

BILL OF MATERIAL FOR COBRA 18LTD

CIRCUIT SYMBOL	DESCRIPTION	DYNASCAN PART NO.
SEMICONDUCTORS		
IC-002	Integrated Circuit,	TA7310P PL-307-133-9-004
IC-001	Integrated Circuit,	TC9106BP PL-308-303-9-001
IC-501	Integrated Circuit,	MB3712 PL-307-151-9-001
TR-012,015	Transistor,	2SA1015-GR PL-177-057-9-001
TR-002,004,005,009,010,011	Transistor,	2SC380TM-O PL-176-133-9-001
TR-003	Transistor,	2SC380TM-Y PL-176-133-9-002
TR-008	Transistor,	2SC941TM-O PL-176-089-9-004
TR-016	Transistor,	2SC1815-O PL-176-085-9-002
TR-006,007,013,014	Transistor,	2SC1815-Y PL-176-089-9-003
TR-001	Transistor,	2SC1923-O PL-176-085-9-001
TR-502	Transistor,	2SC2028-B/20 PL-172-038-9-001
TR-501	Transistor,	2SC2029-B/10 PL-172-038-9-002
TR-017	Transistor,	2SD471-L PL-176-117-9-002
D-003	Diode,	1N60 AM PL-150-014-9-001
D-009	Diode, Vari-Cap,	1S2688EB PL-154-006-9-001
D-011	Diode,	XZ-094 PL-152-121-9-001
D-001,002,005,006,008,010,013,014,019,020	Diode,	1S2075K PL-151-028-9-001
D-004	Diode,	1S2076A PL-151-101-9-001
D-007,012	Diode,	1N4003 PL-151-083-9-001
D-551	Diode,	LDR204AL PL-238-023-9-001
INDUCTORS		
L-011	Coil,	LA-088 PL-066-019-9-002
L-004	Coil,	LA-107 PL-060-022-9-003
L-003	Coil,	LA-163 PL-060-022-9-001
L-012	Coil,	LA-165 PL-044-046-9-001
L-013	Coil,	LA-201 PL-046-024-9-002
L-010	Coil,	LA-208 PL-060-029-9-004
L-001	Coil,	LA-279 PL-046-027-9-001
L-002	Coil,	LA-308 PL-047-004-9-001
L-015	Coil,	LA-373 PL-047-004-9-002
L-014	Coil,	LA-374 PL-047-004-9-003
L-007	Coil,	LC-073 PL-044-041-9-001
L-009	Coil,	LC-130 PL-041-106-9-001
L-008	Coil,	LD-033 PL-041-083-9-003
L-005,006	Coil,	LE-093 PL-041-115-9-002
L-017	Coil,	LD-077 PL-763-084-9-001
SEMI-FIXED & VARIABLE RESISTORS		
VR-001	Resistor, Semi-fixed,	RT-530 30K ohm B
VR-002,003	Resistor, Semi-fixed,	RT-530 50K ohm B
VR-551	Resistor, Variable,	RV-495 50K ohm A
VR-552	Resistor, Variable,	RV-501

CIRCUIT
SYMBOL

DESCRIPTION

DYNASCAN
PART NO.

FIXED RESISTORS

NOTE:

