

SERVICE MANUAL & PARTS LIST (without price)

LABEL PRINTER **KL-C500**(ZX-255A/B)

NOV. 1999



KL-C500

CASIO®

Ver.1 March / 2000

CONTENTS

1. SPECIFICATIONS	1
2. GENERAL GUIDE	3
3. CLEANING THE PRINTER HEAD AND ROLLER	5
4. RESET OPERATION (INITIALIZING)	6
5. DOWNLOADING DATA FROM PC	8
6. ADJUSTMENT	10
7. OPERATION CHECK	11
8. TROUBLESHOOTING	14
9. MESSAGES	17
10. DISASSEMBLY PROCEDURE	20
10-1. MAIN UNIT	20
10-2. PRINTER UNIT	23
11. SCHEMATIC DIAGRAMS	24
12. PARTS LIST	34
12-1. COMPONENTS	34
12-2. CHASSIS ASSY	37
13. EXPLODED VIEW	38

1. SPECIFICATIONS

Model: KL-C500

Input

Keyboard Layout: Typewriter (QWERTY)

Character Types

Alpha (English and other languages): 52 (A~Z, a~z), 99 (Á, ß, Ç, Z etc.)

Numbers: 10

Symbols/Greek and Russian Characters: 331

Illustrations: 126

Display

Type: Liquid crystal display

Character matrix: 144 × 64-dot plus symbol

Columns: 18

Lines: 4

Printing

Type: Monochrome: Melt-type thermal transfer

Color: Thermal dye sublimation

Speed: Approximately 6.25 mm/second

Width: 46mm maximum; 4mm(6mm tape) ; 7mm(9mm tape) ; 10mm (12mm tape) ; 16mm (18mm tape) ; 22mm (24mm tape) ; 32mm (36mm tape) ; 36mm (enlarged printing on 36mm tape) ; 43mm (46mm tape) ; 46mm (enlarged printing on 46mm tape) ; 18mm (color 18mm tape) ; 36mm (color 36mm tape) ; 46mm (color 46mm tape)

Character Configuration: Outline fonts

Character fonts: Sans-serif, Old face, Courier, Logo style, Sans-serif rounded, Roman, Rich stroke, Stencil, Bold script, Black letter

Character Pitch: 7 levels; 8/8, 9/8, 10/8, 11/8, 12/8, 16/8, 24/8 character

Tape Length: 0.0cm to 99.9cm (FIXED); longer lengths possible with AUTO

Printing Functions: Just Fit, horizontal, vertical, mirror, multiple copy-printing etc.

Character Sizes: 14 types (mm sizes are approximate)

9pt (3mm), 12pt (4mm), 14pt (5mm), 17pt (6mm), 20pt (7mm), 26pt (9mm), 34pt (12mm), 43pt (15mm), 51pt (18mm), 59pt (21mm), 68pt (24mm), 85pt (30mm), 102pt (36mm), 119pt (42mm)

Number of Lines:

Normal Printing:

6mm tape:	1 line maximum
9mm tape:	1 line maximum
12mm tape:	2 line maximum
18mm tape:	4 line maximum
24mm tape:	5 line maximum
36mm tape:	8 line maximum
46mm tape:	10 line maximum

Frame Printing:

6mm tape:	1 line maximum
9mm tape:	1 line maximum
12mm tape:	2 line maximum
18mm tape:	3 line maximum
24mm tape:	4 line maximum
36mm tape:	6 line maximum
46mm tape:	8 line maximum

Character Styles: Normal, bold, outline, shadow, raised, italic, italic-bold, italic-outline, italic-shadow, italic-raised

Character Effects: Shade, underline, box (Can be specified for each individual character.)

Frames: 65types

Memory

Text Input: Up to approximately 551 characters

Text Storage: Up to approximately 4,000 characters

Memory Data Recall: Sequential search, character search

Date Communication: Using bundled PC Link software (FA-930C)

General

Power supply: Power cord

Memory Back-up: Built-in battery

Memory Back-up Battery Life: As indicated on the sticker on the back of the label printer. Indicated battery life is for operation under normal temperatures (20° C). Contact a nearby dealer for battery replacement. You will be charged for replacement.

Power consumption: 40W

Current consumption:

■ Primary input alternating current (AC)

Condition: At the time of printing with **PRN1** of OPERATION CHECK
(Refer to **7.OPERATION CHECK** in this manual.)

Applicable Unit	Applicable Primary input voltage (AC)	Input voltage for measurement (AC)	Primary input alternating current (AC)
KL-C500-A	120 V	120 V	0.4A (TYP.)/ 0.6A (MAX.)
KL-C500-B	220 ~ 240 V	230 V	0.2A (TYP.)/ 0.3A (MAX.)

Note: Refer to **12.PARTS LIST** in this manual concerning Applicable Unit.
TYP.: Typical value/ MAX.: Maximum value

■ Memory Back up using Lithium battery

Condition: Terminal voltage for Lithium battery: 3V DC
At the time of removing AC power cord (No AC power cord)

1.0 μA (TYP.)/ **3.0 μA** (MAX.) DC

Auto power off: Approximately thirty minutes after last key operation

Ambient temperature: 10° to 35° (50° to 95° F)

Dimensions: 101(H) × 225(W) × 262(D) mm (3 ¹⁵/₁₆"(H) × 8 ⁷/₈"(W) × 10 ⁵/₁₆"(D))

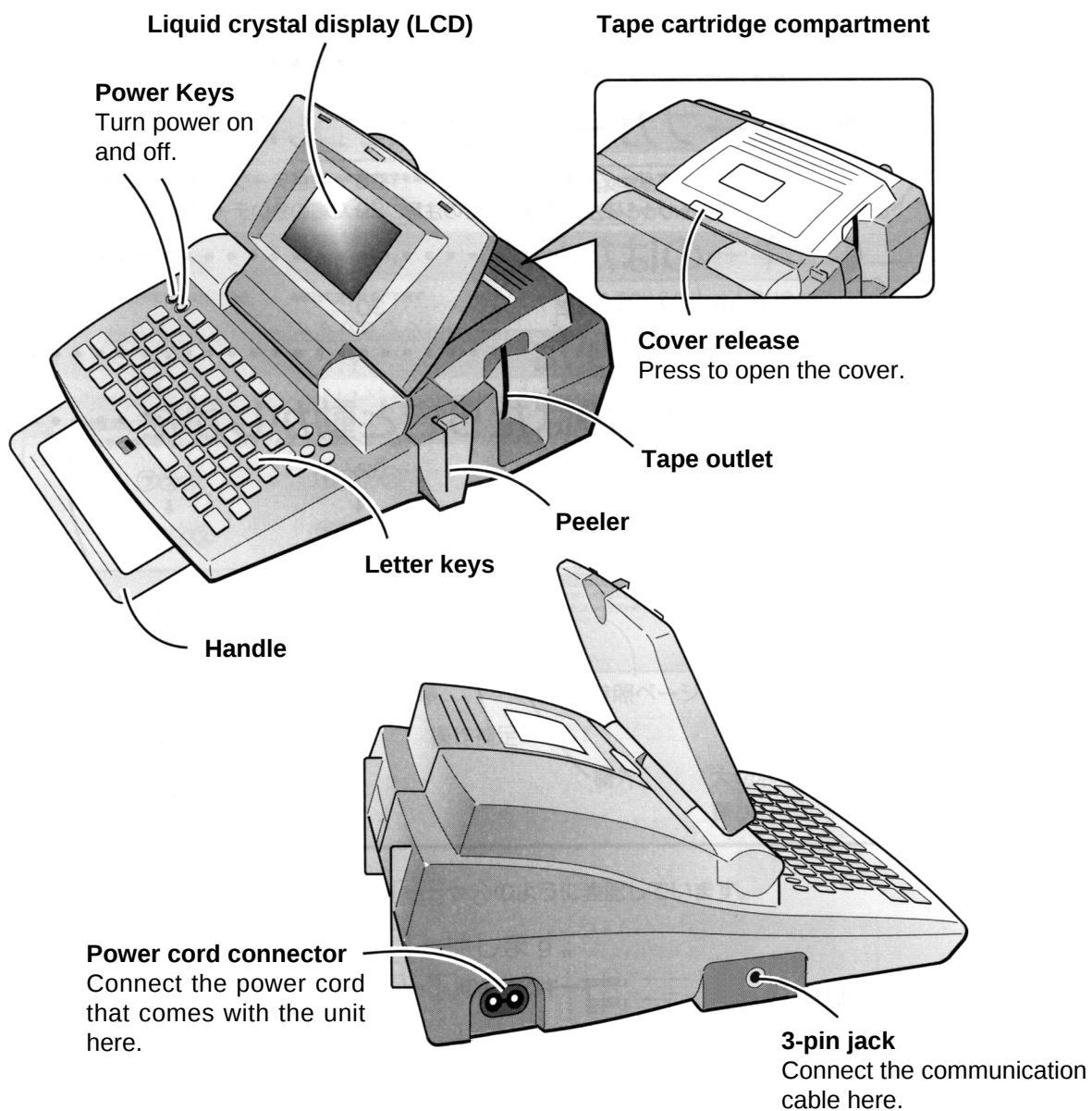
Weight: Approximately 1600 g (56.4 oz) (including battery)

CAUTION

Danger of explosion if battery is incorrectly replaced.

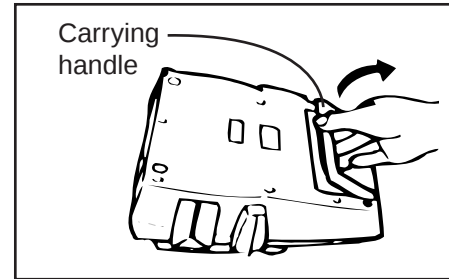
Replace only with the same or equivalent type recommended by the manufacturer.
Dispose of used batteries according to the manufacturer's instructions.

2. GENERAL GUIDE



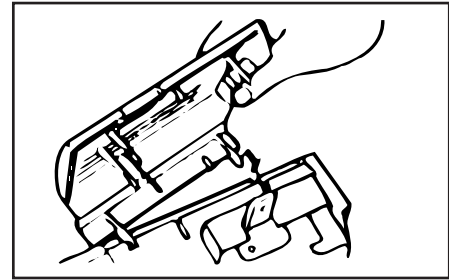
Using the Carrying Handle

Pull up carrying handle as shown in the illustration so you can use it for carrying the label printer.



Replacing the Cover if it Comes Off

If the cover comes off, replace it as shown in the illustration nearby. Take care to avoid damaging the tabs and hinges when installing the cover.

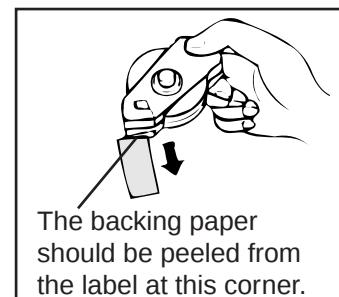
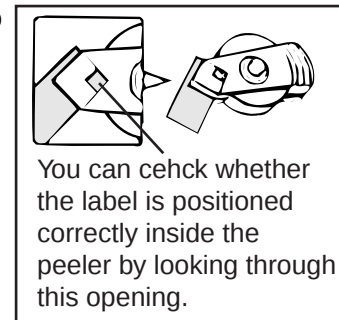
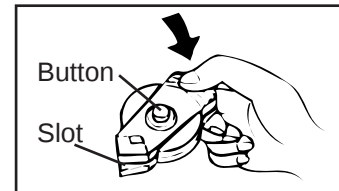


Included Items

- AC power cord : See **PARTS LIST** and **EXPLODED VIEW**.
 - Tape cartridge XR-18BKWE
 - PC link cable
 - PC link soft (CD-ROM)
 - Peeler (This makes it easy to remove the backing paper from the printed label.)
- } See **DOWNLOADING DATA FROM PC**,
PARTS LIST and **EXPLODED VIEW**.
- : See this pages, **PARTS LIST** and **EXPLODED VIEW**.

To remove backing paper with the peeler tool

1. Open the peeler slot.
2. With the printed surface of the label facing downwards, insert it into the peeler.
3. Close the peeler slot.
4. Press the button a number of times.
5. Open the peeler slot and remove the label.

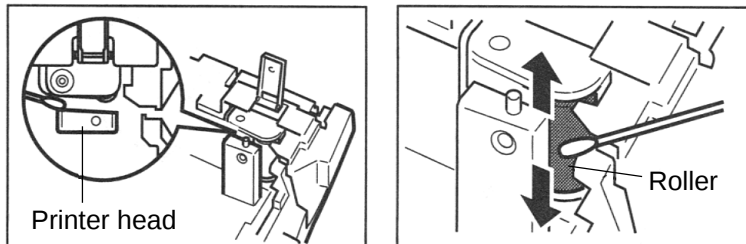


3. CLEANING THE PRINTER HEAD AND ROLLER

A dirty printer head and roller can result in poor printing quality. If you have problems with print quality, use the following procedure to clean the printer head and roller.

To clean the printer head and roller

1. Make sure the Label Printer is turned off.
2. Press the tape cartridge compartment cover release and open the compartment cover.
3. Remove the tape cartridge.
4. Use a cotton swab dipped in alcohol to clean the printer head and roller as shown in the illustration.



5. Replace the tape cartridge and close the back cover.

4. RESET OPERATION (INITIALIZING)

You should reset the memory of the label printer before using it for the first time, after you have not used it for a long time, or if nothing happens when you turn power on.

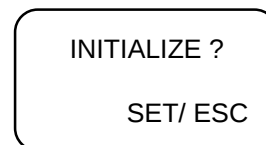
Important! Resetting (INITIALZING) label printer memory clears its memory of all input data.

Make sure you have a back-up copy of text stored in memory if you need it.

Refer to **5. DOWNLOADING DATA FROM PC** in this manual if performing this back-up by hand.

To reset the memory (INITIALIZING)

1. Make sure that label printer power is off.
2. While holding down the **PRINT** and **ESC** keys, press **ON** to turn power on.



3. Press **SET** to initializing the label printer or **ESC** to abort the reset operation without initializing anything.

Note :

Generally speaking, **Resetting** and **Initializing** are the same operation for CASIO Label Printer, and this operation for CASIO Label Printer do not indicate RESET to CPU.

The instruction manual (User's Guide) for KL-C500 will be corrected in future.

■ Initial Settings

The following are the initial settings of the label printer whenever you turn it power on or reset the unit.

Item	Power On	Reset
Display	Cleared*	Cleared
Memory	Retained	Cleared
ab(CAPS OFF)/AB(CAPS ON)	Retained	ab

* Pressing **SET** when the message “PRESS [SET] TO RECALL” appears on the display, recalls the text that was on the screen when you last turned off power.

