

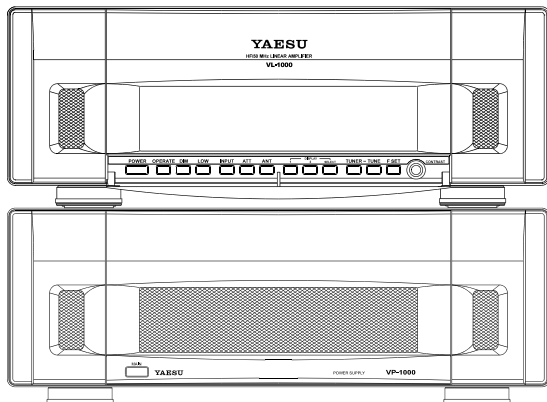
# YAESU

## VL-1000

### HF & 50-MHz Band Linear Amplifier

### Technical Supplement

(Includes AC Power Supply VP-1000)



**VERTEX STANDARD CO., LTD.**

4-8-8 Nakameguro, Meguro-Ku, Tokyo 153-8644, Japan

**VERTEX STANDARD**

**US Headquarters**

10900 Walker Street, Cypress, CA 90630, U.S.A.

**YAESU EUROPE B.V.**

P.O. Box 75525, 1118 ZN Schiphol, The Netherlands

**YAESU UK LTD.**

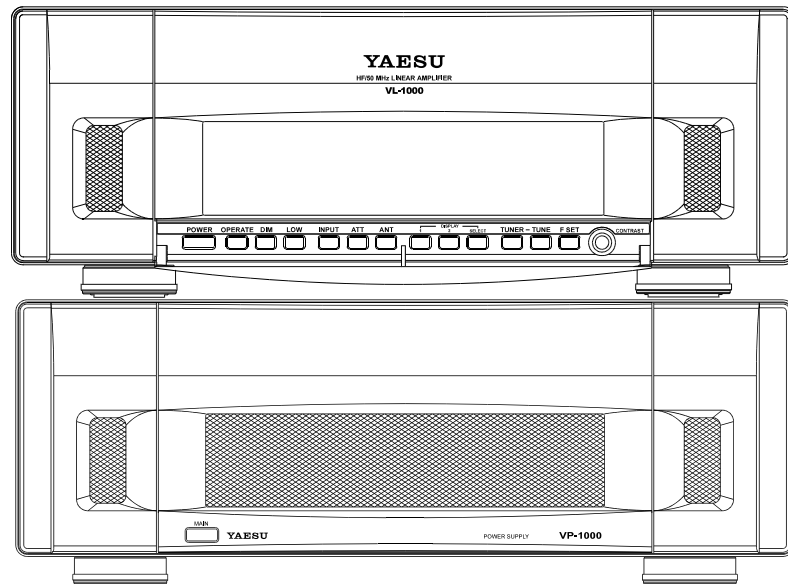
Unit 12, Sun Valley Business Park, Winnall Close  
Winchester, Hampshire, SO23 0LB, U.K.

**VERTEX STANDARD HK LTD.**

Unit 5, 20/F., Seaview Centre, 139-141 Hoi Bun Road,  
Kwun Tong, Kowloon, Hong Kong

# Contents

<i>Introduction</i> .....	1-1
<i>Specifications</i> .....	1-2
<i>Chip Component Information</i> .....	1-3
<i>Mechanical Details (Exploded Views &amp; Mechanical Parts)</i> .....	2-1
VL-1000 .....	2-1
VP-1000 .....	2-3
<i>Alignment</i> .....	3-1
<i>Block &amp; Interconnection Diagrams</i> .....	4-1
<i>PCB Diagrams &amp; Parts List</i>	
CNTL Unit .....	5A-1
Tuner Unit .....	5B-1
LPF Unit .....	5C-1
Divider Unit .....	5D-1
PA Unit .....	5E-1
Display Unit .....	5F-1
ANT-SW Unit .....	5G-1
Connector Unit .....	5H-1
Liner-Filter Unit .....	5 I -1
Sensor Unit .....	5 J -1
Jack Unit .....	5K-1
Relay Unit .....	5L-1
<i>AC Power Supply VP-1000 PCB Diagrams &amp; Parts List</i>	
Filter Unit .....	6A-1
Power Supply Unit PB1 .....	6B-1
Power Supply Unit PB2 .....	6C-1



This manual provides technical information necessary for servicing the Yaesu VL-1000 HF & 50-MHz-Band Linear Amplifier. It does not include information on installation and operation, which are described in the VL-1000 Operating Manual provided with the transceiver, or on accessories which are described in their manuals.

The VL-1000 is carefully designed to allow the knowledgeable operator to make nearly all adjustments required for various station conditions, modes and operator preferences simply from the controls on the panels, without opening the case of the Linear Amplifier. The VL-1000 Operating Manual describes these adjustments, plus certain internal settings.

Servicing this equipment requires expertise in handling surface mount chip components. Attempts by unqualified persons to service this equipment may result in permanent damage not

covered by warranty. For the major circuit boards, each side of the board is identified by the type of the majority of components installed on that side. In most cases one side has only chip components, and the other has either a mixture of both chip and lead components (trimmers, coils, electrolytic capacitors, packaged ICs, etc.), or lead components only.

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 this transceiver and the alignment procedures, in the interest of technological improvement, without notification of owners.

# Specifications

---

## VL-1000 Specifications

### *General*

Frequency Coverage:	160 ~ 6 Meter Amateur Bands (USA Version: 160 ~ 15, 6 Meter Amateur Bands)
Power Output:	1000 Watts @ 220V AC Input to VP-1000 Power Supply
Continuous Transmission Period:	100% @ 500 W for 1 hour
Case Size (WHD):	410 × 135 × 410 mm
Weight (Approx.):	21 kg
Supply Voltage:	+48 VDC, +12 VDC, -12 VDC
Power Consumption (Max.):	48 A @ +48 VDC, 3 A @ +12 VDC, 0.1 A @ -12 VDC

### *Linear Amplifier Section*

Excitation Power:	50 ~ 80 Watts
ALC Voltage (output) Range:	0 ~ -10 V (Nominal -4 V @ 1000 W output)
Spurious Radiation:	less than -60 dB
Third-order IMD:	less than -30 dB @ 1000 W PEP (Typical)
Input/Output Impedance:	50 Ohms, unbalanced

### *Automatic Antenna Tuner Section*

Impedance Matching Range:	16 ~ 150 Ohms, unbalanced
Frequency Range:	160 ~ 6 Meter Amateur Bands
Matching Time:	less than 10 seconds
Matched SWR:	1.5:1 or better
Tuning Memory Register:	50 channels

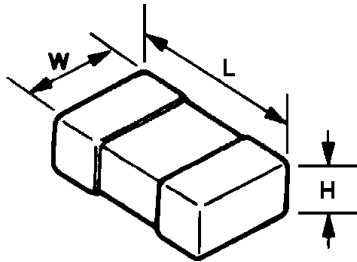
## VP-1000 Specifications

Output Voltage:	+48 VDC, +12 VDC, -12 VDC
Output Current:	+48 V: 48 Amps +12V: 3 Amps -12V: 0.1 Amps
Input Voltage:	100 ~ 234 VAC, 50/60 Hz
Current Consumption:	14 Amps @ 200/220/234 VAC Input 18 Amps @ 100/117 VAC Input
Operating Temperature Range:	-10 °C ~ +50 °C
Case Size:	410 × 135 × 369 mm (W × H × D)
Weight:	13.5 kg (Approx.)

# Chip Component Information

The diagrams below indicate some of the distinguishing features of common chip components .

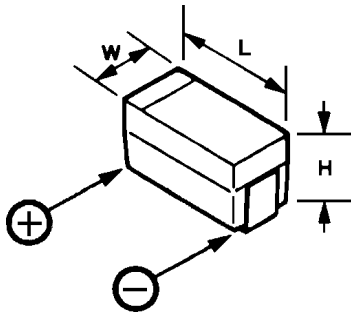
## Capacitors



(Unit: mm)

Type	L	W	H
2125	2.0	1.25	0.35 ~ 0.5
1608	1.6	0.8	0.65 ~ 0.95
1005	1.0	0.5	0.45 ~ 0.55

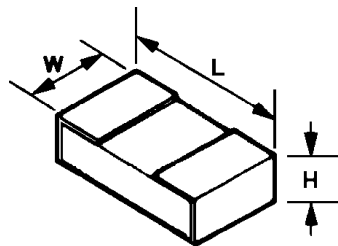
## Tantalum Capacitors



(Unit: mm)

Type	L	W	H
P	2.0	1.25	1.2
A	3.2	1.6	1.6
B	3.4	2.8	1.9
C	5.8	3.2	2.3

## Resistors



Marking\* 100, 222, 473...

473

Tens	Ones	Multiplier
0	0	10 <sup>0</sup>
1	1	10 <sup>1</sup>
2	2	10 <sup>2</sup>
3	3	10 <sup>3</sup>
4	4	10 <sup>4</sup>
5	5	10 <sup>5</sup>
6	6	10 <sup>6</sup>
7	7	10 <sup>7</sup>
8	8	10 <sup>8</sup>
9	9	10 <sup>9</sup>

Indicated Letters

**1 2 3 4 5 6 7 8 9 0 .**

(Unit: mm)

Type	L	W	H
1/10	2.0	1.25	0.5
1/16	1.6	0.8	0.45
1/16S	1.0	0.5	0.35

Examples: 100=10Ω  
222=2.2kΩ  
473=47kΩ

# Chip Component Information

---

## *Replacing Chip Components*

Chip components are installed at the factory by a series of robots. The first one places a small spot of adhesive resin at the location where each part is to be installed, and later robots handle and place parts using vacuum suction.

For single sided boards, solder paste is applied and the board is then baked to harden the resin and flow the solder. For double sided boards, no solder paste is applied, but the board is baked (or exposed to ultra-violet light) to cure the resin before dip soldering.

In our laboratories and service shops, small quantities of chip components are mounted manually by applying a spot of resin, placing the components with tweezers, and then soldering by very small dual streams of hot air (without physical contact during soldering). We remove parts by first removing solder using a vacuum suction iron, which applies a light steady vacuum at the iron tip, and then breaking the adhesive with tweezers.

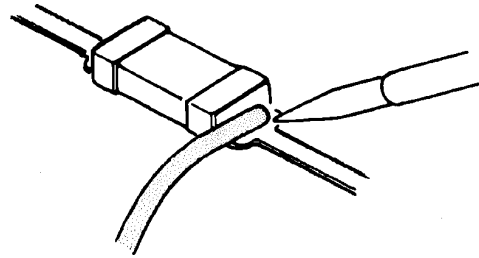
Special vacuum/desoldering equipment is recommended if you expect to do a lot of chip replacements. Otherwise, it is usually possible to remove and replace chip components with only a tapered, temperature-controlled soldering iron, a set of tweezers and braided copper solder wick. Soldering iron temperature should be below 280°C (536°F).

## *Precautions for Chip Replacement*

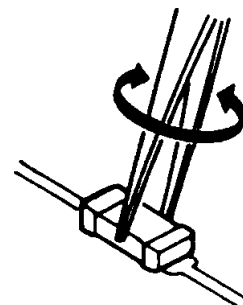
- Do not disconnect a chip forcefully, or the foil pattern may peel off the board.
- Never re-use a chip component. Dispose of all removed chip components immediately to avoid mixing with new parts.
- Limit soldering time to 3 seconds or less to avoid damaging the component and board.

## *Removing Chip Components*

- Remove the solder at each joint, one joint at a time, using solder wick whetted with non-acidic fluxes as shown below. Avoid applying pressure, and do not attempt to remove tinning from the chip's electrode.



- Grasp the chip on both sides with tweezers, and gently twist the tweezers back and forth (to break the adhesive bond) while alternately heating each electrode. Be careful to avoid peeling the foil traces from the board. Dispose of the chip when removed.
- After removing the chip, use the copper braid and soldering iron to wick away any excess solder and smooth the land for installation of the replacement part.



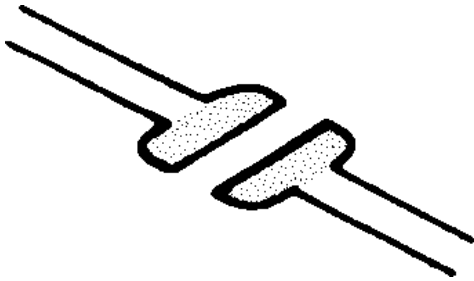
---

# Chip Component Information

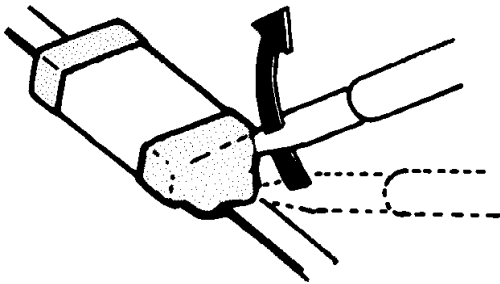
## *Installing a Replacement Chip*

As the value of some chip components is not indicated on the body of the chip, be careful to get the right part for replacement.

- Apply a small amount of solder to the land on one side where the chip is to be installed. Avoid too much solder, which may cause bridging (shorting to other parts).



- Hold the chip with tweezers in the desired position, and apply the soldering iron with a motion line as indicated by the arrow in the diagram below. Do not apply heat for more than 3 seconds.



- Remove the tweezers and solder the electrode on the other side in the manner just described.

# Chip Component Information

---

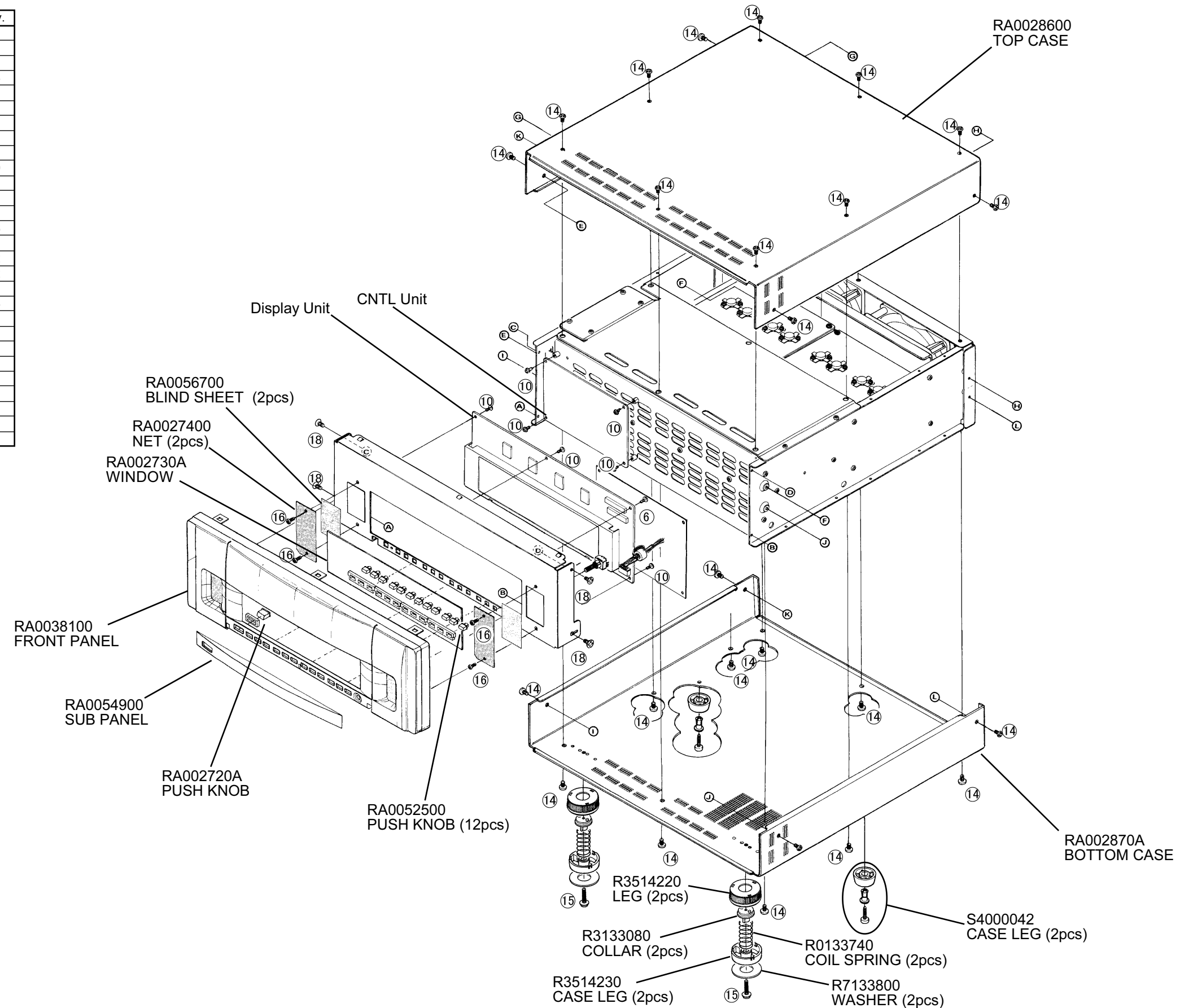
*Notes:*



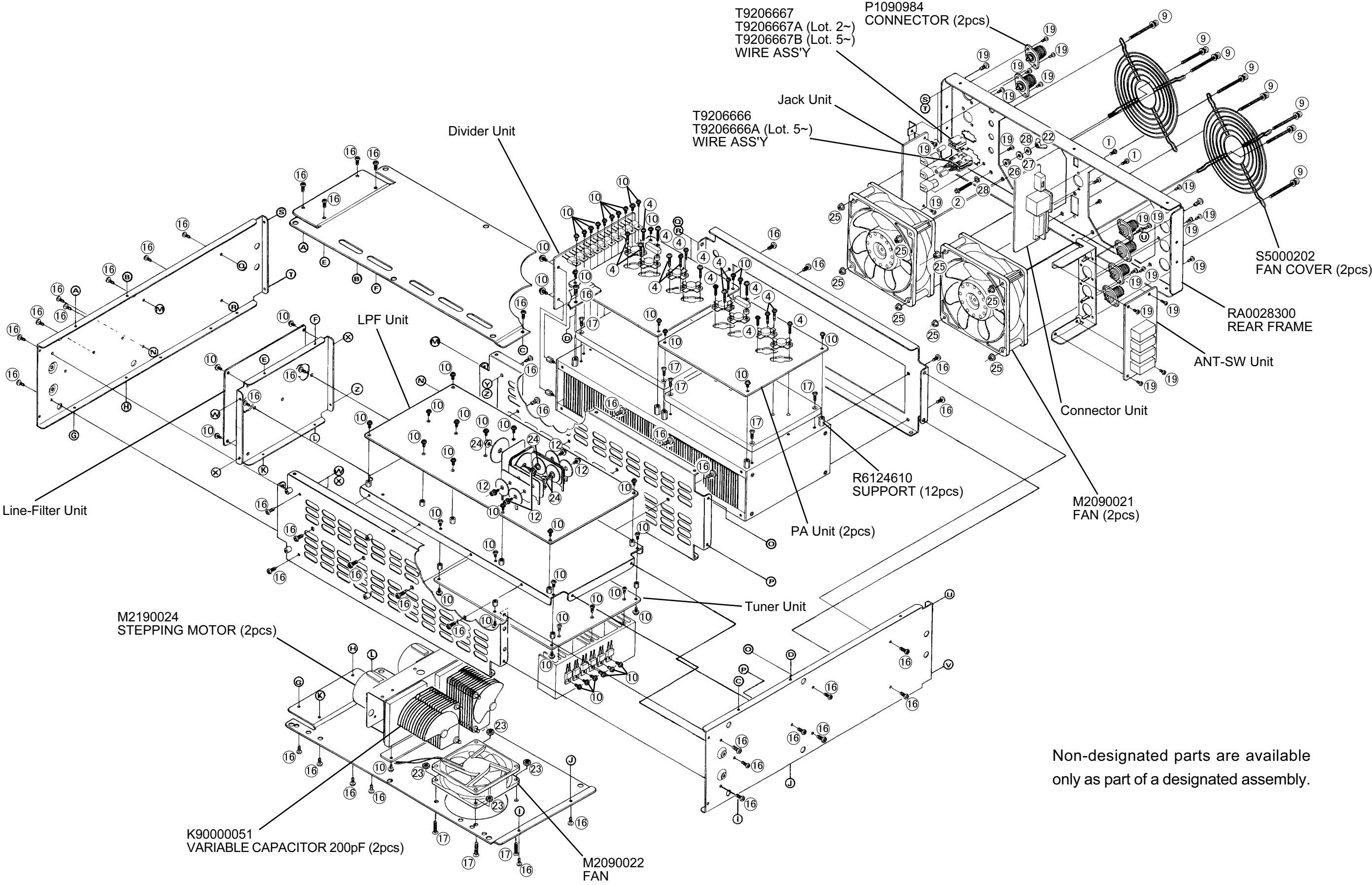
# VL-1000 Exploded View & Miscellaneous Parts

Ref.	YAESU P/N	Description	Qty.
1	U00306002	PAN HEAD SCREW M3×6Ni	2
2	U00520002	PAN HEAD SCREW M5×20Ni	1
3	U02304001	SEMS SCREW SM3×4	6
4	U02315001	SEMS SCREW SM3×15	14
5	U02406007	SEMS SCREW SM4×6B	6
6	U03306001	SEMS SCREW ASM3×6	1
7	U03308001	SEMS SCREW ASM3×8	1
8	U03325007	SEMS SCREW ASM3×25B	2
9	U03450002	PAN HEAD SCREW ASM4×50Ni	8
10	U04306001	SEMS SCREW HSM3×6	79
11	U04306002	SEMS SCREW HSM3×6Ni	2
12	U04310002	SEMS SCREW HSM3×10Ni	5
13	U05306002	CAP SCREW TM3×6Ni	4
14	U20406007	BINDING HEAD SCREW M4×6B	26
15	U22416007	SEMS SCREW HM4×16B	2
16	U24306001	TAPTITE SCREW M3×6	52
17	U30312001	FLAT HEAD SCREW M3×12	12
18	U34306001	TAPTITE SCREW M3×6	4
19	U44308002	TAPTITE SCREW M3×8Ni	24
20	U44406001	TAPTITE SCREW M4×6	3
21	U60300301	HEX NUT N3	1
22	U65500102	WING NUT N5Ni	1
23	U66300001	FLANGE NUT N3	4
24	U66300002	FLANGE NUT N3Ni	5
25	U66400001	FLANGE NUT N4	8
26	U66500002	FLANGE NUT N5Ni	1
27	U70005002	PLAIN WASHER FW5Ni	2
28	U73005002	TOOTHED LOCK WASHER IW5Ni	2

Non-designated parts are available only as part of a designated assembly.



# VL-1000 Exploded View & Miscellaneous Parts

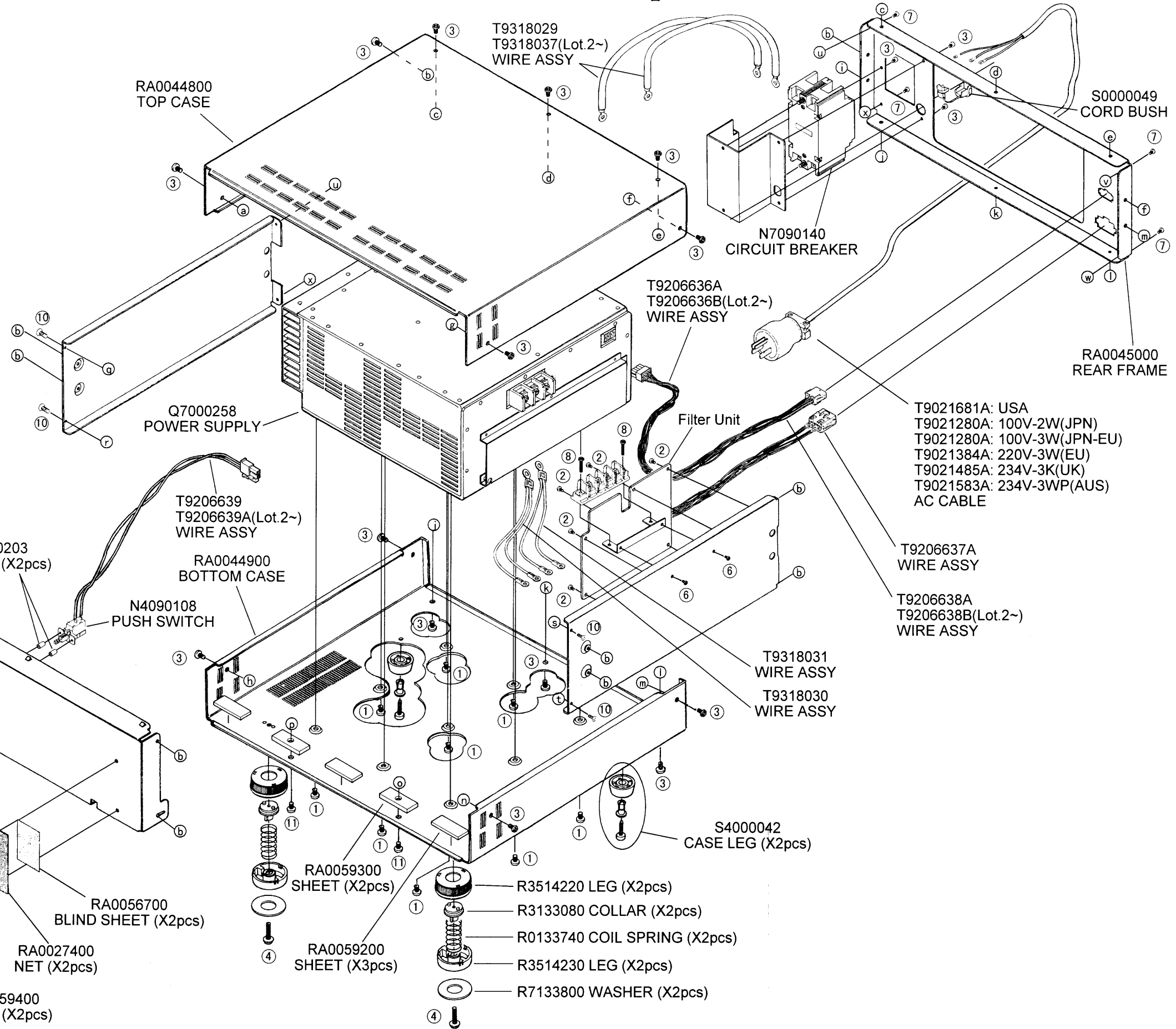


Non-designated parts are available only as part of a designated assembly.

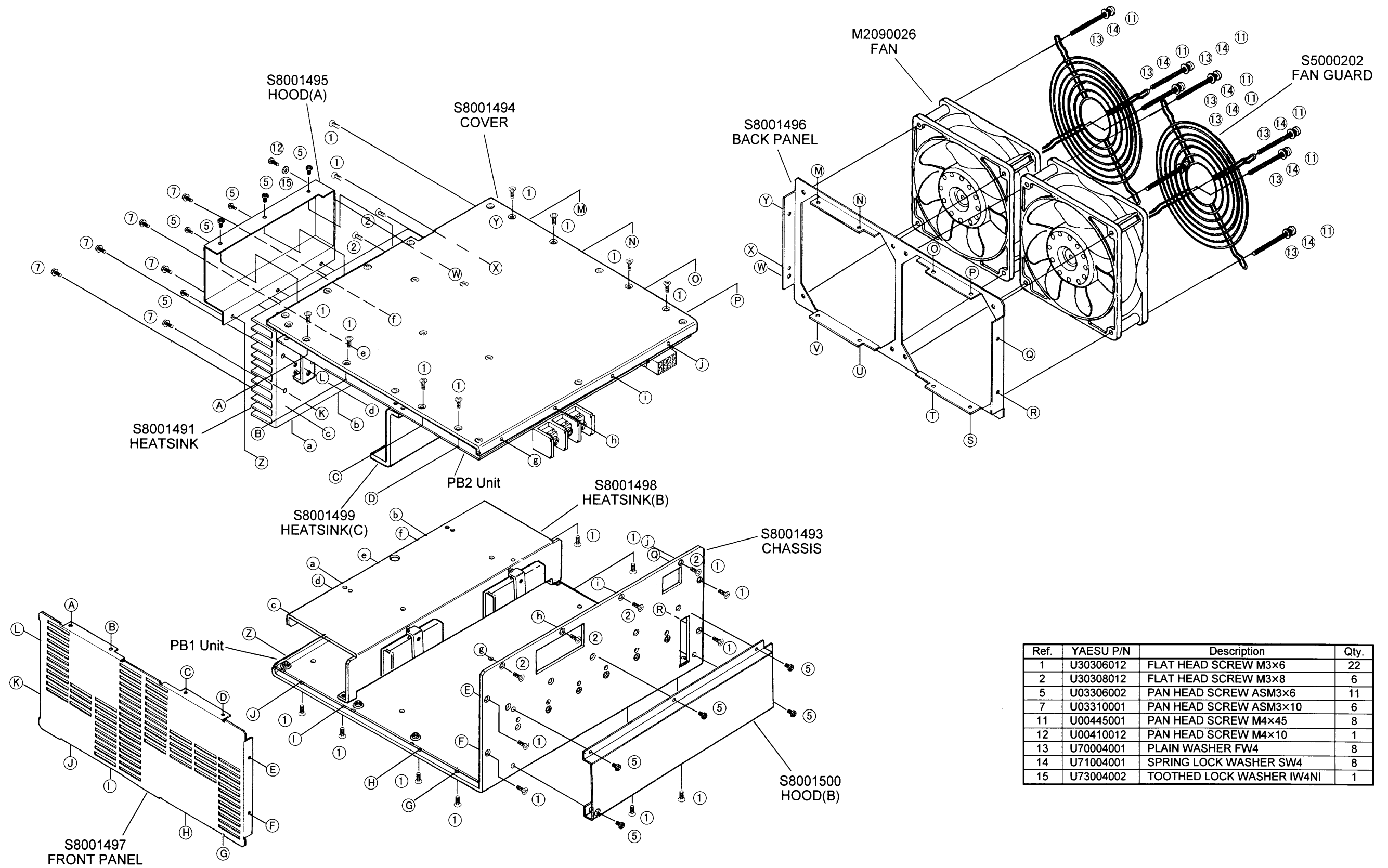
# VP-1000 Exploded View & Miscellaneous Parts

Ref.	YAESU P/N	Description	Qty.
1	U02406007	SEMS SCREW SM4x6B	9
2	U04306001	SEMS SCREW HSM3x6	5
3	U20406007	BINDING HEAD SCREW M4x6B	17
4	U22416007	BINDING HEAD SCREW HM4x16B	2
5	U23112001	TAPTITE SCREW M2x12	2
6	U24306001	TAPTITE SCREW M3x6	6
7	U24306002	TAPTITE SCREW M3x6Ni	4
8	U24316001	TAPTITE SCREW M3x16	2
9	U30315001	FLAT HEAD SCREW M3x15	2
10	U34306001	TAPTITE SCREW M3x6	4
11	U44308002	TAPTITE SCREW M3x8Ni	2
12	U70001001	PLAIN WASHER FW2	2
13	U70003001	PLAIN WASHER FW3	2
14	U70004001	PLAIN WASHER FW4	2

Non-designated parts are available only as part of a designated assembly.



# VP-1000 Exploded View & Miscellaneous Parts



Ref.	YAESU P/N	Description	Qty.
1	U30306012	FLAT HEAD SCREW M3x6	22
2	U30308012	FLAT HEAD SCREW M3x8	6
5	U03306002	PAN HEAD SCREW ASM3x6	11
7	U03310001	PAN HEAD SCREW ASM3x10	6
11	U00445001	PAN HEAD SCREW M4x45	8
12	U00410012	PAN HEAD SCREW M4x10	1
13	U70004001	PLAIN WASHER FW4	8
14	U71004001	SPRING LOCK WASHER SW4	8
15	U73004002	TOOTHED LOCK WASHER IW4NI	1

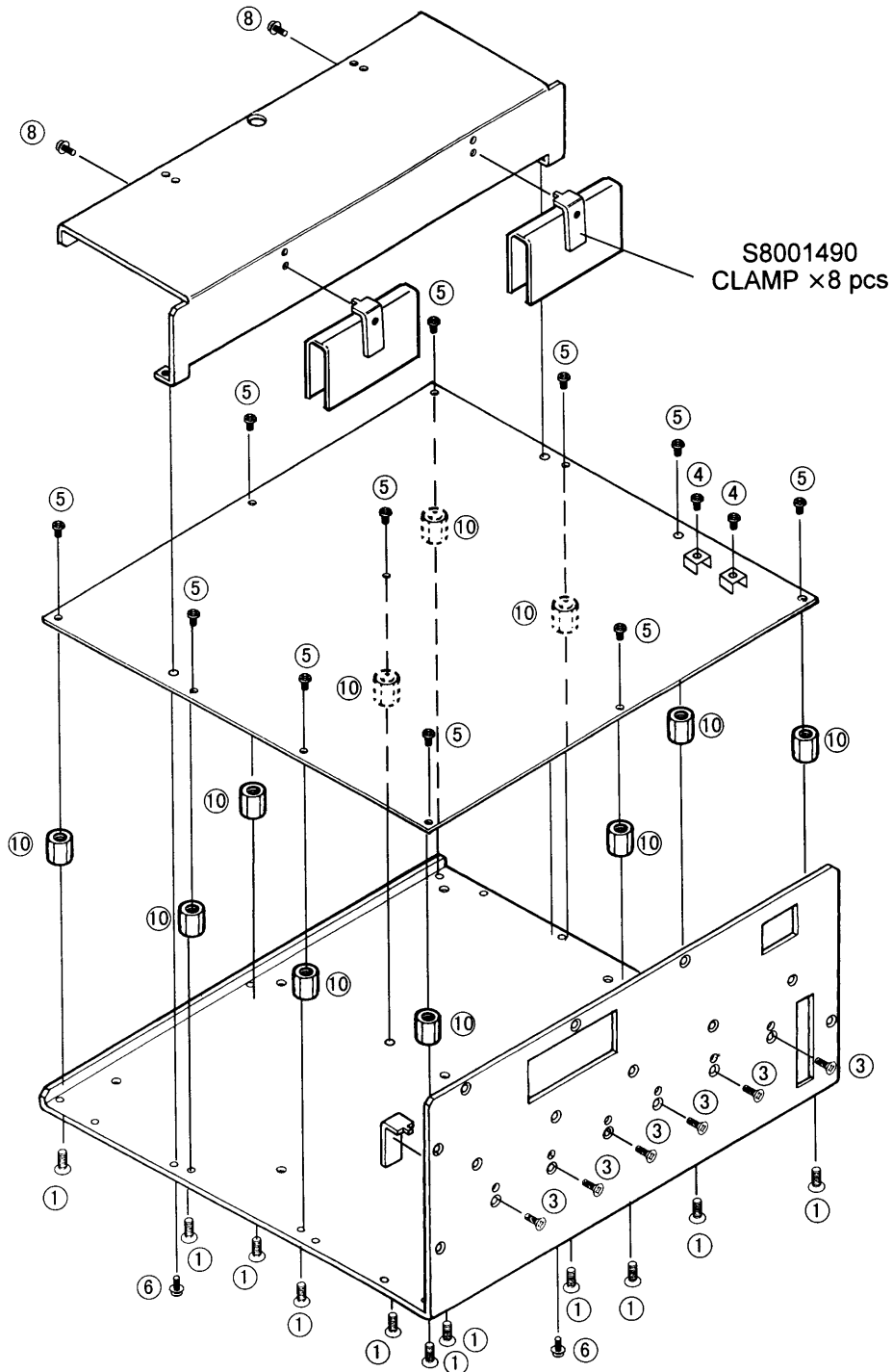
Non-designated parts are available only as part of a designated assembly.

# — VP-1000 Exploded View & Miscellaneous Parts

## PCB1-Unit

Non-designated parts are available only as part of a designated assembly.

Ref.	YAESU P/N	Description	Qty.
1	U30306012	FLAT HEAD SCREW M3 X 6	11
3	U30315001	FLAT HEAD SCREW M3 X 15	6
4	U40310201	TAPPING SCREW 3 X 10	2
5	U03306002	PAN HEAD SCREW ASM3 X 6	11
6	U03308002	PAN HEAD SCREW ASM3 X 8	2
8	U03314001	PAN HEAD SCREW ASM3 X 14	2
10	R6052651	SPACER L=8	11

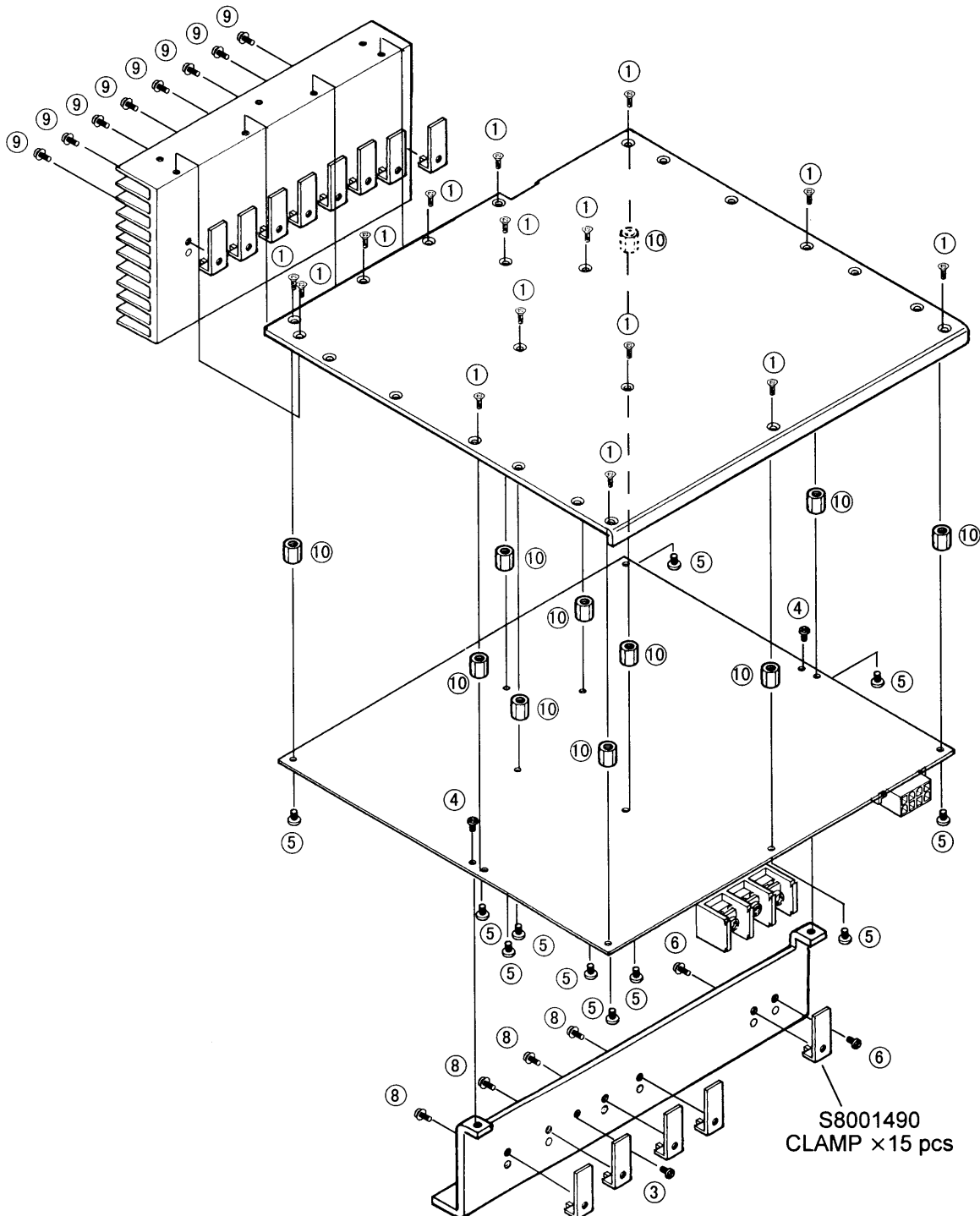


# VP-1000 Exploded View & Miscellaneous

## PCB2-Unit

Non-designated parts are available only as part of a designated assembly.

Ref.	YAESU P/N	Description	Qty.
1	U30306012	FLAT HEAD SCREW M3 X 6	11
3	U30315001	FLAT HEAD SCREW M3 X 15	1
4	U40310201	TAPPING SCREW 3 X 10	2
5	U03306002	PAN HEAD SCREW ASM3 X 6	11
6	U03308002	PAN HEAD SCREW ASM3 X 8	2
8	U03314001	PAN HEAD SCREW ASM3 X 14	4
9	U03318012	PAN HEAD SCREW ASM3 X 18	8
10	R6052651	SPACER L=8	11



## Introduction

The following procedures cover adjustments that are not normally required once the amplifier has left the factory. However, if damage occurs and some parts must be replaced, realignment may be required. If a *sudden* problem occurs during otherwise normal operation, it is most likely due to component failure; realignment should, therefore, not be attempted unless normal amplifier operation is thoroughly understood, the cause of the malfunction has been clearly diagnosed to involve part failure, and the faulty component has been located and replaced.

We recommend that servicing be performed by authorized Yaesu service technicians, who are experienced with the circuitry and fully equipped for repair and alignment. If a fault is suspected, contact the dealer from whom you purchased the amplifier for instructions regarding repair. Authorized Yaesu service technicians will, at the completion of the repair process, perform a complete performance check to ensure compliance with all factory specifications.

Those who undertake any of the following alignment procedures are cautioned that they are doing so at their own risk. Problems caused by unauthorized attempts at realignment are not covered by the warranty covering this product. Also, Yaesu must necessarily reserve the right to change circuits and/or alignment procedures, in the interest of improved performance, without notifying owners.

## Required Test Equipment

The following test equipment (and thorough familiarity with its correct use) is necessary for complete realignment. Correction of problems caused by misalignment resulting from unauthorized adjustments and/or made with improper test equipment is not covered by our warranty. Although most align-

ment procedures documented below do not require *all* of the listed test equipment at any one time, the interaction of some adjustments may require that more complex procedures must be accomplished later. Do not attempt to perform only a single step unless it clearly is isolated electrically from all other steps. It is better to have all test equipment ready from the beginning, and follow all of the steps in a section in the order they are presented.

The following test equipment is required:

- VP-1000 Matching Power Supply
- FT-920 or other 100W transceiver
- DC Ammeter
- Control Cables
- ALC (RCA-RCA) Cable
- In-line Wattmeter (50  $\Omega$ , 2 kW)  
(Connect between Antenna Jack 1 and 50  $\Omega$  Dummy Load)
- 50  $\Omega$  Dummy Load (2 kW)  
(Connect to In-Line Wattmeter)
- 75  $\Omega$  Dummy Load (2 kW)  
(Connect to Antenna Jack 2)

## Preparation & Precautions

A 50  $\Omega$  Dummy Load and the in-line Wattmeter must be connected to Antenna Jack 1 during most all procedures (except for the *Reverse ALC Adjustment* procedure, which utilizes a 75  $\Omega$  Dummy Load, which can be connected to Antenna Jack 2). Correct alignment is not possible using an antenna. Except where specified otherwise, the exciting transceiver should be set to 14.2500 MHz, FM or (key-down) CW mode, and the VL-1000 controls should be preset as indicated:

- OPERATE** and **REMOTE** switches: both **ON**.
- DIM**, **LOW**, **ATT**, and **TUNER**: all **OFF**.
- DISPLAY SELECT**: **MULTI-METER 1**.

# Alignment

---

Read each step to determine if the same test equipment used in the *previous* step will be required. If not, *remove* the test equipment (except the Dummy Load and Wattmeter) before proceeding.

The in-line Wattmeter is not used for any specific alignment procedure. However, it is extremely useful for the purpose of verifying proper signal flow from the rear panel antenna jacks.

Correct alignment requires that the ambient temperature of the VL-1000, the exciter, and the test equipment all be the same, and that this temperature should be between 20° and 30° C (68° ~ 86° F). If any equipment is brought into the shop from an environment that is hotter or colder than this temperature range, it should be allowed time for thermal equalization before alignment is begun.

Amplifier alignment must only be performed with all circuit boards firmly in place. All voltages shown in alignment procedures are nominal ( $\pm 10\%$  tolerance).

## PA Unit Idling Current

The adjustment of the PA Idling Current must be performed twice, as there are two identical 500W PA Units in the VL-1000. When performing alignment steps, be certain that you confine your work to one PA Unit at a time.

- With the transceiver, power supply, and amplifier all turned off, connect all interconnection cables required for normal operation. Connect the DC Ammeter in the +48-Volt line between the VL-1000 and VP-1000.
- With the front panel of the VL-1000 facing toward you, align the PA Unit on the *left* side of the amplifier (immediately behind the left fan) *first*; after completing this alignment, repeat the process on the *right* PA Unit, as instructed below.

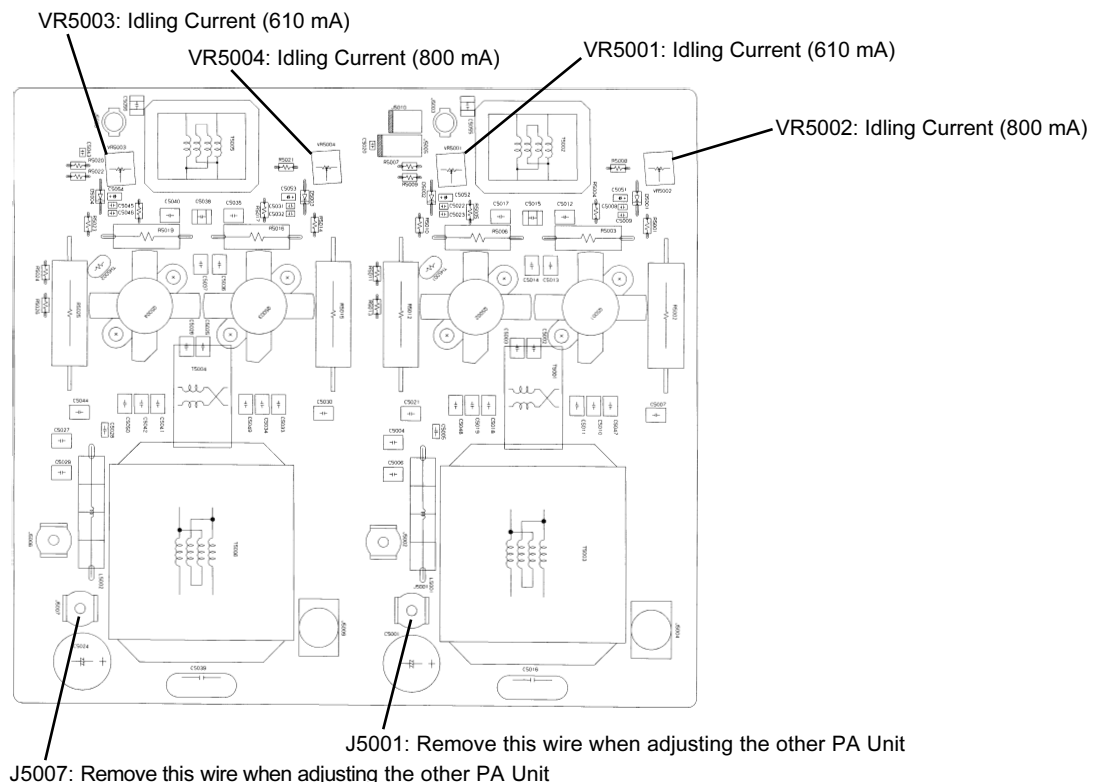
- Disconnect the wires connected to J5001 and J5007 of the *right* PA Unit, and move them safely out of the way.
- Turn on the power supply, amplifier, and transceiver. Preset VR5001, VR5002, VR5003 and VR5004 on the *left* PA Unit fully counterclockwise. Key the transmitter in the SSB mode (with *zero* drive power), and adjust VR5003 for 210 mA, VR5004 for 400 mA, VR5001 for 610 mA, and VR5002 for 800 mA on the DC Ammeter. Try to make these adjustments in order, and as quickly as possible. When done, turn off the power supply, amplifier, and transceiver.
- Now remove both +48V wires (one each from J5001 and J5007) from the *left* PA Unit.
- The next steps will be performed on the *right* PA Unit.
- Connect both +48V wires (one each to J5001 and J5007) on the *right* PA Unit. Turn on the power supply, amplifier, and transceiver. Preset VR5001, VR5002, VR5003 and VR5004 on the *right* PA Unit fully counterclockwise. Key the transmitter in the SSB mode (with *zero* drive power), and adjust VR5003 for 210 mA, VR5004 for 400 mA, VR5001 for 610 mA, and VR5002 for 800 mA on the DC Ammeter. Try to make these adjustments in order, and as quickly as possible.
- Now connect both +48V wires (one each to J5001 and J5007) on the *left* PA Unit. All +48V wires should now be connected on both PA Units.



## Forward ALC Adjustment (High Power)

- ❑ Tune the transceiver to 14.050 MHz, FM mode, and set the **DRIVE** or **RF PWR** control fully clockwise.
- ❑ Press and hold in the **INPUT** switch on the front panel of the VL-1000 for ½ second. This initiates the “ALC Alignment” mode.
- ❑ Start with the transceiver’s **DRIVE** or **RF PWR** control fully counter-clockwise, then rotate the **DRIVE** or **RF PWR** control to the fully clockwise position while transmitting.
- ❑ If the power output from the amplifier (as displayed on the **AVG PWR** meter) does not reach 1000 W because of the effect of the VL-1000’s ALC voltage at full excited drive, keep the transceiver’s **DRIVE** or **RF PWR** control fully clockwise, then press and hold in the **DISPLAY 2** key until the power output from the amplifier reaches 1000 Watts.

- ❑ If, on the other hand, the ALC voltage from the VL-1000 does not cause the exciter drive to be controlled such that the power output from the amplifier limits at 1000 Watts, reduce the setting of the **DRIVE** or **RF PWR** control to that the output power is 1000 Watts. Now press and hold in the **DISPLAY 2** key until you observe the amplifier output *just begin* to fall below 1000 Watts. At this point, advance the **DRIVE** or **RF PWR** control fully clockwise, and press/hold in the **DISPLAY 1** or **DISPLAY 2** key so as to achieve 1000 Watts of power output.
- ❑ If the above adjustments are not successful, it is possible that the Forward ALC potentiometer, VR1001, is maladjusted. While transmitting, slowly rotate VR1001 in the direction that provides improved output control (either more or less ALC voltage, as observed on the transceiver’s ALC meter). When 1000 Watts of output



PA Unit Alignment Points

# Alignment

power are obtained, the FT-920 transceiver's ALC meter should have *six bars* illuminated. Other transceivers should show mid-scale indication on their ALC meter.

- ❑ Unkey the transmitter when adjustment is successful. Now press and hold in the **INPUT** switch on the VL-1000 front panel for ½ second to exit the ALC alignment mode.
- ❑ If your VL-1000 is after prod. lot 002, key the transmitter with the **DRIVE** or **RF PWR** control fully clockwise, adjust VR2001 for 1000 Watts on the **AVG PWR** meter.

## Forward ALC Adjustment (Low Power)

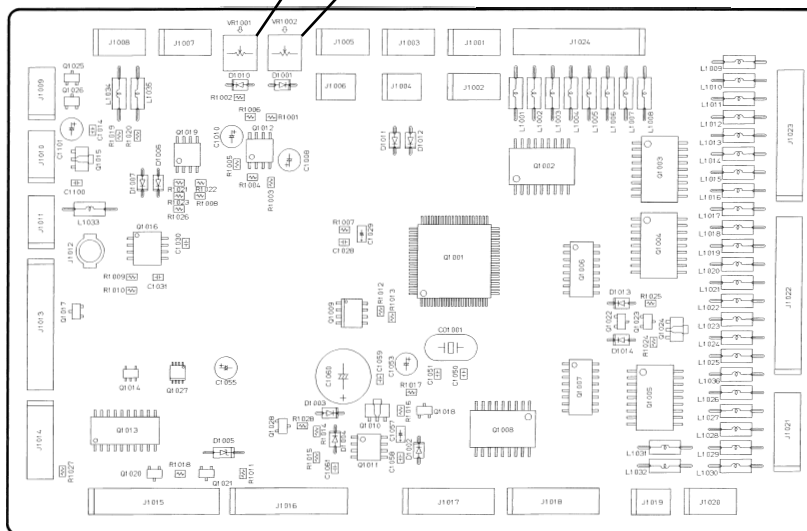
- ❑ The transceiver should be left at 50.100 MHz in the FM mode, with the transceiver's **DRIVE** or **RF PWR** control fully clockwise.
- ❑ Press the **LOW** switch on the front panel of the VL-1000. Now press and hold in the **INPUT** switch for ½ second so as to enter the "ALC Alignment" mode once again.

- ❑ Key the transmitter, and press the **DISPLAY 1** (to increase the power) or the **DISPLAY 2** key (to decrease the power) so as to achieve 500 Watts output power as displayed on the **AVG PWR** meter.
- ❑ Return the transceiver to the receive mode. Press and hold in the **INPUT** switch for ½ second to exit the ALC Alignment mode.

## Reverse ALC Adjustment

- ❑ Press the **ANT** switch on the front panel to select **ANTENNA 2** (to which the 75 Ω dummy load is connected).
- ❑ With the transceiver still set to 50.100 MHz in the FM mode, set the **DRIVE** or **RF PWR** control of the transceiver fully clockwise. If necessary, press the **LOW** switch to select *high power* operation.
- ❑ Press and hold in the **INPUT** switch for ½ second to enter the "ALC Alignment" mode.

