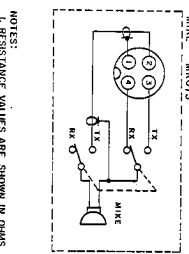
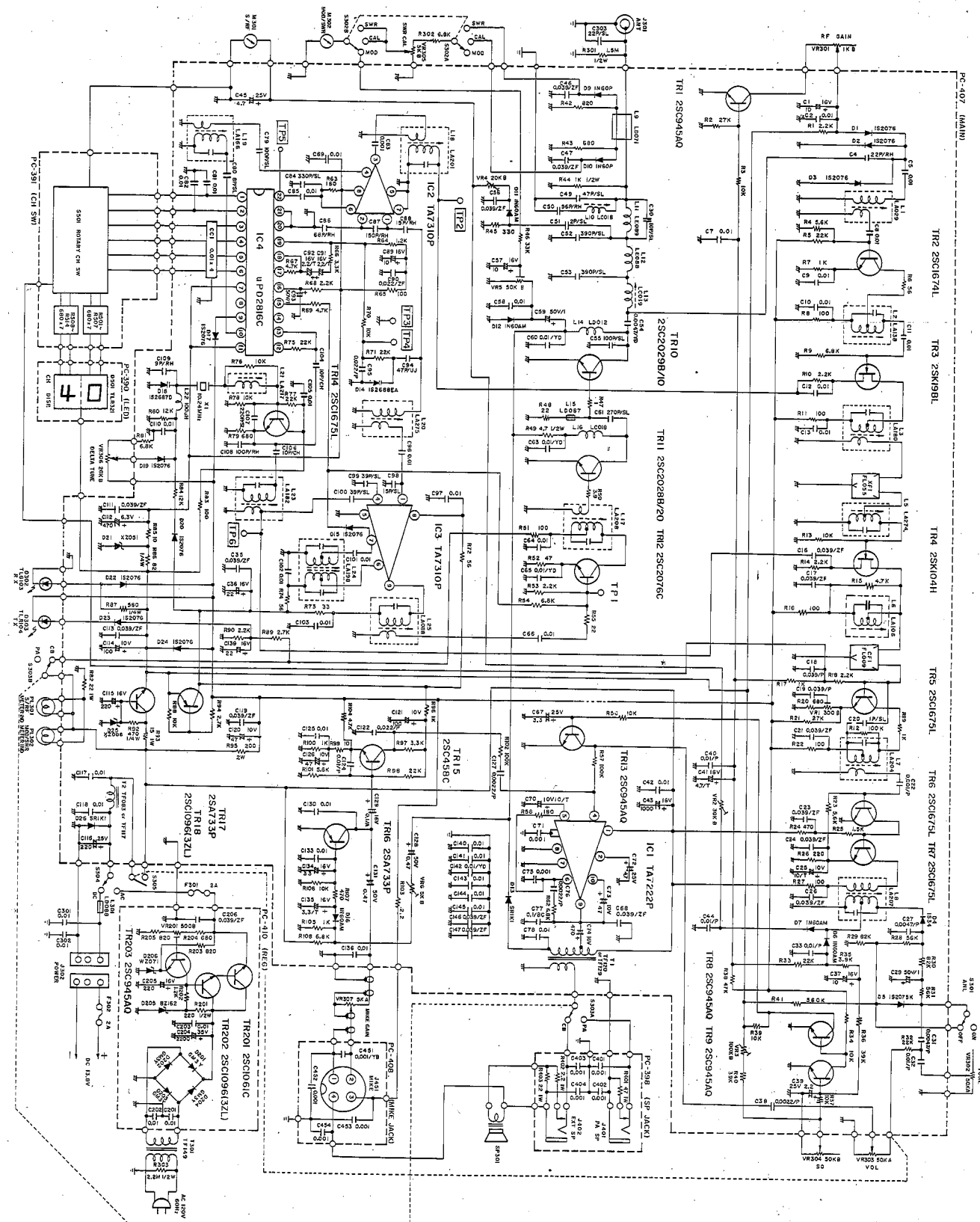


CIRCUIT DIAGRAM FOR COBRA 89GTL



- NOTES:
1. RESISTANCE VALUES ARE SHOWN IN OHMS (R), KILO OHMS (K), MEG OHMS (M).
 2. RESISTOR VALUES ARE 1/8W UNLESS OTHERWISE SPECIFIED.
 3. CAPACITANCE VALUES ARE IN MICROFARADS UNLESS OTHERWISE SPECIFIED.
 4. CHARACTERISTICS ARE "V" UNLESS OTHERWISE NOTED.

