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**Cobra 19XS Service Manual**

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# SERVICE MANUAL SERVICE MANUAL

## SERVICE MANUAL 19XS



**Cobra Model 19XS  
40 Channel Mobile CB Radio**

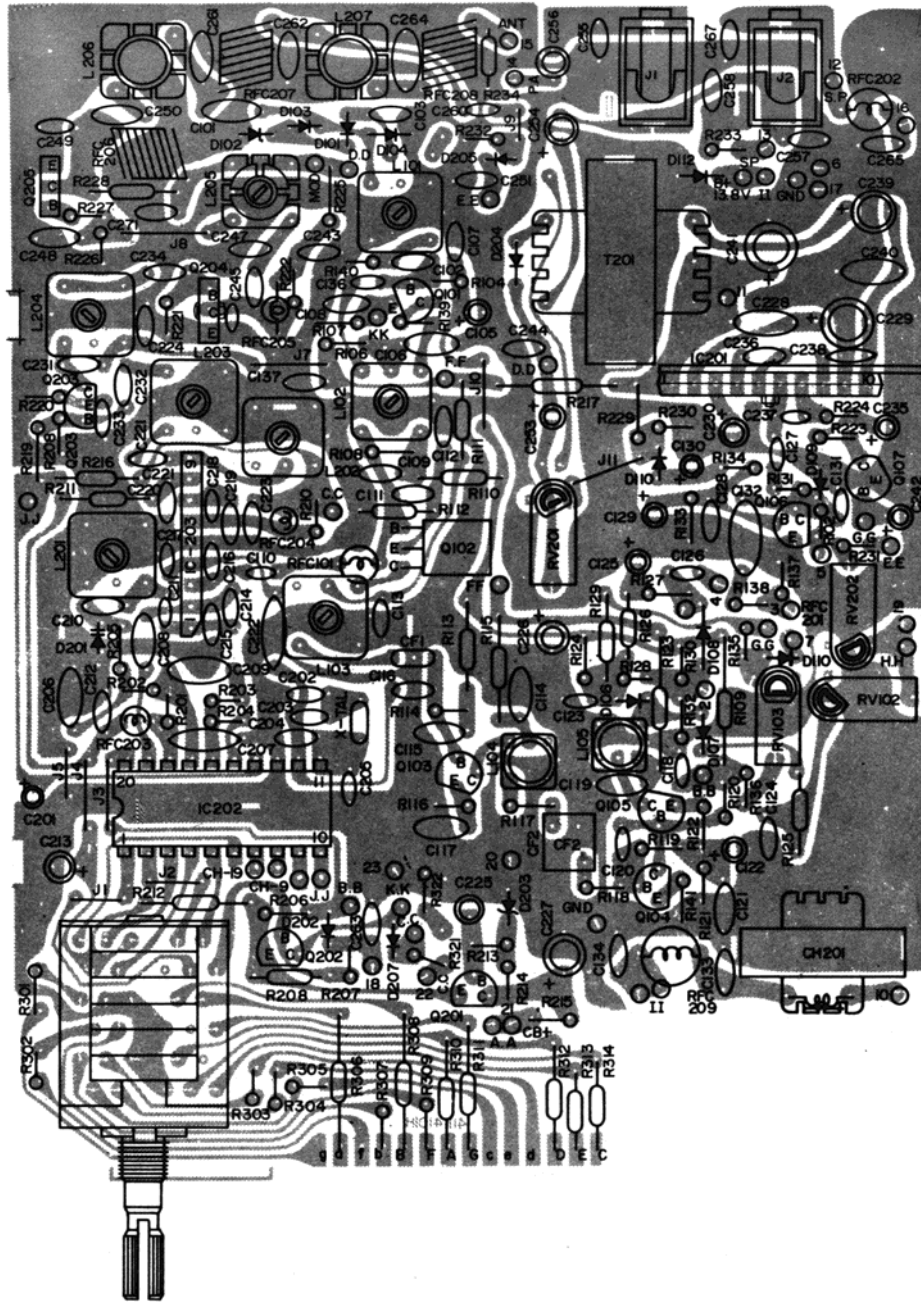
**Cobra Communications Product Group  
DYNASCAN CORPORATION  
6500 West Cortland Street  
Chicago, Illinois 60635**



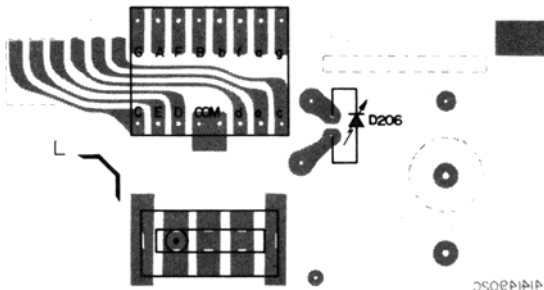
## TABLE OF CONTENTS

Description	Page Number
Table of Contents . . . . .	1
Parts Layout . . . . .	2,3
Wiring Diagram (PCB) . . . . .	4
Wiring Diagram (Chassis and Microphone Pins) . . . . .	5
PLL Block Diagram . . . . .	6
Block Diagram . . . . .	7
Integrated Circuits . . . . .	8
Internal Diagrams . . . . .	9
Test Equipment Set Up . . . . .	10
Voltage Chart . . . . .	11
Exploded View . . . . .	12
Exploded View Parts List . . . . .	13
Mechanical Parts List . . . . .	14,15,16
Electrical Parts List . . . . .	17,18,19
Schematic Diagram . . . . .	20

