



SCHEMATIC
COBRA 28A
480-153-9-001

NOTE

- All resistors are in ohms and 1/4W unless otherwise noted.
- All mylarfilm capacitors indicated as 0.033 etc. are in μ F.
- All ceramic capacitors indicated as 22 etc. are in PF.
- All ceramic capacitors of this mark (—|—) are 4700PF unless otherwise noted.
- All diodes of this mark (—|—) are IS1555 unless otherwise noted.

SCHEMATIC SYMBOL	DESCRIPTION	DYNASCAN PART NO.	TOBMS SYMBOL
C100	Semi-Conductor Capacitor 0.1 μ F	033-017-9-001	
C54	Mylar-Film 6800pF, 50V	025-060-9-002	
C20, 22, 25, 26, 27, 59, 87, 93	Mylar-Film 0.033 μ F, 50V	025-060-9-003	
C95, 104	Tantalum 33 μ F, 3V	027-005-9-001	
C51, 52, 53, 83	Electrolytic 1 μ F, 50V	022-076-9-001	
C19, 30	Electrolytic 3.3 μ F, 50V	022-076-9-002	
C2, 32, 45, 61, 84, 89, 97, 101	Electrolytic 10 μ F, 16V	022-076-9-003	
C33, 60, 103	Electrolytic 33 μ F, 16V	022-076-9-005	
C107	Electrolytic 100 μ F, 10V	022-076-9-010	
C106	Electrolytic 100 μ F, 16V	022-091-9-001	
C108	Electrolytic 220 μ F, 25V	022-076-9-011	
R83	Semi-Fixed(Pot.) 10K Ohms	000-080-9-000	
R25	Semi-Fixed(Pot.) 50K Ohms	000-080-9-001	
R102	Semi-Fixed(Pot.) 200K Ohms	000-080-9-002	
R84	Variable 5K Ohms	000-080-9-003	
R58	Variable 20K Ohms	000-080-9-004	
R118	Variable 50K Ohms	000-080-9-005	
R85	Thermistor D333	000-080-9-006	
C12	Ceramic SL 1pF, 50V	020-088-9-000	
C16, 58, 70	Ceramic SL 2pF, 50V	020-088-9-001	
C65, 69, 124	Ceramic SL 3pF, 50V	020-088-9-002	
C9, 21	Ceramic SL 5pF, 50V	020-088-9-003	
C66	Ceramic SL 7pF, 50V	020-088-9-004	
C13	Ceramic SL 10pF, 50V	020-088-9-005	
C14	Ceramic SL 15pF, 50V	020-088-9-006	
C40, 49, 63	Ceramic SL 22pF, 50V	020-088-9-007	
C39	Ceramic SL 47pF, 50V	020-088-9-008	
C77	Ceramic SL 56pF, 50V	020-088-9-009	
C48, 62	Ceramic SL 82pF, 50V	020-088-9-010	
C67, 74, 78, 81	Ceramic SL 100pF, 50V	020-088-9-011	
C80	Ceramic SL 150pF, 50V	020-088-9-012	
C24	Ceramic NPO 1.5pF, 50V	031-030-9-005	
C8	Ceramic NPO 10pF, 50V	031-030-9-006	
C5	Ceramic N470 22pF, 50V	020-088-9-007	
C15, 18	Ceramic N470 180pF, 50V	020-088-9-008	
C55, 56, 90, 98	Ceramic YR 470pF, 50V	020-088-9-009	
C1, 3, 4, 6, 7, 10, 11	Ceramic YR 4700pF, 50V	020-088-9-010	
17, 23, 28, 29, 35, 36			
37, 31, 38, 41, 42, 43			
44, 46, 47, 64, 68, 71			
72, 73, 75, 76, 82, 85, 88			
91, 92, 94, 96, 99, 102			
109, 111, 112, 115, 116			
117, 118, 119, 120, 121			
122, 123			

COBRA 28A PARTS LIST

000-0-820-153

RESISTORS, CONTROLS, AND THERMISTORS

SCHEMATIC SYMBOL	DESCRIPTION	DYNASCAN PART NO.	TOBMS SYMBOL
R83	Semi-Fixed(Pot.) 10K Ohms	000-080-9-000	
R25	Semi-Fixed(Pot.) 50K Ohms	000-080-9-001	
R102	Semi-Fixed(Pot.) 200K Ohms	000-080-9-002	
R84	Variable 5K Ohms	000-080-9-003	
R58	Variable 20K Ohms	000-080-9-004	
R118	Variable 50K Ohms	000-080-9-005	
R85	Thermistor D333	000-080-9-006	