BILL OF MATERIAL FOR COBRA 89GTL

CIRCUIT SYMBOL	DESCRIPTION	DYNAMSCAN PART NO.
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, #P02816C, PLL	307 145 9 001
TR-3	Field Effect Transistor, 2SK119BL	182 037 9 001
TR-4	Field Effect Transistor, 2SK119BL	182 038 9 001
TR-16,17	Transistor, 2SC168-C	176 048 9 002
TR-15,20,3	Transistor, 2SC965A-C	176 052 9 001
TR-1,8,9,13	Transistor, 2SC1061-C	172 044 9 001
TR-201	Transistor, 2SC1068-3ZL	172 044 9 001
TR-16,20,2	2SC1674-L	176 083 9 002
TR-6,6,7,14	2SC1675-L	176 085 9 001
TR-11	2SC2028 B/10	172 038 9 001
TR-10	2SC2028 B/10	172 038 9 002
TR-12	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, 1S24	150 016 9 001
D-5	Diode, 1S207AK	151 027 9 001
D-1,2,3,11,15,17,19,20	Diode, GM-3Y	161 077 9 001
D-13,26	Diode, SR1K-1	151 040 9 003
D-201,202,203,204	Diode, BZ-16Z	152 051 9 001
D-205	Diode, WZ-071	152 075 9 001
D-206	Diode, XZ-051	152 088 9 001
D-21	Diode, XZ-086	152 088 9 001
D-302	Diode, L.E.D., TLG 103, RX IND.	158 022 9 002
D-303	Diode, L.E.D., TLR 104, TX IND.	158 008 9 001
D-501	Diode, L.E.D., TLR 321, CH IND.	158 014 9 001
D-18	Diode, Varicap, 1S2687-D	153 000 9 001
D-14	Diode, Varicap, 1S2688-EA	154 004 9 001
L-1	Coil, LA-029	080 023 9 001
L-25	Coil, LA-106	086 019 9 002
L-6	Coil, LA-108	086 024 9 002
L-2	Coil, LA-166	086 025 9 005
L-9	Coil, LA-180	080 024 9 001
L-3	Coil, LA-182	080 024 9 003
L-23	Coil, LA-188	080 029 9 001
L-18	Coil, LA-204	046 024 9 002
L-7	Coil, LA-207	046 024 9 003
L-8	Coil, LA-208	080 024 9 004
L-17	Coil, LA-217	080 020 9 002
L-5	Coil, LA-274	080 020 9 003
L-20	Coil, LA-275	046 029 9 003

INDUCTORS

CIRCUIT SYMBOL	DESCRIPTION	DYNAMSCAN PART NO.
L-10,16	Coil, C-134	022 108 5 821
L-13	Coil, C-115,205	002 108 5 100
L-14	Coil, C-74	002 108 5 220
L-12	Coil, C-413	002 108 5 330
L-11	Coil, C-465,2,131	002 108 5 470
L-2	Coil, C-116	002 108 5 560
L-22	Coil, C-200	002 108 5 620
L-21	Coil, C-265,9,33	002 108 5 821
L-15	Coil, C-129	002 108 5 821
L-301	Coil, C-38,127	002 108 5 471
L-302	Coil, C-32,33,40,44,124	002 108 5 331
L-303	Coil, C-95,122	002 108 5 682
L-304	Coil, C-18,19	002 108 5 471
L-305	Coil, C-20,80	002 108 5 331
L-306	Coil, C-51	002 108 5 153
L-307	Coil, C-30	002 108 5 183
L-308	Coil, C-98	002 108 5 223
L-309	Coil, C-109	002 108 5 273
L-310	Coil, C-109	002 108 5 333
L-311	Coil, C-108	002 108 5 393
L-312	Coil, C-108	002 108 5 473
L-313	Coil, C-49	002 108 5 683
L-314	Coil, C-48	002 108 5 683
L-315	Coil, C-39,107	002 108 5 104
L-316	Coil, C-61	002 108 5 221
L-317	Coil, C-84	002 108 5 221
L-318	Coil, C-71,5,83,401,402,403,404	002 108 5 103
L-319	Coil, C-2,5,7,9,10,11,12,13,42,58,64,66,78,79,81,82,85,86,97,101,102,103,105,110,112,118,125,130,133,136,140,141,142,143,144,145,201,202,203,301,302,482,483,484,24,26,46,48,17,20,23,21,11,113,119,146,147,148,206	002 108 5 153

