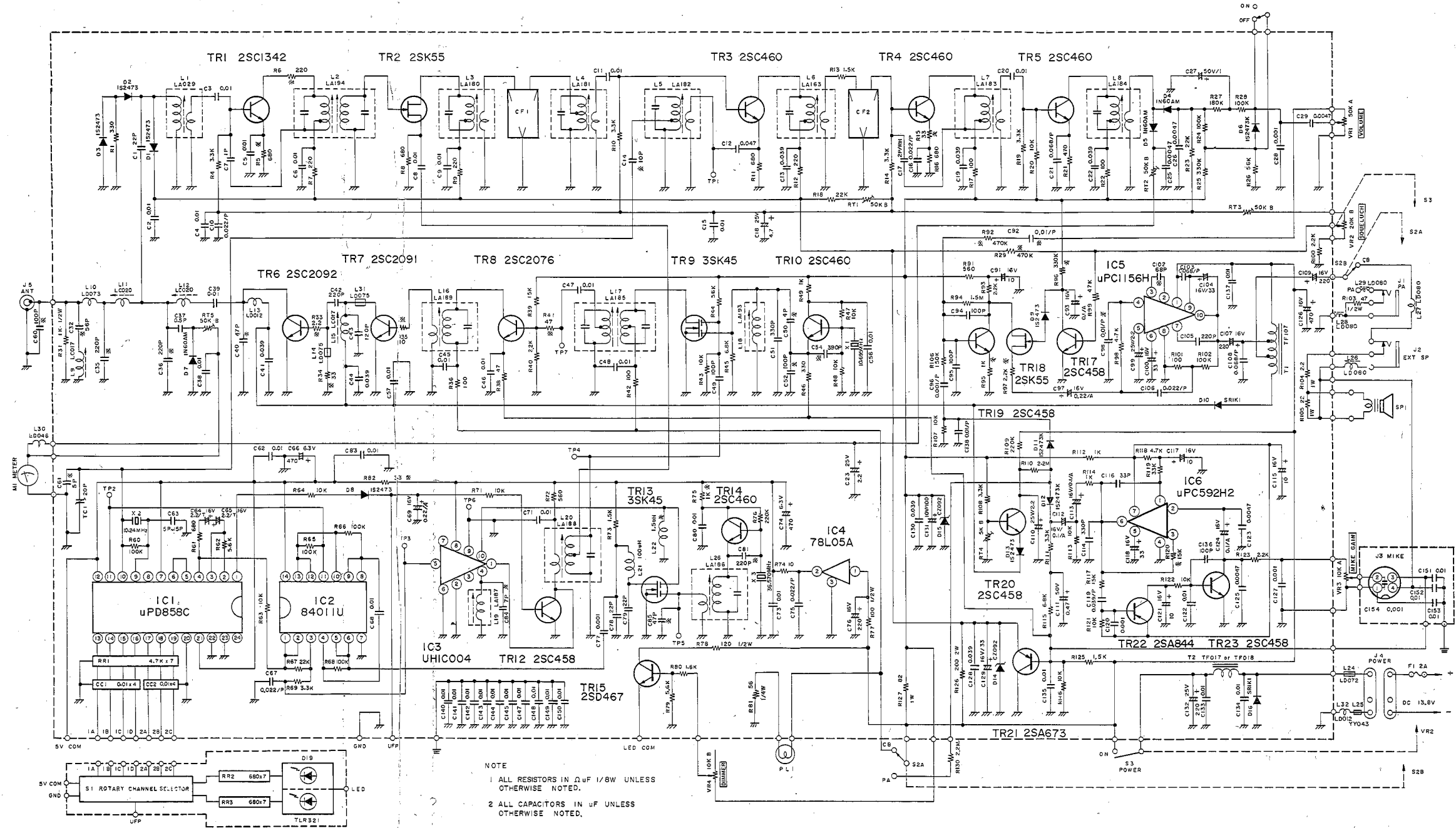


CIRCUIT DIAGRAM FOR COBRA 21X LR



NOTE
 1 ALL RESISTORS IN Ω, μF, 1/8W UNLESS OTHERWISE NOTED.
 2 ALL CAPACITORS IN μF UNLESS OTHERWISE NOTED.
 * SUBJECT TO CHANGE WITHOUT NOTICE.

