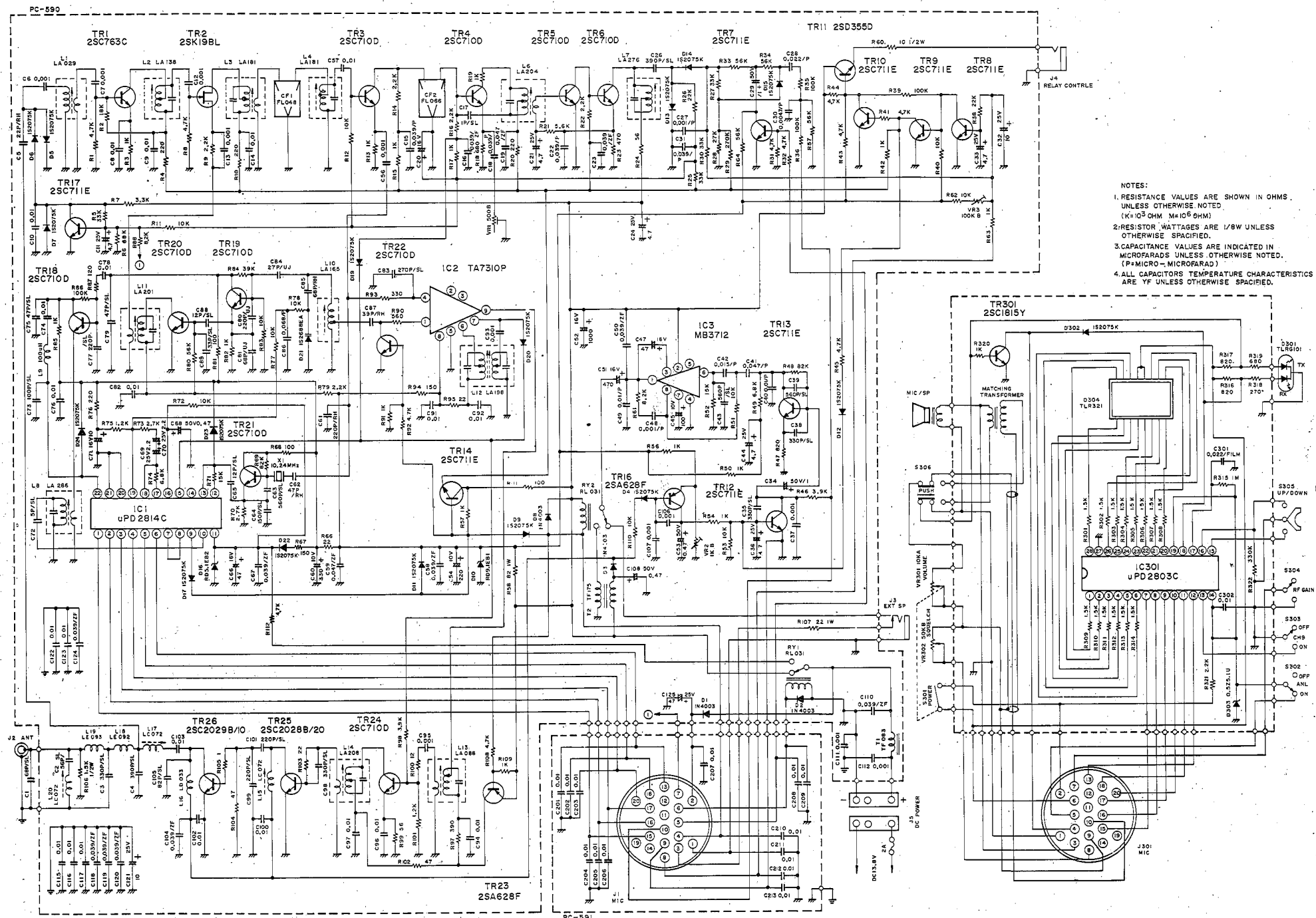


# CIRCUIT DIAGRAM FOR COBRA 66GTL



- NOTES:
1. RESISTANCE VALUES ARE SHOWN IN OHMS, UNLESS OTHERWISE NOTED.  
(K=10<sup>3</sup> OHM, M=10<sup>6</sup> OHM)
  2. RESISTOR WATTAGES ARE 1/8W UNLESS OTHERWISE SPECIFIED.
  3. CAPACITANCE VALUES ARE INDICATED IN MICROFARADS UNLESS OTHERWISE NOTED.  
(P=PICO-MICROFARAD)
  4. ALL CAPACITORS TEMPERATURE CHARACTERISTICS ARE YF UNLESS OTHERWISE SPECIFIED.

**BILL OF MATERIAL FOR COBRA 66GTL**

CIRCUIT SYMBOL	DESCRIPTION	DYNASCAN PART NO.
