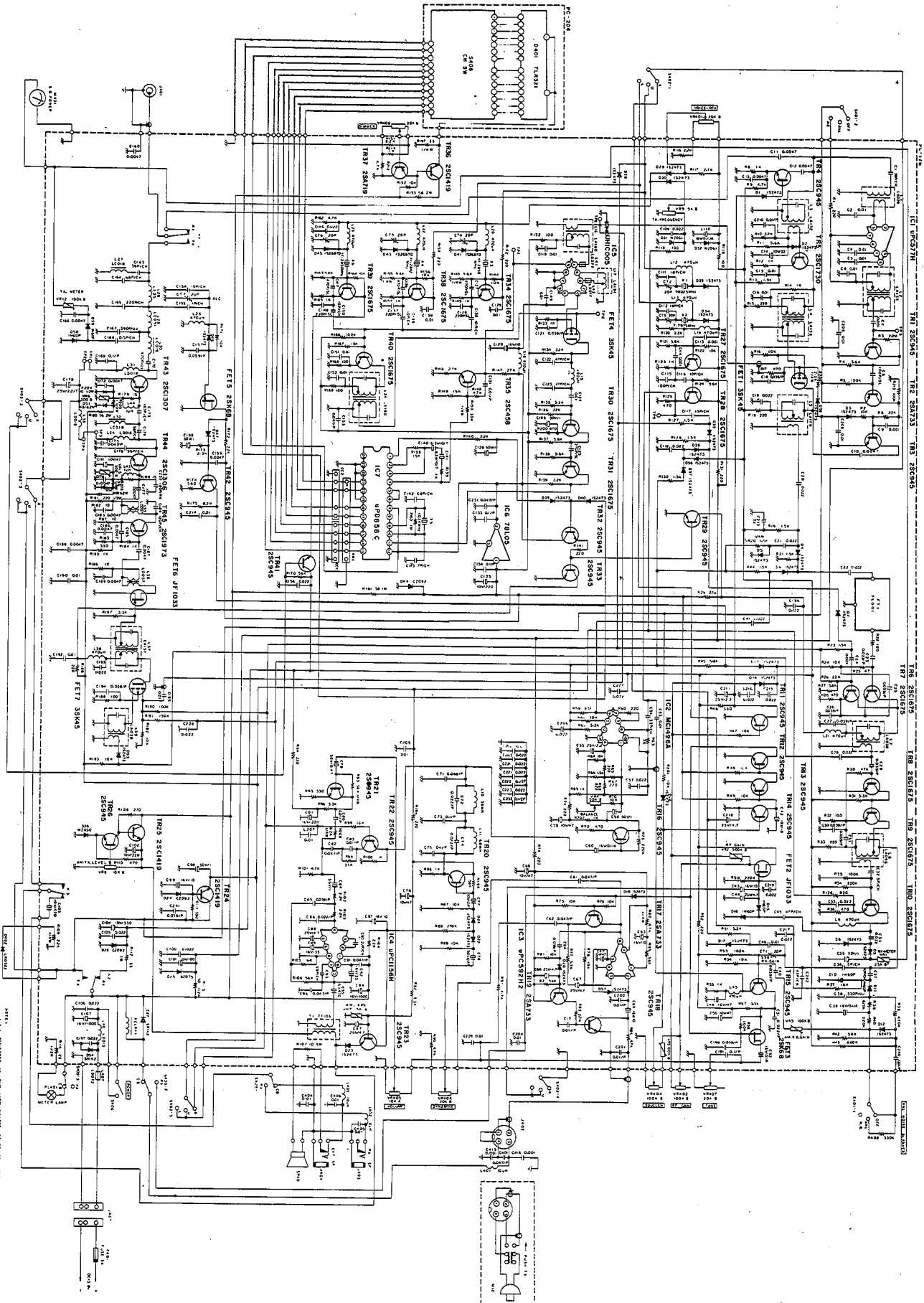


CIRCUIT DIAGRAM FOR COBRA 138XLR



NOTE: ALL COMPONENTS TO BE USED EXCEPT WHERE SHOWN.
ALL DIMENSIONS IN INCHES UNLESS OTHERWISE SPECIFIED.

