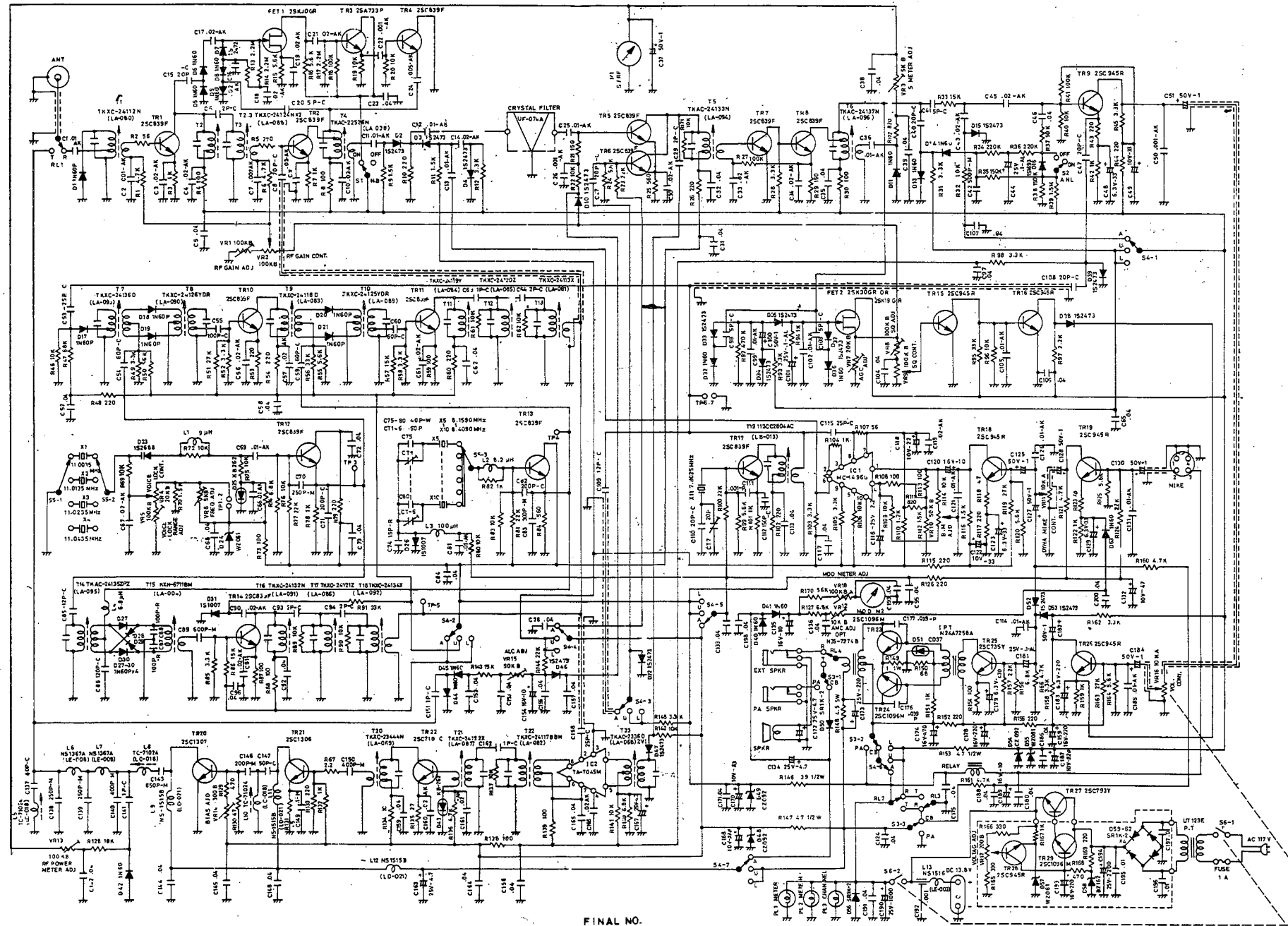


CIRCUIT DIAGRAM FOR COBRA 139



- FINAL NO.
- | | |
|-------|------|
| TR 29 | VR18 |
| FET 7 | CT 7 |
| IC 7 | M 2 |
| D63 | R172 |
| T23 | S 5 |
| L13 | FL 3 |
| C20C | P 7 |
| X 11 | |

