS5000	RE 42	SK3054	RT-197	ECG186
Q901	2SC930		GE-60	(IR)2SC772	PTC132	HEPS0016	RE 9	SK3018	RT-108	ECG229
Q902	2SC930		GE-60	(IR)2SC772	PTC132	HEPS0016	RE 9	SK3018	RT-108	ECG229
	2SC839(1)		GE-20	(IR)2SC644	PTC121	HEPS0015	RE 13	SK3018	RT-107A	ECG123A
Q903	2SC930		GE-60	(IR)2SC772	PTC132	HEPS0016	RE 9	SK3018	RT-108	ECG229
	2SC839(1)		GE-20	(IR)2SC644	PTC121	HEPS0015	RE 13	SK3018	RT-107A	ECG123A
Q904	2SC930		GE-60	(IR)2SC772	PTC132	HEPS0016	RE 9	SK3018	RT-108	ECG229
	2SC839(1)		GE-20	(IR)2SC644	PTC121	HEPS0015	RE 13	SK3018	RT-107A	ECG123A
Q905	2SC930		GE-60	(IR)2SC772	PTC132	HEPS0016	RE 9	SK3018	RT-108	ECG229
	2SC839(1)		GE-20	(IR)2SC644	PTC121	HEPS0015	RE 13	SK3018	RT-107A	ECG123A
Q906	2SC839		GE-20	(IR)2SC644	PTC121	HEPS0015	RE 13	SK3018	RT-107A	ECG123A
	2SC930(1)		GE-60	(IR)2SC772	PTC132	HEPS0016	RE 9	SK3018	RT-108	ECG229
Q907	2SC1166		GE-18	TR-63	PTC143	HEPS5026	RE 23	SK3024	RT-110	ECG298
Q908	2SC1017(3)		GE-215						RT-186	ECG299
Q909	2SC799(4)				PTC158			SK3049		ECG237

(1) Alternate.
(2) Rating 10 watts @ 2 amps.
(3) Rating 4 watts @ 1 amp.
(4) Rating 10 watts @ 3 amps.

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.
C313	4.7 6.3V		RME-A-J-005	EP30-5	PC5-50	VTT4R7A50	EV-1319
C315	10 16V		RME-B-G-010	EP15-10	PC10-25	VTT10A25	EV-1222
C521	.22 10V		RME-E-E-050	EP15-50	PC50-16	MTV50CB15	TVA-1150
C523	100 16V		CTA-1450		WBR50-450	TC79B	TVA-1713
C524	4.7 16V		RME-A-J-005	EP30-5	PC5-50	VTT4R7A50	EV-1319
C527	10 16V		RME-B-G-010	EP15-10	PC10-25	VTT10A25	EV-1222
C528	1 50V		RME-A-J-001	EP50-1	PC1-50	MTV1CB50	EV-1615
C533	4.7 6.3V		RME-A-J-005	EP30-5	PC5-50	VTT4R7A50	EV-1319
C701	.22 10V		RME-E-E-050	EP15-50	PC50-16	MTV50CB15	TVA-1150
C702	.47 10V		RME-A-J-001	EP30-1	PC1-50	VTTR47B63	EV-1310
C703	100 6.3V		RME-E-E-100	EP6-100	PC100-10	MTV100CB6	EV-1030
C704	33 10V		ME-3-D-035	EP15-25	PC30-25	VTT33A10	EV-1125
C706	4.7 6.3V		RME-A-J-005	EP30-5	PC5-50	VTT4R7A50	EV-1319
C707	4.7 6.3V		RME-A-J-005	EP30-5	PC5-50	VTT4R7A50	EV-1319
C709	33 10V		ME-3-D-035	EP15-25	PC30-25	VTT33A10	EV-1125
C710	4.7 6.3V		RME-A-J-005	EP30-5	PC5-50	VTT4R7A50	EV-1319
C711	47 6.3V		RME-C-B-050	EP6-50	PC50-10	VTT47A6	EV-1026
C714	33 6.3V		ME-3-D-035	EP15-25	PC30-25	VTT33A10	EV-1125
C716	220 16V		RME-J-E-250	EP15-250	PC250-25	VTT220G16	EV-1240
C718	2200 16V		ME-G2000	EA15-2000	WBR2000-16	TC1520C	TVA-1175.3
C726	3300 25V				DD0003A	TC50300	TVA-1214
C922	33 10V		ME-3-D-035	EP15-25	PC30-25	VTT33A10	EV-1125

