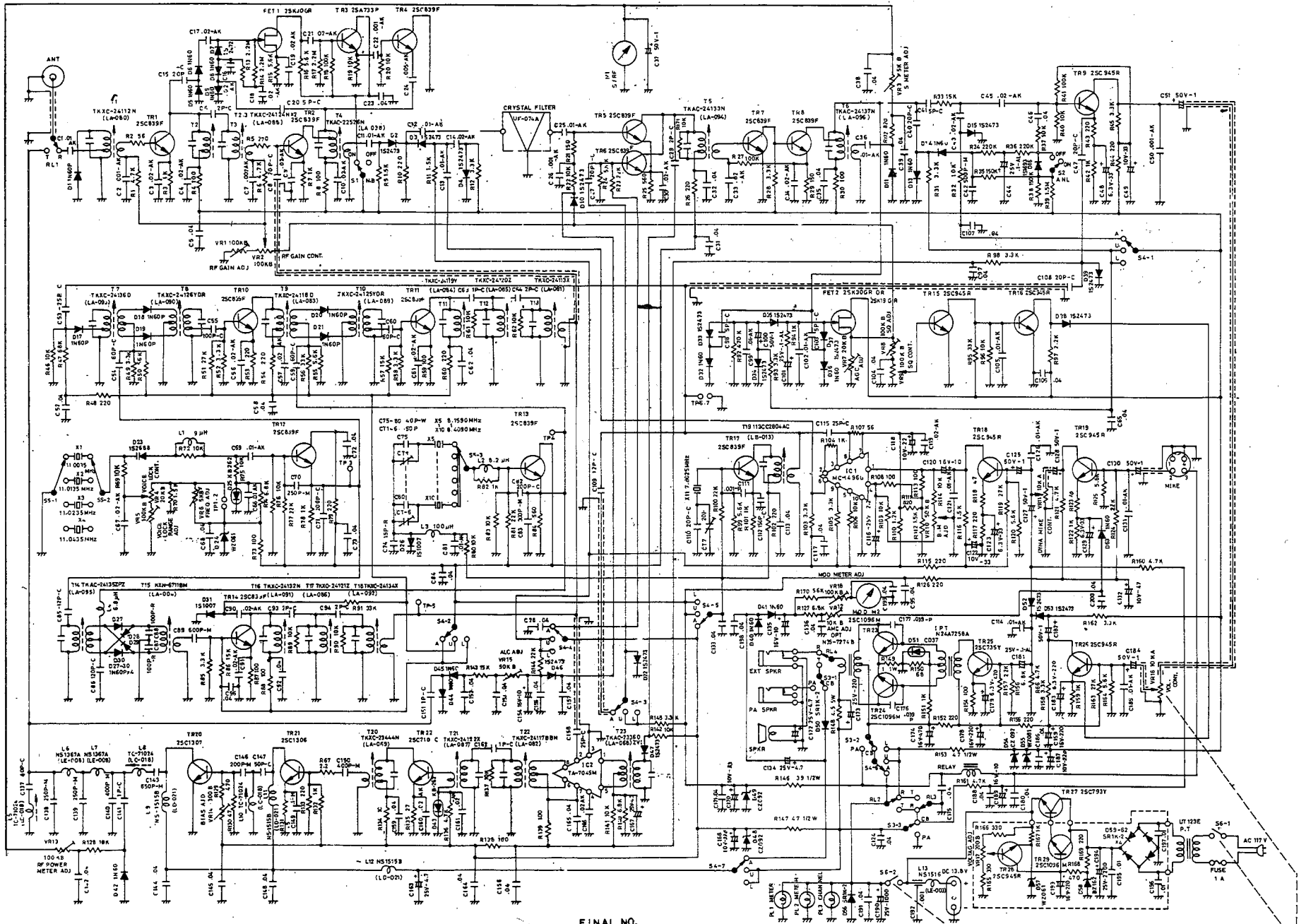


# CIRCUIT DIAGRAM FOR COBRA 139



FINAL NO.