VR1001: Forward ALC (High Power)  
(PO=1000 W on AVG PWR meter)  
VR1002: Reverse ALC (Slight power turn-down into 75Ω dummy load)



CNTL Unit Alignment Points

- ❑ Key the transmitter, and adjust VR1002 such that the power output (as indicated on the **AVG PWR** meter) just begins to fall below 1000 Watts of power output. You may also watch the exciter's ALC meter, and adjust VR1002 to the point where the ALC meter just begins to deflect beyond the point set in the "Forward ALC" section. This sets the threshold for SWR protection at 1.5:1 SWR.
- ❑ Unkey the transmitter, and press and hold in the **INPUT** switch for ½ second to exit the ALC Alignment mode.
- ❑ Loosen the two screws affixing each variable capacitor to the motor shafts. Be sure that both variable capacitors rotate freely on the shaft.
- ❑ With the amplifier off, press and hold in the **OPERATE** and **DIM** switches; while holding them in, turn the VL-1000 power on. Release the switches; the motors will rotate to a "Reset" position.
- ❑ Only one screw on each motor shaft coupling will be easily accessible at this point; tighten these screws snugly.
- ❑ With the **TUNER** switch set to *on*, switch the amplifier to the 10 MHz band by pressing the "10 MHz" band key on the transceiver.
- ❑ The motors will now rotate approximately 90 degrees, allowing access to the remaining two shaft coupling screws (one on each shaft). Tighten these screws snugly. Capacitor alignment is now complete.

### *Antenna Tuner Variable Capacitor Alignment*

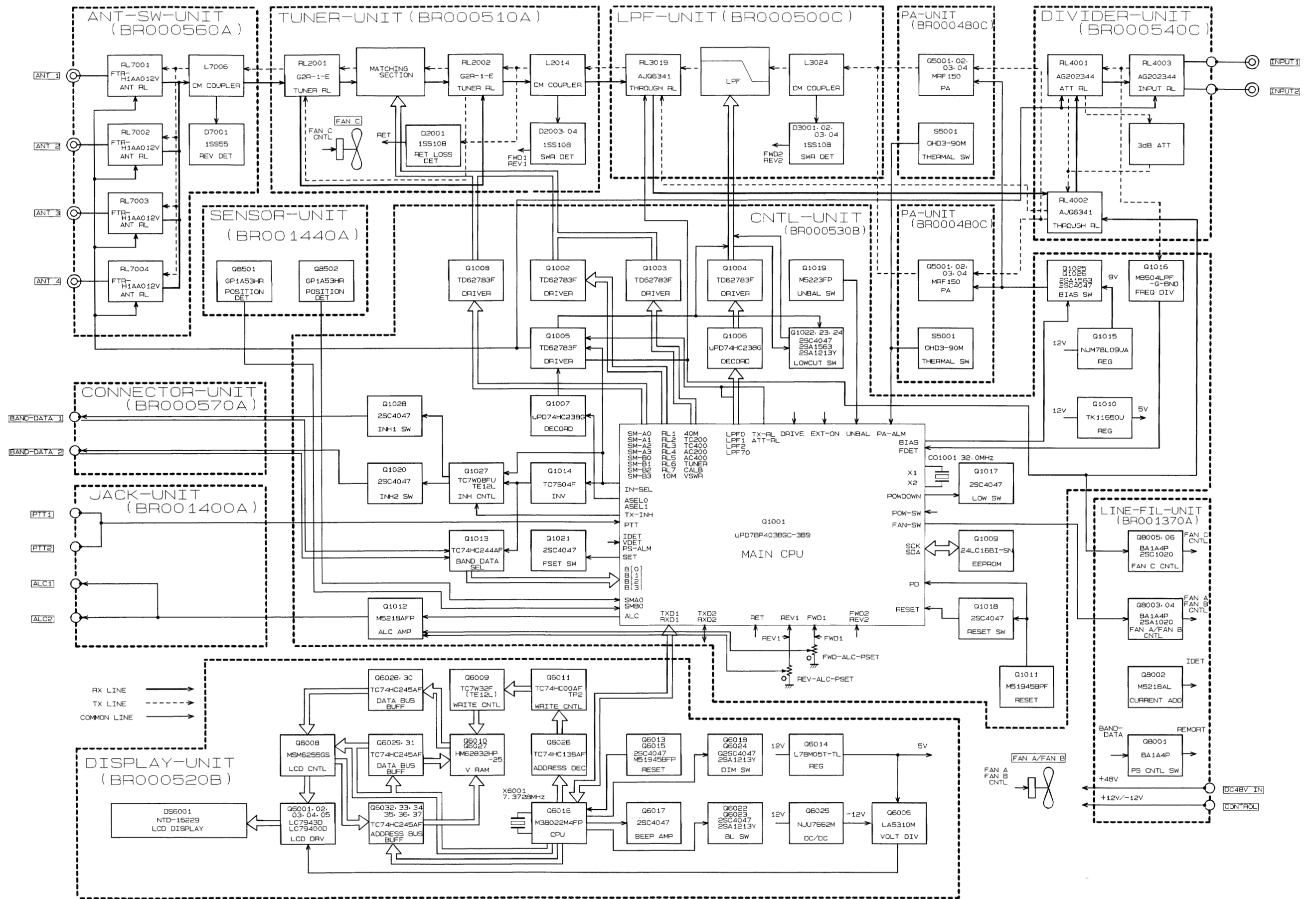
If a new Antenna Tuner Unit must be installed, or if the tuning capacitors and/or motors must be replaced, the position of the capacitors on the motor shafts must be aligned. The procedure is automated, and follows this simple procedure. Start with the VL-1000 turned *off*.

# Alignment

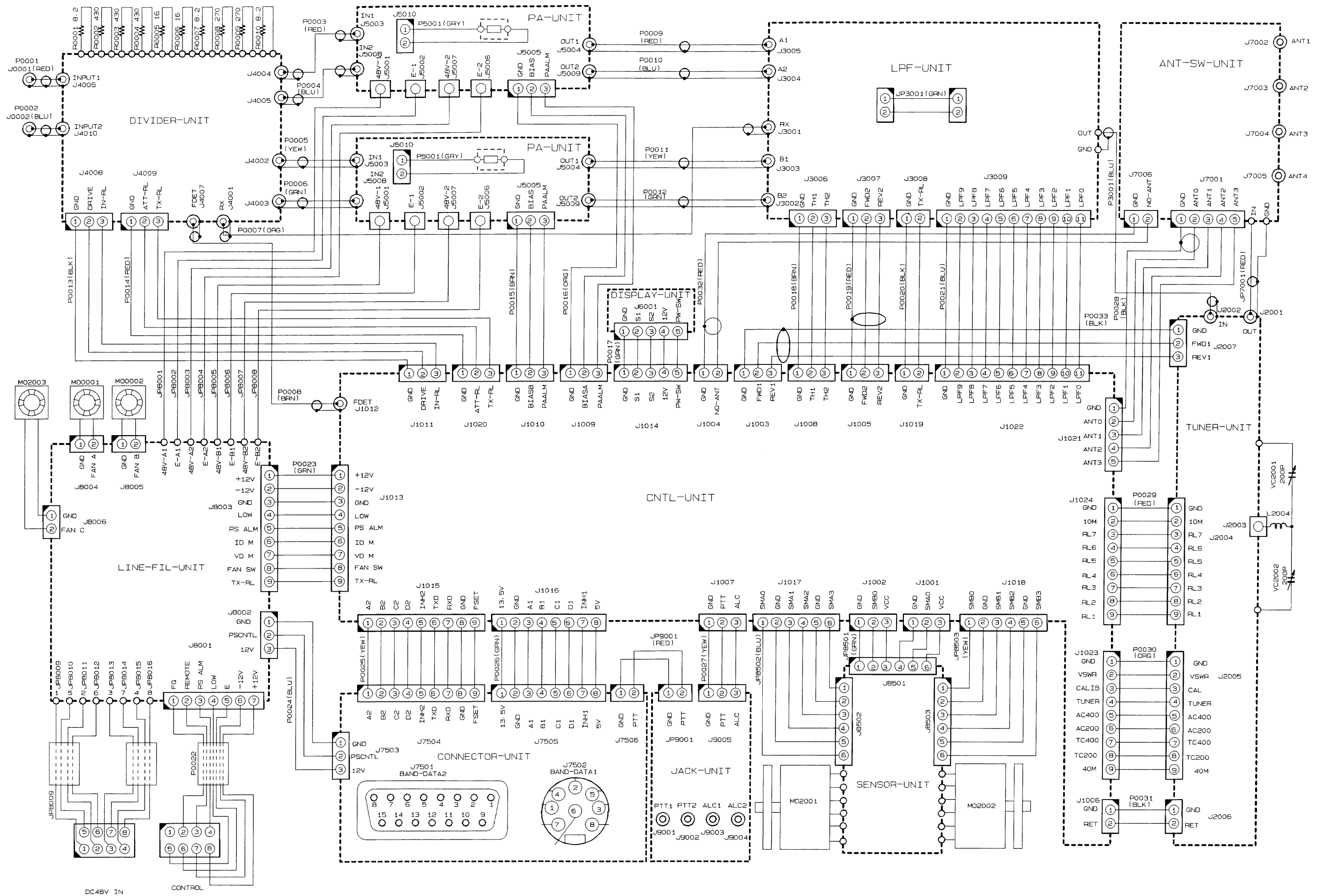
---

*Notes:*

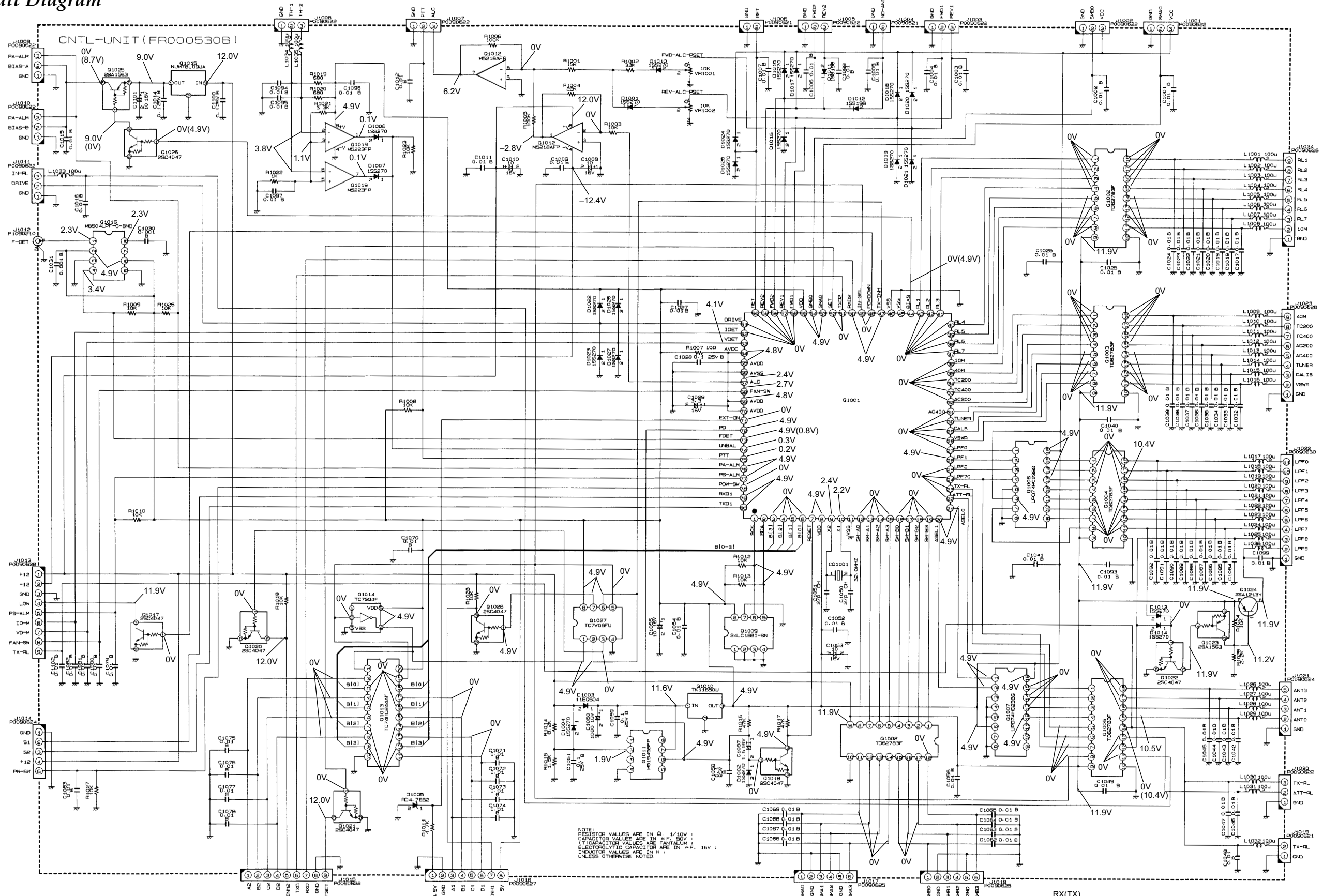
# Block Diagram



# Interconnection Diagram



Circuit Diagram



RX(TX)  
 Before measuring the voltage, disconnect the Band DATA Cable and Resetting the CPU.  
 Measuring Conditions  
 Display Select: Multi Meter1  
 OPERATE: ON  
 DIM, LOW, ATT and TUNER: all OFF  
 INPUT and ANT: both 1

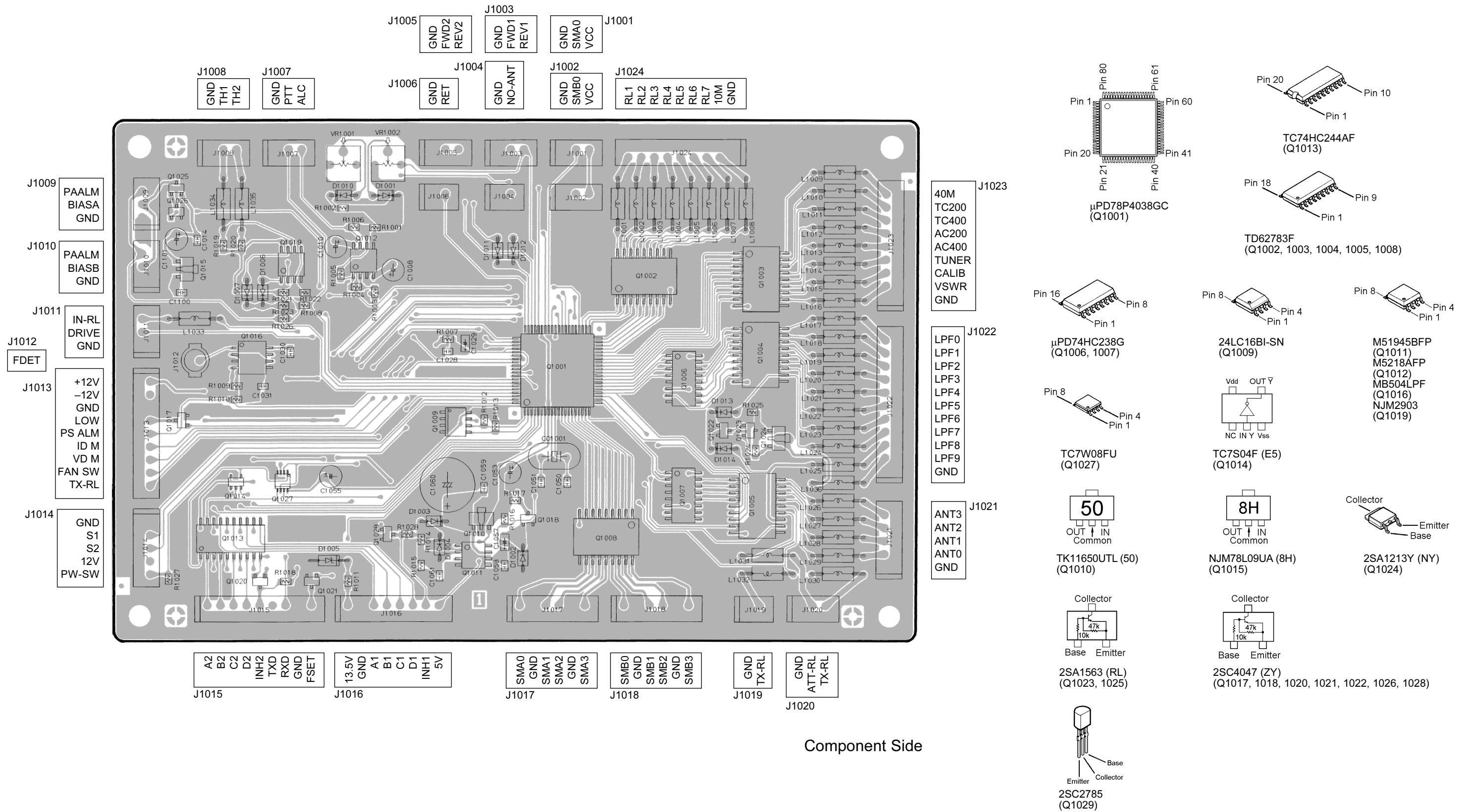
**CNTL Unit**

---

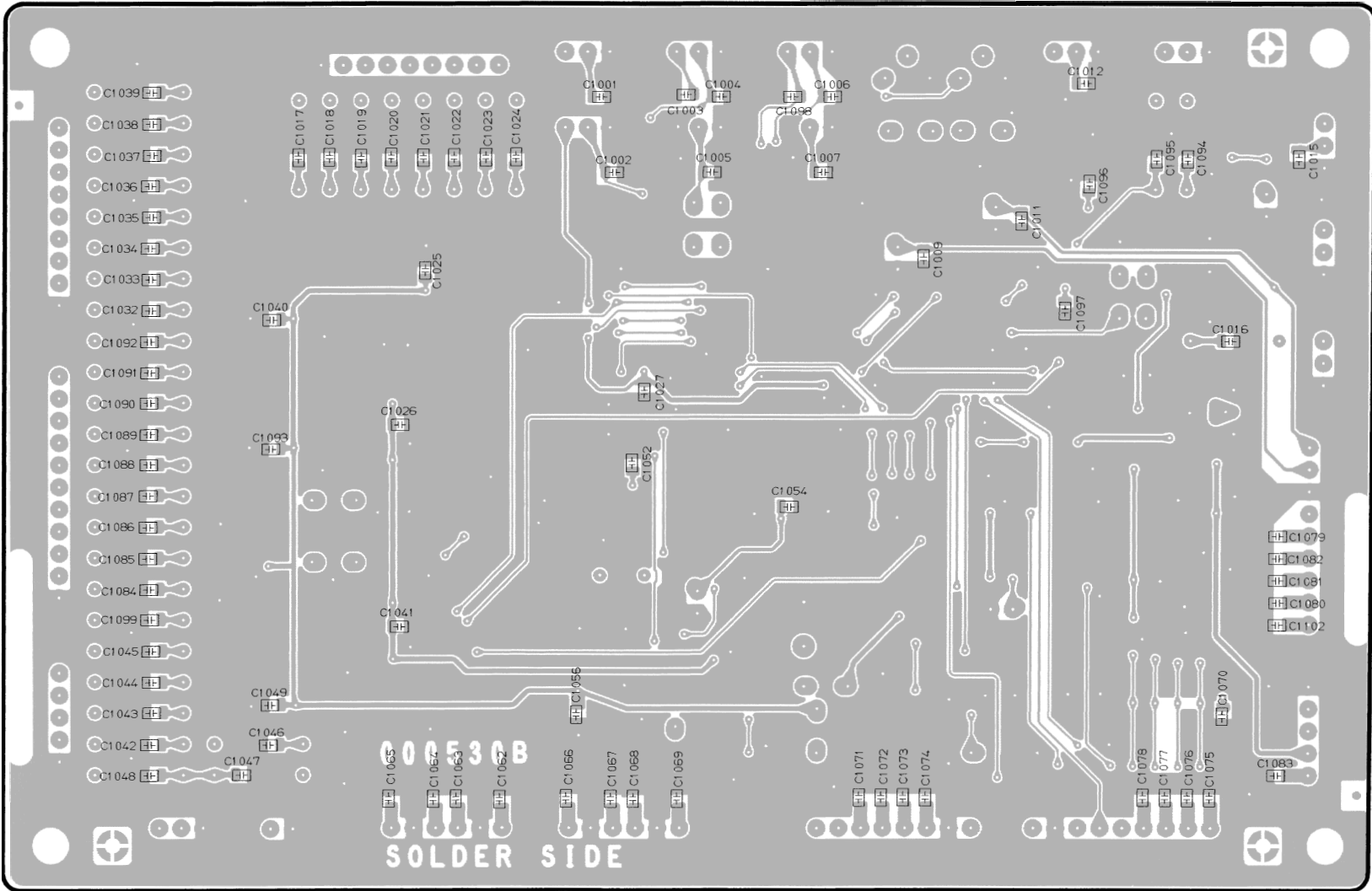
*Notes:*



Parts Layout

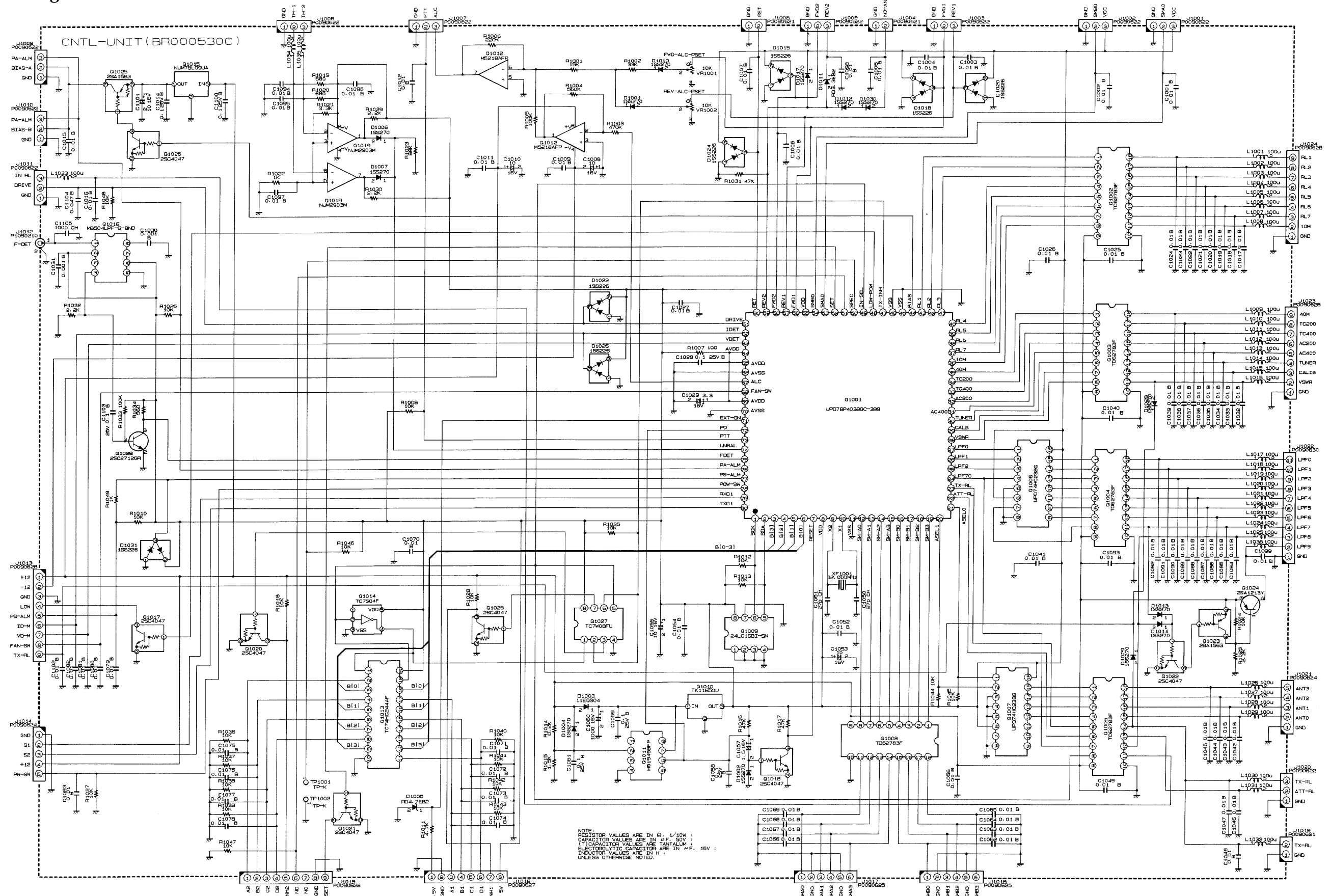


Component Side



Chip Side

Circuit Diagram

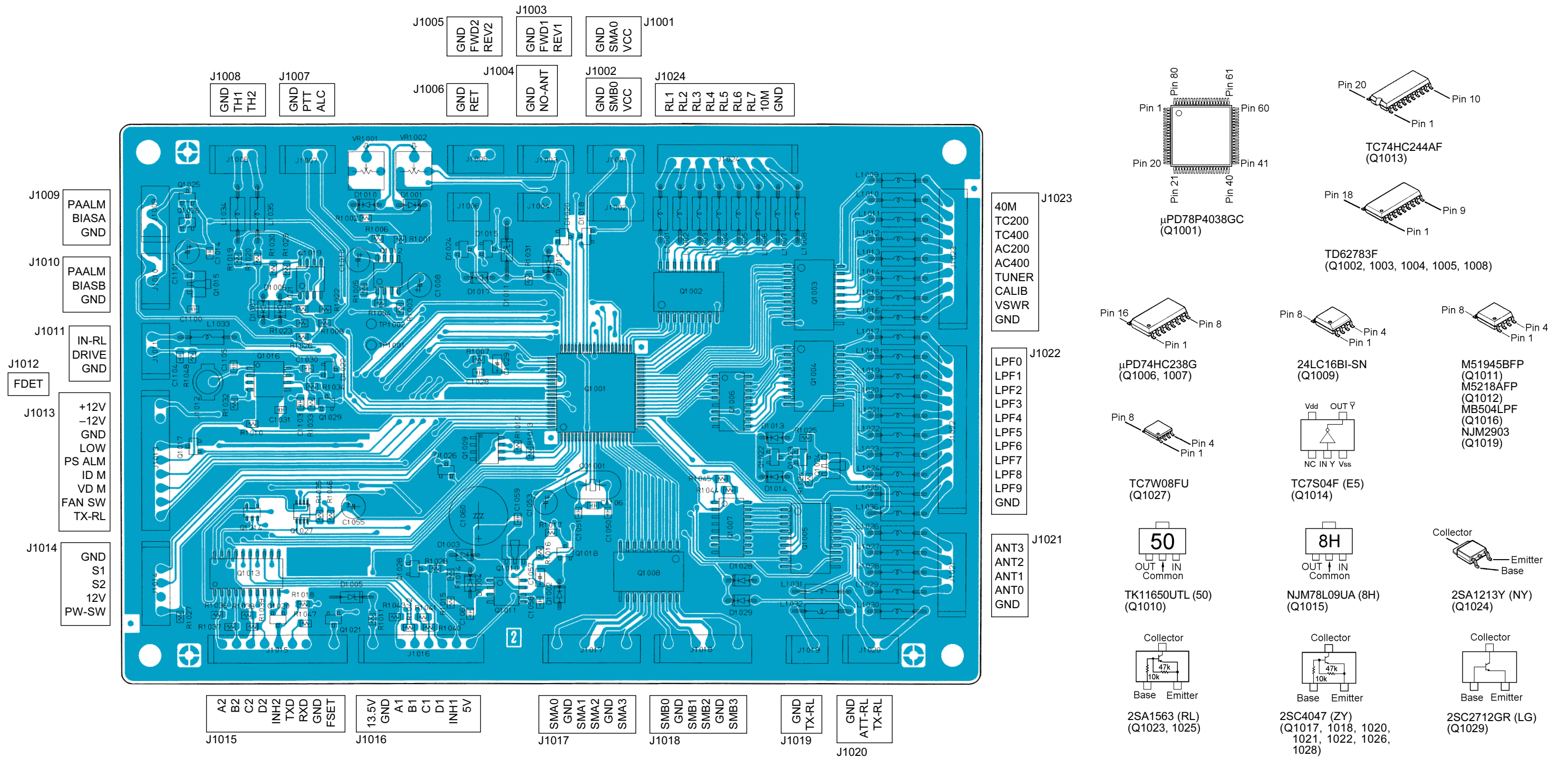


**CNTL Unit** (Lot. 2~)

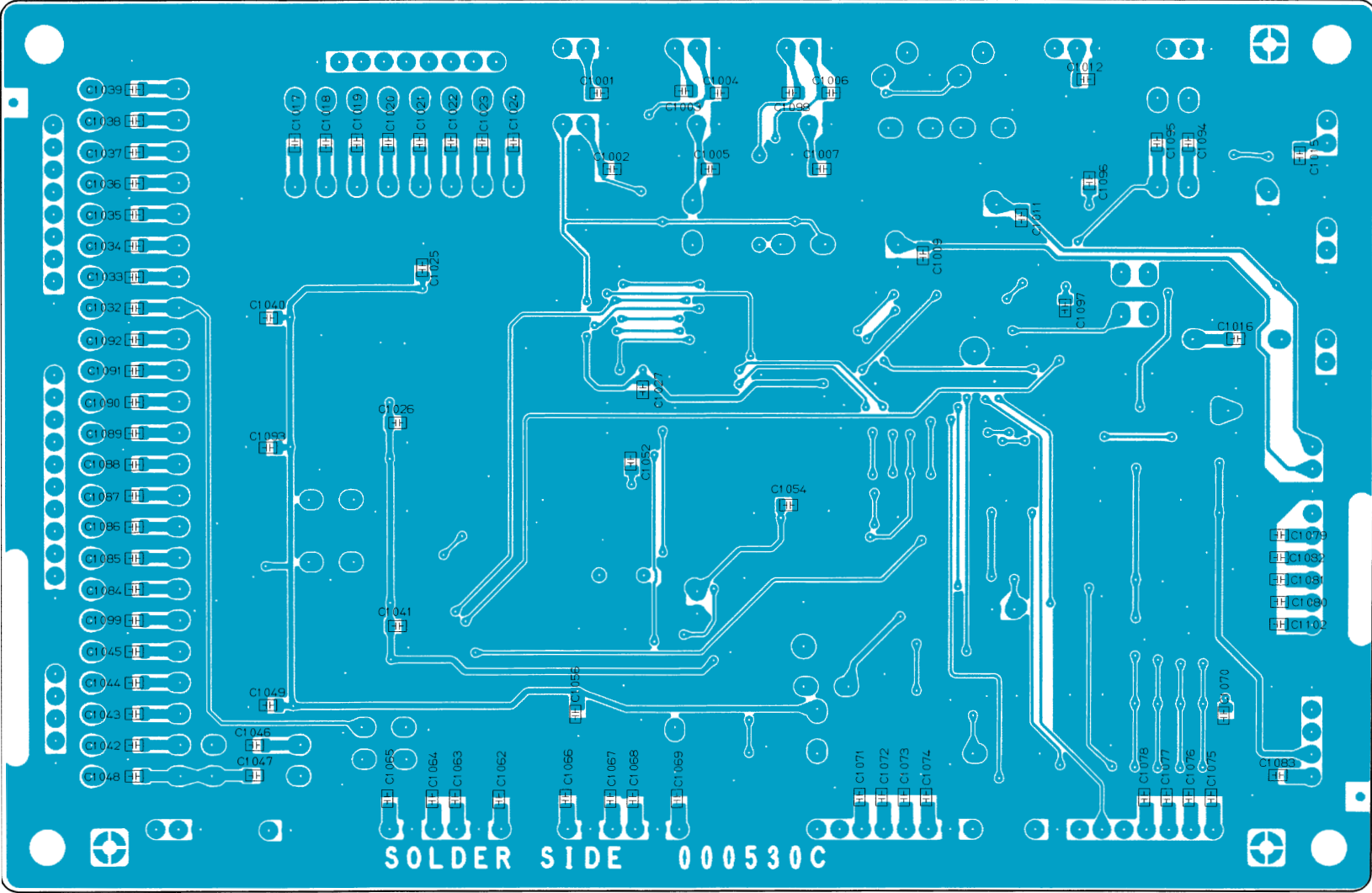
---

*Notes:*

Parts Layout



Component Side



Chip Side

## Parts List

REF.	DESCRIPTION	VALUE	WV	TOL.	MFGR'S DESIG	YAESU P/N	VERS.	LOT.
*** CNTL UNIT ***								
PCB with Components						CB0082001		
Printed Circuit Board						FR000530B		1-
Printed Circuit Board						FR000530C		2-
C 1001	CHIP CAP.	0.01uF	50V	B	GRM40B103M50PT	K22170817		1-
C 1002	CHIP CAP.	0.01uF	50V	B	GRM40B103M50PT	K22170817		1-
C 1003	CHIP CAP.	0.01uF	50V	B	GRM40B103M50PT	K22170817		1-
C 1004	CHIP CAP.	0.01uF	50V	B	GRM40B103M50PT	K22170817		1-
C 1005	CHIP CAP.	0.01uF	50V	B	GRM40B103M50PT	K22170817		1-
C 1006	CHIP CAP.	0.01uF	50V	B	GRM40B103M50PT	K22170817		1-
C 1007	CHIP CAP.	0.01uF	50V	B	GRM40B103M50PT	K22170817		1-
C 1008	AL.ELECTRO.CAP.	10uF	16V		16V100M4X7TR2	K46120004		1-
C 1009	CHIP CAP.	0.01uF	50V	B	GRM40B103M50PT	K22170817		1-
C 1010	AL.ELECTRO.CAP.	10uF	16V		16V100M4X7TR2	K46120004		1-
C 1011	CHIP CAP.	0.01uF	50V	B	GRM40B103M50PT	K22170817		1-
C 1012	CHIP CAP.	0.01uF	50V	B	GRM40B103M50PT	K22170817		1-
C 1014	CHIP CAP.	0.1uF	25V	B	GRM40B104M25PT	K22140811		1-
C 1015	CHIP CAP.	0.01uF	50V	B	GRM40B103M50PT	K22170817		1-
C 1016	CHIP CAP.	0.01uF	50V	B	GRM40B103M50PT	K22170817		1-
C 1017	CHIP CAP.	0.01uF	50V	B	GRM40B103M50PT	K22170817		1-
C 1018	CHIP CAP.	0.01uF	50V	B	GRM40B103M50PT	K22170817		1-
C 1019	CHIP CAP.	0.01uF	50V	B	GRM40B103M50PT	K22170817		1-
C 1020	CHIP CAP.	0.01uF	50V	B	GRM40B103M50PT	K22170817		1-
C 1021	CHIP CAP.	0.01uF	50V	B	GRM40B103M50PT	K22170817		1-
C 1022	CHIP CAP.	0.01uF	50V	B	GRM40B103M50PT	K22170817		1-
C 1023	CHIP CAP.	0.01uF	50V	B	GRM40B103M50PT	K22170817		1-
C 1024	CHIP CAP.	0.01uF	50V	B	GRM40B103M50PT	K22170817		1-
C 1025	CHIP CAP.	0.01uF	50V	B	GRM40B103M50PT	K22170817		1-
C 1026	CHIP CAP.	0.01uF	50V	B	GRM40B103M50PT	K22170817		1-
C 1027	CHIP CAP.	0.01uF	50V	B	GRM40B103M50PT	K22170817		1-
C 1028	CHIP CAP.	0.1uF	25V	B	GRM40B104M25PT	K22140811		1-
C 1029	TANTALUM CHIP CAP.	3.3uF	16V		TEMSVA1C335M-8R	K78120021		1-
C 1030	CHIP CAP.	0.001uF	50V	B	GRM40B102M50PT	K22170805		1-
C 1031	CHIP CAP.	0.001uF	50V	B	GRM40B102M50PT	K22170805		1-
C 1032	CHIP CAP.	0.01uF	50V	B	GRM40B103M50PT	K22170817		1-
C 1033	CHIP CAP.	0.01uF	50V	B	GRM40B103M50PT	K22170817		1-
C 1034	CHIP CAP.	0.01uF	50V	B	GRM40B103M50PT	K22170817		1-
C 1035	CHIP CAP.	0.01uF	50V	B	GRM40B103M50PT	K22170817		1-
C 1036	CHIP CAP.	0.01uF	50V	B	GRM40B103M50PT	K22170817		1-
C 1037	CHIP CAP.	0.01uF	50V	B	GRM40B103M50PT	K22170817		1-
C 1038	CHIP CAP.	0.01uF	50V	B	GRM40B103M50PT	K22170817		1-
C 1039	CHIP CAP.	0.01uF	50V	B	GRM40B103M50PT	K22170817		1-
C 1040	CHIP CAP.	0.01uF	50V	B	GRM40B103M50PT	K22170817		1-
C 1041	CHIP CAP.	0.01uF	50V	B	GRM40B103M50PT	K22170817		1-
C 1042	CHIP CAP.	0.01uF	50V	B	GRM40B103M50PT	K22170817		1-
C 1043	CHIP CAP.	0.01uF	50V	B	GRM40B103M50PT	K22170817		1-
C 1044	CHIP CAP.	0.01uF	50V	B	GRM40B103M50PT	K22170817		1-
C 1045	CHIP CAP.	0.01uF	50V	B	GRM40B103M50PT	K22170817		1-
C 1046	CHIP CAP.	0.01uF	50V	B	GRM40B103M50PT	K22170817		1-
C 1047	CHIP CAP.	0.01uF	50V	B	GRM40B103M50PT	K22170817		1-
C 1048	CHIP CAP.	0.01uF	50V	B	GRM40B103M50PT	K22170817		1-
C 1049	CHIP CAP.	0.01uF	50V	B	GRM40B103M50PT	K22170817		1-
C 1050	CHIP CAP.	27pF	50V	CH	GRM40CH270J50PT	K22170221		1-
C 1051	CHIP CAP.	27pF	50V	CH	GRM40CH270J50PT	K22170221		1-
C 1052	CHIP CAP.	0.01uF	50V	B	GRM40B103M50PT	K22170817		1-
C 1053	AL.ELECTRO.CAP.	10uF	16V		16V100M4X7TR2	K46120004		1-
C 1054	CHIP CAP.	0.01uF	50V	B	GRM40B103M50PT	K22170817		1-
C 1055	AL.ELECTRO.CAP.	10uF	16V		16V100M4X7TR2	K46120004		1-
C 1056	CHIP CAP.	0.01uF	50V	B	GRM40B103M50PT	K22170817		1-
C 1057	TANTALUM CHIP CAP.	1.5uF	16V		TESVA1C155M1-8R	K78120020		1-

# CNTL Unit

REF.	DESCRIPTION	VALUE	WV	TOL.	MFGR'S DESIG	YAESU P/N	VERS.	LOT.
C 1058	CHIP CAP.	0.1uF	25V	B	GRM40B104M25PT	K22140811		1-
C 1059	CHIP CAP.	0.1uF	25V	B	GRM40B104M25PT	K22140811		1-
C 1060	AL.ELECTRO.CAP.	1000uF	16V		RE3-16V102MS	K40129067		1-
C 1061	CHIP CAP.	0.1uF	25V	B	GRM40B104M25PT	K22140811		1-
C 1062	CHIP CAP.	0.01uF	50V	B	GRM40B103M50PT	K22170817		1-
C 1063	CHIP CAP.	0.01uF	50V	B	GRM40B103M50PT	K22170817		1-
C 1064	CHIP CAP.	0.01uF	50V	B	GRM40B103M50PT	K22170817		1-
C 1065	CHIP CAP.	0.01uF	50V	B	GRM40B103M50PT	K22170817		1-
C 1066	CHIP CAP.	0.01uF	50V	B	GRM40B103M50PT	K22170817		1-
C 1067	CHIP CAP.	0.01uF	50V	B	GRM40B103M50PT	K22170817		1-
C 1068	CHIP CAP.	0.01uF	50V	B	GRM40B103M50PT	K22170817		1-
C 1069	CHIP CAP.	0.01uF	50V	B	GRM40B103M50PT	K22170817		1-
C 1070	CHIP CAP.	0.01uF	50V	B	GRM40B103M50PT	K22170817		1-
C 1071	CHIP CAP.	0.01uF	50V	B	GRM40B103M50PT	K22170817		1-
C 1072	CHIP CAP.	0.01uF	50V	B	GRM40B103M50PT	K22170817		1-
C 1073	CHIP CAP.	0.01uF	50V	B	GRM40B103M50PT	K22170817		1-
C 1074	CHIP CAP.	0.01uF	50V	B	GRM40B103M50PT	K22170817		1-
C 1075	CHIP CAP.	0.01uF	50V	B	GRM40B103M50PT	K22170817		1-
C 1076	CHIP CAP.	0.01uF	50V	B	GRM40B103M50PT	K22170817		1-
C 1077	CHIP CAP.	0.01uF	50V	B	GRM40B103M50PT	K22170817		1-
C 1078	CHIP CAP.	0.01uF	50V	B	GRM40B103M50PT	K22170817		1-
C 1079	CHIP CAP.	0.01uF	50V	B	GRM40B103M50PT	K22170817		1-
C 1080	CHIP CAP.	0.01uF	50V	B	GRM40B103M50PT	K22170817		1-
C 1081	CHIP CAP.	0.01uF	50V	B	GRM40B103M50PT	K22170817		1-
C 1082	CHIP CAP.	0.01uF	50V	B	GRM40B103M50PT	K22170817		1-
C 1083	CHIP CAP.	0.01uF	50V	B	GRM40B103M50PT	K22170817		1-
C 1084	CHIP CAP.	0.01uF	50V	B	GRM40B103M50PT	K22170817		1-
C 1085	CHIP CAP.	0.01uF	50V	B	GRM40B103M50PT	K22170817		1-
C 1086	CHIP CAP.	0.01uF	50V	B	GRM40B103M50PT	K22170817		1-
C 1087	CHIP CAP.	0.01uF	50V	B	GRM40B103M50PT	K22170817		1-
C 1088	CHIP CAP.	0.01uF	50V	B	GRM40B103M50PT	K22170817		1-
C 1089	CHIP CAP.	0.01uF	50V	B	GRM40B103M50PT	K22170817		1-
C 1090	CHIP CAP.	0.01uF	50V	B	GRM40B103M50PT	K22170817		1-
C 1091	CHIP CAP.	0.01uF	50V	B	GRM40B103M50PT	K22170817		1-
C 1092	CHIP CAP.	0.01uF	50V	B	GRM40B103M50PT	K22170817		1-
C 1093	CHIP CAP.	0.01uF	50V	B	GRM40B103M50PT	K22170817		1-
C 1094	CHIP CAP.	0.01uF	50V	B	GRM40B103M50PT	K22170817		1-
C 1095	CHIP CAP.	0.01uF	50V	B	GRM40B103M50PT	K22170817		1-
C 1096	CHIP CAP.	0.01uF	50V	B	GRM40B103M50PT	K22170817		1-
C 1097	CHIP CAP.	0.01uF	50V	B	GRM40B103M50PT	K22170817		1-
C 1098	CHIP CAP.	0.01uF	50V	B	GRM40B103M50PT	K22170817		1-
C 1099	CHIP CAP.	0.01uF	50V	B	GRM40B103M50PT	K22170817		1-
C 1100	CHIP CAP.	0.1uF	25V	B	GRM40B104M25PT	K22140811		1-
C 1101	AL.ELECTRO.CAP.	10uF	16V		16V100M4X7TR2	K46120004		1-
C 1102	CHIP CAP.	0.01uF	50V	B	GRM40B103M50PT	K22170817		1-
C 1103	CERAMIC CAP.	0.1uF	50V	F	UP050F104Z-A-B	K28179003		1-
C 1103	CHIP CAP.	0.1uF	25V	B	GRM40B104M25PT	K22140811		2-
C 1104	CERAMIC CAP.	0.047uF	50V	F	UP050F473Z-A-B	K28179002		1-
C 1104	CHIP CAP.	0.047uF	50V	B	GRM40B473M50PT	K22170823		2-
C 1105	CHIP CAP.	100pF	50V	CH	GRM40CH101J50PT	K22170235		1-
D 1001	DIODE				1SS270TJ	G2060004		1-
D 1002	DIODE				1SS270TJ	G2060004		1-
D 1003	DIODE				11EQS04-TA1B2	G2060008		1-
D 1004	DIODE				1SS270TJ	G2060004		1-
D 1005	DIODE				RD4.7EB2-T1	G2060006		1-
D 1006	DIODE				1SS270TJ	G2060004		1-
D 1007	DIODE				1SS270TJ	G2060004		1-
D 1010	DIODE				1SS270TJ	G2060004		1-
D 1011	DIODE				RD3.3EB2	G2090201		1-
D 1012	DIODE				1SS270TJ	G2060004		1-



REF.	DESCRIPTION	VALUE	WV	TOL.	MFGR'S DESIG	YAESU P/N	VERS.	LOT.
D 1013	DIODE				1SS270TJ	G2060004		1-
D 1014	DIODE				1SS270TJ	G2060004		1-
D 1015	DIODE				1SS270	G2090408		1-
D 1015	DIODE				1SS226 TE85R	G2070003		2-
D 1016	DIODE				1SS270	G2090408		1-
D 1017	DIODE				1SS270	G2090408		1-
D 1017	DIODE				1SS270TJ	G2060004		2-
D 1018	DIODE				1SS270	G2090408		1-
D 1018	DIODE				1SS226 TE85R	G2070003		2-
D 1019	DIODE				1SS270	G2090408		1-
D 1020	DIODE				1SS270	G2090408		1-
D 1020	DIODE				1SS226 TE85R	G2070003		2-
D 1021	DIODE				1SS270	G2090408		1-
D 1022	DIODE				1SS270	G2090408		1-
D 1022	DIODE				1SS226 TE85R	G2070003		2-
D 1023	DIODE				1SS270	G2090408		1-
D 1024	DIODE				1SS270	G2090408		1-
D 1024	DIODE				1SS226 TE85R	G2070003		2-
D 1025	DIODE				1SS270	G2090408		1-
D 1026	DIODE				1SS270	G2090408		1-
D 1026	DIODE				1SS226 TE85R	G2070003		2-
D 1027	DIODE				1SS270	G2090408		1-
D 1028	DIODE				1SS270	G2090408		1-
D 1028	DIODE				1SS270TJ	G2060004		2-
D 1029	DIODE				1SS270	G2090408		1-
D 1029	DIODE				1SS270TJ	G2060004		2-
D 1030	DIODE				1SS270TJ	G2060004		1-
D 1031	DIODE				1SS226 TE85R	G2070003		4-
J 1001	CONNECTOR				SC25-03WS	P0090622		1-
J 1002	CONNECTOR				SC25-03WS	P0090622		1-
J 1003	CONNECTOR				SC25-03WS	P0090622		1-
J 1004	CONNECTOR				SC25-02WS	P0090621		1-
J 1005	CONNECTOR				SC25-03WS	P0090622		1-
J 1006	CONNECTOR				SC25-02WS	P0090621		1-
J 1007	CONNECTOR				SC25-03WS	P0090622		1-
J 1008	CONNECTOR				SC25-03WS	P0090622		1-
J 1009	CONNECTOR				SC25-03WS	P0090622		1-
J 1010	CONNECTOR				SC25-03WS	P0090622		1-
J 1011	CONNECTOR				SC25-03WS	P0090622		1-
J 1012	CONNECTOR				TMP-J01X-V6	P1090210		1-
J 1013	CONNECTOR				SC25-09WS	P0090628		1-
J 1014	CONNECTOR				SC25-05WS	P0090624		1-
J 1015	CONNECTOR				SC25-09WS	P0090628		1-
J 1016	CONNECTOR				SC25-08WS	P0090627		1-
J 1017	CONNECTOR				SC25-06WS	P0090625		1-
J 1018	CONNECTOR				SC25-06WS	P0090625		1-
J 1019	CONNECTOR				SC25-02WS	P0090621		1-
J 1020	CONNECTOR				SC25-03WS	P0090622		1-
J 1021	CONNECTOR				SC25-05WS	P0090624		1-
J 1022	CONNECTOR				SC25-11WS	P0090630		1-
J 1023	CONNECTOR				SC25-09WS	P0090628		1-
J 1024	CONNECTOR				SC25-09WS	P0090628		1-
L 1001	M.RFC	100uH			LAL03NA101K	L1190218		1-
L 1001	M.RFC	100uH			LAL03TA101K	L1790107		2-
L 1002	M.RFC	100uH			LAL03NA101K	L1190218		1-
L 1002	M.RFC	100uH			LAL03TA101K	L1790107		2-
L 1003	M.RFC	100uH			LAL03NA101K	L1190218		1-
L 1003	M.RFC	100uH			LAL03TA101K	L1790107		2-
L 1004	M.RFC	100uH			LAL03NA101K	L1190218		1-
L 1004	M.RFC	100uH			LAL03TA101K	L1790107		2-

# CNTL Unit

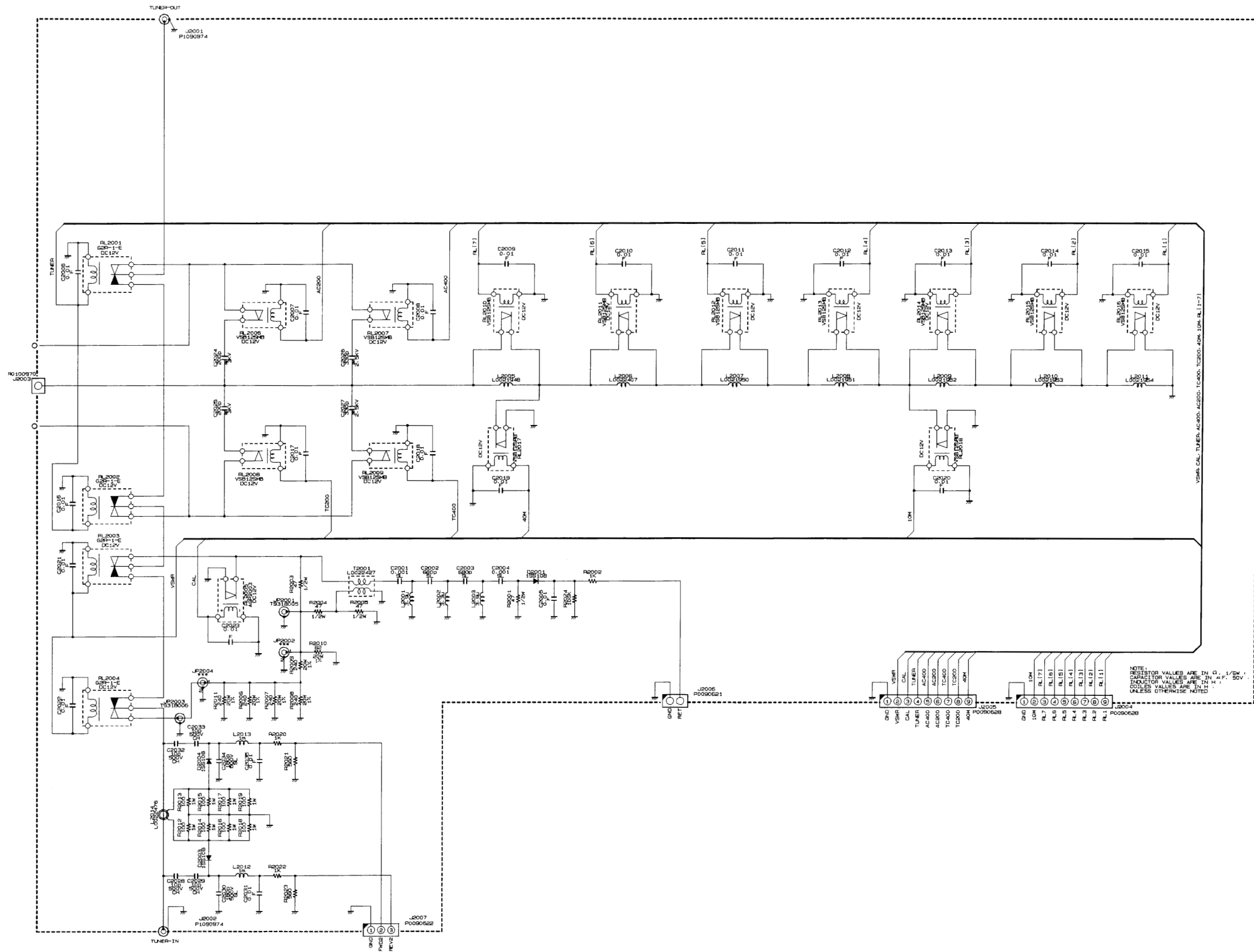
REF.	DESCRIPTION	VALUE	WV	TOL.	MFGR'S DESIG	YAESU P/N	VERS.	LOT.
L 1005	M.RFC	100uH			LAL03NA101K	L1190218		1-
L 1005	M.RFC	100uH			LAL03TA101K	L1790107		2-
L 1006	M.RFC	100uH			LAL03NA101K	L1190218		1-
L 1006	M.RFC	100uH			LAL03TA101K	L1790107		2-
L 1007	M.RFC	100uH			LAL03NA101K	L1190218		1-
L 1007	M.RFC	100uH			LAL03TA101K	L1790107		2-
L 1008	M.RFC	100uH			LAL03NA101K	L1190218		1-
L 1008	M.RFC	100uH			LAL03TA101K	L1790107		2-
L 1009	M.RFC	100uH			LAL03NA101K	L1190218		1-
L 1009	M.RFC	100uH			LAL03TA101K	L1790107		2-
L 1010	M.RFC	100uH			LAL03NA101K	L1190218		1-
L 1010	M.RFC	100uH			LAL03TA101K	L1790107		2-
L 1011	M.RFC	100uH			LAL03NA101K	L1190218		1-
L 1011	M.RFC	100uH			LAL03TA101K	L1790107		2-
L 1012	M.RFC	100uH			LAL03NA101K	L1190218		1-
L 1012	M.RFC	100uH			LAL03TA101K	L1790107		2-
L 1013	M.RFC	100uH			LAL03NA101K	L1190218		1-
L 1013	M.RFC	100uH			LAL03TA101K	L1790107		2-
L 1014	M.RFC	100uH			LAL03NA101K	L1190218		1-
L 1014	M.RFC	100uH			LAL03TA101K	L1790107		2-
L 1015	M.RFC	100uH			LAL03NA101K	L1190218		1-
L 1015	M.RFC	100uH			LAL03TA101K	L1790107		2-
L 1016	M.RFC	100uH			LAL03NA101K	L1190218		1-
L 1016	M.RFC	100uH			LAL03TA101K	L1790107		2-
L 1017	M.RFC	100uH			LAL03NA101K	L1190218		1-
L 1017	M.RFC	100uH			LAL03TA101K	L1790107		2-
L 1018	M.RFC	100uH			LAL03NA101K	L1190218		1-
L 1018	M.RFC	100uH			LAL03TA101K	L1790107		2-
L 1019	M.RFC	100uH			LAL03NA101K	L1190218		1-
L 1019	M.RFC	100uH			LAL03TA101K	L1790107		2-
L 1020	M.RFC	100uH			LAL03NA101K	L1190218		1-
L 1020	M.RFC	100uH			LAL03TA101K	L1790107		2-
L 1021	M.RFC	100uH			LAL03NA101K	L1190218		1-
L 1021	M.RFC	100uH			LAL03TA101K	L1790107		2-
L 1022	M.RFC	100uH			LAL03NA101K	L1190218		1-
L 1022	M.RFC	100uH			LAL03TA101K	L1790107		2-
L 1023	M.RFC	100uH			LAL03NA101K	L1190218		1-
L 1023	M.RFC	100uH			LAL03TA101K	L1790107		2-
L 1024	M.RFC	100uH			LAL03NA101K	L1190218		1-
L 1024	M.RFC	100uH			LAL03TA101K	L1790107		2-
L 1025	M.RFC	100uH			LAL03NA101K	L1190218		1-
L 1025	M.RFC	100uH			LAL03TA101K	L1790107		2-
L 1026	M.RFC	100uH			LAL03NA101K	L1190218		1-
L 1026	M.RFC	100uH			LAL03TA101K	L1790107		2-
L 1027	M.RFC	100uH			LAL03NA101K	L1190218		1-
L 1027	M.RFC	100uH			LAL03TA101K	L1790107		2-
L 1028	M.RFC	100uH			LAL03NA101K	L1190218		1-
L 1028	M.RFC	100uH			LAL03TA101K	L1790107		2-
L 1029	M.RFC	100uH			LAL03NA101K	L1190218		1-
L 1029	M.RFC	100uH			LAL03TA101K	L1790107		2-
L 1030	M.RFC	100uH			LAL03NA101K	L1190218		1-
L 1030	M.RFC	100uH			LAL03TA101K	L1790107		2-
L 1031	M.RFC	100uH			LAL03NA101K	L1190218		1-
L 1031	M.RFC	100uH			LAL03TA101K	L1790107		2-
L 1032	M.RFC	100uH			LAL03NA101K	L1190218		1-
L 1032	M.RFC	100uH			LAL03TA101K	L1790107		2-
L 1033	M.RFC	100uH			LAL03NA101K	L1190218		1-
L 1033	M.RFC	100uH			LAL03TA101K	L1790107		2-
L 1034	M.RFC	100uH			LAL03NA101K	L1190218		1-
L 1034	M.RFC	100uH			LAL03TA101K	L1790107		2-

