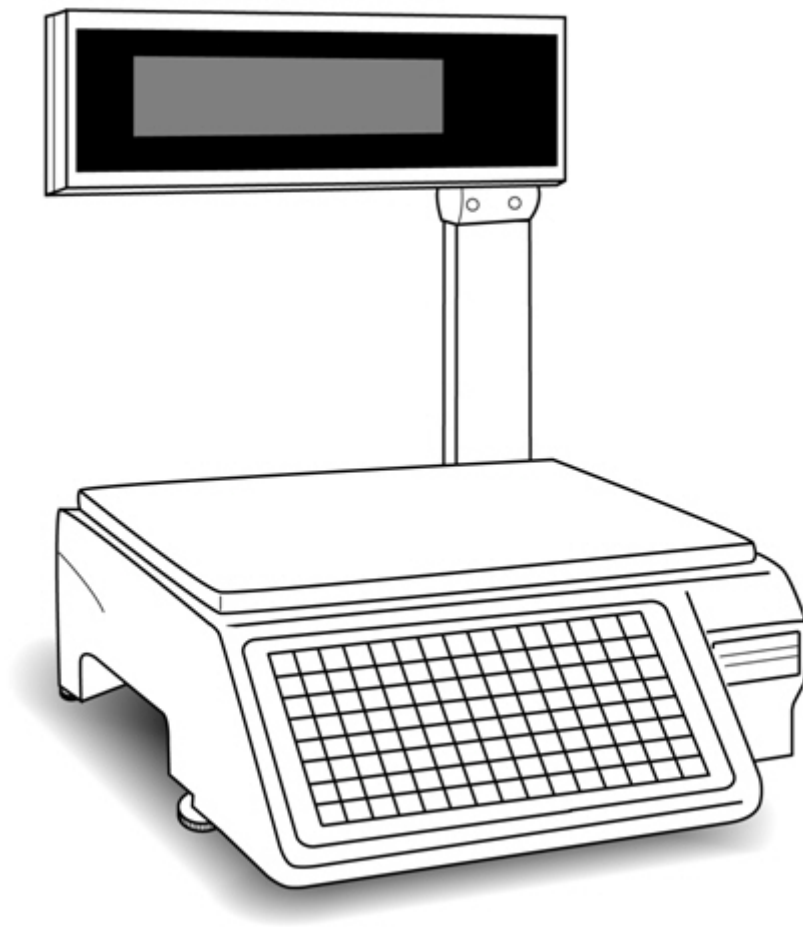


# BC-4000 Series

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*4th Edition*

## Service Manual



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## Revision history

4th Edition (December 23,2009)

### 1 Chapte1 : OVERVIEW

- Added: 1.3 VARIATION  
1.4 DIMENSION  
1.5 KEY SHEET Bench type
- Modified: 1.5 KEY SHEET Pole type  
1.6 SPECIFICATIONS

### 2 Chapter 3 TEST MODE

- Modified: 3.5 C04 LABEL SENSOR CHECK  
3.8 C07 PEEL SENSOR CHECK

### 3 Chapter 4 COMPONENT REPLACEMENT

How to remove the top cover, and added a picture of the seal wire screws.

- 4.2 Print Roller Replacement  
4.3 LOAD CELL REPLACEMENT  
4.4 MAIN BOARD REPLACEMENT  
4.5 KEY SHEET REPLACEMENT  
4.6 A/D BOARD REPLACEMENT  
4.7 POWER SUPPLY BOARD REPLACEMENT
- Added: 4.8 DISPLAY DRIVER PS-038 REPLACEMENT(BC-4000E/S)  
3.9 DISPLAY UNIT REPLACEMENT 4.9.3 E AND S TYPE

### 4 Chapter 6 Electric Assembly

- Added: BLOCK DIAGRAM
- 6.1.2 BC-4000E  
6.1.3 BC-4000EB  
6.1.4 BC-4000S  
6.1.5 BC-4000SB
- 6.5 PS-038 DISPLAY DRIVER

### 5 Added: Chapter 7 P-990 MAIN BOARD REPLACEMENT

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## **IMPORTANT NOTICE**

Thank you for purchasing the ISHIDA BC-4000.

This manual explains the procedures to perform installation, operation, service, or maintenance of the machine.

Those who handle the machine must be aware of the hazards involved. These dangers may not be obvious, so it is imperative to follow the instructions detailed in this manual when installing, operating, inspecting, or servicing the machine. Therefore, we recommend that you thoroughly read and understand this manual before installing, operating, inspecting, or servicing the machine, and keep this manual in a safe place where you can refer to it whenever necessary.

