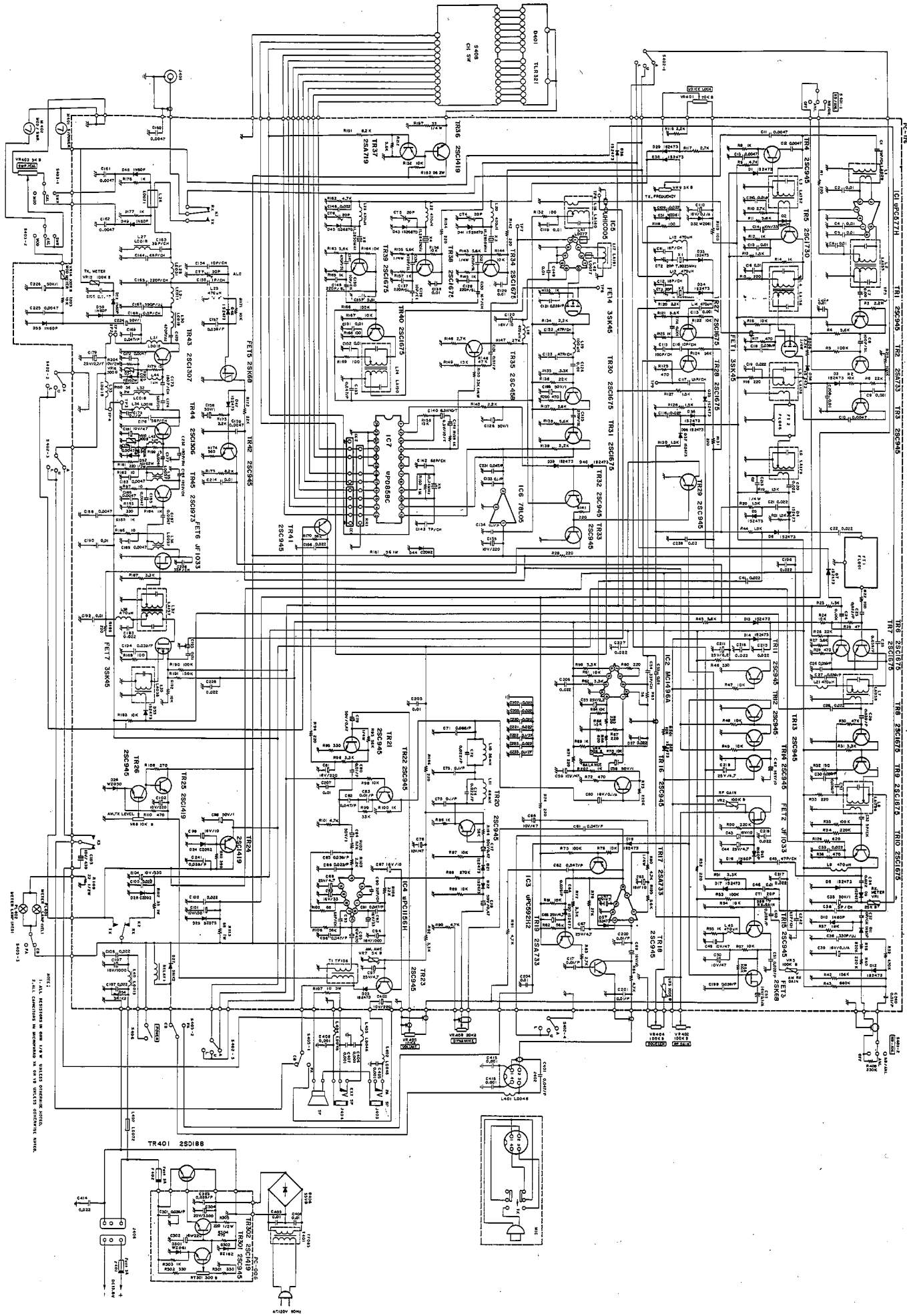


CIRCUIT DIAGRAM FOR COBRA 139XLR



NOTE: 1. ALL RESISTORS ARE 1/4W UNLESS OTHERWISE NOTED.