- |       |      |
|-------|------|
| TR 29 | VR18 |
| FET   | CT7  |
| IC2   | M2   |
| D63   | R172 |
| T23   | S8   |
| L13   | FL3  |
| C20C  | P3   |
| X11   |      |

**PARTS LIST FOR COBRA 139**

CIRCUIT SYMBOL	DESCRIPTION	DYNASCAN PART NO.
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**TRANSISTORS, DIODES**

TR-1,2,4,5,6,7,8,10	Transistor 2SC839F/2SC917Z (0)	1-78-042-9-002
TR-9,15,16,18,19	Transistor 2SC945R/2SC937Z (V)	1-78-042-9-003
TR-23,24,29	Transistor 2SC1098M	1-72-024-9-004
TR-21	Transistor 2SC1308 Pwr. NPN	1-72-024-9-002
TR-20	Transistor 2SC1307 Pwr. NPN	1-72-024-9-003
TR-3	Transistor 2SA733H SSig. NPN	1-77-017-2-9-001
TR-27	Transistor 2SC793Y	1-72-024-9-005
TR-22	Transistor 2SC736Y SSig. NPN	1-76-047-9-001
TR-25	Transistor 2SC1047D or 2SC710C	1-82-014-9-002
FET1,2	Transistor 2SK306H or 2SK196H FET	1-82-014-9-001
IC-2	Integrated Circuit TA7045M	3-07-047-9-002
IC-1	Integrated Circuit MC1496B	1-80-006-9-001
D-1,17,18,19,20,21	Diode IN60P Germanium	1-50-006-9-001
D-5,6,8,9,11,12,13	Diode IN60	1-50-001-9-005
D-14,32,36,40,41,42	Diode SRK-2	1-51-045-9-001
D-2,3,4,10,15,22,33	Diode IS2473 (vertical)	1-51-035-9-003
34,35,37,38,39	Diode IS2473 (vertical)	1-51-035-9-001
46,52,53	Diode IS2473 (horizontal)	1-51-035-9-001
D-4,7	Diode IS2472 (vertical)	1-51-040-9-002
D-7	Diode CD37	1-51-045-9-003
D-26,31	Diode IS1007	1-51-046-9-003
D-16	Diode IS1693	1-52-051-9-001
D-48,49,54	Zener Diode CZ092	1-52-054-9-001
D-55	Zener Diode WZ-081	1-52-052-9-002
D-24,57	Zener Diode WZ061	1-52-001-9-001
D-58	Zener Diode BZ162	1-54-001-9-001
D-23	Var-Cap IS2688	1-51-032-9-004
D-25,43	Varactor KB262	

**COILS, TRANSFORMERS**

T-1	Coil TKXC-24124N RF XFMR	066-019-9-001
T-2,3	Coil TKXC-24124N RF XFMR	066-019-9-002
T-4	Coil TKAC-22526N IF XFMR	060-018-9-001
T-5	Coil TKAC-24133N IF XFMR	060-018-9-002
T-6	Coil TKAC-24137N IF XFMR	060-018-9-003
T-7	Coil TKXC-24126YDR IF XFMR	060-018-9-004
T-8	Coil TKXC-24118D IF XFMR	060-018-9-005
T-9	Coil TKXC-24125YDR IF	060-018-9-006
T-10	Coil TKXC-24119Y IF	060-018-9-007
T-11	Coil TKXC-24120Z Variable Shield	046-013-9-001
T-12	Coil TKXC-24113X Variable Shield	046-013-9-002
T-13	Coil TKAC-24135ZPZ IF XFMR	060-018-9-009
T-14	Coil TXN-6711BM, Osc XFMR	060-013-9-001
T-15	Coil TKXC-24132N, Osc XFMR	064-013-9-002

CIRCUIT SYMBOL	DESCRIPTION	DYNASCAN PART NO.
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**COILS, TRANSFORMERS (Continued)**

T-17	Coil TKXC-24121Z IF XFMR	060-018-9-010
T-18	Coil TKXC-24134X IF XFMR	060-018-9-011
T-19	Coil TKXC-2804AC IF XFMR	060-018-9-012
T-20	Coil TKXC-2344AN IF XFMR	060-018-9-014
T-21	Coil TKXC-24122X Variable Shield	046-013-9-004
T-22	Coil TKXC-24175BH Variable Shield	060-018-9-013
T-23	Coil TKAC-23360ZVI IF XFMR	060-018-9-015
L-1	Micro Inductor LF-4 10 H	041-062-9-001
L-2	Micro Inductor LF-4 8.2 H	041-062-9-003
L-3	Micro Inductor LF-1 100 H	041-062-9-002
L-4	Micro Inductor LF-4 6.8 H	041-061-9-002
L-5,8,10	Coil TC-71024 TVI Trap Coil	041-056-9-003
L-6,7	Coil NS-1367A Variable	044-032-9-001
L-9,11,12	Coil NS-1515B RF Choke	041-062-9-004
L-13	Coil NS-1515B RF Choke	041-062-9-005
LP-T	Input Transformer N24A-7268A	068-007-9-001
	Output Transformer N36-7214B	061-023-9-001

**MISCELLANEOUS**

Printed Circuit Board 144-100-00 ..... 302-153-9-001  
 Printed Circuit Board 123E-200-00 ..... 302-154-9-001