ISHIDA is not liable for any damage, loss or injury that results from incorrect operation, insufficient caution, unauthorized modifications to the machine, or failure to follow the instructions contained in this manual.

In the recent weighing industry, the latent hazards involved with handling the machine have increased due to new materials, new processing methods, and higher processing speeds, and it is impossible to predict all of the possible dangers.

Likewise, there are far too many operations that cannot or should not be performed to fully describe all of them in the manual. Please assume that any handling or operation not specifically described in this manual should never be performed.

Safety countermeasures should be carefully considered and implemented before performing any installation, operation, inspection, or maintenance procedure not specifically described in this manual or indicated on the machine itself.

## **CHANGE IN SPECIFICATIONS**

Machine specifications and accessories may be changed at any time due to improvements or other reasons. Consult with your ISHIDA representative at any time to confirm the actual specifications of the purchased machine.

## **ERRORS AND OMISSIONS**

The information in this manual has been carefully checked and is believed to be accurate. However, please understand that the descriptions in this manual may not agree with the actual machine due to machine improvements. The information is subject to change without prior notice in the future. ISHIDA assumes no responsibility for clerical, typographical or proofreading errors, or omissions.

## **LIMITATIONS OF LIABILITY**

ISHIDA assumes no responsibility for special, indirect, or consequential damages, loss of profits or commercial loss in any way connected with the machine, whether such claim is based on contract, warranty, negligence, or strict liability.

ISHIDA shall assume responsibility for problems with the machine or the system based on an individual maintenance contract. However, ISHIDA shall not be responsible for secondary problems. ISHIDA assumes no responsibility for the user's programming of this machine, or any consequence thereof.

In no event shall ISHIDA be responsible for warranty, repair, or other claims regarding the machine unless ISHIDA's analysis confirms that the machines were properly handled, stored, installed, and maintained and not subject to contamination, abuse, misuse, or inappropriate modification or repair.



## SAFETY CONSIDERATIONS

**This operation manual contains information necessary for operating the BC-4000.**

**It is strongly advised that the following safety measures must be observed to ensure the safe operation of the machine:**

### **Properly ground machinery**

As a Class 1 electrical device, this machine requires protective grounding for safe operation. To avoid any potential electrical shock, securely attach the protective ground wire to the main grounding provision.

### **Do not remove covers or enclosures**

To avoid personal injury and shock, do not open or remove any covers or enclosures of the machine unless specified in the manual.

### **Do not perform unspecified maintenance**

For your personal safety, do not perform any maintenance procedures which are not specified in the manual.

### **Disconnect power supply before servicing**

To ensure your personal safety, disconnect the power supply before servicing.

### **Take precaution against residual electrical charge hazard**

Capacitors inside the machine may still hold an electrical charge even after power is disconnected.

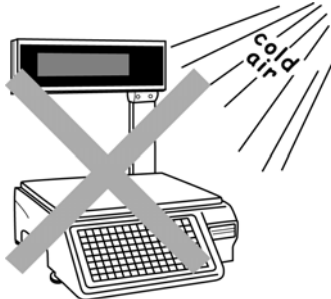
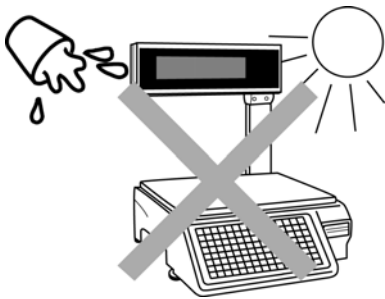


## CAUTIONS FOR INSTALLATION

### WARNING

**Do not install the machine in the following types of places:**

- Places subject to high temperatures or high humidity
- Places exposed to direct sunlight
- Places where water or other liquids are easily spilled on the machine
- Places subject to excessive vibration or unstable foundations
- Places exposed to direct cold air from air conditioners or refrigerators
- Places where the floor or foundation is unstable
- Places subject to a lot of dust or dirt
- Places with large voltage fluctuations

