

FT-736R

TECHNICAL SUPPLEMENT

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C.P.O. BOX 1500
TOKYO, JAPAN

FT-736R TECHNICAL SUPPLEMENT



This manual is intended to serve as a supplement to the FT-736R Operating Manual. Detailed information regarding functions, installation, interconnections and operation has been provided in the Operating Manual, and is not reprinted herein. Therefore, this supplement is not intended to serve as an independent reference, but to be used in conjunction with the information provided in the Operating Manual.

Because there are nearly five hundred semiconductor devices in the FT-736R, circuit description information is provided in the form of numerous block diagrams. We hope that this manner of providing functional information proves to be more convenient for the owner and technician than would a lengthy verbal description. Those readers unfamiliar with the basic types of analog and digital circuits that serve as the building blocks of the FT-736R are encouraged to study instructional material, such as that provided in handbooks on amateur radio and digital circuit design, before attempting to understand the design of the FT-736R. Each block in the block diagrams represents one such basic circuit, while the Component Applications List provides additional details for each semiconductor. General information on integrated circuits and their applications is available in the data provided by the IC manufacturers. Specific circuit details are provided in the schematic diagrams in this manual.

While we believe the technical information in this manual is correct, Yaesu assumes no liability for damage that may occur as a result of typographical or other errors that may be present. Your cooperation in pointing out any inconsistencies in the technical information would be appreciated.

Yaesu Musen reserves the right to make changes in the circuitry of this transceiver, in the interest of technological improvement, without obligation to notify owners or to modify any sets produced prior to the modification.

CONTENTS

CIRCUIT BOARD ACCESS	1
RX UNIT PARTS LAYOUT.....	3
RX UNIT CIRCUIT DIAGRAM	5
TX UNIT PARTS LAYOUT	6
TX UNIT CIRCUIT DIAGRAM	8
AF UNIT PARTS LAYOUT/CIRCUIT DIAGRAM	9
144MHz MAIN UNIT PARTS LAYOUT	10
144MHz MAIN UNIT CIRCUIT DIAGRAM	12
430MHz RF UNIT PARTS LAYOUT	13
430MHz RF UNIT CIRCUIT DIAGRAM	15
430MHz PLL UNIT PARTS LAYOUT	16
430MHz PLL UNIT CIRCUIT DIAGRAM	17
CNTL UNIT PARTS LAYOUT	18
CNTL UNIT CIRCUIT DIAGRAM	20
DISPLAY, REG and PROTECTOR UNIT PARTS LAYOUT	21
DISPLAY CIRCUIT DIAGRAM	23
SW, ENCODER and VR UNIT PARTS LAYOUT	24
CONNECTION DIAGRAM	25
BLOCK DIAGRAM	26
SIGNAL TRACING (SSB MODE)	27
SIGNAL TRACING (CW MODE)	28
SIGNAL TRACING (FM MODE)	29
SEMICONDUCTOR CROSS-REFERENCE	30
EXPLODED VIEW	31
50MHz BAND MODULE (FEX-736-50) OPTION	33
220MHz BAND MODULE (FEX-736-220) OPTION	39
1200MHz BAND MODULE (FEX-736-1.2) OPTION	45
LEVEL DIAGRAM (144MHz RX)	51
LEVEL DIAGRAM (430MHz RX)	52
LEVEL DIAGRAM (144MHz TX)	53
LEVEL DIAGRAM (430MHz TX)	54
ALIGNMENT	55
ALIGNMENT (PLL)	57
ALIGNMENT (Transmitter)	60
ALIGNMENT (Receiver)	64
ALIGNMENT (FEX-736-50)	69
ALIGNMENT (FEX-736-220)	72
ALIGNMENT (FEX-736-1.2)	76
PARTS LIST	81

CIRCUIT BOARD ACCESS

TOP COVER

The following units (pcb's) are accessed by removing the top cover:

- TX Unit
- 144 MHz Main Unit
- 144 & 430 MHz PA Units
- 430 MHz PLL Unit
- 430 MHz RF Unit
- 430 MHz Front End Unit
- AF Unit
- Protector Unit
- $\frac{1}{2}$ of RX Unit

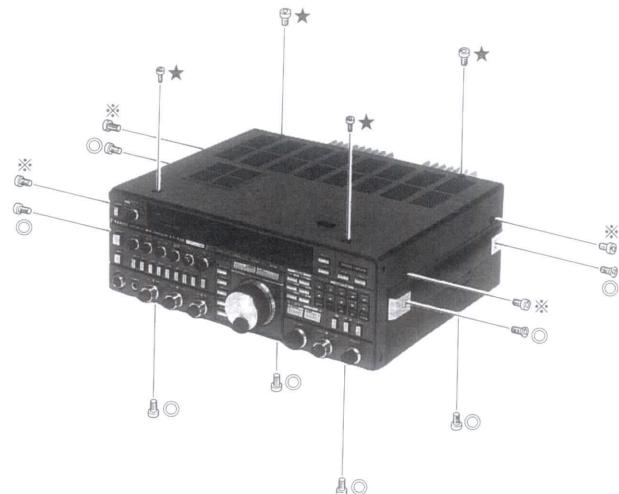


Figure 1

To remove the top cover, remove the eight screws (4 each marked "★" or "※") in Figure 1. Then lift the cover off slowly so as not to stress the loudspeaker wires. Unplug these wires from J3016 on the RX Unit before pulling the cover away.

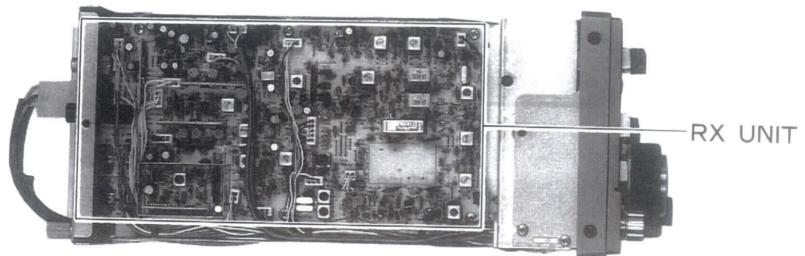


Figure 2

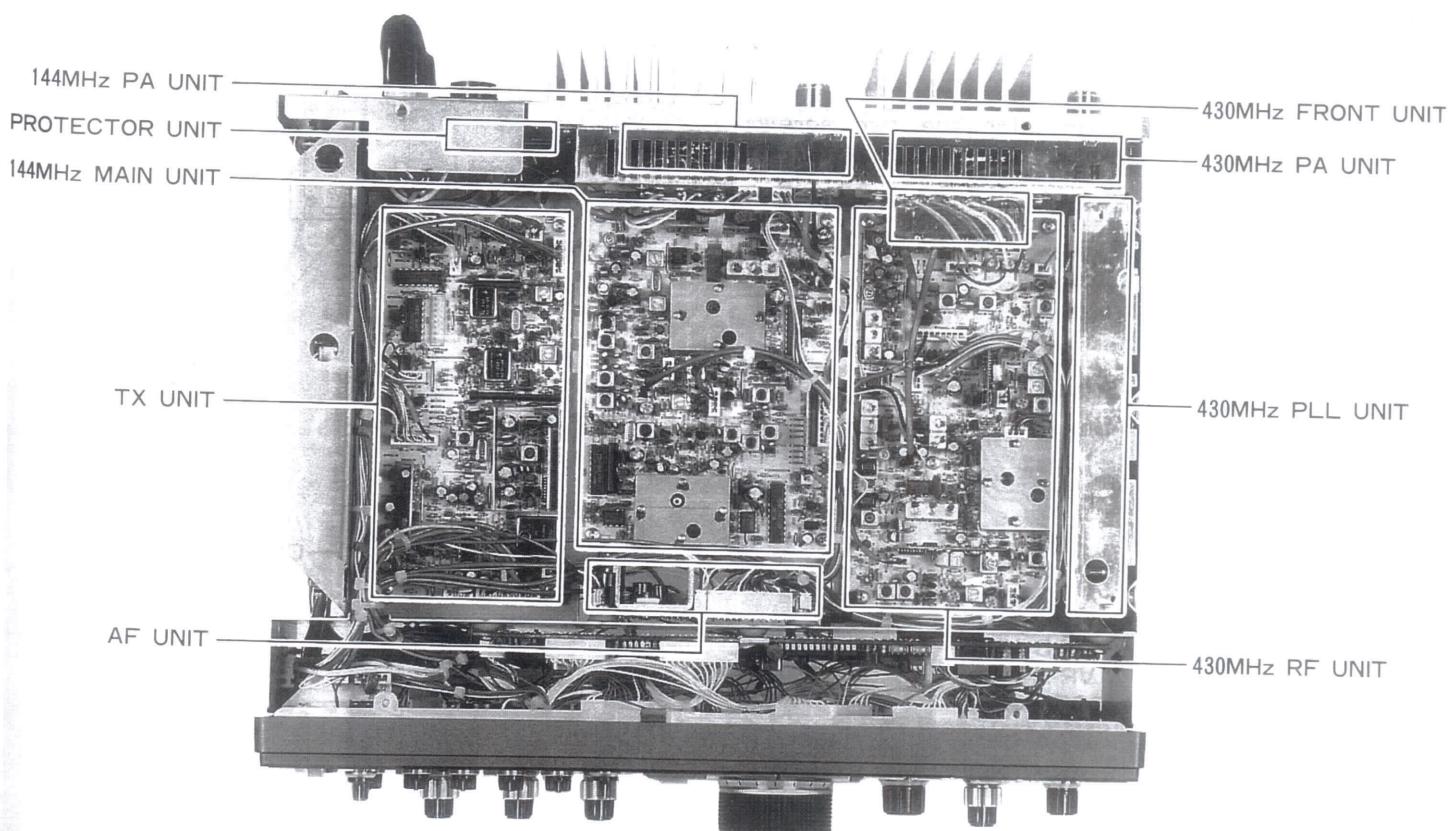


Figure 3

CIRCUIT BOARD ACCESS

BOTTOM COVER

Removing the bottom cover exposes the following units:

- Power Supply Unit
- Reg Unit
- Optional Band Modules
- $\frac{1}{2}$ of RX Unit

To remove the bottom cover, remove the twelve screws (4 marked "※" and 8 marked "◎") in Figure 1).

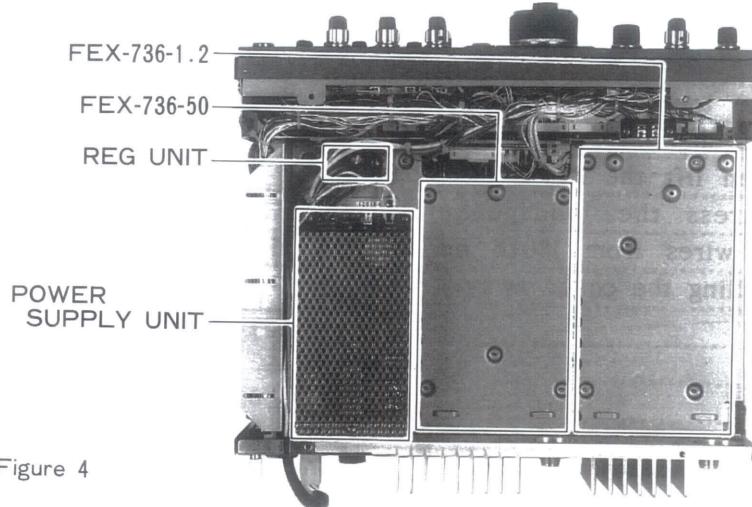


Figure 4

FRONT PANEL HINGE

When the top and bottom covers have been removed, the front can be slid forward and folded down after loosening the two screws on either side, shown in Figure 5. This provides access to the following boards:

- Control Unit
- Display Unit
- VR-A, -B, -C and -D Units
- SW-A, -B and -C Unit
- Encoder Unit

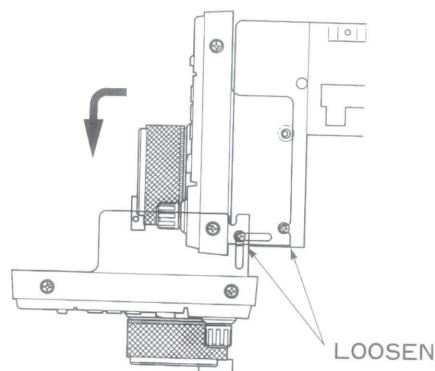


Figure 5

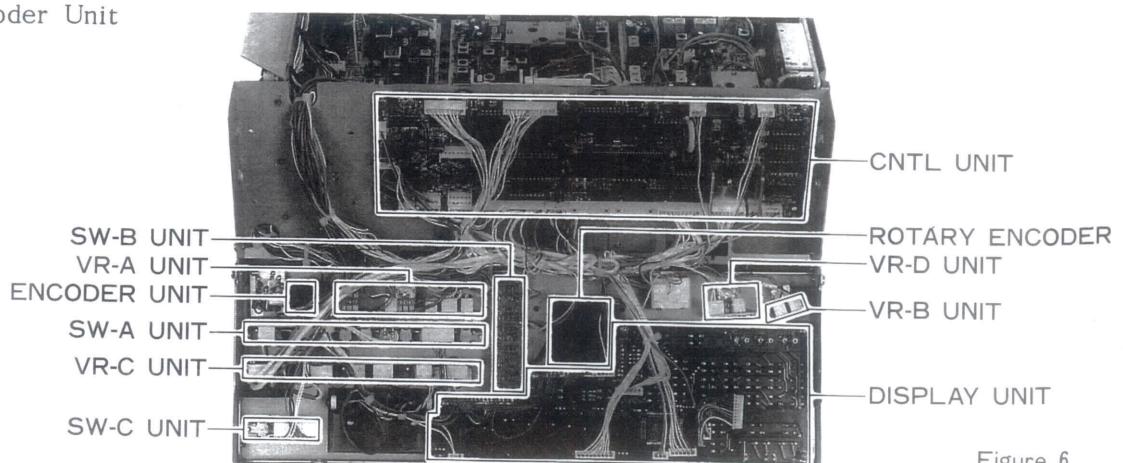


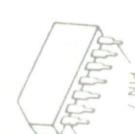
Figure 6

RX UNIT PCB LAYOUT

RX UNIT (No. 3×××



μ PC1037H(03003,3046)



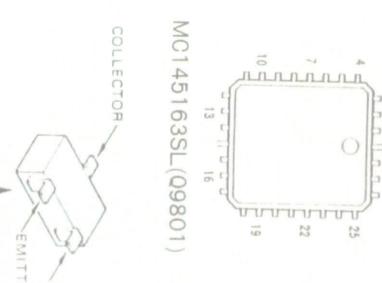
μ PC577H(Q3021)



LA6324M(09301,9401)



MO145163SL(09801)

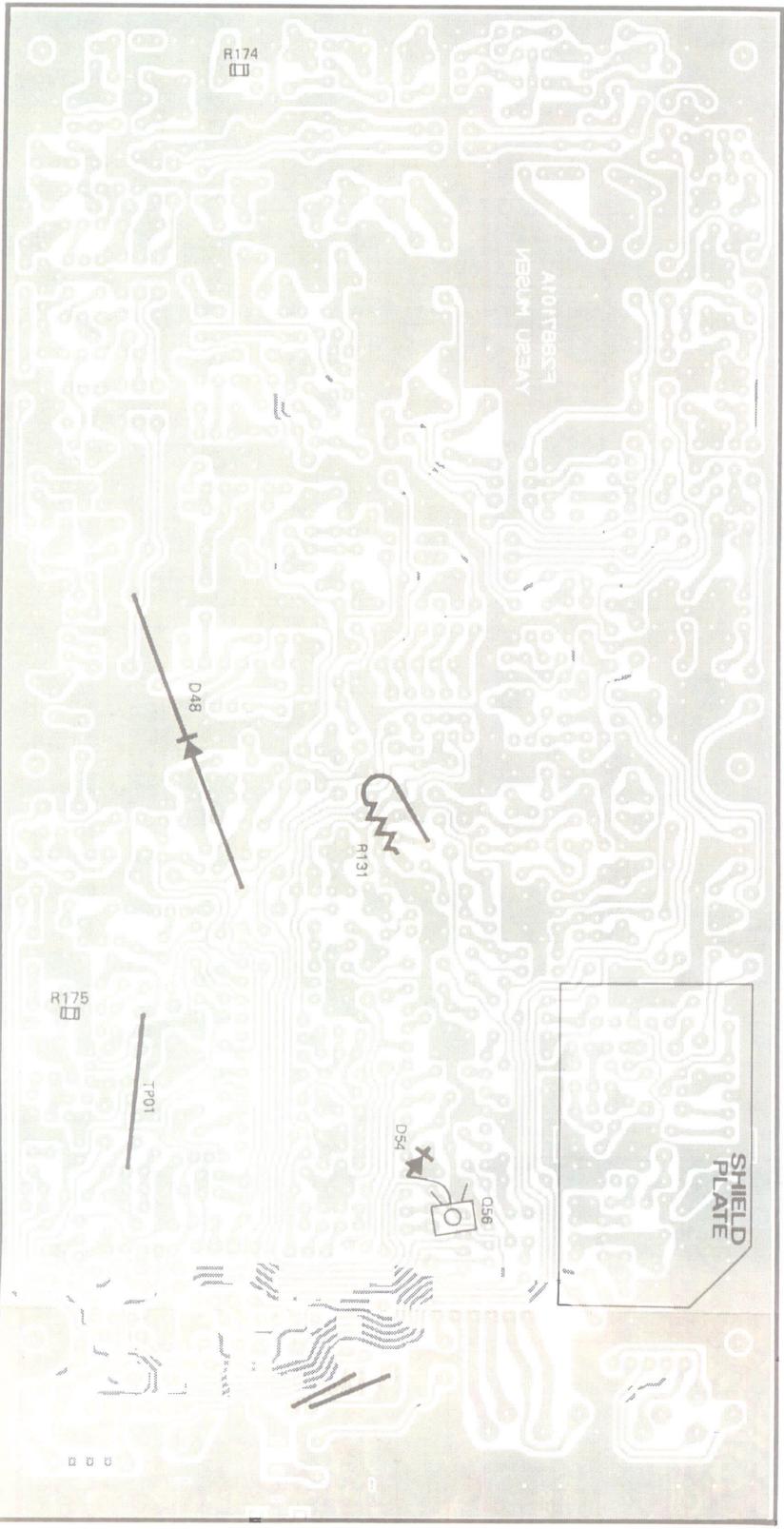
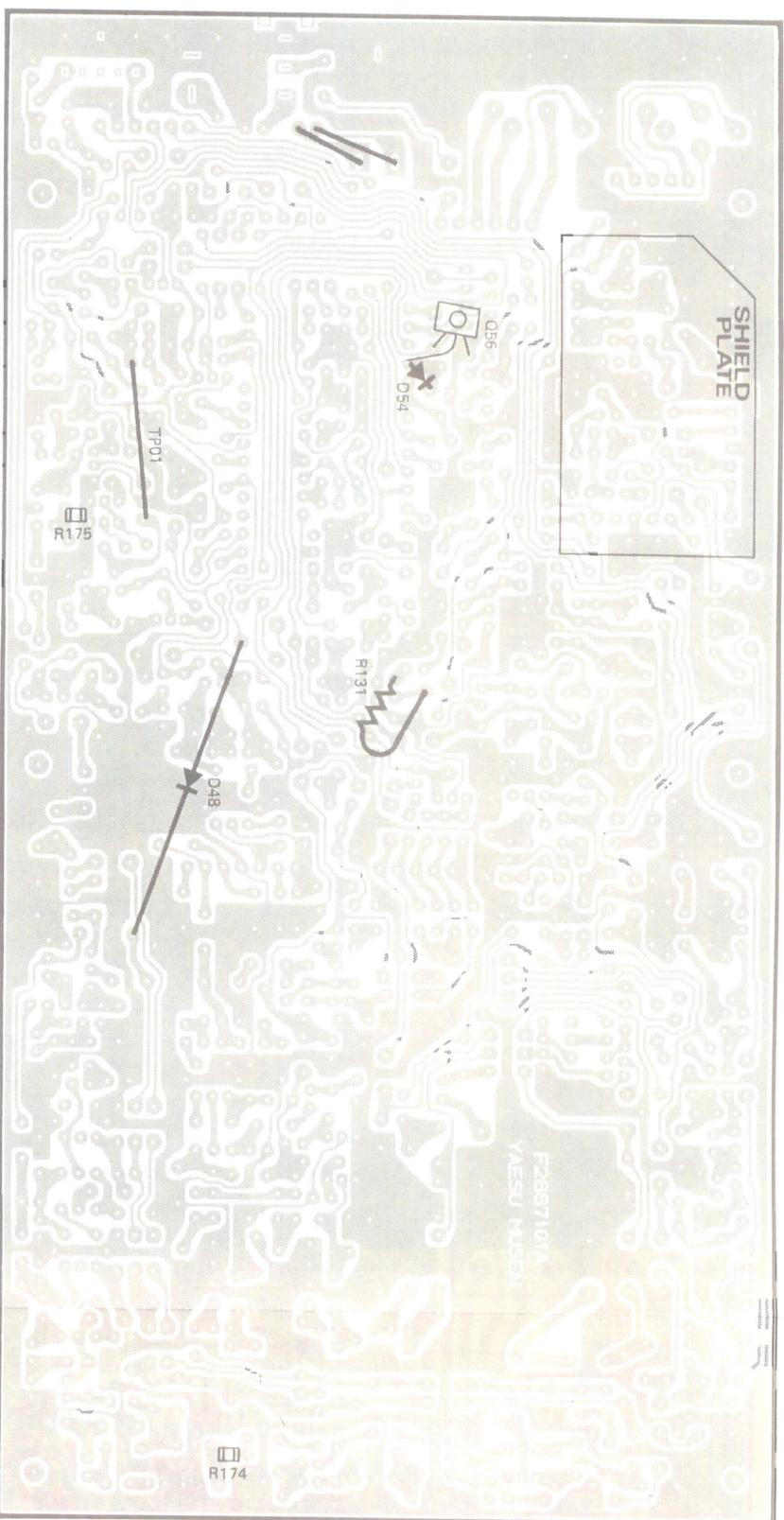


2SC02619F(FB) (09802,9803)

2SC02712GR(LG)

(09001,9003,9005)

RX UNIT PARTS LAYOUT



Component side (obverse)

Component side (reverse)

	E(S)	C(D)	B (G ₁)	REMARKS		E(S)	C(D)	B (G ₂)	REMARKS
Q3001	3.06	7.60	3.70		03029	0.03	0.02	0.02	FM
Q3002	3.6	1.30	2.00		03030	0	4.0/0	0/6.7	FM SOLVR MAX/MIN
Q3004	3.0	7.80	3.60		03031	0.84	3.60	1.49	FM
Q3005	0.67	7.60	1.40		03032	0.75	6.65	0.85	2.45 SSB-CW (No SIG.)
Q3006	0	7.70	1.20		03033	4.50	7.60	5.10	SSB-CW
Q3007	0.85	7.60			03034	4.50	6.10	5.00	SSB-CW
Q3008	0.85	7.60			03035	4.00	7.60	4.65	SSB-CW
Q3009	3.42	7.50	3.48		03036	0.75	6.70	0.84	2.42 SSB-CW (No SIG.)
Q3010	1.95	7.50	2.60		03037	4.70	7.65	5.30	SSB-CW
Q3011	1.95	7.50	2.60		03038	0	2.43	0.05	SSB-CW (No SIG.)
Q3012	1.95	7.60	2.60		03039	3.0	7.7	3.7	
Q3013	1.95	7.60	2.60		03040	0	0	7.5	
Q3015	0	7.8/0		NB ON/OFF	03041	0	0.01	4.77	
Q3017	0	4.45			03042	0	780/06	0.06/5.10	—
Q3018	0	5.30	0.28		03043	0	780/06	0.06/5.10	SSB-CW / SSB-CW
Q3019	1.16	7.70	1.83	FM	03044	0	780/06	0.60/5.20	FM-N / FM-N
Q3020	0	3.75	0.68	FM	03045	0	780/06	0.06/2.70	FM-W / FM-W
Q3022	1.40	7.70	2.02	FM	03047	7.86	7.71/01	0.06/7.82	FM-N / FM-FM-N
Q3023	0.30	2.80	1.00	FM	03048	7.86	0.08/7.52	7.83/06	FM-N / FM-FM-N
Q3024	0	2.20/0		FM / FM	03049	0	3.14	0	
Q3025	0	0.01	4.76	FM	03054	0	0.01/0.04	4.84/0.01	MUTE ON/OFF
Q3026	0	0.02	4.76	FM	03055	7.50	0.07	7.45	FM
Q3027	0	0.02	0.01	FM	03056	0	0.01/1.63	4.84/0.01	MUTE ON/OFF
Q3028	0	0.02	0.02	FM					

	E(S)	C(D)	B (G ₁)	REMARKS		E(S)	C(D)	B (G ₂)	REMARKS
Q3003	7.00	6.15	—	0	3.11	3.11	3.11		
Q3021	5.10	1.90	1.90	0	7.60	2.80	7.00	FM	
Q3046	6.94	6.09	—	0	3.07	3.07	3.07		

RX UNIT VOLTAGE CHART

(DC VOLTS)

	E(S)	C(D)	B (G ₁)	REMARKS		E(S)	C(D)	B (G ₂)	REMARKS
Q3010-3013,3016-3018	3.0	7.80	3.60		03029	0.03	0.02	0.02	FM
3020,3022,3023,3028	3.0	7.80	3.60		03030	0	4.0/0	0/6.7	FM SOLVR MAX/MIN
3029,3031,3033-3035	0.67	7.60	1.40		03031	0.84	3.60	1.49	FM
3037-3039	0	7.70	1.20		03032	0.75	6.65	0.85	2.45 SSB-CW (No SIG.)
Q3053B	0.85	7.60			03033	4.50	7.60	5.10	SSB-CW
(Q3001,3005,3009,3019)	0.85	7.60			03034	4.50	6.10	5.00	SSB-CW
Q3008	0.85	7.60			03035	4.00	7.60	4.65	SSB-CW
Q3009	3.42	7.50	3.48		03036	0.75	6.70	0.84	2.42 SSB-CW (No SIG.)
Q3010	1.95	7.50	2.60		03037	4.70	7.65	5.30	SSB-CW
Q3011	1.95	7.50	2.60		03038	0	2.43	0.05	SSB-CW (No SIG.)
Q3012	1.95	7.60	2.60		03039	3.0	7.7	3.7	
Q3013	1.95	7.60	2.60		03040	0	0	7.5	
Q3015	0	7.8/0		NB ON/OFF	03041	0	0.01	4.77	
Q3017	0	4.45			03042	0	780/06	0.06/5.10	—
Q3018	0	5.30	0.28		03043	0	780/06	0.06/5.10	SSB-CW / SSB-CW
Q3019	1.16	7.70	1.83	FM	03044	0	780/06	0.60/5.20	FM-N / FM-N
Q3020	0	3.75	0.68	FM	03045	0	780/06	0.06/2.70	FM-W / FM-W
Q3022	1.40	7.70	2.02	FM	03047	7.86	7.71/01	0.06/7.82	FM-N / FM-FM-N
Q3023	0.30	2.80	1.00	FM	03048	7.86	0.08/7.52	7.83/06	FM-N / FM-FM-N
Q3024	0	2.20/0		FM / FM	03049	0	3.14	0	
Q3025	0	0.01	4.76	FM	03054	0	0.01/0.04	4.84/0.01	MUTE ON/OFF
Q3026	0	0.02	4.76	FM	03055	7.50	0.07	7.45	FM
Q3027	0	0.02	0.01	FM	03056	0	0.01/1.63	4.84/0.01	MUTE ON/OFF
Q3028	0	0.02	0.02	FM					

	E(S)	C(D)	B (G ₁)	REMARKS		E(S)	C(D)	B (G ₂)	REMARKS
Q3003	7.00	6.15	—	0	3.11	3.11	3.11		
Q3021	5.10	1.90	1.90	0	7.60	2.80	7.00	FM	
Q3046	6.94	6.09	—	0	3.07	3.07	3.07		

RX UNIT IC VOLTAGE CHART

(DC VOLTS)

	1	2	3	4	5	6	7	REMARKS
Q3003	7.00	6.15	—	0	3.11	3.11	3.11	
Q3021	5.10	1.90	1.90	0	7.60	2.80	7.00	FM
Q3046	6.94	6.09	—	0	3.07	3.07	3.07	

COLLECTOR Emitter
BASE

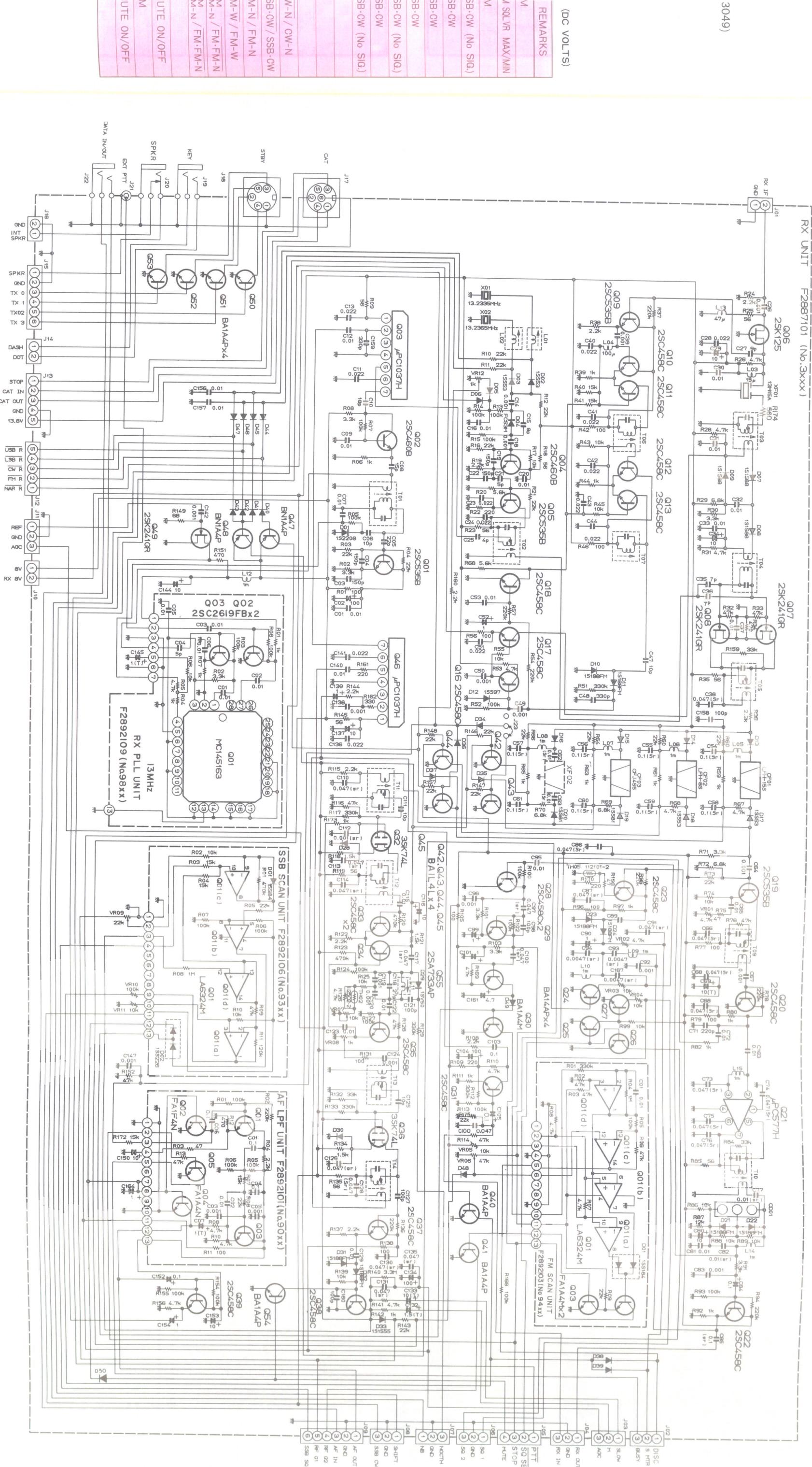
SOURCE Drain
GATE

COLLECTOR Emitter
BASE

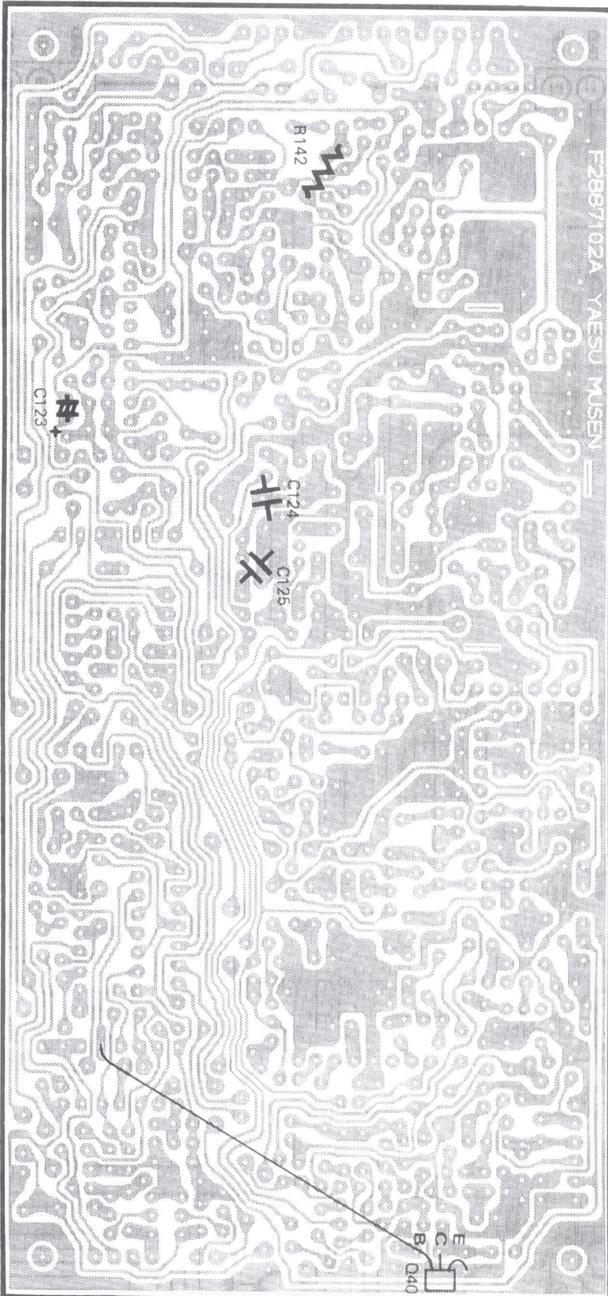
GATE SOURCE Drain

COLLECTOR Emitter
BASE

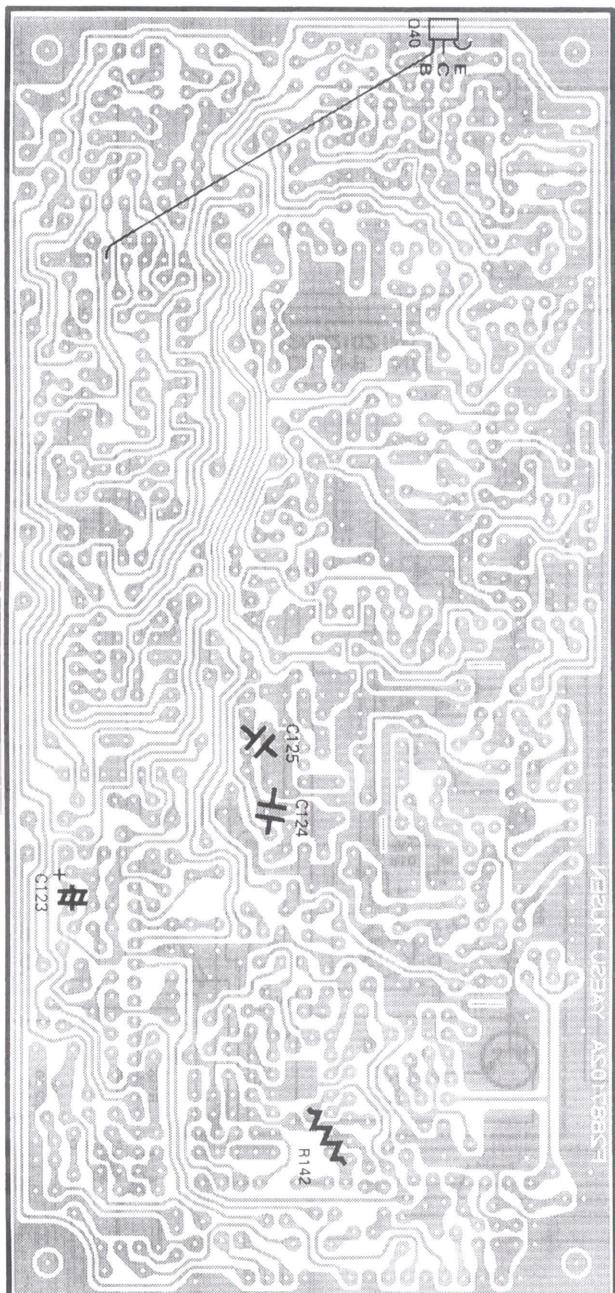
GATE SOURCE Drain



TX UNIT PARTS LAYOUT



Solder side (obverse)



Solder side (reverse)

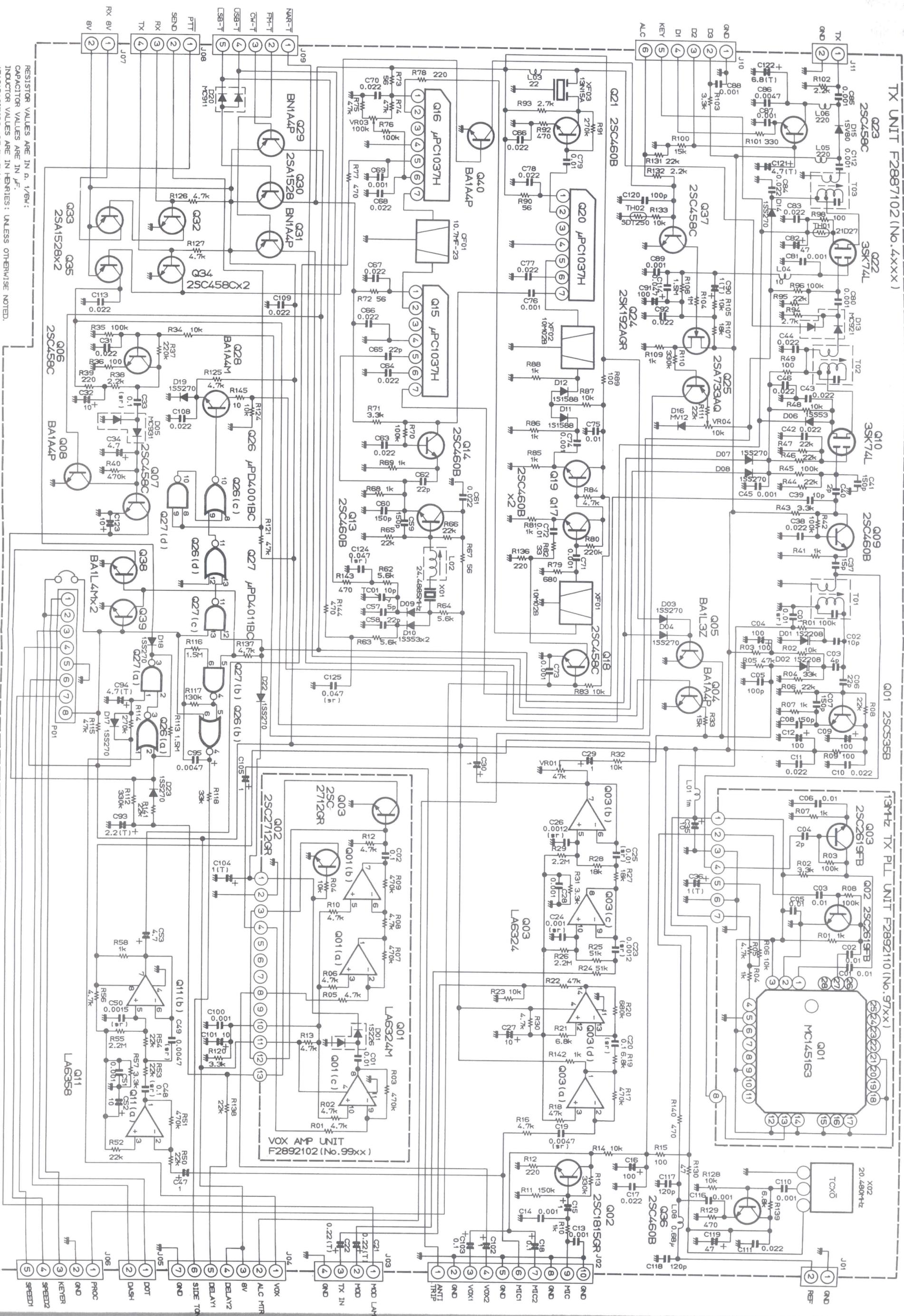
TX UNIT VOLTAGE CHART (DC VOLTS)													
	E(S)	C(D)	(G ₁)	B (G ₂)	REMARKS	E(S)	C(D)	(G ₁)	B (G ₂)	REMARKS			
Q4001	2.8	7.5	3.4			04023	0	7.6	0				
Q4002	3.42	7.41	4.11			04024	2.69	7.88	0.99				
Q4004	0	0	4.96/0.04		SSB-CW / FM-N FM / CW-N	04025	3.30	1.74	2.70			CW ALC/DISC @ 10W output	
Q4005	0	0	7.2/0		SSB CW / FM	04028	0.62/0.79	3.30/0	0.01/1.75			CW KEY UP/DOWN	
Q4006	0.14/0.16	4.39/3.90	0.80/0.055		with MIC input / without MIC input	04029	7.90	7.85/0	0/7.85			SSB / SSB	
Q4007	0	1210/0.20	0.42/0.78		with MIC input / without MIC input / with MIC input without MIC input	04030	7.90	7.85/0	0/7.790			CW-N / CW/CW-N FM/FM-N/FM/FM-N	
Q4008	0	0.43/0.78	0			04031	7.90	7.80/0.01	0/7.80				
Q4009	1.3	3.5	2.0			04032	0	7.87/0.02	0/0.0074			TX / RX	
Q4010	0	7.0	1.5	2.0		04033	7.90	0.03/0.02	7.90/7.80			TX / RX	
Q4013	2.85	7.72	3.47		SSB	04034	0	7.90/0	0/0.75			TX / RX	
Q4014	1.30	3.57	1.96		SSB	04035	7.90	0.02/0	7.90/0			TX / RX	
Q4017	0.8	3.5	1.4		SSB	04036	3.4	7.4	4.1				
Q4018	0	0/0.06	0/0.69		SSB, PROG OFF/ON	04037	0	1.08	0.48			@ 10W output	
Q4019	2.82	7.30	3.52		SSB	04038	0	7.70/0	0/4/7.10			CW KEY UP/DOWN	
Q4021	1.40	5.27	2.06		SSB	04039	0	0/04/7.10	4/5/0			CW KEY UP/DOWN	
Q4022	0	7.13	1.43	2.68	DRIVE control CCW	04040	0	0	0/7.70			TX / RX	

TX UNIT IC VOLTAGE CHART

(DC VOLTS)

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	REMARKS
Q4003	2.77	2.78	2.76	6.76	2.80	2.81	2.81	2.81	2.35	0	2.77	2.77	2.76		
Q4011	2.80	2.80	2.80	0	2.35	2.82	2.82	6.75							SSB
Q4015	7.00	6.10	—	0	3.05	3.05	3.05								SSB
Q4016	7.0	6.1	—	0	3.1	3.1	3.1								SSB
Q4020	6.90	6.10	—	0	3.05	3.05	3.05								SSB
Q4026	L/L	H/L	L/L	L/H	H/H	L/L	0	L/L	H/L	L/H	L/L	L/H	L/L	L/H	L/L
Q4027	L/H	H/L	L/H	L/3.81	H/H	L/3.67	0	L/H	H/H	L/L	H/H	L/H	L/L	L/H	L/L
															H=8.0 L=0
014															OW KEY UP/DOWN
021															
1)															
002)															

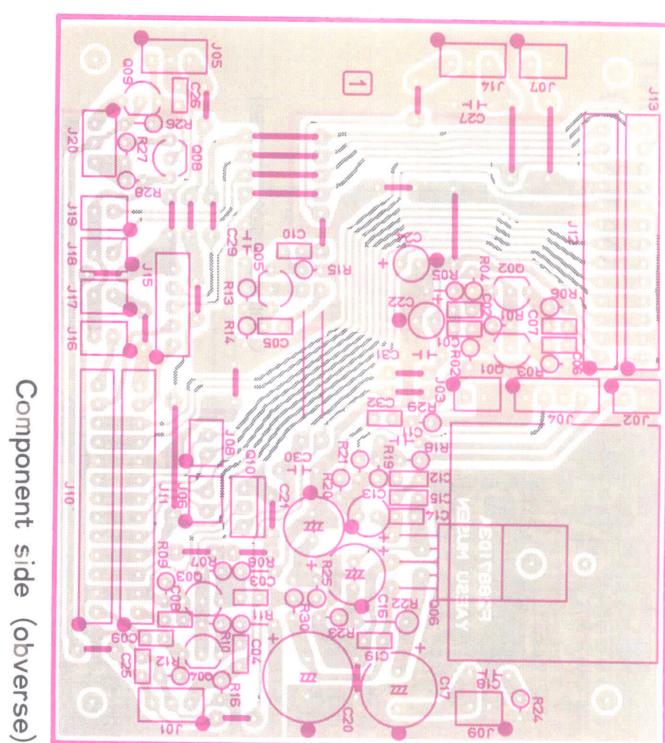
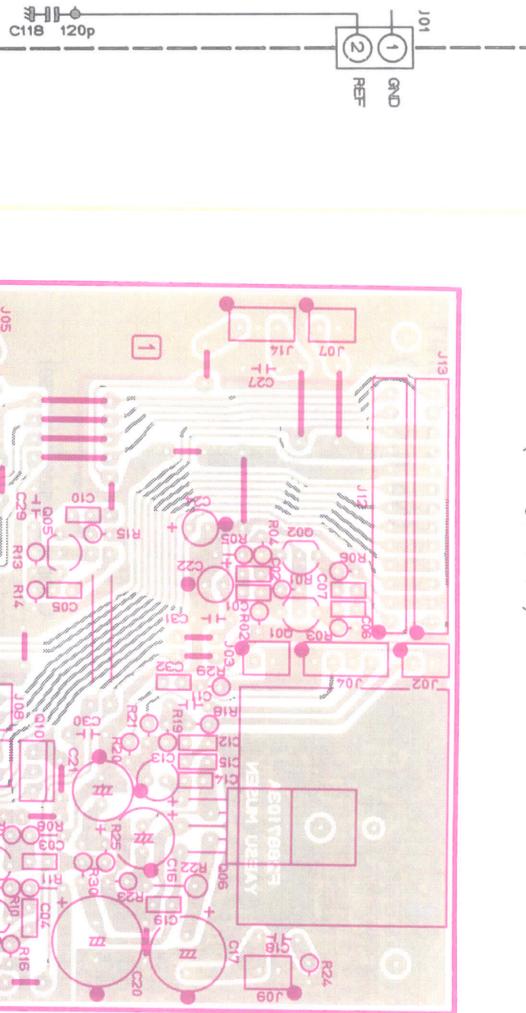
TX UNIT CIRCUIT DIAGRAM



— 8 —

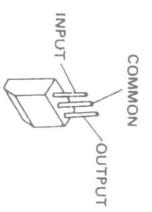
AF UNIT PARTS LAYOUT/CIRCUIT DIAGRAM

AF UNIT (No. 5×××

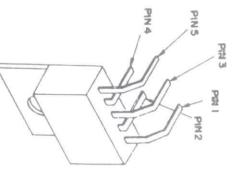


Component side (obverse)

μ PC78L08(Q50010)

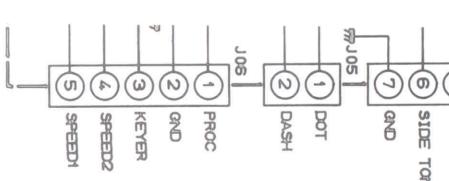
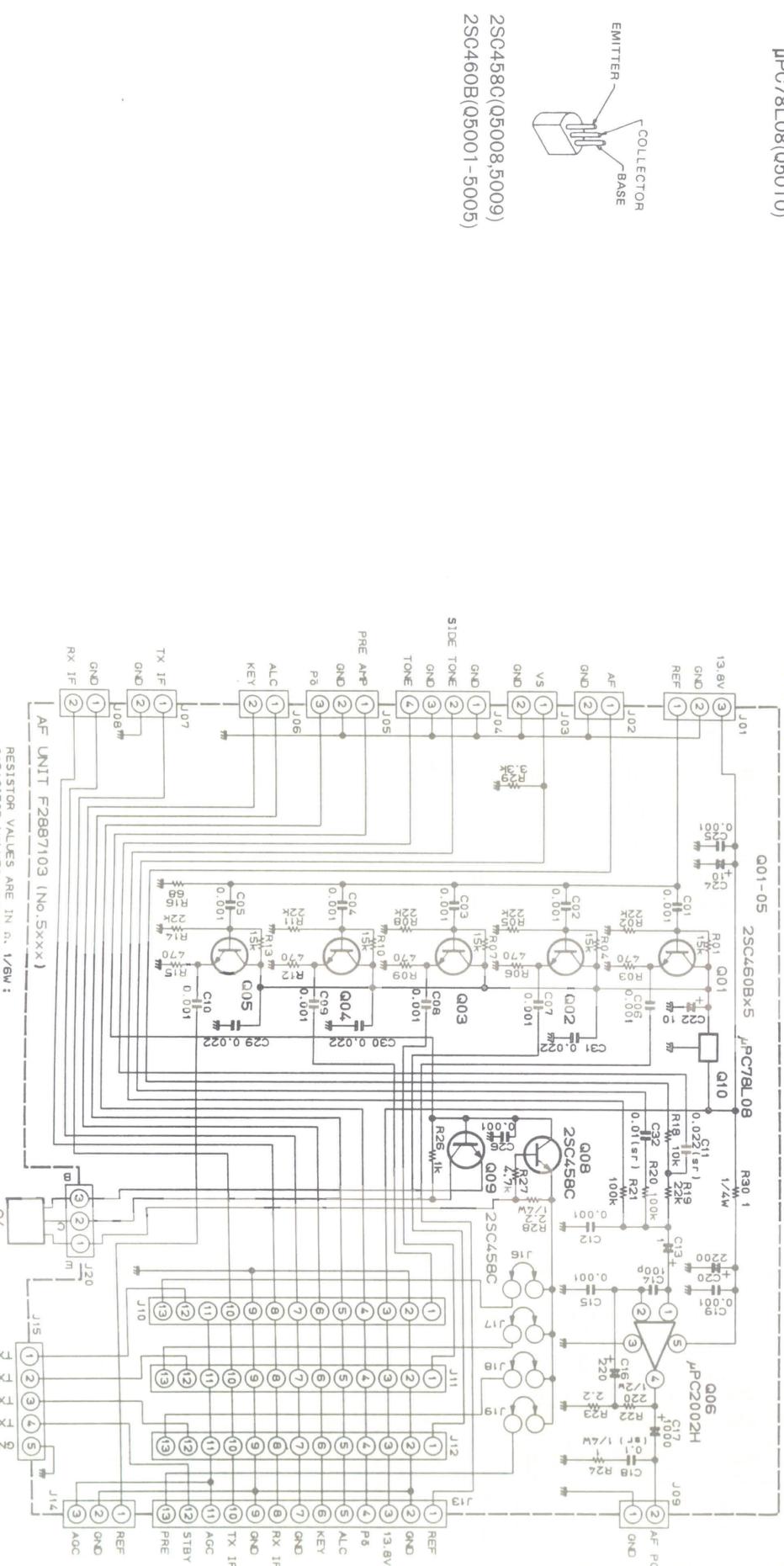


μ PC2002H(Q5006)



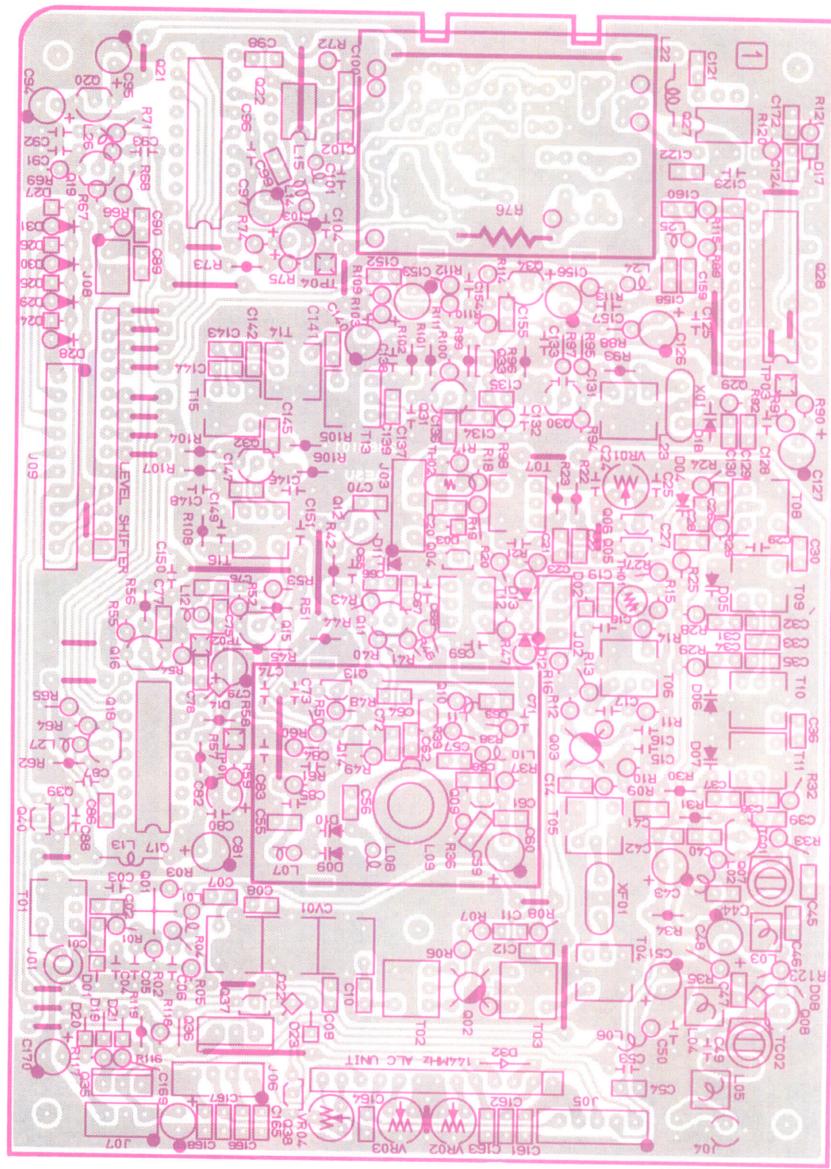
	1	2	3	4	5	REMARKS	1(IN)	2(GND)	3(OUT)	4	5	REMARKS
05006	0.7	0.7	0	6.4	13.6		05010	13.8	0	8.0		
05002	3.4	8.0	4.1				05008	0.01/1250	0.01/1360	0.01/1250		PRE AMP OFF/ON
05003	3.4	8.0	4.1				05009	0.01/1360	13.60	0.01/1310		PRE AMP OFF/ON
05004	3.4	8.0	4.1									

AF UNIT IC VOLTAGE CHART
(DC VOLTS)

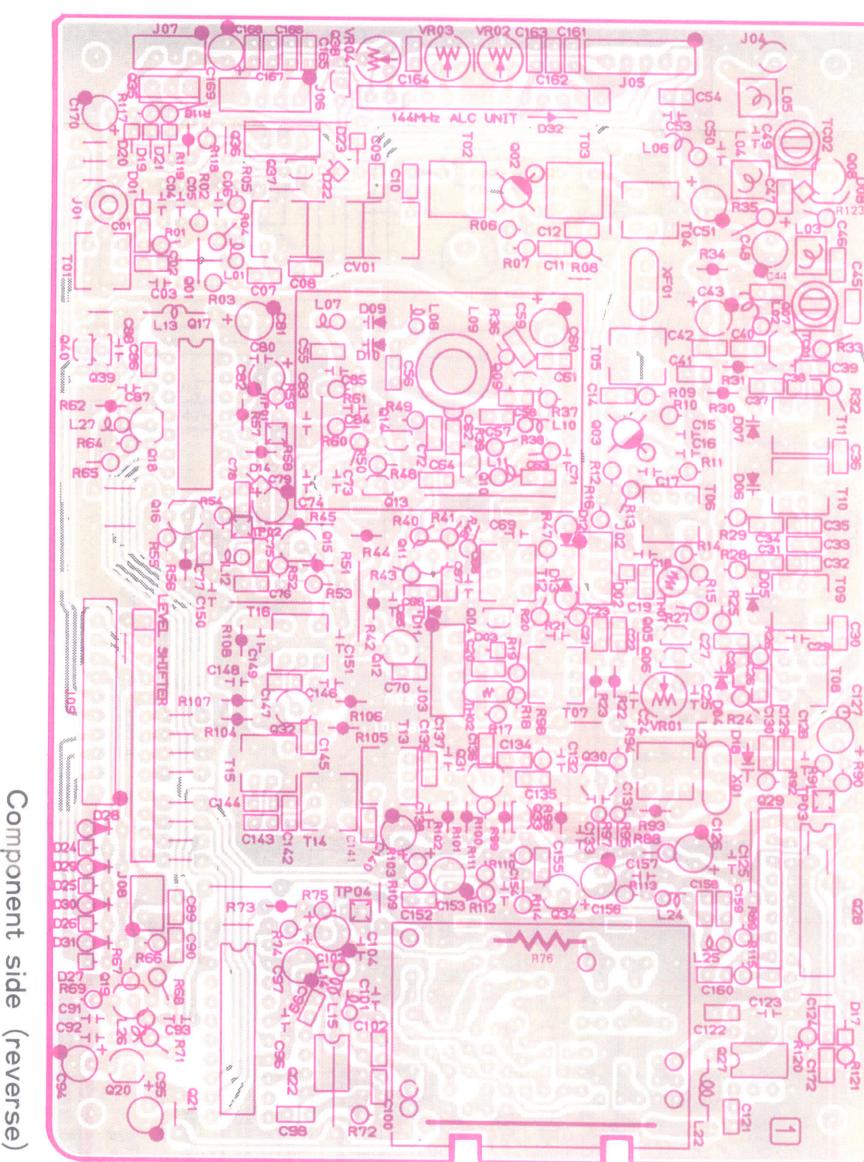


144MHz MAIN UNIT PARTS LAYOUT

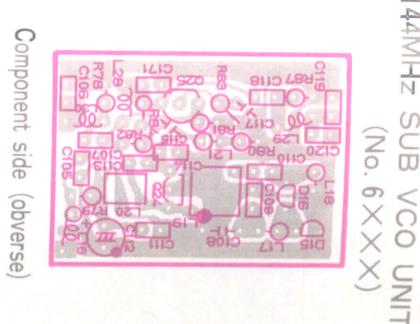
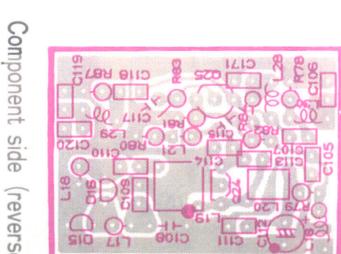
144MHz MAIN UNIT (No. 6×××



Component side (obverse)



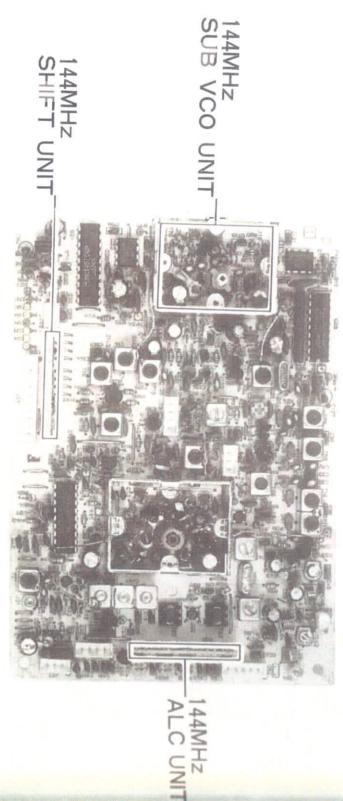
Component side (reverse)



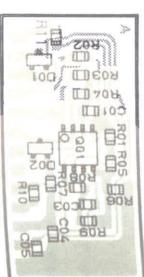
Component side (obverse)

Component side (reverse)

144MHz SHIFT UNIT
(No. 91××

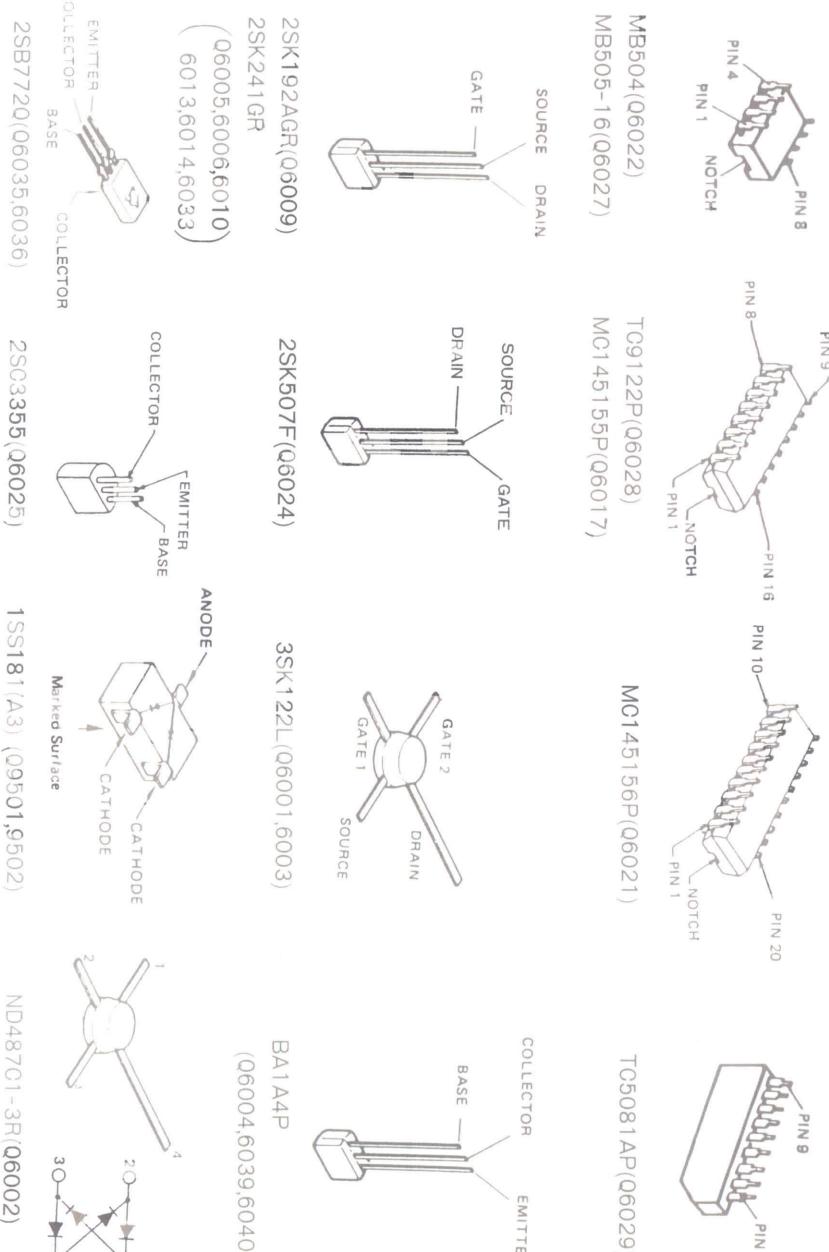


144MHz ALC UNIT
(No. 95××

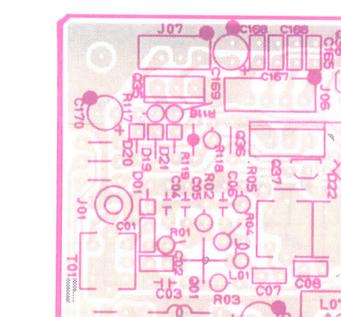


Solder side (obverse)

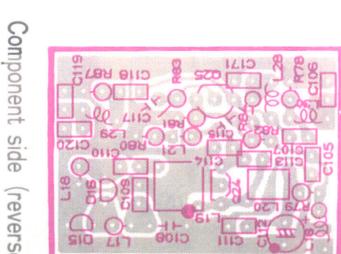
Solder side (obverse)



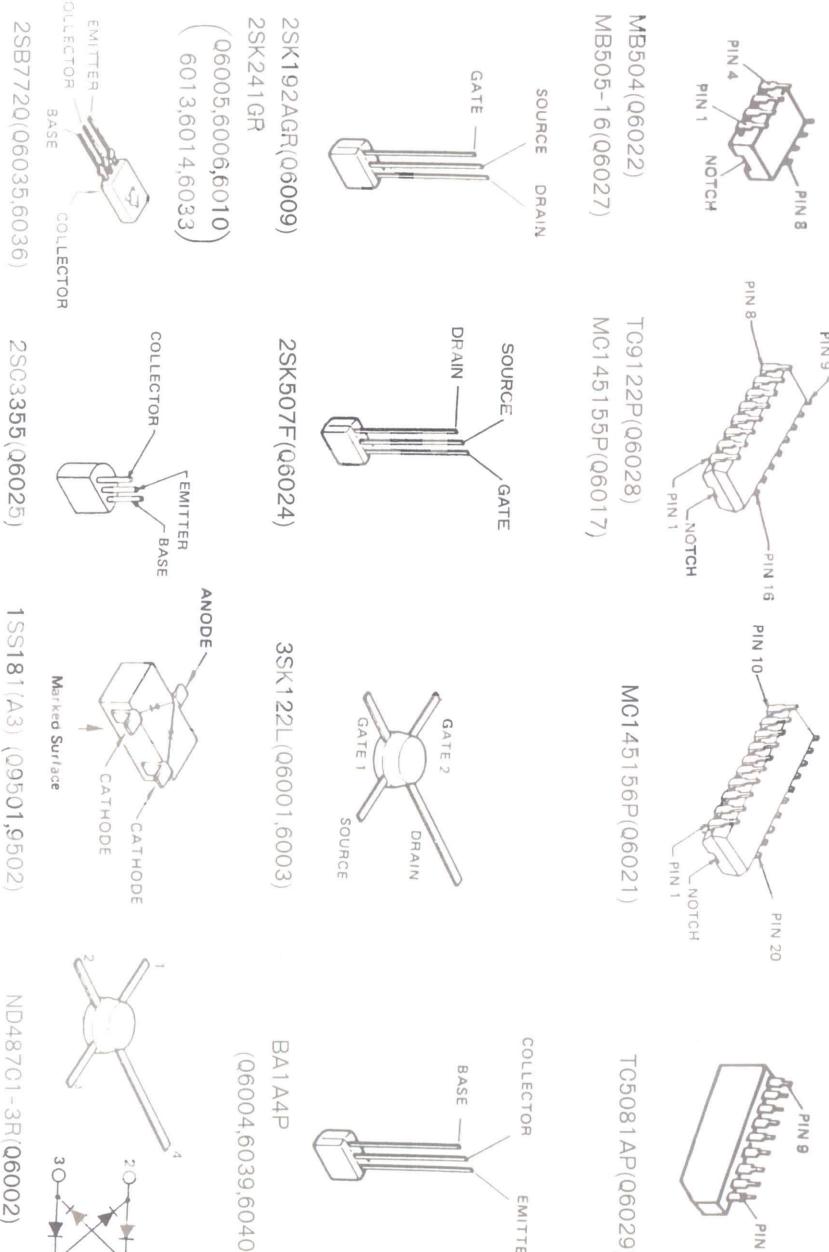
Component side (obverse)



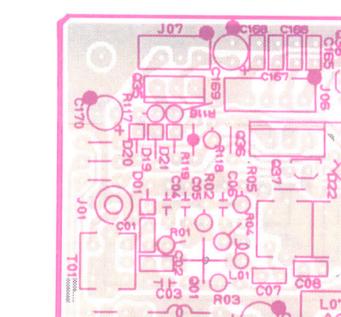
Component side (reverse)



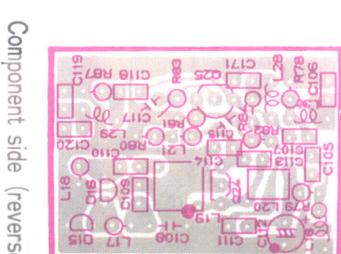
Component side (reverse)



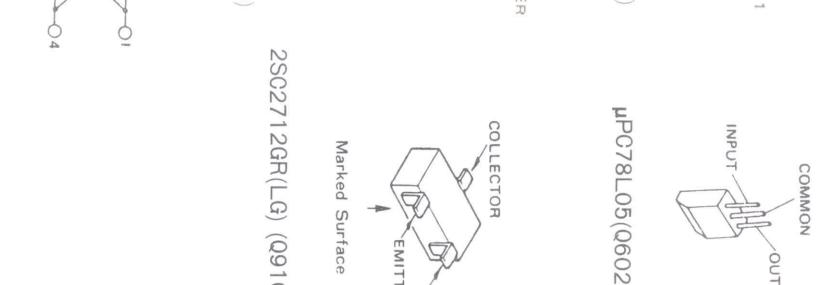
Component side (obverse)



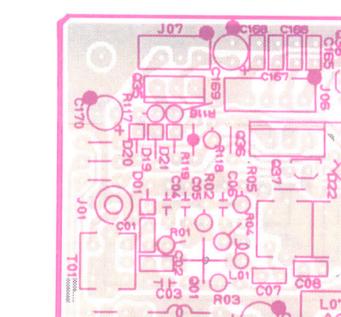
Component side (reverse)



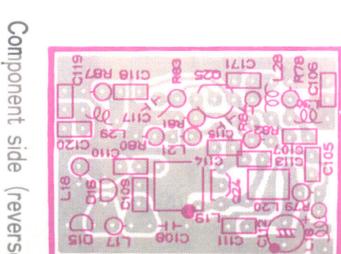
Component side (reverse)



Component side (obverse)

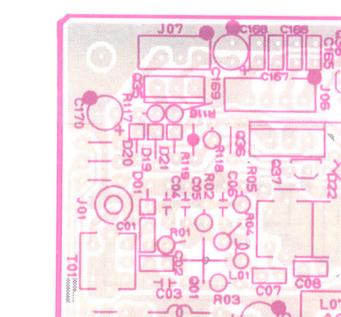


Component side (reverse)

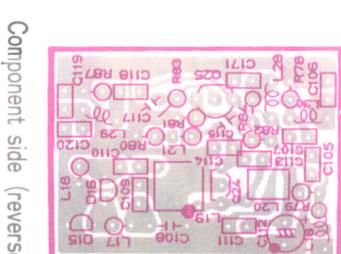


Component side (reverse)

Component side (obverse)

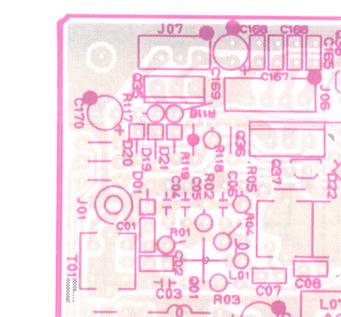


Component side (reverse)

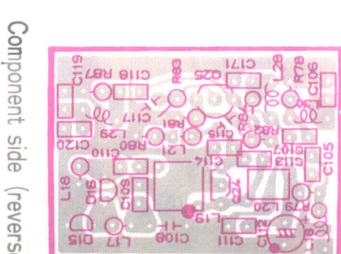


Component side (reverse)

Component side (obverse)

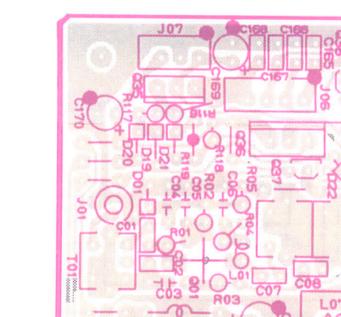


Component side (reverse)

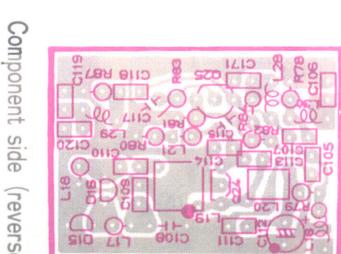


Component side (reverse)

Component side (obverse)

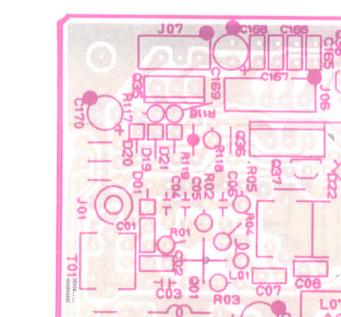


Component side (reverse)

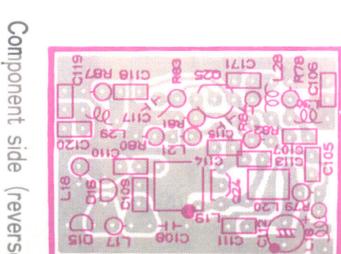


Component side (reverse)

Component side (obverse)

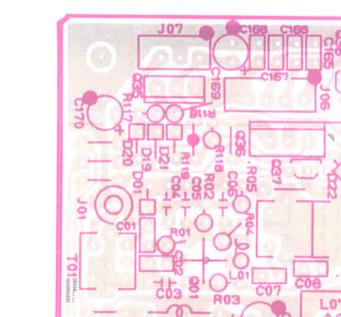


Component side (reverse)

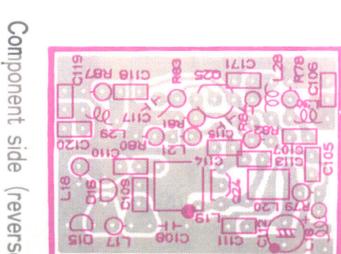


Component side (reverse)

Component side (obverse)

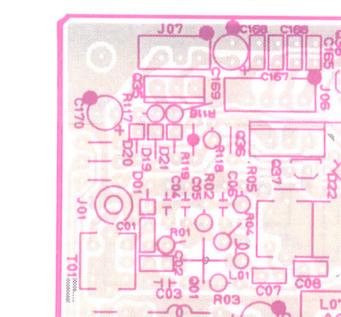


Component side (reverse)

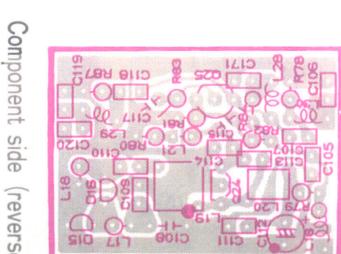


Component side (reverse)

Component side (obverse)

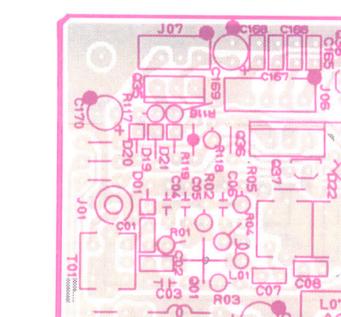


Component side (reverse)

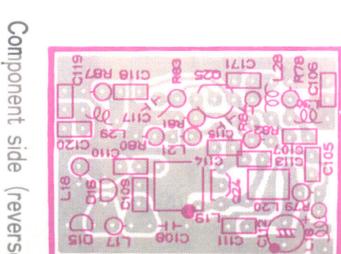


Component side (reverse)

Component side (obverse)

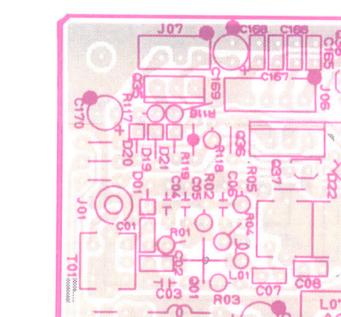


Component side (reverse)

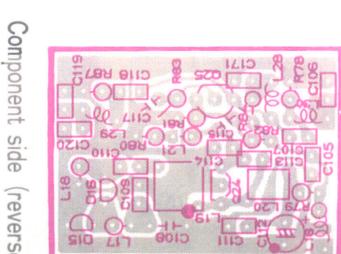


Component side (reverse)

Component side (obverse)

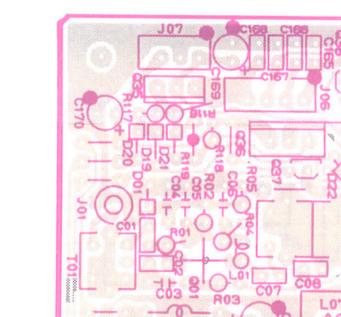


Component side (reverse)

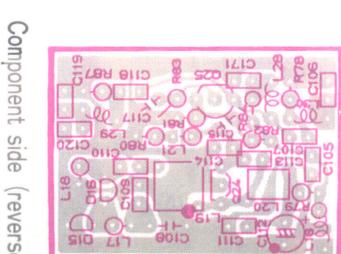


Component side (reverse)

Component side (obverse)

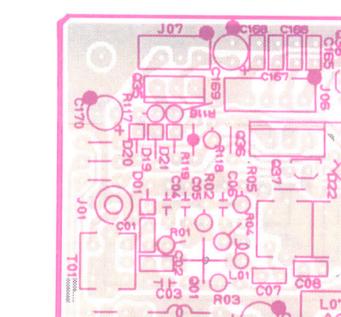


Component side (reverse)

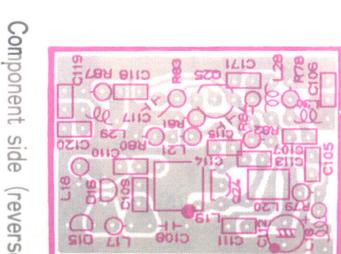


Component side (reverse)

Component side (obverse)

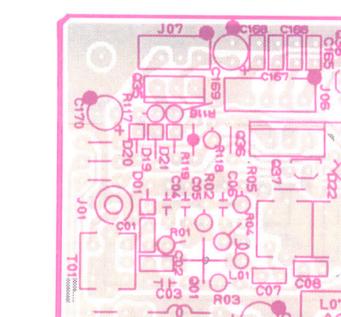


Component side (reverse)

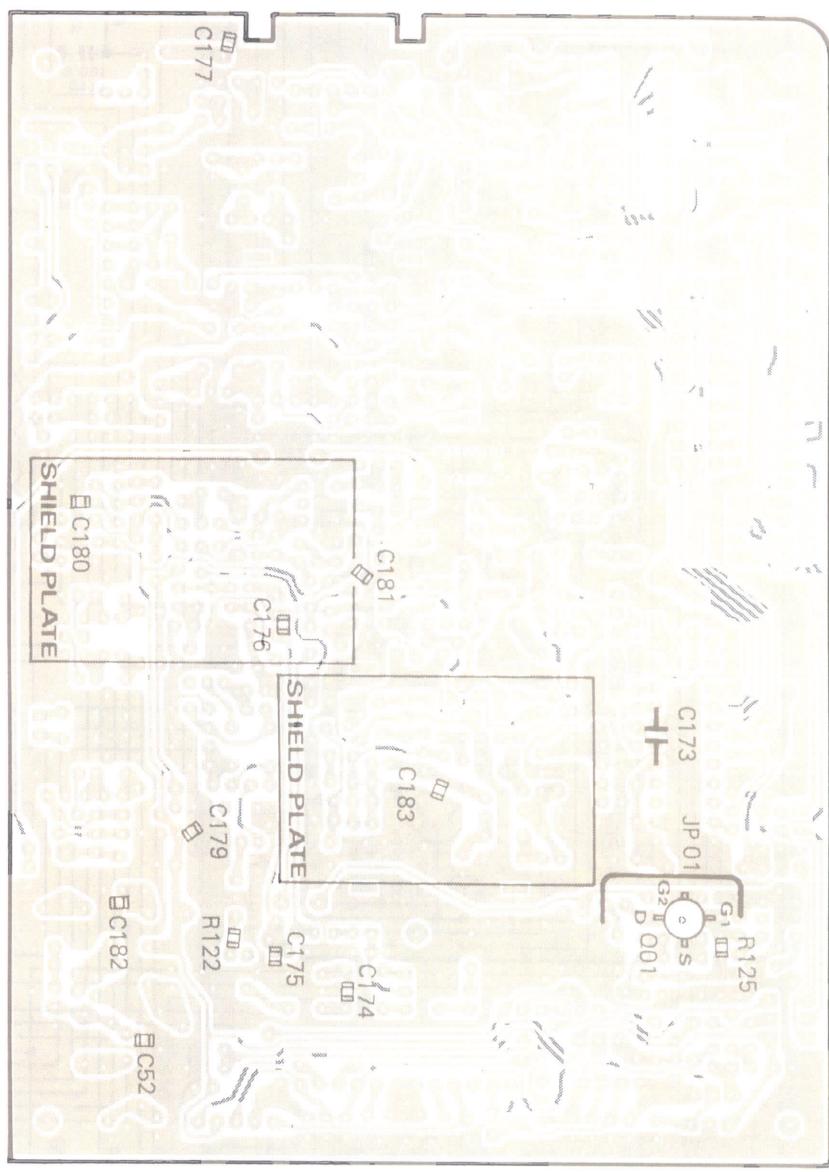


Component side (reverse)

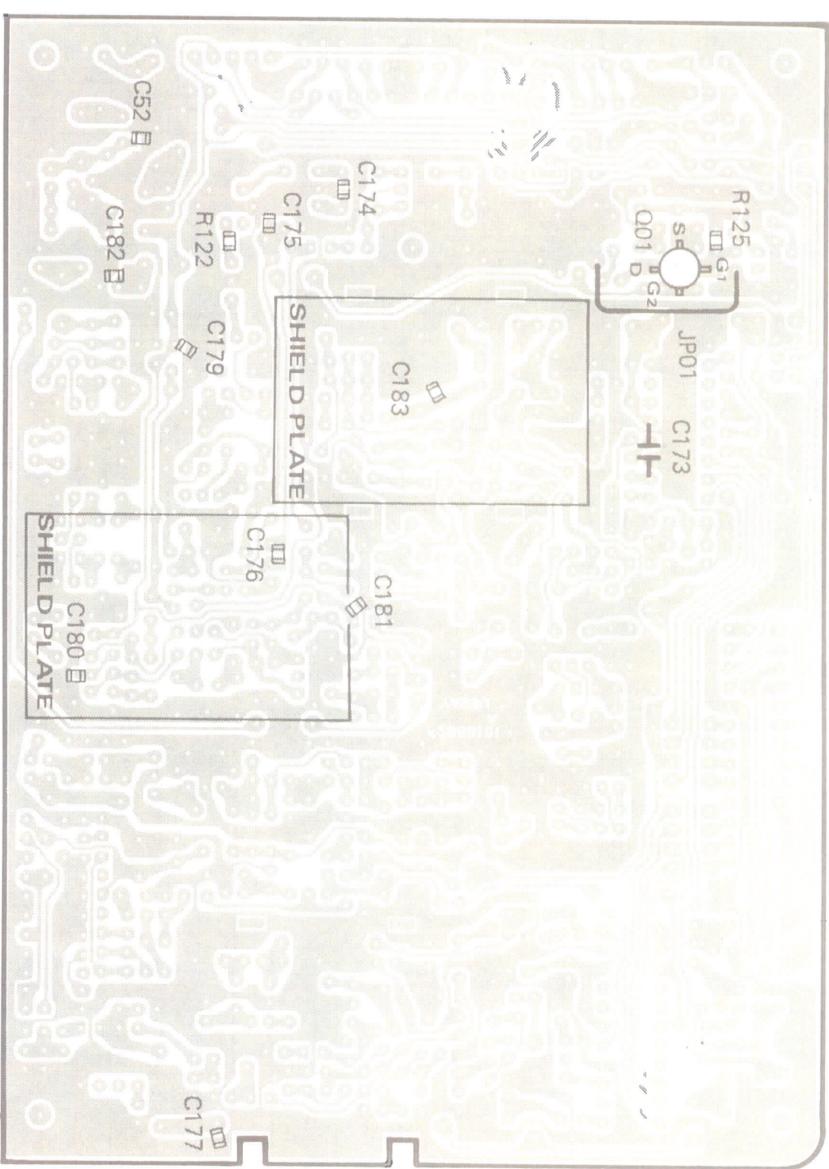
Component side (obverse)



Component side (reverse)



Solder side (obverse)



Solder side (reverse)

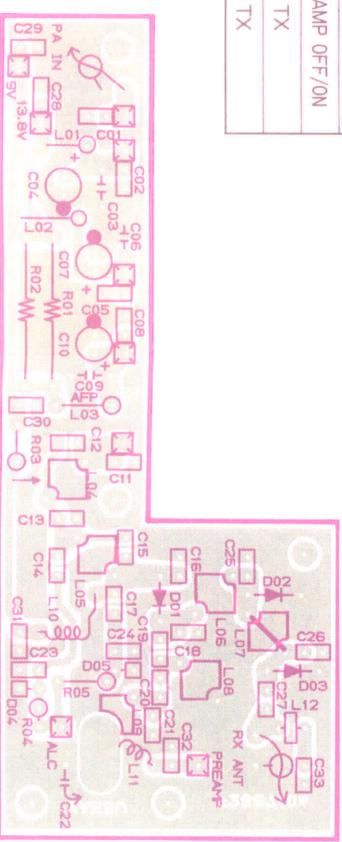
144MHz MAIN UNIT VOLTAGE CHART

(DC VOLTS)

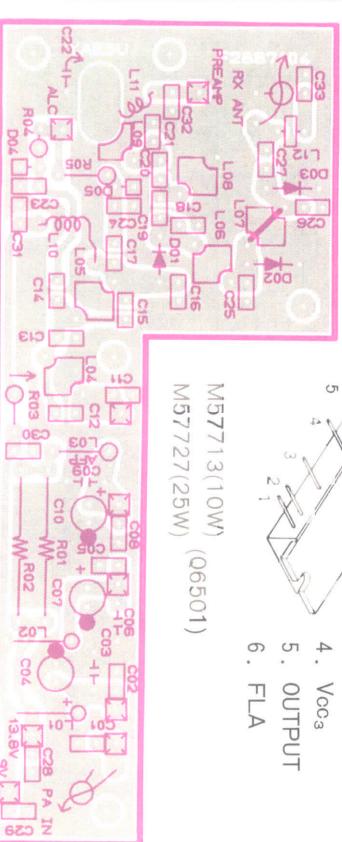
	E(S)	C(D)	(G ₁)	B (G ₂)	REMARKS		E(S)	C(D)	(G ₁)	B (G ₂)	REMARKS
Q6001	1.03	8.70	0.93	2.04	RX	06018	0.2	9.0	2.3		
Q6003	0.6	8.4	0.6	4.5	RX	06019	1.5	8.8	2.1		
Q6004	0/9.0	0/0	0/0.01		RX/TX	06024	1.3	8.9	0		
Q6005	1.0	8.6	0		RX	06025	1.3	7.8	2.0		
Q6006	1.0	8.6	0		RX	06030	2.3	7.9	2.9		
Q6007	1.0	8.9	2.5		RX	06031	0.9	7.8	1.5		
Q6008	0	13.5	0.7		RX	06032	8.70	1.96	1.20		
Q6009	0.66	8.50	0			06033	0	4.1	0		
Q6010	0	9.0	0			06034	0.9	4.9	1.5		
Q6011	1.45	8.70	1.65			06035	13.7	13.8	12.9		
Q6012	0	0.07	0.71			06036	9.00	0/900	905/832		RX / TX
Q6013	3.3	9.0	2.6			06037	9.00	900/0	0/76/900		RX / TX
Q6014	0	4.9	0			06038	0/1260	0/1260	0/01/082		PRE AMP OFF/ON
Q6015	1.10	5.80	1.73			06039	0	0.13/880	490/0		RX / TX
Q6016	1.40	5.20	1.14			06040	0	885/022	0/490		RX / TX

144MHz PA UNIT IC VOLTAGE CHART (DC VOLTS)

	1	2	3	4	5	REMARKS
06501	—	13.80	9.00	13.34	—	@ 10W output



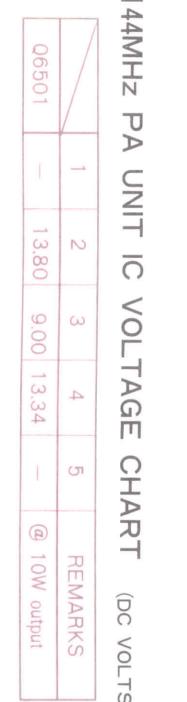
Component side (obverse)



Component side (reverse)



rse



obverse)

144MHz MAIN UNIT CIRCUIT DIAGRAM

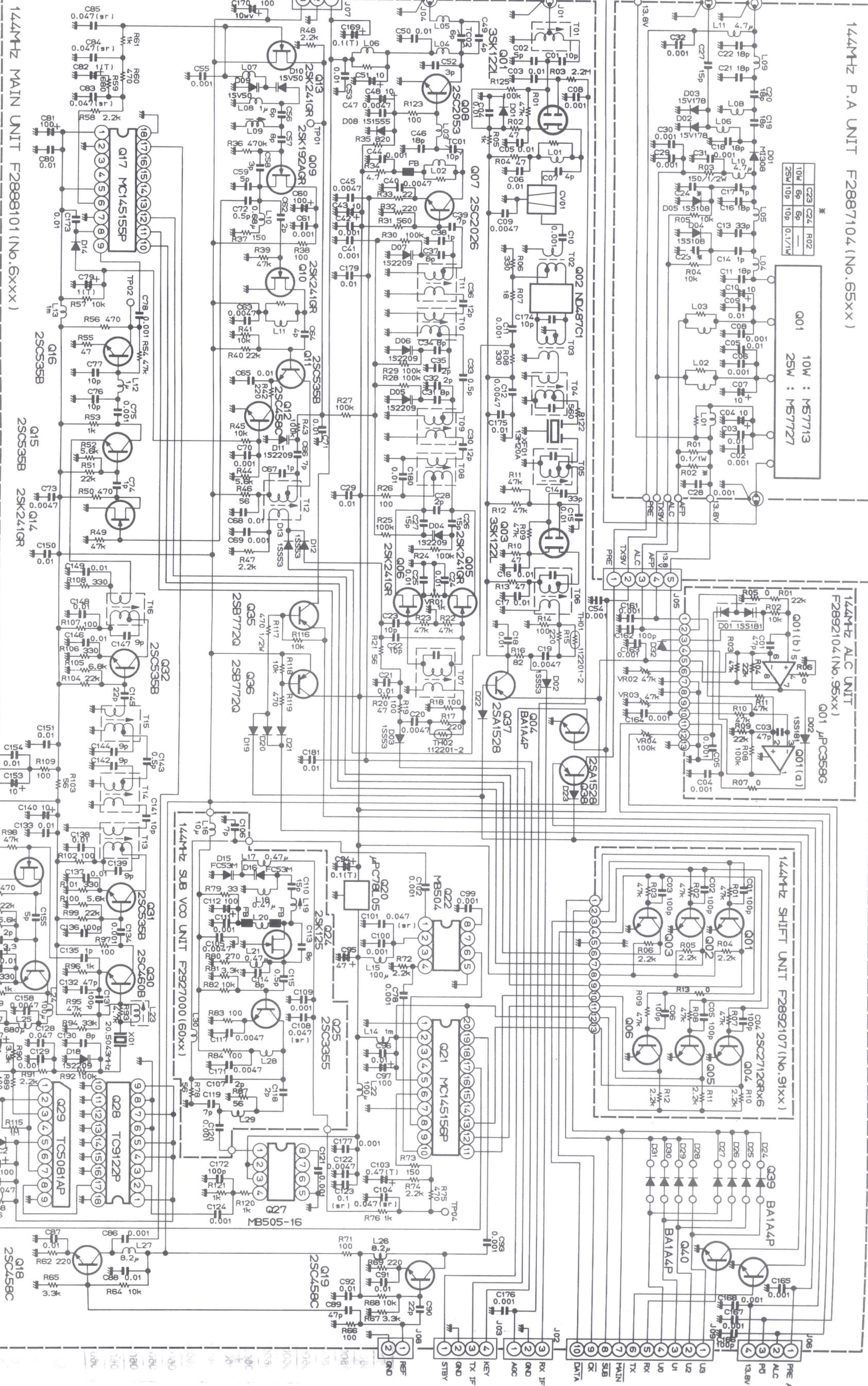
144MHz P.A. UNIT F2887104 (No.65xx)

144MHz ALC UNIT F2892104 (No.95xx)

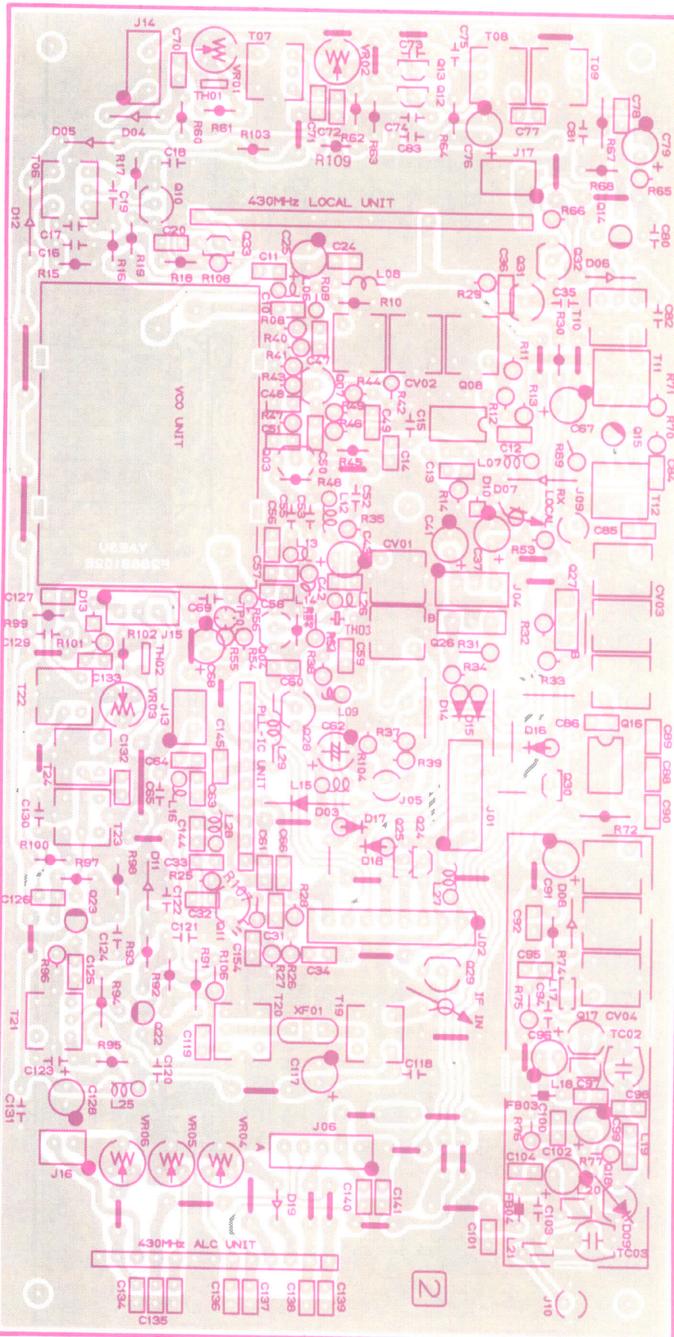
Q01 μ PC358G

144MHz SHIFT UNIT F2892107 (No.91xx)

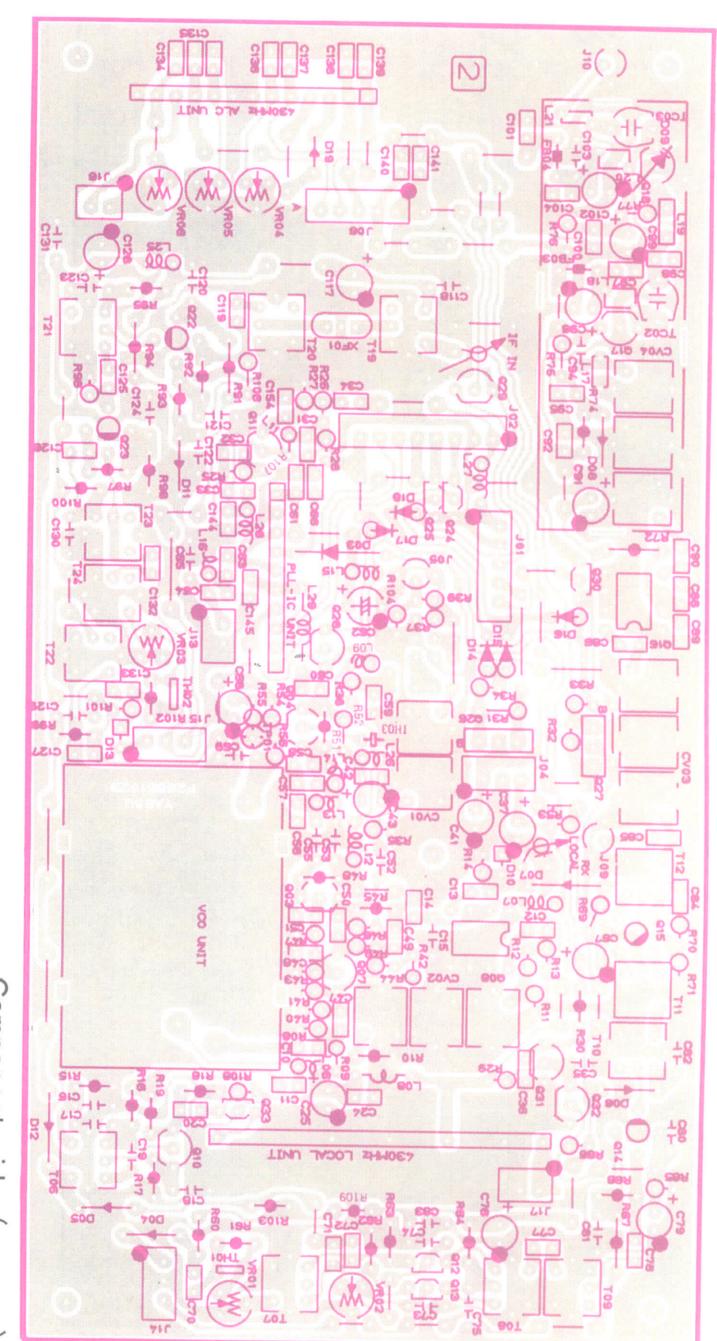
Q01 MC14515SP



430MHz RF UNIT (No. 7XXXX)

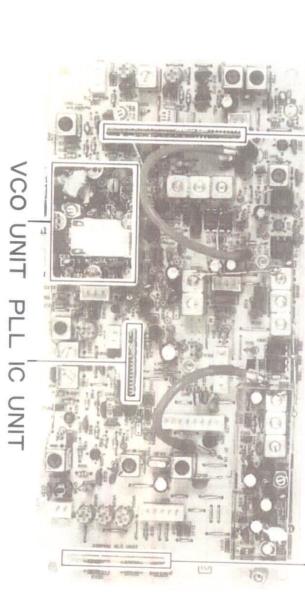


Component side (obverse)



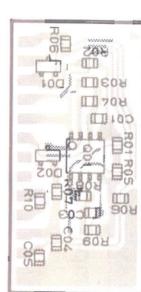
Component side (reverse)

430MHz LOCAL UNIT (No. 77XXX)



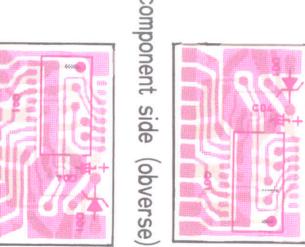
430MHz LOCAL UNIT (No. 77XXX)

430MHz ALC UNIT (No. 96XXX)



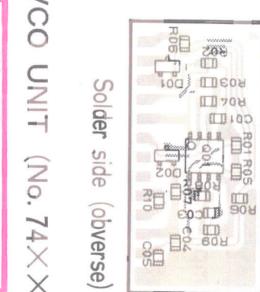
430MHz ALC UNIT (No. 96XXX)

PLL IC UNIT (No. 76XXX)

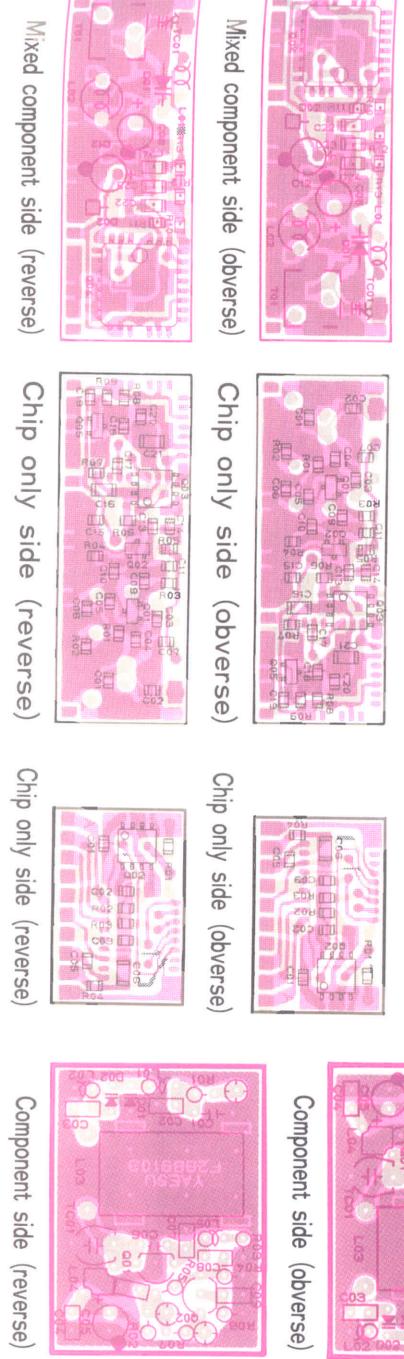


430MHz PLL IC UNIT (No. 76XXX)

VCO UNIT (No. 74XXX)



430MHz VCO UNIT (No. 74XXX)



Mixed component side (reverse)

Chip only side (reverse)

Component side (reverse)

2SA1528(Q7028,7029)

2SC458G
(Q7011,7031,7032)

2SC460B(Q7010)

2SK210GR(YG) (Q7701)

2SK302GR(TG) (Q7702)

2SK241GR
(Q7012,7013,7033)

3SK81(Q7023)

3SK122L(Q7014,7022)

1SS181(A3) (Q9601,9602)

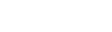
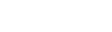
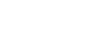
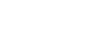
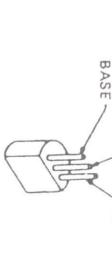
BA1A4P
(Q7024,7025,7034)

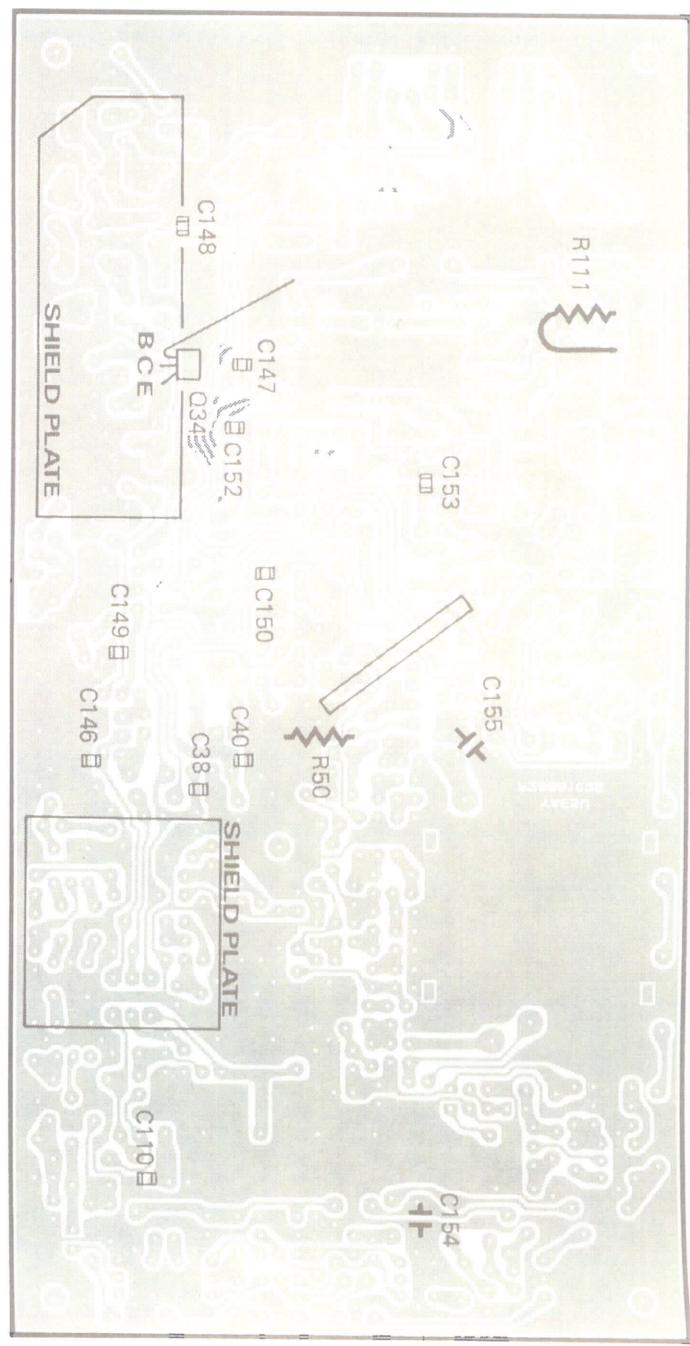
ND48702-3R(Q7015)

2SC02407(1) (Q7018)

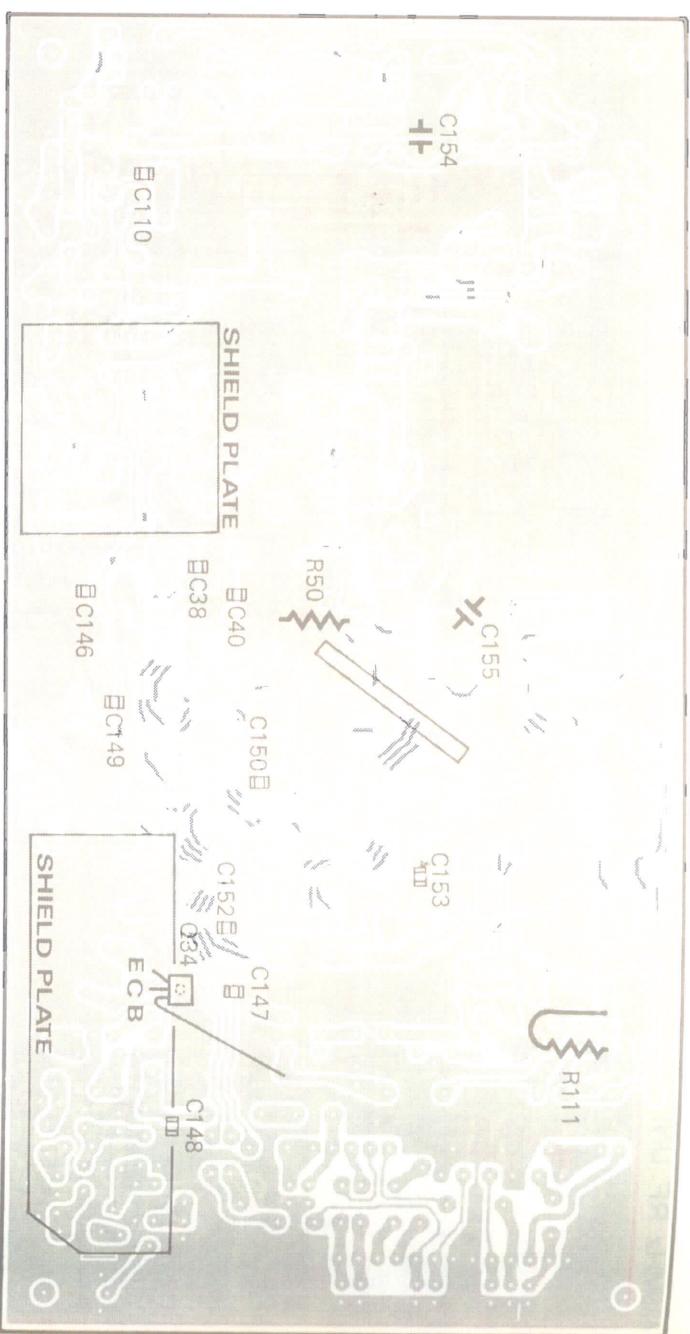
2SC03355
(Q7003,7004,7007)

2SB772Q(Q7026,7027)



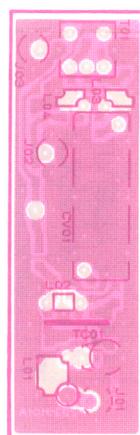


Solder side (obverse)

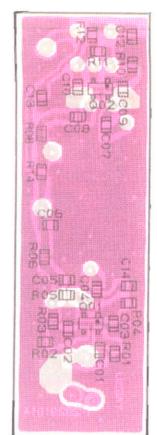


Solder side (reverse)

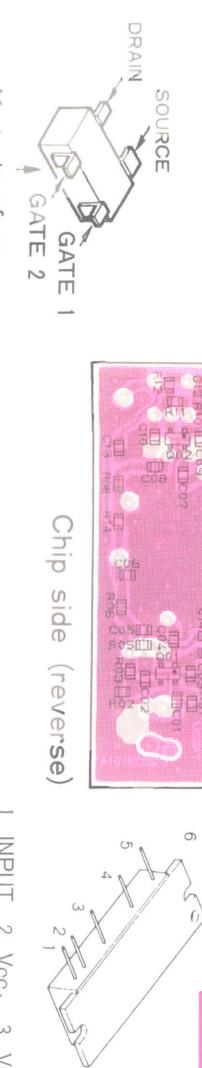
430MHz FRONTEND UNIT (No. 78XX)



Chip side (obverse)



Clip side (Reverse)



Component side (reverse)



Component side (reverse)

	1(IN)	2(OUT)	3	4	5	6	7	8	REMARKS
Q7008	0.97	0	0	0	4.80	9.00	9.00	0	
Q7015	0	0							
Q7016	0.98	0	0	0	4.78	8.80	8.80	0	

3SK164(F0) (07801.7802)

430MHz RF UNIT CIRCUIT DIAGRAM

430MHz P.A. UNIT
F2887105 (No. 75xx)

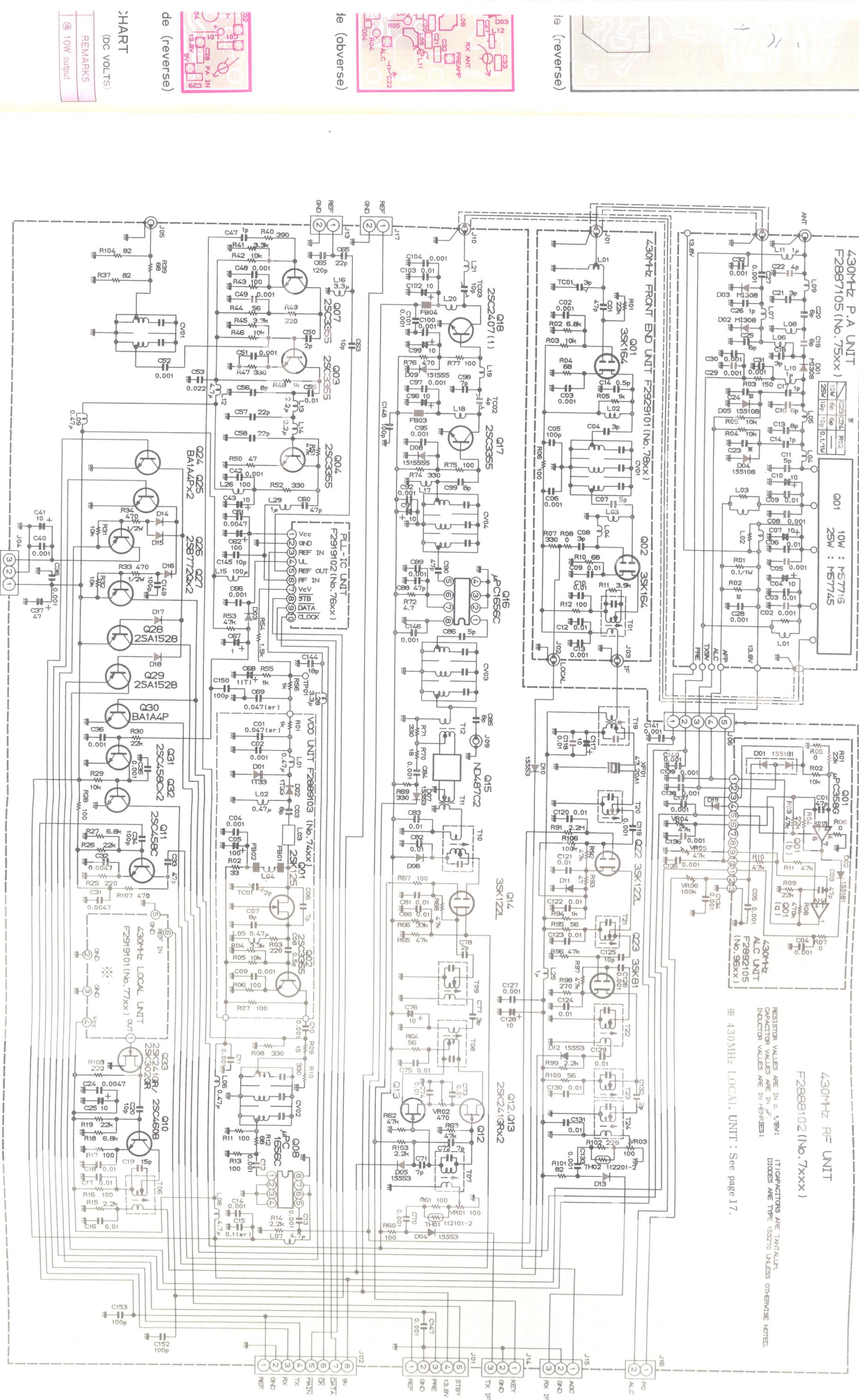
Q01 10W : M57716
Q02 25W : M67745

430MHz UNIT
F28892105 (No. 96xx)

430MHz RF UNIT
F2888102 (No. 7xxx)

RESISTOR VALUES ARE IN Ω , $1\text{M}\Omega$
CAPACITOR VALUES ARE IN μF ,
INDUCTOR VALUES ARE IN HENRIES:
(T1)CAPACITORS ARE TANTALUM
DIODES ARE TYPE 1SS270 UNLESS OTHERWISE NOTED.

