

BILL OF MATERIAL FOR COBRA 19GTL

CIRCUIT SYMBOL	DESCRIPTION	DYNASCAN PART NO.
SEMICONDUCTORS		
IC-1	Integrated Circuit, MB3712	
IC-2	Integrated Circuit, TA7310P	
IC-3	Integrated Circuit, T93109P	
TR-8	Transistor, 2SA628 E	
TR-9	Transistor, 2SA710	
TR-10	Transistor, 2SC710C	
TR-11,5,11	Transistor, 2SC711E	
TR-12,9,12	Transistor, 2SC1342-B	
TR-14,16	Transistor, 2SC2028-B/20	
TR-15	Transistor, 2SC2029-B/10	
TR-13	Transistor, 2SC2029-B/10	
D-1,2,3,7,8,9,13,14	Diode, 1S907SK	
D-4,5	Diode, 1N807AM	
D-6	Diode, 1N4007	
D-10,17	Diode, 1M4002	
D-15	Diode, CZ-094	
D-11,16	Diode, Zener, RD7.5E-82	
D-12	Diode, Vari-Cap, 1S2688-EA	
D-18	Diode, LED, TLER321	
INDUCTORS		
L-2	Coil, LA-088	
L-7	Coil, LA-207	
L-8	Coil, LA-208	
L-1	Coil, LA-208	
L-1	Coil, LA-279	
L-6	Coil, LA-281	
L-10	Coil, LA-283	
L-9	Coil, LA-307	
L-3	Coil, LB-119	
L-4	Coil, LB-122	
L-12	Coil, LC-133	
L-15	Coil, LC-019	
L-16	Coil, LC-015	
L-17	Coil, LD-087	
L-1	Coil, LE-098	
L-17	Coil, LE-098	
L-1	Coil, LZ-002	
L-5	Inductor, Molded, LZ-002 10uH	
L-3	Inductor, Molded, LZ-002 10uH	
L-2	Coil AF Choke, TF-153	
L-1	Transformer, Output, TF-154	
SEMI-FIXED & VARIABLE RESISTORS		
VR-7	Resistor, Semi-fixed, RV-189 500 ohm B	
VR-4,6	Resistor, Semi-fixed, or RV-182 or RV-189 20K ohm B	

CIRCUIT SYMBOL	DESCRIPTION	DYNASCAN PART NO.
SEMI-FIXED & VARIABLE RESISTORS (Continued)		
VR-5	Resistor, Semi-fixed, RV-189 50K ohm B	
VR-3	Resistor, Semi-fixed, or RV-182 or RV-189 100K ohm B	
VR-1	Resistor, Variable, RV-242 50K ohm A	
VR-2	Resistor, Variable, RV-241 50K ohm B	
FIXED RESISTORS		
R-41	Resistor, Metal Film, 100 ohm 2W K	
R-39,60	Resistor, Metal Film, 47 ohm 1W K	
R-58	Resistor, Carbon, Axial Lead, 2.2K ohm 1/8W J	
R-13	Resistor, Carbon, Axial Lead, 100 ohm 1/8W J	
R-9,80	Resistor, Carbon, Axial Lead, 220 ohm 1/8W J	
R-70	Resistor, Carbon, Axial Lead, 680 ohm 1/8W J	
R-11,36,40	Resistor, Carbon, Axial Lead, 2.2K ohm 1/8W J	
R-51	Resistor, Carbon, Axial Lead, 4.7K ohm 1/8W J	
R-30,42	Resistor, Carbon, Axial Lead, 10K ohm 1/8W J	
R-27,52	Resistor, Carbon, Axial Lead, 22K ohm 1/8W J	
R-28	Resistor, Carbon, Axial Lead, 100K ohm 1/8W J	
R-53	Resistor, Carbon, Formed VERT, 12 ohm 1/8W J	
R-56,61,81	Resistor, Carbon, Formed VERT, 22 ohm 1/8W J	
R-14	Resistor, Carbon, Formed VERT, 33 ohm 1/8W J	
R-62,77,78	Resistor, Carbon, Formed VERT, 47 ohm 1/8W J	
R-12	Resistor, Carbon, Formed VERT, 150 ohm 1/8W J	
R-79	Resistor, Carbon, Formed VERT, 220 ohm 1/8W J	
R-5,24,59,65	Resistor, Carbon, Formed VERT, 330 ohm 1/8W J	
R-89	Resistor, Carbon, Formed VERT, 470 ohm 1/8W J	
R-80,1	Resistor, Carbon, Formed VERT, 680 ohm 1/8W J	
R-93,96,67,68,69,71,72	Resistor, Carbon, Formed VERT, 980 ohm 1/8W J	
R-6,8,38	Resistor, Carbon, Formed VERT, 1K ohm 1/8W J	
R-3,46,47	Resistor, Carbon, Formed VERT, 1.5K ohm 1/8W J	
R-7,34	Resistor, Carbon, Formed VERT, 2.2K ohm 1/8W J	
R-24,23,26,87	Resistor, Carbon, Formed VERT, 3.3K ohm 1/8W J	
R-54	Resistor, Carbon, Formed VERT, 3.9K ohm 1/8W J	
R-48,49	Resistor, Carbon, Formed VERT, 4.7K ohm 1/8W J	
R-10,31	Resistor, Carbon, Formed VERT, 5.6K ohm 1/8W J	
R-29,36,37,50,94,95	Resistor, Carbon, Formed VERT, 10K ohm 1/8W J	
R-16,26,43	Resistor, Carbon, Formed VERT, 15K ohm 1/8W J	
R-15,22,110	Resistor, Carbon, Formed VERT, 22K ohm 1/8W J	
R-18,20	Resistor, Carbon, Formed VERT, 33K ohm 1/8W J	
R-45	Resistor, Carbon, Formed VERT, 47K ohm 1/8W J	
R-101	Resistor, Carbon, Formed VERT, 56K ohm 1/8W J	
R-33	Resistor, Carbon, Formed VERT, 68K ohm 1/8W J	
R-32,501	Resistor, Carbon, Formed VERT, 82K ohm 1/8W J	
R-17,92	Resistor, Carbon, Formed VERT, 15K ohm 1/8W J	
R-93	Resistor, Carbon, Formed VERT, 220K ohm 1/8W J	
R-93	Resistor, Carbon, Formed VERT, 330K ohm 1/8W J	

