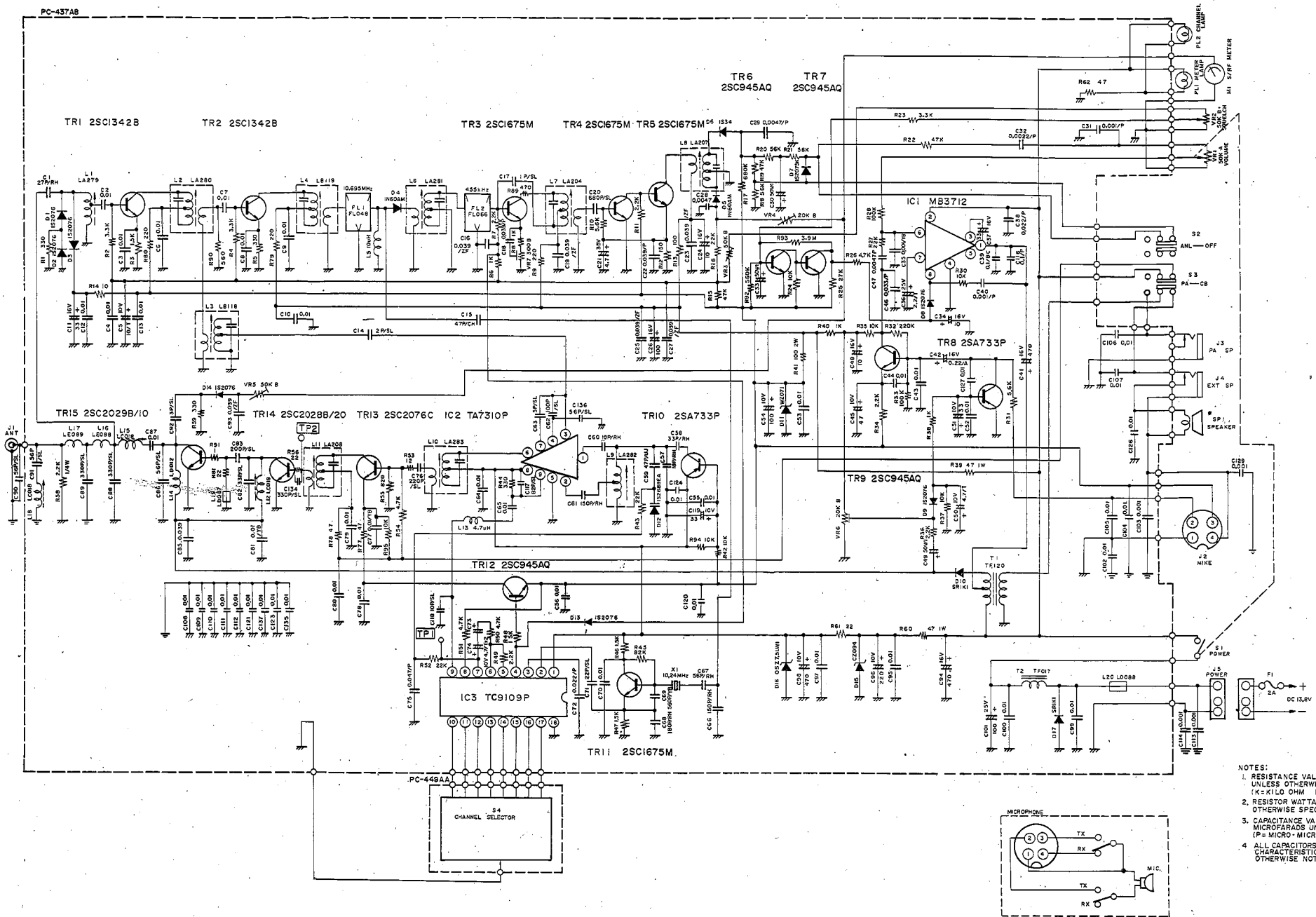
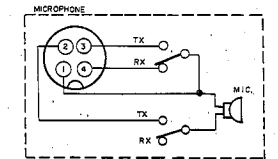