# Parts Layout.

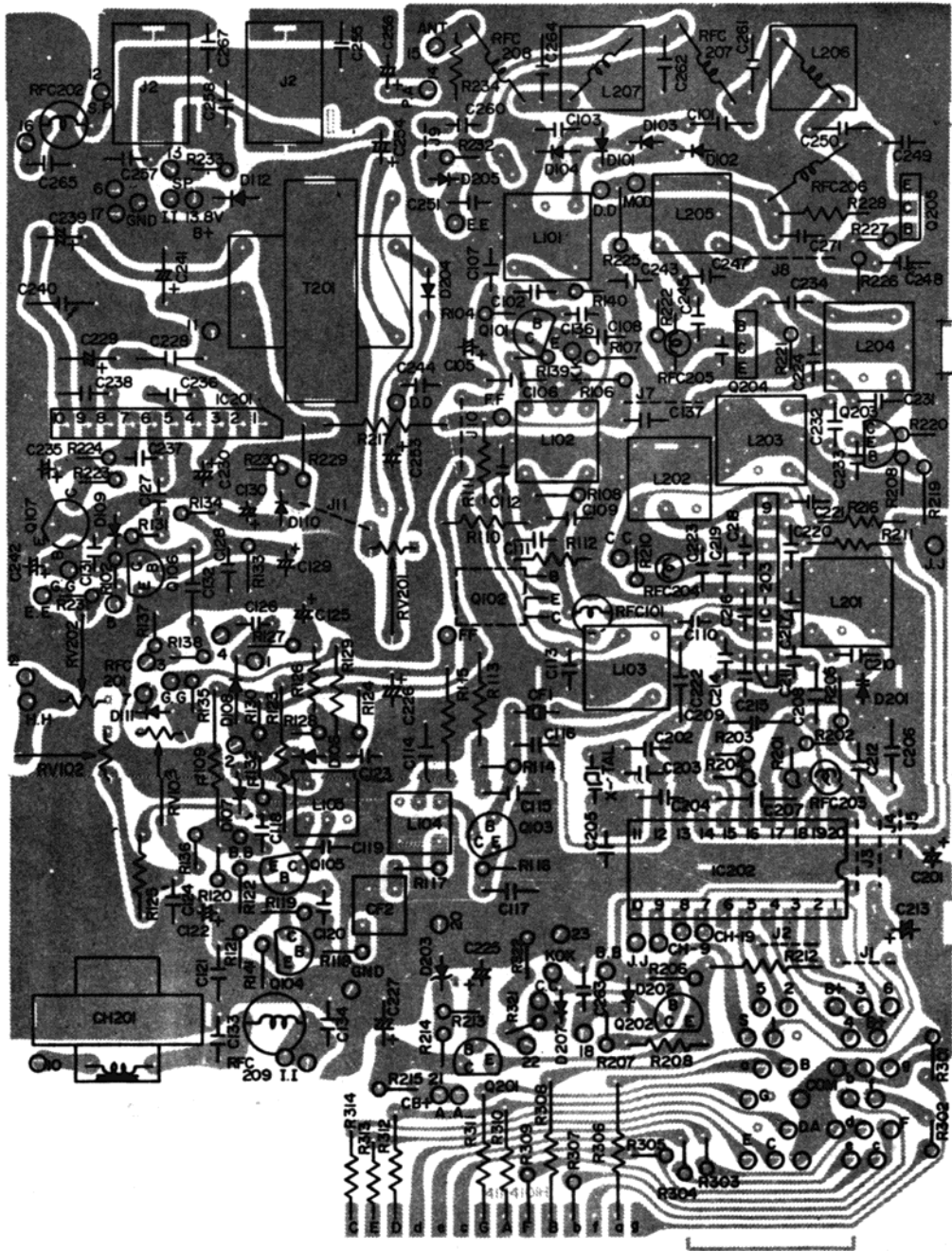


Component side

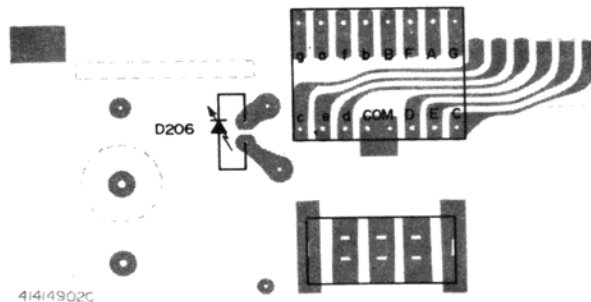


0508P1A1P

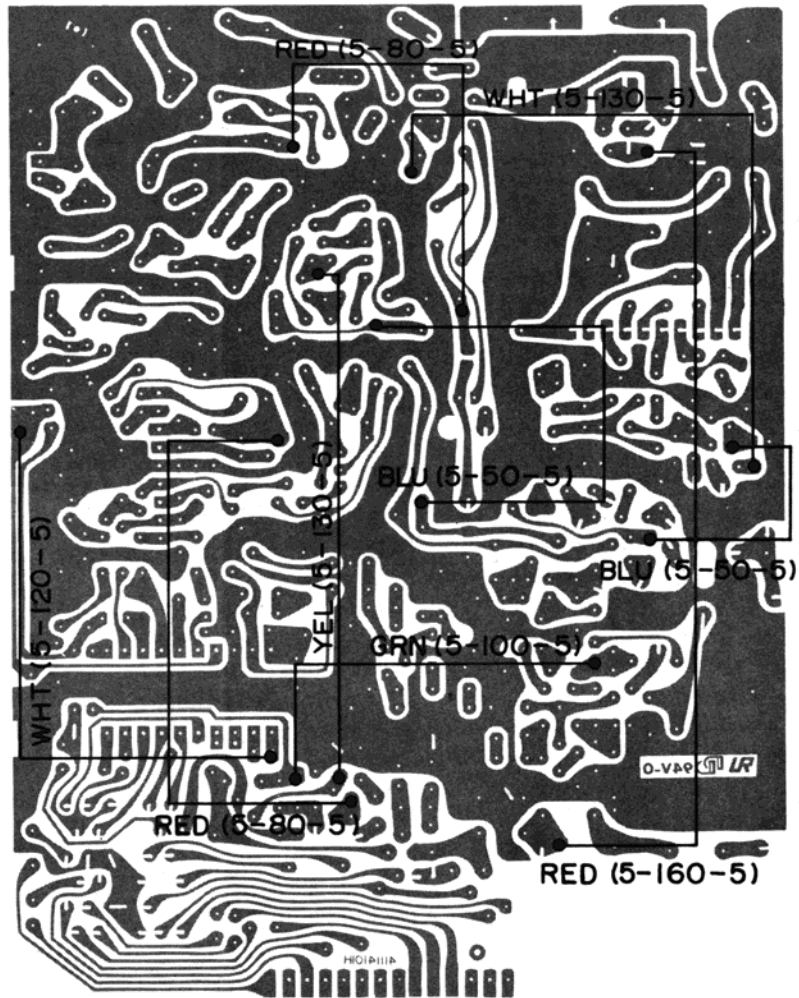
# Parts Layout.