<b>SEMICONDUCTORS</b>		
IC-1	Integrated Circuit, #PD2814C	307-170-9-001
IC-2	Integrated Circuit, TA7310P	307-133-9-001
IC-3	Integrated Circuit, MB3712	307-151-9-001
TR-2	Field Effect Transistor, 2SK198L	182-037-9-001
TR-16,23	Transistor, 2SA628F	177-040-9-001
TR-7,8,9,10,12,13,14,17	Transistor, 2SC711D	176-097-9-001
TR-1	Transistor, 2SC763C	176-059-9-002
TR-3,4,5,6,18,19,20,21,22,24	Transistor, 2SC710D	176-097-9-002
TR-11	Transistor, 2SD355D	172-062-9-001
TR-25	Transistor, 2SC2028 B/20	172-038-9-001
TR-26	Transistor, 2SC2029 B/10	172-038-9-002
D-1,2,3,8	Diode, 1N4003	151-083-9-001
D-4,5,6,7,9,11,12,13,14,15,17,19,20	Diode, 1S2075K	151-028-9-001
D-16	Diode, Zener, RD5.1EB2	152-098-9-001
D-10	Diode, Zener, RD9.1EB1	152-098-9-002
D-21	Diode, Vari-Cap, 1S2688EA	154-004-9-001
<b>INDUCTORS</b>		
L-1	Coil, LA-029	060-023-9-001
L-13	Coil, LA-088	066-019-9-002
L-2	Coil, LA-138	046-024-9-001
L-10	Coil, LA-165	044-046-9-001
L-3,4	Coil, LA-181	060-024-9-002
L-12	Coil, LA-198	060-029-9-001
L-11	Coil, LA-201	046-024-9-002
L-6	Coil, LA-204	046-024-9-003
L-14	Coil, LA-208	060-029-9-004
L-7	Coil, LA-276	046-024-9-004
L-8	Coil, LA-286	046-031-9-001
L-15,17,20	Coil, LC-072	044-040-9-001
L-16	Coil, LD-033	041-083-9-003
L-18	Coil, LE-092	041-115-9-001
L-19	Coil, LE-093	041-115-9-002
L-9	Inductor, Molded, LZ-016 (100μH)	041-115-9-003
T-1	Coil, AF Choke, TF-083	042-021-9-001
T-2	Transformer, Output, TF-175	061-043-9-001
<b>SEMI-FIXED &amp; VARIABLE RESISTORS</b>		
VR-1	Resistor, Semi-fixed, RV-182, 500 ohm B	008-372-9-001
VR-2	Resistor, Semi-fixed, RV-182, 1K ohm B	008-372-9-002
VR-3	Resistor, Semi-fixed, RV-182, 100K ohm B	008-372-9-003

CIRCUIT SYMBOL	DESCRIPTION	DYNASCAN PART NO.