CIRCUIT DIAGRAM FOR COBRA 78X



- NOTES:**
1. RESISTANCE VALUES ARE SHOWN IN OHMS UNLESS OTHERWISE NOTED. (K=KILO OHM M=MEG OHM)
 2. RESISTOR WATTAGES ARE 1/8W UNLESS OTHERWISE SPECIFIED.
 3. CAPACITANCE VALUES ARE INDICATED IN MICROFARADS UNLESS OTHERWISE SPECIFIED. (P= MICRO-MICROFARAD)
 4. ALL CAPACITORS TEMPERATURE CHARACTERISTICS ARE Y6 UNLESS OTHERWISE NOTED.



BILL OF MATERIAL FOR COBRA 78X

CIRCUIT SYMBOL

DYNASCAN PART NO.

CIRCUIT SYMBOL DESCRIPTION SEMICONDUCTORS DYNASCAN PART NO.

IC-1 Integrated Circuit MB3712 307-151-9-001
 IC-2 TAY310F 307-133-9-004
 IC-3 TC9109P 307-151-9-002
 TR-9,10 Transistor 25A733P 177-020-9-001
 TR-6,7,12 Transistor ZSC95A-Q 176-052-9-001
 TR-1,2 Transistor ZSC1342-B 176-074-9-001
 TR-3,4,5,11 Transistor ZSC1675-M 176-060-9-002
 TR-14 Transistor ZSC2028-B/20 172-038-9-001
 TR-15 Transistor ZSC2028-B/10 172-038-9-002
 TR-13 Transistor ZSC2078-C 176-069-9-004

INDUCTORS
 D-7 Diode 1S2075-K 151-028-9-001
 D-4,5 Diode 1S2076 151-067-9-001
 D-10,17 Diode 1N60-AM 150-014-9-001
 D-6 Diode 3R1-K1 151-040-9-003
 D-15 Diode 1S34 150-016-9-001
 D-16 Diode CZ-094 152-003-9-001
 D-11 Diode WZ-071 152-075-9-001
 Diode, Zener 0WZ715-UM 152-075-9-001
 Diode, Var-Cap, 1S2888-EA 154-004-9-001

INDUCTORS
 L-7 Coil LA-204 046-024-9-003
 L-8 Coil LA-205 046-025-9-001
 L-11 Coil LA-208 046-029-9-004
 L-1 Coil LA-279 046-027-9-001
 L-2 Coil LA-280 046-027-9-002
 L-6 Coil LA-281 046-027-9-003
 L-9 Coil LA-282 046-027-9-004
 L-10 Coil LA-283 046-027-9-005
 L-3 Coil LB-119 046-027-9-002
 L-4 Coil LB-118 046-027-9-007
 L-12,15,18 Coil LC-018 041-069-9-003
 L-19 Coil LC-012 041-069-9-004
 L-20 Ferrite Bead Core LD-087 044-048-9-003
 L-16 Ferrite Bead Core LD-088 044-051-9-001
 L-17 Coil LE-089 041-104-9-001
 L-13 Coil LE-089 041-104-9-002
 L-8 Inductor, Molded, LZ-002 (10 JAH) 041-062-9-004
 L-9 Inductor, Molded, LZ-002 (10 JAH) 041-062-9-001

T-2 Coil AF Choke TF-017 042-014-9-001
 T-1 Transformer, Output TF-120 051-041-9-001

SEMI-FIXED & VARIABLE RESISTORS
 VR-1 Resistor, Variable RV-320 50K ohm A 008-347-9-002
 VR-2 Resistor, Variable RV-331 50K ohm B 008-347-9-003
 VR-7 Resistor, Semi-fixed RV-189 20K ohm B 008-345-9-001
 VR-4,6 Resistor, Semi-fixed RV-189 20K ohm B 008-316-9-003