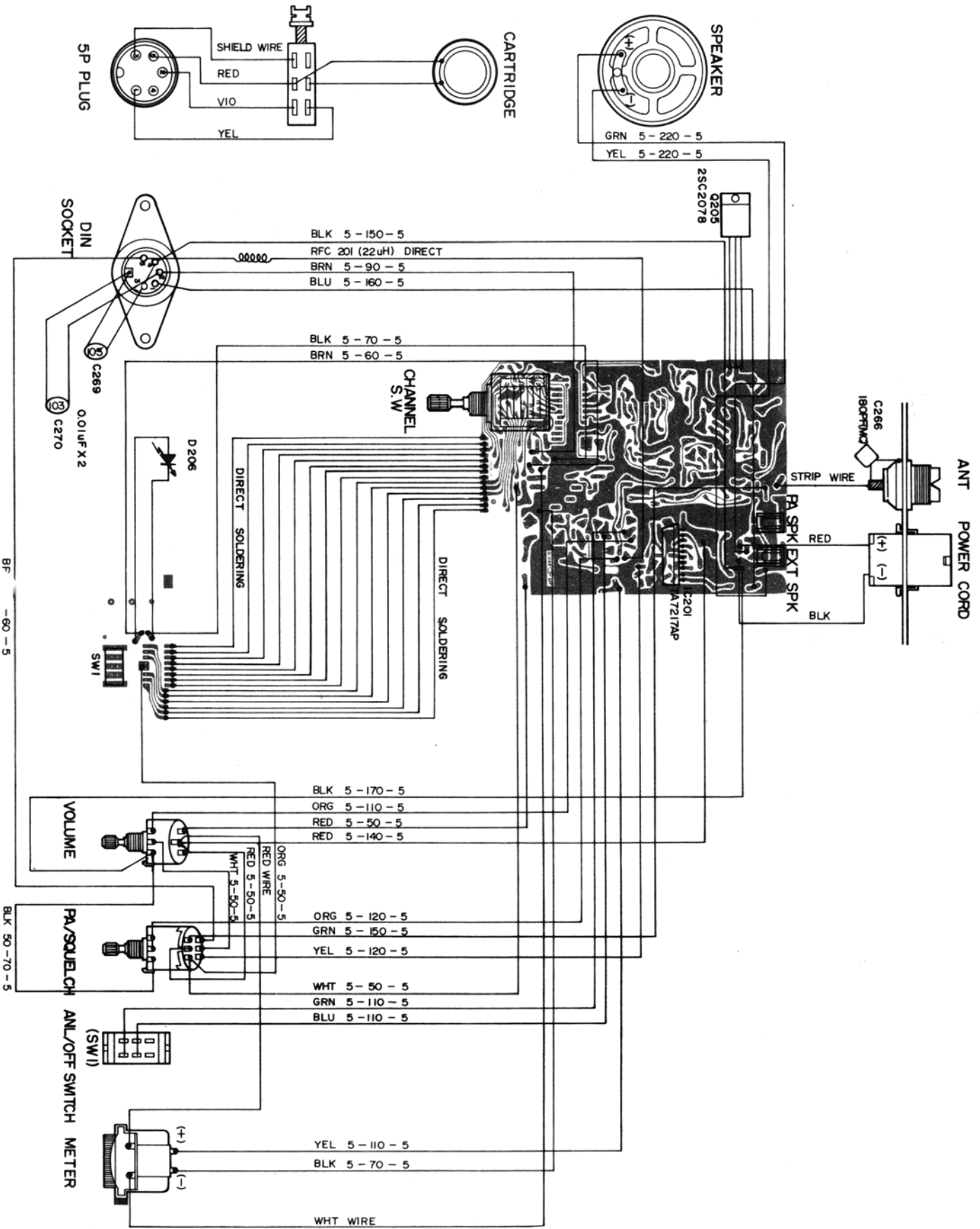
Pattern side



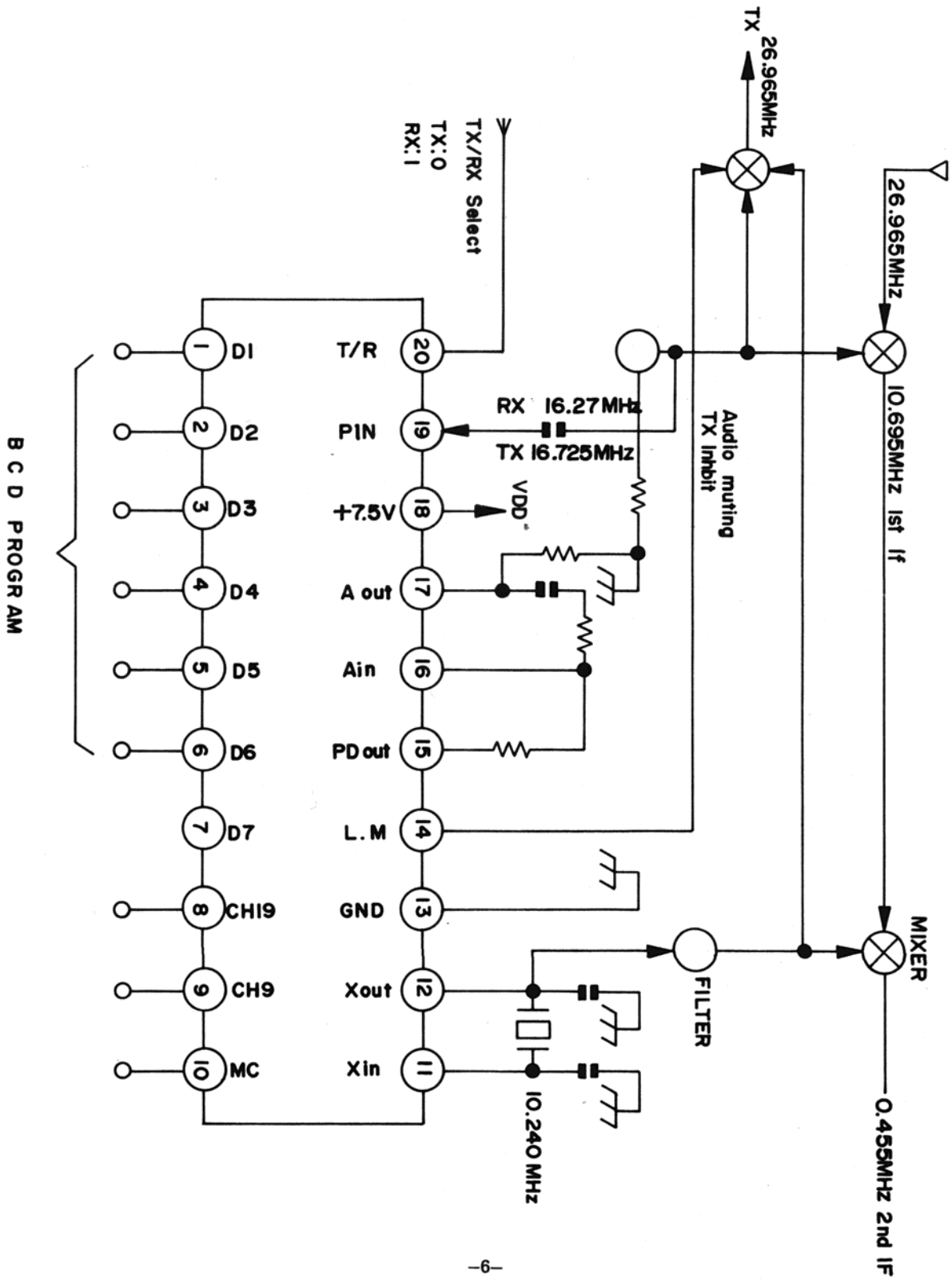
# P.C.B. WIRING DIAGRAM



# Wiring Diagram (Chassis and Microphone Pins)

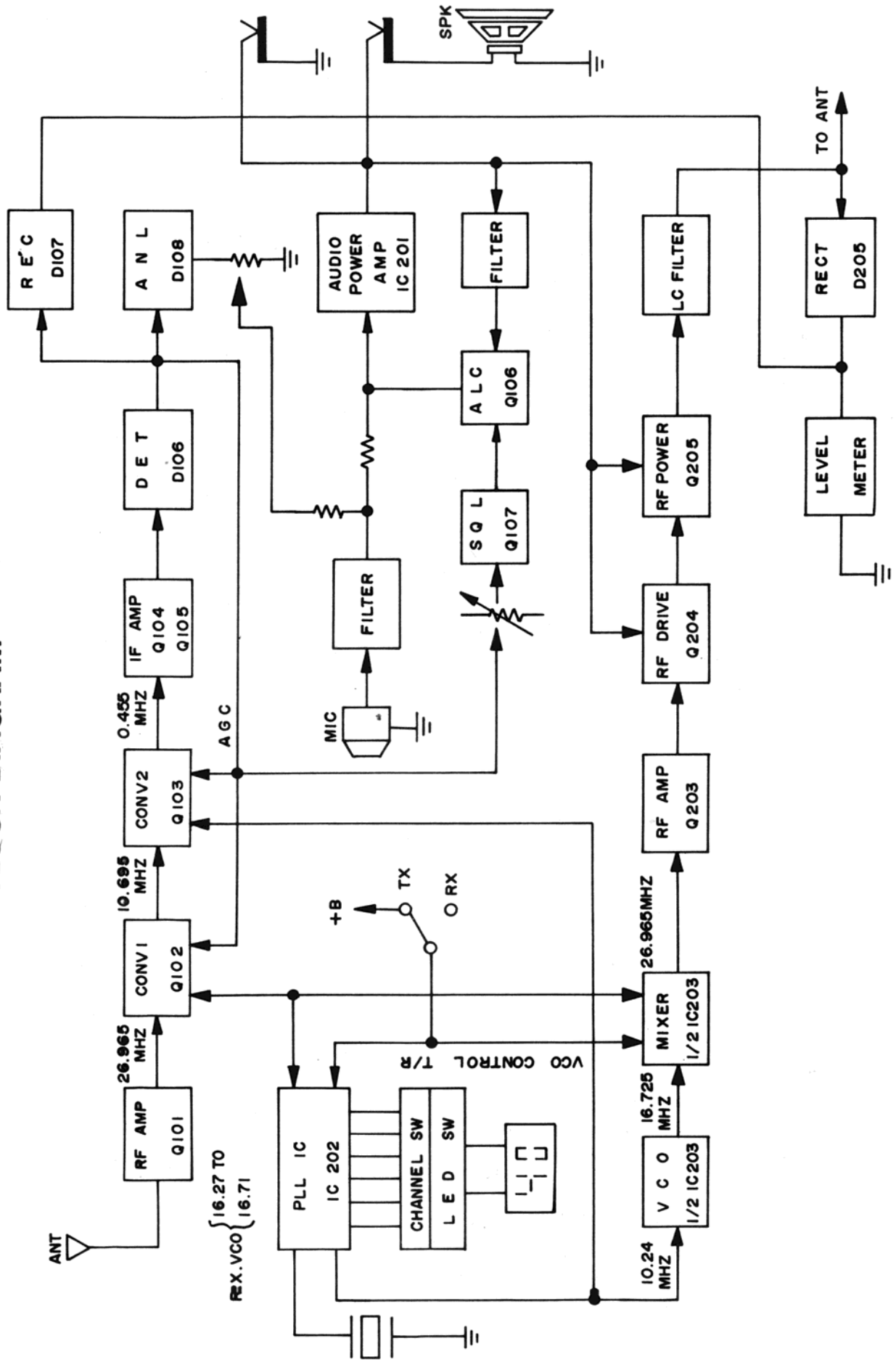


# PLL Block Diagram



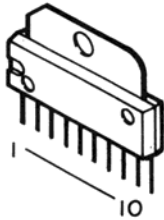


# BLOCK DIAGRAM

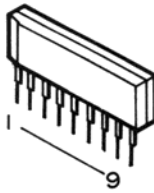


# Integrated Circuits

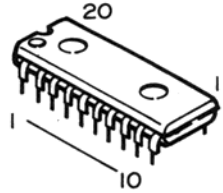
KIA7217AP



TA7310P OR AN103



LC7131



# TRANSISTORS

MPS9623  
MPS9631  
MPS9634  
MPS9681  
MPS9418



MPS9426



2SC1957 OR 2SC2314

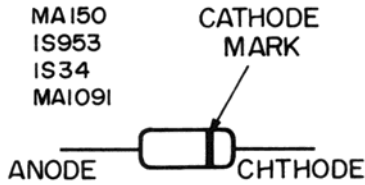


2SC2078 OR 2SC1306

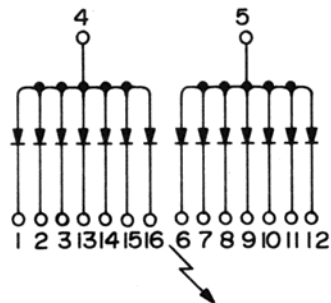
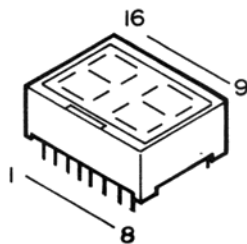