**CAPACITORS**

C-37,51,100,125,127	Electrolytic Capacitor 50V 1 F	022-122-9-001
128,130,182,184	Electrolytic 25V 2.2 F	022-122-9-002
C-116	Electrolytic 25V 4.7 F	022-122-9-003
C-134,163,167,172	Electrolytic Capacitor 25V 1000 F	022-122-9-012
G-190	Electrolytic 16V 10 F	022-120-9-001
C-120,135,154,189	Electrolytic Capacitor 16V 470 F	022-099-9-008
C-174	Electrolytic 16V 220 F	022-122-9-008
C-178,193,169	Electrolytic 10V 33 F	022-122-9-004
C-118	Electrolytic 10V 22 F	022-122-9-005
C-49,122,170	Electrolytic 10V 47 F	022-122-9-002
C-132	Electrolytic 10V 220 F	022-120-9-009
C-188	Electrolytic 10V 330 F	022-122-9-011
C-187	Electrolytic 6.3V 220 F	022-122-9-006
C-189,123,129	Electrolytic 25V 2200 F	022-122-9-010
C-173	Electrolytic 25V 220 F	022-122-9-007
C-194,101,181	Aluminum Capacitor 25V 0.1 F (Vertical)	022-122-9-013
C-144,101,181,162	Ceramic Capacitor 10P 50V CH	020-109-9-007
C-6,31,41,151,162	Ceramic Capacitor 20P 50V CH	020-109-9-010
C-6,29,64,93,94	Ceramic Capacitor 50P 50V CH	020-126-9-002
C-8,5	Ceramic Capacitor 15P 50V CH	020-126-9-010
C-7,4	Ceramic Capacitor 20P 50V CH	020-126-9-003
C-16,27,40,47,108	Ceramic Capacitor 25P 50V CH	020-109-9-015
C-53,115,158	Ceramic Capacitor 30P 50V CH	020-126-9-005
C-137	Ceramic Capacitor 40P 50V CH	020-126-9-002
C-8	Ceramic Capacitor 50P 50V CH	020-126-9-006
C-147		

CIRCUIT SYMBOL	DESCRIPTION	DYNASCAN PART NO.
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**CAPACITORS (Continued)**

C-54,59,60	Ceramic Capacitor 60P 50V CH	020-126-9-006
C-55	Ceramic Capacitor 100P 50V K CH	020-109-9-007
C-56	Ceramic Capacitor 120P 50V CH	020-109-9-004
C-20,112	Ceramic Capacitor 150P 50V CH	020-128-9-013
C-7,113	Ceramic Capacitor 200P 50V K BH	020-128-9-008
C-21,82	Ceramic Capacitor 100P 50V K BH	020-128-9-008
C-5,75,77,78,79,80	Ceramic Capacitor 40P 50V K WJ	020-128-9-014
C-24,22,28	Ceramic Capacitor 0001 F 50V W YA	020-128-9-015
C-24	Ceramic Capacitor 0001 F 50V W YA	020-109-9-002
C-11,12,13,23,36,50	Ceramic Capacitor 0.01 F 50V YA	020-109-9-002
66,69,81,99,102		
105,114,121,126		
C-3,4,9,10,14,16,17	Ceramic Capacitor 0.02 F 50V YA	020-126-9-008
18,19,21,30,33,34		
43,45,56,57,61,67		
90,91,119,160,161		
166		
C-193,196,197	Ceramic Capacitor 0.01 F 50VZ SL	020-109-9-002
C-23,28,31,32,35	Ceramic Capacitor 0.04 F 50V SL	020-109-9-005
38,39,62,92,98,92		
93,98,72,73,94,96		
95,99,91,104,106		
107,113,114,124,133		
135,142,144,145,146		
152,153,155,156,157		
159,164,165,171,175		
180,186,188,191,198		

CIRCUIT SYMBOL	DESCRIPTION	DYNASCAN PART NO.
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**RESISTORS, CONTROLS**

VR-14	Semi-Fixed Resistor EVL10A 300K	008-209-9-006
VR-3,6	Semi-Fixed Volume KUSF10-688M5K	008-209-9-003
VR-12	Semi-Fixed Volume KUSF10-88M 10K	008-209-9-002
VR-7	Semi-Fixed Volume EXL-10A 20K	008-187-9-006
VR-15	Semi-Fixed Volume EXL-10A 50K	008-209-9-004
VR-1,5,8,13,18	Semi-Fixed Volume EXL-10A 100K	008-209-9-001
VR-10	Semi-Fixed Resistor EVL SOA 50K ohm	008-209-9-004
VR-17	Semi-Fixed Resistor KVSF105BA 200 ohm	008-209-9-007