<b>FIXED RESISTORS</b>		
<b>NOTE:</b> Resistor tolerance: J = ±5% K = ±10%		
R-107	Resistor, Metal Film, 22 ohm 1W K	013-011-9-002
R-58	Resistor, Metal Film, 82 ohm 1W K	013-015-9-001
R-60	Resistor, Carbon, Axial Lead, 10 ohm 1/2W J	001-102-5-100
R-106	Resistor, Carbon, Axial Lead, 1.5K ohm 1/2W J	001-102-5-152
R-42,50	Resistor, Carbon, Axial Lead, 1K ohm 1/8W J	002-108-5-102
R-43	Resistor, Carbon, Axial Lead, 2.2K ohm 1/8W J	002-108-5-222
R-61	Resistor, Carbon, Axial Lead, 8.2K ohm 1/8W J	002-108-5-822
R-38,40,77,78	Resistor, Carbon, Axial Lead, 10K ohm 1/8W J	002-108-5-103
R-30	Resistor, Carbon, Axial Lead, 33K ohm 1/8W J	002-108-5-333
R-105	Resistor, Carbon, Formed VERT, 1 ohm 1/8W J	002-108-5-109
R-100	Resistor, Carbon, Formed VERT, 12 ohm 1/8W J	002-108-5-120
R-66,95,103	Resistor, Carbon, Formed VERT, 22 ohm 1/8W J	002-108-5-220
R-104,102	Resistor, Carbon, Formed VERT, 47 ohm 1/8W J	002-108-5-470
R-24,99	Resistor, Carbon, Formed VERT, 56 ohm 1/8W J	002-108-5-560
R-69,81,111	Resistor, Carbon, Formed VERT, 100 ohm 1/8W J	002-108-5-101
R-87	Resistor, Carbon, Formed VERT, 120 ohm 1/8W J	002-108-5-121
R-94,67	Resistor, Carbon, Formed VERT, 150 ohm 1/8W J	002-108-5-151
R-4,10,76,20	Resistor, Carbon, Formed VERT, 220 ohm 1/8W J	002-108-5-221
R-93	Resistor, Carbon, Formed VERT, 330 ohm 1/8W J	002-108-5-331
R-97	Resistor, Carbon, Formed VERT, 390 ohm 1/8W J	002-108-5-391
R-23	Resistor, Carbon, Formed VERT, 470 ohm 1/8W J	002-108-5-471
R-90	Resistor, Carbon, Formed VERT, 560 ohm 1/8W J	002-108-5-561
R-18	Resistor, Carbon, Formed VERT, 680 ohm 1/8W J	002-108-5-681
R-47	Resistor, Carbon, Formed VERT, 820 ohm 1/8W J	002-108-5-821
R-3,13,15,17,18,54,56,57,63,82,85,91,109,110	Resistor, Carbon, Formed VERT, 1K ohm 1/8W J	002-108-5-102
R-75,101	Resistor, Carbon, Formed VERT, 1.2K ohm 1/8W J	002-108-5-122
R-9,14,16,22,44,79	Resistor, Carbon, Formed VERT, 2.2K ohm 1/8W J	002-108-5-222
R-70,73	Resistor, Carbon, Formed VERT, 2.7K ohm 1/8W J	002-108-5-272
R-7	Resistor, Carbon, Formed VERT, 3.3K ohm 1/8W J	002-108-5-332
R-46,98	Resistor, Carbon, Formed VERT, 3.9K ohm 1/8W J	002-108-5-392
R-1,8,31,32,41,45,92,108	Resistor, Carbon, Formed VERT, 4.7K ohm 1/8W J	002-108-5-472
R-21	Resistor, Carbon, Formed VERT, 5.6K ohm 1/8W J	002-108-5-562
R-49,74	Resistor, Carbon, Formed VERT, 6.8K ohm 1/8W J	002-108-5-682
R-112	Resistor, Carbon, Formed VERT, 8.2K ohm 1/8W J	002-108-5-822
R-11,12,51,53,62,72,83,	Resistor, Carbon, Formed VERT, 10K ohm 1/8W J	002-108-5-103
R-52,71	Resistor, Carbon, Formed VERT, 15K ohm 1/8W J	002-108-5-153
R-2	Resistor, Carbon, Formed VERT, 18K ohm 1/8W J	002-108-5-183
R-26	Resistor, Carbon, Formed VERT, 22K ohm 1/8W J	002-108-5-223
R-28	Resistor, Carbon, Formed VERT, 27K ohm 1/8W J	002-108-5-273
R-5,25,27	Resistor, Carbon, Formed VERT, 33K ohm 1/8W J	002-108-5-333
R-84	Resistor, Carbon, Formed VERT, 39K ohm 1/8W J	002-108-5-393
R-33,34,37,64,80	Resistor, Carbon, Formed VERT, 56K ohm 1/8W J	002-108-5-563
R-6	Resistor, Carbon, Formed VERT, 68K ohm 1/8W J	002-108-5-683
R-48,69	Resistor, Carbon, Formed VERT, 82K ohm 1/8W J	002-108-5-823
R-35,36,86	Resistor, Carbon, Formed VERT, 100K ohm 1/8W J	002-108-5-104
R-39	Resistor, Carbon, Formed VERT, 180K ohm 1/8W J	002-108-5-184
R-29	Resistor, Carbon, Formed VERT, 270K ohm 1/8W J	002-108-5-274

CIRCUIT SYMBOL	DESCRIPTION	DYNASCAN PART NO.
