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# Cobra 89GTL Parts List

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# BILL OF MATERIAL FOR COBRA 89GTL

#### CIRCUIT SYMBOL

#### DESCRIPTION

DYNASCAN PART NO.

#### **SEMICONDUCTORS**

IC-1	Integrated Circuit,	TA-7222P, AF PWR 307 143 9 003
IC-2,3	Integrated Circuit,	TA-7310P, VCO/TX MIX 307-133-9-004
IC-4	Integrated Circuit,	μPD2816C, PLL 307-145-9-001
TR-3	Field Effect Transistor,	2SK19-BL
TR-4	Field Effect Transistor,	2SK104-H 182-055-9-001
TR-16,17	Transistor,	2SA733-AP
TR-15,203	Transistor,	2SC458-C 176-048-9-002
TR-1,8,9,13	Transistor,	2SC945A-Q 176-062-9-001
TR-201	Transistor,	2SC1061-C 172-044-9-001
TR-18,202	Transistor,	2SC1096-3ZL 172-024-9-001
TR-2	Transistor,	2SC1674-L 176-081-9-002
TR-5,6,7,14	Transistor,	2SC1675-L 176-065-9-001
TR-11	Transistor,	2SC2028 B/20 172-038-9-001
TR-10	Transistor,	2SC2029 B/10 172-038-9-002
TR-12	Transistor,	2SC2076-C 176-060-9-004
	•	
D-6,7,12,16	Diode,	1N60-AM 150-001-9-005
D-9,10	Diode,	1N60-P 150-006-9-001
D-4	Diode,	1S34 150-016-9-001
D-5	Diode,	1S2075K 151-028-9-001
D-1,2,3,11,15,17,19,20,	Diode,	1 <b>S2076</b> 151 067 9 001
22,23,24		
D-201,202,203,204	Diode,	GM-3Y
D-13,26	Diode,	SR1K-1 151-040-9-003
D-205	Diode, Zener,	BZ-162 152-057-9-001
D-206	Diode, Zener,	WZ-071 152-075-9-001
D-21		XZ-051 152-088-9-001
D-25	Diode, Zener,	
D-302		RX IND
D-303		TX IND
D-501		CH IND 158-014-9-001
D-18		1S2687-D 153-008-9-001
D-14		1S2688 EA 154 004 9 001
	, ·	

#### INDUCTORS

Ľ-1	Coil,	LA-029	060-023-9-001
L-25	Coil,	LA-088	066-019-9-002
L-6	Coil,	LA-106	060-019-9-002
L-2	Coil,	LA-138	046-024-9-001
L-19	Coil,	LA-166	066-025-9-005
L-3	Coil,	LA-180	060-024-9-001
L-23	Coil,	LA-182	060-024-9-003
L-24	Coil,	LA-198	060-029-9-001
L-18	Coil,	LA-201	046-024-9-002
L-7	Coil,	LA-204	046-024-9-003
L-8	Coil,	LA-207	046-025-9-001
L-17	Coil,	LA-208	060-024-9-004
L-21	Coil,	LA-217	060-030-9-003
L-5	Coil,	LA-274	046-025-9-002
L-20	Coil,	LA-275	046-025-9-0 <b>03</b>