**MISCELLANEOUS**

Relay AE-3344 ..... 441-008-9-001

CIRCUIT SYMBOL	DESCRIPTION	DYNASCAN PART NO.
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**CRYSTALS (Continued)**

X-10	Crystal HC-25/U 8.4090MHz	133-007-9-010
X-11	Crystal HC-25/U 7.8028MHz	133-007-9-011
	Crystal Filter UF-074A 7.8MHz	143-003-9-001

**MISCELLANEOUS**

M1-02402	Crystal Socket SD0105	748-079-9-001
M2-02403	DC Cord Assembly	523-082-9-001
M2-2404	Chassis SPC-1	227-052-9-001
M2-2405	Back Panel	282-012-9-001
M2-2406	Top Cabinet	252-032-9-001
M4-00817	Bottom Cabinet	232-015-9-001
M4-00818	Condenser Setting Metal	221-130-9-001
M4-00819	Front Panel Setting metal (Left)	231-131-9-001
M4-00820	Front Panel Setting metal (Right)	231-132-9-001
M4-01127	Knob Channel	380-215-9-001
M4-01128	Knob VR S/D ETC	781-095-9-002
M4-01728	Channel Number Disc	380-176-9-002
M3-02409	Brand Name Plate	280-048-9-001
M3-02410	Brand Name Plate for Mike	280-047-9-001
M4-02296	Speaker Net	783-025-9-001
M3-02411	Speaker Foot 25 x17mm(H)	503-080-9-001
M4-02413	Sivofram Box (right & Left)	500-238-9-001
M2-02415,16	Instruction Manual	480-149-9-001
	FCC Application Form	492-041-9-001
	Warranty Card	491-138-9-001
	Service Dept. Address List	492-036-0-000
	Schematic/Parts List	499-063-9-001

CIRCUIT SYMBOL	DESCRIPTION	DYNASCAN PART NO.
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**CAPACITORS**

CT1-2,3,4,5,6	Trimmer ECV-12W 50R32	020-030-9-002
CT-7	Trimmer Capacitor ECV-12W20P32	028-030-9-002
VR-16	Variable Resistor Power SW/VR	008-210-9-005
VR-11	EVH-80AK20A14	008-210-9-003
VR-29	EVH-80AK20B24	008-210-9-004
	EVH-80AK20B15 Variable Resistor RF Gain	008-210-9-002

**MISCELLANEOUS**

Meier 49F1 37 MOD ..... 320-054-9-001  
 Meier S/RP ..... 320-055-9-000  
 AC Cord SPT-1 UL 6-feet Brown ..... 420-001-9-009  
 Strain Relief Bushing BU3270 ..... 380-001-9-001  
 Rubber Bushing ..... 381-057-9-001  
 Fuse Holder ..... 742-025-9-001  
 Cemented Resistor 5 ohm SW R ..... 013-002-9-001

**RESISTORS, CONTROLS**

Metal Coated Resistor 1 ohm K 1WR ..... 013-002-9-002

**MISCELLANEOUS**

SKR	Speaker, 107D10T (PM)	580-015-9-001
MIKE	3F Consent	733-054-9-001
SS-1/SS-3	Microphone	562-006-9-001
SS-1/SS-7	Metal Consent w/Plug SM-144	173-045-9-001
SS-1/SS-4	Fuse 2 Amp	191-251-3-002
SS-1/SS-2	Rotary Switch RL-2 4 24 Channel	083-159-9-001
SS-1/SS-3	Rotary Switch Mode	084-036-9-001
PL-1	Slide Switch SL-2-2-2-14 SW PA/CB ANL/NB	084-036-9-002
PL-2	Slide Switch SL-3-3-2-03	400-035-9-001
PL-3	Pilot Lamp 14V 80mA w/White lead	400-035-9-002
ANT	Pilot Lamp w/Yellow Lead	400-035-9-003
	AC Power Supply Transformer UT-123E	065-102-9-001
	"M" Type Connector	772-025-9-001
	Jack SJ-296 w/Fibre Washer 3.5	773-045-9-002

**CRYSTALS**

X-1	Crystal HC-25/U 11.00350MHz	133-007-9-001
X-2	Crystal HC-25/U 11.01350MHz	133-007-9-002
X-3	Crystal HC-25/U 11.02350MHz	133-007-9-003
X-4	Crystal HC-25/U 11.04350MHz	133-007-9-004
X-5	Crystal HC-25/U 8.16900MHz	133-007-9-005
X-6	Crystal HC-25/U 8.20900MHz	133-007-9-006
X-7	Crystal HC-25/U 8.25900MHz	133-007-9-007
X-8	Crystal HC-25/U 8.30900MHz	133-007-9-008
X-9	Crystal HC-25/U 8.35900MHz	133-007-9-009