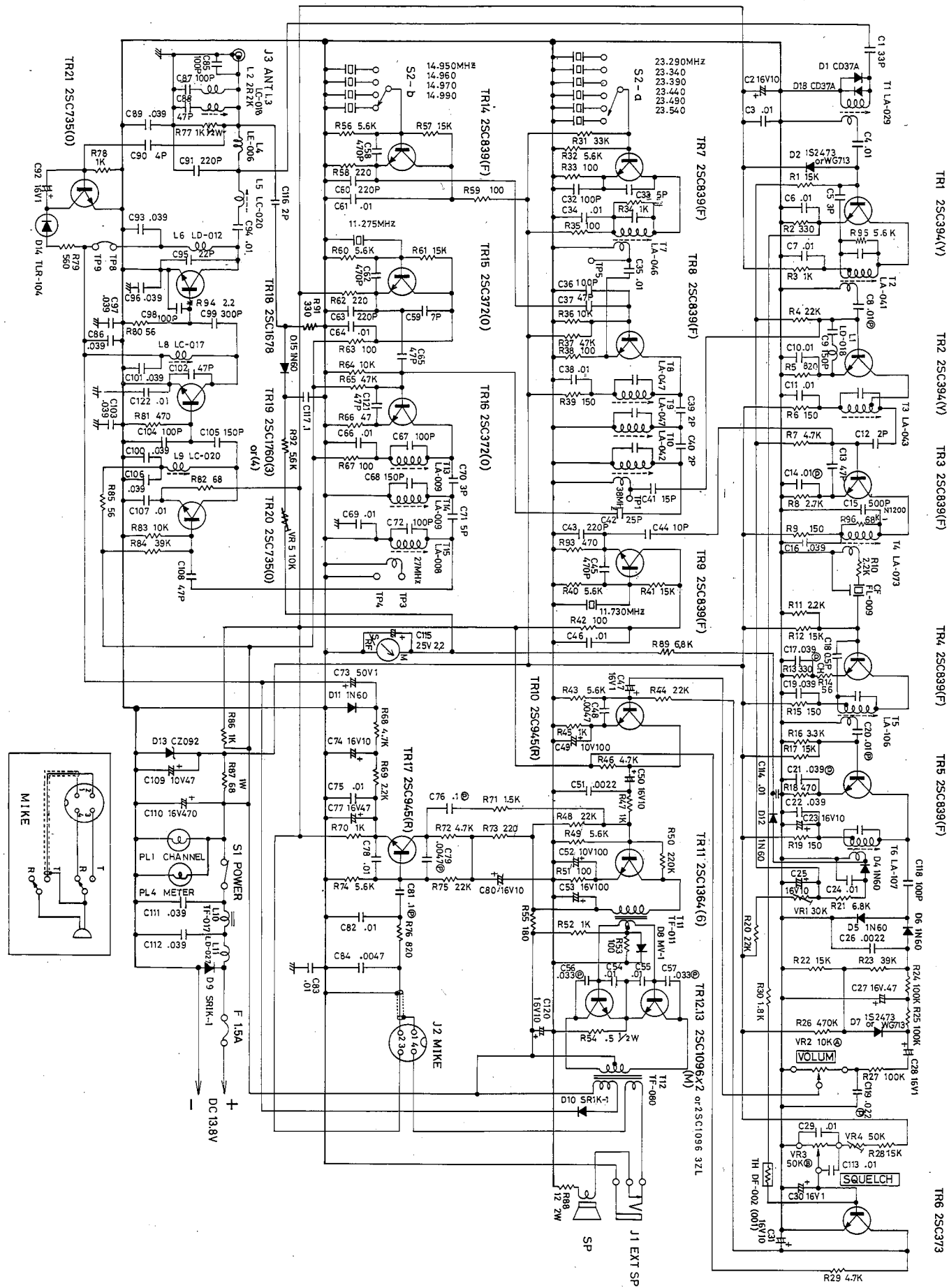


CIRCUIT DIAGRAM FOR COBRA 19M



BILLS OF MATERIAL FOR COBRA 19M

CIRCUIT SYMBOL

DESCRIPTION

PARTS NO

TRANSISTORS & DIODES

TR-1, 2	Trnsistor 2SC394 (Y)	176-042-9-001
TR-3, 4, 5, 7, 8, 9 14, 15, 16	Trnsistor 2SC839 (F)	176-042-9-002
TR-6	Trnsistor 2SC373	176-025-9-001
TR-10, 17	Trnsistor 2SC945(R)	176-042-9-003
TR-11	Trnsistor 2SC1364-6	176-054-9-001
TR-12, 13	Trnsistor 2SC1096(M) w/Z type fin	172-024-9-004
TR-18	Trnsistor 2SC1678	172-028-9-001
TR-19	Trnsistor 2SC1760-3	172-028-9-002
TR-20, 21	Trnsistor 2SC735(O)	176-042-9-006
D-1	Diode CD37A	151-040-9-001
D-2, 7	Diode WG-713	151-059-9-001
D-4, 5, 6, 11	Diode IN60	150-001-9-005
D-8	Varistor MV-1	151-049-9-002
D-9, 10	Diode SR1K-1	151-040-9-003
D-13	Zenor Diode CZ-092	152-051-9-001
D-14	LED TLR-104	158-008-9-001
TH	Thermistor DF-002(001)	013-006-9-001

COILS & TRANSFORMERS