CAPACITORS (Continued)
 C-119,51 Capacitor, Electrolytic 33uF 10V 022-189-9-005
 C-11,37 Capacitor, Electrolytic 33uF 16V 022-187-9-006
 C-54 Capacitor, Electrolytic 100uF 16V 022-187-9-006
 C-10 Capacitor, Electrolytic 100uF 25V 022-157-9-006
 C-98 Capacitor, Electrolytic 220uF 25V 022-173-0-01
 C-96 Capacitor, Electrolytic 470uF 10V 022-160-9-001
 C-41,94 Capacitor, Electrolytic 0.0027uF 25V ±20% 025-134-9-002
 C-32 Capacitor, Mylar 0.0042uF 25V ±20% 025-134-9-002
 C-29,47 Capacitor, Mylar 0.0022uF 25V ±20% 025-137-9-006
 C-38,72 Capacitor, Mylar 0.033uF 25V ±20% 025-137-9-006
 C-48 Capacitor, Mylar 0.033uF 25V ±20% 025-137-9-006
 C-18,22 Capacitor, Mylar 0.033uF 25V ±20% 025-137-9-006
 C-17 Capacitor, Mylar 0.033uF 25V ±20% 025-137-9-006
 C-16 Capacitor, Mylar 0.1uF 25V ±20% 025-137-9-006
 C-116 Capacitor, Ceramic 470pF 50V ±10% CH 020-180-9-006
 C-60 Capacitor, Ceramic 10pF 50V ±10% RH 020-220-9-001
 C-57 Capacitor, Ceramic 18pF 50V ±10% RH 020-220-9-002
 C-177 Capacitor, Ceramic 27pF 50V ±10% RH 020-210-9-006
 C-58 Capacitor, Ceramic 33pF 50V ±10% RH 020-205-9-003
 C-67 Capacitor, Ceramic 50pF 50V ±10% RH 020-208-9-002
 C-61,66 Capacitor, Ceramic 150pF 50V ±10% RH 020-204-9-011
 C-69 Capacitor, Ceramic 47pF 50V ±10% UI 020-207-9-002
 C-177 Capacitor, Ceramic 1uF 50V ±0.25pF SL 020-180-9-001
 C-97 Capacitor, Ceramic 2uF 50V ±0.25pF SL 020-180-9-001
 C-92 Capacitor, Ceramic 3pF 50V ±0.25pF SL 020-180-9-003
 C-63 Capacitor, Ceramic 5pF 50V ±0.25pF SL 020-180-9-009
 C-118 Capacitor, Ceramic 10pF 50V ±10% SL 020-181-9-004
 C-71 Capacitor, Ceramic 22pF 50V ±10% SL 020-180-9-011
 C-82 Capacitor, Ceramic 33pF 50V ±10% SL 020-180-9-012
 C-88 Capacitor, Ceramic 56pF 50V ±10% SL 020-186-9-004
 C-117 Capacitor, Ceramic 82pF 50V ±10% SL 020-220-9-003
 C-62 Capacitor, Ceramic 100pF 50V ±10% SL 020-180-9-016
 C-76 Capacitor, Ceramic 220pF 50V ±10% SL 020-180-9-019
 C-29,36 Capacitor, Ceramic 330pF 50V ±10% SL 020-181-9-008
 C-80 Capacitor, Ceramic 330pF 50V ±10% SL 020-181-9-008
 C-83 Capacitor, Ceramic 200pF 50V ±10% SL 020-180-9-017
 C-103,113,114,129 Capacitor, Ceramic 0.001uF 50V ±8% YF 020-190-9-012
 C-28 Capacitor, Ceramic 0.001uF 50V ±8% YF 020-190-9-014
 C-23,4,6,7,8,9,10,12,13 Capacitor, Ceramic 0.01uF 50V ±8% YF 020-190-9-015
 C-43,44,52,53,55,56,64,65,70,78,79,80,87,95,97,99,100,102,104,106,106,107,108,109,110,111,112,120,121,123,124,126,127,135,137 C-18,19,23,25,27,33 Capacitor, Ceramic 0.039uF 25V ±8% ZF 020-206-9-001
 C-89 Washer, Lock, ZMC 3.5x 731-041-9-001
 C-88 Washer, Lock, ZMC 3.5x 731-041-9-002
 C-85 Washer, Lock, ZMC 3.5x 731-041-9-002
 C-86 Washer, Lock, CS 1Type, 10x 381-087-9-001
 C-87 Bushing, Rubber 763-084-9-004
 C-84 Knob, Spring 763-084-9-004
 C-83 Rivet, AL, JD Plate 733-022-9-001
 C-82 Styrofoam Pad 503-160-9-001
 C-81 Styrofoam Pad 503-160-9-002
 C-80 Display Box 500-387-9-001
 C-79 Owners' Manual 480-239-9-001
 C-78 Bill of Material, Schematic Diagram 489-119-9-001
 C-77 Warranty Card 492-041-9-001
 C-76 FCC A Station Form 505 492-041-9-001
 C-75 FCC A Station Form 505 492-041-9-001
 C-74 Temporary Permit Form 555-B 492-041-9-001
 C-73 FCC Rules Part 95 492-047-9-001