PARTS LIST FOR COBRA 139

| CIRCUIT SYMBOL | DESCRIPTION | DYNASCAN PART NO. |
|----------------|-------------|-------------------|
|----------------|-------------|-------------------|

| CIRCUIT SYMBOL | DESCRIPTION | DYNASCAN PART NO. |
|----------------|-------------|-------------------|
|----------------|-------------|-------------------|

TRANSISTORS, DIODES

| | | |
|------------------------|-----------------------------------|-----------------|
| TR-1,2,4,5,6,7,8,10 | Transistor 2SC839F/2SC917Z (O) | 178-042-9-002 |
| TR-9,10,11,12,13,14,17 | Transistor 2SC945R/2SC937Z (V) | 178-042-9-003 |
| TR-23,24,29 | Transistor 2SC1098M | 172-024-9-004 |
| TR-21 | Transistor 2SC1308 Pwr. NPN | 172-024-9-002 |
| TR-20 | Transistor 2SC1307 Pwr. NPN | 172-024-9-003 |
| TR-3 | Transistor 2SA733H SSig. NPN | 177-017-2-9-001 |
| TR-27 | Transistor 2SC793Y | 172-024-9-005 |
| TR-22 | Transistor 2SC736Y SSig. NPN | 176-047-9-001 |
| TR-25 | Transistor 2SC1047D or 2SC710C | 178-047-9-002 |
| FETT2 | Transistor 2SK30GH or 2SK19GH FET | 182-014-9-000 |
| IC-2 | Integrated Circuit TA7045M | 307-047-9-002 |
| IC-1 | Integrated Circuit MC1496B | 150-006-9-001 |
| D-1,17,18,19,20,21 | Diode 1N60P Germanium | 150-006-9-001 |
| D-5,6,8,9,11,12,13 | Diode 1N60 | 150-001-9-005 |
| D-14,32,36,40,41,42 | Diode SRK-2 | 151-045-9-001 |
| D-2,3,4,10,15,22,33 | Diode IS2473 (Vertical) | 151-035-9-003 |
| 34,35,37,38,39 | Diode IS2472 (Vertical) | 151-035-9-002 |
| 46,52,53 | Diode IS2473 (Horizontal) | 151-035-9-001 |
| D-47 | Diode CD37 | 151-040-9-002 |
| D-7 | Diode IS1007 | 151-045-9-003 |
| D-26,31 | Diode IS1693 | 151-046-9-001 |
| D-16 | Zener Diode C2092 | 152-051-9-001 |
| D-48,49,54 | Zener Diode WZ-081 | 152-054-9-001 |
| D-55 | Zener Diode WZ061 | 152-052-9-002 |
| D-24,57 | Zener Diode BZ162 | 152-001-9-001 |
| D-58 | Var-Cap IS2688 | 154-001-9-001 |
| D-23 | Var-Cap IS2688 | 151-032-9-004 |
| D-25,43 | Varactor KB262 | |

COILS, TRANSFORMERS

| | | |
|------------|-----------------------------------|---------------|
| T-17 | Coil TKXC-24121Z JF XFMR | 080-018-9-010 |
| T-18 | Coil TKXC-24134X JF XFMR | 080-018-9-011 |
| T-19 | Coil 1130C-2804AC JF XFMR | 080-018-9-012 |
| T-20 | Coil TKXC-23444N JF XFMR | 080-018-9-014 |
| T-21 | Coil TKXC-24122X Variable Shield | 046-013-9-004 |
| T-22 | Coil TKXC-24175BH Variable Shield | 080-018-9-013 |
| T-23 | Coil TKAC-23360ZV JF XFMR | 080-018-9-013 |
| L-1 | Micro Inductor LF-4 10 H | 041-062-9-001 |
| L-2 | Micro Inductor LF-4 8.2 H | 041-062-9-003 |
| L-3 | Micro Inductor LF-1 100 H | 041-062-9-002 |
| L-4 | Micro Inductor LF-4 6.8 H | 041-061-9-002 |
| L-5,8,10 | Coil TC-71024 TVI Trap Coil | 041-056-9-003 |
| L-6,7 | Coil NS-1367A Variable | 044-032-9-001 |
| L-9,11,112 | Coil NS-1515B RF Choke | 041-062-9-004 |
| L-13 | Coil NS-1515B RF Choke | 041-062-9-004 |
| LP-T | Input Transformer N24A-7288A | 088-007-9-001 |
| Output | Transformer N35-7214B | 081-023-9-001 |

MISCELLANEOUS

| | |
|-----------------------------------|---------------|
| Printed Circuit Board 144-100-00 | 302-153-9-001 |
| Printed Circuit Board 123E-200-00 | 302-154-9-001 |