※ 430MHz LOCAL. UNIT : See page 17.



430MHz PLL UNIT CIRCUIT DIAGRAM

430MHz PLL UNIT VOLTAGE CHART

(DC VOLTS)

	E(S)	C(D)	B (G ₁)	B (G ₂)	REMARKS		E(S)	C(D)	B (G ₁)	B (G ₂)	REMARKS	
Q8001	0.96	8.90	0				Q8011	1.4	7.5	2.0		
Q8002	1.2	7.7	2.0				Q8012	3.0	8.7	3.6		
Q8005	2.57	5.10	2.73	0	—	—	Q8013	0.86	8.65	1.50		
Q8006	7.5	2.9	—	7.5	—	—	Q8014	1.2	8.6	1.9		
Q8008	—	0	7.5	—	7.5	—	Q8015	4.75	1.00	1.70		
Q8010	0	0	7.80	0.01								

430MHz PLL UNIT IC VOLTAGE CHART

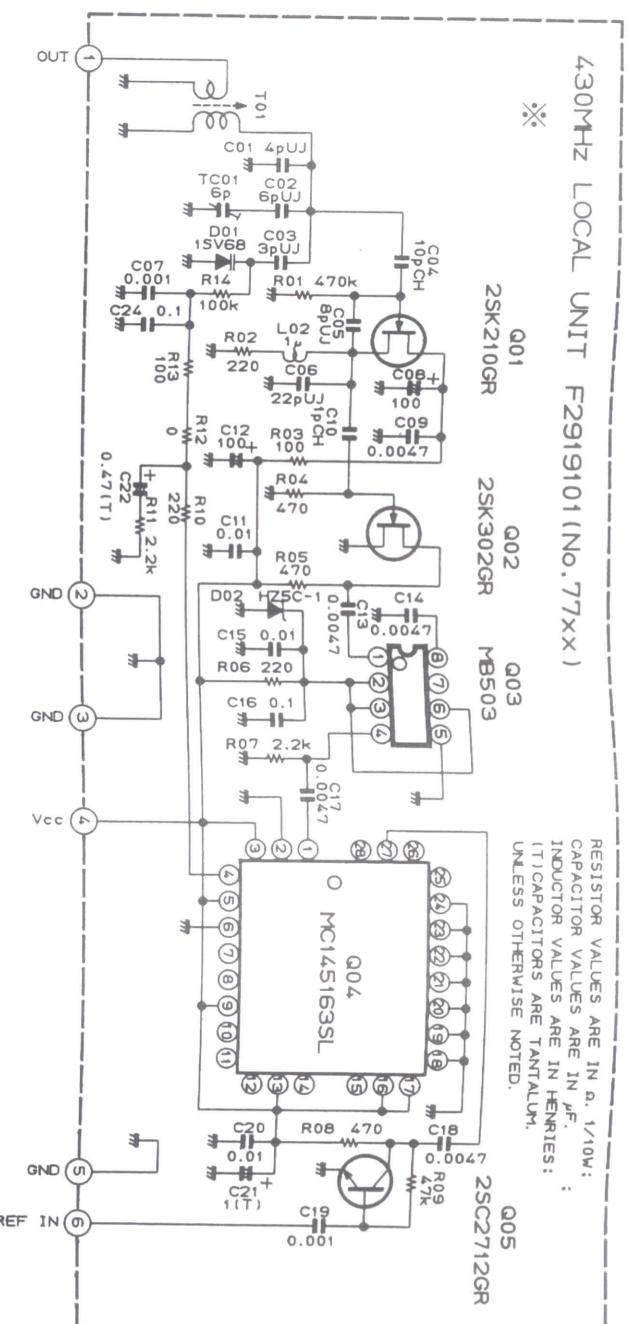
(DC VOLTS)

430MHz PLL UNIT F2888103 (No. 8xxx)

430MHz SHIFT UNIT F2892108 (No. 92xx)

430MHz LOCAL UNIT F2919101 (No. 77xx)

※ 430MHz LOCAL UNIT Parts Layout
See page 13.



RESISTOR VALUES ARE IN Ω , 1/10W;
CAPACITOR VALUES ARE IN μF .
INDUCTOR VALUES ARE IN HENRIES;
CAPACITORS ARE TANTALUM.
UNLESS OTHERWISE NOTED.

Q05

2SK210GR

2SK302GR

MB503

MC145163SL

2SC2712GRx6

2SC45BC

2SK241GR

2SC45BC

μPC78A05

2SC535B

2SC2407A

2SC535B

2SK507F

2SC3355

MB505-16

TC5081AP

Q05

Q03

Q04

Q02

Q01

Q06

Q07

Q08

Q09

Q10

Q11

Q12

Q13

Q14

Q15

Q01

Q02

Q03

Q04

Q05

Q06

Q07

Q08

Q09

Q10

Q11

Q12

Q13

Q14

Q15

Q01

Q02

Q03

Q04

Q05

Q06

Q07

Q08

Q09

Q10

Q11

Q12

Q13

Q14

Q15

Q01

Q02

Q03

Q04

Q05

Q06

Q07

Q08

Q09

Q10

Q11

Q12

Q13

Q14

Q15

Q01

Q02

Q03

Q04

Q05

Q06

Q07

Q08

Q09

Q10

Q11

Q12

Q13

Q14

Q15

Q01

Q02

Q03

Q04

Q05

Q06

Q07

Q08

Q09

Q10

Q11

Q12

Q13

Q14

Q15

Q01

Q02

Q03

Q04

Q05

Q06

Q07

Q08

Q09

Q10

Q11

Q12

Q13

Q14

Q15

Q01

Q02

Q03

Q04

Q05

Q06

Q07

Q08

Q09

Q10

Q11

Q12

Q13

Q14

Q15

Q01

Q02

Q03

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Q05

Q06

Q07

Q08

Q09

Q10

Q11

Q12

Q13

Q14

Q15

Q01

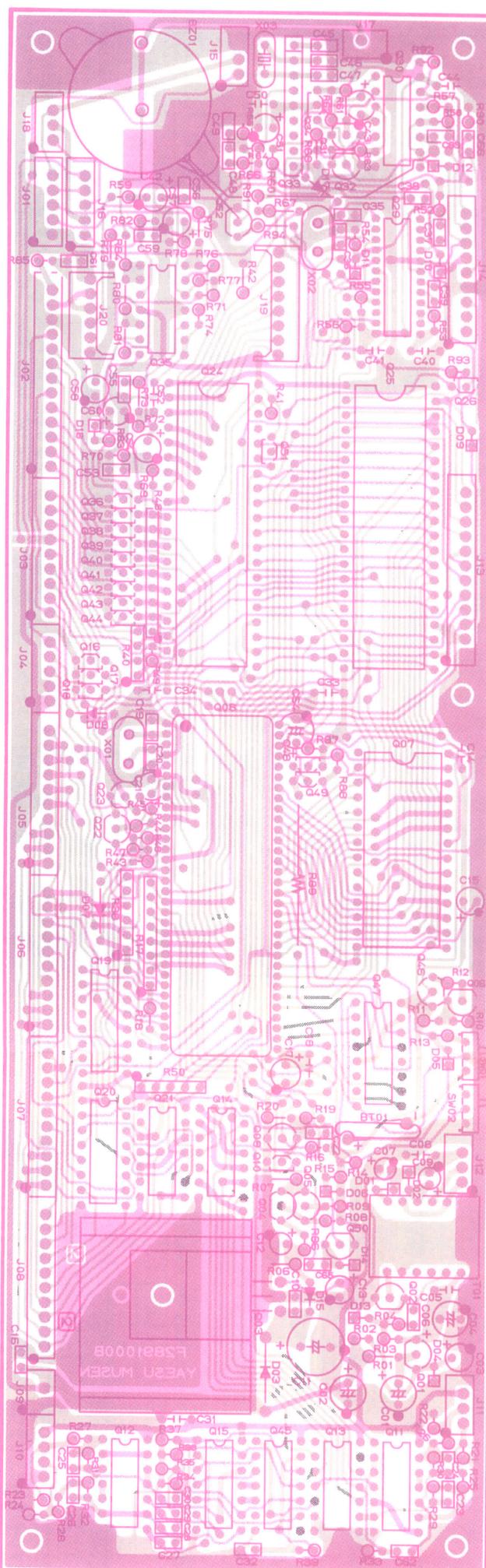
Q02

Q03

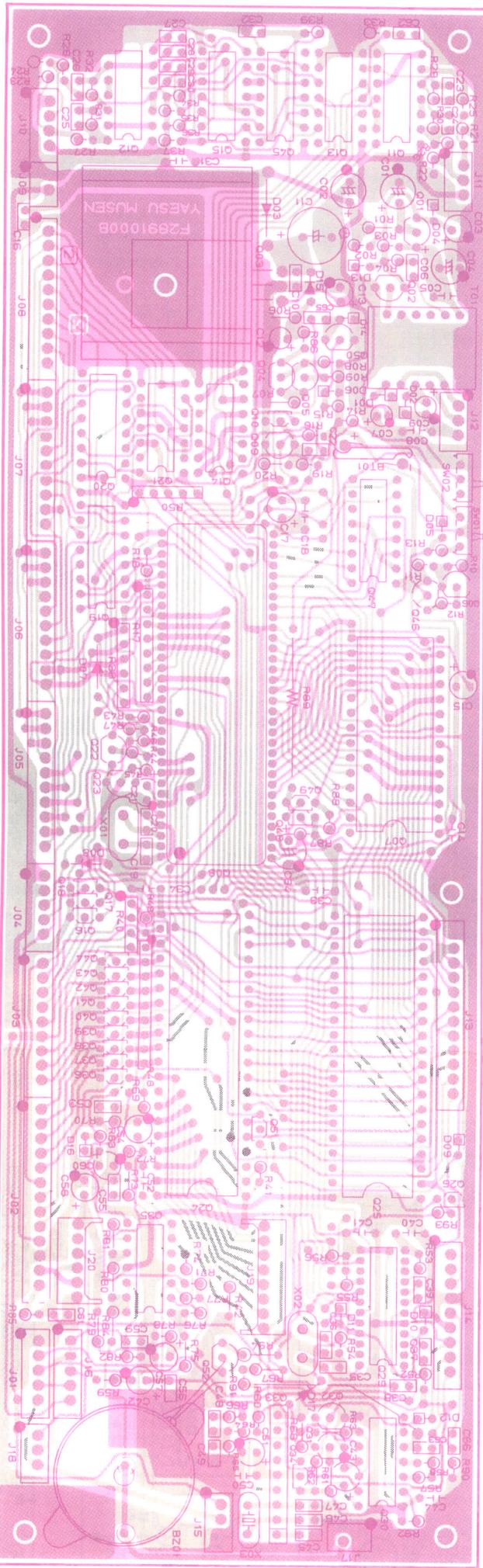
Q04

CNTL UNIT PARTS LAYOUT

CNTL UNIT (No. 1 × × ×)



Component side (obverse)



Component side (reverse)

CNTL UNIT IC VOLTAGE CHART

(DC VOLTS)

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	REMARKS	
01007	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40		
	0	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00		
01024	4.30	2.90	0.70	0.70	1.50	5.00	5.00	5.00	0.07	0.08	0.08	0	1.00	1.50	1.70	1.50	1.60	4.10				
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
01025	5.00	5.00	5.00	5.00	0	5.00	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	0	5.00	5.00	5.00	5.00	0	5.00	0	0	0	0	0	0	0	0	0	0	0	0	0		
01029	2.50	2.50	0	0	2.50	5.00	2.50	3.00	5.00	2.50	2.50	2.50	2.50	2.50	2.50	2.50	2.50	2.50	2.50	0		
	2.50	2.50	2.50	0.48																		

※ In the initialize state.

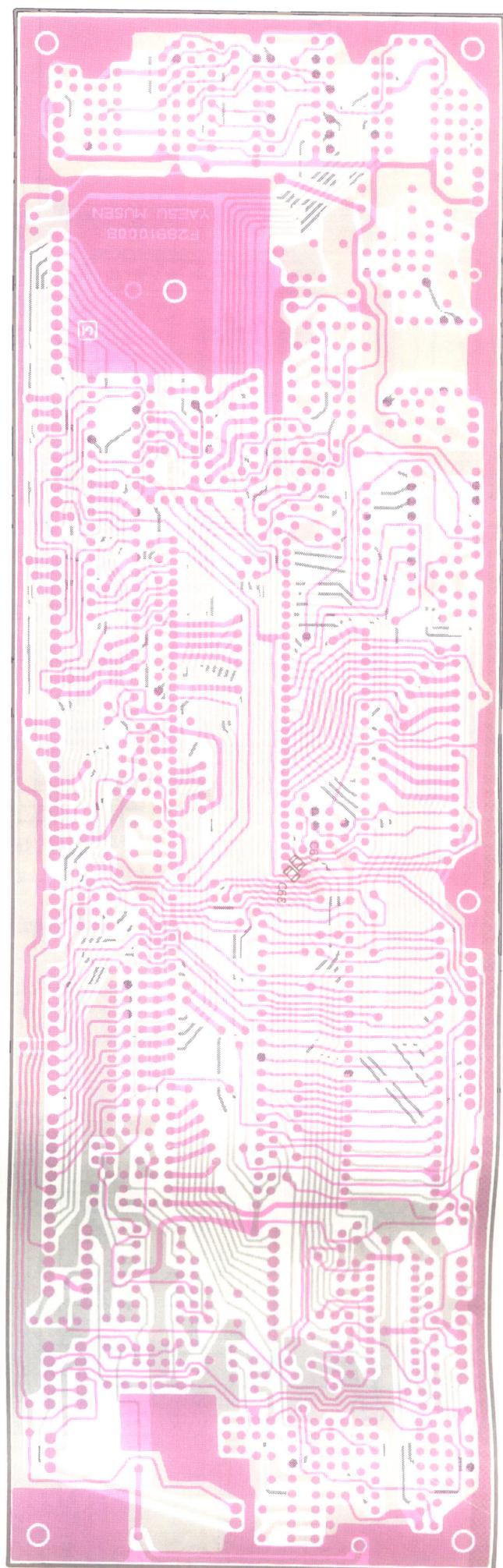
CNTL UNIT IC VOLTAGE CHART

(DC VOLTS)

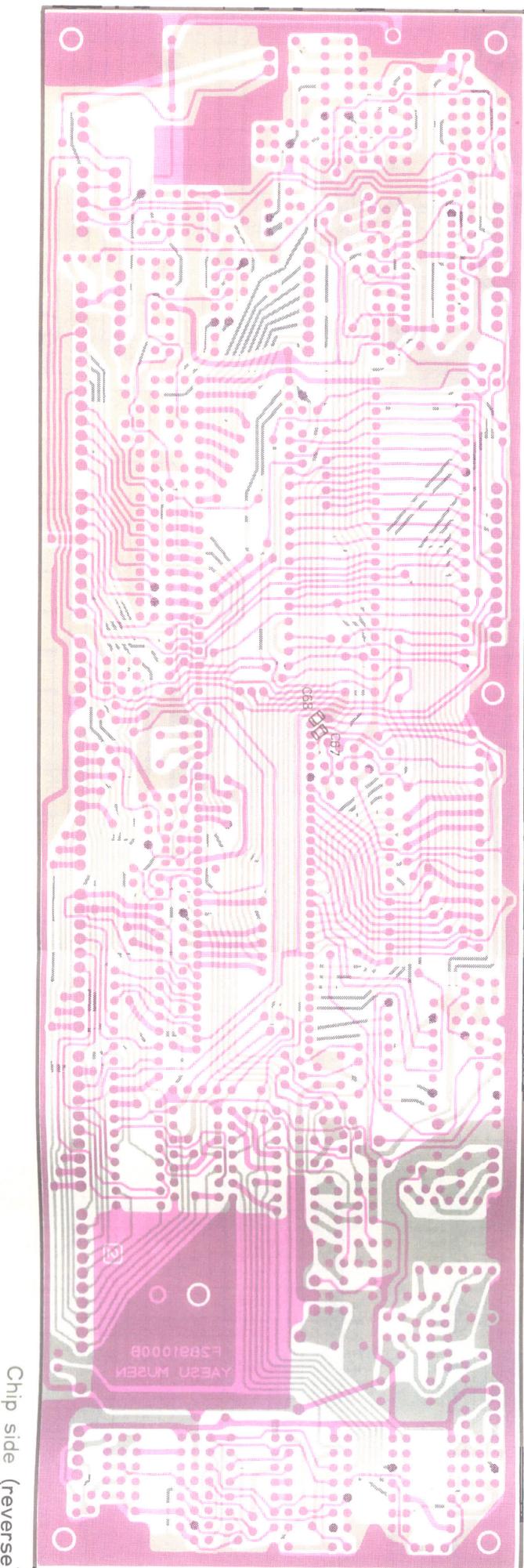
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	REMARKS
01008	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34				
	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51				
01009	52	53	54	55	56	57	58	59	60	61	62	63	64								
	0	200	200	0	0	5.00	5.00	4.50	5.00	3.80	0	0	5.00	0.80	0.01	0.05	5.00	5.00			
01010	0.02	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	
	0	5.00	5.00	5.00	4.30	4.70	5.00	4.70	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	
01011	0.70	1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.50	
	0	1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.50	
01012	0.70	1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.50	
	0	1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.50	
01013	0.70	1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.50	
	0	1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.50	
01014	0.70	1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.50	
	0	1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.50	
01015	0.70	1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.50	
	0	1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.50	
01016	0.70	1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.50	
	0	1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.50	
01017	0.70	1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.50	
	0	1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.50	
01018	0.70	1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.50	
	0	1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.50	
01019	0.70	1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.50	
	0	1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.50	
01020	0.70	1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.50	
	0	1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.50	
01021	0.70	1.50	1.50	1.50	1.50																

CNTL U

PARTS L



Chip side (obverse)



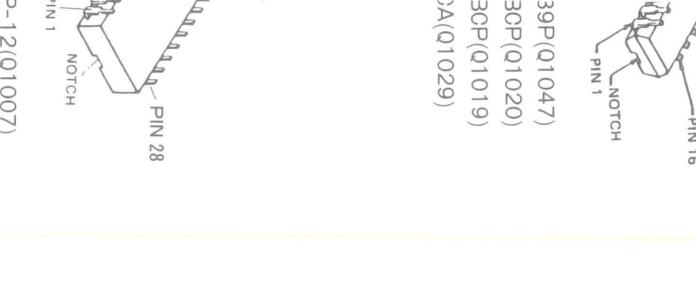
Chip side (reverse)

CNTL UNIT VOLTAGE CHART

(DC VOLTS)

CNTL UNIT IC VOLTAGE CHART

(DC VOLTS)



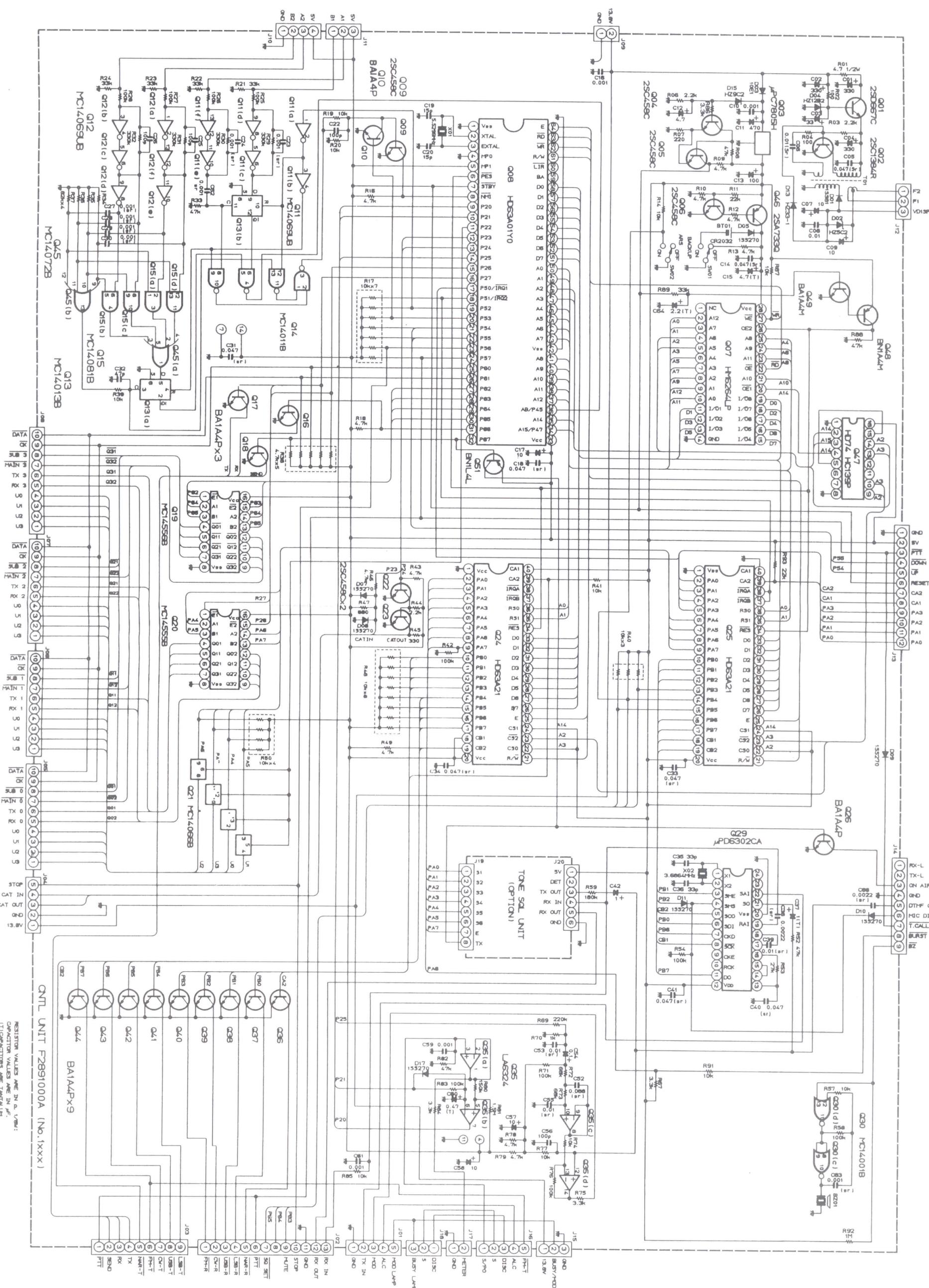
PIN 1
NOTCH

PIN 28

PIN 16

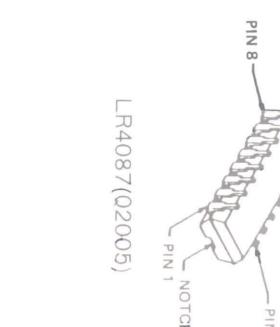
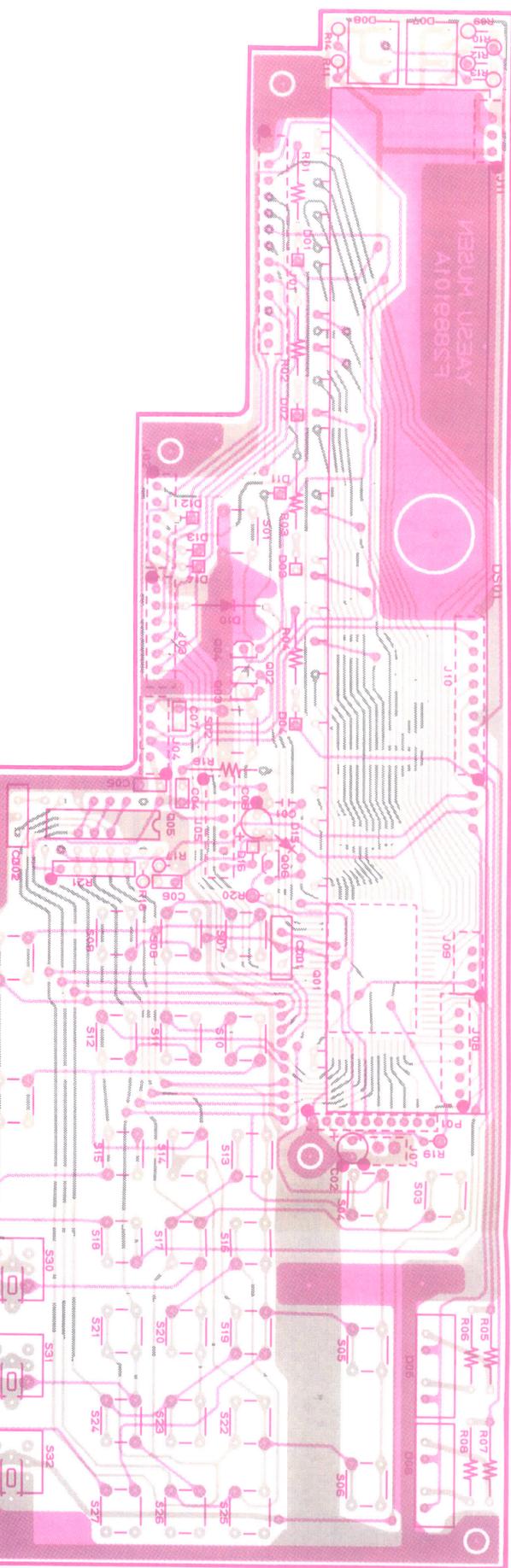
PIN 1

CNTL UNIT CIRCUIT DIAGRAM



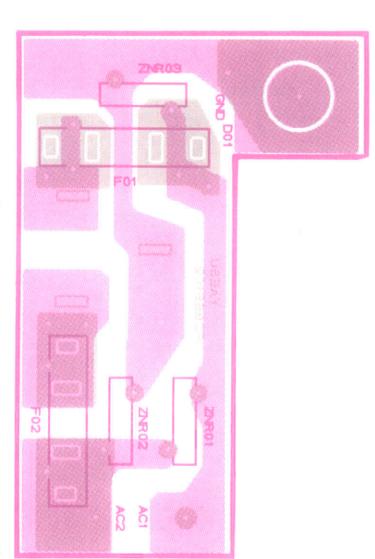
DISPLAY, REG and PROTECTOR UNIT PARTS LAYOUT

DISPLAY UNIT (No. 2XXXX)

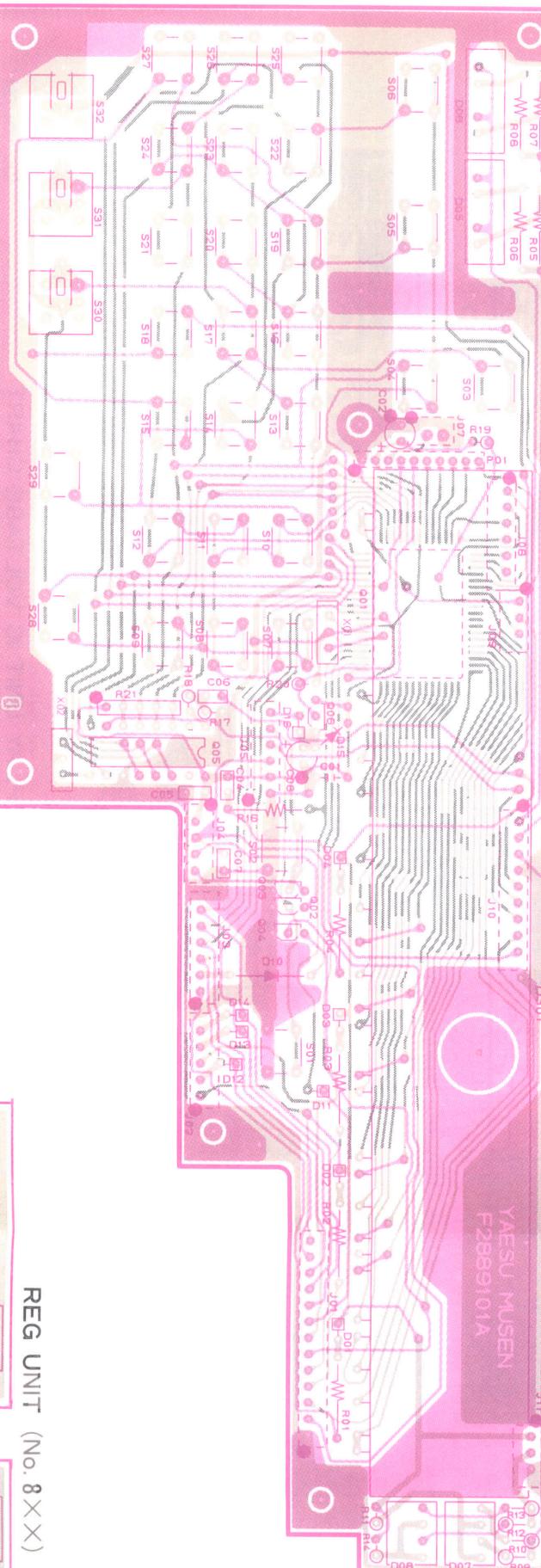


Display side (obverse)

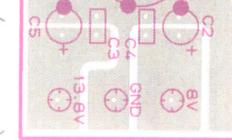
PROTECTOR UNIT (No. 7XXX)



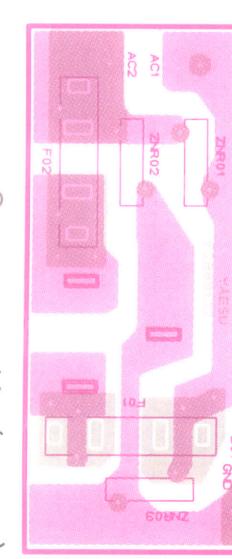
Component side (obverse)



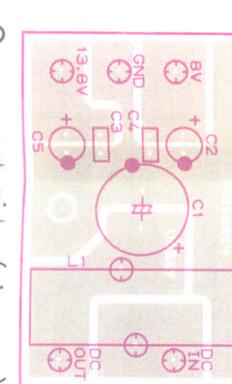
REG UNIT (No. 8XXX)



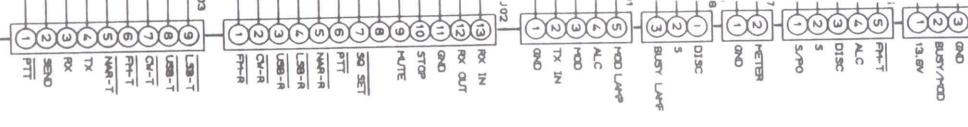
Component side (reverse)



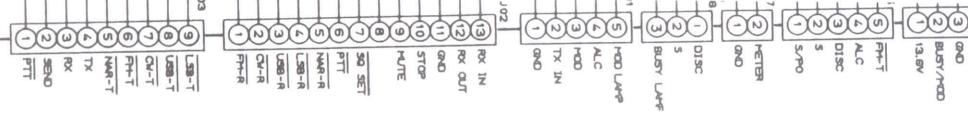
Component side (reverse)

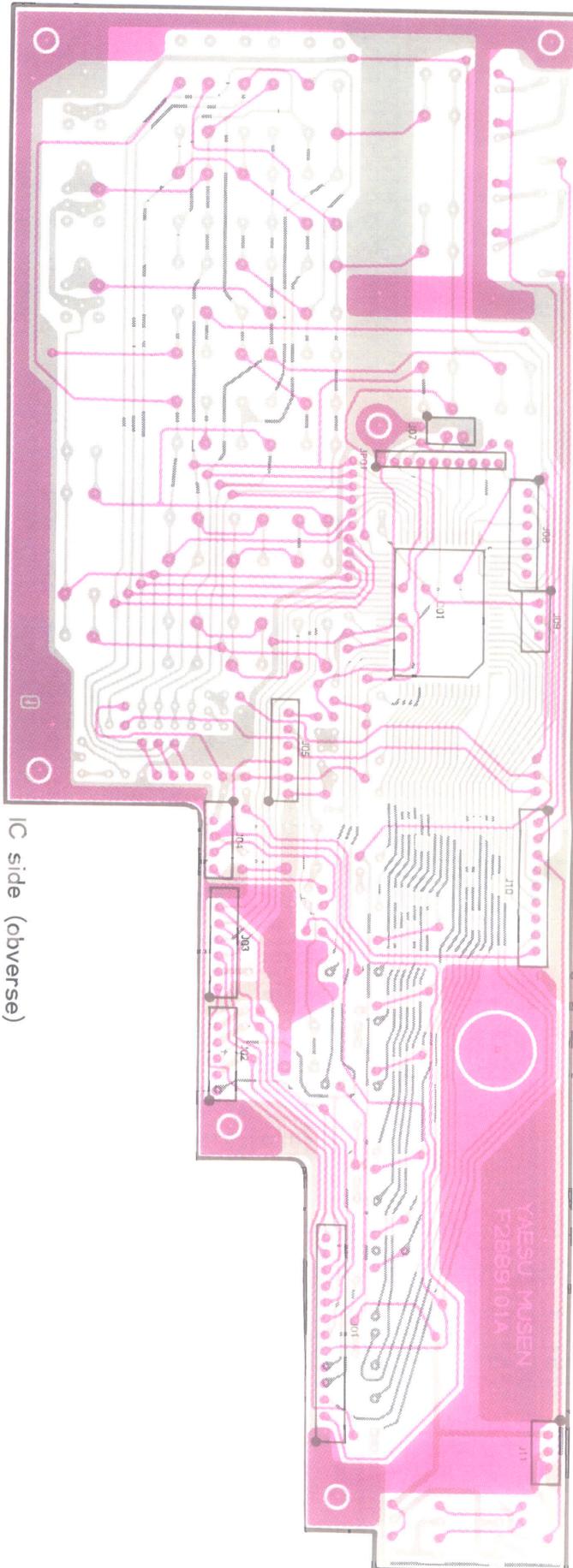


Component side (obverse)



Display side (reverse)





The image shows a detailed circuit board layout for the IC side of a YAESU FT-8810AY. The board features a central integrated circuit (IC) package labeled '001'. Numerous pink lines represent the internal connections within the IC. On the left side, there is a large area of the board that is highlighted with pink lines, representing the reverse side of the IC. Various component designators are visible, such as 'J01' through 'J11' at the top edge, and 'J04' and 'J05' on the left side. On the right side, the text 'FT-8810AY' and 'YAESU' is printed vertically. The entire board is surrounded by a green border.

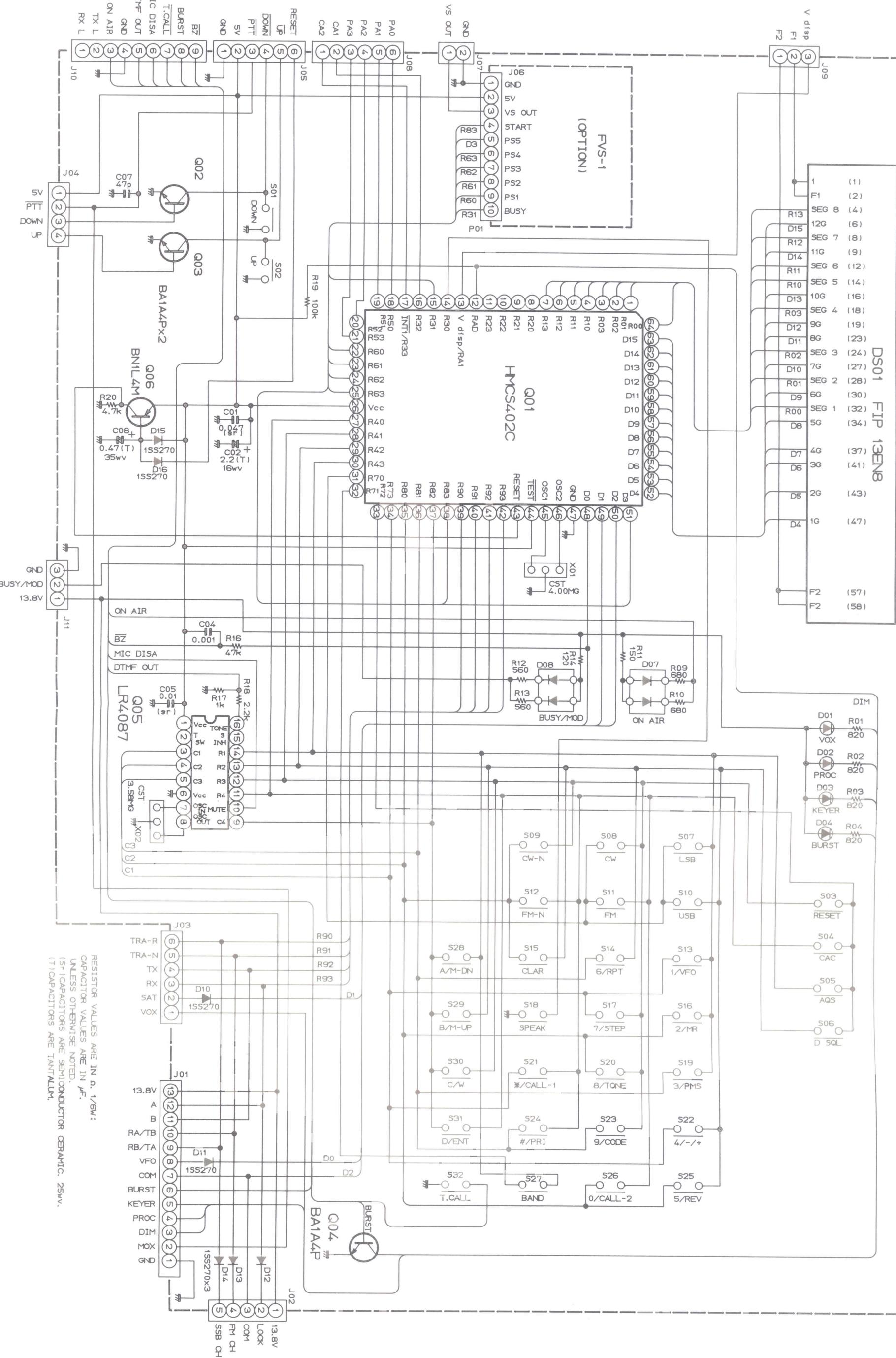
DISPLAY UNIT VOLTAGE CHART

	E(S)	C(D)	(G ₁)	B (G ₂)	REMARKS		E(S)	C(D)	(G ₁)	B (G ₂)	REMARKS
Q2002	0	5.0	0				Q2004	0	12.0	0	
Q2003	0	5.0	0				Q2006	0	5.0	0	

※ In the initialize state.

DISPLAY UNIT CIRCUIT DIAGRAM

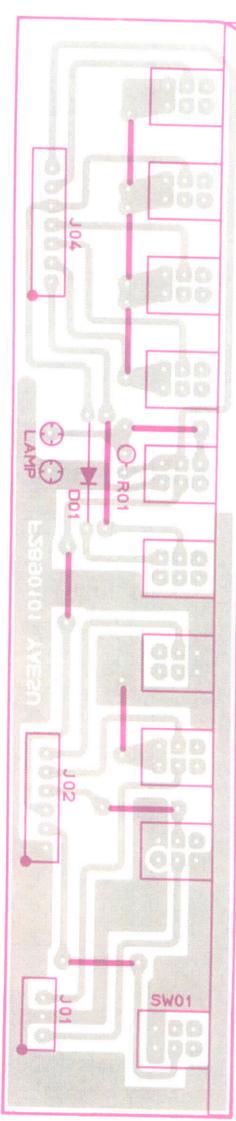
DISPLAY UNIT F2889101 (No.2xx)



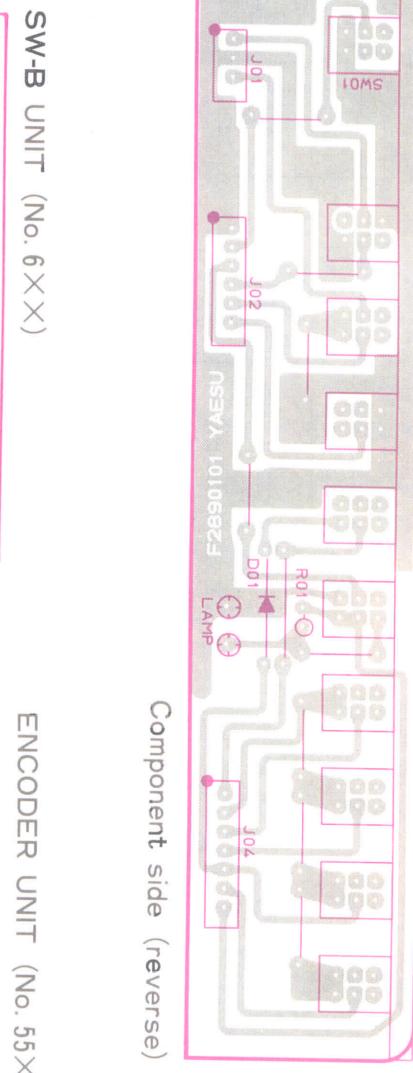
RESISTOR VALUES ARE IN Ω , 1/5W:
CAPACITOR VALUES ARE IN μF :
UNLESS OTHERWISE NOTED.
TANTALUM.
TANTALUM CAPACITORS ARE SEMICONDUCTOR CERAMIC. 25WV.

SW, ENCODER and VR UNIT PARTS LAYOUT

SW-A UNIT (No. 3××

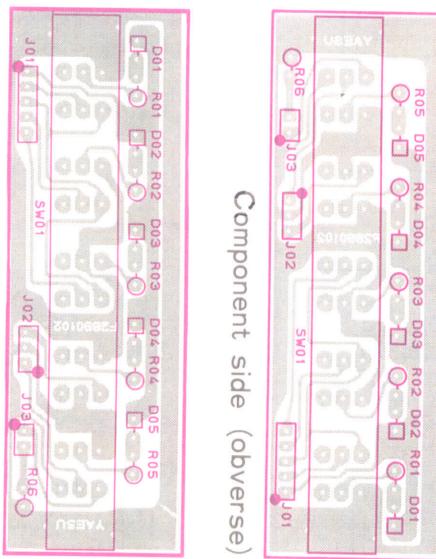


Component side (obverse)



Component side (reverse)

SW-B UNIT (No. 6××

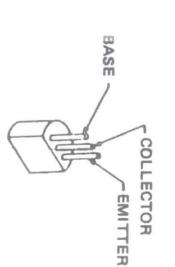


Component side (obverse)



Component side (reverse)

ENCODER UNIT (No. 55×)



Component side (obverse)

Component side (reverse)

Component side (reverse)

VR-B UNIT (No. 5××



Component side (obverse)



Component side (reverse)

VR-D UNIT (No. 9××

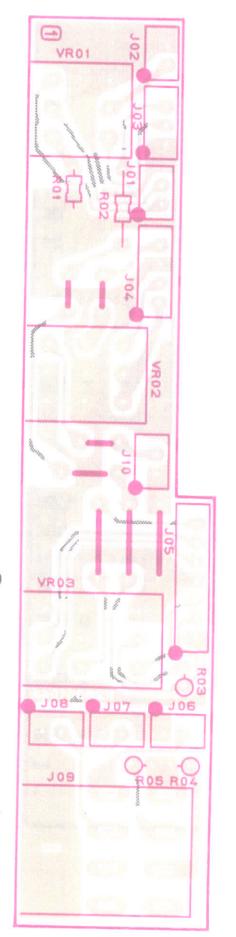


Component side (obverse)

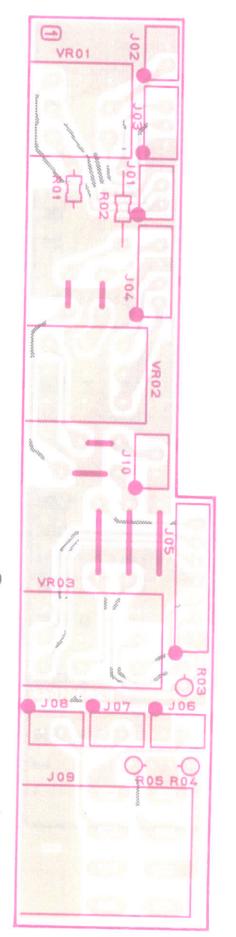


Component side (reverse)

VR-A UNIT (No. 4××



Component side (obverse)



Component side (reverse)

VR-C UNIT (No. 2××



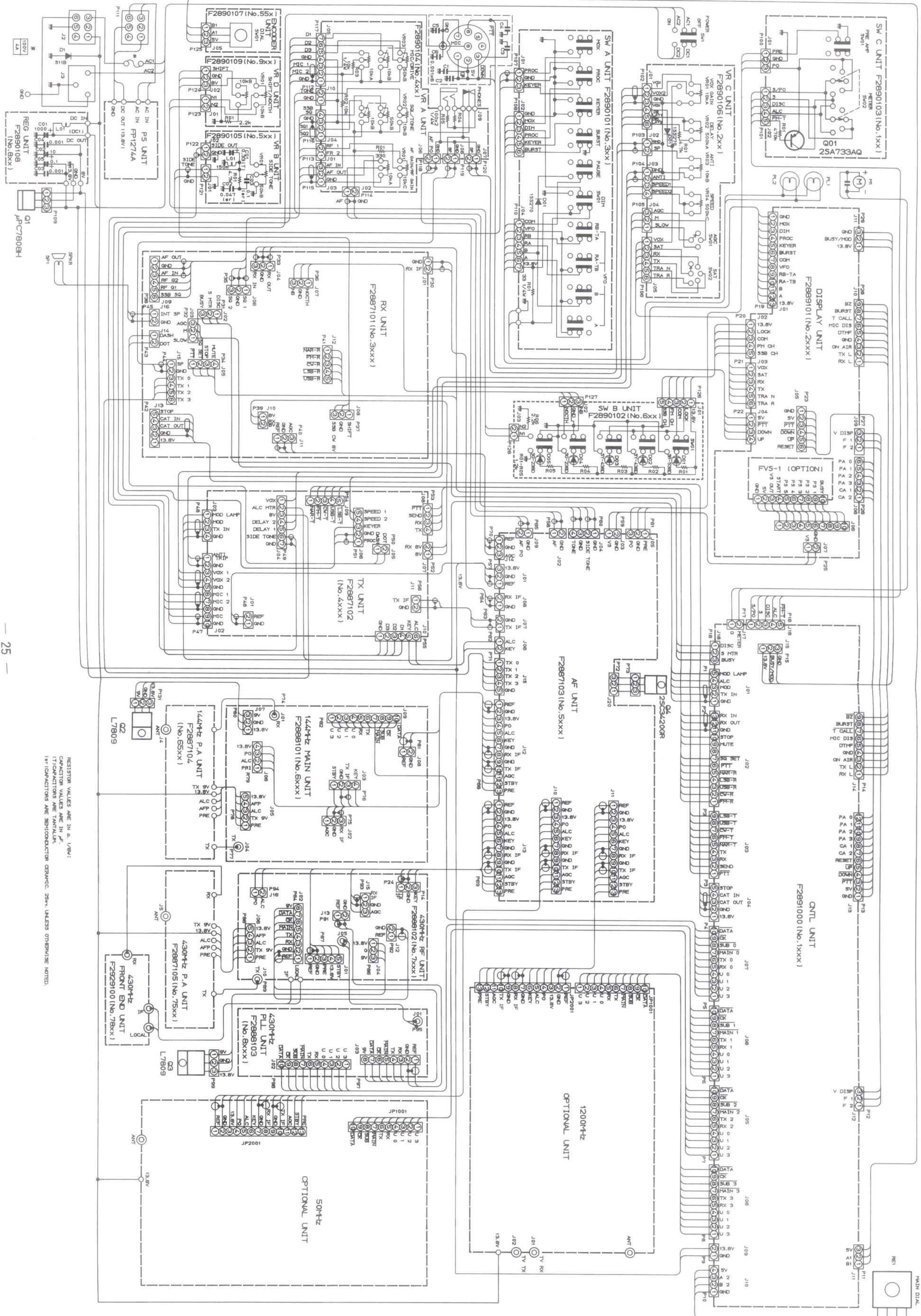
Component side (obverse)



Component side (reverse)

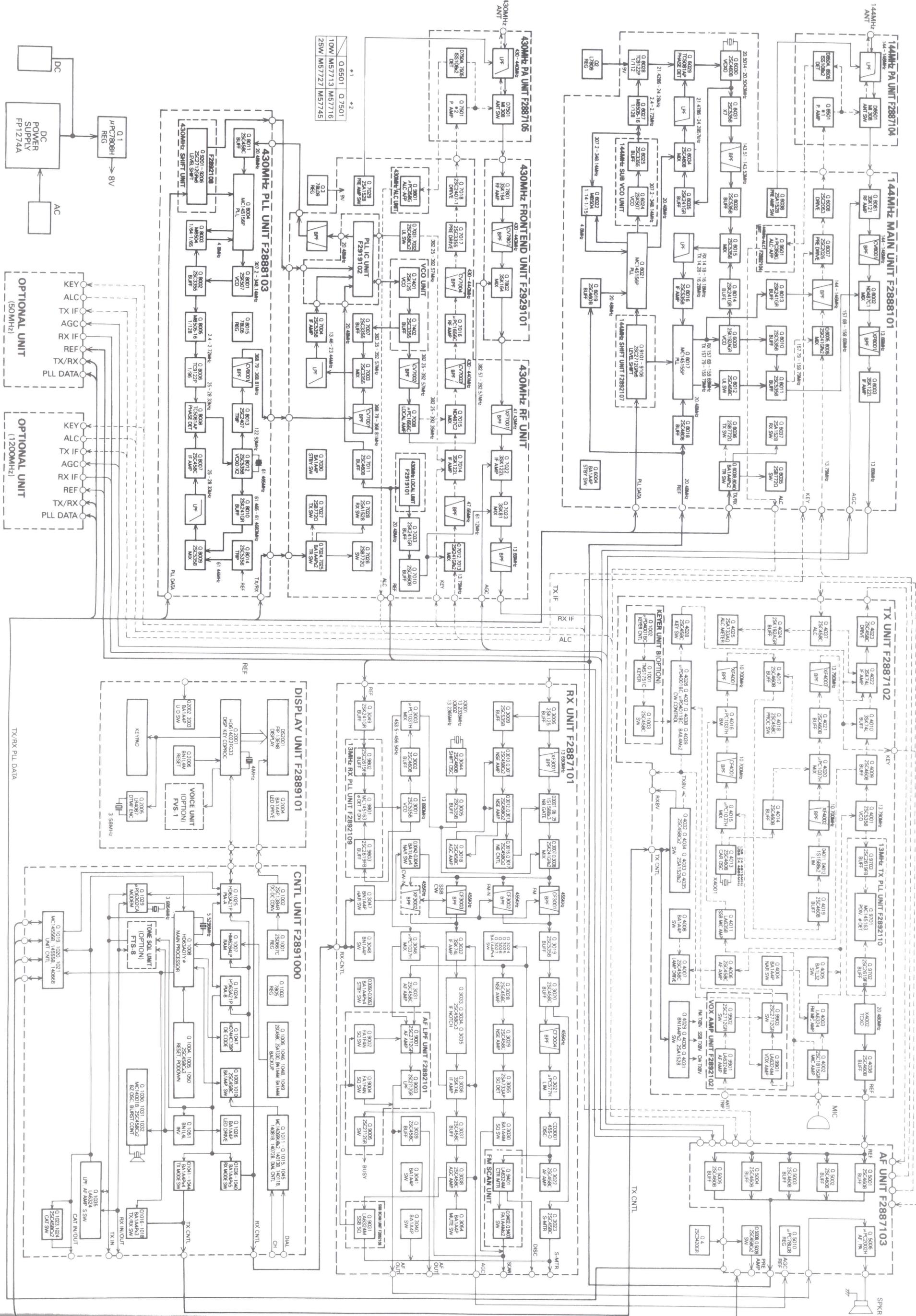
※ Circuit Diagram is as shown page 25.

CONNECTION DIAGRAM

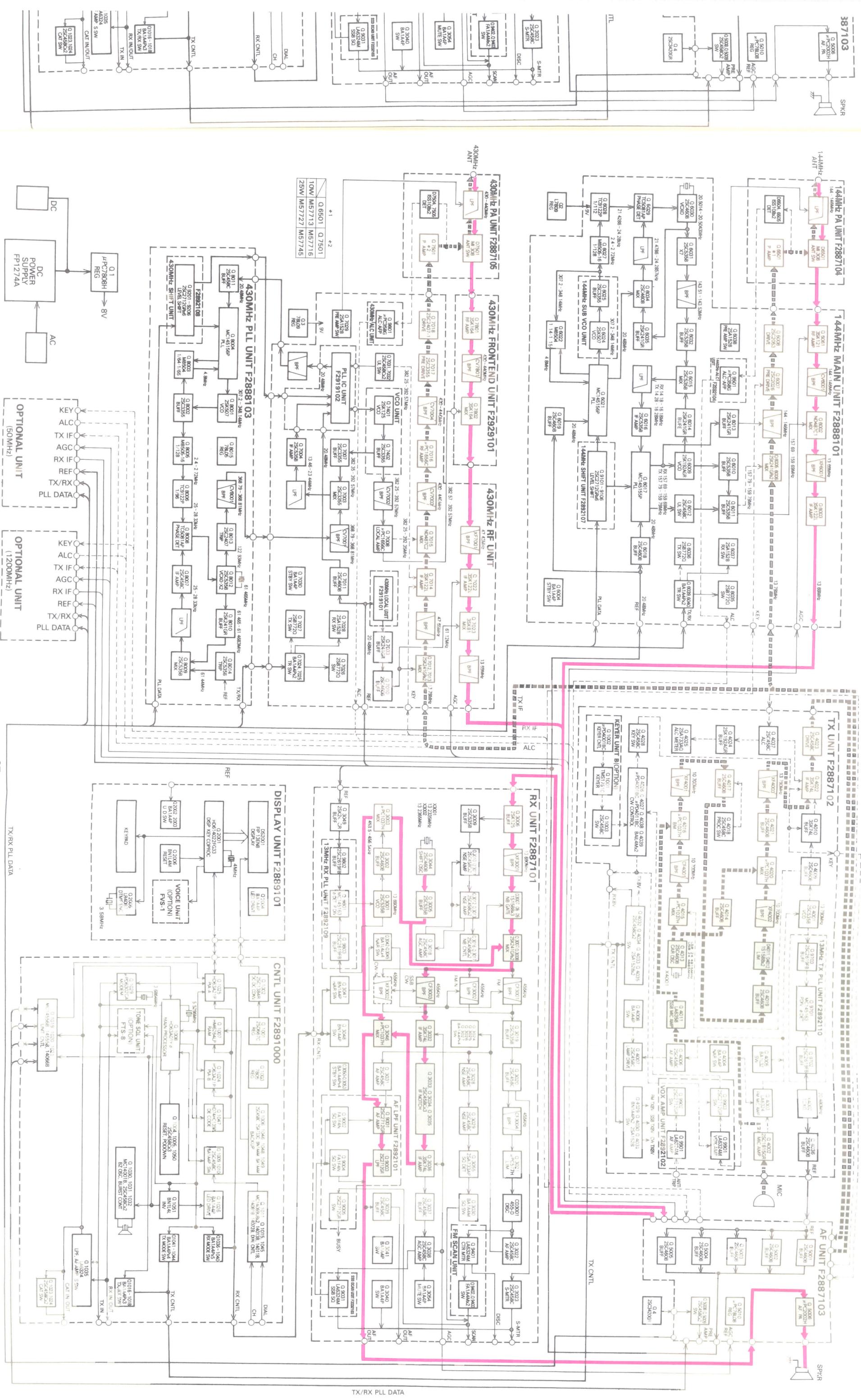


RESISTOR VALUES ARE IN Ω . 1/8W.
CAPACITOR VALUES ARE IN μF .

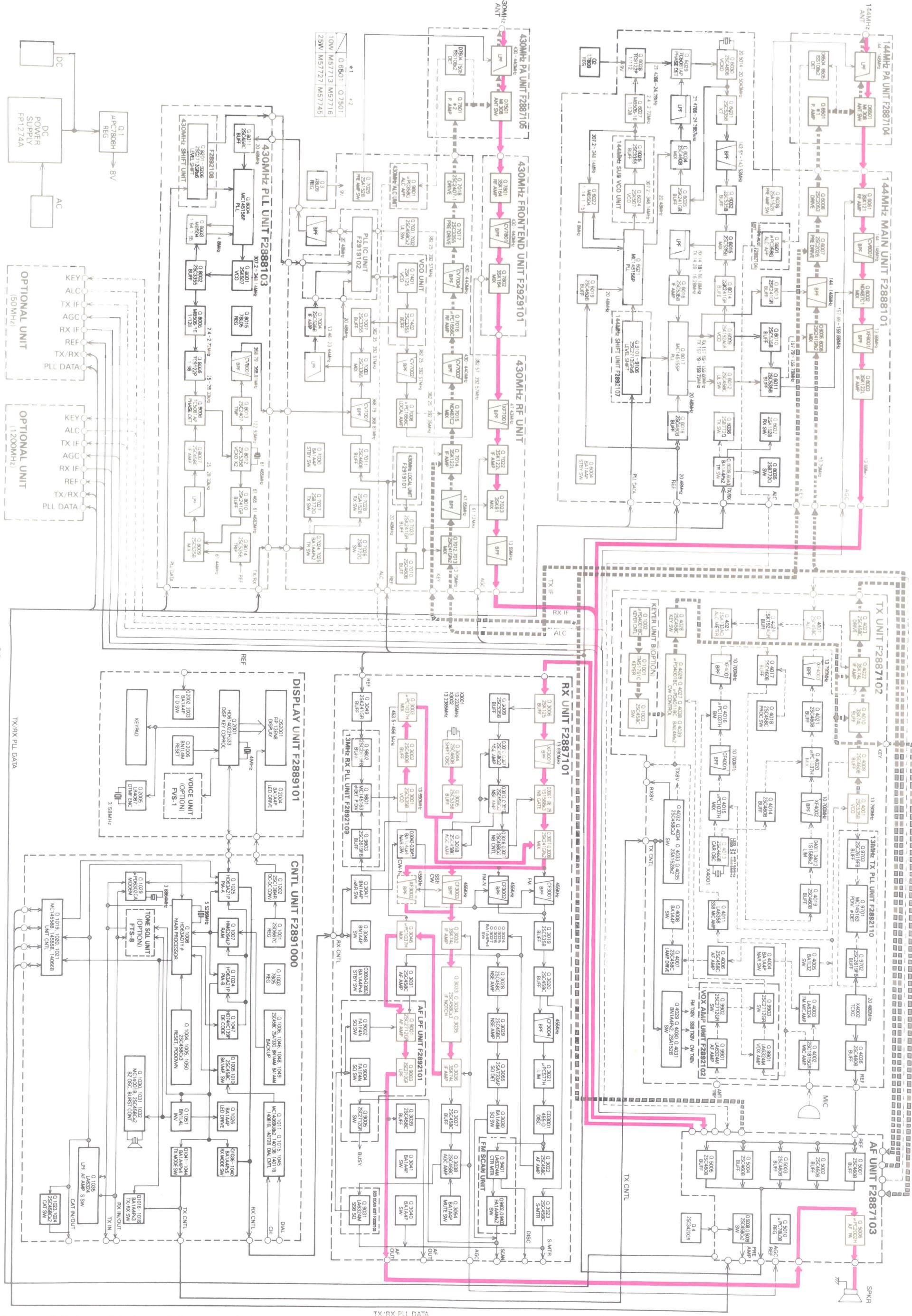
BLOCK DIAGRAM

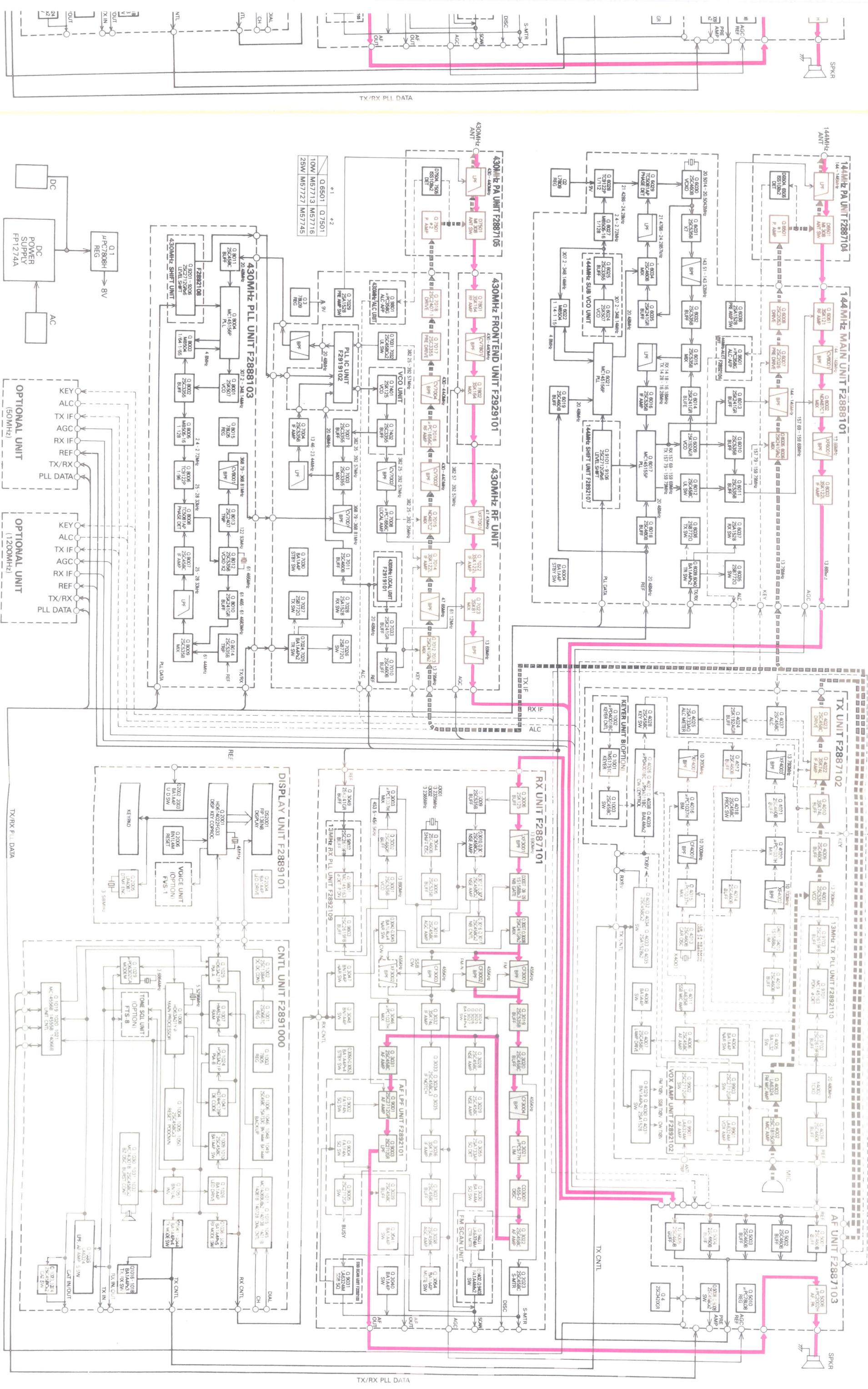


SIGNAL TRACING (SSB MODE)



SIGNAL TRACING (CW MODE)





SEMICONDUCTOR CROSS-REFERENCE

MAIN CHASSIS

ORIGINAL		REPLACEMENT		REPLACEMENT	
Symbol No.	Part No.	Part No.	Part No.	Part No.	Part No.
04	2SC3420GR	2SD1667			
		G3334200G	G3416670		
01		μPD7808H	L7808		
			G1090294	G1090777	

RX UNIT

ORIGINAL		REPLACEMENT		REPLACEMENT	
Symbol No.	Part No.	Part No.	Part No.	Part No.	Part No.
03030	BA1A4M	2SC3402			
		G3090074	G3334020		
D3005	3SC00630283030				
	30045303530273038				
	303930403013042				
	3043304430053046				
	3047304930503051				
D3036	3048	G2090408	G2090027		
	1SS53				
D9001	1601460156020				
	6021160226026024				
	602560260276028				
	6029602603031				
D032					
	1SS53T1				
D3036	3048	G2060004	G2060002		

AF LPF UNIT

ORIGINAL		REPLACEMENT		REPLACEMENT	
Symbol No.	Part No.	Part No.	Part No.	Part No.	Part No.
09001,9002,9003,	2SC27120R TE85R	2SC1623 L6/L7	2SC2812 L6/L7	2SC2482 LO/LD	
9004,9005	G3327127G	G3316237 F/G	G3328127 F/G	G3324827 C/D	

FM SCAN UNIT

ORIGINAL		REPLACEMENT		REPLACEMENT	
Symbol No.	Part No.	Part No.	Part No.	Part No.	Part No.
D9401	ISS184 TE85R	DOB015-TA	MC2838-T14-2		
		G2070009	G2070012	G2070018	

SSB SCAN UNIT

ORIGINAL		REPLACEMENT		REPLACEMENT	
Symbol No.	Part No.	Part No.	Part No.	Part No.	Part No.
D9301	ISS184 TE85R	DOB015-TA	MC2838-T14-2		
		G2070009	G2070012	G2070018	

TX UNIT

ORIGINAL		REPLACEMENT		REPLACEMENT	
Symbol No.	Part No.	Part No.	Part No.	Part No.	Part No.
04032,4034	2SC458C	2SC945AP			
		G330945JP			
04005	BA113Z	2SC03901			
		G3050077			
04038,4039	BA114M	2SC3399			
		G3090080			
04003	LA6324	μP324C	M5224P		
		G1090230	G1090757		
04026	μPD4001BC	MC14001BCP			
		G1090278	G1090027		
04027	μPD4011BC	MC14011BCP			
		G1090068			
D4003,4004,4005,4007	1SS53				
	4008,4014,4017,4018	1SS270			
	4019,4022	02090408			
D4023		1SS270J			
		1SS53			
		02090027			
		1SS270J			
		1SS53T1			
		G2060004			

430MHz ALC UNIT

ORIGINAL		REPLACEMENT		REPLACEMENT	
Symbol No.	Part No.	Part No.	Part No.	Part No.	Part No.
D6601,9602	1SS181 TE85R	MC2836-T14-2			
		G2070001	G2070024		

430MHz PLL UNIT

ORIGINAL		REPLACEMENT		REPLACEMENT	
Symbol No.	Part No.	Part No.	Part No.	Part No.	Part No.
DB004,8005,9005,8007,	1SS270	1SS53			
	8008,8009,8010,8011	G2090408	G2090027		

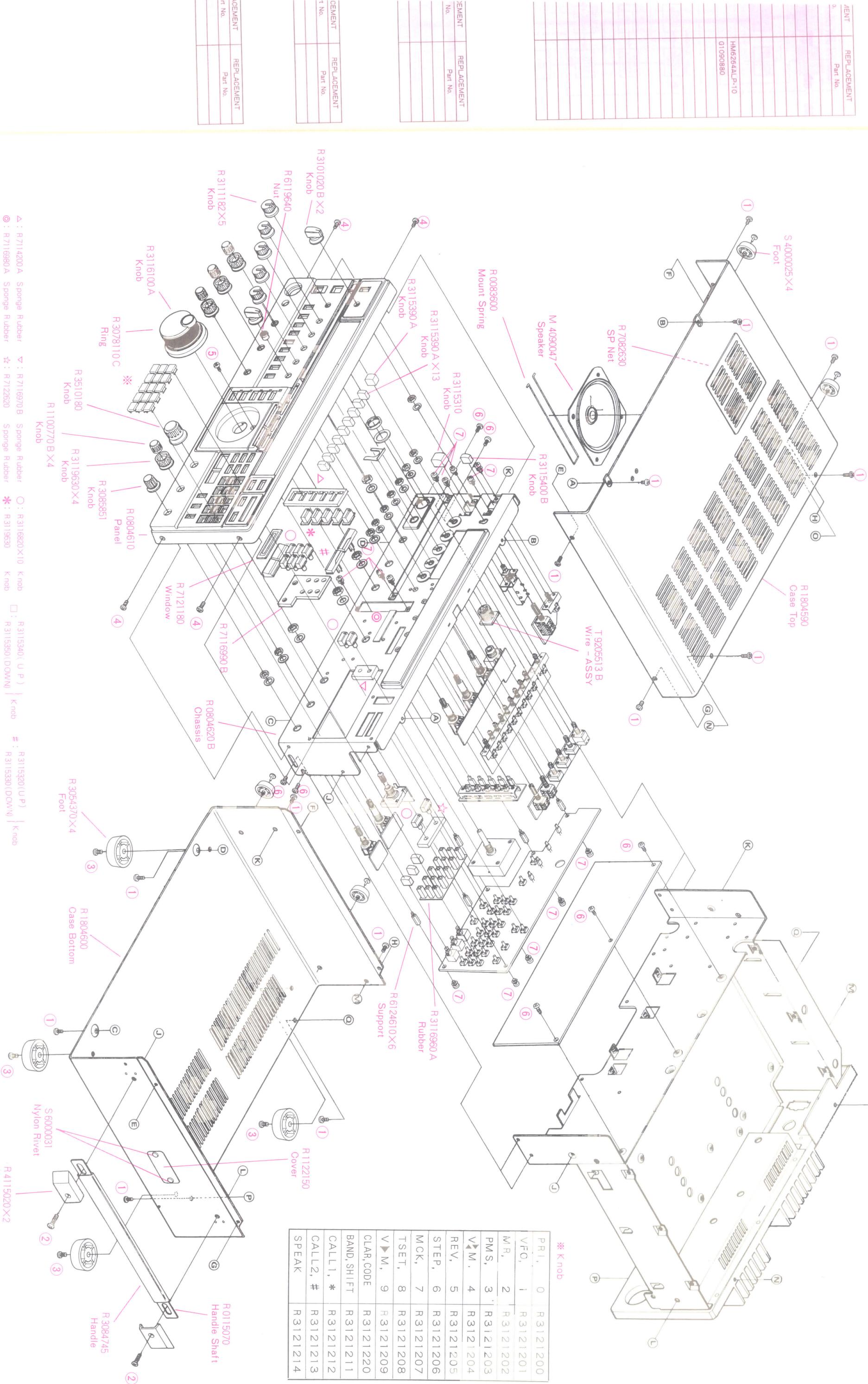
VOX UNIT

ORIGINAL		REPLACEMENT		REPLACEMENT	
Symbol No.	Part No.	Part No.	Part No.	Part No.	Part No.
09902,9903	2SC2712GR TE85R	2SC1623 L6/L7	2SC2812 L6/L7	2SC2462 LO/LD	
	03227127G	G3328127 F/G	G3324627 G/D	G3327127 F/G	

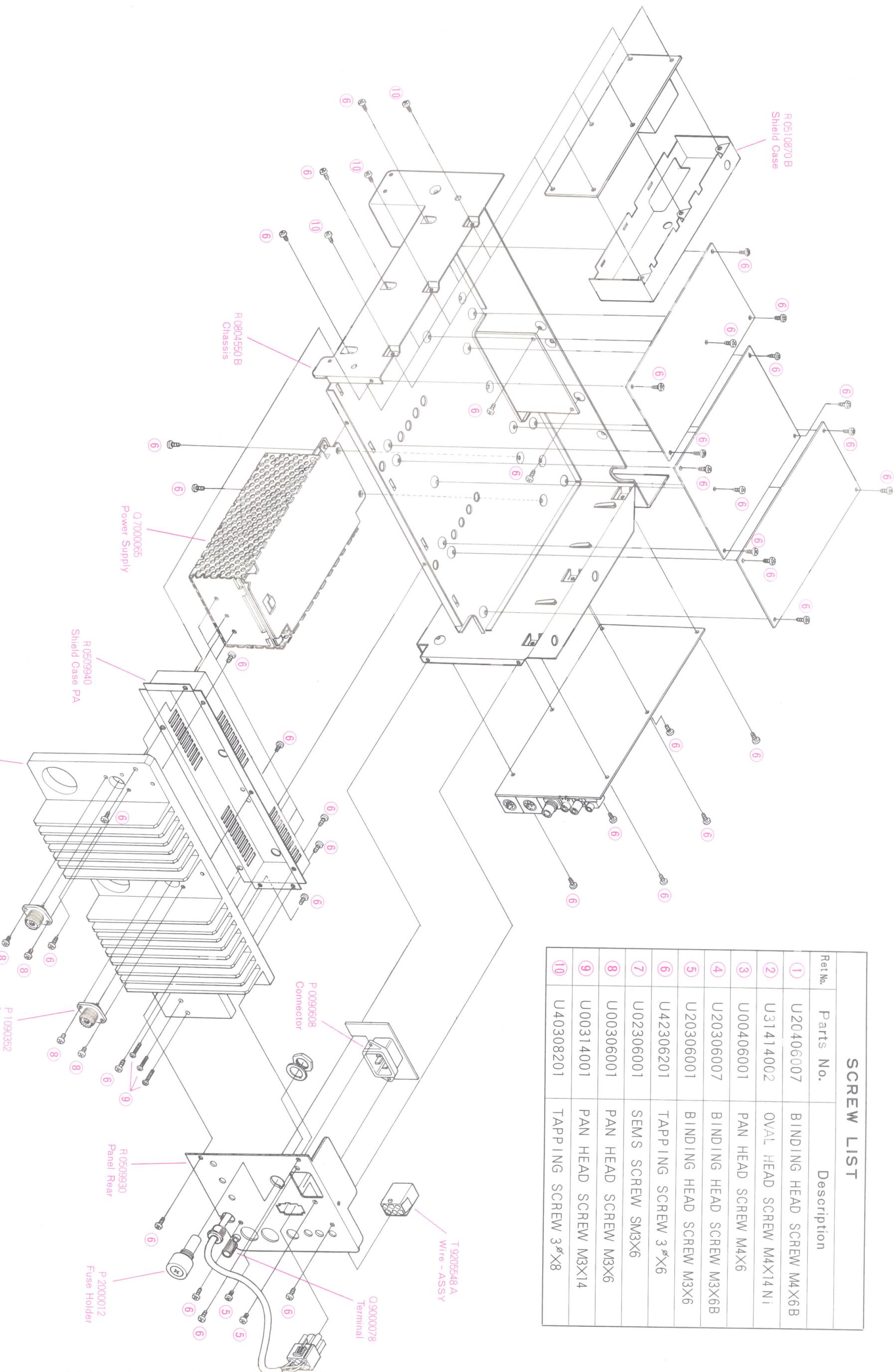
AUDIO UNIT

ORIGINAL		REPLACEMENT		REPLACEMENT	
Symbol No.	Part No.	Part No.	Part No.	Part No.	Part No.
03008,5009	2SC458C	2SC945AP			
		G3304580C	G3309451P		
D1012	2SC458C	2SC945AP			
		G3304580C	G3309451P		
01014	MC14011BCP				
		G1090068	G1090282		
01013	MC14013BCP				
		G1090067	G1090280		
01021	MC14065BCP				
		G1090257	G1090283		
01015	μPD4081BCP				
		G1090053			

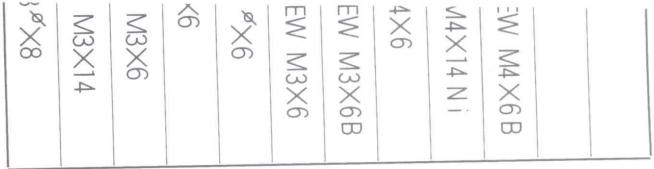
EXPLODED VIEW



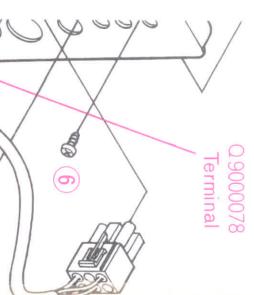
EXPLODED VIEW



50MHz PLL UNIT (No. 1XXXX)

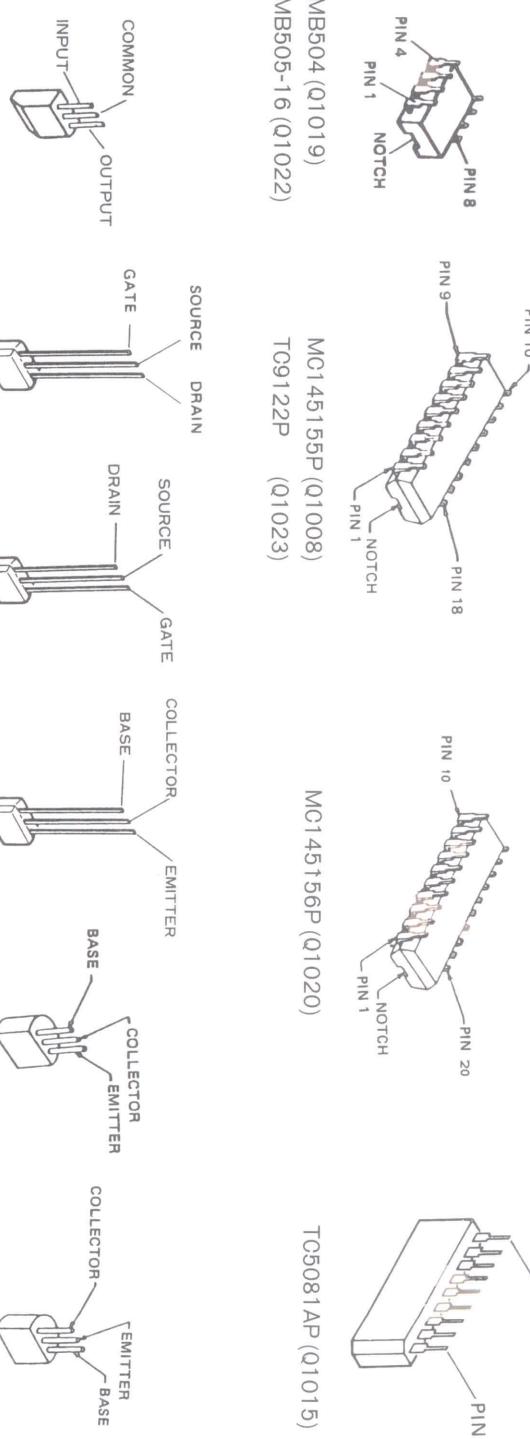


T 9205548A
Wire - ASSY

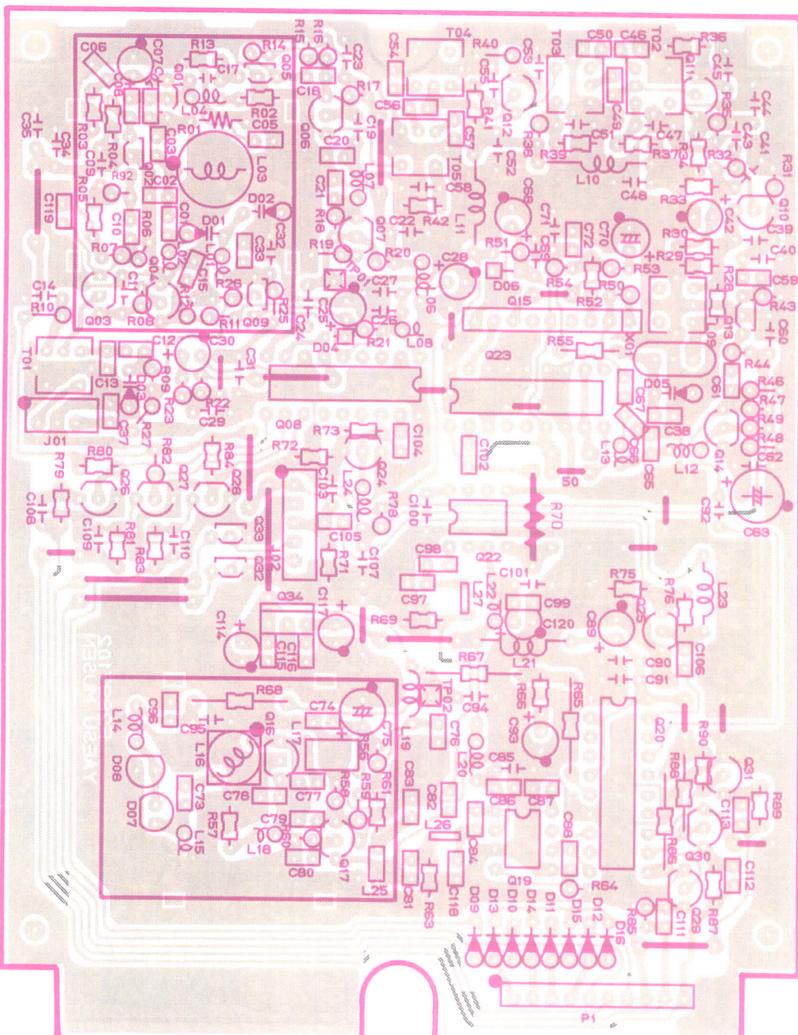


Q9000078
Terminal

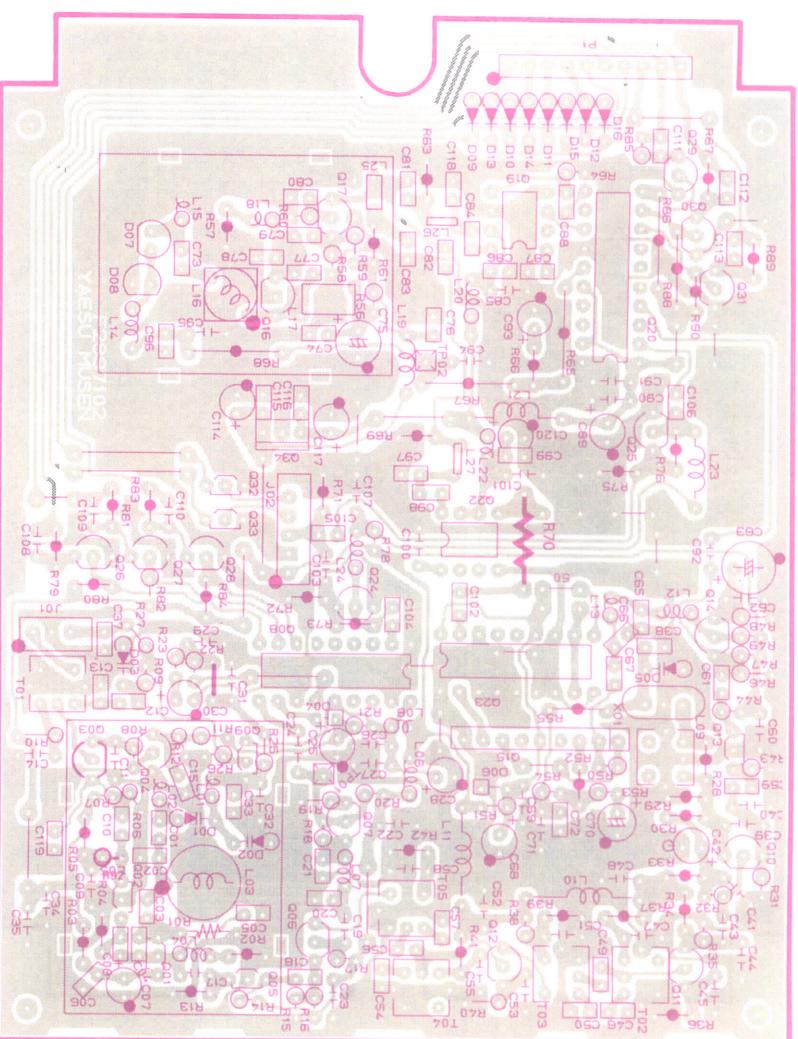
P2000012
Fuse Holder



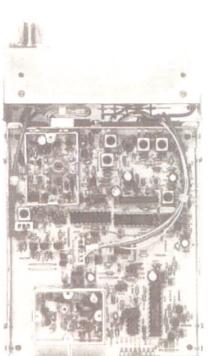
Component side (obverse)



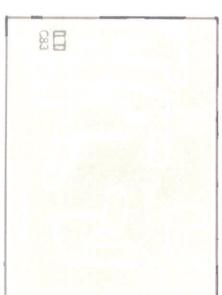
Component side (reverse)



50MHz SUB VCO UNIT (No. 1XXX)



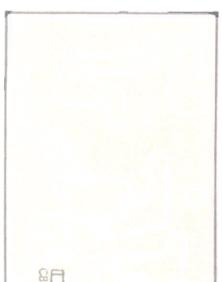
50MHz SUB



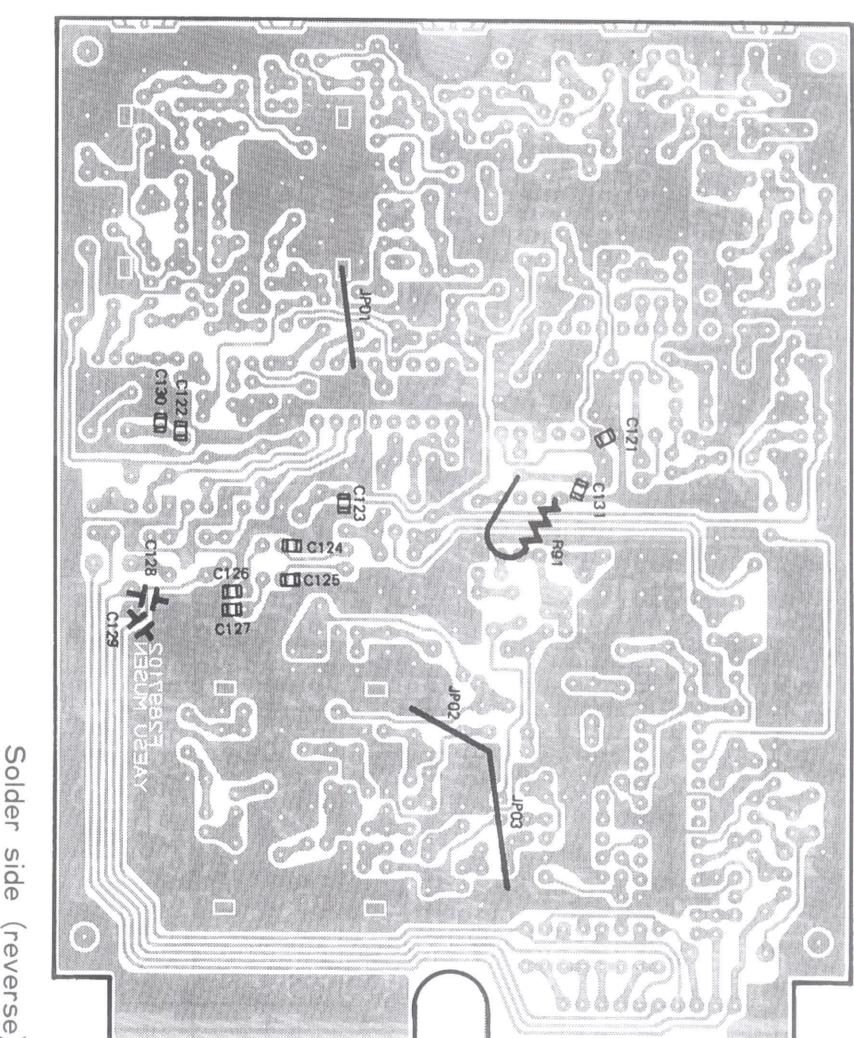
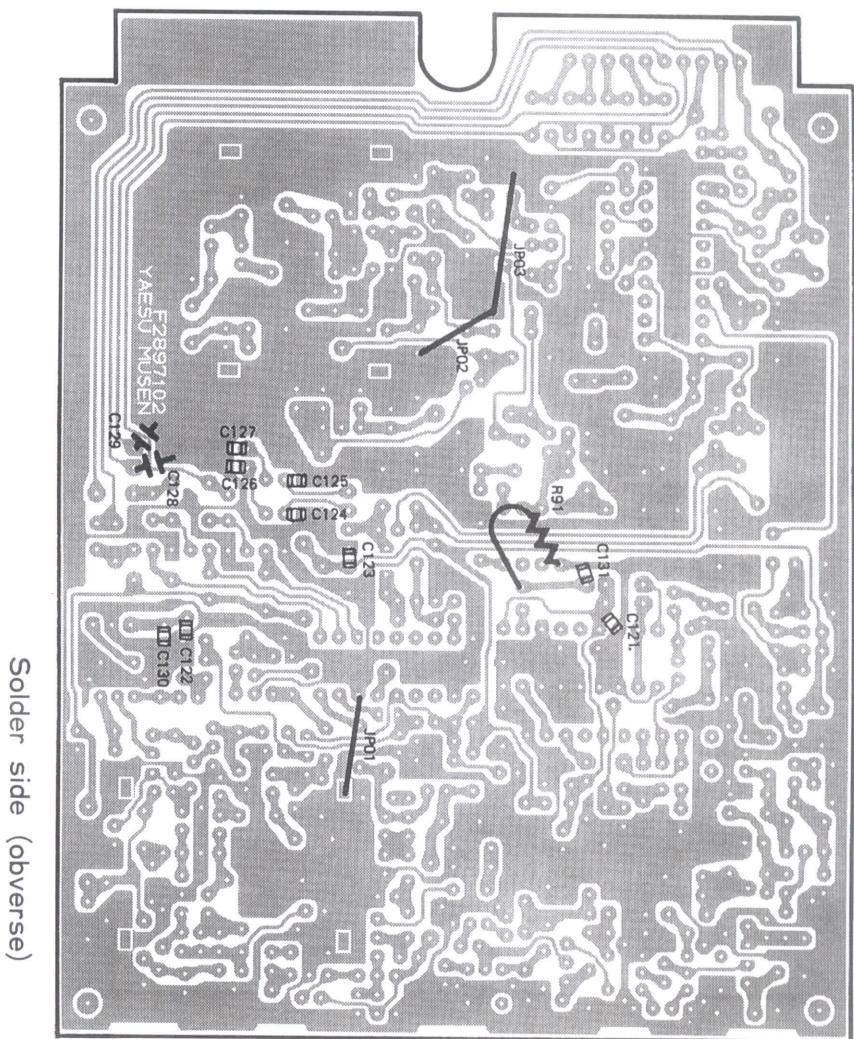
Component side (obverse)



Component side (reverse)



50MHz BAND MODULE (FEX-736-50) OPTION



Solder side (obverse)

Solder side (reverse)

50MHz PLL UNIT VOLTAGE CHART
(DC VOLTS)

	E(S)	C(D)	(G ₁)	B (G ₂)	REMARKS		E(S)	C(D)	(G ₁)	B (G ₂)	REMARKS
Q1001	0.61	8.53	0				Q1016	0	8.77	1.20	
Q1002	0	3.10	0				Q1017	1.26	7.70	2.00	
Q1003	1.56	8.64	2.23				Q1024	0	5.67	0.72	
Q1004	0	0.07	0.71				Q1025	0	5.67	0.72	
Q1005	0	3.57	0				Q1026	0	0.07	0.67	
Q1006	0.97	5.84	1.64				Q1027	0	0.07	0.67	
Q1007	0.74	5.41	1.46				Q1028	0	0.07	0.67	
Q1009	6.17	8.56	5.38				Q1029	0	0.07	0.67	
Q1010	2.37	7.71	3.00				Q1030	0	0.07	0.67	
Q1011	1.16	8.71	1.73				Q1031	0	0.07	0.67	
Q1012	0.98	8.74	1.67				Q1032	0	0.14/8.79	4.79/0	RX/TX
Q1013	0	4.19	0				Q1033	0	8.73/0.27	4.78/0	RX/TX
Q1014	0.99	5.65	1.70								

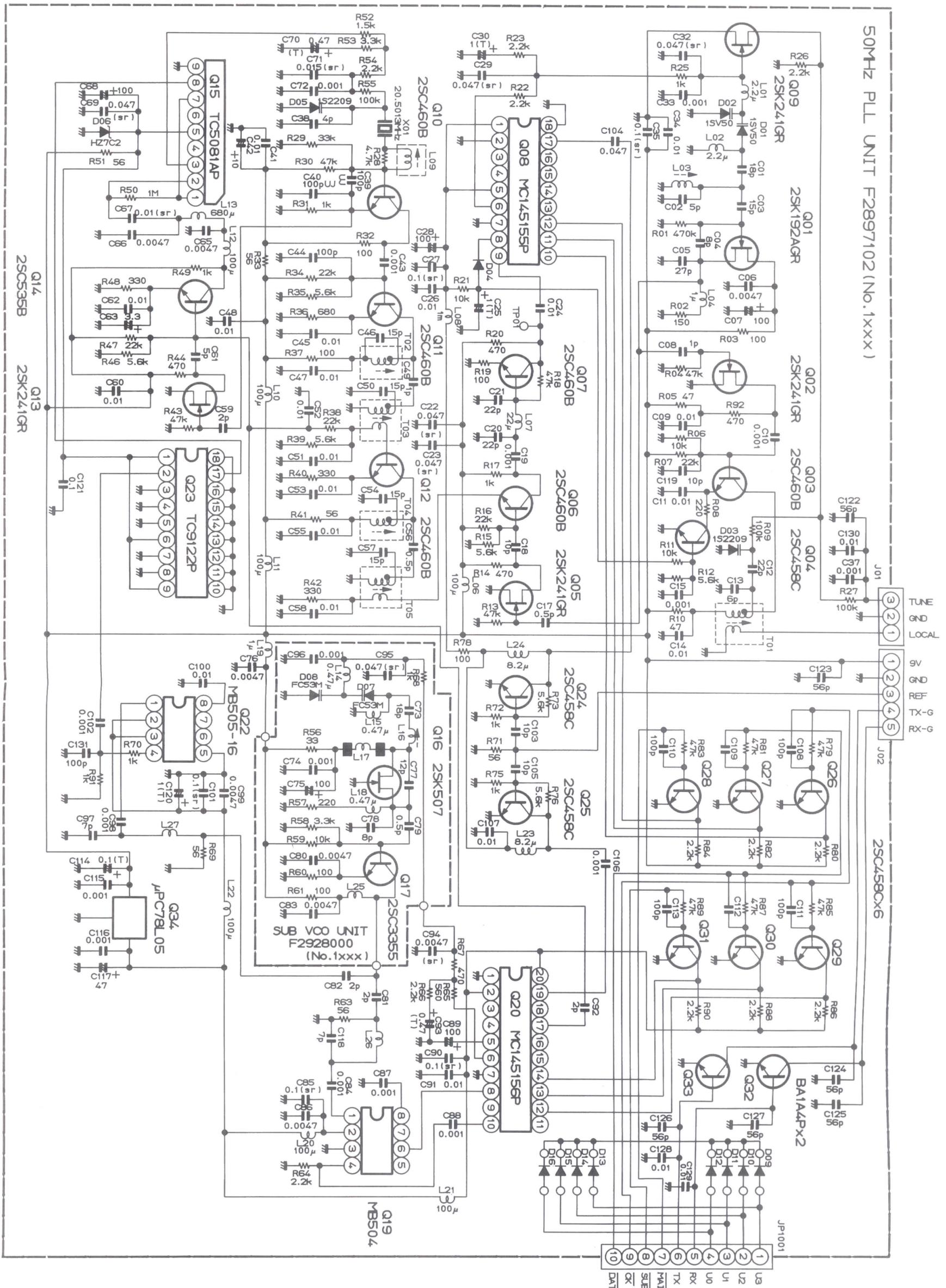
50MHz PLL UNIT IC VOLTAGE CHART
(DC VOLTS)

	1(IN)	2(OUT)	3(GND)	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	REMARKS
Q1008	8.57	0	—	—	8.56	5.22	0	8.49	3.92	0.09	0.09	0.09	—	—	—	3.97	0				
Q1015	3.32	3.30	2.78	—	7.57	—	3.32	0.79	0												
Q1019	2.53	5.02	0	2.91	—	4.45	—	2.52													
Q1020	0	5.02	—	—	5.03	1.62	0	4.45	—	1.98	0.72	0.07	0.06	0.03	—	—	2.53	—	2.04	5.03	
Q1022	2.46	5.03	5.03	2.70	0	—	—	2.46													
Q1023	7.56	3.11	0	0.02	0.02	7.56	0	0	7.56	0	0	0	0	0	0	0	0.79	0			
Q1034	9.00	0	5.01																		

50MHz PLL UNIT IC VOLTAGE CHART
(DC VOLTS)

(DC VOLTS)

50MHz BAND MODULE (FEX-736-50) OPTION

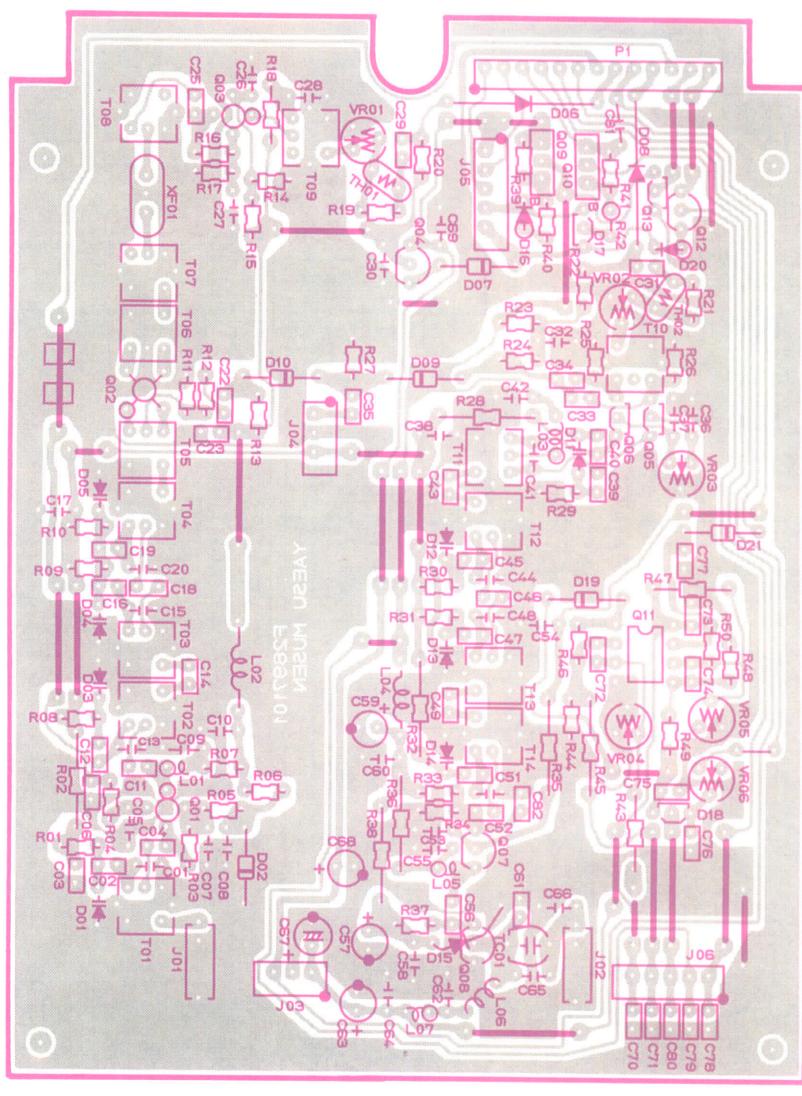


RESISTOR VALUES ARE IN Ω . 1/6W;
CAPACITOR VALUES ARE IN μF .
INDUCTOR VALUES ARE IN HENRIES. UNLESS OTHERWISE NOTED.