SEMI-FIXED & VARIABLE RESISTORS

CIRCUIT SYMBOL	DESCRIPTION	DYNAMSCAN PART NO.
VR-1	Resistor, Variable, RV-303, S305	008 347 9 001
VR-201	Resistor, Variable, RV-306	008 342 9 001
VR-4	Resistor, Variable, VR-307	008 316 9 003
VR-6	Resistor, Variable, VR-304	008 344 9 005
VR-2	Resistor, Variable, VR-302	008 347 9 003
VR-3	Resistor, Variable, VR-301,305	008 347 9 005
VR-306	Resistor, Variable, RV-320	008 347 9 002
VR-307	Resistor, Variable, RV-293	008 344 9 005
VR-304	Resistor, Variable, RV-331	008 347 9 003
VR-302	Resistor, Variable, RV-333	008 347 9 003
VR-301,305	Resistor, Variable, RV-315 DUAL, 1K/5K ohm B, 10K/CAL 008 347 9 005	008 347 9 005
VR-1	Resistor, Semifixed, RV-189	008 342 9 001
VR-201	Resistor, Semifixed, RV-189	008 342 9 001
VR-4	Resistor, Semifixed, RV-189	008 316 9 003
VR-6	Resistor, Semifixed, RV-189	008 331 9 001
VR-2	Resistor, Semifixed, RV-189	008 316 9 002
VR-3	Resistor, Semifixed, RV-189	008 316 9 001
VR-303, S305	Resistor, Variable, RV-320	008 347 9 002
VR-306	Resistor, Variable, RV-293	008 344 9 005
VR-307	Resistor, Variable, RV-331	008 347 9 003
VR-304	Resistor, Variable, RV-333	008 347 9 003
VR-302	Resistor, Variable, RV-315 DUAL, 1K/5K ohm B, 10K/CAL 008 347 9 005	008 347 9 005
VR-301,305	Resistor, Variable, RV-315 DUAL, 1K/5K ohm B, 10K/CAL 008 347 9 005	008 347 9 005

FIXED RESISTORS

CIRCUIT SYMBOL	DESCRIPTION	DYNAMSCAN PART NO.
R-402	Resistor, Metallic Film, 2.2 ohm	013 011 9 001
R-303	Resistor, Metallic Film, 15 ohm	013 038 9 001
R-401	Resistor, Metallic Film, 22 ohm	013 011 9 002
R-40	Resistor, Metallic Film, 47 ohm	013 038 9 002
R-82	Resistor, Metallic Film, 22 ohm	013 028 9 003
R-95	Resistor, Metallic Film, 200 ohm	013 015 9 002
R-301	Resistor, Solid, 1K ohm	001 102 6 102
R-103	Resistor, Carbon Film, 1.5M ohm	001 102 6 155
R-50	Resistor, Carbon Film, 2.2 ohm	002 108 5 229
R-10	Resistor, Carbon Film, 3.9 ohm	002 108 5 339
R-8,11,22,27,51	Resistor, Carbon Film, 470 ohm	002 108 5 471
R-203,205	Resistor, Carbon Film, 680 ohm	002 108 5 681
R-64,202	Resistor, Carbon Film, 820 ohm	002 108 5 821
R-188	Resistor, Carbon Film, 1.2K ohm	002 108 5 122
R-99	Resistor, Carbon Film, 2.2K ohm	002 108 5 222
R-60	Resistor, Carbon Film, 3.3K ohm	002 108 5 332
R-80	Resistor, Carbon Film, 4.7K ohm	002 108 5 472
R-80,80,302	Resistor, Carbon Film, 6.8K ohm	002 108 5 682
R-89	Resistor, Carbon Film, 22 ohm	002 108 5 220
R-59	Resistor, Carbon Film, 100 ohm	002 108 5 101