REF.	DESCRIPTION	VALUE	WV	TOL.	MFGR'S DESIG	YAESU P/N	VERS.	LOT.
L 1035	M.RFC	100uH			LAL03NA101K	L1190218		1-
L 1035	M.RFC	100uH			LAL03TA101K	L1790107		2-
L 1036	M.RFC	100uH			LAL03NA101K	L1190218		1-
L 1036	M.RFC	100uH			LAL03TA101K	L1790107		2-
Q 1001	IC				UPD78P4038GC-3B9 R0188	G1092709		1-
Q 1001	IC				UPD78P4038GC-3B9 R0202	G1092765		3-
Q 1002	IC				TD62783F TP1	G1091620		1-
Q 1003	IC				TD62783F TP1	G1091620		1-
Q 1004	IC				TD62783F TP1	G1091620		1-
Q 1005	IC				TD62783F TP1	G1091620		1-
Q 1006	IC				UPD74HC238G	G1091049		1-
Q 1007	IC				UPD74HC238G	G1091049		1-
Q 1008	IC				TD62783F TP1	G1091620		1-
Q 1009	IC				24LC16BI-SN TER	G1091852		1-
Q 1010	IC				TK11650UTL	G1091663		1-
Q 1011	IC				M51945BFP-600C	G1091990		1-
Q 1012	IC				M5218AFP-600C	G1091607		1-
Q 1013	IC				TC74HC244AF(EL)	G1091566		1-
Q 1014	IC				TC7S04F TE85R	G1091444		1-
Q 1015	IC				NJM78L09UA TE2	G1091305		1-
Q 1016	IC				MB504LPF-G-BND-TF	G1090927		1-
Q 1017	TRANSISTOR				2SC4047-TA	G3340477		1-
Q 1018	TRANSISTOR				2SC4047-TA	G3340477		1-
Q 1019	IC				NJM2903M T2	G1091073		1-
Q 1020	TRANSISTOR				2SC4047-TA	G3340477		1-
Q 1021	TRANSISTOR				2SC4047-TA	G3340477		1-
Q 1022	TRANSISTOR				2SC4047-TA	G3340477		1-
Q 1023	TRANSISTOR				2SA1563-TB	G3115638		1-
Q 1024	TRANSISTOR				2SA1213Y TE12R	G3112137Y		1-
Q 1025	TRANSISTOR				2SA1563-TB	G3115638		1-
Q 1026	TRANSISTOR				2SC4047-TA	G3340477		1-
Q 1027	IC				TC7W08FU TE12L	G1092264		1-
Q 1028	TRANSISTOR				2SC4047-TA	G3340477		1-
Q 1029	TRANSISTOR				2SC2785E	G3327850E		1-
Q 1029	TRANSISTOR				2SC2712GR TE85R	G3327127G		2-
R 1001	CHIP RES.	15kohm	1/10W	5%	RMC1/10T 153J	J24205153		1-
R 1002	CHIP RES.	33kohm	1/10W	5%	RMC1/10T 333J	J24205333		1-
R 1003	CHIP RES.	470kohm	1/10W	5%	RMC1/10T 474J	J24205474		1-
R 1004	CHIP RES.	560kohm	1/10W	5%	RMC1/10T 564J	J24205564		1-
R 1005	CHIP RES.	100kohm	1/10W	5%	RMC1/10T 104J	J24205104		1-
R 1006	CHIP RES.	220kohm	1/10W	5%	RMC1/10T 224J	J24205224		1-
R 1007	CHIP RES.	100ohm	1/10W	5%	RMC1/10T 101J	J24205101		1-
R 1008	CARBON FILM RES.	10kohm	1/6W	5%	RD16PJ103 10K	J01225103		1-
R 1008	CHIP RES.	10kohm	1/10W	5%	RMC1/10T 103J	J24205103		2-
R 1010	CHIP RES.	10kohm	1/10W	5%	RMC1/10T 103J	J24205103		1-
R 1011	CHIP RES.	4.7kohm	1/10W	5%	RMC1/10T 472J	J24205472		1-
R 1012	CHIP RES.	10kohm	1/10W	5%	RMC1/10T 103J	J24205103		1-
R 1013	CHIP RES.	10kohm	1/10W	5%	RMC1/10T 103J	J24205103		1-
R 1014	CHIP RES.	8.2kohm	1/10W	5%	RMC1/10T 822J	J24205822		1-
R 1015	CHIP RES.	1.5kohm	1/10W	5%	RMC1/10T 152J	J24205152		1-
R 1016	CHIP RES.	47kohm	1/10W	5%	RMC1/10T 473J	J24205473		1-
R 1017	CHIP RES.	47kohm	1/10W	5%	RMC1/10T 473J	J24205473		1-
R 1018	CHIP RES.	10kohm	1/10W	5%	RMC1/10T 103J	J24205103		1-
R 1019	CHIP RES.	680ohm	1/10W	5%	RMC1/10T 681J	J24205681		1-
R 1020	CHIP RES.	680ohm	1/10W	5%	RMC1/10T 681J	J24205681		1-
R 1021	CHIP RES.	3.3kohm	1/10W	5%	RMC1/10T 332J	J24205332		1-
R 1022	CHIP RES.	1kohm	1/10W	5%	RMC1/10T 102J	J24205102		1-
R 1023	CHIP RES.	68kohm	1/10W	5%	RMC1/10T 683J	J24205683		1-
R 1024	CHIP RES.	10kohm	1/10W	5%	RMC1/10T 103J	J24205103		1-
R 1025	CHIP RES.	2.2kohm	1/10W	5%	RMC1/10T 222J	J24205222		1-

# CNTL Unit

REF.	DESCRIPTION	VALUE	WV	TOL.	MFGR'S DESIG	YAESU P/N	VERS.	LOT.
R 1026	CHIP RES.	10kohm	1/10W	5%	RMC1/10T 103J	J24205103		1-
R 1027	CHIP RES.	10kohm	1/10W	5%	RMC1/10T 103J	J24205103		1-
R 1028	CHIP RES.	10kohm	1/10W	5%	RMC1/10T 103J	J24205103		1-
R 1029	CARBON FILM RES.	2.2kohm	1/6W	5%	RD16PJ222 2.2K	J01225222		1-
R 1029	CHIP RES.	2.2kohm	1/10W	5%	RMC1/10T 222J	J24205222		2-
R 1030	CARBON FILM RES.	2.2kohm	1/6W	5%	RD16PJ222 2.2K	J01225222		1-
R 1030	CHIP RES.	2.2kohm	1/10W	5%	RMC1/10T 222J	J24205222		2-
R 1031	CARBON FILM RES.	47kohm	1/6W	5%	RD16PJ473 47K	J01225473		1-
R 1031	CHIP RES.	47kohm	1/10W	5%	RMC1/10T 473J	J24205473		2-
R 1032	CARBON FILM RES.	2.2kohm	1/6W	5%	RD16PJ222 2.2K	J01225222		1-
R 1032	CHIP RES.	2.2kohm	1/10W	5%	RMC1/10T 222J	J24205222		2-
R 1033	CARBON FILM RES.	100kohm	1/6W	5%	RD16PJ104 100K	J01225104		1-
R 1033	CHIP RES.	100kohm	1/10W	5%	RMC1/10T 104J	J24205104		2-
R 1034	CHIP RES.	560ohm	1/10W	5%	RMC1/10T 561J	J24205561		1-
R 1035	CARBON FILM RES.	10kohm	1/6W	5%	RD16PJ103 10K	J01225103		1-
R 1035	CHIP RES.	10kohm	1/10W	5%	RMC1/10T 103J	J24205103		2-
R 1036	CHIP RES.	10kohm	1/10W	5%	RMC1/10T 103J	J24205103		1-
R 1037	CHIP RES.	10kohm	1/10W	5%	RMC1/10T 103J	J24205103		1-
R 1038	CHIP RES.	10kohm	1/10W	5%	RMC1/10T 103J	J24205103		1-
R 1039	CHIP RES.	10kohm	1/10W	5%	RMC1/10T 103J	J24205103		1-
R 1040	CHIP RES.	10kohm	1/10W	5%	RMC1/10T 103J	J24205103		1-
R 1041	CHIP RES.	10kohm	1/10W	5%	RMC1/10T 103J	J24205103		1-
R 1042	CHIP RES.	10kohm	1/10W	5%	RMC1/10T 103J	J24205103		1-
R 1043	CHIP RES.	10kohm	1/10W	5%	RMC1/10T 103J	J24205103		1-
R 1044	CARBON FILM RES.	10kohm	1/6W	5%	RD16PJ103 10K	J01225103		1-
R 1044	CHIP RES.	10kohm	1/10W	5%	RMC1/10T 103J	J24205103		2-
R 1045	CARBON FILM RES.	10kohm	1/6W	5%	RD16PJ103 10K	J01225103		1-
R 1045	CHIP RES.	10kohm	1/10W	5%	RMC1/10T 103J	J24205103		2-
R 1046	CHIP RES.	10kohm	1/10W	5%	RMC1/10T 103J	J24205103		2-
R 1047	CHIP RES.	10kohm	1/10W	5%	RMC1/10T 103J	J24205103		2-
R 1048	CARBON FILM RES.	10kohm	1/6W	5%	RD16PJ103 10K	J01225103		1-
R 1048	CHIP RES.	10kohm	1/10W	5%	RMC1/10T 103J	J24205103		2-
R 1049	CARBON FILM RES.	1kohm	1/6W	5%	RD16PJ102 1K	J01225102		4-
TP1001	TERMINAL				TP-K IPS-1136	Q5000050		2-
TP1002	TERMINAL				TP-K IPS-1136	Q5000050		2-
VR1001	POT.	10kohm			EVN-DCAA03B14 10K	J50784103		1-
VR1002	POT.	10kohm			EVN-DCAA03B14 10K	J50784103		1-
XF1001	XTAL	32MHz			32.000MHz	H0103173		1-

Circuit Diagram

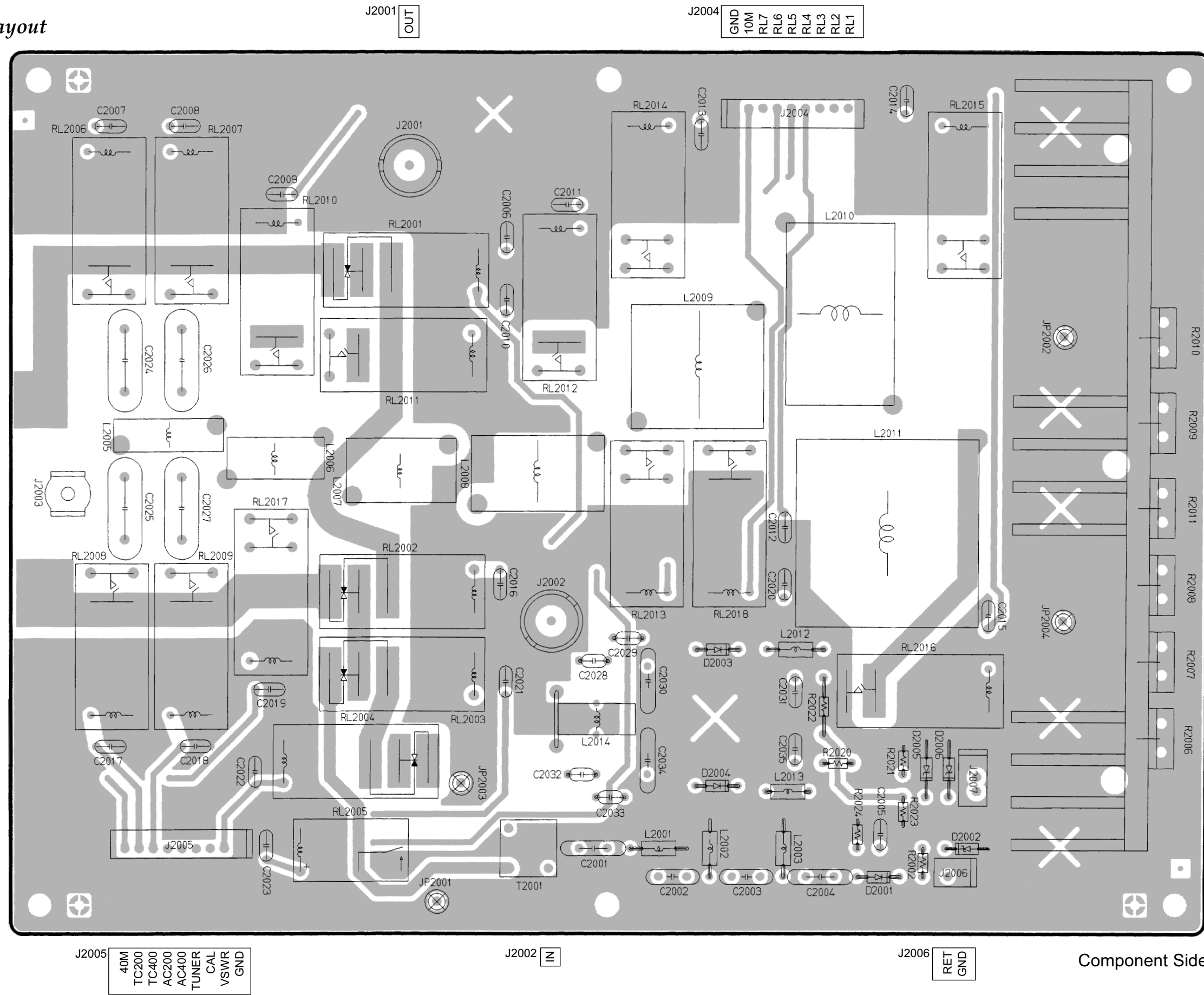


# Tuner Unit

---

*Notes:*

Parts Layout



J2001  
OUT

J2004  
GND  
10M  
RL7  
RL6  
RL5  
RL4  
RL3  
RL2  
RL1

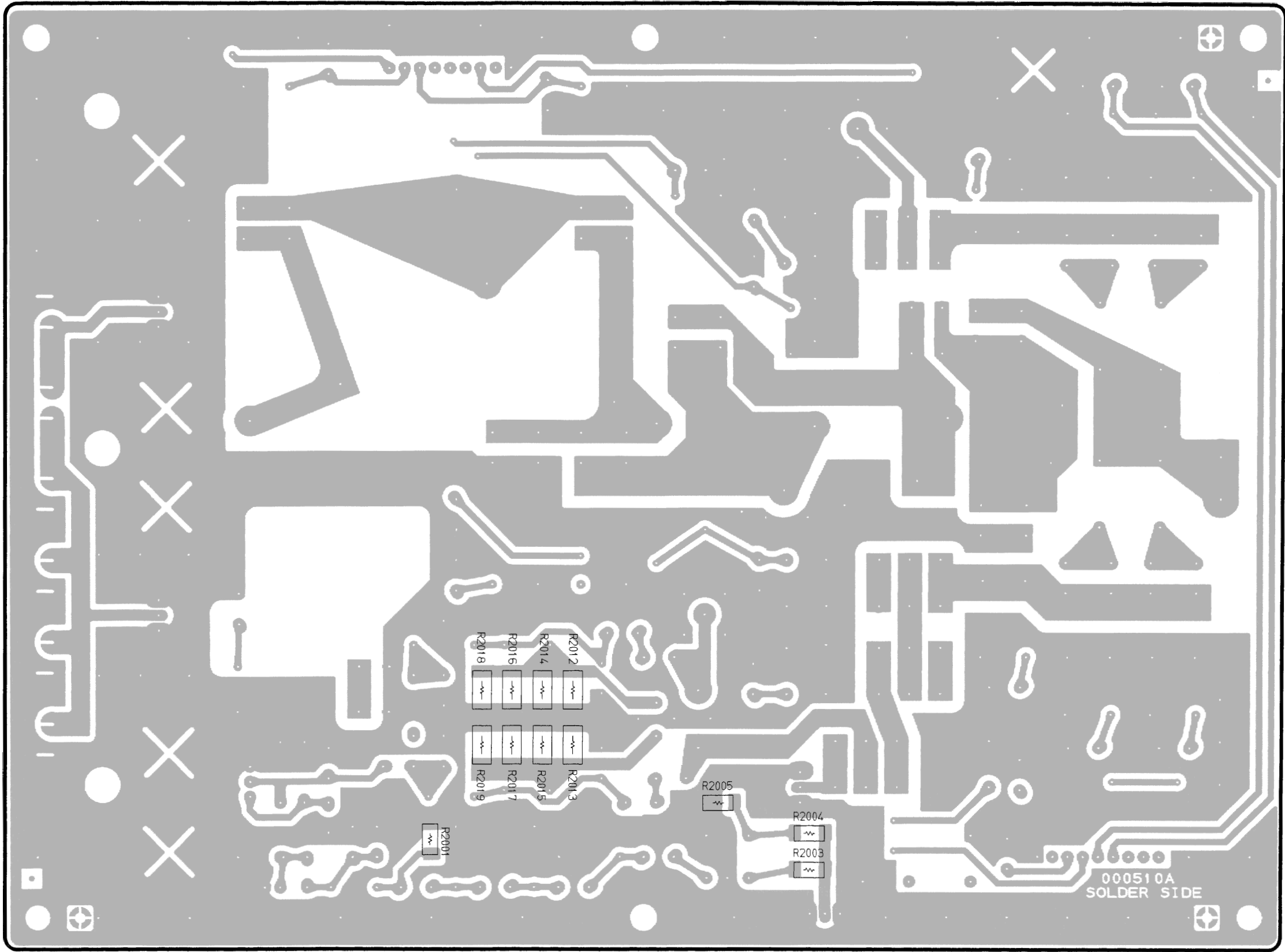
J2005  
40M  
TC200  
TC400  
AC200  
AC400  
TUNER  
CAL  
VSWR  
GND

J2002  
N

J2006  
RET  
GND

J2007  
GND  
FWD1  
REV1

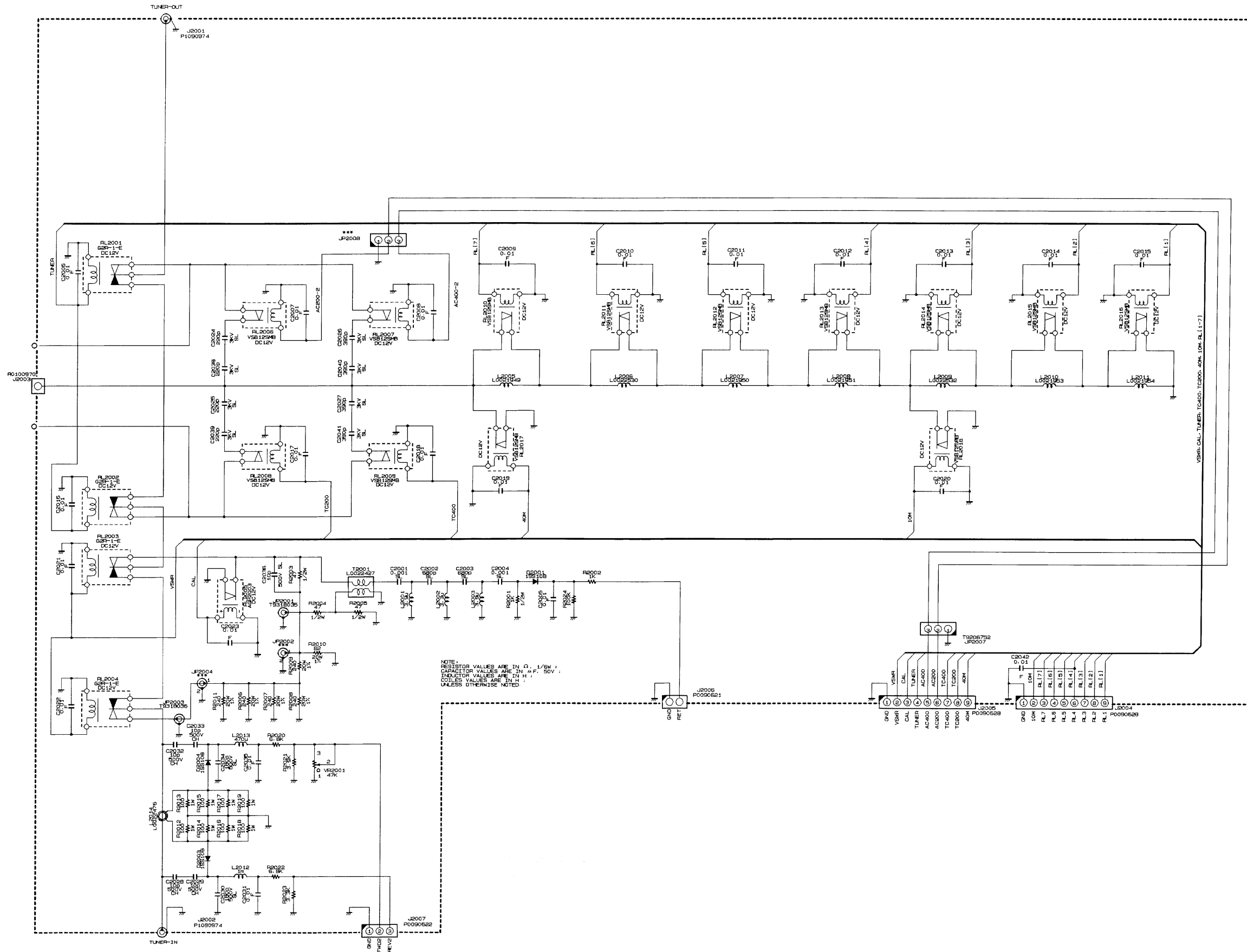
Component Side



Chip Side



Circuit Diagram

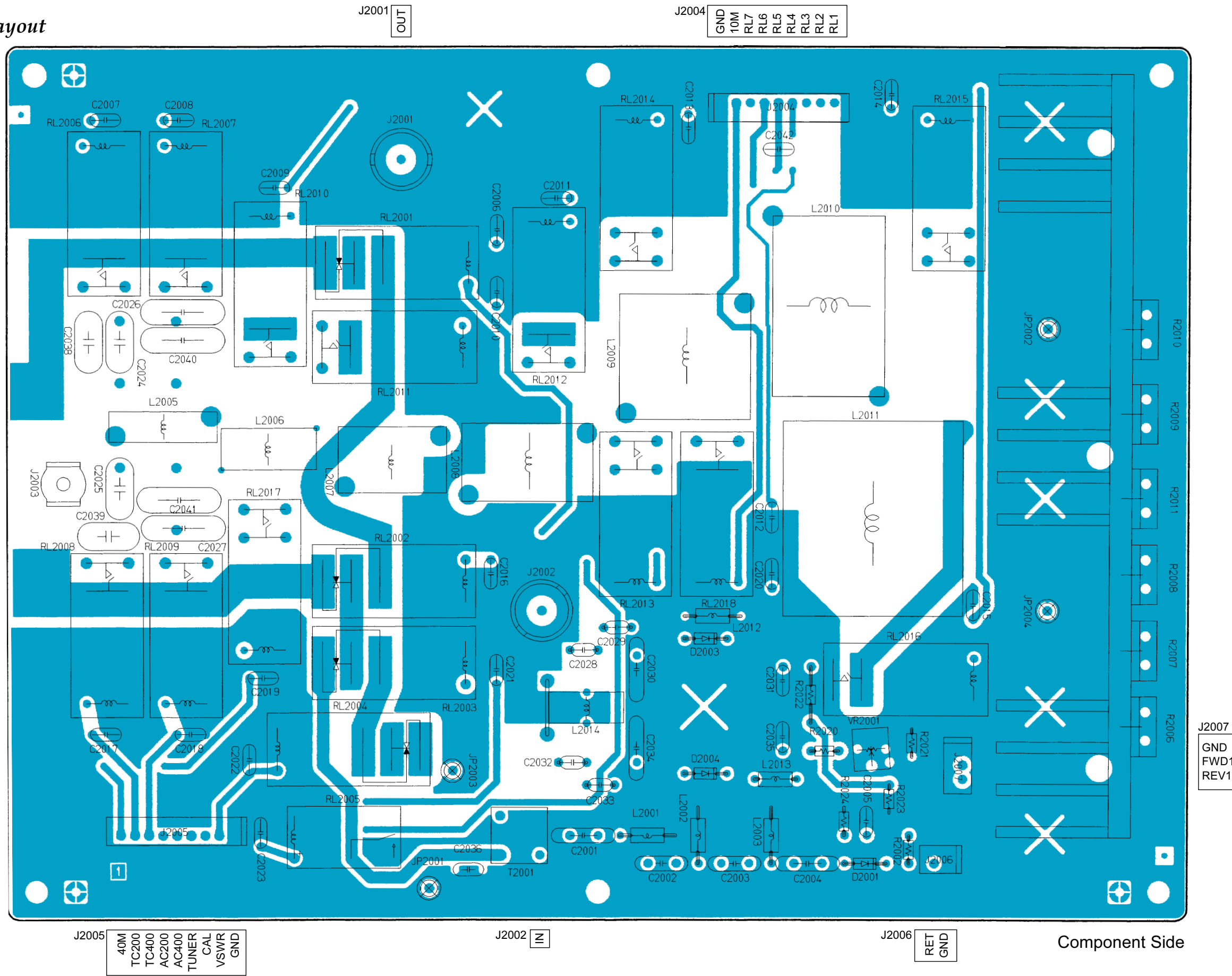


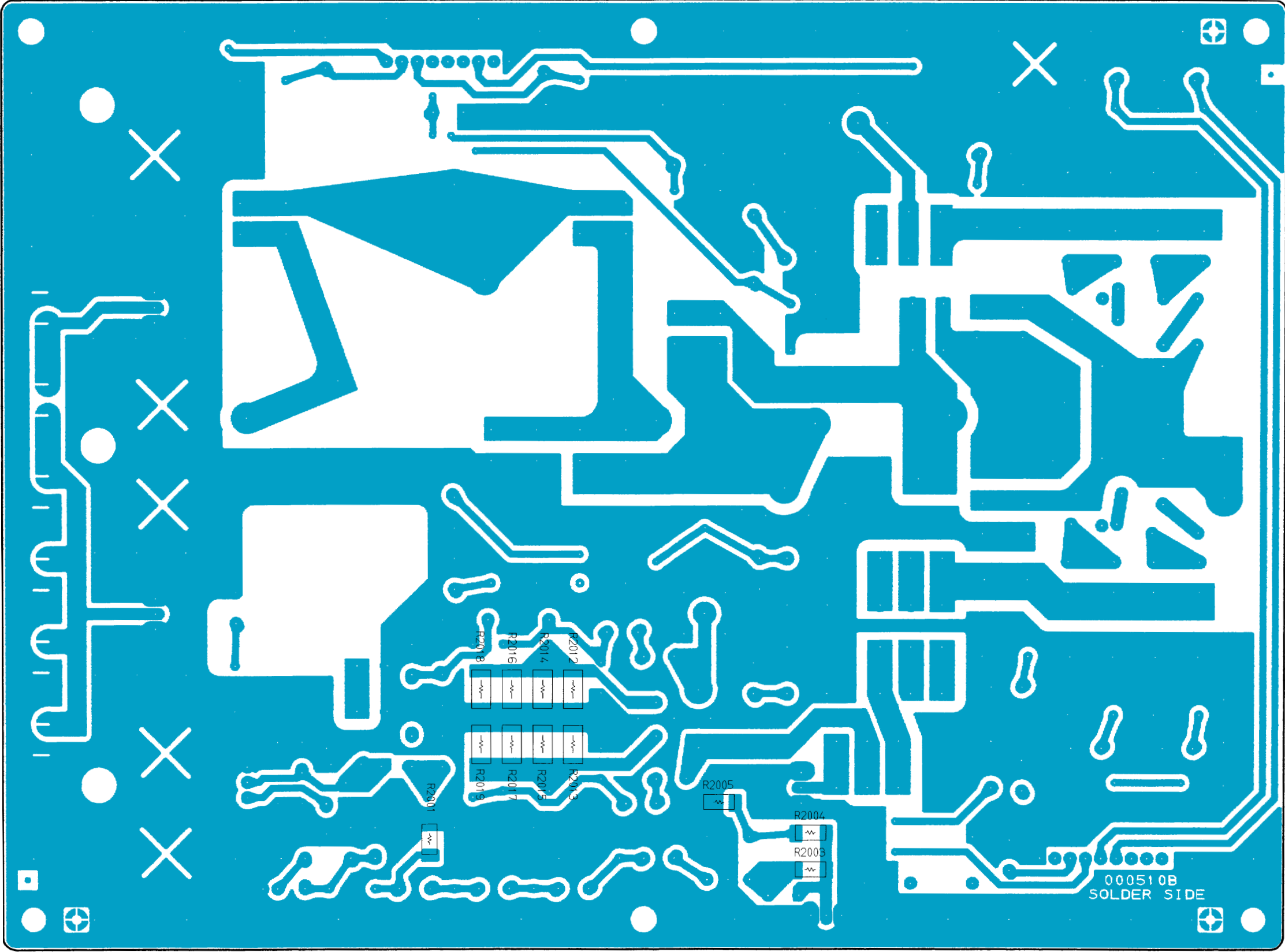
# Tuner Unit (Lot. 4~)

---

*Notes:*

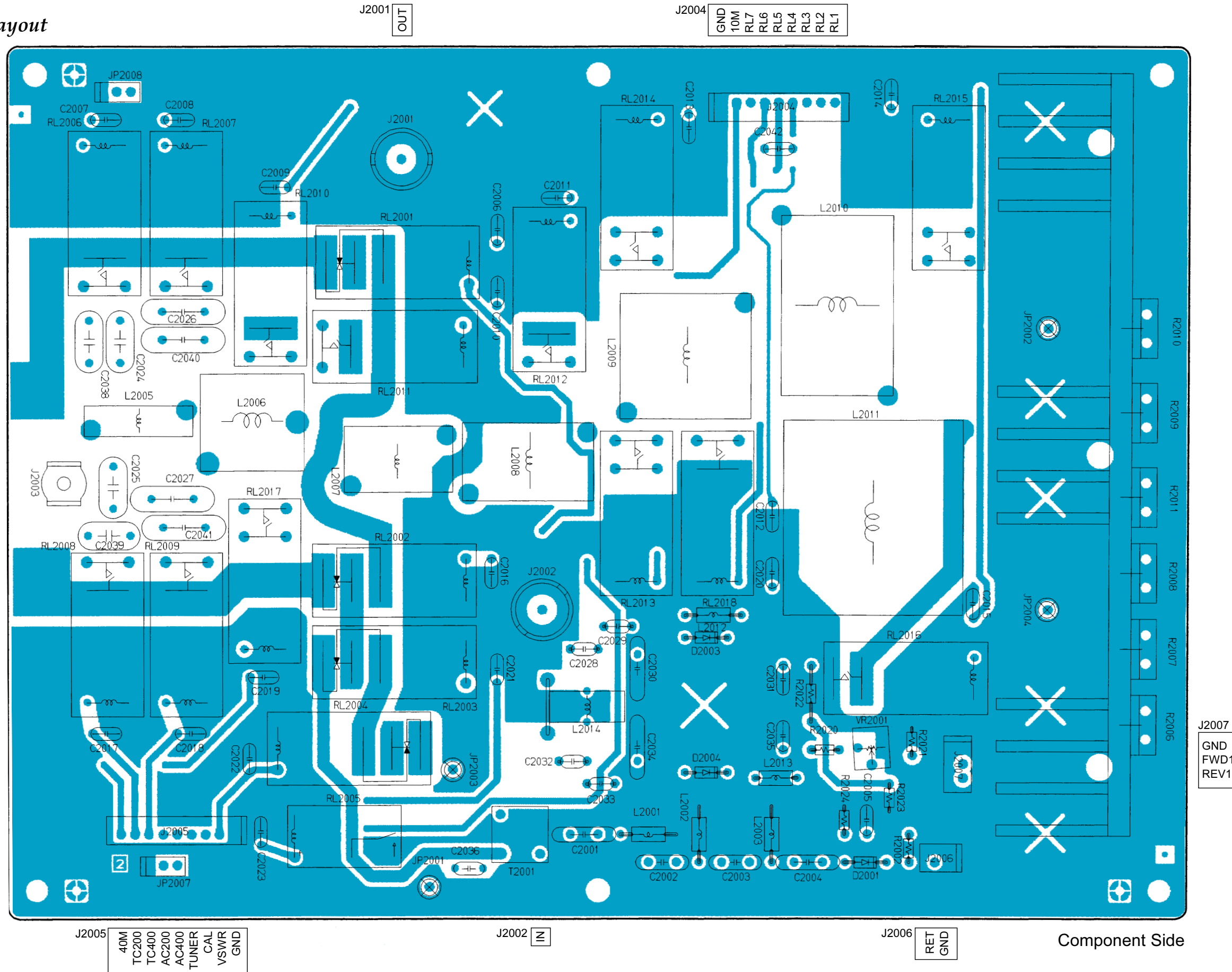
Parts Layout

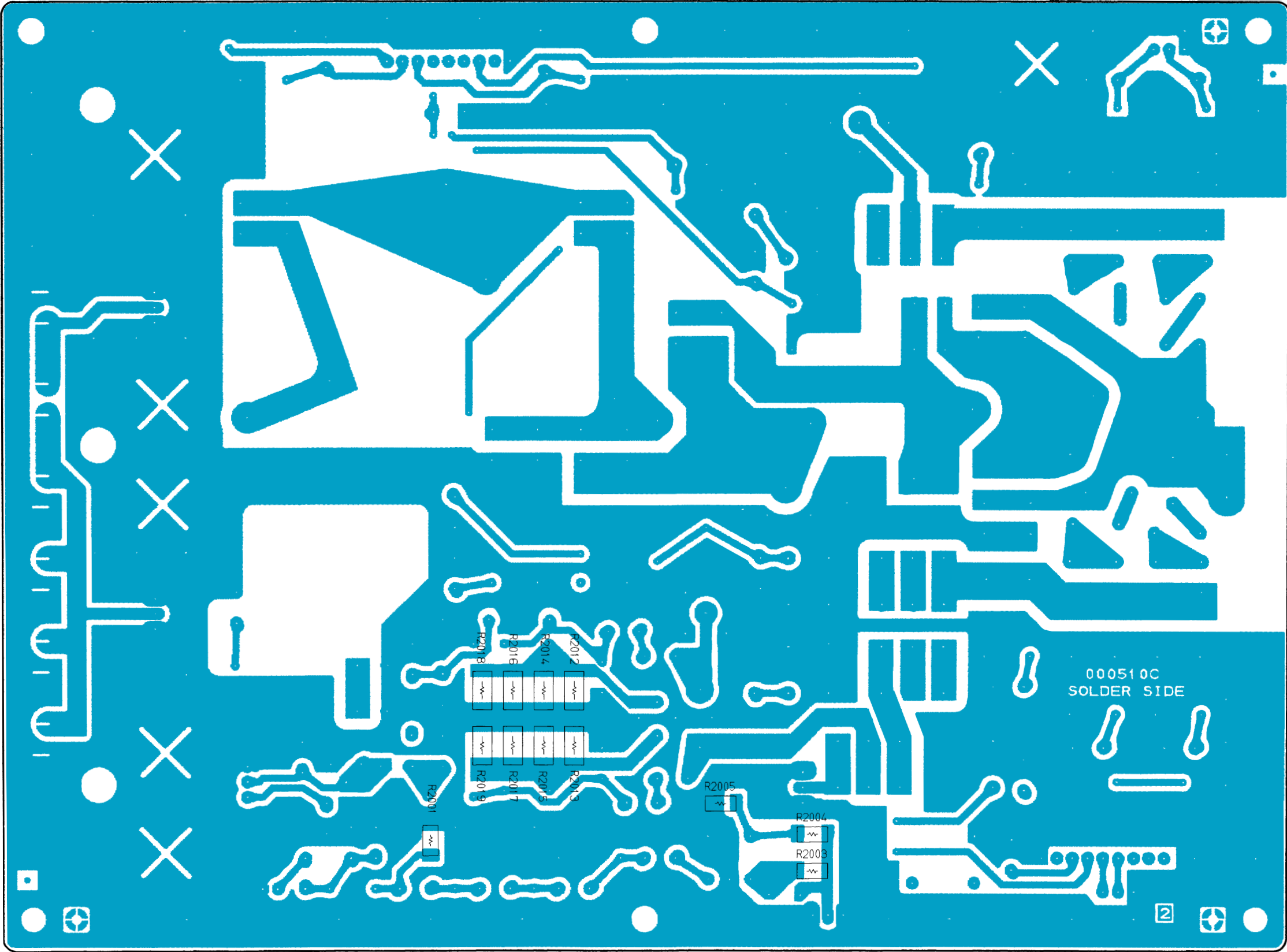




Chip Side

Parts Layout





Chip Side

## Parts List

REF.	DESCRIPTION	VALUE	WV	TOL.	MFGR'S DESIG	YAESU P/N	VERS.	LOT.
*** TUNER UNIT ***								
PCB with Components (w/o HEATSINK)						CS1552001		
	Printed Circuit Board					FR000510A		1-
	Printed Circuit Board					FR000510B		4-
	Printed Circuit Board					FR000510C		7-
C 2001	CERAMIC CAP.	0.001uF	50V	SL	RBU11SL102J-6L36VC	K26171053		1-
C 2002	CERAMIC CAP.	680pF	50V	SL	RBU11SL681J-6L36VC	K26171049		1-
C 2003	CERAMIC CAP.	680pF	50V	SL	RBU11SL681J-6L36VC	K26171049		1-
C 2004	CERAMIC CAP.	0.001uF	50V	SL	RBU11SL102J-6L36VC	K26171053		1-
C 2005	CERAMIC CAP.	0.01uF	50V	F	RBU07F103Z-6L36VC	K26170657		1-
C 2006	CERAMIC CAP.	0.01uF	50V	F	RBU07F103Z-6L36VC	K26170657		1-
C 2007	CERAMIC CAP.	0.01uF	50V	F	RBU07F103Z-6L36VC	K26170657		1-
C 2008	CERAMIC CAP.	0.01uF	50V	F	RBU07F103Z-6L36VC	K26170657		1-
C 2009	CERAMIC CAP.	0.01uF	50V	F	RBU07F103Z-6L36VC	K26170657		1-
C 2010	CERAMIC CAP.	0.01uF	50V	F	RBU07F103Z-6L36VC	K26170657		1-
C 2011	CERAMIC CAP.	0.01uF	50V	F	RBU07F103Z-6L36VC	K26170657		1-
C 2012	CERAMIC CAP.	0.01uF	50V	F	RBU07F103Z-6L36VC	K26170657		1-
C 2013	CERAMIC CAP.	0.01uF	50V	F	RBU07F103Z-6L36VC	K26170657		1-
C 2014	CERAMIC CAP.	0.01uF	50V	F	RBU07F103Z-6L36VC	K26170657		1-
C 2015	CERAMIC CAP.	0.01uF	50V	F	RBU07F103Z-6L36VC	K26170657		1-
C 2016	CERAMIC CAP.	0.01uF	50V	F	RBU07F103Z-6L36VC	K26170657		1-
C 2017	CERAMIC CAP.	0.01uF	50V	F	RBU07F103Z-6L36VC	K26170657		1-
C 2018	CERAMIC CAP.	0.01uF	50V	F	RBU07F103Z-6L36VC	K26170657		1-
C 2019	CERAMIC CAP.	0.01uF	50V	F	RBU07F103Z-6L36VC	K26170657		1-
C 2020	CERAMIC CAP.	0.01uF	50V	F	RBU07F103Z-6L36VC	K26170657		1-
C 2021	CERAMIC CAP.	0.01uF	50V	F	RBU07F103Z-6L36VC	K26170657		1-
C 2022	CERAMIC CAP.	0.01uF	50V	F	RBU07F103Z-6L36VC	K26170657		1-
C 2023	CERAMIC CAP.	0.01uF	50V	F	RBU07F103Z-6L36VC	K26170657		1-
C 2024	CERAMIC CAP.	180pF	3KV	SL	DE1107SL181J3K	K00359021		1-
C 2024	CERAMIC CAP.	220pF	3KV	SL	DE1207SL221J3K	K00359022		2-
C 2025	CERAMIC CAP.	180pF	3KV	SL	DE1107SL181J3K	K00359021		1-
C 2025	CERAMIC CAP.	220pF	3KV	SL	DE1207SL221J3K	K00359022		2-
C 2026	CERAMIC CAP.	390pF	3KV	SL	DE1610SL391J3K	K00359025		1-
C 2026	CERAMIC CAP.	390pF	3KV	SL	DE1607SL391J3K	K00359026		2-
C 2027	CERAMIC CAP.	390pF	3KV	SL	DE1610SL391J3K	K00359025		1-
C 2027	CERAMIC CAP.	390pF	3KV	SL	DE1607SL391J3K	K00359026		2-
C 2028	CERAMIC CAP.	10pF	500V	CH	DD05-979CH100D500	K26270112		1-
C 2029	CERAMIC CAP.	10pF	500V	CH	DD05-979CH100D500	K26270112		1-
C 2030	CERAMIC CAP.	180pF	500V	SL	DD12SL181J500	K00275181		1-
C 2031	CERAMIC CAP.	0.01uF	50V	F	RBU07F103Z-6L36VC	K26170657		1-
C 2032	CERAMIC CAP.	10pF	500V	CH	DD05-979CH100D500	K26270112		1-
C 2033	CERAMIC CAP.	10pF	500V	CH	DD05-979CH100D500	K26270112		1-
C 2034	CERAMIC CAP.	180pF	500V	SL	DD12SL181J500	K00275181		1-
C 2035	CERAMIC CAP.	0.01uF	50V	F	RBU07F103Z-6L36VC	K26170657		1-
C 2036	CERAMIC CAP.	10pF	500V	SL	DD06SL100D500	K00275100		1-
C 2038	CERAMIC CAP.	180pF	3KV	SL	DE1107SL181J3K	K00359021		1-
C 2038	CERAMIC CAP.	220pF	3KV	SL	DE1207SL221J3K	K00359022		2-
C 2039	CERAMIC CAP.	180pF	3KV	SL	DE1107SL181J3K	K00359021		1-
C 2039	CERAMIC CAP.	220pF	3KV	SL	DE1207SL221J3K	K00359022		2-
C 2040	CERAMIC CAP.	390pF	3KV	SL	DE1610SL391J3K	K00359025		1-
C 2040	CERAMIC CAP.	390pF	3KV	SL	DE1607SL391J3K	K00359026		2-
C 2041	CERAMIC CAP.	390pF	3KV	SL	DE1610SL391J3K	K00359025		1-
C 2041	CERAMIC CAP.	390pF	3KV	SL	DE1607SL391J3K	K00359026		2-
C 2042	CERAMIC CAP.	0.01uF	50V	F	RBU07F103Z-6L36VC	K26170657		2-
D 2001	DIODE				1SS108	G2090377		1-
D 2003	DIODE				1SS108	G2090377		1-
D 2004	DIODE				1SS108	G2090377		1-
J 2001	CONNECTOR				050-1424	P1090974		1-
J 2002	CONNECTOR				050-1424	P1090974		1-
J 2003	TERMINAL					R0100970		1-

# Tuner Unit

REF.	DESCRIPTION	VALUE	WV	TOL.	MFGR'S DESIG	YAESU P/N	VERS.	LOT.
J 2004	CONNECTOR				SC25-09WS	P0090628		1-
J 2005	CONNECTOR				SC25-09WS	P0090628		1-
J 2006	CONNECTOR				SC25-02WS	P0090621		1-
J 2007	CONNECTOR				SC25-03WS	P0090622		1-
JP2001	WIRE ASSY				GRA 200 TMP/TMP	T9318005		1-
JP2001	WIRE ASSY				GRA 230 TMP/TMP	T9318035		2-
JP2003	WIRE ASSY				GRA 160 TMP/TMP	T9318006		1-
JP2003	WIRE ASSY				GRA 170 TMP/TMP	T9318036		2-
JP2005	WIRE ASSY				WHT 75 (2.5)/(2.5)	T9318081		5-
JP2006	WIRE ASSY				WHT 75 (2.5)/(2.5)	T9318081		5-
JP2007	WIRE ASSY				A0897	T9206752		7-
L 2001	M.RFC	3.9uH			LAL03NA3R9K	L1190202		1-
L 2002	M.RFC	3.3uH			LAL03NA3R3K	L1190201		1-
L 2003	M.RFC	3.9uH			LAL03NA3R9K	L1190202		1-
L 2004	COIL				3T10D2.0ACW R	L0022481		1-
L 2004	COIL				3T10D2.0ACW R	L0022481A		2-
L 2005	COIL				1.5T15D2.0PVF R	L0021948		1-
L 2005	COIL				2.5T15D2.0PVF R	L0021949		2-
L 2006	COIL				3.5T15D2.0PVF R	L0022407		1-
L 2006	COIL				4.75T12D2.6PEW L	L0022530		2-
L 2007	COIL				4.5T15D2.0PVF R	L0021950		1-
L 2008	COIL				5.5T19D2.0PVF R	L0021951		1-
L 2009	COIL				9.5T19D2.0PVF R	L0021952		1-
L 2009	COIL				8.5T19D2.0PEW	L0022532		2-
L 2010	COIL				9.5T30D2.0PVF R	L0021953		1-
L 2011	COIL				16.5T30D2.0PVF R	L0021954		1-
L 2012	M.RFC	1mH			LAL03NA102K	L1190189		1-
L 2013	M.RFC	1mH			LAL03NA102K	L1190189		1-
L 2013	M.RFC	470uH			LAL03NA471K	L1190226		4-
L 2014	TOROIDAL COIL	39uH			39U 5B TRB12X6X4	L0022476		1-
MO2001	STEPPING MOTOR				PK43G470-30(12)3	M2190024		1-
MO2002	STEPPING MOTOR				PK43G470-30(12)3	M2190024		1-
MO2003	FAN				JF0825S1M-038 DC12V	M2090022		1-
R 2001	CHIP RES.	1kohm	1/2W	5%	RMC1/2 102JCTP	J24275102		1-
R 2002	CARBON FILM RES.	1kohm	1/6W	5%	RD16TPJ102 1K	J07225102		1-
R 2003	CHIP RES.	47ohm	1/2W	5%	RMC1/2 470JCTP	J24275470		1-
R 2004	CHIP RES.	47ohm	1/2W	5%	RMC1/2 470JCTP	J24275470		1-
R 2005	CHIP RES.	47ohm	1/2W	5%	RMC1/2 470JCTP	J24275470		2-
R 2006	METAL FILM RES.	240ohm	20W	1%	RNP-20S C241F	J22439002		1-
R 2007	METAL FILM RES.	240ohm	20W	1%	RNP-20S C241F	J22439002		1-
R 2008	METAL FILM RES.	240ohm	20W	1%	RNP-20S C241F	J22439002		1-
R 2009	METAL FILM RES.	240ohm	20W	1%	RNP-20S C241F	J22439002		1-
R 2010	METAL FILM RES.	62ohm	20W	1%	RNP-20S C620F	J22439003		1-
R 2011	METAL FILM RES.	240ohm	20W	1%	RNP-20S C241F	J22439002		1-
R 2012	CHIP RES.	100ohm	1W	5%	RMC1 101JTE	J24305101		1-
R 2013	CHIP RES.	100ohm	1W	5%	RMC1 101JTE	J24305101		1-
R 2014	CHIP RES.	100ohm	1W	5%	RMC1 101JTE	J24305101		1-
R 2015	CHIP RES.	100ohm	1W	5%	RMC1 101JTE	J24305101		1-
R 2016	CHIP RES.	100ohm	1W	5%	RMC1 101JTE	J24305101		1-
R 2017	CHIP RES.	100ohm	1W	5%	RMC1 101JTE	J24305101		1-
R 2018	CHIP RES.	100ohm	1W	5%	RMC1 101JTE	J24305101		1-
R 2019	CHIP RES.	100ohm	1W	5%	RMC1 101JTE	J24305101		1-
R 2020	CARBON FILM RES.	6.8kohm	1/6W	5%	RD16TPJ682 6.8K	J07225682		1-
R 2021	CARBON FILM RES.	3.3kohm	1/6W	5%	RD16TPJ332 3.3K	J07225332		1-
R 2021	CARBON FILM RES.	3.9kohm	1/6W	5%	RD16TPJ392 3.9K	J07225392		2-
R 2022	CARBON FILM RES.	6.8kohm	1/6W	5%	RD16TPJ682 6.8K	J07225682		1-
R 2023	CARBON FILM RES.	3.3kohm	1/6W	5%	RD16TPJ332 3.3K	J07225332		1-
R 2024	CARBON FILM RES.	100kohm	1/6W	5%	RD16TPJ104 100K	J07225104		1-
RL2001	RELAY		DC12V		G2R-1-E DC12V	M1190141		1-
RL2002	RELAY		DC12V		G2R-1-E DC12V	M1190141		1-