NOTE: Resistor tolerance J = ±5% K = ±10%

CIRCUIT SYMBOL	DESCRIPTION	DYNASCAN PART NO.
CAPACITORS		
C-2	Capacitor, Tantalum, 22uF 25V M	
C-21,50	Capacitor, Tantalum, 4.7uF 18V M	
C-73,74	Capacitor, Electrolytic, 22uF 50V	
C-42	Capacitor, Electrolytic, 0.47uF 50V	
C-30,33,49	Capacitor, Electrolytic, 1uF 50V	
C-5,34	Capacitor, Electrolytic, 10uF 16V	
C-45	Capacitor, Electrolytic, 47uF 10V	
C-51	Capacitor, Electrolytic, 33uF 10V	
C-11,37,48	Capacitor, Electrolytic, 33uF 16V	
C-54	Capacitor, Electrolytic, 100uF 16V	
C-5	Capacitor, Electrolytic, 100uF 16V	
C-101	Capacitor, Electrolytic, 100uF 25V	
C-98	Capacitor, Electrolytic, 220uF 10V	
C-31,40	Capacitor, Electrolytic, 470uF 10V	
C-32	Capacitor, Mylar, 0.001uF 50V K	
C-29,47	Capacitor, Mylar, 0.0022uF 50V K	
C-38	Capacitor, Mylar, 0.0047uF 50V K	
C-48	Capacitor, Mylar, 0.022uF 50V K	
C-18,22	Capacitor, Mylar, 0.033uF 50V K	
C-11	Capacitor, Mylar, 0.047uF 50V K	
C-12,3,142	Capacitor, Mylar, 0.1uF 50V K	
C-15	Capacitor, Ceramic, 47pF 50V K CH	
C-57	Capacitor, Ceramic, 27pF 50V J RH	
C-58	Capacitor, Ceramic, 68pF 50V J RH	
C-1	Capacitor, Ceramic, 27pF 50V K RH	
C-67	Capacitor, Ceramic, 47pF 50V K RH	
C-66	Capacitor, Ceramic, 180pF 50V K RH	
C-60,61,88	Capacitor, Ceramic, 220pF 50V K RH	
C-59	Capacitor, Ceramic, 82pF 50V J RU	
C-17	Capacitor, Ceramic, 3pF 50V C SL	
C-1	Capacitor, Ceramic, 3pF 50V C SL	
C-63	Capacitor, Ceramic, 10pF 50V K SL	
C-118	Capacitor, Ceramic, 22pF 50V K SL	
C-71	Capacitor, Ceramic, 33pF 50V K SL	
C-82	Capacitor, Ceramic, 56pF 50V K SL	
C-62,90,91	Capacitor, Ceramic, 82pF 50V K SL	
C-117	Capacitor, Ceramic, 100pF 50V K SL	
C-86	Capacitor, Ceramic, 220pF 50V K SL	
C-76,83	Capacitor, Ceramic, 270pF 50V K SL	
C-88,134,503	Capacitor, Ceramic, 0.001uF 50V Z YF	
C-28	Capacitor, Ceramic, 0.0047uF 50V Z YF	

NOTE: The first code indicates tolerance of capacitance: C = ±10%, D = ±20%, F = ±30%, G = ±42%, J = ±5%, K = ±10%, M = ±20%, Z = ±70%, -20%. The second code indicates variation of capacitance with temperature: YA = ±5%, YB = ±10%, YD = ±20%, YE = ±30%, YF = ±50%, YG = ±85%, ZF = ±50%, ZB = ±10%, ZC = ±20%, ZD = ±30%, ZE = ±40%, ZF = ±50%, ZG = ±85%, ZH = ±10%, ZI = ±20%, ZJ = ±30%, ZK = ±40%, ZL = ±50%, ZM = ±85%, ZN = ±10%, ZO = ±20%, ZP = ±30%, ZQ = ±40%, ZR = ±50%, ZS = ±85%, ZT = ±10%, ZU = ±20%, ZV = ±30%, ZW = ±40%, ZX = ±50%, ZY = ±85%, ZZ = ±10%. The third code indicates tolerance of inductance: SL = ±350ppm/°C, ~ = ±1000ppm/°C.