<b>CAPACITORS</b>		
<b>NOTE:</b> The first code indicates tolerance of capacitance: C = ±0.25pF, D = ±0.5pF, F = ±1pF, G = ±2%, J = ±5%, K = ±10%, M = ±20%, Z = +70% -20% The second code indicates variation of capacitance with temperature: YA = ±5%, YB = ±10%, YD = ±20 -30%, YE = ±20 -50%, YF = ±30 -80%, (-25 ~ +85°C), ZF = ±30 -80% (-10 ~ +70°C), CH = 0.60ppm/°C, RH = -220ppm/°C ±160ppm/°C, CJ = 0.4120ppm/°C, RJ = -220ppm/°C ±120ppm/°C, TH = -470ppm/°C ±60ppm/°C, UJ = -750ppm/°C ±120ppm/°C, SL = ±350ppm/°C ~ -1000ppm/°C		
C53,68,108	Capacitor, Electrolytic, 0.47μF 50V	022-157-9-001
C29,34	Capacitor, Electrolytic, 1μF 50V	022-157-9-002
C69,70	Capacitor, Electrolytic, 2.2μF 25V	022-158-9-002
C-11,21,24,32,33,44	Capacitor, Electrolytic, 4.7μF 25V	022-157-9-003
C-20,71	Capacitor, Electrolytic, 10μF 16V	022-157-9-004
C-121	Capacitor, Electrolytic, 10μF 25V	022-171-9-001
C-47,66,36	Capacitor, Electrolytic, 47μF 16V	022-164-9-002
C-125	Capacitor, Electrolytic, 47μF 25V	022-197-9-001
C-45	Capacitor, Electrolytic, 100μF 10V	022-157-9-008
C-54	Capacitor, Electrolytic, 220μF 10V	002-171-9-002
C-60	Capacitor, Electrolytic, 330μF 10V	022-183-9-001
C-51	Capacitor, Electrolytic, 470μF 16V	022-076-9-008
C-52	Capacitor, Electrolytic, 1000μF 16V	022-158-9-004
C-27,48	Capacitor, Mylar, 0.001μF 50V K	025-074-9-003
C-30	Capacitor, Mylar, 0.004μF 50V K	025-126-9-001
C-40	Capacitor, Mylar, 0.01μF 50V K	025-121-9-002
C-42	Capacitor, Mylar, 0.015μF 50V K	025-130-9-001
C-28	Capacitor, Mylar, 0.022μF 50V K	025-121-9-003
C-15,18,22,31	Capacitor, Mylar, 0.039μF 50V K	025-121-9-005
C-41	Capacitor, Mylar, 0.047μF 50V K	025-121-9-006
C-86	Capacitor, Mylar, 0.068μF 50V K	025-125-9-001
C-49	Capacitor, Mylar, 0.1μF 50V K	025-121-9-001
C-84	Capacitor, Ceramic, 27pF 50V K UJ	020-232-9-001
C-81	Capacitor, Ceramic, 68pF 50V K UJ	020-205-9-006
C-80	Capacitor, Ceramic, 220pF 50V K UJ	020-205-9-008
C-5	Capacitor, Ceramic, 22pF 50V K RH	020-207-9-007
C-87	Capacitor, Ceramic, 39pF 50V K RH	020-180-9-029
C-62	Capacitor, Ceramic, 47pF 50V K RH	020-181-9-014
C-85	Capacitor, Ceramic, 68pF 50V K RH	020-195-9-001
C-61	Capacitor, Ceramic, 220pF 50V K RH	020-205-9-005
C-17	Capacitor, Ceramic, 1pF 50V K SL	020-190-9-001
C-72	Capacitor, Ceramic, 5pF 50V K SL	020-180-9-009
C-65,88	Capacitor, Ceramic, 12pF 50V K SL	020-195-9-003
C-89	Capacitor, Ceramic, 33pF 50V K SL	020-180-9-012
C-75,79	Capacitor, Ceramic, 47pF 50V K SL	020-180-9-013
C-2	Capacitor, Ceramic, 56pF 50V K SL	020-196-9-004
C-1	Capacitor, Ceramic, 68pF 50V K SL	020-180-9-015
C-105	Capacitor, Ceramic, 82pF 50V K SL	020-220-9-003
C-73	Capacitor, Ceramic, 100pF 50V K SL	020-180-9-016
C-64	Capacitor, Ceramic, 150pF 50V K SL	020-180-9-014
C-77,101,99	Capacitor, Ceramic, 220pF 50V K SL	020-180-9-019
C-83	Capacitor, Ceramic, 270pF 50V K SL	020-190-9-010
C-3,35,38,98	Capacitor, Ceramic, 330pF 50V K SL	020-181-9-008
C-4,26	Capacitor, Ceramic, 390pF 50V K SL	020-190-9-011
C-39,63,43	Capacitor, Ceramic, 560pF 50V K SL	020-213-9-003
C-19,59	Capacitor, Ceramic, 0.047μF 25V Z ZF	020-205-9-010

CIRCUIT SYMBOL	DESCRIPTION	DYNASCAN PART NO.