Resistor tolerance: J = $\pm 5\%$ K = $\pm 10\%$

R-104,552,553,555,558	Resistor, Carbon, Axial Lead,	1K ohm 1/8W J
R-062	Resistor, Carbon, Axial Lead,	10K ohm 1/8W J
R-043	Resistor, Carbon, Axial Lead,	12 ohm 1/8W J
R-038	Resistor, Carbon, Axial Lead,	2.2K ohm 1/8W J
R-078	Resistor, Carbon, Axial Lead,	2.7K ohm 1/8W J
R-049	Resistor, Carbon, Axial Lead,	330 ohm 1/8W J
R-046	Resistor, Carbon, Axial Lead,	3.3K ohm 1/8W J
R-089	Resistor, Carbon, Axial Lead,	4.7K ohm 1/8W J
R-029	Resistor, Carbon, Axial Lead,	470K ohm 1/8W J
R-570	Resistor, Carbon, Axial Lead,	68 ohm 1/8W J
R-008	Resistor, Carbon, Axial Lead,	330 ohm 1/8W J
R-021,091	Resistor, Carbon, Formed VERT,	100 ohm 1/8W J
R-011,018	Resistor, Carbon, Formed VERT,	1K ohm 1/8W J
R-101,106,107,112,559, 560,563	Resistor, Carbon, Formed VERT,	1K ohm 1/8W J
R-026,036,052,057,060	Resistor, Carbon, Formed VERT,	10K ohm 1/8W J
R-042,056	Resistor, Carbon, Formed VERT,	1 ohm 1/8W J
R-016	Resistor, Carbon, Formed VERT,	12 ohm 1/8W J
R-072	Resistor, Carbon, Formed VERT,	1.2K ohm 1/8W J
R-050,064	Resistor, Carbon, Formed VERT,	1.5K ohm 1/8W J
R-019,024	Resistor, Carbon, Formed VERT,	18K ohm 1/8W J
R-015,080	Resistor, Carbon, Formed VERT,	180K ohm 1/8W J
R-006,074	Resistor, Carbon, Formed VERT,	220 ohm 1/8W J
R-020,077	Resistor, Carbon, Formed VERT,	2.2K ohm 1/8W J
R-082,084,085	Resistor, Carbon, Formed VERT,	2.2K ohm 1/8W J
R-030,054,067,088	Resistor, Carbon, Formed VERT,	22K ohm 1/8W J
R-071	Resistor, Carbon, Formed VERT,	220K ohm 1/8W J
R-048	Resistor, Carbon, Formed VERT,	27 ohm 1/8W J
R-065	Resistor, Carbon, Formed VERT,	2.7K ohm 1/8W J
R-041	Resistor, Carbon, Formed VERT,	33 ohm 1/8W J
R-014,022,035	Resistor, Carbon, Formed VERT,	330 ohm 1/8W J
R-003,009,070,081	Resistor, Carbon, Formed VERT,	3.3K ohm 1/8W J
R-025	Resistor, Carbon, Formed VERT,	33K ohm 1/8W J
R-010	Resistor, Carbon, Formed VERT,	3.3 ohm 1/8W J
R-068,086	Resistor, Carbon, Formed VERT,	39K ohm 1/8W J
R-023,044	Resistor, Carbon, Formed VERT,	47 ohm 1/8W J
R-012,013,111	Resistor, Carbon, Formed VERT,	470 ohm 1/8W J
R-061,063,087	Resistor, Carbon, Formed VERT,	4.7K ohm 1/8W J
R-051,076,083	Resistor, Carbon, Formed VERT,	47K ohm 1/8W J
R-004,039,092	Resistor, Carbon, Formed VERT,	560 ohm 1/8W J
R-005,079	Resistor, Carbon, Formed VERT,	5.6K ohm 1/8W J
R-028,031,032,037,053, 069	Resistor, Carbon, Formed VERT,	56K ohm 1/8W J
R-045	Resistor, Carbon, Formed VERT,	68 ohm 1/8W J
R-001,017	Resistor, Carbon, Formed VERT,	680 ohm 1/8W J
R-047	Resistor, Carbon, Formed VERT,	6.8K ohm 1/8W J
R-027,033	Resistor, Carbon, Formed VERT,	68K ohm 1/8W J
R-055	Resistor, Carbon, Formed VERT,	8.2K ohm 1/8W J
R-066	Resistor, Carbon, Formed VERT,	82K ohm 1/8W J
R-034	Resistor, Carbon, Formed VERT,	820K ohm 1/8W J
R-093	Resistor, Carbon, Formed VERT,	8.2 ohm 1/8W J

CIRCUIT
SYMBOL

DESCRIPTION

DYNASCAN
PART NO.