BILLS OF MATERIAL FOR COBRA 21XLR

CIRCUIT SYMBOL	DESCRIPTION	DYNASCAN PART NO.	CIRCUIT SYMBOL	DESCRIPTION	DYNASCAN PART NO.
	TRANSISTORS & DIODES			TRANSISTORS & DIODES	
I-C1	Integrated Circuit: pnp8989C	307-095-9-004		Integrated Circuit: pnp8989C	307-095-9-004
I-C2	Integrated Circuit: M68901 TU	307-113-9-001		Integrated Circuit: M68901 TU	307-113-9-001
I-C3	Integrated Circuit: LMHC-004	307-113-9-002		Integrated Circuit: LMHC-004	307-113-9-002
I-C4	Integrated Circuit: NLM781 c6A	307-112-9-003		Integrated Circuit: NLM781 c6A	307-112-9-003
I-C5	Integrated Circuit: dPC1156H1	307-112-9-001		Integrated Circuit: dPC1156H1	307-112-9-001
I-C6	Integrated Circuit: dPC592H2	307-113-9-004		Integrated Circuit: dPC592H2	307-113-9-004
TR-2, 18	FET 2SK55-D	182-045-9-001	VR-2	Variable Resistor RV-d9 20K-B	008-308-9-001
TR-9, 13	FET 3SK45-B	182-038-9-001	VR-3	Variable Resistor RV-055 10K-A	008-187-9-002
TR-21	Transistor 2SA673-C	177-025-9-001	VR-4	Variable Resistor RV-191 10K-B	008-308-9-002
TR-22	Transistor 2SA844-C	177-025-9-002	VR-1	Variable Resistor RV-197 50K-A	008-308-9-003
TR-12, 17, 19, 20, 23	Transistor 2SC485-C	176-048-9-002	R-104	Metalized Resistor 2.2 ohm 1W-K	013-011-9-001
TR-3, 4, 5, 10, 14	Transistor 2SC480-B	176-072-9-005	R-105	Metalized Resistor 2.2 ohm 1W-K	013-011-9-002
TR-1	Transistor 2SC1342-B	176-074-9-001	R-127	Metalized Resistor 82 ohm 1W-K	013-015-9-001
TR-8	Transistor 2SC2076-CB	176-060-9-004	R-126	Metalized Resistor 200 ohm 2W-K	013-015-9-002
TR-7	Transistor 2SC2091	176-074-9-002	R-81	Carbon Resistor 56 ohm 1/8W J (U Type)	002-108-5-560
TR-6	Transistor 2SC2092	176-074-9-003	R-81	Carbon Resistor 56 ohm 1/8W J (U Type)	002-108-5-560
TR-15	Transistor 2SD467-C	176-074-9-004	R-133	Carbon Resistor 47 ohm 1/2W K (P Type)	002-102-5-470
D-4, 5, 7	Diode 1N60AM (U type forming)	150-013-9-001	R-78	Carbon Resistor 120 ohm 1/2W K (P Type)	002-102-5-120
D-1, 2, 3, 8, 9, 13	Diode 1S24/3 (U type forming)	151-038-9-001	R-31	Carbon Resistor 1K ohm 1/2W K (P Type)	002-102-5-1K
D-6, 11, 12	Diode S11K (U type forming)	151-000-9-003	R-33	Carbon Resistor 1K ohm 1/2W K (P Type)	002-102-5-1K
D-10, 16	Zener Diode GZ-002	152-051-9-000	R-35, 74	Carbon Resistor 2.2 ohm 1/8W J (Forming Type)	002-108-5-229
D-14, 15	Zener Diode GZ-002	152-051-9-000	R-36, 74	Carbon Resistor 2.2 ohm 1/8W J (Forming Type)	002-108-5-229
D-14, 15	Light Emitting Diode TL-R321	158-014-9-001	R-38, 41	Carbon Resistor 33 ohm 1/8W J (Forming Type)	002-108-5-330
			R-17, 22, 36, 42, 101	Carbon Resistor 100 ohm 1/8W J (Forming Type)	002-108-5-101
			R-1, 46	Carbon Resistor 47 ohm 1/8W J (Forming Type)	002-108-5-470
			R-21	Carbon Resistor 330 ohm 1/8W J (Forming Type)	002-108-5-331
			R-72, 91	Carbon Resistor 470 ohm 1/8W J (Forming Type)	002-108-5-471