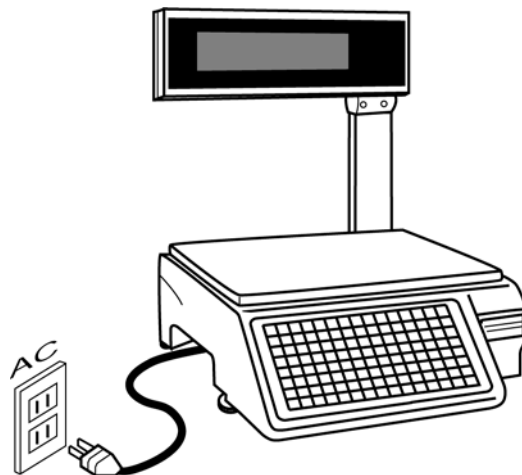


## CAUTIONS FOR POWER SUPPLY

### WARNING

**Heed the following precautions about power supply:**

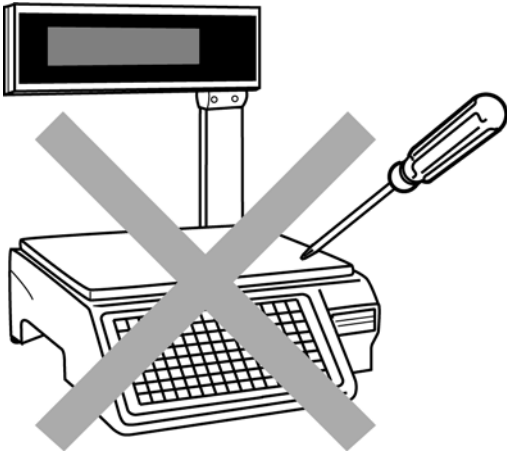
- Use a power supply with rated voltage ground.
- Prepare a dedicated power source.  
A power supply that generates voltage variation may cause a malfunction.
- Do not stand on the power cord, and do not place anything heavy on the cord.  
Doing so may damage the cord, resulting in accident or trouble.



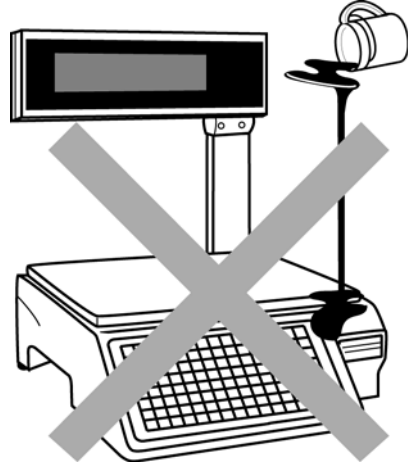


## CAUTIONS FOR HANDLING

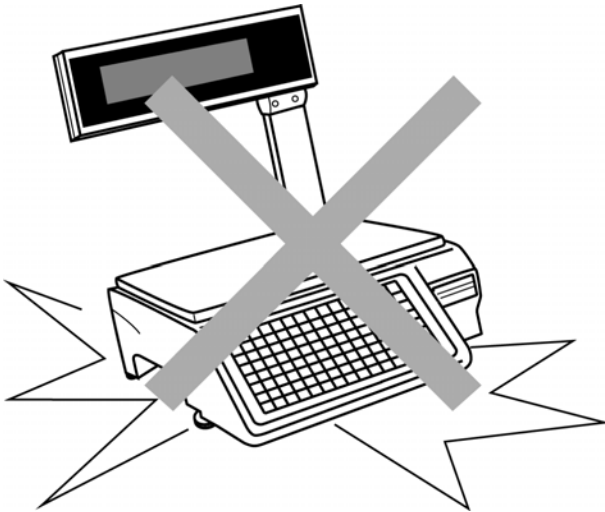
- ▶ Do not disassemble the machine.



- ▶ Do not allow any liquids to come into contact with the machine.



- ▶ Do not drop or apply a strong shock to the machine.



- ▶ When cleaning the machine, only use a soft dry cloth or a cloth wetted with a neutral cleanser. Never use thinner or other volatile liquids.