# DIODES

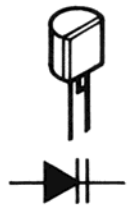
IN 4002  
MA150  
IS953  
IS34  
MA1091



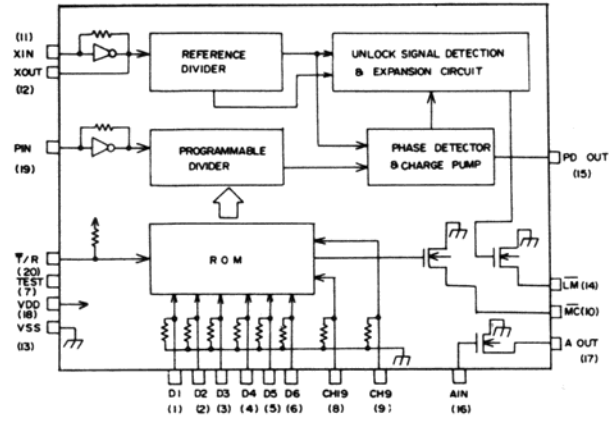
KLR321



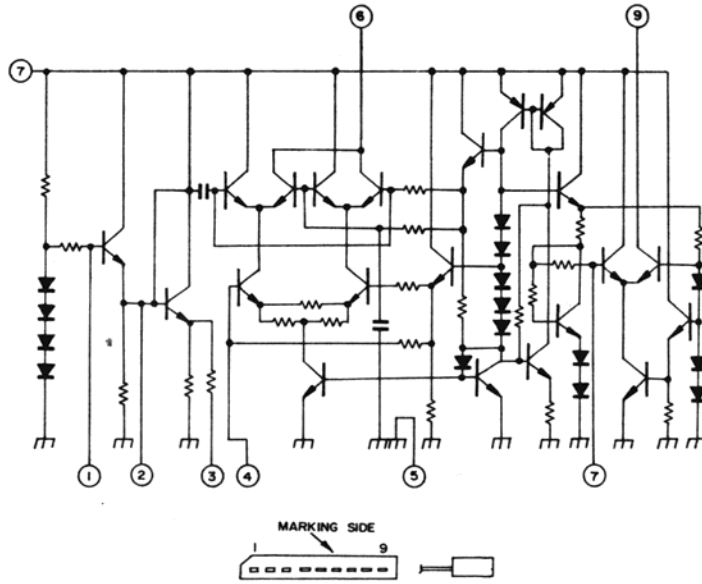
SVC251Y



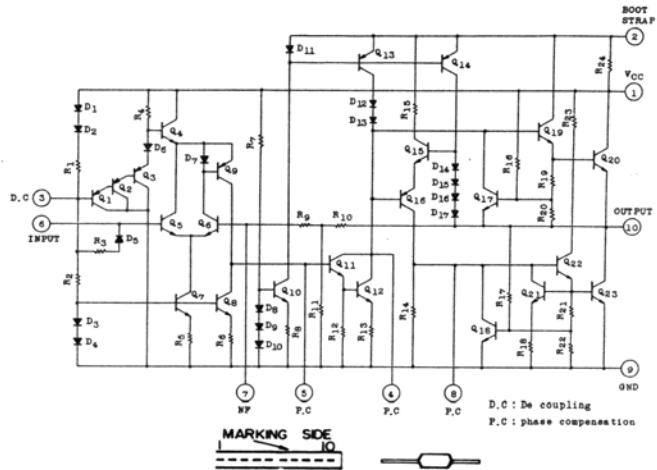
LC7131



ANI03

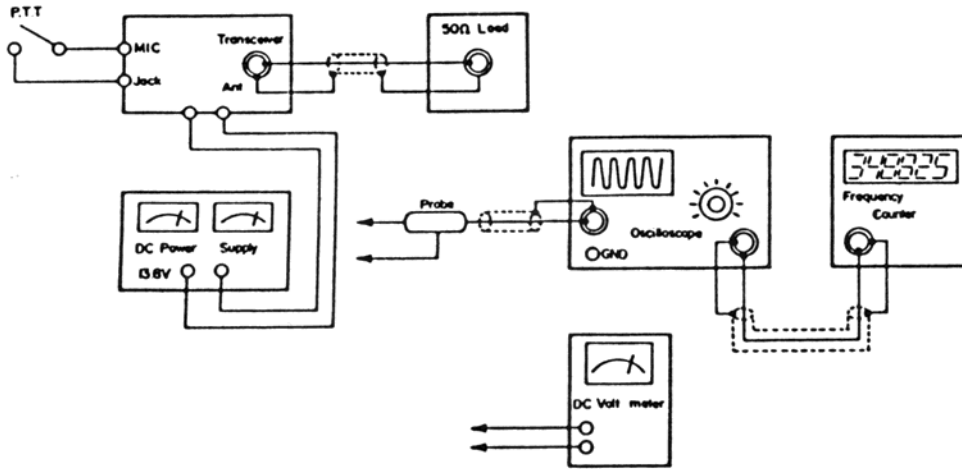


KIA7217AP

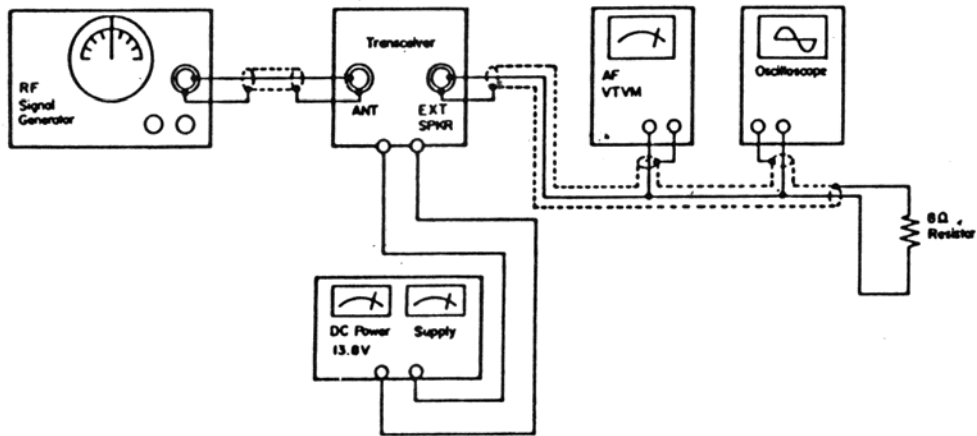


# Test Equipments Setup

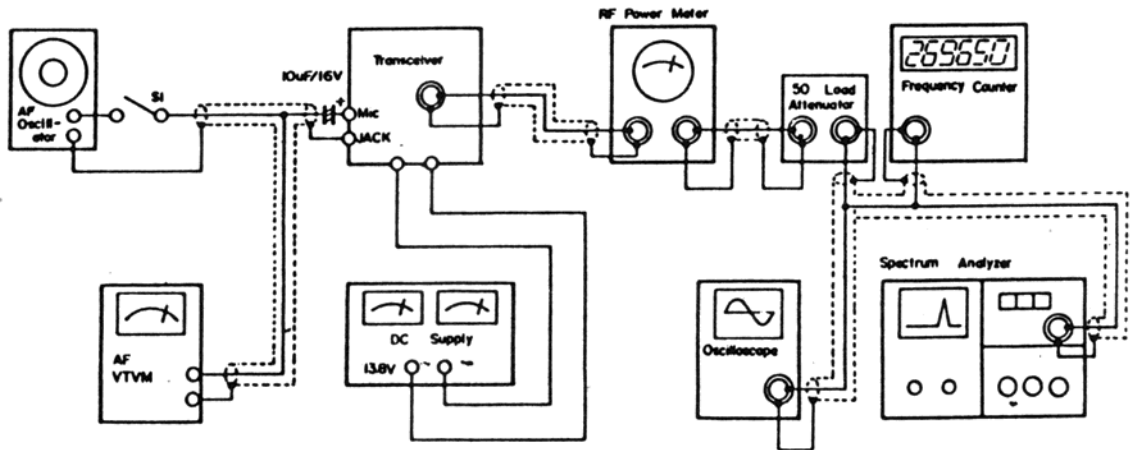
## PLL AND CARRIER SECTION



## RECEIVER SECTION



## TRANSMITTER SECTION



# VOLTAGE CHART

CONDITION ; MEASURED CH19  
NO SIGNAL  
NO MODULATION

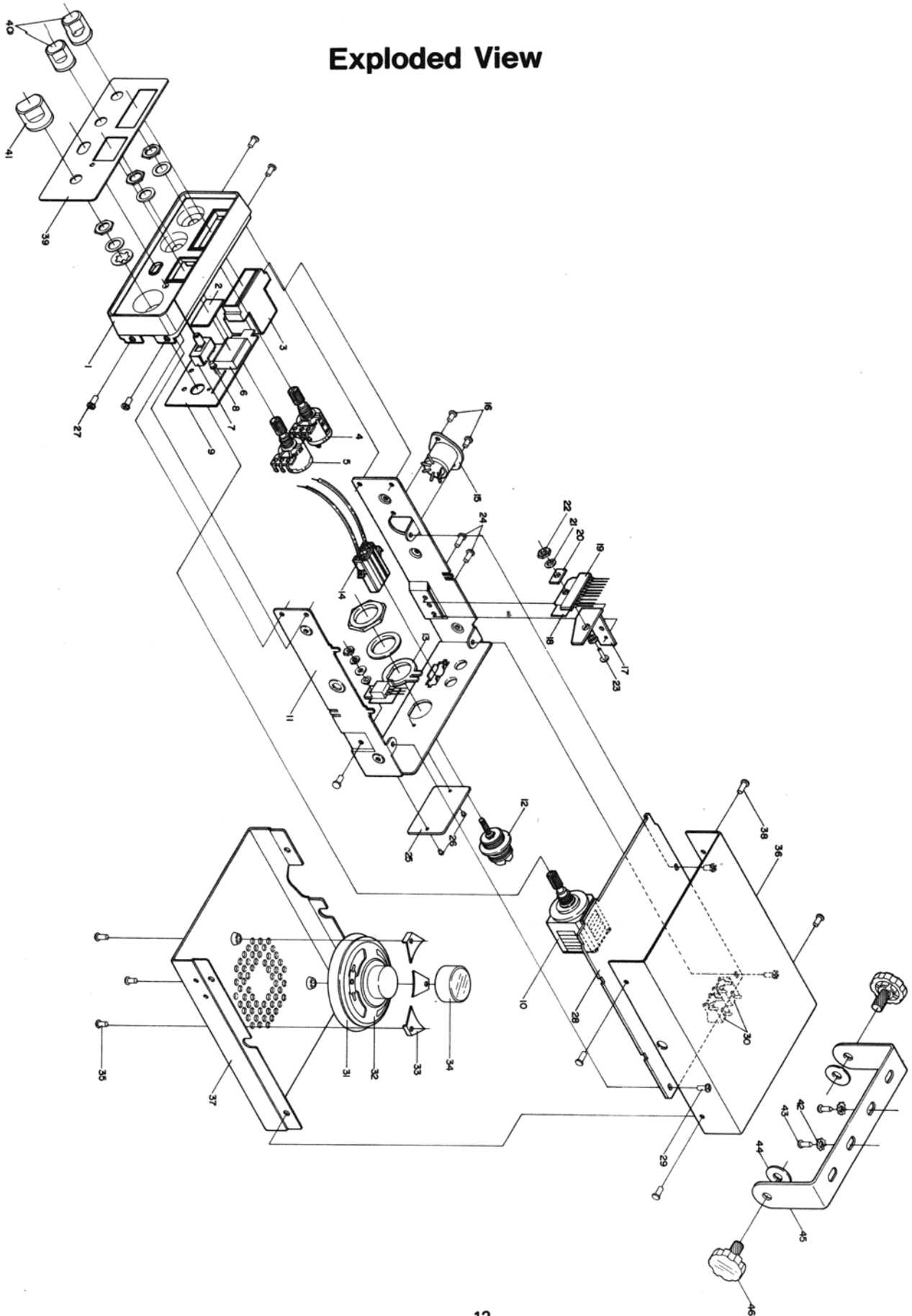
## 1) TRANSISTOR

TR NO		B	C	E	TR NO		B	C	E	TR NO		B	C	E
Q101	RX	1.74	12.56	1.07	Q105	RX	3.29	12.63	2.60	Q202	RX	8.28	1.09	8.29
	TX	2.48	12.27	1.09		TX	0.79	12.20	0.16		TX	7.47	8.13	8.24
Q102	RX	1.74	11.54	1.01	Q106	RX	0	0	0	Q203	RX	0.28	12.89	0
	TX	1.49	11.13	0.80		TX	0	0.47mv	-0.69mv		TX	1.29	12.67	0.58