PARTS LIST AND DESCRIPTION (CONTINUED)

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

CAPACITORS

ITEM No.	RATING	MFGR. PART No.	REPLACEMENT DATA				
			ARCO PART No.	CENTRALAB PART No.	CORNELL-DUBILIER PART No.	MALLORY PART No.	SPRAGUE PART No.
C101	16		CCT0-150	DTZ-15	NP015	CN0415	10TCC-Q15
C102	40 5% N220		*			*	10TCR-Q39
C103	.04		CCD-403			GP140	5GA-S40
C104	.01		CCD-103	DC-103	GP10000	MAG5011	2SS-S10
C105	1					CN0510	10TCC-V10
C106	80 5% N220		*			*	10TCR-Q82
C107	.01		CCD-103	DC-103	GP10000	MAG5011	2SS-S10
C108	.01		CCD-103	DC-103	GP10000	MAG5011	2SS-S10
C109	30		CCT0-300				10TCC-Q30
C110	.01		CCD-103	DC-103	GP10000	MAG5011	2SS-S10
C111	.01		CCD-103	DC-103	GP10000	MAG5011	2SS-S10
C112	.01		CCD-103	DC-103	GP10000	MAG5011	2SS-S10
C113	.01		CCD-103	DC-103	GP10000	MAG5011	2SS-S10
C301	.01		CCD-103	DC-103	GP10000	MAG5011	2SS-S10
C302	2		CCT0-2R2	DTZ-2R2	NP02P2	CN0522	10TCC-V22
C303	.04		CCD-403			GP140	5GA-S40
C304	150		CCD-151	DD-151		CN0315	10TCC-T15
C305	.04		CCD-403			GP140	5GA-S40
C307	500		DM15-501J		CD15FD501J03		
C308	.039		6DP-3-393		DPMS6S39	PVC6139	6PS-S39
C309	.04		CCD-403			GP140	5GA-S40
C310	.04		CCD-403			GP140	5GA-S40
C311	.01		CCD-103	DC-103	GP10000	MAG5011	2SS-S10
C312	.04			DC-104	MGP1	MAG5001	TG-P10
C314	.04			DC-104	MGP1	MAG5001	TG-P10
C316	.01		1MDF-1-103	CPJ-103	DPMS4S1	EWF1A110	1PB-S10
C525	.01		CCD-103	DC-103	GP10000	MAG5011	2SS-S10
C530	6			DTZ-6R8	NP06P8		10TCC-V68
C531	5		CCT0-050				10TCC-V50
C532	.01		CCD-103	DC-103	GP10000	MAG5011	2SS-S10
C705	.04		CCD-403			GP140	5GA-S40
C708	.01		1MDF-1-103	CPJ-103	DPMS4S1	EWF1A110	1PB-S10
C713	.04		CCD-403			GP140	5GA-S40
C715	.01		1MDF-1-103	CPJ-103	DPMS4S1	EWF1A110	1PB-S10
C717	.039		6DP-3-393		DPMS6S39	PVC6139	6PS-S39
C719	.1			DC-104	MGP1	MAG5001	TG-P10
C720	.1			DC-104	MGP1	MAG5001	TG-P10
C721	.01		CCD-103	DC-103	GP10000	MAG5011	2SS-S10
C722	.01		CCD-103	DC-103	GP10000	MAG5011	2SS-S10
C723	.01		1MDF-1-103	CPJ-103	DPMS4S1	EWF1A110	1PB-S10
C724	.001 150VAC						
C725	.001 150VAC						
C901	.01		CCD-103	DC-103	GP10000	MAG5011	2SS-S10
C902	150 5% NP0			DTZ-150		CN0315	10TCC-T15
C903	40		CCT0-390			CN0439	10TCC-Q39
C904	50		CCT0-510	DTZ-50	NP050	CN0450	10TCC-Q50
C905	100 5% N220		*			*	10TCR-T10
C906	.01		CCD-103	DC-103	GP10000	MAG5011	2SS-S10
C907	.01		CCD-103	DC-103	GP10000	MAG5011	2SS-S10
C908	.01		CCD-103	DC-103	GP10000	MAG5011	2SS-S10
C909	.01		CCD-103	DC-103	GP10000	MAG5011	2SS-S10
C910	100 5% N220		*			*	10TCR-T10
C911	50 5% NP0			DTZ-50	NP050	CN0450	10TCC-Q50
C912	100 5% NP0			DTZ-100	NP0100	CN0310	10TCC-T10
C913	2		CCT0-2R2	DTZ-2R2	NP02P2	CN0522	10TCC-V22
C914	2		CCT0-2R2	DTZ-2R2	NP02P2	CN0522	10TCC-V22
C915	80 5% NP0			DTZ-82	NP082	CN0482	10TCC-Q82
C916	40 5% NP0		CCT0-390			CN0439	10TCC-Q39
C917	.01		CCD-103	DC-103	GP10000	MAG5011	2SS-S10
C918	270			DTZ-270			10TCC-T27
C919	.001		CCD-102	DD-102		GP210	10TS-D10
C920	.01		CCD-103	DC-103	GP10000	MAG5011	2SS-S10
C921	.01		CCD-103	DC-103	GP10000	MAG5011	2SS-S10
C923	500		CCD-501	DD-501	GP500	GP350	10TS-T50
C924	120 5% NP0			DTZ-120		CN0312	10TCC-T12
C925	.01		CCD-103	DC-103	GP10000	MAG5011	2SS-S10
C926	.01		CCD-103	DC-103	GP10000	MAG5011	2SS-S10
C927	200		CCD-201	DD-201	GP200	GP320	10TS-T20
C928	.001 10%		CCD-202			GP220	10TS-D20
C929	.01		CCD-103	DC-103	GP10000	MAG5011	2SS-S10
C930	.01		CCD-103	DC-103	GP10000	MAG5011	2SS-S10
C931	130		CCT0-121	DTZ-120		CN0312	10TCC-T12
C932	200		CCD-201	DD-201	GP200	GP320	10TS-T20
C933	.01		CCD-103	DC-103	GP10000	MAG5011	2SS-S10
C934	.01		CCD-103	DC-103	GP10000	MAG5011	2SS-S10
C935	.01		CCD-103	DC-103	GP10000	MAG5011	2SS-S10
C936	150 5% N220		*				10TCR-T15
C937	150 5% N220		*				10TCR-T15
C938	50 5% N220		*				
C939	3		CCT0-3R3	DTZ-3R3	NP03P3	CN0533	10TCC-V33
C960	3		CCT0-3R3	DTZ-3R3	NP03P3	CN0533	10TCC-V33
C941	.002 10%		CCD-202			GP220	10TS-D20
C942	.01		CCD-103	DC-103	GP10000	MAG5011	2SS-S10