			R-5, 8, 11, 16, 61	Carbon Resistor 560 ohm 1/8W J (Forming Type)	002-108-5-561
			R-48, 75, 95, 112, 114	Carbon Resistor 680 ohm 1/8W J (Forming Type)	002-108-5-681
			R-13, 73	Carbon Resistor 1K ohm 1/8W J (Forming Type)	002-108-5-1K
			F-80, 125	Carbon Resistor 1.5K ohm 1/8W J (Forming Type)	002-108-5-152
			R-40, 93, 100, 123	Carbon Resistor 1.8K ohm 1/8W J (Forming Type)	002-108-5-182
			R-4, 10, 14, 19, 69, 70, 108, 111	Carbon Resistor 2.2K ohm 1/8W J (Forming Type)	002-108-5-220
			R-97, 98, 118	Carbon Resistor 3.3K ohm 1/8W J (Forming Type)	002-108-5-332
			R-62, 78	Carbon Resistor 4.7K ohm 1/8W J (Forming Type)	002-108-5-472
			R-20, 43, 47, 48, 63, 64, 112, 113, 116, 122	Carbon Resistor 5.6K ohm 1/8W J (Forming Type)	002-108-5-562
			R-36, 67, 117	Carbon Resistor 6.8K ohm 1/8W J (Forming Type)	002-108-5-689
			R-120	Carbon Resistor 10K ohm 1/8W J (Forming Type)	002-108-5-10K
			R-18, 119	Carbon Resistor 15K ohm 1/8W J (Forming Type)	002-108-5-15K
			R-99	Carbon Resistor 22K ohm 1/8W J (Forming Type)	002-108-5-22K
			R-28	Carbon Resistor 33K ohm 1/8W J (Forming Type)	002-108-5-33K
			R-24, 28, 60, 65, 66, 68, 92, 102	Carbon Resistor 47K ohm 1/8W J (Forming Type)	002-108-5-47K
				Carbon Resistor 56K ohm 1/8W J (Forming Type)	002-108-5-56K
				Carbon Resistor 100K ohm 1/8W J (Forming Type)	002-108-5-104

CIRCUIT SYMBOL	DESCRIPTION	DYNASCAN PART NO.	CIRCUIT SYMBOL	DESCRIPTION	DYNASCAN PART NO.
	COILS & TRANSFORMERS			COILS & TRANSFORMERS	
L-1	Coil LA-029	066-017-9-001		Coil LA-029	066-017-9-001
L-6	Coil LA-183	066-022-9-001		Coil LA-183	066-022-9-001
L-3	Coil LA-180	066-024-9-001		Coil LA-180	066-024-9-001
L-4	Coil LA-181	066-024-9-002		Coil LA-181	066-024-9-002
L-5	Coil LA-182	066-024-9-003		Coil LA-182	066-024-9-003
L-7	Coil LA-183	066-024-9-004		Coil LA-183	066-024-9-004
L-8	Coil LA-184	066-024-9-005		Coil LA-184	066-024-9-005
L-17	Coil LA-185	066-024-9-006		Coil LA-185	066-024-9-006
L-23	Coil LA-186	066-024-9-007		Coil LA-186	066-024-9-007
L-19	Coil LA-187	066-024-9-008		Coil LA-187	066-024-9-008
L-20	Coil LA-188	066-024-9-009		Coil LA-188	066-024-9-009
L-16	Coil LA-189	066-024-9-010		Coil LA-189	066-024-9-010
L-2	Coil LA-193	066-024-9-011		Coil LA-193	066-024-9-011
L-2	Coil LA-194	066-024-9-012		Coil LA-194	066-024-9-012
L-9, 15	Coil LC-017	064-028-9-004		Coil LC-017	064-028-9-004
L-12	Coil LC-018	064-028-9-005		Coil LC-018	064-028-9-005
L-11	Coil LC-020	064-028-9-003		Coil LC-020	064-028-9-003
L-13	Coil LD-012	044-028-9-008		Coil LD-012	044-028-9-008
L-26, 25	Coil LD-072	044-042-9-002		Coil LD-072	044-042-9-002
L-22	Micro Inductor LF-4 J4	041-087-9-001		Micro Inductor LF-4 J4	041-087-9-001
L-21	Micro Inductor FL-5H1 100u	041-087-9-002		Micro Inductor FL-5H1 100u	041-087-9-002

CIRCUIT SYMBOL	DESCRIPTION	DYNASCAN PART NO.	CIRCUIT SYMBOL	DESCRIPTION	DYNASCAN PART NO.