CAPACITORS

| | | |
|---------------------|-----------------------------------|---------------|
| C-37,51,100,125,127 | Electrolytic Capacitor 50V 1 F | 022-122-9-001 |
| 128,130,182,184 | Electrolytic 25V 2.2 F | 022-122-9-002 |
| C-116 | Electrolytic 25V 4.7 F | 022-122-9-003 |
| C-134,163,167,172 | Electrolytic Capacitor 25V 1000 F | 022-122-9-012 |
| G-190 | Electrolytic 16V 10 F | 022-120-9-001 |
| C-120,135,154,189 | Electrolytic Capacitor 16V 470 F | 022-099-9-008 |
| C-174 | Electrolytic 16V 220 F | 022-122-9-005 |
| C-178,193,169 | Electrolytic 10V 33 F | 022-122-9-004 |
| C-118 | Electrolytic 10V 22 F | 022-122-9-005 |
| C-49,122,170 | Electrolytic 10V 47 F | 022-122-9-002 |
| C-132 | Electrolytic 10V 220 F | 022-120-9-002 |
| C-188 | Electrolytic 10V 330 F | 022-122-9-011 |
| C-187 | Electrolytic 6.3V 220 F | 022-122-9-006 |
| C-179,183 | Electrolytic 25V 220 F | 022-122-9-007 |
| C-194,101,181 | Aluminum Capacitor 25V 2200 F | 022-122-9-013 |
| C-63,141,151,162 | Aluminum Capacitor 10F 50V CH | 022-122-9-015 |
| C-6,29,64,93,94 | Ceramic Capacitor 20F 50V CH | 020-109-9-007 |
| C-20,41,98,103,108 | Ceramic Capacitor 12F 50V CH | 020-109-9-010 |
| C-85 | Ceramic Capacitor 15F 50V CH | 020-126-9-002 |
| C-74 | Ceramic Capacitor 15F 50V CH | 020-126-9-010 |
| C-16,27,40,47,108 | Ceramic Capacitor 20F 50V CH | 020-126-9-003 |
| 110 | Ceramic Capacitor 25F 50V CH | 020-109-9-015 |
| C-53,115,158 | Ceramic Capacitor 30F 50V CH | 020-126-9-002 |
| C-137 | Ceramic Capacitor 40F 50V CH | 020-126-9-005 |
| C-8 | Ceramic Capacitor 50F 50V CH | 020-126-9-006 |
| C-147 | Ceramic Capacitor 50F 50V CH | 020-126-9-005 |

COILS, TRANSFORMERS

| | | |
|-------|----------------------------------|---------------|
| T-1 | Coil TKXC-24121N RF XFMR | 066-019-9-001 |
| T-2,3 | Coil TKXC-24124N RF XFMR | 066-019-9-002 |
| T-4 | Coil TKAC-22526N JF XFMR | 060-018-9-001 |
| T-5 | Coil TKAC-24133N JF XFMR | 060-018-9-002 |
| T-6 | Coil TKAC-24137N JF XFMR | 060-018-9-003 |
| T-7 | Coil TKXC-24136D JF XFMR | 060-018-9-004 |
| T-8 | Coil TKXC-24126YDR JF XFMR | 060-018-9-005 |
| T-9 | Coil TKXC-24118D JF XFMR | 060-018-9-006 |
| T-10 | Coil TKXC-24125YDR JF | 060-018-9-007 |
| T-11 | Coil TKXC-24120Z Variable Shield | 046-013-9-001 |
| T-12 | Coil TKXC-24113X Variable Shield | 046-013-9-002 |
| T-13 | Coil TKAC-24135ZPZ JF XFMR | 060-018-9-009 |
| T-14 | Coil TXN-6711BM, Osc XFMR | 060-013-9-001 |
| T-15 | Coil TKXC-24132N, Osc XFMR | 064-013-9-002 |
| T-16 | Coil TKXC-24132N, Osc XFMR | |