Q103	RX	1.74	11.32	1.12	Q107	RX	0	3.34	0	Q204	RX	0	13.6	0
	TX	1.50	10.99	0.91		TX	0.09	3.21	0		TX	0.01	9.56	0
Q104	RX	1.10	3.30	0.42	Q201	RX	8.91	12.67	8.27	Q205	RX	0	13.5	0
	TX	0.08	0.79	0		TX	8.84	11.37	8.24		TX	0.04	11.28	0

## 2) IC (INTEGRATED CIRCUIT)

IC	PINNO	RX	TX	IC	PINNO	RX	TX	IC	PINNO	RX	TX
IC201 (TA721 7AP)	1	13.48	13.02	IC202 LM7131	7	0	0.03	IC203 AN103	3	1.28	1.31
	2	12.50	11.90		8	0	0.03		4	1.83	2.59
	3	3.85	3.82		9	0	0.03		5	0	0
	4	7.95	7.75		10	0.74	4.31		6	1.23	7.43
	5	1.38	1.42		11	3.13	3.11		7	2.22	2.08
	6	3.33	3.21		12	3.63	3.62		8	5.50	5.60
	7	3.33	3.21		13	0	0		9	1.23	7.44
	8	1.12	1.30		14	0.74	4.38				
	9	0	0		15	1.78	1.68				
	10	6.68	6.45		16	1.78	1.68				
	1	7.71	7.71	17	1.54	2.88					
	2	0	0.04	18	7.69	7.67					
	3	0	0.04	19	3.17	3.16					
	4	7.71	7.62	20	7.51	0.80					
	5	7.71	7.71	1	2.55	2.51					
	6	0	0.04	2	1.91	1.85					