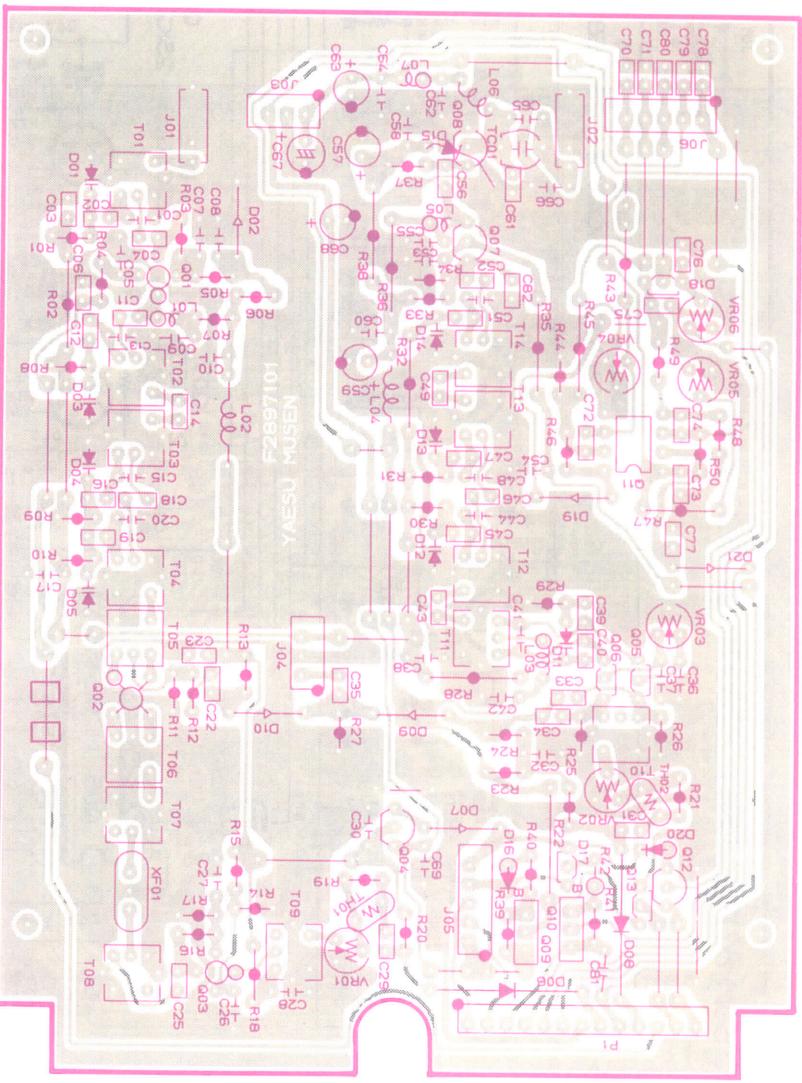
DIODES ARE TYPE 1SS270 UNLESS OTHERWISE NOTED.
(T)CAPACITORS ARE TANTALUM.
(sr)CAPACITORS ARE SEMICONDUCTOR CERAMIC. 25MV²

50MHz BAND MODULE (FEX-736-50) OPTION

50MHz RF UNIT (No. 2XXX)

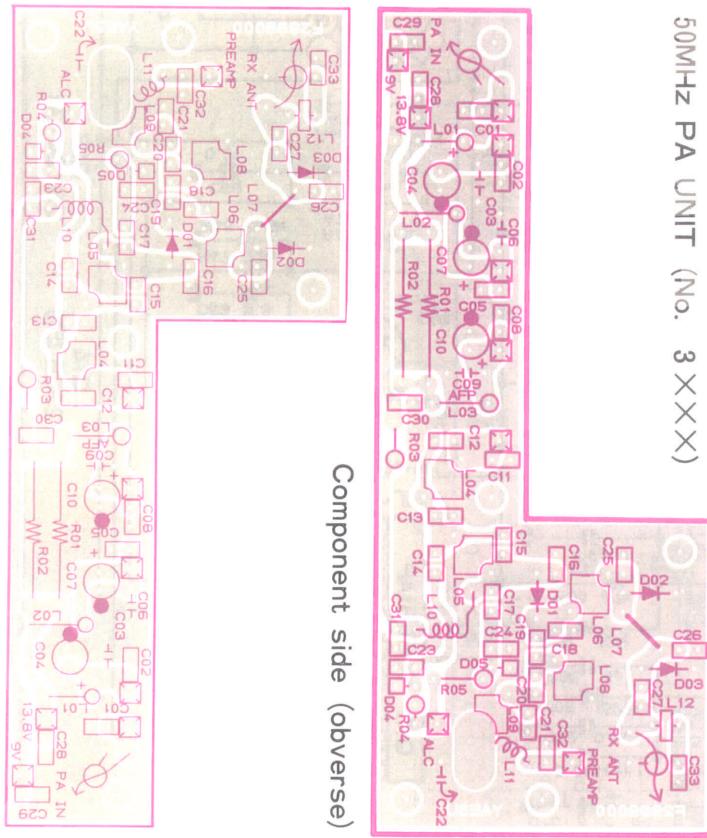


Component side (obverse)

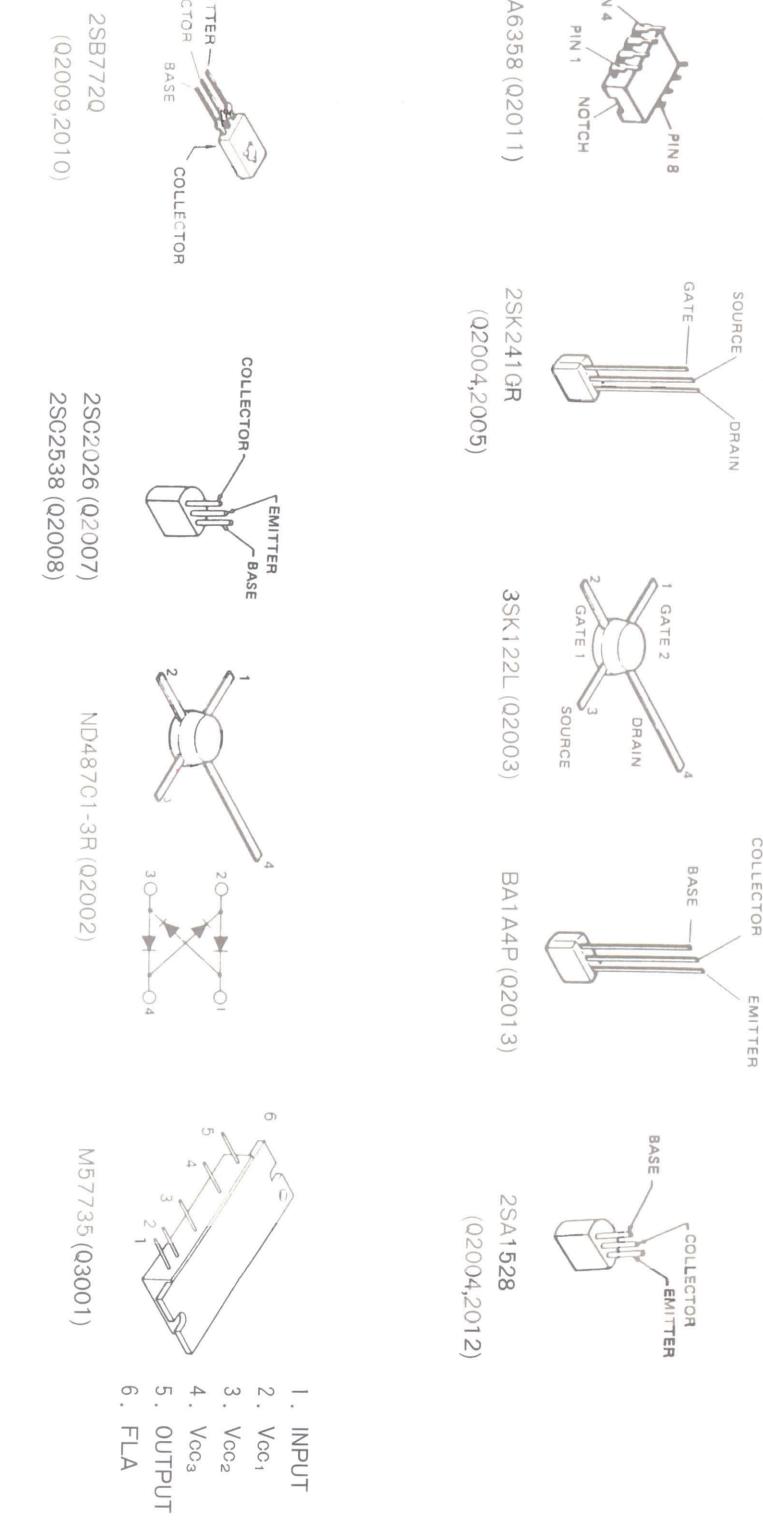


Component side (reverse)

50MHz PA UNIT (No. 3XXX)

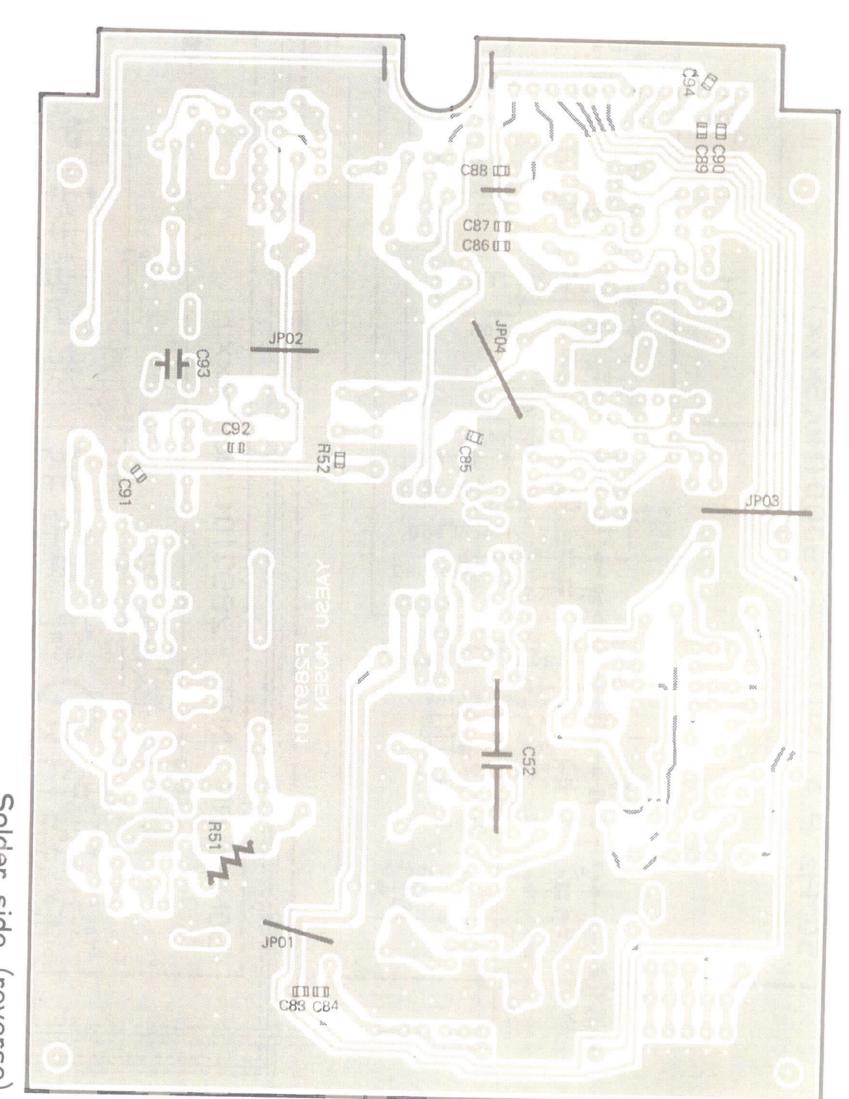
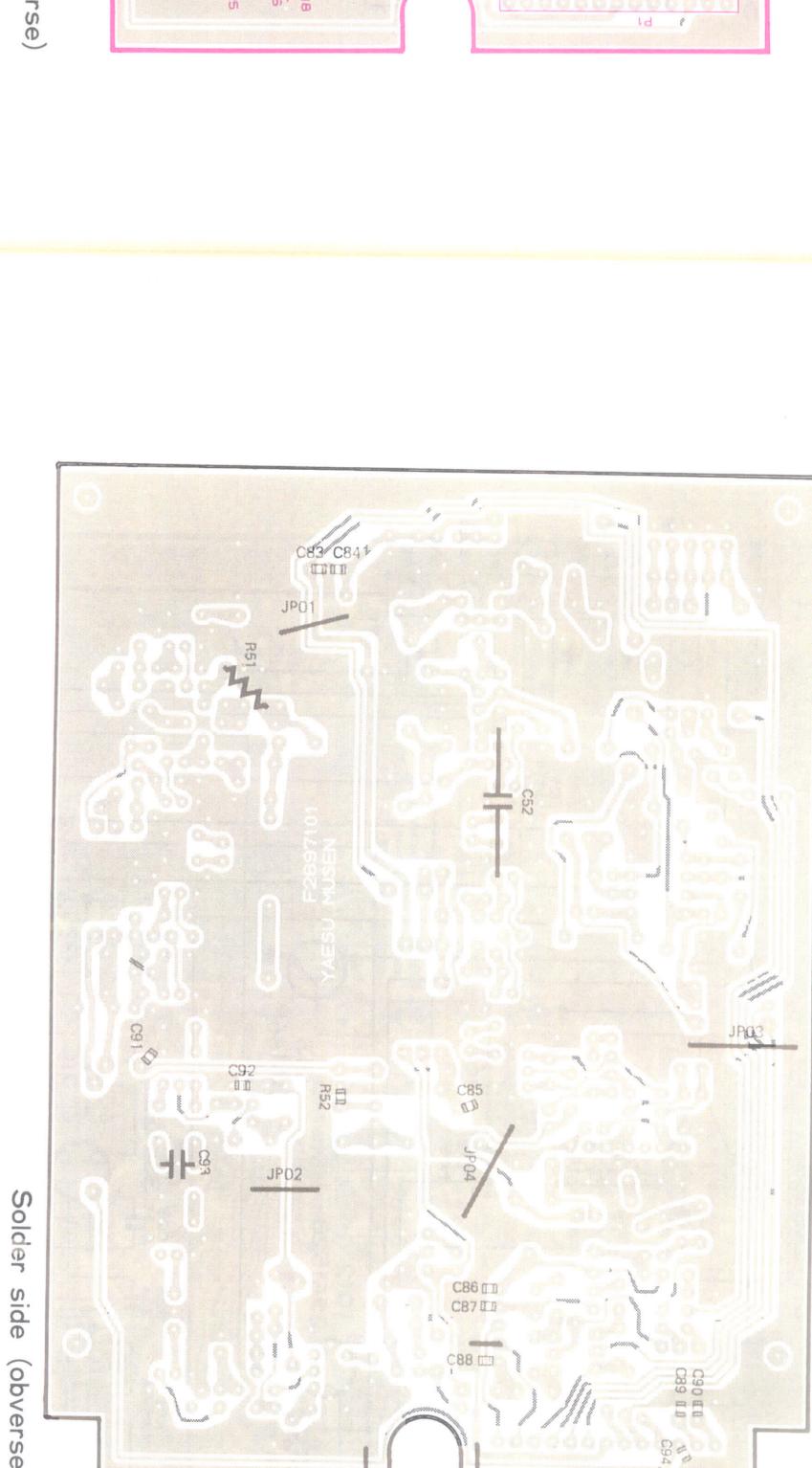


Component side (obverse)



Component side (reverse)

50MHz BAND MODULE (FEX-736-50) OPTION



erse)

Solder side (obverse)

Solder side (reverse)

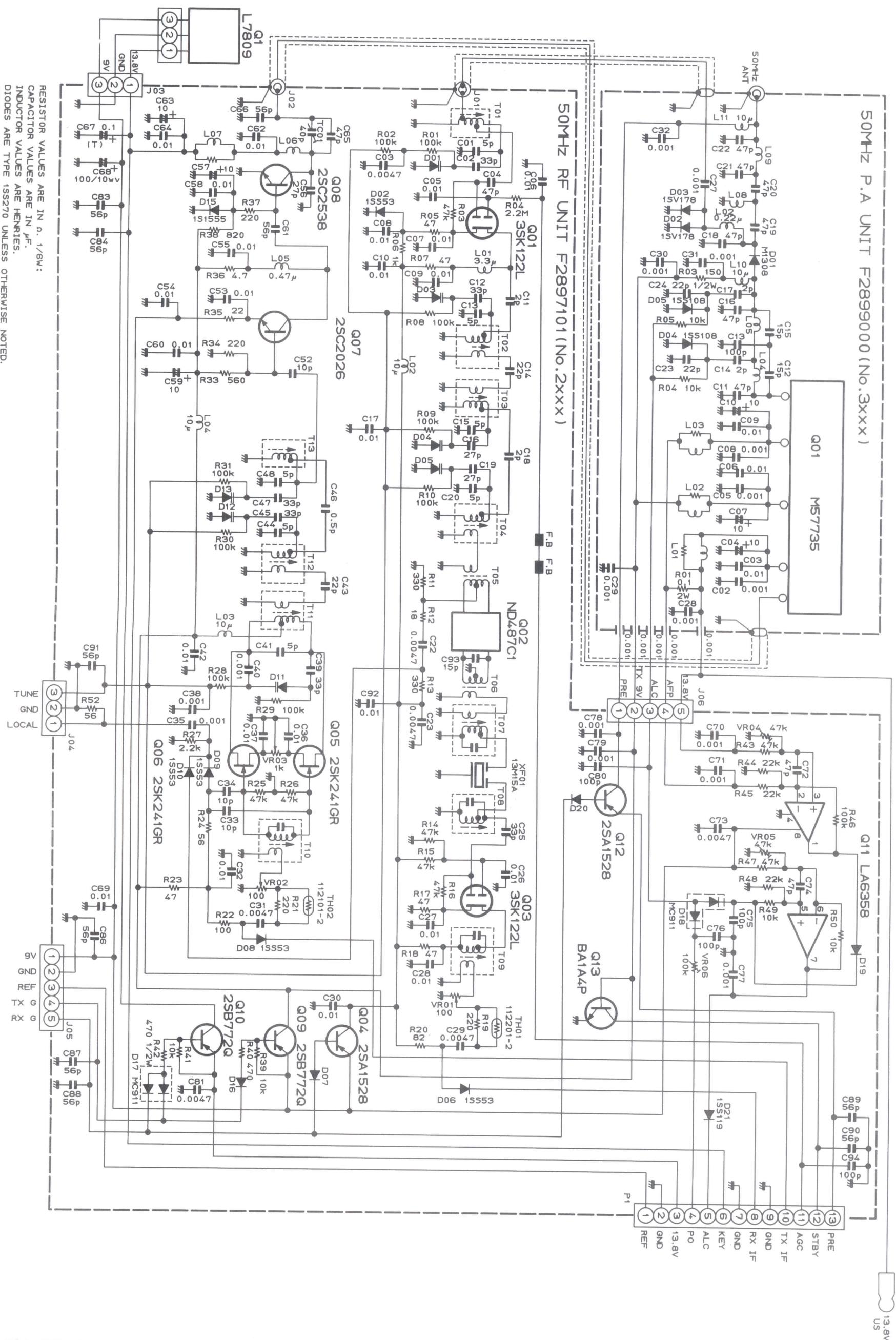
50MHz RF UNIT VOLTAGE CHART
(DC VOLTS)

	E(S)	C(D)	B (G ₁)	B (G ₂)	REMARKS
02001	1.24	8.50	1.07	1.99	
02003	0.61	8.34	0.61	4.44	
02004	9.00	893/02	880/896	RX/TX	
02005	0.95	8.94	0.05		
02006	0.95	8.94	0.05		
02007	1.71	8.78	2.47		
02008	0	13.04	0.64		
02009	8.98	0/8.90	889/822	RX/TX	
02010	13.80	1342/13.19	1280/1252	RX/TX	
02012	0/12.50	0/12.50	0/0.79	PRE/AMP OFF/ON	
02013	0	0	0/8.90	RX/TX	

50MHz RF UNIT IC VOLTAGE CHART
(DC VOLTS)

	1(IN)	2(OUT)	3(GND)	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	REMARKS
02002	0	0																			
02011	8.67	6.14	6.13	0.07	1.27	1.27	1.27	1.20	9.06												
03001	—	13.8	9.00	1342	—																@ 10W output
001	13.50	0	9.05																		@ 10W output

50MHz BAND MODULE (FEX-736-50) OPTION

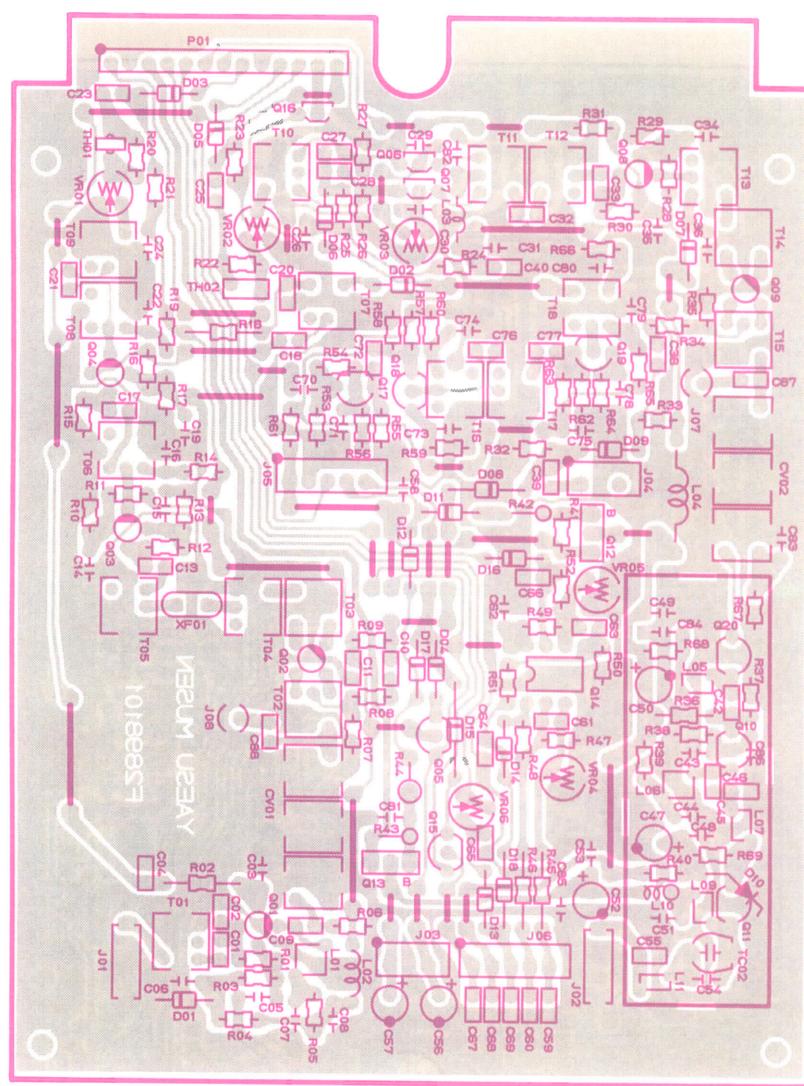


RESISTOR VALUES ARE IN Ω . 1/6W:
CAPACITOR VALUES ARE IN μF :
INDUCTOR VALUES ARE HENRIES.
DIODES ARE TYPE 1SS270 UNLESS OTHERWISE NOTED.
CUTICAPACITORS ARE TANTALUM.

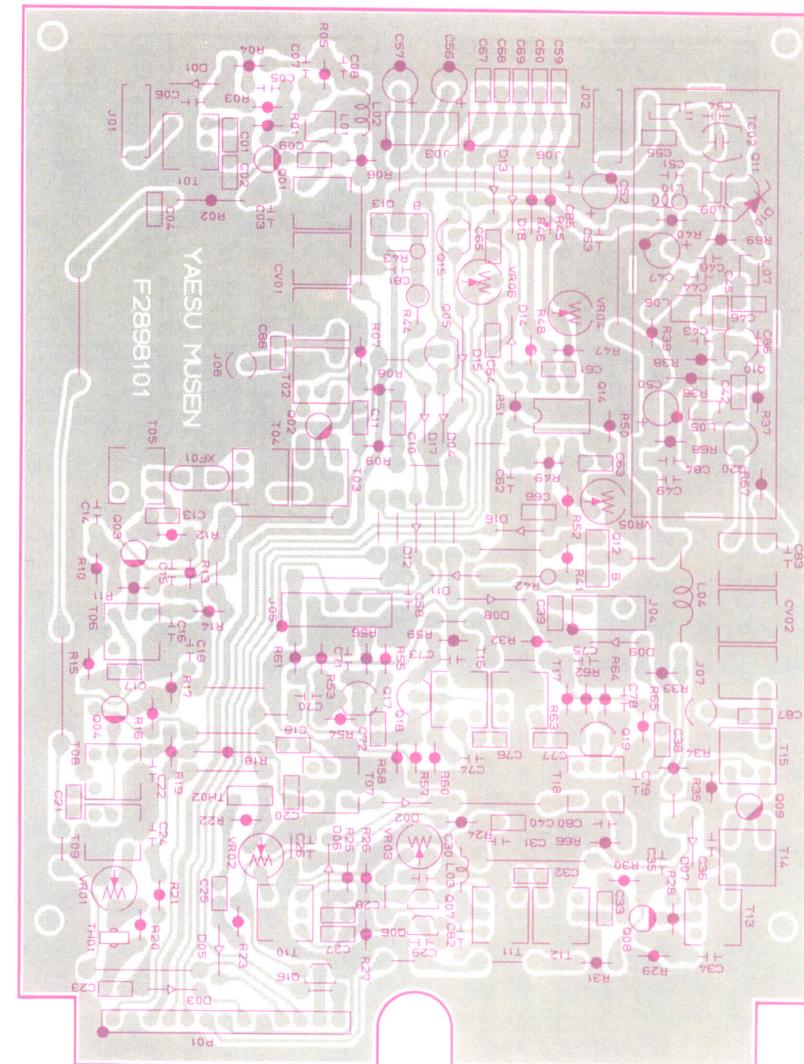
220MHz BAND MODULE (FEX-736-220) OPTION

220MHz RF UNIT (No. 2 XXX)

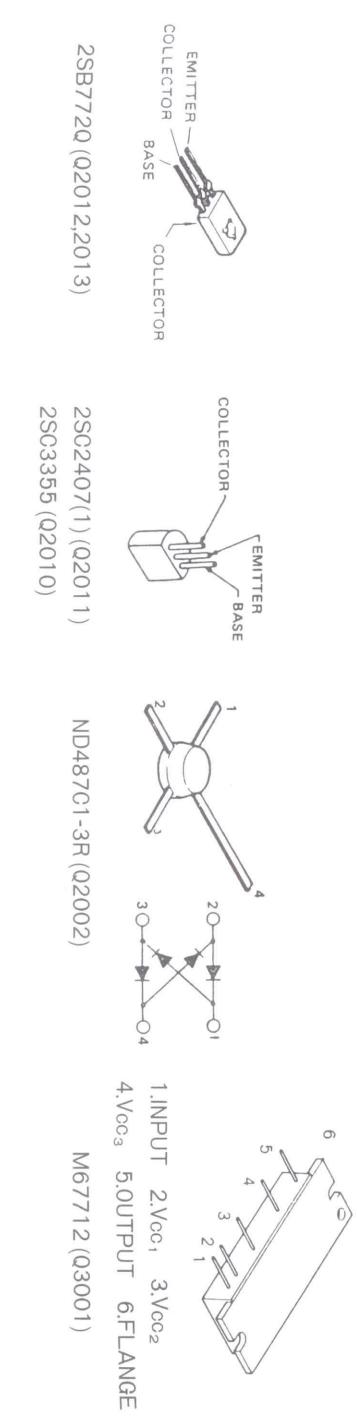
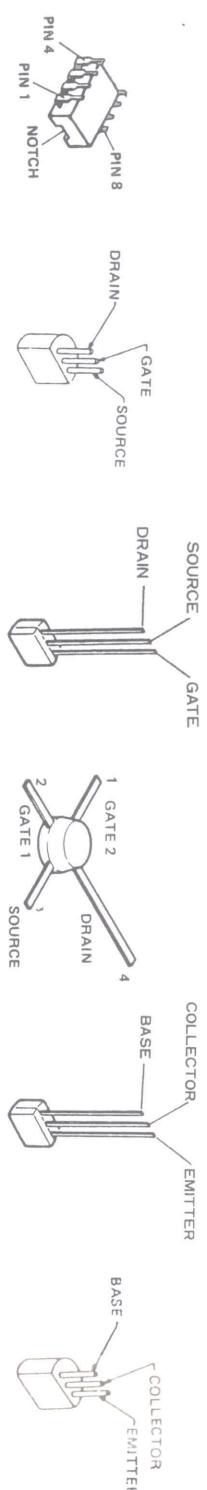
13.8V
US



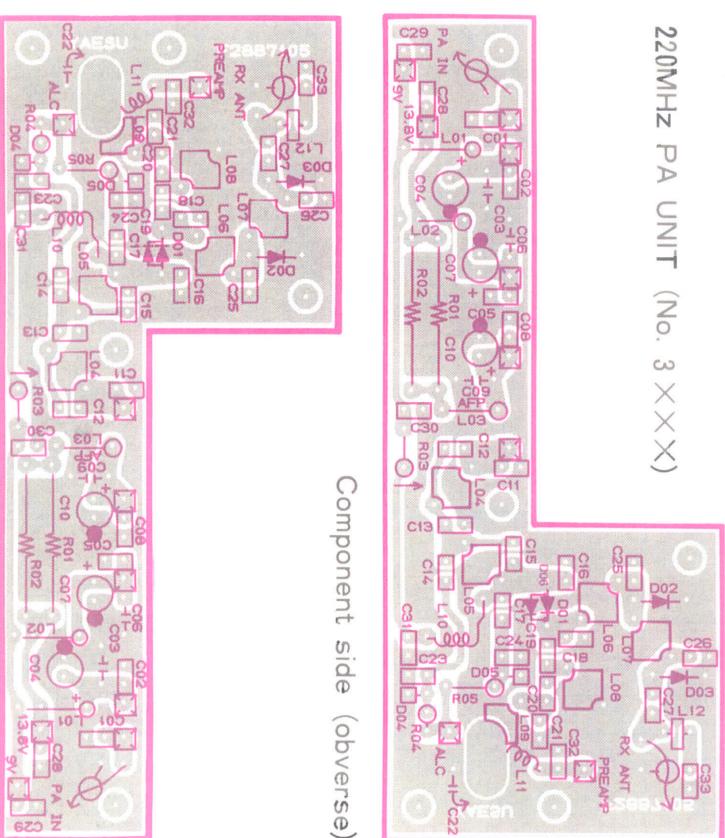
Component side (obverse)



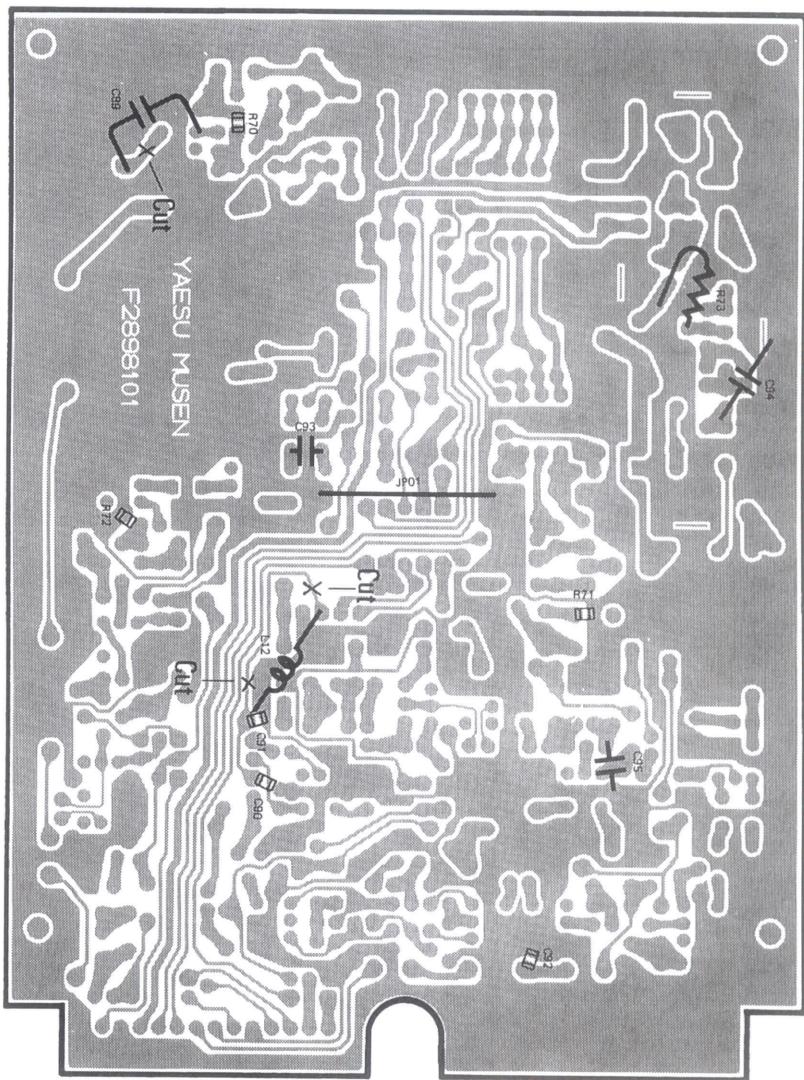
Component side (reverse)



Component side (reverse)



220MHz BAND MODULE (FEX-736-220) OPTION



Solder side (obverse)

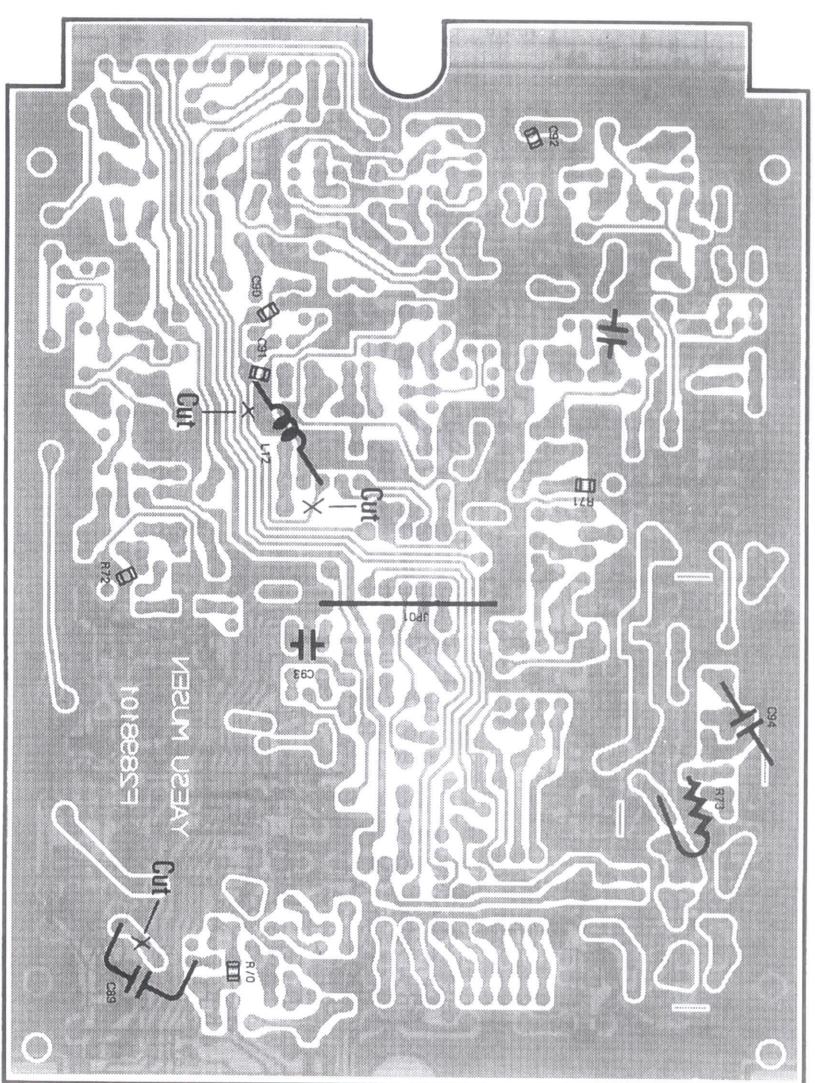
220MHz RF UNIT VOLTAGE CHART
(DC VOLTS)

	E(S)	C(D)	B (G ₁)	G ₂)	REMARKS
Q2001	1.02	8.64	0.92	1.99	
Q2003	0.50	8.43	0.33	4.47	
Q2004	0.28	8.67	0	0.19	
Q2005	9.00	8.95/0	0.79/8.89		RX/TX
Q2006	1.0	8.9	0		
Q2007	1.0	8.9	0		
Q2008	1.69	8.18	1.82	5.21	
Q2010	0.81	8.55	1.55		
Q2011	0	12.56	0.47		
Q2012	9.00	0/8.91	8.99/8.20		RX/TX
Q2013	13.80	1344/1285	1222/1216		RX/TX
Q2015	0/12.50	0/12.50	0/0.79		PRE AMP OFF/ON
Q2016	0	0.23/0	0/8.53		RX/TX
Q2018	0.97	8.76	1.52		
Q2019	1.34	8.73	2.00		
Q2020	1.28	7.65	0		

220MHz RF UNIT IC VOLTAGE CHART
(DC VOLTS)

	1(IN)	2(OUT)	3(GND)	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	REMARKS
Q2002	0	0																			
Q2009	0	0																			
Q2014	1.19	6.02	6.02	0	1.57	1.57	1.06	8.97													@ 10W output
Q3001	—	13.80	9.00	13.16	—																@ 10W output
Q01	13.8	8.0	0																		

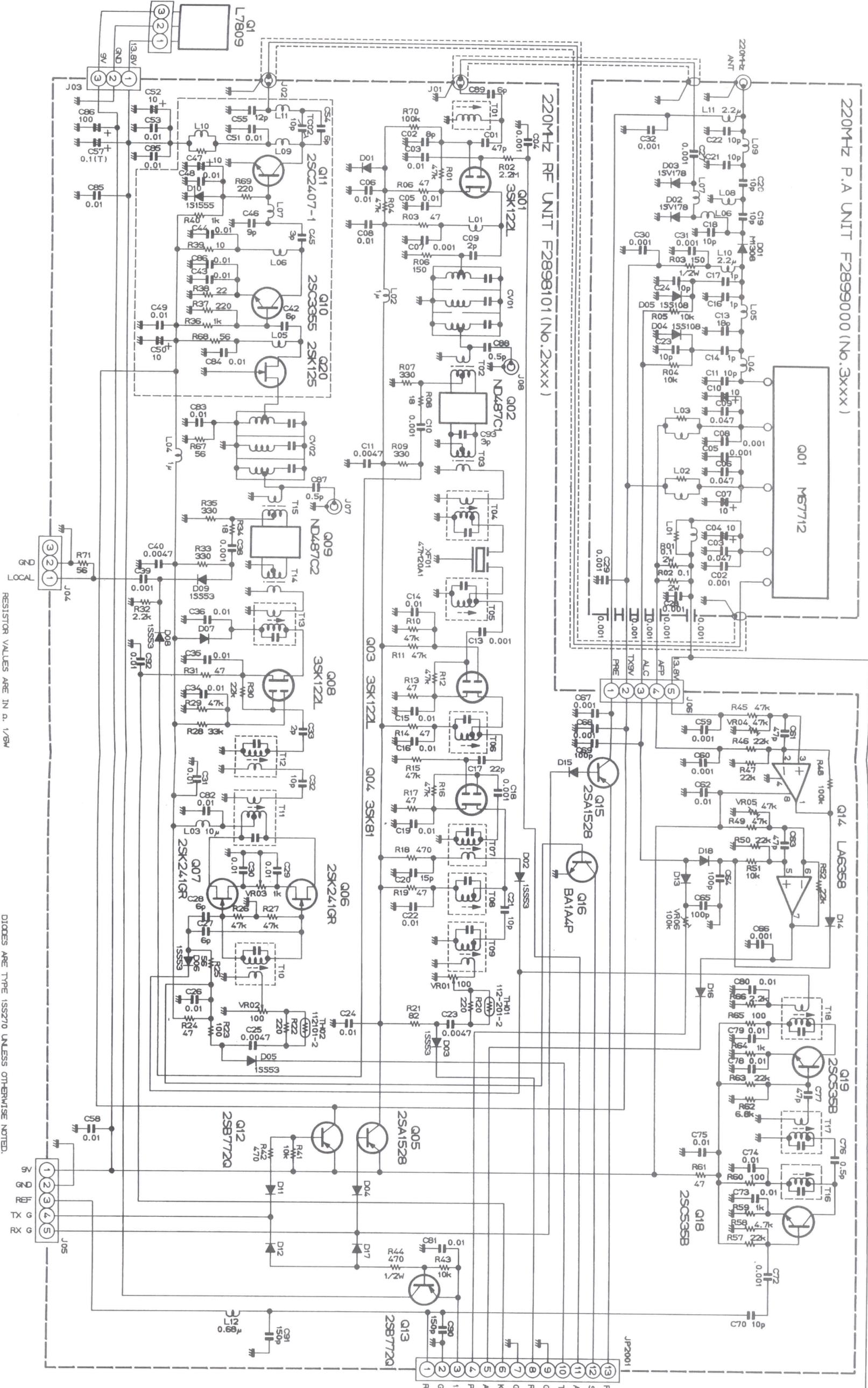
Solder side (reverse)



220MHz BAND MODULE(FEX-736-220) OPTION

220MHz P.A UNIT F2899000 (No.3xxx)

Q01
M67712

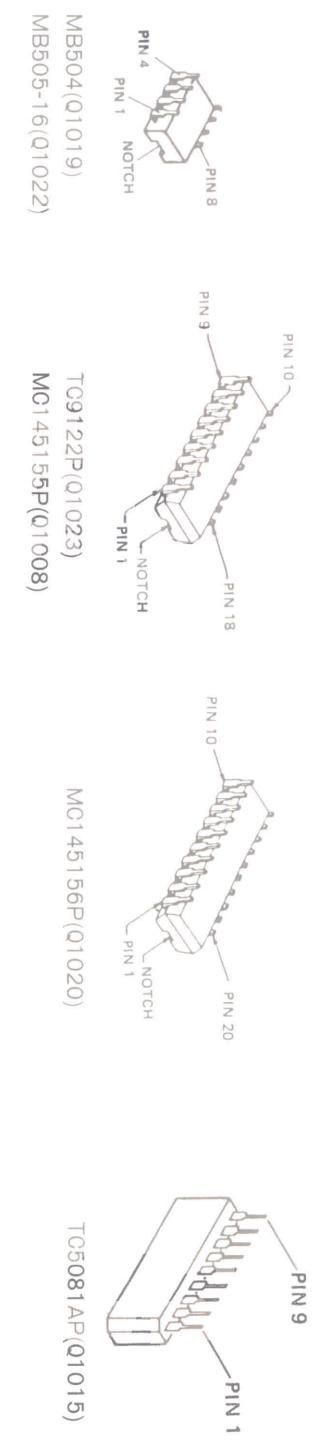
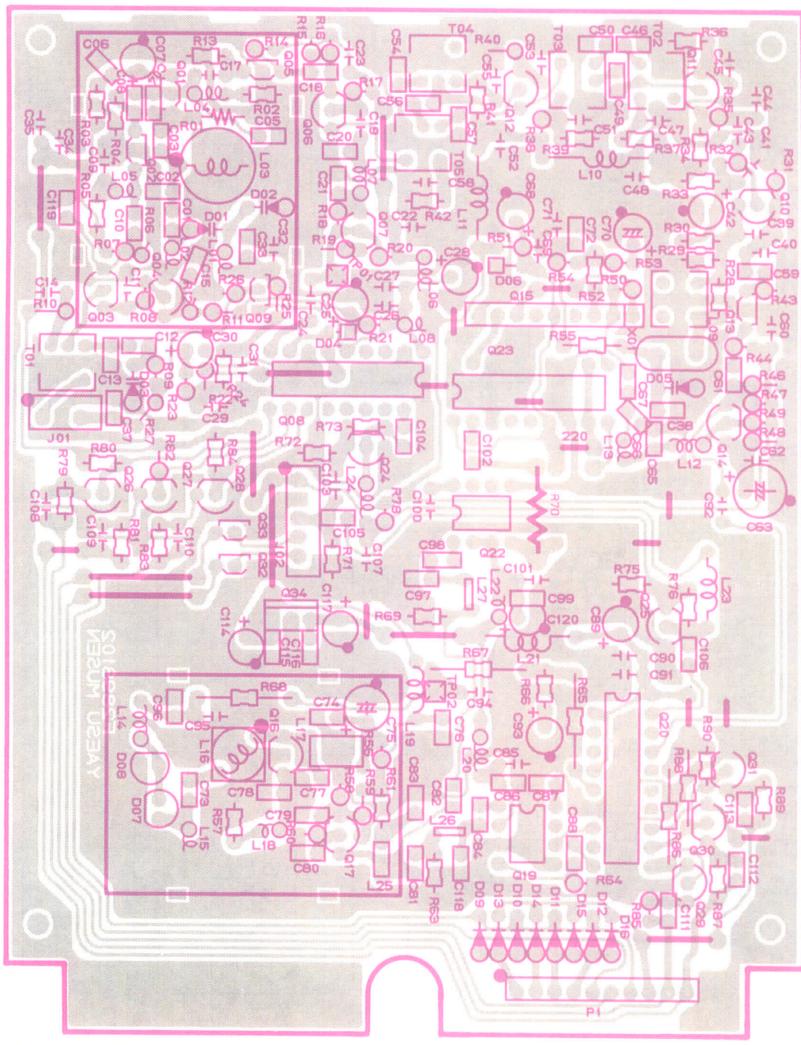


RESISTOR VALUES ARE IN Ω , 1/16W
CAPACITOR VALUES ARE IN μF .
INDUCTOR VALUES ARE IN HENRIES. UNLESS OTHERWISE NOTED.

DIODES ARE TYPE 1SS270 UNLESS OTHERWISE NOTED.
(*)CAPACITORS ARE TANTALUM.
(**)CAPACITORS ARE SEMICONDUCTOR CERAMIC, 25mV.

220MHz BAND MODULE (FEX-736-220) OPTION

220MHz PLL UNIT (No. XXX)

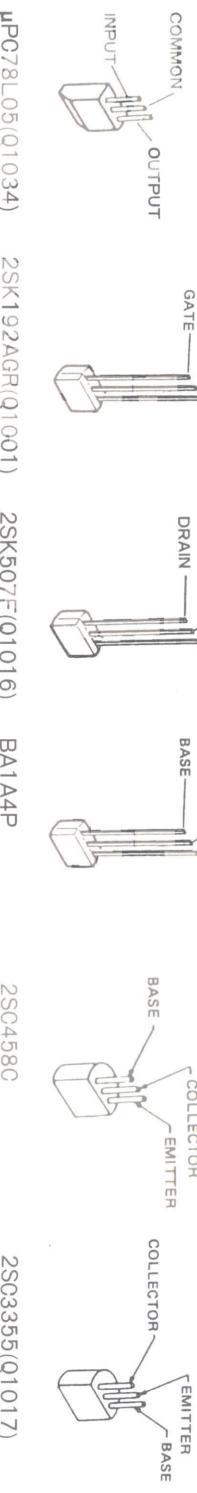


MB504(01019)
MB505-16(01022)

TC9122P(01023)
MC145155P(01008)

MC145156P(01020)

TC5081AP(01015)



μ PG78L05(Q1034)

2SK192AGR(Q1001)
2SK241GR
(Q1002,1005,1013)

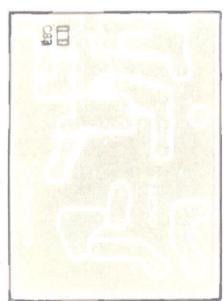
BA1A4P
(Q1032,1033)

2SC458C
(Q1004,1024,1025)
1026,1027,1028
1029,1030,1031

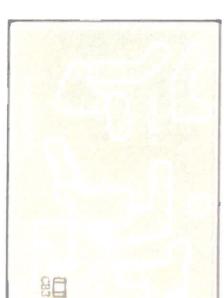
2SC3355(Q1017)

Component side (obverse)

Component side (reverse)

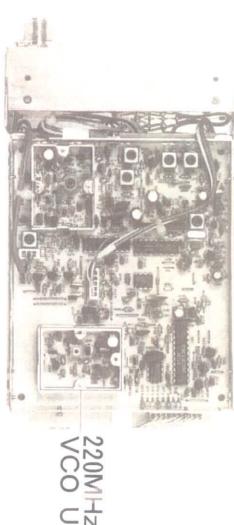


Solder side (obverse)



Solder side (reverse)

220MHz SUB VCO UNIT (No. 1XXX)

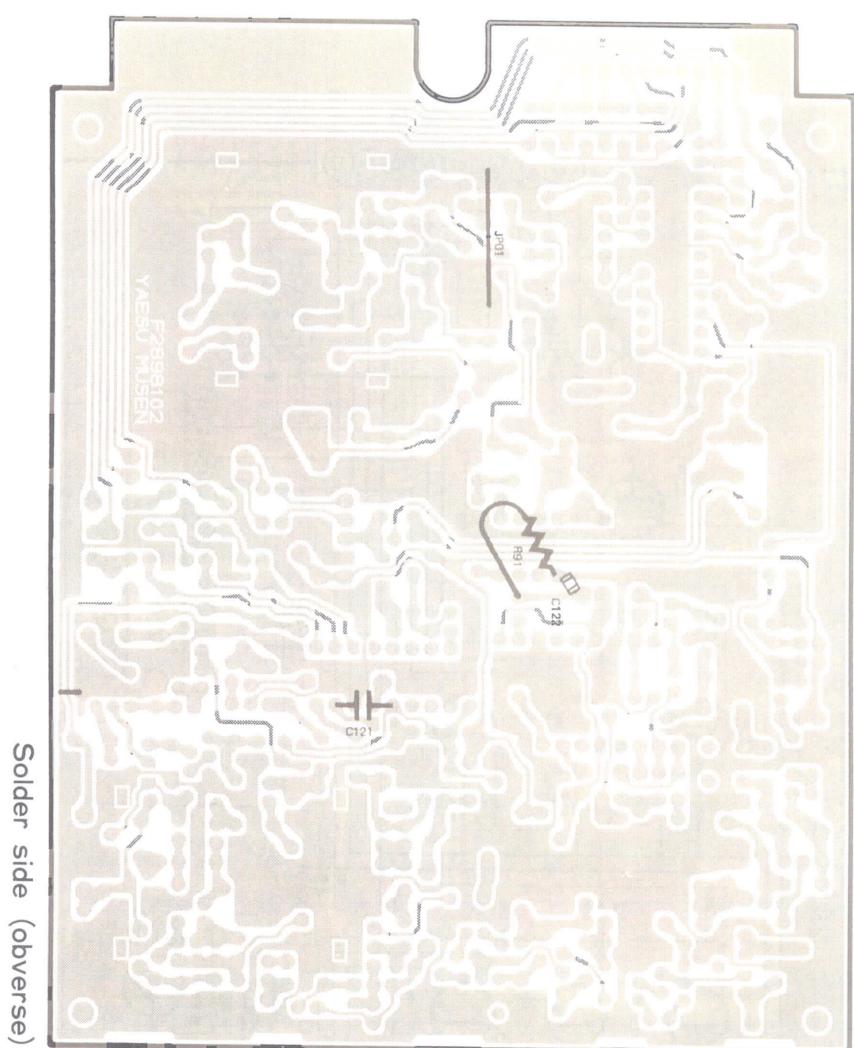


Component side (reverse)



Component side (reverse)

220MHz BAND MODULE(FX-730-220) OPTION



Solder side (obverse)

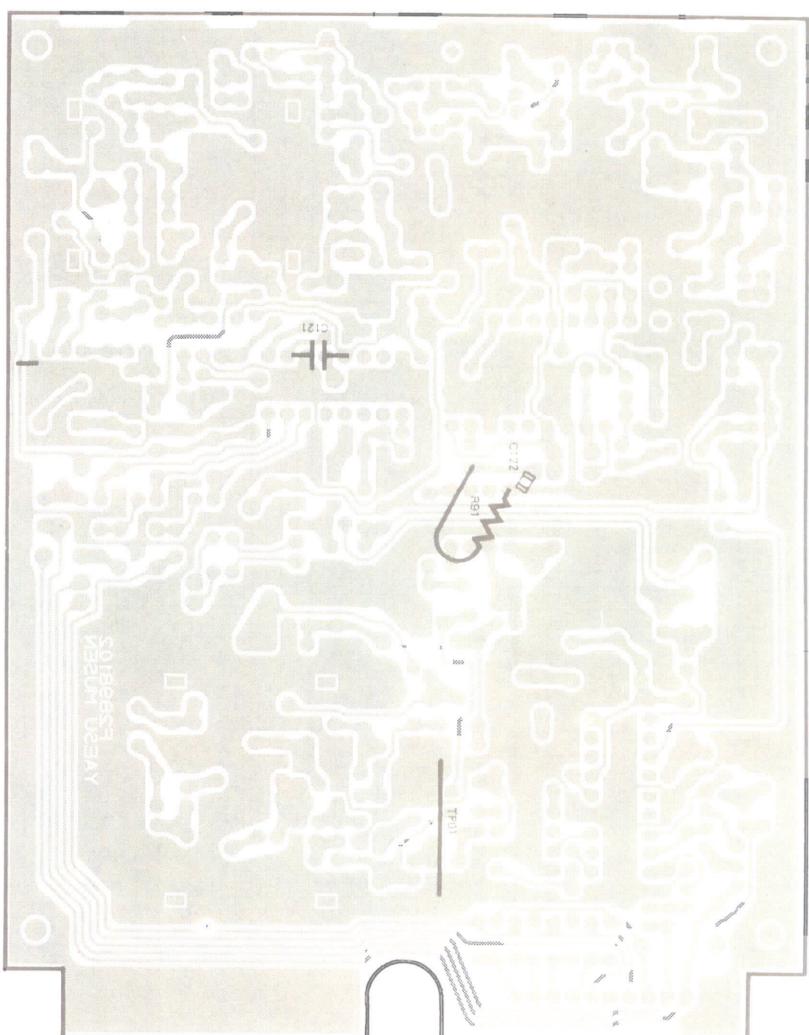
220MHz PLL UNIT VOLTAGE CHART

(DC VOLTS)

	E(S)	C(D)	G ₁	B (G ₂)	REMARKS		E(S)	C(D)	G ₁	B (G ₂)	REMARKS
Q1001	0.64	8.32	0			Q1016	1.17	8.67	0		
Q1002	0	8.53	0			Q1017	1.08	7.81	1.86		
Q1003	1.38	8.64	1.77			Q1024	0	5.08	0.70		
Q1004	0	0.06	0.71			Q1025	0	4.55	0.67		
Q1005	0	4.63	0			Q1026	0	0.09	0.69		
Q1006	0.97	6.00	1.58			Q1027	0	0.09	0.69		
Q1007	0.73	5.33	1.46			Q1028	0	0.09	0.09		
Q1010	2.44	8.51	3.04			Q1029	0	0.07	0.68		
Q1011	1.15	8.70	1.74			Q1030	0	0.07	0.68		
Q1012	0.95	8.77	1.63			Q1031	0	0.07	0.68		
Q1013	0	4.74	0			Q1032	0	0.44893	4.73/0	RX/TX	
Q1014	1.05	5.21	1.62			Q1033	0	8.93/0.27	0/4.73	RX/TX	

220MHz PLL UNIT IC VOLTAGE CHART

(DC VOLTS)

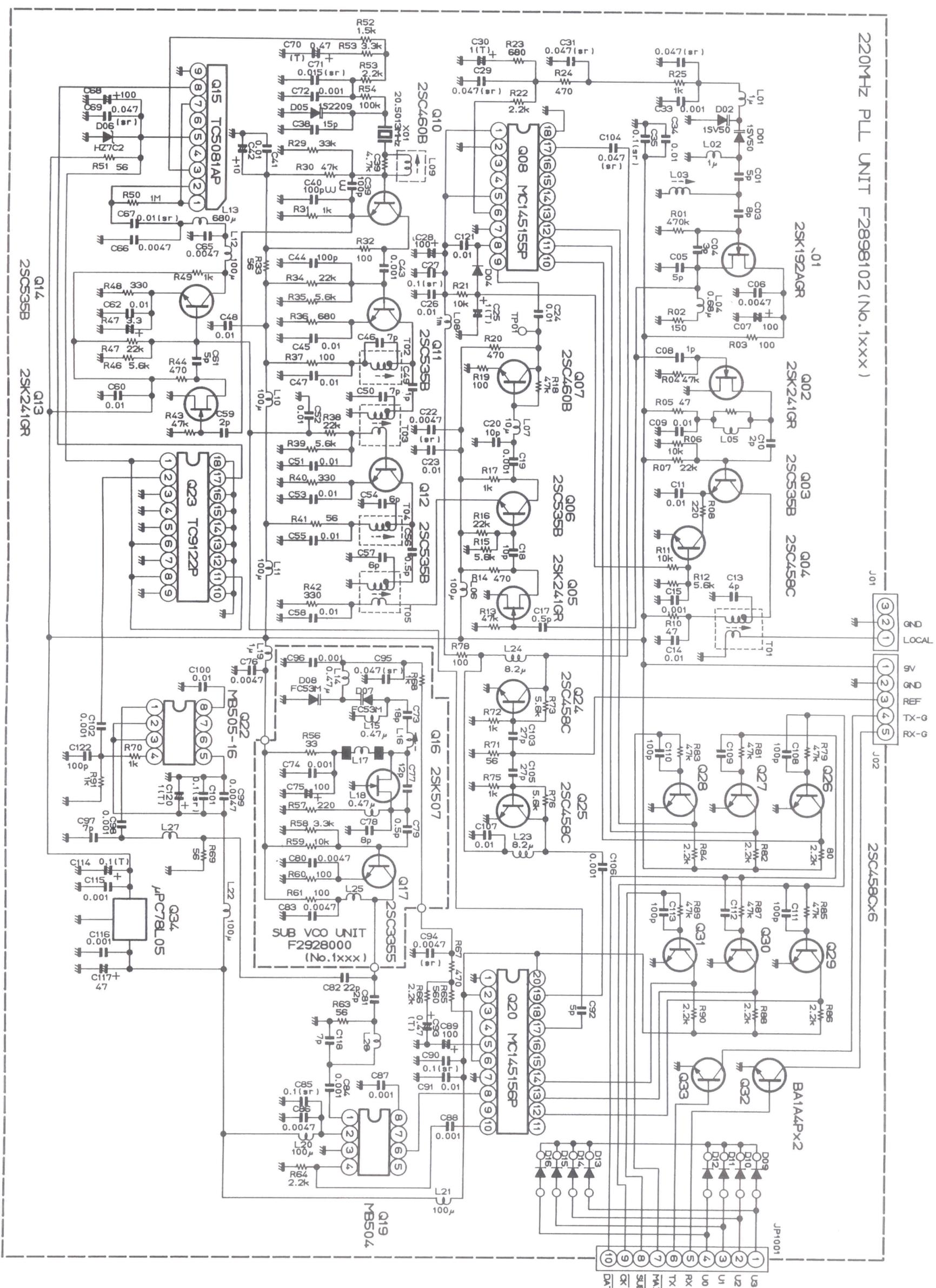


Solder side (reverse)

	1 (IN)	2 (OUT)	3 (END)	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	REMARKS
Q1008	8.53	0	—	—	8.53	4.60	0	8.47	3.68	0.08	0.08	0.08	—	—	—	—	3.94	0			
Q1015	3.28	3.19	7.43	—	7.53	—	3.28	0.30	0												
Q1019	2.42	4.96	0	2.83	—	4.39	—	2.43													
Q1020	0	5.03	—	—	5.01	5.06	0	4.37	—	2.08	—	0.70	0.70	0.12	—	—	2.19	—	2.16	5.07	
Q1022	2.41	4.91	5.01	2.51	0	—	—	2.43													
Q1023	7.52	2.93	0	0	0	7.53	0	7.53	0	0	7.53	0	0	0	0	0	0	0.30	0		
Q1034	8.88	5.01	0																		

220MHz BAND MODULE(FEX-736-220) OPTION

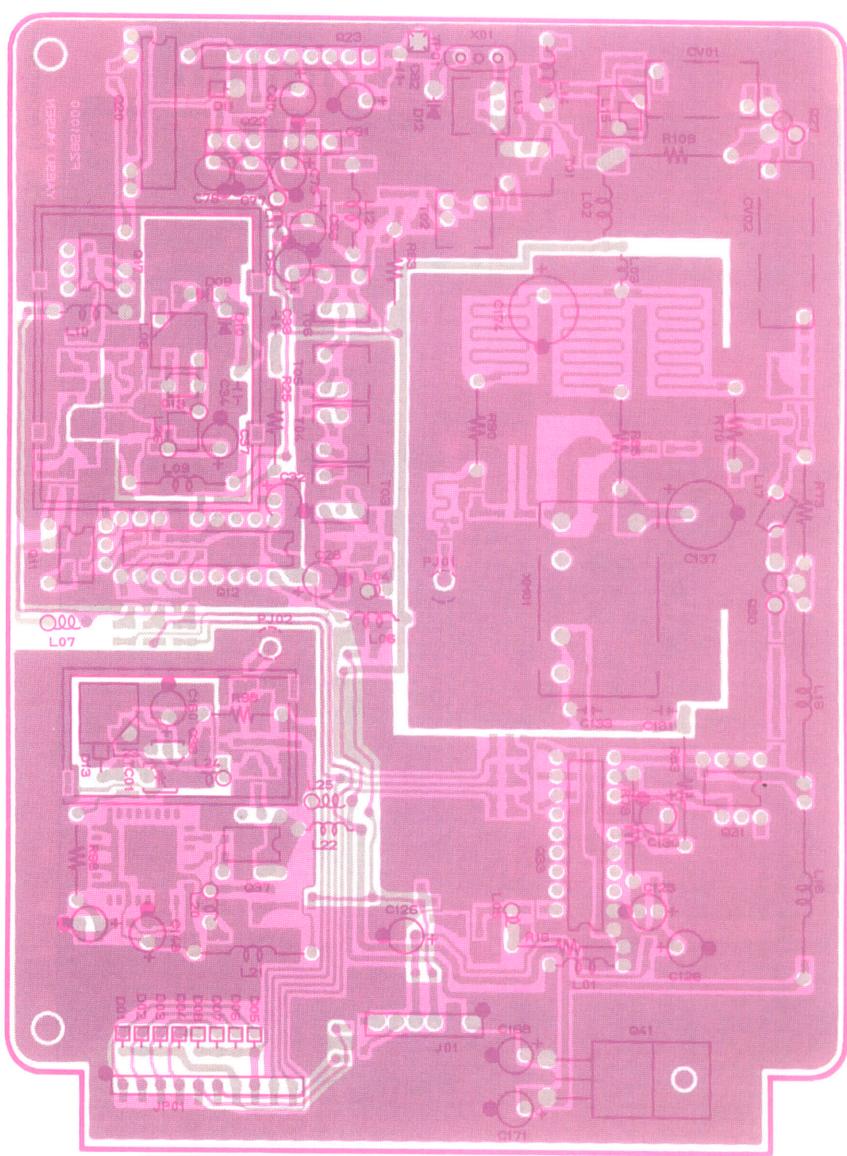
220MHz PLL UNIT F2898102 (No.1xxx)



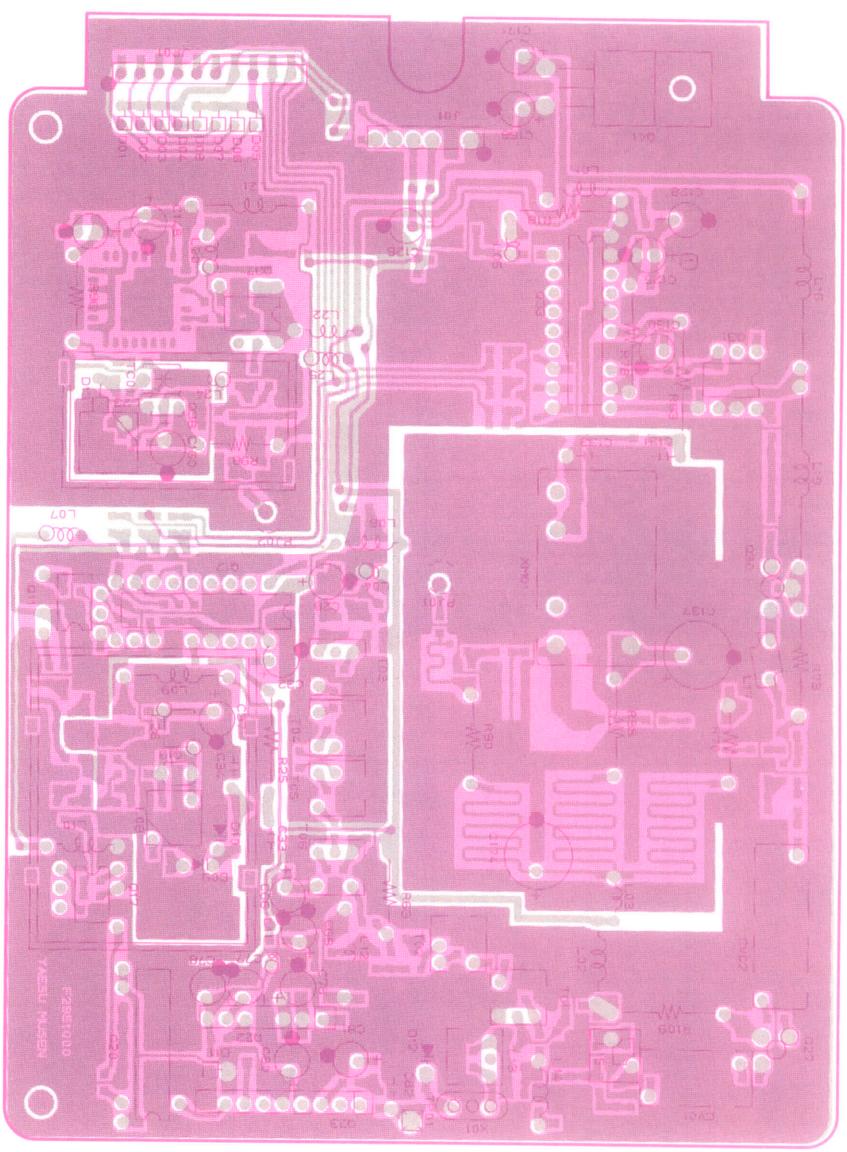
RESISTOR VALUES ARE IN Ω . 1MW:
CAPACITOR VALUES ARE IN μF .
INDUCTOR VALUES ARE IN HERTZES. UNLESS OTHERWISE NOTED.

DIODES ARE TYPE 1SS270 UNLESS OTHERWISE NOTED.
(T1)CAPACTORS ARE TANTALUM.
(sr)CAPACTATORS ARE SEMICONDUCTOR CERAMIC. 25uV:

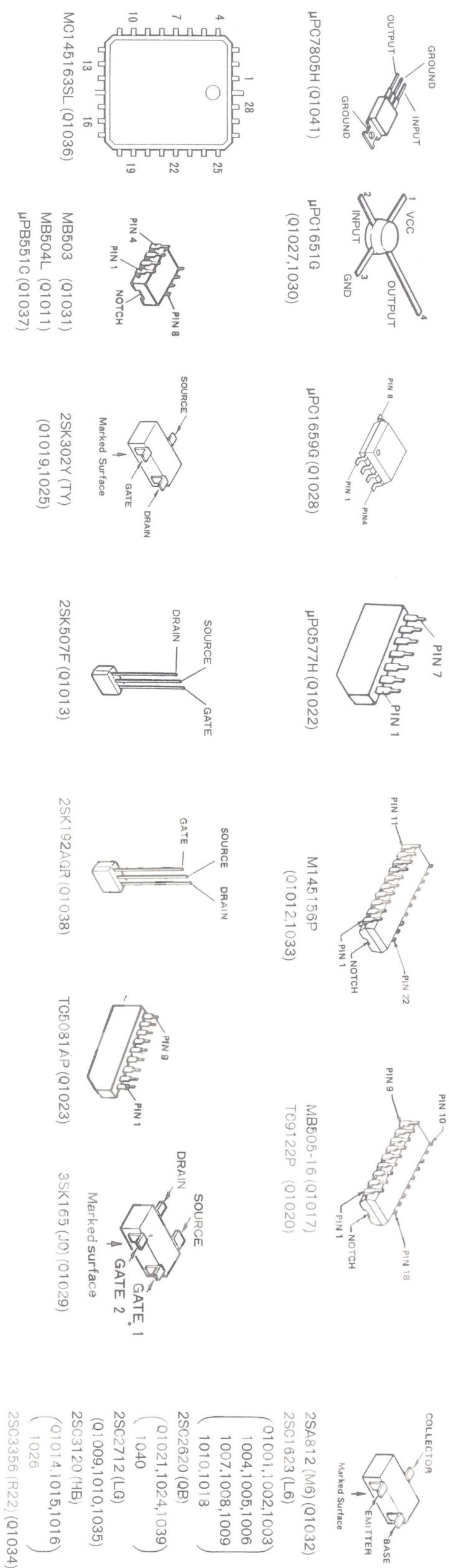
1200MHz PLL UNIT (No. 1 XXXX)



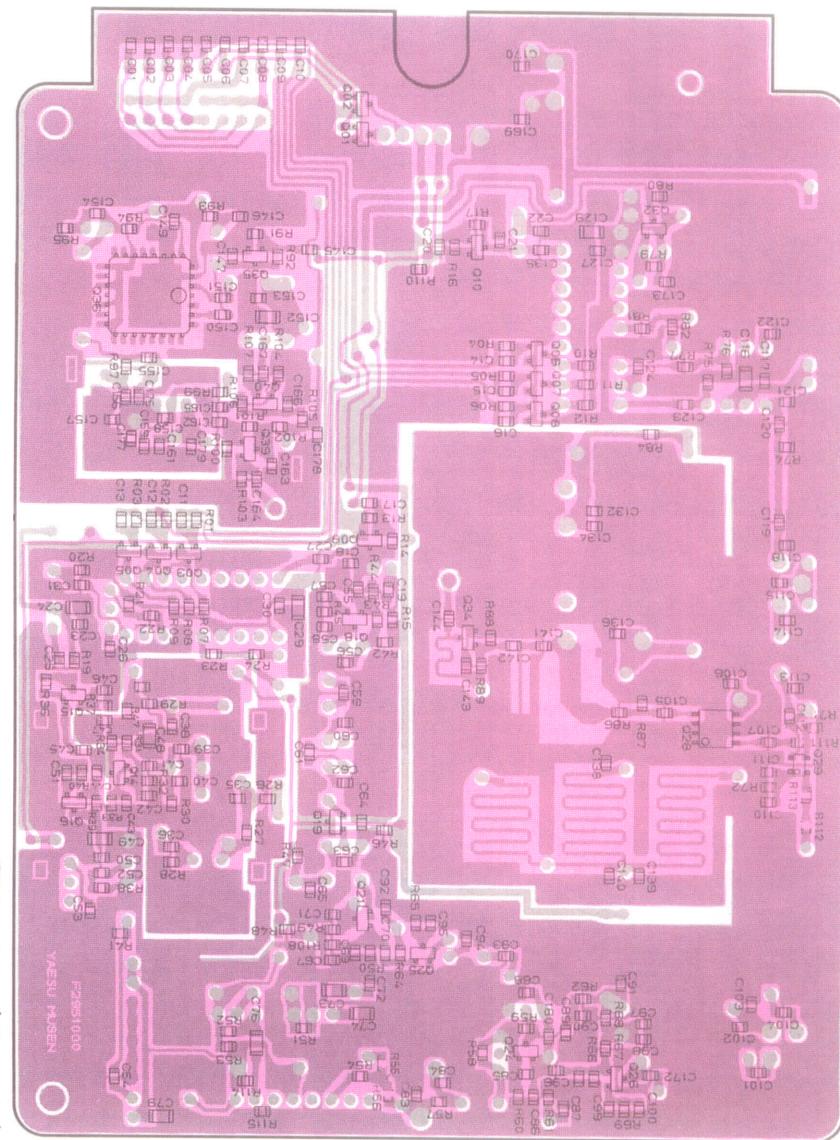
Component side (obverse)



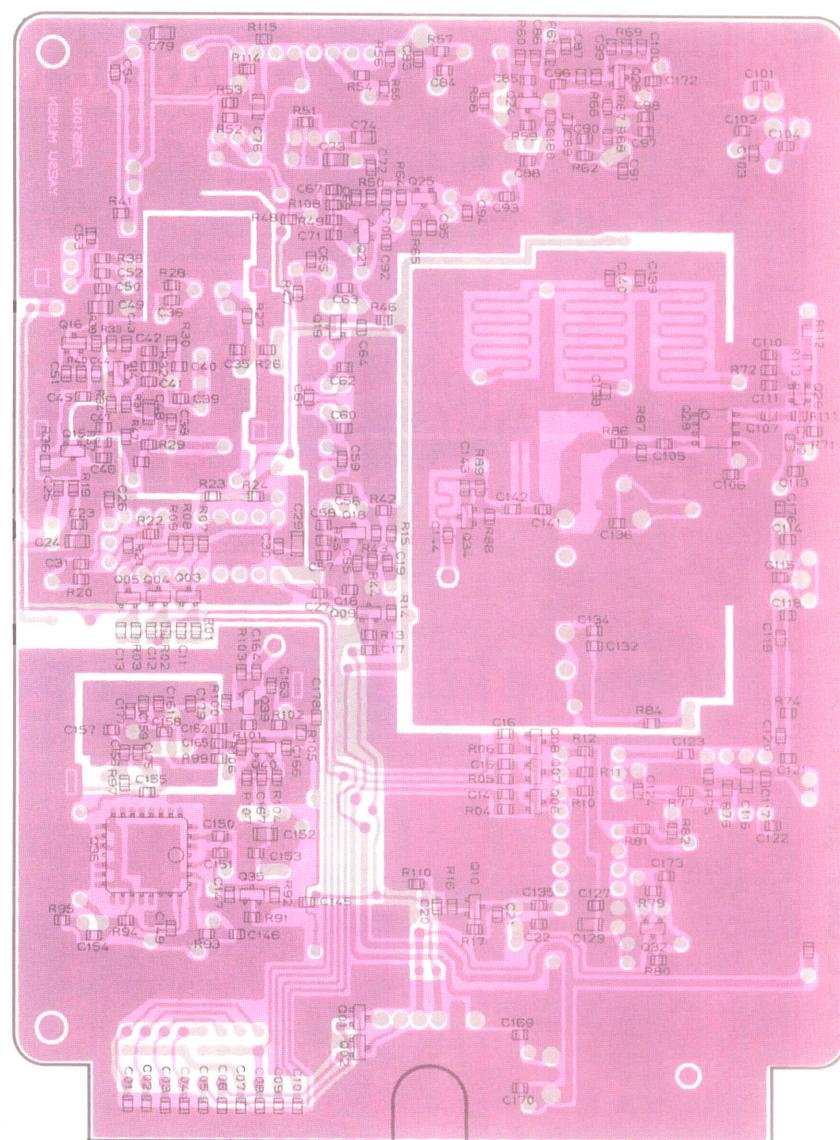
Component side (reverse)



1200MHz BAND MODULE (FEX-736-1.2) OPTION



Chip side (obverse)



Chip side (reverse)

1200MHz PLL UNIT VOLTAGE CHART

(DC VOLTS)

E(S)	C(D)	G ₁	B	G ₂	REMARKS	E(S)	C(D)	G ₁	B	G ₂	REMARKS
01001	0	0.0/8.70	081/0	RX/TX	01018	1.17	7.10	0.45			
01002	0	8.90/0.01	0	RX/TX	01019	0	8.2	0			
01003	0	0.05	5.60		01021	0.94	7.80	1.60			
01004	0	0.05	5.60		01024	3.40	8.50	4.10			
01005	0	0.05	5.60		01025	0.46	8.30	0			
01006	0	0.05	5.60		01026	0.84	8.60	1.50			
01007	0	0.05	5.60		01029	1.58	4.60	0	0		
01008	0	0.05	5.60		01032	7.78	0	0.74			
01009	0	5.02	0.67		01034	0	5.00	0.75			
01010	0	5.02	0.68		01035	0	5.30	0.68			
01013	1.06	8.65	0		01038	1.77	8.28	0			
01014	1.29	4.57	2.02		01039	2.93	8.16	3.67			
01015	0.41	3.10	1.14		01040	3.43	8.62	4.14			
01016	0.52	2.64	1.25								

1200MHz PLL UNIT IC VOLTAGE CHART

(DC VOLTS)

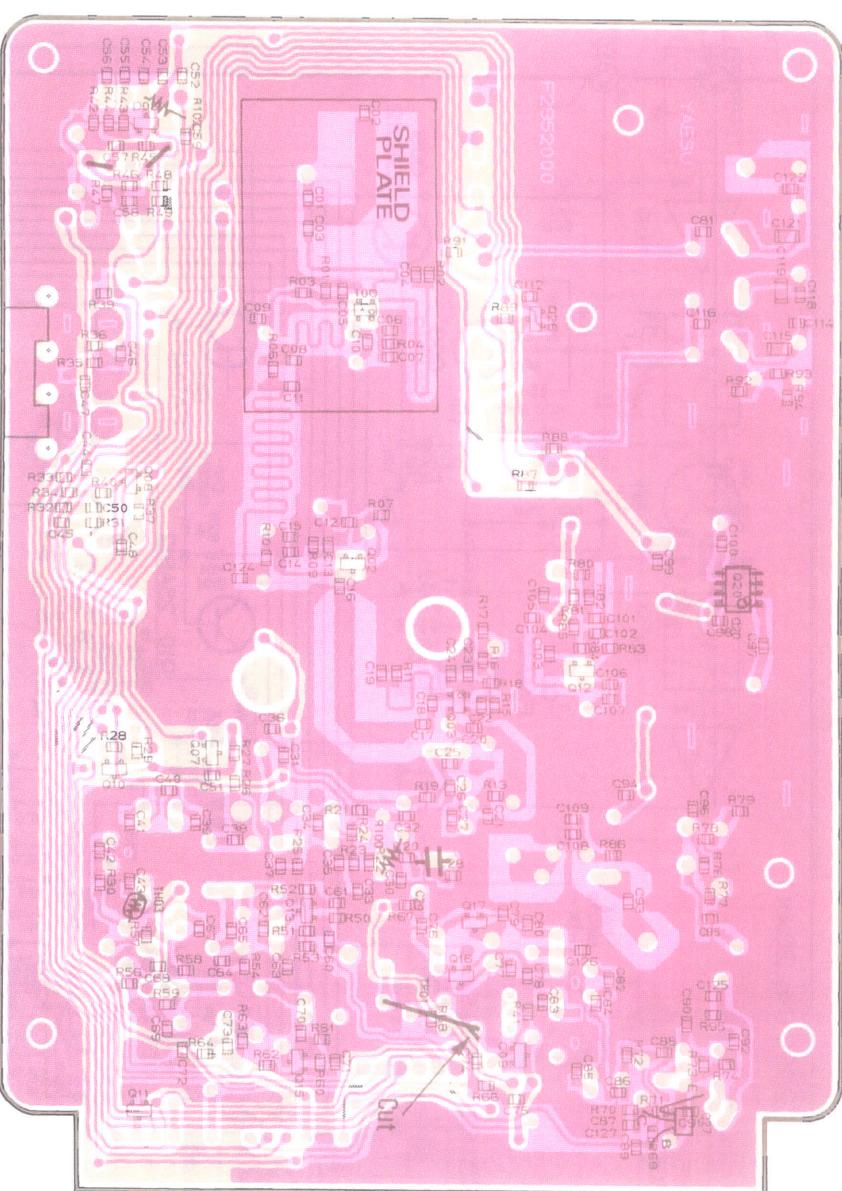
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	REMARKS
01012	0	8.54	—	—	8.54	1.24	0	7.50	—	3.91	0.05	0.05	0.05	—	—	—	—	—	3.76	
01020	7.52	0	0	0	0	0	0	7.52	7.52	0	0	0	0	0	0	0	0.63	0		
01033	7.80	7.80	—	—	7.80	4.42	0	7.61	7.74	3.53	0.05	0.05	0.05	—	—	—	4.22	3.49		
01036	4.26	0	8.63	5.38	0	0	—	—	8.63	—	8.63	—	8.63	8.03	—	8.63	8.63	—		
01012	8.85																		4.19	
01020																				
01033	0																			
01036	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—		

1200MHz BAND MODULE (FEX-736-1.2) OPTION

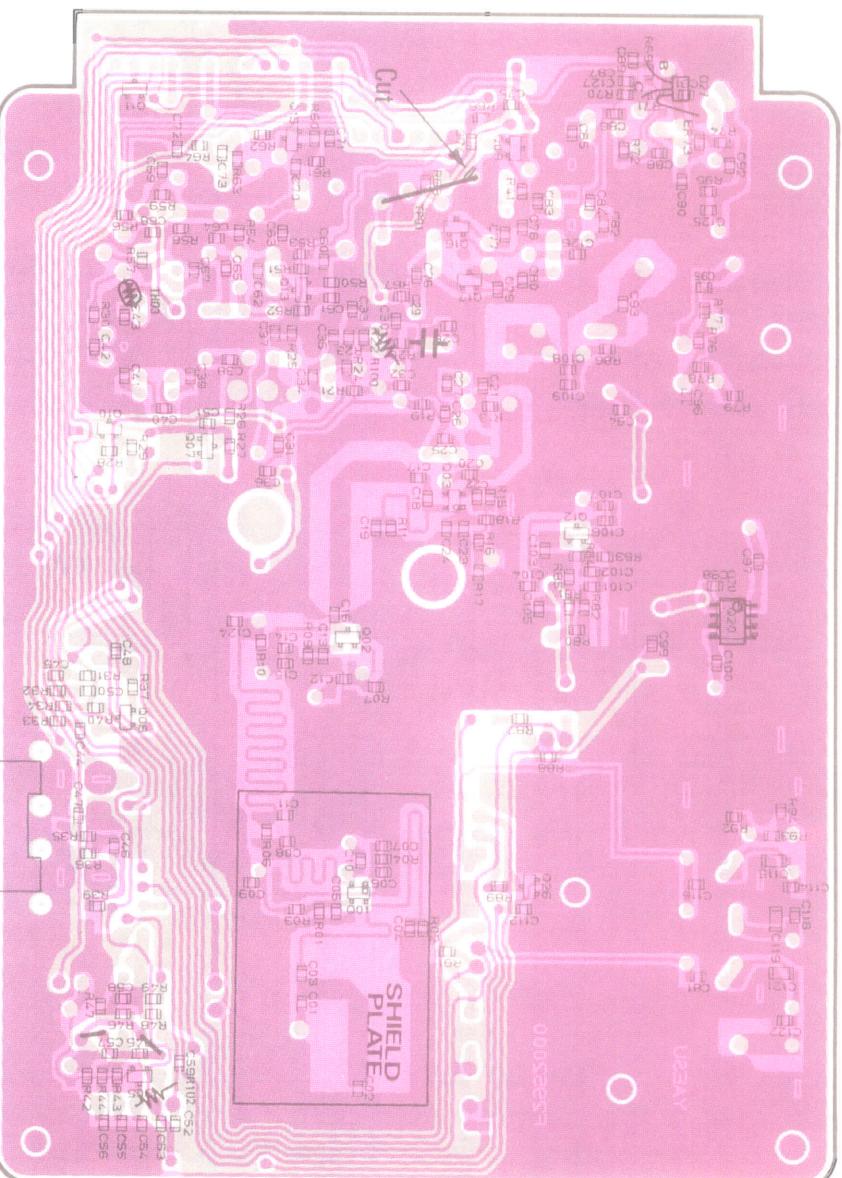
1200MHz PLL UNIT F2951000 (No. 10xx)

1st LOCAL
J101
9V GND REF UL TX G RX G

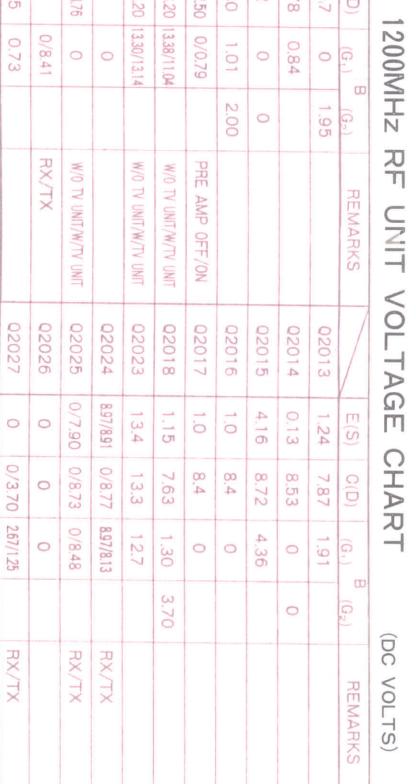
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R04 470k
R05 470k
R06 470k
R07 33k
R08 33k
R09 33k
R10 33k
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C15 10p
C16 10p
C17 10p
C18 56p
C19 0.01
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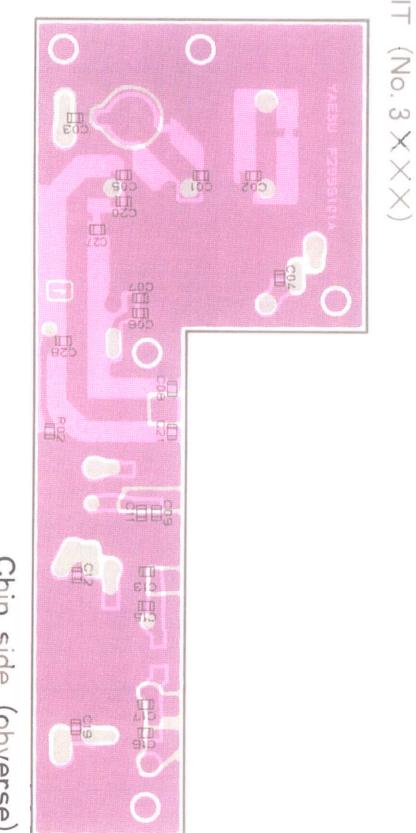
Chip side (obverse)



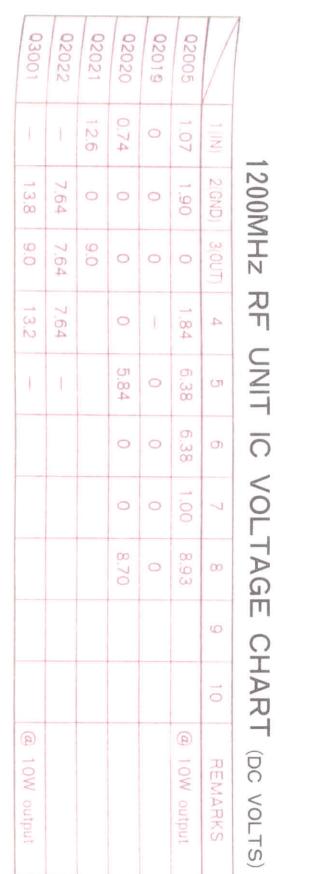
Chip side (reverse)



1200MHz PA UNIT (No. 3 XXX)



Chip side (reverse)

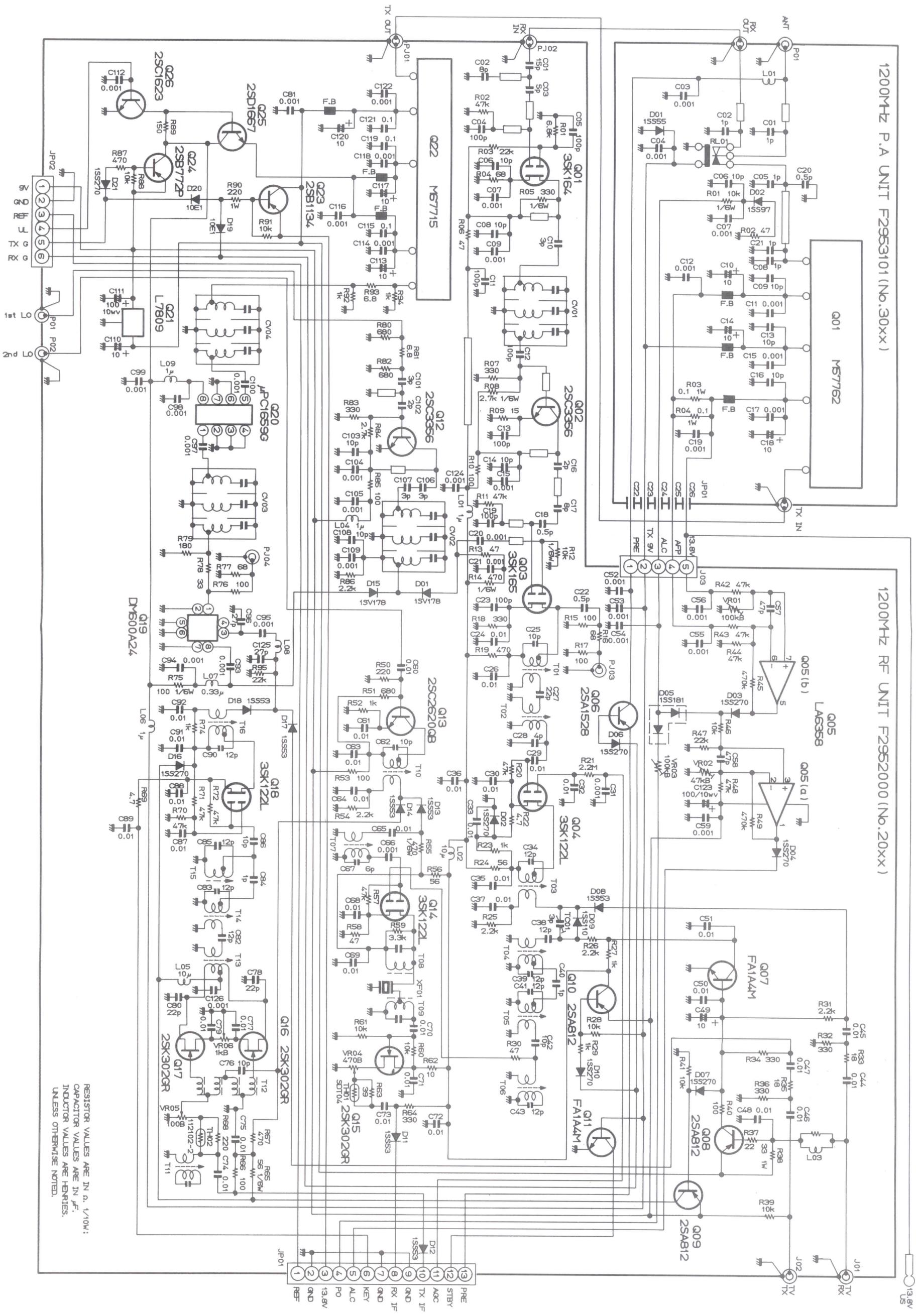


1200MHz RF UNIT IC VOLTAGE CHART (DC VOLTS)

Component side (reverse)

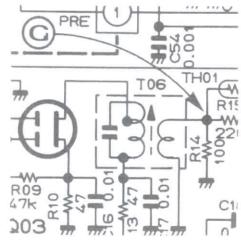
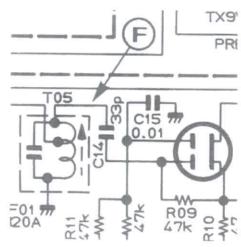
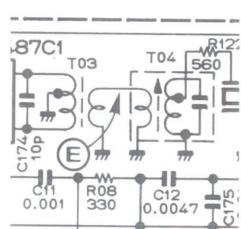
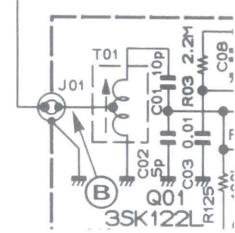
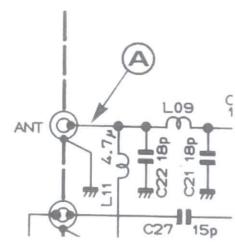
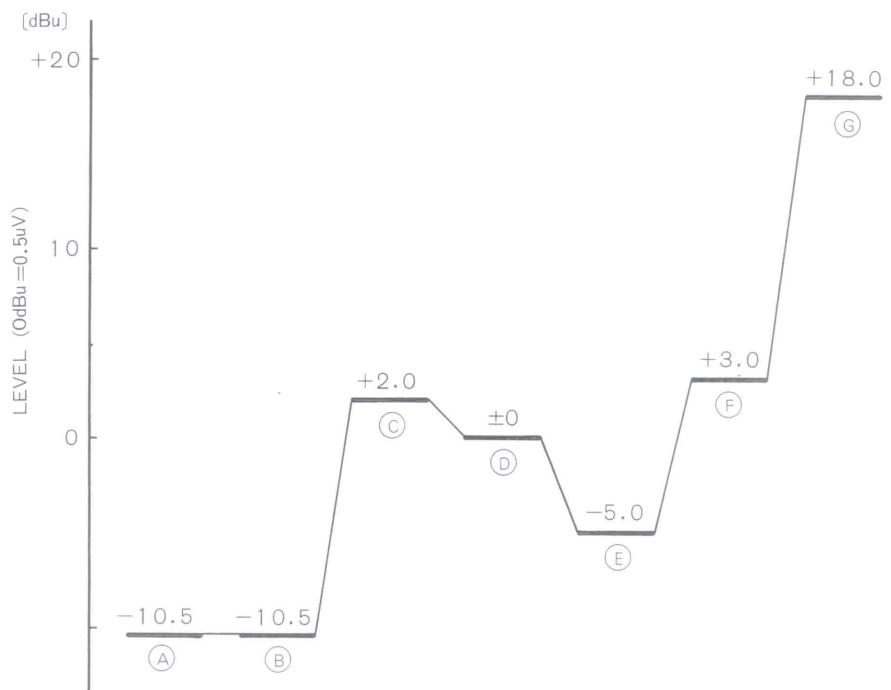
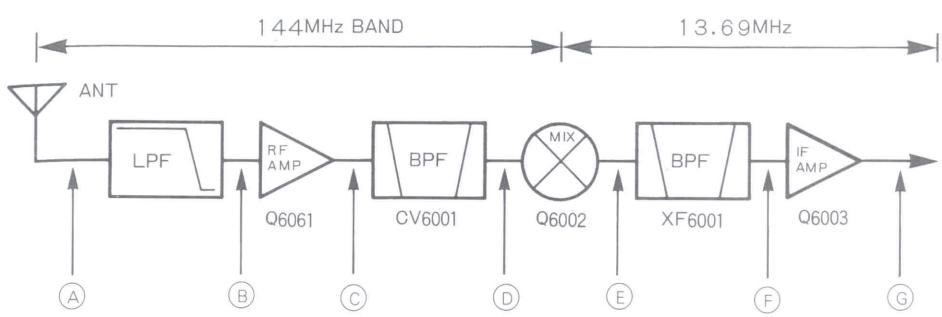
Component side (obverse)

1200MHz BAND MODULE (FEX-736-1.2) OPTION



RESISTOR VALUES ARE IN Ω . 1/10W.
CAPACITOR VALUES ARE IN μF .
INDUCTOR VALUES ARE HERRIES.
UNLESS OTHERWISE NOTED.