CIRCUIT SYMBOL	DESCRIPTION	DYNASCAN PART NO.
MISCELLANEOUS		
C-2,3,4,6,7,8,9,10,12,13	Crystal, QX-074, 10.24 MHz	
20,43,44,52,53,55,56	PC Board, PC-527AC Main PCB	
64,65,70,77,78,79,80	PC Board, PC-438AA, CH SW PCB	
81,87,95,97,98,100	PC Board, PC-554AA	
102,104,105,107,109	Filter, Ceramic, FL-048	
110,111,112,137,120	Filter, Ceramic, FL-066	
121,122,123,128,129,126	Switch, Rotary, SR-223	
127,150,108,109	Switch, Slide, SW-054	
C-39	Speaker, SPK-059	
C-85	Speaker, SPK-059	
C-69	Speaker, SPK-059	
C-39	Capacitor, Ceramic, 0.039uF 25V Z ZF	
C-69	Capacitor, Ceramic, 560pF 50V Z ZF	
C-39	Capacitor, Ceramic, 560pF 50V K YB	
C-39	Capacitor, Semicapacitor, 0.1uF 25V Z YF	
CRYSTAL		
X-1	Crystal, QX-074, 10.24 MHz	
MISCELLANEOUS		
PC Board, PC-527AC Main PCB		
PC Board, PC-438AA, CH SW PCB		
PC Board, PC-554AA		
Filter, Ceramic, FL-048		
Filter, Ceramic, FL-066		
Switch, Rotary, SR-223		
Switch, Slide, SW-054		
Speaker, SPK-059		
Speaker, SPK-059		
Speaker, SPK-059		
Capacitor, Ceramic, 0.039uF 25V Z ZF		
Capacitor, Ceramic, 560pF 50V Z ZF		
Capacitor, Ceramic, 560pF 50V K YB		
Capacitor, Semicapacitor, 0.1uF 25V Z YF		

CIRCUIT SYMBOL	DESCRIPTION	DYNASCAN PART NO.
MISCELLANEOUS (Continued)		
Plate, Front Panel, A1P	Plate, Front Panel, A1P	FC1
ID Plate, FCC, A1P	ID Plate, FCC, A1P	FC2
Label, Warning, DC Cord, t=1	Label, Warning, DC Cord, t=1	FC3
Label, Serial No., t=1	Label, Serial No., t=1	
Label, Serial No. Rear, t=1	Label, Serial No. Rear, t=1	
Screw, Pan Hd Plastic, M3 x 6	Screw, Pan Hd Plastic, M3 x 6	
Screw, Pan Hd Plastic, M3 x 8	Screw, Pan Hd Plastic, M3 x 8	
Screw, Pan Hd Plastic, M3 x 9	Screw, Pan Hd Plastic, M3 x 9	
Tap Light Screw Blind Hd, NI, M3 x 6	Tap Light Screw Blind Hd, NI, M3 x 6	
Tap Light Screw Blind Hd, NI, M3 x 8	Tap Light Screw Blind Hd, NI, M3 x 8	
Screw, Blind Hd, NI, M2 x 5	Screw, Blind Hd, NI, M2 x 5	
Tap Light Screw, Round Hd, ZMC, 3.5φ x 8	Tap Light Screw, Round Hd, ZMC, 3.5φ x 8	
Tap Light Screw, Round Hd, ZMC, 5φ x 10	Tap Light Screw, Round Hd, ZMC, 5φ x 10	
Nut, Hex, NI, M3	Nut, Hex, NI, M3	
Washer, Lock, ZMC, 3.5φ	Washer, Lock, ZMC, 3.5φ	
Washer, Star, ZMC, 9φ	Washer, Star, ZMC, 9φ	
Washer, Flat, NI, 1.6	Washer, Flat, NI, 1.6	
Washer, Flat, NI, 5φ	Washer, Flat, NI, 5φ	
Washer, Flat, NI, 5φ	Washer, Flat, NI, 5φ	
Bolt, Hex, ZMC, M5 x 8	Bolt, Hex, ZMC, M5 x 8	
Synroam Pad	Synroam Pad	
Display Box	Display Box	
Shipping Carton Box	Shipping Carton Box	
Owners Manual	Owners Manual	
Schematic Diagram	Schematic Diagram	
Warranty Card	Warranty Card	
Service Station Card	Service Station Card	
FCC Rules Part 95	FCC Rules Part 95	