BILLS OF MATERIAL FOR COBRA 138XLR

CIRCUIT SYMBOL	DESCRIPTION	DYNASCAN PART NO.
TR-1, 3, 4, 11, 12, 13	IC, TRANSISTORS & DIODES	
TR-5	Transistor 2SC945 (A) P	176-069-9-003
TR-6, 7, 8, 9, 10, 27	Transistor 2SC1675 L	176-065-9-001
TR-35	Transistor 2SC458 C	176-049-9-002
TR-43	Transistor 2SC1730 L	176-073-9-001
TR-44	Transistor 2SC1307 (1)	176-073-9-002
TR-24, 25, 38	Transistor 2SC2306	172-024-9-002
TR-37	Transistor 2SC1973	176-073-9-003
TR-24, 25, 38	Transistor 2SC4733 P	177-020-9-001
TR-37	Transistor 2SC1419 C	176-069-9-004
TR-37	Transistor 2SA179 P	177-029-9-001
FET-3, 5	FET 2SK88A M	182-044-9-001
FET-2, 6	FET JF 1033 Rnd	182-044-9-002
FET-1, 7	FET 2SK45 (B) -09	182-138-9-001
FET-4	FET 2SK45 (B) -09	182-042-9-001
IC-1	Integrated Circuit μ PC557H	307-112-9-007
IC-2	Integrated Circuit MCI496A	307-112-9-005
IC-3	Integrated Circuit μ PC592H2	307-112-9-006
IC-4	Integrated Circuit μ PC156H	307-112-9-001
IC-5	Integrated Circuit μ PC78L05	307-112-9-002
IC-6	Integrated Circuit μ PC78L05	307-112-9-003
IC-7	Integrated Circuit μ PD859C	307-112-9-004
D-10, 11, 15, 16, 50, 59	P Diode 1N40P (12.5) Forming	150-006-9-001
D-9, 31, 58, 6, 7, 12	P Diode 1S2473 (12.5) Forming	151-069-9-001
D-1, 2, 17, 18, 19	P Diode 1S2473 (10) Forming	151-064-9-002
20, 21, 22, 23, 29	30, 33, 34, 35, 36	
38, 39, 40, 46, 47,		
53, 58		
D-57	Diode 1S2473	151-035-9-003
D-27, 54	Diode SR1K-2	151-045-9-001
D-401	Diode TLR321	158-014-9-001
D-402	Diode LRO702R	151-064-9-003
D-25	Zener BZ 075	152-079-9-004
D-24, 28, 44	Zener CZ 092	152-051-9-001
D-32	Zener WZ 080 (10) Forming	152-079-9-001
D-31	Zener WZ 081 (10) Forming	152-079-9-002
D-31, 43, 45	Varicap KS-192M Forming	152-069-9-003
D-31, 52	Varicap KS-192M	153-008-9-002
L-1	Coil LA-029	060-023-9-001
L-7, 39	Coil LA-038	060-018-9-001