	DESCRIPTION		DYNASCAN PART NO.			
	INDUCTORS (Continued)					
L-10,16 L-13 L-14 L-12 L-11 L-22 L-9 L-15 L-301	Coil, Coil, Coil, Coil, Coil, Micro Inductor, Ferrite Core, Ferrite Core, Ferrite Core,	LC-018 LC-019 LD-012 LE-088 LE-089 LZ-001, 100µH LD-071 LD-087 LD-088	041-088-9-001 041-069-9-004 044-043-9-006 044-048-9-003 044-051-9-001 041-104-9-001 041-104-9-002			
T-301 T-1 T-2	Choke Coil,	TF-150 TF-120 TF-083	061-041-9-001			
	SEMI-FIXED & VA	ARIABLE RESISTORS				
VR-1 VR-201 VR-4 VR-6 VR-2 VR-5 VR-3	Resistor, Semi-fixed, Resistor, Semi-fixed, Resistor, Semi-fixed, Resistor, Semi-fixed, Resistor, Semi-fixed, Resistor, Semi-fixed, Resistor, Semi-fixed,	RV-189 300 ohm B   RV-189 500 ohm B   RV-189 20K ohm B   RV-189 5K ohm B   RV-189 5K ohm B   RV-189 30K ohm B   RV-189 30K ohm B   RV-189 50K ohm B   RV-189 100K ohm B	008-342-9-001 008-316-9-003 008-316-9-004 008-331-9-001 008-316-9-002			
VR-303,S305 VR-306 VR-307 VR-304 VR-302 VR-301,305		315 DUAL 1K/5K ohm B, RF/CAL	008-345-9-003 008-344-9-005 008-347-9-003 008-347-9-004			
•	FIXED RESISTOR	5				
R-402 R-93 R-403 R-401 R-82 R-95 R-44 R-301 R-103 R-50 R-8,11,22,27,51 R-24,107 R-204 R-203,205 R-64,202 R-1,68 R-94 R-97 R-69 R-108,302 R-98 R-57	Resistor, Metalic Film, Resistor, Solid, Resistor, Solid, Resistor, Carbon Film, Resistor, Carbon Film,	15 ohm 1W ±10%   22 ohm 1W ±10%   47 ohm 1W ±10%   22 ohm 2W ±10%   200 ohm 2W ±10%   200 ohm 2W ±10%   1K ohm 1/2W ±10%   1SM ohm 1/2W ±10%   2.2 ohm 1/8W ±5%   3.9 ohm 1/8W ±5%   3.9 ohm 1/8W ±5%   470 ohm 1/8W ±5%   680 ohm 1/8W ±5%   820 ohm 1/8W ±5%   2.2K ohm 1/8W ±5%   2.7K ohm 1/8W ±5%   3.3K ohm 1/8W ±5%   4.7K ohm 1/8W ±5%   6.8K ohm 1/8W ±5%	013-038-9-001 013-011-9-002 013-038-9-002 013-038-9-003 013-015-9-002 001-102-6-102 001-102-6-155 002-108-5-229 002-108-5-399 002-108-5-471 002-108-5-821 002-108-5-821 002-108-5-821 002-108-5-222 002-108-5-222 002-108-5-332 002-108-5-332 002-108-5-472 002-108-5-682 002-108-5-682 002-108-5-220			