CIRCUIT SYMBOL DESCRIPTION DYNASCAN PART NO.

MISCELLANEOUS (Continued)
 Nut, Flange, ZMC, M3 653-026-9-002
 Washer, Lock, ZMC 3.5x 731-041-9-001
 Washer, Lock, ZMC 3.5x 731-041-9-002
 Washer, Lock, CS 1Type, 10x 381-087-9-001
 Bushing, Rubber 763-084-9-004
 Knob, Spring 763-084-9-004
 Rivet, AL, JD Plate 733-022-9-001
 Styrofoam Pad 503-160-9-001
 Styrofoam Pad 503-160-9-002
 Display Box 500-387-9-001
 Owners' Manual 480-239-9-001
 Bill of Material, Schematic Diagram 489-119-9-001
 Warranty Card 492-041-9-001
 FCC A Station Form 505 492-041-9-001
 FCC A Station Form 505 492-041-9-001
 Temporary Permit Form 555-B 492-041-9-001
 FCC Rules Part 95 492-047-9-001

CIRCUIT SYMBOL

DYNASCAN PART NO.

CIRCUIT SYMBOL DESCRIPTION SEMI-FIXED & VARIABLE RESISTORS (Continued) DYNASCAN PART NO.

FIXED RESISTORS
 R-41 Resistor, Metal Oxide, 100 ohm 2W ±10% 426-043-9-001
 R-39,60 Resistor, Metal Oxide, 47 ohm 1W ±10% 013-038-9-002
 R-58 Resistor, Carbon, Axial Lead, 2.2K ohm 1/4W ±5% 002-104-5-222
 R-13 Resistor, Carbon, Axial Lead, 100 ohm 1/8W ±5% 002-108-5-101
 R-9,10 Resistor, Carbon, Axial Lead, 220 ohm 1/8W ±5% 002-108-5-221
 R-40 Resistor, Carbon, Axial Lead, 1K ohm 1/8W ±5% 002-108-5-102
 R-11,36 Resistor, Carbon, Axial Lead, 2.2K ohm 1/8W ±5% 002-108-5-222
 R-51 Resistor, Carbon, Axial Lead, 4.7K ohm 1/8W ±5% 002-108-5-472
 R-42 Resistor, Carbon, Axial Lead, 22K ohm 1/8W ±5% 002-108-5-223
 R-27 Resistor, Carbon, Axial Lead, 22K ohm 1/8W ±5% 002-108-5-223
 R-28 Resistor, Carbon, Axial Lead, 100K ohm 1/8W ±5% 002-108-5-103
 R-81 Resistor, Carbon, Formed VERT, 1 ohm 1/8W ±5% 002-108-5-101
 R-14 Resistor, Carbon, Formed VERT, 10 ohm 1/8W ±5% 002-108-5-100
 R-11 Resistor, Carbon, Formed VERT, 12 ohm 1/8W ±5% 002-108-5-120
 R-56,61,81 Resistor, Carbon, Formed VERT, 22 ohm 1/8W ±5% 002-108-5-220
 R-62,77,78 Resistor, Carbon, Formed VERT, 47 ohm 1/8W ±5% 002-108-5-470
 R-12 Resistor, Carbon, Formed VERT, 150 ohm 1/8W ±5% 002-108-5-151
 R-79,84,89 Resistor, Carbon, Formed VERT, 220 ohm 1/8W ±5% 002-108-5-221