CIRCUIT SYMBOL	DESCRIPTION	DYNASCAN PART NO.
R-128	P Carbon resistor (Forming type) 820 1/8W J	002-108-5-821
R-7, 182, 186	Carbon resistor (Forming type) 107 1/8W J 12.5	002-108-5-100
R-20, 199	Carbon resistor (Forming type) 157 1/8W J 12.5	002-108-5-150
R-25	Carbon resistor (Forming type) 520 1/8W J 12.5	002-108-5-520
R-83	Carbon resistor (Forming type) 47 1/8W J 12.5	002-108-5-470
R-105	Carbon resistor (Forming type) 56 1/8W J 12.5	002-108-5-560
R-22, 118, 119, 132,	Carbon resistor (Forming type) 100 1/8W J 12.5	002-108-5-101
R-68, 169, 189	Carbon resistor (Forming type) 150 1/8W J 12.5	002-108-5-151
R-32	Carbon resistor (Forming type) 220 1/8W J 12.5	002-108-5-221
R-1, 18, 29, 33, 52, 56,	Carbon resistor (Forming type) 60, 65, 71, 74, 94,	
131, 141, 142, 154,		
183, 198		
R-108	Carbon resistor (Forming type) 220 1/8W J 12.5	002-108-5-21
R-46, 95, 183	Carbon resistor (Forming type) 330 1/8W J 12.5	002-108-5-331
R-17, 18, 36, 72, 110	Carbon resistor (Forming type) 470 1/8W J 12.5	002-108-5-471
R-208	Carbon resistor (Forming type) 820 1/8W J 12.5	002-108-5-821
R-209	U Carbon resistor 8 2K 1/4W J	002-104-5-822
R-20	U Carbon resistor 1 5K 1/4W J	002-104-5-152
R-4, 12, 14, 55, 69, 86,	Carbon resistor (Forming type) 1K 1/8W J 12.5	002-108-5-102
100, 123, 133, 145,		
157, 159, 165, 184,		
185, 202		
R-99	Carbon resistor (Forming type) 1.2K 1/8W J 12.5	002-108-5-122
R-13, 19, 21, 23, 44, 66,	Carbon resistor (Forming type) 1.5K 1/8W J 12.5	002-108-5-152
127, 128, 130		
R-47, 102, 103, 116,	Carbon resistor (Forming type) 2.2K 1/8W J 12.5	002-108-5-222
120, 134, 140, 173,		
138		
R-10, 83, 90, 117, 146	Carbon resistor (Forming type) 2.7K 1/8W J 12.5	002-108-5-272
R-31, 51, 59, 62, 77,	Carbon resistor (Forming type) 3.3K 1/8W J 12.5	002-108-5-332
R-9, 84, 91, 101,	Carbon resistor (Forming type) 4.7K 1/8W J 12.5	002-108-5-472
162, 212		
R-4, 11, 27, 45, 121	Carbon resistor (Forming type) 5.6K 1/8W J 12.5	002-108-5-562
R-63, 137, 138	Carbon resistor (Forming type) 8.2K 1/8W J 12.5	002-108-5-822
R-75, 151, 48, 49, 54,	Carbon resistor (Forming type) 10K 1/8W J 12.5	002-108-5-103
81, 84, 90, 93, 97, 104,		
144, 153, 155, 164,		
167, 182, 193, 201, 89		
R-149, 158, 78	Carbon resistor (Forming type) 15K 1/8W J 12.5	002-108-5-153
R-37	Carbon resistor (Forming type) 18K 1/8W J 12.5	002-108-5-183
R-6, 26, 136, 172, 104	Carbon resistor (Forming type) 22K 1/8W J 12.5	002-108-5-223
R-147	Carbon resistor (Forming type) 27K 1/8W J 12.5	002-108-5-273
R-30, 148	Carbon resistor (Forming type) 47K 1/8W J 12.5	002-108-5-473
R-82, 106, 124, 170,	Carbon resistor (Forming type) 56K 1/8W J 12.5	002-108-5-563
194, 198		
R-5, 35, 39, 53, 58,	Carbon resistor (Forming type) 100K 1/8W J 12.5	002-103-5-104
75, 166, 190		