CAPACITORS

NOTE:

The first code indicates tolerance of capacitance:

C = $\pm 0.25\mu\text{F}$, D = $\pm 0.5\mu\text{F}$, F = $\pm 1\mu\text{F}$, G = $\pm 2\%$, J = $\pm 5\%$, K = $\pm 10\%$, M = $\pm 20\%$, Z = $+70\% -20\%$

The second code indicates variation of capacitance with temperature:

YA = $\pm 5\%$, YB = $\pm 10\%$, YD = $+20 -30\%$, YE = $+20 -50\%$, YF = $+30 -70\%$, (-25 ~ +85°C), ZF = $+30 -80\%$ (-10 ~ +70°C), CH = $0 \pm 60\text{ppm}/^\circ\text{C}$, RH = $-220\text{ppm}/^\circ\text{C} \pm 60\text{ppm}/^\circ\text{C}$, CJ = $0 \pm 120\text{ppm}/^\circ\text{C}$, RJ = $-220\text{ppm}/^\circ\text{C} \pm 120\text{ppm}/^\circ\text{C}$, TH = $-470\text{ppm}/^\circ\text{C} \pm 60\text{ppm}/^\circ\text{C}$, UJ = $-750\text{ppm}/^\circ\text{C} \pm 120\text{ppm}/^\circ\text{C}$, SL = $+350\text{ppm}/^\circ\text{C} \sim -1000\text{ppm}/^\circ\text{C}$

C-067	Capacitor, Electrolytic,	0.22 μF	50V	M	C-061	....
C-056	Capacitor, Electrolytic(SP),	2.2 μF	25V	M	C-086	....
C-113	Capacitor, Electrolytic,	100 μF	10V			.....
C-098	Capacitor, Electrolytic,	22 μF	10V			.....
C-051	Capacitor, Electrolytic,	33 μF	10V			.....
C-097,107	Capacitor, Electrolytic,	47 μF	10V			.....
C-060,074	Capacitor, Electrolytic,	470 μF	10V			.....
C-005	Capacitor, Electrolytic,	10 μF	16V			.....
C-115	Capacitor, Electrolytic,	1000 μF	16V			.....
C-114	Capacitor, Electrolytic,	220 μF	16V			.....
C-057	Capacitor, Electrolytic,	33 μF	16V			.....
C-094	Capacitor, Electrolytic,	47 μF	16V			.....
C-030,064,065	Capacitor, Electrolytic,	2.2 μF	25V			.....
C-019,027,112	Capacitor, Electrolytic,	4.7 μF	25V			.....
C-024,106	Capacitor, Electrolytic,	1 μF	50V			.....
C-158	Capacitor, Semi-conductor(SR),	0.01 μF	25V	M		.....
C-059,071.	Capacitor, Semi-conductor(SR),	0.1 μF	25V	M		.....
C-156	Capacitor, Semi-conductor(SR),	0.015 μF	25V	M		.....
C-154	Capacitor, Semi-conductor(SR),	0.022 μF	25V	M		.....
C-018	Capacitor, Semi-conductor(SR),	0.047 μF	25V	M		.....
C-076	Capacitor, Ceramic,	47pF	50V	J	CH	.....
C-016	Capacitor, Ceramic,	15pF	50V	K	SL	.....
C-072,096	Capacitor, Ceramic,	150pF	50V	K	SL	.....
C-086	Capacitor, Ceramic,	18pF	50V	K	SL	.....
C-068	Capacitor, Ceramic,	22pF	50V	K	SL	.....
C-011,032,042	Capacitor, Ceramic,	220pF	50V	K	SL	.....
C-034	Capacitor, Ceramic,	270pF	50V	K	SL	.....
C-037,089	Capacitor, Ceramic,	3pF	50V	C	SL	.....
C-033,041,070	Capacitor, Ceramic,	33pF	50V	K	SL	.....
C-036	Capacitor, Ceramic,	39pF	50V	K	SL	.....
C-073	Capacitor, Ceramic,	390pF	50V	K	SL	.....
C-077	Capacitor, Ceramic,	470pF	50V	K	SL	.....
C-093	Capacitor, Ceramic,	0.5pF	50V	C	SL	.....
C-083,087,088	Capacitor, Ceramic,	5pF	50V	C	SL	.....
C-044	Capacitor, Ceramic,	56pF	50V	K	SL	.....
C-501	Capacitor, Ceramic,	82pF	50V	K	SL	.....
C-001	Capacitor, Ceramic,	18pF	50V	K	RH	.....
C-080	Capacitor, Ceramic,	33pF	50V	K	RH	.....
C-084	Capacitor, Ceramic,	100pF	50V	K	UJ	.....
C-081	Capacitor, Ceramic,	220pF	50V	K	UJ	.....
C-079	Capacitor, Ceramic,	68pF	50V	K	UJ	.....
C-022,023	Capacitor, Ceramic,	0.001 μF	50V	K	YP(B)	....
C-055,058	Capacitor, Ceramic,	0.0022 μF	50V	K	YP(B)	....
C-054	Capacitor, Ceramic,	0.0056 μF	50V	K	YP(B)	....
C-015,017,020,038,123	Capacitor, Ceramic,	0.047 μF	25V	Z	ZF	.....