(144MHz RX) LEVEL DIAGRAM



... PRE

... TH01

... R15

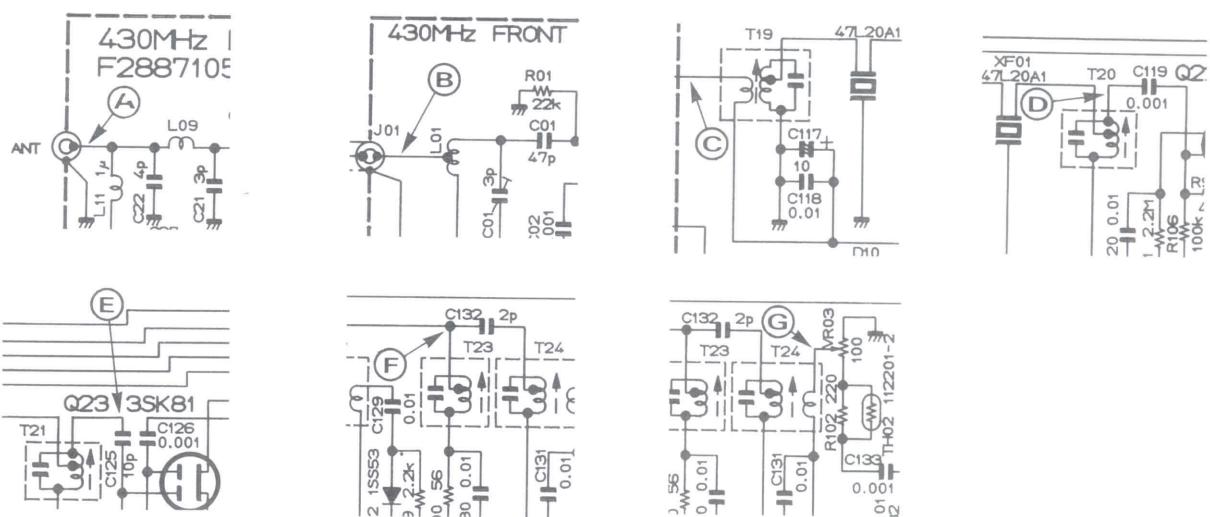
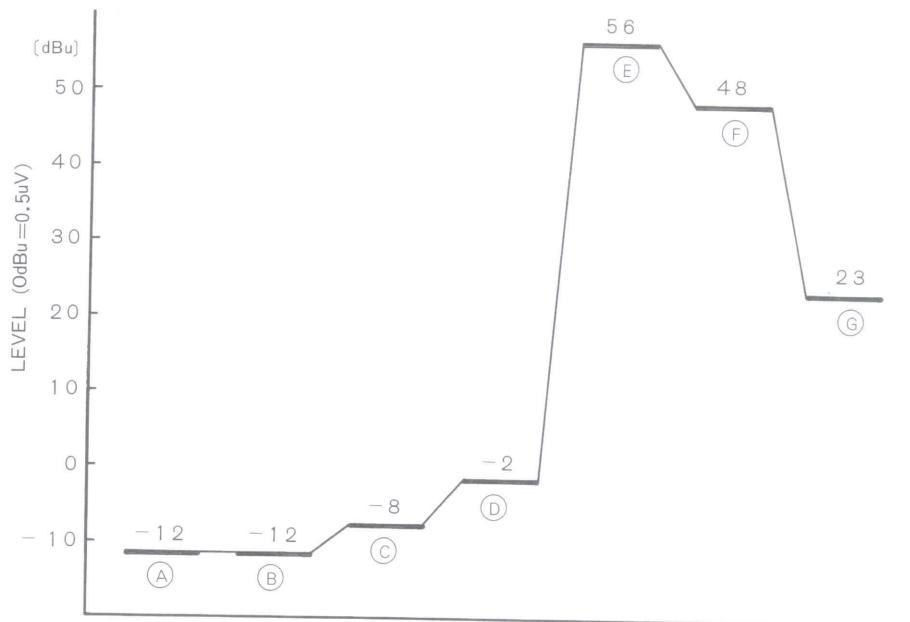
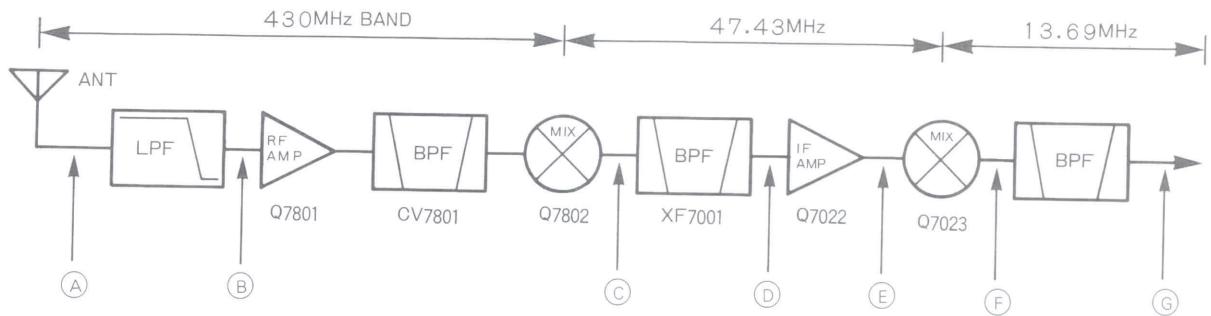
... R16

... R17

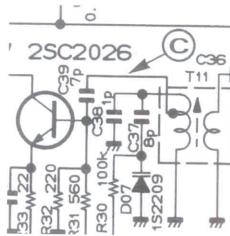
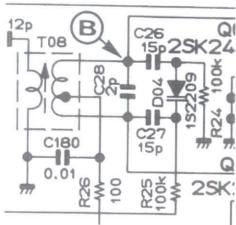
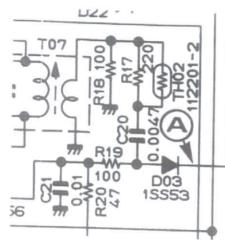
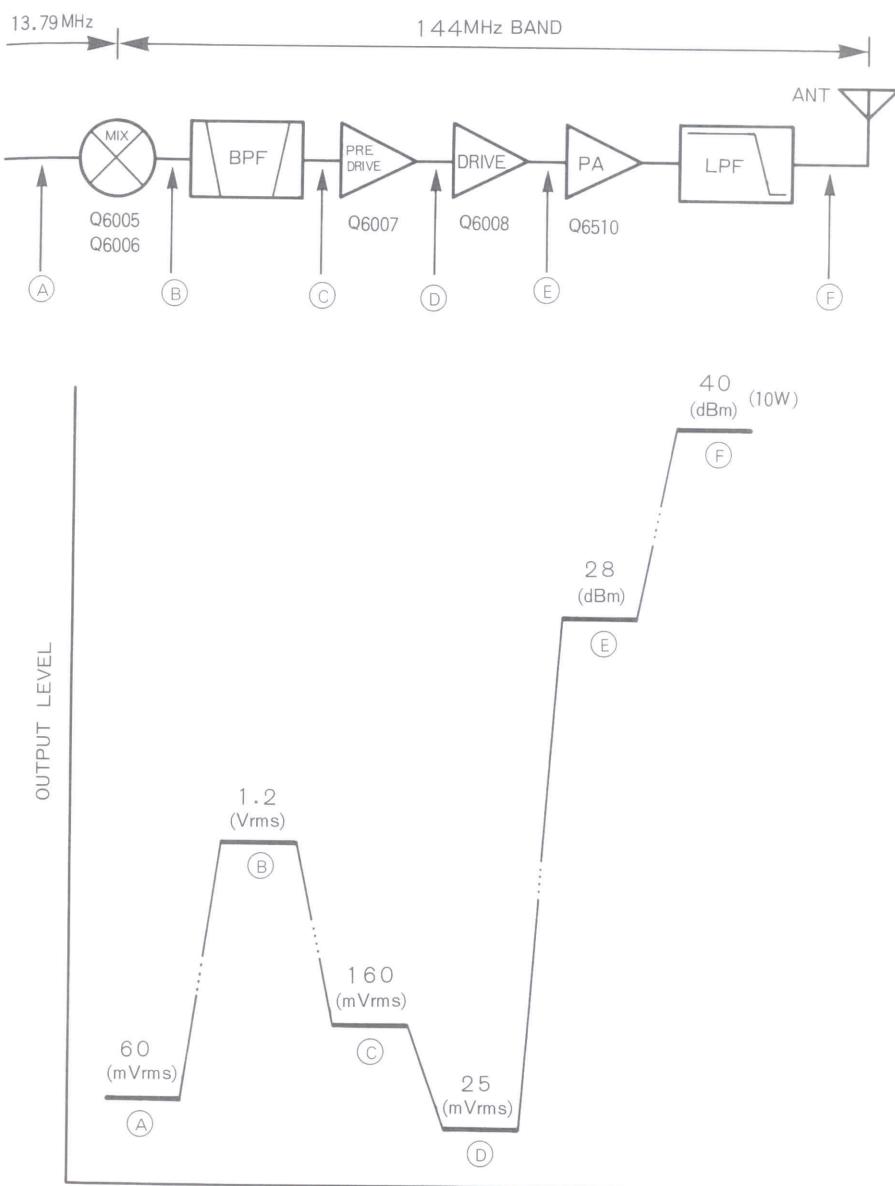
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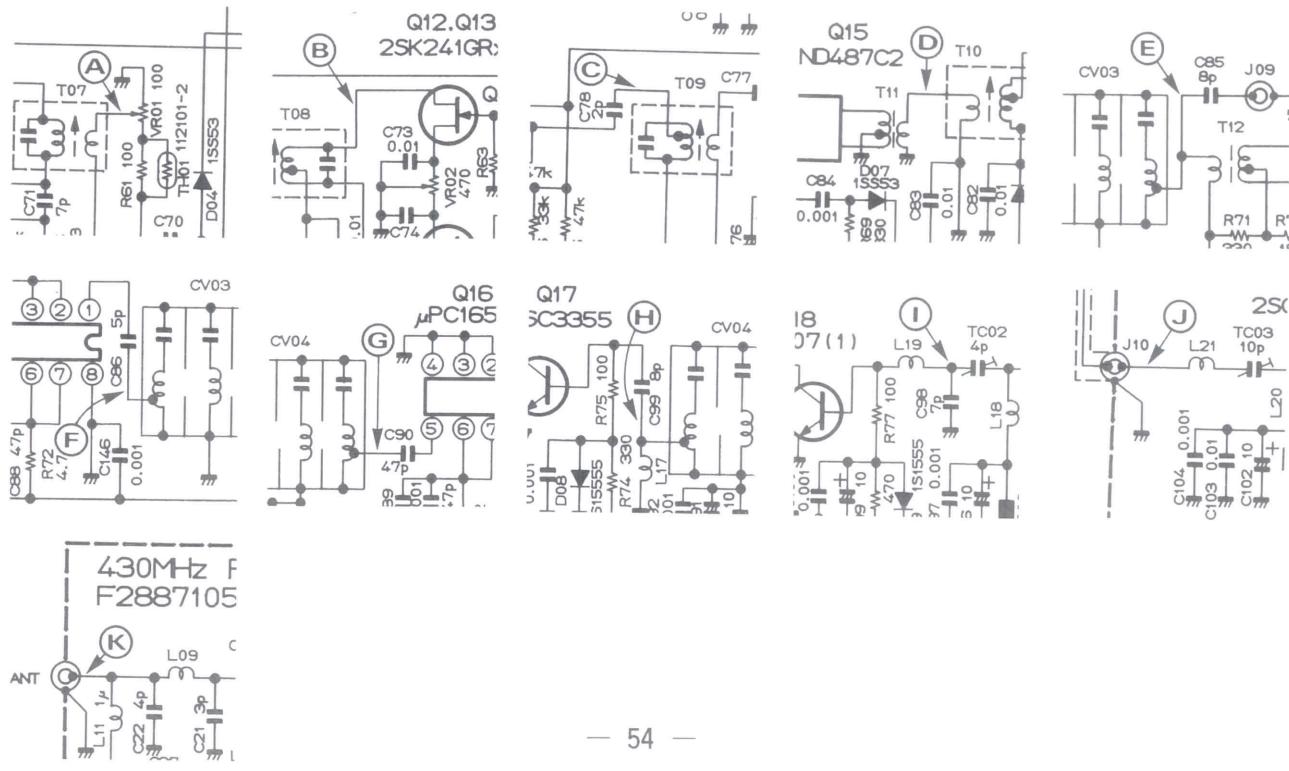
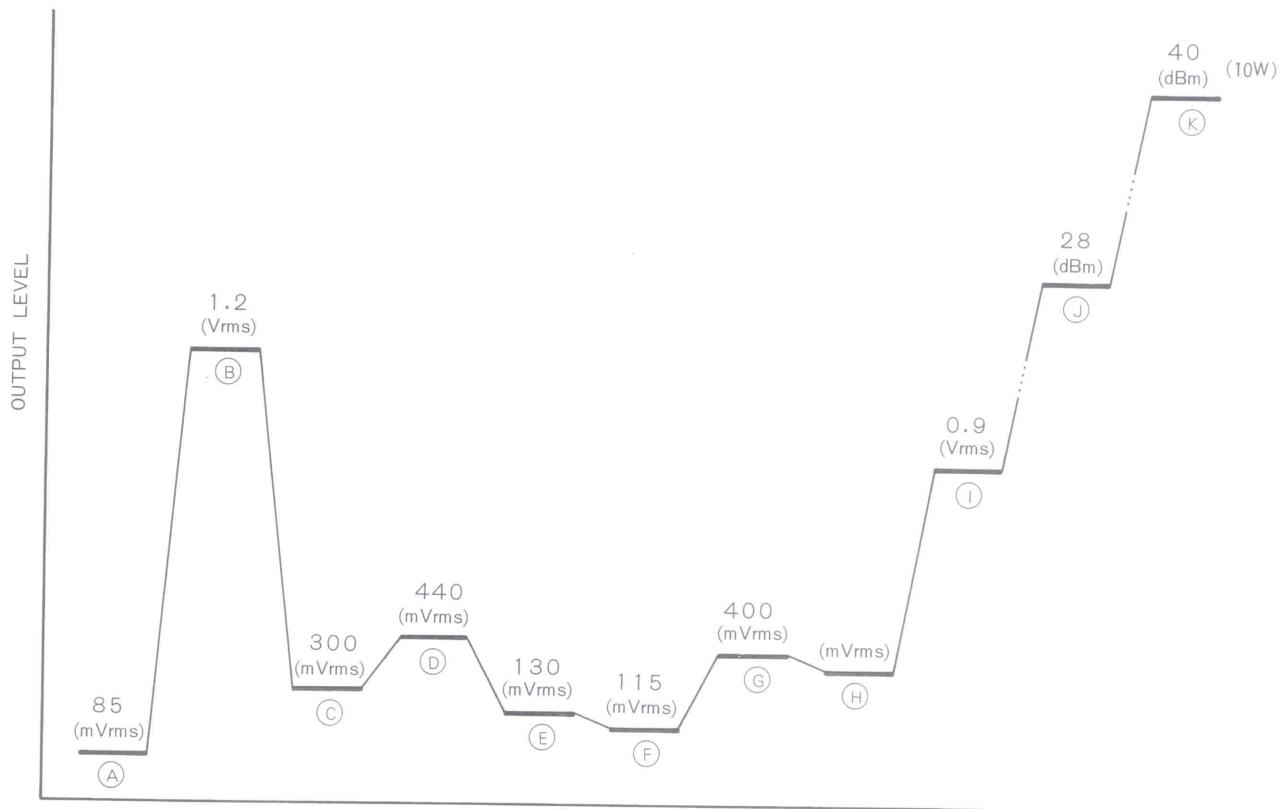
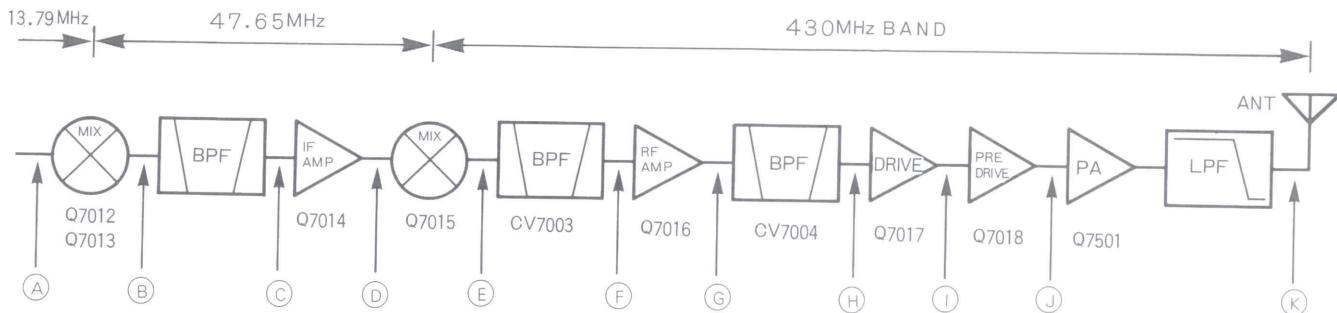
LEVEL DIAGRAM (430MHz RX)



(144MHz TX) LEVEL DIAGRAM



LEVEL DIAGRAM (430MHz TX)



ALIGNMENT

The FT-736R is carefully designed to allow the knowledgeable operator to make all adjustments required for various station conditions, modes and operator preferences simply from the controls on the front panel, without opening the case of the transceiver. These adjustments are described in the FT-736R Operating Manual.

The following procedures cover the sometimes critical and tedious adjustments that are not normally required once the transceiver has left the factory. However, if damage occurs and some parts subsequently be replaced, realignment may be required. If a sudden problem occurs during normal operation, it is likely due to component failure; realignment should not be done until after the faulty component has been replaced.

We recommend servicing be performed only by authorized Yaesu service technicians who are experienced with the circuitry and fully equipped for repair and alignment. Therefore, if a fault is suspected, contact the dealer from whom the transceiver was purchased for instructions regarding repair. Authorized Yaesu service technicians realign all circuits and make complete performance checks to ensure compliance with factory specifications after replacing any faulty components.

Those who do undertake any alignment are cautioned to proceed at their own risk. Problems caused by unauthorized attempts at realignment are not covered by the warranty policy. Also, Yaesu must reserve the right to change circuits and alignment procedures in the interest of improved performance, without notifying owners.

Under no circumstances should alignment be attempted unless the normal function and operation of the transceiver are clearly understood, the cause of the malfunction has been clearly pinpointed and any faulty

components replaced, and the need for realignment determined to be absolutely necessary.

The following test equipment (and thorough familiarity with its correct use) is necessary for complete realignment. Correction of problems caused by misalignment resulting from use of improper test equipment is not covered under the warranty policy. While most steps do not require all equipment listed, interactions of some adjustments may require complex adjustments be performed afterwards. Do not attempt to perform only a single step unless it is clearly isolated electrically from all other steps. Rather, have all test equipment ready before beginning, and follow all of the steps in a section in the order they are presented.

A 50-ohm dummy load must be connected to the antenna jack in steps calling for transmission (pressing the MOX button). Correct alignment is not possible with an antenna.

The SHIFT control must be set to the 12 o'clock position, the NOTCH control set fully counterclockwise to OFF, the RF gain control fully clockwise (maximum), and the SQL control must be fully counterclockwise, unless stated otherwise.

After completing one step, read the following step to determine whether the same test equipment will be required. If not, remove the test equipment (except dummy load and wattmeter, if connected) before proceeding.

CAUTION!!!

The front panel PREAMP button must be set to OFF, and jumper plugs J5016-J5019 must be removed from the AF Unit to prevent DC voltage at the Antenna Jacks (which could damage the test equipment).

ALIGNMENT

Alignment Precautions

Correct alignment requires that the ambient temperature be the same as that of the transceiver and test equipment, and that this temperature be held constant between 20 and 30 °C (68 to 86 °F). When the transceiver is brought into the shop from hot or cold air it should be allowed some time for thermal equalization before alignment.

Alignments must only be made with oscillator shields and circuit boards firmly affixed in place. Also, the test equipment must be thoroughly warmed up before beginning.

Alignment values assume an internal DC bus voltage of 13.5V DC.

Note: Signal levels in dB referred to in the alignment procedure are based on 0dBu=0.5uV.

Test Equipment:

Spectrum analyzer covering up to 1300 MHz, or to top edge of highest frequency band installed

Tracking generator covering up to 1300 MHz, or to top edge of highest frequency band installed

RF signal generator covering up to 1300 MHz, or to top edge of highest frequency band installed, with calibrated output and modulation

RF voltmeter ranging from 5mV to 3Vrms, with 5% accuracy to 1300 MHz, or to top edge of highest frequency band installed

Frequency counter with 0.1 ppm accuracy to 1300 MHz, or to top edge of highest frequency band installed

DC voltmeter with at least 10 Megohms impedance

In-line wattmeter accurate to 1300 MHz, or to top edge of highest frequency band installed

50-ohm dummy load, non-reactive to 1300 MHz, or to top edge of highest frequency band installed, 30-watt capacity

FM Deviation meter and SINAD meter

Sampling coupler "T"

AF signal generator with adjustable output from 0.5 to 100mV

AF millivoltmeter

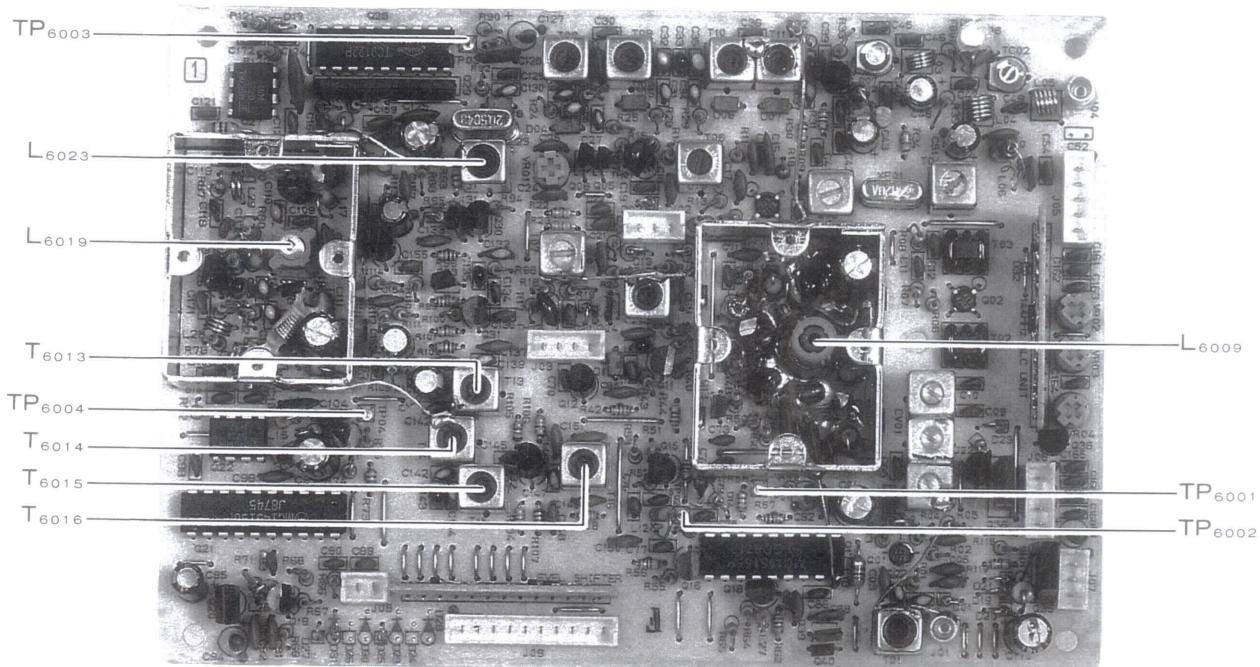
Oscilloscope with 100 MHz bandwidth

(PLL) ALIGNMENT

I. PLL

- A. 144 MHz PLL Sub Loop (on 144 MHz Main Unit - requires DC voltmeter)
1. Connect the DC voltmeter between TP6004 and chassis ground.
 2. Tune the transceiver to 14x.01999 MHz, CW mode, and adjust L6019 for 4.2V on the voltmeter.
 3. Retune the transceiver to 14x.02000 MHz and confirm at least 0.6V on the voltmeter.
 4. Disconnect the voltmeter.
- B. 144 MHz PLL VCXO (on 144 MHz Main Unit - requires oscilloscope and DC voltmeter)
1. Connect the oscilloscope to TP6002 and the voltmeter between TP6003 and chassis ground.
 2. Tune the transceiver to 14x.01999 MHz, CW mode, and adjust L6023 for 5.0V on the voltmeter.
 3. Retune the transceiver to 14x.02000 MHz and confirm at least 1.0V on the voltmeter.
 4. Adjust T6013-T6016 for maximum amplitude on the 'scope.
 5. Disconnect the 'scope and voltmeter.

- C. 144 MHz PLL Main Loop (on 144 MHz Main Unit - requires DC voltmeter)
1. Connect the DC voltmeter between TP6001 and chassis ground.
 2. Tune the transceiver to the low band edge, CW mode, and adjust L6009 for 2.0V on the voltmeter.
 3. Retune the transceiver to the high band edge and confirm 3.0 ± 0.5 V (or 2.0 ± 0.5 V in versions B1, C1 and H1) on the voltmeter.
 4. Disconnect the voltmeter.
- D. Transmitter PLL (on TX Unit, requires DC voltmeter)
1. Connect the voltmeter between the exposed lead of R4001 and chassis ground.
 2. Adjust T4001 for 4.0V on the voltmeter.
 3. Remove the voltmeter.
- E. Receiver PLL (on RX Unit, requires DC voltmeter)
1. Connect the voltmeter between the exposed lead of R3005 and chassis ground.
 2. Adjust T3001 for 4.0V on the voltmeter.
 3. Remove the voltmeter.



144MHz MAIN UNIT ALIGNMENT POINTS

ALIGNMENT (PLL)

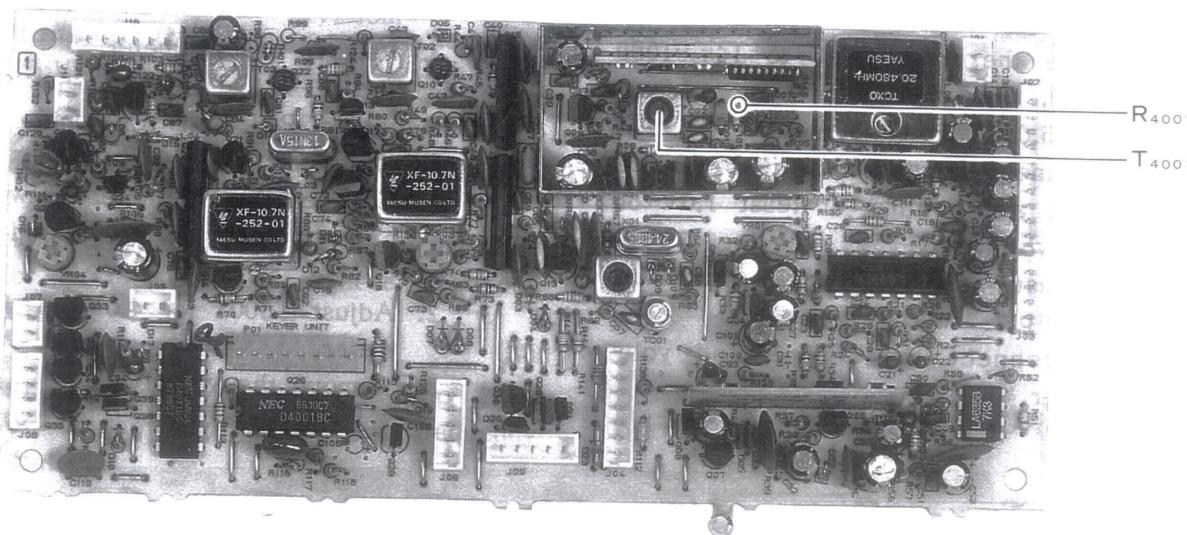
F. 430 MHz PLL Sub Loop (on 430 MHz PLL Unit - requires DC voltmeter)

1. Connect the DC voltmeter between TP8001 and chassis ground.
2. Tune the transceiver to 4xx.01999 MHz, CW mode, and adjust L8004 for 4.2V on the voltmeter.
3. Retune the transceiver to 4xx.02000 MHz and confirm at least 0.6V on the voltmeter.
4. Disconnect the voltmeter.

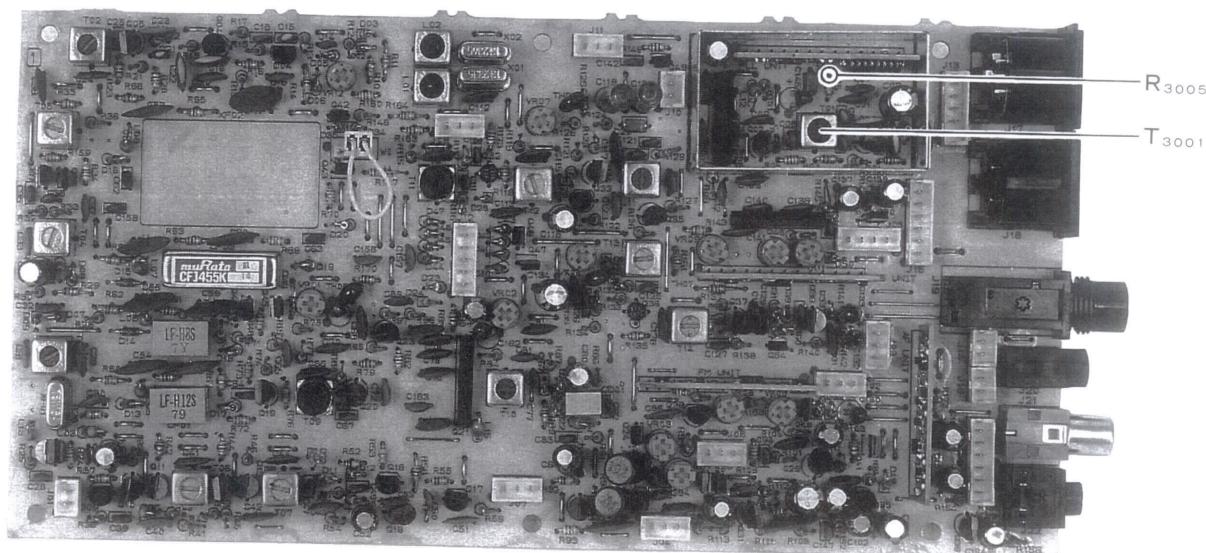
G. 430 MHz PLL VCXO (on 430 MHz PLL Unit - requires RF voltmeter and DC voltmeter)

1. Connect the RF voltmeter to the exposed lead of R8015, and the DC voltmeter between the exposed lead of R8017 and chassis ground.

2. Tune the transceiver to 4xx.01999 MHz, CW mode.
3. Adjust T8001 for maximum RF voltage, and then adjust L8016 for 6.5V on the DC voltmeter.
4. Retune the transceiver to 4xx.02000 MHz and confirm at least 1.0V on the DC voltmeter.
5. Retune the transceiver to the center of the band, FM mode, and move the RF voltmeter to J8001.
6. Adjust T8002 and CV8001 for maximum on the RF voltmeter.
7. Disconnect the voltmeters.



TX UNIT ALIGNMENT POINTS

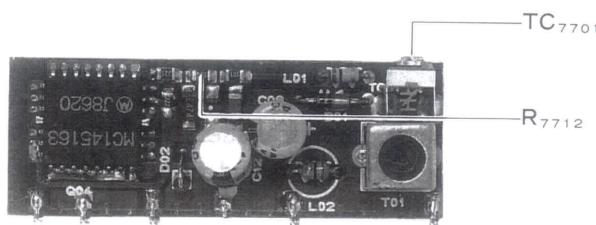


RX UNIT ALIGNMENT POINTS

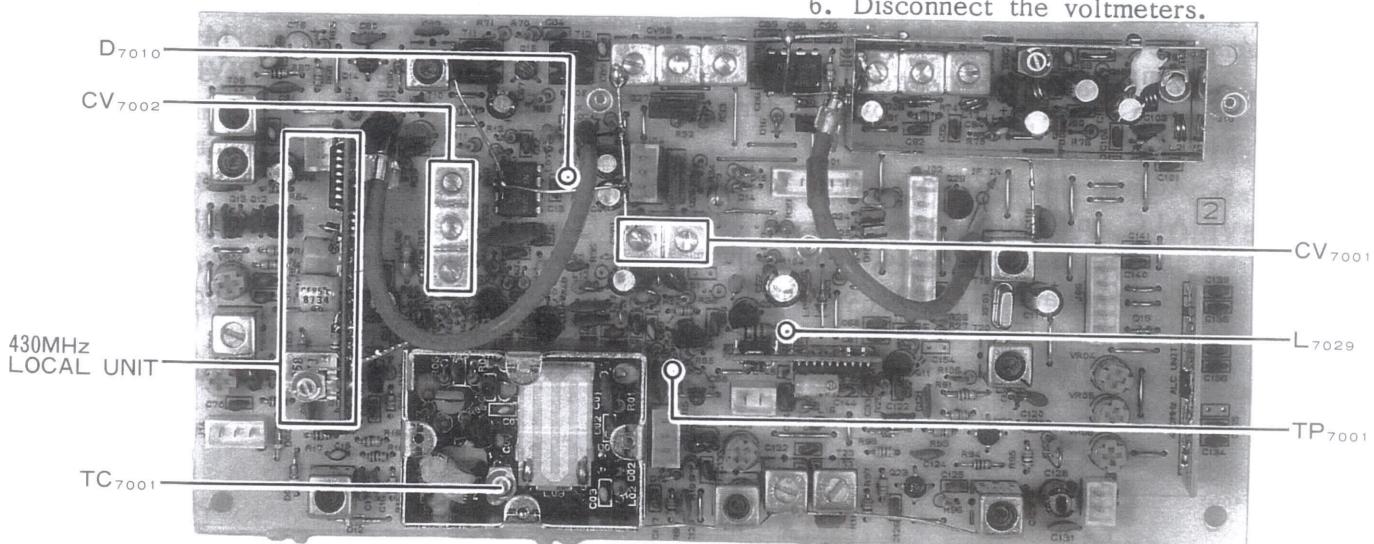
(PLL) ALIGNMENT

H. 430 MHz 2nd Local (on 430 MHz Local and RF Units - requires RF and DC voltmeters)

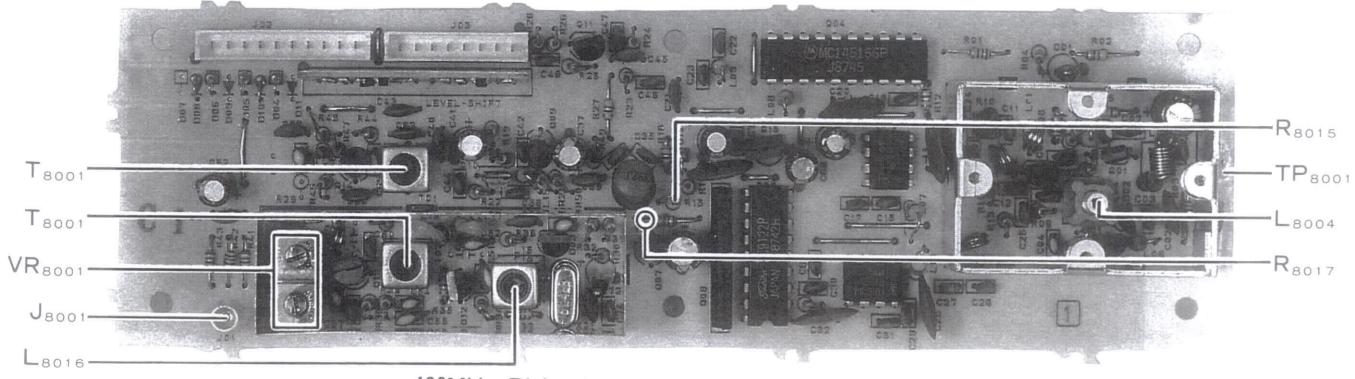
1. Connect the DC voltmeter between the exposed lead of R7712 on the 430 MHz Local Unit and chassis ground. Connect the RF voltmeter to the exposed lead of L7029 on the 430 MHz RF Unit.
2. Set the transceiver to the center of the 70cm band, FM mode.
3. Adjust TC7701 on the 430 MHz Local Unit for 5.0V on the DC voltmeter.
4. Adjust CV7001 on the 430 MHz RF Unit for maximum on the RF voltmeter.
5. Disconnect the voltmeters.



430MHz LOCAL UNIT ALIGNMENT POINTS



430MHz RF UNIT ALIGNMENT POINTS



430MHz PLL UNIT ALIGNMENT POINTS

I. 430 MHz PLL Main Loop (on 430 MHz RF Unit - requires RF and DC voltmeters)

1. Connect the DC voltmeter between TP7001 and chassis ground. Connect the RF voltmeter to the cathode of D7010.
2. Tune the transceiver to the high edge of the 70cm band, CW mode, and adjust TC7001 for 4.0V (7.5V for versions A1 and A2) on the DC voltmeter.
3. Retune the transceiver to the low band edge and confirm at least 1.0V on the DC voltmeter.
4. Retune the transceiver to the center of the band and adjust CV7002 for peak on the RF voltmeter.
5. Retune the transceiver to the high and low band edges and confirm that the RF voltmeter reads within $\pm 1\text{dB}$ ($\pm 2\text{dB}$ for versions A1 and A2) relative to the level at the center of the band.
6. Disconnect the voltmeters.

ALIGNMENT (Transmitter)

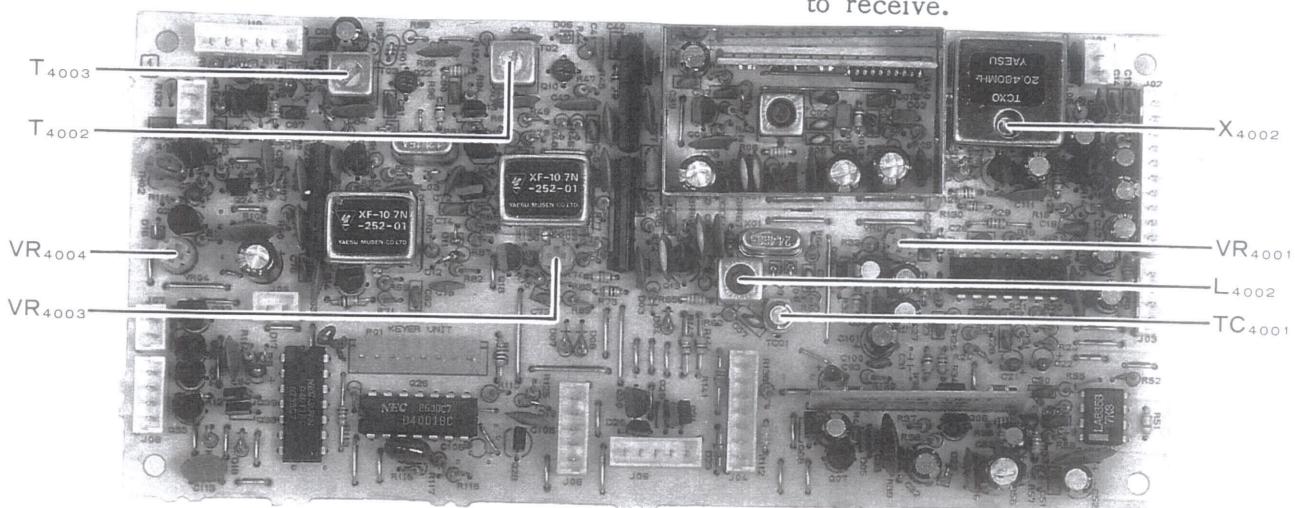
II. Transmitter

A. ALC Meter Sensitivity (on TX Unit)

1. Set the METER selector to the DISC/ALC position, and select the CW mode.
2. Tune the transceiver to the center of the 144 MHz band and adjust VR4004 so that the ALC meter just begins to deflect while receiving.

B. 144 MHz Transmitter (on TX Unit and 144 MHz Main Unit - requires dummy load, wattmeter)

1. Set the METER selector to DISC-/ALC and select the FM mode.
2. Tune the transceiver to the center of the 2m band, and connect the dummy load and wattmeter to the 144 MHz antenna jack.
3. Press the MOX button and adjust the DRIVE control for 4W on the wattmeter.
4. Adjust T4002 and T4003 on the TX Unit, and T6008-T6012 on the 144 MHz Main Unit for peak on the wattmeter, reducing the DRIVE control setting if necessary to keep power output below 5W during adjustment.
5. Adjust the DRIVE control for an ALC indication equivalent to "7" on the S-Unit scale, and adjust TC6001 and TC6002 on the 144 MHz Main Unit for peak output.
6. Press the MOX button again to return to receive.



TX UNIT ALIGNMENT POINTS

C. 144 MHz AFP (Automatic Final Protection, on 144 MHz Main Unit, requires dummy load, wattmeter and DC voltmeter)

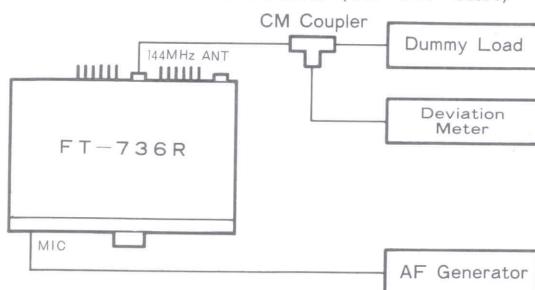
1. Set the transceiver to the FM mode, turn the DRIVE control fully clockwise, and tune to the center of the 2m band.
2. With the dummy load and wattmeter connected to the 144 MHz antenna jack, connect the DC voltmeter to the anode of D6032.
3. Press the MOX button and adjust VR6003 for 1.0V on the voltmeter.
4. Press the MOX button to return to receive, and remove the voltmeter.

D. 144 MHz ALC level & PO Meter Sensitivity (on 144 MHz Main Unit - requires dummy load and wattmeter)

1. Set the transceiver to the center of the 2m band, FM mode, and set the METER selector to the S/PO position.
2. With the dummy load and wattmeter connected to the 144 MHz antenna jack, set the DRIVE control fully clockwise.
3. Press the MOX button and alternately adjust VR6002 for 25W on the wattmeter and VR6004 for an indication of "8" on the PO meter scale, repeating both adjustments several times.
4. Press the MOX button to return to receive.

(Transmitter) ALIGNMENT

E. 144 MHz FM Deviation (on TX Unit)

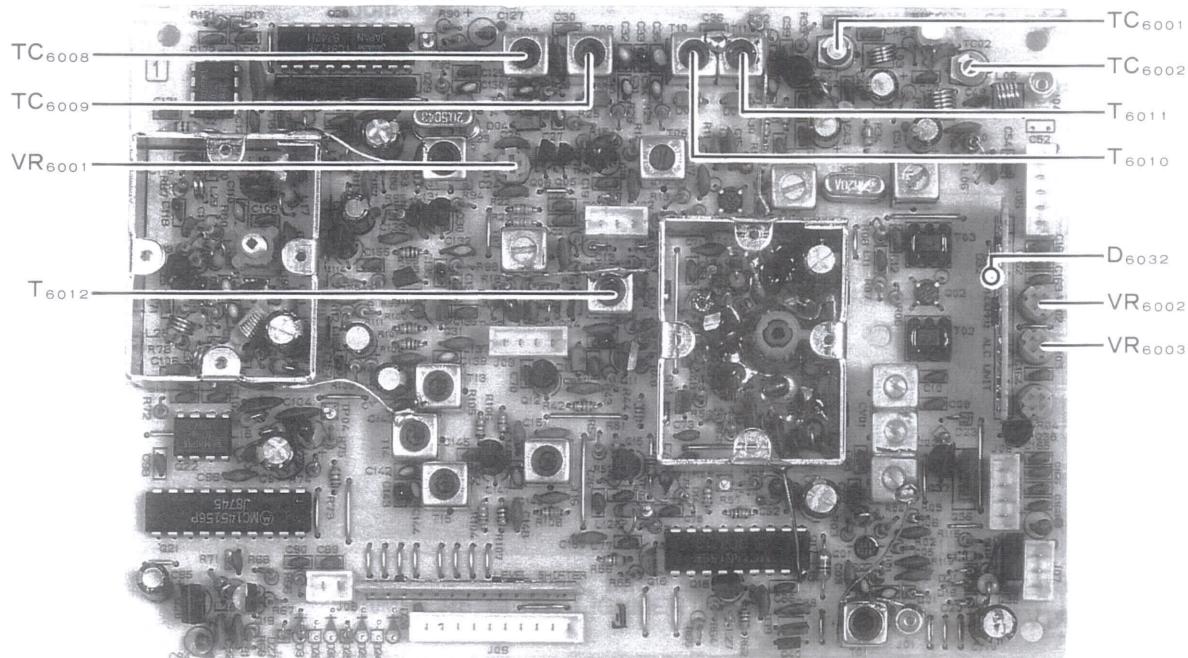


1. Connect the test equipment as shown in the diagram above.
2. In FM mode, tune the transceiver to the center of the 144 MHz band, and set the MIC Gain to 12 o'clock and DRIVE fully clockwise.
3. Set the AF generator for 15mV output at 1 kHz.
4. Press the MOX button and adjust VR4001 for ± 4.5 kHz deviation on the deviation meter.
5. Now select the FM-N mode and confirm ± 2 to ± 3 kHz deviation.
6. Press the MOX button again to return to receive.

F. SSB Carrier Point (on TX Unit—requires dummy load, wattmeter and AF generator)

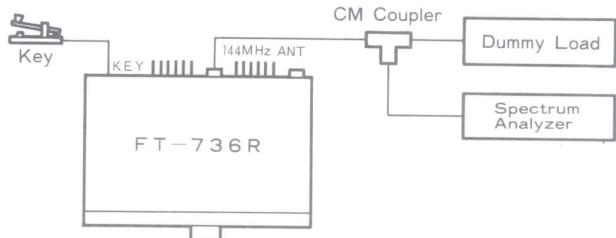
1. Connect the dummy load and wattmeter to the 144 MHz antenna jack, and the AF generator to pin 8 of the MIC jack (pin 7 is ground).

144MHz MAIN UNIT ALIGNMENT POINTS



2. Tune the transceiver to the center of the 2m band in USB mode. Set the MIC gain control to 12 o'clock and the DRIVE control to 9 o'clock. Press the MOX button.
3. While maintaining a constant AF injection level of 1mV, tune the AF generator back and forth between 300 and 2700 Hz while adjusting L4002 so that the power output is the same at both AF injection frequencies.
4. Change to LSB mode and repeat step 3, adjusting L4001.
5. Press the MOX button to return to receive, remove the AF generator.

G. SSB Carrier Balance (on TX Unit)

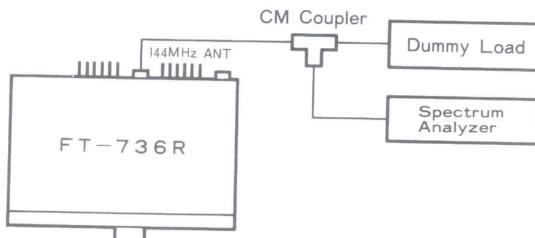


1. Connect the test equipment as shown in the diagram above.
2. In CW mode, tune the transceiver to the center of the 144 MHz band. Set the MIC Gain fully counterclockwise and DRIVE fully clockwise. Also, set the VOX gain control to 9 o'clock.

ALIGNMENT (Transmitter)

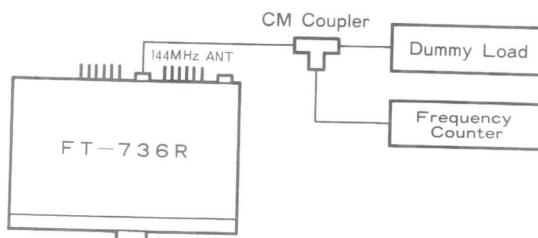
3. Close the key and note the carrier level on the analyzer. Then change to the USB mode.
4. Press the MOX button and adjust VR4003 for minimum carrier level (less than 40dB below the CW carrier level noted in step 3).
5. Change to LSB mode and confirm at least 40dB carrier suppression while transmitting.
6. Press the MOX button to return to receive.

H. 144 MHz TX Mixer (on 144 MHz Main Unit)



1. Connect the test equipment as shown in the diagram above.
2. In FM mode, tune the transceiver to the center of the 144 MHz band. Set the MIC Gain fully counterclockwise and DRIVE fully clockwise.
3. Press the MOX button and adjust VR6001 so that the spuri at 13.79 MHz on either side of the carrier are at least 65dB down.
4. Press the MOX button again to return to receive.

I. TX Frequency Calibration (on TX Unit)



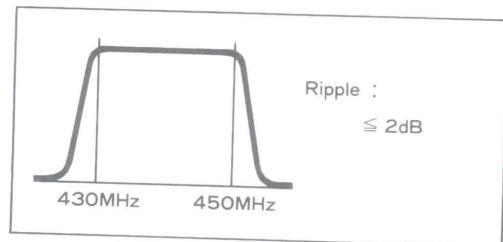
1. Connect the test equipment as shown in the diagram above.
2. In FM mode, tune the transceiver to 145.00000 MHz. Set the MIC gain fully counterclockwise and DRIVE fully clockwise.

3. Press the MOX button and adjust the trimmer inside the TCXO (X4002) housing for 145.00000 MHz on the counter.

4. Press the MOX button to return to receive.

J. 430 MHz TX RF (on 430 MHz RF Unit - requires tracking generator and spectrum analyzer)

1. Connect the tracking generator to J7009 on the 430 MHz Main Unit, and couple the spectrum analyzer to the 430 MHz antenna jack.
2. Set the tracking generator output to -30dBm and adjust CV7003, CV7004, TC7002 and TC7003 for the passband shown (reducing injection level, if necessary, to avoid saturation).



K. 430 MHz TX IF, Part I (on 430 MHz RF Unit - requires dummy load and wattmeter)

1. With the dummy load and wattmeter connected to the 430 MHz antenna jack, tune the transceiver to the center of the 70cm band, FM mode.
2. Press the MOX button and set the DRIVE control for 4W output.
3. Adjust T7006-T7010 for maximum deflection on the wattmeter (but do not exceed 5W output: reduce the DRIVE control setting, if necessary).
4. Press the MOX button again to return to receive.

(Transmitter) ALIGNMENT

L. 430 MHz AFP (Automatic Final Protection, on 430 MHz RF Unit -requires dummy load and DC voltmeter)

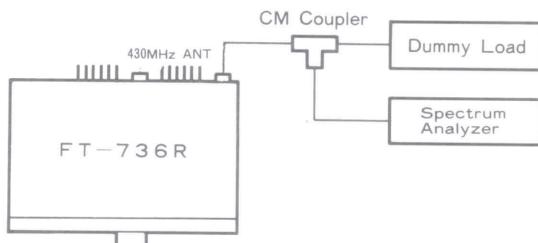
1. With the dummy load connected to the 430 MHz antenna jack, connect the DC voltmeter to the jumper wire (marked "A" in the drawing below) on the 430 MHz RF Unit.
2. Set the transceiver to FM, band center. Set the DRIVE control fully clockwise, and set the METER selector to S/PO. Press the MOX button.
3. Adjust VR7005 for 1.0V on the DC voltmeter.
4. Press the MOX button again to return to receive, and remove the voltmeter.

M. 430 MHz ALC and PO Meter Sensitivity (on 430 MHz RF Unit -requires dummy load and wattmeter)

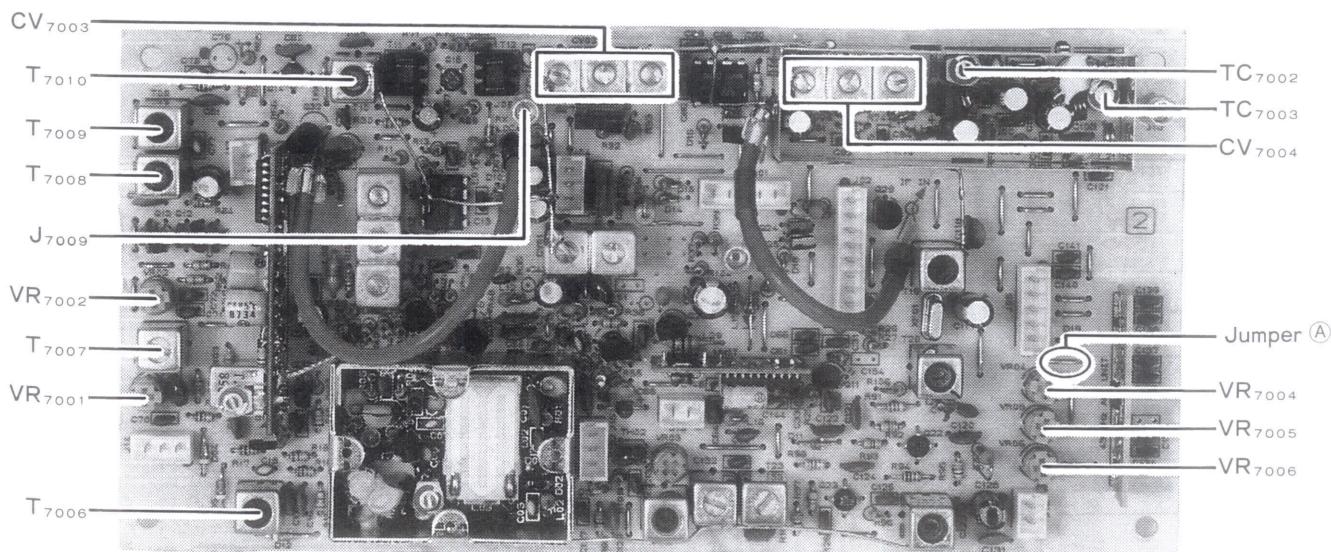
1. With the dummy load connected to the 430 MHz antenna jack, set the transceiver to FM, band center. Set the DRIVE control fully clockwise, and set the METER selector to S/PO.
2. Press the MOX button and alternately adjust VR7004 for 25W output and VR7006 so the transceiver meter deflects to "8" on the PO scale.

3. Repeat the adjustments in step 2 several times, and then press the MOX button again to return to receive.

N. 430 MHz TX Mixer (on 430 RF Unit)



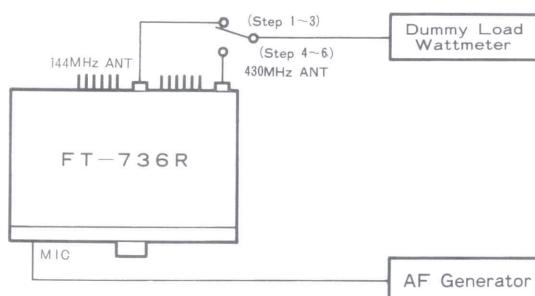
1. Connect the test equipment as shown in the diagram above.
2. Tune the transceiver to the center of the 70cm band, FM mode. Set the MIC gain fully counterclockwise and DRIVE fully clockwise.
3. Press the MOX button and adjust VR7002 so that the spuri at 13.79 MHz on either side of the carrier are at least 65dB down.
4. Press the MOX button again to return to receive.



430MHz RF UNIT ALIGNMENT POINTS

ALIGNMENT (Transmitter Receiver)

O. 430 MHz TX IF, Part II (on 430 MHz RF Unit)

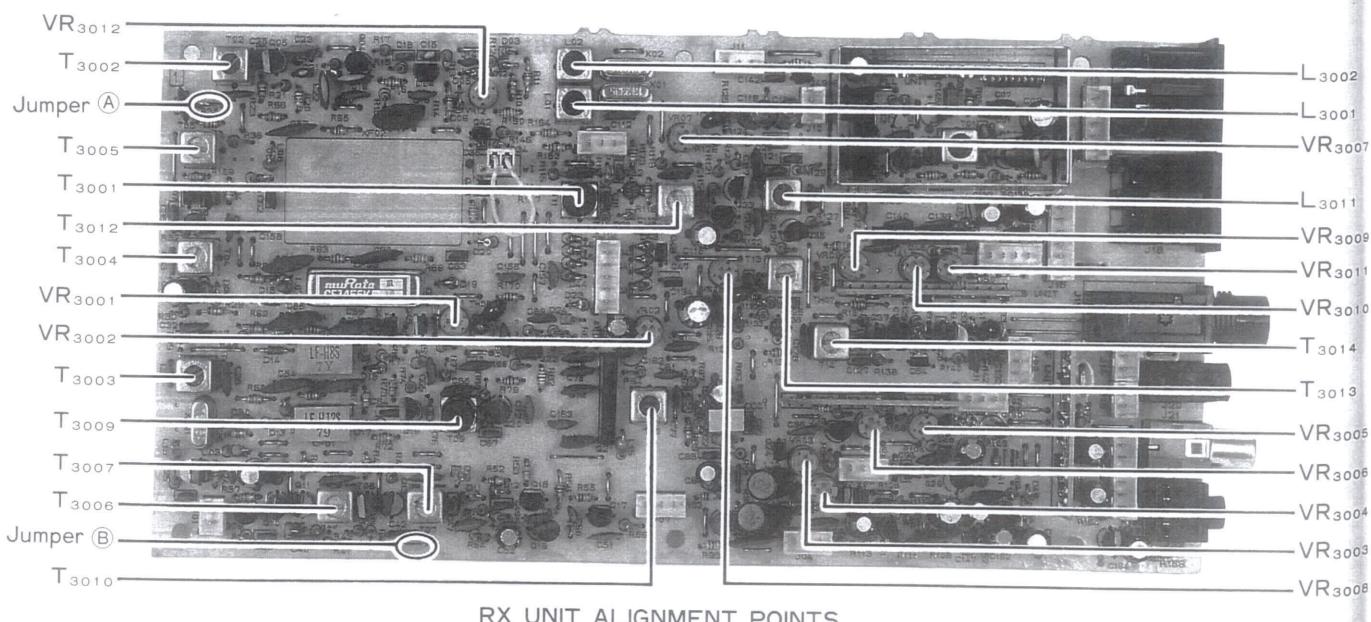


1. Connect the test equipment as shown above, with the AF generator set for 3mV @ 1 kHz.
2. Set the transceiver to USB, at the center of the 144 MHz band.
3. Set the DRIVE control fully clockwise, press the MOX button to transmit, and adjust the MIC gain for 5W output. Press the MOX button again to return to receive.
4. Retune the transceiver, now to the center of the 430 MHz band.
5. Press the MOX button and adjust VR7001 for 5W output.
6. Press the MOX button to return to receive, and disconnect the test equipment.

III. Receiver

A. IF Shift (on RX Unit - requires frequency counter)

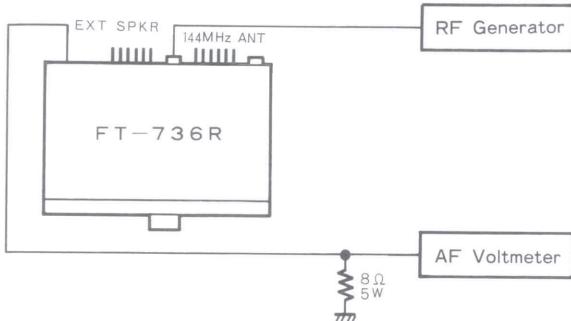
1. Connect the counter to jumper "A" in the diagram below.
2. Tune the transceiver to the center of the 430 MHz band, USB mode, and set the SHIFT control to 12 o'clock.
3. Adjust L3001 for 13.2335 MHz ± 50 Hz on the counter.
4. Confirm at least ± 1 kHz shift on the counter when the SHIFT control is set to its extremes.
5. Center the SHIFT control and select the LSB mode.
6. Adjust L3002 for 13.2365 MHz ± 50 Hz on the counter.
7. Repeat step 4.
8. Center the SHIFT control and select the CW mode.
9. Adjust VR3012 for 13.2350 MHz ± 50 Hz on the counter. In CW mode the counter frequency should not change when the SHIFT control is turned.
10. Disconnect the counter.



(Receiver) ALIGNMENT

B. 144 MHz RX (on RX Unit and 144 MHz Main Unit)

1. Connect the test equipment as shown here.

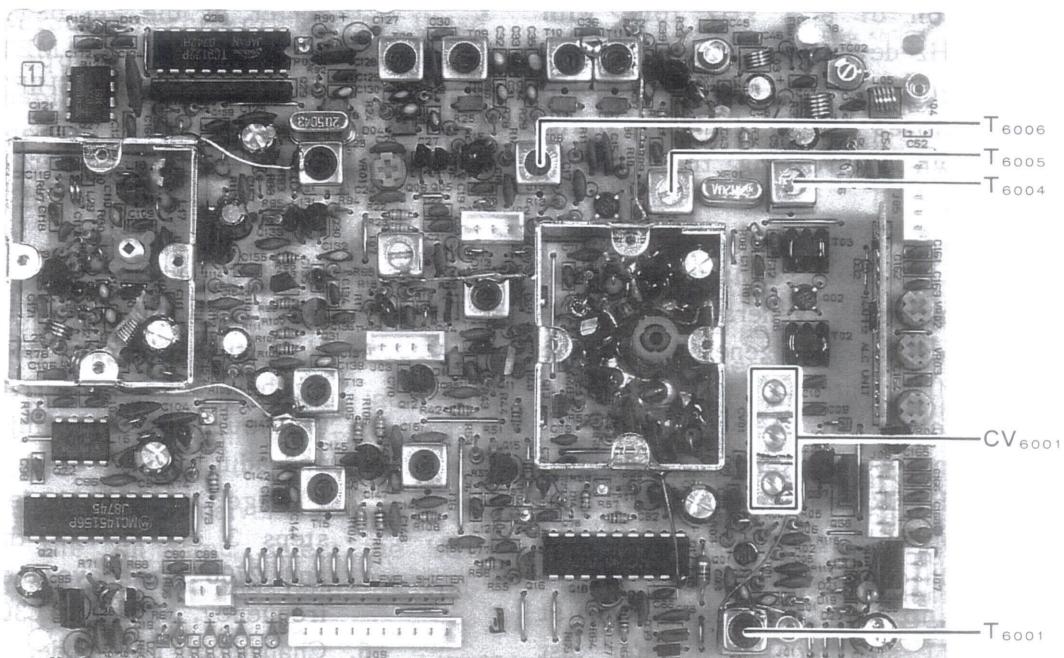


2. Set the transceiver to FM mode, the METER selector to S/PO, AF gain to 10 o'clock and RF gain fully clockwise.
3. Tune the transceiver and RF generator to the center of the 2m band. Inject a 1 kHz tone with ± 7 kHz deviation at a level sufficient to produce an S-7 reading on the S-meter.
4. Adjust T6001, CV6001 and T6004-T6006 on the 144 MHz RX Unit, and T3002-T3005 and T3009 on the RX Unit for peak S-meter deflection.
5. Adjust T3010 on the RX Unit for maximum deflection on the AF voltmeter.
6. Repeat steps 4 and 5 several times.

7. Change to mode to USB and turn off the RF generator's injection modulation.
8. Tune the transceiver for a 1.5 kHz heterodyne on the injected carrier, and adjust the injection level for S-7 on the S-meter.
9. Adjust T3011-T3014 on the RX Unit for maximum deflection on the AF voltmeter, reducing the injection level if necessary to maintain an S-7 indication on the S-meter.
10. Remove the test equipment.

C. Noise Squelch (RX Unit - requires RF generator)

1. With the RF generator connected to the 144 MHz antenna jack and switched off, set the transceiver to FM, and set the SQL and RF gain controls fully clockwise.
2. Tune the transceiver to the center of the 2m band and turn the SQL control counterclockwise just until the squelch opens, which should be around 9 o'clock.
3. Set the SQL control to 9 o'clock and adjust VR3003, if necessary, to the point just before the squelch opens with no RF injection.



144MHz MAIN UNIT ALIGNMENT POINTS

ALIGNMENT (Receiver)

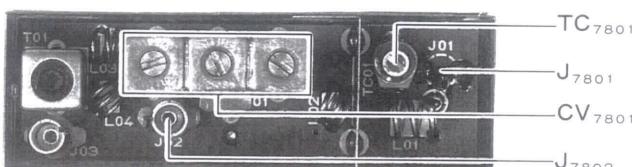
4. Set the RF generator for ± 3.5 kHz deviation of a 1 kHz tone at the same frequency as the transceiver, and confirm that the squelch opens with less than -12dBu injection when the SQL control is at 9 o'clock.
 5. Turn off the RF generator, move the SQL control to 10 o'clock, select USB mode and adjust VR3009 so the squelch is just closed.
 6. Adjust the frequency of the RF generator (with no modulation) for a 1.5 kHz heterodyne in the receiver, and reduce the injection level to confirm that the squelch opens with less than 0dBu injection.
 7. Return to FM mode and turn the SQL control fully clockwise. Retune the RF generator to the transceiver frequency, and modulate with ± 3.5 kHz of a 1 kHz tone.
 8. Confirm that the squelch just opens with an injection level of 0dBu ± 5 dB.
- D. Digital Squelch (on RX Unit - requires RF generator)
1. Connect the RF generator to the 144 MHz antenna jack and tune it and the transceiver to the center of the 2m band, FM mode.
 2. Set the RF generator for -11 dBu injection of a 1 kHz tone with ± 3.5 kHz deviation.
 3. Adjust VR3004 so that the squelch just closes (BUSY indicator turns off) while pressing the RESET button.
- E. 144 MHz S-Meter Sensitivity (on RX Unit - requires RF generator)
1. Connect the RF generator to the 144 MHz antenna jack. Tune the transceiver to the center of the 2m band. Select USB mode and set the METER selector to S/PO, SQL control fully counterclockwise and RF gain control fully clockwise.
 2. With no RF injection, adjust VR3011 so that the S-meter just begins to deflect.
3. Inject a 20dBu carrier (with no modulation), and tune the generator to produce a 1.5 kHz heterodyne in the receiver.
 4. With 20dBu carrier injection, adjust VR3010 for S-9 indication on the S-meter.
 5. Reduce the injection level to 0dBu and adjust VR3008 for S-2 indication. Then repeat step 4 and this step several times.
 6. Select the FM mode, and retune the RF generator to the same frequency as the transceiver (band center). Modulate the alignment signal with ± 3.5 kHz deviation of a 1 kHz tone.
 7. Inject 60dBu and adjust VR3002 for full scale S-meter deflection.
 8. Reduce the injection level to 10dBu and adjust VR3001 for S-7 deflection.
 9. Repeat steps 7 and 8 several times.
- F. RX Carrier Point (on RX Unit - requires RF signal generator and frequency counter)
1. Connect the RF generator to the 144 MHz antenna jack, and the counter to jumper "B" in the diagram on the page 64.
 2. With the transceiver tuned to the center of the 2m band, select the USB mode, set the METER selector to S/PO and the SHIFT control to 12 o'clock.
 3. Tune the RF generator 300 Hz below the displayed transceiver frequency, and set the injection for S-9 indication on the S-meter (with no modulation).
 4. Now tune the RF generator 2700 Hz below the transceiver frequency (without changing injection level) and adjust L3001 again for S-9.
 5. Change to LSB mode and repeat steps 3 and 4, but this time 300 and 2700 Hz above the transceiver frequency, adjusting L3002.
 6. Change to FM mode, turn off the RF generator and adjust VR3012 for 13.2350 MHz ± 50 Hz on the counter.

(Receiver) ALIGNMENT

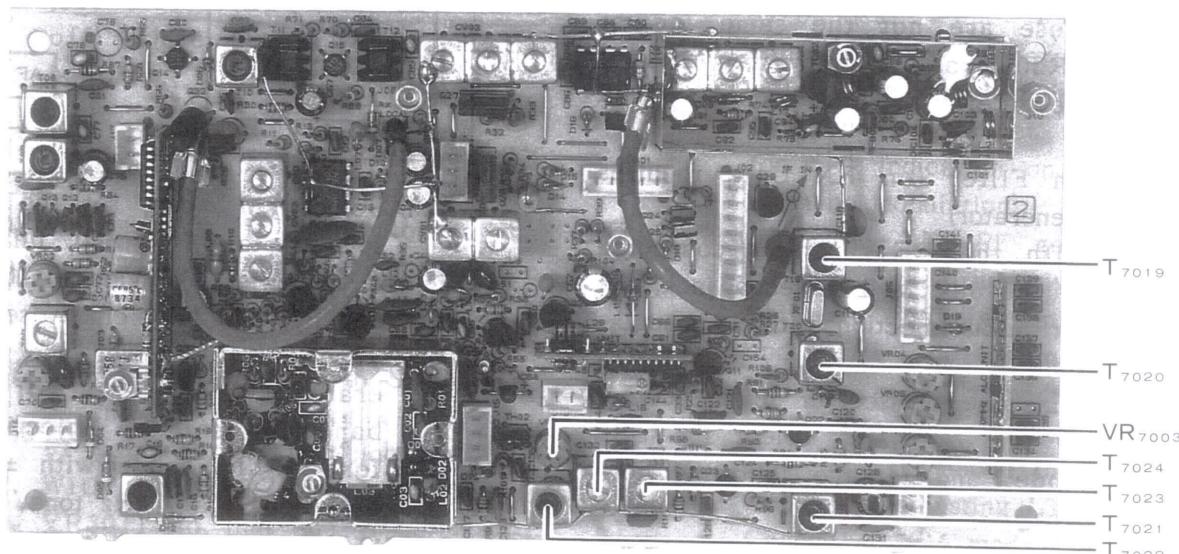
7. Disconnect the counter.
- G. DISC Meter (on RX Unit - requires RF generator)
1. With the RF generator connected to the 144 MHz antenna jack, tune the transceiver and RF generator to the center of the 2m band, select the FM mode, and set the METER selector to DISC/ALC.
 2. With 20dBu injection of a 1 kHz tone with ± 3.5 kHz deviation, adjust VR3006 so that the meter deflects to the center ("5" on the PO scale).
- H. Scanner Center Stop (on RX Unit - requires RF generator)
1. With the RF generator connected to the 144 MHz antenna jack and set for 20dBu injection with no modulation, tune the transceiver and RF generator to the center of the 2m band, select the FM mode, and set the SQL and RF gain controls fully clockwise.
 2. Tune the RF generator frequency back and forth slightly while watching the BUSY indicator, noting the frequencies above and below the transceiver frequency at which the indicator turns off.
 3. Calculate the offsets of these frequencies from the frequency displayed on the transceiver. If these are not the same, adjust VR3005 and repeat step 2 until they are.
- I. Notch Filter (on RX Unit, requires RF generator)
1. With the RF generator connected to the 144 MHz antenna jack, set for 5dBu injection with no modulation.
 2. Tune the transceiver to the center of the 2m band, select the USB mode, and set the following controls:
 - a. METER selector to S/PO
 - b. SQL control fully clockwise
 - c. RF gain fully clockwise
 - d. AF gain to 10 o'clock
 - e. NOTCH control to 12 o'clock
 - f. NOTCH button ON (depressed)
 3. Tune the RF generator 1.5 kHz above the receiver frequency and adjust L3011 for minimum S-meter deflection. Then adjust VR3007 for best null of the 1.5 kHz heterodyne in the loudspeaker.
- J. Noise Blanker (on RX Unit - requires RF generator and DC voltmeter)
1. With the RF generator connected to the 144 MHz antenna jack, connect the DC voltmeter to point "B" in the diagram on the page 64.
 2. Tune the transceiver and RF generator to the center of the 2m band, and inject a 20dBu carrier with no modulation.
 3. Select the USB mode, set the RF gain fully clockwise and adjust T3006 and T3007 for minimum deflection on the voltmeter.
 4. Disconnect the voltmeter.
- K. 144 MHz Receiver Overall Check
1. Connect the test equipment as shown below.
- ```
graph LR; RF[RF Generator] -- "144MHz ANT" --> FT[FT-736R]; FT -- EXT SPKR --> AF[AF Voltmeter]; FT --> SINAD[SINAD Meter]; SINAD --- GND[Ground]
```
2. Select FM mode, set the METER selector to S/PO, SQL fully counterclockwise, AF gain to 10 o'clock and RF gain fully clockwise.
  3. Tune the transceiver and RF generator to the center of the 2m band and set the injection level for S-9 indication with  $\pm 3.5$  kHz deviation of a 1 kHz tone.

# ALIGNMENT (Receiver)

4. Tune the transceiver and RF generator to the high and low band edges and confirm that the injection level required for S-9 indication is within  $\pm 3\text{dB}$  of that at band center.
  5. Retune the transceiver and RF generator to band center, and confirm that 12dB SINAD is better than -9dB.
  6. Select the USB mode and set the injection level to -10dB with no modulation. Confirm at least 12dB (S+N)/N.
  7. Remove the test equipment.
- 
- L. 430 MHz RX RF (on 430 MHz Front End Unit - requires tracking generator and spectrum analyzer)
    1. Connect the tracking generator to J7801 and the analyzer to J7802. Set the tracking generator level to about -30dBm, and reduce it if necessary to avoid saturation.
    2. Adjust TC7801 and CV7801 for less than  $\pm 5\text{dB}$  ripple between 430 and 450 MHz.



430MHz FRONTEND UNIT ALIGNMENT POINTS



430MHz RX UNIT ALIGNMENT POINTS

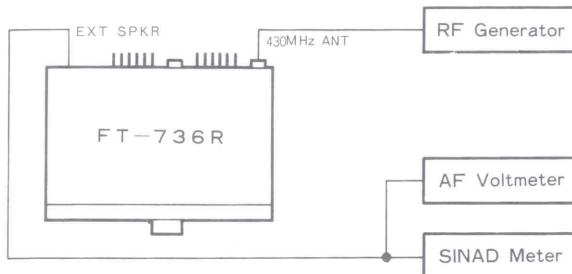
- M. 430 MHz RX IF (on 430 MHz RX Unit - requires RF generator)
  1. Connect the RF generator to the 430 MHz antenna jack.
  2. Set the transceiver to FM, METER selector to S/PO and RF gain fully clockwise.
  3. Tune the RF generator and transceiver to the center of the 70cm band, and inject  $\pm 7\text{ kHz}$  deviation of a 1 kHz tone at a level sufficient to produce S-7 deflection on the S-meter.
  4. Adjust T7019-T7024 for peak S-meter deflection.

- N. 430 MHz Module Gain (on 430 MHz RX Unit - requires RF generator)
  1. Connect the RF generator to the 430 MHz antenna jack.
  2. Set the transceiver to USB, METER selector to S/PO and RF gain fully clockwise.
  3. Tune the transceiver to the center of the 70cm band.
  4. Inject a 20dBu carrier with no modulation 1.5 kHz above the transceiver frequency, and adjust VR7003 for S-9 deflection on the S-meter.

# (Receiver FEX-736-50) ALIGNMENT

## O. 430 MHz Receiver Overall Check

1. Connect the test equipment as shown below.



2. Select the FM mode, set the METER selector to S/PO, SQL fully counterclockwise, AF gain to 10 o'clock and RF gain fully clockwise.
3. Tune the transceiver and RF generator to the center of the 70cm band and set the injection level for S-9 indication with  $\pm 3.5$  kHz deviation of a 1 kHz tone.
4. Tune the transceiver and RF generator to the high and low band edges and confirm that the injection level required for S-9 indication is within  $\pm 3$  dB of that at band center.
5. Retune the transceiver and RF generator to band center, and confirm that 12dB SINAD is better than -9dB.
6. Select the USB mode and set the injection level to -10dB with no modulation. Confirm at least 12dB (S+N)/N.
7. Remove the test equipment.

## IV. FEX-736-50

- A. 50 MHz PLL Sub Loop (on 50 MHz PLL Unit - requires oscilloscope and DC voltmeter)

1. Connect the 'scope to TP1001 and the DC voltmeter between TP1002 and chassis ground.
2. Tune the transceiver to 52.00000 MHz, CW mode, and adjust T1002-T1005 for maximum amplitude on the 'scope.
3. Retune the transceiver to 52.01999 MHz and adjust L1016 for 4.2V on the voltmeter.
4. Retune the transceiver to 52.02000 MHz and confirm at least 0.6V on the voltmeter.
5. Disconnect the 'scope and voltmeter.

- B. 50 MHz PLL VCXO (on 50 MHz PLL Unit - requires DC voltmeter)

1. Connect the voltmeter between the exposed lead of R1055 and chassis ground.
2. Tune the transceiver to 52.01999 MHz, CW mode, and adjust L1009 for 6.0V on the voltmeter.
3. Retune the transceiver to 52.02000 MHz and confirm at least 1.0V on the voltmeter.
4. Disconnect the voltmeter.

- C. 50 MHz PLL Main Loop (on 50 MHz PLL Unit - requires DC and RF voltmeters)

1. Connect the DC voltmeter between the exposed lead of R1022 and chassis ground. Connect the RF voltmeter to pin 1 of J1001.
2. Tune the transceiver to 53.99999 MHz, CW mode, and adjust L1003 for 6.0V on the voltmeter.
3. Retune the transceiver to 50.00000 MHz and confirm at least 2.0V on the DC voltmeter.
4. Retune the transceiver to 52.00000 MHz and adjust T1001 for maximum on the RF voltmeter.
5. Disconnect the voltmeters.

# ALIGNMENT (FEX-736-50)

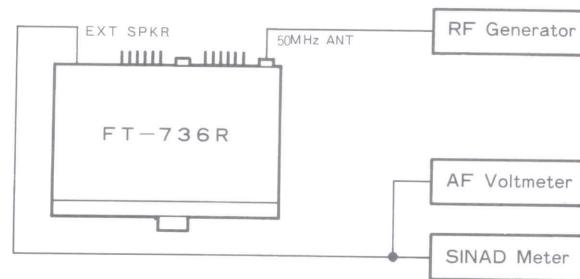
- D. 50 MHz RX (on 50 RF Unit - require RF generator)
1. Connect the RF generator to the 50 MHz antenna jack.
  2. Set the transceiver to FM mode, the METER selector to S/PO and RF gain fully clockwise.
  3. Tune the transceiver and RF generator to 52.00000 MHz. Inject a 1 kHz tone with  $\pm 7$  kHz deviation at a level sufficient to produce an S-7 reading on the S-meter.
  4. Adjust T2001-T2004 and T2007-T2009 for peak S-meter deflection.
- E. 50 MHz Module Gain (on 50 MHz RF Unit - requires RF generator)
1. Connect the RF generator to the 50 MHz antenna jack.
  2. Set the transceiver to USB, METER selector to S/PO and RF gain fully clockwise.
  3. Tune the transceiver to 52.00000 MHz.
  4. Inject a 20dBu carrier with no modulation 1.5 kHz above the transceiver frequency, and adjust VR2001 for S-9 deflection on the S-meter.

5. Tune the transceiver and RF generator as indicated below, and confirm that the injection level required for S-9 indication is within  $\pm 3$ dB of that required at 52.00000 MHz.

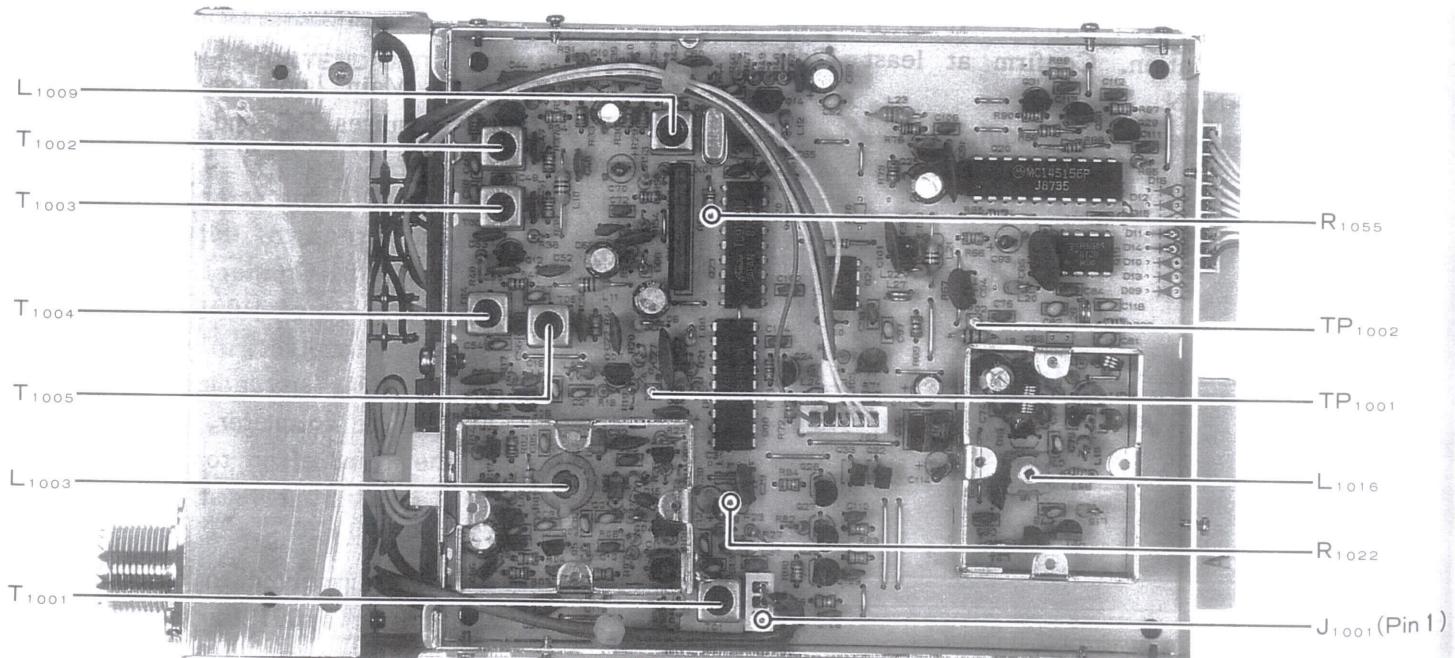
| Transceiver  | RF Generator |
|--------------|--------------|
| 53.99999 MHz | 54.00149 MHz |
| 50.00000 MHz | 50.00150 MHz |

## F. 50 MHz Receiver Overall Check

1. Connect the test equipment as shown below.



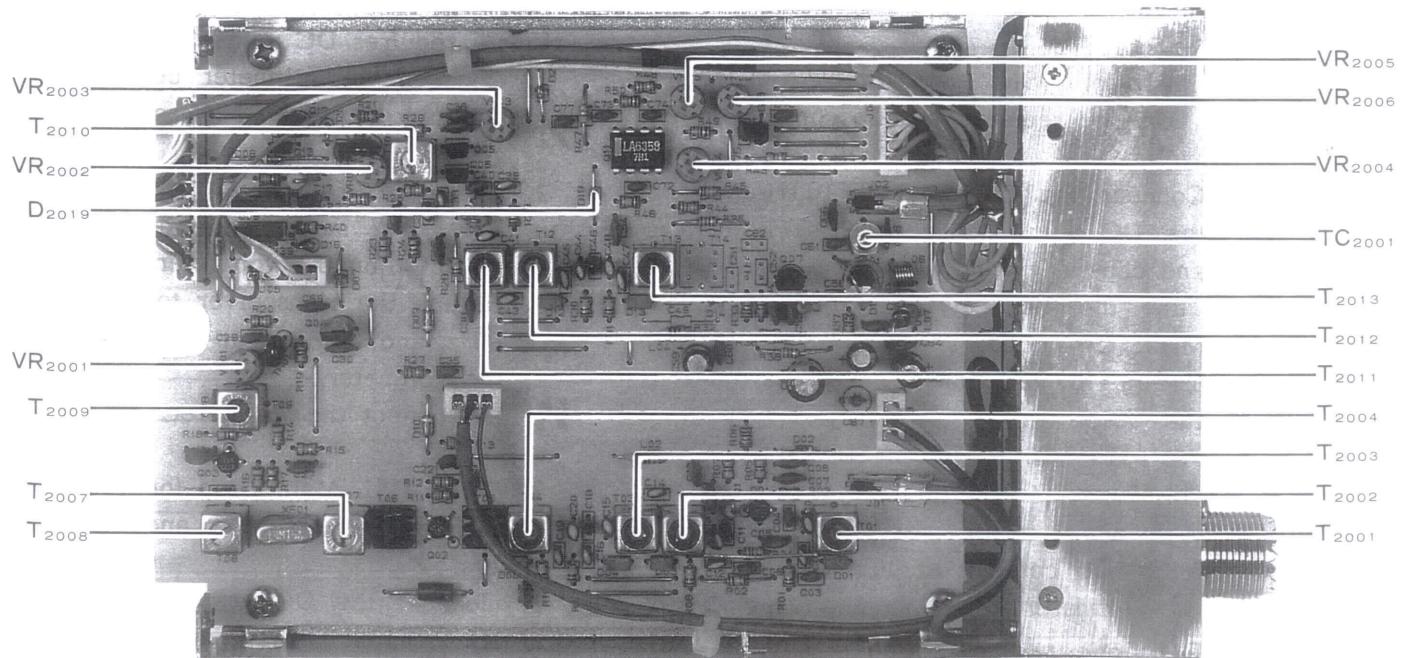
2. Select the FM mode, set the METER selector to S/PO, SQL fully counterclockwise, AF gain to 10 o'clock and RF gain fully clockwise.
3. Tune the transceiver and RF generator to 52.00000 MHz. Inject a 1 kHz tone with  $\pm 3.5$  kHz deviation, and confirm a 12dB SINAD of -9dB or better.



50MHz PLL UNIT ALIGNMENT POINTS

# (FEX-736-50) ALIGNMENT

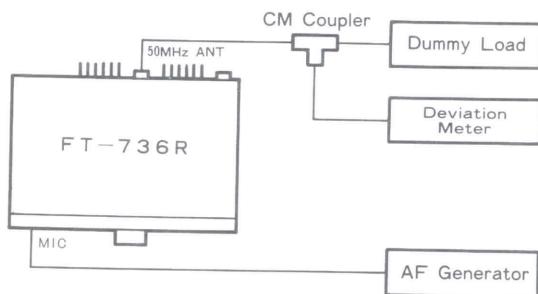
4. Select the USB mode and set the injection level to -10dB with no modulation. Confirm at least 12dB (S+N)/N.
  5. Remove the test equipment.
- G. 50 MHz TX IF, Part I (on 50 MHz RF Unit - requires dummy load and wattmeter)
1. With the dummy load and wattmeter connected to the 50 MHz antenna jack, tune the transceiver to 52.00000 MHz, FM mode.
  2. Press the MOX button and set the DRIVE control for 4W output.
  3. Adjust T2010-T2013 and TC2001 for peak on the wattmeter, reducing the DRIVE control setting, if necessary, to keep power output below 5W during adjustments.
  4. Press the MOX button again to return to receive.
- H. 50 MHz AFP (Automatic Final Protection, on 50 MHz RF Unit, requires dummy load, wattmeter and DC voltmeter)
1. Set the transceiver to the FM mode, turn the DRIVE control fully clockwise, and tune to 52.00000 MHz.
2. With the dummy load and wattmeter connected to the 50 MHz antenna jack, connect the DC voltmeter to the anode of D2019.
  3. Press the MOX button and adjust VR2004 for 1.0V on the voltmeter.
  4. Press the MOX button to return to receive, and remove the voltmeter.
- I. 50 MHz ALC level & PO Meter Sensitivity (on 50 MHz RF Unit - requires dummy load and wattmeter)
1. Set the transceiver to 52.00000 MHz, FM mode, and set the METER selector to the S/PO position.
  2. With the dummy load and wattmeter connected to the 50 MHz antenna jack, set the DRIVE control fully clockwise.
  3. Press the MOX button and alternately adjust VR2005 for 10W on the wattmeter and VR2006 for an indication of "8" on the PO meter scale, repeating both adjustments several times.
  4. Press the MOX button to return to receive.



50MHz RF UNIT ALIGNMENT POINTS

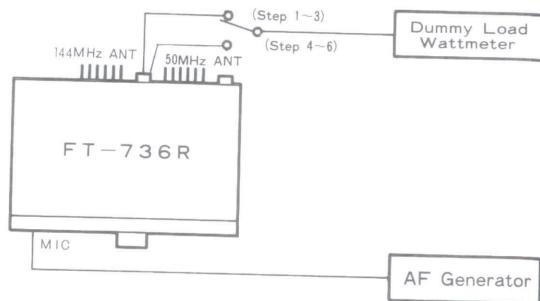
# ALIGNMENT (FEX-736-50) (FEX-736-220)

## J. 50 MHz TX Mixer (on 50 MHz RF Unit)



1. Connect the test equipment as shown in the diagram above.
2. In FM mode, tune the transceiver to 52.00000 MHz, FM mode. Set the MIC Gain fully counterclockwise and DRIVE fully clockwise.
3. Press the MOX button and adjust VR2003 so that the spuri at 13.79 MHz on either side of the carrier are at least 65dB down.
4. Press the MOX button again to return to receive.

## K. 50 MHz TX IF, Part II (on 50 MHz RF Unit)



1. Connect the test equipment as shown above, with the AF generator set for 3mV @ 1 kHz.
2. Set the transceiver to USB, at the center of the 144 MHz band.
3. Set the DRIVE control fully clockwise, press the MOX button to transmit, and adjust the MIC gain for 5W output. Press the MOX button again to return to receive.
4. Retune the transceiver to 52.00000 MHz.
5. Press the MOX button and adjust VR2002 for 5W output.
6. Press the MOX button to return to receive, and disconnect the test equipment.

## V. FEX-736-220

### A. 220 MHz PLL Sub Loop (on 220 MHz PLL Unit - requires oscilloscope and DC voltmeter)

1. Connect the 'scope to TP1001 and the DC voltmeter between TP1002 and chassis ground.
2. Tune the transceiver to 222.01999 MHz, CW mode, and adjust T1002-T1005 for maximum amplitude on the 'scope.
3. Adjust L1016 for 4.2V on the voltmeter.
4. Retune the transceiver to 222.02000 MHz and confirm at least 0.6V on the voltmeter.
5. Disconnect the 'scope and voltmeter.

### B. 220 MHz PLL VCXO (on 220 MHz PLL Unit - requires DC voltmeter)

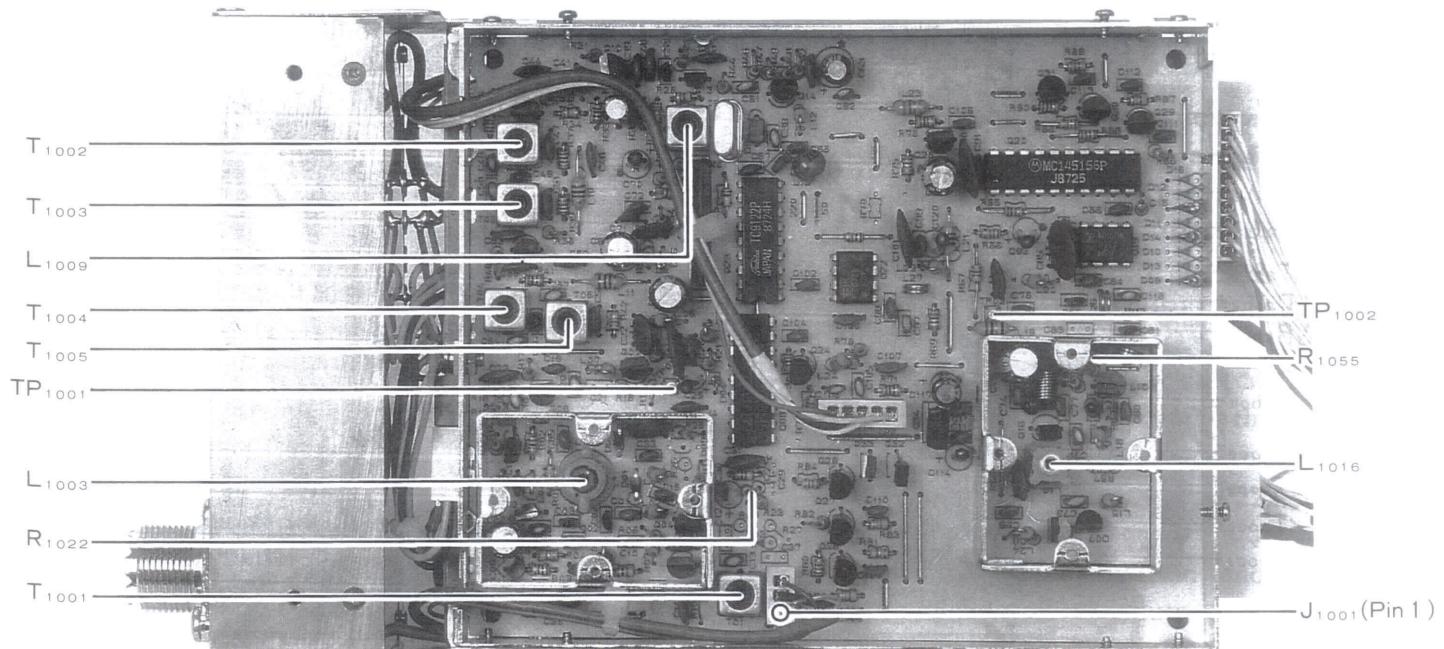
1. Connect the voltmeter between the exposed lead of R1055 and chassis ground.
2. Tune the transceiver to 222.01999 MHz, CW mode, and adjust L1009 for 6.0V on the voltmeter.
3. Retune the transceiver to 222.02000 MHz and confirm at least 1.0V on the voltmeter.
4. Disconnect the voltmeter.

### C. 220 MHz PLL Main Loop (on 220 MHz PLL Unit - requires DC and RF voltmeters)

1. Connect the DC voltmeter between the exposed lead of R1022 and chassis ground. Connect the RF voltmeter to pin 1 of J1001.