T-1	Coil LA-029	066-020-9-001
T-2	Coil LA-041	066-020-9-002
T-3	Coil LA-043	066-020-9-003
T-4	Coil LA-073	060-019-9-001
T-5	Coil LA-106	060-019-9-002
T-6	Coil LA-107	060-019-9-003
T-7	Coil LA-046	066-020-9-004
T-8, 9	Coil LA-047	066-020-9-005
T-10	Coil LA-042	066-020-9-006
T-11	Transformer TF-011 or TF-069	061-026-9-001
T-12	Transformer TF-080 or TF-082	061-026-9-002
T-13, 14	Coil LA-009	066-020-9-007
T-15	Coil LA-008	066-020-9-008
L-1	Coil LD-018 or LD-032	041-069-9-001
L-2	Micro Inductor 7BA-144LY-2R2K	041-069-9-002
L-3	Coil LC-018 or LC-072	044-033-9-001
L-4	Coil LE-006 or LE-031	041-069-9-003
L-5, 9	Coil LC-020 or LC-074	044-033-9-002
L-6	Coil LD-012 or LD-033	041-069-9-004
L-8	Coil LC-017 or LC-071	044-033-9-003
L-10	Transformer TF-017 or TF-083	042-014-9-001
L-11	Coil LD-027or LD-031	041-069-9-005
CF	Ceramic Filter FL-009 or FL-019	140-009-9-001