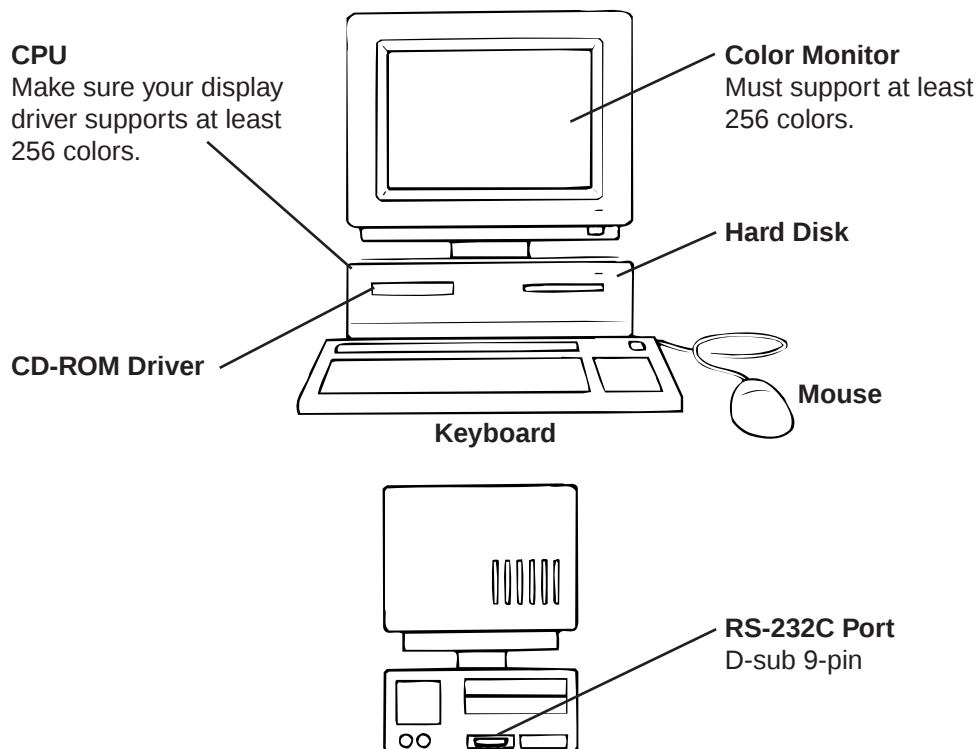
Item	Power On	Reset
Horz/Vert	Horizontal	Horizontal
Text Alignment	Left	Left
Character Pitch	8/8	8/8
Block Length	Auto	Auto
Mirror Printing	Normal	Normal
Proportional Spacing	On	On
Block Spacing	Narrow	Narrow
Auto Feed	Long	Long
Default Font	Retained	Sans-Serif
Insert/Overwrite	Retained	Insert
Contrast (32 levers)	Retained	Level 15
Density (5 levels)	Retained	Level 3
Sound	Retained	On
Language	Retained	English
Character Attributes		
Fonts	Default font	Sans-Serif
Character Styles	Normal	Normal
Text Effects	None	None
Character sizes:		
(SIZE 9-119pt)	Auto sizing	Auto sizing
(LINE:FORMAT MENU)	Canceled	Canceled
cm/inch	Retained	cm

5. DOWNLOADING DATA FROM PC

The PC Link Software (FA-930C) that comes bundled with the label printer makes it possible for you to print data from your computer on the label printer. See the documentation that comes with the FA-930C for information about how to connect the label printer to your computer and how to use the software.

Important!

The FA-930C software may not run properly on certain computer configurations. The following are the system requirements to run the FA-930C software.



- Note that the above is intended to provide only a general idea of the appearance of a computer. Specific components may be arranged or located differently from those shown above.

The following parts are included in Optional unit FA-930C.

1. CD-ROM: CDZ988JA01A
2. RS-232C PC LINK cable: U00043#01-0
3. Instruction Manual for this software
4. Others

"C" in the term FA-930C indicates **Color**.

The optional unit FA-930C can be applicable to the other CASIO Label Printer KL-8100 and KL-8200 also. FA-920 for KL-8100 and FA-900 for KL-8200 will not be shipped in future.

However, this CD-ROM and a PC LINK cable are enclosed in KL-C500, and can be supplied for the spare parts. See **PARTS LIST** and **EXPLODED VIEW** in this manual.

System requirements

Operating System:	Microsoft [®] Windows [®] 95/98 English Version
CPU:	i486/66MHz or higher (Pentium 75 MHz or higher recommendend)
Connector:	RS-232C port (D-sub 9-pin)
RAM:	At least 16 MB (32 MB recommended)
Hard Disk:	At least 20 MB available for installation ;40 MB available for operation
Monitor:	Support for at least 256 colors
CD-ROM Driver	

- Microsoft Excel 95/97/2000 must also be installed on your system if you plan to import Excel files using a version of the PC LINK application that supports Excel file import.

Sending Data from your personal computer

This section tells you how to send data from personal computer to the label printer.

Important!

- Before performing any of the procedures in this section, make sure to load a single-color tape for monochrome data or a colored tape for color image data.
- You need to prepare the cable that comes with the package to connect the PC to the label printer for data communication.

The FA-930C application that comes with the package, makes it possible for you to use the label printer to print data created on your personal computer.

To connect the PC to the label printer

1. Turn off the power of the label printer and your PC.
2. Use the cable to connect to the label printer.
3. Turn on the power of the label printer and the PC.

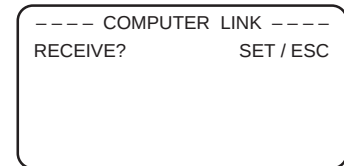
To send data from the PC to the label printer

4. Recall the data you want to send.

- See the Use's Guide that comes with the FA-930C for details on how to recall data.

5. On the label printer, press **COMPUTER LINK**

- This causes the message "RECEIVE? SET/ESC" to appear on the label printer screen.
- If there are text remaining in the text input screen, a message "INPUT TEXT WILL BE CLEARED! OK TO CONTINUE? SET/ESC" will appear.



Press **SET** to clear the text or **ESC** to return to the text input screen.

- Press **SET** to execute the operation, or **ESC** to quit data communication.
6. Press **SET** and the message changes to "RECEIVE OK!"
 - A communication error occurs on the label printer if it does not start to receive data within about 20 seconds after the "RECEIVE OK!" message appears on its screen.
 - If a communication error occurs on the label printer, press any key besides **OFF**, **FUNCTION**, **SHIFT**, **CODE** or **ON** to clear the error, and then try again.
 - A message "NOW SENDING" appears on the screen of the label printer while data is being transferred.
7. The data will be automatically printed.
 8. Turn the label printer and the computer off and disconnect the cable.

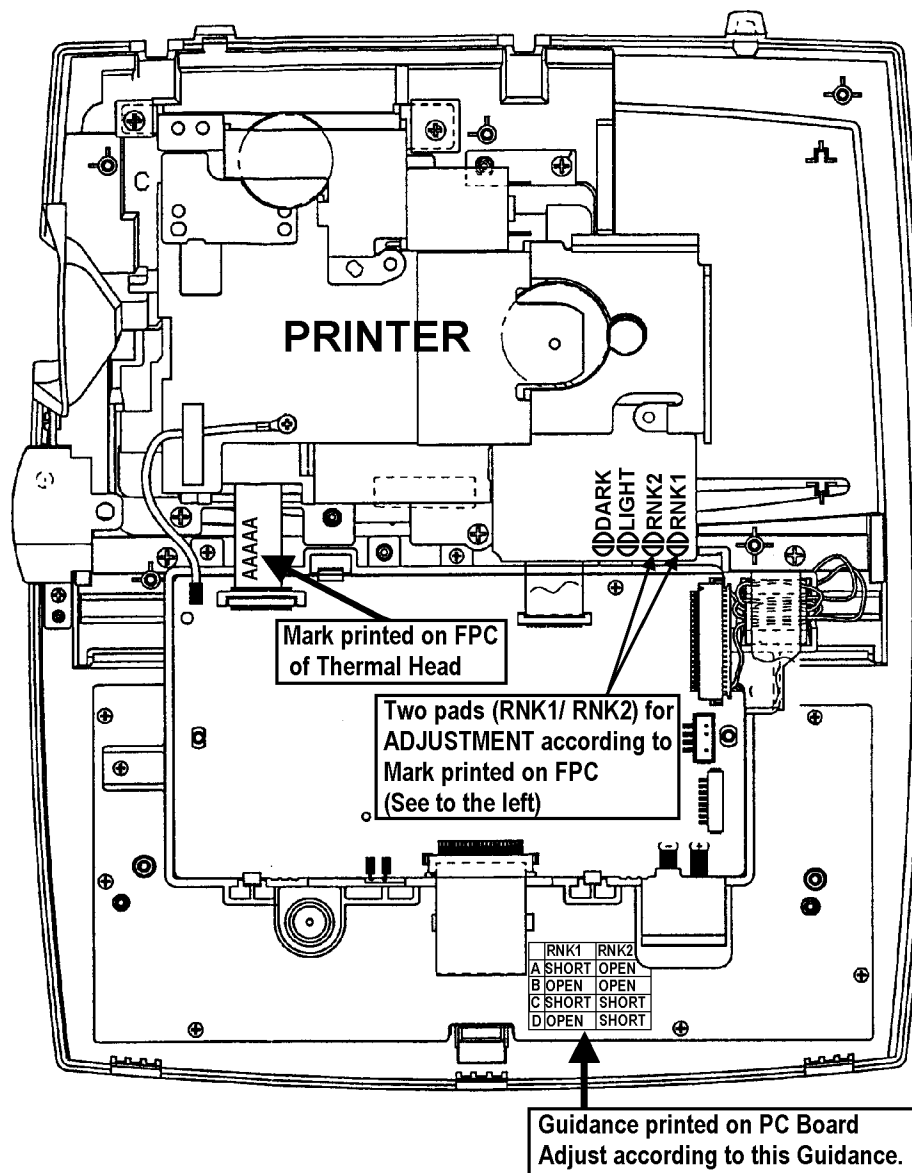
Important!

- Label printer functions are disable while data communication with a computer is in progress.

6. ADJUSTMENT

There is one kind of adjustment (i.e. Adjustment for Head Rank of the thermal head) concerning KL-C500.

When replacing the printer or the thermal head, perform this adjustment.



<Procedure> Refer to the illustration shown above.

1. Confirm the mark printed on FPC of thermal head.
2. See the guidance printed on PC Board.
3. Solder(short) or de-solder(open) two pads (RNK1/ RNK2) according to this guidance.
For example, if the head rank is A, solder (short) RNK1 pad, and de-solder (open) RNK2 pad if RNK2 pad is soldered.

Note: 1. **LIGHT** and **DARK** pads are not necessary to adjust.
Leave these pads open.

2. This adjustment can be confirmed performing **6 SW** in **OPERATION CHECK**.
For example, if both RNK1 and RNK2 pad are open, "**RNK B**" display appears in this check. Vice versa.
Refer to **7. OPERATION CHECK** in this manual.

7. OPERATION CEHCK

7-1. How to enter OPERATION CHECK

<Procedure>

1. Turn off the unit.
2. Press **ON** button while holding down **P**, **Z** and **SPACE** buttons.
3. The following Main Menu for **OPERATION CHECK** will appear.

```

CHECK PROGRAM
1 ALL      2 ROM
3 RAM      4 LCD
5 KEY      6 KEY
7 LPCK     8 RX
9 PRN1     A PRN2
B MTR      C VIDEO
D RSET     E PR1+2
```

If you want to resume this Main Menu when performing these each check, press **ESC** button.

7-2. OPERATION CHECK

4. After selecting **2 ROM** using the cursor keys, press **SET** button.
Doing so, the following display appears.

```

ROM CHECK
CPU XXXXH OK
16M XXXXH OK
```

ESC TO EXIT

Pressing **ESC** button, return to **Main Menu**.

5. After selecting **3 RAM** using the cursor keys, press **SET** button.
Doing so, the following display appears.

```

RAM CHECK
2MBIT SRAM OK
4MBIT DRAM OK
```

ESC TO EXIT

Pressing **ESC** button, return to **Main Menu**.

6. After selecting **4 LCD** using the cursor keys, press **SET** button.
Doing so, the frame display appears.
Pressing **SET** button again, all dots display appears.
Pressing **SET** button once more again, check display appears.
Pressing **SET** button once more again, the reversed check display appears.
Pressing **SET** button once more again, **Main Menu** display appears.
7. After selecting **5 KEY** using the cursor keys, press **SET** button.
Doing so, the following display appears.

KEY CHECK

- 1 ALL KEY
- 2 EASY KEY

Pressing 1 button, the following display appears.

KEY CHECK
PuSH COM
Now X

ESC P+SPACE+Z

Press **COMPUTER LINK** button according to this message.

Press buttons according to the messages on display in order and one after another from the left to the right downwards.

Finally, after pressing **SET** button, **Main Menu** appears.

8. After selecting **6 SW** using the cursor keys, press **SET** button.
Doing so, the following display appears.

For example,

TAPE	RANK	
TMP	25°c	
SW	NOT	111111
RNK	A	
NOD	2	
SC1JM	●	SC2CT ●
SC3HP	○	SC4KT ○
SC5IK	●	

This display indicates that the temperature of thermal head is 25°C, the adjustment for Head Rank is performed with **A**, and the print density setting becomes **3**. Difference between the actual print density setting and the display of this display is as follows;

Actual print setting	Display in this check
1	0
2	1
3	2
4	3
5	4

* Refer to page 32 in User's Guide (Instruction Manual) concerning Actual print density.

Pressing **ESC** button, return to **Main Menu**.

Check the communication with PC using the data transfer in **5. DOWNLOADING DATA FROM PC** in this manual instead of checks of **7 LPCK** and **8 RX**.

9. After entering a tape cartridge and selecting **9 PRN1** using the cursor keys, press **SET** button.
Doing so, the following display appears after print density adjustment.

NOW PRINTING

ESC TO EXIT

Print both the monochromatic and the color tape with this check.

10. After entering a tape cartridge and selecting **A PRN2** using the cursor keys, press **SET** button. Doing so, the following display appears after print density adjustment.

NOW PRINTING

CASIO COMPUTER	↵
CASIO COMPUTER	↵
CASIO COMPUTER	↵

Print both the monochromatic and the color tape with this check.

Note: Selecting **E PR1+2**, it is impossible to print the color tape.

However, it is possible to print the monochromatic tape with PRN1 and PRN2 one after another.