2. ALL CAPACITORS ARE 50V UNLESS OTHERWISE NOTED.

BILLS OF MATERIAL FOR COBRA 139XL R

CIRCUIT SYMBOL	DESCRIPTION	DYNAMSCAN PART NO.	CIRCUIT SYMBOL	DESCRIPTION	DYNAMSCAN PART NO.
TR-2, 19, 17	Transistor 2SA733-P	177-020-9-001	COILS & TRANSFORMERS		
TR-1, 3, 4, 11, 12, 13, 14, 15, 16, 18, 20, 21, 22, 23, 26, 29, 32, 33, 41, 42, 50	Transistor 2SC945-AP	176-000-9-003	Coil LA-938	060-025-9-002	
TR-6, 7, 8, 9, 10, 27, 28, 29, 31, 34, 35, 39, 40	Transistor 2SC1675-L	176-065-9-001	Coil LA-939	060-025-9-003	
TR-35	Transistor 2SC1730-L	176-073-9-001	Coil LA-940	060-025-9-004	
TR-43	Transistor 2SC1307-C	176-073-9-002	Coil LA-152	060-025-9-004	
TR-44	Transistor 2SC1306	176-024-9-002	Coil LA-155	060-025-9-005	
TR-5	Transistor 2SC1973	176-073-9-003	Coil LA-156	060-025-9-006	
TR-401	Transistor 2SD1888-M	176-000-9-001	Coil LA-157	060-025-9-007	
TR-24, 25, 36, 302	Transistor 2SC1419-C	176-055-9-004	Coil LA-180	060-025-9-008	
TR-37	Transistor 2SA719P	177-024-9-001	Coil LA-178	060-025-9-009	
FET 1, 4, 7	FET 3SK45-B	182-028-9-001	Coil LA-179	060-025-9-010	
FET 2, 6	FET JE 1033	182-044-9-002	Coil LA-190	060-025-9-011	
FET 3, 5	FET 2SK68A-M	182-046-9-001	Coil LA-191	061-056-9-003	
IC-1	Integrated Circuit μ PC557H	307-112-9-007	Coil LA-192	061-056-9-001	
IC-3	Integrated Circuit μ PC552H	307-112-9-004	Coil LA-193	061-056-9-002	
IC-4	Integrated Circuit μ PC1156H	307-112-9-001	Coil LA-194	061-056-9-003	
IC-7	Integrated Circuit μ PD989C	307-085-9-006	Coil LA-195	061-056-9-004	
IC-2	Integrated Circuit MC1495A	307-112-9-005	Coil LA-196	061-056-9-005	
IC-6	Integrated Circuit μ PC781.05	307-112-9-003	Coil LA-197	061-056-9-006	
IC-5	Integrated Circuit μ HD-005	307-112-9-002	Coil LA-198	061-056-9-007	
D-41, 43, 45	Diode (Var-cap) 1S2687D	153-008-9-001	Coil LA-199	061-056-9-008	
D-57	Diode 1S2473	151-005-9-001	Coil LA-200	061-056-9-009	
D-27, 54	SR IK2	151-045-9-001	Coil LA-201	061-056-9-010	
D-24, 28, 44	Zener Diode CZ-082	152-051-9-001	Coil LA-202	061-056-9-011	
D-301	Zener Diode WZ-081	152-052-9-002	Coil LA-203	061-056-9-012	
D-202	Zener Diode BZ-162	152-079-9-001	Coil LA-204	061-056-9-013	
D-31, 52	Varistor KB-162M	153-008-9-002	Coil LA-205	061-056-9-014	
D-406	Varistor SVB	151-008-9-001	Coil LA-206	061-056-9-015	
D-40	FEL Diode 1LW16	159-025-9-001	Coil LA-207	061-056-9-016	
D-1, 7, 17, 18, 19, 20, 21, 22, 23, 26, 30, 33, 34, 35, 36, 38, 39, 40, 46, 47, 53, 58, 59, 55, 59	P Type Forming 1S2473 (12.5mm)	151-005-9-001	Coil LA-208	061-056-9-017	
D-8, 9, 37, 56	P Type Forming 1N60P (12.5mm)	151-006-9-001	Coil LA-209	061-056-9-018	
D-26	P Type Forming WZ-050 (10mm)	152-069-9-001	Coil LA-210	061-056-9-019	
D-32	P Type Forming WZ-061 (10mm)	152-062-9-002	Coil LA-211	061-056-9-020	
D-31	P Type Forming WZ-061 (12.5mm)	152-052-9-002	Coil LA-212	061-056-9-021	
COILS & TRANSFORMERS			Coil LA-213	061-056-9-022	
Coil LA-029		060-025-9-001	Coil LA-214	061-056-9-023	

CIRCUIT SYMBOL	DESCRIPTION	DYNAMSCAN PART NO.	CIRCUIT SYMBOL	DESCRIPTION	DYNAMSCAN PART NO.