 R-32 Resistor, Carbon, Formed VERT, 470 ohm 1/8W ±5% 002-108-5-470
 R-55 Resistor, Carbon, Formed VERT, 820 ohm 1/8W ±5% 002-108-5-820
 R-63,38 Resistor, Carbon, Formed VERT, 1K ohm 1/8W ±5% 002-108-5-102
 R-3,46,47 Resistor, Carbon, Formed VERT, 1.5K ohm 1/8W ±5% 002-108-5-152
 R-7,49,34 Resistor, Carbon, Formed VERT, 2.2K ohm 1/8W ±5% 002-108-5-222
 R-2,4,23 Resistor, Carbon, Formed VERT, 3.3K ohm 1/8W ±5% 002-108-5-332
 R-26,50,54 Resistor, Carbon, Formed VERT, 4.7K ohm 1/8W ±5% 002-108-5-472
 R-10,31 Resistor, Carbon, Formed VERT, 5.6K ohm 1/8W ±5% 002-108-5-562
 R-29,35,37,94,95 Resistor, Carbon, Formed VERT, 10K ohm 1/8W ±5% 002-108-5-103
 R-16,43,52 Resistor, Carbon, Formed VERT, 22K ohm 1/8W ±5% 002-108-5-223
 R-25 Resistor, Carbon, Formed VERT, 22K ohm 1/8W ±5% 002-108-5-223
 R-15,19,22 Resistor, Carbon, Formed VERT, 47K ohm 1/8W ±5% 002-108-5-470
 R-26 Resistor, Carbon, Formed VERT, 56K ohm 1/8W ±5% 002-108-5-563
 R-45 Resistor, Carbon, Formed VERT, 82K ohm 1/8W ±5% 002-108-5-823
 R-33 Resistor, Carbon, Formed VERT, 100K ohm 1/8W ±5% 002-108-5-104
 R-32 Resistor, Carbon, Formed VERT, 220K ohm 1/8W ±5% 002-108-5-224
 R-17 Resistor, Carbon, Formed VERT, 680K ohm 1/8W ±5% 002-108-5-684
 R-92 Resistor, Carbon, Formed VERT, 590K ohm 1/8W ±5% 002-108-5-595
 R-53 Resistor, Carbon, Formed VERT, 3.9M ohm 1/8W ±5% 002-108-5-395
 R-50 Resistor, Carbon, Formed VERT, 500 ohm 1/8W ±5% 002-108-5-501

CAPACITORS
 C-38 Capacitor, Tantalum, 2.2uF 25V ±20% 027-031-9-001
 C-74 Capacitor, Tantalum, 4.7uF 10V ±20% 027-026-9-005
 C-5 Capacitor, Tantalum, 10uF 10V ±20% 027-025-9-001
 C-30,33,49 Capacitor, Al Solid, 0.22uF 16V ±20% 022-158-9-001
 C-21 Capacitor, Electrolytic, 1uF 50V 022-157-9-002
 C-21 Capacitor, Electrolytic, 4.7uF 50V 022-182-9-001
 C-49 Capacitor, Electrolytic, 47uF 10V 022-150-9-004
 C-49 Capacitor, Electrolytic, 47uF 10V 022-108-9-002

CRYSTAL
 C-38 10.240 MHz, OX-074... 132-027-9-001

CIRCUIT SYMBOL

DYNASCAN PART NO.