11. Pressing a downward key in four cursor keys after selecting **E PR1+2**, the beep from the buzzer is emitted (Buzzer Check).

B MTP is a check for the stepping motor in factory.

Perform these **PRN** check instead of **B MTP** check.

C VIDEO is a obsolete check, and has not been performed even in factory now.

Pressing **SET** button after selecting **D RSET**, the beep is emitted, and the data stored in the unit will be deleted.

Perform this operation when you want to initialize the unit during OPERATION CHECK.

12. Turn off the unit pressing **OFF** button.

8. TROUBLESHOOTING

● Power Supply

Nothing appears on the display.	
Possible Cause	Action
Improper display contrast setting	Adjust display contrast.
AC power cord is not connected correctly	Make sure the AC power cord is connected correctly.

● Text Input

Cannot input text.	
Possible Cause	Action
FUNCTION key has been pressed.	Press ESC to clear FUNCTION key operation.

Tape does not come out when PRINT is pressed.	
Possible Cause	Action
Tape cartridge compartment cover is not closed completely.	Securely close the tape cartridge cover.
No more tape left in the cartridge.	Replace the tape cartridge with a new one.
Tape jam	Remove the tape cartridge and pull out the jammed tape by hand. Cut off excess tape with scissors and carefully replace the cartridge into the label printer. Important! Never do any of the following while printing is in progress. • Allow the tape out outlet to become blocked • Touch the tape coming out of the label printer • Open the tape cartridge compartment cover • Turn off label printer power

Tape comes out when PRINT is pressed, but nothing is printed on it.	
Possible Cause	Action
Only blank spaces were input.	Input the text you want to print.

Printing is blurred, blotched, broken, etc.	
Possible Cause	Action
Improper print density setting	Adjust the print density setting.
Improper loading of the cartridge	Remove the tape cartridge and reload it correctly.
Dirty print head or rubber roller	Clean the printer head and roller.

Ink ribbon is being fed from the tape outlet along with the tape.	
Possible Cause	Action
Ink ribbon cassette loaded while the ink ribbon is slack.	Remove the ink ribbon cassette and check to make sure the ink ribbon is not broken. Next, take up any slack in the ink ribbon and then reload the tape cartridge. Important! Never do any of the following while printing is in progress. • Before loading an ink ribbon cassette into the label printer, always make sure you take up any slack in the ink ribbon first. • If the ink ribbon is broken, you must change to another ink ribbon cassette.

● Tape Cutting

Cannot cut tape.	
Possible Cause	Action
Tape cutter blade is dull.	Replace the tape cutter (item 12 in PARTS LIST and EXPLODED VIEW of this manual).
Tape is jammed.	Turn off power, remove the tape cartridge, and clear the jammed tape.
You are using colored tape.	When using colored tape, you cannot cut the tape by pressing FUNCTION IMAGE.
MANUAL is set as the FEED setting.	Change the feed setting to LONG, MEDIUM, or SHORT.
You selected AUTO CUT: OFF before printing.	Change the setting to AUTO CUT : ON.
The label length (TAPE LENGTH) setting is too short (less than 31mm when using FEED: MEDIUM, less than 24mm when using FEED: SHORT).	After printing is complete, use scissors to cut the tape.

● Using Labels

Label will not adhere to a surface.	
Possible Cause	Action
The backing paper is still on the back of the tape.	Peel the backing paper from the back of the tape to expose the adhesive.
Surface is unsuitable for affixing a tape.	Labels do not adhere well to surfaces that are rough, wet, oily, or dirty.

● Data Communication

Cannot transfer data.	
Possible Cause	Action
Poor data communication cable connection	Make sure the data communication cable jacks are connected securely.
Passage of too much time after setting up for data communication	Be sure to start actual data transfer within about 20 seconds after pressing SET to start a data communication operation.

9. MESSAGES

The messages in the following table are listed in alphabetical order.

Messages	Possible Cause	Action
CANCEL FORMAT? SET/ESC	- You changed the number of lines. - You specified character size (points) for individual characters.	- To cancel preset format specification press SET. - If you do not want to cancel the specification, press ESC.
CANNOT INSERT!	Recalling text into existing text results in more than 511 characters or 16 blocks.	Reduce the number of characters or blocks in existing text.
CANNOT PRINT! BAR CODE MUST HAVE EVEN NUMBER OF DIGITS!	- Even number of digits input for ITF bar code when a check digit is being used. - Odd number of digits input for ITF bar code when a check digit is not being used.	- Add a 0 (zero) at the first digit and re-input. - Add a 0 (zero) at the first digit and re-input.
CANNOT PRINT! NOT ENOUGH DIGITS!	Bar code printed does not have enough digits.	Re-input with the proper number of digits.
CANNOT PRINT! YOU ARE USING ILLEGAL CHARACTERS!	- Invalid characters used in a bar code. - Letter other than A, B, C or D input for CODABAR bar code start code or end code.	- Change to allowed characters. - Use only the allowable characters.
CANNOT RECALL MEMORY DATA IN THIS MODE!	Attempt made to recall barcode data as text.	Recall data as barcode data in the PRESETS menu.
DATA ERROR! RESET THE LABEL PRINTER!	- Corrupted or lost memory contents due to low battery power. - Attempting to save text in memory before initializing memory. - Attempting to print text in memory before initializing memory.	Perform the reset operation and try again.
GETTING READY...	Printer is not.	Wait for a while. Printing will resume when temperature returns to normal. If this problem happens often, try making the print density lighter (lower).
INPUT TEXT!	Attempt made to perform text save without inputting text first.	Input text and then perform text save operation.
INPUT TEXT WILL BE CLEARED! OK TO CONTINUE? SET/ESC	Input text on the screen when selecting enlarged printing, the barcode printing menu(PRESET), or the data communication menu(COMPUTER LINK) while there is input text on the display.	- To proceed with the print operation, press SET. - To cancel the operation, press ESC and then save the text.

Messages	Possible Cause	Action
LABEL HAS TOO MANY LINES!	Too many lines to be printed.	Reduce the number of lines or use a wider tape.
LABEL IS LONGER THAN TAPE LENGTH! SET/ESC	Tape Length specified for printing is longer than the actual tape length.	- To proceed with the print operation, press SET. - To cancel printing, press ESC. Next, you can correct the condition by reducing the number of characters, changing the tape length setting, or turning on automatic tape length setting.
LENGTH OF PRINT IS TOO LONG!	When printing text that is longer than the allowed length, the length of each piece is too long, or the number of copies specification causes the total print length to be longer than eight meters.	Shorten the print length or reduce the number of copies.
LOAD A TAPE CARTRIDGE THAT IS 18mm OR WIDER	Loaded tape width is less than 18mm during barcode printing.	Use a tape cartridge that is 18mm or wider.
LOAD A TAPE CARTRIDGE THAT IS 36mm OR WIDER	Loaded tape width is less than 36mm during enlarged printing.	Use a tape cartridge that is 36mm or wider.
LOOK FOR? NOT FOUND!	No text in memory matches what you specified.	Specify the correct text or scroll through text in memory to find what you want.
MEMORY FULL!	Memory is full.	Delete data you no longer need to make room for more data.
NO DATA!	There is no data stored in memory.	You must have data in memory before you can search for data.
NOT ENOUGH MEMORY! SET/ESC	Not enough memory to store a barcode.	- To print the barcode without storing it, press SET. - To store the barcode, press ESC to return to the PRESETS menu. Delete memory data you no longer need and then perform the barcode store operation again.
PRESS [SET] TO RECALL	Input characters were left on the display the last time power was turned off.	- To recall the text that was last on the display, press SET. - To perform another operation without recalling text, simply perform the operation.

Messages	Possible Cause	Action
PRINTING ERROR! CHECK THE TAPE CARTRIDGE!	• Tape jam during printing • Some foreign object, in the tape cutter • Some foreign object or tape residue on the rubber roller	• Turn off power, remove the tape cartridge, and clear the tape jam. • Turn off power, remove the tape cartridge, and remove the foreign object. • Clean the rubber roller to remove the foreign object.
RESET THE LABEL PRINTER!	Memory has not been initialized yet.	Perform the reset operation.
SAME DATA ALREADY EXISTS!	Attempt made to store data when the same data already exists in memory.	Store other data.
SEND ERROR!	• You did not perform sending the data within 20 seconds after the "RECEIVE OK!" message appeared. • Label printer was unable to receive data being set from an external source. • Tape cartridge type is not suitable for the type of data being sent to the label printer. • Interruption of data send from the computer	• Press any key besides ON, FUNCTION, SHIFT or CODE and start again. • Check cable connections and parameter settings. • Turn off power and replace the tape cartridge. Load a single-colored tape for monochrome data or a colored tape for color image data. • Try again.
THAT NAME IS ALREADY USED!	Name being assigned to a barcode is already used.	Use a different name.
THIS IS THE WRONG TYPE OF TAPE CARTRIDGE	Tape cartridge is not compatible with label printer model.	Turn off power and load the proper tape cartridge.
TOO MANY BLOCKS!	Attempt to input a 16th block mark (only 15 are allowed).	Delete block marks you don't need.
TOO MANY LINES TO FRAME!	Too many lines for printing with a frame.	Reduce the number of lines or use a wider tape.
TURN OFF POWER THEN LOAD A TAPE CARTRIDGE	Printing operation performed while the tape cartridge compartment is empty.	Load a tape cartridge and try again.

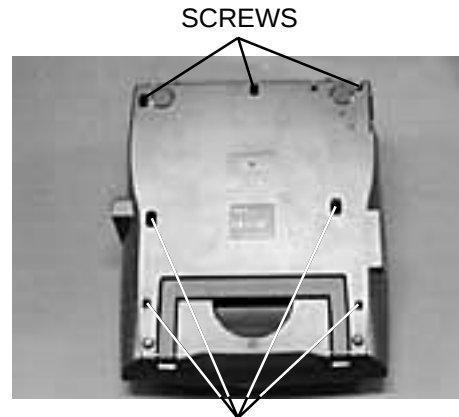
10. DISASSEMBLY PROCEDURE

Refer to EXPLODED VIEW in this manual

10-1. MAIN UNIT

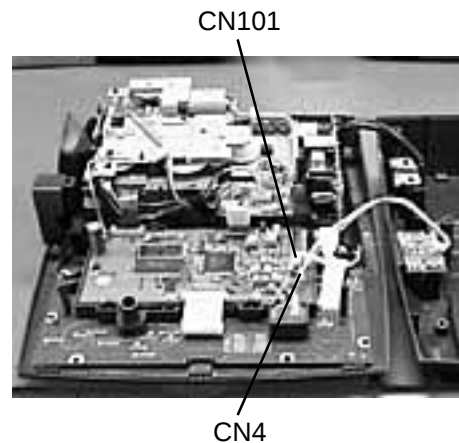
1. Place the unit as the bottom case (52) facing up and remove seven screws.

NOTE: For example, (52) indicates item 52 in PARTS LIST and EXPLODED VIEW in this manual.



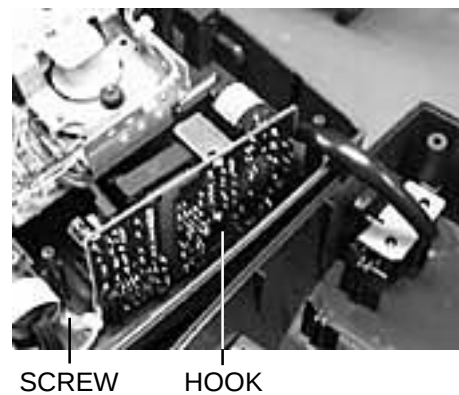
SCREWS

2. Remove a connector (CN101) on Main PCB (35), then remove one screw. Unhook the power unit (22) and take it out from the top case (37).



CN101

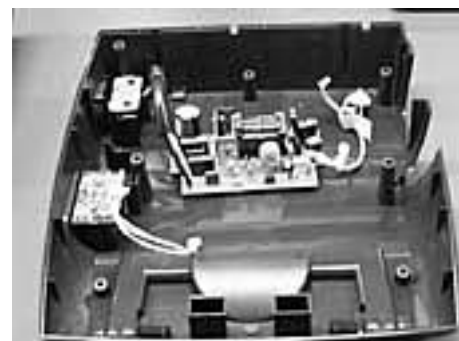
CN4



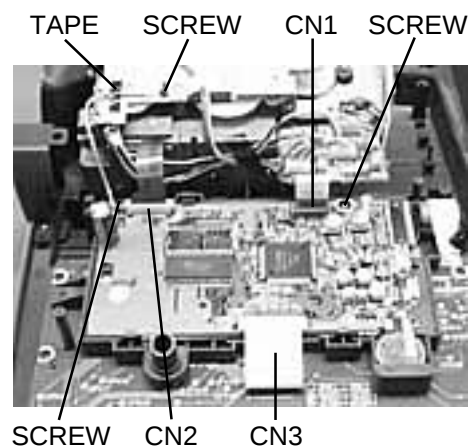
SCREW

HOOK

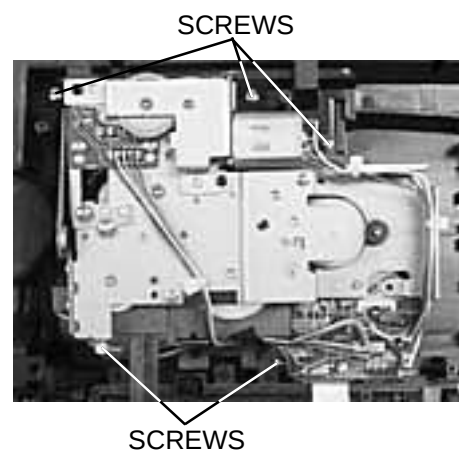
3. Remove a connector (CN4) on Main PCB.



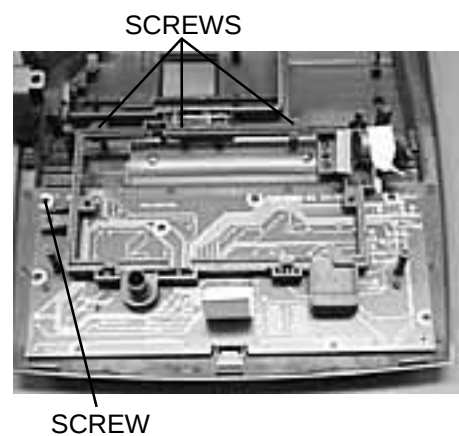
4. Remove connectors (CN4), (CN2), (CN3) and (CN5) on Main PCB (35).
Remove two screws.
Peel off a tape on the printer unit, and then remove one screw.
Take out Main PCB (35) from the inner case (38).