# (FEX-736-220) ALIGNMENT

2. Tune the transceiver to 224.99999 MHz, CW mode, and adjust L1003 for 6.0V on the voltmeter.
  3. Retune the transceiver to 220.00000 MHz and confirm at least 2.0V on the DC voltmeter.
  4. Retune the transceiver to 222.50000 MHz and adjust T1001 for maximum on the RF voltmeter.
  5. Disconnect the voltmeters.
- D. 220 MHz RX (on 220 RF Unit - requires tracking generator and spectrum analyzer)
1. Connect the tracking generator to the 220 MHz antenna jack and the analyzer to J2008. Set the tracking generator level to about -30dBm, reducing the level during adjustment, if necessary, to avoid saturation.
  2. Adjust T2001 and CV2001 for less  $\pm 3$ dB ripple between 220 and 225 MHz.
  3. Remove the test equipment.
- E. 220 MHz 2nd Local (on 220 MHz RF Unit - requires oscilloscope)
1. Connect the 'scope to the anode of D2002.
  2. Adjust T2016-T2018 for maximum amplitude on the 'scope.
3. Remove the 'scope.
- F. 220 MHz RX IF (on 220 MHz RF Unit - requires RF generator)
1. Connect the RF generator to the 220 MHz antenna jack.
  2. Set the transceiver to FM, METER selector to S/PO and RF gain fully clockwise.
  3. Tune the RF generator and transceiver to 222.50000 MHz, and inject  $\pm 7$  kHz deviation of a 1 kHz tone at a level sufficient to produce S-7 deflection on the S-meter.
  4. Adjust T2004-T2009 for peak S-meter deflection.
- G. 220 MHz Module Gain (on 220 MHz RF Unit - requires RF generator)
1. Connect the RF generator to the 220 MHz antenna jack.
  2. Set the transceiver to USB, METER selector to S/PO and RF gain fully clockwise.
  3. Tune the transceiver to 222.50000 MHz.
  4. Inject a 20dBu carrier with no modulation 1.5 kHz above the transceiver frequency, and adjust VR2001 for S-9 deflection on the S-meter.

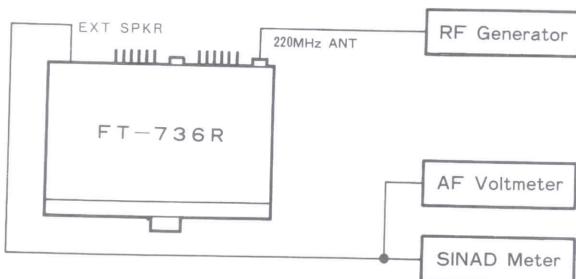


220MHz PLL UNIT ALIGNMENT POINTS

# ALIGNMENT (FEX-736-220)

## H. 220 MHz Receiver Overall Check

1. Connect the test equipment as shown below.



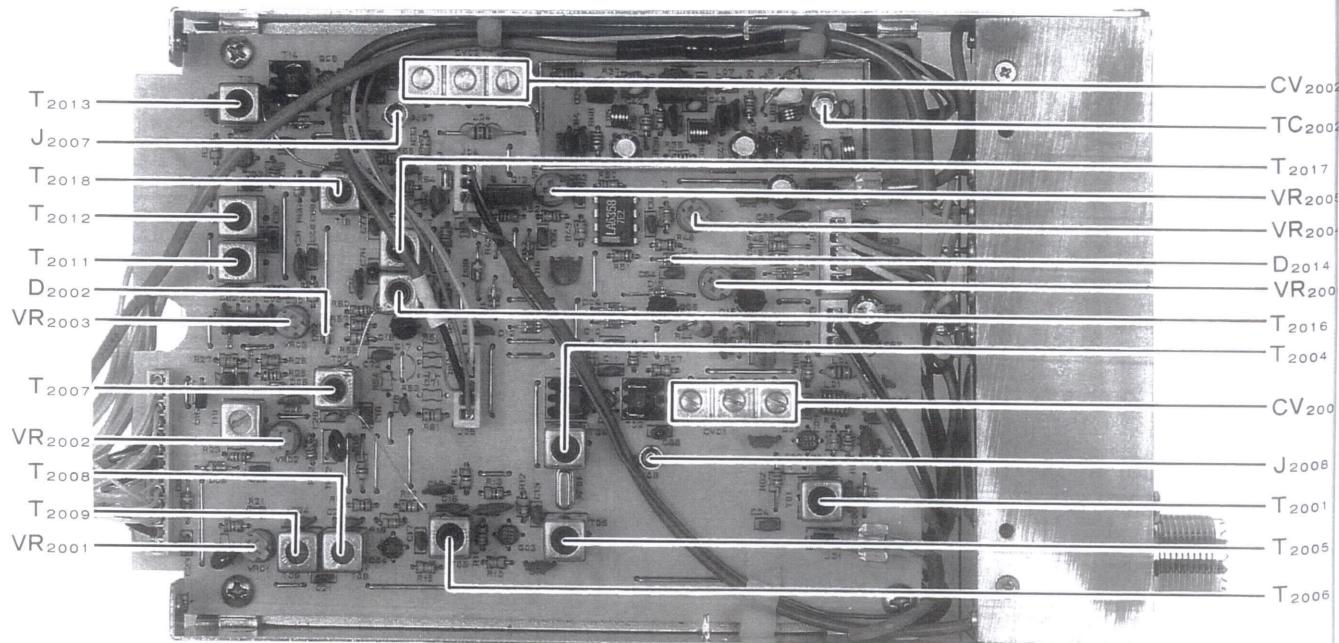
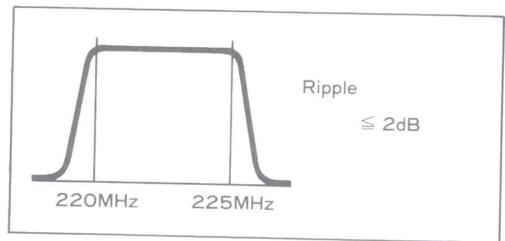
2. Select the FM mode, set the METER selector to S/PO, SQL fully counterclockwise, AF gain to 10 o'clock and RF gain fully clockwise.
3. Tune the transceiver and RF generator to 222.50000 MHz and set the injection level for S-9 indication with  $\pm 3.5$  kHz deviation of a 1 kHz tone.
4. Tune the transceiver and RF generator to the high and low band edges and confirm that the injection level required for S-9 indication is within  $\pm 3$  dB of that at band center.
5. Retune the transceiver and RF generator to 222.50000 MHz, and confirm that 12dB SINAD is better than -9dB.

6. Select the USB mode and set the injection level to -10dB with no modulation. Confirm at least 12dB (S+N)/N.

7. Remove the test equipment.

## I. 220 MHz TX RF (on 220 MHz RF Unit - requires tracking generator and spectrum analyzer)

1. Connect the tracking generator to J2007 and couple the spectrum analyzer to the 220 MHz antenna jack.
2. Set the tracking generator output to -30dBm and adjust CV2002 for the passband shown (reducing injection level, if necessary, to avoid saturation).
3. Remove the test equipment.

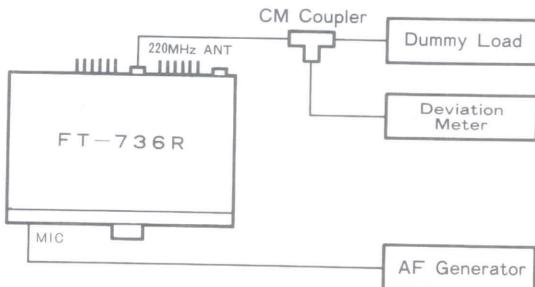


220MHz RF UNIT ALIGNMENT POINTS

# (FEX-736-220) ALIGNMENT

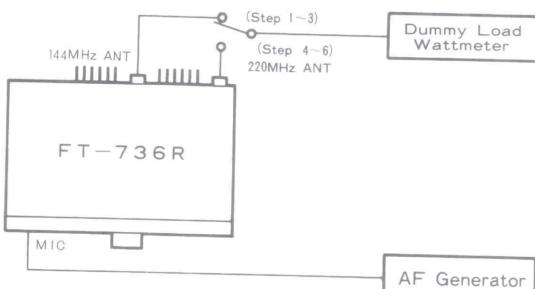
- J. 220 MHz TX IF, Part I (on 220 MHz RF Unit - requires dummy load and wattmeter)
- With the dummy load and wattmeter connected to the 220 MHz antenna jack, tune the transceiver to 222.50000 MHz, FM mode.
  - Press the MOX button and set the DRIVE control for 4W output.
  - Adjust T2011-T2013 and TC2002 for maximum deflection on the wattmeter (but do not exceed 5W output: reduce the DRIVE control setting, if necessary).
  - Press the MOX button again to return to receive.
- K. 220 MHz AFP (Automatic Final Protection, on 220 MHz RF Unit - requires dummy load and DC voltmeter)
- With the dummy load connected to the 220 MHz antenna jack, connect the DC voltmeter to the anode of D2014.
  - Set the transceiver to FM, 222.50000 MHz and set the DRIVE control fully clockwise.
  - Press the MOX button and adjust VR2004 for 1.0V on the DC voltmeter.
  - Press the MOX button again to return to receive, and remove the voltmeter.
- L. 220 MHz ALC level & PO Meter Sensitivity (on 220 MHz RF Unit - requires dummy load and wattmeter)
- Set the transceiver to 222.50000 MHz, FM mode, and set the METER selector to the S/PO position.
  - With the dummy load and wattmeter connected to the 220 MHz antenna jack, set the DRIVE control fully clockwise.
  - Press the MOX button and alternately adjust VR2005 for 25W on the wattmeter and VR2006 for an indication of "8" on the PO meter scale, repeating both adjustments several times.
  - Press the MOX button to return to receive.

M. 220 MHz TX Mixer (on 220 RF Unit)



- Connect the test equipment as shown in the diagram above.
- In FM mode, tune the transceiver to 222.50000 MHz. Set the MIC gain fully counterclockwise and DRIVE fully clockwise.
- Press the MOX button and adjust VR2003 so that the spuri at 13.79 MHz on either side of the carrier are at least 65dB down.
- Press the MOX button again to return to receive.
- Disconnect the test equipment.

N. 220 MHz TX IF, Part II (on 220 MHz RF Unit)



- Connect the test equipment as shown above, with the AF generator set for 3mV @ 1 kHz.
- Set the transceiver to USB, at the center of the 144 MHz band.
- Set the DRIVE control fully clockwise, press the MOX button to transmit, and adjust the MIC gain for 5W output. Press the MOX button again to return to receive.
- Retune the transceiver to 222.50000 MHz.
- Press the MOX button and adjust VR2002 for 5W output.
- Press the MOX button to return to receive, and disconnect the test equipment.

# ALIGNMENT (FEX-736-1.2)

## VI. FEX-736-1.2

A. 1.2 GHz PLL 2nd Local (on 1.2 GHz PLL Unit - requires DC voltmeter)

1. Connect the voltmeter between R1096 ("A" in the diagram below) and chassis ground.
2. Tune the transceiver to 1280.00000 MHz, FM mode, and adjust TC1001 for 4.0V on the voltmeter.
3. Remove the voltmeter.

B. 1.2 GHz PLL Sub Loop (on 1.2 GHz PLL Unit - requires DC voltmeter)

1. Connect the DC voltmeter between R1025 ("B" in the diagram below) and chassis ground.
2. Tune the transceiver to 1280.01999 MHz, USB mode, and adjust L1008 for 7.5V on the voltmeter.
3. Retune the transceiver to 1280.02000 MHz and confirm at least 1.0V on the voltmeter.
4. Disconnect the voltmeter.

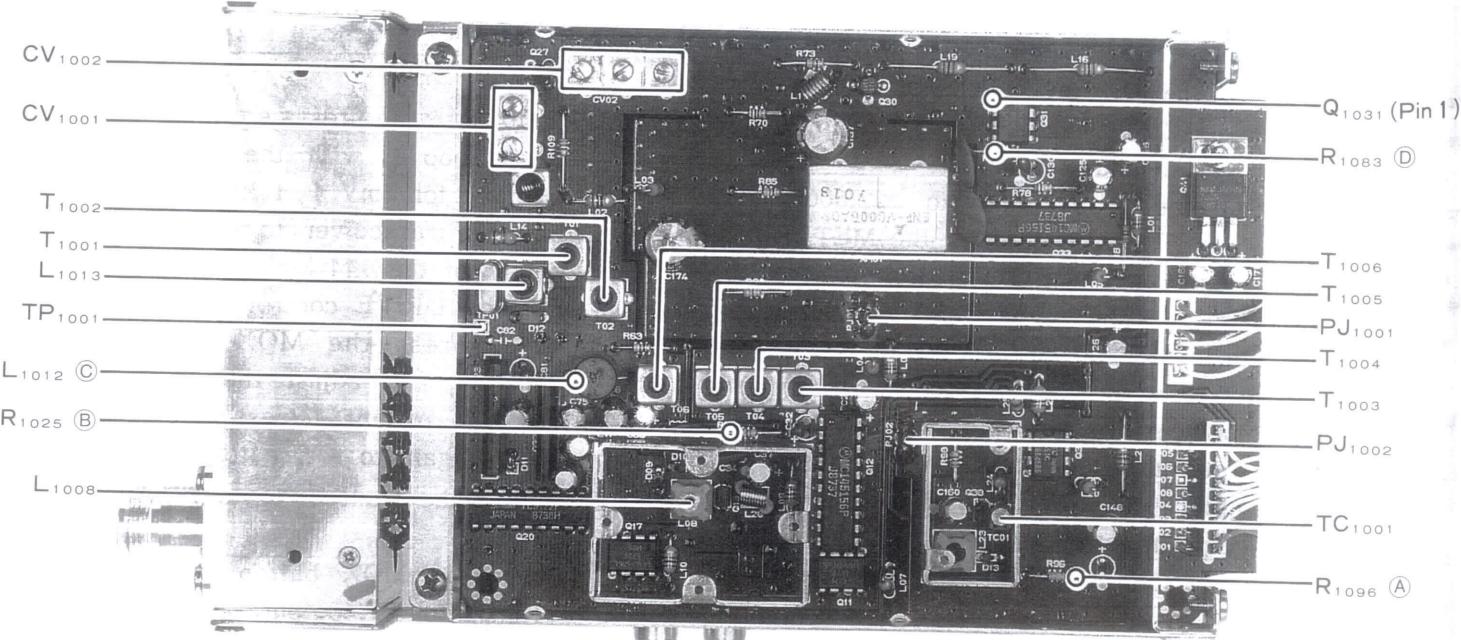
C. 1.2 GHz PLL VCXO (on 1.2 GHz PLL Unit - requires AF and DC voltmeters)

1. Connect the AF millivoltmeter between L1012 ("C" in the diagram below) and chassis ground.
2. Connect the DC voltmeter between TP1001 and chassis ground.

3. Tune the transceiver to 1280.00000 MHz, USB mode, and adjust T1001-T1006 for peak on the AF millivoltmeter.
4. Retune the transceiver to 1280.01999 MHz and adjust L1013 for 4.5V on the DC voltmeter.
5. Retune the transceiver to 1280.02000 MHz and confirm at least 1.0V on the DC voltmeter.
6. Disconnect the voltmeters.

D. 1.2 GHz PLL Main Loop (on 1.2 GHz PLL Unit - requires DC and RF voltmeters)

1. Connect the DC voltmeter between R1083 ("D" in the diagram below) and chassis ground. Connect the RF voltmeter to pin 1 of Q1031.
2. Tune the transceiver to the high band edge, USB mode, and adjust CV1001 and CV1002 for peak on the RF voltmeter. Confirm about 6.0V on the DC voltmeter.
3. Retune the transceiver to the low band edge and confirm at least 1.5V on the DC voltmeter.
4. Disconnect the voltmeters.



1.2GHz PLL UNIT ALIGNMENT POINTS

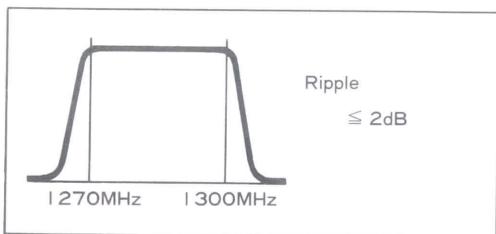
## (FEX-736-1.2) ALIGNMENT

E. 1.2 GHz PLL Overall Check (on 1.2 GHz PLL Unit - requires 50-ohm,  $\frac{1}{4}$ -watt resistor and RF voltmeter)

1. Disconnect the TMP plug from PJ1002 and connect the 50-ohm resistor and RF voltmeter in its place.
2. Tune the transceiver to 1280.00000 MHz, FM mode, and confirm about -15dBm on the voltmeter.
3. Move the resistor and meter from PJ1002 to PJ1001 and confirm about +5dBm on the RF voltmeter.
4. Remove the resistor and meter, and replace the TMP plugs.

F. 1.2 GHz RX RF (on 1.2 GHz RF Unit - requires tracking generator and spectrum analyzer)

1. Connect the tracking generator to PJ2002 and the analyzer to PJ2003. Set the tracking generator level to about -30dBm, reducing the level during adjustment, if necessary, to avoid saturation.
2. Adjust CV2001 for the passband shown below.
3. Remove the test equipment.



G. 1.2 GHz RX IF (on 1.2 GHz RF Unit - requires RF generator)

1. Connect the RF generator to the 1.2 GHz antenna jack.
2. Set the transceiver to FM, METER selector to S/PO and RF gain fully clockwise.
3. Tune the RF generator and transceiver to 1280.00000 MHz, and inject  $\pm 7$  kHz deviation of a 1 kHz tone at a level sufficient to produce S-7 deflection on the S-meter.
4. Adjust T2001-T2010 for peak S-meter deflection.

H. 1.2 GHz Module Gain (on 1.2 GHz RF Unit - requires RF generator)

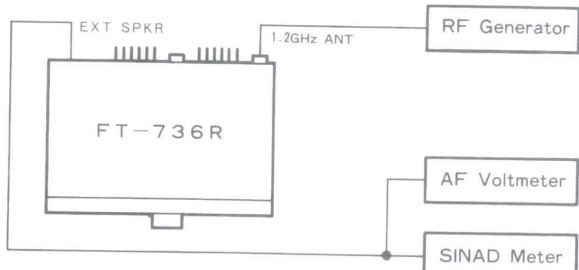
1. Connect the RF generator to the 1.2 GHz antenna jack.
2. Set the transceiver to USB, METER selector to S/PO and RF gain fully clockwise.
3. Tune to 1280.00000 MHz.
4. Inject a 20dBu carrier with no modulation 1.5 kHz above the transceiver frequency, and adjust VR2004 for S-9 S-meter deflection.
5. Tune the transceiver and RF generator as indicated below, and confirm that the injection level required for S-9 indication is within  $\pm 3\text{dB}$  of that required at 1280.00000 MHz.

| Transceiver    | RF Generator   |
|----------------|----------------|
| 1299.99999 MHz | 1300.00149 MHz |
| 1260.00000 MHz | 1260.00150 MHz |

6. Connect the jumper plug at J2001 and retune the transceiver to 1280.00000 MHz.
7. Inject a 40dB carrier with no modulation 1.5 kHz above the transceiver frequency, and adjust TC2001 for S-9 S-meter deflection.

I. 1.2 GHz Receiver Overall Check

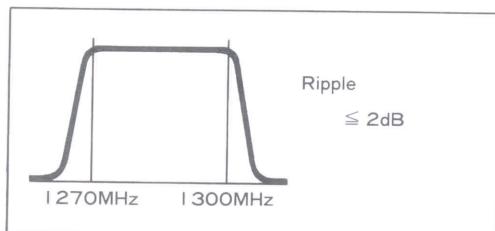
1. Connect the test equipment as shown below.



2. Select the FM mode, set the METER selector to S/PO, SQL fully counterclockwise, AF gain to 10 o'clock and RF gain fully clockwise.
3. Tune the transceiver and RF generator to 1280.00000 MHz. Inject a 1 kHz tone with  $\pm 3.5$  kHz deviation, and confirm a 12dB SINAD better than -9dB.

# ALIGNMENT (FEX-736-1.2)

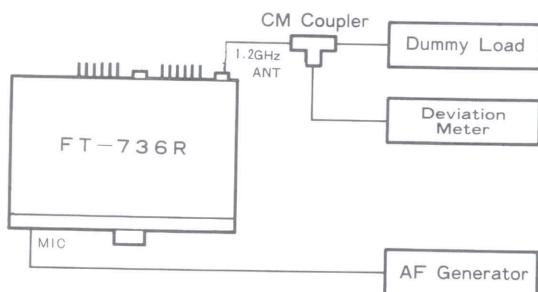
4. Select the USB mode and set the injection level to -10dB with no modulation. Confirm at least 12dB (S+N)/N.
  5. Remove the test equipment.
- J. 1.2 GHz TX RF (on 1.2 GHz RF Unit - requires tracking generator and spectrum analyzer)
1. Connect the tracking generator to PJ2004 and the spectrum analyzer to PJ2001.
  2. Set the tracking generator output to -30dBm and adjust CV2003 and CV2004 for the passband shown below (reducing injection level, if necessary, to avoid saturation).
  3. Remove the test equipment.
- K. 1.2 GHz TX IF, Part I (on 1.2 GHz RF Unit - requires dummy load and wattmeter)
1. With the dummy load and wattmeter connected to the 1.2 GHz antenna jack, tune the transceiver to 1280.00000 MHz, FM mode.
  2. Press the MOX button and set the DRIVE control for 4W output.
  3. Adjust T2011 and T2013-T2016 for maximum deflection on the wattmeter (but do not exceed 5W output: reduce the DRIVE control setting, if necessary).
  4. Press the MOX button again to return to receive.



- L. 1.2 GHz ALC level & PO Meter Sensitivity (on 1.2 GHz RF Unit - requires dummy load and wattmeter)
1. Set the transceiver to 1280.00000 MHz, FM mode, and set the METER selector to the S/PO position.
  2. With the dummy load and wattmeter connected to the 1.2 GHz antenna jack, set the DRIVE control fully clockwise.
  3. Press the MOX button and alternately adjust VR2002 for 10W on the wattmeter and VR2003 for an indication of "8" on the PO meter scale, repeating both adjustments several times.
  4. Press the MOX button to return to receive.

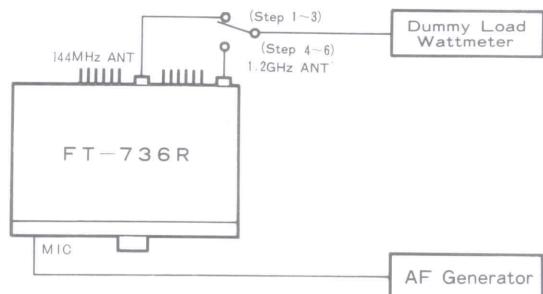
# (FEX-736-1.2) ALIGNMENT

M. 1.2 GHz TX Mixer (on 1.2 GHz RF Unit)

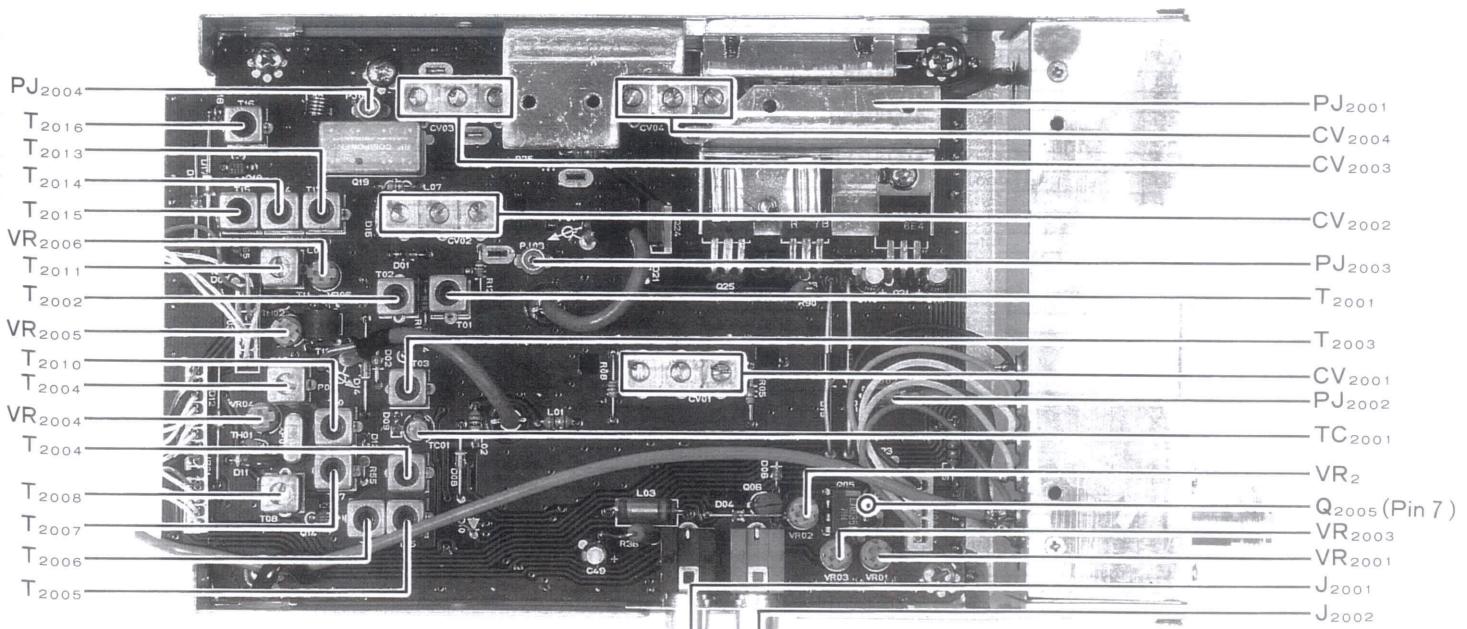


1. Connect the test equipment as shown in the diagram above.
2. In FM mode, tune the transceiver to 1280.00000 MHz. Set the MIC gain fully counterclockwise and DRIVE fully clockwise.
3. Press the MOX button and adjust VR2003 so that the spurs at 13.79 MHz on either side of the carrier are at least 65dB down.
4. Press the MOX button again to return to receive.
5. Disconnect the test equipment.

N. 1.2 GHz TX IF, Part II (on 1.2 GHz RF Unit)



1. Connect the test equipment as shown above, with the AF generator set for 3mV @ 1 kHz.
2. Set the transceiver to USB, at the center of the 144 MHz band.
3. Set the DRIVE control fully clockwise, press the MOX button to transmit, and adjust the MIC gain for 5W output. Press the MOX button again to return to receive.
4. Retune the transceiver to 1280.00000 MHz, FM mode.
5. Press the MOX button and adjust VR2005 for 5W output.
6. Press the MOX button to return to receive, and disconnect the test equipment.



1.2GHz RF UNIT ALIGNMENT POINTS

## NOTES

# PARTS LIST

| MAIN CHASSIS      |           |                           |                      |
|-------------------|-----------|---------------------------|----------------------|
| Symbol No.        | Part No.  | Description               | Device               |
| Q1                | G1090294  | IC                        | uPC7808H             |
| Q2                | G1090778  | IC                        | L7809                |
| Q3                | G1090778  | IC                        | L7809                |
| Q4                | G3334200G | Transistor                | 2SC3420GR            |
| R1(10W)           | J01225682 | Carbon Film RES.          | 1/6W 6.8k ohm PJ     |
| C6                | K21170002 | Feed Through CAP.         | 50WV 0.001uF         |
| C7                | K21170002 | Feed Through CAP.         | 50WV 0.001uF         |
| C8                | K21170002 | Feed Through CAP.         | 50WV 0.001uF         |
| C9                | K21170002 | Feed Through CAP.         | 50WV 0.001uF         |
| C10               | K21170002 | Feed Through CAP.         | 50WV 0.001uF         |
| C11               | K21170002 | Feed Through CAP.         | 50WV 0.001uF         |
| C12               | K21170002 | Feed Through CAP.         | 50WV 0.001uF         |
| C13               | K21170002 | Feed Through CAP.         | 50WV 0.001uF         |
| C14               | K21170002 | Feed Through CAP.         | 50WV 0.001uF         |
| C15               | K21170002 | Feed Through CAP.         | 50WV 0.001uF         |
| L2                | L2190002  | Coil                      |                      |
|                   | L9190035  | Ferrite Beads             |                      |
| M1                | M0290055  | Meter                     |                      |
| SP1               | M4090047  | Speaker                   |                      |
| S1                | N4090020  | Push Switch               |                      |
| J2                | T9205548A | Connector<br>(13.8V DC)   |                      |
| J3                | P0090608  | Connector<br>(AC)         |                      |
| J4                | P1090352  | Connector<br>(144MHz ANT) |                      |
| J5(M Type)        | P1090352  | Connector<br>(430MHz ANT) |                      |
| J5(N Type)        | P1090547  | Connector<br>(430MHz ANT) |                      |
| F1<br>(100, 117V) | Q0000006  | Fuse                      | 4A                   |
| F1<br>(220, 234V) | Q0000003  | Fuse                      | 2A                   |
| FH1               | P2000012  | Fuse Holder               |                      |
| PL1               | Q1000047  | Lamp                      |                      |
| PL2               | Q1000047  | Lamp                      |                      |
|                   | Q9000358A | Rotary Encoder            | MAIN DIAL            |
|                   | T9205498  | Wire ASSY                 | P1-P48, P49          |
|                   | T9205499C | Wire ASSY                 | P2-P33, P34, P41     |
|                   | T9205500A | Wire ASSY                 | P3-P53, P54          |
|                   | T9205501C | Wire ASSY                 | P5-P82               |
|                   | T9205502B | Wire ASSY                 | P6-P96               |
|                   | T9205503  | Wire ASSY                 | P11-P125             |
|                   | T9205504  | Wire ASSY                 | P12-P27              |
|                   | T9205505  | Wire ASSY                 | P13-P23, P26         |
|                   | T9205506  | Wire ASSY                 | P14-P28              |
|                   | T9205507A | Wire ASSY                 | P15-P29              |
|                   | T9205508  | Wire ASSY                 | P16-P101             |
|                   | T9205509  | Wire ASSY                 | P17                  |
|                   | T9205510  | Wire ASSY                 | P19-P108, P110       |
|                   | T9205511A | Wire ASSY                 | P20-P126             |
|                   | T9205512  | Wire ASSY                 | P21-P106             |
|                   | T9205513B | Wire ASSY                 | MIC JACK             |
|                   | T9205514  | Wire ASSY                 | P25-P59              |
|                   | T9205515A | Wire ASSY                 | P30-P64              |
|                   | T9205516A | Wire ASSY                 | P31-P18              |
|                   | T9205517  | Wire ASSY                 | P32-P105             |
|                   | T9205518  | Wire ASSY                 | P35-P116             |
|                   | T9205519  | Wire ASSY                 | P36-P127             |
|                   | T9205520  | Wire ASSY                 | P37-P124             |
|                   | T9205521  | Wire ASSY                 | P38-P113, P115, P116 |
|                   | T9205522  | Wire ASSY                 | P39-P52              |

|           |                 |                                                            |
|-----------|-----------------|------------------------------------------------------------|
| T9205523  | Wire ASSY       | P40-P70                                                    |
| T9205524A | Wire ASSY       | P42-P4                                                     |
| T9205525  | Wire ASSY       | P43-P50                                                    |
| T9205526B | Wire ASSY       | P44-P71, P119                                              |
| T9205527A | Wire ASSY       | P45                                                        |
| T9205528  | Wire ASSY       | P56-P63                                                    |
| T9205529A | Wire ASSY       | P57-P46                                                    |
| T9205530  | Wire ASSY       | P58-P114                                                   |
| T9205531A | Wire ASSY       | P60-P112, P121                                             |
| T9205532  | Wire ASSY       | P61-P100                                                   |
| T9205533A | Wire ASSY       | P65-P118                                                   |
| T9205534  | Wire ASSY       | P68-P75, P76, P79                                          |
| T9205535  | Wire ASSY       | P69-P23, P24, P83, P93, P94                                |
| T9205536B | Wire ASSY       | P72-P73                                                    |
| T9205537  | Wire ASSY       | P77                                                        |
| T9205538B | Wire ASSY       | P92-P84-P97-P91                                            |
| T9205540  | Wire ASSY       | P86-P99                                                    |
| T9205542A | Wire ASSY       | P103-P120                                                  |
| T9205543A | Wire ASSY       | P123-P128                                                  |
| T9205609  | Wire ASSY       | P88                                                        |
| T9205547E | Wire ASSY       |                                                            |
| T9205553  | Wire ASSY       | P109                                                       |
| T9316102  | Wire ASSY       | P95-P87                                                    |
| R0804550B | Chassis         |                                                            |
| R0509930  | Panel Rear      |                                                            |
| R5804580A | Heat Sink       |                                                            |
| R0509940  | Shield Case PA. |                                                            |
| R0804620B | Front Panel     |                                                            |
| R1804590  | Case Top        |                                                            |
| R1804600  | Case Bottom     |                                                            |
| R7082630  | SP Net          |                                                            |
| R0083600  | Mount Spring    |                                                            |
| R3084745  | Handle          |                                                            |
| R0115070  | Handle Shaft    |                                                            |
| R4115020  | Handle End      |                                                            |
| R3054370  | Foot            | 30                                                         |
| S4000025  | Foot            | FF-008                                                     |
| R6025944B | Support D       |                                                            |
| R6119640  | Nut             |                                                            |
| S6000032  | Nylon Rivet     | 3.0x5.5                                                    |
| S6000031  | Nylon Rivet     | 3.0x4.5                                                    |
| R1122150  | Cover           |                                                            |
| R0123770  | Ground Lead     |                                                            |
| S5000057  | Lead Clamper    | L=38                                                       |
| R6124610  | Support         |                                                            |
| R0804610  | Panel           |                                                            |
| R7121180  | Window          |                                                            |
| R8116670  | Plate           |                                                            |
| R3116100A | Knob            | MAIN DIAL                                                  |
| R3078110C | Ring            | MAIN DIAL                                                  |
| R3121200  | Knob            | PRI, 0                                                     |
| R3121201  | Knob            | VFO, 1                                                     |
| R3121202  | Knob            | MR, 2                                                      |
| R3121203  | Knob            | PMS, 3                                                     |
| R3121204  | Knob            | VIM, 4                                                     |
| R3121205  | Knob            | REV, 5                                                     |
| R3121206  | Knob            | STEP, 6                                                    |
| R3121207  | Knob            | MCK, 7                                                     |
| R3121208  | Knob            | TSET, 8                                                    |
| R3121209  | Knob            | VIM, 9                                                     |
| R3121210  | Knob            | CLAR, CODE                                                 |
| R3121211  | Knob            | BAND, SHIFT                                                |
| R3121212  | Knob            | CALL, *                                                    |
| R3121213  | Knob            | CALL2, #                                                   |
| R3121214  | Knob            | SPEAK                                                      |
| R3115320  | Knob            | UP                                                         |
| R3115330  | Knob            | DOWN                                                       |
| R3115340  | Knob            | CH UP                                                      |
| R3115350  | Knob            | CH DOWN                                                    |
| R3116820  | Knob            | MODE, RESET, CAC, AQ5, DSQ5                                |
| R3115310  | Knob            | POWER                                                      |
| R3115390A | Knob            | MOX                                                        |
| R3115400B | Knob            | PROC, KEYER, BURST, PAUSE, DIM, VFO, F, ENT, T CALL PREAMP |
| R3119630  | Knob            | D LOCK, FMCH, SSBCH, NB, NOTCH                             |
| R3111182  | Knob            | VOX, KEYER SPEED, AGC                                      |
| R3101020B | Knob            | FT-14VK(METER, SAT)                                        |
| R3085851  | Knob            | FT-18XK(MONITOR)                                           |
| R3510180  | Knob            | CHANNEL                                                    |
| R3100770B | Knob            | FT-13WK (MIC, SQL, AF, SHIFT)                              |

# PARTS LIST

|  |           |                |                                    |        |           |                  |                    |
|--|-----------|----------------|------------------------------------|--------|-----------|------------------|--------------------|
|  | R6100760A | Knob           | FT-18D<br>(DRIVE, TONE, RF, NOTCH) | D3005  | G2090408  | Diode            | ISS270             |
|  | Q6000093  | Terminal       |                                    | D3006  | G2090408  | Diode            | ISS270             |
|  | Q6000001  | Terminal Strip |                                    | D3007  | G2015880  | Diode            | IS1588             |
|  | Q9000078  | Terminal       |                                    | D3008  | G2015880  | Diode            | IS1588             |
|  | S2000006  | Color Cap      |                                    | D3009  | G2015880  | Diode            | IS1588             |
|  | Q7000065  | Power Supply   |                                    | D3010  | G2001880F | Diode            | IS188FM1           |
|  |           |                |                                    | D3011  | G2001880F | Diode            | IS188FM1           |
|  |           |                |                                    | D3012  | G2090118  | Diode            | ISS97              |
|  |           |                |                                    | D3013  | G2090338  | Diode            | ISS81              |
|  |           |                |                                    | D3014  | G2090338  | Diode            | ISS81              |
|  |           |                |                                    | D3015  | G2090338  | Diode            | ISS81              |
|  |           |                |                                    | D3016  | G2090338  | Diode            | ISS81              |
|  |           |                |                                    | D3017  | G2090027  | Diode            | ISS53              |
|  |           |                |                                    | D3018  | G2090027  | Diode            | ISS53              |
|  |           |                |                                    | D3019  | G2090338  | Diode            | ISS81              |
|  |           |                |                                    | D3020  | G2090338  | Diode            | ISS81              |
|  |           |                |                                    | D3021  | G2001880F | Diode            | IS188FM1           |
|  |           |                |                                    | D3022  | G2001880F | Diode            | IS188FM1           |
|  |           |                |                                    | D3023  | G2090118  | Diode            | ISS97              |
|  |           |                |                                    | D3028  | G2090408  | Diode            | ISS270             |
|  |           |                |                                    | D3029  | G2090023  | Diode            | ISV50              |
|  |           |                |                                    | D3030  | G2090408  | Diode            | ISS270             |
|  |           |                |                                    | D3031  | G2001880F | Diode            | IS188FM1           |
|  |           |                |                                    | D3032  | G2001880F | Diode            | IS188FM1           |
|  |           |                |                                    | D3033  | G2015550  | Diode            | IS1555             |
|  |           |                |                                    | D3034  | G2090408  | Diode            | ISS270             |
|  |           |                |                                    | D3035  | G2090408  | Diode            | ISS270             |
|  |           |                |                                    | D3036  | G2060004  | Diode            | ISS270TJ           |
|  |           |                |                                    | D3037  | G2090408  | Diode            | ISS270             |
|  |           |                |                                    | D3038  | G2090408  | Diode            | ISS270             |
|  |           |                |                                    | D3039  | G2090408  | Diode            | ISS270             |
|  |           |                |                                    | D3040  | G2090408  | Diode            | ISS270             |
|  |           |                |                                    | D3041  | G2090408  | Diode            | ISS270             |
|  |           |                |                                    | D3042  | G2090408  | Diode            | ISS270             |
|  |           |                |                                    | D3043  | G2090408  | Diode            | ISS270             |
|  |           |                |                                    | D3044  | G2090408  | Diode            | ISS270             |
|  |           |                |                                    | D3045  | G2090408  | Diode            | ISS270             |
|  |           |                |                                    | D3046  | G2090408  | Diode            | ISS270             |
|  |           |                |                                    | D3047  | G2090408  | Diode            | ISS270             |
|  |           |                |                                    | D3048  | G2090408  | Diode            | ISS270             |
|  |           |                |                                    | D3049  | G2090408  | Diode            | ISS270             |
|  |           |                |                                    | D3050  | G2090408  | Diode            | ISS270             |
|  |           |                |                                    | D3051  | G2090408  | Diode            | ISS270             |
|  |           |                |                                    | D3052  | G2090408  | Diode            | ISS270             |
|  |           |                |                                    | D3054  | G2090408  | Diode            | ISS270             |
|  |           |                |                                    | TH3002 | G9090035  | Thermistor       |                    |
|  |           |                |                                    | TH3005 | G9090026  | Thermistor       |                    |
|  |           |                |                                    | TH3006 | G9090035  | Thermistor       |                    |
|  |           |                |                                    | X3001  | H0102813  | XTAL             | HC-49/T 13.2335MHz |
|  |           |                |                                    | X3002  | H0102812  | XTAL             | HC-49/T 13.2365MHz |
|  |           |                |                                    | XF3001 | H1102119  | XTAL Filter      | 13M15A             |
|  |           |                |                                    | XF3002 | H1102073  | XTAL Filter      | XF-455MC           |
|  |           |                |                                    | CF3001 | H3900382  | Ceramic Filter   | LF-H12S            |
|  |           |                |                                    | CF3002 | H3900387  | Ceramic Filter   | LF-H8S             |
|  |           |                |                                    | CF3003 | H3900386  | Ceramic Filter   | CFJ455K14          |
|  |           |                |                                    | CD3001 | H7900010  | Ceramic DISC.    | 455-D              |
|  |           |                |                                    | R3001  | J01225101 | Carbon Film RES. | 1/6W 100 ohm PJ    |
|  |           |                |                                    | R3002  | J02225332 | Carbon Film RES. | 1/6W 3.3k ohm UJ   |
|  |           |                |                                    | R3003  | J01225223 | Carbon Film RES. | 1/6W 22k ohm PJ    |
|  |           |                |                                    | R3004  | J02225223 | Carbon Film RES. | 1/6W 22k ohm UJ    |
|  |           |                |                                    | R3005  | J01225104 | Carbon Film RES. | 1/6W 100k ohm PJ   |
|  |           |                |                                    | R3006  | J01225102 | Carbon Film RES. | 1/6W 1k ohm PJ     |
|  |           |                |                                    | R3007  | J02225104 | Carbon Film RES. | 1/6W 100k ohm UJ   |
|  |           |                |                                    | R3008  | J02225332 | Carbon Film RES. | 1/6W 3.3k ohm UJ   |
|  |           |                |                                    | R3009  | J02225560 | Carbon Film RES. | 1/6W 56 ohm UJ     |
|  |           |                |                                    | R3010  | J01225223 | Carbon Film RES. | 1/6W 22k ohm PJ    |
|  |           |                |                                    | R3011  | J01225223 | Carbon Film RES. | 1/6W 22k ohm PJ    |
|  |           |                |                                    | R3012  | J02225223 | Carbon Film RES. | 1/6W 22k ohm UJ    |

# PARTS LIST

|       |           |                  |               |    |       |           |                  |               |    |
|-------|-----------|------------------|---------------|----|-------|-----------|------------------|---------------|----|
| R3013 | J02225104 | Carbon Film RES. | 1/6W 100k ohm | UJ | R3061 | J01225103 | Carbon Film RES. | 1/6W 10k ohm  | PJ |
| R3014 | J01225104 | Carbon Film RES. | 1/6W 100k ohm | PJ | R3062 | J01225223 | Carbon Film RES. | 1/6W 22k ohm  | PJ |
| R3015 | J02225104 | Carbon Film RES. | 1/6W 100k ohm | UJ | R3063 | J01225102 | Carbon Film RES. | 1/6W 1k ohm   | PJ |
| R3016 | J01225223 | Carbon Film RES. | 1/6W 22k ohm  | PJ | R3064 | J01225223 | Carbon Film RES. | 1/6W 22k ohm  | PJ |
| R3017 | J02225223 | Carbon Film RES. | 1/6W 22k ohm  | UJ | R3065 | J01225102 | Carbon Film RES. | 1/6W 1k ohm   | PJ |
| R3018 | J02225560 | Carbon Film RES. | 1/6W 56 ohm   | UJ | R3066 | J01225223 | Carbon Film RES. | 1/6W 22k ohm  | PJ |
| R3019 | J02225222 | Carbon Film RES. | 1/6W 2.2k ohm | UJ | R3067 | J01225472 | Carbon Film RES. | 1/6W 4.7k ohm | PJ |
| R3020 | J01225562 | Carbon Film RES. | 1/6W 5.6k ohm | PJ | R3068 | J02225472 | Carbon Film RES. | 1/6W 4.7k ohm | UJ |
| R3021 | J02225223 | Carbon Film RES. | 1/6W 22k ohm  | UJ | R3069 | J01225682 | Carbon Film RES. | 1/6W 6.8k ohm | PJ |
| R3022 | J02225221 | Carbon Film RES. | 1/6W 220 ohm  | UJ | R3070 | J01225682 | Carbon Film RES. | 1/6W 6.8k ohm | PJ |
| R3023 | J01225560 | Carbon Film RES. | 1/6W 56 ohm   | PJ | R3071 | J02225332 | Carbon Film RES. | 1/6W 3.3k ohm | UJ |
| R3024 | J01225222 | Carbon Film RES. | 1/6W 2.2k ohm | PJ | R3072 | J01225682 | Carbon Film RES. | 1/6W 6.8k ohm | PJ |
| R3025 | J02225560 | Carbon Film RES. | 1/6W 56 ohm   | UJ | R3073 | J01225223 | Carbon Film RES. | 1/6W 22k ohm  | PJ |
| R3026 | J01225472 | Carbon Film RES. | 1/6W 4.7k ohm | PJ | R3074 | J02225103 | Carbon Film RES. | 1/6W 10k ohm  | UJ |
| R3028 | J02225472 | Carbon Film RES. | 1/6W 4.7k ohm | UJ | R3075 | J02225470 | Carbon Film RES. | 1/6W 47 ohm   | UJ |
| R3029 | J01225682 | Carbon Film RES. | 1/6W 6.8k ohm | PJ | R3076 | J01225473 | Carbon Film RES. | 1/6W 47k ohm  | PJ |
| R3030 | J02225332 | Carbon Film RES. | 1/6W 3.3k ohm | UJ | R3077 | J02225101 | Carbon Film RES. | 1/6W 100 ohm  | UJ |
| R3031 | J02225472 | Carbon Film RES. | 1/6W 4.7k ohm | UJ | R3078 | J02225224 | Carbon Film RES. | 1/6W 220k ohm | UJ |
| R3032 | J02225473 | Carbon Film RES. | 1/6W 47k ohm  | UJ | R3079 | J01225101 | Carbon Film RES. | 1/6W 100 ohm  | PJ |
| R3033 | J02225473 | Carbon Film RES. | 1/6W 47k ohm  | UJ | R3080 | J02225102 | Carbon Film RES. | 1/6W 1k ohm   | UJ |
| R3034 | J01225471 | Carbon Film RES. | 1/6W 470 ohm  | PJ | R3082 | J01225102 | Carbon Film RES. | 1/6W 1k ohm   | PJ |
| R3035 | J01225560 | Carbon Film RES. | 1/6W 56 ohm   | PJ | R3084 | J02225333 | Carbon Film RES. | 1/6W 33k ohm  | UJ |
| R3036 | J02225222 | Carbon Film RES. | 1/6W 2.2k ohm | UJ | R3085 | J01225560 | Carbon Film RES. | 1/6W 56 ohm   | PJ |
| R3037 | J02225224 | Carbon Film RES. | 1/6W 220k ohm | PJ | R3086 | J02225103 | Carbon Film RES. | 1/6W 10k ohm  | UJ |
| R3038 | J02225222 | Carbon Film RES. | 1/6W 2.2k ohm | UJ | R3087 | J02225123 | Carbon Film RES. | 1/6W 12k ohm  | UJ |
| R3039 | J02225102 | Carbon Film RES. | 1/6W 1k ohm   | UJ | R3088 | J02225103 | Carbon Film RES. | 1/6W 10k ohm  | UJ |
| R3040 | J02225153 | Carbon Film RES. | 1/6W 15k ohm  | UJ | R3089 | J01225103 | Carbon Film RES. | 1/6W 10k ohm  | PJ |
| R3041 | J02225153 | Carbon Film RES. | 1/6W 15k ohm  | UJ | R3091 | J02225332 | Carbon Film RES. | 1/6W 3.3k ohm | UJ |
| R3042 | J01225101 | Carbon Film RES. | 1/6W 100 ohm  | PJ | R3092 | J01225104 | Carbon Film RES. | 1/6W 100k ohm | PJ |
| R3043 | J02225103 | Carbon Film RES. | 1/6W 10k ohm  | UJ | R3093 | J01225102 | Carbon Film RES. | 1/6W 1k ohm   | PJ |
| R3044 | J01225102 | Carbon Film RES. | 1/6W 1k ohm   | PJ | R3094 | J01225224 | Carbon Film RES. | 1/6W 220k ohm | PJ |
| R3045 | J02225103 | Carbon Film RES. | 1/6W 10k ohm  | UJ | R3095 | J02225104 | Carbon Film RES. | 1/6W 100k ohm | UJ |
| R3046 | J02225101 | Carbon Film RES. | 1/6W 100 ohm  | UJ | R3096 | J02225101 | Carbon Film RES. | 1/6W 100 ohm  | UJ |
| R3051 | J02225334 | Carbon Film RES. | 1/6W 330k ohm | UJ | R3097 | J02225102 | Carbon Film RES. | 1/6W 1k ohm   | UJ |
| R3052 | J01225104 | Carbon Film RES. | 1/6W 100k ohm | PJ | R3099 | J02225103 | Carbon Film RES. | 1/6W 10k ohm  | UJ |
| R3053 | J01225472 | Carbon Film RES. | 1/6W 4.7k ohm | PJ | R3100 | J02225104 | Carbon Film RES. | 1/6W 100k ohm | UJ |
| R3054 | J02225224 | Carbon Film RES. | 1/6W 220k ohm | UJ | R3101 | J02225332 | Carbon Film RES. | 1/6W 3.3k ohm | UJ |
| R3055 | J01225103 | Carbon Film RES. | 1/6W 10k ohm  | PJ | R3102 | J02225104 | Carbon Film RES. | 1/6W 100k ohm | UJ |
| R3056 | J02225101 | Carbon Film RES. | 1/6W 100 ohm  | UJ | R3103 | J01225332 | Carbon Film RES. | 1/6W 3.3k ohm | PJ |
| R3057 | J02225224 | Carbon Film RES. | 1/6W 220k ohm | UJ | R3105 | J02225101 | Carbon Film RES. | 1/6W 100 ohm  | UJ |
| R3058 | J01225562 | Carbon Film RES. | 1/6W 5.6k ohm | PJ | R3108 | J02225222 | Carbon Film RES. | 1/6W 2.2k ohm | UJ |
| R3059 | J01225102 | Carbon Film RES. | 1/6W 1k ohm   | PJ | R3109 | J01225221 | Carbon Film RES. | 1/6W 220 ohm  | PJ |
| R3060 | J01225223 | Carbon Film RES. | 1/6W 22k ohm  | PJ | R3110 | J02225472 | Carbon Film RES. | 1/6W 4.7k ohm | UJ |

# PARTS LIST

|       |           |                  |               |    |        |           |                   |                |    |
|-------|-----------|------------------|---------------|----|--------|-----------|-------------------|----------------|----|
| R3111 | J02225102 | Carbon Film RES. | 1/6W 1k ohm   | UJ | R3157  | J02225223 | Carbon Film RES.  | 1/6W 22k ohm   | UJ |
| R3112 | J02225334 | Carbon Film RES. | 1/6W 330k ohm | UJ | R3159  | J01225333 | Carbon Film RES.  | 1/6W 33k ohm   | PJ |
| R3113 | J02225104 | Carbon Film RES. | 1/6W 100k ohm | UJ | R3160  | J01225222 | Carbon Film RES.  | 1/6W 2.2k ohm  | PJ |
| R3114 | J02225473 | Carbon Film RES. | 1/6W 47k ohm  | UJ | R3161  | J01225221 | Carbon Film RES.  | 1/6W 220 ohm   | PJ |
| R3115 | J02225222 | Carbon Film RES. | 1/6W 2.2k ohm | UJ | R3162  | J02225331 | Carbon Film RES.  | 1/6W 330 ohm   | UJ |
| R3116 | J01225223 | Carbon Film RES. | 1/6W 22k ohm  | PJ | R3163  | J01225223 | Carbon Film RES.  | 1/6W 22k ohm   | PJ |
| R3117 | J02225334 | Carbon Film RES. | 1/6W 330k ohm | UJ | R3164  | J01225223 | Carbon Film RES.  | 1/6W 22k ohm   | PJ |
| R3118 | J01225152 | Carbon Film RES. | 1/6W 1.5k ohm | PJ | R3168  | J02225104 | Carbon Film RES.  | 1/6W 100k ohm  | UJ |
| R3119 | J02225560 | Carbon Film RES. | 1/6W 56 ohm   | UJ | R3169  | J02225473 | Carbon Film RES.  | 1/6W 47k ohm   | UJ |
| R3120 | J02225474 | Carbon Film RES. | 1/6W 470k ohm | UJ | R3170  | J01225101 | Carbon Film RES.  | 1/6W 100 ohm   | PJ |
| R3121 | J02225152 | Carbon Film RES. | 1/6W 1.5k ohm | UJ | R3172  | J01225153 | Carbon Film RES.  | 1/6W 15k ohm   | PJ |
| R3122 | J02225222 | Carbon Film RES. | 1/6W 2.2k ohm | UJ | R3173  | J01225102 | Carbon Film RES.  | 1/6W 1k ohm    | PJ |
| R3123 | J02225474 | Carbon Film RES. | 1/6W 470k ohm | UJ | R3174  | J24205561 | RES. Chip         | 1/10W 560 ohm  |    |
| R3124 | J02225104 | Carbon Film RES. | 1/6W 100k ohm | UJ | R3175  | J24205223 | RES. Chip         | 1/10W 22k ohm  |    |
| R3125 | J01225103 | Carbon Film RES. | 1/6W 10k ohm  | PJ | R3176  | J02225472 | Carbon Film RES.  | 1/6W 4.7k ohm  | UJ |
| R3126 | J02225472 | Carbon Film RES. | 1/6W 4.7k ohm | UJ | R3177  | J01225222 | Carbon Film RES.  | 1/6W 2.2k ohm  | PJ |
| R3127 | J02225104 | Carbon Film RES. | 1/6W 100k ohm | UJ | VR3001 | J51745472 | POT.              | B 4.7k ohm     |    |
| R3128 | J02225473 | Carbon Film RES. | 1/6W 47k ohm  | UJ | VR3002 | J51745104 | POT.              | B 100k ohm     |    |
| R3129 | J02225334 | Carbon Film RES. | 1/6W 330k ohm | UJ | VR3003 | J51745103 | POT.              | B 10k ohm      |    |
| R3131 | J01225272 | Carbon Film RES. | 1/6W 2.7k ohm | PJ | VR3004 | J51745103 | POT.              | B 10k ohm      |    |
| R3132 | J01225223 | Carbon Film RES. | 1/6W 22k ohm  | PJ | VR3005 | J51745103 | POT.              | B 47k ohm      |    |
| R3133 | J02225334 | Carbon Film RES. | 1/6W 330k ohm | UJ | VR3006 | J51745473 | POT.              | B 10k ohm      |    |
| R3134 | J02225152 | Carbon Film RES. | 1/6W 1.5k ohm | UJ | VR3007 | J51745103 | POT.              | B 1k ohm       |    |
| R3135 | J01225560 | Carbon Film RES. | 1/6W 56 ohm   | PJ | VR3008 | J51745102 | POT.              | B 22k ohm      |    |
| R3136 | J02225224 | Carbon Film RES. | 1/6W 220k ohm | UJ | VR3009 | J51745223 | POT.              | B 100k ohm     |    |
| R3137 | J02225222 | Carbon Film RES. | 1/6W 2.2k ohm | UJ | VR3010 | J51745104 | POT.              | B 10k ohm      |    |
| R3138 | J02225101 | Carbon Film RES. | 1/6W 100 ohm  | UJ | VR3011 | J51745103 | POT.              | B 1k ohm       |    |
| R3139 | J02225103 | Carbon Film RES. | 1/6W 10k ohm  | UJ | VR3012 | J51745102 | POT.              |                |    |
| R3140 | J02225335 | Carbon Film RES. | 1/6W 3.3M ohm | UJ | C3001  | K13179008 | Ceramic CAP.      | F 50WV 0.01uF  |    |
| R3141 | J02225472 | Carbon Film RES. | 1/6W 4.7k ohm | UJ | C3002  | K40109001 | AL. Electro. CAP. | 10WV 100uF     |    |
| R3142 | J02225102 | Carbon Film RES. | 1/6W 1k ohm   | UJ | C3003  | K05175151 | Ceramic CAP.      | RH 50WV 150pF  |    |
| R3143 | J01225153 | Carbon Film RES. | 1/6W 15k ohm  | PJ | C3004  | K05175151 | Ceramic CAP.      | RH 50WV 150pF  |    |
| R3144 | J02225222 | Carbon Film RES. | 1/6W 2.2k ohm | UJ | C3005  | K05175220 | Ceramic CAP.      | RH 50WV 22pF   |    |
| R3145 | J02225560 | Carbon Film RES. | 1/6W 56 ohm   | UJ | C3006  | K05173100 | Ceramic CAP.      | RH 50WV 10pF   |    |
| R3146 | J02225223 | Carbon Film RES. | 1/6W 22k ohm  | UJ | C3007  | K13179008 | Ceramic CAP.      | F 50WV 0.01uF  |    |
| R3147 | J01225223 | Carbon Film RES. | 1/6W 22k ohm  | PJ | C3008  | K00175150 | Ceramic CAP.      | SL 50WV 15pF   |    |
| R3148 | J01225223 | Carbon Film RES. | 1/6W 22k ohm  | PJ | C3009  | K13179008 | Ceramic CAP.      | F 50WV 0.01uF  |    |
| R3149 | J01225560 | Carbon Film RES. | 1/6W 56 ohm   | PJ | C3010  | K00175180 | Ceramic CAP.      | SL 50WV 18pF   |    |
| R3150 | J02225472 | Carbon Film RES. | 1/6W 4.7k ohm | UJ | C3011  | K13179010 | Ceramic CAP.      | F 50WV 0.022uF |    |
| R3151 | J02225471 | Carbon Film RES. | 1/6W 470 ohm  | UJ | C3012  | K13179008 | Ceramic CAP.      | F 50WV 0.01uF  |    |
| R3152 | J02225473 | Carbon Film RES. | 1/6W 47k ohm  | UJ | C3013  | K13179010 | Ceramic CAP.      | F 50WV 0.022uF |    |
| R3153 | J02225104 | Carbon Film RES. | 1/6W 100k ohm | UJ | C3014  | K12171102 | Ceramic CAP.      | E 50WV 0.001uF |    |
| R3154 | J02225223 | Carbon Film RES. | 1/6W 2.2k ohm | PJ | C3015  | K05173080 | Ceramic CAP.      | RH 50WV 8pF    |    |
| R3155 | J02225223 | Carbon Film RES. | 1/6W 22k ohm  | UJ | C3016  | K13179008 | Ceramic CAP.      | F 50WV 0.01uF  |    |
| R3156 | J02225472 | Carbon Film RES. | 1/6W 4.7k ohm | UJ | C3018  | K12171102 | Ceramic CAP.      | E 50WV 0.001uF |    |
| R3157 | J02225473 | Carbon Film RES. | 1/6W 47k ohm  | UJ | C3019  | K05175151 | Ceramic CAP.      | RH 50WV 150pF  |    |
| R3158 | J02225104 | Carbon Film RES. | 1/6W 100k ohm | UJ | C3020  | K13179008 | Ceramic CAP.      | F 50WV 0.01uF  |    |
| R3159 | J02225103 | Carbon Film RES. | 1/6W 10k ohm  | UJ | C3021  | K05172050 | Ceramic CAP.      | RH 50WV 5pF    |    |
| R3160 | J02225223 | Carbon Film RES. | 1/6W 2.2k ohm | UJ | C3022  | K05175151 | Ceramic CAP.      | RH 50WV 150pF  |    |
| R3161 | J02225221 | Carbon Film RES. | 1/6W 220 ohm  | PJ | C3023  | K13179010 | Ceramic CAP.      | F 50WV 0.022uF |    |
| R3162 | J02225331 | Carbon Film RES. | 1/6W 330 ohm  | UJ | C3024  | K13179010 | Ceramic CAP.      | F 50WV 0.022uF |    |
| R3163 | J01225223 | Carbon Film RES. | 1/6W 22k ohm  | PJ | C3025  | K00172040 | Ceramic CAP.      | SL 50WV 4pF    |    |
| R3164 | J01225221 | Carbon Film RES. | 1/6W 220 ohm  | PJ | C3026  | K12171102 | Ceramic CAP.      | E 50WV 0.001uF |    |
| R3165 | J01225223 | Carbon Film RES. | 1/6W 22k ohm  | PJ | C3027  | K00173090 | Ceramic CAP.      | SL 50WV 9pF    |    |
| R3166 | J01225223 | Carbon Film RES. | 1/6W 22k ohm  | PJ | C3028  | K13179010 | Ceramic CAP.      | F 50WV 0.022uF |    |
| R3167 | J01225223 | Carbon Film RES. | 1/6W 22k ohm  | PJ | C3029  | K40129004 | AL. Electro. CAP. | 16WV 10uF      |    |
| R3168 | J01225221 | Carbon Film RES. | 1/6W 220 ohm  | PJ | C3030  | K13179008 | Ceramic CAP.      | F 50WV 0.01uF  |    |
| R3169 | J01225223 | Carbon Film RES. | 1/6W 22k ohm  | PJ | C3031  | K13179008 | Ceramic CAP.      | F 50WV 0.01uF  |    |
| R3170 | J01225221 | Carbon Film RES. | 1/6W 220 ohm  | PJ | C3032  | K13179008 | Ceramic CAP.      | F 50WV 0.01uF  |    |
| R3171 | J01225223 | Carbon Film RES. | 1/6W 22k ohm  | PJ | C3033  | K13179008 | Ceramic CAP.      | F 50WV 0.01uF  |    |
| R3172 | J01225223 | Carbon Film RES. | 1/6W 22k ohm  | PJ | C3034  | K40129004 | AL. Electro. CAP. | 16WV 10uF      |    |
| R3173 | J01225223 | Carbon Film RES. | 1/6W 22k ohm  | PJ | C3035  | K00173070 | Ceramic CAP.      | SL 50WV 7pF    |    |
| R3174 | J01225223 | Carbon Film RES. | 1/6W 220 ohm  | PJ | C3036  | K00173070 | Ceramic CAP.      | SL 50WV 7pF    |    |
| R3175 | J01225223 | Carbon Film RES. | 1/6W 22k ohm  | PJ | C3037  | K13179008 | Ceramic CAP.      | F 50WV 0.01uF  |    |
| R3176 | J01225223 | Carbon Film RES. | 1/6W 22k ohm  | PJ | C3038  | K19149021 | Ceramic CAP.      | 25WV 0.047uF   |    |
| R3177 | J01225223 | Carbon Film RES. | 1/6W 22k ohm  | PJ | C3039  | K12171102 | Ceramic CAP.      | E 50WV 0.001uF |    |
| R3178 | J01225223 | Carbon Film RES. | 1/6W 22k ohm  | PJ | C3040  | K13179010 | Ceramic CAP.      | F 50WV 0.022uF |    |
| R3179 | J01225223 | Carbon Film RES. | 1/6W 22k ohm  | PJ | C3041  | K13179010 | Ceramic CAP.      | F 50WV 0.022uF |    |

# PARTS LIST

|       |           |                   |    |      |          |       |           |                   |               |              |
|-------|-----------|-------------------|----|------|----------|-------|-----------|-------------------|---------------|--------------|
| C3042 | K13179010 | Ceramic CAP.      | F  | 50WV | 0.022uF  | C3133 | K70107106 | Tantalum CAP.     | 10WV          | 10uF         |
| C3044 | K13179010 | Ceramic CAP.      | F  | 50WV | 0.022uF  | C3134 | K40109001 | AL. Electro. CAP. | 10WV          | 100uF        |
| C3047 | K00173100 | Ceramic CAP.      | SL | 50WV | 10pF     | C3135 | K19149021 | Ceramic CAP.      | 25WV          | 0.047uF      |
| C3048 | K00175331 | Ceramic CAP.      | SL | 50WV | 330pF    | C3136 | K13179010 | Ceramic CAP.      | F             | 50WV 0.022uF |
| C3049 | K12171102 | Ceramic CAP.      | F  | 50WV | 0.001uF  | C3137 | K40129004 | AL. Electro. CAP. | 16WV          | 10uF         |
| C3050 | K12171102 | Ceramic CAP.      | F  | 50WV | 0.001uF  | C3138 | K12171102 | Ceramic CAP.      | E             | 50WV 0.001uF |
| C3051 | K13179010 | Ceramic CAP.      | F  | 50WV | 0.022uF  | C3139 | K40179013 | AL. Electro. CAP. | 50WV          | 1uF          |
| C3052 | K40179013 | AL. Electro. CAP. |    | 50WV | 1uF      | C3140 | K13179008 | Ceramic CAP.      | F             | 50WV 0.01uF  |
| C3053 | K13179008 | Ceramic CAP.      | F  | 50WV | 0.01uF   | C3141 | K13179010 | Ceramic CAP.      | F             | 50WV 0.022uF |
| C3054 | K19149025 | Ceramic CAP.      |    | 25WV | 0.1uF    | C3142 | K12171102 | Ceramic CAP.      | E             | 50WV 0.001uF |
| C3055 | K19149025 | Ceramic CAP.      |    | 25WV | 0.1uF    | C3144 | K40129004 | AL. Electro. CAP. | 16WV          | 10uF         |
| C3056 | K19149025 | Ceramic CAP.      |    | 25WV | 0.1uF    | C3145 | K70147105 | Tantalum CAP.     | 25WV          | 1uF          |
| C3057 | K19149025 | Ceramic CAP.      |    | 25WV | 0.1uF    | C3147 | K12171102 | Ceramic CAP.      | E             | 50WV 0.001uF |
| C3058 | K19149025 | Ceramic CAP.      |    | 25WV | 0.1uF    | C3150 | K70107106 | Tantalum CAP.     | 10WV          | 10uF         |
| C3059 | K19149025 | Ceramic CAP.      |    | 25WV | 0.1uF    | C3152 | K40179016 | AL. Electro. CAP. | 50WV          | 0.1uF        |
| C3060 | K19149025 | Ceramic CAP.      |    | 25WV | 0.1uF    | C3153 | K40129004 | AL. Electro. CAP. | 16WV          | 10uF         |
| C3061 | K19149025 | Ceramic CAP.      |    | 25WV | 0.1uF    | C3154 | K40179013 | AL. Electro. CAP. | 50WV          | 1uF          |
| C3062 | K19149013 | Ceramic CAP.      |    | 25WV | 0.01uF   | C3156 | K13179008 | Ceramic CAP.      | F             | 50WV 0.01uF  |
| C3063 | K19149013 | Ceramic CAP.      |    | 25WV | 0.01uF   | C3157 | K13179008 | Ceramic CAP.      | F             | 50WV 0.01uF  |
| C3064 | K12171102 | Ceramic CAP.      | E  | 50WV | 0.001uF  | C3158 | K00175101 | Ceramic CAP.      | SL            | 50WV 100pF   |
| C3065 | K13179008 | Ceramic CAP.      | F  | 50WV | 0.01uF   | C3159 | K00175331 | Ceramic CAP.      | SL            | 50WV 330pF   |
| C3066 | K19149021 | Ceramic CAP.      |    | 25WV | 0.047uF  | C3160 | K00175101 | Ceramic CAP.      | SL            | 50WV 100pF   |
| C3067 | K12171102 | Ceramic CAP.      | E  | 50WV | 0.001uF  | C3161 | K40149001 | AL. Electro. CAP. | 25WV          | 4.7uF        |
| C3068 | K19149022 | Ceramic CAP.      |    | 25WV | 0.047uF  | C3162 | K70107226 | Tantalum CAP.     | 10WV          | 22uF         |
| C3069 | K70107106 | Tantalum CAP.     |    | 10WV | 10uF     | C3163 | K13179008 | Ceramic CAP.      | F             | 50WV 0.01uF  |
| C3070 | K19149021 | Ceramic CAP.      |    | 25WV | 0.047uF  | C3164 | K40179013 | AL. Electro. CAP. | 50WV          | 1uF          |
| C3072 | K13179008 | Ceramic CAP.      | F  | 50WV | 0.01uF   | C3166 | K12171102 | Ceramic CAP.      | E             | 50WV 0.001uF |
| C3073 | K19149021 | Ceramic CAP.      |    | 25WV | 0.047uF  | C3167 | K19149009 | Ceramic CAP.      | 25WV 0.0047uF |              |
| C3074 | K19149021 | Ceramic CAP.      |    | 25WV | 0.047uF  | C3168 | K19149021 | Ceramic CAP.      | 25WV 0.0047uF |              |
| C3075 | K19149021 | Ceramic CAP.      |    | 25WV | 0.047uF  | T3001 | L0021533  | Coil              |               |              |
| C3076 | K19149021 | Ceramic CAP.      |    | 25WV | 0.047uF  | T3002 | L0021735  | Coil              |               |              |
| C3077 | K19149013 | Ceramic CAP.      |    | 25WV | 0.01uF   | T3003 | L0021735  | Coil              |               |              |
| C3080 | K40129004 | AL. Electro. CAP. |    | 16WV | 10uF     | T3004 | L0021736  | Coil              |               |              |
| C3081 | K13179008 | Ceramic CAP.      | F  | 50WV | 0.01uF   | T3005 | L0021737  | Coil              |               |              |
| C3082 | K19149013 | Ceramic CAP.      |    | 25WV | 0.01uF   | T3006 | L0021736  | Coil              |               |              |
| C3083 | K12171102 | Ceramic CAP.      | E  | 50WV | 0.001uF  | T3007 | L0021736  | Coil              |               |              |
| C3084 | K40179013 | AL. Electro. CAP. |    | 50WV | 0.1uF    | T3009 | L0190002  | Coil              |               |              |
| C3085 | K19149025 | Ceramic CAP.      |    | 25WV | 0.1uF    | T3010 | L0021469  | Coil              |               |              |
| C3087 | K19149021 | Ceramic CAP.      |    | 25WV | 0.047uF  | T3011 | L0190002  | Coil              |               |              |
| C3089 | K19149017 | Ceramic CAP.      |    | 25WV | 0.022uF  | T3012 | L0190094  | Coil              |               |              |
| C3090 | K40179013 | AL. Electro. CAP. |    | 50WV | 1uF      | T3013 | L0190094  | Coil              |               |              |
| C3091 | K19149021 | Ceramic CAP.      |    | 25WV | 0.047uF  | T3014 | L0190094  | Coil              |               |              |
| C3093 | K19149009 | Ceramic CAP.      |    | 25WV | 0.0047uF | L3001 | L0021257  | Coil              |               |              |
| C3094 | K19149009 | Ceramic CAP.      |    | 25WV | 0.0047uF | L3002 | L0021257  | Coil              |               |              |
| C3095 | K10179024 | Ceramic CAP.      | B  | 50WV | 0.0047uF | L3003 | L1190270  | M. RFC            | 100uH         |              |
| C3096 | K12171102 | Ceramic CAP.      | E  | 50WV | 0.01uF   | L3004 | L1190270  | M. RFC            | 100uH         |              |
| C3097 | K19149021 | Ceramic CAP.      |    | 25WV | 0.047uF  | L3005 | L1190189  | M. RFC            | 1mH           |              |
| C3098 | K00175101 | Ceramic CAP.      | SL | 50WV | 100pF    | L3006 | L1190189  | M. RFC            | 1mH           |              |
| C3099 | K40179013 | AL. Electro. CAP. |    | 50WV | 1uF      | L3007 | L1190189  | M. RFC            | 1mH           |              |
| C3100 | K19149021 | Ceramic CAP.      |    | 25WV | 0.047uF  | L3008 | L1190189  | M. RFC            | 1mH           |              |
| C3101 | K40179013 | AL. Electro. CAP. |    | 50WV | 1uF      | L3009 | L1190040  | M. RFC            | 1mH           |              |
| C3103 | K19149025 | Ceramic CAP.      |    | 25WV | 0.1uF    | L3010 | L1190040  | M. RFC            | 1mH           |              |
| C3104 | K40109001 | AL. Electro. CAP. |    | 10WV | 100uF    | L3011 | L0021610  | Coil              | 250uH         |              |
| C3105 | K40179016 | AL. Electro. CAP. |    | 50WV | 0.1uF    | L3012 | L1190189  | M. RFC            | 1mH           |              |
| C3106 | K19149021 | Ceramic CAP.      |    | 25WV | 0.047uF  | L3013 | L1190266  | M. RFC            | 47uH          |              |
| C3110 | K19149021 | Ceramic CAP.      |    | 25WV | 0.047uF  | L3014 | L1190189  | M. RFC            | 1mH           |              |
| C3111 | K00173100 | Ceramic CAP.      | SL | 50WV | 10pF     | L3015 | L1190189  | M. RFC            | 1mH           |              |
| C3112 | K19149021 | Ceramic CAP.      |    | 25WV | 0.047uF  | J3001 | P0090524  | Connector         |               |              |
| C3113 | K19149021 | Ceramic CAP.      |    | 25WV | 0.047uF  | J3002 | P0090525  | Connector         |               |              |
| C3114 | K19149021 | Ceramic CAP.      |    | 25WV | 0.047uF  | J3003 | P0090525  | Connector         |               |              |
| C3115 | K13179008 | Ceramic CAP.      | F  | 50WV | 0.01uF   | J3004 | P0090525  | Connector         |               |              |
| C3116 | K40179004 | AL. Electro. CAP. |    | 16WV | 10uF     | J3005 | P0090526  | Connector         |               |              |
| C3117 | K19149021 | Ceramic CAP.      |    | 25WV | 0.047uF  | J3006 | P0090525  | Connector         |               |              |
| C3118 | K00175270 | Ceramic CAP.      | SL | 50WV | 27pF     | J3007 | P0090525  | Connector         |               |              |
| C3119 | K51176102 | Styrol CAP.       |    | 50WV | 0.001uF  | J3008 | P0090525  | Connector         |               |              |
| C3120 | K51176102 | Styrol CAP.       |    | 50WV | 0.001uF  | J3009 | P0090528  | Connector         |               |              |
| C3121 | K00175101 | Ceramic CAP.      | SL | 50WV | 100pF    | J3010 | P0090524  | Connector         |               |              |
| C3122 | K13179008 | Ceramic CAP.      | F  | 50WV | 0.01uF   | J3011 | P0090525  | Connector         |               |              |
| C3123 | K13179008 | Ceramic CAP.      | F  | 50WV | 0.01uF   | J3012 | P0090527  | Connector         |               |              |
| C3124 | K19149013 | Ceramic CAP.      |    | 25WV | 0.01uF   | J3013 | P0090527  | Connector         |               |              |
| C3125 | K00173100 | Ceramic CAP.      | SL | 50WV | 10pF     | J3014 | P0090524  | Connector         |               |              |
| C3126 | K19149021 | Ceramic CAP.      |    | 25WV | 0.047uF  | J3015 | P0090528  | Connector         |               |              |
| C3127 | K00175101 | Ceramic CAP.      | SL | 50WV | 100pF    | J3016 | P0090524  | Connector         |               |              |
| C3128 | K19149021 | Ceramic CAP.      |    | 25WV | 0.047uF  | J3017 | P0090554  | Connector (CAT)   |               |              |
| C3129 | K13179008 | Ceramic CAP.      | F  | 50WV | 0.01uF   | J3018 | P0090553  | Connector (STBY)  |               |              |
| C3130 | K19149021 | Ceramic CAP.      |    | 25WV | 0.047uF  |       |           |                   |               |              |
| C3131 | K19149021 | Ceramic CAP.      |    | 25WV | 0.047uF  |       |           |                   |               |              |
| C3032 | K70147155 | Tantalum CAP.     |    | 25WV | 1.5uF    |       |           |                   |               |              |

## PARTS LIST

# PARTS LIST

|        |           |                  |                   |       |           |                  |      |          |    |
|--------|-----------|------------------|-------------------|-------|-----------|------------------|------|----------|----|
| Q4019  | G3304600B | Transistor       | 2SC460B           | R4031 | J02225332 | Carbon Film RES. | 1/6W | 3.3k ohm | UJ |
| Q4020  | G1090101  | IC               | uPC1037H          | R4032 | J02225103 | Carbon Film RES. | 1/6W | 10k ohm  | UJ |
| Q4021  | G3304600B | Transistor       | 2SC460B           | R4033 | J01225153 | Carbon Film RES. | 1/6W | 15k ohm  | PJ |
| Q4022  | G4800740L | FET              | 3SK74L            | R4034 | J01225103 | Carbon Film RES. | 1/6W | 10k ohm  | PJ |
| Q4023  | G3304580C | Transistor       | 2SC458C           | R4035 | J01225104 | Carbon Film RES. | 1/6W | 100k ohm | PJ |
| Q4024  | G3801921G | FET              | 2SK192AGR         | R4036 | J01225101 | Carbon Film RES. | 1/6W | 100 ohm  | PJ |
| Q4025  | G3107331Q | Transistor       | 2SA733AQ          | R4037 | J02225224 | Carbon Film RES. | 1/6W | 220k ohm | UJ |
| Q4026  | G1090278  | IC               | uPD4001BC         | R4038 | J02225222 | Carbon Film RES. | 1/6W | 2.2k ohm | UJ |
| Q4027  | G1090282  | IC               | uPD4011BC         | R4039 | J01225221 | Carbon Film RES. | 1/6W | 220 ohm  | PJ |
| Q4028  | G3090074  | Transistor       | BA1A4M            | R4040 | J02225474 | Carbon Film RES. | 1/6W | 470k ohm | UJ |
| Q4029  | G3090075  | Transistor       | BN1A4P            | R4041 | J02225102 | Carbon Film RES. | 1/6W | 1k ohm   | UJ |
| Q4030  | G3115280  | Transistor       | 2SA1528           | R4042 | J02225104 | Carbon Film RES. | 1/6W | 100k ohm | UJ |
| Q4031  | G3090075  | Transistor       | BN1A4P            | R4043 | J02225332 | Carbon Film RES. | 1/6W | 3.3k ohm | UJ |
| Q4032  | G3304580C | Transistor       | 2SC458C           | R4044 | J02225273 | Carbon Film RES. | 1/6W | 27k ohm  | UJ |
| Q4033  | G3115280  | Transistor       | 2SA1528           | R4045 | J01225104 | Carbon Film RES. | 1/6W | 100k ohm | PJ |
| Q4034  | G3304580C | Transistor       | 2SC458C           | R4046 | J02225223 | Carbon Film RES. | 1/6W | 22k ohm  | UJ |
| Q4035  | G3115280  | Transistor       | 2SA1528           | R4047 | J02225223 | Carbon Film RES. | 1/6W | 22k ohm  | UJ |
| Q4036  | G3304600B | Transistor       | 2SC460B           | R4048 | J02225103 | Carbon Film RES. | 1/6W | 10k ohm  | UJ |
| Q4037  | G3304580C | Transistor       | 2SC458C           | R4049 | J02225101 | Carbon Film RES. | 1/6W | 100 ohm  | UJ |
| Q4038  | G3090080  | Transistor       | BA1L4M            | R4050 | J01225223 | Carbon Film RES. | 1/6W | 22k ohm  | PJ |
| Q4039  | G3090080  | Transistor       | BA1L4M            | R4051 | J01225474 | Carbon Film RES. | 1/6W | 470k ohm | PJ |
| Q4040  | G3090079  | Transistor       | BA1A4P            | R4052 | J02225223 | Carbon Film RES. | 1/6W | 22k ohm  | UJ |
| D4001  | G2022080  | Diode            | 1S2208            | R4053 | J01225223 | Carbon Film RES. | 1/6W | 22k ohm  | PJ |
| D4002  | G2022080  | Diode            | 1S2208            | R4054 | J02225223 | Carbon Film RES. | 1/6W | 22k ohm  | UJ |
| D4003  | G2090408  | Diode            | 1SS270            | R4055 | J02225225 | Carbon Film RES. | 1/6W | 2.2M ohm | UJ |
| D4004  | G2090408  | Diode            | 1SS270            | R4056 | J02225472 | Carbon Film RES. | 1/6W | 4.7k ohm | UJ |
| D4005  | G2090382  | Diode            | MC931             | R4057 | J02225332 | Carbon Film RES. | 1/6W | 3.3k ohm | UJ |
| D4006  | G2090408  | Diode            | 1SS270            | R4058 | J02225102 | Carbon Film RES. | 1/6W | 1k ohm   | UJ |
| D4007  | G2090408  | Diode            | 1SS270            | R4062 | J02225562 | Carbon Film RES. | 1/6W | 5.6k ohm | UJ |
| D4008  | G2090408  | Diode            | 1SS270            | R4063 | J02225562 | Carbon Film RES. | 1/6W | 5.6k ohm | UJ |
| D4009  | G2090027  | Diode            | 1SS53             | R4064 | J02225562 | Carbon Film RES. | 1/6W | 5.6k ohm | UJ |
| D4010  | G2090027  | Diode            | 1SS53             | R4065 | J01225223 | Carbon Film RES. | 1/6W | 22k ohm  | PJ |
| D4011  | G2015880  | Diode            | 1S1588            | R4066 | J02225223 | Carbon Film RES. | 1/6W | 22k ohm  | UJ |
| D4012  | G2015880  | Diode            | 1S1588            | R4067 | J01225560 | Carbon Film RES. | 1/6W | 56 ohm   | PJ |
| D4013  | G2090381  | Diode            | MC921             | R4068 | J02225102 | Carbon Film RES. | 1/6W | 1k ohm   | UJ |
| D4014  | G2090408  | Diode            | 1SS270            | R4069 | J02225102 | Carbon Film RES. | 1/6W | 1k ohm   | UJ |
| D4015  | G2090200  | Diode            | 1SV80             | R4070 | J01225104 | Carbon Film RES. | 1/6W | 100k ohm | PJ |
| D4016  | G9090007  | Varistor         | MV-12             | R4071 | J02225332 | Carbon Film RES. | 1/6W | 3.3k ohm | UJ |
| D4017  | G2090408  | Diode            | 1SS270            | R4072 | J02225560 | Carbon Film RES. | 1/6W | 56 ohm   | UJ |
| D4018  | G2090408  | Diode            | 1SS270            | R4073 | J01225560 | Carbon Film RES. | 1/6W | 56 ohm   | PJ |
| D4019  | G2090408  | Diode            | 1SS270            | R4074 | J01225473 | Carbon Film RES. | 1/6W | 47k ohm  | PJ |
| D4020  | G2090383  | Diode            | MC911             | R4075 | J02225473 | Carbon Film RES. | 1/6W | 47k ohm  | UJ |
| D4022  | G2090408  | Diode            | 1SS270            | R4076 | J02225104 | Carbon Film RES. | 1/6W | 100k ohm | UJ |
| D4023  | G2090408  | Diode            | 1SS270            | R4077 | J02225471 | Carbon Film RES. | 1/6W | 470 ohm  | UJ |
| TH4002 | G9090001  | Thermistor       |                   | R4078 | J02225221 | Carbon Film RES. | 1/6W | 220 ohm  | UJ |
| X4001  | H0102815  | XTAL             | HC-49/T 24.488MHz | R4079 | J02225681 | Carbon Film RES. | 1/6W | 680 ohm  | UJ |
| X4002  | H9500100  | XTAL OSC         | GFS-203H 20.48MHz | R4080 | J02225224 | Carbon Film RES. | 1/6W | 220k ohm | UJ |
| XF4001 | H1102123  | XTAL Filter      | XF-10.7N-252-01   | R4081 | J02225102 | Carbon Film RES. | 1/6W | 1k ohm   | UJ |
| XF4002 | H1102123  | XTAL Filter      | XF-10.7N-252-01   | R4082 | J02225330 | Carbon Film RES. | 1/6W | 33 ohm   | UJ |
| XF4003 | H1102120  | XTAL Filter      | 13N15A            | R4083 | J02225103 | Carbon Film RES. | 1/6W | 10k ohm  | UJ |
| CF4001 | H3900393  | Ceramic Filter   | SFE10.7MS2-A      | R4084 | J02225472 | Carbon Film RES. | 1/6W | 4.7k ohm | UJ |
| R4001  | J01225104 | Carbon Film RES. | 1/6W 100k ohm     | R4085 | J02225102 | Carbon Film RES. | 1/6W | 1k ohm   | UJ |
| R4002  | J02225103 | Carbon Film RES. | 1/6W 10k ohm      | R4086 | J02225102 | Carbon Film RES. | 1/6W | 1k ohm   | UJ |
| R4003  | J02225101 | Carbon Film RES. | 1/6W 100 ohm      | R4087 | J02225103 | Carbon Film RES. | 1/6W | 10k ohm  | UJ |
| R4004  | J02225333 | Carbon Film RES. | 1/6W 33k ohm      | R4088 | J02225102 | Carbon Film RES. | 1/6W | 1k ohm   | UJ |
| R4005  | J02225473 | Carbon Film RES. | 1/6W 47k ohm      | R4089 | J02225101 | Carbon Film RES. | 1/6W | 100 ohm  | UJ |
| R4006  | J01225223 | Carbon Film RES. | 1/6W 22k ohm      | R4090 | J02225560 | Carbon Film RES. | 1/6W | 56 ohm   | UJ |
| R4007  | J02225102 | Carbon Film RES. | 1/6W 1k ohm       | R4091 | J02225274 | Carbon Film RES. | 1/6W | 270k ohm | UJ |
| R4008  | J02225223 | Carbon Film RES. | 1/6W 22k ohm      | R4092 | J02225152 | Carbon Film RES. | 1/6W | 1.5k ohm | UJ |
| R4009  | J02225101 | Carbon Film RES. | 1/6W 100 ohm      | R4093 | J02225272 | Carbon Film RES. | 1/6W | 2.7k ohm | UJ |
| R4010  | J02225102 | Carbon Film RES. | 1/6W 1k ohm       | R4094 | J02225272 | Carbon Film RES. | 1/6W | 2.7k ohm | UJ |
| R4011  | J02225154 | Carbon Film RES. | 1/6W 150k ohm     | R4095 | J01225223 | Carbon Film RES. | 1/6W | 22k ohm  | PJ |
| R4012  | J02225221 | Carbon Film RES. | 1/6W 220 ohm      | R4096 | J01225104 | Carbon Film RES. | 1/6W | 100k ohm | PJ |
| R4013  | J02225334 | Carbon Film RES. | 1/6W 330k ohm     | R4100 | J01225153 | Carbon Film RES. | 1/6W | 15k ohm  | PJ |
| R4014  | J02225103 | Carbon Film RES. | 1/6W 10k ohm      | R4101 | J01225331 | Carbon Film RES. | 1/6W | 330 ohm  | PJ |
| R4015  | J02225101 | Carbon Film RES. | 1/6W 100 ohm      | R4102 | J02225222 | Carbon Film RES. | 1/6W | 2.2k ohm | UJ |
| R4016  | J02225472 | Carbon Film RES. | 1/6W 4.7k ohm     | R4103 | J01225332 | Carbon Film RES. | 1/6W | 3.3k ohm | PJ |
| R4017  | J02225474 | Carbon Film RES. | 1/6W 470k ohm     | R4104 | J02225105 | Carbon Film RES. | 1/6W | 1M ohm   | UJ |
| R4018  | J02225473 | Carbon Film RES. | 1/6W 47k ohm      | R4105 | J02225103 | Carbon Film RES. | 1/6W | 10k ohm  | UJ |
| R4019  | J02225682 | Carbon Film RES. | 1/6W 6.8k ohm     | R4106 | J01225155 | Carbon Film RES. | 1/6W | 1.5M ohm | PJ |
| R4020  | J02225684 | Carbon Film RES. | 1/6W 680k ohm     | R4107 | J02225183 | Carbon Film RES. | 1/6W | 18k ohm  | UJ |
| R4021  | J02225682 | Carbon Film RES. | 1/6W 6.8k ohm     | R4109 | J02225102 | Carbon Film RES. | 1/6W | 1k ohm   | UJ |
| R4022  | J02225473 | Carbon Film RES. | 1/6W 47k ohm      | R4110 | J02225334 | Carbon Film RES. | 1/6W | 330k ohm | UJ |
| R4023  | J02225103 | Carbon Film RES. | 1/6W 10k ohm      | R4111 | J02225223 | Carbon Film RES. | 1/6W | 22k ohm  | UJ |
| R4024  | J02225513 | Carbon Film RES. | 1/6W 51k ohm      | R4112 | J01225334 | Carbon Film RES. | 1/6W | 330k ohm | PJ |
| R4025  | J02225513 | Carbon Film RES. | 1/6W 51k ohm      | R4113 | J01225155 | Carbon Film RES. | 1/6W | 1.5M ohm | PJ |
| R4026  | J02225225 | Carbon Film RES. | 1/6W 2.2M ohm     | R4114 | J02225274 | Carbon Film RES. | 1/6W | 270k ohm | UJ |
| R4027  | J02225183 | Carbon Film RES. | 1/6W 18k ohm      | R4115 | J02225473 | Carbon Film RES. | 1/6W | 47k ohm  | UJ |
| R4028  | J01225183 | Carbon Film RES. | 1/6W 18k ohm      | R4116 | J02225155 | Carbon Film RES. | 1/6W | 1.5M ohm | UJ |
| R4029  | J01225225 | Carbon Film RES. | 1/6W 2.2M ohm     | R4117 | J02225134 | Carbon Film RES. | 1/6W | 130k ohm | UJ |
| R4030  | J01225472 | Carbon Film RES. | 1/6W 4.7k ohm     | R4118 | J02225333 | Carbon Film RES. | 1/6W | 33k ohm  | UJ |
|        |           |                  |                   | R4119 | J02225333 | Carbon Film RES. | 1/6W | 33k ohm  | UJ |
|        |           |                  |                   | R4120 | J02225332 | Carbon Film RES. | 1/6W | 3.3k ohm | UJ |
|        |           |                  |                   | R4121 | J02225473 | Carbon Film RES. | 1/6W | 47k ohm  | UJ |
|        |           |                  |                   | R4124 | J02225103 | Carbon Film RES. | 1/6W | 10k ohm  | UJ |
|        |           |                  |                   | R4125 | J02225472 | Carbon Film RES. | 1/6W | 4.7k ohm | UJ |
|        |           |                  |                   | R4126 | J02225472 | Carbon Film RES. | 1/6W | 4.7k ohm | UJ |
|        |           |                  |                   | R4127 | J01225472 | Carbon Film RES. | 1/6W | 4.7k ohm | PJ |

# PARTS LIST

|        |           |                   |      |          |          |        |           |                   |    |        |          |
|--------|-----------|-------------------|------|----------|----------|--------|-----------|-------------------|----|--------|----------|
| R4128  | J02225103 | Carbon Film RES.  | 1/6W | 10k ohm  | UJ       | C4057  | K05172050 | Ceramic CAP.      | RH | 50WV   | 5pF      |
| R4129  | J01225471 | Carbon Film RES.  | 1/6W | 470 ohm  | PJ       | C4058  | K05175220 | Ceramic CAP.      | RH | 50WV   | 22pF     |
| R4130  | J01225470 | Carbon Film RES.  | 1/6W | 47 ohm   | PJ       | C4059  | K05175151 | Ceramic CAP.      | RH | 50WV   | 150pF    |
| R4131  | J02225223 | Carbon Film RES.  | 1/6W | 22k ohm  | UJ       | C4060  | K05175151 | Ceramic CAP.      | RH | 50WV   | 150pF    |
| R4132  | J02225222 | Carbon Film RES.  | 1/6W | 2.2k ohm | UJ       | C4061  | K13179010 | Ceramic CAP.      | F  | 50WV   | 0.022uF  |
| R4133  | J02225222 | Carbon Film RES.  | 1/6W | 2.2k ohm | UJ       | C4062  | K00175220 | Ceramic CAP.      | SL | 50WV   | 22pF     |
| R4136  | J02225221 | Carbon Film RES.  | 1/6W | 220 ohm  | UJ       | C4063  | K13179010 | Ceramic CAP.      | F  | 50WV   | 0.022uF  |
| R4137  | J02225472 | Carbon Film RES.  | 1/6W | 4.7k ohm | UJ       | C4064  | K13179010 | Ceramic CAP.      | F  | 50WV   | 0.022uF  |
| R4138  | J02225683 | Carbon Film RES.  | 1/6W | 68k ohm  | UJ       | C4065  | K00175220 | Ceramic CAP.      | SL | 50WV   | 22pF     |
| R4139  | J02225682 | Carbon Film RES.  | 1/6W | 6.8k ohm | UJ       | C4066  | K13179010 | Ceramic CAP.      | F  | 50WV   | 0.022uF  |
| R4140  | J02225471 | Carbon Film RES.  | 1/6W | 470 ohm  | UJ       | C4067  | K13179010 | Ceramic CAP.      | F  | 50WV   | 0.022uF  |
| R4141  | J01225223 | Carbon Film RES.  | 1/6W | 22k ohm  | PJ       | C4068  | K13179010 | Ceramic CAP.      | F  | 50WV   | 0.022uF  |
| R4142  | J01225102 | Carbon Film RES.  | 1/6W | 1k ohm   | PJ       | C4069  | K12171102 | Ceramic CAP.      | E  | 50WV   | 0.001uF  |
| R4143  | J01225471 | Carbon Film RES.  | 1/6W | 470 ohm  | PJ       | C4070  | K13179010 | Ceramic CAP.      | F  | 50WV   | 0.022uF  |
| R4144  | J01225471 | Carbon Film RES.  | 1/6W | 470 ohm  | PJ       | C4071  | K12171102 | Ceramic CAP.      | E  | 50WV   | 0.001uF  |
| R4145  | J01225100 | Carbon Film RES.  | 1/6W | 10 ohm   | PJ       | C4072  | K13179008 | Ceramic CAP.      | F  | 50WV   | 0.01uF   |
| VR4001 | J51745473 | POT.              | B    | 47k ohm  |          | C4073  | K12171102 | Ceramic CAP.      | E  | 50WV   | 0.01uF   |
| VR4003 | J51745104 | POT.              | B    | 100k ohm |          | C4074  | K12171102 | Ceramic CAP.      | E  | 50WV   | 0.001uF  |
| VR4004 | J51745103 | POT.              | B    | 10k ohm  |          | C4075  | K13179008 | Ceramic CAP.      | F  | 50WV   | 0.01uF   |
| C4001  | K19149013 | Ceramic CAP.      |      |          |          | C4076  | K12171102 | Ceramic CAP.      | E  | 50WV   | 0.001uF  |
| C4002  | K05173100 | Ceramic CAP.      | RH   | 25WV     | 0.01uF   | C4077  | K13179010 | Ceramic CAP.      | F  | 50WV   | 0.022uF  |
| C4003  | K02172040 | Ceramic CAP.      | CH   | 50WV     | 10pF     | C4078  | K13179010 | Ceramic CAP.      | F  | 50WV   | 0.022uF  |
| C4004  | K40109001 | AL. Electro. CAP. |      | 4pF      |          | C4079  | K13179008 | Ceramic CAP.      | F  | 50WV   | 0.01uF   |
| C4005  | K02175101 | Ceramic CAP.      | CH   | 10WV     | 100uF    | C4080  | K12171102 | Ceramic CAP.      | E  | 50WV   | 0.001uF  |
| C4006  | K05175220 | Ceramic CAP.      | RH   | 50WV     | 22pF     | C4081  | K12171102 | Ceramic CAP.      | E  | 50WV   | 0.001uF  |
| C4007  | K05175151 | Ceramic CAP.      | RH   | 50WV     | 150pF    | C4082  | K40109002 | AL. Electro. CAP. |    | 10WV   | 47uF     |
| C4008  | K05175151 | Ceramic CAP.      | RH   | 50WV     | 150pF    | C4083  | K13179010 | Ceramic CAP.      | F  | 50WV   | 0.022uF  |
| C4009  | K40109001 | AL. Electro. CAP. |      | 100uF    |          | C4084  | K13179010 | Ceramic CAP.      | F  | 50WV   | 0.022uF  |
| C4010  | K13179010 | Ceramic CAP.      | F    | 50WV     | 0.022uF  | C4085  | K12171102 | Ceramic CAP.      | E  | 50WV   | 0.001uF  |
| C4012  | K40109001 | AL. Electro. CAP. |      | 100uF    |          | C4086  | K13179014 | Ceramic CAP.      | F  | 50WV   | 0.0047uF |
| C4013  | K12171102 | Ceramic CAP.      | E    | 10WV     |          | C4087  | K12171102 | Ceramic CAP.      | E  | 50WV   | 0.0047uF |
| C4014  | K12171102 | Ceramic CAP.      | E    | 50WV     | 0.001uF  | C4088  | K12171102 | Ceramic CAP.      | E  | 50WV   | 0.001uF  |
| C4015  | K40179013 | AL. Electro. CAP. |      | 50WV     | 1uF      | C4089  | K12171102 | Ceramic CAP.      | E  | 50WV   | 0.001uF  |
| C4016  | K40109001 | AL. Electro. CAP. |      | 100uF    |          | C4090  | K70147105 | Tantalum CAP.     |    | 25WV   | 1uF      |
| C4017  | K13179010 | Ceramic CAP.      | F    | 10WV     |          | C4091  | K40109001 | AL. Electro. CAP. |    | 10WV   | 100uF    |
| C4018  | K40179016 | AL. Electro. CAP. |      | 50WV     | 0.1uF    | C4092  | K13179010 | Ceramic CAP.      | F  | 50WV   | 0.022uF  |
| C4019  | K19149007 | Ceramic CAP.      |      |          |          | C4093  | K70127225 | Tantalum CAP.     |    | 16WV   | 2.2uF    |
| C4020  | K19149025 | Ceramic CAP.      |      |          |          | C4094  | K70107475 | Tantalum CAP.     |    | 10WV   | 4.7uF    |
| C4021  | K70167224 | Tantalum CAP.     |      |          |          | C4095  | K55209003 | Film CAP.         |    | 10WV   | 0.0047uF |
| C4022  | K70167224 | Tantalum CAP.     |      |          |          | C4100  | K12171102 | Ceramic CAP.      | E  | 50WV   | 0.001uF  |
| C4023  | K19149002 | Ceramic CAP.      |      |          |          | C4101  | K40129004 | AL. Electro. CAP. |    | 16WV   | 10uF     |
| C4024  | K19149001 | Ceramic CAP.      |      |          |          | C4102  | K40179013 | AL. Electro. CAP. |    | 50WV   | 1uF      |
| C4025  | K19149013 | Ceramic CAP.      |      |          |          | C4103  | K40179016 | AL. Electro. CAP. |    | 50WV   | 0.1uF    |
| C4026  | K19149002 | Ceramic CAP.      |      |          |          | C4104  | K70147105 | Tantalum CAP.     |    | 10WV   | 1uF      |
| C4027  | K40129004 | AL. Electro. CAP. |      |          |          | C4105  | K40179013 | AL. Electro. CAP. |    | 50WV   | 1uF      |
| C4028  | K12171102 | Ceramic CAP.      | E    | 16WV     | 10uF     | C4108  | K13179010 | Ceramic CAP.      | F  | 50WV   | 0.022uF  |
| C4029  | K40179013 | AL. Electro. CAP. |      | 50WV     | 1uF      | C4109  | K13179010 | Ceramic CAP.      | F  | 50WV   | 0.022uF  |
| C4030  | K40179013 | AL. Electro. CAP. |      | 50WV     | 1uF      | C4110  | K12171102 | Ceramic CAP.      | E  | 50WV   | 0.001uF  |
| C4032  | K40129004 | AL. Electro. CAP. |      | 50WV     | 10uF     | C4111  | K13179010 | Ceramic CAP.      | F  | 50WV   | 0.022uF  |
| C4033  | K19149025 | Ceramic CAP.      |      | 50WV     | 0.1uF    | C4112  | K12171102 | Ceramic CAP.      | E  | 50WV   | 0.001uF  |
| C4034  | K40179012 | AL. Electro. CAP. |      | 50WV     | 4.7uF    | C4113  | K13179010 | Ceramic CAP.      | F  | 50WV   | 0.022uF  |
| C4035  | K40129004 | AL. Electro. CAP. |      | 50WV     | 10uF     | C4114  | K13179009 | Ceramic CAP.      | F  | 50WV   | 0.022uF  |
| C4036  | K70147105 | Tantalum CAP.     |      |          |          | C4116  | K12171102 | Ceramic CAP.      | E  | 50WV   | 0.0047uF |
| C4037  | K00175150 | Ceramic CAP.      | SL   | 25WV     | 1uF      | C4117  | K02175121 | Ceramic CAP.      | CH | 50WV   | 0.001uF  |
| C4038  | K13179010 | Ceramic CAP.      | F    | 50WV     | 15pF     | C4118  | K02175121 | Ceramic CAP.      | CH | 50WV   | 120pF    |
| C4039  | K00173100 | Ceramic CAP.      | SL   | 50WV     | 0.022uF  | C4119  | K40129054 | AL. Electro. CAP. |    | 16WV   | 47uF     |
| C4040  | K00172020 | Ceramic CAP.      | SL   | 50WV     | 10pF     | C4120  | K00175101 | Ceramic CAP.      | SL | 50WV   | 100pF    |
| C4041  | K00175151 | Ceramic CAP.      | SL   | 50WV     | 2pF      | C4121  | K70107475 | Tantalum CAP.     |    | 10WV   | 4.7uF    |
| C4042  | K13179010 | Ceramic CAP.      | F    | 50WV     | 150pF    | C4122  | K70107685 | Tantalum CAP.     |    | 10WV   | 6.8uF    |
| C4043  | K13179010 | Ceramic CAP.      | F    | 50WV     | 0.022uF  | C4123  | K40129012 | AL. Electro. CAP. |    | 16WV   | 10uF     |
| C4044  | K13179010 | Ceramic CAP.      | F    | 50WV     | 0.022uF  | C4124  | K19149021 | Ceramic CAP.      |    | 25WV   | 0.047uF  |
| C4045  | K12171102 | Ceramic CAP.      | E    | 50WV     | 0.022uF  | C4125  | K19149021 | Ceramic CAP.      |    | 25WV   | 0.047uF  |
| C4046  | K13179010 | Ceramic CAP.      | F    | 50WV     | 0.022uF  | TC4001 | K91000028 | Variable CAP.     |    | 10pF   |          |
| C4047  | K40179013 | AL. Electro. CAP. |      | 50WV     | 1uF      | T4001  | L0021533  | Coil              |    |        |          |
| C4048  | K19149025 | Ceramic CAP.      |      | 50WV     | 0.1uF    | T4002  | L0021736  | Coil              |    |        |          |
| C4049  | K19149009 | Ceramic CAP.      |      | 50WV     | 0.004uF  | T4003  | L0021736  | Coil              |    |        |          |
| C4050  | K19149003 | Ceramic CAP.      |      | 50WV     | 0.0015uF | L4001  | L1190189  | M. RFC            |    | 1mH    |          |
| C4051  | K12171102 | Ceramic CAP.      | E    | 50WV     | 0.001uF  | L4002  | L0020533  | Coil              |    |        |          |
| C4052  | K40129004 | AL. Electro. CAP. |      | 16WV     | 10uF     | L4003  | L1190262  | M. RFC            |    | 22uH   |          |
| C4053  | K40179012 | AL. Electro. CAP. |      | 50WV     | 4.7uF    | L4004  | L1190258  | M. RFC            |    | 10uH   |          |
|        |           |                   |      |          |          | L4005  | L1190274  | M. RFC            |    | 220uH  |          |
|        |           |                   |      |          |          | L4006  | L1190274  | M. RFC            |    | 220uH  |          |
|        |           |                   |      |          |          | L4008  | L1190244  | M. RFC            |    | 0.68uH |          |
|        |           |                   |      |          |          | J4001  | P0090524  | Connector         |    |        |          |
|        |           |                   |      |          |          | J4002  | P0090532  | Connector         |    |        |          |