MISCELLANEOUS
 PC Board, Main PCB, PC-437 AB 302-355-9-001
 PC Board, CH SW PCB, PC-449AA 302-356-9-001
 Filter, Ceramic, FL-008 140-022-9-001
 Filter, Ceramic, FL-066 140-022-9-001
 Switch, Rotary, SR-227 083-247-9-001
 Switch, Slide, SW-054 084-051-9-001
 Switch, SP-052 080-028-9-001
 Meter, MT-134 520-095-9-001
 Microphone, MK-075 520-025-9-001
 Pilot Lamp, PL-006 400-030-9-001
 Connector, M Tymo, ANT, JK-009 770-027-9-001
 Jack, Microphone, JK-009 770-027-9-001
 Back, Power, JK-009 770-027-9-001
 Jack, Power, JK-009 770-027-9-001
 Terminal, Check Point, TP-029 757-033-9-001
 Fuse, FS-012 191-261-3-002
 Insulation sheet, TR-15 YY-027 342-039-9-001
 Insulation sheet, IC-1 YD-046 342-060-9-001
 Clamp, Wire, YY-047 380-278-9-001
 Flat Cable, WF-104 426-053-9-001
 DC Power Cord, W-070088 426-020-9-001
 Chassis, SPCC t=1 257-111-9-001
 Cover, Top, SR-K08 253-070-9-001
 Mounting Bracket, SR-K08 253-070-9-001
 Heat Sink, SPCC t=1.6 251-228-9-001
 Hanger, Microphone, AIP t=1.5 741-074-9-001
 Panel, Front, ABS 255-142-9-001
 Knob, Channel, C-1 751-170-9-001
 Knob, ABS 751-095-9-002
 Channel Disk, ABS 753-120-9-001
 Nameplate, Front, AIP t=0.5 600-053-9-001
 ID Plate, FC 600-053-9-002
 Label, Serial No, 483-338-9-001
 Label, Warning, DC Cord, 484-035-9-001
 Illumination Screw, B8W 634-101-9-001
 Illumination Screw, B8W 634-101-9-001
 Wood-coated Paper, Wood Teak 763-089-9-001
 Washer, Rubber t=2 347-074-9-003
 Screw, Pan Hd., Plastic, M3 x 6 634-051-9-001
 Screw, Pan Hd., Plastic, M3 x 8 634-101-9-002
 Screw, Flat Hd., NI, M3 x 5 634-067-9-004
 Screw, Flat Hd., NI, M3 x 4 634-069-9-002
 Screw, Blind Hd., NI, M3 x 4 634-069-9-001
 Screw, Blind Hd., NI, M3 x 8 634-069-9-001
 Tapping Screw, Round Hd., ZMC 3.5 x 8 710-020-9-001
 Tapping Screw, Round Hd., ZMC 5 x 10 710-021-9-002
 Tapping Screw Blind Hd., ZMC M3 x 6 710-021-9-002
 Nut, Hex, NI, M2 653-026-9-001
 Nut, Hex, NI, M3 634-024-9-001

CIRCUIT SYMBOL

MISCELLANEOUS (Continued)
 Nut, Flange, ZMC, M3 653-026-9-002
 Washer, Lock, ZMC 3.5x 731-041-9-001
 Washer, Lock, ZMC 3.5x 731-041-9-002
 Washer, Lock, CS 1Type, 10x 381-087-9-001
 Bushing, Rubber 763-084-9-004
 Knob, Spring 763-084-9-004
 Rivet, AL, JD Plate 733-022-9-001
 Styrofoam Pad 503-160-9-001
 Styrofoam Pad 503-160-9-002
 Display Box 500-387-9-001
 Owners' Manual 480-239-9-001
 Bill of Material, Schematic Diagram 489-119-9-001
 Warranty Card 492-041-9-001
 FCC A Station Form 505 492-041-9-001
 FCC A Station Form 505 492-041-9-001
 Temporary Permit Form 555-B 492-041-9-001
 FCC Rules Part 95 492-047-9-001