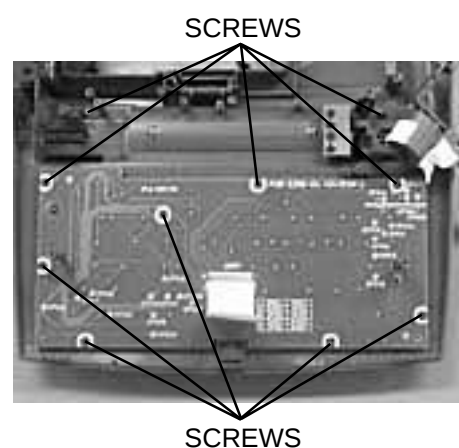
5. Remove five screws, then remove the printer unit.



6. Remove four screws, then remove the inner case (38).

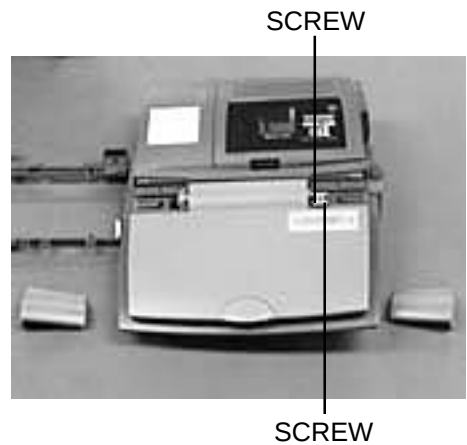


7. Remove eight screws and PCB (4), then take out the key rubber (36).
Remove two screws and take out hard covers (23)(24).





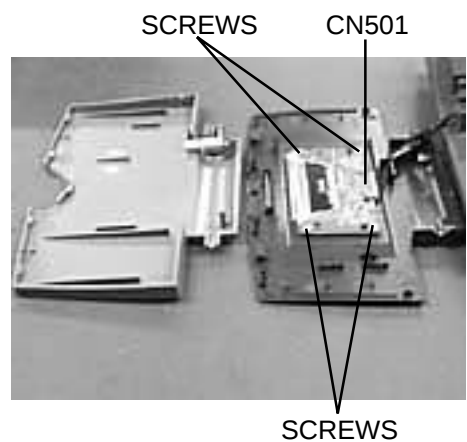
8. Remove two screws, then remove the display case unit.



9. Take out two cushions (47) with a screwdriver (-), and remove two screws.

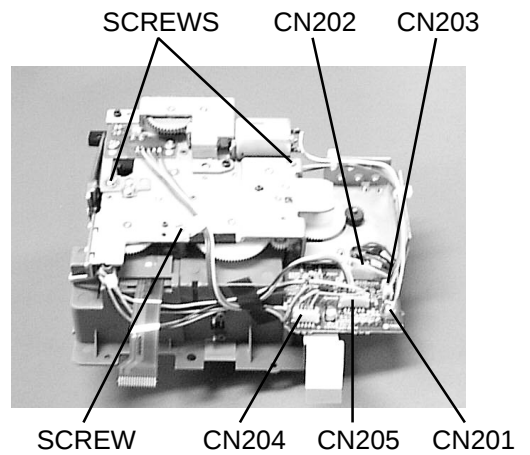


10. Prize open the case with a screwdriver.
11. Remove four screws, then remove PCB ASSY (41).

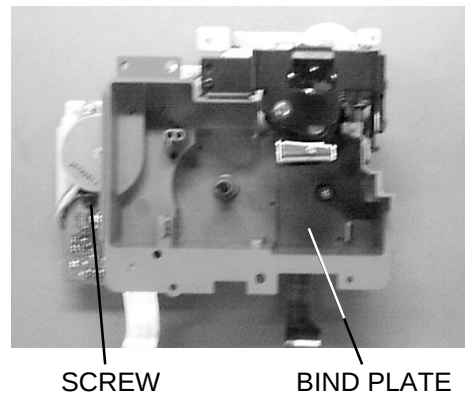


10-2. PRINTER UNIT

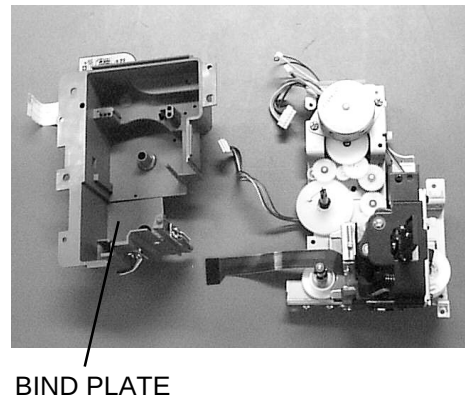
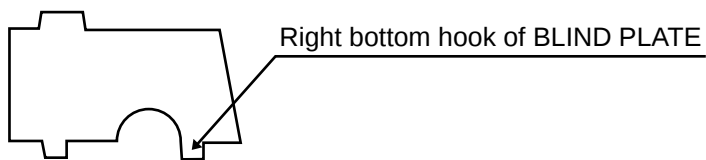
1. Remove three screws and connectors, (CN201), (CN202), (CN203), (CN204) and (CN205).