<b>CAPACITORS (Continued)</b>		
C-23,16,50,58,57,104,110,118,119,120,124	Capacitor, Ceramic, 0.039μF 25V Z ZF	020-206-9-001
C-6,7,12,13,37,56,93,95,106,107,111,112	Capacitor, Ceramic, 0.001μF 50V Z YF	020-190-9-012
C-8,9,10,14,57,74,76,78,82,91,92,94,96,97,100,102,103,115,116,117,122,123,201,202,203,204,205,206,207,208,209,210,211,212,213	Capacitor, Ceramic, 0.01μF 50V Z YF	020-190-9-015
<b>CRYSTAL</b>		
X-1	Crystal, QX-074, 10.24 MHz	132-027-9-001
<b>MISCELLANEOUS</b>		
PC Board, PC-590AA, Main PCB		302-414-9-001
PC Board, PC-591AA, Mic Jack PCB		302-415-9-001
Filter, Ceramic, FL-048 (10.7 MHz)		140-020-9-001
Filter, Ceramic, FL-066 (455 kHz)		140-022-9-001
Relay, RL-031		441-025-9-001
Connector, M Type, ANT, JK-035		772-027-9-001
Jack, Microphone, JK-134		773-088-9-001
Jack, JK-089 (EXT SP)		773-086-9-001
Jack, JK-126 (Relay Cont.)		773-098-9-002
Receptacle, DC Power, JK-052		762-020-9-001
Terminal, Check Point, TP-019		757-028-9-002
Microphone, MK-125		523-272-9-001
Fuse, 2A, FS-014		191-251-3-002
DC Power Cord, W-070229		426-032-9-001
Insulation sheet, for IC-3, YD-047		342-067-9-001
Insulation sheet, for TR-26, YY-027		342-039-9-001
Clamper, Wire, YJ-047		350-278-9-001
Chassis, Front, SPCC t=1.0 ZMC		257-059-9-001
Chassis, Front, t=1.0 SB-K08		258-046-9-001
Cover, Top, t=1.0 SB-K08		253-066-9-001
Cover, Bottom, t=1.0 SB-K08		252-025-9-001
Mounting Bracket, SPCC t=1.6 ZMC		251-345-9-001
Hanger, Microphone, SPCC t=1.0 Ni		741-074-9-001
Heat Sink, AIP t=1.5		747-063-9-001
ID Plate, FCC, AIP t=0.8		600-057-9-001
Nameplate, Brand, t=0.5		260-144-9-003
Plate, Rear Chassis, t=0.5		262-024-9-001
Label, Serial No.		483-338-9-001
Label, Warning, DC Cord		484-035-9-001
Screw, Pan Hd, Plastic, M3 x 6		634-051-9-001
Screw, Pan Hd, Plastic, M3 x 8		634-101-9-002
Screw, Bind Hd, Ni, M3 x 5		634-067-9-002
Tapping Screw, Round Hd, ZMC, 3.5φ x 8		710-020-9-001
Tapping Screw, Round Hd, ZMC, 5φ x 10		710-021-9-002
Bolt, Hex, ZMC, M5 x 8		634-102-9-001
Washer, Flat, Ni, 5φ		724-030-9-002
Washer, Lock, ZMC, 3.5φ		731-041-9-001
Washer, Star, ZMC, 5φ		731-041-9-002
Flat Cable, WF-004 (9.5-50-9.5)		426-062-9-001

CIRCUIT SYMBOL	DESCRIPTION	DYNASCAN PART NO.
<b>MISCELLANEOUS (Continued)</b>		
Rivet, AL, ID Plate, 3.2φ x 58		733-024-9-001
Styrofoam Pad		503-149-9-001
Sleeve		503-154-9-001
Display Box		500-417-9-001
Shipping Carton Box		500-417-9-002
Owners Manual		480-200-9-001
Schematic Diagram /Bill of Material		499-135-9-001
FCC Rules Part 95		492-047-9-001
Warranty Card		491-191-9-001
Service Station Card		492-042-0-000