## PARTS LIST

# PARTS LIST

|       |          |           |  |        |           |                  |                    |
|-------|----------|-----------|--|--------|-----------|------------------|--------------------|
| J5014 | P0090525 | Connector |  | X6001  | H0102814  | XTAL             | HC-48/T 20.5043MHz |
| J5015 | P0090527 | Connector |  | XF6001 | H1102126  | XTAL Filter      | 13M20A             |
| J5016 | P0090429 | Connector |  | R6001  | J02225473 | Carbon Film RES. | 1/6W 47k ohm UJ    |
| J5017 | P0090429 | Connector |  | R6002  | J02225470 | Carbon Film RES. | 1/6W 47 ohm UJ     |
| J5018 | P0090429 | Connector |  | R6003  | J02225225 | Carbon Film RES. | 1/6W 2.2M ohm UJ   |
| J5019 | P0090429 | Connector |  | R6004  | J02225470 | Carbon Film RES. | 1/6W 47 ohm UJ     |
| J5020 | P0090525 | Connector |  | R6005  | J02225102 | Carbon Film RES. | 1/6W 1K ohm UJ     |
|       |          |           |  | R6006  | J02225331 | Carbon Film RES. | 1/6W 330 ohm UJ    |
|       |          |           |  | R6007  | J02225180 | Carbon Film RES. | 1/6W 18 ohm UJ     |
|       |          |           |  | R6008  | J02225331 | Carbon Film RES. | 1/6W 330 ohm UJ    |
|       |          |           |  | R6009  | J02225473 | Carbon Film RES. | 1/6W 47k ohm UJ    |
|       |          |           |  | R6010  | J02225470 | Carbon Film RES. | 1/6W 47 ohm UJ     |
|       |          |           |  | R6011  | J02225473 | Carbon Film RES. | 1/6W 47k ohm UJ    |
|       |          |           |  | R6012  | J02225473 | Carbon Film RES. | 1/6W 47K ohm UJ    |
|       |          |           |  | R6013  | J02225470 | Carbon Film RES. | 1/6W 47 ohm UJ     |
|       |          |           |  | R6014  | J02225680 | Carbon Film RES. | 1/6W 68 ohm UJ     |
|       |          |           |  | R6015  | J02225681 | Carbon Film RES. | 1/6W 680 ohm UJ    |
|       |          |           |  | R6016  | J02225680 | Carbon Film RES. | 1/6W 68 ohm UJ     |
|       |          |           |  | R6017  | J02225221 | Carbon Film RES. | 1/6W 220 ohm UJ    |
|       |          |           |  | R6018  | J02225101 | Carbon Film RES. | 1/6W 100 ohm UJ    |
|       |          |           |  | R6019  | J02225101 | Carbon Film RES. | 1/6W 100 ohm UJ    |
|       |          |           |  | R6020  | J02225470 | Carbon Film RES. | 1/6W 47 ohm UJ     |
|       |          |           |  | R6021  | J02225560 | Carbon Film RES. | 1/6W 56 ohm UJ     |
|       |          |           |  | R6022  | J01225473 | Carbon Film RES. | 1/6W 47k ohm PJ    |
|       |          |           |  | R6023  | J01225473 | Carbon Film RES. | 1/6W 47k ohm PJ    |
|       |          |           |  | R6024  | J02225104 | Carbon Film RES. | 1/6W 100k ohm UJ   |
|       |          |           |  | R6025  | J02225104 | Carbon Film RES. | 1/6W 100k ohm UJ   |
|       |          |           |  | R6026  | J02225101 | Carbon Film RES. | 1/6W 100 ohm UJ    |
|       |          |           |  | R6027  | J02225104 | Carbon Film RES. | 1/6W 100k ohm UJ   |
|       |          |           |  | R6028  | J02225104 | Carbon Film RES. | 1/6W 100k ohm UJ   |
|       |          |           |  | R6029  | J02225104 | Carbon Film RES. | 1/6W 100k ohm UJ   |
|       |          |           |  | R6030  | J01225104 | Carbon Film RES. | 1/6W 100k ohm PJ   |
|       |          |           |  | R6031  | J01225561 | Carbon Film RES. | 1/6W 560 ohm PJ    |
|       |          |           |  | R6032  | J02225221 | Carbon Film RES. | 1/6W 220 ohm UJ    |
|       |          |           |  | R6033  | J02225220 | Carbon Film RES. | 1/6W 22 ohm UJ     |
|       |          |           |  | R6034  | J01225479 | Carbon Film RES. | 1/6W 4.7 ohm PJ    |
|       |          |           |  | R6035  | J02225821 | Carbon Film RES. | 1/6W 820 ohm UJ    |
|       |          |           |  | R6036  | J02225474 | Carbon Film RES. | 1/6W 470k ohm UJ   |
|       |          |           |  | R6037  | J02225101 | Carbon Film RES. | 1/6W 100 ohm UJ    |
|       |          |           |  | R6038  | J02225101 | Carbon Film RES. | 1/6W 100 ohm UJ    |
|       |          |           |  | R6039  | J02225473 | Carbon Film RES. | 1/6W 47k ohm UJ    |
|       |          |           |  | R6040  | J02225223 | Carbon Film RES. | 1/6W 22k ohm UJ    |
|       |          |           |  | R6041  | J02225103 | Carbon Film RES. | 1/6W 10k ohm UJ    |
|       |          |           |  | R6042  | J01225221 | Carbon Film RES. | 1/6W 220 ohm PJ    |
|       |          |           |  | R6043  | J02225104 | Carbon Film RES. | 1/6W 100k ohm UJ   |
|       |          |           |  | R6044  | J01225562 | Carbon Film RES. | 1/6W 5.6k ohm PJ   |
|       |          |           |  | R6045  | J01225103 | Carbon Film RES. | 1/6W 10k ohm PJ    |
|       |          |           |  | R6046  | J02225560 | Carbon Film RES. | 1/6W 56 ohm UJ     |
|       |          |           |  | R6047  | J02225222 | Carbon Film RES. | 1/6W 2.2k ohm UJ   |
|       |          |           |  | R6048  | J02225222 | Carbon Film RES. | 1/6W 2.2k ohm UJ   |
|       |          |           |  | R6049  | J02225473 | Carbon Film RES. | 1/6W 47k ohm UJ    |
|       |          |           |  | R6050  | J02225471 | Carbon Film RES. | 1/6W 470 ohm UJ    |
|       |          |           |  | R6051  | J01225223 | Carbon Film RES. | 1/6W 22k ohm PJ    |
|       |          |           |  | R6052  | J02225562 | Carbon Film RES. | 1/6W 5.6k ohm UJ   |
|       |          |           |  | R6053  | J02225102 | Carbon Film RES. | 1/6W 1k ohm UJ     |
|       |          |           |  | R6054  | J02225473 | Carbon Film RES. | 1/6W 47k ohm UJ    |
|       |          |           |  | R6055  | J02225470 | Carbon Film RES. | 1/6W 47 ohm UJ     |
|       |          |           |  | R6056  | J01225471 | Carbon Film RES. | 1/6W 470 ohm PJ    |
|       |          |           |  | R6057  | J01225103 | Carbon Film RES. | 1/6W 10k ohm PJ    |
|       |          |           |  | R6058  | J01225222 | Carbon Film RES. | 1/6W 2.2k ohm PJ   |
|       |          |           |  | R6059  | J02225681 | Carbon Film RES. | 1/6W 680 ohm UJ    |
|       |          |           |  | R6060  | J02225471 | Carbon Film RES. | 1/6W 470 ohm UJ    |
|       |          |           |  | R6061  | J02225102 | Carbon Film RES. | 1/6W 1k ohm UJ     |
|       |          |           |  | R6062  | J02225102 | Carbon Film RES. | 1/6W 1k ohm UJ     |
|       |          |           |  | R6064  | J02225103 | Carbon Film RES. | 1/6W 10k ohm UJ    |
|       |          |           |  | R6065  | J02225332 | Carbon Film RES. | 1/6W 3.3k ohm UJ   |
|       |          |           |  | R6066  | J02225101 | Carbon Film RES. | 1/6W 100 ohm UJ    |
|       |          |           |  | R6067  | J02225332 | Carbon Film RES. | 1/6W 3.3k ohm UJ   |
|       |          |           |  | R6068  | J02225103 | Carbon Film RES. | 1/6W 10k ohm UJ    |
|       |          |           |  | R6069  | J02225681 | Carbon Film RES. | 1/6W 680 ohm UJ    |
|       |          |           |  | R6071  | J02225101 | Carbon Film RES. | 1/6W 100 ohm UJ    |
|       |          |           |  | R6072  | J02225222 | Carbon Film RES. | 1/6W 2.2k ohm UJ   |
|       |          |           |  | R6073  | J01225151 | Carbon Film RES. | 1/6W 150 ohm PJ    |
|       |          |           |  | R6074  | J02225222 | Carbon Film RES. | 1/6W 2.2k ohm UJ   |
|       |          |           |  | R6075  | J02225471 | Carbon Film RES. | 1/6W 470 ohm UJ    |
|       |          |           |  | R6076  | J01225102 | Carbon Film RES. | 1/6W 1k ohm PJ     |
|       |          |           |  | R6088  | J02225560 | Carbon Film RES. | 1/6W 56 ohm UJ     |
|       |          |           |  | R6089  | J02225101 | Carbon Film RES. | 1/6W 100 ohm UJ    |
|       |          |           |  | R6090  | J02225332 | Carbon Film RES. | 1/6W 3.3k ohm UJ   |
|       |          |           |  | R6091  | J02225222 | Carbon Film RES. | 1/6W 2.2k ohm UJ   |
|       |          |           |  | R6092  | J02225104 | Carbon Film RES. | 1/6W 100k ohm UJ   |
|       |          |           |  | R6093  | J01225472 | Carbon Film RES. | 1/6W 4.7k ohm PJ   |
|       |          |           |  | R6094  | J02225333 | Carbon Film RES. | 1/6W 33k ohm UJ    |
|       |          |           |  | R6095  | J02225473 | Carbon Film RES. | 1/6W 47k ohm UJ    |

| Version | PCB with Components<br>w/o 144MHz ALC UNIT,<br>144MHz SHIFT UNIT,<br>144MHz SUB VCO UNIT | PCB with Components<br>w/o 144MHz ALC UNIT,<br>144MHz SHIFT UNIT,<br>144MHz SUB VCO UNIT | Version | PCB with Components<br>w/o 144MHz ALC UNIT,<br>144MHz SHIFT UNIT,<br>144MHz SUB VCO UNIT | PCB with Components<br>w/o 144MHz ALC UNIT,<br>144MHz SHIFT UNIT,<br>144MHz SUB VCO UNIT |
|---------|------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------|---------|------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------|
| A1.H2   | C028881AA                                                                                | C028881AJ                                                                                | B3.C3   | C028881AE                                                                                | C028881AN                                                                                |
| A2.H3   | C028881AB                                                                                | C028881AK                                                                                | C1      | C028881AF                                                                                | C028881AP                                                                                |
| B1      | C028881AC                                                                                | C028881AL                                                                                | F       | C028881AG                                                                                | C028881AQ                                                                                |
| B2.C2   | C028881AD                                                                                | C028881AM                                                                                | H1      | C028881AH                                                                                | C028881AR                                                                                |

# PARTS LIST

|        |           |                   |       |          |          |       |           |                   |    |      |          |
|--------|-----------|-------------------|-------|----------|----------|-------|-----------|-------------------|----|------|----------|
| R6096  | J01225102 | Carbon Film RES.  | 1/6W  | 1k ohm   | PJ       | C6051 | K40129004 | AL. Electro. CAP. |    | 16WV | 10uF     |
| R6097  | J02225101 | Carbon Film RES.  | 1/6W  | 100 ohm  | UJ       | C6052 | K22170204 | CAP. Chip         |    | 50WV | 3pF      |
| R6098  | J02225473 | Carbon Film RES.  | 1/6W  | 47k ohm  | UJ       | C6053 | K13179008 | Ceramic CAP.      | F  | 50WV | 0.01uF   |
| R6099  | J01225223 | Carbon Film RES.  | 1/6W  | 22k ohm  | PJ       | C6054 | K12171102 | Ceramic CAP.      | E  | 50WV | 0.01uF   |
| R6100  | J02225562 | Carbon Film RES.  | 1/6W  | 5.6k ohm | UJ       | C6055 | K12171102 | Ceramic CAP.      | E  | 50WV | 0.01uF   |
| R6101  | J01225331 | Carbon Film RES.  | 1/6W  | 330 ohm  | PJ       | C6056 | K06173070 | Ceramic CAP.      | UJ | 50WV | 7pF      |
| R6102  | J01225101 | Carbon Film RES.  | 1/6W  | 100 ohm  | PJ       | C6057 | K02173060 | Ceramic CAP.      | CH | 50WV | 6pF      |
| R6103  | J02225560 | Carbon Film RES.  | 1/6W  | 56 ohm   | UJ       | C6058 | K05172050 | Ceramic CAP.      | RJ | 50WV | 5pF      |
| R6104  | J01225223 | Carbon Film RES.  | 1/6W  | 22k ohm  | PJ       | C6059 | K06172050 | Ceramic CAP.      | UJ | 50WV | 5pF      |
| R6105  | J01225682 | Carbon Film RES.  | 1/6W  | 6.8k ohm | PJ       | C6060 | K40109001 | AL. Electro. CAP. |    | 10WV | 100uF    |
| R6106  | J01225331 | Carbon Film RES.  | 1/6W  | 330 ohm  | PJ       | C6061 | K12171102 | Ceramic CAP.      | E  | 50WV | 0.001uF  |
| R6107  | J01225101 | Carbon Film RES.  | 1/6W  | 100 ohm  | PJ       | C6062 | K02172020 | Ceramic CAP.      | CK | 50WV | 2pF      |
| R6108  | J01225331 | Carbon Film RES.  | 1/6W  | 330 ohm  | PJ       | C6063 | K13179014 | Ceramic CAP.      | F  | 50WV | 0.0047uF |
| R6109  | J02225101 | Carbon Film RES.  | 1/6W  | 100 ohm  | UJ       | C6064 | K00172040 | Ceramic CAP.      | SL | 50WV | 4pF      |
| R6110  | J02225471 | Carbon Film RES.  | 1/6W  | 470 ohm  | UJ       | C6065 | K13179008 | Ceramic CAP.      | F  | 50WV | 0.01uF   |
| R6111  | J01225223 | Carbon Film RES.  | 1/6W  | 22k ohm  | UJ       | C6066 | K00173070 | Ceramic CAP.      | SL | 50WV | 7pF      |
| R6112  | J02225562 | Carbon Film RES.  | 1/6W  | 5.6k ohm | UJ       | C6067 | K02179001 | Ceramic CAP.      | CK | 50WV | 1pF      |
| R6113  | J02225331 | Carbon Film RES.  | 1/6W  | 330 ohm  | UJ       | C6068 | K13179008 | Ceramic CAP.      | F  | 50WV | 0.01uF   |
| R6114  | J02225102 | Carbon Film RES.  | 1/6W  | 1k ohm   | UJ       | C6069 | K12171102 | Ceramic CAP.      | E  | 50WV | 0.0047uF |
| R6115  | J02225105 | Carbon Film RES.  | 1/6W  | 1M ohm   | UJ       | C6070 | K12171102 | Ceramic CAP.      | E  | 50WV | 0.001uF  |
| R6116  | J02225103 | Carbon Film RES.  | 1/6W  | 10k ohm  | UJ       | C6071 | K13179008 | Ceramic CAP.      | F  | 50WV | 0.01uF   |
| R6117  | J01225471 | Carbon Film RES.  | 1/2W  | 470 ohm  | TJ       | C6072 | K02172059 | Ceramic CAP.      | CK | 50WV | 0.5pF    |
| R6118  | J02225103 | Carbon Film RES.  | 1/6W  | 10k ohm  | UJ       | C6073 | K13179014 | Ceramic CAP.      | F  | 50WV | 0.0047uF |
| R6119  | J01225471 | Carbon Film RES.  | 1/6W  | 470 ohm  | PJ       | C6074 | K02172040 | Ceramic CAP.      | CH | 50WV | 4pF      |
| R6120  | J02225102 | Carbon Film RES.  | 1/6W  | 1k ohm   | UJ       | C6075 | K12171102 | Ceramic CAP.      | E  | 50WV | 0.001uF  |
| R6121  | J02225102 | Carbon Film RES.  | 1/6W  | 1k ohm   | UJ       | C6076 | K00173100 | Ceramic CAP.      | SL | 50WV | 10pF     |
| R6122  | J24205561 | RES. Chip         | 1/10W | 560 ohm  |          | C6077 | K00173100 | Ceramic CAP.      | SL | 50WV | 10pF     |
| R6123  | J02225101 | Carbon Film RES.  | 1/6W  | 100 ohm  | UJ       | C6078 | K12171102 | Ceramic CAP.      | E  | 50WV | 0.001uF  |
| R6125  | J24205104 | RES. Chip         | 1/10W | 100k ohm |          | C6079 | K70147105 | Tantalum CAP.     |    | 25WV | 1uF      |
| R6126  | J02225471 | Carbon Film RES.  | 1/6W  | 470 ohm  | UJ       | C6080 | K13179008 | Ceramic CAP.      | F  | 50WV | 0.01uF   |
| VR6001 | J51745102 | POT.              | B     | 1k ohm   |          | C6081 | K40109001 | AL. Electro. CAP. |    | 10WV | 100uF    |
| VR6002 | J51745473 | POT.              | B     | 47k ohm  |          | C6082 | K70147105 | Tantalum CAP.     |    | 25WV | 1uF      |
| VR6003 | J51745473 | POT.              | B     | 47k ohm  |          | C6084 | K19149021 | Ceramic CAP.      |    | 25WV | 0.047uF  |
| VR6004 | J51745104 | POT.              | B     | 100k ohm |          | C6085 | K19149021 | Ceramic CAP.      |    | 25WV | 0.047uF  |
| C6001  | K05173100 | Ceramic CAP.      | RH    | 50WV     | 10pF     | C6086 | K12171102 | Ceramic CAP.      | E  | 50WV | 0.001uF  |
| C6002  | K05172050 | Ceramic CAP.      | RH    | 50WV     | 5pF      | C6087 | K13179008 | Ceramic CAP.      | F  | 50WV | 0.01uF   |
| C6003  | K13179008 | Ceramic CAP.      | F     | 50WV     | 0.01uF   | C6088 | K13179008 | Ceramic CAP.      | F  | 50WV | 0.01uF   |
| C6004  | K13179008 | Ceramic CAP.      | F     | 50WV     | 0.01uF   | C6089 | K00175470 | Ceramic CAP.      | SL | 50WV | 47pF     |
| C6005  | K13179008 | Ceramic CAP.      | F     | 50WV     | 0.01uF   | C6090 | K00175220 | Ceramic CAP.      | SL | 50WV | 22pF     |
| C6006  | K13179008 | Ceramic CAP.      | F     | 50WV     | 0.01uF   | C6091 | K13179008 | Ceramic CAP.      | F  | 50WV | 0.01uF   |
| C6007  | K00172040 | Ceramic CAP.      | SL    | 50WV     | 4pF      | C6092 | K13179008 | Ceramic CAP.      | F  | 50WV | 0.01uF   |
| C6008  | K12171102 | Ceramic CAP.      | E     | 50WV     | 0.001uF  | C6093 | K12171102 | Ceramic CAP.      | E  | 50WV | 0.001uF  |
| C6009  | K13179014 | Ceramic CAP.      | F     | 50WV     | 0.0047uF | C6094 | K70167104 | Tantalum CAP.     |    | 35WV | 0.1uF    |
| C6010  | K12171102 | Ceramic CAP.      | E     | 50WV     | 0.001uF  | C6095 | K40109002 | AL. Electro. CAP. |    | 10WV | 47uF     |
| C6011  | K12171102 | Ceramic CAP.      | E     | 50WV     | 0.001uF  | C6096 | K13179008 | Ceramic CAP.      | F  | 50WV | 0.01uF   |
| C6012  | K13179014 | Ceramic CAP.      | F     | 50WV     | 0.0047uF | C6097 | K40109001 | AL. Electro. CAP. |    | 10WV | 100uF    |
| C6014  | K00175330 | Ceramic CAP.      | SL    | 50WV     | 33pF     | C6098 | K12171102 | Ceramic CAP.      | E  | 50WV | 0.001uF  |
| C6015  | K10179024 | Ceramic CAP.      | B     | 50WV     | 0.01uF   | C6099 | K12171102 | Ceramic CAP.      | E  | 50WV | 0.001uF  |
| C6016  | K13179008 | Ceramic CAP.      | F     | 50WV     | 0.01uF   | C6100 | K12171102 | Ceramic CAP.      | E  | 50WV | 0.001uF  |
| C6017  | K13179008 | Ceramic CAP.      | F     | 50WV     | 0.01uF   | C6101 | K19149021 | Ceramic CAP.      |    | 25WV | 0.047uF  |
| C6018  | K13179008 | Ceramic CAP.      | F     | 50WV     | 0.01uF   | C6102 | K12171102 | Ceramic CAP.      | E  | 50WV | 0.001uF  |
| C6019  | K13179014 | Ceramic CAP.      | F     | 50WV     | 0.0047uF | C6103 | K70167474 | Tantalum CAP.     |    | 35WV | 0.47uF   |
| C6020  | K13179014 | Ceramic CAP.      | F     | 50WV     | 0.0047uF | C6104 | K19149021 | Ceramic CAP.      |    | 25WV | 0.047uF  |
| C6021  | K13179008 | Ceramic CAP.      | F     | 50WV     | 0.01uF   | C6121 | K12171102 | Ceramic CAP.      | E  | 50WV | 0.001uF  |
| C6022  | K00173100 | Ceramic CAP.      | SL    | 50WV     | 10pF     | C6122 | K13179014 | Ceramic CAP.      | F  | 50WV | 0.0047uF |
| C6023  | K00173100 | Ceramic CAP.      | SL    | 50WV     | 10pF     | C6123 | K19149025 | Ceramic CAP.      |    | 25WV | 0.1uF    |
| C6024  | K13179008 | Ceramic CAP.      | F     | 50WV     | 0.01uF   | C6124 | K12171102 | Ceramic CAP.      | E  | 50WV | 0.001uF  |
| C6025  | K13179008 | Ceramic CAP.      | F     | 50WV     | 0.01uF   | C6125 | K19149021 | Ceramic CAP.      |    | 25WV | 0.047uF  |
| C6026  | K05175150 | Ceramic CAP.      | RH    | 50WV     | 15pF     | C6126 | K40109001 | AL. Electro. CAP. |    | 10WV | 100uF    |
| C6027  | K05175150 | Ceramic CAP.      | RH    | 50WV     | 15pF     | C6127 | K70167154 | Tantalum CAP.     |    | 35WV | 0.15uF   |
| C6028  | K05172020 | Ceramic CAP.      | RK    | 50WV     | 2pF      | C6128 | K19149021 | Ceramic CAP.      |    | 25WV | 0.047uF  |
| C6029  | K13179008 | Ceramic CAP.      | F     | 50WV     | 0.01uF   | C6129 | K12171102 | Ceramic CAP.      | E  | 50WV | 0.001uF  |
| C6030  | K00175120 | Ceramic CAP.      | SL    | 50WV     | 12pF     | C6130 | K05173080 | Ceramic CAP.      | RH | 50WV | 8pF      |
| C6031  | K05173080 | Ceramic CAP.      | RH    | 50WV     | 8pF      | C6131 | K02175101 | Ceramic CAP.      | CH | 50WV | 100pF    |
| C6032  | K05172020 | Ceramic CAP.      | RK    | 50WV     | 2pF      | C6132 | K05175470 | Ceramic CAP.      | RH | 50WV | 47pF     |
| C6033  | K02172059 | Ceramic CAP.      | CK    | 50WV     | 0.5pF    | C6133 | K13179008 | Ceramic CAP.      | F  | 50WV | 0.01uF   |
| C6034  | K05173080 | Ceramic CAP.      | RH    | 50WV     | 8pF      | C6134 | K12171102 | Ceramic CAP.      | E  | 50WV | 0.001uF  |
| C6035  | K05172020 | Ceramic CAP.      | RK    | 50WV     | 2pF      | C6135 | K02179001 | Ceramic CAP.      | CK | 50WV | 1pF      |
| C6036  | K00175120 | Ceramic CAP.      | SL    | 50WV     | 12pF     | C6136 | K00175101 | Ceramic CAP.      | SL | 50WV | 100pF    |
| C6037  | K05173080 | Ceramic CAP.      | RH    | 50WV     | 8pF      | C6137 | K13179008 | Ceramic CAP.      | F  | 50WV | 0.01uF   |
| C6038  | K02179001 | Ceramic CAP.      | CK    | 50WV     | 1pF      | C6138 | K13179008 | Ceramic CAP.      | F  | 50WV | 0.01uF   |
| C6039  | K00173070 | Ceramic CAP.      | SL    | 50WV     | 7pF      | C6139 | K05173090 | Ceramic CAP.      | RH | 50WV | 9pF      |
| C6040  | K13179014 | Ceramic CAP.      | F     | 50WV     | 0.0047uF | C6140 | K40129004 | AL. Electro. CAP. |    | 16WV | 10uF     |
| C6041  | K12171102 | Ceramic CAP.      | E     | 50WV     | 0.001uF  | C6141 | K00173100 | Ceramic CAP.      | SL | 50WV | 10pF     |
| C6042  | K12171102 | Ceramic CAP.      | E     | 50WV     | 0.001uF  | C6142 | K05173090 | Ceramic CAP.      | RH | 50WV | 9pF      |
| C6043  | K40129004 | AL. Electro. CAP. |       | 16WV     | 10uF     | C6143 | K02172059 | Ceramic CAP.      | CK | 50WV | 0.5pF    |
| C6044  | K12171102 | Ceramic CAP.      | E     | 50WV     | 0.001uF  | C6144 | K05173090 | Ceramic CAP.      | RH | 50WV | 9pF      |
| C6045  | K13179014 | Ceramic CAP.      | F     | 50WV     | 0.0047uF | C6145 | K00175220 | Ceramic CAP.      | SL | 50WV | 22pF     |
| C6046  | K00175180 | Ceramic CAP.      | SL    | 50WV     | 18pF     | C6146 | K13179008 | Ceramic CAP.      | F  | 50WV | 0.01uF   |
| C6047  | K13179014 | Ceramic CAP.      | F     | 50WV     | 0.0047uF | C6147 | K05173090 | Ceramic CAP.      | RH | 50WV | 9pF      |
| C6048  | K40129004 | AL. Electro. CAP. |       | 16WV     | 10uF     |       |           |                   |    |      |          |
| C6049  | K02172040 | Ceramic CAP.      | CH    | 50WV     | 4pF      |       |           |                   |    |      |          |
| C6050  | K13179008 | Ceramic CAP.      | F     | 50WV     | 0.01uF   |       |           |                   |    |      |          |

# PARTS LIST

|        |           |                   |    |       |          |           |              |            |                 |
|--------|-----------|-------------------|----|-------|----------|-----------|--------------|------------|-----------------|
| C6148  | K13179008 | Ceramic CAP.      | F  | 50WV  | 0.01uF   | J6006     | P0090526     | Connector  |                 |
| C6149  | K13179008 | Ceramic CAP.      | F  | 50WV  | 0.01uF   | J6007     | P0090525     | Connector  |                 |
| C6150  | K13179008 | Ceramic CAP.      | F  | 50WV  | 0.01uF   | J6008     | P0090524     | Connector  |                 |
| C6151  | K13179008 | Ceramic CAP.      | F  | 50WV  | 0.01uF   | J6009     | P0090532     | Connector  |                 |
| C6152  | K02172020 | Ceramic CAP.      | CK | 50WV  | 2pF      | TP6001    | Q5000036     | TP-G       | MK-1095         |
| C6153  | K40129004 | AL. Electro. CAP. |    | 16WV  | 10uF     | TP6002    | Q5000036     | TP-G       | MK-1095         |
| C6154  | K13179008 | Ceramic CAP.      | F  | 50WV  | 0.01uF   | TP6003    | Q5000036     | TP-G       | MK-1095         |
| C6155  | K00172050 | Ceramic CAP.      | SL | 50WV  | 5pF      | TP6004    | Q5000036     | TP-G       | MK-1095         |
| C6156  | K40179011 | Ceramic CAP.      |    | 50WV  | 3.3uF    | R0062770B | VCO Case A   |            |                 |
| C6157  | K13179008 | Ceramic CAP.      | F  | 50WV  | 0.01uF   | R0062780A | VCO Case Lid |            |                 |
| C6158  | K13179014 | Ceramic CAP.      | F  | 50WV  | 0.0047uF | R0122640  | Spring Plate |            |                 |
| C6159  | K13179014 | Ceramic CAP.      | F  | 50WV  | 0.0047uF | R0122650  | Spring Plate |            |                 |
| C6160  | K19149013 | Ceramic CAP.      |    | 25WV  | 0.01uF   | R0123550  | Leaf Spring  |            |                 |
| C6161  | K12171102 | Ceramic CAP.      | E  | 50WV  | 0.001uF  |           |              |            |                 |
| C6162  | K00175101 | Ceramic CAP.      | SL | 50WV  | 100pF    |           |              |            |                 |
| C6163  | K12171102 | Ceramic CAP.      | E  | 50WV  | 0.001uF  |           |              |            |                 |
| C6164  | K12171102 | Ceramic CAP.      | E  | 50WV  | 0.001uF  |           |              |            |                 |
| C6165  | K12171102 | Ceramic CAP.      | E  | 50WV  | 0.001uF  |           |              |            |                 |
| C6166  | K00175101 | Ceramic CAP.      | SL | 50WV  | 100pF    |           |              |            |                 |
| C6167  | K12171102 | Ceramic CAP.      | E  | 50WV  | 0.001uF  |           |              |            |                 |
| C6168  | K12171102 | Ceramic CAP.      | E  | 50WV  | 0.001uF  |           |              |            |                 |
| C6169  | K70167104 | Tantalum CAP.     |    | 35WV  | 0.1uF    |           |              |            |                 |
| C6170  | K40109001 | AL. Electro. CAP. |    | 10WV  | 100uF    |           |              |            |                 |
| C6172  | K00175101 | Ceramic CAP.      | SL | 50WV  | 100pF    |           |              |            |                 |
| C6173  | K13179008 | Ceramic CAP.      | F  | 50WV  | 0.01uF   |           |              |            |                 |
| C6174  | K22170221 | CAP. Chip         | CH | 50WV  | 10pF     | D9501     | G2070001     | Diode      | 1SS181 TE85R    |
| C6175  | K22170805 | CAP. Chip         | B  | 50WV  | 0.001uF  | D9502     | G2070001     | Diode      | 1SS181 TE85R    |
| C6176  | K22170805 | CAP. Chip         | B  | 50WV  | 0.001uF  | R9501     | J24205223    | RES. Chip  | 1/10W 22k ohm   |
| C6177  | K22170805 | CAP. Chip         | B  | 50WV  | 0.001uF  | R9502     | J24205103    | RES. Chip  | 1/10W 10k ohm   |
| C6179  | K22171004 | CAP. Chip         | F  | 50WV  | 0.01uF   | R9503     | J24205473    | RES. Chip  | 1/10W 47k ohm   |
| C6180  | K22171004 | CAP. Chip         | F  | 50WV  | 0.01uF   | R9504     | J24205223    | RES. Chip  | 1/10W 22k ohm   |
| C6181  | K22171004 | CAP. Chip         | F  | 50WV  | 0.01uF   | R9505     | J24205000    | RES. Chip  | 1/10W 0 ohm     |
| C6182  | K22141804 | CAP. Chip         | B  | 25WV  | 0.022uF  | R9506     | J24205000    | RES. Chip  | 1/10W 0 ohm     |
| C6183  | K22170203 | CAP. Chip         | CH | 50WV  | 2pF      | R9507     | J24205000    | RES. Chip  | 1/10W 0 ohm     |
| TC6001 | K91000028 | Variable CAP.     |    | 10pF  |          | R9508     | J24205104    | RES. Chip  | 1/10W 100k ohm  |
| TC6002 | K91000055 | Variable CAP.     |    | 6pF   |          | R9509     | J24205223    | RES. Chip  | 1/10W 22k ohm   |
| T6001  | L0020345  | Coil              |    |       |          | R9510     | J24205473    | RES. Chip  | 1/10W 47k ohm   |
| T6002  | L0021718  | Coil              |    |       |          | R9511     | J24205473    | RES. Chip  | 1/10W 47k ohm   |
| T6003  | L0021718  | Coil              |    |       |          | C9501     | K22170227    | CAP. Chip  | CH 50WV 47pF    |
| T6004  | L0021736  | Coil              |    |       |          | C9503     | K22170227    | CAP. Chip  | CH 50WV 47pF    |
| T6005  | L0021736  | Coil              |    |       |          | C9504     | K22170805    | CAP. Chip  | B 50WV 0.001uF  |
| T6006  | L0021735  | Coil              |    |       |          | C9505     | K22170805    | CAP. Chip  | B 50WV 0.001uF  |
| T6007  | L0021736  | Coil              |    |       |          | Q5000057  | Lead Frame   |            |                 |
| T6008  | L0020907  | Coil              |    |       |          |           |              |            |                 |
| T6009  | L0020907  | Coil              |    |       |          |           |              |            |                 |
| T6010  | L0020907  | Coil              |    |       |          |           |              |            |                 |
| T6011  | L0020907  | Coil              |    |       |          |           |              |            |                 |
| T6012  | L0020907  | Coil              |    |       |          |           |              |            |                 |
| T6013  | L0020907  | Coil              |    |       |          |           |              |            |                 |
| T6014  | L0020907  | Coil              |    |       |          |           |              |            |                 |
| T6015  | L0020907  | Coil              |    |       |          |           |              |            |                 |
| T6016  | L0020907  | Coil              |    |       |          |           |              |            |                 |
| L6001  | L1020673  | RFC               |    |       |          | Q9101     | G3327127G    | Tramsistor | 2SC2712GR-TE85R |
| L6002  | L1020673  | RFC               |    |       |          | Q9102     | G3327127G    | Tramsistor | 2SC2712GR-TE85R |
| L6003  | L0020678  | Coil              |    |       |          | Q9103     | G3327127G    | Tramsistor | 2SC2712GR-TE85R |
| L6004  | L0020679  | Coil              |    |       |          | Q9104     | G3327127G    | Tramsistor | 2SC2712GR-TE85R |
| L6005  | L0020679  | Coil              |    |       |          | Q9105     | G3327127G    | Tramsistor | 2SC2712GR-TE85R |
| L6006  | L1020673  | RFC               |    |       |          | Q9106     | G3327127G    | Tramsistor | 2SC2712GR-TE85R |
| L6007  | L1190246  | M. RFC            |    |       |          | R9101     | J24205473    | RES. Chip  | 1/10W 47k ohm   |
| L6008  | L1190246  | M. RFC            |    |       |          | R9102     | J24205473    | RES. Chip  | 1/10W 47k ohm   |
| L6009  | L0190150  | Coil              |    |       |          | R9103     | J24205473    | RES. Chip  | 1/10W 47k ohm   |
| L6010  | L1190244  | M. RFC            |    |       |          | R9104     | J24205222    | RES. Chip  | 1/10W 2.2k ohm  |
| L6012  | L1190246  | M. RFC            |    |       |          | R9105     | J24205222    | RES. Chip  | 1/10W 2.2k ohm  |
| L6013  | L1190189  | M. RFC            |    |       |          | R9106     | J24205222    | RES. Chip  | 1/10W 2.2k ohm  |
| L6014  | L1190189  | M. RFC            |    |       |          | R9107     | J24205473    | RES. Chip  | 1/10W 47k ohm   |
| L6015  | L1190270  | M. RFC            |    |       |          | R9108     | J24205473    | RES. Chip  | 1/10W 47k ohm   |
| L6022  | L1190270  | M. RFC            |    |       |          | R9109     | J24205473    | RES. Chip  | 1/10W 47k ohm   |
| L6023  | L0020652  | Coil              |    |       |          | R9110     | J24205222    | RES. Chip  | 1/10W 47k ohm   |
| L6024  | L1190270  | M. RFC            |    |       |          | R9111     | J24205222    | RES. Chip  | 1/10W 2.2k ohm  |
| L6025  | L1190228  | M. RFC            |    |       |          | R9112     | J24205222    | RES. Chip  | 1/10W 2.2k ohm  |
| L6026  | L1190257  | M. RFC            |    | 8.2uH |          | R9113     | J24205000    | RES. Chip  | 1/10W 2.2k ohm  |
| L6027  | L1190257  | M. RFC            |    | 8.2uH |          |           |              |            |                 |
| CV6001 | L4020080  | Helical Resonator |    |       |          | C9101     | K22170235    | CAP. Chip  | CH 50WV 100pF   |
| FB6001 | L9190001  | Ferrite Beads     |    |       |          | C9102     | K22170235    | CAP. Chip  | CH 50WV 100pF   |
| J6001  | P1090210  | Connector         |    |       |          | C9103     | K22170235    | CAP. Chip  | CH 50WV 100pF   |
| J6002  | P0090525  | Connector         |    |       |          | C9104     | K22170235    | CAP. Chip  | CH 50WV 100pF   |
| J6003  | P0090526  | Connector         |    |       |          | C9105     | K22170235    | CAP. Chip  | CH 50WV 100pF   |
| J6004  | P1090210  | Connector         |    |       |          | C9106     | K22170235    | CAP. Chip  | CH 50WV 100pF   |
| J6005  | P0090527  | Connector         |    |       |          | Q5000057  | Lead Frame   |            |                 |

# PARTS LIST

| 144MHz SUB VCO UNIT |           |                                |                  | 430MHz RF UNIT |                |                                                                                   |                |
|---------------------|-----------|--------------------------------|------------------|----------------|----------------|-----------------------------------------------------------------------------------|----------------|
| Symbol No.          | Part No.  | Description                    | Device           | Symbol No.     | Part No.       | Description                                                                       | Device         |
|                     | F2927000  | Printed Circuit Board          |                  | C6506          | K13179008      | Ceramic CAP.                                                                      | F 50WV 0.01uF  |
|                     | C029270AA | PCB with Components            |                  | C6507          | K40129004      | AL. Electro. CAP.                                                                 | 16WV 10uF      |
| Q6024               | G3805070F | FET                            | 2SK507F          | C6508          | K10176102      | Ceramic CAP.                                                                      | B 50WV 0.001uF |
| Q6025               | G3333550  | Transistor                     | 2SC3355          | C6509          | K13179008      | Ceramic CAP.                                                                      | F 50WV 0.01uF  |
| D6015               | G2090180  | Diode                          | FC53M-5          | C6510          | K40129004      | AL. Electro. CAP.                                                                 | 16WV 10uF      |
| D6016               | G2090180  | Diode                          | FC53M-5          | C6511          | K02175180      | Ceramic CAP.                                                                      | CH 50WV 18pF   |
| R6078               | J02225560 | Carbon Film RES.               | 1/6W 56 ohm UJ   | C6513          | K02175330      | Ceramic CAP.                                                                      | CH 50WV 33pF   |
| R6079               | J02225330 | Carbon Film RES.               | 1/6W 33 ohm UJ   | C6514          | K02179001      | Ceramic CAP.                                                                      | CK 50WV 1pF    |
| R6080               | J02225331 | Carbon Film RES.               | 1/6W 330 ohm UJ  | C6515(25W)     | K02172040      | Ceramic CAP.                                                                      | CH 50WV 4pF    |
| R6081               | J02225332 | Carbon Film RES.               | 1/6W 3.3k ohm UJ | C6516          | K02175180      | Ceramic CAP.                                                                      | CH 50WV 8pF    |
| R6082               | J02225103 | Carbon Film RES.               | 1/6W 10k ohm UJ  | C6517          | K02179001      | Ceramic CAP.                                                                      | CK 50WV 1pF    |
| R6083               | J02225101 | Carbon Film RES.               | 1/6W 100 ohm UJ  | C6518          | K02175180      | Ceramic CAP.                                                                      | CH 50WV 18pF   |
| R6084               | J02225101 | Carbon Film RES.               | 1/6W 100 ohm UJ  | C6519          | K02175180      | Ceramic CAP.                                                                      | CH 50WV 18pF   |
| R6087               | J02225560 | Carbon Film RES.               | 1/6W 56 ohm UJ   | C6520          | K02175180      | Ceramic CAP.                                                                      | CH 50WV 18pF   |
| C6105               | K13179014 | Ceramic CAP.                   | F 50WV 0.0047uF  | C6521          | K02175180      | Ceramic CAP.                                                                      | CH 50WV 18pF   |
| C6106               | K00173070 | Ceramic CAP.                   | SL 50WV 7pF      | C6522          | K02175180      | Ceramic CAP.                                                                      | CH 50WV 18pF   |
| C6107               | K02172020 | Ceramic CAP.                   | CK 50WV 2pF      | C6523(10W)     | K02173060      | Ceramic CAP.                                                                      | CH 50WV 6pF    |
| C6108               | K19149021 | Ceramic CAP.                   | 25WV 0.047uF     | C6523(25W)     | K02173100      | Ceramic CAP.                                                                      | CH 50WV 10pF   |
| C6109               | K12171102 | Ceramic CAP.                   | E 50WV 0.001uF   | C6524(10W)     | K02173060      | Ceramic CAP.                                                                      | CH 50WV 6pF    |
| C6110               | K05175180 | Ceramic CAP.                   | RH 50WV 18pF     | C6524(25W)     | K02173100      | Ceramic CAP.                                                                      | CH 50WV 10pF   |
| C6111               | K12171102 | Ceramic CAP.                   | E 50WV 0.001uF   | C6527          | K02175150      | Ceramic CAP.                                                                      | CH 50WV 15pF   |
| C6112               | K40109001 | AL. Electro. CAP.              | 10WV 100uF       | C6528          | K10176102      | Ceramic CAP.                                                                      | B 50WV 0.001uF |
| C6113               | K06173080 | Ceramic CAP.                   | RH 50WV 8pF      | C6529          | K10176102      | Ceramic CAP.                                                                      | B 50WV 0.001uF |
| C6114               | K05173080 | Ceramic CAP.                   | RH 50WV 8pF      | C6530          | K10176102      | Ceramic CAP.                                                                      | B 50WV 0.001uF |
| C6115               | K02172059 | Ceramic CAP.                   | CK 50WV 0.5pF    | C6531          | K10176102      | Ceramic CAP.                                                                      | B 50WV 0.001uF |
| C6117               | K12171102 | Ceramic CAP.                   | E 50WV 0.001uF   | C6532          | K10176102      | Ceramic CAP.                                                                      | B 50WV 0.001uF |
| C6118               | K02172020 | Ceramic CAP.                   | CK 50WV 2pF      | C6533          | K02173060      | Ceramic CAP.                                                                      | CH 50WV 6pF    |
| C6119               | K00173070 | Ceramic CAP.                   | SL 50WV 7pF      | L6501          | L1020469       | RFC                                                                               |                |
| C6120               | K12171102 | Ceramic CAP.                   | E 50WV 0.001uF   | L6502          | L1020469       | RFC                                                                               |                |
| C6171               | K13179014 | Ceramic CAP.                   | F 50WV 0.0047uF  | L6503          | L1020663       | RFC                                                                               |                |
| L6016               | L1190258  | M. RFC                         | 10uH             | L6504          | L0021149       | Coil                                                                              |                |
| L6017               | L1190242  | M. RFC                         | 0.47uH           | L6505          | L0021149       | Coil                                                                              |                |
| L6018               | L1190242  | M. RFC                         | 0.47uH           | L6506          | L0021457       | Coil                                                                              |                |
| L6019               | L0190138  | Coil                           |                  | L6508          | L0021149       | Coil                                                                              |                |
| L6020               | L0021520  | Coil                           |                  | L6509          | L0021149       | Coil                                                                              |                |
| L6021               | L1190242  | M. RFC                         | 0.47uH           | L6510          | L1190095       | M. RFC                                                                            | 4.7uH          |
| L6028               | L0020852  | Coil                           |                  | L6511          | L1190254       | M. RFC                                                                            | 4.7uH          |
| L6029               | L0021359  | Coil                           |                  | L6512          | L0020749       | Coil                                                                              |                |
| L6030               | L0021359  | Coil                           |                  | Q5000057       | TP-G           | MK-1095                                                                           |                |
| FB6003              | L9190001  | Ferrite Beads                  |                  | R6047250       | Booster Spacer |                                                                                   |                |
| FB6004              | L9190001  | Ferrite Beads                  |                  |                |                |                                                                                   |                |
|                     | R0062770B | VCO Case A                     |                  |                |                |                                                                                   |                |
| 144MHz PA UNIT      |           |                                |                  | 430MHz RF UNIT |                |                                                                                   |                |
| Symbol No.          | Part No.  | Description                    | Device           | Symbol No.     | Part No.       | Description                                                                       | Device         |
|                     | F2887104  | Printed Circuit Board          |                  | C02888102B     |                | Printed Circuit Board                                                             |                |
|                     | C028874AA | PCB with Components: 10W Model |                  | C028882AA      |                | PCB with Components w/o VCO UNIT, 430MHz ALC UNIT, 430MHz LOCAL UNIT, PLL IC UNIT |                |
|                     | C028874AB | PCB with Components: 25W Model |                  | C028882AB      |                | PCB with Components w/ VCO UNIT, 430MHz ALC UNIT, 430MHz LOCAL UNIT, PLL IC UNIT  |                |
| Q6501(10W)          | G1090295  | IC                             | M57713           | Q7003          | G3333550       | Transistor                                                                        | 2SC3355        |
| Q6501(25W)          | G1090474  | IC                             | M57727           | Q7004          | G3333550       | Transistor                                                                        | 2SC3355        |
| D6501               | G2090337  | Diode                          | MI308            | Q7007          | G3333550       | Transistor                                                                        | 2SC3355        |
| D6502               | G2090344  | Diode                          | 1SV178           | Q7008          | G1090804       | IC                                                                                | uPC1656C       |
| D6503               | G2090344  | Diode                          | 1SV178           | Q7010          | G3304600B      | Transistor                                                                        | 2SC460B        |
| D6504               | G2090118  | Diode                          | ISS97            | Q7011          | G3304580C      | Transistor                                                                        | 2SC458C        |
| D6505               | G2090118  | Diode                          | ISS97            | Q7012          | G3802410G      | FET                                                                               | 2SK241GR       |
| R6501               | J31309002 | RES.                           | 1W 0.1 ohm       | Q7013          | G3802410G      | FET                                                                               | 2SK241GR       |
| R6502(25W)          | J31309002 | RES.                           | 1W 0.1 ohm       | Q7014          | G4801220L      | FET                                                                               | 3SK122L        |
| R6503               | J01275151 | Carbon Film RES.               | 1/2W 150 ohm TJ  | Q7015          | G2090135       | Diode                                                                             | ND487C2-3R     |
| R6504               | J02245103 | Carbon Film RES.               | 1/4W 10k ohm SJ  | Q7016          | G1090804       | IC                                                                                | uPC1656C       |
| R6505               | J02245103 | Carbon Film RES.               | 1/4W 10k ohm SJ  | Q7017          | G3333550       | Transistor                                                                        | 2SC3355        |
| C6502               | K10176102 | Ceramic CAP.                   | B 50WV 0.001uF   | Q7018          | G3090050       | Transistor                                                                        | 2SC2407(1)     |
| C6503               | K13179008 | Ceramic CAP.                   | F 50WV 0.01uF    | Q7022          | G4801220L      | FET                                                                               | 3SK122L        |
| C6504               | K40129004 | AL. Electro. CAP.              | 16WV 10uF        | Q7023          | G4800810       | FET                                                                               | 3SK81          |
| C6505               | K10176102 | Ceramic CAP.                   | B 50WV 0.001uF   | Q7024          | G3090079       | Transistor                                                                        | BA1A4P         |
|                     |           |                                |                  | Q7025          | G3090079       | Transistor                                                                        | BA1A4P         |
|                     |           |                                |                  | Q7026          | G3207720Q      | Transistor                                                                        | 2SB772Q        |
|                     |           |                                |                  | Q7027          | G3207720Q      | Transistor                                                                        | 2SB772Q        |

# PARTS LIST

|        |           |                  |               |        |           |                  |                   |               |               |       |           |              |    |          |  |
|--------|-----------|------------------|---------------|--------|-----------|------------------|-------------------|---------------|---------------|-------|-----------|--------------|----|----------|--|
| Q7028  | G3115280  | Transistor       | 2SA1528       | R7075  | J02225101 | Carbon Film RES. | 1/6W              | 100 ohm       | UJ            |       |           |              |    |          |  |
| Q7029  | G3115280  | Transistor       | 2SA1528       | R7076  | J02225471 | Carbon Film RES. | 1/6W              | 470 ohm       | UJ            |       |           |              |    |          |  |
| Q7030  | G3090079  | Transistor       | BA1A4P        | R7077  | J02225101 | Carbon Film RES. | 1/6W              | 100 ohm       | UJ            |       |           |              |    |          |  |
| Q7031  | G3304580C | Transistor       | 2SC458C       | R7091  | J01225225 | Carbon Film RES. | 1/6W              | 2.2M ohm      | PJ            |       |           |              |    |          |  |
| Q7032  | G3304580C | Transistor       | 2SC458C       | R7092  | J01225473 | Carbon Film RES. | 1/6W              | 47k ohm       | PJ            |       |           |              |    |          |  |
| Q7033  | G3802410G | FET              | 2SK241GR      | R7093  | J01225470 | Carbon Film RES. | 1/6W              | 47 ohm        | PJ            |       |           |              |    |          |  |
| Q7034  | G3090079  | Transistor       | BA1A4P        | R7094  | J01225102 | Carbon Film RES. | 1/6W              | 1k ohm        | PJ            |       |           |              |    |          |  |
| D7003  | G2090408  | Diode            | ISS270        | R7095  | J01225560 | Carbon Film RES. | 1/6W              | 56 ohm        | PJ            |       |           |              |    |          |  |
| D7004  | G2090027  | Diode            | ISS53         | R7096  | J02225473 | Carbon Film RES. | 1/6W              | 47k ohm       | UJ            |       |           |              |    |          |  |
| D7005  | G2090027  | Diode            | ISS53         | R7097  | J01225473 | Carbon Film RES. | 1/6W              | 47k ohm       | PJ            |       |           |              |    |          |  |
| D7006  | G2060004  | Diode            | ISS270TJ      | R7098  | J01225271 | Carbon Film RES. | 1/6W              | 270 ohm       | PJ            |       |           |              |    |          |  |
| D7007  | G2090027  | Diode            | ISS53         | R7099  | J01225560 | Carbon Film RES. | 1/6W              | 56 ohm        | PJ            |       |           |              |    |          |  |
| D7008  | G2015550  | Diode            | IS1555        | R7100  | J01225560 | Carbon Film RES. | 1/6W              | 56 ohm        | PJ            |       |           |              |    |          |  |
| D7009  | G2015550  | Diode            | IS1555        | R7101  | J02225680 | Carbon Film RES. | 1/6W              | 68 ohm        | UJ            |       |           |              |    |          |  |
| D7010  | G2090027  | Diode            | ISS53         | R7102  | J01225681 | Carbon Film RES. | 1/6W              | 680 ohm       | PJ            |       |           |              |    |          |  |
| D7011  | G2060004  | Diode            | ISS270TJ      | R7103  | J01225560 | Carbon Film RES. | 1/6W              | 56 ohm        | PJ            |       |           |              |    |          |  |
| D7012  | G2090027  | Diode            | ISS53         | R7104  | J02225331 | Carbon Film RES. | 1/6W              | 330 ohm       | UJ            |       |           |              |    |          |  |
| D7013  | G2090027  | Diode            | ISS53         | R7106  | J02225104 | Carbon Film RES. | 1/6W              | 100k ohm      | UJ            |       |           |              |    |          |  |
| D7014  | G2090408  | Diode            | ISS270        | R7107  | J02225471 | Carbon Film RES. | 1/6W              | 470 ohm       | UJ            |       |           |              |    |          |  |
| D7015  | G2090408  | Diode            | ISS270        | R7108  | J02225221 | Carbon Film RES. | 1/6W              | 220 ohm       | UJ            |       |           |              |    |          |  |
| D7016  | G2090408  | Diode            | ISS270        | R7109  | J02225560 | Carbon Film RES. | 1/6W              | 56 ohm        | UJ            |       |           |              |    |          |  |
| D7017  | G2090408  | Diode            | ISS270        | R7110  | J24205680 | RES. Chip        | 1/10W             | 68 ohm        |               |       |           |              |    |          |  |
| D7018  | G2090408  | Diode            | ISS270        | R7111  | J01225472 | Carbon Film RES. | 1/6W              | 4.7k ohm      | PJ            |       |           |              |    |          |  |
| D7019  | G2060004  | Diode            | ISS270TJ      | R7112  | J01225102 | Carbon Film RES. | 1/6W              | 1k ohm        | PJ            |       |           |              |    |          |  |
|        |           |                  |               | R7113  | J24205101 | RES. Chip        | 1/10W             | 100 ohm       |               |       |           |              |    |          |  |
| TH7001 | G9090026  | Thermistor       |               | VR7001 | J51745101 | POT.             | B                 | 100 ohm       |               |       |           |              |    |          |  |
| TH7002 | G9090026  | Thermistor       |               | VR7002 | J51745102 | POT.             | B                 | 1k ohm        |               |       |           |              |    |          |  |
| TH7003 | G9090026  | Thermistor       |               | VR7003 | J51745101 | POT.             | B                 | 100 ohm       |               |       |           |              |    |          |  |
| XF7001 | H1102127  | XTAL Filter      | 47L20A1       | VR7004 | J51745473 | POT.             | B                 | 47k ohm       |               |       |           |              |    |          |  |
|        |           |                  |               | VR7005 | J51745473 | POT.             | B                 | 47k ohm       |               |       |           |              |    |          |  |
|        |           |                  |               | VR7006 | J51745104 | POT.             | B                 | 100k ohm      |               |       |           |              |    |          |  |
| R7008  | J02225181 | Carbon Film RES. | 1/6W 180 ohm  | UJ     | C7010     | K12171102        | Ceramic CAP.      | E             | 50WV 0.001uF  |       |           |              |    |          |  |
| R7009  | J02225330 | Carbon Film RES. | 1/6W 33 ohm   | UJ     | C7011     | K12171102        | Ceramic CAP.      | E             | 50WV 0.001uF  |       |           |              |    |          |  |
| R7010  | J01225181 | Carbon Film RES. | 1/6W 180 ohm  | PJ     | C7012     | K12171102        | Ceramic CAP.      | E             | 50WV 0.001uF  |       |           |              |    |          |  |
| R7011  | J02225101 | Carbon Film RES. | 1/6W 100 ohm  | UJ     | C7013     | K12171102        | Ceramic CAP.      | E             | 50WV 0.001uF  |       |           |              |    |          |  |
| R7012  | J02225680 | Carbon Film RES. | 1/6W 68 ohm   | UJ     | C7014     | K12171102        | Ceramic CAP.      | E             | 50WV 0.001uF  |       |           |              |    |          |  |
| R7013  | J02225101 | Carbon Film RES. | 1/6W 100 ohm  | UJ     | C7015     | K19149025        | Ceramic CAP.      |               | 25WV 0.1uF    |       |           |              |    |          |  |
| R7014  | J02225222 | Carbon Film RES. | 1/6W 2.2k ohm | UJ     | C7016     | K13179008        | Ceramic CAP.      | F             | 50WV 0.01uF   |       |           |              |    |          |  |
| R7015  | J01225222 | Carbon Film RES. | 1/6W 2.2k ohm | PJ     | C7017     | K13179008        | Ceramic CAP.      | F             | 50WV 0.01uF   |       |           |              |    |          |  |
| R7016  | J01225101 | Carbon Film RES. | 1/6W 100 ohm  | PJ     | C7018     | K13179008        | Ceramic CAP.      | F             | 50WV 0.01uF   |       |           |              |    |          |  |
| R7017  | J01225101 | Carbon Film RES. | 1/6W 100 ohm  | PJ     | C7019     | K05175150        | Ceramic CAP.      | RH            | 50WV 15pF     |       |           |              |    |          |  |
| R7018  | J01225682 | Carbon Film RES. | 1/6W 6.8k ohm | PJ     | C7020     | K02172050        | Ceramic CAP.      | CH            | 50WV 5pF      |       |           |              |    |          |  |
| R7019  | J01225223 | Carbon Film RES. | 1/6W 22k ohm  | PJ     | C7024     | K13179014        | Ceramic CAP.      | F             | 50WV 0.0047uF |       |           |              |    |          |  |
| R7025  | J02225221 | Carbon Film RES. | 1/6W 220 ohm  | UJ     | C7025     | K40129004        | AL. Electro. CAP. |               | 16WV 10uF     |       |           |              |    |          |  |
| R7026  | J02225223 | Carbon Film RES. | 1/6W 22k ohm  | UJ     | C7031     | K13179014        | Ceramic CAP.      | F             | 50WV 0.0047uF |       |           |              |    |          |  |
| R7027  | J02225682 | Carbon Film RES. | 1/6W 6.8k ohm | UJ     | C7032     | K13179014        | Ceramic CAP.      | F             | 50WV 0.0047uF |       |           |              |    |          |  |
| R7028  | J02225101 | Carbon Film RES. | 1/6W 100 ohm  | UJ     | C7033     | K00175470        | Ceramic CAP.      | SL            | 50WV 47pF     |       |           |              |    |          |  |
| R7029  | J02225103 | Carbon Film RES. | 1/6W 10k ohm  | UJ     | C7034     | K00175101        | Ceramic CAP.      | SL            | 50WV 100pF    |       |           |              |    |          |  |
| R7030  | J01225223 | Carbon Film RES. | 1/6W 22k ohm  | PJ     | C7035     | K12171102        | Ceramic CAP.      | E             | 50WV 0.001uF  |       |           |              |    |          |  |
| R7031  | J02225103 | Carbon Film RES. | 1/6W 10k ohm  | UJ     | C7036     | K12171102        | Ceramic CAP.      | E             | 50WV 0.001uF  |       |           |              |    |          |  |
| R7032  | J02225103 | Carbon Film RES. | 1/6W 10k ohm  | UJ     | C7037     | K40109002        | AL. Electro. CAP. |               | 10WV 47uF     |       |           |              |    |          |  |
| R7033  | J02245471 | Carbon Film RES. | 1/4W 470 ohm  | SJ     | C7038     | K22170805        | CAP. Chip.        | B             | 50WV 0.001uF  |       |           |              |    |          |  |
| R7034  | J02245471 | Carbon Film RES. | 1/2W 470 ohm  | TJ     | C7040     | K22170805        | CAP. Chip.        | B             | 50WV 0.001uF  |       |           |              |    |          |  |
| R7037  | J02225331 | Carbon Film RES. | 1/6W 330 ohm  | UJ     | C7041     | K40129004        | AL. Electro. CAP. |               | 16WV 10uF     |       |           |              |    |          |  |
| R7039  | J02225150 | Carbon Film RES. | 1/6W 15 ohm   | UJ     | C7042     | K12171102        | Ceramic CAP.      | E             | 50WV 0.001uF  |       |           |              |    |          |  |
| R7040  | J02225391 | Carbon Film RES. | 1/6W 390 ohm  | UJ     | C7043     | K40129004        | AL. Electro. CAP. |               | 16WV 10uF     |       |           |              |    |          |  |
| R7041  | J02225332 | Carbon Film RES. | 1/6W 3.3k ohm | UJ     | C7044     | K22170805        | CAP. Chip.        | B             | 50WV 0.001uF  |       |           |              |    |          |  |
| R7042  | J02225103 | Carbon Film RES. | 1/6W 10k ohm  | UJ     | C7045     | K22170805        | CAP. Chip.        | B             | 50WV 0.001uF  |       |           |              |    |          |  |
| R7043  | J02225101 | Carbon Film RES. | 1/6W 100 ohm  | UJ     | C7046     | K01225332        | Carbon Film RES.  | 1/6W 3.3k ohm | PJ            | C7047 | K02179001 | Ceramic CAP. | CK | 50WV 1pF |  |
| R7044  | J02225560 | Carbon Film RES. | 1/6W 56 ohm   | UJ     | C7048     | K12171102        | Ceramic CAP.      | E             | 50WV 0.001uF  |       |           |              |    |          |  |
| R7045  | J01225332 | Carbon Film RES. | 1/6W 3.3k ohm | PJ     | C7049     | K12171102        | Ceramic CAP.      | E             | 50WV 0.001uF  |       |           |              |    |          |  |
| R7046  | J02225103 | Carbon Film RES. | 1/6W 10k ohm  | UJ     | C7050     | K05172020        | Ceramic CAP.      | RK            | 50WV 2pF      |       |           |              |    |          |  |
| R7047  | J02225331 | Carbon Film RES. | 1/6W 330 ohm  | UJ     | C7051     | K12171102        | Ceramic CAP.      | E             | 50WV 0.001uF  |       |           |              |    |          |  |
| R7048  | J01225102 | Carbon Film RES. | 1/6W 1k ohm   | PJ     | C7052     | K12171102        | Ceramic CAP.      | E             | 50WV 0.001uF  |       |           |              |    |          |  |
| R7049  | J02225221 | Carbon Film RES. | 1/6W 220 ohm  | UJ     | C7053     | K13179010        | Ceramic CAP.      | F             | 50WV 0.022uF  |       |           |              |    |          |  |
| R7050  | J02225221 | Carbon Film RES. | 1/6W 220 ohm  | UJ     | C7055     | K13179008        | Ceramic CAP.      | F             | 50WV 0.01uF   |       |           |              |    |          |  |
| R7051  | J01225473 | Carbon Film RES. | 1/6W 47k ohm  | PJ     | C7056     | K00173080        | Ceramic CAP.      | SL            | 50WV 8pF      |       |           |              |    |          |  |
| R7052  | J02225331 | Carbon Film RES. | 1/6W 330 ohm  | UJ     | C7057     | K00175220        | Ceramic CAP.      | SL            | 50WV 22pF     |       |           |              |    |          |  |
| R7053  | J02225473 | Carbon Film RES. | 1/6W 47k ohm  | UJ     | C7058     | K05175220        | Ceramic CAP.      | RH            | 50WV 22pF     |       |           |              |    |          |  |
| R7054  | J02225152 | Carbon Film RES. | 1/6W 1.5k ohm | UJ     | C7060     | K00175470        | Ceramic CAP.      | SL            | 50WV 47pF     |       |           |              |    |          |  |
| R7055  | J02225102 | Carbon Film RES. | 1/6W 1k ohm   | UJ     | C7061     | K13179014        | Ceramic CAP.      | F             | 50WV 0.0047uF |       |           |              |    |          |  |
| R7056  | J02225102 | Carbon Film RES. | 1/6W 1k ohm   | UJ     | C7062     | K40109001        | AL. Electro. CAP. |               | 10WV 100uF    |       |           |              |    |          |  |
| R7060  | J01225101 | Carbon Film RES. | 1/6W 100 ohm  | PJ     | C7063     | K00173100        | Ceramic CAP.      | SL            | 50WV 10pF     |       |           |              |    |          |  |
| R7061  | J01225681 | Carbon Film RES. | 1/6W 680 ohm  | PJ     | C7064     | K00175220        | Ceramic CAP.      | SL            | 50WV 22pF     |       |           |              |    |          |  |
| R7062  | J01225473 | Carbon Film RES. | 1/6W 47k ohm  | PJ     | C7065     | K00175121        | Ceramic CAP.      | SL            | 50WV 120pF    |       |           |              |    |          |  |
| R7063  | J01225473 | Carbon Film RES. | 1/6W 47k ohm  | PJ     | C7066     | K12171102        | Ceramic CAP.      | E             | 50WV 0.001uF  |       |           |              |    |          |  |
| R7064  | J01225560 | Carbon Film RES. | 1/6W 56 ohm   | PJ     | C7067     | K40179013        | AL. Electro. CAP. |               | 50WV 1uF      |       |           |              |    |          |  |
| R7065  | J02225473 | Carbon Film RES. | 1/6W 47k ohm  | UJ     | C7068     | K70147105        | Tantalum CAP.     |               | 25WV 1uF      |       |           |              |    |          |  |
| R7066  | J02225333 | Carbon Film RES. | 1/6W 33k ohm  | UJ     | C7069     | K19149021        | Ceramic CAP.      |               | 25WV 0.047uF  |       |           |              |    |          |  |
| R7067  | J01225101 | Carbon Film RES. | 1/6W 100 ohm  | PJ     | C7070     | K12171102        | Ceramic CAP.      | E             | 50WV 0.001uF  |       |           |              |    |          |  |
| R7068  | J01225473 | Carbon Film RES. | 1/6W 47k ohm  | PJ     | C7071     | K00173070        | Ceramic CAP.      | SL            | 50WV 7pF      |       |           |              |    |          |  |
| R7069  | J02225331 | Carbon Film RES. | 1/6W 330 ohm  | UJ     |           |                  |                   |               |               |       |           |              |    |          |  |
| R7070  | J02225180 | Carbon Film RES. | 1/6W 18 ohm   | UJ     |           |                  |                   |               |               |       |           |              |    |          |  |
| R7071  | J02225331 | Carbon Film RES. | 1/6W 330 ohm  | UJ     |           |                  |                   |               |               |       |           |              |    |          |  |
| R7072  | J01225479 | Carbon Film RES. | 1/6W 4.7 ohm  | PJ     |           |                  |                   |               |               |       |           |              |    |          |  |
| R7074  | J01225331 | Carbon Film RES. | 1/6W 330 ohm  | PJ     |           |                  |                   |               |               |       |           |              |    |          |  |

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|        |           |                   |    |      |         |        |           |                   |                  |
|--------|-----------|-------------------|----|------|---------|--------|-----------|-------------------|------------------|
| C7072  | K00173070 | Ceramic CAP.      | SL | 50WV | 7pF     | T7022  | L0021165  | Coil              |                  |
| C7073  | K13179008 | Ceramic CAP.      | F  | 50WV | 0.01uF  | T7023  | L0021736  | Coil              |                  |
| C7074  | K13179008 | Ceramic CAP.      | F  | 50WV | 0.01uF  | T7024  | L0021736  | Coil              |                  |
| C7075  | K13179008 | Ceramic CAP.      | F  | 50WV | 0.01uF  |        |           |                   |                  |
| C7076  | K40129004 | AL. Electro. CAP. |    | 16WV | 10uF    | L7006  | L1190242  | M.RFC             | 0.47uH           |
| C7077  | K05172060 | Ceramic CAP.      | RH | 50WV | 6pF     | L7007  | L1190254  | M.RFC             | 0.47uH           |
| C7078  | K05172020 | Ceramic CAP.      | RK | 50WV | 2pF     | L7008  | L1190254  | M.RFC             | 0.47uH           |
| C7080  | K13179008 | Ceramic CAP.      | F  | 50WV | 0.01uF  | L7009  | L1190242  | M.RFC             | 0.47uH           |
| C7081  | K13179008 | Ceramic CAP.      | F  | 50WV | 0.01uF  | L7012  | L1190254  | M.RFC             | 4.7uH            |
| C7082  | K13179008 | Ceramic CAP.      | F  | 50WV | 0.01uF  | L7013  | L1190250  | M.RFC             | 2.2uH            |
| C7083  | K13179008 | Ceramic CAP.      | F  | 50WV | 0.01uF  | L7014  | L1190250  | M.RFC             | 2.2uH            |
| C7084  | K12171102 | Ceramic CAP.      | E  | 50WV | 0.001uF | L7015  | L1190270  | M.RFC             | 100uH            |
| C7085  | K05173080 | Ceramic CAP.      | RH | 50WV | 8pF     | L7016  | L1190252  | M.RFC             | 3.3uH            |
| C7086  | K00172050 | Ceramic CAP.      | SL | 50WV | 5pF     | L7017  | L0020886  | Coil              |                  |
| C7088  | K00175470 | Ceramic CAP.      | SL | 50WV | 47pF    | L7018  | L0021359  | Coil              |                  |
| C7089  | K12171102 | Ceramic CAP.      | E  | 50WV | 0.001uF | L7019  | L0020474  | Coil              |                  |
| C7090  | K00175470 | Ceramic CAP.      | SL | 50WV | 47pF    | L7020  | L0020852  | Coil              |                  |
| C7091  | K40129004 | AL. Electro. CAP. |    | 16WV | 10uF    | L7021  | L0021359  | Coil              |                  |
| C7092  | K12171102 | Ceramic CAP.      | E  | 50WV | 0.001uF | L7025  | L1190246  | M.RFC             | 1uH              |
| C7094  | K05175150 | Ceramic CAP.      | RH | 50WV | 15pF    | L7026  | L1190270  | M.RFC             | 100uH            |
| C7095  | K12171102 | Ceramic CAP.      | E  | 50WV | 0.001uF | L7027  | L1190244  | M.RFC             | 0.68uH           |
| C7096  | K40129004 | AL. Electro. CAP. |    | 16WV | 10uF    | L7028  | L1190289  | M.RFC             | 3.3uH            |
| C7097  | K12171102 | Ceramic CAP.      | E  | 50WV | 0.001uF | L7029  | L1190246  | M.RFC             | 1uH              |
| C7098  | K05172050 | Ceramic CAP.      | RH | 50WV | 5pF     |        |           |                   |                  |
| C7099  | K40129004 | AL. Electro. CAP. |    | 16WV | 10uF    |        |           |                   |                  |
| C7100  | K12171102 | Ceramic CAP.      | E  | 50WV | 0.001uF | CV7001 | L4020086  | Helical Resonator |                  |
| C7101  | K12171102 | Ceramic CAP.      | E  | 50WV | 0.001uF | CV7002 | L4020087  | Helical Resonator |                  |
| C7102  | K40129004 | AL. Electro. CAP. |    | 16WV | 10uF    | CV7003 | L4020081  | Helical Resonator |                  |
| C7103  | K13179008 | Ceramic CAP.      | F  | 50WV | 0.01uF  | CV7004 | L4020081  | Helical Resonator |                  |
| C7014  | K12171102 | Ceramic CAP.      | E  | 50WV | 0.001uF |        |           |                   |                  |
| C7017  | K40129004 | AL. Electro. CAP. |    | 16WV | 10uF    | FB7003 | L9190001  | Ferrite Beards    |                  |
| C7118  | K13179008 | Ceramic CAP.      | F  | 50WV | 0.01uF  | FB7004 | L9190001  | Ferrite Beards    |                  |
| C7119  | K12171102 | Ceramic CAP.      | E  | 50WV | 0.001uF | J7001  | P0090527  | Connector         |                  |
| C7120  | K13179008 | Ceramic CAP.      | F  | 50WV | 0.01uF  | J7002  | P0090530  | Connector         |                  |
| C7121  | K13179008 | Ceramic CAP.      | F  | 50WV | 0.01uF  | J7004  | P0090525  | Connector         |                  |
| C7122  | K13179008 | Ceramic CAP.      | F  | 50WV | 0.01uF  | J7005  | P1090210  | Connector         |                  |
| C7123  | K13179008 | Ceramic CAP.      | F  | 50WV | 0.01uF  | J7006  | P0090527  | Connector         |                  |
| C7124  | K13179008 | Ceramic CAP.      | F  | 50WV | 0.01uF  | J7009  | P1090210  | Connector         |                  |
| C7125  | K00173100 | Ceramic CAP.      | SL | 50WV | 10pF    | J7010  | P1090210  | Connector         |                  |
| C7126  | K12171102 | Ceramic CAP.      | E  | 50WV | 0.001uF | J7013  | P0090524  | Connector         |                  |
| C7127  | K12171102 | Ceramic CAP.      | E  | 50WV | 0.001uF | J7014  | P0090525  | Connector         |                  |
| C7128  | K40129004 | AL. Electro. CAP. |    | 16WV | 10uF    | J7015  | P0090525  | Connector         |                  |
| C7129  | K13179008 | Ceramic CAP.      | F  | 50WV | 0.01uF  | J7016  | P0090524  | Connector         |                  |
| C7130  | K13179008 | Ceramic CAP.      | F  | 50WV | 0.01uF  | J7017  | P0090524  | Connector         |                  |
| C7131  | K13179008 | Ceramic CAP.      | F  | 50WV | 0.01uF  | TP7001 | Q5000036  | TP-G              | MK-1095          |
| C7132  | K00172020 | Ceramic CAP.      | SL | 50WV | 2pF     |        |           |                   |                  |
| C7133  | K12172102 | Ceramic CAP.      | E  | 50WV | 0.001uF |        |           |                   |                  |
| C7134  | K12172102 | Ceramic CAP.      | E  | 50WV | 0.001uF |        |           |                   |                  |
| C7135  | K12172102 | Ceramic CAP.      | E  | 50WV | 0.001uF |        |           |                   |                  |
| C7136  | K12172102 | Ceramic CAP.      | E  | 50WV | 0.001uF |        |           |                   |                  |
| C7137  | K12172102 | Ceramic CAP.      | E  | 50WV | 0.001uF |        |           |                   |                  |
| C7138  | K12172102 | Ceramic CAP.      | E  | 50WV | 0.001uF |        |           |                   |                  |
| C7139  | K12172102 | Ceramic CAP.      | E  | 50WV | 0.001uF |        |           |                   |                  |
| C7140  | K12172102 | Ceramic CAP.      | E  | 50WV | 0.001uF |        |           |                   |                  |
| C7141  | K12172102 | Ceramic CAP.      | E  | 50WV | 0.001uF |        |           |                   |                  |
| C7144  | K05175180 | Ceramic CAP.      | RH | 50WV | 18pF    |        |           |                   |                  |
| C7145  | K05175100 | Ceramic CAP.      | RH | 50WV | 10pF    |        |           |                   |                  |
| C7146  | K22170805 | CAP. Chip         | B  | 50WV | 0.001uF | D7401  | G2090271  | Diode             | 1T33             |
| C7147  | K22170805 | CAP. Chip         | B  | 50WV | 0.001uF | D7402  | G2090271  | Diode             | 1T33             |
| C7148  | K22170235 | CAP. Chip         | CH | 50WV | 100pF   | R7401  | J02225102 | Carbon Film RES.  | 1/6W 1k ohm UJ   |
| C7149  | K22170235 | CAP. Chip         | CH | 50WV | 100pF   | R7402  | J02225330 | Carbon Film RES.  | 1/6W 33 ohm UJ   |
| C7150  | K22170235 | CAP. Chip         | CH | 50WV | 100pF   | R7403  | J02225221 | Carbon Film RES.  | 1/6W 220 ohm UJ  |
| C7152  | K22170235 | CAP. Chip         | CH | 50WV | 100pF   | R7404  | J02225332 | Carbon Film RES.  | 1/6W 3.3k ohm UJ |
| C7153  | K22141809 | CAP. Chip         | B  | 25WV | 0.1uF   | R7405  | J02225103 | Carbon Film RES.  | 1/6W 10k ohm UJ  |
| C7154  | K13179008 | Ceramic CAP.      | F  | 50WV | 0.01uF  | R7406  | J02225101 | Carbon Film RES.  | 1/6W 100 ohm UJ  |
| C7155  | K19149021 | Ceramic CAP.      |    | 25WV | 0.047uF | R7407  | J02225101 | Carbon Film RES.  | 1/6W 100 ohm UJ  |
| TC7002 | K91000059 | Variable CAP.     |    | 4pF  |         | C7401  | K19149021 | Ceramic CAP.      | 25WV 0.047uF     |
| TC7003 | K91000028 | Variable CAP.     |    | 10pF |         | C7402  | K12171102 | Ceramic CAP.      | E 50WV 0.001uF   |
| T7006  | L0021358  | Coil              |    |      |         | C7403  | K05173080 | Ceramic CAP.      | RH 50WV 8pF      |
| T7007  | L0021736  | Coil              |    |      |         | C7404  | K12171102 | Ceramic CAP.      | E 50WV 0.001uF   |
| T7008  | L0021740  | Coil              |    |      |         | C7405  | K40109015 | AL. Electro. CAP. | 10WV 100uF       |
| T7009  | L0021740  | Coil              |    |      |         | C7406  | K05173070 | Ceramic CAP.      | RH 50WV 7pF      |
| T7010  | L0021740  | Coil              |    |      |         | C7407  | K05173080 | Ceramic CAP.      | RH 50WV 8pF      |
| T7011  | L0021718  | Coil              |    |      |         | C7408  | K02172059 | Ceramic CAP.      | CK 50WV 0.5pF    |
| T7012  | L0021718  | Coil              |    |      |         | C7409  | K12171102 | Ceramic CAP.      | E 50WV 0.001uF   |
| T7019  | L0021740  | Coil              |    |      |         | TC7401 | K91000055 | Variable CAP.     | 6pF              |
| T7020  | L0021740  | Coil              |    |      |         |        |           |                   |                  |
| T7021  | L0021740  | Coil              |    |      |         |        |           |                   |                  |

## PARTS LIST

# PARTS LIST

|       |           |                                                                    |                    |                                                   |
|-------|-----------|--------------------------------------------------------------------|--------------------|---------------------------------------------------|
|       | C028883AE | PCB with Components:<br>Vers. H1, H2, H3<br>w/o 430MHz SHIFT UNIT, |                    | R8027 J01225470 Carbon Film RES. 1/6W 47 ohm PJ   |
|       | C028883AF | PCB with Components:<br>Vers. A1, A2<br>w/ 430MHz SHIFT UNIT,      |                    | R8028 J02225560 Carbon Film RES. 1/6W 56 ohm UJ   |
|       | C028883AG | PCB with Components:<br>Vers. B1, B2, B3<br>w/ 430MHz SHIFT UNIT,  |                    | R8030 J02225332 Carbon Film RES. 1/6W 3.3k ohm UJ |
|       | C028883AH | PCB with Components:<br>Vers. C1, C2, C3<br>w/ 430MHz SHIFT UNIT,  |                    | R8031 J02225222 Carbon Film RES. 1/6W 2.2k ohm UJ |
|       | C028883AJ | PCB with Components:<br>Vers. F<br>w/ 430MHz SHIFT UNIT,           |                    | R8032 J02225104 Carbon Film RES. 1/6W 100k ohm UJ |
|       | C028883AK | PCB with Components:<br>Vers. H1, H2, H3<br>w/ 430MHz SHIFT UNIT,  |                    | R8033 J01225472 Carbon Film RES. 1/6W 4.7k ohm PJ |
| Q8001 | G3805070F | FET                                                                | 2SK705F            | R8034 J02225223 Carbon Film RES. 1/6W 22k ohm UJ  |
| Q8002 | G3333550  | Transistor                                                         | 2SC3355            | R8035 J01225223 Carbon Film RES. 1/6W 22k ohm PJ  |
| Q8003 | G1090795  | IC                                                                 | MB504              | R8036 J02225681 Carbon Film RES. 1/6W 680 ohm UJ  |
| Q8004 | G1090707  | IC                                                                 | MC145156P          | R8037 J02225103 Carbon Film RES. 1/6W 10k ohm UJ  |
| Q8005 | G1090796  | IC                                                                 | MB505-16           | R8038 J02225272 Carbon Film RES. 1/6W 2.7k ohm UJ |
| Q8006 | G1090247  | IC                                                                 | TC9122P            | R8039 J02225470 Carbon Film RES. 1/6W 47 ohm UJ   |
| Q8007 | G3304580C | Transistor                                                         | 2SC458C            | R8040 J01225150 Carbon Film RES. 1/6W 15 ohm PJ   |
| Q8008 | G1090473  | IC                                                                 | TC5081AP           | R8041 J01225820 Carbon Film RES. 1/6W 82 ohm PJ   |
| Q8009 | G3305350B | Transistor                                                         | 2SC535B            | R8042 J01225680 Carbon Film RES. 1/6W 68 ohm PJ   |
| Q8010 | G3802410G | FET                                                                | 2SK241GR           | R8043 J01225820 Carbon Film RES. 1/6W 82 ohm PJ   |
| Q8011 | G3304580C | Transistor                                                         | 2SC458C            | R8044 J02225101 Carbon Film RES. 1/6W 100 ohm UJ  |
| Q8012 | G3305350B | Transistor                                                         | 2SC535B            | R8045 J02225331 Carbon Film RES. 1/6W 330 ohm UJ  |
| Q8013 | G3324071  | Transistor                                                         | 2SC2407A           | R8046 J02225682 Carbon Film RES. 1/6W 6.8k ohm UJ |
| Q8014 | G3305350B | Transistor                                                         | 2SC535B            | R8047 J02225223 Carbon Film RES. 1/6W 22k ohm UJ  |
| Q8015 | G1090084  | IC                                                                 | uPC78L05           | R8048 J02225150 Carbon Film RES. 1/6W 15 ohm UJ   |
| D8001 | G2090180  | Diode                                                              | FC53M-5            | R8049 J02225101 Carbon Film RES. 1/6W 100 ohm UJ  |
| D8002 | G2090180  | Diode                                                              | FC53M-5            | R8050 J02225102 Carbon Film RES. 1/6W 1k ohm UJ   |
| D8003 | G2090180  | Diode                                                              | FC53M-5            |                                                   |
| D8004 |           | See Model Chart                                                    |                    | C8001 K70167474 Tantalum CAP. 35WV 0.47uF         |
| D8005 |           | See Model Chart                                                    |                    | C8002 K19149021 Ceramic CAP. 25WV 0.047uF         |
| D8006 |           | See Model Chart                                                    |                    | C8003 K12171102 Ceramic CAP. E 50WV 0.001uF       |
| D8007 |           | See Model Chart                                                    |                    | C8004 K05175150 Ceramic CAP. RH 50WV 15pH         |
| D8008 |           | See Model Chart                                                    |                    | C8005 K12171102 Ceramic CAP. E 50WV 0.001uF       |
| D8010 |           | See Model Chart                                                    |                    | C8006 K40109001 AL. Electro. CAP. 10WV 100uF      |
| D8011 |           | See Model Chart                                                    |                    |                                                   |
| D8012 | G2090384  | Diode                                                              | HZ7C2              | C8007 K02175120 Ceramic CAP. CH 50WV 12pF         |
| X8001 | H0102818  | XTAL                                                               | HC-49T 61.46833MHZ | C8008 K05173080 Ceramic CAP. RH 50WV 8pF          |
| R8001 | J01225561 | Carbon Film RES.                                                   | 1/6W 560 ohm       | C8009 K02172059 Ceramic CAP. CK 50WV 0.5pF        |
| R8002 | J01225471 | Carbon Film RES.                                                   | 1/6W 470 ohm       | C8010 K13179014 Ceramic CAP. F 50WV 0.0047uF      |
| R8003 | J01225102 | Carbon Film RES.                                                   | 1/6W 1k ohm        | C8011 K13179014 Ceramic CAP. F 50WV 0.0047uF      |
| R8004 | J02225222 | Carbon Film RES.                                                   | 1/6W 2.2k ohm      | C8012 K00172020 Ceramic CAP. SL 50WV 2pF          |
| R8005 | J01225330 | Carbon Film RES.                                                   | 1/6W 33 ohm        | C8013 K00173070 Ceramic CAP. SL 50WV 7pF          |
| R8006 | J02225221 | Carbon Film RES.                                                   | 1/6W 220 ohm       | C8014 K12171102 Ceramic CAP. E 50WV 0.001uF       |
| R8007 | J02225332 | Carbon Film RES.                                                   | 1/6W 3.3k ohm      | C8015 K13179014 Ceramic CAP. F 50WV 0.0047uF      |
| R8008 | J01225103 | Carbon Film RES.                                                   | 1/6W 10k ohm       | C8016 K19149025 Ceramic CAP. 25WV 0.1uF           |
| R8009 | J02225101 | Carbon Film RES.                                                   | 1/6W 100 ohm       | C8017 K12171102 Ceramic CAP. E 50WV 0.001uF       |
| R8010 | J02225101 | Carbon Film RES.                                                   | 1/6W 100 ohm       | C8018 K12171102 Ceramic CAP. E 50WV 0.001uF       |
| R8011 | J02225560 | Carbon Film RES.                                                   | 1/6W 56 ohm        | C8019 K40109002 AL. Electro. CAP. 10WV 47uF       |
| R8012 | J01225222 | Carbon Film RES.                                                   | 1/6W 2.2k ohm      |                                                   |
| R8013 | J02225560 | Carbon Film RES.                                                   | 1/6W 56 ohm        | C8020 K19149025 Ceramic CAP. 25WV 0.1uF           |
| R8014 | J02225222 | Carbon Film RES.                                                   | 1/6W 2.2k ohm      | C8021 K13179008 Ceramic CAP. F 50WV 0.01uF        |
| R8015 | J02225104 | Carbon Film RES.                                                   | 1/6W 100k ohm      | C8022 K00175220 Ceramic CAP. SL 50WV 22pF         |
| R8016 | J02225471 | Carbon Film RES.                                                   | 1/6W 470 ohm       | C8023 K00175220 Ceramic CAP. SL 50WV 22pF         |
| R8017 | J01225101 | Carbon Film RES.                                                   | 1/6W 100 ohm       | C8024 K13179008 Ceramic CAP. F 50WV 0.01uF        |
| R8018 | J01225560 | Carbon Film RES.                                                   | 1/6W 56 ohm        | C8025 K00172020 Ceramic CAP. SL 50WV 2pF          |
| R8019 | J02225331 | Carbon Film RES.                                                   | 1/6W 330 ohm       | C8026 K00173070 Ceramic CAP. SL 50WV 7pF          |
| R8020 | J02225682 | Carbon Film RES.                                                   | 1/6W 6.8k ohm      | C8027 K12171102 Ceramic CAP. E 50WV 0.001uF       |
| R8021 | J02225223 | Carbon Film RES.                                                   | 1/6W 22k ohm       | C8028 K19149025 Ceramic CAP. 25WV 0.1uF           |
| R8022 | J02225560 | Carbon Film RES.                                                   | 1/6W 56 ohm        | C8029 K13179014 Ceramic CAP. F 50WV 0.0047uF      |
| R8023 | J02225471 | Carbon Film RES.                                                   | 1/6W 470 ohm       | C8030 K12171102 Ceramic CAP. E 50WV 0.001uF       |
| R8024 | J02225471 | Carbon Film RES.                                                   | 1/6W 470 ohm       | C8031 K12171102 Ceramic CAP. E 50WV 0.001uF       |
| R8025 | J02225223 | Carbon Film RES.                                                   | 1/6W 22k ohm       | C8032 K19149025 Ceramic CAP. 25WV 0.1uF           |
| R8026 | J02225682 | Carbon Film RES.                                                   | 1/6W 6.8k ohm      | C8033 K19149025 Ceramic CAP. 25WV 0.1uF           |
|       |           |                                                                    |                    | C8034 K40109001 AL. Electro. CAP. 10WV 100uF      |
|       |           |                                                                    |                    | C8035 K13179014 Ceramic CAP. F 50WV 0.0047uF      |
|       |           |                                                                    |                    | C8036 K13179014 Ceramic CAP. F 50WV 0.0047uF      |
|       |           |                                                                    |                    | C8037 K40129004 AL. Electro. CAP. 16WV 10uF       |
|       |           |                                                                    |                    | C8038 K12171102 Ceramic CAP. E 50WV 0.001uF       |
|       |           |                                                                    |                    | C8039 K13179008 Ceramic CAP. F 50WV 0.01uF        |
|       |           |                                                                    |                    | C8040 K13179008 Ceramic CAP. F 50WV 0.01uF        |
|       |           |                                                                    |                    | C8041 K40179011 AL. Electro. CAP. 50WV 3.3uF      |
|       |           |                                                                    |                    | C8042 K00173070 Ceramic CAP. SL 50WV 7pF          |
|       |           |                                                                    |                    | C8043 K13179008 Ceramic CAP. F 50WV 0.01uF        |
|       |           |                                                                    |                    | C8044 K00172020 Ceramic CAP. SL 50WV 2pF          |
|       |           |                                                                    |                    | C8045 K13179008 Ceramic CAP. F 50WV 0.01uF        |
|       |           |                                                                    |                    | C8046 K00175470 Ceramic CAP. SL 50WV 47pF         |
|       |           |                                                                    |                    | C8047 K13179014 Ceramic CAP. F 50WV 0.0047uF      |
|       |           |                                                                    |                    | C8048 K00175220 Ceramic CAP. SL 50WV 2pF          |
|       |           |                                                                    |                    | C8049 K19149015 Ceramic CAP. 25WV 0.015uF         |
|       |           |                                                                    |                    | C8050 K05172030 Ceramic CAP. RJ 50WV 3pF          |
|       |           |                                                                    |                    | C8051 K05175470 Ceramic CAP. RH 50WV 47pF         |
|       |           |                                                                    |                    | C8052 K05175560 Ceramic CAP. RH 50WV 56pF         |
|       |           |                                                                    |                    | C8053 K13179008 Ceramic CAP. F 50WV 0.01uF        |
|       |           |                                                                    |                    | C8054 K05175150 Ceramic CAP. RH 50WV 15pF         |
|       |           |                                                                    |                    | C8055 K05175470 Ceramic CAP. RH 50WV 47pF         |
|       |           |                                                                    |                    | C8056 K22171004 CAP. Chip F 50WV 0.01uF           |
|       |           |                                                                    |                    | C8057 K13179014 Ceramic CAP. F 50WV 0.0047uF      |
|       |           |                                                                    |                    | C8058 K05172030 Ceramic CAP. RJ 50WV 3pF          |

## PARTS LIST

## PARTS LIST

| 430MHz PA UNIT |           |                                   |                | CNTL UNIT  |           |                                               |        |
|----------------|-----------|-----------------------------------|----------------|------------|-----------|-----------------------------------------------|--------|
| Symbol No.     | Part No.  | Description                       | Device         | Symbol No. | Part No.  | Description                                   | Device |
|                | F2887105  | Printed Circuit Board             |                |            | F2891000B | Printed Circuit Board                         |        |
|                | C028875AA | PCB with Components:<br>10W Model |                |            | C028910AA | PCB with Components (w/o BURST Tone)          |        |
|                | C028875AB | PCB with Components:<br>25W Model |                |            | C028910AB | PCB with Components*<br>(w/1750Hz BURST Tone) |        |
|                |           |                                   |                |            | C028910AC | PCB with Components*<br>(w/1800Hz BURST Tone) |        |
| Q7501(10W)     | G1090858  | IC                                | M57716         |            |           |                                               |        |
| Q7501(25W)     | G1090790  | IC                                | M57745         |            |           |                                               |        |
| D7501          | G2090377  | Diode                             | MI308          |            |           |                                               |        |
| D7502          | G2090377  | Diode                             | MI308          |            |           |                                               |        |
| D7503          | G2090377  | Diode                             | MI308          |            |           |                                               |        |
| D7504          | G2090118  | Diode                             | 1SS97          |            |           |                                               |        |
| D7505          | G2090118  | Diode                             | 1SS97          |            |           |                                               |        |
| D7506(25W)     | G2090377  | Diode                             | MI308          |            |           |                                               |        |
| R7501          | J31309002 | RES.                              | 1W 0.1 ohm     |            |           |                                               |        |
| R7502(25W)     | J31309002 | RES.                              | 1W 0.1 ohm     |            |           |                                               |        |
| R7503          | J01275151 | Carbon Film RES.                  | 1/2W 150 ohm   | TJ         |           |                                               |        |
| R7504          | J02245103 | Carbon Film RES.                  | 1/4W 10k ohm   | SJ         |           |                                               |        |
| R7505          | J02245103 | Carbon Film RES.                  | 1/4W 10k ohm   | SJ         |           |                                               |        |
| R7506(10W)     | J01225101 | Carbon Film RES.                  | 1/6W 100 ohm   | PJ         |           |                                               |        |
| R7507(10W)     | J01225680 | Carbon Film RES.                  | 1/6W 68 ohm    | PJ         |           |                                               |        |
| R7508(10W)     | J01225680 | Carbon Film RES.                  | 1/6W 100 ohm   | PJ         |           |                                               |        |
| C7502          | K10176102 | Ceramic CAP.                      | B 50WV 0.001uF |            |           |                                               |        |
| C7503          | K13179008 | Ceramic CAP.                      | F 50WV 0.01uF  |            |           |                                               |        |
| C7504          | K40129004 | AL. Electro. CAP.                 |                | 16WV 10uF  |           |                                               |        |
| C7605          | K10176102 | Ceramic CAP.                      | B 50WV 0.00uF  |            |           |                                               |        |
| C7606          | K13179008 | Ceramic CAP.                      | F 50WV 0.01uF  |            |           |                                               |        |
| C7607          | K40129004 | AL. Electro. CAP.                 |                | 16WV 10uF  |           |                                               |        |
| C7608          | K10176102 | Ceramic CAP.                      | B 50WV 0.001uF |            |           |                                               |        |
| C7609          | K13178008 | Ceramic CAP.                      | F 50WV 0.01uF  |            |           |                                               |        |
| C7510          | K40129004 | AL. Electro. CAP.                 |                | 16WV 10uF  |           |                                               |        |
| C7511          | K02172050 | Ceramic CAP.                      | CH 50WV 5pF    |            |           |                                               |        |
| C7513          | K02173080 | Ceramic CAP.                      | CH 50WV 8pF    |            |           |                                               |        |
| C7514          | K02179001 | Ceramic CAP.                      | CK 50WV 1pF    |            |           |                                               |        |
| C7516(10W)     | K02173060 | Ceramic CAP.                      | CH 50WV 6pF    |            |           |                                               |        |
| C7516(25W)     | K02172040 | Ceramic CAP.                      | CH 50WV 4pF    |            |           |                                               |        |
| C7517          | K02179001 | Ceramic CAP.                      | CK 50WV 1pF    |            |           |                                               |        |
| C7518          | K02172030 | Ceramic CAP.                      | CJ 50WV 3pF    |            |           |                                               |        |
| C7519          | K02173060 | Ceramic CAP.                      | CH 50WV 6pF    |            |           |                                               |        |
| C7520          | K02173060 | Ceramic CAP.                      | CH 50WV 6pF    |            |           |                                               |        |
| C7521          | K02172030 | Ceramic CAP.                      | CJ 50WV 3pF    |            |           |                                               |        |
| C7522          | K02172040 | Ceramic CAP.                      | CH 50WV 4pF    |            |           |                                               |        |
| C7523(10W)     | K02173080 | Ceramic CAP.                      | CH 50WV 8pF    |            |           |                                               |        |
| C7523(25W)     | K02173100 | Ceramic CAP.                      | CH 50WV 10pF   |            |           |                                               |        |
| C7524(10W)     | K02173080 | Ceramic CAP.                      | CH 50WV 8pF    |            |           |                                               |        |
| C7524(25W)     | K02173100 | Ceramic CAP.                      | CH 50WV 10pF   |            |           |                                               |        |
| C7525          | K02173060 | Ceramic CAP.                      | CH 50WV 6pF    |            |           |                                               |        |
| C7526          | K02179001 | Ceramic CAP.                      | CK 50WV 1pF    |            |           |                                               |        |
| C7527          | K10176102 | Ceramic CAP.                      | B 50WV 0.001uF |            |           |                                               |        |
| C7528          | K10176102 | Ceramic CAP.                      | B 50WV 0.001uF |            |           |                                               |        |
| C7529          | K10176102 | Ceramic CAP.                      | B 50WV 0.001uF |            |           |                                               |        |
| C7530          | K10176102 | Ceramic CAP.                      | B 50WV 0.001uF |            |           |                                               |        |
| C7531          | K10176102 | Ceramic CAP.                      | B 50WV 0.001uF |            |           |                                               |        |
| C7532          | K10176102 | Ceramic CAP.                      | B 50WV 0.001uF |            |           |                                               |        |
| L7501          | L1020469  | RFC                               |                |            |           |                                               |        |
| L7502          | L1020469  | RFC                               |                |            |           |                                               |        |
| L7503          | L1020663  | RFC                               |                |            |           |                                               |        |
| L7504          | L0020840  | Coil                              |                |            |           |                                               |        |
| L7505          | L0020840  | Coil                              |                |            |           |                                               |        |
| L7506          | L0020901  | Coil                              |                |            |           |                                               |        |
| L7507          | L0020901  | Coil                              |                |            |           |                                               |        |
| L7508          | L0020840  | Coil                              |                |            |           |                                               |        |
| L7509          | L0020840  | Coil                              |                |            |           |                                               |        |
| L7510          | L1190246  | M. RFC                            | 1uH            |            |           |                                               |        |
| L7511          | L1190246  | M. RFC                            | 1uH            |            |           |                                               |        |
|                | Q5000036  | TP-G                              | MK-1095        |            |           |                                               |        |
|                | Q6000001  | Terminal Strip                    | (10W Model)    |            |           |                                               |        |
|                | R6047250  | Booster Spacer                    |                |            |           |                                               |        |
|                | S6000138  | Beads                             | (25W Model)    |            |           |                                               |        |