# Exploded View



**EXPLODED VIEW PARTS LIST** .....

<b>No.</b>	<b>Part No.</b>	<b>Description</b>	<b>DYNASCAN Part No.</b>
1	800415	Escutcheon ABS CR-Plat	380-471-9-003
2	810296	Lens Acryl 27x19x2T (RED)	
3	4200264	Level Meter WHT 36F or H-18 (W/Lamp)	320-121-9-001
4	4504041	Resistor Variable (VR) 10KC (W/DPDT SW)	008-464-9-001
5	4506023	Resistor Variable (VR) 40KA	008-436-9-002
6	2520018	LED Display TH2010 RED	
7	4310097	Slide SW (2P-2C PCB Type) KSA-2259D BLK-Plat	
8	251179	L.E.D. Lamp KLR124	158-045-9-001
9	41414901C	P.C.B. Led Display 68x38x1.6T	
10	4300047	Rotary SW (40CH W/LED Cord) GPS-2096 Shaft Length 25MM	083-292-9-001
11	700672	Main Body SPC 48x405x1T	
12	864142500	Antenna Receptacle (W/Nut Washer) Kyeong Seong M Type 8112	
13	730477	Holder (Ant MTG) SPCC 32x35x0.5T NI-P	
14	861140900	Molex Power Cord Ass'y Plug and Receptacle	428-031-9-001
15	4215022	MIC 5 Pin, Din Socket	763-169-9-001
16	623265	(+) Tapping Screw (B.H) 3x6-2S Zn-Plat	
17	760421	Heat Sink (IC MTG) ALP3 65x20x2T	
18	900966	Mica	
19	2220064	I.C TA7217AP	307-331-9-001
20	660299	Square Washer SPC Zn Plating 10x7x0.5Tx32&	
21	662305	Spring Washer M3 Zn Plating	
22	651024	Nut SS41 M3-1S Zn Plating	
23	613305	(+) Machine Screw (B.H) M3x8 Zn Plating	
24	623265	(+) Tapping Screw (B.H) 3x6-2S Zn Plating	
25	783495	Name Plate (Cobra 19XS) ALP3 32x45x0.5T	600-116-9-001
26	670016	Rivet (half Head) Zn 2&x3M/M	
27	611095	(+) Machine Screw (F.H) M2.6x5 Zn Plating	
28	4010263	P.C.B. Main 140x108x1.6T	
29	623265	(+) Tapping Screw (B.H) 3x6-2X Zn Plating	
30	4207076	Earphone Jack HSJ 0615-01-010	
31	900133	Speaker Felt	
32	4201030	Speaker 2& 1/2" 8 ohm 0.25W	
33	730015	Holder (Speaker) SPC 25x25x1T	
34	832140040	Cap (Speaker)	
35	623344	(+) Tapping Screw (B.H) 3x8-2S BLK	
36	710860	Cover (Upper) SPC 172x150x0.8T BLK	
37	710879	Cover (Bottom) SPC 172x150x0.8T BLK	
38	633082	(+) Tap Tite Screw (B'H) 3x6 BLK	
39	782834	Overlay ALP3 116x46x0.4T	
40	820518	Knob (Control) ABX Pot-Paint Cr Plating	
41	820013	Knob (Channel) ABS 3G CR	
42	664411	Lock Washer B Type Zn Plating M4	
43	625007	(+) Tapping Screw (T.H) 5x12-1S Zn Plating	
44	660138	Washer Rubber 7x1.5T BLK	
45	720915	Bracket (Set) SPC 30x235x1.5T	
46	600051	Securing Screw M6 (P=1)x9	

**MECHANICAL PARTS LIST** .....

No.	Part No.	Description	Qty.	DYNASCAN	
				Part Number	Reference Number
1	600051	Securing Screw M6 (P=1)x9	2	634-166-9-001	
2	611095	(+) Machine Screw (F.H) M2.6x5 Zn Plating	4		Escutcheon & Main Body
3	613305	(+) Machine Screw (B.H) M3x8 Zn Plating	3		IC & TR
4	623238	(+) Tapping Screw (B'H) 3x5-2S Zn Plating	1		
5	623265	(+) Tapping Screw (B'H) 3x6-2S Zn Plating	6		1 Main Body & PCB 3 2 Heat Sink & Main Body: 2 3. Din so BLACK Holder & Cover
6	623344	(+) Tapping Screw (B'H) 3x8-2S BLK	3		
7	621195	(+) Tapping Screw (R.H) 2.6x6-1S An Plating	2		
8	624040	(+) Tapping Screw (R.H) 4x8-2S Zn Plating	2		
9	625007	(+) Tapping Screw (T.H) 5x12-1S Zn Plating	3		
10	633082	(+) Tap Tite Screw (B.H) 3x6 BLK	4		Blk Main Body & Cover
11	642004	(+) Wood Screw (R+F.H) 2.7x16-1S Ni Plating	3		CR-P
12	642053	(+) Wood Screw (R+F.H) 2.7x18-1S Ni Plating	2		CR-P
13	651024	Nut SS41 M3-1S Zn Plating	3		IC & TR
14	660138	Washer Rubber 7x1.5T BLK	2	381-105-9-001	
15	660299	Square Washer SPC Zn Plating 10x7x0.5T x3.2&	1		IC
16	662305	Spring Washer M3 Zn Plating	3		IC-TR
17	664411	Lock Washer B Type Zn Plating M4	2		
18	664518	Lock Washer B Type M5 Zn Plating	3		
19	670016	Rivet (Half Head) Zn 2&x3M/M	2		
20	700672	Main Body SPC 48x405x1T	1		48x405x1T
21	710860	Cover (Upper) SPC 172x150x0.8T BLK	1		172x150x0.8T Blk
22	710879	Cover (Bottom) SPC 172x150x0.8T BLK	1		172x150x0.8T Blk
23	710107	Cover (MIC, Upper) ABS 17G BLK	1		Black
24	710116	Cover (MIC, Bottom) ABS 13G BLK	1		Black
25	720049	Bracket (MIC, MTG) SPC 35x55x1T	1		
26	720915	Bracket (Set) SPC 30x235x1.5T	1	250-112-9-001	30x235x1.5T
27	730024	Holder (MIC) ABS 2G BLK	1		Black
28	730015	Holder (Speaker) SPC 25x25x1T	3		
29	730477	Holder (Ant MTG) SPCC 32x35c0.5T Ni Plating	1		
30	740018	Lever (MIC) ABS 3.2G BLK	1		Black
31	750048	Stopper (Cord Wire) SPC 12x25x1T	1		12x25x1T
32	760421	Heat Sink (IC MTG) ALP3 65x20x2T	1		65x20x2T
33	762140420	Heat Sink (TR MTG) ALP 12x30x0.8T	1		
34	782834	Overlay ALP3 116x46x0.4T	1		116x46x0.4T
35	783495	Name Plate (Cobra 19XS) ALP3 32x45x0.5T	1	600-116-9-001	32x45x0.5T
36	780092	Back Plate ALP3	1		
37	780782	Name Plate (MIC) ALP3 30x8x0.3T	1		30x8x0.3T
38	800415	Escutcheon ABS Cr Plating	1	380-471-9-003	Cr Plating
39	810296	Lens Acryl 27x19x2T (RED)	1		27x19x2T
40	820013	Knob (Channel) ABS 3G CR	1	751-209-9-001	Cr Plating
41	820518	Knob (Control) ABS Dot Paint Cr Plating	2	751-234-9-003	Cr Plating
42	830025	Cap (MIC) PE 3G	1		
43	830052	Grill (MIC) ABS 8.5G BLK	1		Black
44	850395	Bushing (TR2078)	1		
45	861140110	Din Plug (5P-	1		
46	4207076	Earphone Jack HSJ 0615-01-010	2		
47	861140900	Molex Power Cord Ass'y Plug & Receptacle	1	428-031-9-001	
48	861141790	Molex Plug Ass'y Ter (M), Conn (F), Wire (6CH)	1		
49	861141840	Molex Connector (Female) 5025-03P	1	428-031-9-001	
50	863141850	Molex Terminal (Male) 5006T	2		
51	4290368	Molex Power Cord Wire 156CM (Plug 6CM Recptl 150CM)			
52	861141800	Molex Receptacle Ass'y Ter (F), F, F.H Conn (M), Wire (150)	1		
53	861141860	Molex Connector (Male) 5025-03R1	1		
54	863010	Fuse Holder	1		