R-143, 155	Carbon Resistor 5.6 Kohm 1/4W (U Type)	002-104-5-662	R-160	Carbon Resistor 1Mohm 1/8W J (Forming Type)	002-108-5-105
R-208	Carbon Resistor 8.2 Kohm 1/4W J (U Type)	002-104-5-822	R-3	Carbon Resistor 2.2Mohm 1/8W J (Forming Type)	002-108-5-225
R-150	Carbon Resistor 3.3 Kohm 1/4W J (U Type)	002-104-5-333	R-15	Carbon Resistor 220 ohm 1/8W J (P Type)	002-108-5-221
R-93, 195	Carbon Resistor 56Kohm 1/4W J (Forming Type)	002-108-5-563	R-301, 302	Carbon Resistor 330 ohm 1/8W J (Forming Type)	002-108-5-331
R-179, 199	Carbon Resistor 10 ohm 1/8W J (Forming Type)	002-108-5-100	R-304	Carbon Resistor 470 ohm 1/8W J (Forming Type)	002-108-5-471
R-25	Carbon Resistor 15 ohm 1/8W J (Forming Type)	002-108-5-150	R-174	Carbon Resistor 560 ohm 1/8W J (Forming Type)	002-108-5-561
R-105	Carbon Resistor 47 ohm 1/8W J (Forming Type)	002-108-5-470	R-126	Carbon Resistor 828 ohm 1/8W J (Forming Type)	002-108-5-821
R-22, 118, 119, 168, 169, 188, 132	Carbon Resistor 100 ohm 1/8W J (Forming Type)	002-108-5-101	R-303	Carbon Resistor 1Kohm 1/8W J (Forming Type)	002-108-5-102
R-32	Carbon Resistor 150 ohm 1/8W J (Forming Type)	002-108-5-151	R-107	Carbon Resistor 8.2Kohm 1/8W J (Forming Type)	013-016-8-001
R-1, 18, 29, 33, 56, 60, 65, 67, 71, 74, 94, 92, 131, 148, 142, 154, 156, 188	Carbon Resistor 220 ohm 1/8W J (Forming Type)	002-108-5-221	R-112	Metalized Resistor 33 ohm 1W K	011-125-9-001
R-108, 183, 95	Carbon Resistor 330 ohm 1/8W J (Forming Type)	002-108-5-331	R-161	Metalized Resistor 56 ohm 1W K	011-125-9-002
R-111	Carbon Resistor 390 ohm 1/8W J (Forming Type)	002-108-5-391	R-113	Metalized Resistor 22 ohm 1/2W K	011-125-9-003
R-17, 28, 36, 110, 125, 200, 72	Carbon Resistor 470 ohm 1/8W J (Forming Type)	002-108-5-471	R-109	Metalized Resistor 22 ohm 1/2W K	011-125-9-004
R-68	Carbon Resistor 820 ohm 1/8W J (Forming Type)	002-108-5-821	C-27, 78, 79	Electrolytic Capacitor 0.47uF 50V	022-122-9-016
R-8, 12, 14, 55, 69, 86, 100, 123, 133, 145, 157, 159, 165, 184, 185, 202, 176, 177	Carbon Resistor 1K ohm 1/8W J (Forming Type)	002-108-5-102	C-35, 56, 98, 94, 126, 158, 199, 224, 226	Electrolytic Capacitor 1.00uF 10V	022-144-9-001
R-99	Carbon Resistor 1.2Kohm 1/8W J (Forming Type)	002-108-5-122	C-55, 211	Electrolytic Capacitor 2.20uF 25V	022-154-9-001
R-13, 19, 21, 23, 44, 66, 127, 128, 130	Carbon Resistor 1.5Kohm 1/8W J (Forming Type)	002-108-5-152	C-44, 67, 68, 88, 97, 218	Electrolytic Capacitor 4.70uF 25V	022-122-9-003
R-47, 102, 103, 116, 120, 134, 140, 173, 139	Carbon Resistor 2.2Kohm 1/8W J (Forming Type)	002-108-5-222	C-42, 43, 63, 69, 87, 99, 120	Electrolytic Capacitor 10.00uF 16V	022-142-9-001