	RESISTORS			RESISTORS	
R-106	Carbon Resistor 180K ohm 1/8W J (Forming Type)	002-108-5-184	C-13, 19, 22, 41, 44, 128	Ceramic Capacitor 0.039uF 25V Z YG	020-143-9-004
R-27, 44	Carbon Resistor 180K ohm 1/8W J (Forming Type)	002-108-5-184			
R-76, 109	Carbon Resistor 220K ohm 1/8W J (Forming Type)	002-108-5-224			
R-25, 96	Carbon Resistor 330K ohm 1/8W J (Forming Type)	002-108-5-334			
R-94	Carbon Resistor 1.5M ohm 1/8W J (Forming Type)	002-108-5-155			
R-110	Carbon Resistor 2.2M ohm 1/8W J (Forming Type)	002-108-5-225			
	CAPACITORS			CAPACITORS	
C-64, 65	Tantal Capacitor 2.2uF 16V M	027-022-9-001			
C-83, 112, 113, 124	Aluminum Capacitor 1uF 16V M	033-026-9-001			
C-69, 97	Aluminum Capacitor 0.47uF 50V M	033-028-9-002			
C-11	Electrolytic Capacitor 1uF 50V	022-122-9-016			
C-27	Electrolytic Capacitor 1uF 50V	022-144-9-001			
C-32, 90, 110	Electrolytic Capacitor 2.2uF 25V	022-153-9-001			
C-18	Electrolytic Capacitor 4.7uF 25V	022-153-9-002			
C-31, 115, 117, 120	Electrolytic Capacitor 10uF 16V	022-153-9-003			
C-100, 104, 118, 129	Electrolytic Capacitor 33uF 16V	022-142-9-001			
C-76, 107, 109	Electrolytic Capacitor 220uF 16V	022-122-9-004			
C-126	Electrolytic Capacitor 470uF 16V	022-099-9-006			
C-66, 131	Electrolytic Capacitor 100uF 10V	022-099-9-004			
C-74	Electrolytic Capacitor 220uF 6.3V	022-133-9-003			
C-92, 96	Mylar Capacitor 0.01uF 50V M	025-117-9-001			
C-10, 16, 70, 75, 106	Mylar Capacitor 0.022uF 50V M	025-117-9-002			
C-119	Mylar Capacitor 0.039uF 50V M	025-117-9-003			
C-21, 103, 108	Mylar Capacitor 0.068uF 50V M	025-117-9-005			
C-7	Ceramic Capacitor 0.5pF 50V C RH	020-176-9-001			
C-17	Ceramic Capacitor 1pF 50V C RH	020-176-9-002			
C-50, 61	Ceramic Capacitor 2pF 50V C RH	020-176-9-003			
C-63	Ceramic Capacitor 5pF 50V J RH	020-176-9-006			
C-78, 79	Ceramic Capacitor 10pF 50V J RH	020-176-9-007			
C-32	Ceramic Capacitor 33pF 50V J RH	020-176-9-008			
C-52	Ceramic Capacitor 33pF 50V J RH	020-176-9-009			
C-51	Ceramic Capacitor 10pF 50V D SL	020-176-9-010			
C-1	Ceramic Capacitor 22pF 50V K SL	020-176-9-006			
C-116	Ceramic Capacitor 33pF 50V K SL	020-125-9-001			
C-105	Ceramic Capacitor 88pF 50V K SL	020-148-9-001			
C-40, 49, 94, 95, 102	Ceramic Capacitor 100pF 50V K SL	020-108-9-008			
C-43	Ceramic Capacitor 120pF 50V K SL	020-148-9-002			