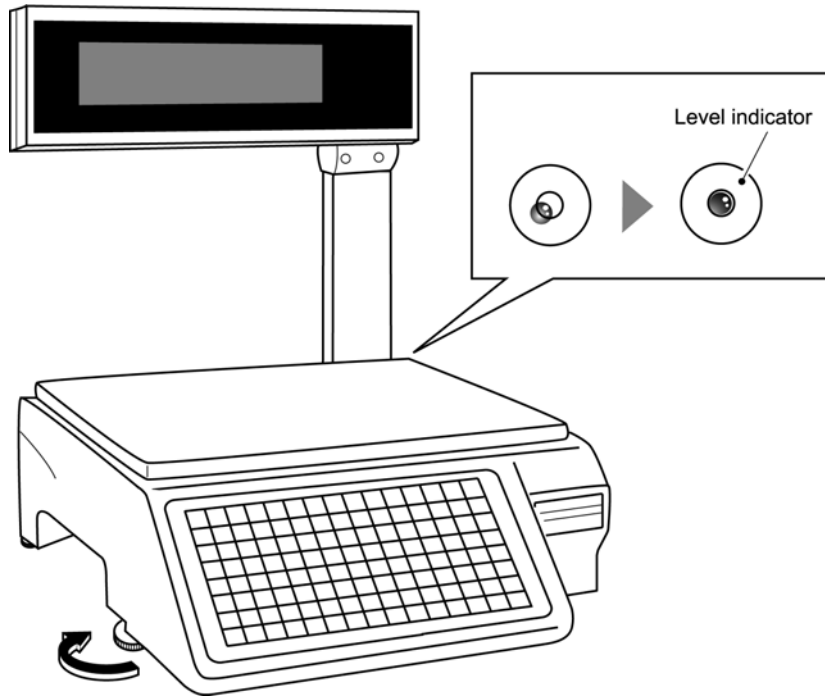




## LEVEL ADJUSTMENT

### WARNING

Ensure that the machine is level:



## WARNING SYMBOLS

This machine is manufactured for use according to proper procedures by qualified service personnel and only for the purposes described in this manual.

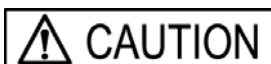
The warning symbols in this manual and warning stickers affixed to the machine itself are divided into three categories depending on the level of danger or seriousness of potential injury. The definition for each of these warnings and precautions are shown below. Failure to heed these warnings and precautions may result in bodily injury or damage to the machine.



Indicates information that, if not heeded, is likely to result in loss of life or serious injury.



Indicates information that, if not heeded, could possibly result in loss of life or serious injury.



Indicates information that, if not heeded, could result in relatively serious or minor injury, damage to the machine, or faulty operation.



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# 1. OVERVIEW

## BC-4000L2 Pole type

### 1.1 FRONT VIEW



### 1.2 REAR VIEW

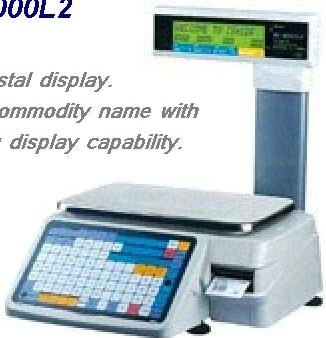


## 1.3 VARIATION


### Pole type

**BC-4000L2**


*Liquid Crystal display.  
Displays commodity name with  
advertising display capability.*



*Commodity name display.*



*Advertising display.*



*Scrolling display, Flashing advertising display.*

**BC-4000E**

*LED display (Coro.Red)  
Total amount display in Large  
size digits.*




**BC-4000S**

*Bright Fluorescent display.*




*Note: The service manual is the  
technical term "Vacuum Fluorescent  
Display" has been expressed.*

### Bench type

*Suitable for baekroom and box weighing.  
BENCH Type is available in BC-4000 L2/E and S versions.*