**MECHANICAL PARTS LIST (continued)** .....

No.	Part No.	Description	Qty.	DYNASCAN Part Number	Reference
55	2800062	Fuse 250V 2A	1	191-251-3-002	
56	863141870	Molex Terminal (Female) 5005T	2		
57	4200264	Level Meter White 36F or H-18 (W/Lamp)	1	320-121-9-001	
58	864142500	Antenna Receptacle (W/Nut Washer) Kyeong Seong M Type 8112	1		
59	4201030	Speaker 2&1/2" 8 ohm 0.25W	1	580-050-9-001	
60	4202026	Cartridge 30 Dia x 12 FD802	1		
61	4300047	Rotary SW (40CH W/LED Cord) GPS-0296 Shaft Length 25MM	1	083-292-9-001	GPS-0260 25M/M
62	4320025	Push S.W P-M1 Block	1	088-071-9-001	
63	4310097	Slide SW (2P-2C PCB Type) KSA-2259D BLK Plating	1	084-120-9-001	KSA-22590 Blk (PCB Type)
64	4215022	MIC 5PIN, DIN Socket	1	763-169-9-001	
65	4203023	Curled Cord	1		
66	870036	Cord Wire Clamp Nylon	1		
67	890096	Rubber Bushing Rubber	1		
68	890050	Rubber Sponge Rubber 28&x5T	1		28&x5T Blk
69	900966	Mica	1		
770	901031	Strip Felt Felt 110x6x0.3T	4		110x6x0.3T
71	900133	Felt Felt 68&x0.3T	1		
72	900142	Felt (MIC) Felt 23&x0.3T	1		23&x0.3T Blk
73	900586	Insulation Ring 5 Dia x 2M/M	1		2M/Mx5&
74	912428	Snow Box (MXCM-20)	2		
75	912279	Inner Box (Cobra 19XS) PAD SW1 206x218x80	1		SW1 206x218x80
76	913104	Out Box (Cobra 19XS) PAD DW1 455x425x223	0		DW1 455x425x223
77	912455	MIC Box SW1 211(W)x73(D)x50(H)	1		73x211x50
78	920087	Poly BAG (Set) Vinyl	1		
79	920041	Poly BAG (Manual) Vinyl 255x185x0.03T	1		
880	920032	Poly BAG (Accessory) Vinyl 65x85x0.03T	2		
81	920023	Poly BAG (MIC) Vinyl 125x205x0.03T	1		
82	931395	Instruction Manual (Cobra 19XS)	1	480-352-9-001	
83	931298	Service Station Book Blue	1	492-042-9-001	
84	931429	Schematic Diagram	1	499-239-9-001	
85	940074	FCC Form 505		492-041-9-001	
86	940171	Warning Card Nega Only	1		
87	940083	Temporary Permit	1	492-046-9-001	
88	940126	CB Regulations	1	492-047-9-001	
89	950013	QC Label	1		
90	4270016	Wire 1007 AWG 24 (1/0.51) BLK	0		
91	4270027	Wire 1007 AWG 24 (1/0.51) BRN	0		
92	4270038	Wire 1007 AWG 24 (1/0.51) RED	0		
93	4270049	Wire 1007 AWG 24 (1/0.51) ORG	0		
94	4270050	Wire 1007 AWG 24 (1/0.51) YEL	0		
95	4270061	Wire 1007 AWG 24 (1/0.51) GRN	0		
96	4270072	Wire 1007 AWG 24 (1/0.51) BLU	0		
97	4270104	Wire 1007 AWG 24 (1/0.51) WHT	0		
98	4270269	Wire 1007 AWG 24 (11/0.16) GRN	0		
99	4270292	Wire 1007 AWG 24 (11/0.16) GRY	0		
100	4271749	Wire Strip 0.5 Dia	0		
101	966007	Solder BAR 60: 40	20		
102	966016	Solder Rosin Core Wire 60 : 0.04"-0.05"	30		
103	966025	Flux Rosin	12		
104	966034	Thinner for Flux	5		
105	967002	Stabilizer Material	50		
106	967011	Bond No. 201 No. 201	10		
107	966061	Silicon Grease YG-6111 or XG-6111	1		
108	967048	Compound	2		

**MECHANICAL PARTS LIST (continued) .....**

<b>No.</b>	<b>Part No.</b>	<b>Description</b>	<b>Qty.</b>	<b>DYNASCAN Part Number</b>	<b>Reference</b>
109	967057	Wax Micro	10		
110	967066	Wax Poly	5		
111	967084	Screw Locking Paint AGP	2		
112	965020	Tape Scotch 20M/M (0.020x25M)	0		
113	965039	Tape Packing PVC (0.05x25M)	0		
114	964052	Tube His 11M/M	0		
115	964098	Tube Empire 1&	0		
116	967163	Wire Tie Vinyl 1.2 Dia	0		

# ELECTRICAL PARTS LIST .....

No.	Part No.	Description	Qty.	DYNASCAN	
				Part Number	Reference
1	2030029	Transistor MPS9634(C)	1	176-128-9-001	Q107
2	2030041	Transistor MPS9426 (B)	3	177-052-9-001	Q101,102,103
3	2030052	Transistor MPS9426 (C)	1	176-115-9-001	Q203
4	2030096	Transistor MPS9681 (T)	2	177-049-9-001	Q106,202
5	2030106	Transistor MPS9418 (T)	1	176-115-9-004	Q201
6	2030117	Transistor MPS9623 (H)	2	176-125-9-001	Q104,105
7	2040101	Transistor 2SC2078 (E)	1	172-062-9-001	Q205
8	2040167	Transistor 2SC2314 (E)	1	176-120-9-001	Q204
9	2220064	IC TA7217AP	1	307-331-9-001	IC201
10	2240042	IC LC7131 40CH PLL	1	307-272-9-002	IC202
11	2250025	IC AN103	1	307-272-9-003	IC203
12	2430021	Diode SI KDS1555	9	151-028-9-007	
	2430043	Diode IS 2473	9	151-035-9-001	D101,104,105,
	2430010	Diode SI 1S953	9	151-093-9-001	107-110,202,207
	2430032	Diode SI MA150	9	151-108-9-001	
13	2450021	Diode 1A100V or 1N4002	2	151-050-9-001	D112,204
14	2420015	Diode Varicap SVC251Y	1	154-008-9-001	D201
	2420026	Diode Varicap MV2209	1	154-009-9-001	D201
15	2510079	LED Lamp KLR124	1	158-045-9-001	D206
16	2520029	LED Display KLR321	1	238-019-9-001	
	2520018	LED Display TH2010 RED	1	238-024-9-001	
17	2440037	Diode OA90	3	150-020-9-001	D106,111,205
	2440026	Diode GE 1S34	3	150-016-9-001	D106,111,205
	2440015	Diode GE 1N60	3	150-001-9-005	D106,111,205
18	2600033	Crystal 10 240MHz HC-18/U	1	132-036-9-001	X101
19	2700014	Filter Ceramic SFE10 7MS2A	1	140-028-9-001	CF1
20	2700069	Filter Ceramic CFU455HT	1	140-026-9-001	CF2
21	0031013	Resistor Carbon Film 100 ohm 1/8W +5%	1		R213
22	0031024	Resistor Carbon Film 1K ohm 1/8W +5%	17		R107,108,117,118 134,222,230,231, 232,233,01,02,03, 04,05,07,09,321
23	0041029	Resistor Carbon Film 1K ohm 1/8W +5%	2		R103,125,306,308, 310-314
24	0031035	Resistor Carbon Film 10K ohm 1/8W +5%	3		R201,207,223
25	0031046	Resistor Carbon Film 100K ohm 1/8W +5%	1		R205
26	0041216	Resistor Carbon Film 120 ohm 1/8W +5%	1		R211
27	0031222	Resistor Carbon Film 1.2K ohm 1/8W +5%	1		R137
28	0041227	Resistor Carbon Film 1.2K ohm 1/8W +5%	1		R228
29	0121516	Resistor Carbon Film 150 ohm 1/2W +5%	1		R322
30	0031518	Resistor Carbon Film 150 ohm 1/8W +5%	1		R139
31	0031530	Resistor Carbon Film 15K ohm 1/8W +5%	1		R133
32	0031541	Resistor Carbon Film 150K ohm 1/8W +5%	1		R130
33	0031837	Resistor Carbon Film 18K ohm 1/8W +5%	1		R124
34	0032207	Resistor Carbon Film 22 ohm 1/8W +5%	1		R215
35	0042202	Resistor Carbon Film 22 ohm 1/8W +5%	1		R212
36	0032218	Resistor Carbon Film 220 ohm 1/8W +5%	3		R106,122,141
37	0032229	Resistor Carbon Film 2.2K ohm 1/8W +5%	3		R120,135,204
38	0032230	Resistor Carbon Film 22K ohm 1/8W +5%	3		R102,119,136
39	0042235	Resistor Carbon Film 22K ohm 1/8W +5%	1		R129
40	0032713	Resistor Carbon Film 270 ohm 1/8W +5%	1		R121
41	0032724	Resistor Carbon Film 2.7K ohm 1/8W +5%	2		R218,229
42	0042730	Resistor Carbon Film 27K ohm 1/8W +5%	1		R109
43	0033314	Resistor Carbon Film 330 ohm 1/8W +5%	3		R114,116,206
44	0043319	Resistor Carbon Film 330 ohm 1/8W +5%	1		R112
45	0033325	Resistor Carbon Film 3.3K ohm 1/8W +5%	2		R131,138
46	0043320	Resistor Carbon Film 3.3K ohm 1/8W +5%	1		R110