CAPACITORS (Continued)

| | | |
|---------------------|------------------------------------|---------------|
| C-54,59,60 | Ceramic Capacitor 60PF 50V CH | 020-126-9-006 |
| C-55 | Ceramic Capacitor 100PF 50V K CH | 020-109-9-007 |
| C-56 | Ceramic Capacitor 120PF 50V CH | 020-109-9-004 |
| C-57 | Ceramic Capacitor 150PF 50V CH | 020-128-9-013 |
| C-20,112 | Ceramic Capacitor 200PF 50V K CH | 020-128-9-008 |
| C-71,82 | Ceramic Capacitor 200PF 50V K RH | 020-128-9-008 |
| C-21,88 | Ceramic Capacitor 400P 50V K, WJ | 020-128-9-016 |
| C-5,76,77,78,79,80 | Ceramic Capacitor 400P 50V K, WJ | 020-128-9-016 |
| C-24,22,28 | Ceramic Capacitor 0001 F 50V W, YA | 020-126-9-015 |
| C-24 | Ceramic Capacitor 0001 F 50V W, YA | 020-109-9-002 |
| C-1,12,13,23,36,50 | Ceramic Capacitor 0.01 F 50V YA | 020-109-9-002 |
| 68,69,81,99,102 | Ceramic Capacitor 0.01 F 50V YA | |
| 105,114,121,126 | Ceramic Capacitor 0.02 F 50V YA | 020-126-9-008 |
| C-34,9,10,14,16,17 | Ceramic Capacitor 0.02 F 50V YA | |
| 18,19,21,30,33,34 | Ceramic Capacitor 0.04 F 50V SL | 020-109-9-002 |
| 43,45,56,57,61,67 | Ceramic Capacitor 0.04 F 50V SL | |
| 90,91,119,160,161 | Ceramic Capacitor 0.01 F 50V Z | 020-109-9-002 |
| 166 | Ceramic Capacitor 0.01 F 50V Z | |
| C-193,196,197 | Ceramic Capacitor 0.01 F 50V Z | |
| C-23,28,31,32,35 | Ceramic Capacitor 0.04 F 50V SL | 020-109-9-002 |
| 38,39,72,73,89,92 | Ceramic Capacitor 0.04 F 50V SL | |
| 95,96,97,104,106 | Ceramic Capacitor 0.01 F 50V M | 020-126-9-012 |
| 107,113,117,124,133 | Ceramic Capacitor 0.01 F 50V M | |
| 136,142,144,145,146 | Ceramic Capacitor 0.01 F 50V M | |
| 152,153,155,156,157 | Ceramic Capacitor 0.01 F 50V M | |
| 159,164,165,171,175 | Ceramic Capacitor 0.01 F 50V M | |
| 180,186,188,191,198 | Ceramic Capacitor 0.01 F 50V M | |
| 199,200 | Ceramic Capacitor 0.01 F 50V M | |
| C-149,176,177 | Tubular Capacitor 0.01 F 50V M | 020-126-9-012 |
| C-192 | Silvered Mica Capacitor 200PF 50V | 023-048-9-001 |
| C-146 | Silvered Mica Capacitor 250PF 50V | 023-048-9-002 |
| C-138,139 | Silvered Mica Capacitor 300PF 50V | 023-048-9-003 |
| C-83 | Silvered Mica Capacitor 400PF 50V | 023-048-9-004 |
| C-140,150 | Silver Mica Capacitor 500PF 50V K | 023-048-9-007 |
| C-42 | Silver Mica Capacitor 600PF 50V | 023-048-9-005 |
| C-89 | Silvered Mica Capacitor 650PF 50V | 023-048-9-006 |
| C-143 | Mylar Capacitor 0.001 F 50V | 025-074-9-003 |

RESISTORS, CONTROLS

| | | |
|----------------|---------------------------------------|---------------|
| VR-14 | Semi-Fixed Resistor EVL10A 300K | 008-209-9-006 |
| VR-3,6 | Semi-Fixed Volume KUSF10-688M5K | 008-209-9-003 |
| VR-12 | Semi-Fixed Volume KUSF10-88M 10K | 008-209-9-002 |
| VR-7 | Semi-Fixed Volume EXL-10A 20K | 008-187-9-006 |
| VR-15 | Semi-Fixed Volume EXL-10A 50K | 008-209-9-004 |
| VR-1,5,8,13,18 | Semi-Fixed Volume EXL-10A 100K | 008-209-9-001 |
| VR-10 | Semi-Fixed Resistor EVL 50A 50K ohm | 008-209-9-004 |
| VR-17 | Semi-Fixed Resistor KVSF105BA 200 ohm | 008-209-9-007 |

RESISTORS, CONTROLS

| | | |
|-------|---|---------------|
| VR-16 | Variable Resistor Power SW/VR | 008-210-9-005 |
| VR-11 | EVA-B0AK20A14 | 008-210-9-003 |
| VR-4 | EVA-C0AK20B24 | 008-210-9-004 |
| VR-29 | EVA-C0AK20B15 Variable Resistor RF Gain | 008-210-9-002 |