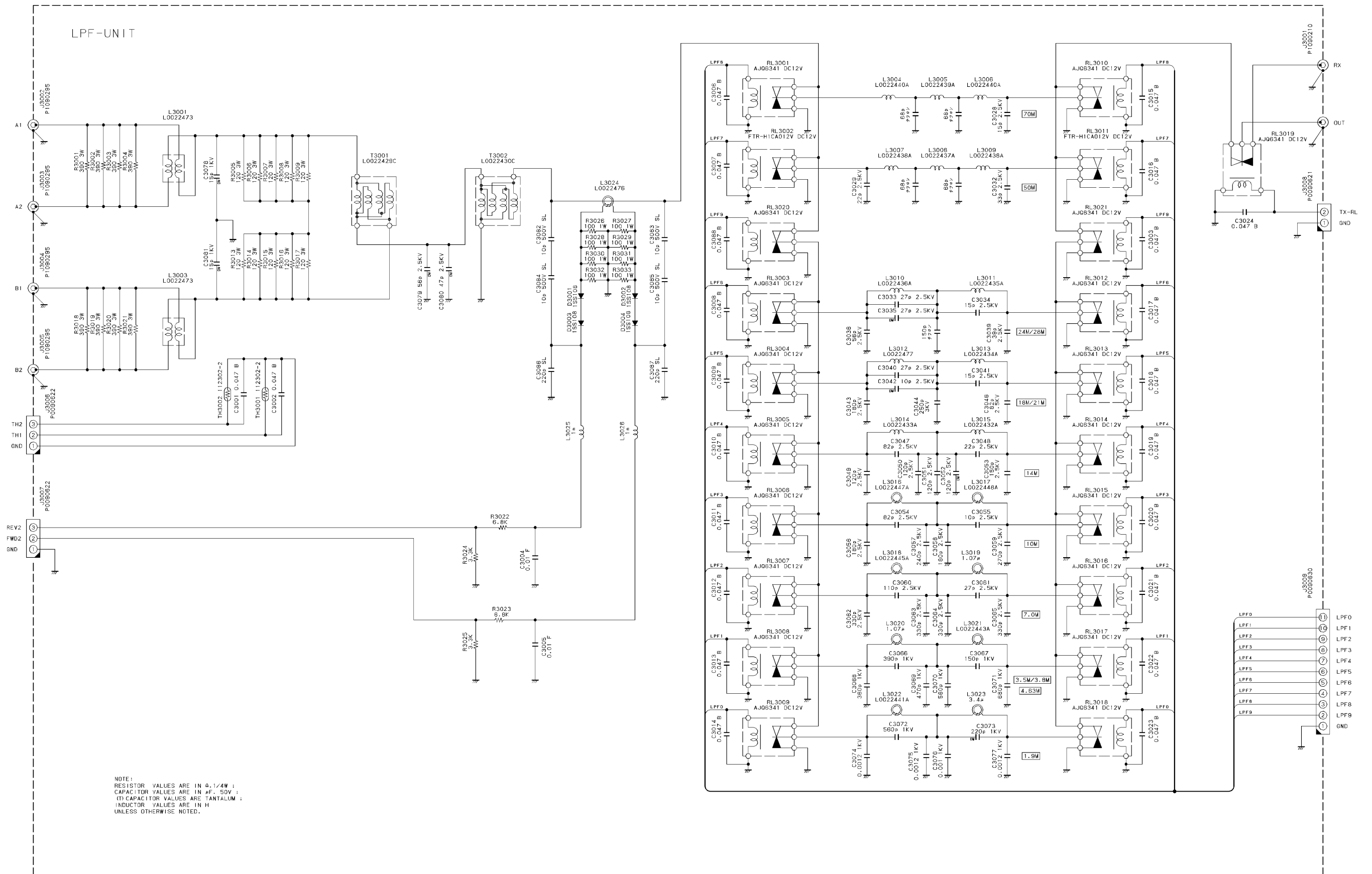
REF.	DESCRIPTION	VALUE	WV	TOL.	MFGR'S DESIG	YAESU P/N	VERS.	LOT.
RL2003	RELAY		DC12V		G2R-1-E DC12V	M1190141		1-
RL2004	RELAY		DC12V		G2R-1-E DC12V	M1190141		1-
RL2005	RELAY		DC12V		AGP2003 DC12V	M1190075		1-
RL2006	RELAY		DC12V		VSB12SMB DC12V	M1190140		1-
RL2007	RELAY		DC12V		VSB12SMB DC12V	M1190140		1-
RL2008	RELAY		DC12V		VSB12SMB DC12V	M1190140		1-
RL2009	RELAY		DC12V		VSB12SMB DC12V	M1190140		1-
RL2010	RELAY		DC12V		VSB12SMB DC12V	M1190140		1-
RL2011	RELAY		DC12V		VSB12SMB DC12V	M1190140		1-
RL2012	RELAY		DC12V		VSB12SMB DC12V	M1190140		1-
RL2013	RELAY		DC12V		VSB12SMB DC12V	M1190140		1-
RL2014	RELAY		DC12V		VSB12SMB DC12V	M1190140		1-
RL2015	RELAY		DC12V		VSB12SMB DC12V	M1190140		1-
RL2016	RELAY		DC12V		VSB12SMB DC12V	M1190140		1-
RL2017	RELAY		DC12V		VSB12SMB DC12V	M1190140		1-
RL2018	RELAY		DC12V		VSB12SMB DC12V	M1190140		1-
T 2001	COIL				1-1 FB801-43	L0022427		1-
VC2001	VARIABLE CAP.	200pF			A0897 200PF	K90000051		1-
VC2002	VARIABLE CAP.	200pF			A0897 200PF	K90000051		1-
VR2001	POT.	47kohm			RH063MCS4R 47KB	J51794473		2-
	MOTOR HOLDER					RA0028500		1-
	HEATSINK					RA0040000		2-
	COLLAR					RA0055000		1-

# Tuner Unit

---

*Notes:*

Circuit Diagram

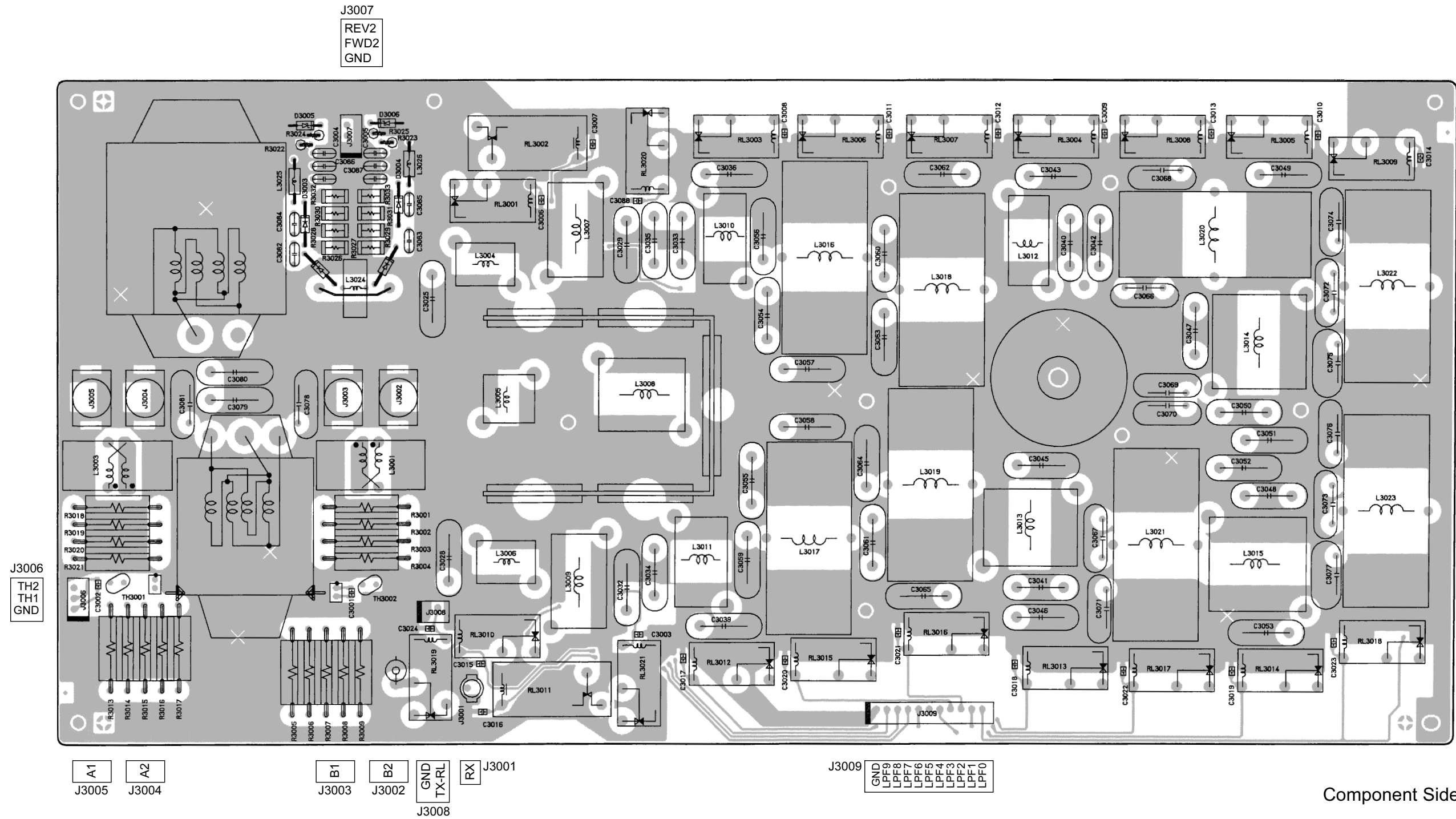


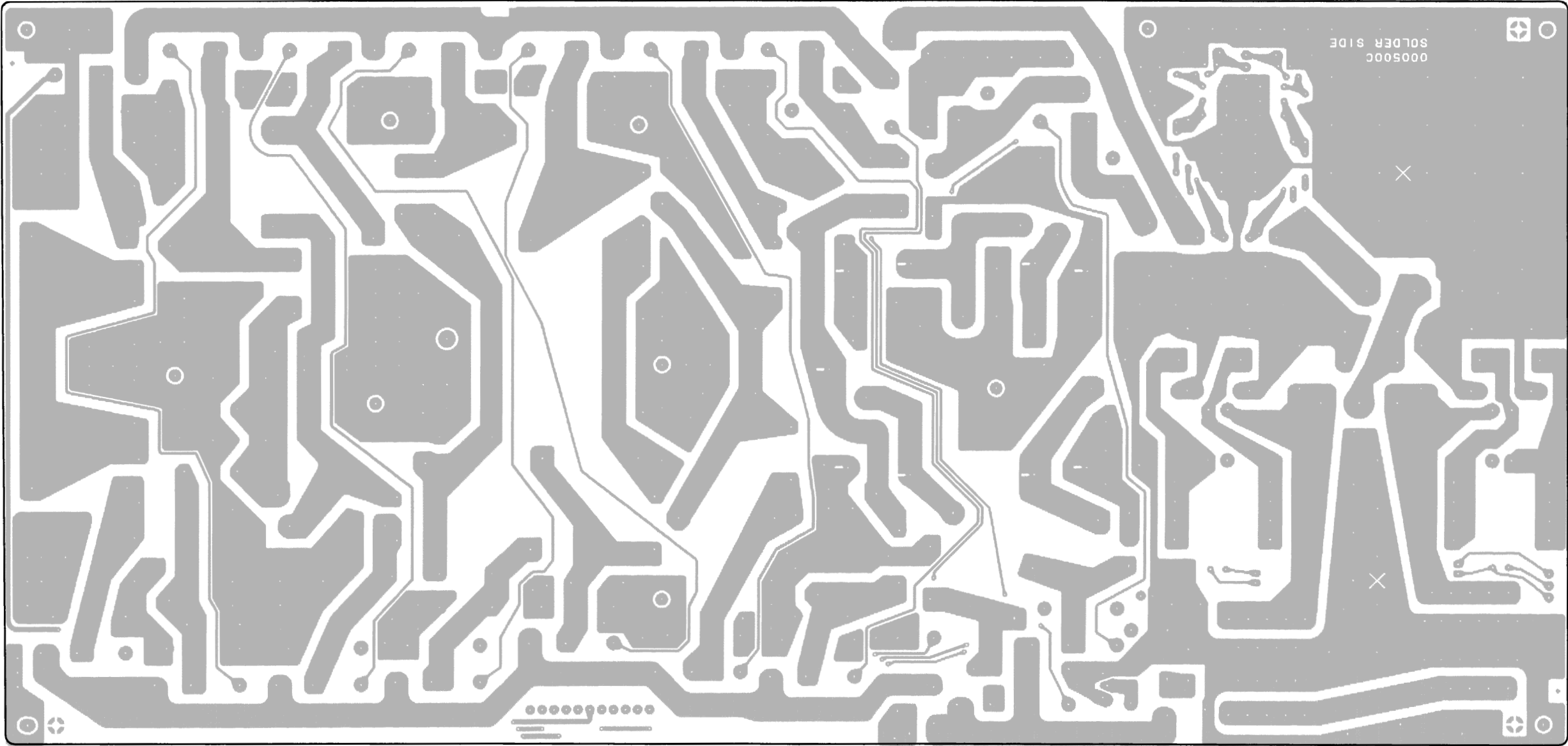
# LPF Unit

---

*Notes:*

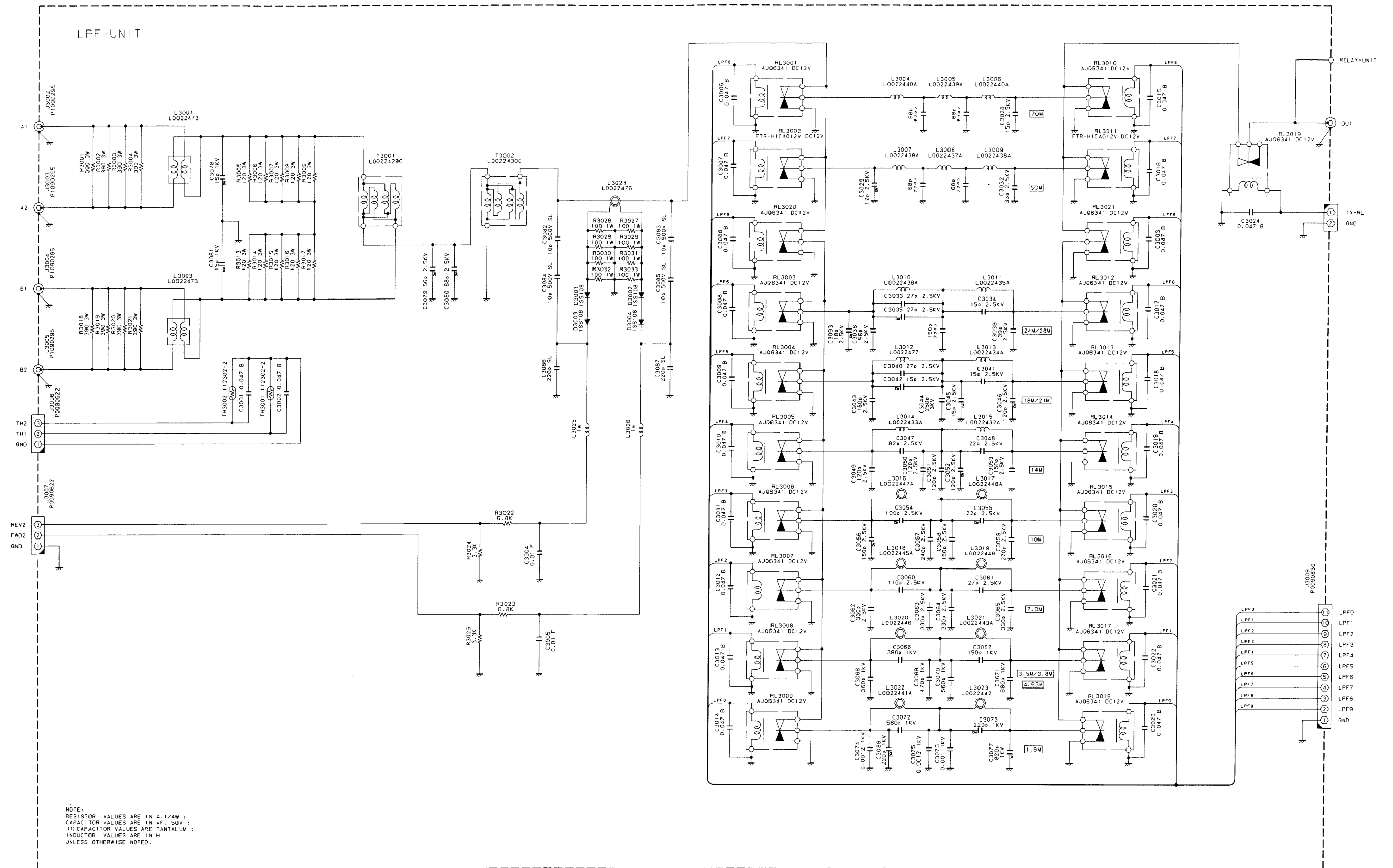
Parts Layout





Solder Side

Circuit Diagram



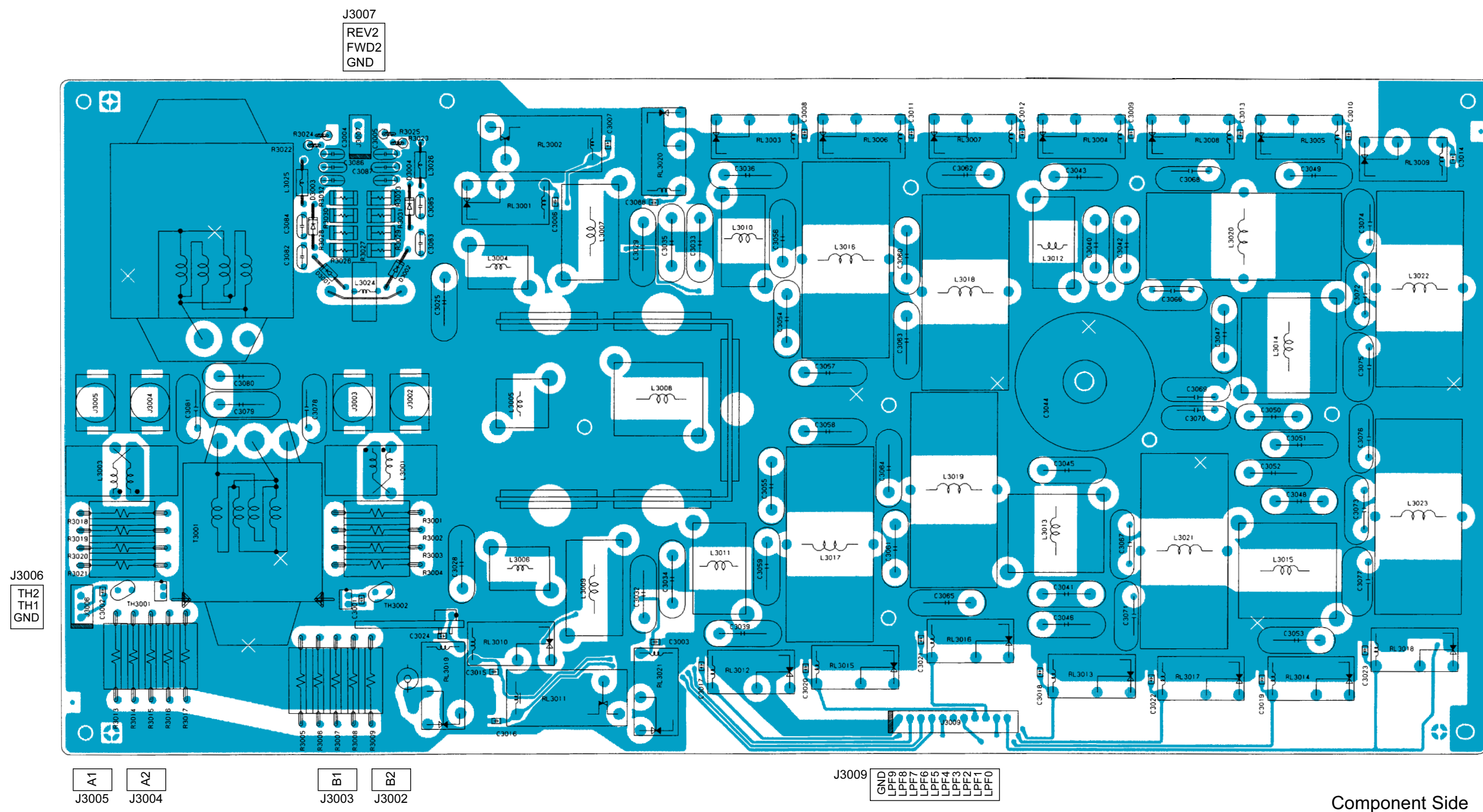
**LPF Unit** (Lot. 4~)

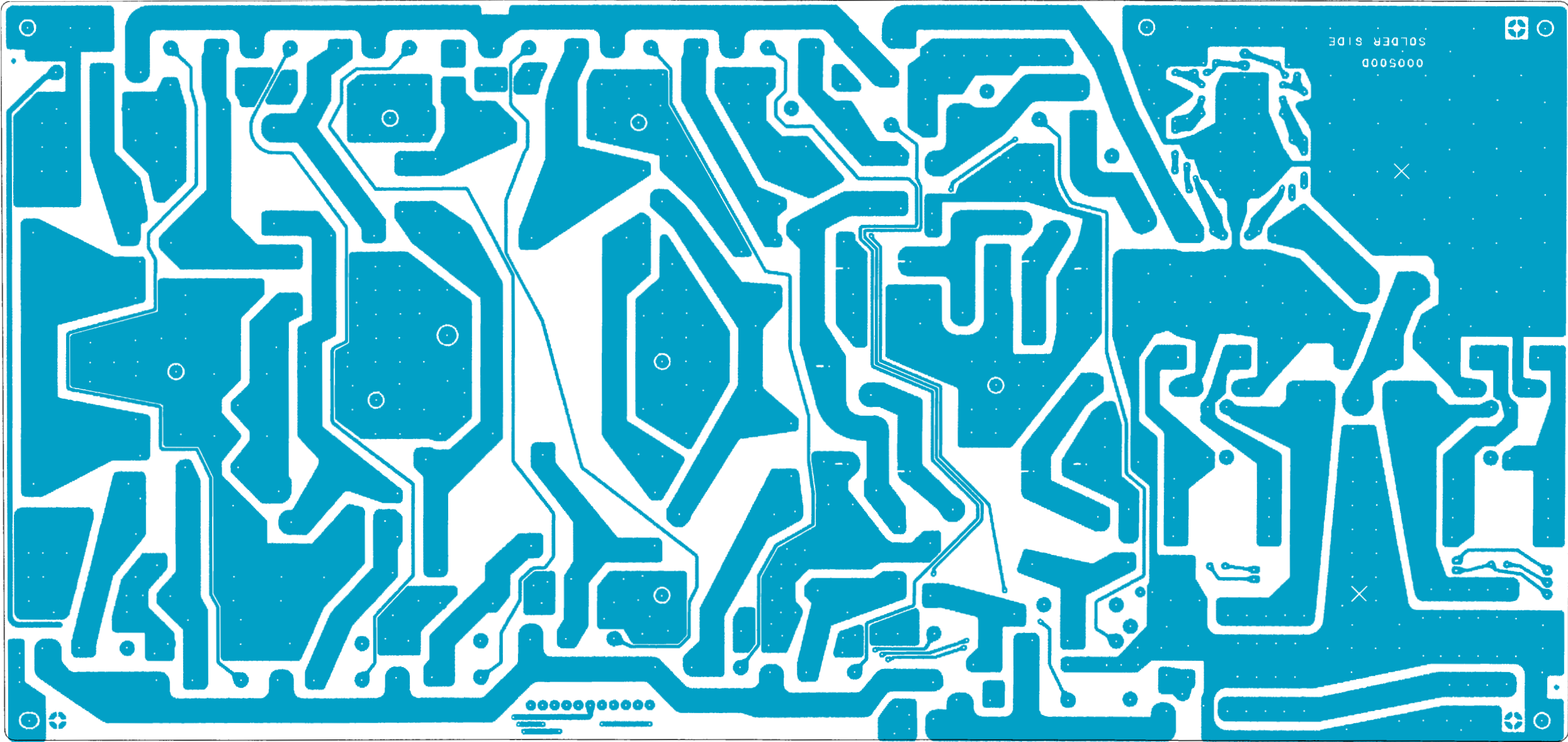
---

*Notes:*



Parts Layout





Solder Side

## Parts List

REF.	DESCRIPTION	VALUE	WV	TOL.	MFGR'S DESIG	YAESU P/N	VERS.	LOT.
*** LPF UNIT ***								
PCB with Components						CB0084001		
Printed Circuit Board						FR000500C		1-
Printed Circuit Board						FR000500D		4-
C 3001	CHIP CAP.	0.047uF	50V	B	GRM40B473M50PT	K22170823		1-
C 3002	CHIP CAP.	0.047uF	50V	B	GRM40B473M50PT	K22170823		1-
C 3003	CHIP CAP.	0.047uF	50V	B	GRM40B473M50PT	K22170823		1-
C 3004	CERAMIC CAP.	0.01uF	50V	F	DD106F103Z50	K13179008		1-
C 3005	CERAMIC CAP.	0.01uF	50V	F	DD106F103Z50	K13179008		1-
C 3006	CHIP CAP.	0.047uF	50V	B	GRM40B473M50PT	K22170823		1-
C 3007	CHIP CAP.	0.047uF	50V	B	GRM40B473M50PT	K22170823		1-
C 3008	CHIP CAP.	0.047uF	50V	B	GRM40B473M50PT	K22170823		1-
C 3009	CHIP CAP.	0.047uF	50V	B	GRM40B473M50PT	K22170823		1-
C 3010	CHIP CAP.	0.047uF	50V	B	GRM40B473M50PT	K22170823		1-
C 3011	CHIP CAP.	0.047uF	50V	B	GRM40B473M50PT	K22170823		1-
C 3012	CHIP CAP.	0.047uF	50V	B	GRM40B473M50PT	K22170823		1-
C 3013	CHIP CAP.	0.047uF	50V	B	GRM40B473M50PT	K22170823		1-
C 3014	CHIP CAP.	0.047uF	50V	B	GRM40B473M50PT	K22170823		1-
C 3015	CHIP CAP.	0.047uF	50V	B	GRM40B473M50PT	K22170823		1-
C 3016	CHIP CAP.	0.047uF	50V	B	GRM40B473M50PT	K22170823		1-
C 3017	CHIP CAP.	0.047uF	50V	B	GRM40B473M50PT	K22170823		1-
C 3018	CHIP CAP.	0.047uF	50V	B	GRM40B473M50PT	K22170823		1-
C 3019	CHIP CAP.	0.047uF	50V	B	GRM40B473M50PT	K22170823		1-
C 3020	CHIP CAP.	0.047uF	50V	B	GRM40B473M50PT	K22170823		1-
C 3021	CHIP CAP.	0.047uF	50V	B	GRM40B473M50PT	K22170823		1-
C 3022	CHIP CAP.	0.047uF	50V	B	GRM40B473M50PT	K22170823		1-
C 3023	CHIP CAP.	0.047uF	50V	B	GRM40B473M50PT	K22170823		1-
C 3024	CHIP CAP.	0.047uF	50V	B	GRM40B473M50PT	K22170823		1-
C 3028	MICA CAP.	15pF	2.5KV		DM30E150J25-0	K30349005		1-
C 3029	MICA CAP.	22pF	2.5KV		DM30E220J25-0	K30349009		1-
C 3029	MICA CAP.	12pF	2.5KV		DM30E120J25-0	K30349003		2-
C 3029	MICA CAP.	12pF	2.5KV		DM30E120J25-0	K30349003		4-
C 3032	MICA CAP.	33pF	2.5KV		DM30E330J25-0	K30349013		1-
C 3033	MICA CAP.	27pF	2.5KV		DM30E270J25-0	K30349011		1-
C 3034	MICA CAP.	15pF	2.5KV		DM30E150J25-0	K30349005		1-
C 3035	MICA CAP.	27pF	2.5KV		DM30E270J25-0	K30349011		1-
C 3036	MICA CAP.	56pF	2.5KV		DM30E560J25-0	K30349019		1-
C 3039	MICA CAP.	39pF	2.5KV		DM30E390J25-0	K30349015		1-
C 3040	MICA CAP.	27pF	2.5KV		DM30E270J25-0	K30349011		1-
C 3041	MICA CAP.	15pF	2.5KV		DM30E150J25-0	K30349005		1-
C 3042	MICA CAP.	15pF	2.5KV		DM30E150J25-0	K30349005		1-
C 3043	MICA CAP.	180pF	2.5KV		DM30E181J25-0	K30349031		1-
C 3044	H.V. CERAMIC CAP.	250pF	3KV		RDA30 250P	K24356251		1-
C 3045	MICA CAP.	15pF	2.5KV		DM30E150J25-0	K30349005		2-
C 3046	MICA CAP.	120pF	2.5KV		DM30E121J25-0	K30349027		2-
C 3047	MICA CAP.	82pF	2.5KV		DM30E820J25-0	K30349023		1-
C 3048	MICA CAP.	22pF	2.5KV		DM30E220J25-0	K30349009		1-
C 3049	MICA CAP.	120pF	2.5KV		DM30E121J25-0	K30349027		1-
C 3050	MICA CAP.	120pF	2.5KV		DM30E121J25-0	K30349027		1-
C 3051	MICA CAP.	120pF	2.5KV		DM30E121J25-0	K30349027		1-
C 3052	MICA CAP.	120pF	2.5KV		DM30E121J25-0	K30349027		1-
C 3053	MICA CAP.	150pF	2.5KV		DM30E151J25-0	K30349029		1-
C 3054	MICA CAP.	82pF	2.5KV		DM30E820J25-0	K30349023		1-
C 3054	MICA CAP.	100pF	2.5KV		DM30E101J25-0	K30349025		2-
C 3055	MICA CAP.	10pF	2.5KV		DM30E100J25-0	K30349001		1-
C 3055	MICA CAP.	22pF	2.5KV		DM30E220J25-0	K30349009		2-
C 3056	MICA CAP.	180pF	2.5KV		DM30E181J25-0	K30349031		1-
C 3056	MICA CAP.	150pF	2.5KV		DM30E151J25-0	K30349029		2-
C 3057	MICA CAP.	240pF	2.5KV		DM30E241J25-0	K30349034		1-
C 3058	MICA CAP.	180pF	2.5KV		DM30E181J25-0	K30349031		1-

# LPF Unit

REF.	DESCRIPTION	VALUE	WV	TOL.	MFGR'S DESIG	YAESU P/N	VERS.	LOT.
C 3059	MICA CAP.	270pF	2.5KV		DM30E271J25-0	K30349035		1-
C 3060	MICA CAP.	110pF	2.5KV		DM30E111J25-0	K30349026		1-
C 3061	MICA CAP.	27pF	2.5KV		DM30E270J25-0	K30349011		1-
C 3062	MICA CAP.	330pF	2.5KV		DM30E331J25-0	K30349037		1-
C 3063	MICA CAP.	330pF	2.5KV		DM30E331J25-0	K30349037		1-
C 3064	MICA CAP.	330pF	2.5KV		DM30E331J25-0	K30349037		1-
C 3065	MICA CAP.	330pF	2.5KV		DM30E331J25-0	K30349037		1-
C 3066	MICA CAP.	390pF	1KV		DML2 391J10	K30309057		1-
C 3067	MICA CAP.	150pF	1KV		DML2 151J10	K30309004		1-
C 3068	MICA CAP.	360pF	1KV		DML2 361J10	K30309019		1-
C 3069	MICA CAP.	470pF	1KV		DML2 471J10	K30309003		1-
C 3070	MICA CAP.	560pF	1KV		DML2 561J10	K30309045		1-
C 3071	MICA CAP.	680pF	1KV		DML2 681J10	K30309014		1-
C 3072	MICA CAP.	560pF	1KV		DML2 561J10	K30309045		1-
C 3073	MICA CAP.	220pF	1KV		DML2 221J10	K30309051		1-
C 3074	MICA CAP.	0.0012uF	1KV		DML2 122J10	K30309044		1-
C 3075	MICA CAP.	0.0012uF	1KV		DML2 122J10	K30309044		1-
C 3076	MICA CAP.	0.001uF	1KV		DML2 102J10	K30309017		1-
C 3077	MICA CAP.	0.0012uF	1KV		DML2 122J10	K30309044		1-
C 3077	MICA CAP.	820pF	1KV		DML2 821J10	K30309002		4-
C 3078	MICA CAP.	15pF	1KV		DML2 150J10	K30309058		1-
C 3079	MICA CAP.	56pF	2.5KV		DM30E560J25-0	K30349019		1-
C 3080	MICA CAP.	68pF	2.5KV		DM30E680J25-0	K30349021		2-
C 3081	MICA CAP.	15pF	1KV		DML2 150J10	K30309058		1-
C 3082	CERAMIC CAP.	10pF	500V	SL	DD06SL100D500	K00275100		1-
C 3083	CERAMIC CAP.	10pF	500V	SL	DD06SL100D500	K00275100		1-
C 3084	CERAMIC CAP.	10pF	500V	SL	DD06SL100D500	K00275100		1-
C 3085	CERAMIC CAP.	10pF	500V	SL	DD06SL100D500	K00275100		1-
C 3086	CERAMIC CAP.	220pF	50V	SL	DD107SL221J50	K00175221		1-
C 3087	CERAMIC CAP.	220pF	50V	SL	DD107SL221J50	K00175221		1-
C 3088	CHIP CAP.	0.047uF	50V	B	GRM40B473M50PT	K22170823		1-
C 3089	MICA CAP.	220pF	1KV		DML2 221J10	K30309051		2-
C 3092	CHIP CAP.	0.047uF	50V	B	GRM40B473M50PT	K22170823		4-
C 3093	MICA CAP.	18pF	2.5KV		DM30E180J25-0	K30349007		4-
D 3001	DIODE				1SS108	G2090377		1-
D 3002	DIODE				1SS108	G2090377		1-
D 3003	DIODE				1SS108	G2090377		1-
D 3004	DIODE				1SS108	G2090377		1-
J 3001	CONNECTOR				TMP-J01X-V6	P1090210		1-
J 3002	CONNECTOR				S-Q3063#01	P1090295		1-
J 3003	CONNECTOR				S-Q3063#01	P1090295		1-
J 3004	CONNECTOR				S-Q3063#01	P1090295		1-
J 3005	CONNECTOR				S-Q3063#01	P1090295		1-
J 3006	CONNECTOR				SC25-03WS	P0090622		1-
J 3007	CONNECTOR				SC25-03WS	P0090622		1-
J 3008	CONNECTOR				SC25-02WS	P0090621		1-
J 3009	CONNECTOR				SC25-11WS	P0090630		1-
JP3001	WIRE ASSY				A0897	T9206665		1-
JP3002	WIRE-ASSY				VIO70 (3)/(3)	T9318034		2-
JP3002	WIRE-ASSY				VIO90 (3)/(3)	T9318064		3-
JP3002	WIRE-ASSY				VIO 125 (3)/(3)	T9318072		4-
L 3001	COIL PWR-WIDE				4D4 TR22X14X8	L0022473		1-
L 3003	COIL PWR-WIDE				4D4 TR22X14X8	L0022473		1-
L 3004	COIL				5.5T8.0D2.0PVC R	L0022440A		1-
L 3005	COIL				4.5T10D2.0PVC R	L0022439A		1-
L 3006	COIL				5.5T8.0D2.0PVC R	L0022440A		1-
L 3007	COIL				5.5T11D2.0PVC R	L0022438A		1-
L 3008	COIL				4.5T15D2.0PVC R	L0022437A		1-
L 3009	COIL				5.5T11D2.0PVC R	L0022438A		1-
L 3010	COIL				2.5T19D2.0PVC R	L0022436A		1-

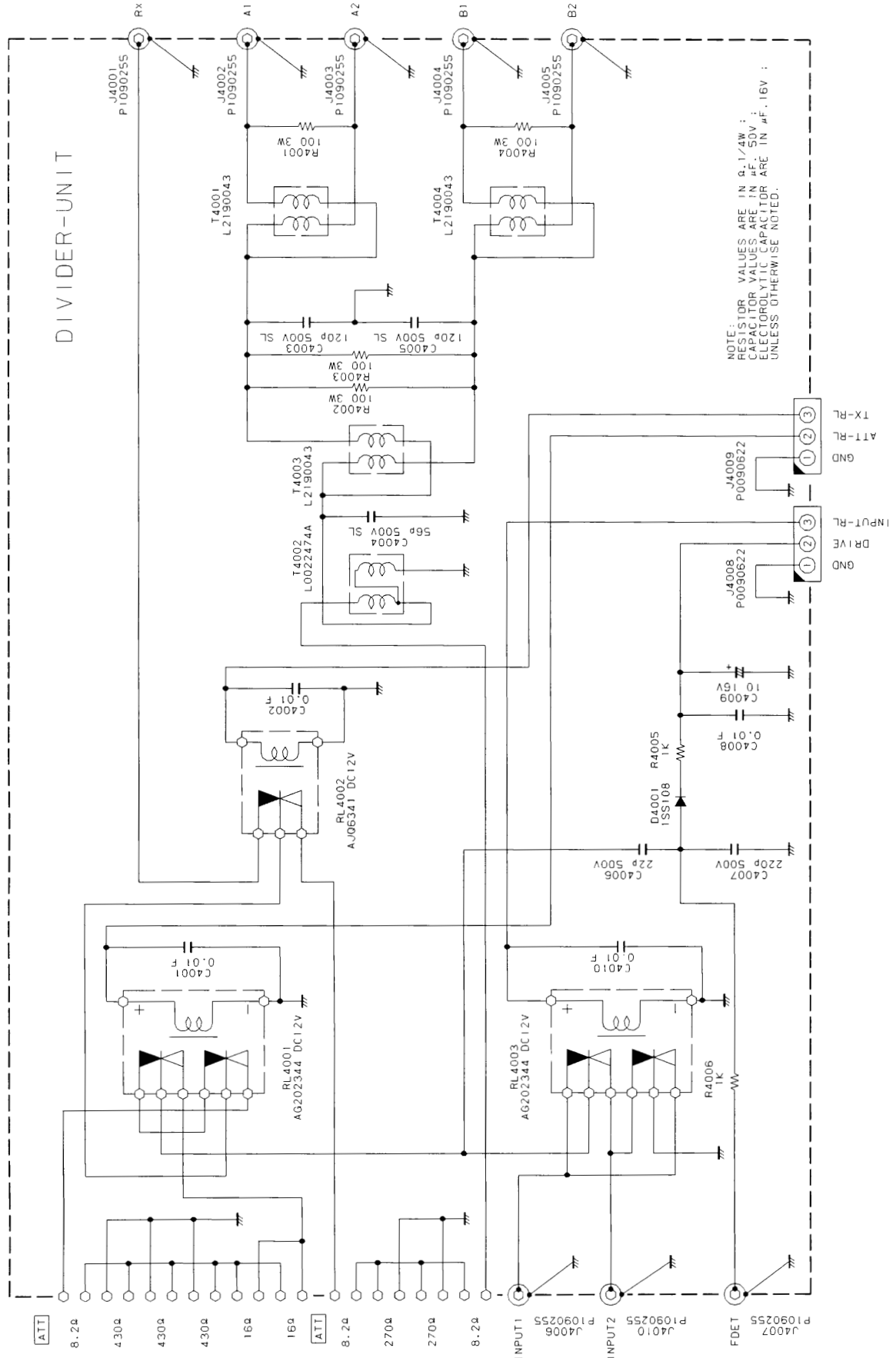
REF.	DESCRIPTION	VALUE	WV	TOL.	MFGR'S DESIG	YAESU P/N	VERS.	LOT.
L 3011	COIL				3.5T19D2.0PVC R	L0022435A		1-
L 3012	COIL				3.5T19D2.0PVC R	L0022477		1-
L 3013	COIL				4.5T20D2.0PVC R	L0022434A		1-
L 3014	COIL				5.5T20D2.0PVC R	L0022433A		1-
L 3015	COIL				6.5T20D2.0PVC R	L0022432A		1-
L 3016	TOROIDAL COIL	0.82uH			0.820U T-157-6	L0022447A		1-
L 3017	TOROIDAL COIL	0.96uH			0.960U T-157-6	L0022448A		1-
L 3018	TOROIDAL COIL	1.03uH			1.030U T-157-2	L0022445A		1-
L 3019	TOROIDAL COIL	1.34uH			1.340U T-157-2	L0022446		1-
L 3020	TOROIDAL COIL	1.34uH			1.340U T-157-2	L0022446		1-
L 3021	TOROIDAL COIL	1.83uH			1.830U T-157-2	L0022443A		1-
L 3022	TOROIDAL COIL	3.5uH			3.500U T-157-2	L0022441A		1-
L 3023	TOROIDAL COIL	4.4uH			4.400U T-157-2	L0022442		1-
L 3024	TOROIDAL COIL	39uH			39U 5B TRB12X6X4	L0022476		1-
L 3025	M.RFC	1mH			LAL03KH102K	L1190390		1-
L 3026	M.RFC	1mH			LAL03KH102K	L1190390		1-
P 3001	WIRE ASSY				BLU470 BNC	T9318028A		1-
P 3002	WIRE-ASSY				BLK50 V1.25/<12>	T9318032		1-
R 3001	METAL FILM RES.	390ohm	3W	5%	ERG-3SJ391P 390	J22359039		1-
R 3002	METAL FILM RES.	390ohm	3W	5%	ERG-3SJ391 390	J22359008		1-
R 3003	METAL FILM RES.	390ohm	3W	5%	ERG-3SJ391P 390	J22359039		1-
R 3004	METAL FILM RES.	390ohm	3W	5%	ERG-3SJ391 390	J22359008		1-
R 3005	METAL FILM RES.	120ohm	3W	5%	ERG-3SJ121 120	J22359004		1-
R 3006	METAL FILM RES.	120ohm	3W	5%	ERG-3SJ121P 120	J22359026		1-
R 3007	METAL FILM RES.	120ohm	3W	5%	ERG-3SJ121 120	J22359004		1-
R 3008	METAL FILM RES.	120ohm	3W	5%	ERG-3SJ121P 120	J22359026		1-
R 3009	METAL FILM RES.	120ohm	3W	5%	ERG-3SJ121 120	J22359004		1-
R 3013	METAL FILM RES.	120ohm	3W	5%	ERG-3SJ121 120	J22359004		1-
R 3014	METAL FILM RES.	120ohm	3W	5%	ERG-3SJ121P 120	J22359026		1-
R 3015	METAL FILM RES.	120ohm	3W	5%	ERG-3SJ121 120	J22359004		1-
R 3016	METAL FILM RES.	120ohm	3W	5%	ERG-3SJ121P 120	J22359026		1-
R 3017	METAL FILM RES.	120ohm	3W	5%	ERG-3SJ121 120	J22359004		1-
R 3018	METAL FILM RES.	390ohm	3W	5%	ERG-3SJ391P 390	J22359039		1-
R 3019	METAL FILM RES.	390ohm	3W	5%	ERG-3SJ391 390	J22359008		1-
R 3020	METAL FILM RES.	390ohm	3W	5%	ERG-3SJ391P 390	J22359039		1-
R 3021	METAL FILM RES.	390ohm	3W	5%	ERG-3SJ391 390	J22359008		1-
R 3022	CARBON FILM RES.	6.8kohm	1/4W	5%	RD14SJ682 6.8K	J02245682		1-
R 3023	CARBON FILM RES.	6.8kohm	1/4W	5%	RD14SJ682 6.8K	J02245682		1-
R 3024	CARBON FILM RES.	3.3kohm	1/4W	5%	RD14SJ332 3.3K	J02245332		1-
R 3025	CARBON FILM RES.	3.3kohm	1/4W	5%	RD14SJ332 3.3K	J02245332		1-
R 3026	CHIP RES.	100ohm	1W	5%	RMC1 101JTE	J24305101		1-
R 3027	CHIP RES.	100ohm	1W	5%	RMC1 101JTE	J24305101		1-
R 3028	CHIP RES.	100ohm	1W	5%	RMC1 101JTE	J24305101		1-
R 3029	CHIP RES.	100ohm	1W	5%	RMC1 101JTE	J24305101		1-
R 3030	CHIP RES.	100ohm	1W	5%	RMC1 101JTE	J24305101		1-
R 3031	CHIP RES.	100ohm	1W	5%	RMC1 101JTE	J24305101		1-
R 3032	CHIP RES.	100ohm	1W	5%	RMC1 101JTE	J24305101		1-
R 3033	CHIP RES.	100ohm	1W	5%	RMC1 101JTE	J24305101		1-
RL3001	RELAY		DC12V		AJQ6341 DC12V	M1190144		1-
RL3002	RELAY		DC12V		FTR-H1CA012V DC12V	M1190148		1-
RL3003	RELAY		DC12V		AJQ6341 DC12V	M1190144		1-
RL3004	RELAY		DC12V		AJQ6341 DC12V	M1190144		1-
RL3005	RELAY		DC12V		AJQ6341 DC12V	M1190144		1-
RL3006	RELAY		DC12V		AJQ6341 DC12V	M1190144		1-
RL3007	RELAY		DC12V		AJQ6341 DC12V	M1190144		1-
RL3008	RELAY		DC12V		AJQ6341 DC12V	M1190144		1-
RL3009	RELAY		DC12V		AJQ6341 DC12V	M1190144		1-
RL3010	RELAY		DC12V		AJQ6341 DC12V	M1190144		1-
RL3011	RELAY		DC12V		FTR-H1CA012V DC12V	M1190148		1-
RL3012	RELAY		DC12V		AJQ6341 DC12V	M1190144		1-

# LPF Unit

---

REF.	DESCRIPTION	VALUE	WV	TOL.	MFGR'S DESIG	YAESU P/N	VERS.	LOT.
RL3013	RELAY		DC12V		AJQ6341 DC12V	M1190144		1-
RL3014	RELAY		DC12V		AJQ6341 DC12V	M1190144		1-
RL3015	RELAY		DC12V		AJQ6341 DC12V	M1190144		1-
RL3016	RELAY		DC12V		AJQ6341 DC12V	M1190144		1-
RL3017	RELAY		DC12V		AJQ6341 DC12V	M1190144		1-
RL3018	RELAY		DC12V		AJQ6341 DC12V	M1190144		1-
RL3019	RELAY		DC12V		AJQ6341 DC12V	M1190144		1-
RL3020	RELAY		DC12V		AJQ6341 DC12V	M1190144		1-
RL3021	RELAY		DC12V		AJQ6341 DC12V	M1190144		1-
T 3001	COIL PWR-WIDE				D12A RIB16X32X32	L0022429C		1-
T 3002	COIL PWR-WIDE				D12A RIB21X42X40	L0022430C		1-
TH3001	THERMISTOR				112302-2	G9090010		1-
TH3002	THERMISTOR				112302-2	G9090010		1-
	HOLDER PLATE					RA0037500		1-
	PLATE				(A1)	RA0037600		1-
	PLATE				(A2)	RA0037700		1-
	PLATE				(B1)	RA0040100		1-
	PLATE				(B2)	RA0040200		1-
	INSULATOR SHEET				(A)	RA003780A		1-
	INSULATOR SHEET				(B)	RA003790A		1-