2. Turn the printer unit around and remove one screw.

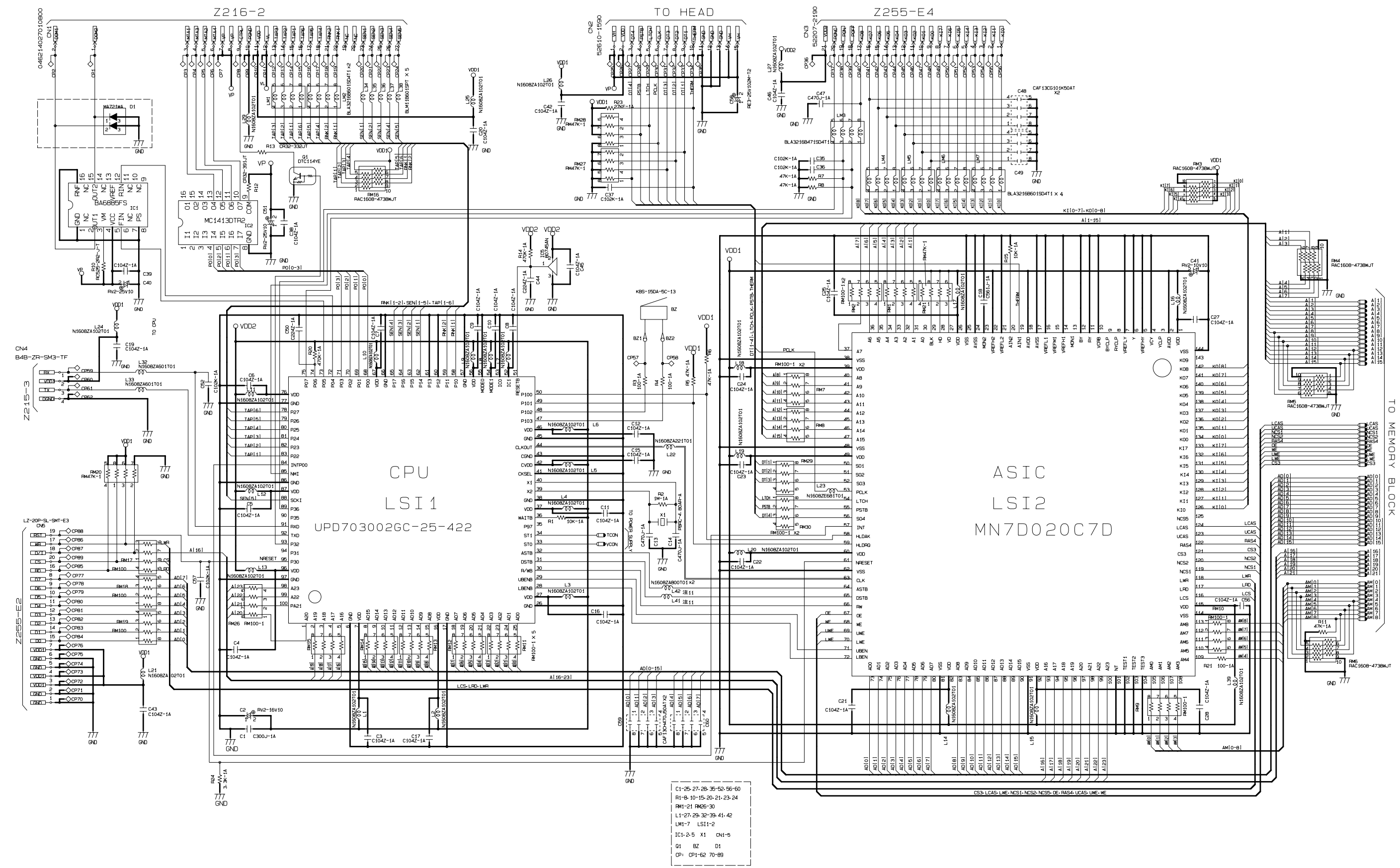


3. After unhooking the right bottom point of BLIND PLATE, pull out FPC, then remove the cassette case (6).

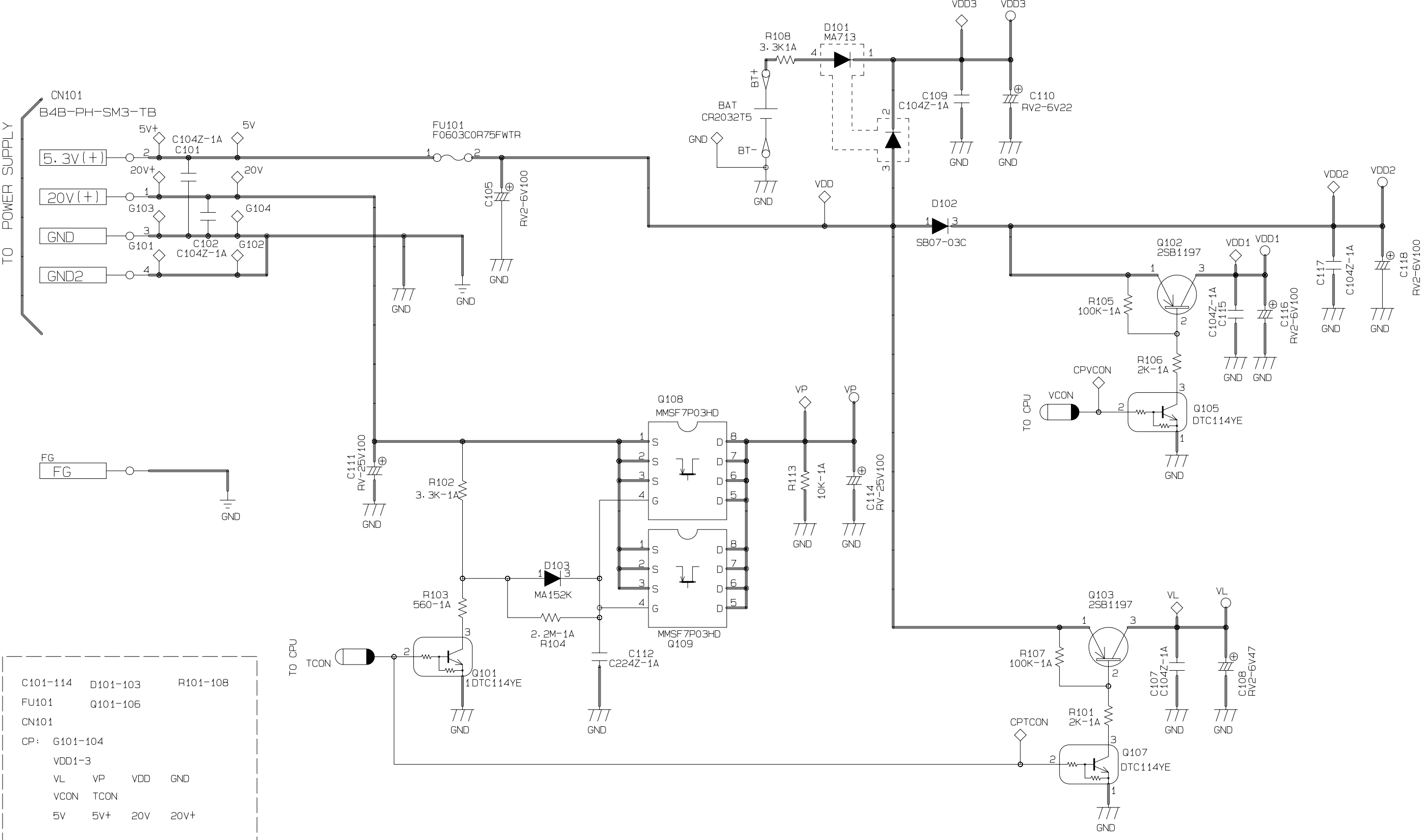


11. SCHEMATIC DIAGRAMS

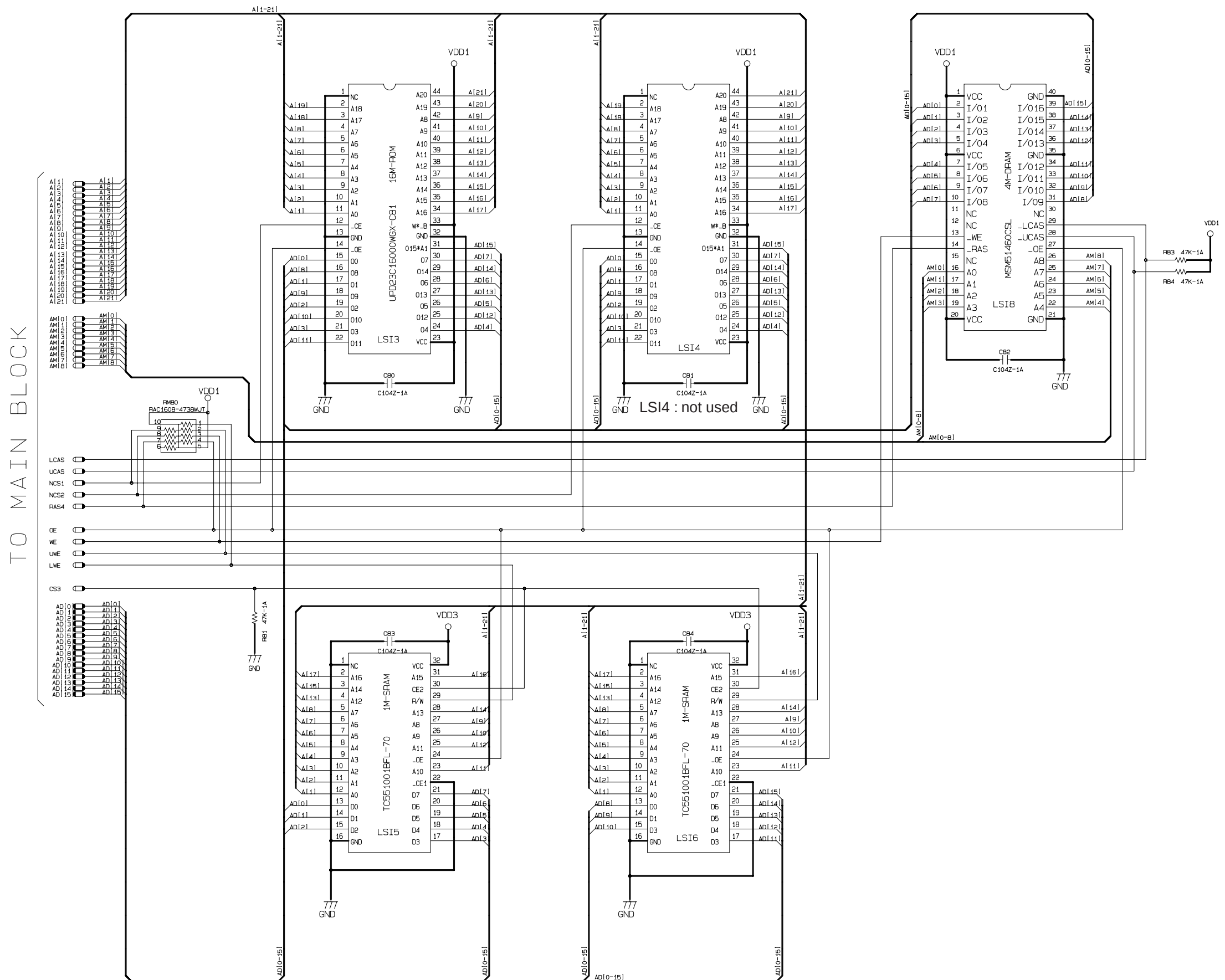
Main block : PCB Z255-1



Power supply : PCB Z255-1



Memory block : PCB Z255-1

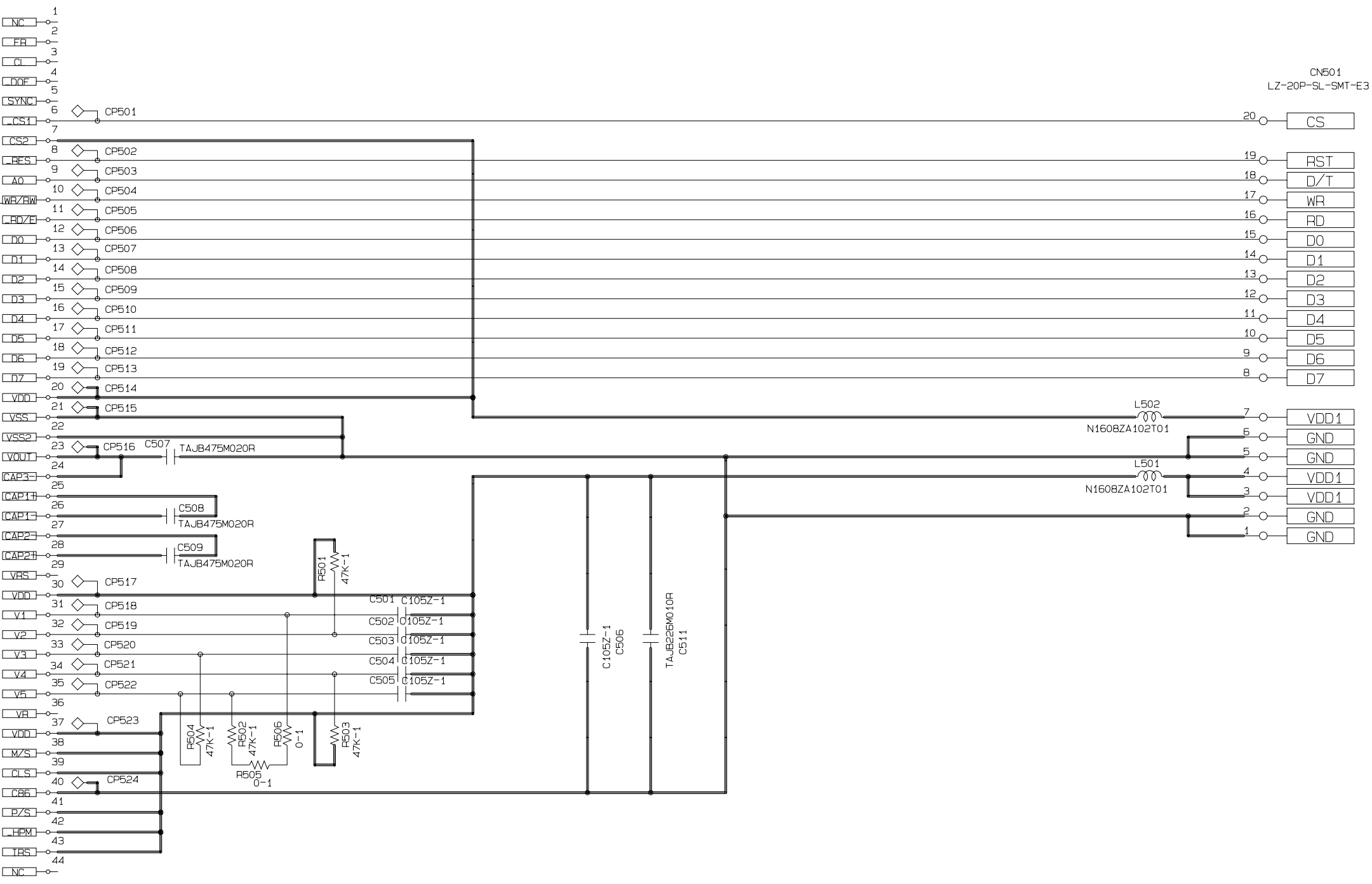


RM80	LSI3-8
RB0-B4	CB0-B5

Display block : PCB Z255-E2

LCD/D
SEK1094B0A

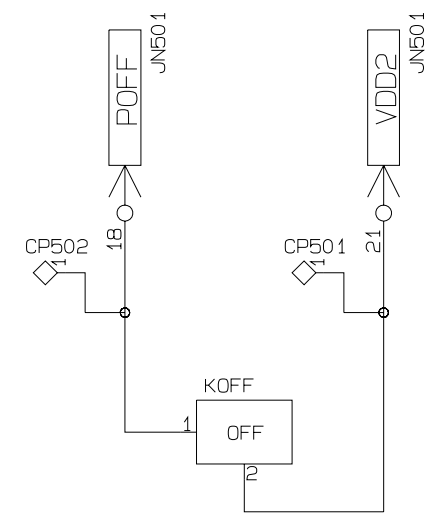
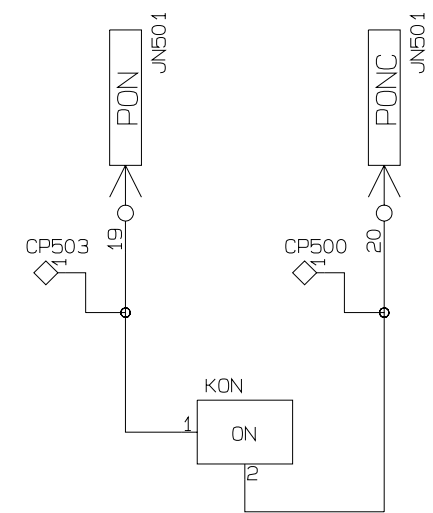
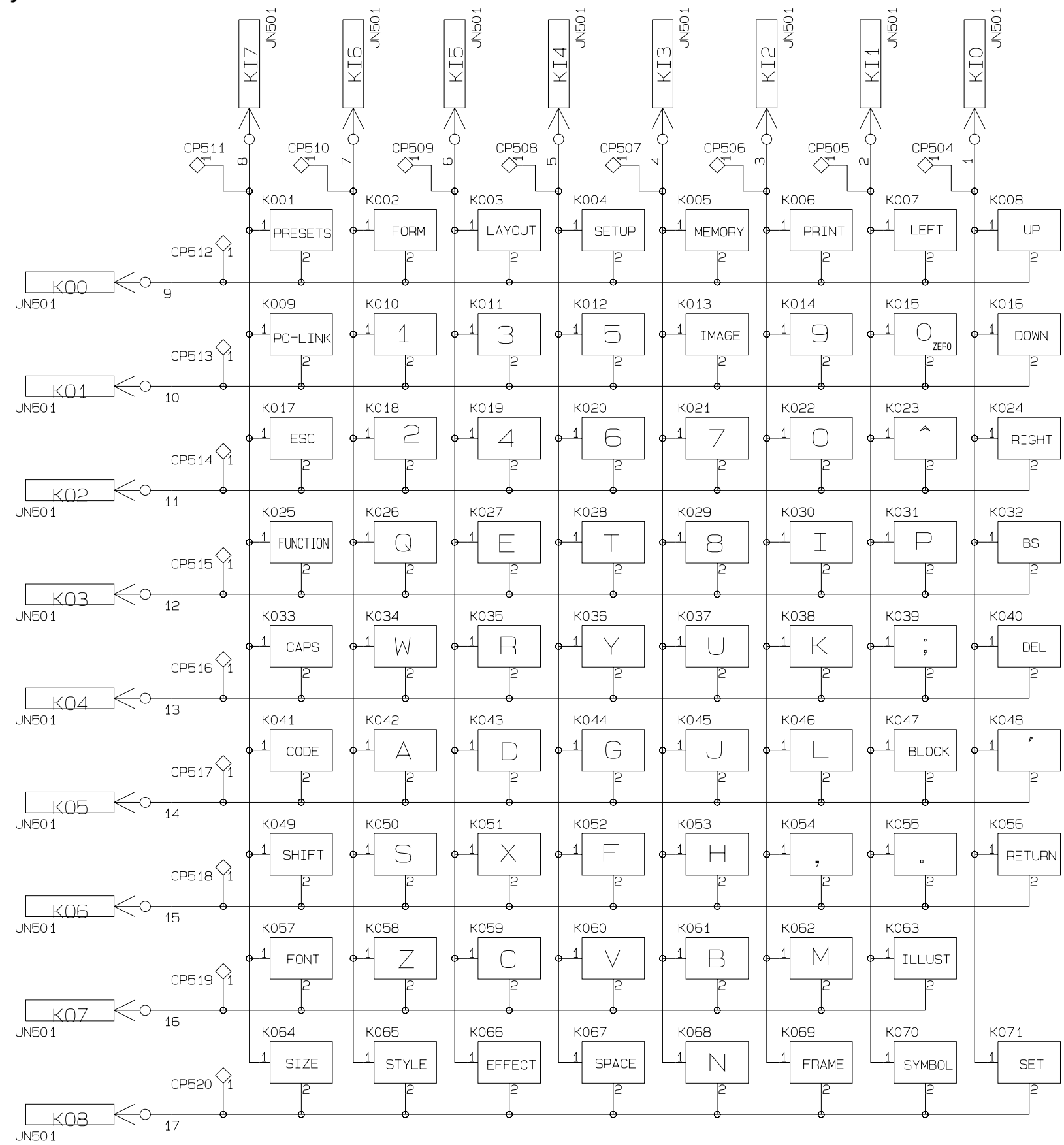
TO LCD/D