R-10, 83, 90, 146, 117	Carbon Resistor 3.3Kohm 1/8W J (Forming Type)	002-108-5-332	C-92, 89	Electrolytic Capacitor 33.00uF 16V	022-144-9-005
R-31, 51, 59, 67, 77, 92, 96, 135, 187	Carbon Resistor 4.7Kohm 1/8W J (Forming Type)	002-108-5-472	C-18, 25, 26, 27, 29, 30	Electrolytic Capacitor 47.00uF 10V	028-120-9-002
R-9, 84, 91, 101, 162	Carbon Resistor 5.6Kohm 1/8W J (Forming Type)	002-108-5-562	C-1, 40, 64, 121, 157, 184, 198, 303, 301, 85	Electrolytic Capacitor 100.00uF 10V	022-099-9-004
R-4, 11, 27, 46, 121, 163, 137, 138, 212	Carbon Resistor 8.2Kohm 1/8W J (Forming Type)	002-108-5-822	C-81, 62, 82, 91, 96, 153, 401, 231, 169	Electrolytic Capacitor 220uF 16V	022-122-9-008
R-21, 6, 24, 48, 49, 54, 61, 69, 193, 203, 193, 192, 193, 201	Carbon Resistor 10Kohm 1/8W J (Forming Type)	002-108-5-103	C-71	Electrolytic Capacitor 330uF 10V	022-184-9-004
70, 76, 57, 81, 87, 89, 98, 122, 171, 144, 152, 156, 164, 167, 203	Carbon Resistor 15Kohm 1/8W J (Forming Type)	002-108-5-153	C-73, 75, 133, 134, 175, C-168	Electrolytic Capacitor 470uF 10V	022-184-9-005
R-149, 188, 78	Carbon Resistor 18Kohm 1/8W J (Forming Type)	002-108-5-183	C-104	Electrolytic Capacitor 470uF 10V	022-184-9-006
R-6, 26, 136, 172, 104	Carbon Resistor 22Kohm 1/8W J (Forming Type)	002-108-5-223	C-35, 107	Electrolytic Capacitor 470uF 10V	022-184-9-007
R-147	Carbon Resistor 27Kohm 1/8W J (Forming Type)	002-108-5-273	C-95, 107	Electrolytic Capacitor 470uF 10V	022-184-9-008
R-30, 108, 124, 170, 194	Carbon Resistor 47Kohm 1/8W J (Forming Type)	002-108-5-473	C-103	Electrolytic Capacitor 470uF 10V	022-184-9-009
R-82, 106, 124, 170, 194	Carbon Resistor 56Kohm 1/8W J (Forming Type)	002-108-5-563	C-150, 116, 130, 139, 154, C-111, 112	Electrolytic Capacitor 470uF 10V	022-184-9-010
R-5, 35, 39, 53, 58, 75, 168, 180	Carbon Resistor 100Kohm 1/8W J (Forming Type)	002-108-5-104	C-90	Electrolytic Capacitor 0.01uF 50V K	025-087-9-001
R-42, 191	Carbon Resistor 150Kohm 1/8W J (Forming Type)	002-108-5-264	C-23, 51, 72, 74, 85	Mylar Capacitor 0.047uF 50V K	025-071-9-002
R-34, 38, 40, 50, 73	Carbon Resistor 220Kohm 1/8W J (Forming Type)	002-108-5-224	C-18, 25, 26, 27, 29, 30	Mylar Capacitor 0.022uF 50V K	025-099-9-001
R-43	Carbon Resistor 820Kohm 1/8W J (Forming Type)	002-108-5-824	31, 40, 64, 121, 157, 184, 198, 303, 301, 85, 401, 231, 169	Mylar Capacitor 0.039uF 50V K	025-089-9-001

CIRCUIT SYMBOL	DESCRIPTION	DYNAMSCAN PART NO.	CIRCUIT SYMBOL	DESCRIPTION	DYNAMSCAN PART NO.