## Circuit Diagram



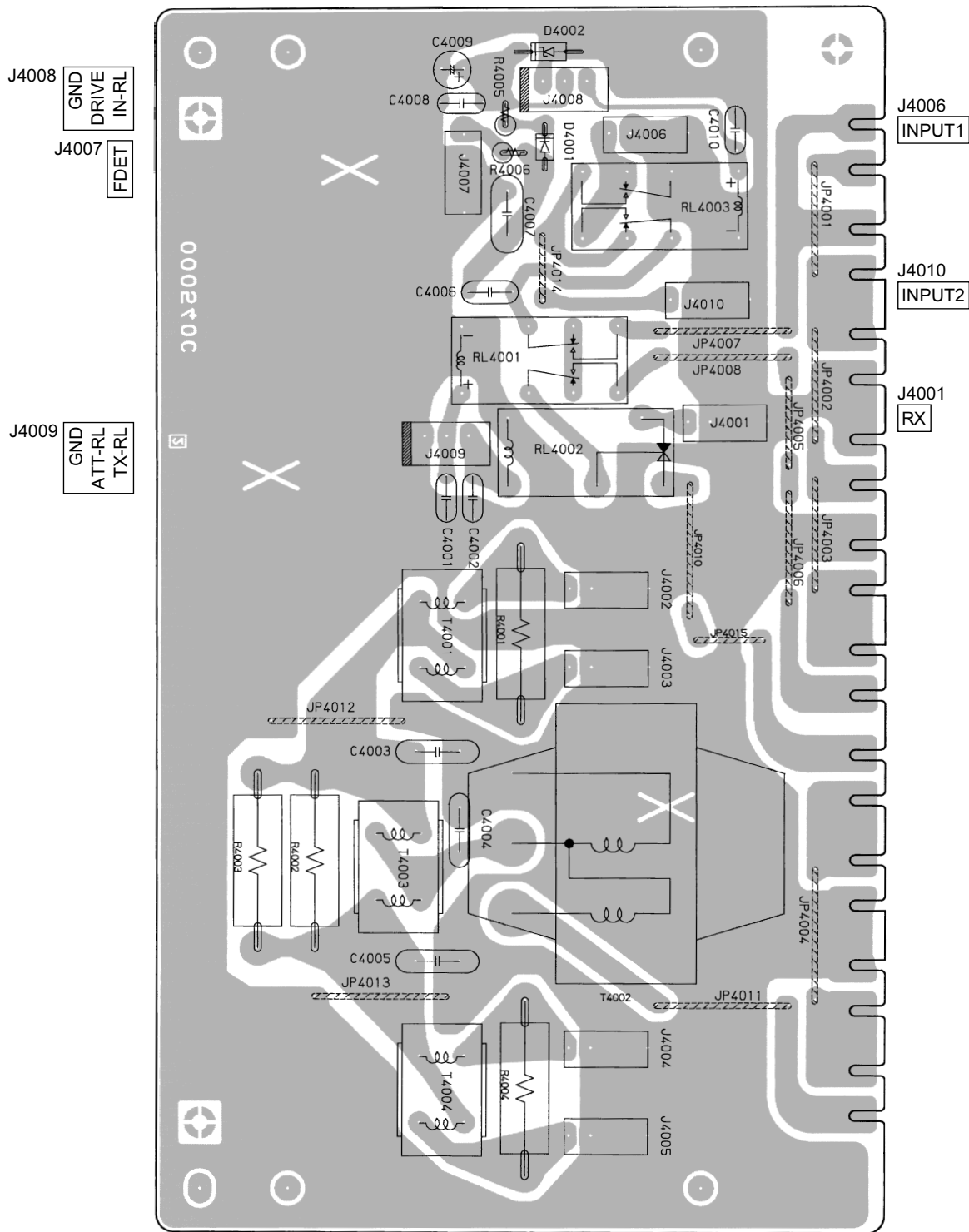
# Divider Unit

---

*Notes:*



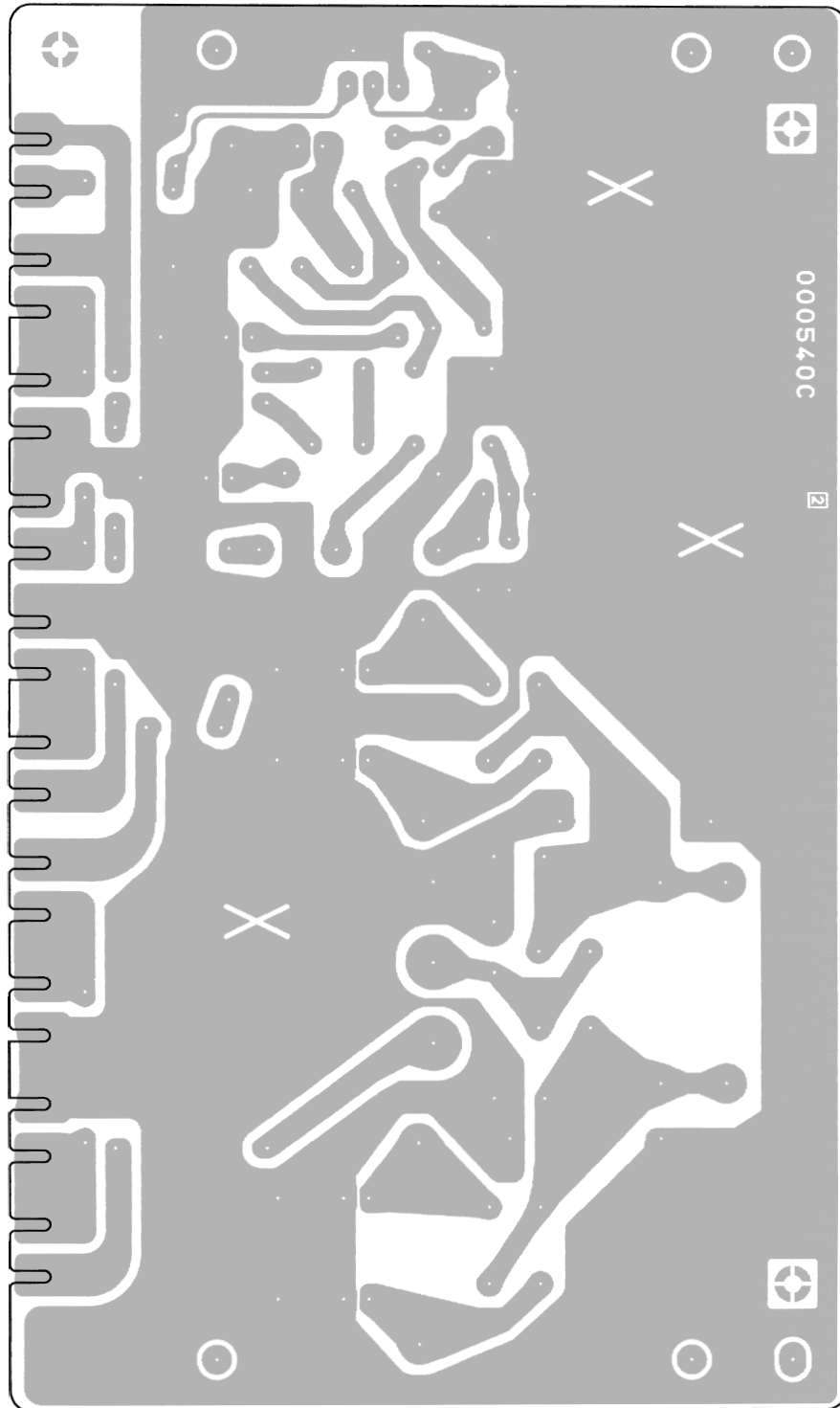
## Parts Layout



Component Side

# Divider Unit

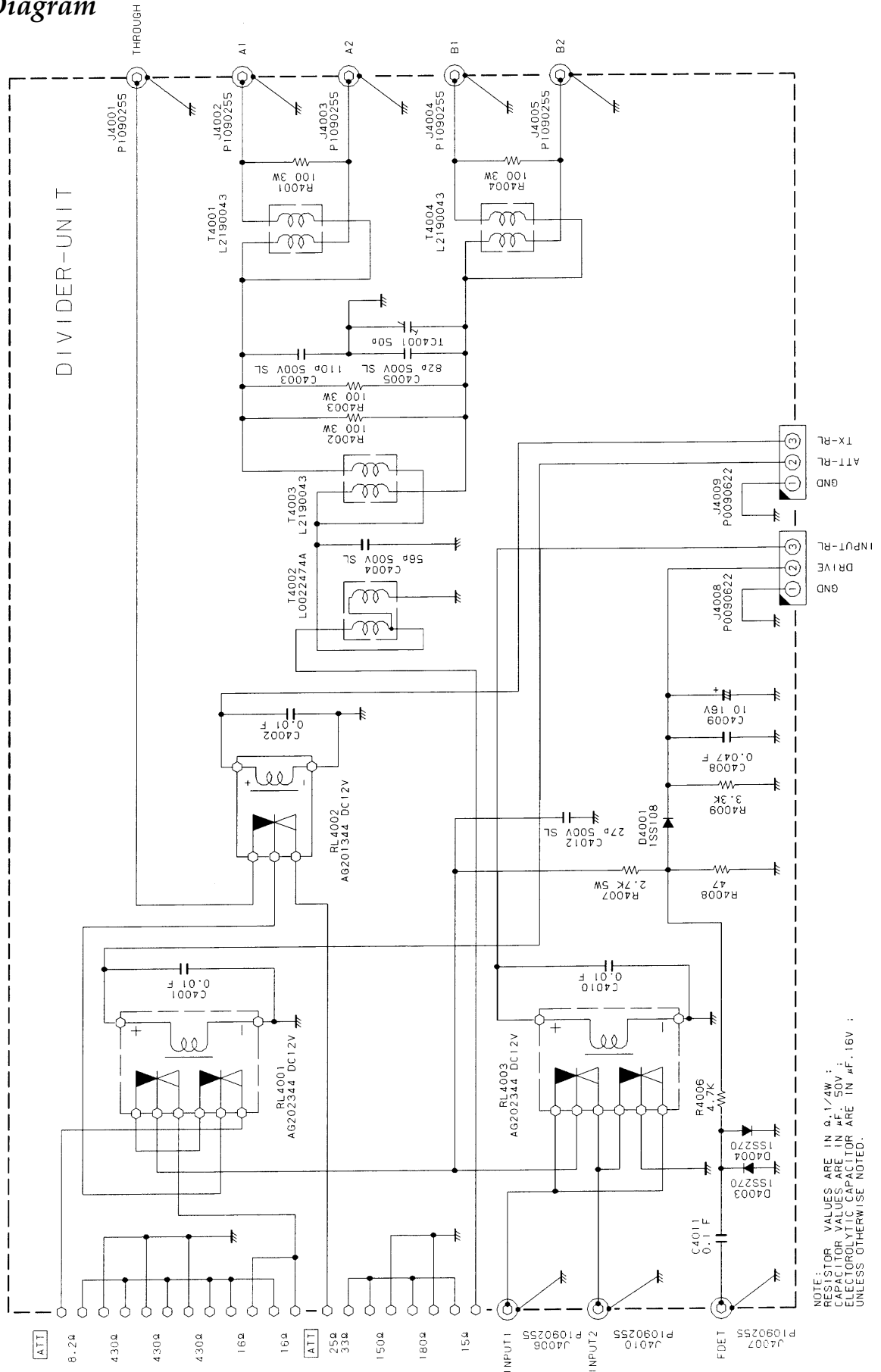
---



Solder Side

# Divider Unit (Lot. 3~)

## Circuit Diagram

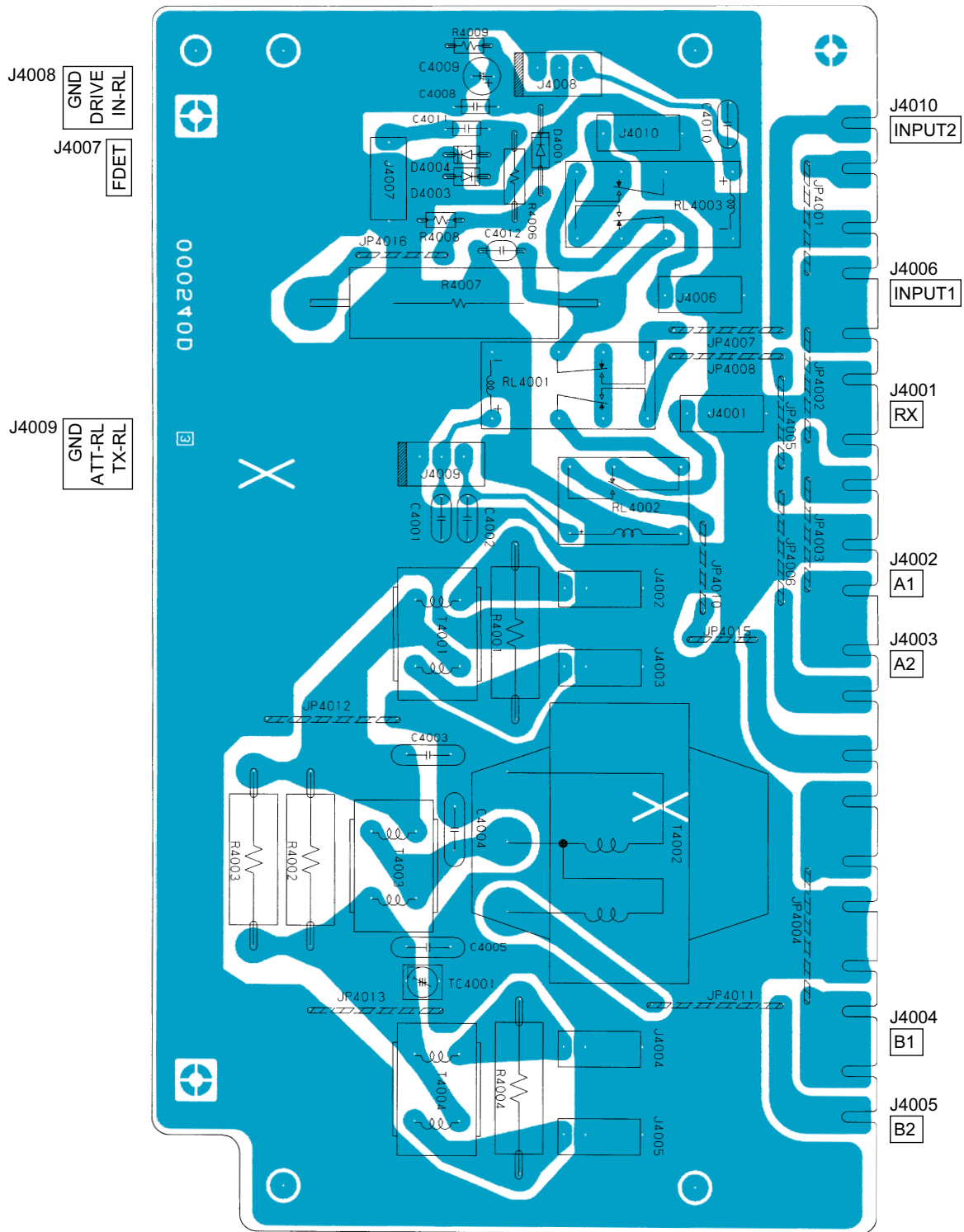


# Divider Unit (Lot. 3~)

---

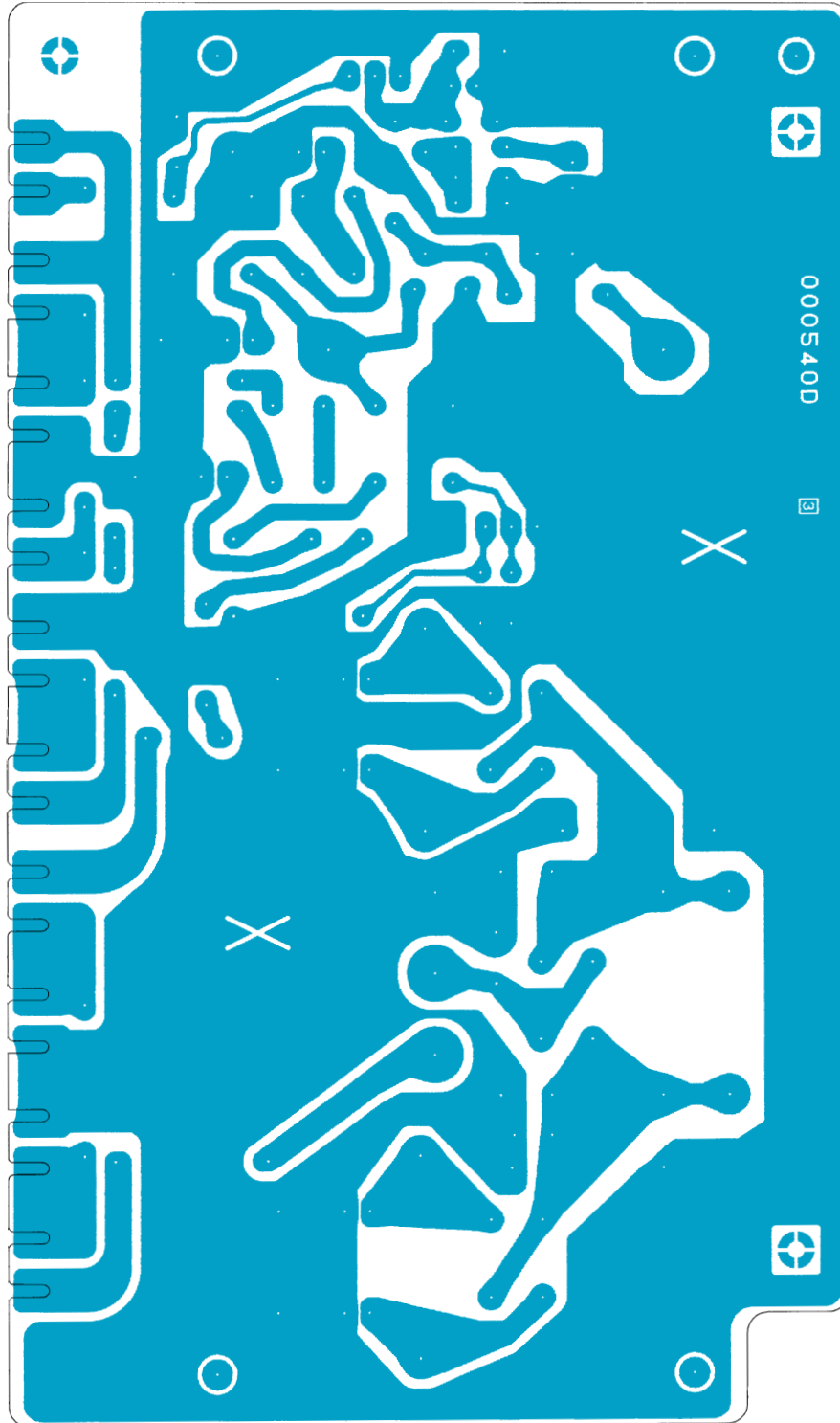
*Notes:*

## Parts Layout



# Divider Unit (Lot. 3~)

---



Solder Side

## Parts List

REF.	DESCRIPTION	VALUE	WV	TOL.	MFGR'S DESIG	YAESU P/N	VERS.	LOT.
*** DIVIDER UNIT ***								
PCB with Components (w/ R0001-R0011)						CS1554001		
Printed Circuit Board						FR000540C		1-
Printed Circuit Board						FR000540D		3-
C 4001	CERAMIC CAP.	0.01uF	50V	F	DD106F103Z50	K13179008		1-
C 4002	CERAMIC CAP.	0.01uF	50V	F	DD106F103Z50	K13179008		1-
C 4003	CERAMIC CAP.	120pF	500V	SL	DD10SL121J500	K00275121		1-
C 4003	CERAMIC CAP.	110pF	500V	SL	DD09SL111J500	K00275111		3-
C 4004	CERAMIC CAP.	56pF	500V	SL	DD09SL560J500	K00275560		1-
C 4005	CERAMIC CAP.	120pF	500V	SL	DD10SL121J500	K00275121		1-
C 4005	CERAMIC CAP.	82pF	500V	SL	DD09SL820J500	K00275820		3-
C 4008	CERAMIC CAP.	0.047uF	50V	F	UP050F473Z-A-B	K28179002		1-
C 4009	AL.ELECTRO.CAP.	10uF	16V		16V100M4X7TR2	K46120004		1-
C 4010	CERAMIC CAP.	0.01uF	50V	F	DD106F103Z50	K13179008		1-
C 4011	CERAMIC CAP.	0.1uF	50V	F	UP050F104Z-A-B	K28179003		1-
C 4012	CERAMIC CAP.	27pF	500V	SL	DD05-979SL270K500	K26270023		1-
D 4001	DIODE				1SS108	G2090377		1-
D 4003	DIODE				1SS270TJ	G2060004		1-
D 4004	DIODE				1SS270TJ	G2060004		1-
J 4001	CONNECTOR				TMP-J01X-A2	P1090255		1-
J 4002	CONNECTOR				TMP-J01X-A2	P1090255		1-
J 4003	CONNECTOR				TMP-J01X-A2	P1090255		1-
J 4004	CONNECTOR				TMP-J01X-A2	P1090255		1-
J 4005	CONNECTOR				TMP-J01X-A2	P1090255		1-
J 4006	CONNECTOR				TMP-J01X-A2	P1090255		1-
J 4007	CONNECTOR				TMP-J01X-A2	P1090255		1-
J 4008	CONNECTOR				SC25-03WS	P0090622		1-
J 4009	CONNECTOR				SC25-03WS	P0090622		1-
J 4010	CONNECTOR				TMP-J01X-A2	P1090255		1-
R 0001	METAL FILM RES.	8.2ohm	20W	1%	RNP-20S C8R2F	J22439005		1-
R 0001	METAL FILM RES.	16ohm	20W	1%	RNP-20S C160F	J22439006		3-
R 0002	METAL FILM RES.	430ohm	20W	1%	RNP-20S C431F	J22439008		1-
R 0002	METAL FILM RES.	16ohm	20W	1%	RNP-20S C160F	J22439006		3-
R 0003	METAL FILM RES.	430ohm	20W	1%	RNP-20S C431F	J22439008		1-
R 0004	METAL FILM RES.	430ohm	20W	1%	RNP-20S C431F	J22439008		1-
R 0005	METAL FILM RES.	16ohm	20W	1%	RNP-20S C160F	J22439006		1-
R 0005	METAL FILM RES.	430ohm	20W	1%	RNP-20S C431F	J22439008		3-
R 0006	METAL FILM RES.	16ohm	20W	1%	RNP-20S C160F	J22439006		1-
R 0006	METAL FILM RES.	8.2ohm	20W	1%	RNP-20S C8R2F	J22439005		3-
R 0007	METAL FILM RES.	25ohm	20W	1%	RNP-20S C250F 25	J22439010		1-
R 0007	METAL FILM RES.	15ohm	20W	1%	RNP-20S C150F 15	J22439009		4-
R 0008	METAL FILM RES.	150ohm	20W	1%	RNP-20S C151F 150	J22439012		1-
R 0008	METAL FILM RES.	240ohm	20W	1%	RNP-20S C241F	J22439002		4-
R 0009	METAL FILM RES.	180ohm	20W	1%	RNP-20S C181F 180	J22439013		1-
R 0010	METAL FILM RES.	15ohm	20W	1%	RNP-20S C150F 15	J22439009		1-
R 0011	METAL FILM RES.	33ohm	20W	1%	RNP-20S C330F 33	J22439011		1-
R 0012	METAL FILM RES.	22ohm	3W	5%	ERG-3SJ220 22	J22359043		4-
R 0013	METAL FILM RES.	22ohm	3W	5%	ERG-3SJ220 22	J22359043		4-
R 4001	METAL FILM RES.	100ohm	3W	5%	ERG-3SJ101 100	J22355101		1-
R 4002	METAL FILM RES.	100ohm	3W	5%	ERG-3SJ101 100	J22355101		1-
R 4003	METAL FILM RES.	100ohm	3W	5%	ERG-3SJ101 100	J22355101		1-
R 4004	METAL FILM RES.	100ohm	3W	5%	ERG-3SJ101 100	J22355101		1-
R 4006	CARBON FILM RES.	4.7kohm	1/4W	5%	RD14TJ472 4.7K	J01245472		1-
R 4007	METAL FILM RES.	2.7kohm	5W	5%	ERG-5SJ272	J22379013		2-
R 4008	CARBON FILM RES.	47ohm	1/6W	5%	RD16PJ470 47	J01225470		1-
R 4008	CARBON FILM RES.	47ohm	1/6W	5%	RD16TPJ470 47	J07225470		3-
R 4009	CHIP RES.	3.3kohm	1/10W	5%	RMC1/10T 332J	J24205332		1-
R 4009	CARBON FILM RES.	3.3kohm	1/6W	5%	RD16TPJ332 3.3K	J07225332		3-
RL4001	RELAY		DC12V		AG202344 DC12V	M1190126		1-
RL4002	RELAY		DC12V		AJQ6341 DC12V	M1190144		1-

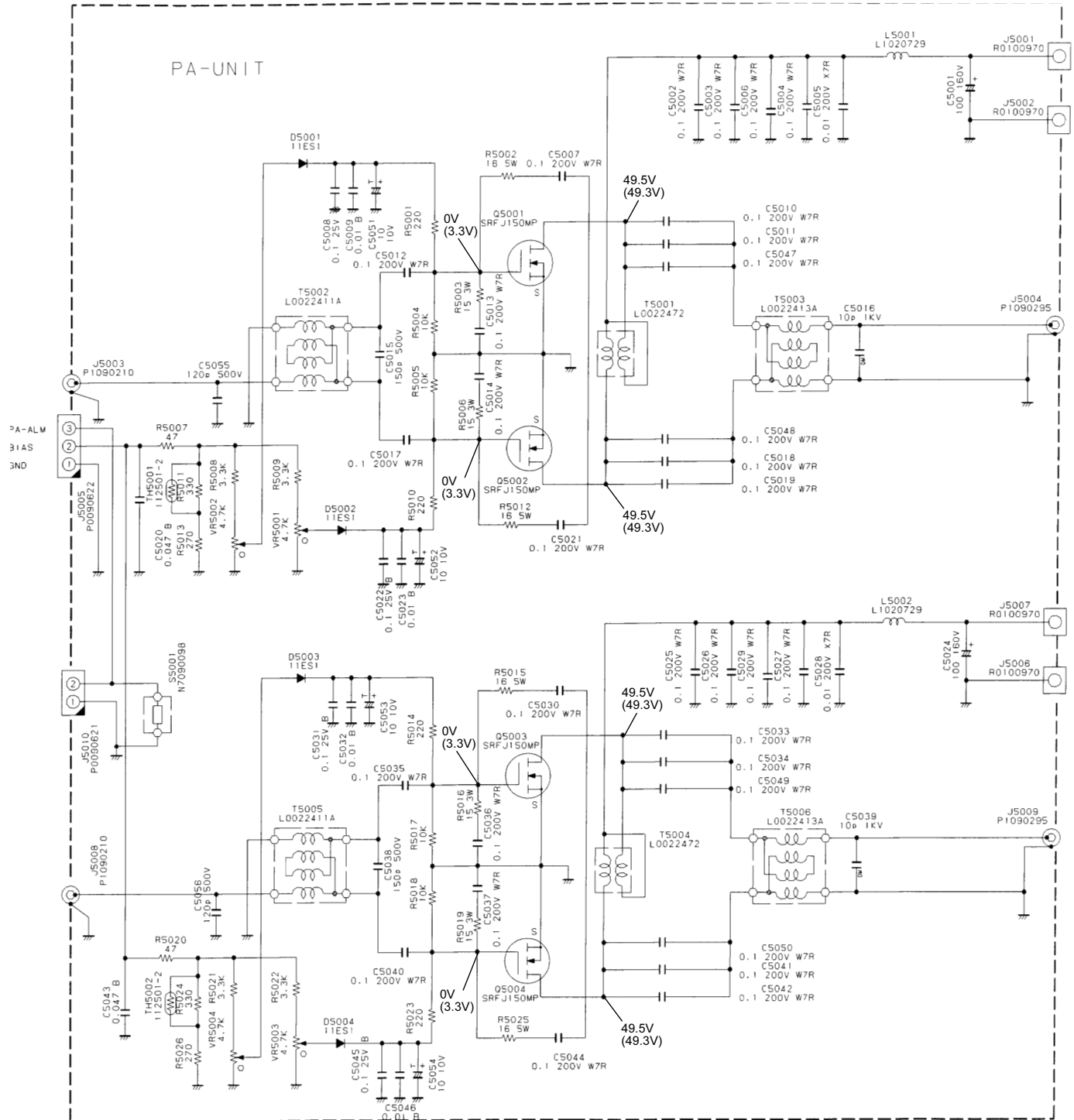
# Divider Unit

---

REF.	DESCRIPTION	VALUE	WV	TOL.	MFGR'S DESIG	YAESU P/N	VERS.	LOT.
RL4002	RELAY		DC12V		AG202344 DC12V	M1190126		2-
RL4002	RELAY		DC12V		AG201344 DC12V	M1190124		3-
RL4003	RELAY		DC12V		AG202344 DC12V	M1190126		1-
T 4001	NOISE FILTER				ST-202A	L2190043		1-
T 4002	COIL PWR-WIDE				D12A RIB16X32X16	L0022474A		1-
T 4003	NOISE FILTER				ST-202A	L2190043		1-
T 4004	NOISE FILTER				ST-202A	L2190043		1-
TC4001	TRIMMER CAP.	50pF			ECR-LA050M12 50PF	K91000174		3-



## Circuit Diagram



RX(TX)

Before measuring the voltage, disconnect the Band DATA Cable and Resetting the CPU.

Measuring Conditions

Display Select: Multi Meter1

OPERATE: ON

DIM, LOW, ATT and TUNER: all OFF

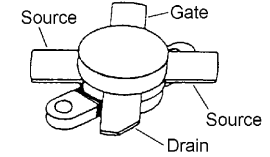
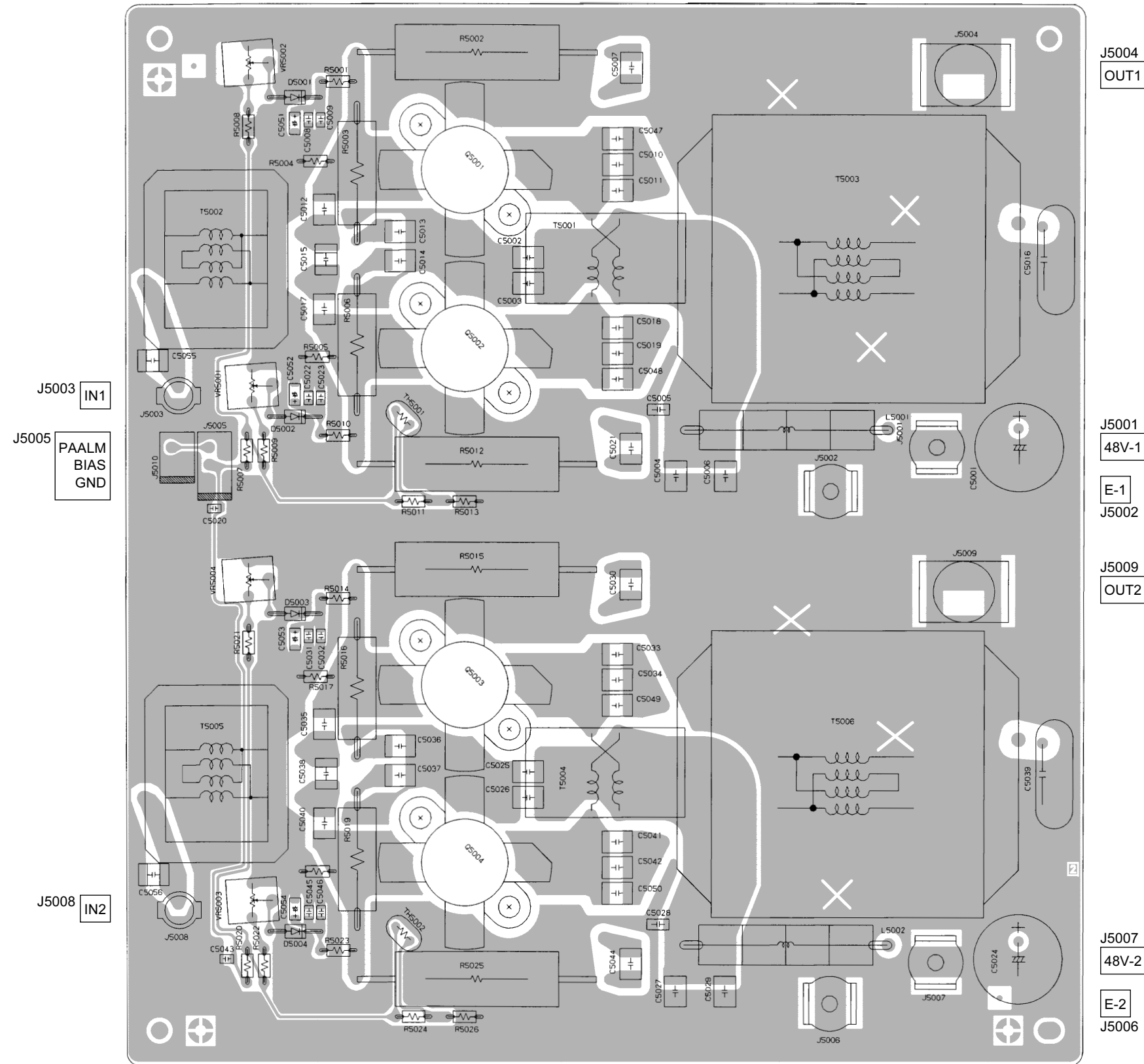
INPUT and ANT: both 1

# PA Unit

---

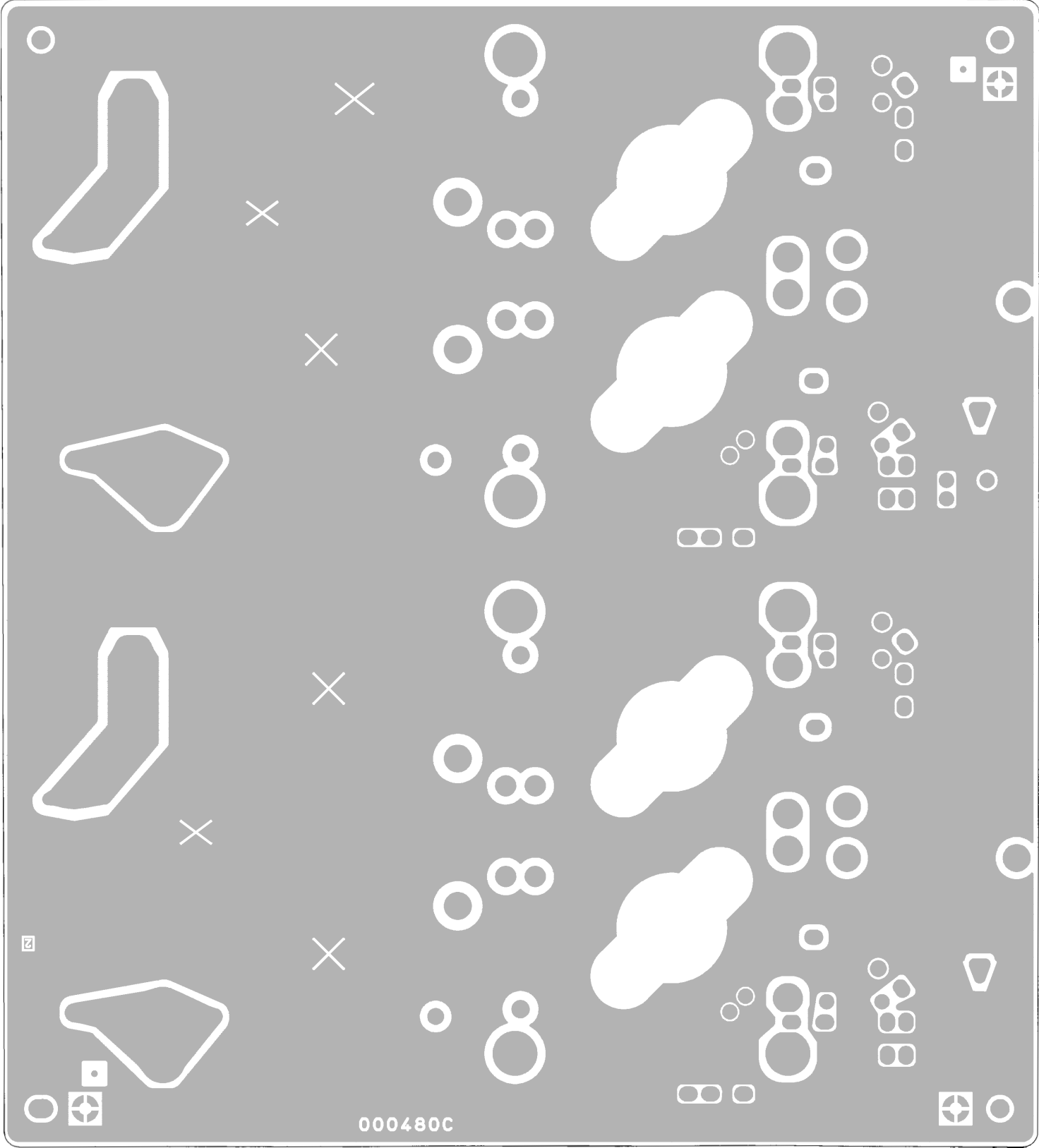
*Notes:*

Parts Layout



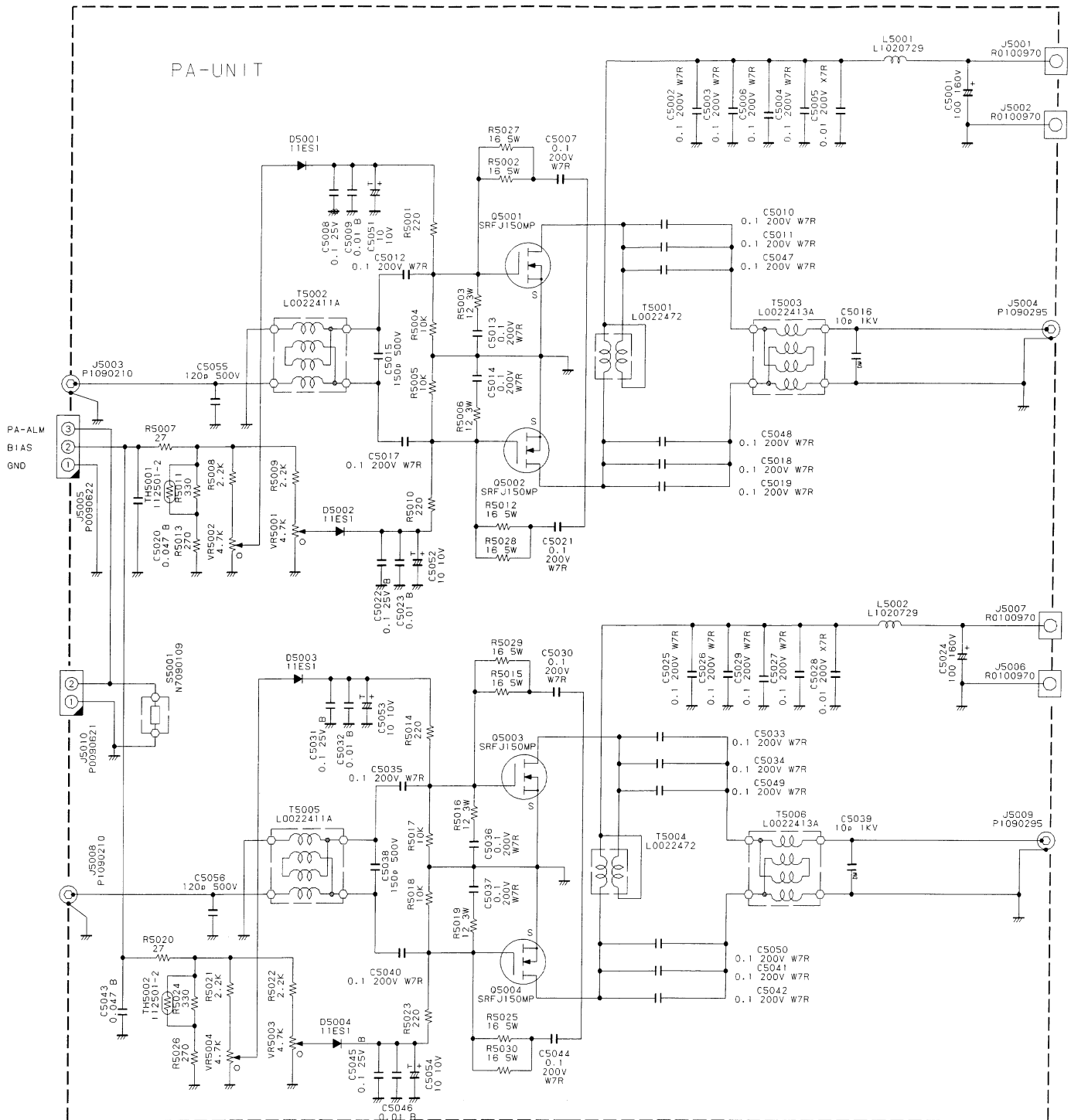
SRFJ150MP  
(Q5001, 5002, 5003, 5004)

Component Side



Solder Side

## Circuit Diagram

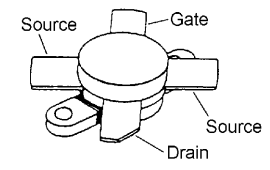
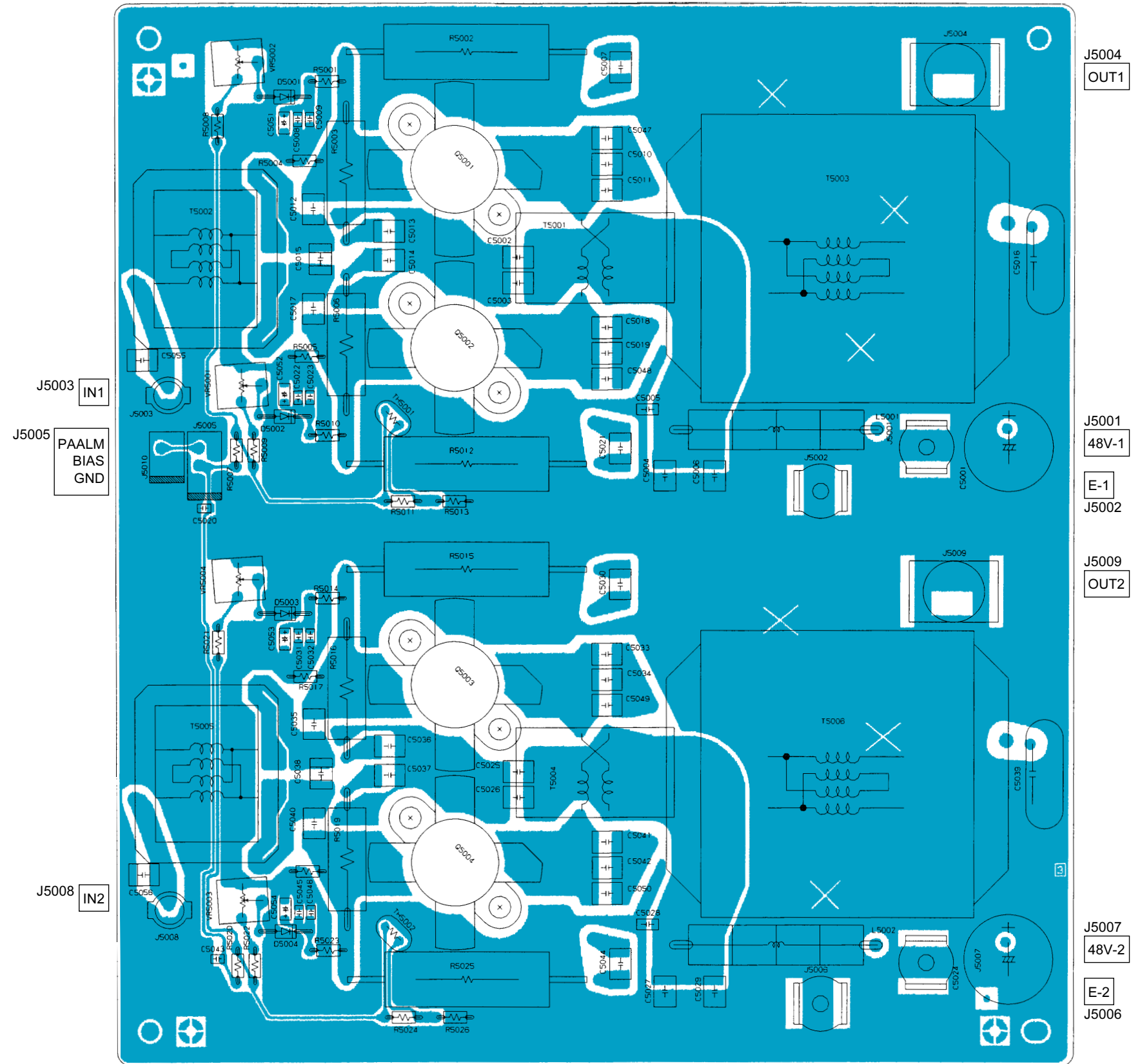


# PA Unit (Lot. 5~)

---

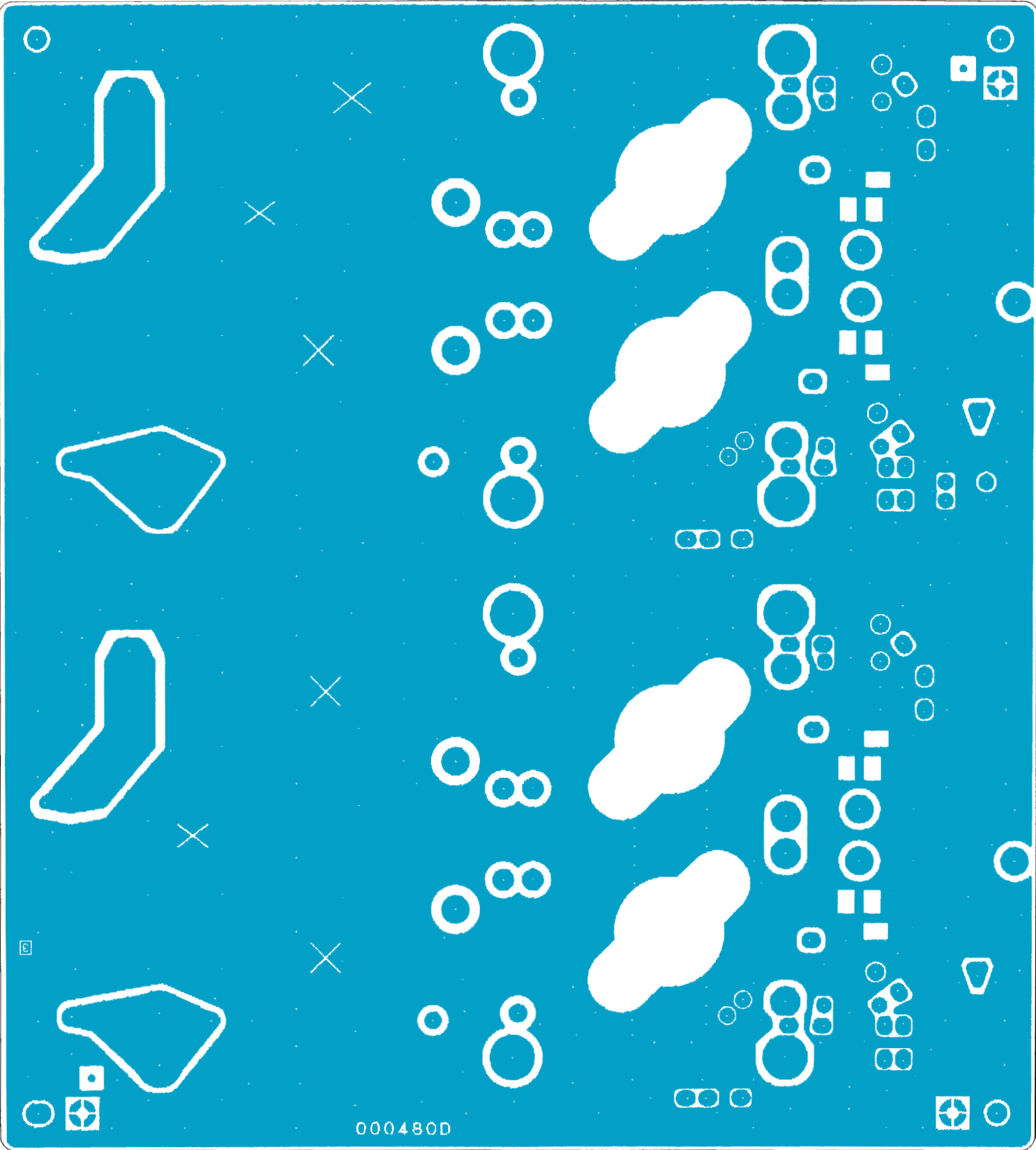
*Notes:*

Parts Layout



SRFJ150MP  
(Q5001, 5002, 5003, 5004)

Component Side



Solder Side



Parts List

REF.	DESCRIPTION	VALUE	WV	TOL.	MFGR'S DESIG	YAESU P/N	VERS.	LOT.
*** PA UNIT ***								
PCB with Components (w/ P5001, S5001, Q5001~Q5004)						CS1553001		
Printed Circuit Board						FR000480C		1-
Printed Circuit Board						FR000480D		5-
C 5001	AL.ELECTRO.CAP.	100uF	160V		RE3-160V101M	K40229001		1-
C 5002	CHIP CAP.	0.1uF	200V	X7R	GRM43-2X7R104K200PT	K22237801		1-
C 5003	CHIP CAP.	0.1uF	200V	X7R	GRM43-2X7R104K200PT	K22237801		1-
C 5004	CHIP CAP.	0.1uF	200V	X7R	GRM43-2X7R104K200PT	K22237801		1-
C 5005	CHIP CAP.	0.01uF	200V	X7R	GRM42-6X7R103K200PT	K22231802		1-
C 5006	CHIP CAP.	0.1uF	200V	X7R	GRM43-2X7R104K200PT	K22237801		1-
C 5007	CHIP CAP.	0.1uF	200V	X7R	GRM43-2X7R104K200PT	K22237801		1-
C 5008	CHIP CAP.	0.1uF	25V	B	GRM40B104M25PT	K22140811		1-
C 5009	CHIP CAP.	0.01uF	50V	B	GRM40B103M50PT	K22170817		1-
C 5010	CHIP CAP.	0.1uF	200V	X7R	GRM43-2X7R104K200PT	K22237801		1-
C 5011	CHIP CAP.	0.1uF	200V	X7R	GRM43-2X7R104K200PT	K22237801		1-
C 5012	CHIP CAP.	0.1uF	200V	X7R	GRM43-2X7R104K200PT	K22237801		1-
C 5013	CHIP CAP.	0.1uF	200V	X7R	GRM43-2X7R104K200PT	K22237801		1-
C 5014	CHIP CAP.	0.1uF	200V	X7R	GRM43-2X7R104K200PT	K22237801		1-
C 5015	FILM CAP.	150pF	500V		UC342H1500J-T	K33279012		1-
C 5016	MICA CAP.	10pF	1KV		DML2 100J10	K30309042		1-
C 5017	CHIP CAP.	0.1uF	200V	X7R	GRM43-2X7R104K200PT	K22237801		1-
C 5018	CHIP CAP.	0.1uF	200V	X7R	GRM43-2X7R104K200PT	K22237801		1-
C 5019	CHIP CAP.	0.1uF	200V	X7R	GRM43-2X7R104K200PT	K22237801		1-
C 5020	CHIP CAP.	0.047uF	50V	B	GRM40B473M50PT	K22170823		1-
C 5021	CHIP CAP.	0.1uF	200V	X7R	GRM43-2X7R104K200PT	K22237801		1-
C 5022	CHIP CAP.	0.1uF	25V	B	GRM40B104M25PT	K22140811		1-
C 5023	CHIP CAP.	0.01uF	50V	B	GRM40B103M50PT	K22170817		1-
C 5024	AL.ELECTRO.CAP.	100uF	160V		RE3-160V101M	K40229001		1-
C 5025	CHIP CAP.	0.1uF	200V	X7R	GRM43-2X7R104K200PT	K22237801		1-
C 5026	CHIP CAP.	0.1uF	200V	X7R	GRM43-2X7R104K200PT	K22237801		1-
C 5027	CHIP CAP.	0.1uF	200V	X7R	GRM43-2X7R104K200PT	K22237801		1-
C 5028	CHIP CAP.	0.01uF	200V	X7R	GRM42-6X7R103K200PT	K22231802		1-
C 5029	CHIP CAP.	0.1uF	200V	X7R	GRM43-2X7R104K200PT	K22237801		1-
C 5030	CHIP CAP.	0.1uF	200V	X7R	GRM43-2X7R104K200PT	K22237801		1-
C 5031	CHIP CAP.	0.1uF	25V	B	GRM40B104M25PT	K22140811		1-
C 5032	CHIP CAP.	0.01uF	50V	B	GRM40B103M50PT	K22170817		1-
C 5033	CHIP CAP.	0.1uF	200V	X7R	GRM43-2X7R104K200PT	K22237801		1-
C 5034	CHIP CAP.	0.1uF	200V	X7R	GRM43-2X7R104K200PT	K22237801		1-
C 5035	CHIP CAP.	0.1uF	200V	X7R	GRM43-2X7R104K200PT	K22237801		1-
C 5036	CHIP CAP.	0.1uF	200V	X7R	GRM43-2X7R104K200PT	K22237801		1-
C 5037	CHIP CAP.	0.1uF	200V	X7R	GRM43-2X7R104K200PT	K22237801		1-
C 5038	FILM CAP.	150pF	500V		UC342H1500J-T	K33279012		1-
C 5039	MICA CAP.	10pF	1KV		DML2 100J10	K30309042		1-
C 5040	CHIP CAP.	0.1uF	200V	X7R	GRM43-2X7R104K200PT	K22237801		1-
C 5041	CHIP CAP.	0.1uF	200V	X7R	GRM43-2X7R104K200PT	K22237801		1-
C 5042	CHIP CAP.	0.1uF	200V	X7R	GRM43-2X7R104K200PT	K22237801		1-
C 5043	CHIP CAP.	0.047uF	50V	B	GRM40B473M50PT	K22170823		1-
C 5044	CHIP CAP.	0.1uF	200V	X7R	GRM43-2X7R104K200PT	K22237801		1-
C 5045	CHIP CAP.	0.1uF	25V	B	GRM40B104M25PT	K22140811		1-
C 5046	CHIP CAP.	0.01uF	50V	B	GRM40B103M50PT	K22170817		1-
C 5047	CHIP CAP.	0.1uF	200V	X7R	GRM43-2X7R104K200PT	K22237801		1-
C 5048	CHIP CAP.	0.1uF	200V	X7R	GRM43-2X7R104K200PT	K22237801		1-
C 5049	CHIP CAP.	0.1uF	200V	X7R	GRM43-2X7R104K200PT	K22237801		1-
C 5050	CHIP CAP.	0.1uF	200V	X7R	GRM43-2X7R104K200PT	K22237801		1-
C 5051	TANTALUM CHIP CAP.	10uF	10V		TEMSVA1A106M-8R	K78100028		1-
C 5052	TANTALUM CHIP CAP.	10uF	10V		TEMSVA1A106M-8R	K78100028		1-
C 5053	TANTALUM CHIP CAP.	10uF	10V		TEMSVA1A106M-8R	K78100028		1-
C 5054	TANTALUM CHIP CAP.	10uF	10V		TEMSVA1A106M-8R	K78100028		1-
C 5055	FILM CAP.	120pF	500V		UC342H1200J-T	K33279026		1-
C 5056	FILM CAP.	120pF	500V		UC342H1200J-T	K33279026		1-

# PA Unit

REF.	DESCRIPTION	VALUE	WV	TOL.	MFGR'S DESIG	YAESU P/N	VERS.	LOT.
D 5001	DIODE				11ES1	G2090499		1-
D 5002	DIODE				11ES1	G2090499		1-
D 5003	DIODE				11ES1	G2090499		1-
D 5004	DIODE				11ES1	G2090499		1-
J 5001	TERMINAL					R0100970		1-
J 5002	TERMINAL					R0100970		1-
J 5003	CONNECTOR				TMP-J01X-V6	P1090210		1-
J 5004	CONNECTOR				S-Q3063#01	P1090295		1-
J 5005	CONNECTOR				SC25-03WS	P0090622		1-
J 5006	TERMINAL					R0100970		1-
J 5007	TERMINAL					R0100970		1-
J 5008	CONNECTOR				TMP-J01X-V6	P1090210		1-
J 5009	CONNECTOR				S-Q3063#01	P1090295		1-
J 5010	CONNECTOR				SC25-02WS	P0090621		1-
JP5001	WIRE-ASSY				VIO72 <10>/<10>	T9318033		1-
JP5002	WIRE-ASSY				VIO72 <10>/<10>	T9318033		1-
L 5001	RFC WITH BEADS				3A RI5.8X6.4-2	L1020729		1-
L 5002	RFC WITH BEADS				3A RI5.8X6.4-2	L1020729		1-
P 5001	WIRE ASSY				A0897	T9206663		1-
Q 5001	FET				SRFJ150MP	G3090125		1-
Q 5002	FET				SRFJ150MP	G3090125		1-
Q 5003	FET				SRFJ150MP	G3090125		1-
Q 5004	FET				SRFJ150MP	G3090125		1-
R 5001	CARBON FILM RES.	220ohm	1/6W	5%	RD16TPJ221 220	J07225221		1-
R 5002	METAL FILM RES.	16ohm	5W	5%	ERG-5SJ160 16	J22379011		1-
R 5003	METAL FILM RES.	12ohm	3W	5%	ERG-3SJ120V 12	J22359041		1-
R 5003	METAL FILM RES.	12ohm	3W	5%	ERG-3SJ120 12	J22359042		3-
R 5004	CARBON FILM RES.	10kohm	1/6W	5%	RD16TPJ103 10K	J07225103		1-
R 5005	CARBON FILM RES.	10kohm	1/6W	5%	RD16TPJ103 10K	J07225103		1-
R 5006	METAL FILM RES.	12ohm	3W	5%	ERG-3SJ120V 12	J22359041		1-
R 5006	METAL FILM RES.	12ohm	3W	5%	ERG-3SJ120 12	J22359042		3-
R 5007	CARBON FILM RES.	47ohm	1/6W	5%	RD16TPJ470 47	J07225470		1-
R 5007	CARBON FILM RES.	27ohm	1/6W	5%	RD16TPJ270 27	J07225270		2-
R 5008	CARBON FILM RES.	3.3kohm	1/6W	5%	RD16TPJ332 3.3K	J07225332		1-
R 5008	CARBON FILM RES.	2.2kohm	1/6W	5%	RD16TPJ222 2.2K	J07225222		2-
R 5009	CARBON FILM RES.	3.3kohm	1/6W	5%	RD16TPJ332 3.3K	J07225332		1-
R 5009	CARBON FILM RES.	2.2kohm	1/6W	5%	RD16TPJ222 2.2K	J07225222		2-
R 5010	CARBON FILM RES.	220ohm	1/6W	5%	RD16TPJ221 220	J07225221		1-
R 5011	CARBON FILM RES.	330ohm	1/6W	5%	RD16TPJ331 330	J07225331		1-
R 5012	METAL FILM RES.	16ohm	5W	5%	ERG-5SJ160 16	J22379011		1-
R 5013	CARBON FILM RES.	270ohm	1/6W	5%	RD16TPJ271 270	J07225271		1-
R 5014	CARBON FILM RES.	220ohm	1/6W	5%	RD16TPJ221 220	J07225221		1-
R 5015	METAL FILM RES.	16ohm	5W	5%	ERG-5SJ160 16	J22379011		1-
R 5016	METAL FILM RES.	12ohm	3W	5%	ERG-3SJ120V 12	J22359041		1-
R 5016	METAL FILM RES.	12ohm	3W	5%	ERG-3SJ120 12	J22359042		3-
R 5017	CARBON FILM RES.	10kohm	1/6W	5%	RD16TPJ103 10K	J07225103		1-
R 5018	CARBON FILM RES.	10kohm	1/6W	5%	RD16TPJ103 10K	J07225103		1-
R 5019	METAL FILM RES.	12ohm	3W	5%	ERG-3SJ120V 12	J22359041		1-
R 5019	METAL FILM RES.	12ohm	3W	5%	ERG-3SJ120 12	J22359042		3-
R 5020	CARBON FILM RES.	47ohm	1/6W	5%	RD16TPJ470 47	J07225470		1-
R 5020	CARBON FILM RES.	27ohm	1/6W	5%	RD16TPJ270 27	J07225270		2-
R 5021	CARBON FILM RES.	3.3kohm	1/6W	5%	RD16TPJ332 3.3K	J07225332		1-
R 5021	CARBON FILM RES.	2.2kohm	1/6W	5%	RD16TPJ222 2.2K	J07225222		2-
R 5022	CARBON FILM RES.	3.3kohm	1/6W	5%	RD16TPJ332 3.3K	J07225332		1-
R 5022	CARBON FILM RES.	2.2kohm	1/6W	5%	RD16TPJ222 2.2K	J07225222		2-
R 5023	CARBON FILM RES.	220ohm	1/6W	5%	RD16TPJ221 220	J07225221		1-
R 5024	CARBON FILM RES.	330ohm	1/6W	5%	RD16TPJ331 330	J07225331		1-
R 5025	METAL FILM RES.	16ohm	5W	5%	ERG-5SJ160 16	J22379011		1-
R 5026	CARBON FILM RES.	270ohm	1/6W	5%	RD16TPJ271 270	J07225271		1-
R 5027	METAL FILM RES.	12ohm	5W	5%	ERG-5SJ120 12	J22379012		1-