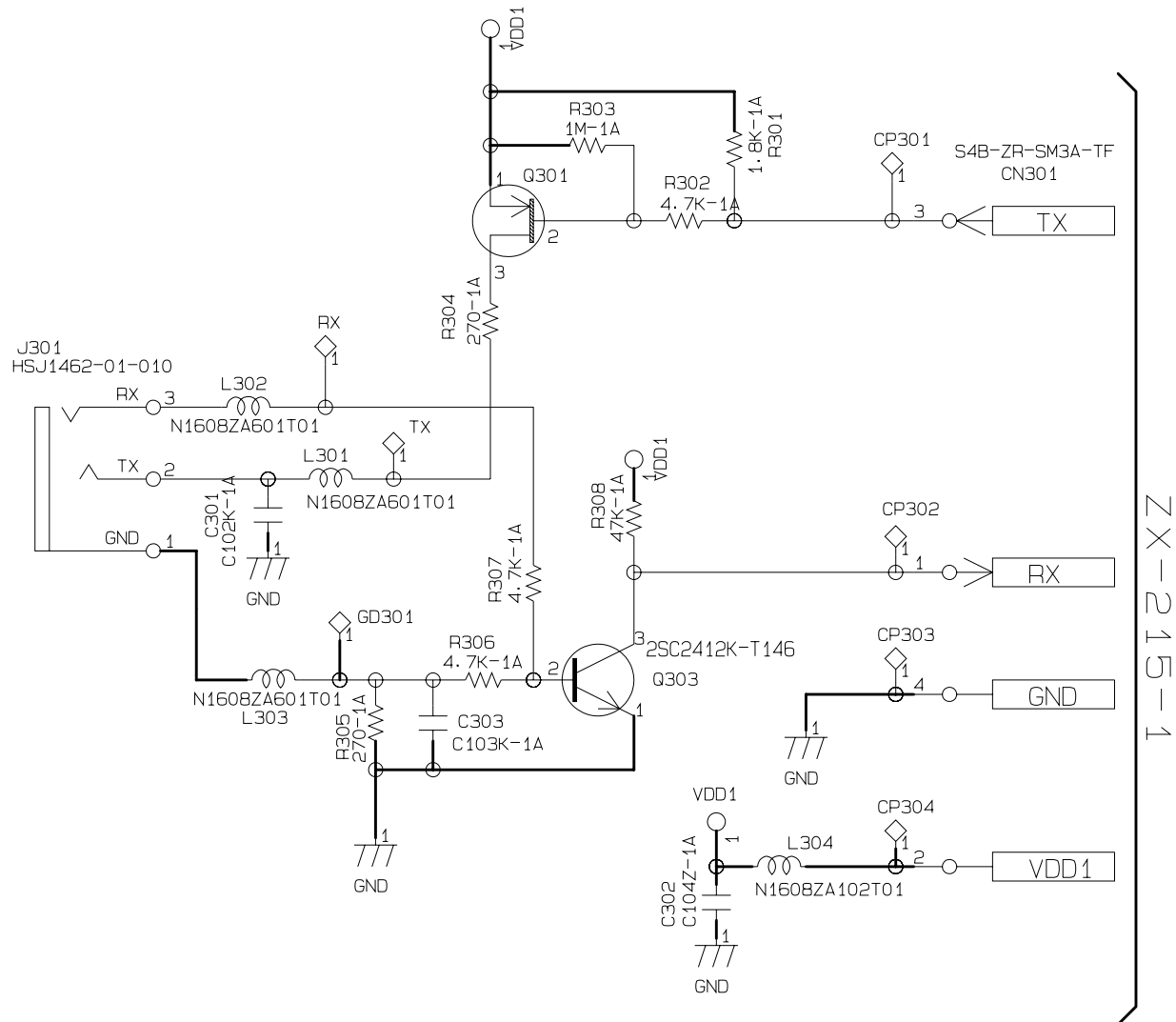
TO MAIN BLOCK

C501-509, 511
R501-506 L501-502
CP: CP501-524

Key matrix : PCB Z215-E4

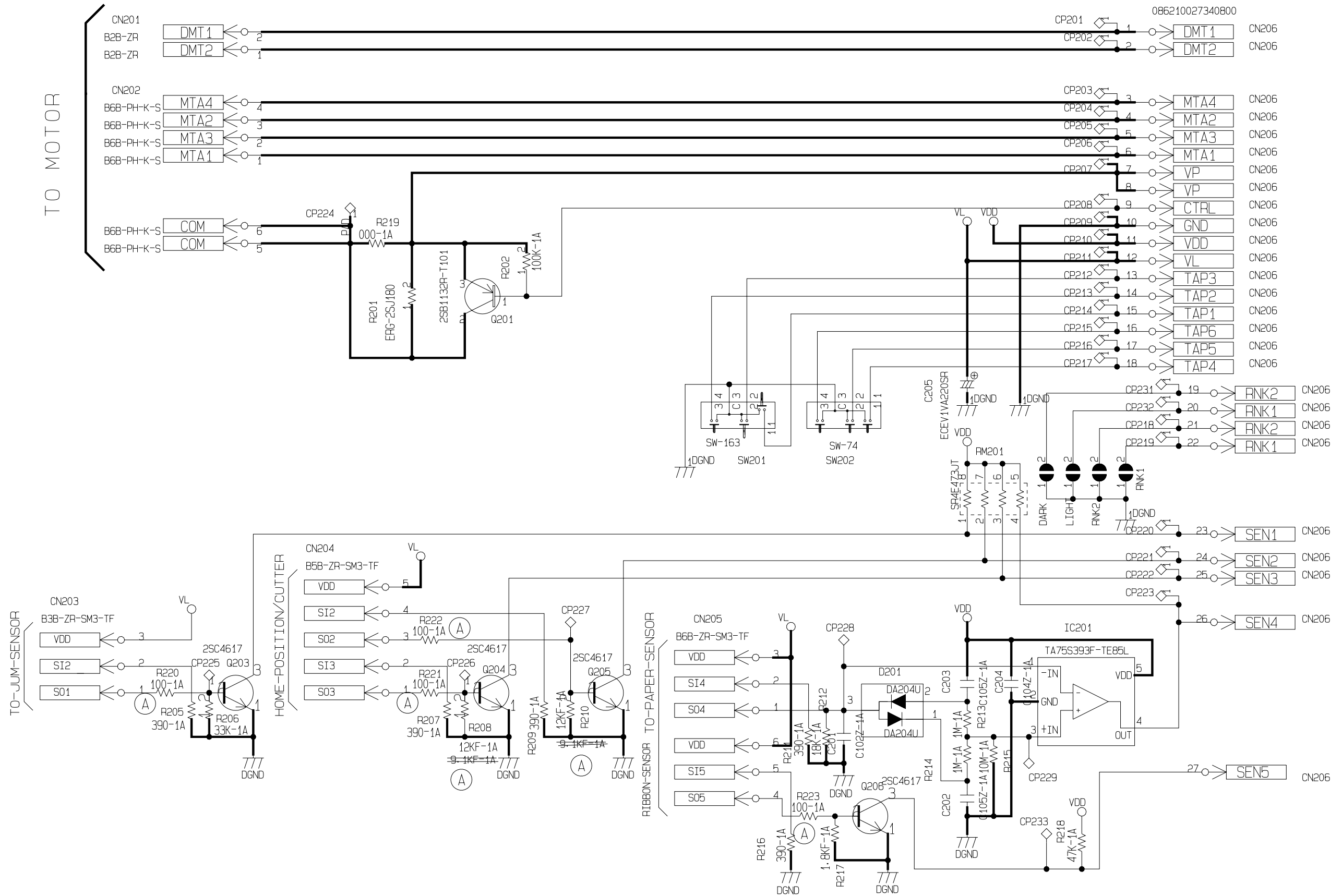


Jack block : PCB Z255-3

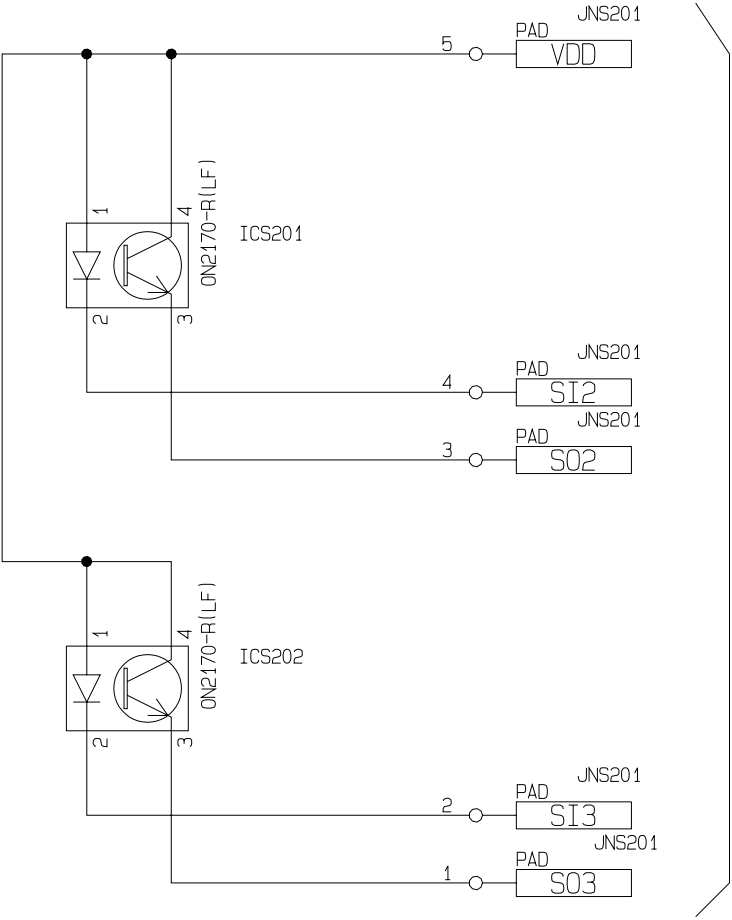


R301-308 C301-303
L301-304 J301
Q301, 303 CN301
CP: CP301-304 RX TX GD301

Sensor block : PCB Z216-2

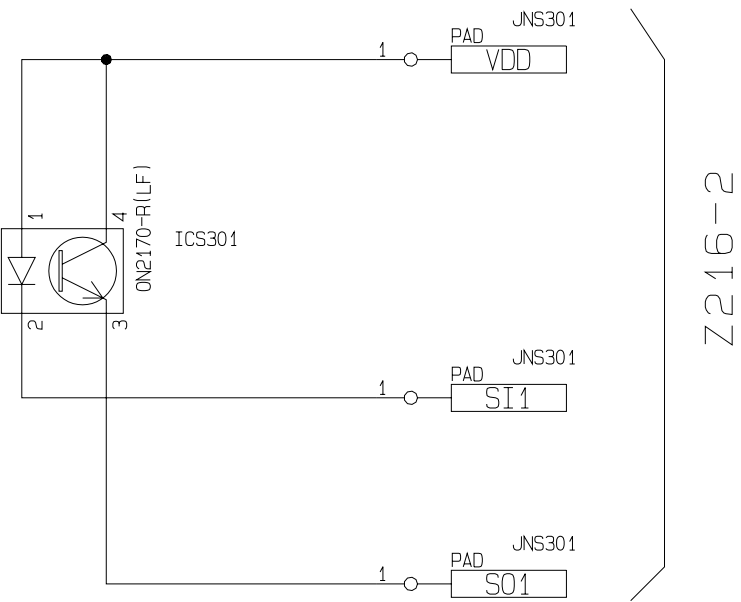


Cam/Sensor : PCB Z216-S2

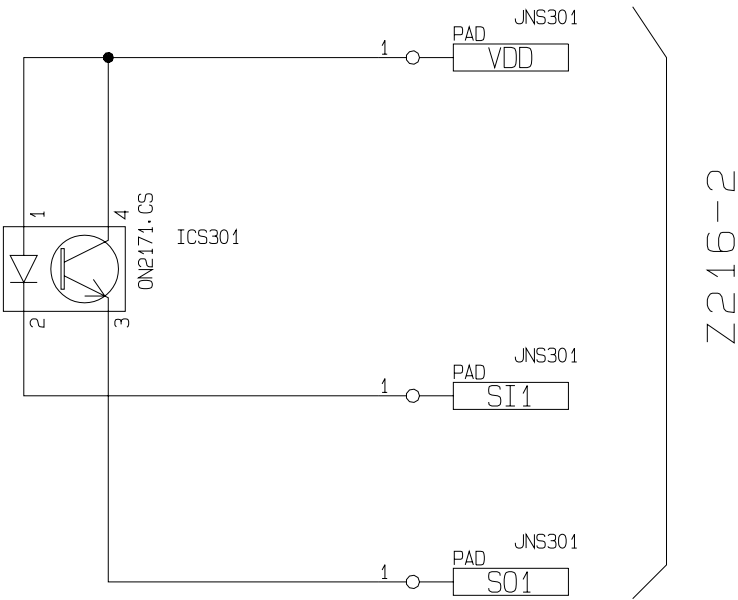


Z216-2

Jum/Sensor : PCB Z216-S3



Paper/Sensor : PCB Z216-S4



12.PARTS PRICE LIST

12-1. COMPONENTS

KL-C500

N	Item	Code No.	Parts Name	Specification	Applicable	Q	Price Code	R
PCB ASSY/MAIN (A141327)								
N	BZ	3122 3479	BUZZER	KBS-15DA-5C-13	Common	1	AC	C
N	LSI1	2012 6680	LSI	UPD703002GC-25-422	Common	1	BT	C
N	LSI2	2012 6387	LSI	MN7D020C7D	Common	1	BW	C
N	LSI3	2012 6681	LSI/ROM	UPD23C16000WGX-C81	Common	1	AZ	C
	LSI5,6	1001 0003	LSI/S-RAM	D431000AGW70LL-E1	Common	2	AZ	C
N	LSI8	2012 6110	LSI	MSM514260CSL60JDR1	Common	1	BF	C
N	X1	2590 2781	OSCILLATOR/CERAMIC	PBRC-4.80AR-A	Common	1	AC	C
N	FU101	1000 3142	FUSE/CHIP	F0603C0R75FWTR	Common	1	AB	B
N	CN5	3502 1844	CONNECTOR	LZ-20P-SL-SMT-E3	Common	1	AE	C
N	CN4	3502 1340	CONNECTOR	B4B-ZR-SM3-TF	Common	1	AB	C
	CN101	7740 1610	CONNECTOR	B4B-PH-SM3-TB	Common	1	AC	C
	CN2	3502 0388	CONNECTOR	52610-1590	Common	1	AD	C
	CN3	3593 0182	CONNECTOR	52207-2190	Common	1	AD	C
N	CN1	3502 2430	CONNECTOR	046214027010800	Common	1	AF	C
PCB ASSY (A241800)								
N	1	3335 6925	LCD ASSY	SEK1094B1A	Common	1	CM	B
N	2	6421 4680	CABLE	A443007*1	Common	1	AY	C
N	CN501	3502 1844	CONNECTOR	LZ-20P-SL-SMT-E3	Common	1	AE	C
PCB ASSY (A342789)								
N	3	6421 5080	CABLE/JOINT	A443005-1	Common	1	AD	C
N	4	1000 3144	PCB	A241539-2	Common	1	AV	C
PCB ASSY (A343205)								
N	J301	1000 3135	JACK	HSJ1453-01-010	Common	1	AC	C
	CN301	3501 7574	CONNECTOR	S4B-ZR-SM3A-TF	Common	1	AC	C
PRINTER UNIT								
N	5	1000 5233	CHASSIS UNIT	A141110*2	Common	1	DQ	X
N	6	1000 3088	CASE/CASSETTE	A140784B-3	Common	1	AM	C
N	7	1000 3086	PCB ASSY	A241092*2	Common	1	BT	B
	SW201	3110 6028	SWITCH/MICRO	SW-163	Common	1	AH	C
	SW202	3110 6035	SWITCH/MICRO	SW-74	Common	1	AH	C
	CN202	3501 6384	CONNECTOR	B6B-PH-K-S	Common	1	AA	C
	CN201	3501 3724	CONNECTOR	B2B-ZR	Common	1	AA	C
	CN204	3501 7546	CONNECTOR	B5B-ZR-SM3-TF	Common	1	AC	C
	CN203	3501 9401	CONNECTOR	B3B-ZR-SM3-TF	Common	1	AC	C
	CN205	3501 7553	CONNECTOR	B6B-ZR-SM3-TF	Common	1	AC	C
N	CN206	3502 2386	CONNECTOR	086212027340800	Common	1	AE	C
N	8	1000 3085	PCB ASSY	A342814*2	Common	1	BC	B
N	9	6424 4880	CABLE/JOINT	A444164-1	Common	1	AE	C
	10	6415 5380	BUTTON/SW	A440618-1	Common	1	AA	C

Notes: N-New parts

Q-Quantity used per unit

R-Rank

R- A:Essential

B:Stock recommended

C:Others

X:No stock recommended

Applicable	Primary input voltage	Model Name on Rating Display
A	AC 120V	KL-C500-A
B	AC 220~240V	KL-C500-B