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 PART No.	CENTRALAB PART No.	CORNELL-DUBILIER PART No.	MALLORY PART No.	SPRAGUE PART No.
C943	.01		CCD-103	DC-103	GP10000	MAG5011	2SS-S10
C944	50		CCTO-510	DTZ-50	NP050	CN0450	10TCC-Q50
C945	.002 10%		CCD-102	DD-102		GP210	10TS-D10
C946	.01		CCD-103	DC-103	GP10000	MAG5011	2SS-S10
C947	30					CN0427	10TCC-Q27
C948	70		CCD-680	DD-680	GP68	GP468	10TS-Q68
C949	.001		1MDF-1-102	CPJ-102	DPMS6D1	EWF1A210	1PB-D10
C950	.04		CCD-403			GP140	5GA-S40
C951	.04		CCD-403			GP140	5GA-S40
C952	130		CCTO-121	DTZ-120		CN0312	10TCC-T12
C953	270		CCD-271	DD-271	GP270	GP327	10TS-T27
C954	130		CCTO-121	DTZ-120		CN0312	10TCC-T12
C955	40		CCTO-390			CN0439	10TCC-Q39
C956	.01		CCD-103	DC-103	GP10000	MAG5011	2SS-S10
C957	.04		CCD-403			GP140	5GA-S40
C958	.04		CCD-403			GP140	5GA-S40
C959	10		CCTO-100	DTZ-10	NP010	CN0410	10TCC-Q10
C960	.01		CCD-103	DC-103	GP10000	MAG5011	2SS-S10
C961	270		CCD-271	DD-271	GP270	GP327	10TS-T27
C962	2		CCTO-2R2	DTZ-2R2	NP02P2	CN0522	10TCC-V22
C964	.01		CCD-103	DC-103	GP10000	MAG5011	2SS-S10
C965	.01		CCD-103	DC-103	GP10000	MAG5011	2SS-S10
C966	.01		1MDF-1-103	CPJ-103	DPMS4S1	EWF1A110	1PB-S10
C967	.01		1MDF-1-103	CPJ-103	DPMS4S1	EWF1A110	1PB-S10
C968	.01		CCD-103	DC-103	GP10000	MAG5011	2SS-S10
C969	30		CCTO-300				10TCC-Q30