C-121,139

#### DESCRIPTION

# FIXED RESISTORS (Continued)

R-47	Resistor, Carbon Film,	1 ohm	1/8W	±5%	002-108-5-010
R-85,99	Resistor, Carbon Film,	10 ohm	1/8W	± <b>5</b> %	002-108-5-100
R-48,55	Resistor, Carbon Film,	22 ohm	1/8W		002-108-5-220
R-73	Resistor, Carbon Film,	33 ohm	1/8W	±5%	002-108-5-330
R-52	Resistor, Carbon Film,	47 ohm	1/8W		002-108-5-470
R-6,72,74	Resistor, Carbon Film,	56 ohm			002-108-5-560
R-86	Resistor, Carbon Film,	82 ohm	1/8W	±5%	002-108-5-820
R-16,65,83	Resistor, Carbon Film,	100 ohm	1/8W		002-108-5-101
R-58,63	Resistor, Carbon Film,	180 ohm	1/8W		002-108-5-181
R-26	Resistor, Carbon Film,	220 ohm	1/8Ŵ	± <b>5</b> %	002-108-5-221
R-96	Resistor, Carbon Film,	330 ohm	1/8W	±5%	002-108-5-331
R·7,92	Resistor, Carbon Film,	470 ohm	1/8W	±5%	002-108-5-471
R-45,82	Resistor, Carbon Film,	560 ohm	1/8W	±5%	002-108-5-561
R-20,43,79,501,502,503,	Resistor, Carbon Film,	6 <b>80</b> ohm	1/8W	± <b>5</b> %	002-108-5-681
504,505,506,507,508, 509,510,511,512,513,					
514					
R-42	Resistor, Carbon Film,	820 ohm	1/8W	±5%	002-108-5-821
R-17, 19, 100, 105	Resistor, Carbon Film,	1K ohm		±5%	002-108-5-102
R-25	Resistor, Carbon Film,	1.5K ohm		±5%	002-108-5-152
R-14,18,90	Resistor, Carbon Film,	2.2K ohm			002-108-5-222
R-9,53,89	Resistor, Carbon Film,	2.7K ohm			002-108-5-272
R-10,66	Resistor, Carbon Film,	3.3K ohm			002-108-5-332
R-15,67,81,104	Resistor, Carbon Film,	4.7K ohm			002-108-5-472
R-4,23,101	Resistor, Carbon Film,	5.6K ohm			002-108-5-562
R-80	Resistor, Carbon Film,	6.8K ohm			002-108-5-682
R-3,5,13,34,37,39,54,56,	Resistor, Carbon Film,	10K ohm			002-108-5-103
70,76,78,88,106					
R-84	Resistor, Carbon Film,	15K ohm	1/8W	±5%	002-108-5-153
R-2	Resistor, Carbon Film,	18K ohm			002-108-5-183
R-32,33,71,77	Resistor, Carbon Film,	22K ohm	1/8W	±5%	002-108-5-223
R-21,35,36	Resistor, Carbon Film,	7K ohm	1/8W	±5%	002-108-5-273
R-46	Resistor, Carbon Film,	33K ohm	1/8W	±5%	002 108 5 333
R-40	Resistor, Carbon Film,	39K ohm	1/8W	±5%	002-108-5-393
R-38	Resistor, Carbon Film,	47K ohm	1/8W	±5%	002-108-5-473
R-28,31 Ø	Resistor, Carbon Film,	56K ohm	1/8W		002-108-5-563
R-62	Resistor, Carbon Film,	68K ohm	1/8W	±5%	002-108-5-683
R-29,30	Resistor, Carbon Film,	82K ohm			002-108-5-823
R-75,102	Resistor, Carbon Film,	100K ohm	1/8W	± <b>5</b> %	002-108-5-104
R-49	Resistor, Carbon Film,	4.7 ohm			002-108-5-479
R-201	Resistor, Carbon Film;				002-102-5-221
R-303	Resistor, Carbon Film,	2.2M ohm	1/2W-	. ±5%	002-102-5-225
	CAPACITORS				
C-25	Capacitor, Tantalum,	10µF		±20%	
C-91,92	Capacitor, Tantalum,	2.2µF		±20%	
C-41,70	Capacitor, Tantalum,	4.7µF		±20%	
C-112	Capacitor, Electrolytic,			•••••	
C-73,120,126	Capacitor, Electrolytic,				
C-114	Capacitor, Electrolytic,			••••••	
C-39	Capacitor, Electrolytic,				
C-67,135	Capacitor, Electrolytic,		16V .	•••••	022-175-9-002
C-1,37,57,89 C-121-139	Capacitor, Electrolytic,	10μF 22μF	16V . 16V		022-157-9-004
	CADACITOR PROTONUTIC				