# PARTS LIST

|         |           |                  |                   |    |         |           |                   |                |    |
|---------|-----------|------------------|-------------------|----|---------|-----------|-------------------|----------------|----|
| X1001   | H0102811  | XTAL             | HC-49/T 5.5296MHz |    | R1089   | J01225333 | Carbon Film RES.  | 1/6W 33k ohm   | UJ |
| X1002   | H0102549  | XTAL             | HC-49/U 3.6864MHz |    | R1091   | J02225103 | Carbon Film RES.  | 1/6W 10k ohm   | UJ |
| X1003*  | H0101982  | XTAL             | HC-18/T 7.168MHz  |    | R1092   | J02225105 | Carbon Film RES.  | 1/6W 1M ohm    | UJ |
| X1003°  | H0101983  | XTAL             | HC-18/T 7.3728MHz |    | R1093   | J02225223 | Carbon Film RES.  | 1/6W 22k ohm   | UJ |
| R1001   | J01275479 | Carbon Film RES. | 1/2W 4.7 ohm      | TJ | R1094** | J02225104 | Carbon Film RES.  | 1/6W 100k ohm  | UJ |
| R1002   | J02225101 | Carbon Film RES. | 1/6W 100 ohm      | UJ | C1001   | K40129043 | AL. Electro. CAP. | 16WV 330uF     |    |
| R1003   | J02225222 | Carbon Film RES. | 1/6W 2.2k ohm     | UJ | C1002   | K40129043 | AL. Electro. CAP. | 16WV 330uF     |    |
| R1004   | J02225101 | Carbon Film RES. | 1/6W 100 ohm      | UJ | C1003   | K40129008 | AL. Electro. CAP. | 16WV 33uF      |    |
| R1006   | J02225222 | Carbon Film RES. | 1/6W 2.2k ohm     | UJ | C1004   | K40129043 | AL. Electro. CAP. | 16WV 330uF     |    |
| R1007   | J02225221 | Carbon Film RES. | 1/6W 220 ohm      | UJ | C1005   | K19149021 | Ceramic CAP.      | 25WV 0.047uF   |    |
| R1008   | J02225473 | Carbon Film RES. | 1/6W 47k ohm      | UJ | C1006   | K19149013 | Ceramic CAP.      | 25WV 0.01uF    |    |
| R1009   | J02225472 | Carbon Film RES. | 1/6W 4.7k ohm     | UJ | C1007   | K40179014 | AL. Electro. CAP. | 50WV 10uF      |    |
| R1010   | J02225472 | Carbon Film RES. | 1/6W 4.7k ohm     | UJ | C1008   | K13179008 | Ceramic CAP.      | F 50WV 0.01uF  |    |
| R1011   | J02225223 | Carbon Film RES. | 1/6W 22k ohm      | UJ | C1009   | K40129004 | AL. Electro. CAP. | 16WV 10uF      |    |
| R1012   | J02225472 | Carbon Film RES. | 1/6W 4.7k ohm     | UJ | C1010   | K12171102 | Ceramic CAP.      | E 50WV 0.001uF |    |
| R1013   | J02225472 | Carbon Film RES. | 1/6W 4.7k ohm     | UJ | C1011   | K40129049 | AL. Electro. CAP. | 16WV 470uF     |    |
| R1014   | J02225103 | Carbon Film RES. | 1/6W 10k ohm      | UJ | C1012   | K40149001 | AL. Electro. CAP. | 25WV 4.7uF     |    |
| R1016   | J02225472 | Carbon Film RES. | 1/6W 4.7k ohm     | UJ | C1013   | K40109001 | AL. Electro. CAP. | 10WV 100uF     |    |
| R1017   | J40900163 | Block RES.       | 1/8W 10k ohm      |    | C1014   | K19149021 | Ceramic CAP.      | 25WV 0.047uF   |    |
| R1018   | J02225472 | Carbon Film RES. | 1/6W 4.7k ohm     | UJ | C1015   | K70107475 | Tantalum CAP.     | 10WV 4.7uF     |    |
| R1019   | J02225103 | Carbon Film RES. | 1/6W 10k ohm      | UJ | C1016   | K12171102 | Ceramic CAP.      | E 50WV 0.001uF |    |
| R1020   | J02225103 | Carbon Film RES. | 1/6W 10k ohm      | UJ | C1017   | K40129004 | AL. Electro. CAP. | 16WV 10uF      |    |
| R1021   | J02225333 | Carbon Film RES. | 1/6W 33k ohm      | UJ | C1018   | K19149021 | Ceramic CAP.      | 25WV 0.0047uF  |    |
| R1022   | J02225333 | Carbon Film RES. | 1/6W 33k ohm      | UJ | C1019   | K00175150 | Ceramic CAP.      | 50WV 15pF      |    |
| R1023   | J02225333 | Carbon Film RES. | 1/6W 33k ohm      | UJ | C1020   | K00175150 | Ceramic CAP.      | 50WV 15pF      |    |
| R1024   | J02225333 | Carbon Film RES. | 1/6W 33k ohm      | UJ | C1022   | K00175101 | Ceramic CAP.      | 50WV 100pF     |    |
| R1025   | J02225104 | Carbon Film RES. | 1/6W 100k ohm     | UJ | C1023   | K19149001 | Ceramic CAP.      | 25WV 0.001uF   |    |
| R1026   | J02225104 | Carbon Film RES. | 1/6W 100k ohm     | UJ | C1024   | K19149001 | Ceramic CAP.      | 25WV 0.001uF   |    |
| R1027   | J02225104 | Carbon Film RES. | 1/6W 100k ohm     | UJ | C1025   | K00175101 | Ceramic CAP.      | SL 50WV 100pF  |    |
| R1028   | J02225104 | Carbon Film RES. | 1/6W 100k ohm     | UJ | C1026   | K00175101 | Ceramic CAP.      | SL 50WV 100pF  |    |
| R1029   | J02225334 | Carbon Film RES. | 1/6W 330k ohm     | UJ | C1027   | K19149001 | Ceramic CAP.      | 25WV 0.001uF   |    |
| R1030   | J02225334 | Carbon Film RES. | 1/6W 330k ohm     | UJ | C1028   | K19149001 | Ceramic CAP.      | 25WV 0.001uF   |    |
| R1031   | J02225334 | Carbon Film RES. | 1/6W 330k ohm     | UJ | C1029   | K19149001 | Ceramic CAP.      | 25WV 0.001uF   |    |
| R1032   | J02225334 | Carbon Film RES. | 1/6W 330k ohm     | UJ | C1030   | K19149001 | Ceramic CAP.      | 25WV 0.001uF   |    |
| R1033   | J02225473 | Carbon Film RES. | 1/6W 47k ohm      | UJ | C1031   | K19149021 | Ceramic CAP.      | 25WV 0.047uF   |    |
| R1034   | J02225823 | Carbon Film RES. | 1/6W 82k ohm      | UJ | C1032   | K00175470 | Ceramic CAP.      | SL 25WV 47pF   |    |
| R1035   | J02225823 | Carbon Film RES. | 1/6W 82k ohm      | UJ | C1033   | K19149021 | Ceramic CAP.      | 25WV 0.047uF   |    |
| R1036   | J02225823 | Carbon Film RES. | 1/6W 82k ohm      | UJ | C1034   | K19149021 | Ceramic CAP.      | 25WV 0.047uF   |    |
| R1037   | J02225823 | Carbon Film RES. | 1/6W 82k ohm      | UJ | C1035   | K00175330 | Ceramic CAP.      | SL 50WV 33pF   |    |
| R1038   | J40900031 | Block RES.       | 1/8W 4.7k ohm     |    | C1036   | K00175330 | Ceramic CAP.      | SL 50WV 33pF   |    |
| R1039   | J02225103 | Carbon Film RES. | 1/6W 10k ohm      | UJ | C1037   | K70167105 | Tantalum CAP.     | 35WV 1uF       |    |
| R1040   | J40900165 | Block RES.       | 1/8W 10k ohm      |    | C1038   | K19149005 | Ceramic CAP.      | 25WV 0.0022uF  |    |
| R1041   | J02225103 | Carbon Film RES. | 1/6W 10k ohm      | UJ | C1039   | K19149013 | Ceramic CAP.      | 25WV 0.01uF    |    |
| R1042   | J02225104 | Carbon Film RES. | 1/6W 100k ohm     | UJ | C1040   | K19149021 | Ceramic CAP.      | 25WV 0.047uF   |    |
| R1043   | J02225472 | Carbon Film RES. | 1/6W 4.7k ohm     | UJ | C1041   | K19149021 | Ceramic CAP.      | 25WV 0.047uF   |    |
| R1044   | J02225222 | Carbon Film RES. | 1/6W 2.2k ohm     | UJ | C1042   | K40179013 | AL. Electro. CAP. | 50WV 1uF       |    |
| R1045   | J02225331 | Carbon Film RES. | 1/6W 330 ohm      | UJ | C1043** | K70147105 | Tantalum CAP.     | 25WV 1uF       |    |
| R1046   | J02225472 | Carbon Film RES. | 1/6W 4.7k ohm     | UJ | C1044   | K19149021 | Ceramic CAP.      | 25WV 0.047uF   |    |
| R1047   | J02225681 | Carbon Film RES. | 1/6W 680 ohm      | UJ | C1045** | K12171102 | Ceramic CAP.      | E 50WV 0.001uF |    |
| R1048   | J40900035 | Block RES.       | 1/8W 10k ohm      |    | C1046** | K00175330 | Ceramic CAP.      | SL 50WV 33pF   |    |
| R1049   | J02225472 | Carbon Film RES. | 1/6W 4.7k ohm     | UJ | C1047** | K00175330 | Ceramic CAP.      | SL 50WV 33pF   |    |
| R1050   | J40900164 | Block RES.       | 1/8W 4.7k ohm     |    | C1048** | K19149013 | Ceramic CAP.      | 25WV 0.01uF    |    |
| R1052   | J02225473 | Carbon Film RES. | 1/6W 47k ohm      | UJ | C1049** | K19149013 | Ceramic CAP.      | 25WV 0.01uF    |    |
| R1053   | J02225273 | Carbon Film RES. | 1/6W 27k ohm      | UJ | C1050** | K19149021 | Ceramic CAP.      | 25WV 0.047uF   |    |
| R1054   | J02225104 | Carbon Film RES. | 1/6W 100k ohm     | UJ | C1051** | K40129004 | AL. Electro. CAP. | 16WV 10uF      |    |
| R1057   | J02225103 | Carbon Film RES. | 1/6W 10k ohm      | UJ | C1052   | K19149023 | Ceramic CAP.      | 25WV 0.068uF   |    |
| R1058   | J02225104 | Carbon Film RES. | 1/6W 100k ohm     | UJ | C1053   | K19149013 | Ceramic CAP.      | 25WV 0.01uF    |    |
| R1059   | J02225124 | Carbon Film RES. | 1/6W 120k ohm     | UJ | C1054   | K40179016 | AL. Electro. CAP. | 50WV 0.1uF     |    |
| R1060** | J02225473 | Carbon Film RES. | 1/6W 47k ohm      | UJ | C1055   | K19149013 | Ceramic CAP.      | 25WV 0.01uF    |    |
| R1061** | J02225473 | Carbon Film RES. | 1/6W 47k ohm      | UJ | C1056   | K00175101 | Ceramic CAP.      | SL 50WV 100pF  |    |
| R1062** | J02225105 | Carbon Film RES. | 1/6W 1M ohm       | UJ | C1057   | K40129004 | AL. Electro. CAP. | 16WV 10uF      |    |
| R1063** | J02225223 | Carbon Film RES. | 1/6W 22k ohm      | UJ | C1058   | K40129004 | AL. Electro. CAP. | 16WV 10uF      |    |
| R1064** | J02225103 | Carbon Film RES. | 1/6W 10k ohm      | UJ | C1059   | K12171102 | Ceramic CAP.      | E 50WV 0.001uF |    |
| R1066** | J02225274 | Carbon Film RES. | 1/6W 270k ohm     | PJ | C1060   | K70167474 | Tantalum CAP.     | 35WV 0.47uF    |    |
| R1067** | J02225332 | Carbon Film RES. | 1/6W 3.3k ohm     | UJ | C1061   | K12171102 | Ceramic CAP.      | 25WV 0.001uF   |    |
| R1068** | J02225222 | Carbon Film RES. | 1/6W 2.2k ohm     | UJ | C1062   | K19149001 | Ceramic CAP.      | 25WV 0.001uF   |    |
| R1069   | J02225224 | Carbon Film RES. | 1/6W 220k ohm     | UJ | C1063   | K19149001 | Ceramic CAP.      | 25WV 0.001uF   |    |
| R1070   | J02225102 | Carbon Film RES. | 1/6W 1k ohm       | UJ | C1064   | K70137225 | Tantalum CAP.     | 20WV 2.2uF     |    |
| R1071   | J02225104 | Carbon Film RES. | 1/6W 100k ohm     | UJ | C1066   | K19149005 | Ceramic CAP.      | 25WV 0.0022uF  |    |
| R1072   | J02225683 | Carbon Film RES. | 1/6W 68k ohm      | UJ | C1067   | K22170227 | CAP. Chip         | CH 50WV 47pF   |    |
| R1073   | J02225683 | Carbon Film RES. | 1/6W 68k ohm      | UJ | C1068   | K22170227 | CAP. Chip         | CH 50WV 47pF   |    |
| R1074   | J02225103 | Carbon Film RES. | 1/6W 10k ohm      | UJ |         |           |                   |                |    |
| R1075   | J02225332 | Carbon Film RES. | 1/6W 3.3k ohm     | UJ |         |           |                   |                |    |
| R1076   | J02225104 | Carbon Film RES. | 1/6W 100k ohm     | UJ |         |           |                   |                |    |
| R1077   | J02225103 | Carbon Film RES. | 1/6W 10k ohm      | UJ |         |           |                   |                |    |
| R1078   | J02225472 | Carbon Film RES. | 1/6W 4.7k ohm     | UJ |         |           |                   |                |    |
| R1079   | J02225472 | Carbon Film RES. | 1/6W 4.7k ohm     | UJ |         |           |                   |                |    |
| R1080   | J02225154 | Carbon Film RES. | 1/6W 150k ohm     | UJ |         |           |                   |                |    |
| R1081   | J02225155 | Carbon Film RES. | 1/6W 1.5M ohm     | UJ |         |           |                   |                |    |
| R1082   | J02225473 | Carbon Film RES. | 1/6W 47k ohm      | UJ |         |           |                   |                |    |
| R1083   | J02225104 | Carbon Film RES. | 1/6W 100k ohm     | UJ |         |           |                   |                |    |
| R1084   | J02225332 | Carbon Film RES. | 1/6W 3.3k ohm     | UJ |         |           |                   |                |    |
| R1085   | J02225103 | Carbon Film RES. | 1/6W 10k ohm      | UJ |         |           |                   |                |    |
| R1086   | J02225332 | Carbon Film RES. | 1/6W 3.3k ohm     | UJ |         |           |                   |                |    |
| R1087   | J02225103 | Carbon Film RES. | 1/6W 10k ohm      | UJ |         |           |                   |                |    |
| R1088   | J02225473 | Carbon Film RES. | 1/6W 47k ohm      | UJ |         |           |                   |                |    |

## PARTS LIST

| T1001          | L3030125  | Trans                 | MPS-162       | C2002      | K70127225 | Tantalum CAP.         |          | 16WV    | 2.2uF   |
|----------------|-----------|-----------------------|---------------|------------|-----------|-----------------------|----------|---------|---------|
| BZ1001         | M4290004A | Buzzer                | PZS-22K       | C2004      | K12171102 | Ceramic CAP.          | E        | 50WV    | 0.001uF |
| S1001          | N6090051  | Slide Switch          | SSS-212229    | C2005      | K19149013 | Ceramic CAP.          |          | 25WV    | 0.01uF  |
| S1002          | N6090051  | Slide Switch          | SSS-212229    | C2007      | K12171102 | Ceramic CAP.          | E        | 50WV    | 0.001uF |
| J1001          | P0090527  | Connector             |               | C2008      | K70167474 | Tantalum CAP.         |          | 35WV    | 0.47uF  |
| J1002          | P0090535  | Connector             |               | S2001      | N5090028  | Tact Switch           |          |         |         |
| J1003          | P0090531  | Connector             |               | S2002      | N5090028  | Tact Switch           |          |         |         |
| J1004          | P0090527  | Connector             |               | S2003      | N5090028  | Tact Switch           |          |         |         |
| J1005          | P0090532  | Connector             |               | S2004      | N5090028  | Tact Switch           |          |         |         |
| J1006          | P0090532  | Connector             |               | S2005      | N5090028  | Tact Switch           |          |         |         |
| J1007          | P0090532  | Connector             |               | S2006      | N5090028  | Tact Switch           |          |         |         |
| J1008          | P0090532  | Connector             |               | S2007      | N5090028  | Tact Switch           |          |         |         |
| J1009          | P0090524  | Connector             |               | S2008      | N5090028  | Tact Switch           |          |         |         |
| J1010          | P0090193  | Connector             |               | S2009      | N5090028  | Tact Switch           |          |         |         |
| J1011          | P0090525  | Connector             |               | S2010      | N5090028  | Tact Switch           |          |         |         |
| J1012          | P0090525  | Connector             |               | S2011      | N5090028  | Tact Switch           |          |         |         |
| J1013          | P0090534  | Connector             |               | S2012      | N5090028  | Tact Switch           |          |         |         |
| J1014          | P0090531  | Connector             |               | S2013      | N5090028  | Tact Switch           |          |         |         |
| J1015          | P0090525  | Connector             |               | S2014      | N5090028  | Tact Switch           |          |         |         |
| J1016          | P0090527  | Connector             |               | S2015      | N5090028  | Tact Switch           |          |         |         |
| J1017          | P0090524  | Connector             |               | S2016      | N5090028  | Tact Switch           |          |         |         |
| J1018          | P0090525  | Connector             |               | S2017      | N5090028  | Tact Switch           |          |         |         |
| J1019          | P1090250  | Connector             |               | S2018      | N5090028  | Tact Switch           |          |         |         |
| J1020          | P1090419  | Connector             |               | S2019      | N5090028  | Tact Switch           |          |         |         |
| BAT1001        | Q9000385  | Lithium Battery       | CR2032        | S2020      | N5090028  | Tact Switch           |          |         |         |
|                | R0087404A | AF Heatsink           |               | S2021      | N5090028  | Tact Switch           |          |         |         |
|                | R0102810  | Nut Board             |               | S2022      | N5090028  | Tact Switch           |          |         |         |
|                | R7118700  | Fiber                 |               | S2023      | N5090028  | Tact Switch           |          |         |         |
|                |           |                       |               | S2024      | N5090028  | Tact Switch           |          |         |         |
|                |           |                       |               | S2025      | N5090028  | Tact Switch           |          |         |         |
|                |           |                       |               | S2026      | N5090028  | Tact Switch           |          |         |         |
|                |           |                       |               | S2027      | N5090028  | Tact Switch           |          |         |         |
|                |           |                       |               | S2028      | N5090028  | Tact Switch           |          |         |         |
|                |           |                       |               | S2029      | N5090028  | Tact Switch           |          |         |         |
|                |           |                       |               | S2030      | N4090082  | Push Switch           |          |         |         |
|                |           |                       |               | S2031      | N4090082  | Push Switch           |          |         |         |
|                |           |                       |               | S2032      | N4090082  | Push Switch           |          |         |         |
| DISPLAY UNIT   |           |                       |               |            |           |                       |          |         |         |
| Symbol No.     | Part No.  | Description           | Device        |            |           |                       |          |         |         |
|                | F2889101A | Printed Circuit Board |               | J2001      | P0090535  | Connector             |          |         |         |
|                | C028891AB | PCB with Components   |               | J2002      | P0090527  | Connector             |          |         |         |
| Q2001          | G1090857  | IC                    | HD614022FH35  | J2003      | P0090528  | Connector             |          |         |         |
| Q2002          | G3090079  | Transistor            | BA1A4P        | J2004      | P0090526  | Connector             |          |         |         |
| Q2003          | G3090079  | Transistor            | BA1A4P        | J2005      | P0090528  | Connector             |          |         |         |
| Q2004          | G3090079  | Transistor            | BA1A4P        | J2007      | P0090524  | Connector             |          |         |         |
| Q2005          | G1090508  | IC                    | LR4087        | J2008      | P0090528  | Connector             |          |         |         |
| Q2006          | G3090075  | Transistor            | BN1A4P        | J2009      | P0090525  | Connector             |          |         |         |
| D2001          | G2090267  | LED                   | SG-238D       | J2010      | P0090531  | Connector             |          |         |         |
| D2002          | G2090267  | LED                   | SG-238D       | J2011      | P0090525  | Connector             |          |         |         |
| D2003          | G2090267  | LED                   | SG-238D       | P2001      | T9204841  | CW-ASSY               |          |         |         |
| D2004          | G2090267  | LED                   | SG-238D       |            | R7057851  | Cushion               |          |         |         |
| D2007          | G2090362  | LED                   | LT-9002D      |            |           |                       |          |         |         |
| D2008          | G2090363  | LED                   | LT-9002N      | REG UNIT   |           |                       |          |         |         |
| D2010          | G2090408  | Diode                 | 1SS270        | Symbol No. | Part No.  | Description           | Device   |         |         |
| D2011          | G2090408  | Diode                 | 1SS270        |            | F2890108  | Printed Circuit Board |          |         |         |
| D2012          | G2090408  | Diode                 | 1SS270        |            | C028890AA | PCB with Components   |          |         |         |
| D2013          | G2090408  | Diode                 | 1SS270        | C801       | K40129011 | AL. Electro. CAP.     | 16WV     | 1000uF  |         |
| D2014          | G2090408  | Diode                 | 1SS270        | C802       | K40129004 | AL. Electro. CAP.     | 16WV     | 10uF    |         |
| D2015          | G2090408  | Diode                 | 1SS270        | C803       | K12171102 | Ceramic CAP.          | 50WV     | 0.001uF |         |
| D2016          | G2090408  | Diode                 | 1SS270        | C804       | K12171102 | Ceramic CAP.          | 50WV     | 0.001uF |         |
| DS2001         | G6090063  | FCD                   | FIP13EN8      | C805       | K40179016 | AL. Electro. CAP.     | 50WV     | 0.1uF   |         |
| X2001          | H7900380  | Ceramic OSC           | CST4.00-MG    | L801       | L2190002  | AFC                   | 100uH    |         |         |
| X2002          | H7900390  | Ceramic OSC           | CST3.58-MG    | TP801      | Q5000037  | TP-H                  | MK-10160 |         |         |
| R2001          | J01225821 | Carbon Film RES.      | 1/6W 820 ohm  | TP802      | Q5000037  | TP-H                  | MK-10160 |         |         |
| R2002          | J01225821 | Carbon Film RES.      | 1/6W 820 ohm  | TP803      | Q5000037  | TP-H                  | MK-10160 |         |         |
| R2003          | J01225821 | Carbon Film RES.      | 1/6W 820 ohm  | TP804      | Q5000037  | TP-H                  | MK-10160 |         |         |
| R2004          | J01225821 | Carbon Film RES.      | 1/6W 820 ohm  | TP805      | Q5000037  | TP-H                  | MK-10160 |         |         |
| R2009          | J02225681 | Carbon Film RES.      | 1/6W 680 ohm  |            |           |                       |          |         |         |
| R2010          | J02225681 | Carbon Film RES.      | 1/6W 680 ohm  |            |           |                       |          |         |         |
| R2011          | J02225151 | Carbon Film RES.      | 1/6W 150 ohm  |            |           |                       |          |         |         |
| R2012          | J02225561 | Carbon Film RES.      | 1/6W 560 ohm  |            |           |                       |          |         |         |
| R2013          | J02225561 | Carbon Film RES.      | 1/6W 560 ohm  |            |           |                       |          |         |         |
| R2014          | J02225121 | Carbon Film RES.      | 1/6W 120 ohm  |            |           |                       |          |         |         |
| R2016          | J01225473 | Carbon Film RES.      | 1/6W 47k ohm  |            |           |                       |          |         |         |
| R2017          | J02225102 | Carbon Film RES.      | 1/6W 1k ohm   |            |           |                       |          |         |         |
| R2018          | J02225222 | Carbon Film RES.      | 1/6W 2,2k ohm |            |           |                       |          |         |         |
| R2019          | J02225104 | Carbon Film RES.      | 1/6W 100k ohm |            |           |                       |          |         |         |
| R2020          | J02225472 | Carbon Film RES.      | 1/6W 4.7k ohm |            |           |                       |          |         |         |
| C2001          | K19149021 | Ceramic CAP.          |               |            |           |                       |          |         |         |
|                |           |                       | 25WV 0.047uF  |            |           |                       |          |         |         |
| PROTECTOR UNIT |           |                       |               | Symbol No. | Part No.  | Description           | Device   |         |         |
|                |           |                       |               |            | F2889102  | Printed Circuit Board |          |         |         |
|                |           |                       |               |            | C028892AA | PCB with Components   |          |         |         |

## PARTS LIST

| D701       | G2090232  | Diode                         | S11B             |      |           |                       |                             |                  |
|------------|-----------|-------------------------------|------------------|------|-----------|-----------------------|-----------------------------|------------------|
| ZNR701     | Q9000381  | Surge Absorber                | ERZ-C10DK471     | J201 | P0090528  | Connector             |                             |                  |
| ZNR702     | Q9000382  | Surge Absorber                | ERZ-C10DK681     | J202 | P0090524  | Connector             |                             |                  |
| ZNR703     | Q9000382  | Surge Absorber                | ERZ-C10DK681     | J203 | P0090526  | Connector             |                             |                  |
| F701       | Q0000027  | Miniature Fuse                | MF51 5A          | J204 | P0090525  | Connector             |                             |                  |
| F702       | Q0000027  | Miniature Fuse                | MF51 5A          | J205 | P0090528  | Connector             |                             |                  |
|            | P2000024  | Fuse Holder                   |                  |      |           |                       |                             |                  |
|            |           |                               |                  |      |           |                       |                             |                  |
|            |           |                               |                  |      |           |                       |                             |                  |
| VR-A UNIT  |           |                               |                  |      |           |                       |                             |                  |
| Symbol No. | Part No.  | Description                   | Device           |      |           |                       |                             |                  |
|            | F2890104A | Printed Circuit Board         |                  |      | F2890109  | Printed Circuit Board |                             |                  |
|            | C028904AA | PCB with Components           |                  |      | C028909AA | PCB with Components   |                             |                  |
| R402       | J01225103 | Carbon Film RES.              | 1/6W 10K ohm     | PJ   | R901      | J07225222             | Carbon Film RES.            | 1/6W 2.2k ohm PJ |
| R403       | J02245103 | Carbon Film RES.              | 1/4W 10K ohm     | SJ   | VR901     | J62800101             | Potentiometer (SHIFT/NOTCH) | 10KB/10KB        |
| R404       | J02245101 | Carbon Film RES.              | 1/4W 100 ohm     | SJ   | J901      | P0090524              | Connector                   |                  |
| R405       | J02245101 | Carbon Film RES.              | 1/4W 100 ohm     | SJ   | J902      | P0090525              | Connector                   |                  |
| VR401      | J62800100 | Potentiometer (AF/RF)         | 10KA/10KC        |      |           |                       |                             |                  |
| VR402      | J63800008 | Potentiometer (SQL/TONE)      | 50KB, 10KB/10KB  |      |           |                       |                             |                  |
| VR403      | J63800007 | Potentiometer (MIC/DRIVE)     | 10KA/50KB, 10KB  |      |           |                       |                             |                  |
| J401       | P0090524  | Connector                     |                  |      | D301      | G2090408              | Diode                       | 1SS270           |
| J402       | P0090525  | Connector                     |                  |      | R301      | J02245330             | Carbon Film RES.            | 1/4W 33 ohm SJ   |
| J403       | P0090525  | Connector                     |                  |      | S301      | N4090109              | Push Switch                 |                  |
| J404       | P0090526  | Connector                     |                  |      | J301      | P0090525              | Connector                   |                  |
| J405       | P0090529  | Connector                     |                  |      | J302      | P0090528              | Connector                   |                  |
| J406       | P0090524  | Connector                     |                  |      | J303      | P0090529              | Connector                   |                  |
| J407       | P0090524  | Connector                     |                  |      | TP301     | Q5000036              | TP-G                        | MK-1095          |
| J408       | P0090524  | Connector                     |                  |      | TP302     | Q5000036              | TP-G                        | MK-1095          |
| J409       | P1090522  | Connector                     |                  |      |           |                       |                             |                  |
| J410       | P0090524  | Connector                     |                  |      |           |                       |                             |                  |
|            |           |                               |                  |      |           |                       |                             |                  |
| VR-B UNIT  |           |                               |                  |      |           |                       |                             |                  |
| Symbol No. | Part No.  | Description                   | Device           |      |           |                       |                             |                  |
|            | F2890105A | Printed Circuit Board         |                  |      |           |                       |                             |                  |
|            | C028905AA | PCB with Components           |                  |      |           |                       |                             |                  |
| R501       | J02225472 | Carbon Film RES.              | 1/6W 4.7k ohm    | UJ   |           |                       |                             |                  |
| VR501      | J60800133 | Potentiometer (MONITOR)       | 50KB             |      |           |                       |                             |                  |
| C501       | K70167334 | Tantalum CAP.                 | 35WV 0.33uF      |      |           |                       |                             |                  |
| C502       | K19149021 | Ceramic CAP.                  | 25WV 0.047uF     |      |           |                       |                             |                  |
| C503       | K19149025 | Ceramic CAP.                  | 25WV 0.1uF       |      |           |                       |                             |                  |
| L501       | L1190115  | Coil                          | 150mH            |      |           |                       |                             |                  |
|            |           |                               |                  |      |           |                       |                             |                  |
| VR-C UNIT  |           |                               |                  |      |           |                       |                             |                  |
| Symbol No. | Part No.  | Description                   | Device           |      |           |                       |                             |                  |
|            | F2890106A | Printed Circuit Board         |                  |      |           |                       |                             |                  |
|            | C028906AA | PCB with Components           |                  |      |           |                       |                             |                  |
| D201       | G2090379  | Diode                         | ISS119           |      |           |                       |                             |                  |
| R201       | J02225472 | Carbon Film RES.              | 1/6W 4.7k ohm    | UJ   |           |                       |                             |                  |
| VR201      | J60800134 | Potentiometer (VOX GAIN)      | 10KA             |      |           |                       |                             |                  |
| VR202      | J60800136 | Potentiometer (VOX DELAY)     | 500KA            |      |           |                       |                             |                  |
| VR203      | J60800135 | Potentiometer (VOX ANTI-TRIP) | 10KB             |      |           |                       |                             |                  |
| VR204      | J60800137 | Potentiometer (KEYER SPEED)   | 500KC            |      |           |                       |                             |                  |
| S201       | N0190144  | Rotary Switch (AGC)           |                  |      |           |                       |                             |                  |
| S202       | N0190142  | Rotary Switch (SAT)           |                  |      |           |                       |                             |                  |
| VR-D UNIT  |           |                               |                  |      |           |                       |                             |                  |
| Symbol No. | Part No.  | Description                   | Device           |      |           |                       |                             |                  |
|            |           |                               |                  |      |           |                       |                             |                  |
|            |           |                               |                  |      |           |                       |                             |                  |
| SW-A UNIT  |           |                               |                  |      |           |                       |                             |                  |
| Symbol No. | Part No.  | Description                   | Device           |      |           |                       |                             |                  |
|            | F2890101  | Printed Circuit Board         |                  |      |           |                       |                             |                  |
|            | C028901AA | PCB with Components           |                  |      |           |                       |                             |                  |
| D301       | G2090408  | Diode                         | 1SS270           |      |           |                       |                             |                  |
| R301       | J02245330 | Carbon Film RES.              | 1/4W 33 ohm SJ   |      |           |                       |                             |                  |
| S301       | N4090109  | Push Switch                   |                  |      |           |                       |                             |                  |
| J301       | P0090525  | Connector                     |                  |      |           |                       |                             |                  |
| J302       | P0090528  | Connector                     |                  |      |           |                       |                             |                  |
| J303       | P0090529  | Connector                     |                  |      |           |                       |                             |                  |
| TP301      | Q5000036  | TP-G                          | MK-1095          |      |           |                       |                             |                  |
| TP302      | Q5000036  | TP-G                          | MK-1095          |      |           |                       |                             |                  |
| SW-B UNIT  |           |                               |                  |      |           |                       |                             |                  |
| Symbol No. | Part No.  | Description                   | Device           |      |           |                       |                             |                  |
|            | F2890102  | Printed Circuit Board         |                  |      |           |                       |                             |                  |
|            | C028902AA | PCB with Components           |                  |      |           |                       |                             |                  |
| D601       | G2090269  | LED                           | SR-538D          |      |           |                       |                             |                  |
| D602       | G2090268  | LED                           | SY-438D          |      |           |                       |                             |                  |
| D603       | G2090268  | LED                           | SY-438D          |      |           |                       |                             |                  |
| D604       | G2090267  | LED                           | SG-238D          |      |           |                       |                             |                  |
| D605       | G2090267  | LED                           | SG-238D          |      |           |                       |                             |                  |
| R601       | J02225122 | Carbon Film RES.              | 1/6W 1.2k ohm UJ |      |           |                       |                             |                  |
| R602       | J02225122 | Carbon Film RES.              | 1/6W 1.2k ohm UJ |      |           |                       |                             |                  |
| R603       | J02225122 | Carbon Film RES.              | 1/6W 1.2k ohm UJ |      |           |                       |                             |                  |
| R604       | J02225122 | Carbon Film RES.              | 1/6W 1.2k ohm UJ |      |           |                       |                             |                  |
| R605       | J02225122 | Carbon Film RES.              | 1/6W 1.2k ohm UJ |      |           |                       |                             |                  |
| R606       | J02225222 | Carbon Film RES.              | 1/6W 2.2k ohm UJ |      |           |                       |                             |                  |
| S601       | N4090103  | Push Switch                   |                  |      |           |                       |                             |                  |
| SW-C UNIT  |           |                               |                  |      |           |                       |                             |                  |
| Symbol No. | Part No.  | Description                   | Device           |      |           |                       |                             |                  |
|            | F2890103  | Printed Circuit Board         |                  |      |           |                       |                             |                  |
|            | C028903AA | PCB with Components           |                  |      |           |                       |                             |                  |
| Q101       | G3107331Q | Transistor                    | 2SA733AQ         |      |           |                       |                             |                  |
| R101       | J02225474 | Carbon Film RES.              | 1/6W 470k ohm UJ |      |           |                       |                             |                  |
| S101       | N4090104  | Push Switch                   |                  |      |           |                       |                             |                  |
| S102       | N0190137  | Rotary Switch                 |                  |      |           |                       |                             |                  |
| J101       | P0090525  | Connector                     |                  |      |           |                       |                             |                  |
| J102       | P0090527  | Connector                     |                  |      |           |                       |                             |                  |

# PARTS LIST

| ENCODER UNIT |           |                       |        |
|--------------|-----------|-----------------------|--------|
| Symbol No.   | Part No.  | Description           | Device |
|              | F2890107  | Printed Circuit Board |        |
|              | C028907AA | PCB with Components   |        |
| S551         | Q9000388  | Rotary Code Switch    |        |
| J551         | P0090525  | Connector             |        |

MODEL CHART

| Symbol No.          | Part No. | Description | Device | MODEL  |    |    |    |    |    |    |    |    |    |    |   |   |
|---------------------|----------|-------------|--------|--------|----|----|----|----|----|----|----|----|----|----|---|---|
|                     |          |             |        | A1     | A2 | B1 | B2 | B3 | C1 | C2 | C3 | H1 | H2 | H3 | F |   |
| 144MHz<br>MAIN UNIT | D6025    | G2090408    | Diode  | ISS270 | o  | o  |    | o  | o  |    | o  | o  |    | o  | o | o |
|                     | D6026    | G2090408    | Diode  | ISS270 | o  | o  | o  | o  | o  | o  | o  | o  | o  | o  | o | o |
|                     | D6027    | G2090408    | Diode  | ISS270 | o  | o  |    | o  | o  | o  | o  | o  | o  | o  | o | o |
|                     | D6030    | G2090408    | Diode  | ISS270 |    | o  | o  | o  | o  | o  | o  | o  | o  | o  | o | o |
|                     | D6031    | G2090408    | Diode  | ISS270 |    |    | o  | o  | o  | o  | o  | o  | o  |    |   |   |
|                     | D8004    | G2090408    | Diode  | ISS270 |    |    |    |    | o  | o  | o  |    |    |    | o |   |
|                     | D8005    | G2090408    | Diode  | ISS270 | o  | o  |    |    | o  | o  | o  | o  | o  | o  | o | o |
|                     | D8006    | G2090408    | Diode  | ISS270 |    | o  | o  | o  | o  | o  | o  | o  | o  | o  | o | o |
|                     | D8007    | G2090408    | Diode  | ISS270 | o  | o  | o  | o  | o  | o  | o  | o  | o  | o  | o | o |
|                     | D8008    | G2090408    | Diode  | ISS270 | o  | o  | o  | o  | o  | o  | o  | o  | o  | o  | o | o |
|                     | D8010    | G2090408    | Diode  | ISS270 | o  | o  | o  | o  | o  | o  | o  | o  | o  | o  | o | o |
|                     | D8011    | G2090408    | Diode  | ISS270 | o  | o  |    |    |    |    |    |    |    |    |   | o |
| 430MHz<br>PLL UNIT  |          |             |        |        |    |    |    |    |    |    |    |    |    |    |   |   |

| MODEL | FREQUENCY RANGE |               | PRESET FREQUENCY |            | PRESET REPEATER SHIFT |           | TONE BURST |
|-------|-----------------|---------------|------------------|------------|-----------------------|-----------|------------|
|       | 2m BAND         | 70cm BAND     | 2m BAND          | 70cm BAND  | 2m BAND               | 70cm BAND |            |
| A1    | 144 - 148 MHz   | 430 - 450 MHz | 144.00 MHz       | 430.00 MHz | 600 kHz               | 5 MHz     | 1800 Hz    |
| A2    | 141 - 154 MHz   | 430 - 450 MHz | 144.00 MHz       | 430.00 MHz | 600 kHz               | 5 MHz     | 1800 Hz    |
| B1    | 144 - 146 MHz   | 430 - 440 MHz | 144.00 MHz       | 430.00 MHz | 600 kHz               | 7.6 MHz   | 1750 Hz    |
| B2    | 144 - 148 MHz   | 430 - 440 MHz | 144.00 MHz       | 430.00 MHz | 600 kHz               | 7.6 MHz   | 1750 Hz    |
| B3    | 141 - 154 MHz   | 430 - 440 MHz | 141.00 MHz       | 430.00 MHz | 600 kHz               | 7.6 MHz   | 1750 Hz    |
| C1    | 144 - 146 MHz   | 430 - 440 MHz | 144.00 MHz       | 430.00 MHz | 600 kHz               | 1.6 MHz   | 1750 Hz    |
| C2    | 144 - 148 MHz   | 430 - 440 MHz | 144.00 MHz       | 430.00 MHz | 600 kHz               | 1.6 MHz   | 1750 Hz    |
| C3    | 141 - 154 MHz   | 430 - 440 MHz | 144.00 MHz       | 430.00 MHz | 600 kHz               | 1.6 MHz   | 1750 Hz    |
| H1    | 144 - 146 MHz   | 430 - 440 MHz | 144.00 MHz       | 430.00 MHz | 600 kHz               | 5 MHz     | 1750 Hz    |
| H2    | 144 - 148 MHz   | 430 - 440 MHz | 144.00 MHz       | 430.00 MHz | 600 kHz               | 5 MHz     | 1750 Hz    |
| H3    | 141 - 154 MHz   | 430 - 440 MHz | 144.00 MHz       | 430.00 MHz | 600 kHz               | 5 MHz     | 1750 Hz    |
| F     | 144 - 146 MHz   | 430 - 440 MHz | 144.00 MHz       | 430.00 MHz | 600 kHz               | 5 MHz     | -          |

# PARTS LIST (FEX-736-50)

| MAIN CHASSIS |           |                                                     |               | R1007      | J02225223 | Carbon Film RES. | 1/6W              | 22k ohm  | UJ            |
|--------------|-----------|-----------------------------------------------------|---------------|------------|-----------|------------------|-------------------|----------|---------------|
| Symbol No.   | Part No.  | Description                                         | Device        | R1008      | J02225221 | Carbon Film RES. | 1/6W              | 220 ohm  | UJ            |
| Q1           | G1090778  | IC                                                  | L7809         | R1009      | J02225104 | Carbon Film RES. | 1/6W              | 100k ohm | UJ            |
|              | T9205536A | Wire ASSY                                           |               | R1010      | J02225470 | Carbon Film RES. | 1/6W              | 47 ohm   | UJ            |
|              | T9205591  | Wire ASSY                                           |               | R1011      | J02225103 | Carbon Film RES. | 1/6W              | 10k ohm  | UJ            |
|              | T9205590  | Wire ASSY                                           |               | R1012      | J02225562 | Carbon Film RES. | 1/6W              | 5.6k ohm | UJ            |
|              | T9205546  | Wire ASSY                                           |               | R1013      | J01225473 | Carbon Film RES. | 1/6W              | 47k ohm  | PJ            |
|              | T9317800A | Wire ASSY                                           |               | R1014      | J02225471 | Carbon Film RES. | 1/6W              | 470 ohm  | UJ            |
|              | R0083771  | UNIT CHASSIS                                        |               | R1015      | J02225562 | Carbon Film RES. | 1/6W              | 5.6k ohm | UJ            |
|              | R0083790B | UNIT Bottom Cover                                   |               | R1016      | J02225223 | Carbon Film RES. | 1/6W              | 22k ohm  | UJ            |
|              | R0509970B | Shield Cover                                        |               | R1017      | J02225102 | Carbon Film RES. | 1/6W              | 1k ohm   | UJ            |
|              | R8050252  | UNIT Seal A                                         |               | R1018      | J02225473 | Carbon Film RES. | 1/6W              | 47k ohm  | UJ            |
|              |           |                                                     |               | R1019      | J02225101 | Carbon Film RES. | 1/6W              | 100 ohm  | UJ            |
|              |           |                                                     |               | R1020      | J02225471 | Carbon Film RES. | 1/6W              | 470 ohm  | UJ            |
|              |           |                                                     |               | R1021      | J02225103 | Carbon Film RES. | 1/6W              | 10k ohm  | UJ            |
|              |           |                                                     |               | R1022      | J02225222 | Carbon Film RES. | 1/6W              | 2.2k ohm | UJ            |
|              |           |                                                     |               | R1023      | J02225222 | Carbon Film RES. | 1/6W              | 2.2k ohm | UJ            |
|              |           |                                                     |               | R1025      | J02225102 | Carbon Film RES. | 1/6W              | 1k ohm   | UJ            |
|              |           |                                                     |               | R1026      | J02225222 | Carbon Film RES. | 1/6W              | 2.2k ohm | UJ            |
|              | F2897102  | Printed Circuit Board                               |               | R1027      | J02225104 | Carbon Film RES. | 1/6W              | 100k ohm | UJ            |
|              | C028972AA | PCB with Components: Vers. F w/o 50MHz SUB VCO UNIT |               | R1028      | J01225472 | Carbon Film RES. | 1/6W              | 4.7k ohm | PJ            |
|              | C028972AB | PCB with Components: Vers. A w/o 50MHz SUB VCO UNIT |               | R1029      | J01225333 | Carbon Film RES. | 1/6W              | 33k ohm  | PJ            |
|              | C028972AC | PCB with Components: Vers. F w/50MHz SUB VCO UNIT   |               | R1030      | J01225473 | Carbon Film RES. | 1/6W              | 47k ohm  | PJ            |
|              | C028972AD | PCB with Components: Vers. A w/50MHz SUB VCO UNIT   |               | R1031      | J02225102 | Carbon Film RES. | 1/6W              | 1k ohm   | UJ            |
|              |           |                                                     |               | R1032      | J02225101 | Carbon Film RES. | 1/6W              | 100 ohm  | UJ            |
|              |           |                                                     |               | R1033      | J01225560 | Carbon Film RES. | 1/6W              | 56 ohm   | PJ            |
|              |           |                                                     |               | R1034      | J01225223 | Carbon Film RES. | 1/6W              | 22k ohm  | PJ            |
|              |           |                                                     |               | R1035      | J02225562 | Carbon Film RES. | 1/6W              | 5.6k ohm | UJ            |
|              |           |                                                     |               | R1036      | J01225681 | Carbon Film RES. | 1/6W              | 680 ohm  | PJ            |
|              |           |                                                     |               | R1037      | J01225101 | Carbon Film RES. | 1/6W              | 100 ohm  | PJ            |
|              |           |                                                     |               | R1038      | J02225223 | Carbon Film RES. | 1/6W              | 22k ohm  | UJ            |
|              |           |                                                     |               | R1039      | J01225562 | Carbon Film RES. | 1/6W              | 5.6k ohm | PJ            |
|              |           |                                                     |               | R1040      | J02225331 | Carbon Film RES. | 1/6W              | 330 ohm  | UJ            |
|              |           |                                                     |               | R1041      | J01225560 | Carbon Film RES. | 1/6W              | 56 ohm   | PJ            |
|              |           |                                                     |               | R1042      | J01225331 | Carbon Film RES. | 1/6W              | 330 ohm  | PJ            |
|              |           |                                                     |               | R1043      | J02225473 | Carbon Film RES. | 1/6W              | 47k ohm  | UJ            |
|              |           |                                                     |               | R1044      | J02225471 | Carbon Film RES. | 1/6W              | 470 ohm  | UJ            |
|              |           |                                                     |               | R1046      | J02225562 | Carbon Film RES. | 1/6W              | 5.6k ohm | UJ            |
|              |           |                                                     |               | R1047      | J02225223 | Carbon Film RES. | 1/6W              | 22k ohm  | UJ            |
|              |           |                                                     |               | R1048      | J02225331 | Carbon Film RES. | 1/6W              | 330k ohm | UJ            |
|              |           |                                                     |               | R1049      | J02225102 | Carbon Film RES. | 1/6W              | 1k ohm   | UJ            |
| Q1006        | G3304600B | Transistor                                          | 2SC460B       | R1050      | J02225105 | Carbon Film RES. | 1/6W              | 1 Mohm   | UJ            |
| Q1007        | G3304600B | Transistor                                          | 2SC460B       | R1051      | J02225560 | Carbon Film RES. | 1/6W              | 56 ohm   | UJ            |
| Q1008        | G1090798  | IC                                                  | MC145155P     | R1052      | J01225152 | Carbon Film RES. | 1/6W              | 1.5k ohm | PJ            |
| Q1009        | G3802410G | FET                                                 | 2SK241GR      | R1053      | J02225332 | Carbon Film RES. | 1/6W              | 3.3k ohm | UJ            |
| Q1010        | G3304600B | Transistor                                          | 2SC460B       | R1054      | J02225222 | Carbon Film RES. | 1/6W              | 2.2k ohm | UJ            |
| Q1011        | G3304600B | Transistor                                          | 2SC460B       | R1055      | J01225104 | Carbon Film RES. | 1/6W              | 100k ohm | PJ            |
| Q1012        | G3304600B | Transistor                                          | 2SC460B       | R1063      | J01225560 | Carbon Film RES. | 1/6W              | 56 ohm   | PJ            |
| Q1013        | G3802410G | FET                                                 | 2SK241GR      | R1064      | J01225222 | Carbon Film RES. | 1/6W              | 2.2k ohm | PJ            |
| Q1014        | G3305350B | Transistor                                          | 2SC535B       | R1065      | J01225561 | Carbon Film RES. | 1/6W              | 560 ohm  | PJ            |
| Q1015        | G1090473  | IC                                                  | TC5081AP      | R1066      | J01225222 | Carbon Film RES. | 1/6W              | 2.2k ohm | PJ            |
| Q1019        | G1090795  | IC                                                  | MB504         | R1067      | J01225471 | Carbon Film RES. | 1/6W              | 470 ohm  | PJ            |
| Q1020        | G1090707  | IC                                                  | MC145156P     | R1069      | J01225560 | Carbon Film RES. | 1/6W              | 56 ohm   | PJ            |
| Q1022        | G1090796  | IC                                                  | MB505-16      | R1070      | J01225102 | Carbon Film RES. | 1/6W              | 1k ohm   | PJ            |
| Q1023        | G1090247  | IC                                                  | TC9122P       | R1071      | J01225560 | Carbon Film RES. | 1/6W              | 56 ohm   | PJ            |
| Q1024        | G3304600B | Transistor                                          | 2SC460B       | R1072      | J01225102 | Carbon Film RES. | 1/6W              | 1k ohm   | PJ            |
| Q1025        | G3304600B | Transistor                                          | 2SC460B       | R1073      | J01225560 | Carbon Film RES. | 1/6W              | 56 ohm   | PJ            |
| Q1026        | G3304580C | Transistor                                          | 2SC458C       | R1075      | J01225102 | Carbon Film RES. | 1/6W              | 1k ohm   | PJ            |
| Q1027        | G3304580C | Transistor                                          | 2SC458C       | R1076      | J01225562 | Carbon Film RES. | 1/6W              | 5.6k ohm | PJ            |
| Q1028        | G3304580C | Transistor                                          | 2SC458C       | R1078      | J02225101 | Carbon Film RES. | 1/6W              | 100 ohm  | UJ            |
| Q1029        | G3304580C | Transistor                                          | 2SC458C       | R1079      | J01225473 | Carbon Film RES. | 1/6W              | 47k ohm  | PJ            |
| Q1030        | G3304580C | Transistor                                          | 2SC458C       | R1080      | J01225222 | Carbon Film RES. | 1/6W              | 2.2k ohm | PJ            |
| Q1031        | G3304580C | Transistor                                          | 2SC458C       | R1081      | J01225473 | Carbon Film RES. | 1/6W              | 47k ohm  | PJ            |
| Q1032        | G3090079  | Transistor                                          | BA1A4P        | R1082      | J02225222 | Carbon Film RES. | 1/6W              | 2.2k ohm | UJ            |
| Q1033        | G3090079  | Transistor                                          | BA1A4P        | R1083      | J01225473 | Carbon Film RES. | 1/6W              | 47k ohm  | PJ            |
| Q1034        | G1090084  | IC                                                  | uPC78L05      | R1084      | J01225222 | Carbon Film RES. | 1/6W              | 2.2k ohm | PJ            |
| D1001        | G2090023  | Diode                                               | 1SV50         | R1085      | J02225473 | Carbon Film RES. | 1/6W              | 47k ohm  | UJ            |
| D1002        | G2090023  | Diode                                               | 1SV50         | R1086      | J01225222 | Carbon Film RES. | 1/6W              | 2.2k ohm | PJ            |
| D1003        | G2022090  | Diode                                               | 1S2209        | R1087      | J01225473 | Carbon Film RES. | 1/6W              | 47k ohm  | PJ            |
| D1004        | G2090408  | Diode                                               | ISS270        | R1088      | J01225222 | Carbon Film RES. | 1/6W              | 2.2k ohm | PJ            |
| D1005        | G2022090  | Diode                                               | 1S2209        | R1089      | J01225473 | Carbon Film RES. | 1/6W              | 47k ohm  | PJ            |
| D1006        | G2090384  | Diode                                               | HZ7C2         | R1090      | J01225222 | Carbon Film RES. | 1/6W              | 2.2k ohm | PJ            |
| D1011(A)     | G2090408  | Diode                                               | ISS270        | R1091      | J01225102 | Carbon Film RES. | 1/6W              | 1k ohm   | PJ            |
| D1012(F)     | G2090408  | Diode                                               | ISS270        | R1092      | J02225471 | Carbon Film RES. | 1/6W              | 470 ohm  | UJ            |
| D1014        | G2090408  | Diode                                               | ISS270        |            |           |                  |                   |          |               |
| D1016(F)     | G2090408  | Diode                                               | ISS270        |            |           |                  |                   |          |               |
| X1001        | H0102817  | XTAL                                                | HC-49/T       | 20.537 MHz | C1001     | K05175180        | Ceramic CAP.      | RH       | 50WV 18pF     |
|              |           |                                                     |               |            | C1002     | K05172050        | Ceramic CAP.      | RH       | 50WV 5pF      |
|              |           |                                                     |               |            | C1003     | K05175150        | Ceramic CAP.      | RH       | 50WV 15pF     |
|              |           |                                                     |               |            | C1004     | K05173080        | Ceramic CAP.      | RH       | 50WV 8pF      |
|              |           |                                                     |               |            | C1005     | K05175270        | Ceramic CAP.      | RH       | 50WV 27pF     |
|              |           |                                                     |               |            | C1006     | K13179014        | Ceramic CAP.      | F        | 50WV 0.0047uF |
|              |           |                                                     |               |            | C1007     | K40109001        | AL. Electro. CAP. |          | 10WV 100uF    |
| R1001        | J01225474 | Carbon Film RES.                                    | 1/6W 470k ohm | PJ         | C1008     | K02179001        | Ceramic CAP.      | CK       | 50WV 1pF      |
| R1002        | J01225151 | Carbon Film RES.                                    | 1/6W 150 ohm  | PJ         | C1009     | K13179008        | Ceramic CAP.      | F        | 50WV 0.01uF   |
| R1003        | J01225101 | Carbon Film RES.                                    | 1/6W 100 ohm  | PJ         | C1010     | K12171102        | Ceramic CAP.      | E        | 50WV 0.001uF  |
| R1004        | J01225473 | Carbon Film RES.                                    | 1/6W 47k ohm  | PJ         |           |                  |                   |          |               |
| R1005        | J01225470 | Carbon Film RES.                                    | 1/6W 47 ohm   | PJ         |           |                  |                   |          |               |
| R1006        | J02225103 | Carbon Film RES.                                    | 1/6W 10k ohm  | UJ         |           |                  |                   |          |               |

# (FEX-736-50) PARTS LIST

|       |           |                   |    |      |          |            |           |                       |               |       |         |
|-------|-----------|-------------------|----|------|----------|------------|-----------|-----------------------|---------------|-------|---------|
| C1011 | K13179008 | Ceramic CAP.      | F  | 50WV | 0.01uF   | C1106      | K12171102 | Ceramic CAP.          | E             | 50WV  | 0.001uF |
| C1012 | K05175220 | Ceramic CAP.      | RH | 50WV | 22pF     | C1107      | K13179008 | Ceramic CAP.          | F             | 50WV  | 0.01uF  |
| C1013 | K05173060 | Ceramic CAP.      | RH | 50WV | 6pF      | C1108      | K00175101 | Ceramic CAP.          | SL            | 50WV  | 100pF   |
| C1014 | K13179008 | Ceramic CAP.      | F  | 50WV | 0.01uF   | C1109      | K00175101 | Ceramic CAP.          | SL            | 50WV  | 100pF   |
| C1015 | K12171102 | Ceramic CAP.      | E  | 50WV | 0.001uF  | C1110      | K00175101 | Ceramic CAP.          | SL            | 50WV  | 100pF   |
| C1017 | K02172059 | Ceramic CAP.      | CK | 50WV | 0.5pF    | C1111      | K00175101 | Ceramic CAP.          | SL            | 50WV  | 100pF   |
| C1018 | K05173100 | Ceramic CAP.      | RH | 50WV | 10pF     | C1112      | K00175101 | Ceramic CAP.          | SL            | 50WV  | 100pF   |
| C1019 | K12171102 | Ceramic CAP.      | E  | 50WV | 0.001uF  | C1113      | K00175101 | Ceramic CAP.          | SL            | 50WV  | 100pF   |
| C1020 | K05175220 | Ceramic CAP.      | RH | 50WV | 22pF     | C1114      | K70167104 | Tantalum CAP.         |               | 35WV  | 0.1uF   |
| C1021 | K05175220 | Ceramic CAP.      | RH | 50WV | 22pF     | C1115      | K12171102 | Ceramic CAP.          | E             | 50WV  | 0.001uF |
| C1022 | K19149021 | Ceramic CAP.      |    | 25WV | 0.047uF  | C1116      | K12171102 | Ceramic CAP.          | E             | 50WV  | 0.001uF |
| C1023 | K19149021 | Ceramic CAP.      |    | 25WV | 0.047uF  | C1117      | K40109002 | AL. Electro. CAP.     |               | 10WV  | 47uF    |
| C1024 | K13179008 | Ceramic CAP.      | F  | 50WV | 0.01uF   | C1118      | K05173070 | Ceramic CAP.          | RH            | 50WV  | 7pF     |
| C1025 | K70147105 | Tantalum CAP.     |    | 25WV | 1uF      | C1119      | K05173100 | Ceramic CAP.          | RH            | 50WV  | 10pF    |
| C1026 | K13179008 | Ceramic CAP.      | F  | 50WV | 0.01uF   | C1120      | K70147105 | Tantalum CAP.         |               | 25WV  | 1uF     |
| C1027 | K19149025 | Ceramic CAP.      |    | 25WV | 0.1uF    | C1121      | K22141005 | CAP. Chip             | F             | 25WV  | 0.1uF   |
| C1028 | K40109001 | AL. Electro. CAP. |    | 10WV | 100uF    | C1122      | K22170229 | CAP. Chip             | CH            | 50WV  | 56pF    |
| C1029 | K19149021 | Ceramic CAP.      |    | 25WV | 0.047uF  | C1123      | K22170229 | CAP. Chip             | CH            | 50WV  | 56pF    |
| C1030 | K70147105 | Tantalum CAP.     |    | 25WV | 1uF      | C1124      | K22170229 | CAP. Chip             | CH            | 50WV  | 56pF    |
| C1032 | K19149021 | Ceramic CAP.      |    | 25WV | 0.047uF  | C1125      | K22170229 | CAP. Chip             | CH            | 50WV  | 56pF    |
| C1033 | K12171102 | Ceramic CAP.      | E  | 50WV | 0.001uF  | C1126      | K22170229 | CAP. Chip             | CH            | 50WV  | 56pF    |
| C1034 | K13179008 | Ceramic CAP.      | F  | 50WV | 0.01uF   | C1127      | K22170229 | CAP. Chip             | CH            | 50WV  | 56pF    |
| C1035 | K19149025 | Ceramic CAP.      |    | 25WV | 0.1uF    | C1128      | K13179008 | Ceramic CAP.          | F             | 50WV  | 0.01uF  |
| C1037 | K12171102 | Ceramic CAP.      | E  | 50WV | 0.001uF  | C1129      | K13179008 | Ceramic CAP.          | F             | 50WV  | 0.01uF  |
| C1038 | K05172040 | Ceramic CAP.      | RJ | 50WV | 4pF      | C1130      | K22170817 | CAP. Chip             | B             | 50WV  | 0.01uF  |
| C1039 | K06175101 | Ceramic CAP.      | UJ | 50WV | 100pF    | C1131      | K22170235 | CAP. Chip             | CH            | 50WV  | 100pF   |
| C1040 | K06175101 | Ceramic CAP.      | UJ | 50WV | 100pF    | T1001      | L0021358  | Coil                  |               |       |         |
| C1041 | K13179008 | Ceramic CAP.      | F  | 50WV | 0.01uF   | T1002      | L0021358  | Coil                  |               |       |         |
| C1042 | K40129004 | AL. Electro. CAP. |    | 16WV | 10uF     | T1003      | L0021358  | Coil                  |               |       |         |
| C1043 | K12171102 | Ceramic CAP.      | E  | 50WV | 0.001uF  | T1004      | L0021358  | Coil                  |               |       |         |
| C1044 | K02175101 | Ceramic CAP.      | CH | 50WV | 100pF    | T1005      | L0021358  | Coil                  |               |       |         |
| C1045 | K13179008 | Ceramic CAP.      | F  | 50WV | 0.01uF   | L1001      | L1190250  | M. RFC                |               | 2.2uH |         |
| C1046 | K05175150 | Ceramic CAP.      | RH | 50WV | 15pF     | L1002      | L1190250  | M. RFC                |               | 2.2uH |         |
| C1047 | K13179008 | Ceramic CAP.      | F  | 50WV | 0.01uF   | L1003      | L0190025  | Coil                  |               |       |         |
| C1048 | K13179008 | Ceramic CAP.      | F  | 50WV | 0.01uF   | L1004      | L1190246  | M. RFC                |               | 1uH   |         |
| C1049 | K02179001 | Ceramic CAP.      | CK | 50WV | 1pF      | L1006      | L1190270  | M. RFC                |               | 100uH |         |
| C1050 | K05175150 | Ceramic CAP.      | RH | 50WV | 15pF     | L1007      | L1190262  | M. RFC                |               | 22uH  |         |
| C1051 | K13179008 | Ceramic CAP.      | F  | 50WV | 0.01uF   | L1008      | L1190189  | M. RFC                |               | 1mH   |         |
| C1052 | K13179008 | Ceramic CAP.      | F  | 50WV | 0.01uF   | L1009      | L0020652  | Coil                  |               |       |         |
| C1053 | K13179008 | Ceramic CAP.      | F  | 50WV | 0.01uF   | L1010      | L1190270  | M. RFC                |               | 100uH |         |
| C1054 | K05175150 | Ceramic CAP.      | RH | 50WV | 15pF     | L1011      | L1190270  | M. RFC                |               | 100uH |         |
| C1055 | K13179008 | Ceramic CAP.      | F  | 50WV | 0.01uF   | L1012      | L1190270  | M. RFC                |               | 100uH |         |
| C1056 | K02172059 | Ceramic CAP.      | CK | 50WV | 0.5pF    | L1013      | L1190228  | M. RFC                |               | 680uH |         |
| C1057 | K05175150 | Ceramic CAP.      | RH | 50WV | 15pF     | L1019      | L1190246  | M. RFC                |               | 1uH   |         |
| C1058 | K13179008 | Ceramic CAP.      | F  | 50WV | 0.01uF   | L1020      | L1190270  | M. RFC                |               | 100uH |         |
| C1059 | K02179001 | Ceramic CAP.      | CK | 50WV | 1pF      | L1021      | L1190270  | M. RFC                |               | 100uH |         |
| C1060 | K13179008 | Ceramic CAP.      | F  | 50WV | 0.01uF   | L1022      | L1190270  | M. RFC                |               | 100uH |         |
| C1061 | K05172050 | Ceramic CAP.      | RH | 50WV | 5pF      | L1023      | L1190257  | M. RFC                |               | 8.2uH |         |
| C1062 | K13179008 | Ceramic CAP.      | F  | 50WV | 0.01uF   | L1024      | L1190257  | M. RFC                |               | 8.2uH |         |
| C1063 | K40179011 | AL. Electro. CAP. |    | 50WV | 3.3uF    | L1026      | L0021359  | Coil                  |               |       |         |
| C1065 | K13179014 | Ceramic CAP.      | F  | 50WV | 0.0047uF | L1027      | L0021359  | Coil                  |               |       |         |
| C1066 | K13179014 | Ceramic CAP.      | F  | 50WV | 0.0047uF | J1001      | P0090525  | Connector             |               |       |         |
| C1067 | K19149013 | Ceramic CAP.      |    | 25WV | 0.01uF   | J1002      | P0090527  | Connector             |               |       |         |
| C1068 | K40109001 | AL. Electro. CAP. |    | 10WV | 100uF    | P1001      | T9205550  | Wire ASSY             |               |       |         |
| C1069 | K19149021 | Ceramic CAP.      |    | 25WV | 0.047uF  | R0110610   |           | Spring Board          |               |       |         |
| C1070 | K70167474 | Tantalum CAP.     |    | 35WV | 0.47uF   | R0083860D  |           | Shield Case           |               |       |         |
| C1071 | K19149013 | Ceramic CAP.      |    | 25WV | 0.01uF   | R0510040   |           | Shield Cover          |               |       |         |
| C1072 | K12171102 | Ceramic CAP.      | E  | 50WV | 0.001uF  | R0083880   |           | Shield Bottom Cover   |               |       |         |
| C1076 | K13179014 | Ceramic CAP.      | F  | 50WV | 0.0047uF | R0062770B  |           | VCO Case A            |               |       |         |
| C1081 | K05172020 | Ceramic CAP.      | RK | 50WV | 2pF      | R0062780A  |           | VCO Case Lid          |               |       |         |
| C1082 | K05172020 | Ceramic CAP.      | RK | 50WV | 2pF      |            |           |                       |               |       |         |
| C1084 | K12171102 | Ceramic CAP.      | E  | 50WV | 0.001uF  |            |           |                       |               |       |         |
| C1085 | K19149025 | Ceramic CAP.      |    | 25WV | 0.1uF    |            |           |                       |               |       |         |
| C1086 | K13179014 | Ceramic CAP.      | F  | 50WV | 0.0047uF |            |           |                       |               |       |         |
| C1087 | K12171102 | Ceramic CAP.      | E  | 50WV | 0.001uF  |            |           |                       |               |       |         |
| C1088 | K12171102 | Ceramic CAP.      | E  | 50WV | 0.001uF  |            |           |                       |               |       |         |
| C1089 | K40109001 | AL. Electro. CAP. |    | 10WV | 100uF    |            |           | SUB VCO UNIT          |               |       |         |
| C1090 | K19149025 | Ceramic CAP.      |    | 25WV | 0.1uF    | Symbol No. | Part No.  | Description           | Device        |       |         |
| C1091 | K13179008 | Ceramic CAP.      | F  | 50WV | 0.01uF   |            | F2928000  | Printed Circuit Board |               |       |         |
| C1092 | K05172020 | Ceramic CAP.      | RK | 50WV | 2pF      |            | C029280AA | PCB with Components.  |               |       |         |
| C1093 | K70167474 | Tantalum CAP.     |    | 35WV | 0.47uF   |            |           |                       |               |       |         |
| C1094 | K19149021 | Ceramic CAP.      |    | 25WV | 0.047uF  | Q1016      | G3805070F | FET                   | 2SK507F       |       |         |
| C1097 | K05173070 | Ceramic CAP.      | RH | 50WV | 7pF      | Q1017      | G3333550  | Transistor            | 2SC3355       |       |         |
| C1098 | K12171102 | Ceramic CAP.      | E  | 50WV | 0.001uF  | D1007      | G2090180  | Diode                 | FC53M-5       |       |         |
| C1099 | K13179014 | Ceramic CAP.      |    | 50WV | 0.0047uF | D1008      | G2090180  | Diode                 | FC53M-5       |       |         |
| C1100 | K13179008 | Ceramic CAP.      | F  | 50WV | 0.01uF   | R1056      | J02225330 | Carbon Film RES.      | 1/6W 33 ohm   | UJ    |         |
| C1101 | K19149025 | Ceramic CAP.      |    | 25WV | 0.1uF    | R1057      | J01225221 | Carbon Film RES.      | 1/6W 220 ohm  | PJ    |         |
| C1102 | K12171102 | Ceramic CAP.      | E  | 50WV | 0.001uF  | R1058      | J02225332 | Carbon Film RES.      | 1/6W 3.3k ohm | UJ    |         |
| C1103 | K05173100 | Ceramic CAP.      | RH | 50WV | 10pF     | R1059      | J02225103 | Carbon Film RES.      | 1/6W 10k ohm  | UJ    |         |

# PARTS LIST (FEX-736-50)

|           |                          |                      |      |            |          |        |           |                  |       |          |          |
|-----------|--------------------------|----------------------|------|------------|----------|--------|-----------|------------------|-------|----------|----------|
| R1060     | J02225101                | Carbon Film RES.     | 1/6W | 100 ohm    | UJ       | R2018  | J01225470 | Carbon Film RES. | 1/6W  | 47 ohm   | PJ       |
| R1061     | J01225101                | Carbon Film RES.     | 1/6W | 100 ohm    | PJ       | R2019  | J01225221 | Carbon Film RES. | 1/6W  | 220 ohm  | PJ       |
| R1068     | J01225102                | Carbon Film RES.     | 1/6W | 1k ohm     | PJ       | R2020  | J01225820 | Carbon Film RES. | 1/6W  | 82 ohm   | PJ       |
| C1073     | K05175180                | Ceramic CAP.         | RH   | 50WV       | 18pF     | R2021  | J01225221 | Carbon Film RES. | 1/6W  | 220 ohm  | PJ       |
| C1074     | K12171102                | Ceramic CAP.         | E    | 50WV       | 0.001uF  | R2022  | J01225101 | Carbon Film RES. | 1/6W  | 100 ohm  | PJ       |
| C1075     | K40109001                | AL. Electro.<br>CAP. |      | 10WV       | 100uF    | R2023  | J01225470 | Carbon Film RES. | 1/6W  | 47 ohm   | PJ       |
| C1077     | K05173100                | Ceramic CAP.         | UJ   | 50WV       | 10pF     | R2024  | J01225560 | Carbon Film RES. | 1/6W  | 56 ohm   | PJ       |
| C1078     | K05173080                | Ceramic CAP.         | RH   | 50WV       | 8pF      | R2025  | J01225473 | Carbon Film RES. | 1/6W  | 47k ohm  | PJ       |
| C1079     | K02172059                | Ceramic CAP.         | CK   | 50WV       | 0.5pF    | R2026  | J01225473 | Carbon Film RES. | 1/6W  | 47k ohm  | PJ       |
| C1080     | K13179014                | Ceramic CAP.         | F    | 50WV       | 0.0047uF | R2027  | J01225222 | Carbon Film RES. | 1/6W  | 2.2k ohm | PJ       |
| C1083     | K22171002                | CAP. Chip            | F    | 50WV       | 0.0047uF | R2028  | J01225104 | Carbon Film RES. | 1/6W  | 100k ohm | PJ       |
| C1095     | K19149021                | Ceramic CAP.         |      | 25WV       | 0.047uF  | R2029  | J01225104 | Carbon Film RES. | 1/6W  | 100k ohm | PJ       |
| C1096     | K12171102                | Ceramic CAP.         | E    | 50WV       | 0.001uF  | R2030  | J01225104 | Carbon Film RES. | 1/6W  | 100k ohm | PJ       |
| L1014     | L1190242                 | M.RFC                |      | 0.47uH     |          | R2031  | J01225561 | Carbon Film RES. | 1/6W  | 560 ohm  | PJ       |
| L1015     | L1190242                 | M.RFC                |      | 0.47uH     |          | R2032  | J01225221 | Carbon Film RES. | 1/6W  | 220 ohm  | PJ       |
| L1016     | L0190138                 | Coil                 |      |            |          | R2033  | J01225220 | Carbon Film RES. | 1/6W  | 22 ohm   | PJ       |
| L1017     | L0021520                 | Coil                 |      |            |          | R2034  | J01225479 | Carbon Film RES. | 1/6W  | 4.7 ohm  | PJ       |
| L1018     | L1190242                 | M.RFC                |      | 0.47uH     |          | R2035  | J01225221 | Carbon Film RES. | 1/6W  | 220 ohm  | PJ       |
| L1025     | L0020852                 | Coil                 |      |            |          | R2036  | J01225821 | Carbon Film RES. | 1/6W  | 820 ohm  | PJ       |
| L9190001  | Ferrite Beads            |                      |      |            |          | R2037  | J01225103 | Carbon Film RES. | 1/6W  | 10k ohm  | PJ       |
|           |                          |                      |      |            |          | R2038  | J01225821 | Carbon Film RES. | 1/6W  | 470 ohm  | PJ       |
|           |                          |                      |      |            |          | R2039  | J01225103 | Carbon Film RES. | 1/6W  | 10k ohm  | PJ       |
|           |                          |                      |      |            |          | R2040  | J01225471 | Carbon Film RES. | 1/6W  | 470 ohm  | PJ       |
|           |                          |                      |      |            |          | R2041  | J01225103 | Carbon Film RES. | 1/6W  | 10k ohm  | PJ       |
|           |                          |                      |      |            |          | R2042  | J01275471 | Carbon Film RES. | 1/2W  | 470 ohm  | TJ       |
|           |                          |                      |      |            |          | R2043  | J01225473 | Carbon Film RES. | 1/6W  | 47k ohm  | PJ       |
|           |                          |                      |      |            |          | R2044  | J01225223 | Carbon Film RES. | 1/6W  | 22k ohm  | PJ       |
|           |                          |                      |      |            |          | R2045  | J01225223 | Carbon Film RES. | 1/6W  | 22k ohm  | PJ       |
| F2897101  | Printed Circuit<br>Board |                      |      |            |          | R2046  | J01225104 | Carbon Film RES. | 1/6W  | 100k ohm | PJ       |
| C028971AA | PCB with<br>Components   |                      |      |            |          | R2047  | J01225473 | Carbon Film RES. | 1/6W  | 47k ohm  | PJ       |
| Q2001     | G4801220L                | FET                  |      | 3SK122L    |          | R2048  | J01225223 | Carbon Film RES. | 1/6W  | 22k ohm  | PJ       |
| Q2002     | G2090247                 | Diode                |      | ND487C1-3R |          | R2049  | J01225103 | Carbon Film RES. | 1/6W  | 10k ohm  | PJ       |
| Q2003     | G4801220L                | FET                  |      | 3SK122L    |          | R2050  | J01225103 | Carbon Film RES. | 1/6W  | 10k ohm  | PJ       |
| Q2004     | G3115280                 | Transistor           |      | 2SA1528    |          | R2051  | J01225104 | Carbon Film RES. | 1/6W  | 100k ohm | PJ       |
| Q2005     | G3802410G                | FET                  |      | 2SK241GR   |          | R2052  | J42405560 | RES. Chip        | 1/10W | 56 ohm   |          |
| Q2006     | G3802410G                | FET                  |      | 2SK241GR   |          | VR2001 | J51745101 | POT.             | B     | 100 ohm  |          |
| Q2007     | G3320260                 | Transistor           |      | 2SC2026    |          | VR2002 | J51745101 | POT.             | B     | 100 ohm  |          |
| Q2008     | G3325380                 | Transistor           |      | 2SC2538    |          | VR2003 | J51745102 | POT.             | B     | 1k ohm   |          |
| Q2009     | G3207720Q                | Transistor           |      | 2SB772Q    |          | VR2004 | J51745473 | POT.             | B     | 47k ohm  |          |
| Q2010     | G3207720Q                | Transistor           |      | 2SB772Q    |          | VR2005 | J51745473 | POT.             | B     | 47k ohm  |          |
| Q2011     | G1090606                 | IC                   |      | LA6358     |          | VR2006 | J51745104 | POT.             | B     | 100k ohm |          |
| Q2012     | G3115280                 | Transistor           |      | 2SA1528    |          | C2001  | K05172050 | Ceramic CAP.     | RH    | 50WV     | 5pF      |
| Q2013     | G3090079                 | Transistor           |      | BA1A4P     |          | C2002  | K05175330 | Ceramic CAP.     | RH    | 50WV     | 33pF     |
| D2001     | G2022090                 | Diode                |      | 1S2209     |          | C2003  | K13179014 | Ceramic CAP.     | F     | 50WV     | 0.0047uF |
| D2002     | G2090027                 | Diode                |      | 1SS53      |          | C2004  | K00175470 | Ceramic CAP.     | SL    | 50WV     | 47pF     |
| D2003     | G2022090                 | Diode                |      | 1S2209     |          | C2005  | K13179008 | Ceramic CAP.     | F     | 50WV     | 0.01uF   |
| D2004     | G2022090                 | Diode                |      | 1S2209     |          | C2006  | K12171102 | Ceramic CAP.     | E     | 50WV     | 0.001uF  |
| D2005     | G2022090                 | Diode                |      | 1S2209     |          | C2007  | K13179008 | Ceramic CAP.     | F     | 50WV     | 0.01uF   |
| D2006     | G2090027                 | Diode                |      | 1SS53      |          | C2008  | K13179008 | Ceramic CAP.     | F     | 50WV     | 0.01uF   |
| D2007     | G2060004                 | Diode                |      | 1SS270TJ   |          | C2009  | K13179008 | Ceramic CAP.     | F     | 50WV     | 0.01uF   |
| D2008     | G2090027                 | Diode                |      | 1SS53      |          | C2010  | K13179008 | Ceramic CAP.     | F     | 50WV     | 0.01uF   |
| D2009     | G2090027                 | Diode                |      | 1SS53      |          | C2011  | K02172020 | Ceramic CAP.     | CK    | 50WV     | 2pF      |
| D2010     | G2090027                 | Diode                |      | 1SS53      |          | C2012  | K05175330 | Ceramic CAP.     | RH    | 50WV     | 33pF     |
| D2011     | G2022090                 | Diode                |      | 1S2209     |          | C2013  | K05172050 | Ceramic CAP.     | RH    | 50WV     | 5pF      |
| D2012     | G2022090                 | Diode                |      | 1S2209     |          | C2014  | K05175220 | Ceramic CAP.     | RH    | 50WV     | 22pF     |
| D2013     | G2022090                 | Diode                |      | 1S2209     |          | C2015  | K05173060 | Ceramic CAP.     | RH    | 50WV     | 6pF      |
| D2015     | G2015550                 | Diode                |      | 1S1555     |          | C2016  | K05175270 | Ceramic CAP.     | RH    | 50WV     | 27pF     |
| D2016     | G2090408                 | Diode                |      | 1SS270     |          | C2017  | K13179008 | Ceramic CAP.     | F     | 50WV     | 0.01uF   |
| D2017     | G2090383                 | Diode                |      | MC911      |          | C2018  | K02172050 | Ceramic CAP.     | CK    | 50WV     | 2pF      |
| D2018     | G2090383                 | Diode                |      | MC911      |          | C2019  | K05175270 | Ceramic CAP.     | RH    | 50WV     | 27pF     |
| D2019     | G2060004                 | Diode                |      | 1SS270TJ   |          | C2020  | K05173060 | Ceramic CAP.     | RH    | 50WV     | 6pF      |
| D2020     | G2090408                 | Diode                |      | 1SS270     |          | C2022  | K13179014 | Ceramic CAP.     | F     | 50WV     | 0.0047uF |
| D2021     | G2060004                 | Diode                |      | 1SS270TJ   |          | C2023  | K13179014 | Ceramic CAP.     | F     | 50WV     | 0.0047uF |
|           |                          |                      |      |            |          | C2025  | K05175330 | Ceramic CAP.     | RH    | 50WV     | 33pF     |
|           |                          |                      |      |            |          | C2026  | K13179008 | Ceramic CAP.     | F     | 50WV     | 0.01uF   |
| TH2001    | G9090026                 | Thermistor           |      |            |          | C2027  | K13179008 | Ceramic CAP.     | F     | 50WV     | 0.01uF   |
| TH2002    | G9090020                 | Thermistor           |      |            |          | C2028  | K13179008 | Ceramic CAP.     | F     | 50WV     | 0.01uF   |
|           |                          |                      |      |            |          | C2029  | K13179014 | Ceramic CAP.     | F     | 50WV     | 0.0047uF |
| R2002     | J01225104                | Carbon Film RES.     | 1/6W | 100k ohm   | PJ       | C2030  | K13179008 | Ceramic CAP.     | F     | 50WV     | 0.01uF   |
| R2003     | J01225473                | Carbon Film RES.     | 1/6W | 47k ohm    | PJ       | C2031  | K13179014 | Ceramic CAP.     | F     | 50WV     | 0.0047uF |
| R2004     | J01225225                | Carbon Film RES.     | 1/6W | 2.2 Mohm   | PJ       | C2032  | K13179008 | Ceramic CAP.     | F     | 50WV     | 0.01uF   |
| R2005     | J01225470                | Carbon Film RES.     | 1/6W | 47 ohm     | PJ       | C2033  | K05173100 | Ceramic CAP.     | RH    | 50WV     | 10pF     |
| R2006     | J01225102                | Carbon Film RES.     | 1/6W | 1k ohm     | PJ       | C2034  | K05173100 | Ceramic CAP.     | RH    | 50WV     | 10pF     |
| R2007     | J01225470                | Carbon Film RES.     | 1/6W | 47 ohm     | PJ       | C2035  | K12171102 | Ceramic CAP.     | E     | 50WV     | 0.001uF  |
| R2008     | J01225104                | Carbon Film RES.     | 1/6W | 100k ohm   | PJ       | C2036  | K13179008 | Ceramic CAP.     | F     | 50WV     | 0.01uF   |
| R2009     | J01225104                | Carbon Film RES.     | 1/6W | 100k ohm   | PJ       | C2037  | K13179008 | Ceramic CAP.     | F     | 50WV     | 0.01uF   |
| R2010     | J01225104                | Carbon Film RES.     | 1/6W | 100k ohm   | PJ       | C2038  | K10179042 | Ceramic CAP.     | B     | 50WV     | 0.001uF  |
| R2011     | J01225331                | Carbon Film RES.     | 1/6W | 330 ohm    | PJ       | C2039  | K05175330 | Ceramic CAP.     | RH    | 50WV     | 33pF     |
| R2012     | J01225180                | Carbon Film RES.     | 1/6W | 18 ohm     | PJ       | C2040  | K12171102 | Ceramic CAP.     | E     | 50WV     | 0.001uF  |
| R2013     | J01225331                | Carbon Film RES.     | 1/6W | 330 ohm    | PJ       | C2041  | K05172050 | Ceramic CAP.     | RH    | 50WV     | 5pF      |
| R2014     | J01225473                | Carbon Film RES.     | 1/6W | 47k ohm    | PJ       | C2042  | K13179008 | Ceramic CAP.     | F     | 50WV     | 0.01uF   |
| R2015     | J01225473                | Carbon Film RES.     | 1/6W | 47k ohm    | PJ       | C2043  | K05175220 | Ceramic CAP.     | RH    | 50WV     | 22pF     |
| R2016     | J01225473                | Carbon Film RES.     | 1/6W | 47k ohm    | PJ       | C2044  | K05172050 | Ceramic CAP.     | RH    | 50WV     | 5pF      |
| R2017     | J01225470                | Carbon Film RES.     | 1/6W | 47 ohm     | PJ       | C2045  | K05175330 | Ceramic CAP.     | RH    | 50WV     | 33pF     |
|           |                          |                      |      |            |          | C2046  | K02172059 | Ceramic CAP.     | CK    | 50WV     | 0.5pF    |

# (FEX-736-50) PARTS LIST

|          |           |                   |    |        |          |
|----------|-----------|-------------------|----|--------|----------|
| C2047    | K05175330 | Ceramic CAP.      | RH | 50WV   | 33pF     |
| C2048    | K05172050 | Ceramic CAP.      | RH | 50WV   | 5pF      |
| C2052    | K05173100 | Ceramic CAP.      | RH | 50WV   | 10pF     |
| C2053    | K13179008 | Ceramic CAP.      | F  | 50WV   | 0.01uF   |
| C2054    | K13179008 | Ceramic CAP.      | F  | 50WV   | 0.01uF   |
| C2055    | K13179008 | Ceramic CAP.      | F  | 50WV   | 0.01uF   |
| C2056    | K05175270 | Ceramic CAP.      | RH | 50WV   | 27pF     |
| C2057    | K40129004 | AL. Electro. CAP. |    | 16WV   | 10uF     |
| C2058    | K13179008 | Ceramic CAP.      | F  | 50WV   | 0.01uF   |
| C2059    | K40129004 | AL. Electro. CAP. |    | 16WV   | 10uF     |
| C2060    | K13179008 | Ceramic CAP.      | F  | 50WV   | 0.01uF   |
| C2061    | K00175560 | Ceramic CAP.      | SL | 50WV   | 56pF     |
| C2062    | K13179008 | Ceramic CAP.      | F  | 50WV   | 0.01uF   |
| C2063    | K40129004 | AL. Electro. CAP. |    | 16WV   | 10uF     |
| C2064    | K13179008 | Ceramic CAP.      | F  | 50WV   | 0.01uF   |
| C2065    | K02175470 | Ceramic CAP.      | CH | 50WV   | 47pF     |
| C2066    | K02175560 | Ceramic CAP.      | CH | 50WV   | 56pF     |
| C2067    | K70167104 | Tantalum CAP.     |    | 35WV   | 0.1uF    |
| C2068    | K40109001 | AL. Electro. CAP. |    | 10WV   | 100uF    |
| C2069    | K13179008 | Ceramic CAP.      | F  | 50WV   | 0.01uF   |
| C2070    | K12171102 | Ceramic CAP.      | E  | 50WV   | 0.001uF  |
| C2071    | K12171102 | Ceramic CAP.      | E  | 50WV   | 0.001uF  |
| C2072    | K00175470 | Ceramic CAP.      | SL | 50WV   | 47pF     |
| C2073    | K13179014 | Ceramic CAP.      | F  | 50WV   | 0.0047uF |
| C2074    | K00175470 | Ceramic CAP.      | SL | 50WV   | 47pF     |
| C2075    | K00175101 | Ceramic CAP.      | SL | 50WV   | 100pF    |
| C2076    | K00175101 | Ceramic CAP.      | SL | 50WV   | 100pF    |
| C2077    | K12171102 | Ceramic CAP.      | E  | 50WV   | 0.001uF  |
| C2078    | K12171102 | Ceramic CAP.      | E  | 50WV   | 0.001uF  |
| C2079    | K12171102 | Ceramic CAP.      | E  | 50WV   | 0.001uF  |
| C2080    | K00175101 | Ceramic CAP.      | SL | 50WV   | 100pF    |
| C2081    | K10179038 | Ceramic CAP.      | B  | 50WV   | 0.0047uF |
| C2083    | K22170229 | CAP. Chip         | CH | 50WV   | 56pF     |
| C2084    | K22170229 | CAP. Chip         | CH | 50WV   | 56pF     |
| C2085    | K22170229 | CAP. Chip         | CH | 50WV   | 56pF     |
| C2086    | K22170229 | CAP. Chip         | CH | 50WV   | 56pF     |
| C2087    | K22170229 | CAP. Chip         | CH | 50WV   | 56pF     |
| C2088    | K22170229 | CAP. Chip         | CH | 50WV   | 56pF     |
| C2089    | K22140903 | CAP. Chip         | D  | 25WV   | 0.022uF  |
| C2090    | K22170229 | CAP. Chip         | CH | 50WV   | 56pF     |
| C2091    | K22170229 | CAP. Chip         | CH | 50WV   | 56pF     |
| C2092    | K22170817 | CAP. Chip         | B  | 50WV   | 0.01uF   |
| C2093    | K05175150 | Ceramic CAP.      | RH | 50WV   | 15pF     |
| C2094    | K22170235 | CAP. Chip         | CH | 50WV   | 100pF    |
| TC2001   | K91000030 | Variable CAP.     |    | 40pF   |          |
| T2001    | L0020825  | Coil              |    |        |          |
| T2002    | L0020825  | Coil              |    |        |          |
| T2003    | L0020825  | Coil              |    |        |          |
| T2004    | L0020825  | Coil              |    |        |          |
| T2005    | L0021718  | Coil              |    |        |          |
| T2006    | L0021718  | Coil              |    |        |          |
| T2007    | L0021736  | Coil              |    |        |          |
| T2008    | L0021736  | Coil              |    |        |          |
| T2009    | L0021735  | Coil              |    |        |          |
| T2010    | L0021736  | Coil              |    |        |          |
| T2011    | L0020825  | Coil              |    |        |          |
| T2012    | L0020825  | Coil              |    |        |          |
| T2013    | L0020825  | Coil              |    |        |          |
| L2001    | L1190252  | M.RFC             |    | 3.3uH  |          |
| L2002    | L1190258  | M.RFC             |    | 10uH   |          |
| L2003    | L1190258  | M.RFC             |    | 10uH   |          |
| L2004    | L1190258  | M.RFC             |    | 10uH   |          |
| L2005    | L1190242  | M.RFC             |    | 0.47uH |          |
| L2006    | L0020340  | Coil              |    |        |          |
| L2007    | L1020673  | RFC               |    |        |          |
| J2001    | P1090255  | Connector         |    |        |          |
| J2002    | P1090255  | Connector         |    |        |          |
| J2003    | P0090525  | Connector         |    |        |          |
| J2004    | P0090525  | Connector         |    |        |          |
| J2005    | P0090527  | Connector         |    |        |          |
| J2006    | P0090527  | Connector         |    |        |          |
| P2001    | T9205551  | Wire ASSY         |    |        |          |
| L9190001 | L9190001  | Ferrite Beads     |    |        |          |

| 50MHz PA UNIT |                   |                       |                 |
|---------------|-------------------|-----------------------|-----------------|
| Symbol No.    | Part No.          | Description           | Device          |
|               | F2899000          | Printed Circuit Board |                 |
|               | C028990AA         | PCB with Components   |                 |
| Q3001         | G1090475          | IC                    | M57735          |
| D3001         | G2090337          | Diode                 | MI308           |
| D3002         | G2090344          | Diode                 | ISV178          |
| D3003         | G2090344          | Diode                 | ISV178          |
| D3004         | G2090377          | Diode                 | ISS108          |
| D3005         | G2090377          | Diode                 | ISS108          |
| R3001         | J31309002         | RES.                  | 1W 0.1 ohm TJ   |
| R3003         | J01275151         | Carbon Film RES.      | 1/2W 150 ohm SJ |
| R3004         | J02245103         | Carbon Film RES.      | 1/4W 10k ohm SJ |
| R3005         | J02245103         | Carbon Film RES.      | 1/4W 10k ohm SJ |
| C3002         | K10176102         | Ceramic CAP.          | B 50WV 0.001uF  |
| C3003         | K13179008         | Ceramic CAP.          | F 50WV 0.01uF   |
| C3004         | K40129004         | AL. Electro. CAP.     | 16WV 10uF       |
| C3005         | K10176102         | Ceramic CAP.          | B 50WV 0.001uF  |
| C3006         | K13179008         | Ceramic CAP.          | F 50WV 0.01uF   |
| C3007         | K40129004         | AL. Electro. CAP.     | 16WV 10uF       |
| C3008         | K10176102         | Ceramic CAP.          | B 50WV 0.001uF  |
| C3009         | K13179008         | Ceramic CAP.          | F 50WV 0.01uF   |
| C3010         | K40129004         | AL. Electro. CAP.     | 16WV 10uF       |
| C3011         | K00175470         | Ceramic CAP.          | SL 50WV 47pF    |
| C3012         | K02175150         | Ceramic CAP.          | CH 50WV 15pF    |
| C3013         | K00175101         | Ceramic CAP.          | SL 50WV 100pF   |
| C3014         | K02172020         | Ceramic CAP.          | CK 50WV 2pF     |
| C3015         | K02175150         | Ceramic CAP.          | CH 50WV 15pF    |
| C3016         | K00175470         | Ceramic CAP.          | SL 50WV 47pF    |
| C3017         | K02172020         | Ceramic CAP.          | CK 50WV 2pF     |
| C3018         | K00175470         | Ceramic CAP.          | SL 50WV 47pF    |
| C3019         | K00175470         | Ceramic CAP.          | SL 50WV 47pF    |
| C3020         | K00175470         | Ceramic CAP.          | SL 50WV 47pF    |
| C3021         | K00175470         | Ceramic CAP.          | SL 50WV 47pF    |
| C3022         | K00175470         | Ceramic CAP.          | SL 50WV 47pF    |
| C3023         | K02179009         | Ceramic CAP.          | CH 50WV 22pF    |
| C3024         | K02179009         | Ceramic CAP.          | CH 50WV 22pF    |
| C3025         | K00175470         | Ceramic CAP.          | SL 50WV 47pF    |
| C3027         | K10176102         | Ceramic CAP.          | B 50WV 0.001uF  |
| C3028         | K10176102         | Ceramic CAP.          | B 50WV 0.001uF  |
| C3029         | K10176102         | Ceramic CAP.          | B 50WV 0.001uF  |
| C3030         | K10176102         | Ceramic CAP.          | B 50WV 0.001uF  |
| C3031         | K10176102         | Ceramic CAP.          | B 50WV 0.001uF  |
| C3032         | K10176102         | Ceramic CAP.          | B 50WV 0.001uF  |
| C3034         | K21170002         | Feed Through CAP.     | 50WV 0.001uF    |
| C3035         | K21170002         | Feed Through CAP.     | 50WV 0.001uF    |
| C3036         | K21170002         | Feed Through CAP.     | 50WV 0.001uF    |
| C3037         | K21170002         | Feed Through CAP.     | 50WV 0.001uF    |
| C3038         | K21170002         | Feed Through CAP.     | 50WV 0.001uF    |
| L3001         | L1020469          | RFC                   |                 |
| L3002         | L1020469          | RFC                   |                 |
| L3003         | L1020663          | RFC                   |                 |
| L3004         | L0020824          | Coil                  |                 |
| L3005         | L0020824          | Coil                  |                 |
| L3006         | L1190238          | M.RFC                 | 0.22uH          |
| L3008         | L0020824          | Coil                  | 0.17uH          |
| L3009         | L0020824          | Coil                  | 0.17uH          |
| L3010         | L1190258          | M.RFC                 | 10uH            |
| L3011         | L1190258          | M.RFC                 | 10uH            |
| J3001         | P1090352          | Connector             |                 |
| Q5000036      | TP-G              |                       | MK-1095         |
| T9307003      | Wire ASSY         |                       |                 |
| T9205537      | Wire ASSY         |                       |                 |
| R4083840B     | Booster Heatsink  |                       |                 |
| R0083800B     | Booster Cover A   |                       |                 |
| R0083810B     | Booster Cover B   |                       |                 |
| R7043900      | Insulator Board B |                       |                 |

# PARTS LIST (FEX-736-220)

| MAIN CHASSIS |           |                                                  | R1016               | J02225223 | Carbon Film RES. | 1/6W              | 22k ohm  | UJ       |          |
|--------------|-----------|--------------------------------------------------|---------------------|-----------|------------------|-------------------|----------|----------|----------|
| Symbol No.   | Part No.  | Description                                      | R1017               | J02225102 | Carbon Film RES. | 1/6W              | 1k ohm   | UJ       |          |
| Q1           | G1090778  | IC                                               | L7809               | R1018     | J02225473        | Carbon Film RES.  | 1/6W     | 47k ohm  | UJ       |
|              |           |                                                  | R1019               | J02225101 | Carbon Film RES. | 1/6W              | 100 ohm  | UJ       |          |
|              | T9205536A | Wire ASSY                                        | R1020               | J02225471 | Carbon Film RES. | 1/6W              | 470 ohm  | UJ       |          |
|              | T9205549  | Wire ASSY                                        | R1021               | J02225103 | Carbon Film RES. | 1/6W              | 10k ohm  | UJ       |          |
|              | T9205552  | Wire ASSY                                        | R1022               | J01225222 | Carbon Film RES. | 1/6W              | 2.2k ohm | PJ       |          |
|              | T9205546  | Wire ASSY                                        | R1023               | J02225681 | Carbon Film RES. | 1/6W              | 680 ohm  | UJ       |          |
|              | T9317800A | Wire ASSY                                        | R1024               | J01225471 | Carbon Film RES. | 1/6W              | 470 ohm  | PJ       |          |
|              | R0083771  | UNIT CHASSIS                                     | R1025               | J02225102 | Carbon Film RES. | 1/6W              | 1k ohm   | UJ       |          |
|              | R0083790B | UNIT Bottom Cover                                | R1028               | J01225472 | Carbon Film RES. | 1/6W              | 4.7k ohm | PJ       |          |
|              | R0509970B | Shield Cover                                     | R1029               | J01225333 | Carbon Film RES. | 1/6W              | 33k ohm  | PJ       |          |
|              | R8123040  | Seil "220 MHz"                                   | R1030               | J01225473 | Carbon Film RES. | 1/6W              | 47k ohm  | PJ       |          |
|              |           |                                                  | R1031               | J02225102 | Carbon Film RES. | 1/6W              | 1k ohm   | UJ       |          |
|              |           |                                                  | R1032               | J02225101 | Carbon Film RES. | 1/6W              | 100 ohm  | UJ       |          |
|              |           |                                                  | R1033               | J01225560 | Carbon Film RES. | 1/6W              | 56 ohm   | PJ       |          |
|              |           |                                                  | R1034               | J01225223 | Carbon Film RES. | 1/6W              | 22k ohm  | PJ       |          |
|              |           |                                                  | R1035               | J02225562 | Carbon Film RES. | 1/6W              | 5.6k ohm | UJ       |          |
|              | F2898102  | Printed Circuit Board                            | R1036               | J01225681 | Carbon Film RES. | 1/6W              | 680 ohm  | PJ       |          |
|              | C028982AA | PCB With Components:<br>w/o 220 MHz SUB VCO UNIT | R1037               | J01225101 | Carbon Film RES. | 1/6W              | 100 ohm  | PJ       |          |
|              | C028982AB | PCB With Components:<br>w/ 220 MHz SUB VCO UNIT  | R1038               | J02225223 | Carbon Film RES. | 1/6W              | 22k ohm  | UJ       |          |
|              |           |                                                  | R1039               | J01225562 | Carbon Film RES. | 1/6W              | 5.6k ohm | PJ       |          |
|              |           |                                                  | R1040               | J02225331 | Carbon Film RES. | 1/6W              | 330 ohm  | UJ       |          |
|              |           |                                                  | R1041               | J01225560 | Carbon Film RES. | 1/6W              | 56 ohm   | PJ       |          |
|              |           |                                                  | R1042               | J01225331 | Carbon Film RES. | 1/6W              | 330 ohm  | PJ       |          |
|              |           |                                                  | R1043               | J02225473 | Carbon Film RES. | 1/6W              | 47k ohm  | UJ       |          |
|              |           |                                                  | R1044               | J02225471 | Carbon Film RES. | 1/6W              | 470 ohm  | UJ       |          |
|              |           |                                                  | R1046               | J02225562 | Carbon Film RES. | 1/6W              | 5.6k ohm | UJ       |          |
|              |           |                                                  | R1047               | J02225223 | Carbon Film RES. | 1/6W              | 22k ohm  | UJ       |          |
|              |           |                                                  | R1048               | J02225331 | Carbon Film RES. | 1/6W              | 330 ohm  | UJ       |          |
|              |           |                                                  | R1049               | J01225102 | Carbon Film RES. | 1/6W              | 1k ohm   | UJ       |          |
|              |           |                                                  | R1050               | J02225105 | Carbon Film RES. | 1/6W              | 1M ohm   | UJ       |          |
| Q1001        | G3801921G | FET                                              | 2SK192AGR           | R1051     | J02225560        | Carbon Film RES.  | 1/6W     | 56 ohm   | UJ       |
| Q1002        | G3802410G | FET                                              | 2SK241GR            | R1052     | J01225152        | Carbon Film RES.  | 1/6W     | 1.5k ohm | PJ       |
| Q1003        | G3305350B | Transistor                                       | 2SC535B             | R1053     | J02225332        | Carbon Film RES.  | 1/6W     | 3.3k ohm | UJ       |
| Q1004        | G3304580C | Transistor                                       | 2SC458C             | R1054     | J02225222        | Carbon Film RES.  | 1/6W     | 2.2k ohm | UJ       |
| Q1005        | G3802410G | FET                                              | 2SK241GR            | R1055     | J01225104        | Carbon Film RES.  | 1/6W     | 100k ohm | PJ       |
| Q1006        | G3305350B | Transistor                                       | 2SC535B             | R1063     | J01225560        | Carbon Film RES.  | 1/6W     | 56 ohm   | PJ       |
| Q1007        | G3304600B | Transistor                                       | 2SC460B             | R1064     | J02225222        | Carbon Film RES.  | 1/6W     | 2.2k ohm | UJ       |
| Q1008        | G1090798  | IC                                               | MC145155P           | R1065     | J01225561        | Carbon Film RES.  | 1/6W     | 560 ohm  | PJ       |
| Q1010        | G3304600B | Transistor                                       | 2SC460B             | R1066     | J01222221        | Carbon Film RES.  | 1/6W     | 220 ohm  | PJ       |
| Q1011        | G3305350B | Transistor                                       | 2SC535B             | R1067     | J01225471        | Carbon Film RES.  | 1/6W     | 470 ohm  | PJ       |
| Q1012        | G3305350B | Transistor                                       | 2SC535B             | R1069     | J01225560        | Carbon Film RES.  | 1/6W     | 56 ohm   | PJ       |
| Q1013        | G3802410G | FET                                              | 2SK241GR            | R1070     | J01225102        | Carbon Film RES.  | 1/6W     | 1k ohm   | PJ       |
| Q1014        | G3305350B | Transistor                                       | 2SC535B             | R1071     | J01225560        | Carbon Film RES.  | 1/6W     | 56 ohm   | PJ       |
| Q1015        | G1090473  | IC                                               | TC5081AP            | R1072     | J01225102        | Carbon Film RES.  | 1/6W     | 1k ohm   | PJ       |
| Q1019        | G1090795  | IC                                               | MB504               | R1073     | J01225562        | Carbon Film RES.  | 1/6W     | 5.6k ohm | PJ       |
| Q1020        | G1090707  | IC                                               | MC145156P           | R1075     | J01225102        | Carbon Film RES.  | 1/6W     | 1k ohm   | PJ       |
| Q1022        | G1090796  | IC                                               | MB505-16            | R1076     | J01225562        | Carbon Film RES.  | 1/6W     | 5.6k ohm | PJ       |
| Q1023        | G1090247  | IC                                               | TC9122P             | R1078     | J02225101        | Carbon Film RES.  | 1/6W     | 100 ohm  | PJ       |
| Q1024        | G3304580C | Transistor                                       | 2SC458C             | R1079     | J01225473        | Carbon Film RES.  | 1/6W     | 47k ohm  | PJ       |
| Q1025        | G3304580C | Transistor                                       | 2SC458C             | R1080     | J01225222        | Carbon Film RES.  | 1/6W     | 2.2k ohm | PJ       |
| Q1026        | G3304580C | Transistor                                       | 2SC458C             | R1081     | J01225473        | Carbon Film RES.  | 1/6W     | 47k ohm  | PJ       |
| Q1027        | G3304580C | Transistor                                       | 2SC458C             | R1082     | J02225222        | Carbon Film RES.  | 1/6W     | 2.2k ohm | UJ       |
| Q1028        | G3304580C | Transistor                                       | 2SC458C             | R1083     | J01225473        | Carbon Film RES.  | 1/6W     | 47k ohm  | PJ       |
| Q1029        | G3304580C | Transistor                                       | 2SC458C             | R1084     | J01225222        | Carbon Film RES.  | 1/6W     | 2.2k ohm | PJ       |
| Q1030        | G3304580C | Transistor                                       | 2SC458C             | R1085     | J02225473        | Carbon Film RES.  | 1/6W     | 47k ohm  | PJ       |
| Q1031        | G3304580C | Transistor                                       | 2SC458C             | R1086     | J01225222        | Carbon Film RES.  | 1/6W     | 2.2k ohm | PJ       |
| Q1032        | G3090079  | Transistor                                       | BA1A4P              | R1087     | J01225473        | Carbon Film RES.  | 1/6W     | 47k ohm  | PJ       |
| Q1033        | G3090079  | Transistor                                       | BA1A4P              | R1088     | J01225222        | Carbon Film RES.  | 1/6W     | 2.2k ohm | PJ       |
| Q1034        | G1090084  | IC                                               | uPC78L05            | R1089     | J01225473        | Carbon Film RES.  | 1/6W     | 47k ohm  | PJ       |
| D1001        | G2090271  | Diode                                            | 1T33                | R1090     | J01225222        | Carbon Film RES.  | 1/6W     | 2.2k ohm | PJ       |
| D1002        | G2090271  | Diode                                            | 1T33                | R1091     | J01225102        | Carbon Film RES.  | 1/6W     | 1k ohm   | PJ       |
| D1004        | G2090408  | Diode                                            | ISS270              |           |                  |                   |          |          |          |
| D1005        | G2022090  | Diode                                            | IS2209              | C1001     | K06173060        | Ceramic CAP.      | UJ       | 50WV     | 6pF      |
| D1006        | G2090384  | Diode                                            | HZTC2               | C1002     | K02172020        | Ceramic CAP.      | CK       | 50WV     | 2pF      |
| D1009        | G2090408  | Diode                                            | ISS270              | C1003     | K02173060        | Ceramic CAP.      | CH       | 50WV     | 6pF      |
| D1014        | G2090408  | Diode                                            | ISS270              | C1004     | K05172050        | Ceramic CAP.      | RH       | 50WV     | 5pF      |
| D1015        | G2090408  | Diode                                            | ISS270              | C1005     | K06172050        | Ceramic CAP.      | UJ       | 50WV     | 5pF      |
| X1001        | H0102814  | XTAL                                             | HC-49/T 20.5043 MHz | C1006     | K13179014        | Ceramic CAP.      | F        | 50WV     | 0.0047uF |
| R1001        | J01225474 | Carbon Film RES.                                 | 1/6W 470k ohm       | C1007     | K40109001        | AL. Electro. CAP. |          | 10WV     | 100uF    |
| R1002        | J01225101 | Carbon Film RES.                                 | 1/6W 100 ohm        | C1008     | K02179001        | Ceramic CAP.      | CK       | 50WV     | 1pF      |
| R1003        | J01225101 | Carbon Film RES.                                 | 1/6W 100 ohm        | C1009     | K13179008        | Ceramic CAP.      | F        | 50WV     | 0.01uF   |
| R1004        | J01225473 | Carbon Film RES.                                 | 1/6W 47k ohm        | C1010     | K02172020        | Ceramic CAP.      | CK       | 50WV     | 2pF      |
| R1005        | J01225470 | Carbon Film RES.                                 | 1/6W 47 ohm         | C1011     | K13179008        | Ceramic CAP.      | F        | 50WV     | 0.01uF   |
| R1006        | J02225103 | Carbon Film RES.                                 | 1/6W 10k ohm        | C1013     | K05172040        | Ceramic CAP.      | RJ       | 50WV     | 4pF      |
| R1007        | J02225223 | Carbon Film RES.                                 | 1/6W 22k ohm        | C1014     | K13179008        | Ceramic CAP.      | F        | 50WV     | 0.01uF   |
| R1008        | J02225221 | Carbon Film RES.                                 | 1/6W 220 ohm        | C1015     | K12171102        | Ceramic CAP.      | E        | 50WV     | 0.001uF  |
| R1010        | J02225470 | Carbon Film RES.                                 | 1/6W 47 ohm         | C1017     | K02172059        | Ceramic CAP.      | CK       | 50WV     | 0.5pF    |
| R1011        | J02225103 | Carbon Film RES.                                 | 1/6W 10k ohm        | C1018     | K05173100        | Ceramic CAP.      | RH       | 50WV     | 10pF     |
| R1012        | J02225562 | Carbon Film RES.                                 | 1/6W 5.6k ohm       | C1019     | K12171102        | Ceramic CAP.      | E        | 50WV     | 0.001uF  |
| R1013        | J01225473 | Carbon Film RES.                                 | 1/6W 47k ohm        | C1020     | K05173100        | Ceramic CAP.      | RH       | 50WV     | 10pF     |
| R1014        | J02225471 | Carbon Film RES.                                 | 1/6W 470 ohm        | C1022     | K19149021        | Ceramic CAP.      |          | 25WV     | 0.047uF  |
| R1015        | J02225562 | Carbon Film RES.                                 | 1/6W 5.6k ohm       | C1023     | K19149021        | Ceramic CAP.      |          | 25WV     | 0.047uF  |
|              |           |                                                  |                     | C1024     | K13179008        | Ceramic CAP.      | F        | 50WV     | 0.01uF   |
|              |           |                                                  |                     | C1025     | K70147105        | Tantalum CAP.     |          | 50WV     | 1uF      |