* 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	RESISTANCE	REPLACEMENT DATA				
			MFGR. PART No.	CENTRALAB PART No.	CLAROSTAT PART No.	MALLORY PART No.	TRW PART No.
VR1	AGC	50K	P-6203	TSV-50K (2) or T-50K (2)	C-503 (2)	MTC54L1 (2)	X201R503B (2)
VR2	Squelch Range	10K	P-6202	TSV-10K (2) or T-10K (2)	C-103 (2)	MTC14L1 (2)	X201R103B (2)
VR3	Squelch	10K	P-0742				
VR4	Meter Zero	2000	P-6200	TSV-25K (2) or T-2500 (2)	C-252 (2)	MTC23L1 (2)	X201R252B (2)
VR5	AF Meter	50K	P-6203	TSV-50K (2) or T-50K (2)	C-503 (2)	MTC54L1 (2)	X201R503B (2)
VR6	"S" Meter	5000	P-6201	TSV-5K (2) or T-5000 (2)	C-502 (2)	MTC53L1 (2)	X201R502B (2)
VR7	Volume/Switch	50K					
VR8	Modulation	20K		T-20K (2) or TSV-25K (2)	C-253 (2)	MTC24L1 (2)	X201R253B (2)

(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.
R936	1900 Cold NTC		SDT-500

ITEM No.	RATING	REPLACEMENT DATA	
		WORKMAN PART No.	MFGR. PART No.

COILS (RF-IF)

ITEM No.	FUNCTION	REPLACEMENT DATA			REMARKS
		PART No.	OTHER IDENTIFICATION	MILLER PART No.	
L101	RF Input (27MHz)	CA-2991	4-257R326		
L102	RF Output (27MHz)	CA-4498	4-259R828		
L901	Synth. Osc (23MHz)	CA-4509	4-258R813A		
L902	Synth. Mixer Out (23MHz)	CA-4499	4-259R825		
L903	Harmonic Sup (23MHz)	CA-4500	4-259R826		
L904	Harmonic Sup (23MHz)	CA-4501	4-259R827		
L905	Harmonic Sup (27MHz)	CA-4502	4-259R801		
L906	Harmonic Sup (27MHz)	CA-4502	4-259R801		
L907	Xmit Mixer (27MHz)	CA-4503	4-259R802		
L908	Xmit Buffer (27MHz)	CA-4504	4-259R10904A		
L909	RF Choke	CB-2206	4-253R701		
L910	Xmit Driver (27MHz)	CA-4508	4-259R823		
L911	RF Choke	CB-2207	4-255R103		

PARTS LIST AND DESCRIPTION (CONTINUED)

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

COILS (RF-IF)(cont)

ITEM No.	FUNCTION	REPLACEMENT DATA			REMARKS
		PART No.	OTHER IDENTIFICATION	MILLER PART No.	
L912	Final, Amp (27MHz)	CA-4505	4-259R805		
L913	Pi Filter (27MHz)	CA-4506	4-259R806		
L914	TVI Trap (54MHz)	CA-4507	4-259R807		
T301	11MHz IF	CA-7438	4-256R717		
T302	11MHz IF	CA-7439	4-256R714		
T303	2nd Mixer Output (455kHz)	C-0540	4-256R197		
T304	Input IF (455kHz)	CA-7352	4-256R198		
T305	Interstage IF (455kHz)	CA-7350	4-256R703		
T306	Output IF (455kHz)	CA-7351	4-256R711		