RESISTORS

R-87	Resistor Solid 68 ohm 1W K	001-001-6-680
R-77	Resistor Solid 1K ohm 1/2W K	013-006-9-003
R-9	Resistor P Carbon 150 ohm 1/4W J	
R-4, 44	Resistor P Carbon 22K ohm 1/4W J	
R-94	Resistor P Carbon 2.2 ohm 1/4W J	
R-82	Resistor P Carbon 68 ohm 1/4W J	
R-54	Resistor Metal 0.5 ohm 1/2W K	013-006-9-002
R-88	Resistor Metal 12 ohm 2W K	013-006-9-005
R-66	Resistor U Carbon 47 ohm 1/4W J	
R-14, 80, 85	Resistor U Carbon 56 ohm 1/4W J	
R-33, 35, 38, 42, 51 53, 63, 67, 59	Resistor U Carbon 100 ohm 1/4W J	
R-6, 15, 19, 39	Resistor U Carbon 150 ohm 1/4W J	
R-55	Resistor U Carbon 180 ohm 1/4W J	
R-58, 62, 73	Resistor U Carbon 220 ohm 1/4W J	
R-2, 13	Resistor U Carbon 330 ohm 1/4W J	
R-18, 81, 93	Resistor U Carbon 470 ohm 1/4W J	
R-79	Resistor U Carbon 560 ohm 1/4W J	
R-5, 76	Resistor U Carbon 820 ohm 1/4W J	
R-3, 34, 45, 47, 52 70, 78, 86	Resistor U Carbon 1K ohm 1/4W J	
R-71	Resistor U Carbon 1.5K ohm 1/4W J	
R-30	Resistor U Carbon 1.8K ohm 1/4W J	
R-10, 11, 69	Resistor U Carbon 2.2K ohm 1/4W J	
R-8	Resistor U Carbon 2.7K ohm 1/4W J	
R-16	Resistor U Carbon 3.3K ohm 1/4W J	
R-7, 28, 46, 68, 72	Resistor U Carbon 4.7K ohm 1/4W J	
R-32, 40, 43, 49, 56 60, 74, 95	Resistor U Carbon 5.6K ohm 1/4W J	
R-21	Resistor U Carbon 6.8K ohm 1/4W J	
R-36, 64, 83	Resistor U Carbon 10K ohm 1/4W J	
R-1, 12, 17, 22, 41 28, 57, 61	Resistor U Carbon 15K ohm 1/4W J	
R-20, 48, 75	Resistor U Carbon 22K ohm 1/4W J	
R-31	Resistor U Carbon 33K ohm 1/4W J	
R-23, 84	Resistor U Carbon 39K ohm 1/4W J	
R-37, 65	Resistor U Carbon 47K ohm 1/4W J	
R-24, 25, 27	Resistor U Carbon 100K ohm 1/4W J	
R-50	Resistor U Carbon 220K ohm 1/4W J	
R-26	Resistor U Carbon 470K ohm 1/4W J	

VARIABLE RESISTORS

VR-1	Semi-fixed Resistor RV-103 30K ohm	008-227-9-001
VR-4	Semi-fixed Resistor RV-103 50K ohm	008-227-9-004
VR-2, S-1	Variable Resistor RV-027	008-227-9-002
VR-3	Variable Resistor VR-071	008-227-9-003
S-2	Rotary Switch SR-078	083-182-9-001

CIRCUIT SYMBOL

DESCRIPTION

PARTS NO

CAPACITORS

C-18	Capacitor Ceramic 0.5pF 50V CH	020-143-9-005
C-12, 39, 40	Capacitor Ceramic 2pF 50V SL	020-143-9-003
C-5, 70	Capacitor Ceramic 3pF 50V SL	020-143-9-002
C-90	Capacitor Ceramic 4pF 50V SL	020-143-9-008
C 33, 71	Capacitor Ceramic 5pF 50V SL	
C-59	Capacitor Ceramic 7pF 50V SL	020-143-9-007
C-44	Capacitor Ceramic 10pF 50V K SL	
C-41	Capacitor Ceramic 15pF 50V K SL	
C-95	Capacitor Ceramic 22pF 50V K SL	
C-42	Capacitor Ceramic 25pF 50V K SL	
C-1	Capacitor Ceramic 33pF 50V K SL	020-143-9-001
C-13, 37, 65, 88, 102 108, 121	Capacitor Ceramic 47pF 50V K SL	
C-32, 36, 67, 72, 85 87, 98, 104, 118	Capacitor Ceramic 100pF 50V K SL	
C-9, 68, 105	Capacitor Ceramic 150pF 50V K SL	
C-43, 60, 63, 91	Capacitor Ceramic 220pF 50V K SL	
C-99	Capacitor Ceramic 300pF 50V K SL	020-085-9-008
C-45, 58, 62	Capacitor Ceramic 470pF 50V K SL	
C-15	Capacitor Ceramic 500pF 50V K N1200	020-127-9-003
C-27	Capacitor Electrolytic 0.47µF 16V P	022-122-9-002
C-28, 30, 47, 92	Capacitor Electrolytic 1µF 16V P	022-127-9-003
C-73	Capacitor Electrolytic 1µF 50V P	022-127-9-006
C-2, 23, 25, 31, 50 74, 80, 120	Capacitor Electrolytic 10µF 16V P	022-127-9-001
C-109	Capacitor Electrolytic 47µF 10V P	022-127-9-008
C-77	Capacitor Electrolytic 47µF 16V P	022-127-9-007
C-52, 49	Capacitor Electrolytic 100µF 10V P	022-127-9-004
C-53	Capacitor Electrolytic 100µF 16V P	022-127-9-005
C-110	Capacitor Electrolytic 470µF 16V P	022-127-9-009
C-26, 51	Capacitor Ceramic 0.002µF 25V Z	
C-48, 84	Capacitor Ceramic 0.0047µF 25V Z	020-143-9-006
C-3, 4, 6, 7, 10, 11, 24 29, 34, 35, 38, 46	Capacitor Ceramic 0.01µF 25V Z	
C-16, 19, 22, 86, 89 93, 96, 97, 101, 103 106, 111, 112, 100	Capacitor Ceramic 0.039µF 25V Z	020-143-9-005
C-79	Capacitor Mylar 0.0047µF 50V K	025-099-9-002
C-8, 14, 20	Capacitor Mylar 0.01µF 50V K	
C-56, 57	Capacitor Mylar 0.033µF 50V K	
C-17, 21	Capacitor Mylar 0.039µF 50V K	025-099-9-001
C-76, 81	Capacitor Mylar 0.1µF 50V K	
C-119	Capacitor Mylar 0.02µF 50V K	025-099-9-003