N	Item	Code No.	Parts Name	Specification	Applicable	Q	Price Code	R
N	11	6421 4620	MOTOR ASSY	A341887*1	Common	1	BL	C
	12	6424 7340	SCISSORS ASSY	A342880*1	Common	1	BF	B
	13	6417 7480	CHASSIS ASSY/SP.ST	A341208*1	Common	1	AC	C
N	14	6424 4870	SPRING	A444149-1	Common	1	AA	C
N	15	6421 4880	SPACER	A341913-1	Common	1	AA	C
	16	6415 5160	REEL	A340402-1	Common	1	AB	C
COMPONENTS								
	17	6424 4631	COVER/CASSETTE	A140855A-2	Common	1	AN	C
	18	6421 1940	HOLDER	A442907-1	Common	1	AC	C
	19	6422 3150	SPACER	A443395-1	Common	1	AB	C
	20	3815 0800	BATTERY/LITHIUM	CR2032T5	Common	1	AF	C
N	21	1000 3235	PLATE/DISPLAY	A342000-3	Common	1	AP	B
N	22	1000 3239	POWER SUPPLY	AC-I20100/55030MU	A	1	CM	C
N	22	1000 5148	POWER SUPPLY	AC-I20100/55030MG	B	1	CR	C
	23	6424 4770	COVER/HARD	A342022-2	Common	1	AD	X
	24	6424 4780	COVER/HARD	A342023-2	Common	1	AD	X
	25	6424 4690	BUTTON	A241161-2	Common	1	AB	C
	26	6424 4760	LEVER	A342017-2	Common	1	AB	C
N	27	6421 4970	COVER	A342032-1	Common	1	AA	C
N	28	6421 4980	COVER	A342033-1	Common	1	AA	C
N	29	6421 5740	SPRING	A443136-1	Common	1	AA	C
N	30	1000 3117	LABEL	A441531-8	A	1	AA	C
N	30	1000 5142	LABEL	A343207-1	B	1	AA	C
N	31	6424 4790	HINGE(GUIDE)	A342027-2	Common	1	AB	C
	32	6424 4700	CASE/PEELER	A241183-2	Common	1	AD	X
	33	6424 4710	PLATE	A241184-2	Common	1	AB	X
	34	6424 4720	COVER	A241185-2	Common	1	AC	X
N	35	1000 3126	PCB ASSY/MAIN	A141327*1	Common	1	DQ	B
N	36	1000 3128	RUBBER/KEY	A140841-3	Common	1	AT	C
N	37	1000 3129	CASE/UPPER	A140845B-3	Common	1	BF	X
N	38	1000 3130	CASE/INNER	A141102-2	Common	1	AG	X
N	39	1000 3122	CASE/UPPER	A140856A-3	Common	1	AY	X
N	40	1000 3123	CASE/LOWER	A140857-3	Common	1	AU	X
N	41	1000 3124	PCB ASSY	A241800*1	Common	1	CY	B
N	42	1000 3125	PLATE/DISPLAY	A341999-3	Common	1	AP	C
	43	6421 4630	TILT SUB ASSY	A342045*1	Common	1	AU	C
	44	6424 4680	SWITCH	A241152-2	Common	1	AD	C
	45	6421 5090	SPRING	A443081-1	Common	1	AA	C

Notes: N-New parts

Q-Quantity used per unit

R-Rank

R- A:Essential

B:Stock recommended

C:Others

X:No stock recommended

Applicable	Primary input voltage	Model Name on Rating Display
A	AC 120V	KL-C500-A
B	AC 220~240V	KL-C500-B

Applicable	Specification	Shipment
A	UC-400-01A	U.S.A., Canada and Others
B	HC-400-01A	Hong Kong and Others
B	EC-400-01A	Europe and Others (Germen type)
B	BC-400-01A	U.K.

N	Item	Code No.	Parts Name	Specification	Applicable	Q	Price Code	R
	46	6424 4821	RUBBER	A443082A-2	Common	2	AA	C
	47	6424 4831	RUBBER	A443083A-2	Common	2	AA	C
	48	6409 3440	SHAFT	A413992-1	Common	2	AA	C
	49	6408 9950	RUBBER/FOOT	A414533-1	Common	2	AA	C
	50	6421 1930	RUBBER/FOOT	A442906-1	Common	2	AA	C
	51	6424 4670	HANDLE	A240937-3	Common	1	AG	C
N	52	1000 3119	CASE/LOWER	A140844C-3	A	1	BE	X
N	52	1000 5145	CASE/LOWER	A140844C-4	B	1	BE	X
N	53	1000 3120	PCB ASSY	A343205*1	Common	1	AW	B
N	54	1000 3121	CABLE	A444166*2	Common	1	AE	C
OTHERS								
N	55	1000 3108	SOFTWARE/CD-ROM	CDZ988JA01A	Common	1	AM	C
N	56	1000 3109	CABLE	U00043#01-0	Common	1	BV	C
	57	3701 1133	CODE/AC	UC-400-01A	A	1	AV	C
	57	3701 1135	CODE/AC	HC-400-01A	B	1	BN	C
	57	3701 1134	CODE/AC	EC-400-01A	B	1	AV	C
	57	3701 1136	CODE/AC	BC-400-01A	B	1	BK	C
			<i>Refer to the lower table concerning above three AC power cords.</i>					
	58	6424 9710	TOTAL SSY (PEELER)	A141144B*1	Common	1	BC	C
			Parts Prices will be informed separately by Parts Price List.					

Notes: N-New parts

Q-Quantity used per unit

R-Rank

R- A:Essential

B:Stock recommended

C:Others

X:No stock recommended

Applicable	Primary input voltage	Model Name on Rating Display
A	AC 120V	KL-C500-A
B	AC 220~240V	KL-C500-B

Applicable	Specification	Shipment
A	UC-400-01A	U.S.A., Canada and Others
B	HC-400-01A	Hong Kong and Others
B	EC-400-01A	Europe and Others (Germen type)
B	BC-400-01A	U.K.

12-2. CHASSIS ASSY

	Item	Code No.	Parts Name	Specification	Applicable	Q	Price Code	R
PLATEN ASSY (A241096)								
N	101	1000 3083	PLATEN ASSY	A241096*3	Common	1	BT	C
N	102	1000 3089	PCB ASSY	A341885*2	Common	1	AW	C
CHASSIS ASSY								
N	103	3222 0154	MOTOR/STEPPING	SMB35-4857-A	Common	1	BC	C
	104	1000 3087	PCB ASSY	A341884*2	Common	1	BB	C
	105	6418 7110	ARM ASSY/GEAR	A441690*1 A	Common	1	AJ	C
HOLDER ASSY								
	106	6424 4540	HOLDER ASSY	A241543B*1	Common	1	DD	B
			The termal head is assembled to HODER ASSY.					
			Parts Prices will be informed separately by Parts Price List.					