CAPACITORS

SCHEMATIC SYMBOL	DESCRIPTION	DYNASCAN PART NO.	TOBMS SYMBOL
C12	Ceramic SL 1pF, 50V	020-088-9-000	
C16, 58, 70	Ceramic SL 2pF, 50V	020-088-9-001	
C65, 69, 124	Ceramic SL 3pF, 50V	020-088-9-002	
C9, 21	Ceramic SL 5pF, 50V	020-088-9-003	
C66	Ceramic SL 7pF, 50V	020-088-9-004	
C13	Ceramic SL 10pF, 50V	020-088-9-005	
C14	Ceramic SL 15pF, 50V	020-088-9-006	
C40, 49, 63	Ceramic SL 22pF, 50V	020-088-9-007	
C39	Ceramic SL 47pF, 50V	020-088-9-008	
C77	Ceramic SL 56pF, 50V	020-088-9-009	
C48, 62	Ceramic SL 82pF, 50V	020-088-9-010	
C67, 74, 78, 81	Ceramic SL 100pF, 50V	020-088-9-011	
C80	Ceramic SL 150pF, 50V	020-088-9-012	
C24	Ceramic NPO 1.5pF, 50V	031-030-9-005	
C8	Ceramic NPO 10pF, 50V	031-030-9-006	
C5	Ceramic N470 22pF, 50V	020-088-9-007	
C15, 18	Ceramic N470 180pF, 50V	020-088-9-008	
C55, 56, 90, 98	Ceramic YR 470pF, 50V	020-088-9-009	
C1, 3, 4, 6, 7, 10, 11	Ceramic YR 4700pF, 50V	020-088-9-010	
17, 23, 28, 29, 35, 36			
37, 31, 38, 41, 42, 43			
44, 46, 47, 64, 68, 71			
72, 73, 75, 76, 82, 85, 88			
91, 92, 94, 96, 99, 102			
109, 111, 112, 115, 116			
117, 118, 119, 120, 121			
122, 123			

NOTE: Standard value resistors and capacitors are not listed, values may be obtained from schematic diagram.
Minimum charge \$2.00 per invoice. Orders will be shipped C.O.D. unless previous open account arrangements have been made or remittance accompanies order.
Advance remittance must cover postage or express charge.
Specify serial number when ordering replacement parts.

NO. PART	DESCRIPTION	DYNASCAN PART NO.	TOBMS SYMBOL
100-6-9-9-000	Case	027-005-9-001	
100-6-9-9-000	DC Power Cord Assy	023-114-9-001	
100-6-9-9-000	Heat Sink for RF Drive	747-474-9-000	
100-6-9-9-000	Microphone Clip	763-033-9-000	
100-6-9-9-000	Screws for Mounting Bracket	634-049-9-000	
100-6-9-9-000	Car Mounting Bracket	250-048-9-000	
100-6-9-9-000	Schematic Diagram	488-143-9-000	
100-6-9-9-000	Parts List	488-143-9-000	
100-6-9-9-000	Instruction Manual	480-160-9-000	
100-6-9-9-000	Kit Screws and Nuts	763-032-9-000	
100-6-9-9-000	Meter Holder	251-151-9-000	
100-6-9-9-000	Sub Panel for Volume and Squelch	254-015-9-002	
100-6-9-9-000	Sub Panel for Channel Switch and Delta	254-015-9-001	
100-6-9-9-000	Channel Indicator	388-151-9-000	
100-6-9-9-000	Knob for Volume, Squelch and Delta	082-080-151-9-000	
100-6-9-9-000	Knob for Channel Switch	082-080-151-9-000	
100-6-9-9-000	Shield Spacer for 2SD235 and 2SC1235	057-570-657-9-000	
100-6-9-9-000	Shield washer for 2SD235 and 2SC1235	056-950-747-9-000	
100-6-9-9-000	Fuse Holder	028-028-747-9-000	
100-6-9-9-000	Fuse 2A	191-251-9-000	
100-6-9-9-000	Ceramic Filter CFU4551	010-141-9-000	
100-6-9-9-000	Ceramic Filter BFB4551	010-141-9-001	
100-6-9-9-000	Indicator Lamp	6.3" X 2.35"	
100-6-9-9-000	Indicator Lamp	6.3" X 2.35"	
100-6-9-9-000	Indicator Lamp	6.3" X 2.35"	

MISCELLANEOUS

NO. PART	DESCRIPTION	DYNASCAN PART NO.	TOBMS SYMBOL
100-6-9-9-000	Indicator Lamp	6.3" X 2.35"	
100-6-9-9-000	Indicator Lamp	6.3" X 2.35"	
100-6-9-9-000	Indicator Lamp	6.3" X 2.35"	

CAPACITORS

SCHEMATIC SYMBOL	DESCRIPTION	DYNASCAN PART NO.
C100	Semi-Conductor Capacitor 0.1 μ F	033-017-9-001
C54	Mylar-Film 6800pF, 50V	025-060-9-002
C20, 22, 25, 26, 27, 59, 87, 93	Mylar-Film 0.033 μ F, 50V	025-060-9-003
C95, 104	Tantalum 33 μ F, 3V	027-005-9-001
C51, 52, 53, 83	Electrolytic 1 μ F, 50V	022-076-9-001
C19, 30	Electrolytic 3.3 μ F, 50V	022-076-9-002
C2, 32, 45, 61, 84, 89, 97, 101	Electrolytic 10 μ F, 16V	022-076-9-003
C33, 60, 103	Electrolytic 33 μ F, 16V	022-076-9-005
C107	Electrolytic 100 μ F, 10V	022-076-9-010
C106	Electrolytic 100 μ F, 16V	022-091-9-001
C108	Electrolytic 220 μ F, 25V	022-076-9-011