CIRCUIT SYMBOL	DESCRIPTION	DYNASCAN PART NO.
L-8	Coil LA-096	060-018-9-003
L-3	Coil LA-152	060-023-9-002
L-2	Coil LA-155	060-023-9-003
L-4	Coil LA-157	060-023-9-004
L-37	Coil LA-160	060-023-9-005
L-16	Coil LA-170	046-018-9-001
L-5	Coil LA-176	046-018-9-002
L-24	Coil LA-090	046-018-9-003
L-17	Coil LA-191	046-018-9-004
L-401, 402, 403	Coil LA-191	046-018-9-005
L-27, 32	Coil LD-046	046-018-9-006
L-30	Coil LC-019	046-018-9-007
L-40, 33, 34	Coil LD-019	046-018-9-008
L-31, 33, 34	Coil LD-019	046-018-9-009
L-20, 28	Coil LD-027	046-018-9-010
L-28, 29	Coil LD-051	046-018-9-011
L-19	Coil LE-051	046-018-9-012
L-9, 12, 13, 14, 15, 18, 20	Micro inductor LZ-012 100uH	041-068-9-001
21, 22, 23, 25, 38	Micro inductor LZ-012 50uH	041-068-9-002
L-10	Micro inductor LZ-015 50uH	041-068-9-003
L-11	Micro inductor LZ-015 60uH	041-068-9-004
L-43, 44	Micro inductor LZ-002 1uH	041-068-9-005
T-1	Output Trans TF-106	061-032-9-001
L-41, 42	Bead Core LD-007	763-080-9-003
VR-7, 9	Semi fixed resistor RV-135 5K B	008-307-9-001
VR-8	Semi fixed resistor RV-135 10K B	008-307-9-002
VR-1	Semi fixed resistor RV-135 20K B	008-307-9-003
VR-2, 3, 5, 12	Semi fixed resistor RV-135 25K B	008-307-9-004
VR-15, 16	Semi fixed resistor RV-135 100K B	008-307-9-005
VR-405	Semi fixed resistor RV-135 300 B	008-307-9-006
VR-402, 404	Variable resistor RV-138	008-307-9-007
VR-401, 408	Variable resistor RV-048	008-307-9-008
VR-406, 407	Variable resistor RV-187	008-283-9-002
VR-408, 407	Variable resistor RV-197	008-307-9-009

CIRCUIT SYMBOL	DESCRIPTION	DYNASCAN PART NO.
R-153	P Carbon resistor 1K 1/8W J	002-108-5-102
R-114	P Carbon resistor 22 1/2W J	002-102-5-220
R-181	P Carbon resistor 220 1/2W J	002-102-5-221
R-109, 209	P Carbon resistor 2.2K 1/4W J	002-104-5-222
R-197	P Carbon resistor 33 1/4W J	002-104-5-330
R-204	P Carbon resistor 10 1/2W J	002-102-5-100
R-205	U Carbon resistor 1 1/2W J	002-102-5-110
R-80	U Carbon resistor 4.7K 1/4W J	002-104-5-470
R-143, 185	U Carbon resistor 5.6K 1/4W J	002-104-5-562
R-150	U Carbon resistor 33K 1/4W J	002-104-5-335
R-208	P Carbon resistor 5.6 1/8W J	002-108-5-589
R-19	P Carbon resistor 50 1/8W J	002-108-5-229
R-115	P Carbon resistor 550 1/8W J	002-108-5-551
R-43, 181, 78, 79	Carbon resistor (Forming type) 150K 1/8W J 12.5	002-108-5-154
R-36, 58, 89, 94, 128	Carbon resistor (Forming type) 220K 1/8W J 12.5	002-108-5-224
R-88	Carbon resistor (Forming type) 270K 1/8W J 12.5	002-108-5-274
R-44, 43	Carbon resistor (Forming type) 820K 1/8 J	002-108-5-824
R-160	Carbon resistor (Forming type) 1M 1/8 J	002-108-5-105
R-3	Carbon resistor (Forming type) 2.2M 1/8W J 12.5	002-108-5-225
R-107	Carbon resistor (Forming type) 10 5W K	013-014-9-001
R-180	Meat Covered Resistor 56 2W K	013-014-9-002
R-112	Meat Covered Resistor 33 1W K	013-014-9-003
R-181	Meat Covered Resistor 56 1W K	013-014-9-004
R-113	Meat Covered Resistor 68 1W K	013-014-9-005
C-77, 78, 79	Electrolytic Capacitor 0.47u 50V	022-182-9-003
C-35, 58, 89, 94, 128	Electrolytic Capacitor 1u 50V K	022-152-9-004
C-85, 211	Electrolytic Capacitor 2.2u 25V	022-123-9-002
C-2, 7, 8, 88, 88, 97, 218	Electrolytic Capacitor 4.7u 25V	022-123-9-001
C-42, 43, 53, 69, 87, 98	Electrolytic Capacitor 10u 16V	022-120-9-001
C-120	Electrolytic Capacitor 33u 10V	022-132-9-005
C-89, 92	Electrolytic Capacitor 33u 16V	022-132-9-006
C-47, 49, 50, 59, 66, 76	Electrolytic Capacitor 47u 10V	022-120-9-002
C-101	Electrolytic Capacitor 100u 10V	022-122-9-007
C-102, 135, 402	Electrolytic Capacitor 220u 10V	022-122-9-008
C-81	Electrolytic Capacitor 220u 16V	022-122-9-011
C-104	Electrolytic Capacitor 330u 10V	022-122-9-011
C-103	Electrolytic Capacitor 470u 10V	002-152-9-001
C-97	Electrolytic Capacitor 470u 16V	022-099-9-006
C-94, 107	Electrolytic Capacitor 1.000u 16V	022-152-9-002
C-39, 52, 110, 80	Aluminum Capacitor 0.1u 16V M	033-025-9-001
C-10, 80, 73, 74, 98	Mylar Capacitor 0.01u 50V K	025-071-9-002
C-18, 21, 26, 27, 29, 30	Mylar Capacitor 0.039u 50V K	025-092-9-001
C-31, 40, 64, 171, 189	Mylar Capacitor 0.068u 50V K	025-116-9-001
184, 188, 96	Mylar Capacitor 0.1u 50V K	025-074-9-007
C-71, 75, 133, 134, 191	Mylar Capacitor 0.047u 50V K	025-116-9-002
C-117, 185	Ceramic Capacitor 1p 50V D CH	020-161-9-002
C-32, 36, 37	Ceramic Capacitor 5p 50V D CH	020-175-9-012
C-143	Ceramic Capacitor 7p 50V D CH	020-175-9-013
C-116, 130, 139, 150, 154	Ceramic Capacitor 10p 50V D CH	020-175-9-014
C-168	Ceramic Capacitor 0.1p 50V C CH	020-175-9-015
C-111, 112	Ceramic Capacitor 18p 50V J CH	020-175-9-016
C-84	Ceramic Capacitor 22p 50V J CH	020-175-9-017
C-1, 163	Ceramic Capacitor 39p 50V J CH	020-175-9-018
C-45, 53, 122, 123	Ceramic Capacitor 47p 50V J CH	020-175-9-019
C-174, 176	Ceramic Capacitor 56p 50V J CH	020-175-9-021