CRYSTALS

X-1	Crystal 11.275 MHz QX-014	133-010-9-001
X-2	Crystal 11.730 MHz QX-014	133-010-9-002
X-3	Crystal 14.950 MHz QX-015	133-010-9-003
X-4	Crystal 14.960 MHz QX-015	133-010-9-004
X-5	Crystal 14.970 MHz QX-015	133-010-9-005
X-6	Crystal 14.980 MHz QX-015	133-010-9-006
X-7	Crystal 23.280 MHz QX-016	133-010-9-007
X-8	Crystal 23.340 MHz QX-016	133-010-9-008
X-9	Crystal 23.390 MHz QX-016	133-010-9-009
X-10	Crystal 23.440 MHz QX-016	133-010-9-010
X-11	Crystal 23.490 MHz QX-016	133-010-9-011
X-12	Crystal 23.540 MHz QX-016	133-010-9-012

MISCELLANEOUS

MIKE	Microphone MK-025	562-008-9-001
J-1	Ext Speaker Jack JK-010	773-081-9-001
J-2	Microphone Connector JK-004	770-016-9-001
J-3	Ext Antenna Connector JK-035	772-027-9-001
P	Microphone Plug PG-002	775-031-9-001
SP	Speaker SP-022	580-016-9-001
SK	Crystal Socket SK-010	749-089-9-001
TP-135	Terminal TP-011	345-041-9-001
TP-246	Terminal TP-001	345-041-9-002
PL-1	Pilot Lamp 14V 50mA Clear	400-038-9-001
FS	Fuse FS-001 1.5 Amp	191-002-9-001
Z-1	Wire Wrapping Band YY-001	
	Printed Circuit Board PC-055AA	
	Metal Chassis	257-063-9-001
	Metal Cabinet (upper)	272-103-9-001
	Metal Cabinet (bottom)	272-104-9-001
	Heat-sink	747-032-9-001
	Heat-sink	747-032-9-002
	Mounting Bracket	250-049-9-001
	Microphone Hanger	741-080-9-001
	Front Panel	255-122-9-001
	Channel Disc	380-235-9-001
	Channel Knob	751-121-9-001
	Volume/Squelch Knob	751-121-9-002
	Lamp Holder (rubber)	381-065-9-001
	Front Plate	600-025-9-001
	Microphone Plate	600-025-9-002
	FCC Label	483-195-9-001
	Serial No. Seal	
	Warning Label	
	FCC I.D. Card	
	Instruction Manual	480-162-9-001
	FCC Application Form	
	Warranty Card	
	Service Station Card	
	Schematic Diagram/Parts List	499-075-9-001
	Styrofoam Box (front)	563-087-9-001
	Styrofoam Box (back)	503-087-9-002
	Display Box	500-254-9-001
	Meter, MT-019	320-079-9-001