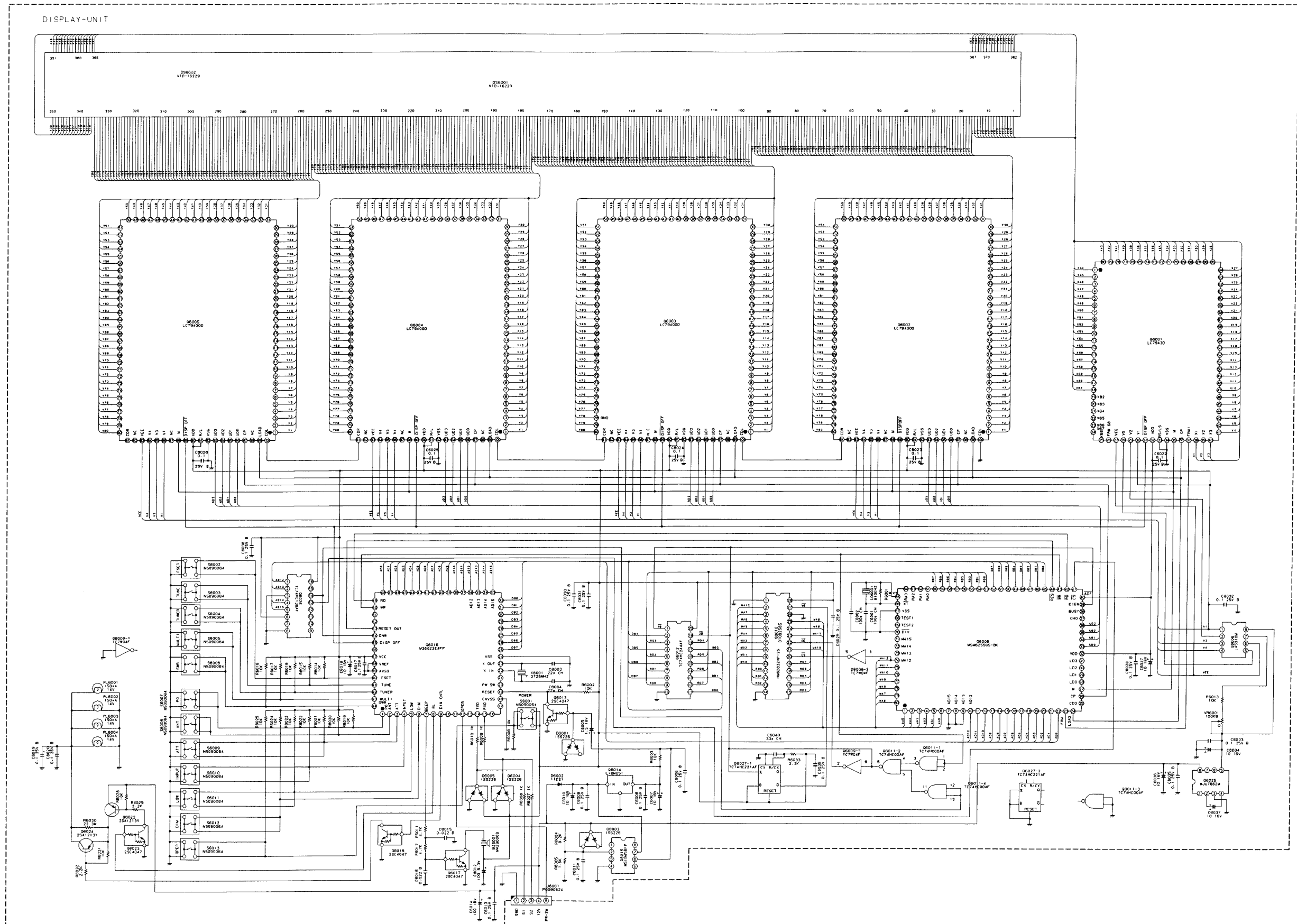
REF.	DESCRIPTION	VALUE	WV	TOL.	MFGR'S DESIG	YAESU P/N	VERS.	LOT.
R 5027	METAL FILM RES.	16ohm	5W	5%	ERG-5SJ160 16	J22379011		2-
R 5028	METAL FILM RES.	12ohm	5W	5%	ERG-5SJ120 12	J22379012		1-
R 5028	METAL FILM RES.	16ohm	5W	5%	ERG-5SJ160 16	J22379011		2-
R 5029	METAL FILM RES.	12ohm	5W	5%	ERG-5SJ120 12	J22379012		1-
R 5029	METAL FILM RES.	16ohm	5W	5%	ERG-5SJ160 16	J22379011		2-
R 5030	METAL FILM RES.	12ohm	5W	5%	ERG-5SJ120 12	J22379012		1-
R 5030	METAL FILM RES.	16ohm	5W	5%	ERG-5SJ160 16	J22379011		2-
S 5001	THERMAL SWITCH				OHD3-110M	N7090109		1-
T 5001	COIL PWR-WIDE				D12A TR20X10X10	L0022472		1-
T 5002	COIL PWR-WIDE				D12A RIB10X20X15	L0022411A		1-
T 5003	COIL PWR-WIDE				D12A RIB21X42X40	L0022413A		1-
T 5004	COIL PWR-WIDE				D12A TR20X10X10	L0022472		1-
T 5005	COIL PWR-WIDE				D12A RIB10X20X15	L0022411A		1-
T 5006	COIL PWR-WIDE				D12A RIB21X42X40	L0022413A		1-
TH5001	THERMISTOR				112501-2	G9090013		1-
TH5002	THERMISTOR				112501-2	G9090013		1-
VR5001	POT.	4.7kohm			RH063MCS3R 4.7KB	J51794472		1-
VR5001	POT.	4.7kohm			RH0638CS3R 4.7KB	J51808472		3-
VR5002	POT.	4.7kohm			RH063MCS3R 4.7KB	J51794472		1-
VR5002	POT.	4.7kohm			RH0638CS3R 4.7KB	J51808472		3-
VR5003	POT.	4.7kohm			RH063MCS3R 4.7KB	J51794472		1-
VR5003	POT.	4.7kohm			RH0638CS3R 4.7KB	J51808472		3-
VR5004	POT.	4.7kohm			RH063MCS3R 4.7KB	J51794472		1-
VR5004	POT.	4.7kohm			RH0638CS3R 4.7KB	J51808472		3-

# PA Unit

---

*Notes:*

Circuit Diagram

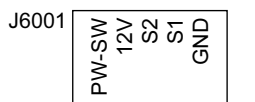
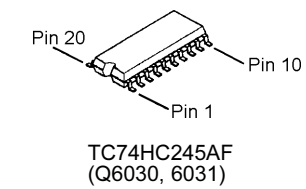
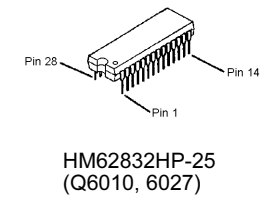
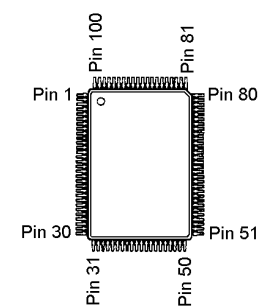
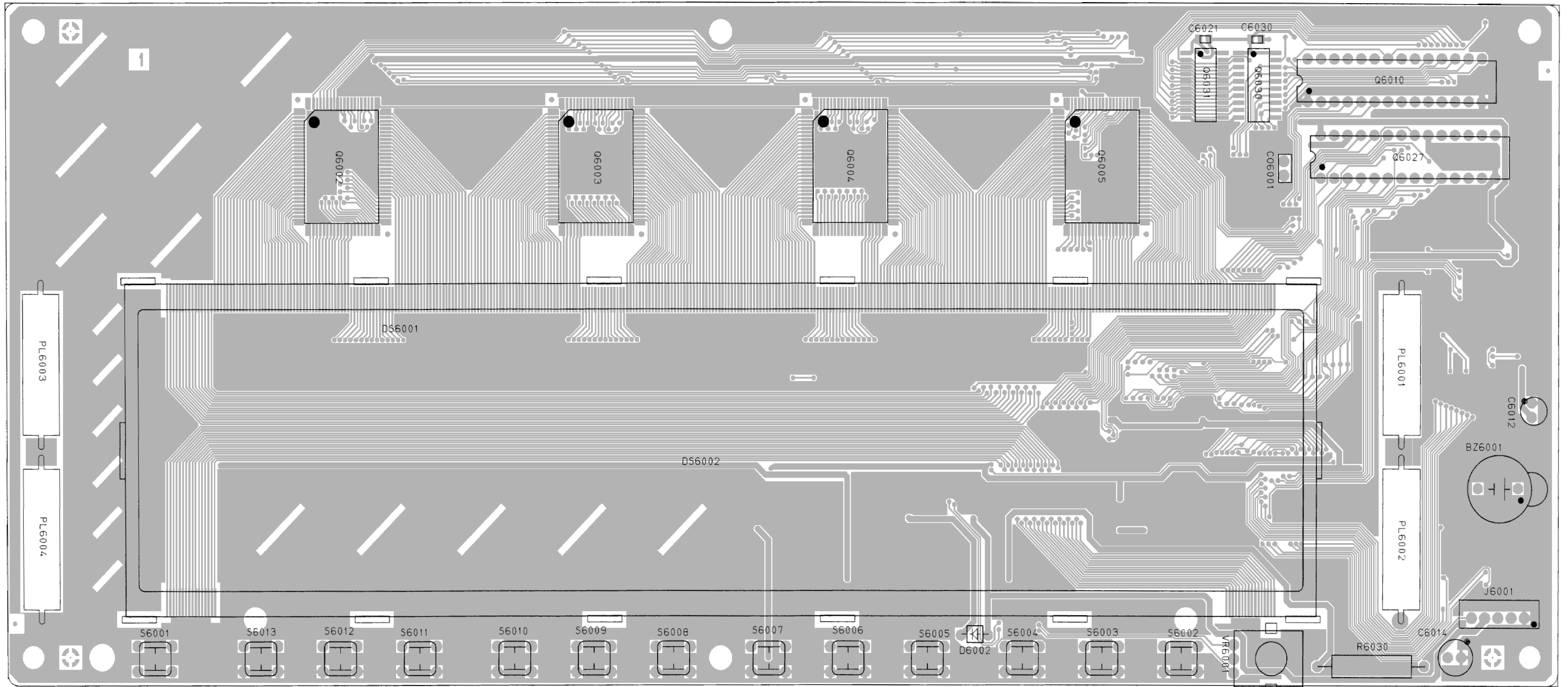


# Display Unit

---

*Notes:*

## Parts Layout



LCD Side

LC79400D  
(Q6002, 6003, 6004, 6005)





# Display Unit

## Parts List

REF.	DESCRIPTION	VALUE	WV	TOL.	MFGR'S DESIG	YAESU P/N	VERS.	LOT.
*** DISPLAY UNIT ***								
PCB with Components						CB0089001		
Printed Circuit Board						FR000520C		1-
BZ6001	BUZZER				MEB-12C-5	M4290009		1-
C 6001	CHIP CAP.	100pF	50V	CH	GRM40CH101J50PT	K22170235		1-
C 6002	CHIP CAP.	100pF	50V	CH	GRM40CH101J50PT	K22170235		1-
C 6003	CHIP CAP.	22pF	50V	CH	GRM40CH220J50PT	K22170219		1-
C 6004	CHIP CAP.	22pF	50V	CH	GRM40CH220J50PT	K22170219		1-
C 6005	TANTALUM CHIP CAP.	1.5uF	16V		TESVA1C155M1-8R	K78120020		1-
C 6006	CHIP CAP.	0.1uF	25V	B	GRM40B104M25PT	K22140811		1-
C 6007	TANTALUM CHIP CAP.	10uF	16V		TEMSVB21C106M-8R	K78120025		1-
C 6008	CHIP CAP.	0.1uF	25V	B	GRM40B104M25PT	K22140811		1-
C 6009	CHIP CAP.	0.1uF	25V	B	GRM40B104M25PT	K22140811		1-
C 6010	TANTALUM CHIP CAP.	10uF	16V		TEMSVB21C106M-8R	K78120025		1-
C 6011	CHIP CAP.	0.1uF	25V	B	GRM40B104M25PT	K22140811		1-
C 6012	AL.ELECTRO.CAP.	100uF	6.3V		RC2-6V101M(6X7)	K40089007		1-
C 6013	CHIP CAP.	0.1uF	25V	B	GRM40B104M25PT	K22140811		1-
C 6014	AL.ELECTRO.CAP.	100uF	16V		RC2-16V101MS(6X7)	K40129038		1-
C 6015	CHIP CAP.	0.022uF	50V	B	GRM40B223M50PT	K22170821		1-
C 6016	CHIP CAP.	0.022uF	50V	B	GRM40B223M50PT	K22170821		1-
C 6016	CHIP CAP.	0.1uF	25V	B	GRM40B104M25PT	K22140811		4-
C 6017	CHIP CAP.	0.1uF	25V	B	GRM40B104M25PT	K22140811		1-
C 6018	TANTALUM CHIP CAP.	10uF	16V		TEMSVB21C106M-8R	K78120025		1-
C 6019	CHIP CAP.	0.1uF	25V	B	GRM40B104M25PT	K22140811		1-
C 6020	CHIP CAP.	0.1uF	25V	B	GRM40B104M25PT	K22140811		1-
C 6021	CHIP CAP.	0.1uF	25V	B	GRM40B104M25PT	K22140811		1-
C 6022	CHIP CAP.	0.1uF	25V	B	GRM40B104M25PT	K22140811		1-
C 6023	CHIP CAP.	0.1uF	25V	B	GRM40B104M25PT	K22140811		1-
C 6024	CHIP CAP.	0.1uF	25V	B	GRM40B104M25PT	K22140811		1-
C 6025	CHIP CAP.	0.1uF	25V	B	GRM40B104M25PT	K22140811		1-
C 6026	CHIP CAP.	0.1uF	25V	B	GRM40B104M25PT	K22140811		1-
C 6027	TANTALUM CHIP CAP.	10uF	16V		TEMSVB21C106M-8R	K78120025		1-
C 6028	CHIP CAP.	0.1uF	25V	B	GRM40B104M25PT	K22140811		1-
C 6029	CHIP CAP.	0.1uF	25V	B	GRM40B104M25PT	K22140811		1-
C 6030	CHIP CAP.	0.1uF	25V	B	GRM40B104M25PT	K22140811		1-
C 6031	CHIP CAP.	0.1uF	25V	B	GRM40B104M25PT	K22140811		1-
C 6032	CHIP CAP.	0.1uF	25V	B	GRM40B104M25PT	K22140811		1-
C 6033	CHIP CAP.	0.1uF	25V	B	GRM40B104M25PT	K22140811		1-
C 6034	TANTALUM CHIP CAP.	10uF	16V		TEMSVB21C106M-8R	K78120025		1-
C 6035	CHIP CAP.	0.1uF	25V	B	GRM40B104M25PT	K22140811		1-
C 6036	TANTALUM CHIP CAP.	10uF	16V		TEMSVB21C106M-8R	K78120025		1-
C 6037	TANTALUM CHIP CAP.	10uF	16V		TEMSVB21C106M-8R	K78120025		1-
C 6038	CHIP CAP.	0.1uF	25V	B	GRM40B104M25PT	K22140811		1-
C 6039	CHIP CAP.	0.1uF	25V	B	GRM40B104M25PT	K22140811		1-
C 6040	CHIP CAP.	0.1uF	25V	B	GRM40B104M25PT	K22140811		1-
C 6041	CHIP CAP.	0.1uF	25V	B	GRM40B104M25PT	K22140811		1-
C 6042	CHIP CAP.	0.1uF	25V	B	GRM40B104M25PT	K22140811		1-
C 6043	AL.ELECTRO.CAP.	330uF	6.3V		RE2-6V331M 330UF	K40089019		2-
C 6044	CHIP CAP.	0.1uF	25V	B	GRM40B104M25PT	K22140811		4-
CO6001	CERAMIC OSC	810kHz			CSB810J	H7900820		1-
D 6001	DIODE				1SS226 TE85R	G2070003		1-
D 6002	DIODE				11ES1	G2090499		1-
D 6003	DIODE				1SS226 TE85R	G2070003		1-
D 6004	DIODE				1SS226 TE85R	G2070003		1-
D 6005	DIODE				1SS226 TE85R	G2070003		1-
DS6001	LCD				NTD-16229	G6090127		1-
DS6002	LCD				NTD-16229	G6090127		1-
J 6001	CONNECTOR				SC25-05WL	P0090638		1-
PL6001	LAMP	150mA	14V		T6.2 C-8 14V 150MA	Q1000091		1-
PL6002	LAMP	150mA	14V		T6.2 C-8 14V 150MA	Q1000091		1-

# Display Unit

REF.	DESCRIPTION	VALUE	WV	TOL.	MFGR'S DESIG	YAESU P/N	VERS.	LOT.
PL6003	LAMP	150mA	14V		T6.2 C-8 14V 150MA	Q1000091		1-
PL6004	LAMP	150mA	14V		T6.2 C-8 14V 150MA	Q1000091		1-
Q 6001	IC				LC7943D	G1092562		1-
Q 6002	IC				LC79400D	G1092563		1-
Q 6003	IC				LC79400D	G1092563		1-
Q 6004	IC				LC79400D	G1092563		1-
Q 6005	IC				LC79400D	G1092563		1-
Q 6006	IC				LA5310M	G1092564		1-
Q 6008	IC				MSM6255GS-BK	G1092565		1-
Q 6009	IC				TC7W32F(TE12L)	G1091951		1-
Q 6010	IC				HM62832HP-25	G1092585		1-
Q 6010	IC				HM62256BLSP-7	G1092704		2-
Q 6011	IC				TC74HC00AF TP2	G1091060		1-
Q 6013	TRANSISTOR				2SC4047-TA	G3340477		1-
Q 6014	IC				L78M05T-TL	G1091731		1-
Q 6015	IC				M51945BFP-600C	G1091990		1-
Q 6016	IC				M38027E8FP R0189	G1092710		1-
Q 6016	IC				M38027E8FP R0191	G1092713		2-
Q 6016	IC				M38027E8FP(NO PROG.)	G1092711		3-
Q 6016	IC				M38027E8FP R0210	G1092802		5-
Q 6017	TRANSISTOR				2SC4047-TA	G3340477		1-
Q 6018	TRANSISTOR				2SC4047-TA	G3340477		1-
Q 6022	TRANSISTOR				2SA1213Y TE12R	G3112137Y		1-
Q 6023	TRANSISTOR				2SC4047-TA	G3340477		1-
Q 6024	TRANSISTOR				2SA1213Y TE12R	G3112137Y		1-
Q 6025	IC				NJU7662M	G1092566		1-
Q 6026	IC				TC74HC138F TP2	G1091023		1-
Q 6027	IC				HM62832HP-25	G1092585		1-
Q 6027	IC				HM62256BLSP-7	G1092704		2-
Q 6028	IC				TC74HC245AF TP2	G1091274		1-
Q 6029	IC				TC74HC245AF TP2	G1091274		1-
Q 6030	IC				TC74HC245AF TP2	G1091274		1-
Q 6031	IC				TC74HC245AF TP2	G1091274		1-
Q 6032	IC				TC74HC245AF TP2	G1091274		1-
Q 6033	IC				TC74HC245AF TP2	G1091274		1-
Q 6034	IC				TC74HC245AF TP2	G1091274		1-
Q 6035	IC				TC74HC245AF TP2	G1091274		1-
Q 6036	IC				TC74HC245AF TP2	G1091274		1-
Q 6037	IC				TC74HC245AF TP2	G1091274		1-
Q 6038	TRANSISTOR				BN1A4P	G3090075		4-
R 6001	CHIP RES.	1Mohm	1/10W	5%	RMC1/10T 105J	J24205105		1-
R 6002	CHIP RES.	10kohm	1/10W	5%	RMC1/10T 103J	J24205103		1-
R 6003	CHIP RES.	10kohm	1/10W	5%	RMC1/10T 103J	J24205103		1-
R 6004	CHIP RES.	8.2kohm	1/10W	5%	RMC1/10T 822J	J24205822		1-
R 6005	CHIP RES.	1.5kohm	1/10W	5%	RMC1/10T 152J	J24205152		1-
R 6007	CHIP RES.	1kohm	1/10W	5%	RMC1/10T 102J	J24205102		1-
R 6008	CHIP RES.	1kohm	1/10W	5%	RMC1/10T 102J	J24205102		1-
R 6009	CHIP RES.	1kohm	1/10W	5%	RMC1/10T 102J	J24205102		1-
R 6010	CHIP RES.	1kohm	1/10W	5%	RMC1/10T 102J	J24205102		1-
R 6011	CHIP RES.	4.7kohm	1/10W	5%	RMC1/10T 472J	J24205472		1-
R 6011	CHIP RES.	0ohm	1/10W	5%	RMC1/10T 000J	J24205000		5-
R 6012	CHIP RES.	4.7kohm	1/10W	5%	RMC1/10T 472J	J24205472		1-
R 6012	CHIP RES.	0ohm	1/10W	5%	RMC1/10T 000J	J24205000		5-
R 6013	CHIP RES.	10kohm	1/10W	5%	RMC1/10T 103J	J24205103		1-
R 6014	CHIP RES.	10kohm	1/10W	5%	RMC1/10T 103J	J24205103		1-
R 6015	CHIP RES.	10kohm	1/10W	5%	RMC1/10T 103J	J24205103		1-
R 6016	CHIP RES.	10kohm	1/10W	5%	RMC1/10T 103J	J24205103		1-
R 6017	CHIP RES.	10kohm	1/10W	5%	RMC1/10T 103J	J24205103		1-
R 6018	CHIP RES.	10kohm	1/10W	5%	RMC1/10T 103J	J24205103		1-
R 6019	CHIP RES.	10kohm	1/10W	5%	RMC1/10T 103J	J24205103		1-

# Display Unit

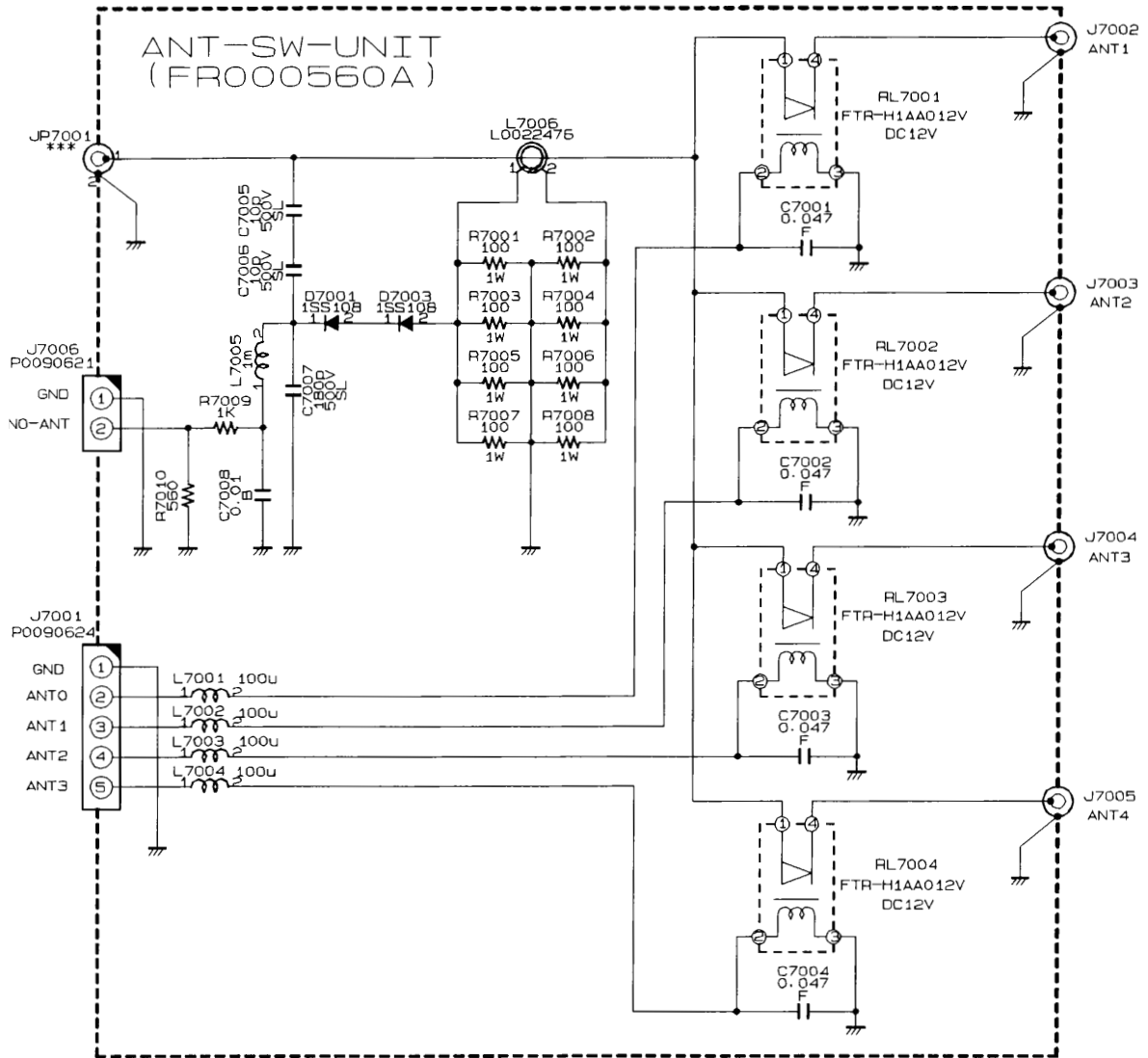
REF.	DESCRIPTION	VALUE	WV	TOL.	MFGR'S DESIG	YAESU P/N	VERS.	LOT.
R 6020	CHIP RES.	10kohm	1/10W	5%	RMC1/10T 103J	J24205103		1-
R 6021	CHIP RES.	10kohm	1/10W	5%	RMC1/10T 103J	J24205103		1-
R 6022	CHIP RES.	10kohm	1/10W	5%	RMC1/10T 103J	J24205103		1-
R 6023	CHIP RES.	10kohm	1/10W	5%	RMC1/10T 103J	J24205103		1-
R 6024	CHIP RES.	10kohm	1/10W	5%	RMC1/10T 103J	J24205103		1-
R 6025	CHIP RES.	10kohm	1/10W	5%	RMC1/10T 103J	J24205103		1-
R 6028	CHIP RES.	10kohm	1/10W	5%	RMC1/10T 103J	J24205103		1-
R 6029	CHIP RES.	2.2kohm	1/10W	5%	RMC1/10T 222J	J24205222		1-
R 6030	METAL FILM RES.	10ohm	3W	5%	ERG-3SJ100 10	J22359002		1-
R 6031	CHIP RES.	10kohm	1/10W	5%	RMC1/10T 103J	J24205103		1-
R 6032	CHIP RES.	2.2kohm	1/10W	5%	RMC1/10T 222J	J24205222		1-
R 6033	CARBON FILM RES.	82ohm	1/6W	5%	RD16PJ820 82	J01225820		3-
S 6001	TACT SWITCH				SKHHAM	N5090064		1-
S 6002	TACT SWITCH				SKHHAM	N5090064		1-
S 6003	TACT SWITCH				SKHHAM	N5090064		1-
S 6004	TACT SWITCH				SKHHAM	N5090064		1-
S 6005	TACT SWITCH				SKHHAM	N5090064		1-
S 6006	TACT SWITCH				SKHHAM	N5090064		1-
S 6007	TACT SWITCH				SKHHAM	N5090064		1-
S 6008	TACT SWITCH				SKHHAM	N5090064		1-
S 6009	TACT SWITCH				SKHHAM	N5090064		1-
S 6010	TACT SWITCH				SKHHAM	N5090064		1-
S 6011	TACT SWITCH				SKHHAM	N5090064		1-
S 6012	TACT SWITCH				SKHHAM	N5090064		1-
S 6013	TACT SWITCH				SKHHAM	N5090064		1-
VR6001	POT.				RK09K1130 L=20 100KB	J60800230		1-
X 6001	XTAL	7.3728MHz			7.3728MHz	H0103090		1-
	LCD HOLDER					RA0027700		1-
	LIGHT GUIDE					RA0027800		1-
	INTER CONNECTOR					RA0027900		1-
	SHEET					RA0027500		1-
	SHEET					RA0027600		1-
	SHEET					RA0051900		1-
	COLOR FILTER					RA004970A		1-
	RUBBER SHEET					RA0045200		1-
	RUBBER SHEET					RA004520A		3-
	SHEET					RA0074800		3-

# Display Unit

---

*Notes:*

## Circuit Diagram

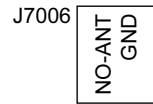
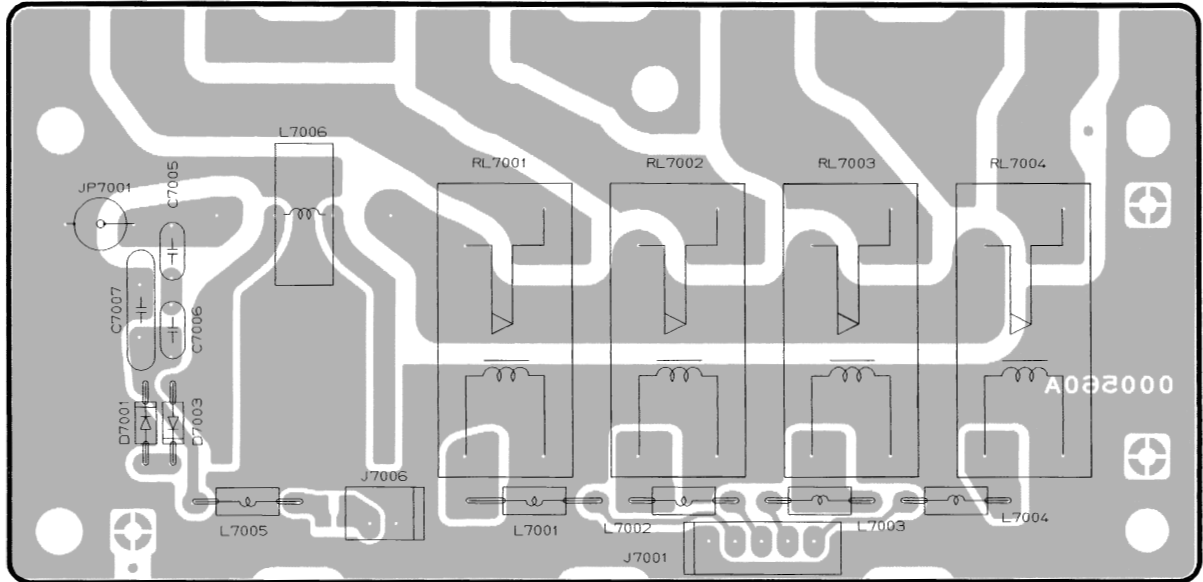


# ANT-SW Unit

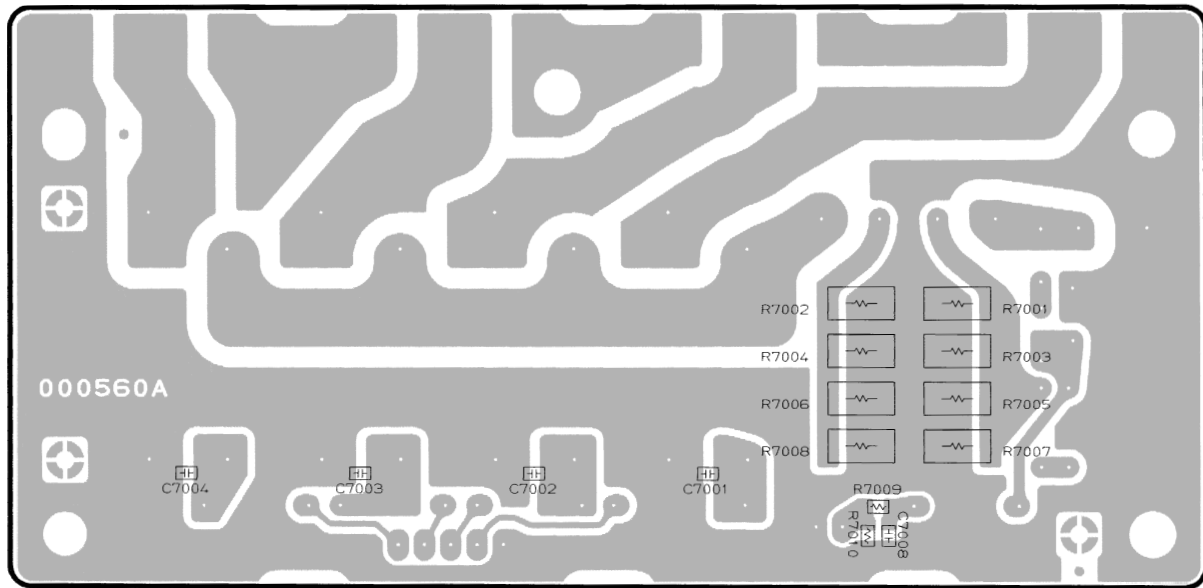
---

*Notes:*

## Parts Layout



Component Side



Chip Side

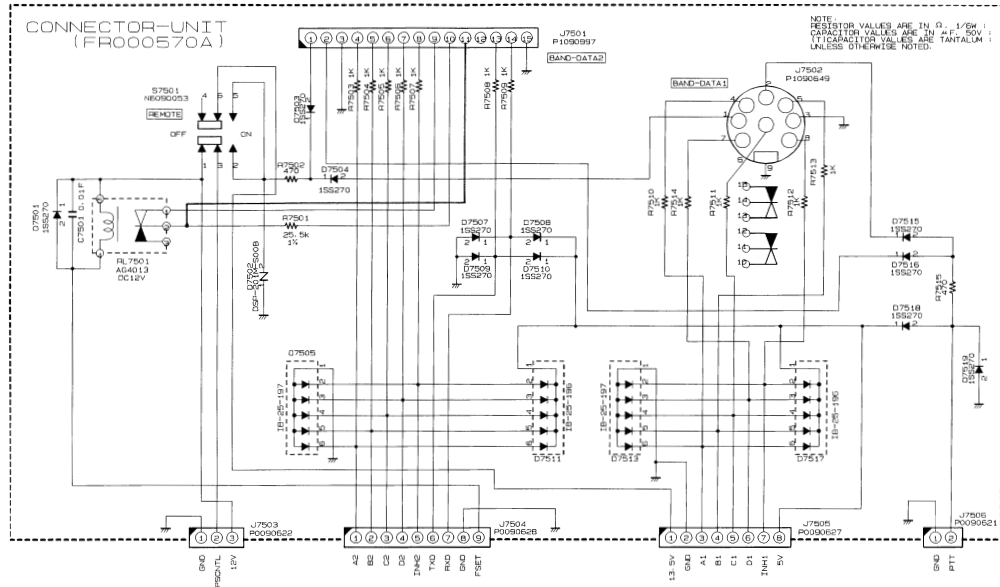
# ANT-SW Unit

## Parts List

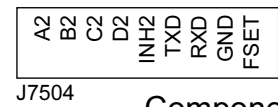
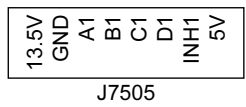
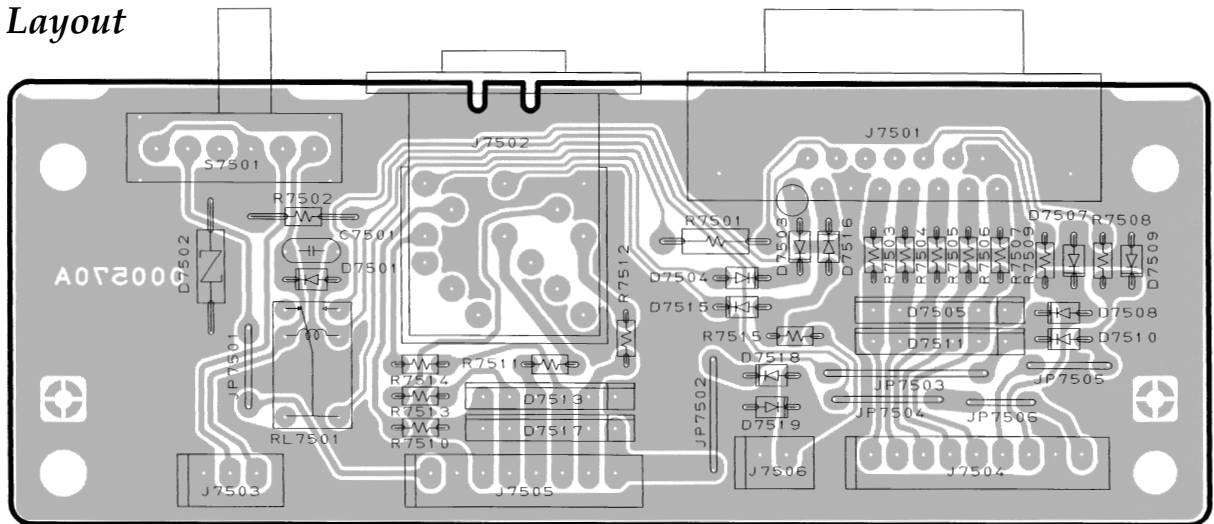
REF.	DESCRIPTION	VALUE	WV	TOL.	MFGR'S DESIG	YAESU P/N	VERS.	LOT.	LAY ADR
*** ANT-SW UNIT ***									
PCB with Components						CB0090001			
Printed Circuit Board						FR000560A			
C 7001	CHIP CAP.	0.047uF	50V	F	GRM40F473Z50PT	K22171008			
C 7002	CHIP CAP.	0.047uF	50V	F	GRM40F473Z50PT	K22171008			
C 7003	CHIP CAP.	0.047uF	50V	F	GRM40F473Z50PT	K22171008			
C 7004	CHIP CAP.	0.047uF	50V	F	GRM40F473Z50PT	K22171008			
C 7005	CERAMIC CAP.	10pF	500V	SL	DD06SL100D500	K00275100			
C 7006	CERAMIC CAP.	10pF	500V	SL	DD06SL100D500	K00275100			
C 7007	CERAMIC CAP.	180pF	500V	SL	DD12SL181J500	K00275181			
C 7008	CHIP CAP.	0.01uF	50V	B	GRM40B103M50PT	K22170817			
D 7001	DIODE				1SS108	G2090377			
D 7003	DIODE				1SS108	G2090377			
J 7001	CONNECTOR				SC25-05WS	P0090624			
J 7002	CONNECTOR				MDR-2	P1090984			
J 7003	CONNECTOR				MDR-2	P1090984			
J 7004	CONNECTOR				MDR-2	P1090984			
J 7005	CONNECTOR				MDR-2	P1090984			
J 7006	CONNECTOR				SC25-02WS	P0090621			
JP7001	WIRE ASSY				RED580 BNC	T9318027B			
L 7001	M.RFC	100uH			LAL03TA101K	L1790107			
L 7002	M.RFC	100uH			LAL03TA101K	L1790107			
L 7003	M.RFC	100uH			LAL03TA101K	L1790107			
L 7004	M.RFC	100uH			LAL03TA101K	L1790107			
L 7005	M.RFC	1mH			LAL03TA102K	L1790119			
L 7006	TOROIDAL COIL	39uH			39U 5B TRB12X6X4	L0022476			
R 7001	CHIP RES.	100ohm	1W	5%	RMC1 101JTE	J24305101			
R 7002	CHIP RES.	100ohm	1W	5%	RMC1 101JTE	J24305101			
R 7003	CHIP RES.	100ohm	1W	5%	RMC1 101JTE	J24305101			
R 7004	CHIP RES.	100ohm	1W	5%	RMC1 101JTE	J24305101			
R 7005	CHIP RES.	100ohm	1W	5%	RMC1 101JTE	J24305101			
R 7006	CHIP RES.	100ohm	1W	5%	RMC1 101JTE	J24305101			
R 7007	CHIP RES.	100ohm	1W	5%	RMC1 101JTE	J24305101			
R 7008	CHIP RES.	100ohm	1W	5%	RMC1 101JTE	J24305101			
R 7009	CHIP RES.	1kohm	1/10W	5%	RMC1/10T 102J	J24205102			
R 7010	CHIP RES.	560ohm	1/10W	5%	RMC1/10T 561J	J24205561			
RL7001	RELAY		DC12V		FTR-H1AA012V DC12V	M1190146			
RL7002	RELAY		DC12V		FTR-H1AA012V DC12V	M1190146			
RL7003	RELAY		DC12V		FTR-H1AA012V DC12V	M1190146			
RL7004	RELAY		DC12V		FTR-H1AA012V DC12V	M1190146			



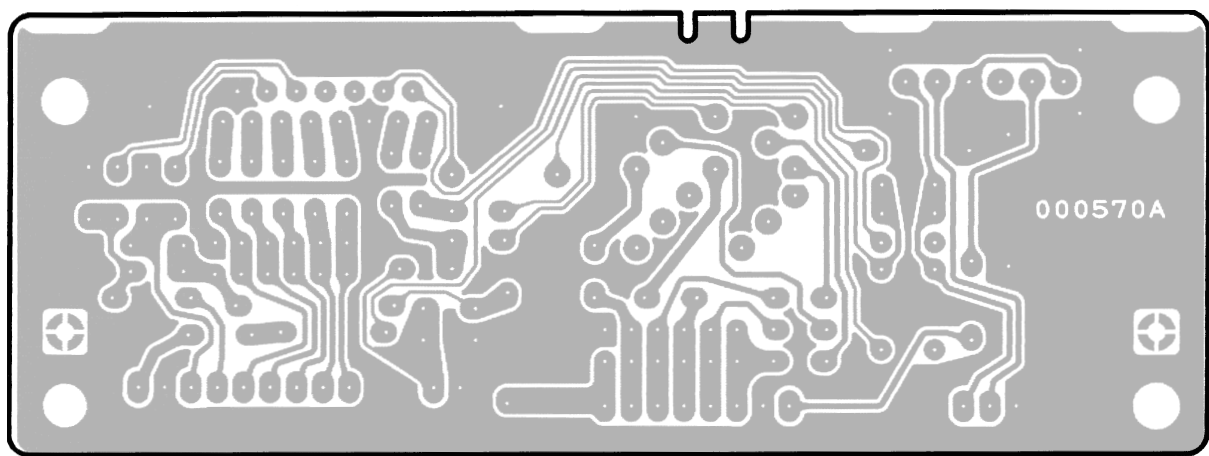
## Circuit Diagram



## Parts Layout



Component Side



Solder Side

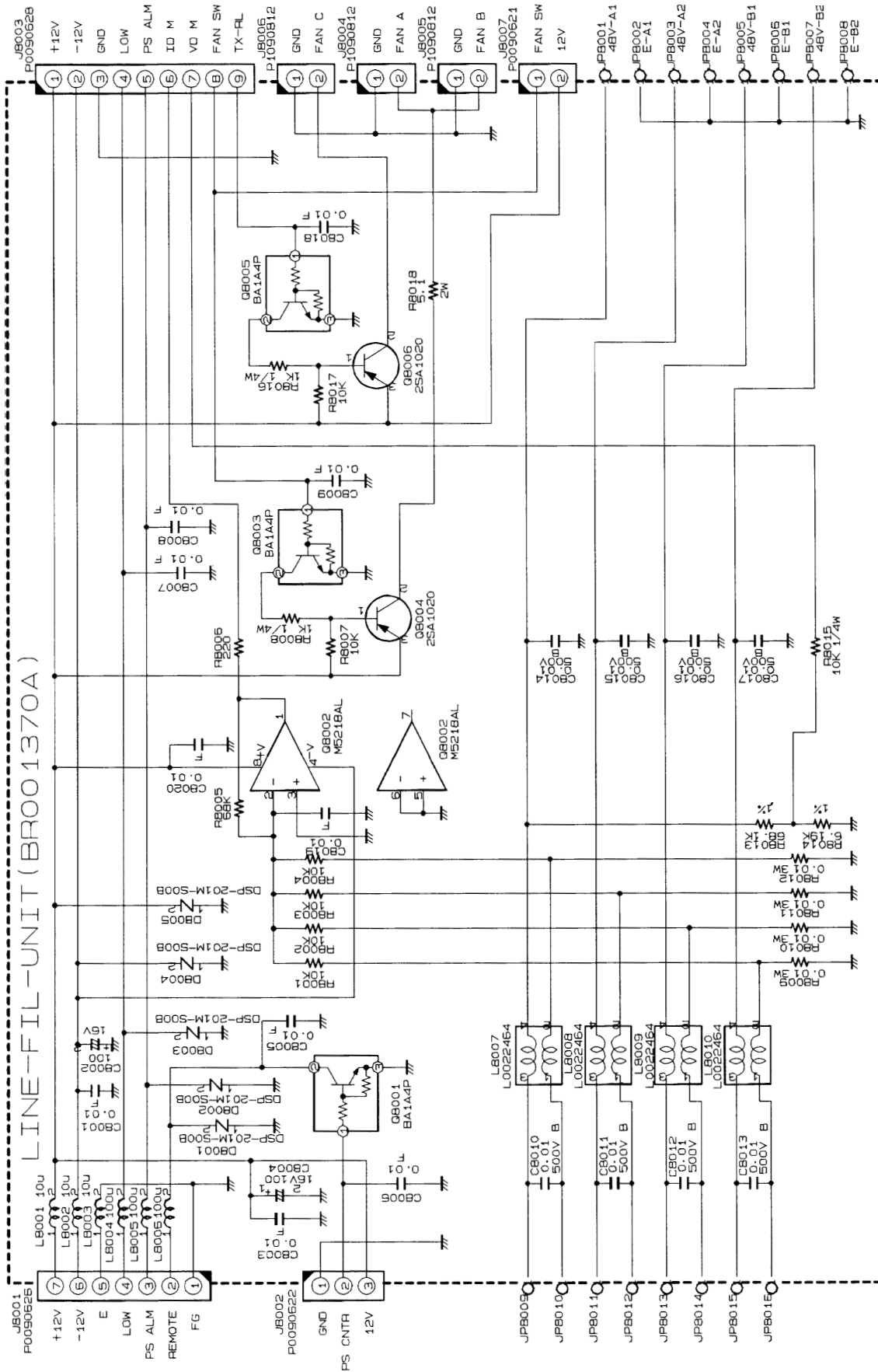
# Connector Unit

## Parts List

REF.	DESCRIPTION	VALUE	WV	TOL.	MFGR'S DESIG	YAESU P/N	VERS.	LOT.	LAY ADR
*** CONNECTOR UNIT ***									
PCB with Components						CB0091001			
Printed Circuit Board						FR000570A			
C 7501	CERAMIC CAP.	0.01uF	50V	F	DD106F103Z50	K13179008			
D 7501	DIODE				1SS270TJ	G2060004			
D 7502	SURGE ABSORBER				DSP201M-S00B	Q9000375			
D 7503	DIODE				1SS270TJ	G2060004			
D 7504	DIODE				1SS270TJ	G2060004			
D 7505	DIODE ARRAY				IB-25-197	G2090700			
D 7507	DIODE				1SS270TJ	G2060004			
D 7510	DIODE				1SS270TJ	G2060004			
D 7511	DIODE ARRAY				IB-25-196	G2090699			
D 7513	DIODE ARRAY				IB-25-197	G2090700			
D 7515	DIODE				1SS270TJ	G2060004			
D 7516	DIODE				1SS270TJ	G2060004			
D 7517	DIODE ARRAY				IB-25-196	G2090699			
D 7518	DIODE				1SS270TJ	G2060004			
D 7519	DIODE				1SS270TJ	G2060004			
J 7501	CONNECTOR				1210-012-15S-AA	P1090997			
J 7502	CONNECTOR				TCS5073-59-4151	P1090649			
J 7503	CONNECTOR				SC25-03WS	P0090622			
J 7504	CONNECTOR				SC25-09WS	P0090628			
J 7505	CONNECTOR				SC25-08WS	P0090627			
J 7506	CONNECTOR				SC25-02WS	P0090621			
R 7501	METAL FILM RES.	25.5kohm	1/4W	1%	REO-25CHF2552	J20249231			
R 7502	CARBON FILM RES.	470ohm	1/6W	5%	RD16TPJ471 470	J07225471			
R 7503	CARBON FILM RES.	1kohm	1/6W	5%	RD16TPJ102 1K	J07225102			
R 7504	CARBON FILM RES.	1kohm	1/6W	5%	RD16TPJ102 1K	J07225102			
R 7505	CARBON FILM RES.	1kohm	1/6W	5%	RD16TPJ102 1K	J07225102			
R 7506	CARBON FILM RES.	1kohm	1/6W	5%	RD16TPJ102 1K	J07225102			
R 7507	CARBON FILM RES.	1kohm	1/6W	5%	RD16TPJ102 1K	J07225102			
R 7510	CARBON FILM RES.	1kohm	1/6W	5%	RD16TPJ102 1K	J07225102			
R 7511	CARBON FILM RES.	1kohm	1/6W	5%	RD16TPJ102 1K	J07225102			
R 7512	CARBON FILM RES.	1kohm	1/6W	5%	RD16TPJ102 1K	J07225102			
R 7513	CARBON FILM RES.	1kohm	1/6W	5%	RD16TPJ102 1K	J07225102			
R 7514	CARBON FILM RES.	1kohm	1/6W	5%	RD16TPJ102 1K	J07225102			
R 7515	CARBON FILM RES.	470ohm	1/6W	5%	RD16TPJ471 470	J07225471			
R 7516	CARBON FILM RES.	10kohm	1/6W	5%	RD16TPJ103 10K	J07225103			
R 7517	CARBON FILM RES.	10kohm	1/6W	5%	RD16TPJ103 10K	J07225103			
RL7501	RELAY		DC12V		AG4013 DC12V	M1190090			
S 7501	SLIDE SWITCH				HSW0273-1-220	N6090053			
Z 7501	PWB HOLDER					RA0038000			

# Line-Filter Unit

## Circuit Diagram



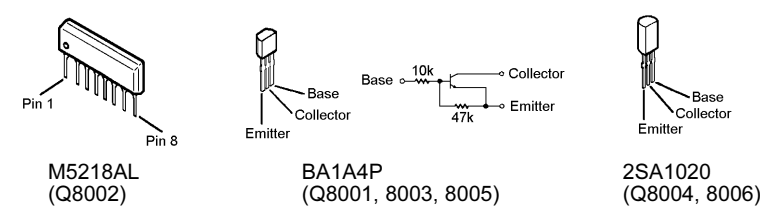
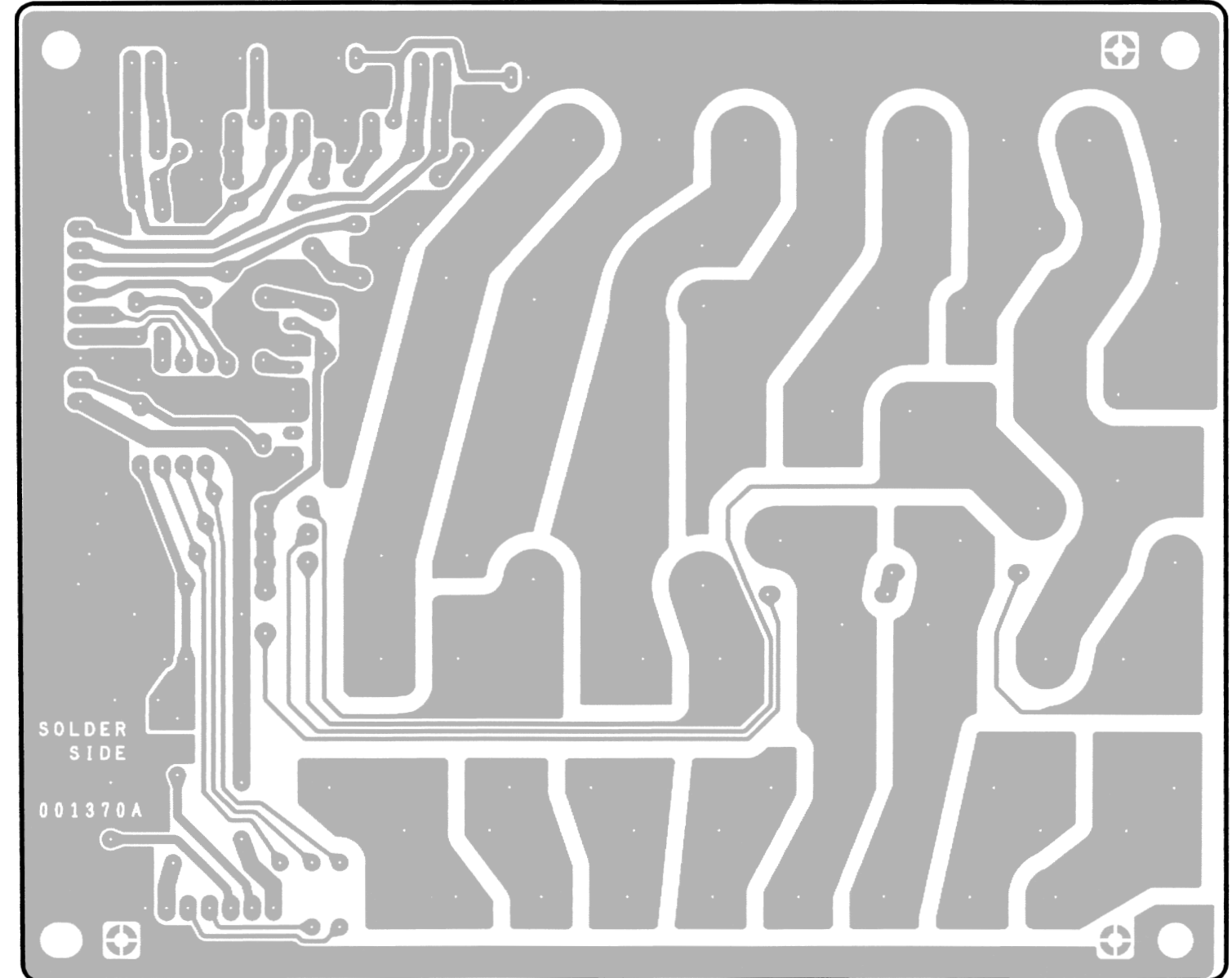
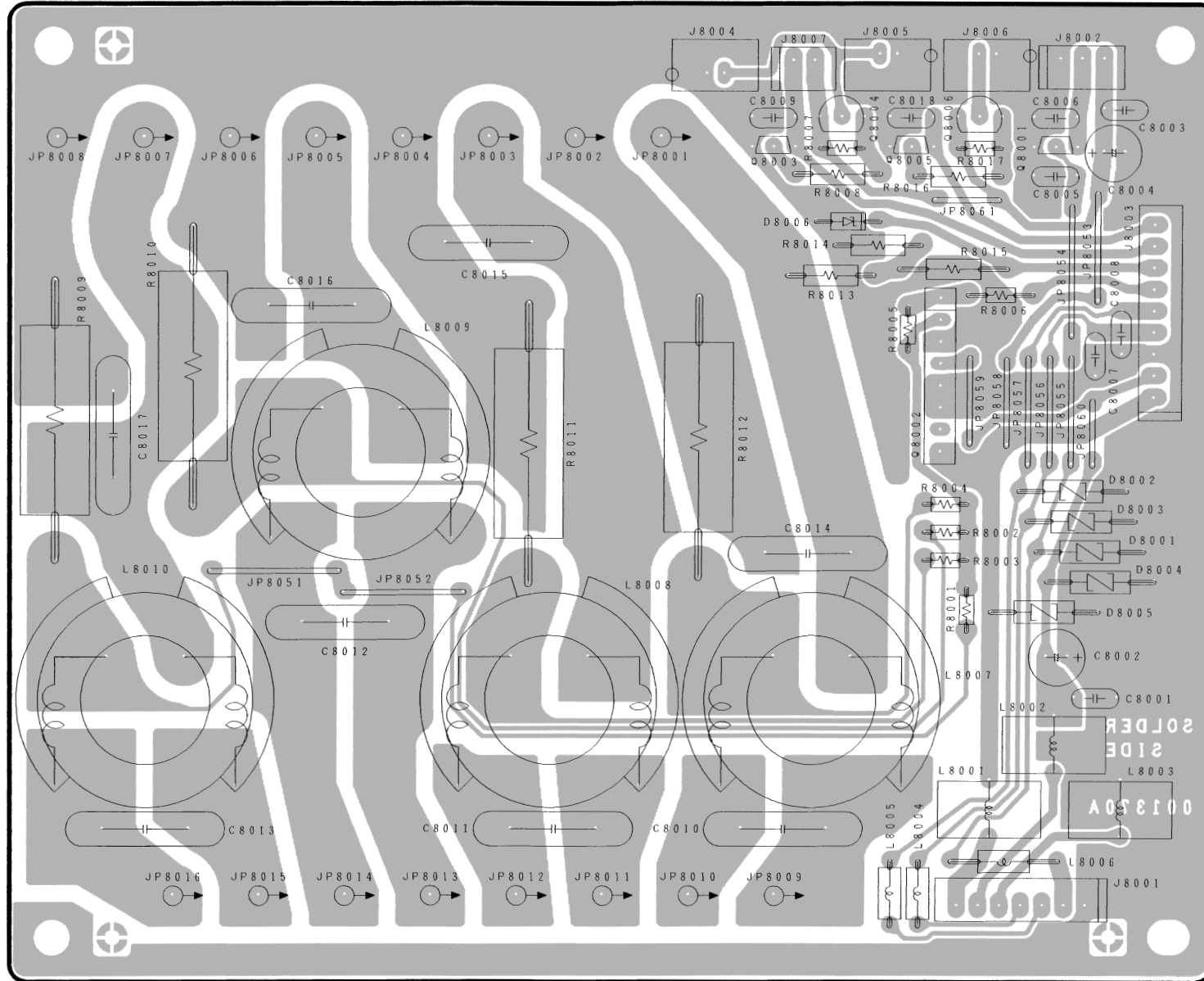
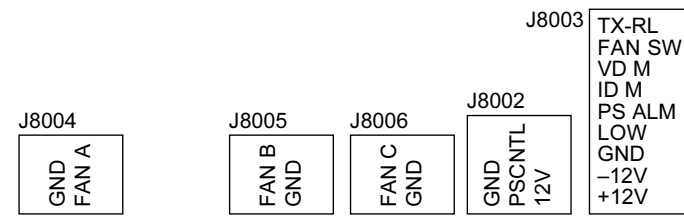
NOTE:  
 RESISTOR VALUES ARE IN  $\Omega$ ,  $1/8W$  ;  
 CAPACITOR VALUES ARE IN  $\mu F$ ,  $50V$  ;  
 ELECTROLYTIC CAPACITOR VALUES ARE IN  $\mu F$ ,  $16V$  ;  
 CAPACITOR VALUES ARE IN  $\mu F$  ;  
 INDUCTOR VALUES ARE IN  $\mu H$  ;  
 UNLESS OTHERWISE NOTED.