CIRCUIT
SYMBOL

DESCRIPTION

DYNASCAN
PART NO.

CAPACITORS (Continued)

C-045,046,047,049,155, 157	Capacitor, Ceramic,	0.01 μ F	50V	M	YD	.....
C-048	Capacitor, Ceramic,	0.0022 μ F	50V	M	YD	.....
C-021,043,153	Capacitor, Ceramic,	0.0047 μ F	50V	M	YD	.....
C-002	Capacitor, Ceramic,	0.001 μ F	50V	Z	YF	.....
C-004,012,050,091,103, 108,109,110,118,119, 551,553,555	Capacitor, Ceramic,	0.001 μ F	50V	Z	YF	.....
C-003,007,008,014,035, 052,061,062,063,066, 069,078,082	Capacitor, Ceramic,	0.01 μ F	50V	Z	YF	.....
C-085,090,092,124,152, 159,160,552,556	Capacitor, Ceramic,	0.01 μ F	50V	Z	YF	.....
C-013	Capacitor, Ceramic,	0.022 μ F	50V	Z	YF	.....
C-029,099,117,120	Capacitor, Ceramic,	0.0047 μ F	50V	Z	YF	.....
C-026,102	Capacitor, Mylar,	0.01 μ F	50V	K	.....	.....
C-095	Capacitor, Mylar,	0.015 μ F	50V	K	.....	.....
C-028	Capacitor, Mylar,	0.022 μ F	50V	K	.....	.....
C-100	Capacitor, Mylar,	0.033 μ F	50V	K	.....	.....

MISCELLANEOUS

FT-002	Filter, Ceramic,	FL-009	.....	PL-140-009-9-001
FT-001	Filter, Ceramic,	FL-048	.....	PL-140-020-9-001
J-501	Jack,	JK-068	.....
J-003	Jack,	JK-089	.....
J-552	Jack,	JK-202	.....
MC-501	Microphone, Ass'y,	MK-251	.....	PL-561-001-9-001
M-501	Meter,	MT-149	.....	PL-320-116-9-001
B-001	PC Board, Main,	PA-031AD	.....
B-551	PC Board, Cont,	PA-049AA	.....
X-001	Crystal,	QX-074	10.240	PL-132-027-9-001
SP-501	Speaker,	SP-057	.....	PL-580-031-9-001
S-001	Switch, Rotary,	SR-220	.....	PL-083-288-9-001
S-554	Switch, Slide,	SW-348	.....	PL-084-114-9-001
T-002	Transformer, AF Choke,	TF-083	.....	PL-042-021-9-001
T-001	Transformer, Output,	TF-209	.....	PL-061-052-9-001
WA-501	Cord, DC,	WZ-246	1500mm	PL-420-046-9-001
YI-501	Bushing, Transistor,	YD-019	B312D-11-A	
YI-502	Bushing, Transistor,	YD-019	B309D	.....
YI-503	Insulation Sheet,	YD-042	.....
YI-504	Insulation Sheet,	YD-043	.....
YI-505	Insulation Sheet,	YD-046	.....
JP-011,012,017,024	Jumper Wire,	YY-052	5.0mm	.....
JP-001,002,003,008,015, 019,020,031	Jumper Wire,	YY-052	7.5mm	.....
JP-006,007,013,014,021, 029,552	Jumper Wire,	YY-052	10.0mm	.....
JP-004,032,033,553	Jumper Wire,	YY-052	12.5mm	.....
JP-005,022,028,554	Jumper Wire,	YY-052	15.0mm	.....
JP-023,030	Jumper Wire,	YY-052	17.5mm	.....
JP-010,018	Jumper Wire,	YY-052	20.0mm	.....
W-002	Wire,	1.5	0.18 x 12	3- 80-3 YEL
W-005	Wire,	1.5	0.18 x 12	15-100-15 YEL
W-003,004	Wire,	1.5	0.18 x 12	5-160-3 WHT