MISCELLANEOUS

| | |
|-------------------------------|---------------|
| Meier 49F1 37 MOD | 320-054-9-001 |
| Meier S/RP | 320-055-9-000 |
| AC Cord SPT-1 UL 6-feet Brown | 420-001-9-009 |
| Strain Relief Bushing BU3270 | 380-001-9-001 |
| Rubber Bushing | 381-057-9-001 |
| Fuse Holder | 742-025-9-001 |
| Cemented Resistor 5 ohm SW R | 013-002-9-001 |

RESISTORS, CONTROLS

| | |
|-----------------------------------|---------------|
| Metal Coated Resistor 1 ohm K 1WR | 013-002-9-002 |
|-----------------------------------|---------------|

MISCELLANEOUS

| | |
|--|---------------|
| Speaker, 107D10T (PM) | 580-015-9-001 |
| 3F Consant | 733-054-9-001 |
| Microphone | 562-006-9-001 |
| Metal Consent w/Plug SM-144 | 173-045-9-001 |
| Fuse 2 Amp | 191-251-3-002 |
| Rotary Switch RL-2 4 24 Channel | 083-159-9-001 |
| Rotary Switch Mode | 083-161-9-001 |
| Slide Switch SL-2 2-2 14 SW PA/CB ANL/NB | 084-036-9-001 |
| Slide Switch SL-3 3-2 03 | 084-036-9-002 |
| Pilot Lamp 14V 80mA w/White lead | 400-035-9-001 |
| Pilot Lamp w/Yellow Lead | 400-035-9-002 |
| AC Power Supply Transformer UT-123E | 065-105-9-003 |
| "M" Type Connector | 772-025-9-001 |
| Jack SJ-296 w/Fibre Washer 3.5 | 773-045-9-002 |

CRYSTALS

| | |
|---------------------------|---------------|
| Crystal HC-25/11 0035AMHz | 133-007-9-001 |
| Crystal HC-25/11 0135AMHz | 133-007-9-002 |
| Crystal HC-25/11 0235AMHz | 133-007-9-003 |
| Crystal HC-25/11 0435AMHz | 133-007-9-004 |
| Crystal HC-25/11 0635AMHz | 133-007-9-005 |
| Crystal HC-25/11 0835AMHz | 133-007-9-006 |
| Crystal HC-25/11 1035AMHz | 133-007-9-007 |
| Crystal HC-25/11 1235AMHz | 133-007-9-008 |
| Crystal HC-25/11 1435AMHz | 133-007-9-009 |
| Crystal HC-25/11 1635AMHz | 133-007-9-010 |

CRYSTALS (Continued)

| | |
|-------------------------------|---------------|
| Crystal HC-25/11 8.4090MHz | 133-007-9-010 |
| Crystal HC-25/11 7.8028MHz | 133-007-9-011 |
| Crystal Filter UF-074A 7.8MHz | 143-003-9-001 |

MISCELLANEOUS

| | |
|-----------------------------------|---------------|
| Crystal Socket SD0105 | 748-079-9-001 |
| DC Cord Assembly | 523-082-9-001 |
| Chassis SPC-1 | 257-056-9-001 |
| Back Panel | 282-012-9-001 |
| Top Cabinet | 252-036-9-001 |
| Bottom Cabinet | 252-016-9-001 |
| Condenser Setting Metal | 231-130-9-001 |
| Front Panel Setting metal (Left) | 231-131-9-001 |
| Front Panel Setting metal (Right) | 231-132-9-001 |
| Knob Channel | 380-215-9-001 |
| Knob VR SD ETC | 781-095-9-002 |
| Channel Number Disc | 380-176-9-002 |
| Control Plate | 280-049-9-001 |
| Brand Name Plate | 280-049-9-001 |
| Brand Name Plate for Mike | 280-047-9-001 |
| Speaker Net | 783-025-9-001 |
| Speaker Foot 25 x17mm(H) | 503-080-9-001 |
| Sivofram Box (Right & Left) | 500-238-9-001 |
| Display Box | 480-149-9-001 |
| Instruction Manual | 492-041-9-001 |
| FCC Application Form | 491-138-9-001 |
| Warranty Card | 492-036-0-000 |
| Service Dept. Address List | 499-063-9-001 |
| Schematic/Parts List | |