# Line-Filter Unit

---

*Notes:*

Parts Layout



Component Side

Solder Side

# Line-Filter Unit

---

*Notes:*

# Line-Filter Unit

## Parts List

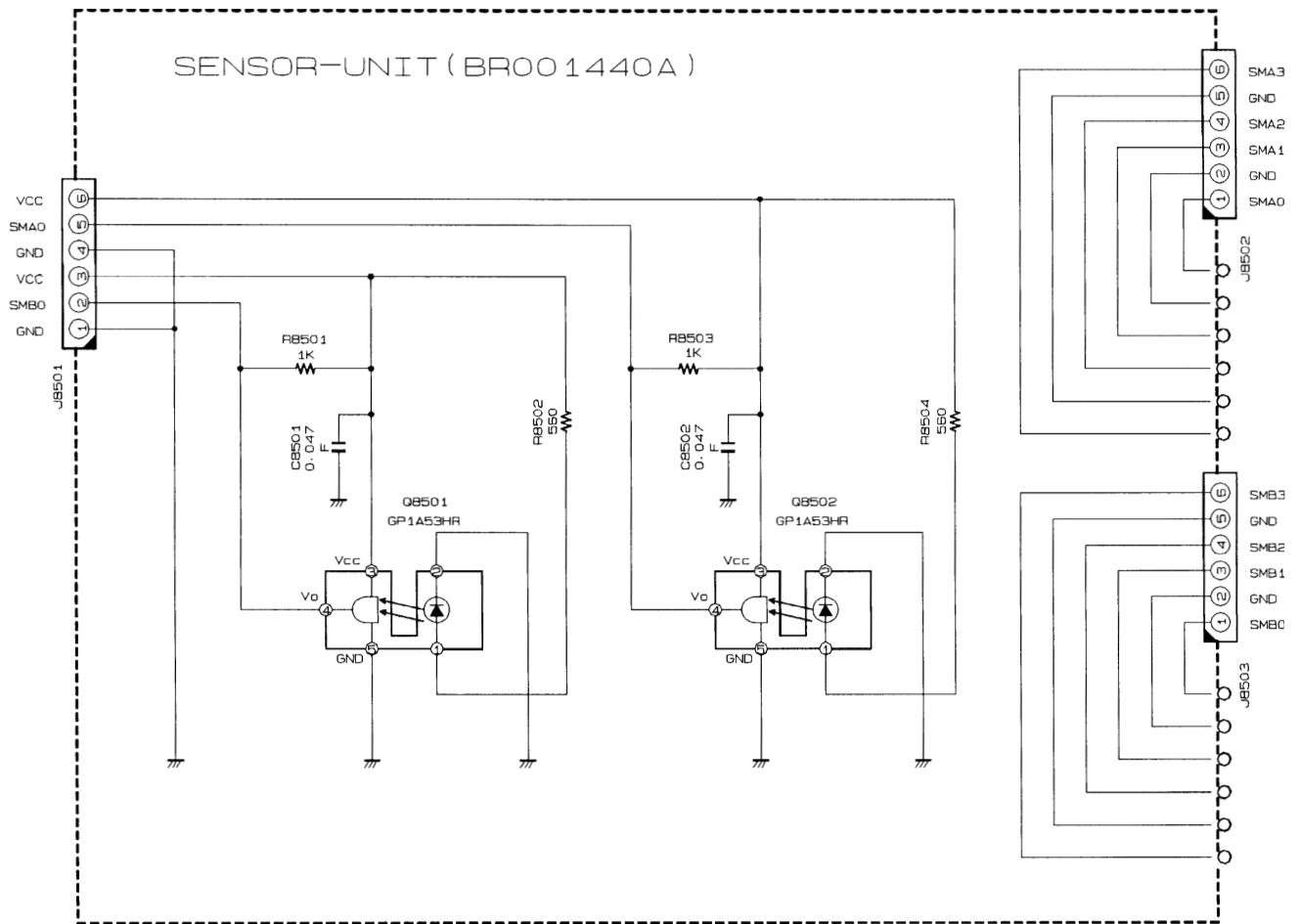
REF.	DESCRIPTION	VALUE	WV	TOL.	MFGR'S DESIG	YAESU P/N	VERS.	LOT.
*** LINE-FIL UNIT ***								
PCB with Components						CB0266001		
Printed Circuit Board						FR001370A		1-
C 8001	CERAMIC CAP.	0.01uF	50V	F	DD106F103Z50	K13179008		1-
C 8002	AL.ELECTRO.CAP.	100uF	16V		RC2-16V101MS(6X7)	K40129038		1-
C 8003	CERAMIC CAP.	0.01uF	50V	F	DD106F103Z50	K13179008		1-
C 8004	AL.ELECTRO.CAP.	100uF	16V		RC2-16V101MS(6X7)	K40129038		1-
C 8005	CERAMIC CAP.	0.01uF	50V	F	DD106F103Z50	K13179008		1-
C 8006	CERAMIC CAP.	0.01uF	50V	F	DD106F103Z50	K13179008		1-
C 8007	CERAMIC CAP.	0.01uF	50V	F	DD106F103Z50	K13179008		1-
C 8008	CERAMIC CAP.	0.01uF	50V	F	DD106F103Z50	K13179008		1-
C 8009	CERAMIC CAP.	0.01uF	50V	F	DD106F103Z50	K13179008		1-
C 8010	CERAMIC CAP.	0.01uF	500V	B	ECKD2H103KB5	K10279026		1-
C 8011	CERAMIC CAP.	0.01uF	500V	B	ECKD2H103KB5	K10279026		1-
C 8012	CERAMIC CAP.	0.01uF	500V	B	ECKD2H103KB5	K10279026		1-
C 8013	CERAMIC CAP.	0.01uF	500V	B	ECKD2H103KB5	K10279026		1-
C 8014	CERAMIC CAP.	0.01uF	500V	B	ECKD2H103KB5	K10279026		1-
C 8015	CERAMIC CAP.	0.01uF	500V	B	ECKD2H103KB5	K10279026		1-
C 8016	CERAMIC CAP.	0.01uF	500V	B	ECKD2H103KB5	K10279026		1-
C 8017	CERAMIC CAP.	0.01uF	500V	B	ECKD2H103KB5	K10279026		1-
C 8018	CERAMIC CAP.	0.01uF	50V	F	DD106F103Z50	K13179008		1-
C 8019	CERAMIC CAP.	0.01uF	50V	F	DD106F103Z50	K13179008		2-
C 8020	CERAMIC CAP.	0.01uF	50V	F	DD106F103Z50	K13179008		2-
D 8001	SURGE ABSORBER				DSP201M-S00B	Q9000375		1-
D 8002	SURGE ABSORBER				DSP201M-S00B	Q9000375		1-
D 8003	SURGE ABSORBER				DSP201M-S00B	Q9000375		1-
D 8004	SURGE ABSORBER				DSP201M-S00B	Q9000375		1-
D 8005	SURGE ABSORBER				DSP201M-S00B	Q9000375		1-
J 8001	CONNECTOR				SC25-07WS	P0090626		1-
J 8002	CONNECTOR				SC25-03WS	P0090622		1-
J 8003	CONNECTOR				SC25-09WS	P0090628		1-
J 8004	CONNECTOR				SBRK 2S-1	P1090812		1-
J 8005	CONNECTOR				SBRK 2S-1	P1090812		1-
J 8006	CONNECTOR				SBRK 2S-1	P1090812		1-
J 8007	CONNECTOR				SC25-02WS	P0090621		1-
JP8001	WIRE ASSY				BRN180 1.25/SIN	T9318015		1-
JP8002	WIRE ASSY				GRN180 1.25/SIN	T9318016		1-
JP8002	WIRE ASSY				RED 180 1.25/STN	T9318074		9-
JP8003	WIRE ASSY				RED250 1.25/SIN	T9318017		1-
JP8003	WIRE ASSY				ORG 250 1.25/STN	T9318075		9-
JP8004	WIRE ASSY				BLU250 1.25/SIN	T9318018		1-
JP8004	WIRE ASSY				YEL 250 1.25/STN	T9318076		9-
JP8005	WIRE ASSY				ORG320 1.25/SIN	T9318019		1-
JP8005	WIRE ASSY				GRN 320 1.25/STN	T9318077		9-
JP8006	WIRE ASSY				VIO320 1.25/SIN	T9318020		1-
JP8006	WIRE ASSY				BLU 320 1.25/STN	T9318078		9-
JP8007	WIRE ASSY				YEL360 1.25/SIN	T9318021		1-
JP8007	WIRE ASSY				BIO 360 1.25/STN	T9318079		9-
JP8008	WIRE ASSY				GRA360 1.25/SIN	T9318022		1-
JP8009	WIRE ASSY				A0897	T9206666		1-
JP8009	WIRE ASSY				A0897	T9206666A		5-
L 8001	TOROIDAL COIL	10uH			10U 3A EI9.3	L0022120		1-
L 8002	TOROIDAL COIL	10uH			10U 3A EI9.3	L0022120		1-
L 8003	TOROIDAL COIL	10uH			10U 3A EI9.3	L0022120		1-
L 8004	M.RFC	100uH			LAL03NA101K	L1190218		1-
L 8005	M.RFC	100uH			LAL03NA101K	L1190218		1-
L 8006	M.RFC	100uH			LAL03NA101K	L1190218		1-
L 8007	TOROIDAL COIL				D12A TR25X15X12	L0022464		1-
L 8008	TOROIDAL COIL				D12A TR25X15X12	L0022464		1-
L 8009	TOROIDAL COIL				D12A TR25X15X12	L0022464		1-

# Line-Filter Unit

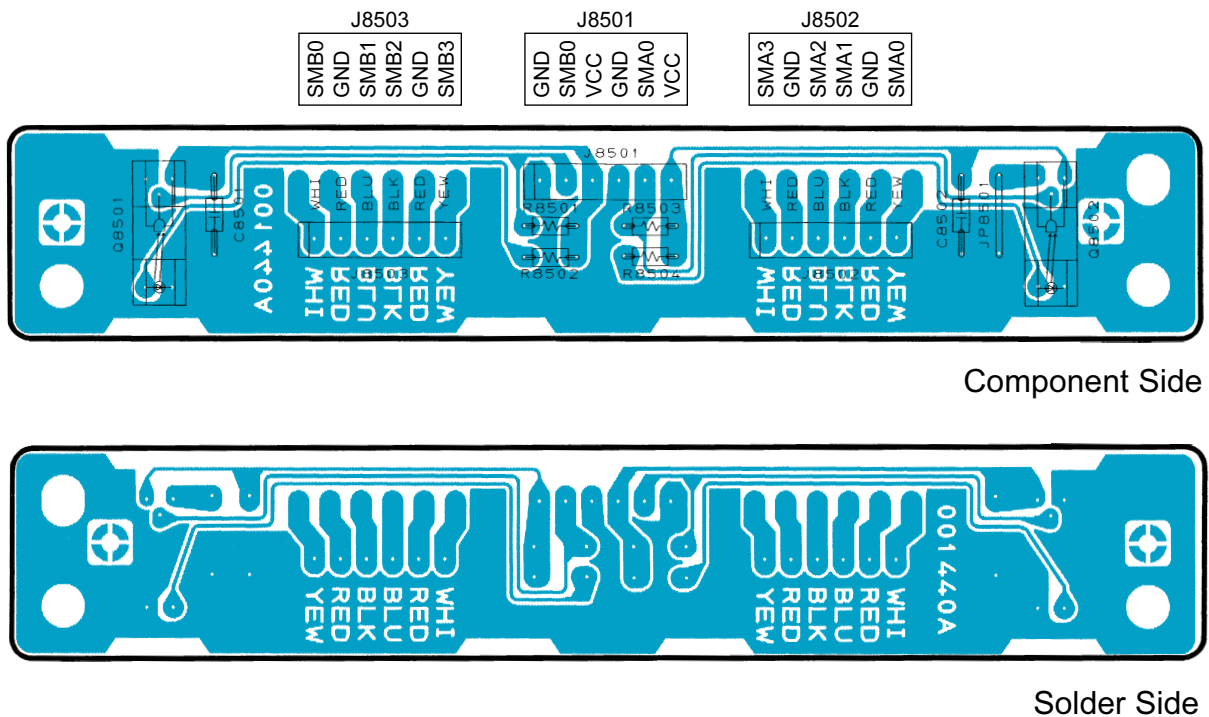
REF.	DESCRIPTION	VALUE	WV	TOL.	MFGR'S DESIG	YAESU P/N	VERS.	LOT.
L 8010	TOROIDAL COIL				D12A TR25X15X12	L0022464		1-
Q 8001	TRANSISTOR				BA1A4P	G3090079		1-
Q 8002	IC				M5218AL	G1091140		1-
Q 8003	TRANSISTOR				BA1A4P	G3090079		1-
Q 8004	TRANSISTOR				2SA1020	G3110200		1-
Q 8005	TRANSISTOR				BA1A4P	G3090079		1-
Q 8006	TRANSISTOR				2SA1020	G3110200		1-
R 8001	CARBON FILM RES.	10kohm	1/6W	5%	RD16PJ103 10K	J01225103		1-
R 8002	CARBON FILM RES.	10kohm	1/6W	5%	RD16PJ103 10K	J01225103		1-
R 8003	CARBON FILM RES.	10kohm	1/6W	5%	RD16PJ103 10K	J01225103		1-
R 8004	CARBON FILM RES.	10kohm	1/6W	5%	RD16PJ103 10K	J01225103		1-
R 8005	CARBON FILM RES.	68kohm	1/6W	5%	RD16TPJ683 68K	J07225683		1-
R 8006	CARBON FILM RES.	220ohm	1/6W	5%	RD16PJ221 220	J01225221		1-
R 8007	CARBON FILM RES.	10kohm	1/6W	5%	RD16PJ103 10K	J01225103		1-
R 8008	CARBON FILM RES.	1kohm	1/4W	5%	RD14TJ102 1K	J01245102		1-
R 8009	CEMENT RES.	0.01ohm	3W	10%	3W 0.01-OHM 10%	J30359001		1-
R 8010	CEMENT RES.	0.01ohm	3W	10%	3W 0.01-OHM 10%	J30359001		1-
R 8011	CEMENT RES.	0.01ohm	3W	10%	3W 0.01-OHM 10%	J30359001		1-
R 8012	CEMENT RES.	0.01ohm	3W	10%	3W 0.01-OHM 10%	J30359001		1-
R 8013	METAL FILM RES.	68.1kohm	1/4W	1%	REO-25CHF6812	J20249233		1-
R 8014	METAL FILM RES.	6.19kohm	1/4W	1%	REO-25CHF6191	J20249232		1-
R 8015	CARBON FILM RES.	10kohm	1/4W	5%	RD14TJ103 10K	J01245103		1-
R 8016	CARBON FILM RES.	1kohm	1/4W	5%	RD14TJ102 1K	J01245102		1-
R 8017	CARBON FILM RES.	10kohm	1/6W	5%	RD16PJ103 10K	J01225103		1-
R 8018	METAL FILM RES.	5.1ohm	2W	5%	ERX-2SJ5R1 5.1	J22339008		1-



## Circuit Diagram



## Parts Layout

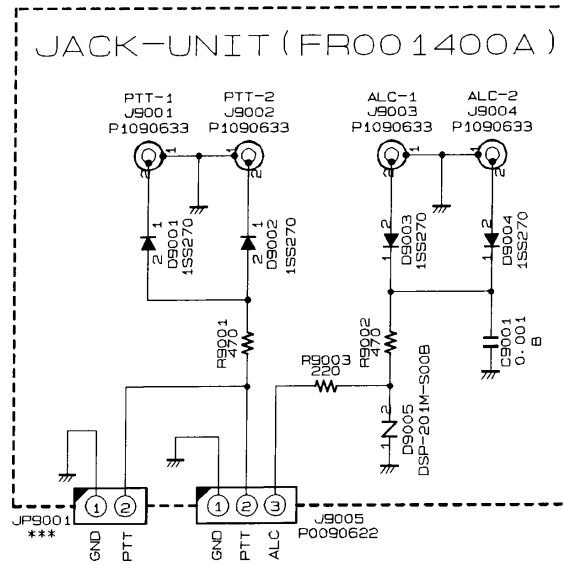


# Sensor Unit

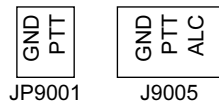
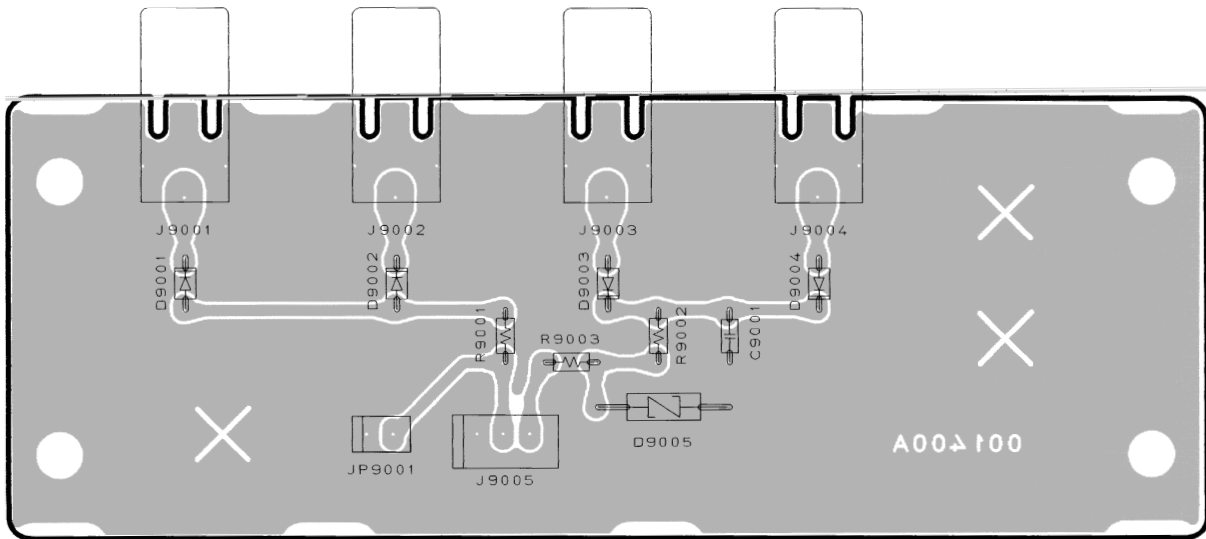
## Parts List

REF.	DESCRIPTION	VALUE	WV	TOL.	MFGR'S DESIG	YAESU P/N	VERS.	LOT.
*** SENSOR UNIT ***								
PCB with Components						CB0267001		
Printed Circuit Board						FR001440A		1-
C 8501	CERAMIC CAP.	0.047uF	50V	F	UP050F473Z-A-B	K28179002		1-
C 8502	CERAMIC CAP.	0.047uF	50V	F	UP050F473Z-A-B	K28179002		1-
J 8501	WIRE ASSY				A0897	T9206660		1-
J 8501	WIRE ASSY				A0897	T9206660A		5-
J 8502	WIRE ASSY				A0897	T9206661		1-
J 8502	WIRE ASSY				A0897	T9206661A		5-
J 8503	WIRE ASSY				A0897	T9206662		1-
J 8503	WIRE ASSY				A0897	T9206662A		5-
Q 8501	PHOTO INTERRUPTOR				GP1A53HR	G0090028		1-
Q 8502	PHOTO INTERRUPTOR				GP1A53HR	G0090028		1-
R 8501	CARBON FILM RES.	1kohm	1/6W	5%	RD16TPJ102 1K	J07225102		1-
R 8502	CARBON FILM RES.	560ohm	1/6W	5%	RD16TPJ561 560	J07225561		1-
R 8503	CARBON FILM RES.	1kohm	1/6W	5%	RD16TPJ102 1K	J07225102		1-
R 8504	CARBON FILM RES.	560ohm	1/6W	5%	RD16TPJ561 560	J07225561		1-

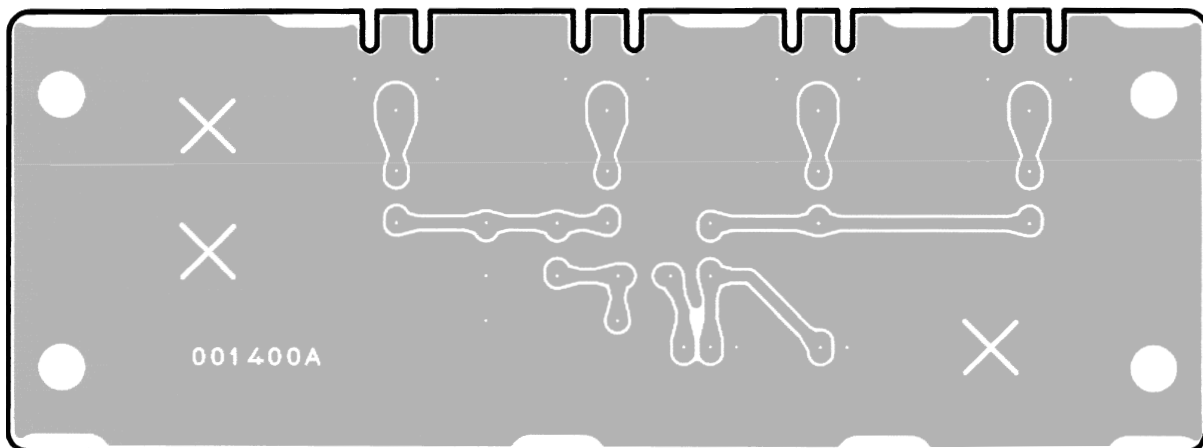
## Circuit Diagram



## Parts Layout



Component Side



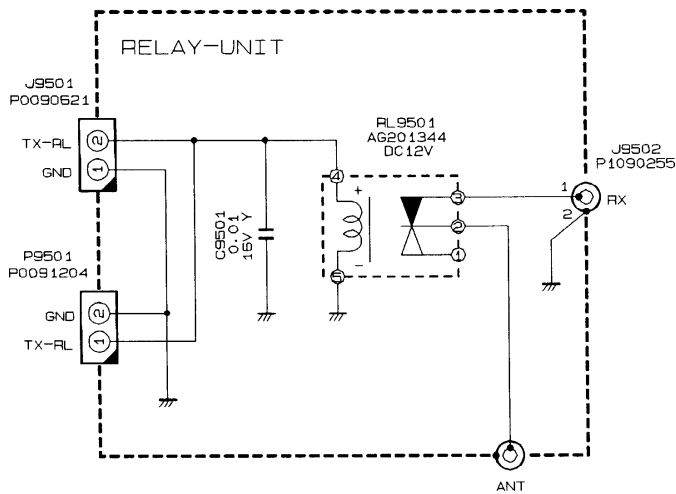
Solder Side

# Jack Unit

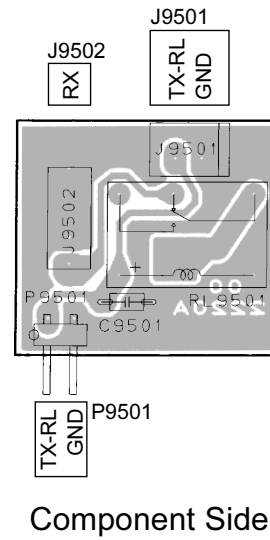
## Parts List

REF.	DESCRIPTION	VALUE	WV	TOL.	MFGR'S DESIG	YAESU P/N	VERS.	LOT.	LAY ADR
*** JACK UNIT ***									
PCB with Components						CB0270001			
Printed Circuit Board						FR001400A			
C 9001	CERAMIC CAP.	0.001uF	50V	B	UP050B102K-A-B	K28179001			
D 9001	DIODE				1SS270TJ	G2060004			
D 9002	DIODE				1SS270TJ	G2060004			
D 9003	DIODE				1SS270TJ	G2060004			
D 9004	DIODE				1SS270TJ	G2060004			
D 9005	SURGE ABSORBER				DSP201M-S00B	Q9000375			
J 9001	CONNECTOR				JPJ2545-01-510	P1090633			
J 9002	CONNECTOR				JPJ2545-01-510	P1090633			
J 9003	CONNECTOR				JPJ2545-01-510	P1090633			
J 9004	CONNECTOR				JPJ2545-01-510	P1090633			
J 9005	CONNECTOR				SC25-03WS	P0090622			
JP9001	WIRE ASSY				A0897	T9206664			
R 9001	CARBON FILM RES.	470ohm	1/6W	5%	RD16TPJ471 470	J07225471			
R 9002	CARBON FILM RES.	470ohm	1/6W	5%	RD16TPJ471 470	J07225471			
R 9003	CARBON FILM RES.	220ohm	1/6W	5%	RD16TPJ221 220	J07225221			

## Circuit Diagram

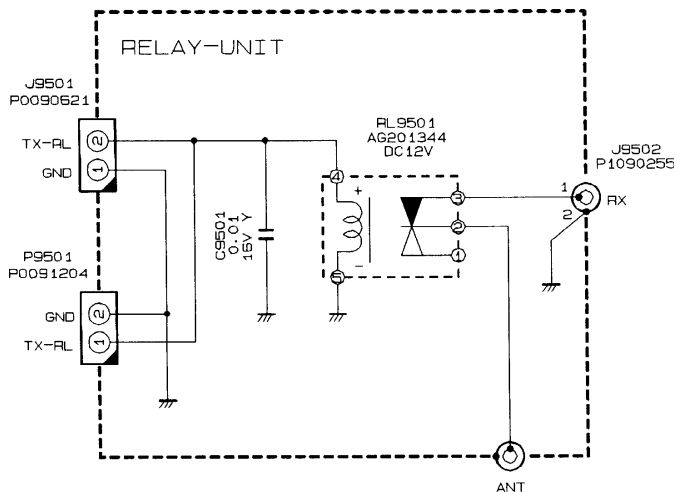


## Parts Layout

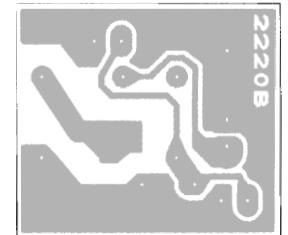
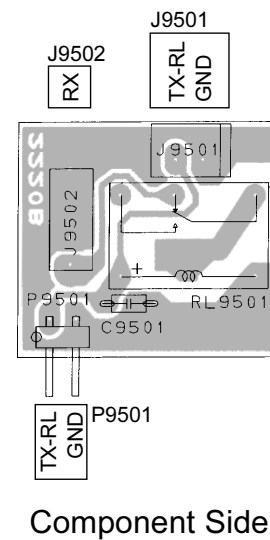


Solder Side

## Circuit Diagram (Lot. 7~)



## Parts Layout (Lot. 7~)



Solder Side

## Parts List

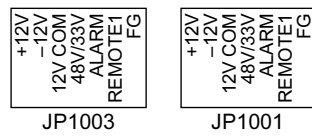
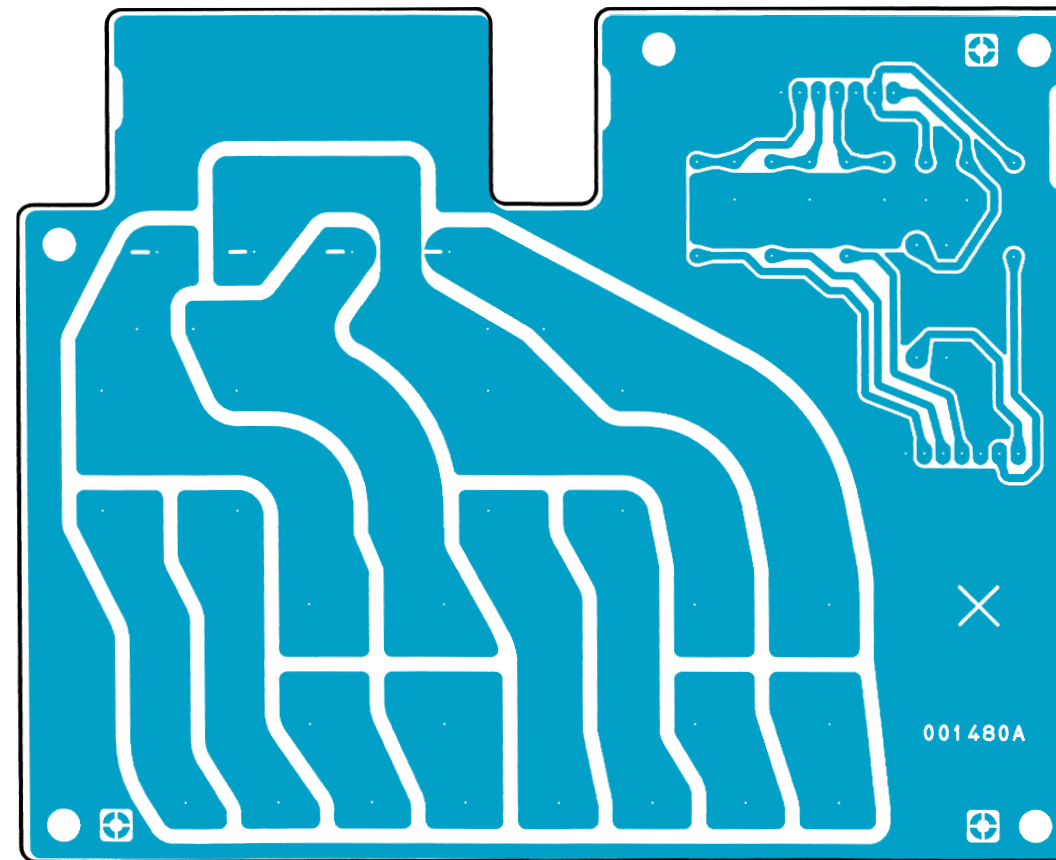
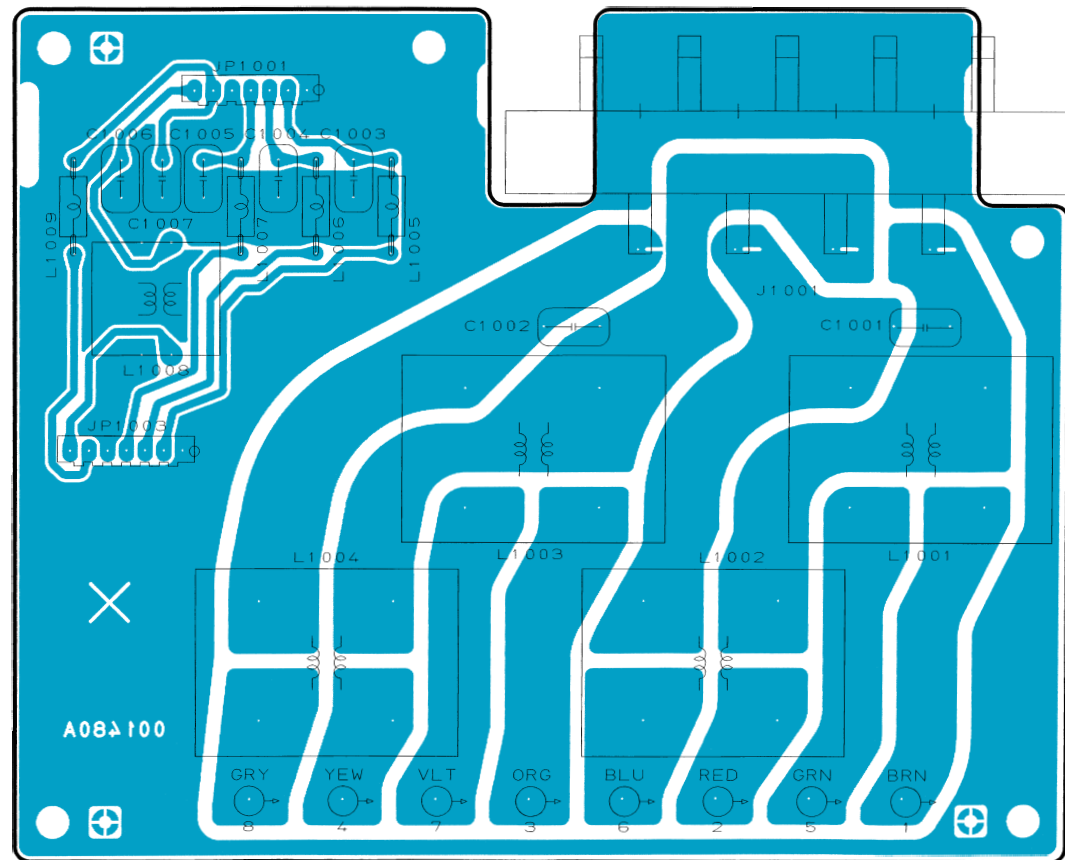
REF.	DESCRIPTION	VALUE	WV	TOL.	MFGR'S DESIG	YAESU P/N	VERS.	LOT.
*** RELAY UNIT ***								
	PCB with Components					CB0481001		
	Printed Circuit Board					FR002220A		1-
	Printed Circuit Board					FR002220B		7-
C 9501	CERAMIC CAP.	0.01uF	16V	Y	EP050Y103N-A	K28129001		1-
J 9501	CONNECTOR				SC25-02WS	P0090621		1-
J 9502	CONNECTOR				TMP-J01X-A2	P1090255		1-
JP9501	WIRE-ASSY				VIO39 <7>/<7>	T9318053		1-
P 9501	CONNECTOR				6027B-02Z010-T	P0091204		1-
RL9501	RELAY		DC12V		AG201344 DC12V	M1190124		1-

# Relay Unit

---

*Notes:*

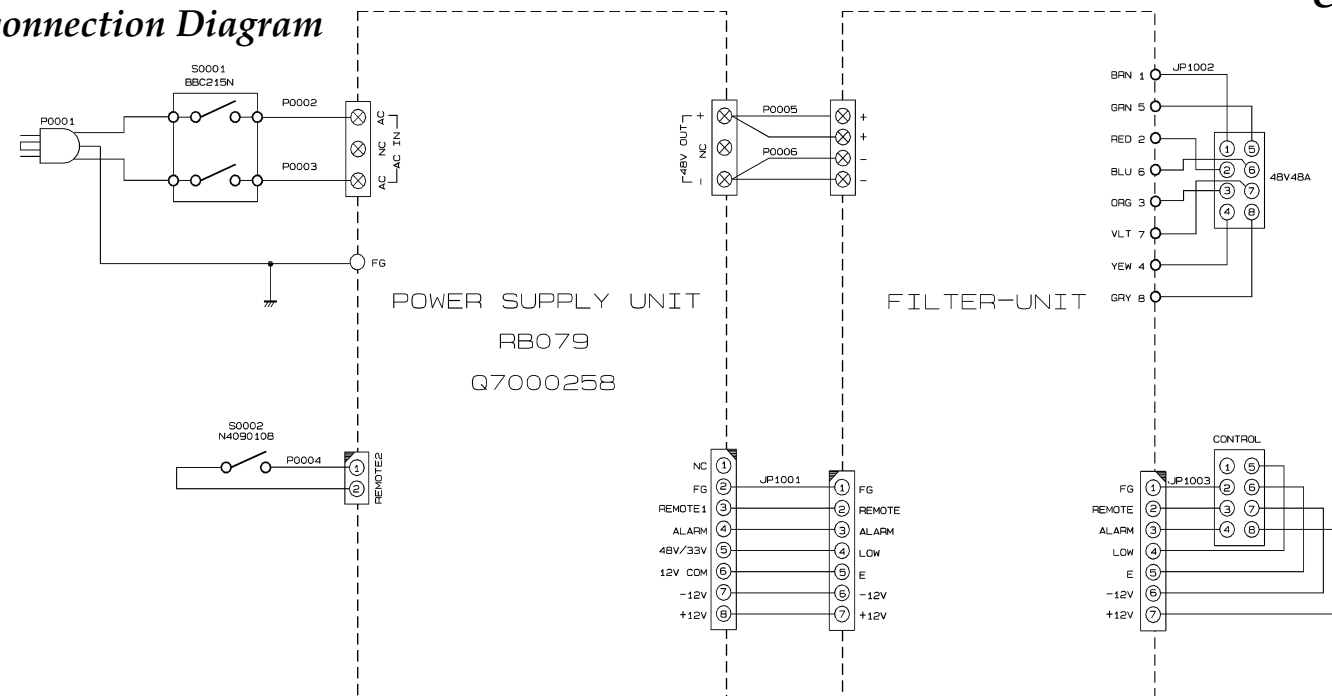
Parts Layout



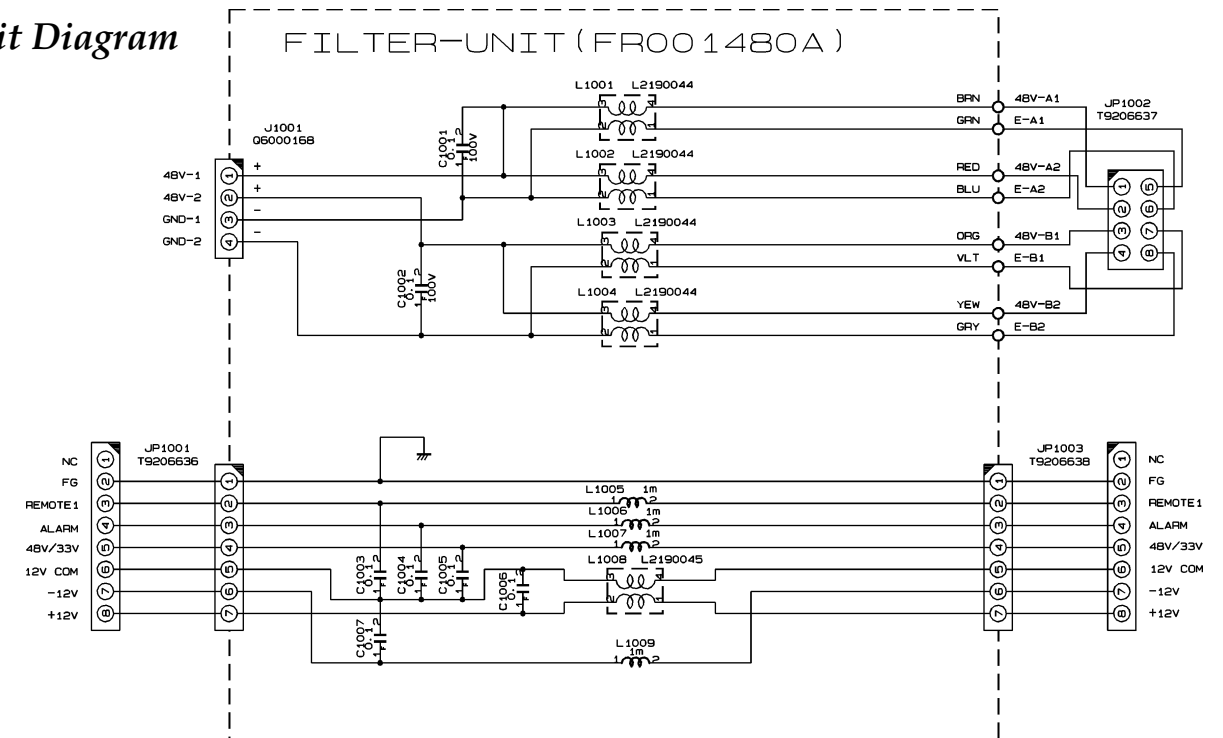
Component Side

Solder Side

VP-1000 Interconnection Diagram



Circuit Diagram



# Filter Unit (AC Power Supply VP-1000)

---

*Notes:*



# Filter Unit (AC Power Supply VP-1000)

## Parts List

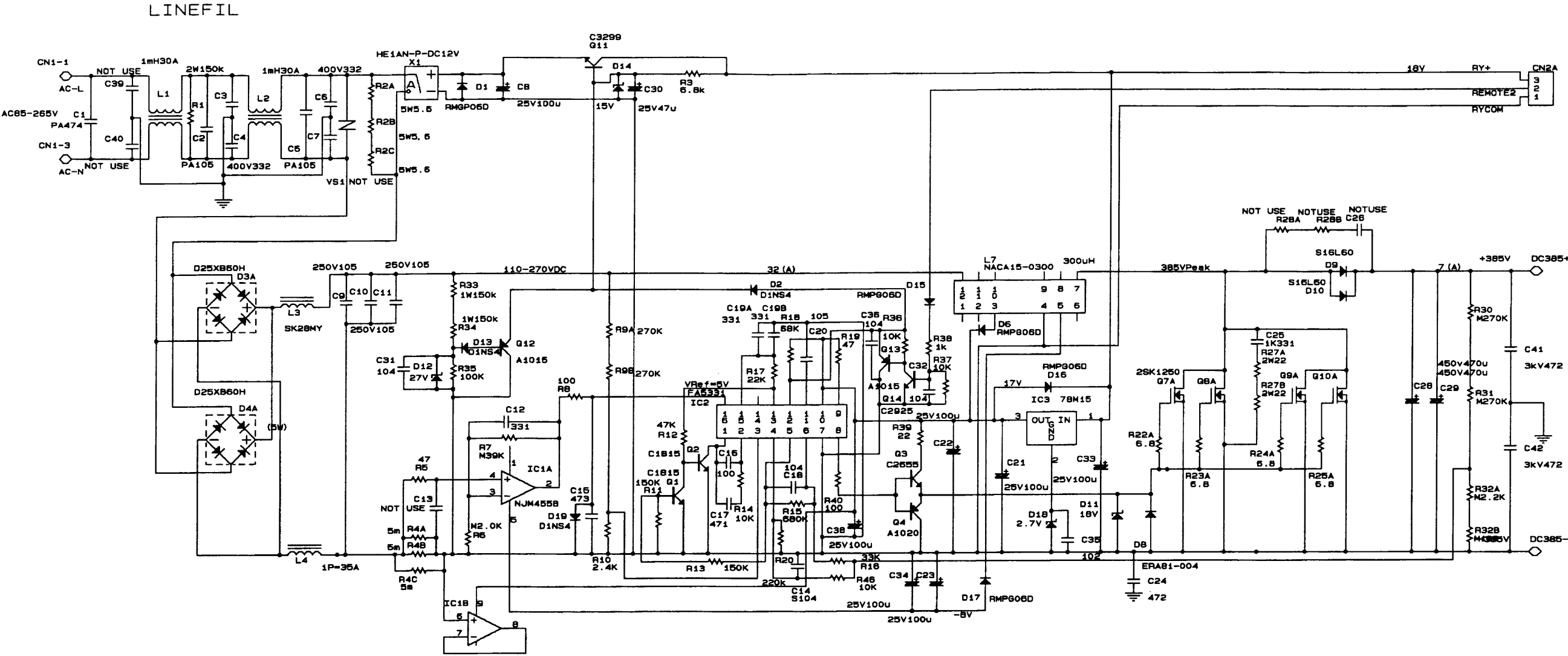
REF.	DESCRIPTION	VALUE	WV	TOL.	MFGR'S DESIG	YAESU P/N	VERS.	LOT.	LAY ADR
*** FILTER UNIT ***									
PCB with Components						CB0333001			
Printed Circuit Board						FR001480A			
C 1001	FILM CAP.	0.1uF	100V		NNM104K100	K50200001			
C 1002	FILM CAP.	0.1uF	100V		NNM104K100	K50200001			
C 1003	FILM CAP.	0.1uF	50V		NNM104K50	K50170044			
C 1004	FILM CAP.	0.1uF	50V		NNM104K50	K50170044			
C 1005	FILM CAP.	0.1uF	50V		NNM104K50	K50170044			
C 1006	FILM CAP.	0.1uF	50V		NNM104K50	K50170044			
C 1007	FILM CAP.	0.1uF	50V		NNM104K50	K50170044			
J 1001	TERMINAL STRIP				UF2350A-19.5L-7.5M-4P	Q6000168			
JP1001	WIRE ASSY				A0910	T9206636A			
JP1002	WIRE ASSY				A0910	T9206637A			
JP1003	WIRE ASSY				A0910	T9206638A			
L 1001	NOISE FILTER				NF15KL601	L2190044			
L 1002	NOISE FILTER				NF15KL601	L2190044			
L 1003	NOISE FILTER				NF15KL601	L2190044			
L 1004	NOISE FILTER				NF15KL601	L2190044			
L 1005	M.RFC	1mH			LAL04NA102K	L1190090			
L 1006	M.RFC	1mH			LAL04NA102K	L1190090			
L 1007	M.RFC	1mH			LAL04NA102K	L1190090			
L 1008	NOISE FILTER				NF03KD102	L2190045			
L 1009	M.RFC	1mH			LAL04NA102K	L1190090			