C-35	Ceramic Capacitor 180pF 50V K SL	020-148-9-004			
C-42, 81	Ceramic Capacitor 220pF 50V K SL	020-108-9-013			
C-36, 114	Ceramic Capacitor 330pF 50V K SL	020-176-9-011			
C-25, 26, 28, 29, 123, 125	Ceramic Capacitor 390pF 50V K YB	020-176-9-012			
C-46	Ceramic Capacitor 0.0047uF 50V K YB	020-176-9-013			
C-77, 120, 127, 154	Ceramic Capacitor 0.0022uF 25V Z YG	020-165-9-004			
C-2, 3, 4, 5, 6, 8, 9, 11, 15	Ceramic Capacitor 0.01uF 25V Z YG	020-165-9-004			
62, 68, 71, 73, 80, 122					
133, 134, 135, 141, 142					
144, 145, 147, 148, 152					
153, 154					

FR-1, 2, 3, 4, 5, 6

CIRCUIT SYMBOL	DESCRIPTION	DYNASCAN PART NO.	CIRCUIT SYMBOL	DESCRIPTION	DYNASCAN PART NO.
	RESISTORS			RESISTORS	
R-106	Carbon Resistor 180K ohm 1/8W J (Forming Type)	002-108-5-184	C-13, 19, 22, 41, 44, 128	Ceramic Capacitor 0.039uF 25V Z YG	020-143-9-004
R-27, 44	Carbon Resistor 180K ohm 1/8W J (Forming Type)	002-108-5-184			
R-76, 109	Carbon Resistor 220K ohm 1/8W J (Forming Type)	002-108-5-224			
R-25, 96	Carbon Resistor 330K ohm 1/8W J (Forming Type)	002-108-5-334			
R-94	Carbon Resistor 1.5M ohm 1/8W J (Forming Type)	002-108-5-155			
R-110	Carbon Resistor 2.2M ohm 1/8W J (Forming Type)	002-108-5-225			
	CAPACITORS			CAPACITORS	
C-64, 65	Tantal Capacitor 2.2uF 16V M	027-022-9-001			
C-83, 112, 113, 124	Aluminum Capacitor 1uF 16V M	033-026-9-001			
C-69, 97	Aluminum Capacitor 0.47uF 50V M	033-028-9-002			
C-11	Electrolytic Capacitor 1uF 50V	022-122-9-016			
C-27	Electrolytic Capacitor 1uF 50V	022-144-9-001			
C-32, 90, 110	Electrolytic Capacitor 2.2uF 25V	022-153-9-001			
C-18	Electrolytic Capacitor 4.7uF 25V	022-153-9-002			
C-31, 115, 117, 120	Electrolytic Capacitor 10uF 16V	022-153-9-003			
C-100, 104, 118, 129	Electrolytic Capacitor 33uF 16V	022-142-9-001			
C-76, 107, 109	Electrolytic Capacitor 220uF 16V	022-099-9-006			
C-126	Electrolytic Capacitor 470uF 16V	022-099-9-004			
C-66, 131	Electrolytic Capacitor 100uF 10V	022-133-9-003			
C-74	Electrolytic Capacitor 220uF 6.3V	022-133-9-003			
C-92, 96	Mylar Capacitor 0.01uF 50V M	025-117-9-001			
C-10, 16, 70, 75, 106	Mylar Capacitor 0.022uF 50V M	025-117-9-002			
C-119	Mylar Capacitor 0.039uF 50V M	025-117-9-003			
C-21, 103, 108	Mylar Capacitor 0.068uF 50V M	025-117-9-005			
C-7	Ceramic Capacitor 0.5pF 50V C RH	020-176-9-001			
C-17</					