CAPACITORS (Continued)

CIRCUIT SYMBOL	DESCRIPTION	DYNAMSCAN PART NO.
C-134	Capacitor, Electrolytic, 33uF	022 157 9 006
C-115,205	Capacitor, Electrolytic, 220uF	022 163 9 008
C-74	Capacitor, Electrolytic, 470uF	022 169 9 008
C-413	Capacitor, Electrolytic, 1000uF	022 157 9 003
C-465,2,131	Capacitor, Electrolytic, 220uF	022 175 9 003
C-116	Capacitor, Electrolytic, 2200uF	022 175 9 004
C-200	Capacitor, Electrolytic, 0.47uF	022 157 9 001
C-265,9,33	Capacitor, Electrolytic, 1uF	022 157 9 002
C-129	Capacitor, Aluminum, 0.1uF	023 026 9 001
C-38,127	Capacitor, Mylar, 0.00022uF	025 134 9 001
C-32,33,40,44,124	Capacitor, Mylar, 0.001uF	025 134 9 003
C-95,122	Capacitor, Mylar, 0.22uF	025 137 9 002
C-18,19	Capacitor, Mylar, 0.039uF	025 134 9 006
C-20,80	Capacitor, Ceramic, 1pF	020 190 9 001
C-51	Capacitor, Ceramic, 10pF	020 190 9 001
C-30	Capacitor, Ceramic, 100pF	020 180 9 011
C-98	Capacitor, Ceramic, 150pF	020 180 9 011
C-109	Capacitor, Ceramic, 220pF	020 180 9 007
C-108	Capacitor, Ceramic, 330pF	020 180 9 013
C-49	Capacitor, Ceramic, 1000pF	020 180 9 016
C-48	Capacitor, Ceramic, 2200pF	020 180 9 019
C-39,107	Capacitor, Ceramic, 2700pF	020 180 9 010
C-61	Capacitor, Ceramic, 3300pF	020 181 9 008
C-84	Capacitor, Ceramic, 3900pF	020 190 9 011
C-71,5,83,401,402,403,404	Capacitor, Ceramic, 0.001uF	020 210 9 001
C-2,5,7,9,10,11,12,13,42,58,64,66,78,79,81,82,85,86,97,101,102,103,105,110,112,118,125,130,133,136,140,141,142,143,144,145,201,202,203,301,302,482,483,484,24,26,46,48,17,20,23,21,11,113,119,146,147,148,206	Capacitor, Ceramic, 0.01uF	020 210 9 002
C-109	Capacitor, Ceramic, 0.029uF	020 210 9 003
C-109	Capacitor, Ceramic, 0.022uF	020 210 9 004
C-109	Capacitor, Ceramic, 90pF	020 181 9 004
C-4	Capacitor, Ceramic, 150pF	020 110 9 006
C-50	Capacitor, Ceramic, 270pF	020 210 9 006
C-86	Capacitor, Ceramic, 560pF	020 198 9 002
C-108	Capacitor, Ceramic, 880pF	020 206 9 001
C-87	Capacitor, Ceramic, 1000pF	020 205 9 004
C-91	Capacitor, Ceramic, 1500pF	020 207 9 008
C-44	Capacitor, Ceramic, 470pF	020 207 9 002
C-54	Capacitor, Ceramic, 0.0001uF	020 200 9 018
C-33,65	Capacitor, Ceramic, 0.001uF	020 204 9 019
C-77	Capacitor, Ceramic, 0.1uF	020 210 9 008

MISCELLANEOUS (Continued)