# Filter Unit (AC Power Supply VP-1000)

---

*Notes:*

Circuit Diagram

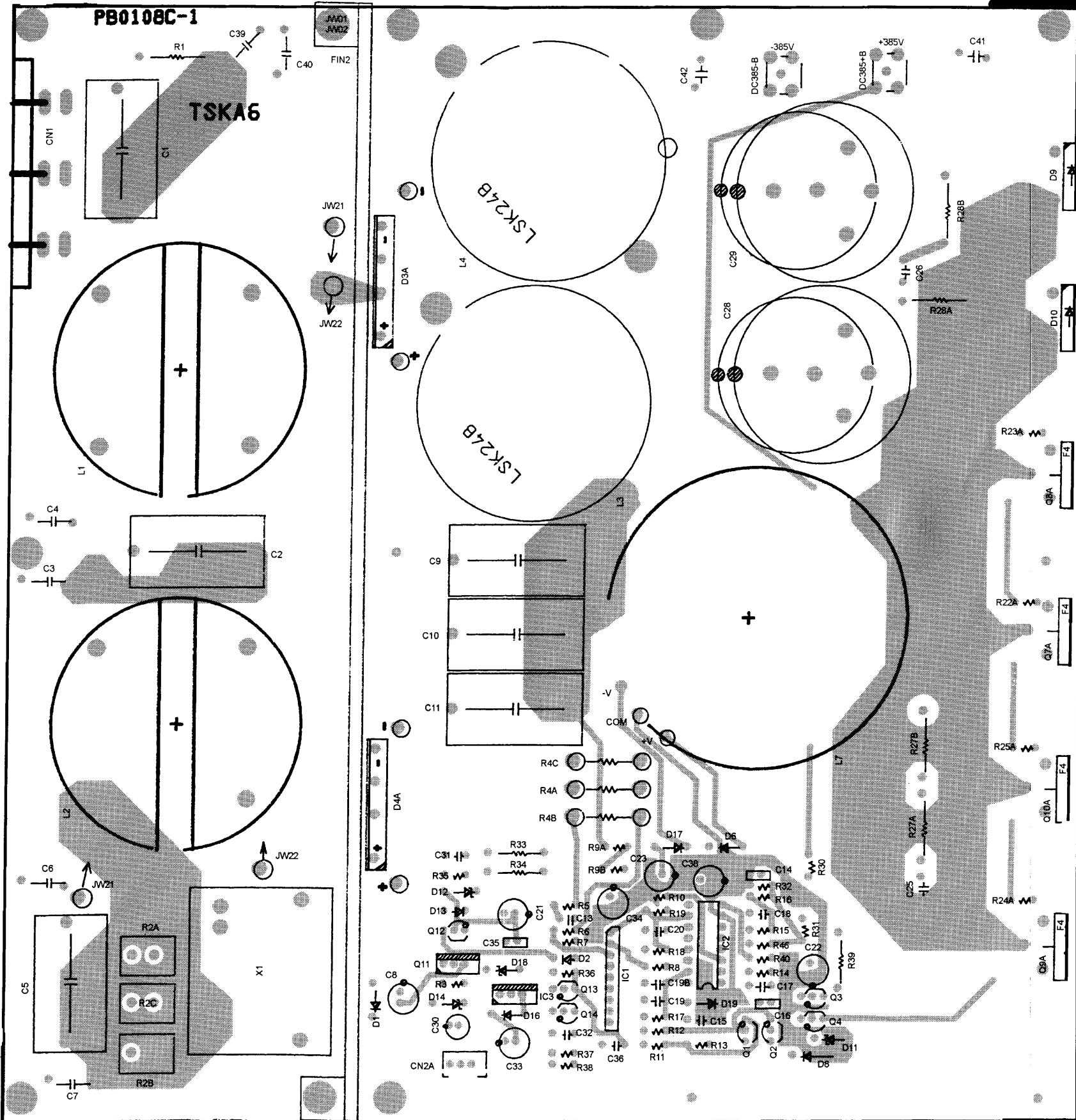


# Power Supply Unit PB1 (AC Power Supply VP-1000)

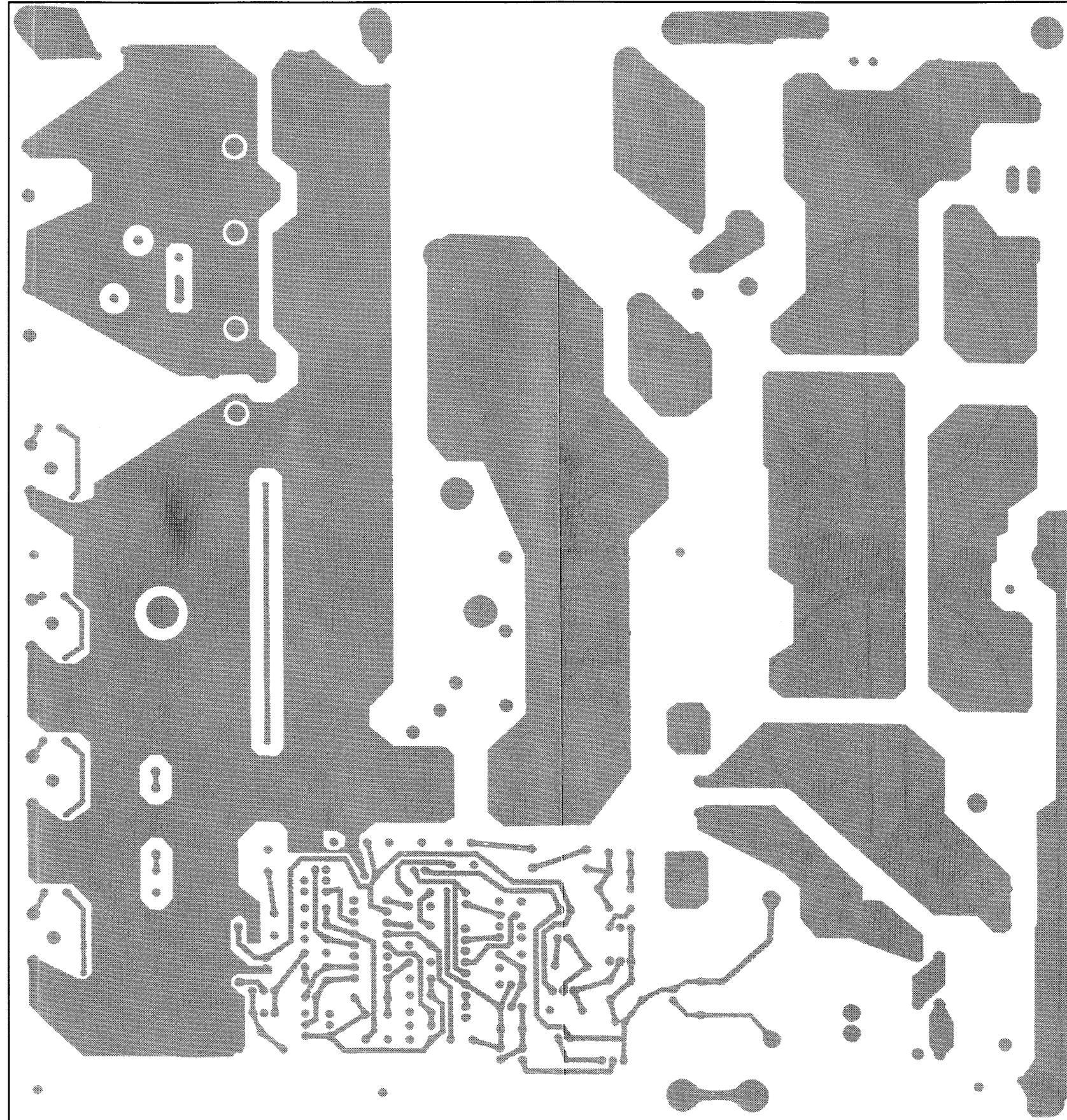
---

*Notes:*

Parts Layout



Component Side



Solder Side

# Power Supply Unit PB1 (AC Power Supply VP-1000)

## Parts List

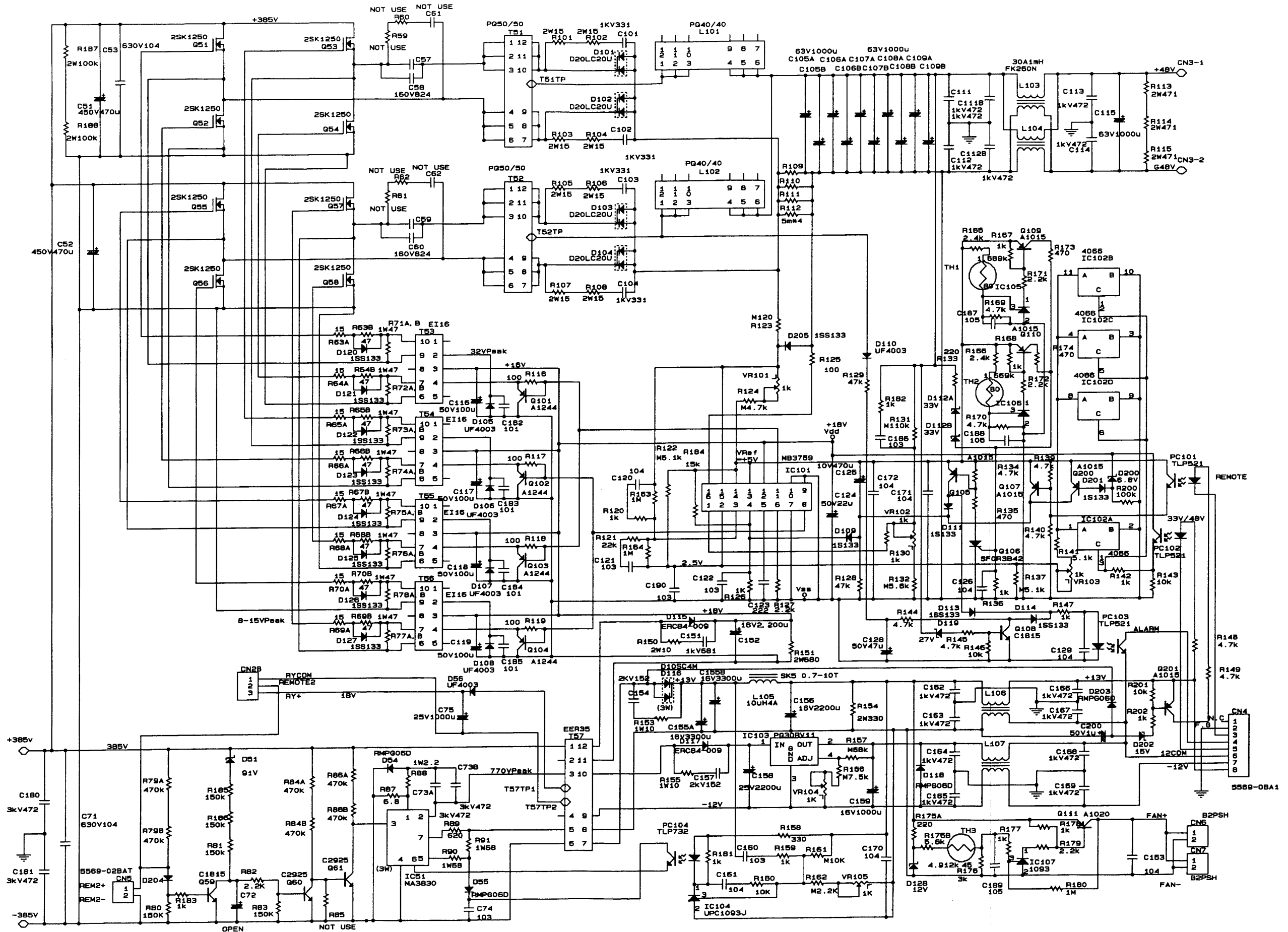
REF.	DESCRIPTION	VALUE	V/W	TOL.	MFR'S DESIG	YAESU P/N	VERS.	LOT.	LAY ADR
*** PB1 ***									
	PCB with Components					S8100700			
	Printed Circuit Board				PB0108C-1	-			
C 0001	X CAP.	0.47uF	275V		R40-275M474 P=27.5	S8100615			
C 0002	X CAP.	1uF	275V		R40-275M105	S8100616			
C 0003	CERAMIC CAP.	0.0033uF	400V		CD14-E2GA332MYAS	S8100625			
C 0004	CERAMIC CAP.	0.0033uF	400V		CD14-E2GA332MYAS	S8100625			
C 0005	X CAP.	1uF	275V		R40-275M105	S8100616			
C 0006	CERAMIC CAP.	0.0033uF	400V		CD14-E2GA332MYAS	S8100625			
C 0007	CERAMIC CAP.	0.0033uF	400V		CD14-E2GA332MYAS	S8100625			
C 0008	AL.ELECTRO.CAP.	100uF	25V		CEBSM1E101M	K40149056			
C 0009	X CAP.	1uF	275V		R40-275M105	S8100616			
C 0010	X CAP.	1uF	275V		R40-275M105	S8100616			
C 0011	X CAP.	1uF	275V		R40-275M105	S8100616			
C 0012	CERAMIC CAP.	330pF	50V	B	CK45B1H331KYA	K10179055			
C 0014	CERAMIC CAP.	0.1uF	50V		FK20X7R1H104Z	S8100624			
C 0015	FILM CAP.	0.047uF	50V		AMZ50K473	K52170011			
C 0016	CERAMIC CAP.	100pF	50V	SL	CC45SL101JYA	S8100621			
C 0017	CERAMIC CAP.	470pF	50V	SL	CC45SL471JYA	S8100620			
C 0018	FILM CAP.	0.1uF	50V		AMZ50K104	K52170009			
C 0019A	CERAMIC CAP.	330pF	50V	SL	CC45SL331JYJ	S8100619			
C 0019B	CERAMIC CAP.	330pF	50V	SL	CC45SL331JYJ	S8100619			
C 0020	CERAMIC CAP.	1uF	25V		TCD21E1E105M	K23140010			
C 0021	AL.ELECTRO.CAP.	100uF	25V		CEBSM1E101M	K40149056			
C 0022	AL.ELECTRO.CAP.	100uF	25V		CEBSM1E101M	K40149056			
C 0023	AL.ELECTRO.CAP.	100uF	25V		CEBSM1E101M	K40149056			
C 0024	CERAMIC CAP.	0.0047uF			DE1610E472Z3K	S8100626			
C 0025	CERAMIC CAP.	330pF	1kV	SL	CC45SL3AD331KYGN	S8100622			
C 0028	AL.ELECTRO.CAP.	470uF	450V		CEAUF2W471M50	K40279471			
C 0029	AL.ELECTRO.CAP.	470uF	450V		CEAUF2W471M50	K40279471			
C 0030	AL.ELECTRO.CAP.	47uF	25V		CEBSM1E470M	K40149059			
C 0031	FILM CAP.	0.1uF	50V		AMZ50K104	K52170009			
C 0032	FILM CAP.	0.1uF	50V		AMZ50K104	K52170009			
C 0033	AL.ELECTRO.CAP.	100uF	25V		CEBSM1E101M	K40149056			
C 0034	AL.ELECTRO.CAP.	100uF	25V		CEBSM1E101M	K40149056			
C 0035	CERAMIC CAP.	0.001uF	50V	B	CK45B1H102KYA	K10179054			
C 0036	FILM CAP.	0.1uF	50V		AMZ50K104	K52170009			
C 0038	AL.ELECTRO.CAP.	100uF	25V		CEBSM1E101M	K40149056			
C 0041	CERAMIC CAP.	0.0047uF			DE1610E472Z3K	S8100626			
C 0042	CERAMIC CAP.	0.0047uF			DE1610E472Z3K	S8100626			
CN0001	TERMINAL				OTB910-BL-M5-3P	S8001492			
CN0002A	CONNECTOR				B3P-SHF-1AA	P0090924			
D 0001	DIODE				RMPG06D	G2090721			
D 0002	DIODE				D1NS4-4060	G2090709			
D 0003A	DIODE				D25XB60	G2090711			
D 0004A	DIODE				D25XB60	G2090711			
D 0006	DIODE				RMPG06D	G2090721			
D 0008	DIODE				ERA81-004	G2090138			
D 0009	DIODE				S16L60	G2090722			
D 0010	DIODE				S16L60	G2090722			
D 0011	DIODE				MTZJT-72-18B	G2090715			
D 0012	DIODE				MTZJT-72-27B	G2090716			
D 0013	DIODE				D1NS4-4060	G2090709			
D 0014	DIODE				MTZJT-72-15B	G2090714			
D 0015	JUMPER				J1/6Z	Q6100068			
D 0016	DIODE				RMPG06D	G2090721			
D 0017	DIODE				RMPG06D	G2090721			
D 0018	DIODE				RD2.7EB	G2090719			
D 0019	DIODE				D1NS4-4060	G2090709			
DC0385+B	TERMINAL				DST 5.5-V3	Q5000144			
DC0385-B	TERMINAL				DST 5.5-V3	Q5000144			
IC0001	IC				NJM4558S	S8100635			
IC0002	IC				FA5331P	G1092807			
IC0003	IC				UPC78M15AHF	G1092812			
L 0001	COIL				FK190M-1820	S8100634			

# Power Supply Unit PB1 (AC Power Supply VP-1000)

REF.	DESCRIPTION	VALUE	V/W	TOL.	MFR'S DESIG	YAESU P/N	VERS.	LOT.	LAY ADR
L 0002	COIL				FK190M-1820	S8100634			
L 0003	TOROID COIL				RB079,L3,4	S8100632			
L 0004	TOROID COIL				RB079,L3,4	S8100632			
L 0007	COIL				NACA-20-0300HT	S8100633			
P 0385	TERMINAL				P-423-M3	S8100638			
P 0385	TERMINAL				P-423-M3	S8100638			
Q 0001	TRANSISTOR				2SC1815Y-TPE2	G3318150Y			
Q 0002	TRANSISTOR				2SC1815Y-TPE2	G3318150Y			
Q 0003	TRANSISTOR				2SC2655Y	G3326550Y			
Q 0004	TRANSISTOR				2SA1020Y	G3110200			
Q 0007A	FET				2SK1250	G3812500			
Q 0008A	FET				2SK1250	G3812500			
Q 0009A	FET				2SK1250	G3812500			
Q 0010A	FET				2SK1250	G3812500			
Q 0011	TRANSISTOR				2SC3299Y	G3332990Y			
Q 0012	TRANSISTOR				2SA1015Y-TPE2	G3110150Y			
Q 0013	TRANSISTOR				2SA1015Y-TPE2	G3110150Y			
Q 0014	TRANSISTOR				2SC2925	G3329250Y			
R 0001	METAL RES.	150kohm	2W		RLF2S150K Ω JBH15	S8100629			
R 0002A	CEMENT RES.	5.6ohm	5W		RWBN5-5.6 Ω J	J31379004			
R 0002B	CEMENT RES.	5.6ohm	5W		RWBN5-5.6 Ω J	J31379004			
R 0002C	CEMENT RES.	5.6ohm	5W		RWBN5-5.6 Ω J	J31379004			
R 0003	CARBON FILM RES.	6.8kohm	1/6W		RD16J6.8K Ω BM515	J03225682			
R 0004A	CUNI WIRE	5.0mohm				S8100630			
R 0004B	CUNI WIRE	5.0mohm				S8100630			
R 0004C	CUNI WIRE	5.0mohm				S8100630			
R 0005	CARBON FILM RES.	47ohm	1/6W		RD16J47 Ω BM515	J03225470			
R 0006	METAL FILM RES.	2.0kohm	1/6W		SN16K2CM5-10-2.0K Ω F	J22243202			
R 0007	METAL FILM RES.	39kohm	1/6W		SN16K2CM5-10-39K Ω F	J22243393			
R 0008	CARBON FILM RES.	22ohm	1/6W		RD16J22 Ω BM515	J03225220			
R 0009A	METAL FILM RES.	270kohm	1/4W		SN14K2CM5-10-270K Ω F	J22243274			
R 0009B	METAL FILM RES.	270kohm	1/4W		SN14K2CM5-10-270K Ω F	J22243274			
R 0010	METAL FILM RES.	2.4kohm	1/4W		SN14K2CM5-10-2.4K Ω F	J22243242			
R 0011	CARBON FILM RES.	150kohm	1/6W		RD16J150K Ω BM515	J03225154			
R 0012	CARBON FILM RES.	47kohm	1/6W		RD16J47K Ω BM515	J03225473			
R 0013	CARBON FILM RES.	150kohm	1/6W		RD16J150K Ω BM515	J03225154			
R 0014	CARBON FILM RES.	10kohm	1/6W		RD16J10K Ω BM515	J03225103			
R 0015	CARBON FILM RES.	680kohm	1/6W		RD16J680K Ω BM515	J03225684			
R 0016	CARBON FILM RES.	33kohm	1/6W		RD16J33K Ω BM515	J03225333			
R 0017	CARBON FILM RES.	22kohm	1/6W		RD16J22K Ω BM515	J03225223			
R 0018	CARBON FILM RES.	68kohm	1/6W		RD16J68K Ω BM515	J03225683			
R 0019	CARBON FILM RES.	47ohm	1/6W		RD16J47 Ω BM515	J03225470			
R 0020	CARBON FILM RES.	220kohm	1/6W		RD16J220K Ω BM515	J03225224			
R 0022A	CARBON FILM RES.	6.8ohm	1/6W		RD16J6.8 Ω B	J01225689			
R 0023A	CARBON FILM RES.	6.8ohm	1/6W		RD16J6.8 Ω B	J01225689			
R 0024A	CARBON FILM RES.	6.8ohm	1/6W		RD16J6.8 Ω B	J01225689			
R 0025A	CARBON FILM RES.	6.8ohm	1/6W		RD16J6.8 Ω B	J01225689			
R 0027A	METAL FILM RES.	22ohm	2W		RSS2L15-22 Ω J	J22339031			
R 0027B	METAL FILM RES.	22ohm	2W		RSS2L15-22 Ω J	J22339031			
R 0030	METAL FILM RES.	270kohm	1/4W		SN14K2CM5-10-270K Ω F	J22243274			
R 0031	METAL FILM RES.	270kohm	1/4W		SN14K2CM5-10-270K Ω F	J22243274			
R 0032A	METAL FILM RES.	2.2kohm	1/4W		SN14K2CM5-10-2.2K Ω F	J22243222			
R 0032B	METAL FILM RES.	100ohm	1/6W		SN16K2CM5-10-100 Ω F	J22243101			
R 0033	METAL FILM RES.	150kohm	1W		RLF1S150K Ω J	S8100628			
R 0034	METAL FILM RES.	150kohm	1W		RLF1S150K Ω J	S8100628			
R 0035	CARBON FILM RES.	100kohm	1/6W		RD16J100K Ω BM515	J03225104			
R 0036	CARBON FILM RES.	10kohm	1/6W		RD16J10K Ω BM515	J03225103			
R 0037	CARBON FILM RES.	10kohm	1/6W		RD16J10K Ω BM515	J03225103			
R 0038	CARBON FILM RES.	1kohm	1/6W		RD16J1K Ω BM515	J03225102			
R 0039	METAL FILM RES.	22ohm	1W		ERG1SJ220	J22305220			
R 0040	CARBON FILM RES.	100ohm	1/6W		RD16J100 Ω BM515	J03225101			
R 0046	CARBON FILM RES.	10kohm	1/6W		RD16J10K Ω BM515	J03225103			
X 0001	RELAY				HE1AN-P-DC12	M1190155			



Circuit Diagram

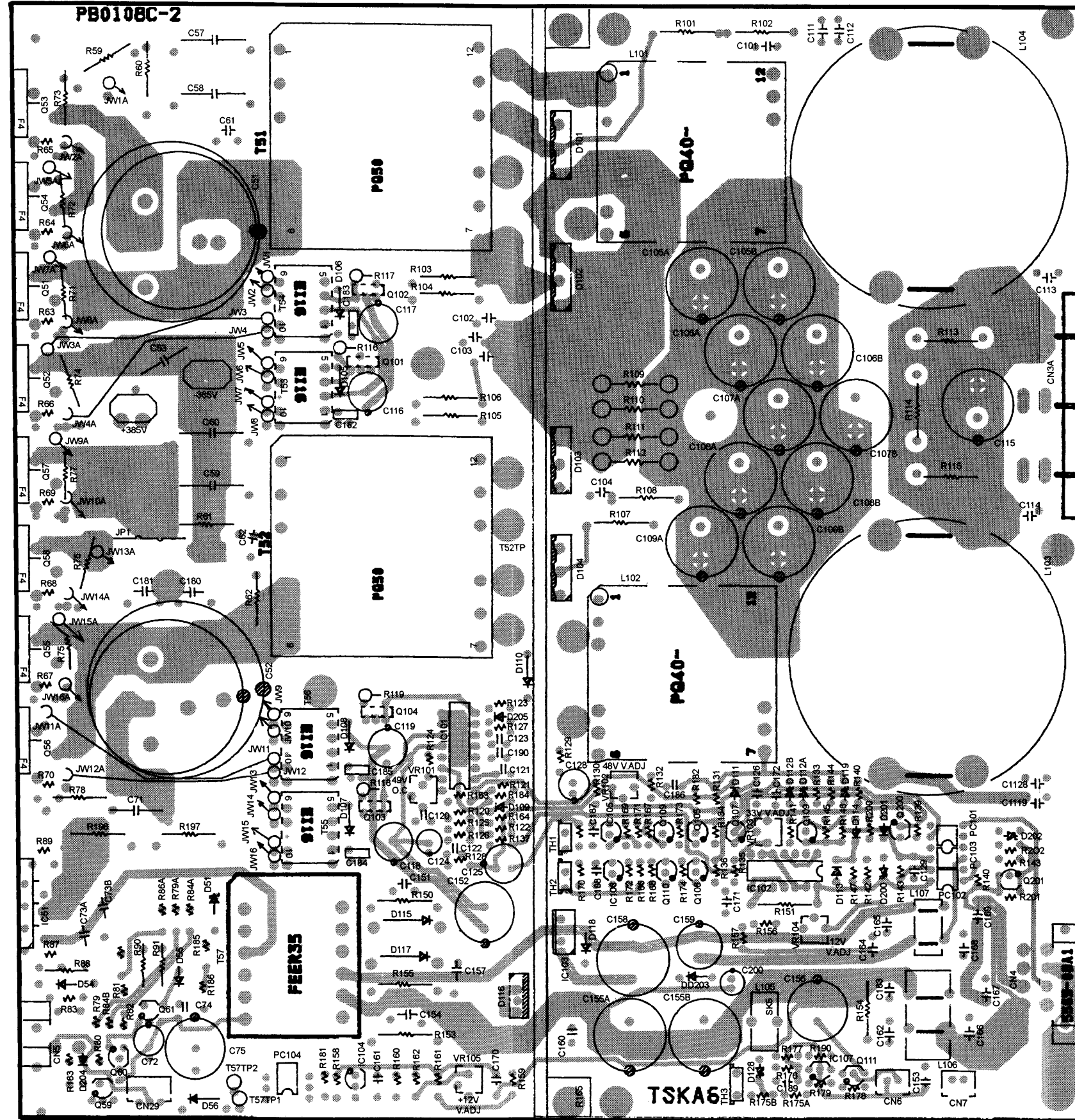


# Power Supply Unit PB2 (AC Power Supply VP-1000)

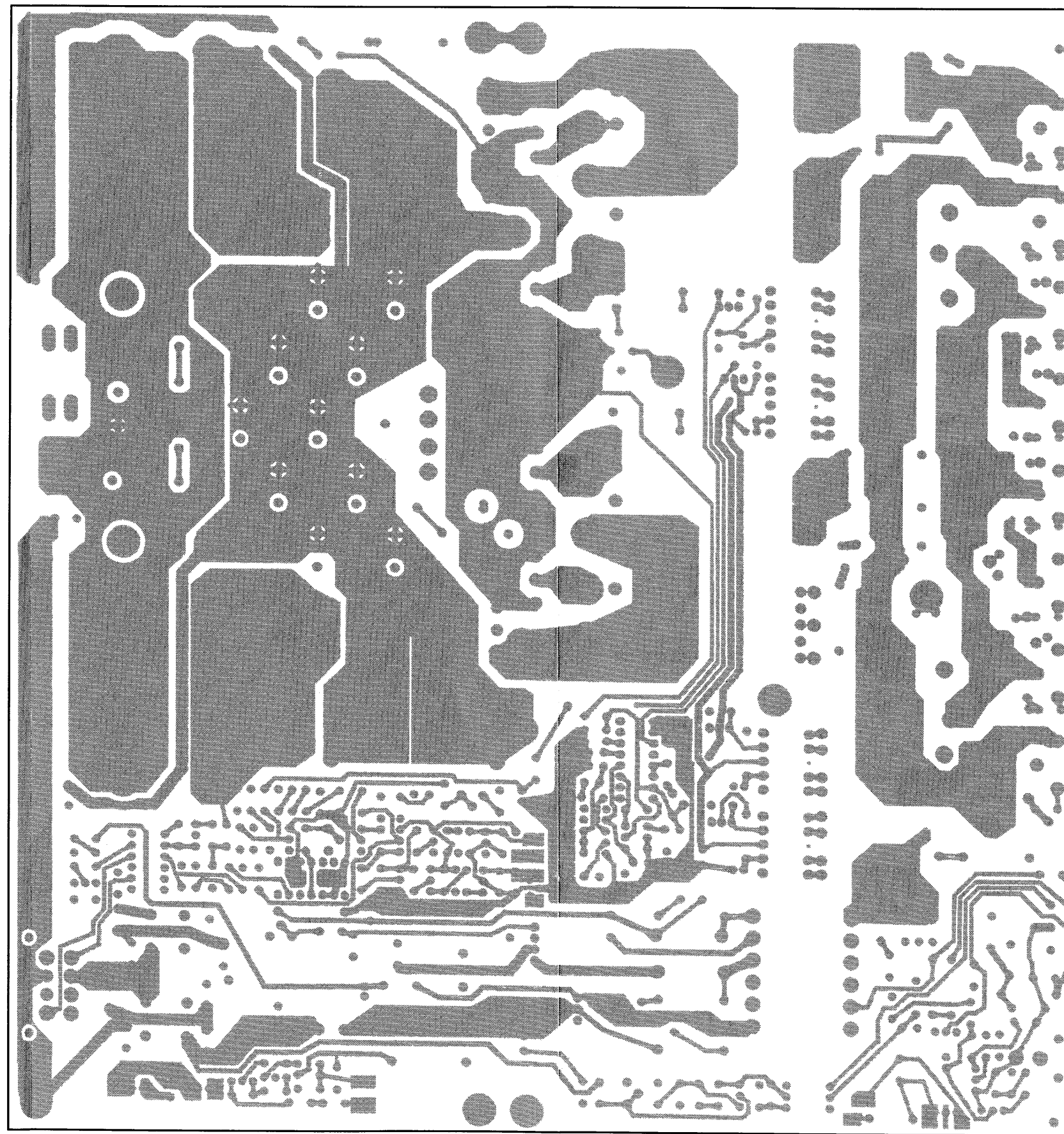
---

*Notes:*

Parts Layout



Component Side



Solder Side

# Power Supply Unit PB2 (AC Power Supply VP-1000)

## Parts List

REF.	DESCRIPTION	VALUE	V/W	TOL.	MFR'S DESIG	YAESU P/N	VERS.	LOT.	LAY ADR
*** PB2 ***									
	PCB with Components					S8100701			
	Printed Circuit Board				PB0108C-2	-			
+385V	CONNECTOR				SIN-21T-1.8	Q5000145			
-385V	CONNECTOR				SIN-21T-1.8	Q5000145			
C 0051	AL.ELECTRO.CAP.	470uF	450V		CEAUF2W471M50	K40279471			
C 0052	AL.ELECTRO.CAP.	470uF	450V		CEAUF2W471M50	K40279471			
C 0053	CAP.	0.1uF	630V		MMC630K104	S8100617			
C 0057	FILM CAP.	0.82uF	160V		TAC2C-824	K52225824			
C 0058	FILM CAP.	0.82uF	160V		TAC2C-824	K52225824			
C 0059	FILM CAP.	0.82uF	160V		TAC2C-824	K52225824			
C 0060	FILM CAP.	0.82uF	160V		TAC2C-824	K52225824			
C 0071	CAP.	0.1uF	630V		MMC630K104	S8100617			
C 0073A	CERAMIC CAP.	0.0047uF			DE1610E472Z3K	S8100626			
C 0073B	CERAMIC CAP.	0.0047uF			DE1610E472Z3K	S8100626			
C 0074	FILM CAP.	0.01uF	50V		AMZ50K103	K52170018			
C 0075	AL.ELECTRO.CAP.	1000uF	25V		CEBSM1E102M	K40149057			
C 0101	CERAMIC CAP.	330pF	1kV	SL	CC45SL3AD331KYGN	S8100622			
C 0102	CERAMIC CAP.	330pF	1kV	SL	CC45SL3AD331KYGN	S8100622			
C 0103	CERAMIC CAP.	330pF	1kV	SL	CC45SL3AD331KYGN	S8100622			
C 0104	CERAMIC CAP.	330pF	1kV	SL	CC45SL3AD331KYGN	S8100622			
C 0105A	AL.ELECTRO.CAP.	1000uF	63V		CEBSM1J102M	K40189008			
C 0105B	AL.ELECTRO.CAP.	1000uF	63V		CEBSM1J102M	K40189008			
C 0106A	AL.ELECTRO.CAP.	1000uF	63V		CEBSM1J102M	K40189008			
C 0106B	AL.ELECTRO.CAP.	1000uF	63V		CEBSM1J102M	K40189008			
C 0107A	AL.ELECTRO.CAP.	1000uF	63V		CEBSM1J102M	K40189008			
C 0107B	AL.ELECTRO.CAP.	1000uF	63V		CEBSM1J102M	K40189008			
C 0108A	AL.ELECTRO.CAP.	1000uF	63V		CEBSM1J102M	K40189008			
C 0108B	AL.ELECTRO.CAP.	1000uF	63V		CEBSM1J102M	K40189008			
C 0109A	AL.ELECTRO.CAP.	1000uF	63V		CEBSM1J102M	K40189008			
C 0109B	AL.ELECTRO.CAP.	1000uF	63V		CEBSM1J102M	K40189008			
C 0111	CERAMIC CAP.	0.0033uF	400V		CD14-E2GA332MYAS	S8100625			
C 0111B	CERAMIC CAP.	0.0033uF	400V		CD14-E2GA332MYAS	S8100625			
C 0112	CERAMIC CAP.	0.0033uF	400V		CD14-E2GA332MYAS	S8100625			
C 0112B	CERAMIC CAP.	0.0033uF	400V		CD14-E2GA332MYAS	S8100625			
C 0113	CERAMIC CAP.	0.0033uF	400V		CD14-E2GA332MYAS	S8100625			
C 0114	CERAMIC CAP.	0.0033uF	400V		CD14-E2GA332MYAS	S8100625			
C 0115	AL.ELECTRO.CAP.	1000uF	63V		CEBSM1J102M	K40189008			
C 0116	AL.ELECTRO.CAP.	100uF	50V		CEBSM1H101M	K40179069			
C 0117	AL.ELECTRO.CAP.	100uF	50V		CEBSM1H101M	K40179069			
C 0118	AL.ELECTRO.CAP.	100uF	50V		CEBSM1H101M	K40179069			
C 0119	AL.ELECTRO.CAP.	100uF	50V		CEBSM1H101M	K40179069			
C 0120	FILM CAP.	0.1uF	50V		AMZ50K104	K52170009			
C 0121	FILM CAP.	0.01uF	50V		AMZ50K103	K52170018			
C 0122	FILM CAP.	0.01uF	50V		AMZ50K103	K52170018			
C 0123	FILM CAP.	0.0022uF	50V		AMZ50K222	K52170019			
C 0124	AL.ELECTRO.CAP.	22uF	50V		CEBSM1H220M	K40179070			
C 0125	AL.ELECTRO.CAP.	470uF	10V		CEBSM1A471M	K40109037			
C 0126	FILM CAP.	0.1uF	50V		AMZ50K104	K52170009			
C 0128	AL.ELECTRO.CAP.	47uF	50V		CEBSM1H470M	K40179071			
C 0129	FILM CAP.	0.1uF	50V		AMZ50K104	K52170009			
C 0151	CERAMIC CAP.	680pF	1kV	B	CK45B3AD681KYGN	S8100623			
C 0152	AL.ELECTRO.CAP.	2200uF	16V		CEBSM1C222M	K40129087			
C 0153	FILM CAP.	0.1uF	50V		AMZ50K104	K52170009			
C 0154	CERAMIC CAP.	0.0015uF	2kV		DE1007B152K2K	S8100618			
C 0155A	AL.ELECTRO.CAP.	3300uF	16V		CEBSM1C332M	K40129088			
C 0155B	AL.ELECTRO.CAP.	3300uF	16V		CEBSM1C332M	K40129088			
C 0156	AL.ELECTRO.CAP.	2200uF	16V		CEBSM1C222M	K40129087			
C 0157	CERAMIC CAP.	0.0015uF	2kV		DE1007B152K2K	S8100618			
C 0158	AL.ELECTRO.CAP.	2200uF	25V		CEBSM1E222M	K40149058			
C 0159	AL.ELECTRO.CAP.	1000uF	16V		CEBSM1C102M	K40129086			
C 0160	FILM CAP.	0.01uF	50V		AMZ50K103	K52170018			
C 0161	FILM CAP.	0.1uF	50V		AMZ50K104	K52170009			
C 0162	CERAMIC CAP.	0.0033uF	400V		CD14-E2GA332MYAS	S8100625			
C 0163	CERAMIC CAP.	0.0033uF	400V		CD14-E2GA332MYAS	S8100625			

# Power Supply Unit PB2 (AC Power Supply VP-1000)

REF.	DESCRIPTION	VALUE	V/W	TOL.	MFR'S DESIG	YAESU P/N	VERS.	LOT.	LAY ADR
C 0164	CERAMIC CAP.	0.0033uF	400V		CD14-E2GA332MYAS	S8100625			
C 0165	CERAMIC CAP.	0.0033uF	400V		CD14-E2GA332MYAS	S8100625			
C 0166	CERAMIC CAP.	0.0033uF	400V		CD14-E2GA332MYAS	S8100625			
C 0167	CERAMIC CAP.	0.0033uF	400V		CD14-E2GA332MYAS	S8100625			
C 0168	CERAMIC CAP.	0.0033uF	400V		CD14-E2GA332MYAS	S8100625			
C 0169	CERAMIC CAP.	0.0033uF	400V		CD14-E2GA332MYAS	S8100625			
C 0170	FILM CAP.	0.1uF	50V		AMZ50K104	K52170009			
C 0171	FILM CAP.	0.1uF	50V		AMZ50K104	K52170009			
C 0172	FILM CAP.	0.1uF	50V		AMZ50K104	K52170009			
C 0180	CERAMIC CAP.	0.0047uF			DE1610E472Z3K	S8100626			
C 0181	CERAMIC CAP.	0.0047uF			DE1610E472Z3K	S8100626			
C 0182	CERAMIC CAP.	100pF	50V	SL	CC45SL101JYJ	S8100621			
C 0183	CERAMIC CAP.	100pF	50V	SL	CC45SL101JYJ	S8100621			
C 0184	CERAMIC CAP.	100pF	50V	SL	CC45SL101JYJ	S8100621			
C 0185	CERAMIC CAP.	100pF	50V	SL	CC45SL101JYJ	S8100621			
C 0186	FILM CAP.	0.01uF	50V		AMZ50K103	K52170018			
C 0187	CERAMIC CAP.	1uF	25V		TCD21E1E105M	K23140010			
C 0188	CERAMIC CAP.	1uF	25V		TCD21E1E105M	K23140010			
C 0189	CERAMIC CAP.	1uF	25V		TCD21E1E105M	K23140010			
C 0190	FILM CAP.	0.01uF	50V		AMZ50K103	K52170018			
C 0200	AL.ELECTRO.CAP.	1uF	50V		CEBSM1H010M	K40179068			
CA0002	HEAT SINK				P-1284-05A	S8001491			
CN0002B	CONNECTOR				B3P-SHF-1AA	P0090924			
CN0003	TERMINAL				OTB910-BL-M5-3P	S8001492			
CN0004	CONNECTOR				5569-08A1	P0091219			
CN0005A	CONNECTOR				5569-02A1	P0091218			
CN0006	CONNECTOR				B2P-SHF-1AA	P0091220			
CN0007	CONNECTOR				B2P-SHF-1AA	P0091220			
D 0051	DIODE				RD91EB	G2090720			
D 0054	DIODE				RMPG06D	G2090721			
D 0055	DIODE				RMPG06D	G2090721			
D 0056	DIODE				UF4003	G2090723			
D 0101	DIODE				D20LC20U	G2090710			
D 0102	DIODE				D20LC20U	G2090710			
D 0103	DIODE				D20LC20U	G2090710			
D 0104	DIODE				D20LC20U	G2090710			
D 0105	DIODE				UF4003	G2090723			
D 0106	DIODE				UF4003	G2090723			
D 0107	DIODE				UF4003	G2090723			
D 0108	DIODE				UF4003	G2090723			
D 0109	DIODE				1SS133 T72	G2090389			
D 0110	DIODE				UF4003	G2090723			
D 0111	DIODE				1SS133 T72	G2090389			
D 0112A	DIODE				MTZJT-72-33B	G2090717			
D 0112B	DIODE				MTZJT-72-33B	G2090717			
D 0113	DIODE				1SS133 T72	G2090389			
D 0114	DIODE				1SS133 T72	G2090389			
D 0115	DIODE				ERC84-009	G2090712			
D 0116	DIODE				D10SC4M	G2090708			
D 0117	DIODE				ERC84-009	G2090712			
D 0118	DIODE				RMPG06D	G2090721			
D 0119	DIODE				MTZJT-72-27B	G2090716			
D 0120	DIODE				1SS133 T72	G2090389			
D 0121	DIODE				1SS133 T72	G2090389			
D 0122	DIODE				1SS133 T72	G2090389			
D 0123	DIODE				1SS133 T72	G2090389			
D 0124	DIODE				1SS133 T72	G2090389			
D 0125	DIODE				1SS133 T72	G2090389			
D 0126	DIODE				1SS133 T72	G2090389			
D 0127	DIODE				1SS133 T72	G2090389			
D 0128	DIODE				MTZJT-72-12B	G2090713			
D 0200	DIODE				MTZJT-72-6.8B	G2090718			
D 0201	DIODE				1SS133 T72	G2090389			
D 0202	DIODE				MTZJT-72-15B	G2090714			
D 0203	DIODE				RMPG06D	G2090721			

# Power Supply Unit PB2 (AC Power Supply VP-1000)

REF.	DESCRIPTION	VALUE	V/W	TOL.	MFR'S DESIG	YAESU P/N	VERS.	LOT.	LAY ADR
D 0204	JUMPER				J1/6Z	Q6100068			
D 0205	DIODE				1SS133 T72	G2090389			
IC0051	IC				MA3830F4104	G1092788			
IC0101	IC				MB3759PG(DIP)	G1092808			
IC0102	IC				NJU4066BD	G1092809			
IC0103	IC				PQ30RV11	G1092810			
IC0104	IC				UPC1093J	G1092811			
IC0105	IC				UPC1093J	G1092811			
IC0106	IC				UPC1093J	G1092811			
IC0107	IC				UPC1093J	G1092811			
L 0103	COIL				FK260N-1020H	L0190241			
L 0104	COIL				FK260N-1020H	L0190241			
PC0101	PHOTO COUPLER				TLP521-1BL	G0090023			
PC0102	PHOTO COUPLER				TLP521-1BL	G0090023			
PC0103	PHOTO COUPLER				TLP521-1BL	G0090023			
PC0104	PHOTO COUPLER				TLP732GB-LF2	G0090034			
Q 0051	FET				2SK1250	G3812500			
Q 0052	FET				2SK1250	G3812500			
Q 0053	FET				2SK1250	G3812500			
Q 0054	FET				2SK1250	G3812500			
Q 0055	FET				2SK1250	G3812500			
Q 0056	FET				2SK1250	G3812500			
Q 0057	FET				2SK1250	G3812500			
Q 0058	FET				2SK1250	G3812500			
Q 0059	TRANSISTOR				2SC1815Y-TPE2	G3318150Y			
Q 0060	TRANSISTOR				2SC2925	G3329250Y			
Q 0061	TRANSISTOR				2SC2925	G3329250Y			
Q 0101	TRANSISTOR				2SA1244Y	G3112440Y			
Q 0102	TRANSISTOR				2SA1244Y	G3112440Y			
Q 0103	TRANSISTOR				2SA1244Y	G3112440Y			
Q 0104	TRANSISTOR				2SA1244Y	G3112440Y			
Q 0105	TRANSISTOR				2SA1015Y-TPE2	G3110150Y			
Q 0106	THIRISTOR				SFOR3G42	G0090033			
Q 0107	TRANSISTOR				2SA1015Y-TPE2	G3110150Y			
Q 0108	TRANSISTOR				2SC1815Y-TPE2	G3318150Y			
Q 0109	TRANSISTOR				2SA1015Y-TPE2	G3110150Y			
Q 0110	TRANSISTOR				2SA1015Y-TPE2	G3110150Y			
Q 0111	TRANSISTOR				2SA1020Y	G3110200			
Q 0200	TRANSISTOR				2SA1015Y-TPE2	G3110150Y			
Q 0201	TRANSISTOR				2SA1015Y-TPE2	G3110150Y			
R 0063A	RES.	15ohm	1/6W		RF16S15Ω J	Q0000080			
R 0063B	CARBON FILM RES.	47ohm	1/6W		RD16J47Ω B	J01225470			
R 0064A	RES.	15ohm	1/6W		RF16S15Ω J	Q0000080			
R 0064B	CARBON FILM RES.	47ohm	1/6W		RD16J47Ω B	J01225470			
R 0065A	RES.	15ohm	1/6W		RF16S15Ω J	Q0000080			
R 0065B	CARBON FILM RES.	47ohm	1/6W		RD16J47Ω B	J01225470			
R 0066A	RES.	15ohm	1/6W		RF16S15Ω J	Q0000080			
R 0066B	CARBON FILM RES.	47ohm	1/6W		RD16J47Ω B	J01225470			
R 0067A	RES.	15ohm	1/6W		RF16S15Ω J	Q0000080			
R 0067B	CARBON FILM RES.	47ohm	1/6W		RD16J47Ω B	J01225470			
R 0068A	RES.	15ohm	1/6W		RF16S15Ω J	Q0000080			
R 0068B	CARBON FILM RES.	47ohm	1/6W		RD16J47Ω B	J01225470			
R 0069A	RES.	15ohm	1/6W		RF16S15Ω J	Q0000080			
R 0069B	CARBON FILM RES.	47ohm	1/6W		RD16J47Ω B	J01225470			
R 0070A	RES.	15ohm	1/6W		RF16S15Ω J	Q0000080			
R 0070B	CARBON FILM RES.	47ohm	1/6W		RD16J47Ω B	J01225470			
R 0071A	METAL FILM RES.	47ohm	1W		ERG1SJ470	J22305470			
R 0072A	METAL FILM RES.	47ohm	1W		ERG1SJ470	J22305470			
R 0073A	METAL FILM RES.	47ohm	1W		ERG1SJ470	J22305470			
R 0074A	METAL FILM RES.	47ohm	1W		ERG1SJ470	J22305470			
R 0075A	METAL FILM RES.	47ohm	1W		ERG1SJ470	J22305470			
R 0076A	METAL FILM RES.	47ohm	1W		ERG1SJ470	J22305470			
R 0077A	METAL FILM RES.	47ohm	1W		ERG1SJ470	J22305470			
R 0078B	METAL FILM RES.	47ohm	1W		ERG1SJ470	J22305470			
R 0079A	CARBON FILM RES.	470kohm	1/6W		RD16J470KΩ BM515	J03225474			

# Power Supply Unit PB2 (AC Power Supply VP-1000)

REF.	DESCRIPTION	VALUE	V/W	TOL.	MFR'S DESIG	YAESU P/N	VERS.	LOT.	LAY ADR
R 0079B	CARBON FILM RES.	470kohm	1/6W		RD16J470K Ω BM515	J03225474			
R 0080	CARBON FILM RES.	150kohm	1/6W		RD16J150K Ω BM515	J03225154			
R 0081	CARBON FILM RES.	150kohm	1/6W		RD16J150K Ω BM515	J03225154			
R 0082	CARBON FILM RES.	2.2kohm	1/6W		RD16J2.2K Ω BM515	J03225222			
R 0083	CARBON FILM RES.	150kohm	1/6W		RD16J150K Ω BM515	J03225154			
R 0084A	CARBON FILM RES.	470kohm	1/6W		RD16J470K Ω BM515	J03225474			
R 0084B	CARBON FILM RES.	470kohm	1/6W		RD16J470K Ω BM515	J03225474			
R 0086A	CARBON FILM RES.	470kohm	1/6W		RD16J470K Ω BM515	J03225474			
R 0086B	CARBON FILM RES.	470kohm	1/6W		RD16J470K Ω BM515	J03225474			
R 0087	CARBON FILM RES.	6.8ohm	1/6W		RD16J6.8 Ω BM515	J03225689			
R 0088	METAL FILM RES.	2.2ohm	1W		RLF1S2.2 Ω J	S8100627			
R 0089	METAL FILM RES.	620ohm	1/6W		SN16K2CM5-10-620 Ω F	J22243621			
R 0090	METAL FILM RES.	68ohm	1W		ERG1SJ680	J22305680			
R 0091	METAL FILM RES.	68ohm	1W		ERG1SJ680	J22305680			
R 0101	METAL FILM RES.	15ohm	2W		RSS2L15-15 Ω J	J22339030			
R 0102	METAL FILM RES.	15ohm	2W		RSS2L15-15 Ω J	J22339030			
R 0103	METAL FILM RES.	15ohm	2W		RSS2L15-15 Ω J	J22339030			
R 0104	METAL FILM RES.	15ohm	2W		RSS2L15-15 Ω J	J22339030			
R 0105	METAL FILM RES.	15ohm	2W		RSS2L15-15 Ω J	J22339030			
R 0106	METAL FILM RES.	15ohm	2W		RSS2L15-15 Ω J	J22339030			
R 0107	METAL FILM RES.	15ohm	2W		RSS2L15-15 Ω J	J22339030			
R 0108	METAL FILM RES.	15ohm	2W		RSS2L15-15 Ω J	J22339030			
R 0109	CUNI WIRE				5.0m Ω	S8100630			
R 0110	CUNI WIRE				5.0m Ω	S8100630			
R 0111	CUNI WIRE				5.0m Ω	S8100630			
R 0112	CUNI WIRE				5.0m Ω	S8100630			
R 0113	METAL FILM RES.	470ohm	2W		RSS2L15-470 Ω J	J22339033			
R 0114	METAL FILM RES.	470ohm	2W		RSS2L15-470 Ω J	J22339033			
R 0115	METAL FILM RES.	470ohm	2W		RSS2L15-470 Ω J	J22339033			
R 0116	METAL FILM RES.	100ohm	1W		ERG1SJ101	J22305101			
R 0117	METAL FILM RES.	100ohm	1W		ERG1SJ101	J22305101			
R 0118	METAL FILM RES.	100ohm	1W		ERG1SJ101	J22305101			
R 0119	METAL FILM RES.	100ohm	1W		ERG1SJ101	J22305101			
R 0120	CARBON FILM RES.	1kohm	1/6W		RD16J1K Ω BM515	J03225102			
R 0121	CARBON FILM RES.	22kohm	1/6W		RD16J22K Ω BM515	J03225223			
R 0122	METAL FILM RES.	5.1kohm	1/6W		SN16K2CM5-10-5.1K Ω F	J22243512			
R 0123	METAL FILM RES.	120ohm	1/6W		SN16K2CM5-10-120 Ω F	J22243121			
R 0124	METAL FILM RES.	4.7kohm	1/6W		SN16K2CM5-10-4.7K Ω F	J22243472			
R 0125	METAL FILM RES.	100ohm	1/4W		SN14K2CM5-10-100 Ω F	J22243101			
R 0126	CARBON FILM RES.	1kohm	1/6W		RD16J1K Ω BM515	J03225102			
R 0127	METAL FILM RES.	2.2kohm	1/4W		SN14K2CM5-10-2.2K Ω F	J22243222			
R 0128	CARBON FILM RES.	47kohm	1/6W		RD16J47K Ω BM515	J03225473			
R 0129	CARBON FILM RES.	47kohm	1/6W		RD16J47K Ω BM515	J03225473			
R 0130	CARBON FILM RES.	1kohm	1/6W		RD16J1K Ω BM515	J03225102			
R 0131	METAL FILM RES.	110kohm	1/4W		SN14K2CM5-10-110K Ω F	J22243114			
R 0132	METAL FILM RES.	5.6kohm	1/4W		SN14K2CM5-10-5.6K Ω F	J22243562			
R 0133	CARBON FILM RES.	220ohm	1/6W		RD16J220 Ω BM515	J03225221			
R 0134	CARBON FILM RES.	4.7kohm	1/6W		RD16J4.7K Ω BM515	J03225472			
R 0135	CARBON FILM RES.	470ohm	1/6W		RD16J470 Ω BM515	J03225471			
R 0136	CARBON FILM RES.	1kohm	1/6W		RD16J1K Ω BM515	J03225102			
R 0137	METAL FILM RES.	5.1kohm	1/4W		SN14K2CM5-10-5.1K Ω F	J22243512			
R 0139	CARBON FILM RES.	4.7kohm	1/6W		RD16J4.7K Ω BM515	J03225472			
R 0140	CARBON FILM RES.	4.7kohm	1/6W		RD16J4.7K Ω BM515	J03225472			
R 0141	METAL FILM RES.	5.1kohm	1/4W		SN14K2CM5-10-5.1K Ω F	J22243512			
R 0142	CARBON FILM RES.	1kohm	1/6W		RD16J1K Ω BM515	J03225102			
R 0143	CARBON FILM RES.	10kohm	1/6W		RD16J10K Ω BM515	J03225103			
R 0144	CARBON FILM RES.	4.7kohm	1/6W		RD16J4.7K Ω BM515	J03225472			
R 0145	CARBON FILM RES.	4.7kohm	1/6W		RD16J4.7K Ω BM515	J03225472			
R 0146	CARBON FILM RES.	10kohm	1/6W		RD16J10K Ω BM515	J03225103			
R 0147	CARBON FILM RES.	1kohm	1/6W		RD16J1K Ω BM515	J03225102			
R 0148	CARBON FILM RES.	4.7kohm	1/6W		RD16J4.7K Ω BM515	J03225472			
R 0149	CARBON FILM RES.	4.7kohm	1/6W		RD16J4.7K Ω BM515	J03225472			
R 0150	METAL FILM RES.	10ohm	2W		RSS2L15-10 Ω J	J22339029			
R 0151	METAL FILM RES.	680ohm	2W		RSS2L15-680 Ω J	J22339034			
R 0153	METAL FILM RES.	10ohm	2W		RSS2L15-10 Ω J	J22339029			



# Power Supply Unit PB2 (AC Power Supply VP-1000)

REF.	DESCRIPTION	VALUE	V/W	TOL.	MFR'S DESIG	YAESU P/N	VERS.	LOT.	LAY ADR
R 0154	METAL FILM RES.	330ohm	2W		RSS2L15-330 Ω J	J22339032			
R 0155	METAL FILM RES.	10ohm	2W		RSS2L15-10 Ω J	J22339029			
R 0156	METAL FILM RES.	7.5kohm	1/4W		SN14K2CM5-10-7.5K Ω F	J22243752			
R 0157	METAL FILM RES.	68kohm	1/4W		SN14K2CM5-10-68K Ω F	J22243683			
R 0158	CARBON FILM RES.	330ohm	1/6W		RD16J330 Ω BM515	J03225331			
R 0159	CARBON FILM RES.	1kohm	1/6W		RD16J1K Ω BM515	J03225102			
R 0160	CARBON FILM RES.	10kohm	1/6W		RD16J10K Ω BM515	J03225103			
R 0161	METAL FILM RES.	10kohm	1/4W		SN14K2CM5-10-10K Ω F	J22243103			
R 0162	METAL FILM RES.	2.2kohm	1/4W		SN14K2CM5-10-2.2K Ω F	J22243222			
R 0163	CARBON FILM RES.	1Mohm	1/6W		RD16J1M Ω BM515	J03225105			
R 0164	CARBON FILM RES.	1Mohm	1/6W		RD16J1M Ω BM515	J03225105			
R 0165	METAL FILM RES.	2.4kohm	1/6W		SN16K2CM5-10-2.4K Ω F	J22243242			
R 0166	METAL FILM RES.	2.4kohm	1/6W		SN16K2CM5-10-2.4K Ω F	J22243242			
R 0167	CARBON FILM RES.	1kohm	1/6W		RD16J1K Ω BM515	J03225102			
R 0168	CARBON FILM RES.	1kohm	1/6W		RD16J1K Ω BM515	J03225102			
R 0169	METAL FILM RES.	4.7kohm	1/4W		SN14K2CM5-10-4.7K Ω F	J22243472			
R 0170	METAL FILM RES.	4.7kohm	1/4W		SN14K2CM5-10-4.7K Ω F	J22243472			
R 0171	CARBON FILM RES.	2.2kohm	1/6W		RD16J2.2K Ω BM515	J03225222			
R 0172	CARBON FILM RES.	2.2kohm	1/6W		RD16J2.2K Ω BM515	J03225222			
R 0173	CARBON FILM RES.	470ohm	1/6W		RD16J470 Ω BM515	J03225471			
R 0174	CARBON FILM RES.	470ohm	1/6W		RD16J470 Ω BM515	J03225471			
R 0175A	CARBON FILM RES.	220ohm	1/6W		RD16J220 Ω BM515	J03225221			
R 0175B	METAL FILM RES.	5.6kohm	1/6W		SN16K2CM5-10-5.6K Ω F	J22243562			
R 0176	METAL FILM RES.	3.0kohm	1/6W		SN16K2CM5-10-3.0K Ω F	J22243302			
R 0177	CARBON FILM RES.	1kohm	1/6W		RD16J1K Ω BM515	J03225102			
R 0178	CARBON FILM RES.	1kohm	1/6W		RD16J1K Ω BM515	J03225102			
R 0179	CARBON FILM RES.	2.2kohm	1/6W		RD16J2.2K Ω BM515	J03225222			
R 0180	CARBON FILM RES.	1Mohm	1/6W		RD16J1M Ω BM515	J03225105			
R 0181	CARBON FILM RES.	1kohm	1/6W		RD16J1K Ω BM515	J03225102			
R 0182	CARBON FILM RES.	1kohm	1/6W		RD16J1K Ω BM515	J03225102			
R 0183	CARBON FILM RES.	1kohm	1/6W		RD16J1K Ω BM515	J03225102			
R 0184	CARBON FILM RES.	15kohm	1/6W		RD16J15K Ω BM515	J03225153			
R 0185	CARBON FILM RES.	150kohm	1/6W		RD16J150K Ω BM515	J03225154			
R 0186	CARBON FILM RES.	150kohm	1/6W		RD16J150K Ω BM515	J03225154			
R 0187	METAL FILM RES.	100kohm	2W		RSS2L15-100K Ω J	J22339028			
R 0188	METAL FILM RES.	100kohm	2W		RSS2L15-100K Ω J	J22339028			
R 0200	CARBON FILM RES.	100kohm	1/6W		RD16J100K Ω BM515	J03225104			
R 0201	CARBON FILM RES.	10kohm	1/6W		RD16J10K Ω BM515	J03225103			
R 0202	CARBON FILM RES.	1kohm	1/6W		RD16J1K Ω BM515	J03225102			
TH0001	THERMISTOR				EC2F103A2-40113	G9090117			
TH0002	THERMISTOR				EC2F103A2-40113	G9090117			
TH0003	THERMISTOR				EC2F103A2-40113	G9090117			
VR0101	TRIMMER RES.	1kohm			3362P-1-102	S8100631			
VR0102	TRIMMER RES.	1kohm			3362P-1-102	S8100631			
VR0103	TRIMMER RES.	1kohm			3362P-1-102	S8100631			
VR0104	TRIMMER RES.	1kohm			3362P-1-102	S8100631			
VR0105	TRIMMER RES.	1kohm			3362P-1-102	S8100631			

# Power Supply Unit PB2 (AC Power Supply VP-1000) ---

*Notes:*



# **YAESU**

*...leading the way.<sup>SM</sup>*

**Copyright 2004**  
**VERTEX STANDARD CO., LTD.**  
**All rights reserved**

No portion of this manual may be  
reproduced without the permission  
of VERTEX STANDARD CO., LTD.