CIRCUIT
SYMBOL

DESCRIPTION

DYNASCAN
PART NO.

MISCELLANEOUS (Continued)

W-001

Wire,	1.5 0.18 x 12	3-60-3	BLK	.....
Panel, Front,	ABS CR	.....			PL-255-220-9-001
Holder, Jack,	ABS, Black	.....			PL-250-071-9-001
Knob, Channel,	ABS, CR	.....			PL-751-171-9-001
Knob,	ABS, CR	.....			PL-751-244-9-001
Mounting Bracket,	SPCC	1.6T	ZMC	.....	PL-250-072-9-001
Case (Bottom),	Vinyl Top	E-type	.....		PL-271-143-9-001
Case (Top),	Vinyl Top	E-type	.....		PL-271-144-9-001
Chassis,	SPCC	1.0T	ZMC	.....
Holder, Meter,	SPCC	ZMC	.....	
Hanger, Microphone,	SPCC	1.0T,	NI	.....
Nameplate, Front,	Alp	0.5T	Silk	.....	PL-600-099-9-001
ID Plate, FCC,	Alp	0.5T	Silk	.....
Optical Filter, Display, Channel,	Acryl,	1.0T	Purple	.....	PL-380-305-9-001
Holder, Led,	Rubber Black	.....		
Washer, Rubber,	**	.....		
Label, Warning, DC Cord,	Paper, Print	.....		
Label, Serial No.,	Paper, Print	.....		
Label, Serial No.,	Paper, Print	.....		
Optical Shielding Cloth,	Himelon,	0.3T,	Black	.....
Cushion,	Neoprene SP,	3.0T,	Black	.....
Cushion,	Neoprene SP,	3T,	Black	.....
Protection Cover, Front Panel,	**	.....		
Wool-coated Paper Wool Tack,	120L x 10W x 0.3T,	Black	.....	
Insulation Plate,	PVC,	0.5T	.....	
Screw, Flat Hd +,	M3x5	NI	.....	
Screw, Bind Hd +,	M3x8	NI	.....	
Screw, Tapping Round Hd +,	D3.5x8	NI	.....	
Screw, Tapping Round Hd +,	D5x10	NI	.....	
Screw, Taptight Bind Hd +,	M3x6	NI	.....	
Hex Nut,	M3.0	NI	.....	
Nut, Flange,	M3	NI	.....	
Washer, Lock,	D3.5	NI	.....	
Washer, Star,	D5	NI	.....	
Screw, P Tight Bind Hd +,	D3x8	NI	.....	
Screw, P Tight Bind Hd +,	D3x10	NI	.....	
Spring Plate, Knob,	D6	.....		
Rivet, AL, ID Plate,	D3.2x3.2	.....		
Owner's Manual,	**	.....		
Warranty Card,	**	.....		
Service Station Card,	**	.....		
Schematic Diagram,	**	.....		
FCC Rules Part 95,	**	.....		
Display Box,	**	.....		
Shipping Carton Box,	**	.....		
Styrofoam Pad,	**	.....		
Protector,	**	.....		
Wing Bolts,	M5x8	ZMC	.....		N/A
Composit (Schematic Diagram/Parts List),	.....			
Vinyl Bag,	100x120x0.05T			
	120x280x0.05T			
	170x320x0.05T			
	320x370x580x0.07T			
	220x300x0.01T			

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