COILS, CHOKES, AND TRANSFORMERS

SCHEMATIC SYMBOL	DESCRIPTION	DYNASCAN PART NO.
T1	RF Transformer L1790	066-015-9-004
T2, 3	RF Transformer L1642	066-015-9-014
T4, 5	RF Transformer L1643	066-015-9-015
T6, 7, 8	RF Transformer D10753	060-014-9-004
T9	RF Transformer L1503	066-013-9-006
T10, 11, 12	RF Transformer L1505	066-013-9-009
T13	AF Driver Transformer 8786	068-008-9-001
T14	AF Output Transformer 7509	061-025-9-001
L1	RF Coil L1906	044-025-9-003
L2	RF Coil L1905	044-025-9-004
L4	RF Choke Coil L1998	042-013-9-002
L5	RF Coil L1101	044-025-9-002
L6, 7	RF Coil L1904	044-025-9-005
L8	AF Choke Coil 9013	042-013-9-003

DIODES, TRANSISTORS, AND INTEGRATED CIRCUIT

SCHEMATIC SYMBOL	DESCRIPTION	DYNASCAN PART NO.
IC1	MH-6-015-D (Hybrid IC)	307-059-9-001
IC2	TA7062P	307-007-9-002
Q1, 5-6, 11, 14-24	2SC372 NPN Silicon	176-029-9-001
Q2	2SC784 NPN Silicon	176-029-9-001
Q3	2SK19-CR FET	182-009-9-001
Q4, 7-10, 12-13	2SC785 NPN Silicon	176-037-9-001
Q25	2SC387ANPN Silicon	176-044-9-002
Q26	2SC166 NPN Silicon	176-037-9-002
Q27	2SC482 NPN Silicon	176-029-9-002
Q28	2SC1237 NPN Power Silicon	172-013-9-001
Q29	2SC735 NPN Silicon	176-031-9-001

DIODES, TRANSISTORS, AND INTEGRATED CIRCUIT

SCHEMATIC SYMBOL	DESCRIPTION	DYNASCAN PART NO.	TOBMS SYMBOL
Q30	2SC562 PNP Silicon	177-006-9-002	
Q31, 33	2SC732 NPN Silicon	176-031-9-002	
Q32	2SA495 PNP Silicon	177-006-9-001	
Q34, 35, 36	2SD235 NPN Power Silicon	172-010-9-001	
CD1, 2, 5-12, 15-19, 21, 23, 26	1S1555	151-030-9-001	
CD3, 4, 27	S3016R	151-030-9-006	
CD13	02Z6.2A	152-047-9-001	
CD14	1S1658	151-030-9-004	
CD20	1S1553	151-042-9-001	
CD22, 24, 25, 28, 29, 31	1S1885	151-030-9-005	
CD30	02Z8.2A	152-042-9-001	

CRYSTALS

SCHEMATIC SYMBOL	DESCRIPTION	DYNASCAN PART NO.	TOBMS SYMBOL
X1	Crystal 10,000 MHz	132-022-9-011	
X2	Crystal 10,010 MHz	132-022-9-012	
X3	Crystal 10,020 MHz	132-022-9-013	
X4	Crystal 10,040 MHz	132-022-9-014	
X5	Crystal 16,965 MHz	132-022-9-001	
X6	Crystal 17,015 MHz	132-022-9-002	
X7	Crystal 17,065 MHz	132-022-9-003	
X8	Crystal 17,115 MHz	132-022-9-004	
X9	Crystal 17,165 MHz	132-022-9-005	
X10	Crystal 17,215 MHz	132-022-9-006	
X11	Crystal 9,545 MHz	132-022-9-007	
X12	Crystal 9,555 MHz	132-022-9-008	
X13	Crystal 9,565 MHz	132-022-9-009	
X14	Crystal 9,585 MHz	132-022-9-010	

SWITCHES AND CONNECTORS

SCHEMATIC SYMBOL	DESCRIPTION	DYNASCAN PART NO.	TOBMS SYMBOL
S1	Rotary Switch 24steps	083-121-9-001	
S2, 3, 4, 5	Slide Switch 4C-2P	084-023-9-001	
J1	Antenna Jack S0239	772-002-9-001	
J2	Microphone Jack	773-057-9-001	
J3, 4	PA and EXT SP Jack	773-057-9-002	
P1	Microphone Plug	775-029-9-001	

MISCELLANEOUS

SCHEMATIC SYMBOL	DESCRIPTION	DYNASCAN PART NO.	TOBMS SYMBOL
K1	Relay 4C-2P 12V	441-006-9-001	
M1	Meter 200 μ A	320-035-9-001	
MK1	Dynamic Microphone	562-003-9-001	