Capacitor, Electrolytic,

22μF 16V ..... 022-157-9-005

CIRCUIT	
SYMBOL	

### DESCRIPTION

#### DYNASCAN PART NO.

# **CAPACITORS** (Continued)

C-134	Capacitor, Electrolytic	:, <b>33μ</b> F			022-157-9-006
C-115,205	Capacitor, Electrolytic	, 220μF	16V		
C-74	Capacitor, Electrolytic	, 470μF	16V		
C-43	Capacitor, Electrolytic	, 1000μF			
C-45,72,131	Capacitor, Electrolytic		25V		
C-116	Capacitor, Electrolytic				
C-204	Capacitor, Electrolytic	•		CZ-048	022-175-9-004
C-128	Capacitor, Electrolytic	· · · ·			
C-29,59,93	Capacitor, Electrolytic				
C-129	Capacitor, Aluminum,				
C-22,76	Capacitor, Mylar,	0.001μF	25V		025-134-9-001
C-38,127	Capacitor, Mylar,	0.0022µF	25V		025-134-9-005
C-27,31	Capacitor, Mylar,	0.0047μF	25V		025-134-9-003
C-32,33,40,44,124	Capacitor, Mylar,	0.01µF	25V		
C-95,122	Capacitor, Mylar,	0.22µF	25V		
C-18,19	Capacitor, Mylar,	0.039µF	25V	± <b>20</b> % .	025-134-9-006
C-20,80	Capacitor, Ceramic,	1pF	50V		F 020-190-9-001
C-51	Capacitor, Ceramic,	2pF	50V		F 020-187-9-001
C-30	Capacitor, Ceramic,	10pF	50V	±10%	SL 020-181-9-004
C-98	Capacitor, Ceramic,	15pF	50V	±10%	SL 020-180-9-010
C-303	Capacitor, Ceramic,	22pF	50V	±10%	SL 020-180-9-011
C-100	Capacitor, Ceramic,	39pF	50V	±10%	SL 020-190-9-007
C-49	Capacitor, Ceramic,	47pF	50V	±10%	SL 020-180-9-013
C-55	Capacitor, Ceramic,	100pF	50V	±10%	SL 020-180-9-016
C-99,107	Capacitor, Ceramic,	220pF	50V	±10%	SL 020-180-9-019
C-61	Capacitor, Ceramic,	270pF	50V	±10%	SL 020-180-9-019
C-84					
	Capacitor, Ceramic,	330pF	50V	±10%	SL 020-181-9-008
C-52,53	Capacitor, Ceramic,	390pF	50V	±10%	SL 020-190-9-011
C-71,75,83,401,402,403,	Capacitor, Ceramic,	0.001µF	50V	±10%	YF 020-210-9-001
404					
C-2,5,7,8,9,10,11,12,13,	Capacitor, Ceramic,	0.01µF	50V	±10%	YF 020-210-9-002
42,58,64,66,78,79,81,					
82,85,96,97,101,102,					
103,105,110,117,118,					
125,130,133,136,140,					
141,142,143,144,145,					
201,202,203,301,302,					
452,453,454					
C-16,17,21,23,24,26,46,	Capacitor, Ceramic,	0.039µF	25V	±10%	ZF 020-210-9-003
47,56,60,68,111,113,					020 210 0 000
119,146,147,148,206					
C-90	Capacitor, Ceramic,	0.022µF	25V	±10%	ZF 020-210-9-004
C-104,106	Capacitor, Ceramic,	10pF	50V	±10%	CH 020-181-9-004
C-109	Capacitor, Ceramic,	9pF	50V	±10%	RH 020-210-9-005
C-88	Capacitor, Ceramic,	15pF	50V	±10%	RH 020-107-9-006
C-4	Capacitor, Ceramic,	27pF	50V	±10%	RH 020-210-9-006
C-50	Capacitor, Ceramic,	56pF	50V	±10%	RH 020-208-9-002
C-86	Capacitor, Ceramic,	68pF	50V	±10%	BH 020-208-9-002
C-108	Capacitor, Ceramic,	100pF	50V	±10%	RH 020-196-9-001
C-108 C-87	Capacitor, Ceramic,	150pF	50V	±10%	RH 020-205-9-004
C-94	•	47pF	50V	±10%	RH 020-207-9-008
C-94 C-451	Capacitor, Ceramic, Capacitor, Ceramic,	47pF 0.001μF	50V	±10%	UJ 020-207-9-002
C-451 C-54		0.001µF	50V	±10% ±20%	YB 020-210-9-007
	Capacitor, Ceramic,			±20% ±20%	YD 020-204-9-018
C-63,65	Capacitor, Ceramic,	0.01μF	50V		YD 020-204-9-019
C-77	Capacitor, Ceramic,	0.1μF	25V	BC	Z 020-210-9-008

#### DESCRIPTION

# CAPACITORS (Continued)

Capacitor Array,

HA-003

0.01µF x 4 ..... 527-077-9-002

### MISCELLANEOUS

Printed Circuit Board, PC-407AA, Main Printed Circuit Board, PC-408AA, Mic Jack Printed Circuit Board, PC-410AA, PWR Printed Circuit Board, PC-390AA, CH LED Printed Circuit Board, PC-391AA, CH SW Printed Circuit Board, PC-398AA, SP Jack Printed Circuit Board, PC-406AA, SW Ceramic Filter, FL-009, 455 KHz Crystal Filter, FL-055, 10.695 MHz Switch, Rotary, SR-216, Channel	
Switch, Slide, SW-099, AC-DC	083-243-9-001
Switch, Slide, SW-099, AC-DC Switch, Slide, SW-110, PA/CB/ANL Switch, Slide, SW-147, MOD/CAL/SWR	084-066-9-002
Switch, Slide, SW-147, MOD/CAL/SWR	084-066-9-003
Speaker, SP-014	580-015-9-001
Meter, MT-120	320-098-9-001
Meter, MT-121	320-097-9-001
Microphone, MK-075	562-025-9-001
Pilot Lamp, PL-065	400-057-9-001
Pilot Lamp, PL-065	400-057-9-002
Jack, JK-001	773-077-9-001
Jack, JK-035	772-027-9-001
Connector, JK-052, DC PWR	762-020-9-001
Connector, JK-058, MIC.	773-073-9-001
Terminal, TP-029, Test Point Fuse, FS-012, 2A	/5/-033-9-001
Fuse, Holder, FH-002	742 025 0 001
AC Power Cord, WZ-038	42-035-9-001
DC Power Cord, W2 050	420-044-9-001
Insulation Plate, YD-003, TR11	420-044-9-002
Insulation Plate, YD-033, TR10/201	
Insulation Plate, YD-039, TA-7222P	
Crystai, QX-074, 10.24 MHz	132-027-9-001
Wire Clamper, YY-047	
Chassis	
Rear Panel	262-021-9-001
Front Panel	
Cover, Top	252-022-9-001
Cover, Bottom	
Bracket for Switch	251-191-9-001
Bracket for Panel (R)	251-208-9-001
Bracket for Panel (L)	251.173-9-003
Transformer Holder	251-209-9-001
Pilot Lamp Holder	251-173-9-002