C-54, C-236	Ceramic Capacitor 32P 50V J CH	020-172-9-006	X-6	Crystal OX-081 11.2850MHz	133-015-9-006
C-1, 163	Ceramic Capacitor 39P 50V J CH	020-172-9-008			
C-45, 122, 123, 53	Ceramic Capacitor 47P 50V J CH	020-172-9-007			
C-174, 176	Ceramic Capacitor 56P 50V J CH	020-172-9-009			
C-93, 142, 164	Ceramic Capacitor 68P 50V J CH	020-172-9-010			
C-115	Ceramic Capacitor 82P 50V J CH	020-172-9-011			
C-184	Ceramic Capacitor 100P 50V K CH	020-161-8-021			
C-173	Ceramic Capacitor 120P 50V K CH	020-172-9-012			
C-165	Ceramic Capacitor 180P 50V K CH	020-172-9-013			
C-232	Ceramic Capacitor 220P 50V K RH	020-172-9-014			
C-38	Ceramic Capacitor 180P 50V K UJ	020-172-9-015			
C-167	Ceramic Capacitor 330P 50V K UJ	020-172-9-016			
C-170	Ceramic Capacitor 470P 50V K SL	020-172-9-017			
C-126	Ceramic Capacitor 220P 50V K SL	020-172-9-018			
C-125	Ceramic Capacitor 470P 50V K SL	020-172-9-020			
C-7, 9, 24, 113, 114, 405, C-10, 11, 12, 13, 159, 160	Ceramic Capacitor 0.001uF 50V K B	020-172-9-022			
406, 407, 408, 415, 416	Ceramic Capacitor 0.0047uF 50V KB	020-172-9-023			
C-10, 11, 12, 13, 159, 160	Ceramic Capacitor 0.01uF 50V KB	020-172-9-024			
161, 162, 166, 172, 171, 176, 183, 188, 186, 187, 188, 189, 192, 196, 46, 119	Ceramic Capacitor 0.01uF 50V KB	020-172-9-025			
162, 156, 180, 182, 204, 205, 207, 208	Ceramic Capacitor 0.022uF 50V ZF	020-172-9-027			
209, 214, 237, 403, 404, C-19, 20, 21, 22, 28, 33, 34, 41, 57, 100, 105, 106, 109, 118, 146, 156, 153, 196, 197, 202	Ceramic Capacitor 0.022uF 50V ZF	020-172-9-027			
203, 206, 215, 216, 217, 219, 220, 221, 223, 227, 228, 238, 414	Ceramic Capacitor 0.1uF 50V Z ZF	020-161-8-029			
C-222, 213, 233	Trimmer Capacitor CV-020 20P	028-045-0-001			
C-1, 2, 3, 4, 5, 6, 7	Trimmer Capacitor CV-020 20P	028-045-0-001			
RR1	CR Components HA-004	527-072-9-001			
CC1, 2	CR Components HA-003	527-007-9-002			
	CRYSTALS				
FT1	Crystal Filter FL-001	143-006-9-001			
FT2	Crystal Filter FL-046	143-006-9-002			
X-1	Crystal XO-017 7.8025MHz	133-015-9-001			
X-2	Crystal OX-044 7.7925MHz	133-015-9-002			
X-3	Crystal OX-081 11.2850MHz	133-015-9-003			
X-4	Crystal OX-081 10.240MHz	133-015-9-004			
X-5	Crystal OX-080 10.240MHz	133-015-9-005			

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