# (FEX-736-220) PARTS LIST

|       |           |                   |    |               |        |           |           |         |            |
|-------|-----------|-------------------|----|---------------|--------|-----------|-----------|---------|------------|
| C1026 | K13179008 | Ceramic CAP.      | F  | 50WV 0.01uF   | C1122  | K22170235 | CAP. Chip | CH      | 50WV 100pF |
| C1027 | K19149025 | Ceramic CAP.      |    | 25WV 0.1uF    | T1001  | L0020907  | Coil      |         |            |
| C1028 | K40109001 | AL. Electro. CAP. |    | 10WV 100uF    | T1002  | L0021358  | Coil      |         |            |
| C1030 | K70147105 | Tantalum CAP.     |    | 25WV 1uF      | T1003  | L0021358  | Coil      |         |            |
| C1031 | K19149021 | Ceramic CAP.      |    | 25WV 0.047uF  | T1004  | L0020907  | Coil      |         |            |
| C1032 | K19149021 | Ceramic CAP.      |    | 25WV 0.047uF  | T1005  | L0020907  | Coil      |         |            |
| C1033 | K12171102 | Ceramic CAP.      | E  | 50WV 0.001uF  | L1001  | L1190246  | M. RFC    | 1uH     |            |
| C1034 | K13179008 | Ceramic CAP.      | F  | 50WV 0.01uF   | L1002  | L1190246  | M. RFC    | 1uH     |            |
| C1035 | K19149025 | Ceramic CAP.      |    | 25WV 0.1uF    | L1003  | L0020706  | Coil      |         |            |
| C1038 | K05175150 | Ceramic CAP.      | RH | 50WV 15pF     | L1004  | L1190244  | M. RFC    | 0.68uH  |            |
| C1039 | K06175101 | Ceramic CAP.      | UJ | 50WV 100pF    | L1005  | L1020673  | RFC       |         |            |
| C1040 | K06175101 | Ceramic CAP.      | UJ | 50WV 100pF    | L1006  | L1190270  | M. RFC    | 100uH   |            |
| C1041 | K13179008 | Ceramic CAP.      | F  | 50WV 0.01uF   | L1007  | L1190258  | M. RFC    | 10uH    |            |
| C1042 | K40129004 | AL. Electro. CAP. |    | 16WV 10uF     | L1008  | L1190189  | M. RFC    | 1mH     |            |
| C1043 | K12171102 | Ceramic CAP.      | E  | 50WV 0.001uF  | L1009  | L0020652  | Coil      |         |            |
| C1044 | K02175101 | Ceramic CAP.      | CH | 50WV 100pF    | L1010  | L1190270  | M. RFC    | 100uH   |            |
| C1045 | K13179008 | Ceramic CAP.      | F  | 50WV 0.01uF   | L1011  | L1190270  | M. RFC    | 100uH   |            |
| C1046 | K05173070 | Ceramic CAP.      | RH | 50WV 7pF      | L1012  | L1190270  | M. RFC    | 100uH   |            |
| C1047 | K13179008 | Ceramic CAP.      | F  | 50WV 0.01uF   | L1013  | L1190228  | M. RFC    | 680uH   |            |
| C1048 | K13179008 | Ceramic CAP.      | F  | 50WV 0.01uF   | L1019  | L1190246  | M. RFC    | 1uH     |            |
| C1049 | K02179001 | Ceramic CAP.      | CK | 50WV 1pF      | L1020  | L1190270  | M. RFC    | 100uH   |            |
| C1050 | K05173070 | Ceramic CAP.      | RH | 50WV 7pF      | L1021  | L1190270  | M. RFC    | 100uH   |            |
| C1051 | K13179008 | Ceramic CAP.      | F  | 50WV 0.01uF   | L1022  | L1190270  | M. RFC    | 100uH   |            |
| C1052 | K13179008 | Ceramic CAP.      | F  | 50WV 0.01uF   | L1023  | L1190257  | M. RFC    | 8.2uH   |            |
| C1053 | K13179008 | Ceramic CAP.      | F  | 50WV 0.01uF   | L1024  | L1190257  | M. RFC    | 8.2uH   |            |
| C1054 | K05173060 | Ceramic CAP.      | RH | 50WV 6pF      | L1026  | L0021359  | Coil      |         |            |
| C1055 | K13179008 | Ceramic CAP.      | F  | 50WV 0.01uF   | L1027  | L0021359  | Coil      |         |            |
| C1056 | K02172059 | Ceramic CAP.      | CK | 50WV 0.5pF    | J1001  | P0090525  | Connector |         |            |
| C1057 | K05173060 | Ceramic CAP.      | RH | 50WV 6pF      | J1002  | P0090527  | Connector |         |            |
| C1058 | K13179008 | Ceramic CAP.      | F  | 50WV 0.01uF   | P1001  | T9205550  | Wire ASSY |         |            |
| C1059 | K02172020 | Ceramic CAP.      | CK | 50WV 2pF      | TP1001 | Q5000036  | TP-G      | MK-1095 |            |
| C1060 | K13179008 | Ceramic CAP.      | F  | 50WV 0.01uF   | TP1002 | Q5000036  | TP-G      | MK-1095 |            |
| C1061 | K05172050 | Ceramic CAP.      | RH | 50WV 5pF      |        |           |           |         |            |
| C1062 | K13179008 | Ceramic CAP.      | F  | 50WV 0.01uF   |        |           |           |         |            |
| C1063 | K40179011 | AL. Electro. CAP. |    | 50WV 3.3uF    |        |           |           |         |            |
| C1065 | K13179014 | Ceramic CAP.      | F  | 50WV 0.0047uF |        |           |           |         |            |
| C1066 | K13179014 | Ceramic CAP.      | F  | 50WV 0.0047uF |        |           |           |         |            |
| C1067 | K19149013 | Ceramic CAP.      |    | 25WV 0.01uF   |        |           |           |         |            |
| C1068 | K40109001 | AL. Electro. CAP. |    | 10WV 100uF    |        |           |           |         |            |
| C1069 | K19149021 | Ceramic CAP.      |    | 25WV 0.047uF  |        |           |           |         |            |
| C1070 | K70167474 | Tantalum CAP.     |    | 35WV 0.47uF   |        |           |           |         |            |
| C1071 | K19149013 | Ceramic CAP.      |    | 25WV 0.01uF   |        |           |           |         |            |
| C1072 | K12171102 | Ceramic CAP.      | E  | 50WV 0.001uF  |        |           |           |         |            |
| C1076 | K13179014 | Ceramic CAP.      | F  | 50WV 0.0047uF |        |           |           |         |            |
| C1081 | K02172020 | Ceramic CAP.      | CK | 50WV 2pF      |        |           |           |         |            |
| C1082 | K02172020 | Ceramic CAP.      | CK | 50WV 2pF      |        |           |           |         |            |
| C1084 | K12171102 | Ceramic CAP.      | E  | 50WV 0.1uF    |        |           |           |         |            |
| C1085 | K19149025 | Ceramic CAP.      |    | 25WV 0.1uF    |        |           |           |         |            |
| C1086 | K13179014 | Ceramic CAP.      | F  | 50WV 0.0047uF |        |           |           |         |            |
| C1087 | K12171102 | Ceramic CAP.      | E  | 50WV 0.001uF  |        |           |           |         |            |
| C1088 | K12171102 | Ceramic CAP.      | E  | 50WV 0.001uF  |        |           |           |         |            |
| C1089 | K40109001 | AL. Electro. CAP. |    | 10WV 100uF    |        |           |           |         |            |
| C1090 | K19149025 | Ceramic CAP.      |    | 25WV 0.1uF    |        |           |           |         |            |
| C1091 | K13179008 | Ceramic CAP.      | F  | 50WV 0.01uF   |        |           |           |         |            |
| C1092 | K05172050 | Ceramic CAP.      | RH | 50WV 5pF      |        |           |           |         |            |
| C1093 | K70167474 | Tantalum CAP.     |    | 35WV 0.47uF   |        |           |           |         |            |
| C1094 | K19149021 | Ceramic CAP.      |    | 25WV 0.047uF  |        |           |           |         |            |
| C1097 | K05173070 | Ceramic CAP.      | RH | 50WV 7pF      |        |           |           |         |            |
| C1098 | K12171102 | Ceramic CAP.      | E  | 50WV 0.001uF  |        |           |           |         |            |
| C1099 | K13179014 | Ceramic CAP.      | F  | 50WV 0.0047uF |        |           |           |         |            |
| C1100 | K13179008 | Ceramic CAP.      | F  | 50WV 0.01uF   |        |           |           |         |            |
| C1101 | K19149025 | Ceramic CAP.      |    | 25WV 0.1uF    |        |           |           |         |            |
| C1102 | K12171102 | Ceramic CAP.      | E  | 50WV 0.001uF  |        |           |           |         |            |
| C1103 | K05175270 | Ceramic CAP.      | RH | 50WV 27pF     |        |           |           |         |            |
| C1104 | K12171102 | Ceramic CAP.      | E  | 50WV 0.001uF  |        |           |           |         |            |
| C1105 | K05175220 | Ceramic CAP.      | RH | 50WV 22pF     |        |           |           |         |            |
| C1106 | K12171102 | Ceramic CAP.      | E  | 50WV 0.001uF  |        |           |           |         |            |
| C1107 | K13179008 | Ceramic CAP.      | F  | 50WV 0.01uF   |        |           |           |         |            |
| C1108 | K00175101 | Ceramic CAP.      | SL | 50WV 100pF    |        |           |           |         |            |
| C1109 | K00175101 | Ceramic CAP.      | SL | 50WV 100pF    |        |           |           |         |            |
| C1110 | K00175101 | Ceramic CAP.      | SL | 50WV 100pF    |        |           |           |         |            |
| C1111 | K00175101 | Ceramic CAP.      | SL | 50WV 100pF    |        |           |           |         |            |
| C1112 | K00175101 | Ceramic CAP.      | SL | 50WV 100pF    |        |           |           |         |            |
| C1113 | K00175101 | Ceramic CAP.      | SL | 50WV 100pF    |        |           |           |         |            |
| C1114 | K70167104 | Tantalum CAP.     | SL | 35WV 0.1uF    |        |           |           |         |            |
| C1115 | K12171102 | Ceramic CAP.      | E  | 50WV 0.001uF  |        |           |           |         |            |
| C1116 | K12171102 | Ceramic CAP.      | E  | 50WV 0.001uF  |        |           |           |         |            |
| C1117 | K40109002 | AL. Electro. CAP. |    | 10WV 47uF     |        |           |           |         |            |
| C1118 | K05173070 | Ceramic CAP.      | RH | 50WV 7pF      |        |           |           |         |            |
| C1120 | K70147105 | Tantalum CAP.     |    | 25WV 1uF      |        |           |           |         |            |
| C1121 | K13179008 | Ceramic CAP.      | F  | 50WV 0.01uF   |        |           |           |         |            |

## 220MHz SUB VCO UNIT

| Symbol No. | Part No.  | Description           | Device           |
|------------|-----------|-----------------------|------------------|
|            | F2928000  | Printed Circuit Board |                  |
|            | C029280AB | PCB With Component    |                  |
| Q1016      | G3805070F | FET                   | 2SK507F          |
| Q1017      | G3333550  | Transistor            | 2SC3355          |
| D1007      | G2090180  | Diode                 | FC53M-5          |
| D1008      | G2090180  | Diode                 | FC53M-5          |
| R1056      | J02225330 | Carbon Film RES.      | 1/6W 33 ohm UJ   |
| R1057      | J01225221 | Carbon Film RES.      | 1/6W 220 ohm PJ  |
| R1058      | J02225332 | Carbon Film RES.      | 1/6W 3.3k ohm UJ |
| R1059      | J02225103 | Carbon Film RES.      | 1/6W 10k ohm UJ  |
| R1060      | J02225101 | Carbon Film RES.      | 1/6W 100 ohm UJ  |
| R1061      | J01225101 | Carbon Film RES.      | 1/6W 100 ohm PJ  |
| R1068      | J01225102 | Carbon Film RES.      | 1/6W 1k ohm PJ   |
| C1073      | K05175180 | Ceramic CAP.          | RH 50WV 18pF     |
| C1074      | K12171121 | Ceramic CAP.          | E 50WV 0.001uF   |
| C1075      | K40109001 | AL. Electro. CAP.     | 10WV 100uF       |
| C1077      | K05173100 | Ceramic CAP.          | UJ 50WV 10pF     |
| C1078      | K05173080 | Ceramic CAP.          | RH 50WV 8pF      |
| C1079      | K02172059 | Ceramic CAP.          | CK 50WV 0.5pF    |
| C1080      | K13179014 | Ceramic CAP.          | F 50WV 0.0047uF  |
| C1083      | K22171002 | CAP. Chip             | F 50WV 0.0047uF  |
| C1095      | K19149021 | Ceramic CAP.          | 25WV 0.047uF     |
| C1096      | K12171102 | Ceramic CAP.          | E 50WV 0.001uF   |
| L1014      | L1190242  | M. RFC                | 0.47uH           |
| L1015      | L1190242  | M. RFC                | 0.47uH           |
| L1016      | L0190138  | Coil                  |                  |
| L1017      | L0021520  | Coil                  |                  |
| L1018      | L1190242  | M. RFC                | 0.47uH           |
| L1025      | L0020852  | Coil                  |                  |

# PARTS LIST (FEX-736-220)

|  |          |               |  |       |           |                   |       |          |          |
|--|----------|---------------|--|-------|-----------|-------------------|-------|----------|----------|
|  | L9190001 | Ferrite Beads |  | R2034 | J01225180 | Carbon Film RES.  | 1/6W  | 18 ohm   | PJ       |
|  |          |               |  | R2035 | J01225331 | Carbon Film RES.  | 1/6W  | 330 ohm  | PJ       |
|  |          |               |  | R2036 | J01225102 | Carbon Film RES.  | 1/6W  | 1k ohm   | PJ       |
|  |          |               |  | R2037 | J01225221 | Carbon Film RES.  | 1/6W  | 220 ohm  | PJ       |
|  |          |               |  | R2038 | J01225220 | Carbon Film RES.  | 1/6W  | 22 ohm   | PJ       |
|  |          |               |  | R2039 | J01225100 | Carbon Film RES.  | 1/6W  | 10 ohm   | PJ       |
|  |          |               |  | R2040 | J01225102 | Carbon Film RES.  | 1/6W  | 1k ohm   | PJ       |
|  |          |               |  | R2041 | J01225103 | Carbon Film RES.  | 1/6W  | 10k ohm  | PJ       |
|  |          |               |  | R2042 | J02225471 | Carbon Film RES.  | 1/2W  | 470 ohm  | UJ       |
|  |          |               |  | R2043 | J02225103 | Carbon Film RES.  | 1/6W  | 10k ohm  | UJ       |
|  |          |               |  | R2044 | J01275471 | Carbon Film RES.  | 1/6W  | 470 ohm  | TJ       |
|  |          |               |  | R2045 | J01225473 | Carbon Film RES.  | 1/6W  | 47k ohm  | PJ       |
|  |          |               |  | R2046 | J01225223 | Carbon Film RES.  | 1/6W  | 22k ohm  | PJ       |
|  |          |               |  | R2047 | J01225223 | Carbon Film RES.  | 1/6W  | 22k ohm  | PJ       |
|  |          |               |  | R2048 | J01225104 | Carbon Film RES.  | 1/6W  | 100k ohm | PJ       |
|  |          |               |  | R2049 | J01225473 | Carbon Film RES.  | 1/6W  | 47k ohm  | PJ       |
|  |          |               |  | R2050 | J01225223 | Carbon Film RES.  | 1/6W  | 22k ohm  | PJ       |
|  |          |               |  | R2051 | J01225103 | Carbon Film RES.  | 1/6W  | 10k ohm  | PJ       |
|  |          |               |  | R2052 | J01225223 | Carbon Film RES.  | 1/6W  | 22k ohm  | PJ       |
|  |          |               |  | R2057 | J01225223 | Carbon Film RES.  | 1/6W  | 22k ohm  | PJ       |
|  |          |               |  | R2058 | J01225472 | Carbon Film RES.  | 1/6W  | 4.7k ohm | PJ       |
|  |          |               |  | R2059 | J01225102 | Carbon Film RES.  | 1/6W  | 1k ohm   | PJ       |
|  |          |               |  | R2060 | J01225101 | Carbon Film RES.  | 1/6W  | 100 ohm  | PJ       |
|  |          |               |  | R2061 | J01225470 | Carbon Film RES.  | 1/6W  | 47 ohm   | PJ       |
|  |          |               |  | R2062 | J01225682 | Carbon Film RES.  | 1/6W  | 6.8k ohm | PJ       |
|  |          |               |  | R2063 | J01225223 | Carbon Film RES.  | 1/6W  | 22k ohm  | PJ       |
|  |          |               |  | R2064 | J01225102 | Carbon Film RES.  | 1/6W  | 1k ohm   | PJ       |
|  |          |               |  | R2065 | J01225101 | Carbon Film RES.  | 1/6W  | 100 ohm  | PJ       |
|  |          |               |  | R2066 | J01225222 | Carbon Film RES.  | 1/6W  | 2.2k ohm | PJ       |
|  |          |               |  | R2067 | J01225560 | Carbon Film RES.  | 1/6W  | 56 ohm   | PJ       |
|  |          |               |  | R2068 | J01225560 | Carbon Film RES.  | 1/6W  | 56 ohm   | PJ       |
|  |          |               |  | R2069 | J01225221 | Carbon Film RES.  | 1/6W  | 220 ohm  | PJ       |
|  |          |               |  | R2070 | J24205104 | RES. Chip         | 1/10W | 100k ohm |          |
|  |          |               |  | R2071 | J24205560 | RES. Chip         | 1/10W | 56 ohm   |          |
|  |          |               |  | R2072 | J24205104 | RES. Chip         | 1/10W | 100k ohm |          |
|  |          |               |  | R2073 | J01225331 | Carbon Film RES.  | 1/6W  | 330 ohm  | PJ       |
|  |          |               |  | C2001 | K00175470 | Ceramic CAP.      | SL    | 50WV     | 47pF     |
|  |          |               |  | C2003 | K13179008 | Ceramic CAP.      | F     | 50WV     | 0.01uF   |
|  |          |               |  | C2004 | K12171102 | Ceramic CAP.      | E     | 50WV     | 0.001uF  |
|  |          |               |  | C2005 | K13179008 | Ceramic CAP.      | F     | 50WV     | 0.01uF   |
|  |          |               |  | C2006 | K13179008 | Ceramic CAP.      | F     | 50WV     | 0.01uF   |
|  |          |               |  | C2007 | K13179008 | Ceramic CAP.      | F     | 50WV     | 0.01uF   |
|  |          |               |  | C2008 | K13179008 | Ceramic CAP.      | F     | 50WV     | 0.01uF   |
|  |          |               |  | C2009 | K02172020 | Ceramic CAP.      | CK    | 50WV     | 2pF      |
|  |          |               |  | C2010 | K12171102 | Ceramic CAP.      | E     | 50WV     | 0.001uF  |
|  |          |               |  | C2011 | K13179014 | Ceramic CAP.      | F     | 50WV     | 0.0047uF |
|  |          |               |  | C2013 | K12171102 | Ceramic CAP.      | E     | 50WV     | 0.001uF  |
|  |          |               |  | C2014 | K13179008 | Ceramic CAP.      | F     | 50WV     | 0.01uF   |
|  |          |               |  | C2015 | K10179024 | Ceramic CAP.      | B     | 50WV     | 0.01uF   |
|  |          |               |  | C2016 | K13179008 | Ceramic CAP.      | F     | 50WV     | 0.01uF   |
|  |          |               |  | C2017 | K00175220 | Ceramic CAP.      | SL    | 50WV     | 22pF     |
|  |          |               |  | C2018 | K12171102 | Ceramic CAP.      | E     | 50WV     | 0.001uF  |
|  |          |               |  | C2019 | K13179008 | Ceramic CAP.      | F     | 50WV     | 0.01uF   |
|  |          |               |  | C2020 | K05175150 | Ceramic CAP.      | RH    | 50WV     | 15pF     |
|  |          |               |  | C2021 | K02173100 | Ceramic CAP.      | CH    | 50WV     | 10pF     |
|  |          |               |  | C2022 | K13179008 | Ceramic CAP.      | F     | 50WV     | 0.01uF   |
|  |          |               |  | C2023 | K13179014 | Ceramic CAP.      | F     | 50WV     | 0.0047uF |
|  |          |               |  | C2024 | K13179008 | Ceramic CAP.      | F     | 50WV     | 0.01uF   |
|  |          |               |  | C2025 | K13179014 | Ceramic CAP.      | F     | 50WV     | 0.0047uF |
|  |          |               |  | C2026 | K13179008 | Ceramic CAP.      | F     | 50WV     | 0.01uF   |
|  |          |               |  | C2027 | K00173060 | Ceramic CAP.      | SL    | 50WV     | 6pF      |
|  |          |               |  | C2028 | K00173060 | Ceramic CAP.      | SL    | 50WV     | 6pF      |
|  |          |               |  | C2029 | K13179008 | Ceramic CAP.      | F     | 50WV     | 0.01uF   |
|  |          |               |  | C2030 | K13179008 | Ceramic CAP.      | F     | 50WV     | 0.01uF   |
|  |          |               |  | C2031 | K13179008 | Ceramic CAP.      | F     | 50WV     | 0.01uF   |
|  |          |               |  | C2032 | K02173100 | Ceramic CAP.      | CH    | 50WV     | 10pF     |
|  |          |               |  | C2033 | K02172050 | Ceramic CAP.      | CH    | 50WV     | 5pF      |
|  |          |               |  | C2034 | K13179008 | Ceramic CAP.      | F     | 50WV     | 0.01uF   |
|  |          |               |  | C2035 | K13179008 | Ceramic CAP.      | F     | 50WV     | 0.01uF   |
|  |          |               |  | C2036 | K13179008 | Ceramic CAP.      | F     | 50WV     | 0.01uF   |
|  |          |               |  | C2038 | K12171102 | Ceramic CAP.      | E     | 50WV     | 0.001uF  |
|  |          |               |  | C2039 | K12171102 | Ceramic CAP.      | E     | 50WV     | 0.001uF  |
|  |          |               |  | C2040 | K13179014 | Ceramic CAP.      | F     | 50WV     | 0.0047uF |
|  |          |               |  | C2042 | K05173060 | Ceramic CAP.      | RH    | 50WV     | 6pF      |
|  |          |               |  | C2043 | K13179008 | Ceramic CAP.      | F     | 50WV     | 0.01uF   |
|  |          |               |  | C2044 | K13179008 | Ceramic CAP.      | F     | 50WV     | 0.01uF   |
|  |          |               |  | C2045 | K05172030 | Ceramic CAP.      | RJ    | 50WV     | 3pF      |
|  |          |               |  | C2046 | K05173090 | Ceramic CAP.      | RH    | 50WV     | 9pF      |
|  |          |               |  | C2047 | K40129004 | AL. Electro. CAP. |       | 16WV     | 10uF     |
|  |          |               |  | C2048 | K13179008 | Ceramic CAP.      | F     | 50WV     | 0.01uF   |
|  |          |               |  | C2049 | K13179008 | Ceramic CAP.      | F     | 50WV     | 0.01uF   |
|  |          |               |  | C2050 | K40129004 | AL. Electro. CAP. |       | 16WV     | 10uF     |
|  |          |               |  | C2051 | K13179008 | Ceramic CAP.      | F     | 50WV     | 0.01uF   |

# (FEX-736-220) PARTS LIST

| 16WV 10uF |           |                   |        | 220MHz PA UNIT |                       |  |
|-----------|-----------|-------------------|--------|----------------|-----------------------|--|
| C2052     | K40129004 | AL. Electro. CAP. |        |                |                       |  |
| C2053     | K13179008 | Ceramic CAP.      | F      | 50WV 0.01uF    | Printed Circuit Board |  |
| C2054     | K00173060 | Ceramic CAP.      | RH     | 50WV 6pF       | PCB With Components   |  |
| C2055     | K05175120 | Ceramic CAP.      | RH     | 50WV 12pF      |                       |  |
| C2056     | K40109001 | AL. Electro. CAP. |        | 10WV 100uF     |                       |  |
| C2057     | K70167104 | Tantalum CAP.     |        | 35WV 0.1uF     |                       |  |
| C2058     | K13179008 | Ceramic CAP.      | F      | 50WV 0.01uF    |                       |  |
| C2059     | K12171102 | Ceramic CAP.      | E      | 50WV 0.001uF   |                       |  |
| C2060     | K12171102 | Ceramic CAP.      | E      | 50WV 0.001uF   |                       |  |
| C2061     | K00175470 | Ceramic CAP.      | SL     | 50WV 47pF      |                       |  |
| C2062     | K13179008 | Ceramic CAP.      | F      | 50WV 0.01uF    |                       |  |
| C2063     | K00175470 | Ceramic CAP.      | SL     | 50WV 47pF      |                       |  |
| C2064     | K10176101 | Ceramic CAP.      | B      | 50WV 100pF     |                       |  |
| C2065     | K10176101 | Ceramic CAP.      | B      | 50WV 100pF     |                       |  |
| C2066     | K12171102 | Ceramic CAP.      | E      | 50WV 0.001uF   |                       |  |
| C2067     | K12171102 | Ceramic CAP.      | E      | 50WV 0.001uF   |                       |  |
| C2068     | K12171102 | Ceramic CAP.      | E      | 50WV 0.001uF   |                       |  |
| C2069     | K10176101 | Ceramic CAP.      | B      | 50WV 100pF     |                       |  |
| C2070     | K00173100 | Ceramic CAP.      | SL     | 50WV 10pF      |                       |  |
| C2072     | K12171102 | Ceramic CAP.      | E      | 50WV 0.001uF   |                       |  |
| C2073     | K13179008 | Ceramic CAP.      | F      | 50WV 0.01uF    |                       |  |
| C2074     | K13179008 | Ceramic CAP.      | F      | 50WV 0.01uF    |                       |  |
| C2075     | K13179008 | Ceramic CAP.      | F      | 50WV 0.01uF    |                       |  |
| C2076     | K02172059 | Ceramic CAP.      | CK     | 50WV 0.5pF     |                       |  |
| C2077     | K00175470 | Ceramic CAP.      | SL     | 50WV 47pF      |                       |  |
| C2078     | K13179008 | Ceramic CAP.      | F      | 50WV 0.01uF    |                       |  |
| C2079     | K13179008 | Ceramic CAP.      | F      | 50WV 0.01uF    |                       |  |
| C2080     | K13179008 | Ceramic CAP.      | F      | 50WV 0.01uF    |                       |  |
| C2081     | K13179008 | Ceramic CAP.      | F      | 50WV 0.01uF    |                       |  |
| C2082     | K13179008 | Ceramic CAP.      | F      | 50WV 0.01uF    |                       |  |
| C2083     | K13179008 | Ceramic CAP.      | F      | 50WV 0.01uF    |                       |  |
| C2084     | K13179008 | Ceramic CAP.      | F      | 50WV 0.01uF    |                       |  |
| C2085     | K13179008 | Ceramic CAP.      | F      | 50WV 0.01uF    |                       |  |
| C2086     | K13179008 | Ceramic CAP.      | F      | 50WV 0.01uF    |                       |  |
| C2087     | K02172059 | Ceramic CAP.      | CK     | 50WV 0.5pF     |                       |  |
| C2088     | K02172059 | Ceramic CAP.      | CK     | 50WV 0.5pF     |                       |  |
| C2089     | K02173060 | Ceramic CAP.      | CH     | 50WV 6pF       |                       |  |
| C2090     | K22170239 | CAP. Chip         | CH     | 50WV 150pF     |                       |  |
| C2091     | K22170239 | CAP. Chip         | CH     | 50WV 150pF     |                       |  |
| C2092     | K22140803 | CAP. Chip         | B      | 25WV 0.01uF    |                       |  |
| C2093     | K05172030 | Ceramic CAP.      | RJ     | 50WV 3pF       |                       |  |
| C2094     | K02179009 | Ceramic CAP.      | CH     | 50WV 22pF      |                       |  |
| C2095     | K13179009 | Ceramic CAP.      | F      | 50WV 0.047uF   |                       |  |
| TC2002    | K91000028 | Variable CAP.     |        | 10pF           |                       |  |
| T2001     | L0021748  | Coil              |        |                |                       |  |
| T2002     | L0021718  | Coil              |        |                |                       |  |
| T2003     | L0021718  | Coil              |        |                |                       |  |
| T2004     | L0021740  | Coil              |        |                |                       |  |
| T2005     | L0021740  | Coil              |        |                |                       |  |
| T2006     | L0021740  | Coil              |        |                |                       |  |
| T2007     | L0021165  | Coil              |        |                |                       |  |
| T2008     | L0021735  | Coil              |        |                |                       |  |
| T2009     | L0021735  | Coil              |        |                |                       |  |
| T2010     | L0021736  | Coil              |        |                |                       |  |
| T2011     | L0021740  | Coil              |        |                |                       |  |
| T2012     | L0021740  | Coil              |        |                |                       |  |
| T2013     | L0021740  | Coil              |        |                |                       |  |
| T2014     | L0021718  | Coil              |        |                |                       |  |
| T2015     | L0021718  | Coil              |        |                |                       |  |
| T2016     | L0021165  | Coil              |        |                |                       |  |
| T2017     | L0021165  | Coil              |        |                |                       |  |
| T2018     | L0021165  | Coil              |        |                |                       |  |
| L2001     | L0021457  | Coil              |        |                |                       |  |
| L2002     | L1190246  | M. RFC            | 1uH    |                |                       |  |
| L2003     | L1190258  | M. RFC            | 10uH   |                |                       |  |
| L2004     | L1190246  | M. RFC            | 1uH    |                |                       |  |
| L2005     | L0020342  | Coil              |        |                |                       |  |
| L2006     | L0020340  | Coil              |        |                |                       |  |
| L2007     | L0020725  | Coil              |        |                |                       |  |
| L2009     | L0020852  | Coil              |        |                |                       |  |
| L2010     | L1020673  | RFC               |        |                |                       |  |
| L2011     | L0020852  | Coil              |        |                |                       |  |
| L2012     | L1190244  | M. RFC            | 0.68uH |                |                       |  |
| CV2001    | L4020085  | Helical Resonator |        |                |                       |  |
| CV2002    | L4020085  | Helical Resonator |        |                |                       |  |
| J2001     | P1090255  | Connector         |        |                |                       |  |
| J2002     | P1090255  | Connector         |        |                |                       |  |
| J2003     | P0090525  | Connector         |        |                |                       |  |
| J2004     | P0090525  | Connector         |        |                |                       |  |
| J2005     | P0090527  | Connector         |        |                |                       |  |
| J2006     | P0090527  | Connector         |        |                |                       |  |
| J2007     | P1090210  | Connector         |        |                |                       |  |
| J2008     | P1090210  | Connector         |        |                |                       |  |
| P2001     | T9205551  | Wire ASSY         |        |                |                       |  |
|           | R7043900  | PLL IF Shield     |        |                |                       |  |
|           | Q5000036  | TP-G              |        | MK-1095        |                       |  |
|           | T9307003  | Wire ASSY         |        |                |                       |  |
|           | T9205537  | Wire ASSY         |        |                |                       |  |
|           | S6000138  | Beads             |        |                |                       |  |
|           | R4083840B | Booster Heatsink  |        |                |                       |  |
|           | R0083800B | Booster Cover A   |        |                |                       |  |
|           | R0083810B | Booster Cover B   |        |                |                       |  |
|           | R7043900  | Insulator Board B |        |                |                       |  |

# PARTS LIST (FEX-736-1.2)

| MAIN CHASSIS     |           |                                 |                       |
|------------------|-----------|---------------------------------|-----------------------|
| Symbol No.       | Part No.  | Description                     | Device                |
| R0804800         |           | Chassis                         |                       |
| R0511100A        |           | Shield Cover                    |                       |
| R0511110         |           | Shield Cover                    |                       |
| R8123060         |           | Seal                            |                       |
| R0124540         |           | Heatsink Plate                  |                       |
| S5000057         |           | Lead Clamper                    | L=38                  |
| 1200MHz PLL UNIT |           |                                 |                       |
| Symbol No.       | Part No.  | Description                     | Device                |
|                  | F2951000A | Printed Circuit Board           |                       |
|                  | C029510AA | PCB with Components:<br>Vers. F |                       |
|                  | C029510AB | PCB with Components:<br>Vers. A |                       |
|                  | C029510AC | PCB with Components:<br>Vers. B |                       |
| Q1001            | G3316237F | Transistor                      | 2SC1623 T2BL6         |
| Q1002            | G3316237F | Transistor                      | 2SC1623 T2BL6         |
| Q1003            | G3316237F | Transistor                      | 2SC1623 T2BL6         |
| Q1004            | G3316237F | Transistor                      | 2SC1623 T2BL6         |
| Q1005            | G3316237F | Transistor                      | 2SC1623 T2BL6         |
| Q1006            | G3316237F | Transistor                      | 2SC1623 T2BL6         |
| Q1007            | G3316237F | Transistor                      | 2SC1623 T2BL6         |
| Q1008            | G3316237F | Transistor                      | 2SC1623 T2BL6         |
| Q1009            | G3327127G | Transistor                      | 2SC2712GR TE85R       |
| Q1010            | G3327127G | Transistor                      | 2SC2712GR TE85R       |
| Q1011            | G1090824  | IC                              | MB504L                |
| Q1012            | G1090707  | IC                              | MC145156L             |
| Q1013            | G3805070F | FET                             | 2SK507F               |
| Q1014            | G3331207  | Transistor                      | 2SC3120 TE85R         |
| Q1015            | G3331207  | Transistor                      | 2SC3120 TE85R         |
| Q1016            | G3331207  | Transistor                      | 2SC3120 TE85R         |
| Q1017            | G1090796  | IC                              | MB505-16              |
| Q1018            | G3316237F | Transistor                      | 2SC1623 T2BL6         |
| Q1019            | G3803027Y | FET                             | 2SK302Y TE85R         |
| Q1020            | G1090247  | IC                              | TC9122P               |
| Q1021            | G3326207B | Transistor                      | 2SC2620 QB            |
| Q1022            | G1090072  | IC                              | uPC577H               |
| Q1023            | G1090473  | IC                              | TC5081AP              |
| Q1024            | G3326207B | Transistor                      | 2SC2620 QB            |
| Q1025            | G3803027Y | FET                             | 2SK302Y               |
| Q1026            | G3331207  | Transistor                      | 2SC3120 TE85R         |
| Q1027            | G1090653  | IC                              | uPC1651G              |
| Q1028            | G1090822  | IC                              | uPC1659G              |
| Q1029            | G4801657O | FET                             | 3SK165-O-T7           |
| Q1030            | G1090653  | IC                              | uPC1651G              |
| Q1031            | G1090860  | IC                              | MB503                 |
| Q1032            | G3108127F | Transistor                      | 2SA812 T2BM6B         |
| Q1033            | G1090707  | IC                              | MC145156P             |
| Q1034            | G3333557  | Transistor                      | 2SC3356 T2B           |
| Q1035            | G3327127G | Transistor                      | 2SC2712GR TE85R       |
| Q1036            | G1090739  | IC                              | MC145163SL            |
| Q1037            | G1090292  | IC                              | uPB551C               |
| Q1038            | G3801921G | FET                             | 2SK192AGR             |
| Q1039            | G3326207B | Transistor                      | 2SC2620QB             |
| Q1040            | G3326207B | Transistor                      | 2SC2620QB             |
| Q1041            | G1090299  | IC                              | uPC7805H              |
| D1001            | G2090408  | Diode                           | 1SS270                |
| D1002            | G2090408  | Diode                           | 1SS270                |
| D1003(F)         | G2090408  | Diode                           | 1SS270                |
| D1004<br>(A,B)   | G2090408  | Diode                           | 1SS270                |
| D1005            | G2090408  | Diode                           | 1SS270                |
| D1006            | G2090408  | Diode                           | 1SS270                |
| D1007(B)         | G2090408  | Diode                           | 1SS270                |
| D1008            | G2090408  | Diode                           | 1SS270                |
| D1009            | G2090271  | Diode                           | 1T33                  |
| D1010            | G2090271  | Diode                           | 1T33                  |
| D1011            | G2090384  | Diode                           | HZ7C2                 |
| D1012            | G2022080  | Diode                           | 1S2208                |
| D1013            | G2090248  | Diode                           | 1T32                  |
| X1001            | H0102844  | XTAL                            | HC-49/U-3P 71.690 MHz |
| XM1001           | Q7000072  | VCO Module                      | ENF-VCO 06A01         |
| R1001            | J24205474 | RES. Chip                       | 1/10W 470k ohm        |
| R1002            | J24205474 | RES. Chip                       | 1/10W 470k ohm        |
| R1003            | J24205474 | RES. Chip                       | 1/10W 470k ohm        |
| R1004            | J24205474 | RES. Chip                       | 1/10W 470k ohm        |
| R1005            | J24205474 | RES. Chip                       | 1/10W 470k ohm        |
| R1006            | J24205474 | RES. Chip                       | 1/10W 470k ohm        |
| R1007            | J24205333 | RES. Chip                       | 1/10W 33k ohm         |
| R1008            | J24205333 | RES. Chip                       | 1/10W 33k ohm         |
| R1009            | J24205333 | RES. Chip                       | 1/10W 33k ohm         |
| R1010            | J24205333 | RES. Chip                       | 1/10W 33k ohm         |
| R1011            | J24205333 | RES. Chip                       | 1/10W 33k ohm         |
| R1012            | J24205333 | RES. Chip                       | 1/10W 33k ohm         |
| R1013            | J24205102 | RES. Chip                       | 1/10W 1k ohm          |
| R1014            | J24205562 | RES. Chip                       | 1/10W 5.6k ohm        |
| R1015            | J24205101 | RES. Chip                       | 1/10W 100 ohm         |
| R1016            | J24205102 | RES. Chip                       | 1/10W 1k ohm          |
| R1017            | J24205562 | RES. Chip                       | 1/10W 5.6k ohm        |
| R1018            | J01225101 | Carbon Film RES.                | 1/6W 100 ohm PJ       |
| R1019            | J24205102 | RES. Chip                       | 1/10W 1k ohm          |
| R1020            | J24205222 | RES. Chip                       | 1/10W 2.2k ohm        |
| R1021            | J24205103 | RES. Chip                       | 1/10W 10k ohm         |
| R1022            | J24205103 | RES. Chip                       | 1/10W 10k ohm         |
| R1023            | J24205152 | RES. Chip                       | 1/10W 1.5k ohm        |
| R1024            | J24205222 | RES. Chip                       | 1/10W 2.2k ohm        |
| R1025            | J01225471 | Carbon Film RES.                | 1/6W 470 ohm PJ       |
| R1026            | J24205102 | RES. Chip                       | 1/10W 1k ohm          |
| R1027            | J24205104 | RES. Chip                       | 1/10W 100k ohm        |
| R1028            | J24205104 | RES. Chip                       | 1/10W 100k ohm        |
| R1029            | J24205330 | RES. Chip                       | 1/10W 33 ohm          |
| R1030            | J24205221 | RES. Chip                       | 1/10W 220 ohm         |
| R1031            | J24205103 | RES. Chip                       | 1/10W 10k ohm         |
| R1032            | J24205332 | RES. Chip                       | 1/10W 3.3k ohm        |
| R1033            | J24205471 | RES. Chip                       | 1/10W 470 ohm         |
| R1034            | J24205152 | RES. Chip                       | 1/10W 1.5k ohm        |
| R1035            | J24205470 | RES. Chip                       | 1/10W 47 ohm          |
| R1036            | J24205683 | RES. Chip                       | 1/10W 68k ohm         |
| R1037            | J24205221 | RES. Chip                       | 1/10W 220 ohm         |
| R1038            | J24205102 | RES. Chip                       | 1/10W 1k ohm          |
| R1039            | J24205683 | RES. Chip                       | 1/10W 68k ohm         |
| R1040            | J24205221 | RES. Chip                       | 1/10W 220 ohm         |
| R1041            | J24205222 | RES. Chip                       | 1/10W 2.2k ohm        |
| R1042            | J24205101 | RES. Chip                       | 1/10W 100 ohm         |
| R1043            | J24205223 | RES. Chip                       | 1/10W 22k ohm         |
| R1044            | J24205222 | RES. Chip                       | 1/10W 2.2k ohm        |
| R1045            | J24205101 | RES. Chip                       | 1/10W 100 ohm         |
| R1046            | J24205101 | RES. Chip                       | 1/10W 100 ohm         |
| R1047            | J24205102 | RES. Chip                       | 1/10W 1k ohm          |
| R1048            | J24205101 | RES. Chip                       | 1/10W 100 ohm         |
| R1049            | J24205102 | RES. Chip                       | 1/10W 1k ohm          |
| R1050            | J24205562 | RES. Chip                       | 1/10W 5.6k ohm        |
| R1051            | J24205102 | RES. Chip                       | 1/10W 1k ohm          |
| R1052            | J24205332 | RES. Chip                       | 1/10W 3.3k ohm        |
| R1053            | J24205560 | RES. Chip                       | 1/10W 56 ohm          |
| R1054            | J24205472 | RES. Chip                       | 1/10W 4.7k ohm        |
| R1055            | J24205103 | RES. Chip                       | 1/10W 10k ohm         |
| R1056            | J24205222 | RES. Chip                       | 1/10W 2.2k ohm        |
| R1057            | J24205104 | RES. Chip                       | 1/10W 100k ohm        |
| R1058            | J24205222 | RES. Chip                       | 1/10W 2.2k ohm        |
| R1059            | J24205472 | RES. Chip                       | 1/10W 4.7k ohm        |
| R1060            | J24205472 | RES. Chip                       | 1/10W 4.7k ohm        |
| R1061            | J24205152 | RES. Chip                       | 1/10W 1.5k ohm        |
| R1062            | J24205101 | RES. Chip                       | 1/10W 100 ohm         |
| R1063            | J01225470 | Carbon Film RES.                | 1/6W 47 ohm PJ        |
| R1064            | J24205471 | RES. Chip                       | 1/10W 470 ohm         |
| R1065            | J24205471 | RES. Chip                       | 1/10W 470 ohm         |
| R1066            | J24205102 | RES. Chip                       | 1/10W 1k ohm          |
| R1067            | J24205472 | RES. Chip                       | 1/10W 4.7k ohm        |
| R1068            | J24205330 | RES. Chip                       | 1/10W 33 ohm          |
| R1069            | J24205221 | RES. Chip                       | 1/10W 220 ohm         |
| R1070            | J01225100 | Carbon Film RES.                | 1/6W 10 ohm PJ        |
| R1071            | J24205101 | RES. Chip                       | 1/10W 100 ohm         |
| R1072            | J24205471 | RES. Chip                       | 1/10W 470 ohm         |
| R1073            | J01225470 | Carbon Film RES.                | 1/6W 47 ohm PJ        |
| R1074            | J24205101 | RES. Chip                       | 1/10W 100 ohm         |
| R1075            | J24205222 | RES. Chip                       | 1/10W 2.2k ohm        |
| R1076            | J24205103 | RES. Chip                       | 1/10W 10k ohm         |
| R1077            | J24205103 | RES. Chip                       | 1/10W 10k ohm         |
| R1078            | J01225104 | Carbon Film RES.                | 1/6W 100k ohm PJ      |
| R1079            | J24205473 | RES. Chip                       | 1/10W 47k ohm         |
| R1080            | J24205103 | RES. Chip                       | 1/10W 10k ohm         |
| R1081            | J24205152 | RES. Chip                       | 1/10W 1.5k ohm        |
| R1082            | J24205681 | RES. Chip                       | 1/10W 680 ohm         |
| R1083            | J01225151 | Carbon Film RES.                | 1/6W 150 ohm PJ       |
| R1084            | J24205102 | RES. Chip                       | 1/10W 1k ohm          |
| R1085            | J01225470 | Carbon Film RES.                | 1/6W 47 ohm PJ        |
| R1086            | J24205181 | RES. Chip                       | 1/10W 180 ohm         |
| R1087            | J24205680 | RES. Chip                       | 1/10W 68 ohm          |
| R1088            | J24205331 | RES. Chip                       | 1/10W 330 ohm         |

# (FEX-736-1.2) PARTS LIST

|       |           |                   |                 |              |       |           |                   |    |              |          |
|-------|-----------|-------------------|-----------------|--------------|-------|-----------|-------------------|----|--------------|----------|
| R1089 | J24205182 | RES. Chip         | 1/10W 1.8k ohm  |              | C1058 | K22170210 | CAP. Chip         | CH | 50WV         | 9pF      |
| R1090 | J01225331 | Carbon Film RES.  | 1/6W 330 ohm    |              | C1059 | K22170215 | CAP. Chip         | CH | 50WV         | 15pF     |
| R1091 | J24205102 | RES. Chip         | 1/10W 1k ohm    |              | C1060 | K22170210 | CAP. Chip         | CH | 50WV         | 9pF      |
| R1092 | J24205562 | RES. Chip         | 1/10W 5.6k ohm  |              | C1061 | K22170202 | CAP. Chip         | CH | 50WV         | 1pF      |
| R1093 | J24205101 | RES. Chip         | 1/10W 100 ohm   |              | C1062 | K22170210 | CAP. Chip         | CH | 50WV         | 9pF      |
| R1094 | J24205151 | RES. Chip         | 1/10W 150 ohm   |              | C1063 | K22170210 | CAP. Chip         | CH | 50WV         | 9pF      |
| R1095 | J24205222 | RES. Chip         | 1/10W 2.2k ohm  | PJ           | C1064 | K22170817 | CAP. Chip         | B  | 50WV         | 0.01uF   |
| R1096 | J01225334 | Carbon Film RES.  | 1/6W 330k ohm   |              | C1065 | K22170817 | CAP. Chip         | B  | 50WV         | 0.01uF   |
| R1097 | J24205104 | RES. Chip         | 1/10W 100k ohm  |              | C1066 | K40179007 | AL. Electro. CAP. |    | 50WV         | 3.3uF    |
| R1098 | J01225101 | Carbon Film RES.  | 1/6W 100 ohm    | PJ           | C1067 | K22170817 | CAP. Chip         | B  | 50WV         | 0.01uF   |
| R1099 | J24205221 | RES. Chip         | 1/10W 220 ohm   |              | C1068 | K40129004 | AL. Electro. CAP. |    | 16WV         | 10uF     |
| R1100 | J24205103 | RES. Chip         | 1/10W 10k ohm   |              | C1070 | K22170203 | CAP. Chip         | CH | 50WV         | 2pF      |
| R1101 | J24205103 | RES. Chip         | 1/10W 10k ohm   |              | C1071 | K22170813 | CAP. Chip         | B  | 50WV         | 0.0047uF |
| R1102 | J24205101 | RES. Chip         | 1/10W 100 ohm   |              | C1072 | K22170813 | CAP. Chip         | B  | 50WV         | 0.0047uF |
| R1103 | J24205471 | RES. Chip         | 1/10W 470 ohm   |              | C1073 | K22141809 | CAP. Chip         | B  | 25WV         | 0.1uF    |
| R1104 | J24205103 | RES. Chip         | 1/10W 10k ohm   |              | C1074 | K22141809 | CAP. Chip         | B  | 25WV         | 0.1uF    |
| R1105 | J24205101 | RES. Chip         | 1/10W 100 ohm   |              | C1075 | K40129004 | AL. Electro. CAP. |    | 16WV         | 10uF     |
| R1106 | J24205103 | RES. Chip         | 1/10W 10k ohm   |              | C1076 | K22141809 | CAP. Chip         | B  | 25WV         | 0.1uF    |
| R1107 | J24205222 | RES. Chip         | 1/10W 2.2k ohm  |              | C1077 | K40129004 | AL. Electro. CAP. |    | 16WV         | 10uF     |
| R1108 | J24205223 | RES. Chip         | 1/10W 22k ohm   |              | C1078 | K40129004 | AL. Electro. CAP. |    | 16WV         | 10uF     |
| R1109 | J01225151 | Carbon Film RES.  | 1/6W 150 ohm    | PJ           | C1079 | K22141809 | CAP. Chip         | B  | 25WV         | 0.1uF    |
| R1110 | J24205101 | RES. Chip         | 1/10W 100 ohm   |              | C1080 | K40109024 | AL. Electro. CAP. |    | 10WV         | 100uF    |
| R1111 | J24205000 | RES. Chip         | 1/10W 0 ohm     |              | C1081 | K70167104 | Tantalum CAP.     |    | 35WV         | 0.1uF    |
| R1112 | J24205000 | RES. Chip         | 1/10W 0 ohm     |              | C1084 | K22170306 | CAP. Chip         | UJ | 50WV         | 5pF      |
| R1113 | J24205000 | RES. Chip         | 1/10W 0 ohm     |              | C1085 | K22170223 | CAP. Chip         | CH | 50WV         | 33pF     |
| R1114 | J24205103 | RES. Chip         | 1/10W 10k ohm   |              | C1086 | K22170227 | CAP. Chip         | CH | 50WV         | 47pF     |
| R1115 | J24205103 | RES. Chip         | 1/10W 10k ohm   |              | C1087 | K22170817 | CAP. Chip         | B  | 50WV         | 0.01uF   |
| C1001 | K22170235 | CAP. Chip         | CH 50WV 100pF   |              | C1088 | K22170210 | CAP. Chip         | CH | 50WV         | 9pF      |
| C1002 | K22170235 | CAP. Chip         | CH 50WV 100pF   |              | C1089 | K22170817 | CAP. Chip         | B  | 50WV         | 0.01uF   |
| C1003 | K22170235 | CAP. Chip         | CH 50WV 100pF   |              | C1090 | K22170805 | CAP. Chip         | B  | 50WV         | 0.001uF  |
| C1004 | K22170235 | CAP. Chip         | CH 50WV 100pF   |              | C1091 | K22170817 | CAP. Chip         | B  | 50WV         | 0.01uF   |
| C1005 | K22170235 | CAP. Chip         | CH 50WV 100pF   |              | C1092 | K22170817 | CAP. Chip         | B  | 50WV         | 0.01uF   |
| C1006 | K22170235 | CAP. Chip         | CH 50WV 100pF   |              | C1093 | K22170206 | CAP. Chip         | CH | 50WV         | 5pF      |
| C1007 | K22170235 | CAP. Chip         | CH 50WV 100pF   |              | C1094 | K22170210 | CAP. Chip         | CH | 50WV         | 9pF      |
| C1008 | K22170235 | CAP. Chip         | CH 50WV 100pF   |              | C1095 | K22170817 | CAP. Chip         | B  | 50WV         | 0.01uF   |
| C1009 | K22170235 | CAP. Chip         | CH 50WV 100pF   |              | C1096 | K22170215 | CAP. Chip         | CH | 50WV         | 15pF     |
| C1010 | K22170235 | CAP. Chip         | CH 50WV 100pF   |              | C1097 | K22170817 | CAP. Chip         | CH | 50WV         | 0.01uF   |
| C1011 | K22170235 | CAP. Chip         | CH 50WV 100pF   |              | C1098 | K22170235 | CAP. Chip         | CH | 50WV         | 100pF    |
| C1012 | K22170235 | CAP. Chip         | CH 50WV 100pF   |              | C1099 | K22170817 | CAP. Chip         | B  | 50WV         | 0.01uF   |
| C1013 | K22170235 | CAP. Chip         | CH 50WV 100pF   |              | C1100 | K22170235 | CAP. Chip         | CH | 50WV         | 100pF    |
| C1014 | K22170235 | CAP. Chip         | CH 50WV 100pF   |              | C1101 | K22170805 | CAP. Chip         | B  | 50WV         | 0.001uF  |
| C1015 | K22170235 | CAP. Chip         | CH 50WV 100pF   |              | C1102 | K22170817 | CAP. Chip         | B  | 50WV         | 0.01uF   |
| C1016 | K22170235 | CAP. Chip         | CH 50WV 100pF   |              | C1103 | K22170235 | CAP. Chip         | CH | 50WV         | 100pF    |
| C1017 | K22170219 | CAP. Chip         | CH 50WV 22pF    |              | C1104 | K22170235 | CAP. Chip         | CH | 50WV         | 100pF    |
| C1018 | K22170229 | CAP. Chip         | CH 50WV 56pF    |              | C1105 | K22170805 | CAP. Chip         | B  | 50WV         | 0.001uF  |
| C1019 | K22170817 | CAP. Chip         | B 50WV 0.01uF   |              | C1106 | K22170805 | CAP. Chip         | B  | 50WV         | 0.001uF  |
| C1020 | K22170211 | CAP. Chip         | CH 50WV 10pF    |              | C1107 | K22170805 | CAP. Chip         | B  | 50WV         | 0.001uF  |
| C1021 | K22170229 | CAP. Chip         | CH 50WV 56pF    |              | C1111 | K22170805 | CAP. Chip         | B  | 50WV         | 0.001uF  |
| C1022 | K22170817 | CAP. Chip         | B 50WV 0.01uF   |              | C1112 | K22170805 | CAP. Chip         | B  | 50WV         | 0.001uF  |
| C1023 | K22170813 | CAP. Chip         | B 50WV 0.0047uF |              | C1113 | K22170219 | CAP. Chip         | CH | 50WV         | 22pF     |
| C1024 | K22141809 | CAP. Chip         | B 25WV 0.1uF    |              | C1114 | K22170219 | CAP. Chip         | CH | 50WV         | 22pF     |
| C1025 | K22170805 | CAP. Chip         | B 50WV 0.01uF   |              | C1115 | K22170817 | CAP. Chip         | B  | 50WV         | 0.01uF   |
| C1026 | K22170805 | CAP. Chip         | B 50WV 0.01uF   |              | C1116 | K22141809 | CAP. Chip         |    | 25WV         | 0.1uF    |
| C1027 | K22170805 | CAP. Chip         | B 50WV 0.01uF   |              | C1117 | K22170817 | CAP. Chip         | B  | 50WV         | 0.01uF   |
| C1028 | K40109024 | AL. Electro. CAP. |                 | 10WV 100uF   | C1119 | K22170805 | CAP. Chip         | B  | 50WV         | 0.001uF  |
| C1029 | K22141809 | CAP. Chip         | B 25WV 0.1uF    |              | C1120 | K22170805 | CAP. Chip         | B  | 50WV         | 0.001uF  |
| C1030 | K22170817 | CAP. Chip         | B 50WV 0.01uF   |              | C1122 | K22170805 | CAP. Chip         | B  | 50WV         | 0.001uF  |
| C1031 | K22170805 | CAP. Chip         | B 50WV 0.001uF  |              | C1123 | K22170805 | CAP. Chip         | B  | 50WV         | 0.001uF  |
| C1032 | K70167334 | Tantalum CAP.     |                 | 35WV 0.33uF  | C1124 | K22170817 | CAP. Chip         | B  | 50WV         | 0.01uF   |
| C1033 | K19149021 | Ceramic CAP.      |                 | 25WV 0.047uF | C1125 | K40179013 | AL. Electro. CAP. |    | 50WV 1uF     |          |
| C1034 | K19149021 | Ceramic CAP.      |                 | 25WV 0.047uF | C1126 | K40179013 | AL. Electro. CAP. |    | 50WV 1uF     |          |
| C1035 | K22170817 | CAP. Chip         | B 50WV 0.01uF   |              | C1127 | K22170817 | CAP. Chip         | B  | 50WV 0.01uF  |          |
| C1036 | K22170805 | CAP. Chip         | B 50WV 0.001uF  |              | C1128 | K40109024 | AL. Electro. CAP. |    | 10WV 100uF   |          |
| C1037 | K40109024 | AL. Electro. CAP. |                 | 10WV 100uF   | C1129 | K22141809 | CAP. Chip         | B  | 25WV 0.1uF   |          |
| C1038 | K22170813 | CAP. Chip         | B 50WV 0.0047uF |              | C1130 | K70137225 | Tantalum CAP.     |    | 20WV 2.2uF   |          |
| C1039 | K22170209 | CAP. Chip         | CH 50WV 8pF     |              | C1131 | K19149025 | Ceramic CAP.      |    | 25WV 0.1uF   |          |
| C1040 | K22170215 | CAP. Chip         | CH 50WV 15pF    |              | C1132 | K22170805 | CAP. Chip         | B  | 50WV 0.001uF |          |
| C1041 | K22170201 | CAP. Chip         | CH 50WV 0.5pF   |              | C1133 | K19149025 | Ceramic CAP.      |    | 25WV 0.1uF   |          |
| C1042 | K22170205 | CAP. Chip         | CH 50WV 4pF     |              | C1134 | K22170235 | CAP. Chip         | CH | 50WV 100pF   |          |
| C1043 | K22170813 | CAP. Chip         | B 50WV 0.0047uF |              | C1135 | K22170805 | CAP. Chip         | B  | 50WV 0.001uF |          |
| C1044 | K22170203 | CAP. Chip         | CH 50WV 2pF     |              | C1136 | K22170235 | CAP. Chip         | CH | 50WV 100pF   |          |
| C1045 | K22170203 | CAP. Chip         | CH 50WV 2pF     |              | C1137 | K40109004 | AL. Electro. CAP. |    | 10WV 470uF   |          |
| C1046 | K22170813 | CAP. Chip         | B 50WV 0.0047uF |              | C1138 | K22170805 | CAP. Chip         | B  | 50WV 0.001uF |          |
| C1047 | K22170813 | CAP. Chip         | B 50WV 0.0047uF |              | C1139 | K22170235 | CAP. Chip         | CH | 50WV 100pF   |          |
| C1048 | K22141809 | CAP. Chip         | B 25WV 0.1uF    |              | C1140 | K22170817 | CAP. Chip         | B  | 50WV 0.01uF  |          |
| C1049 | K22141809 | CAP. Chip         | B 25WV 0.1uF    |              | C1141 | K22170204 | CAP. Chip         | CH | 50WV 3pF     |          |
| C1050 | K22170813 | CAP. Chip         | B 50WV 0.0047uF |              | C1142 | K22170204 | CAP. Chip         | CH | 50WV 3pF     |          |
| C1051 | K22170813 | CAP. Chip         | B 50WV 0.0047uF |              |       |           |                   |    |              |          |
| C1052 | K22170805 | CAP. Chip         | B 50WV 0.001uF  |              |       |           |                   |    |              |          |
| C1053 | K22170817 | CAP. Chip         | B 50WV 0.01uF   |              |       |           |                   |    |              |          |
| C1054 | K22170805 | CAP. Chip         | B 50WV 0.001uF  |              |       |           |                   |    |              |          |
| C1055 | K22170817 | CAP. Chip         | B 50WV 0.01uF   |              |       |           |                   |    |              |          |
| C1056 | K22170805 | CAP. Chip         | B 50WV 0.001uF  |              |       |           |                   |    |              |          |
| C1057 | K22170805 | CAP. Chip         | B 50WV 0.001uF  |              |       |           |                   |    |              |          |

# PARTS LIST (FEX-736-1.2)

|        |           |                      |        |      |         |        |           |                  |                |
|--------|-----------|----------------------|--------|------|---------|--------|-----------|------------------|----------------|
| C1143  | K22170805 | CAP. Chip            | B      | 50WV | 0.001uF | TP1001 | Q5000036  | TP-G             | MK-1095        |
| C1144  | K22170205 | CAP. Chip            | CH     | 50WV | 4pF     |        | L9190001  | Ferrite Beads    |                |
| C1145  | K22170213 | CAP. Chip            | CH     | 50WV | 12pF    |        | R0511090  | Shield Case      |                |
| C1146  | K22170817 | CAP. Chip            | B      | 50WV | 0.01uF  |        | R0062770B | VCO Case A       |                |
| C1147  | K22170229 | CAP. Chip            | CH     | 50WV | 56pF    |        | R0062780A | VCO Case Lid     |                |
| C1148  | K40129004 | AL. Electro.<br>CAP. |        | 16WV | 10uF    |        | R0122640  | Shield Plate     |                |
| C1149  | K22170817 | CAP. Chip            | B      | 50WV | 0.01uF  |        | R0115290  | Shield Case      |                |
| C1150  | K22170817 | CAP. Chip            | B      | 50WV | 0.01uF  |        | R0115300  | Shield Lid       |                |
| C1151  | K22170817 | CAP. Chip            | B      | 50WV | 0.01uF  |        | R0125180  | Shield Plate     |                |
| C1152  | K22141809 | CAP. Chip            | B      | 25WV | 0.1uF   |        | R0125280  | Shield Plate     |                |
| C1153  | K22170817 | CAP. Chip            | B      | 50WV | 0.01uF  |        | L9190016  | Shield Case      |                |
| C1154  | K22170805 | CAP. Chip            | B      | 50WV | 0.001uF |        |           |                  |                |
| C1156  | K22170205 | CAP. Chip            | CH     | 50WV | 4pF     |        |           |                  |                |
| C1157  | K22170223 | CAP. Chip            | CH     | 50WV | 33pF    |        |           |                  |                |
| C1158  | K22170219 | CAP. Chip            | CH     | 50WV | 22pF    |        |           |                  |                |
| C1159  | K22170325 | CAP. Chip            | UJ     | 50WV | 39pF    |        |           |                  |                |
| C1160  | K40109015 | AL. Electro.<br>CAP. |        | 10WV | 100uF   |        |           |                  |                |
| C1161  | K22170817 | CAP. Chip            | B      | 50WV | 0.01uF  |        |           |                  |                |
| C1162  | K22170201 | CAP. Chip            | CH     | 50WV | 0.5pF   |        |           |                  |                |
| C1163  | K22170817 | CAP. Chip            | B      | 50WV | 0.01uF  |        |           |                  |                |
| C1164  | K22170817 | CAP. Chip            | B      | 50WV | 0.01uF  |        |           |                  |                |
| C1165  | K22170202 | CAP. Chip            | CH     | 50WV | 1pF     |        |           |                  |                |
| C1166  | K22170817 | CAP. Chip            | B      | 50WV | 0.01uF  |        |           |                  |                |
| C1167  | K22170235 | CAP. Chip            | CH     | 50WV | 100pF   |        |           |                  |                |
| C1168  | K40109002 | AL. Electro.<br>CAP. |        | 10WV | 47uF    |        |           |                  |                |
| C1169  | K22170805 | CAP. Chip            | B      | 50WV | 0.001uF |        |           |                  |                |
| C1170  | K22170805 | CAP. Chip            | B      | 50WV | 0.001uF |        |           |                  |                |
| C1171  | K40109002 | AL. Electro.<br>CAP. |        | 10WV | 47uF    |        |           |                  |                |
| C1172  | K22170203 | CAP. Chip            | CH     | 50WV | 2pF     |        |           |                  |                |
| C1173  | K22170817 | CAP. Chip            | B      | 50WV | 0.01uF  |        |           |                  |                |
| C1174  | K40109004 | AL. Electro.<br>CAP. |        | 10WV | 470uF   |        |           |                  |                |
| C1175  | K22170805 | CAP. Chip            | B      | 50WV | 0.001uF |        |           |                  |                |
| C1176  | K22170150 | CAP. Chip            | CH     | 50WV | 15pF    |        |           |                  |                |
| C1177  | K22170205 | CAP. Chip            | CH     | 50WV | 4pF     |        |           |                  |                |
| C1178  | K22170805 | CAP. Chip            | B      | 50WV | 0.001uF |        |           |                  |                |
| C1179  | K22170805 | CAP. Chip            | B      | 50WV | 0.001uF |        |           |                  |                |
| C1180  | K22170205 | CAP. Chip            | CH     | 50WV | 1pF     |        |           |                  |                |
| TC1001 | K91000158 | Variable CAP.        |        | 6pF  |         |        |           |                  |                |
| T1001  | L0020907  | Coil                 |        |      |         |        |           |                  |                |
| T1002  | L0020907  | Coil                 |        |      |         |        |           |                  |                |
| T1003  | L0020907  | Coil                 |        |      |         |        |           |                  |                |
| T1004  | L0020907  | Coil                 |        |      |         |        |           |                  |                |
| T1005  | L0020907  | Coil                 |        |      |         |        |           |                  |                |
| T1006  | L0020907  | Coil                 |        |      |         |        |           |                  |                |
| L1001  | L1190189  | M. RFC               | 1mH    |      |         | D2001  | G2090344  | Diode            | 1SV178         |
| L1002  | L1190148  | M. RFC               | 10uH   |      |         | D2002  | G2090408  | Diode            | 1SS270         |
| L1003  | L1190149  | M. RFC               | 1uH    |      |         | D2003  | G2090408  | Diode            | 1SS270         |
| L1004  | L1190149  | M. RFC               | 1uH    |      |         | D2004  | G2090408  | Diode            | 1SS270         |
| L1005  | L1190149  | M. RFC               | 1uH    |      |         | D2005  | G2070001  | Diode            | 1SS188 TE85R   |
| L1006  | L1190189  | M. RFC               | 1mH    |      |         | D2006  | G2090408  | Diode            | 1SS270         |
| L1007  | L1190218  | M. RFC               | 100uH  |      |         | D2007  | G2090408  | Diode            | 1SS270         |
| L1008  | L0190138  | Coil                 |        |      |         | D2008  | G2090027  | Diode            | 1SS53          |
| L1009  | L1190218  | M. RFC               | 100uH  |      |         | D2009  | G2090297  | Diode            | 1SS110         |
| L1010  | L1190218  | M. RFC               | 100uH  |      |         | D2010  | G2090408  | Diode            | 1SS270         |
| L1011  | L1190218  | M. RFC               | 100uH  |      |         | D2011  | G2090027  | Diode            | 1SS53          |
| L1012  | L1190123  | M. RFC               | 3.9mH  |      |         | D2012  | G2090027  | Diode            | 1SS53          |
| L1013  | L0021205  | Coil                 | 0.7uH  |      |         | D2013  | G2090027  | Diode            | 1SS53          |
| L1014  | L1190192  | M. RFC               | 0.47uH |      |         | D2014  | G2090027  | Diode            | 1SS53          |
| L1015  | L0020678  | Coil                 |        |      |         | D2015  | G2090344  | Diode            | 1SV178         |
| L1016  | L1190218  | M. RFC               | 100uH  |      |         | D2016  | G2090408  | Diode            | 1SS270         |
| L1017  | L0021457  | Coil                 |        |      |         | D2017  | G2090027  | Diode            | 1SS53          |
| L1019  | L1190218  | M. RFC               | 100uH  |      |         | D2018  | G2090027  | Diode            | 1SS53          |
| L1020  | L1190149  | M. RFC               | 1uH    |      |         | D2019  | G2090306  | Diode            | 10E1           |
| L1021  | L1190218  | M. RFC               | 100uH  |      |         | D2020  | G2090306  | Diode            | 10E1           |
| L1022  | L1190218  | M. RFC               | 100uH  |      |         | D2021  | G2090408  | Diode            | 1SS270         |
| L1023  | L0190211  | Coil                 |        |      |         | D2022  | G2090408  | Diode            | 1SS270         |
| L1024  | L1190200  | M. RFC               | 2.7uH  |      |         | TH2001 | G9090020  | Thermistor       |                |
| L1025  | L1190149  | M. RFC               | 1uH    |      |         | TH2002 | G9090020  | Thermistor       |                |
| L1026  | L0021520  | Coil                 |        |      |         | TH2003 | G9090020  | Thermistor       |                |
| CV1001 | L4020091  | Helical Resonator    |        |      |         | XF2001 | H1102119  | XTAL Filter      | 13M15A         |
| CV1002 | L4020092  | Helical Resonator    |        |      |         |        |           |                  |                |
| J1001  | P0090528  | Connector            |        |      |         | R2001  | J24205682 | RES. Chip        | 1/10W 6.8k ohm |
| PJ1001 | P1090210  | Connector            |        |      |         | R2002  | J24205473 | RES. Chip        | 1/10W 47k ohm  |
| PJ1002 | P1090210  | Connector            |        |      |         | R2003  | J24205223 | RES. Chip        | 1/10W 22k ohm  |
| JP1001 | T9205550  | Wire ASSY            |        |      |         | R2004  | J24205680 | RES. Chip        | 1/10W 68 ohm   |
|        |           |                      |        |      |         | R2005  | J01225331 | Carbon Film RES. | 1/6W 330 ohm   |
|        |           |                      |        |      |         | R2006  | J24205470 | RES. Chip        | 1/10W 47 ohm   |
|        |           |                      |        |      |         | R2007  | J24205331 | RES. Chip        | 1/10W 330 ohm  |
|        |           |                      |        |      |         |        |           |                  | PJ             |

# (FEX-736-1.2) PARTS LIST

|       |           |                   |                |    |        |           |                   |                |    |
|-------|-----------|-------------------|----------------|----|--------|-----------|-------------------|----------------|----|
| R2008 | J01225272 | Carbon Film RES.  | 1/6W 2.7k ohm  | PJ | R2095  | J24205223 | RES. Chip         | 1/10W 22k ohm  |    |
| R2009 | J24205150 | RES. Chip         | 1/10W 15 ohm   |    | R2100  | J01225104 | Carbon Film RES.  | 1/6W 100k ohm  | PJ |
| R2010 | J24205101 | RES. Chip         | 1/10W 100 ohm  |    | R2101  | J01225470 | Carbon Film RES.  | 1/6W 47 ohm    |    |
| R2011 | J24205473 | RES. Chip         | 1/10W 47k ohm  |    | R2102  | J24205223 | RES. Chip         | 1/10W 22k ohm  |    |
| R2012 | J01225103 | Carbon Film RES.  | 1/6W 10k ohm   | PJ | R2103  | J24205470 | RES. Chip         | 1/10W 47 ohm   |    |
| R2013 | J24205470 | RES. Chip         | 1/10W 47 ohm   |    | VR2001 | J51747104 | POT.              | B 100k ohm     |    |
| R2014 | J01225471 | Carbon Film RES.  | 1/6W 470 ohm   | PJ | VR2002 | J51745473 | POT.              | B 47k ohm      |    |
| R2015 | J24205101 | RES. Chip         | 1/10W 100 ohm  |    | VR2003 | J51745224 | POT.              | B 220k ohm     |    |
| R2016 | J24205680 | RES. Chip         | 1/10W 68 ohm   |    | VR2004 | J51745471 | POT.              | B 470 ohm      |    |
| R2017 | J24205101 | RES. Chip         | 1/10W 100 ohm  |    | VR2005 | J51745101 | POT.              | B 100 ohm      |    |
| R2018 | J24205331 | RES. Chip         | 1/10W 330 ohm  |    | VR2006 | J51745222 | POT.              | B 2.2k ohm     |    |
| R2019 | J24205471 | RES. Chip         | 1/10W 470 ohm  |    | C2001  | K22170215 | CAP. Chip         | CH 50WV 15pF   |    |
| R2020 | J24205473 | RES. Chip         | 1/10W 47k ohm  |    | C2002  | K22170209 | CAP. Chip         | CH 50WV 8pF    |    |
| R2021 | J24205225 | RES. Chip         | 1/10W 2.2M ohm |    | C2003  | K22170206 | CAP. Chip         | CH 50WV 5pF    |    |
| R2022 | J24205470 | RES. Chip         | 1/10W 47 ohm   |    | C2004  | K22170235 | CAP. Chip         | CH 50WV 100pF  |    |
| R2023 | J24205102 | RES. Chip         | 1/10W 1k ohm   |    | C2005  | K22170235 | CAP. Chip         | CH 50WV 100pF  |    |
| R2024 | J24205560 | RES. Chip         | 1/10W 56 ohm   |    | C2006  | K22170211 | CAP. Chip         | CH 50WV 10pF   |    |
| R2025 | J24205222 | RES. Chip         | 1/10W 2.2k ohm |    | C2007  | K22170805 | CAP. Chip         | B 50WV 0.001uF |    |
| R2026 | J24205222 | RES. Chip         | 1/10W 2.2k ohm |    | C2008  | K22170211 | CAP. Chip         | CH 50WV 10pF   |    |
| R2027 | J24205102 | RES. Chip         | 1/10W 1k ohm   |    | C2009  | K22170805 | CAP. Chip         | B 50WV 0.001uF |    |
| R2028 | J24205103 | RES. Chip         | 1/10W 10k ohm  |    | C2010  | K22170204 | CAP. Chip         | CH 50WV 3pF    |    |
| R2029 | J24205102 | RES. Chip         | 1/10W 1k ohm   |    | C2011  | K22170235 | CAP. Chip         | CH 50WV 100pF  |    |
| R2031 | J24205222 | RES. Chip         | 1/10W 2.2k ohm |    | C2012  | K22170235 | CAP. Chip         | CH 50WV 100pF  |    |
| R2032 | J24205331 | RES. Chip         | 1/10W 330 ohm  |    | C2013  | K22170235 | CAP. Chip         | CH 50WV 100pF  |    |
| R2033 | J24205180 | RES. Chip         | 1/10W 18 ohm   |    | C2014  | K22170211 | CAP. Chip         | CH 50WV 10pF   |    |
| R2034 | J24205331 | RES. Chip         | 1/10W 330 ohm  |    | C2015  | K22170805 | CAP. Chip         | B 50WV 0.001uF |    |
| R2035 | J24205180 | RES. Chip         | 1/10W 18 ohm   |    | C2016  | K22170203 | CAP. Chip         | CH 50WV 2pF    |    |
| R2036 | J24205331 | RES. Chip         | 1/10W 330 ohm  |    | C2017  | K22170209 | CAP. Chip         | CH 50WV 8pF    |    |
| R2037 | J24205220 | RES. Chip         | 1/10W 22 ohm   |    | C2018  | K22170201 | CAP. Chip         | CH 50WV 0.5pF  |    |
| R2038 | J20206330 | Metalic Film RES. | 1W 33 ohm      |    | C2019  | K22170235 | CAP. Chip         | CH 50WV 100pF  |    |
| R2039 | J24205103 | RES. Chip         | 1/10W 10k ohm  |    | C2020  | K22170805 | CAP. Chip         | B 50WV 0.001uF |    |
| R2040 | J24205101 | RES. Chip         | 1/10W 100 ohm  |    | C2021  | K22170805 | CAP. Chip         | B 50WV 0.001uF |    |
| R2041 | J24205103 | RES. Chip         | 1/10W 10k ohm  |    | C2022  | K22170201 | CAP. Chip         | CH 50WV 0.5pF  |    |
| R2042 | J24205473 | RES. Chip         | 1/10W 47k ohm  |    | C2023  | K22170235 | CAP. Chip         | CH 50WV 100pF  |    |
| R2043 | J24205473 | RES. Chip         | 1/10W 47k ohm  |    | C2024  | K22170817 | CAP. Chip         | B 50WV 0.01uF  |    |
| R2044 | J24205473 | RES. Chip         | 1/10W 47k ohm  |    | C2025  | K22170211 | CAP. Chip         | CH 50WV 10pF   |    |
| R2045 | J24205104 | RES. Chip         | 1/10W 100k ohm |    | C2026  | K22170817 | CAP. Chip         | B 50WV 0.01uF  |    |
| R2046 | J24205103 | RES. Chip         | 1/10W 10k ohm  |    | C2027  | K22170219 | CAP. Chip         | CH 50WV 22pF   |    |
| R2047 | J24205223 | RES. Chip         | 1/10W 22k ohm  |    | C2028  | K22170210 | CAP. Chip         | CH 50WV 9pF    |    |
| R2048 | J24205473 | RES. Chip         | 1/10W 47k ohm  |    | C2029  | K22170817 | CAP. Chip         | B 50WV 0.01uF  |    |
| R2049 | J24205474 | RES. Chip         | 1/10W 470k ohm |    | C2030  | K22170817 | CAP. Chip         | B 50WV 0.01uF  |    |
| R2050 | J24205221 | RES. Chip         | 1/10W 220 ohm  |    | C2031  | K22170805 | CAP. Chip         | B 50WV 0.001uF |    |
| R2051 | J24205681 | RES. Chip         | 1/10W 680 ohm  |    | C2032  | K22170817 | CAP. Chip         | B 50WV 0.01uF  |    |
| R2052 | J24205102 | RES. Chip         | 1/10W 1k ohm   |    | C2033  | K22170817 | CAP. Chip         | B 50WV 0.01uF  |    |
| R2053 | J24205101 | RES. Chip         | 1/10W 100 ohm  |    | C2034  | K22170209 | CAP. Chip         | CH 50WV 8pF    |    |
| R2054 | J24205222 | RES. Chip         | 1/10W 2.2k ohm |    | C2035  | K22170817 | CAP. Chip         | B 50WV 0.01uF  |    |
| R2055 | J02225471 | Carbon Film RES.  | 1/6W 470 ohm   | UJ | C2036  | K22170817 | CAP. Chip         | B 50WV 0.01uF  |    |
| R2056 | J24205560 | RES. Chip         | 1/10W 56 ohm   |    | C2037  | K22170817 | CAP. Chip         | B 50WV 0.01uF  |    |
| R2057 | J24205473 | RES. Chip         | 1/10W 47k ohm  |    | C2038  | K22170213 | CAP. Chip         | CH 50WV 12pF   |    |
| R2058 | J24205470 | RES. Chip         | 1/10W 47 ohm   |    | C2039  | K22170211 | CAP. Chip         | CH 50WV 10pF   |    |
| R2059 | J24205332 | RES. Chip         | 1/10W 3.3k ohm |    | C2040  | K22170202 | CAP. Chip         | CH 50WV 1pF    |    |
| R2060 | J24205103 | RES. Chip         | 1/10W 10k ohm  |    | C2041  | K22170211 | CAP. Chip         | CH 50WV 10pF   |    |
| R2061 | J24205103 | RES. Chip         | 1/10W 10k ohm  |    | C2042  | K22170218 | CAP. Chip         | CH 50WV 22pF   |    |
| R2062 | J24205100 | RES. Chip         | 1/10W 10 ohm   |    | C2043  | K22170817 | CAP. Chip         | CH 50WV 9pF    |    |
| R2063 | J24205390 | RES. Chip         | 1/10W 39 ohm   |    | C2044  | K22170817 | CAP. Chip         | B 50WV 0.01uF  |    |
| R2064 | J24205331 | RES. Chip         | 1/10W 330 ohm  |    | C2045  | K22170817 | CAP. Chip         | B 50WV 0.01uF  |    |
| R2065 | J02225560 | Carbon Film RES.  | 1/6W 56 ohm    | UJ | C2046  | K22170817 | CAP. Chip         | B 50WV 0.01uF  |    |
| R2066 | J24205101 | RES. Chip         | 1/10W 100 ohm  |    | C2047  | K22170817 | CAP. Chip         | B 50WV 0.01uF  |    |
| R2067 | J24205471 | RES. Chip         | 1/10W 470 ohm  |    | C2048  | K22170817 | CAP. Chip         | B 50WV 0.01uF  |    |
| R2068 | J24205221 | RES. Chip         | 1/10W 220 ohm  |    | C2049  | K40129004 | AL. Electro. CAP. | 16WV 10uF      |    |
| R2069 | J24205479 | RES. Chip         | 1/10W 4.7 ohm  |    | C2050  | K22170817 | CAP. Chip         | B 50WV 0.01uF  |    |
| R2070 | J24205474 | RES. Chip         | 1/10W 470k ohm |    | C2051  | K22170817 | CAP. Chip         | B 50WV 0.01uF  |    |
| R2071 | J24205474 | RES. Chip         | 1/10W 470k ohm |    | C2052  | K22170805 | CAP. Chip         | B 50WV 0.001uF |    |
| R2072 | J24205473 | RES. Chip         | 1/10W 47k ohm  |    | C2053  | K22170805 | CAP. Chip         | B 50WV 0.001uF |    |
| R2074 | J24205102 | RES. Chip         | 1/10W 1k ohm   |    | C2054  | K22170805 | CAP. Chip         | B 50WV 0.001uF |    |
| R2075 | J01225101 | Carbon Film RES.  | 1/6W 100 ohm   | PJ | C2055  | K22170805 | CAP. Chip         | B 50WV 0.001uF |    |
| R2076 | J24205101 | RES. Chip         | 1/10W 100 ohm  |    | C2056  | K22170805 | CAP. Chip         | B 50WV 0.001uF |    |
| R2077 | J24205680 | RES. Chip         | 1/10W 68 ohm   |    | C2057  | K22170227 | CAP. Chip         | B 50WV 47pF    |    |
| R2078 | J24205330 | RES. Chip         | 1/10W 33 ohm   |    | C2058  | K22170227 | CAP. Chip         | CH 50WV 47pF   |    |
| R2079 | J24205181 | RES. Chip         | 1/10W 180 ohm  |    | C2059  | K22170805 | CAP. Chip         | B 50WV 0.001uF |    |
| R2080 | J24205681 | RES. Chip         | 1/10W 680 ohm  |    | C2060  | K22170817 | CAP. Chip         | B 50WV 0.01uF  |    |
| R2081 | J24205689 | RES. Chip         | 1/10W 6.8 ohm  |    | C2061  | K22170817 | CAP. Chip         | B 50WV 0.01uF  |    |
| R2082 | J24205681 | RES. Chip         | 1/10W 680 ohm  |    | C2062  | K22170208 | CAP. Chip         | B 50WV 0.01uF  |    |
| R2083 | J24205331 | RES. Chip         | 1/10W 330 ohm  |    | C2063  | K22170817 | CAP. Chip         | CH 50WV 7pF    |    |
| R2084 | J24205272 | RES. Chip         | 1/10W 2.7k ohm |    | C2064  | K22170817 | CAP. Chip         | B 50WV 0.01uF  |    |
| R2085 | J24205101 | RES. Chip         | 1/10W 100 ohm  |    | C2065  | K22170213 | CAP. Chip         | CH 50WV 12pF   |    |
| R2086 | J24205222 | RES. Chip         | 1/10W 2.2k ohm |    | C2066  | K22170805 | CAP. Chip         | B 50WV 0.001uF |    |
| R2087 | J24205471 | RES. Chip         | 1/10W 470 ohm  |    | C2067  | K22170207 | CAP. Chip         | CH 50WV 6pF    |    |
| R2088 | J24205103 | RES. Chip         | 1/10W 10k ohm  |    | C2068  | K22170817 | CAP. Chip         | B 50WV 0.01uF  |    |
| R2089 | J24205151 | RES. Chip         | 1/10W 150 ohm  |    | C2069  | K22170817 | CAP. Chip         | B 50WV 0.01uF  |    |
| R2090 | J20306221 | Metalic Film RES. | 1W 220 ohm     |    | C2070  | K22170817 | CAP. Chip         | B 50WV 0.01uF  |    |
| R2091 | J24205103 | RES. Chip         | 1/10W 10k ohm  |    | C2071  | K22170817 | CAP. Chip         | B 50WV 0.01uF  |    |
| R2092 | J24205102 | RES. Chip         | 1/10W 1k ohm   |    | C2072  | K22170817 | CAP. Chip         | B 50WV 0.01uF  |    |
| R2093 | J24205689 | RES. Chip         | 1/10W 6.8 ohm  |    | C2073  | K22170817 | CAP. Chip         | B 50WV 0.01uF  |    |
| R2094 | J24205102 | RES. Chip         | 1/10W 1k ohm   |    |        |           |                   |                |    |

# PARTS LIST (FEX-736-1.2)

| C2074                  | K22170817 | CAP. Chip             | B  | 50WV           | 0.01uF       | L2005     | L1190148       | M.RFC             | 10uH |
|------------------------|-----------|-----------------------|----|----------------|--------------|-----------|----------------|-------------------|------|
| C2075                  | K22170817 | CAP. Chip             | B  | 50WV           | 0.01uF       | L2006     | L1190149       | M.RFC             | 1uH  |
| C2076                  | K22170211 | CAP. Chip             | CH | 50WV           | 10pF         | L2008     | L0020679       | Coil              |      |
| C2077                  | K22170817 | CAP. Chip             | B  | 50WV           | 0.01uF       | L2009     | L1190149       | M.RFC             | 1uH  |
| C2078                  | K22170219 | CAP. Chip             | CH | 50WV           | 22pF         |           |                |                   |      |
| C2079                  | K22170817 | CAP. Chip             | B  | 50WV           | 0.01uF       | CV2001    | L4020094       | Helical Resonator |      |
| C2080                  | K22170219 | CAP. Chip             | CH | 50WV           | 22pF         | CV2002    | L4020093       | Helical Resonator |      |
| C2081                  | K22170805 | CAP. Chip             | B  | 50WV           | 0.001uF      | CV2003    | L4020094       | Helical Resonator |      |
| C2082                  | K22170215 | CAP. Chip             | CH | 50WV           | 15pF         | CV2004    | L4020094       | Helical Resonator |      |
| C2083                  | K22170211 | CAP. Chip             | CH | 50WV           | 10pF         |           |                |                   |      |
| C2084                  | K22170206 | CAP. Chip             | CH | 50WV           | 5pF          | J2001     | P1090348       | Connector         |      |
| C2085                  | K22170207 | CAP. Chip             | CH | 50WV           | 6pF          | J2002     | P1090296       | Connector         |      |
| C2086                  | K22170805 | CAP. Chip             | B  | 50WV           | 0.001uF      | J2003     | P0090527       | Connector         |      |
| C2087                  | K22170817 | CAP. Chip             | B  | 50WV           | 0.01uF       |           |                |                   |      |
| C2088                  | K22170817 | CAP. Chip             | B  | 50WV           | 0.01uF       | PJ2001    | P1090255       | Connector         |      |
| C2089                  | K22170817 | CAP. Chip             | B  | 50WV           | 0.01uF       | PJ2002    | P1090255       | Connector         |      |
| C2090                  | K22170211 | CAP. Chip             | CH | 50WV           | 10pF         | PJ2003    | P1090210       | Connector         |      |
| C2091                  | K22170817 | CAP. Chip             | B  | 50WV           | 0.01uF       | PJ2004    | P1090210       | Connector         |      |
| C2092                  | K22170817 | CAP. Chip             | B  | 50WV           | 0.01uF       |           |                |                   |      |
| C2093                  | K22170805 | CAP. Chip             | B  | 50WV           | 0.001uF      | JP2001    | T9205551       | Wire ASSY         |      |
| C2094                  | K22170805 | CAP. Chip             | B  | 50WV           | 0.001uF      | JP2002    | T9205592A      | Wire ASSY         |      |
| C2095                  | K22170805 | CAP. Chip             | B  | 50WV           | 0.001uF      |           |                |                   |      |
| C2096                  | K22170221 | CAP. Chip             | CH | 50WV           | 27pF         | T9317810  | Wire ASSY      |                   |      |
| C2097                  | K22170805 | CAP. Chip             | B  | 50WV           | 0.001uF      | T9311203  | Wire ASSY      |                   |      |
| C2098                  | K22170805 | CAP. Chip             | B  | 50WV           | 0.001uF      |           |                |                   |      |
| C2099                  | K22170805 | CAP. Chip             | B  | 50WV           | 0.001uF      | L9190001  | Ferrite Beads  |                   |      |
| C2100                  | K22170805 | CAP. Chip             | B  | 50WV           | 0.001uF      |           |                |                   |      |
| C2101                  | K22170204 | CAP. Chip             | CH | 50WV           | 3pF          | R0124510  | Shield Plate   |                   |      |
| C2102                  | K22170204 | CAP. Chip             | CH | 50WV           | 3pF          | R0124520  | Heatsink Plate |                   |      |
| C2103                  | K22170215 | CAP. Chip             | CH | 50WV           | 15pF         | R0124530  | Heatsink Plate |                   |      |
| C2105                  | K22170805 | CAP. Chip             | B  | 50WV           | 0.001uF      | R0109760  | Nut Spacer     |                   |      |
| C2106                  | K22170207 | CAP. Chip             | CH | 50WV           | 6pF          | R6112070  | Spacer         |                   |      |
| C2107                  | K22170207 | CAP. Chip             | CH | 50WV           | 6pF          | R6018771  | Booster Screw  |                   |      |
| C2108                  | K22170215 | CAP. Chip             | CH | 50WV           | 15pF         | R6119130A | Spacer         |                   |      |
| C2110                  | K40129004 | AL. Electro. CAP.     |    | 16WV           | 10uF         | R0125560  | Holder         |                   |      |
| C2111                  | K40129004 | AL. Electro. CAP.     |    | 10WV           | 100uF        | R0122640  | Shield Plate   |                   |      |
| C2112                  | K22170805 | CAP. Chip             | B  | 50WV           | 0.001uF      |           |                |                   |      |
| C2113                  | K40129004 | AL. Electro. CAP.     |    | 16WV           | 10uF         |           |                |                   |      |
| C2114                  | K22170805 | CAP. Chip             | B  | 50WV           | 0.001uF      |           |                |                   |      |
| C2115                  | K22141809 | CAP. Chip             | B  | 25WV           | 0.1uF        |           |                |                   |      |
| C2116                  | K22170805 | CAP. Chip             | B  | 50WV           | 0.001uF      |           |                |                   |      |
| C2117                  | K40129004 | AL. Electro. CAP.     |    | 16WV           | 10uF         |           |                |                   |      |
| C2118                  | K22170805 | CAP. Chip             | B  | 50WV           | 0.001uF      |           |                |                   |      |
| C2119                  | K22141809 | CAP. Chip             | B  | 25WV           | 0.1uF        |           |                |                   |      |
| C2120                  | K40129004 | AL. Electro. CAP.     |    | 16WV           | 10uF         |           |                |                   |      |
| C2121                  | K22141809 | CAP. Chip             | B  | 25WV           | 0.1uF        |           |                |                   |      |
| C2122                  | K22170805 | CAP. Chip             | B  | 50WV           | 0.001uF      |           |                |                   |      |
| C2123                  | K40109024 | AL. Electro. CAP.     |    | 10WV           | 100uF        |           |                |                   |      |
| C2124                  | K22170805 | CAP. Chip             | B  | 50WV           | 0.001uF      |           |                |                   |      |
| C2125                  | K22170221 | CAP. Chip             | CH | 50WV           | 27pF         |           |                |                   |      |
| C2126                  | K22170805 | CAP. Chip             | B  | 50WV           | 0.001uF      |           |                |                   |      |
| C2127                  | K22141809 | CAP. Chip             | B  | 25WV           | 0.1uF        |           |                |                   |      |
| C2128                  | K22170202 | CAP. Chip             | CH | 50WV           | 1pF          |           |                |                   |      |
| C2129                  | K02172059 | Ceramic CAP.          | CK | 50WV           | 0.5pF        |           |                |                   |      |
| C2130                  | K22170201 | CAP. Chip             | CH | 50WV           | 0.5pF        |           |                |                   |      |
| C2131                  | K22170201 | CAP. Chip             | CH | 50WV           | 0.5pF        |           |                |                   |      |
| C2132                  | K22170211 | CAP. Chip             | CH | 50WV           | 10pF         |           |                |                   |      |
| TC2001                 | K91000104 | Variable CAP.         |    | 3pF            |              |           |                |                   |      |
| T2001                  | L0020907  | Coil                  |    |                |              |           |                |                   |      |
| T2002                  | L0020907  | Coil                  |    |                |              |           |                |                   |      |
| T2003                  | L0020907  | Coil                  |    |                |              |           |                |                   |      |
| T2004                  | L0020907  | Coil                  |    |                |              |           |                |                   |      |
| T2005                  | L0020907  | Coil                  |    |                |              |           |                |                   |      |
| T2006                  | L0020907  | Coil                  |    |                |              |           |                |                   |      |
| T2007                  | L0020907  | Coil                  |    |                |              |           |                |                   |      |
| T2008                  | L0021736  | Coil                  |    |                |              |           |                |                   |      |
| T2009                  | L0021736  | Coil                  |    |                |              |           |                |                   |      |
| T2010                  | L0020907  | Coil                  |    |                |              |           |                |                   |      |
| T2011                  | L0021736  | Coil                  |    |                |              |           |                |                   |      |
| T2012                  | L0190007  | Coil                  |    |                |              |           |                |                   |      |
| T2013                  | L0020907  | Coil                  |    |                |              |           |                |                   |      |
| T2014                  | L0020907  | Coil                  |    |                |              |           |                |                   |      |
| T2015                  | L0020907  | Coil                  |    |                |              |           |                |                   |      |
| T2016                  | L0020907  | Coil                  |    |                |              |           |                |                   |      |
| L2001                  | L1190149  | M.RFC                 |    | 1uH            |              |           |                |                   |      |
| L2002                  | L1190148  | M.RFC                 |    | 10uH           |              |           |                |                   |      |
| L2003                  | L1020693A | RFC                   |    |                |              |           |                |                   |      |
| L2004                  | L1190149  | M.RFC                 |    | 1uH            |              |           |                |                   |      |
| <b>1200MHz PA UNIT</b> |           |                       |    |                |              |           |                |                   |      |
| Symbol No.             | Part No.  | Description           |    | Device         |              |           |                |                   |      |
|                        | F2953101A | Printed Circuit Board |    |                |              |           |                |                   |      |
|                        | C029531AA | PCB with Components   |    |                |              |           |                |                   |      |
| Q3001                  | G1090712  | IC                    |    | M57762         |              |           |                |                   |      |
| D3001                  | G2090132  | Diode                 |    | ISS55          |              |           |                |                   |      |
| D3002                  | G2090118  | Diode                 |    | ISS97          |              |           |                |                   |      |
| D3003                  | G2090027  | Diode                 |    | ISS53          |              |           |                |                   |      |
| R3001                  | J01225103 | Carbon Film RES.      |    | 1/6W 10k ohm   | PJ           |           |                |                   |      |
| R3002                  | J24205472 | RES. Chip             |    | 1/10W 47k ohm  |              |           |                |                   |      |
| R3003                  | J31309002 | RES.                  |    | 1W 0.1 ohm     |              |           |                |                   |      |
| R3004                  | J31309002 | RES.                  |    | 1W 0.1 ohm     |              |           |                |                   |      |
| C3001                  | K22170202 | CAP. Chip             |    | CH 50WV 1pF    |              |           |                |                   |      |
| C3002                  | K22170202 | CAP. Chip             |    | CH 50WV 1pF    |              |           |                |                   |      |
| C3003                  | K22170805 | CAP. Chip             |    | B 50WV 0.001uF |              |           |                |                   |      |
| C3004                  | K22170805 | CAP. Chip             |    | B 50WV 0.001uF |              |           |                |                   |      |
| C3005                  | K22170202 | CAP. Chip             |    | CH 50WV 1pF    |              |           |                |                   |      |
| C3007                  | K22170805 | CAP. Chip             |    | B 50WV 0.001uF |              |           |                |                   |      |
| C3008                  | K22170202 | CAP. Chip             |    | CH 50WV 1pF    |              |           |                |                   |      |
| C3009                  | K22170211 | CAP. Chip             |    | CH 50WV 10pF   |              |           |                |                   |      |
| C3010                  | K40129004 | AL. Electro. CAP.     |    |                | 16WV 10uF    |           |                |                   |      |
| C3011                  | K22170805 | CAP. Chip             |    | B 50WV 0.001uF |              |           |                |                   |      |
| C3012                  | K22170805 | CAP. Chip             |    | B 50WV 0.001uF |              |           |                |                   |      |
| C3013                  | K22170211 | CAP. Chip             |    | CH 50WV 10pF   |              |           |                |                   |      |
| C3014                  | K40129004 | AL. Electro. CAP.     |    |                | 16WV 10uF    |           |                |                   |      |
| C3015                  | K22170805 | CAP. Chip             |    | B 50WV 0.001uF |              |           |                |                   |      |
| C3016                  | K22170211 | CAP. Chip             |    | CH 50WV 10pF   |              |           |                |                   |      |
| C3017                  | K22170805 | CAP. Chip             |    | B 50WV 0.001uF |              |           |                |                   |      |
| C3018                  | K40129004 | AL. Electro. CAP.     |    |                | 16WV 10uF    |           |                |                   |      |
| C3019                  | K22170805 | CAP. Chip             |    | B 50WV 0.001uF |              |           |                |                   |      |
| C3020                  | K22170201 | CAP. Chip             |    | CH 50WV 0.5pF  |              |           |                |                   |      |
| C3021                  | K22170202 | CAP. Chip             |    | CH 50WV 1pF    |              |           |                |                   |      |
| C3022                  | K21170002 | Feed Through CAP.     |    |                | 50WV 0.001uF |           |                |                   |      |
| C3023                  | K21170002 | Feed Through CAP.     |    |                | 50WV 0.001uF |           |                |                   |      |
| C3024                  | K21170002 | Feed Through CAP.     |    |                | 50WV 0.001uF |           |                |                   |      |
| C3025                  | K21170002 | Feed Through CAP.     |    |                | 50WV 0.001uF |           |                |                   |      |

# (FEX-736-1.2) PARTS LIST

|           |           |                      |          |            |
|-----------|-----------|----------------------|----------|------------|
| C3026     | K21170002 | Feed Through CAP.    | 50WV     | 0.001uF    |
| C3027     | K22170201 | CAP. Chip            | CH       | 50WV 0.5pF |
| C3028     | K22170201 | CAP. Chip            | CH       | 50WV 0.5pF |
| C3029     | K02172059 | Ceramic CAP.         | CK       | 50WV 0.5pF |
| L3001     | L0020678  | Coil                 |          |            |
| P3001     | P1090209  | Connector            |          |            |
| JP3001    | T9205537  | Wire ASSY            |          |            |
| RL3001    | M1190042  | Relay                | G4Y-15ZP |            |
| L9190001  |           | Ferrite Beads        |          |            |
| Q5000036  |           | TP-G                 | MK-1095  |            |
| T9317823  |           | Wire ASSY            |          |            |
| T9317800A |           | Wire ASSY            |          |            |
| T9317822  |           | Wire ASSY            |          |            |
| R4083840B |           | Booster Heatsink     |          |            |
| R0511080A |           | Shield Cover PA      |          |            |
| R0124500  |           | Shield Plate PA      |          |            |
| R7043900  |           | Insulator<br>Board B |          |            |



E2430900(301o-DK)