**ELECTRICAL PARTS LIST (continued)** .....

No.	Part No.	Description	Qty.	DYNASCAN	
				Part Number	Reference
47	0033336	Resistor Carbon Film 33K ohm 1/8W +5%	1		R203
48	0043331	Resistor Carbon Film 33K ohm 1/8W +5%	1		R126
49	0033392	Resistor Carbon Film 3.3 ohm 1/8W +5%	1		R227
50	0033907	Resistor Carbon Film 39 ohm 1/8W +5%	1		R224
51	0033918	Resistor Carbon Film 390 ohm 1/8W +5%	1		R210
52	0043924	Resistor Carbon Film 3.9K ohm 1/8W +5%	1		R113
53	0034706	Resistor Carbon Film 47 ohm 1/8W +5%	1		R220
54	0044701	Resistor Carbon Film 47 ohm 1/8W +5%	2		R123,217
55	0034717	Resistor Carbon Film 470 ohm 1/8W +5%	2		R140,214
56	0044712	Resistor Carbon Film 470 ohm 1/8W +5%	2		R111,115
57	0034728	Resistor Carbon Film 4.7K ohm 1/8W +5%	3		R104,202,219
58	0044723	Resistor Carbon Film 4.7K ohm 1/8W +5%	2		R208,216
59	0034739	Resistor Carbon Film 47K ohm 1/8W +5%	2		R127,128
60	0044734	Resistor Carbon Film 47K ohm 1/8W +5%	1		R234
61	0036809	Resistor Carbon Film 68 ohm 1/8W +5%	2		R221,226
62	0036832	Resistor Carbon Film 68K ohm 1/8W +5%	1		R132
63	0191005	Resistor Metal Oxide 10 ohm 2W	1	013-063-9-001	R225
64	0191500	Resistor Metal Oxide 15 ohm 2W	1	011-002-5-150	R233
65	4504041	Resistor Variable (VR) 10KC (W/DPOT SW)	1	008-464-9-001	VR102
66	4506023	Resistor Variable (VR) 50KA (W/OFF-ON SW)	1	008-436-9-002	VR101
67	0611033	Resistor Semifixed 10K ohm 8 Dia	2	008-407-9-004	RV102,103
68	0612029	Resistor Semifixed 2K ohm 8 Dia	1	008-436-9-003	RV201
69	0612030	Resistor Semifixed 20KB ohm 8&	1	008-407-9-003	RV202
70	1010127	Capacitor Elect 10uF 16WV (5 Dia x 11)	1		C105
71	1010336	Capacitor Elect 1000uF 16WV	1		C241
72	1010062	Capacitor Elect 1.0uF 50WV	1		C125
73	1022214	Capacitor Elect 220uF 10WV	1		C239
74	1022236	Capacitor Elect 220uF 16WV (10 Dia x 16.5)	1		C227
75	1033117	Capacitor Elect 33uF 6.3WV	3		C129,230,242
76	1033085	Capacitor Elect 3.3uF 50WV	1		C253
77	1047110	Capacitor Elect 47uF 10WV	4		C213,225,226,229
78	1047121	Capacitor Elect 47uF 16WV	2		C254,256
79	1047055	Capacitor Elect 4.7uF 25WV	4		C122,130,201,235
80	1110054	Capacitor Mylar 0.01uF 50WV	2		C124,128
81	1110065	Capacitor Mylar 0.1uF 50WV	2		C132,228
82	1122019	Capacitor Mylar 0.0022uF 50WV:J	2		C131,237
83	1122031	Capacitor Mylar 0.022uF 50WV:J	1		C127
84	1147058	Capacitor Mylar 0.047uF 50WV	1		C121
85	1168011	Capacitor Mylar 0.0068uF 50WV	1		C123
86	1168022	Capacitor Mylar 0.068uF 50WV:K	3		C206,209,240
87	1182019	Capacitor Mylar 0.0082uF 50WV	1		C126
88	1310027	Capacitor Ceramic 10pF 50WV	1		C205
89	1310050	Capacitor Ceramic 100pF 50WV	5		C208,215,218
90	1301018	Capacitor Ceramic 0.001uF 50WV	4		C102,255,258,267
91	1301029	Capacitor Ceramic 0.01uF 50WV (HIK (B))	24		C107,108,109,112, 117,118,133,134, 207,212,220,223, 224,232,233,243, 244,251,257,263, 265,269,270,271
92	1315044	Capacitor Ceramic 1.5pF 50WV	1		C260
93	1320022	Capacitor Ceramic 20pF 50WV	1		C203
94	1320033	Capacitor Ceramic 2pF 50WV	2		C136,221
95	1322048	Capacitor Ceramic 220pF 50WV	2		C238,247
96	1327010	Capacitor Ceramic 27pF 50WV	1		C110
97	1333028	Capacitor Ceramic 330pF 50WV SL	4		C214,219,234,248
98	1335011	Capacitor Ceramic 35pF 50WV	2		C101,211
99	1339019	Capacitor Ceramic 39pF 50WV	1		C111

**ELECTRICAL PARTS LIST (continued)** .....

No.	Part No.	Description	Qty.	DYNASCAN Part Number	Reference
100	1340033	Capacitor Ceramic 4pF 50WV	2		C120,222
101	1304053	Capacitor Ceramic 0.047uF 50WV	7		C106,113,114,115, 119,137,268
102	1350050	Capacitor Ceramic 5pF 50WV	1		C116
103	1360022	Capacitor Ceramic 60pF (NPO) 50WV	1		C210
104	1382015	Capacitor Ceramic 82pF 50WV SL	1		C245
105	2410207	Diode Zener UZ9.1B	1		
106	1610059	Capacitor Mica 100pf 50WV	2	023-065-9-004	C231,250
107	1612020	Capacitor Mica 120fp 50WV	1	023-082-9-001	
	231210783	Capacitor Ceramic 120pF 50WV	1		C236
108	1618033	Capacitor Mica 180pF 50WV	3	023-065-9-003	C261,262,266
109	1627020	Capacitor Mica 270pF 50WV	1	023-065-9-002	C264
110	1647019	Capacitor Mica 47pF 50WV	1	023-065-9-006	C204
111	1656017	Capacitor Mica 56pF 50WV	1	023-065-9-005	C202
112	3000081	Choke Trans Former EI-19	1	042-041-9-001	T201
113	3000212	Trans Former OPT Publicom	1	061-059-9-001	CH201
114	3100787	Choke Coil 25uH Mold Type	1	047-012-9-001	RFC203
115	3100798	Choke Coil 0.45uH Mold Type	1	047-012-9-002	RFC204
116	3100226	Coil RF Choke 10uH Core	1	047-012-9-003	RFC209
117	3100259	Coil RF Choke 1uH Bobbin	1	041-134-9-001	RFC205
118	3100381	Coil RF Choke 22uH Bobbin	2	041-134-9-002	RFC201,202
119	3101003	Choke Coil 4uH Bobbin Type	1	047-012-9-004	RFC101
120	3100655	Coil RF Choke 0.5uH Spring	1	041-134-9-008	RFC206
121	3200131	27MHz RX Ant	1	046-039-9-002	L101
122	3200252	27MHz RF AMP-A	1	046-039-9-008	L202
123	3200274	Coil AM AMP 10M/M 27MHz C	1	046-039-9-009	L203
124	3200306	27MHz TX RF PRE AMP	1	047-002-9-008	L204
125	3200317	27MHz RF AMP-E	1	046-039-9-011	L205
126	3200328	Coil AM TX ANT 27MHz A	2	046-039-9-012	RFC207,208
127	3200339	Coil AM TX ANT 27MHz B	1	046-039-9-013	L206
128	3200340	Coil AM IFT 27MHz TX ANT Tuning-C	1	046-039-9-014	L207
129	3200526	VCO OSC	1	046-039-9-015	L201
130	3201512	27MHz RF AP (RX)	1	047-002-9-010	L102
131	3201534	IFT 10.6MHz RF 1st Mixer (RX)	1	047-002-9-011	L103
132	3201545	IFT 455KHz-A	1	047-002-9-012	L104
133	3201556	IFT 455KHz-B	1	047-002-9-013	L105
134	4010263	PCB Main 140x108x1.6T	1		
135	41414901C	PCB LED Display 68x38x1.6T	1		
136	501020150	MIC Ass'y	1	562-028-9-001	