*BC-4000L2 Liquid crystal display.*



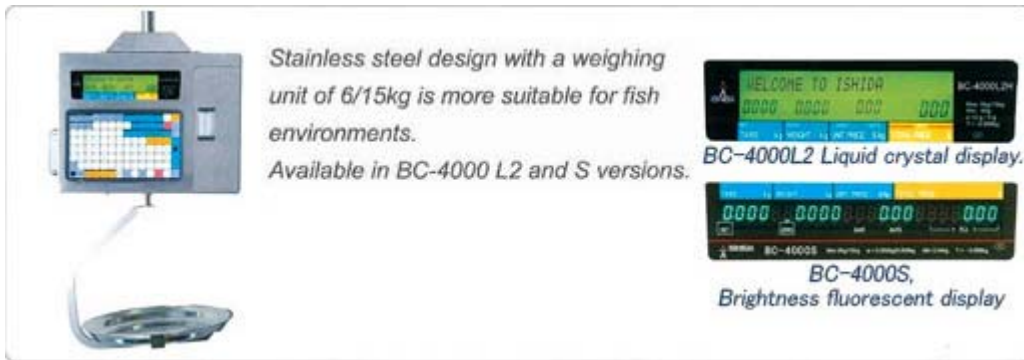
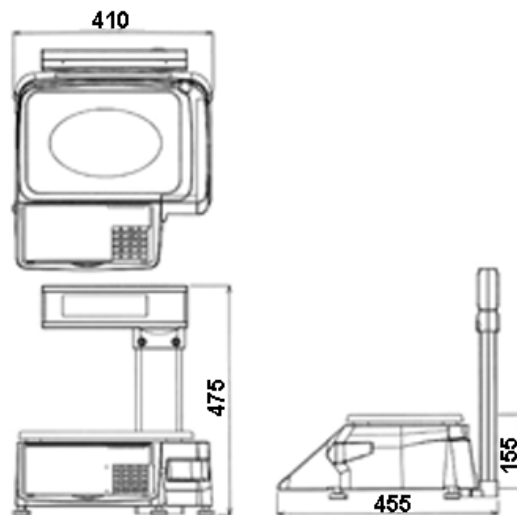
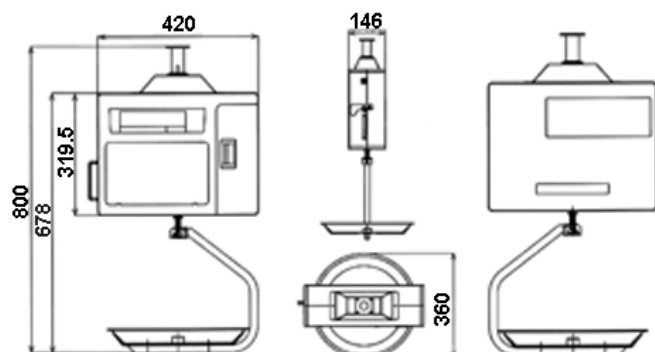
*Advertising display.*



*BC-4000E LED*



*BC-4000S display.  
High-brightness fluorescent display*

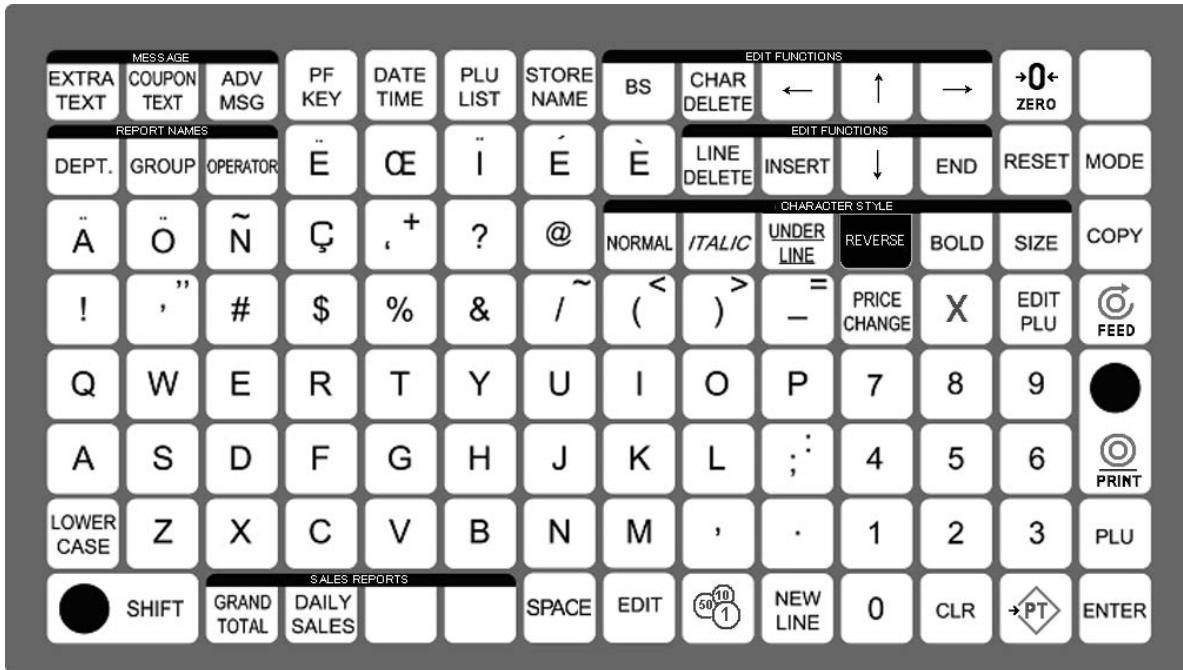
**Hanging type****1.4 DIMENSION****Pole Type****Hanging Type**