Notes: **N**-New parts

Q-Quantity used per unit

R-Rank

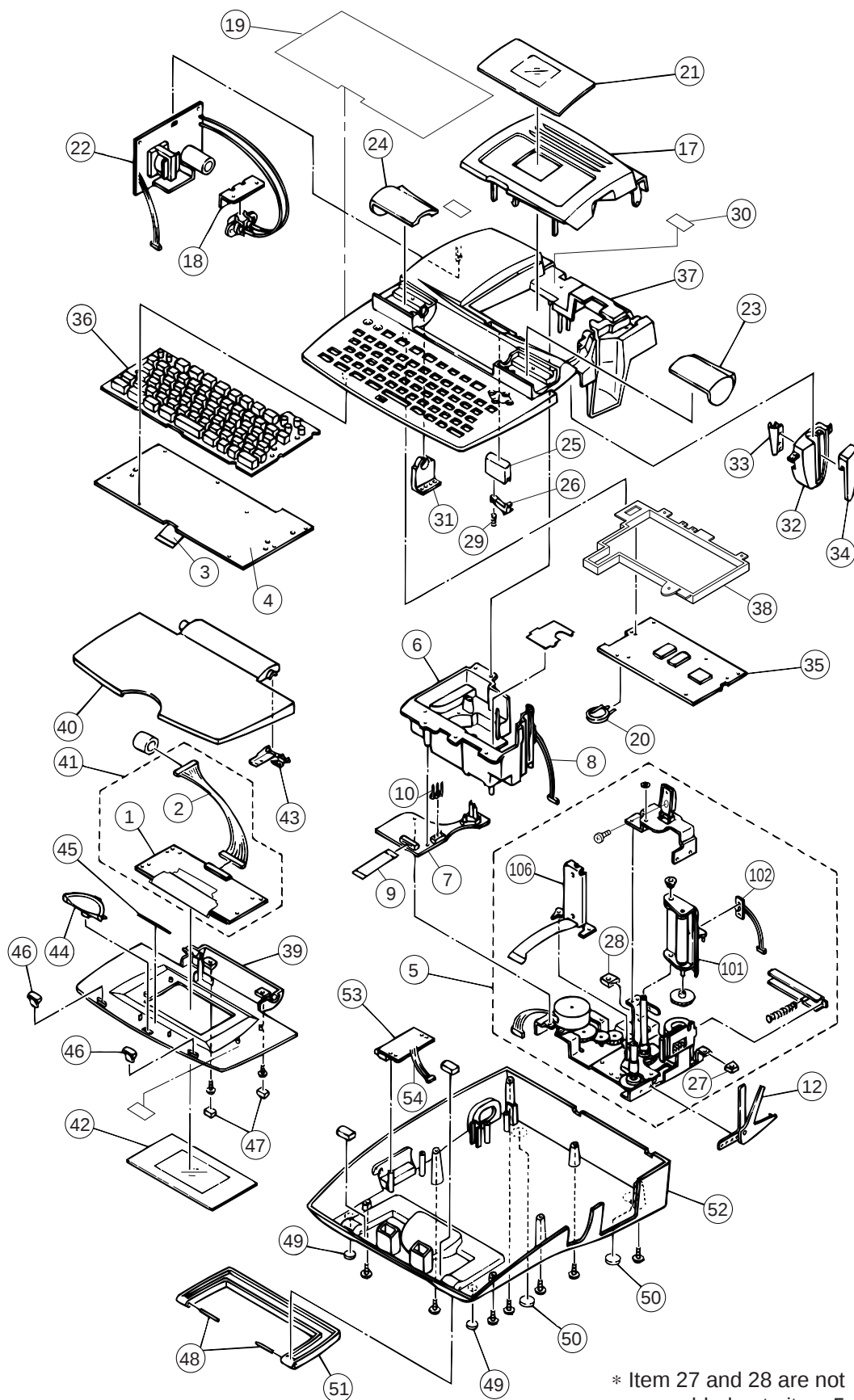
R- A:Essential

B:Stock recommended

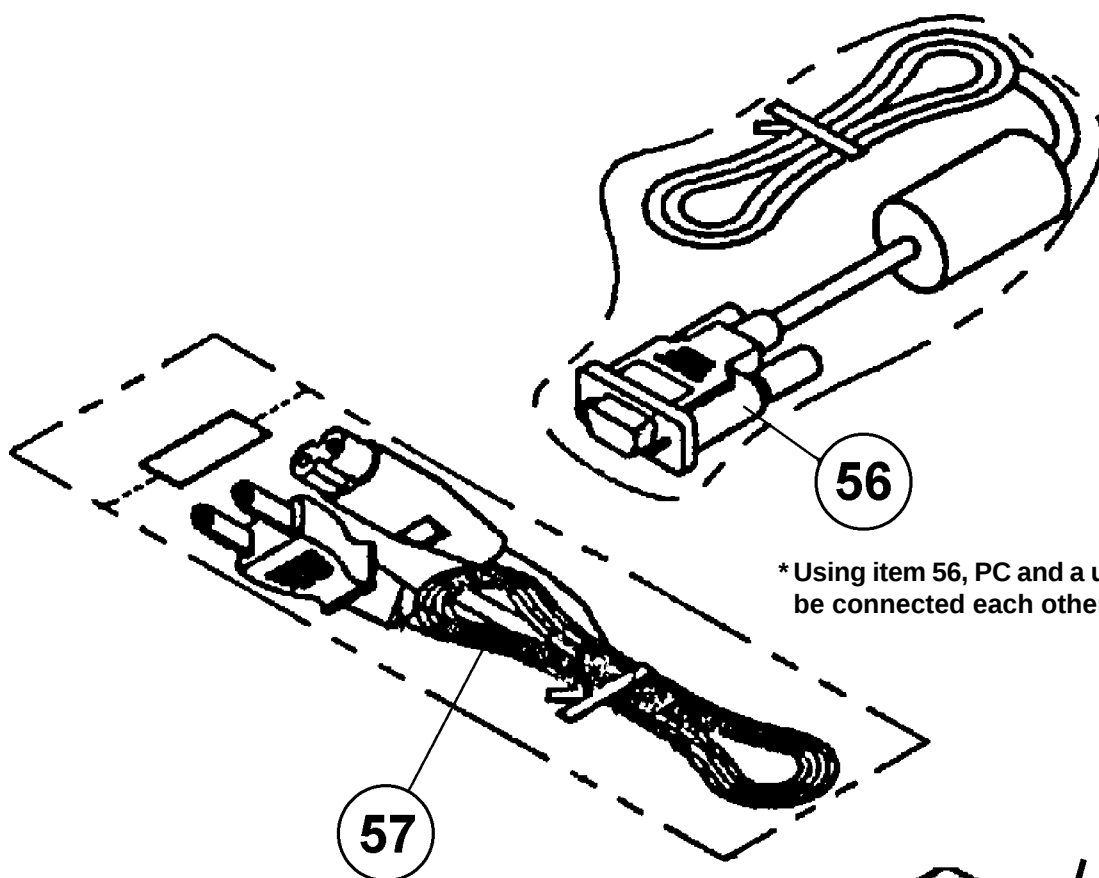
C:Others

X:No stock recommended

13. EXPLODED VIEW

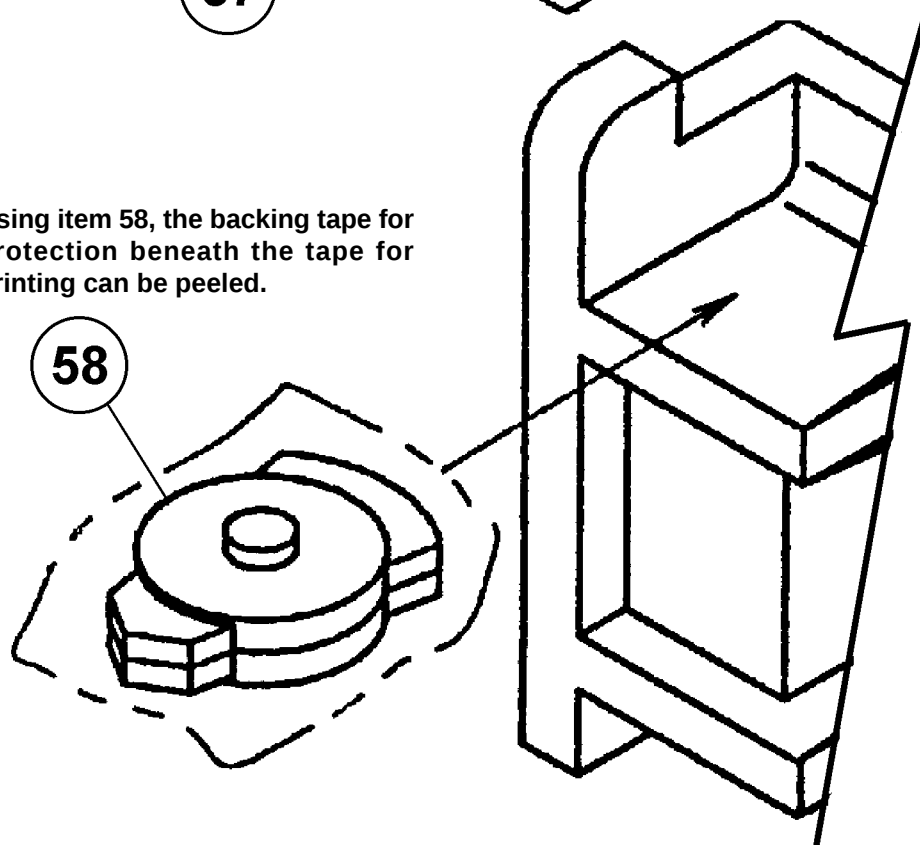


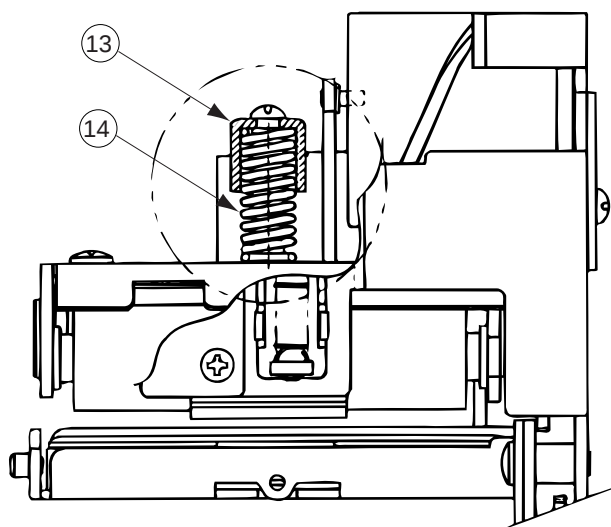
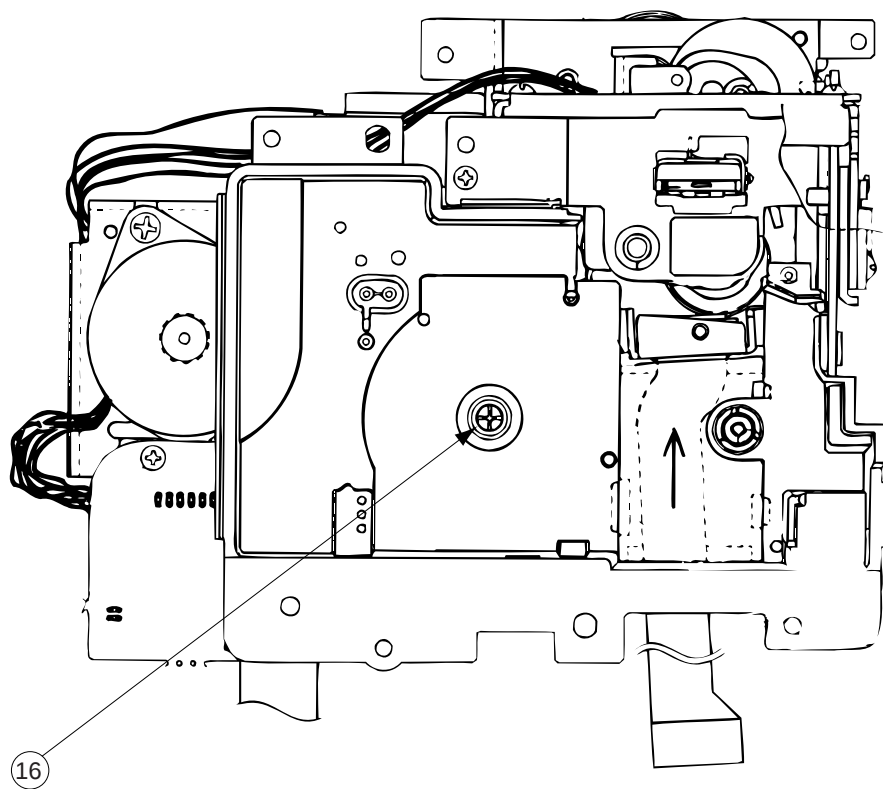
* Item 27 and 28 are not assembled onto item 5.

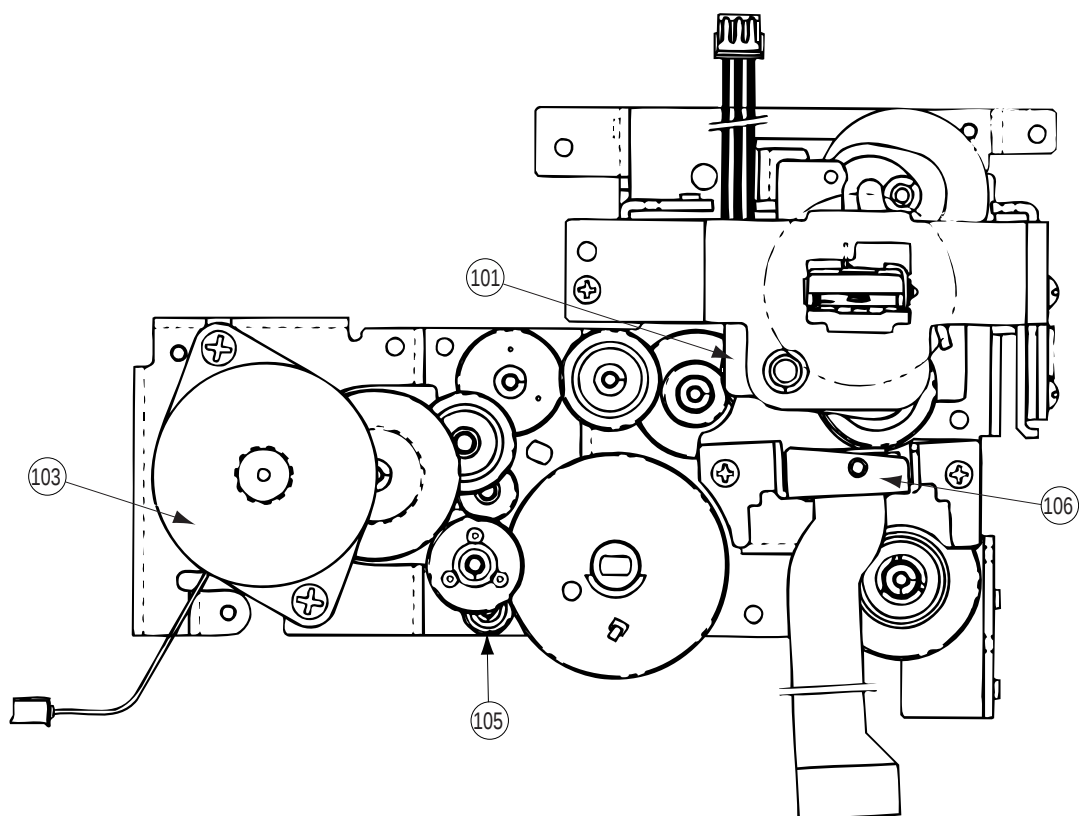
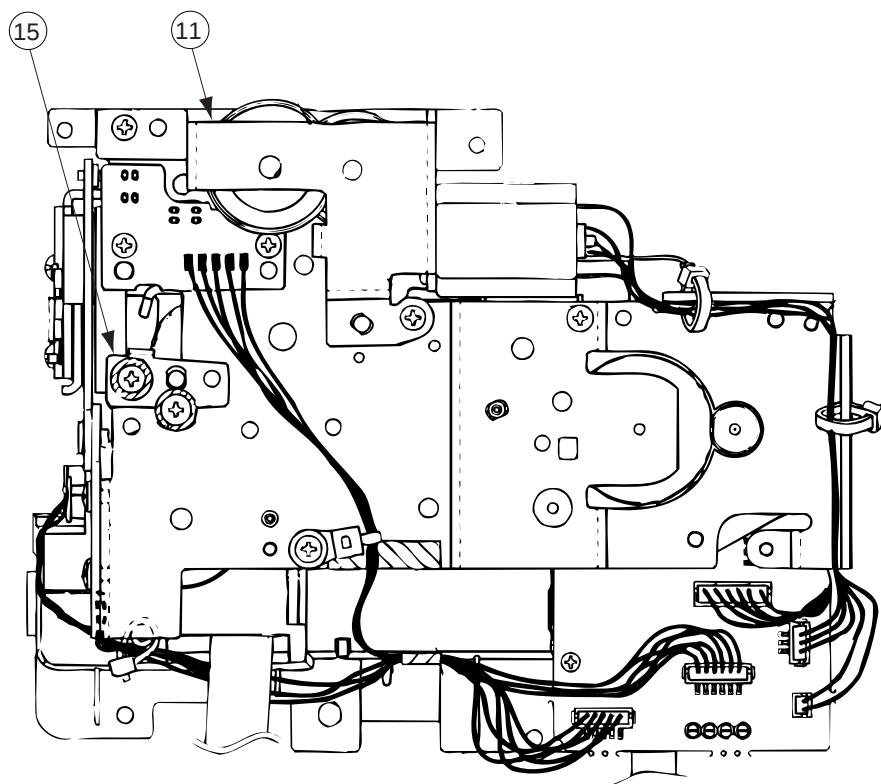


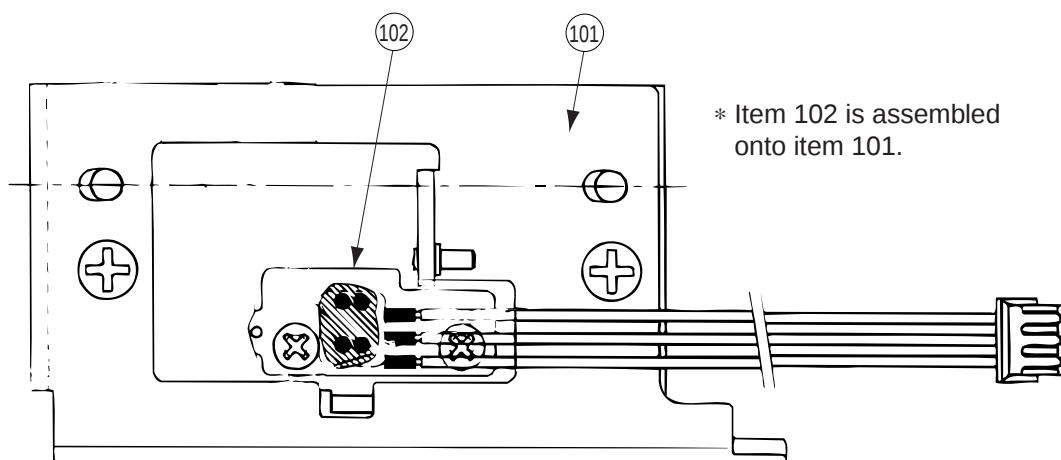
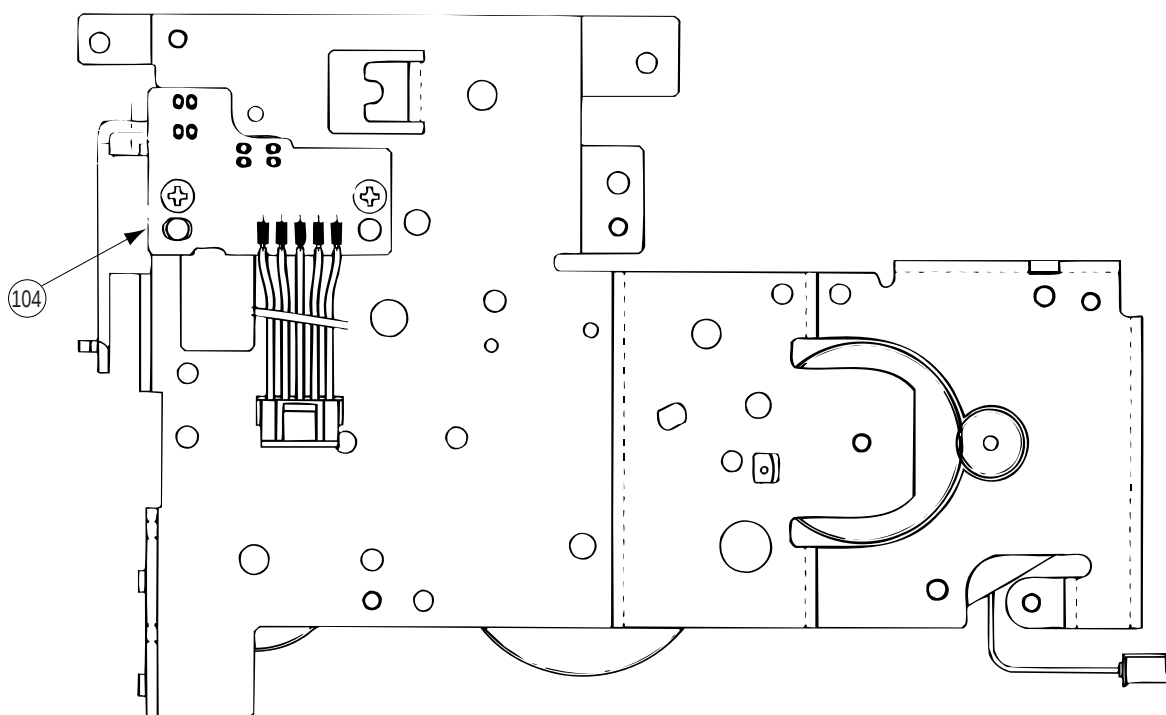
* Using item 56, PC and a unit can be connected each other.

* Using item 58, the backing tape for protection beneath the tape for printing can be peeled.









Ver.1 : Additional spare parts (BS AC power cord for UK: **BC-400-01A**) to **PARTS LIST** (page 36)
(AC power cord **HC-400-01A** will be supplied to Hong Kong/Others due to this modification. Use only **BC-400-01A** in UK)

CASIO TECHNO CO.,LTD.
Overseas Service Division

Nishi-Shinjuku Kimuraya Bldg. 1F
5-25, Nishi-Shinjuku 7-Chome
Shinjuku-ku, Tokyo 160-0023, Japan