FILTER CHOKE

ITEM No.	RATINGS			REPLACEMENT DATA			NOTES
	CURRENT (Measured)	DC RES.	INDUCTANCE (0 CURRENT 1000~)	MFGR. PART No.	THORDARSON PART No.	TRIAD PART No.	
T703	1400mA	.2	2.7mH	CB-2208 R-W6384 (1)			(1) Number on unit

TRANSFORMER (Driver)

ITEM No.	TURNS RATIO			REPLACEMENT DATA			NOTES
	PRI.	SEC. 1	SEC. 2	MFGR. PART No.	THORDARSON PART No.	TRIAD PART No.	
T701	2	1		TN-0066 R-W6375 (1)			(1) Number on unit.

TRANSFORMER (Audio Output)

ITEM No.	IMPEDANCE		REPLACEMENT DATA			NOTES
	PRI.	SEC.	MFGR. PART No.	THORDARSON PART No.	TRIAD PART No.	
T702	32	8	TD-0119 4R80471 (1)			(1) Number on unit

TRANSFORMER (Power)

ITEM No.	RATING		REPLACEMENT DATA			NOTES
	PRI.	SEC. 1	MFGR. PART No.	THORDARSON PART No.	TRIAD PART No.	
T704	120V AC @ 265mA AC	24V AC @ 2000mA AC	TA-0454 4-251R807 (1)			(1) Number on unit

PARTS LIST AND DESCRIPTION (CONTINUED)

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

SPEAKER

ITEM No.	TYPE	REPLACEMENT DATA		NOTES
		MFGR. PART No.	QUAM PART No.	
SP1	3" X 5" PM, 8 ohm	S-4517	35A05Z8	

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	2 Amp. Fast Acting	HF-0087		AGC2	HDJ	312002	150145	26-2253

CRYSTALS

ITEM No.	CRYSTAL FREQUENCY IN MHz	MFGR. PART No.	CTS KNIGHTS PART No.	CHANNEL
X1	23.290	4-225R809	MA20W23.290	1,2,3,4
X2	23.340	4-225R810	MA20W23.340	5,6,7,8
X3	23.390	4-225R811	MA20W23.390	9,10,11,12
X4	23.440	4-225R812	MA20W23.440	13,14,15,16
X5	23.490	4-225R813	MA20W23.490	17,18,19,20
X6	23.540	4-225R814	MA20W23.540	21,22,23

ITEM No.	CRYSTAL FREQUENCY IN MHz	MFGR. PART No.	CTS KNIGHTS PART No.	CHANNEL
X7	14.950	4-225R805	MB90W14.950	1,5,9,13,17,21
X8	14.960	4-225R806	MB90W14.960	2,6,10,14,18,22
X9	14.970	4-225R807	MB90W14.970	3,7,11,15,19
X10	14.990	4-225R808	MB90W14.990	4,8,12,16,20,23
X11	11.730	4-225R803	MC90W11.730	Receive
X12	11.275	4-225R804	MC90W11.275	Transmit

MISCELLANEOUS

ITEM No.	PART NAME	PART No.	NOTES
M1	Meter	M0252	Tuning
S1	Switch	S-1138	Channel Selector
S2	Switch	S-1154	Delta Tune
	Socket	J-6279	AC
	Printed Circuit Board		Main
	Printed Circuit Board		Rectifier

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

ITEM	PART No.
Top Lid	Z-2109
Compartment Lid	Z-2110
Escutcheon	Z-2114
Mobile Mounting Bracket	MB-0107

ITEM	PART No.
Microphone Hanger	M-3072
Knob, Volume/Squlech/Delta	K-1686
Knob, Channel Selector	K-1685
Channel Dial Scale	G-0180

ACCESSORIES

ITEM	MFGR. PART No.	REMARKS
Microphone	M-0253	

WIRING DATA

General-use Hook-up Wire	Use BELDEN No.	8530 (Solid) Available in 12 Colors 8524 (Stranded) Available in 12 Colors
Power Cord, 2-Wire	Use BELDEN No.	17106 (Plastic) or 17126 (Rubber) -6 feet 17109 (Plastic) or 17129 (Rubber) -9 feet
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 8491 4-Conductor (2 shielded, 2 unshielded) Neoprene