CIRCUIT SYMBOL	DESCRIPTION	DYNASCAN PART NO.
J-408	Printed Circuit Board PC-196AA	302-230-9-001
SR-401	Flexible Board PC-206AA	527-081-9-001
M-401	Speaker SR-029	320-064-9-001
MR-1	Resistor RL-023	441-016-9-001
MR-1	Microphone MK-046	562-017-9-001
J-402	Jack JK-058	773-079-9-001
J-401	Antenna connector JK-068	773-078-9-001
L-407	Jack JK-052	773-079-9-002
J-403, 404	Jack JK-010	773-079-9-003
L-402	Plug PG-016	775-044-9-003
L-401	Relay socket SK-018	749-094-9-001
J-402	Crystal socket SK-001	749-094-9-002
J-401	LED socket TP-019	752-019-9-001
J-402	Check terminal TP-027	757-032-9-001
J-403	Fuse FS-001 3A	191-251-3-003
J-404	Relay hook pin YY-050	763-088-9-002
J-401	Encoding seal W-07008	426-029-9-001
J-402	DC Cord	426-029-9-002
J-401	Service Station List	489-188-9-001
J-402	Inventory Booklet	489-188-9-001
J-401	Composite	489-188-9-001
J-402	Schematic	489-188-9-001
J-401	Parts List	489-188-9-001
J-402	FCC License Application F 505	492-041-9-001
J-401	FCC Temporary Form 555-B	492-046-9-001
J-402	FCC Rules Part 95	492-047-9-001

CIRCUIT SYMBOL	DESCRIPTION	DYNASCAN PART NO.
C-93, 142, 164	Ceramic Capacitor 68p 50V J CH	020-175-9-022
C-118	Ceramic Capacitor 100p 50V K CH	020-175-9-017
C-184	Ceramic Capacitor 120p 50V K CH	020-175-9-011
C-186	Ceramic Capacitor 150p 50V K CH	020-175-9-012
C-172	Ceramic Capacitor 180p 50V K CH	020-175-9-002