S-501 S-304 S-301,303 S-302 S-301 M-302 M-301 PL-302 J-401,402 J-301 J-302 J-451 TP-1,2,3,4,5,6 F-301,302

CF-1 XF-1

Bracket for Panel (R)	251-208-9-001
Bracket for Panel (L)	251.173-9-003
Transformer Holder	251-209-9-001
Pilot Lamp Holder	251-173-9-002
Bracket for Pilot Lamp	762-021-9-001
IC Holder	747-052-9-002
Heat Sink	747-065-9-001
Heat Sink	741-074-9-001
Microphone Hanger	255-171-9-001
Knob, Channel	751-147-9-003
Knob	751-095-9-002

# **MISCELLANEOUS** (Continued)

Knob	
Knob	
FCC Nameplate	
Control Nameplate	260-159-9-002
Brand Nameplate	260-159-9-003
UL Label	
Warning Label, DC Cord	
Serial No. Label	
UL Label	
Production Date Label	
Light Filter, CH LED	
Speaker Net	
Rubber Washer	
Protection Pad	
Protection Pad	
Wool - Coated Paper	
Wool - Coated Paper	
Wool - Coated Paper	
Cushion for Meter	
Protection Pad	
Protection Pad	
LED Cap	
Screw, Pan Head, 3D x 6, Metric	753-006-9-002
Screw, Bind Head, 2D x 4, Metric	634-051-9-001
Screw, Bind Head, 2D x 4, Metric	634-069-9-002
Screw, Bind Head, 2.00 x 4, Metric	634-073-9-001
Screw, Bind Head, 3D x 4, Metric	634-087-9-003
Screw, Bind Head, 3D x 6, Metric	634-053-9-001
Screw, Bind Head, 4D x 10, Metric	<b>6</b> 34-084-9-001
Screw, Bind Head, 5D x 10, Metric	634-077-9-002
Screw, Pan Head, 3D x 8, Metric	710-037-9-002
Screw, Pan Head, 3D x 8, Metric	710-032-9-002
Screw, Pan Head, 3D x 10, Metric	710-019-9-001
Screw, Round Head, 3.5D x 8, Metric	710-020-9-001
Screw, Bind Head, 3D x 6, Metric	710-021-9-004
Screw, Pan Head, 3D x 14, Metric	710-032-9-001
Flange Nut	
Washer	
Lock Washer	
Spring Washer	
Rubber Foot	381-058-9-001
Cord Stopper	
Vinyl Bag	
Lug Terminal	
Spring for Knob, 3.5D, Metric	763-084-9-003
Spring for Knob, 6D, Metric Spring for Knob, 6D, Metric	763-085-9-005
Spring for Knob, 6D, Metric	763-084-9-004
Rivet, 3.2D x 3.2, Metric	
Display Box	500-375-9-001
Shipping Carton Box	
Polystyrol Form, Packing	503-155-9-001
Polystyrol Form, Packing	503-155-9-002

# DESCRIPTION

## **MISCELLANEOUS** (Continued)

Protection Paper Sheet	343-024-9-004
Accessory Box	500-324-9-001
Owner's Manual	480-231-9-001
Circuit Diagram/Bill of Material	499-137-9-001
Warranty Card	
Service Station Card	
FCC Application Form	
FCC Temporary Licence Form	
FCC Part 95 Rules	