CIRCUIT SYMBOL	DESCRIPTION	DYNAMSCAN PART NO.
Knob	Knob	271 059 9 001
FCC Nameplate	FCC Nameplate	260 159 9 002
Brand Nameplate	Brand Nameplate	260 159 9 003
Warning Label, DC Cord	Warning Label, DC Cord	751 147 9 002
UL Label	UL Label	753 085 7 003
Production Date Label	Production Date Label	753 085 9 004
Light Filter, CH LED	Light Filter, CH LED	347 072 9 001
Speaker Mesh	Speaker Mesh	753 085 9 004
Protection Pad	Protection Pad	753 085 9 001
Wool - Coated Paper	Wool - Coated Paper	753 085 9 001
Wool - Coated Paper	Wool - Coated Paper	753 085 9 001
Question for Meter	Question for Meter	753 085 9 001
Protection Pad	Protection Pad	753 085 9 002
LED Cap	LED Cap	634 051 9 001
Screw, Pan Head, 3D x 6, Metric	Screw, Pan Head, 3D x 6, Metric	634 051 9 001
Screw, Band Head, 2D x 4, Metric	Screw, Band Head, 2D x 4, Metric	634 073 9 003
Screw, Band Head, 3D x 4, Metric	Screw, Band Head, 3D x 4, Metric	634 087 9 003
Screw, Band Head, 3D x 6, Metric	Screw, Band Head, 3D x 6, Metric	634 083 9 001
Screw, Band Head, 4D x 10, Metric	Screw, Band Head, 4D x 10, Metric	634 084 9 001
Screw, Band Head, 5D x 10, Metric	Screw, Band Head, 5D x 10, Metric	634 077 9 002
Screw, Pan Head, 3D x 8, Metric	Screw, Pan Head, 3D x 8, Metric	710 037 9 002
Screw, Pan Head, 3D x 10, Metric	Screw, Pan Head, 3D x 10, Metric	710 019 9 001
Screw, Round Head, 3.5D x 8, Metric	Screw, Round Head, 3.5D x 8, Metric	710 020 9 001
Screw, Round Head, 3.5D x 6, Metric	Screw, Round Head, 3.5D x 6, Metric	710 021 9 004
Screw, Pan Head, 3D x 14, Metric	Screw, Pan Head, 3D x 14, Metric	710 032 9 001
Flange Nut	Flange Nut	653 037 9 001
Lock Washer	Lock Washer	724 021 9 001
Washer	Washer	753 085 9 002
Spring Washer	Spring Washer	381 068 9 001
Rubber Foot	Rubber Foot	753 111 9 002
Card Stripper	Card Stripper	753 084 9 003
Vinyl Bag	Vinyl Bag	603 155 9 001
Vinyl Bag	Vinyl Bag	753 085 9 005
Vinyl Bag	Vinyl Bag	753 084 9 004
Vinyl Bag	Vinyl Bag	500 375 9 001
Lug Terminal	Lug Terminal	603 155 9 001
Spring for Knob, 3.5D, Metric	Spring for Knob, 3.5D, Metric	753 084 9 003
Spring for Knob, 6D, Metric	Spring for Knob, 6D, Metric	753 085 9 005
Spring for Knob, 6D, Metric	Spring for Knob, 6D, Metric	753 084 9 004
Rivet, 3.2D x 3.2, Metric	Rivet, 3.2D x 3.2, Metric	500 375 9 001
Display Box	Display Box	603 155 9 001
Shipping Carton Box	Shipping Carton Box	603 155 9 001
Polystyrol Form, Packing	Polystyrol Form, Packing	503 155 9 002

CAPACITORS (Continued)

CIRCUIT SYMBOL	DESCRIPTION	DYNAMSCAN PART NO.
C-25	Capacitor, Tantalum, 10uF	027 025 9 001
C-41,70	Capacitor, Tantalum, 2.2uF	027 024 9 001
C-112	Capacitor, Electrolytic, 4.7uF	027 026 9 004
C-73,120,126	Capacitor, Electrolytic, 47uF	027 158 9 002
C-114	Capacitor, Electrolytic, 100uF	022 157 9 008
C-39	Capacitor, Electrolytic, 2.2uF	022 175 9 001
C-67,135	Capacitor, Electrolytic, 3.3uF	022 157 9 002
C-137,57,89	Capacitor, Electrolytic, 10uF	022 157 9 004
C-121,139	Capacitor, Electrolytic, 22uF	022 157 9 005
R-47	Resistor, Carbon Film,	