unit : mm

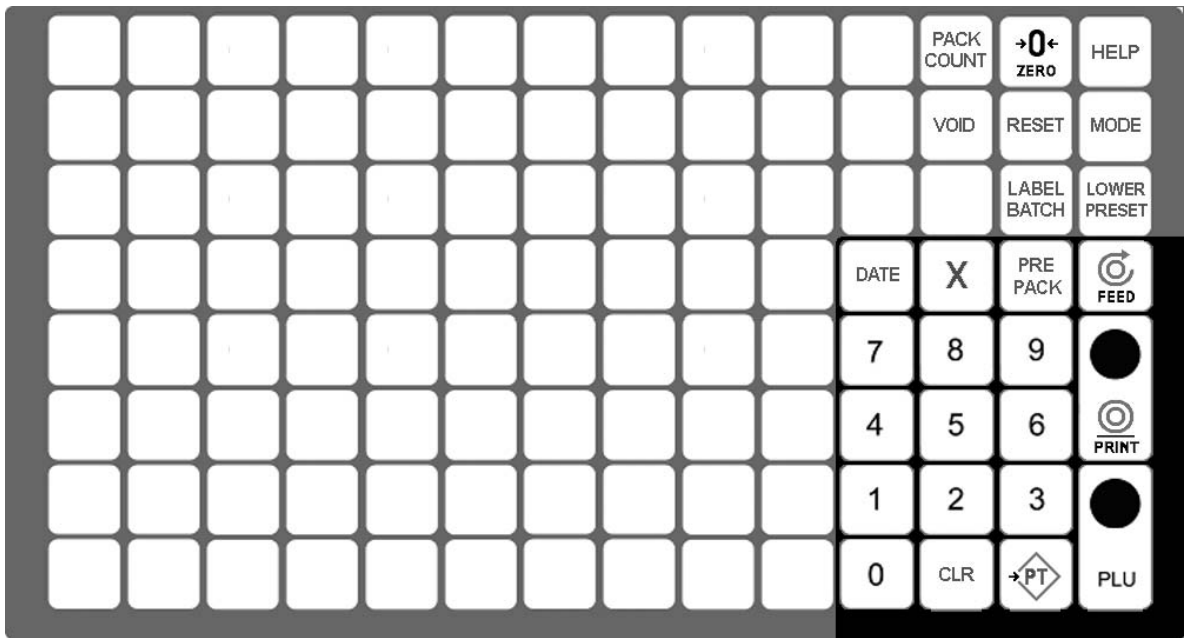


## 1.5 KEY SHEETS

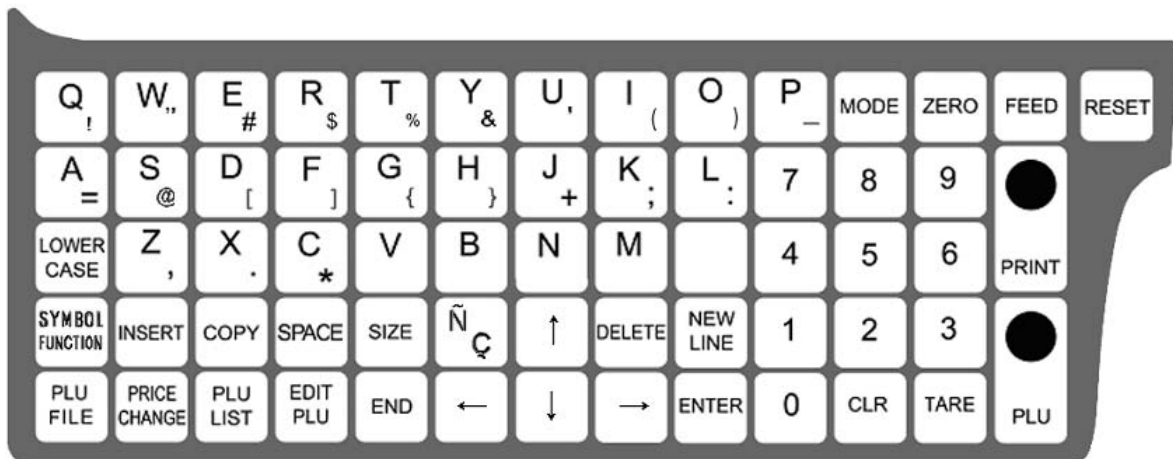
### *Pole type*



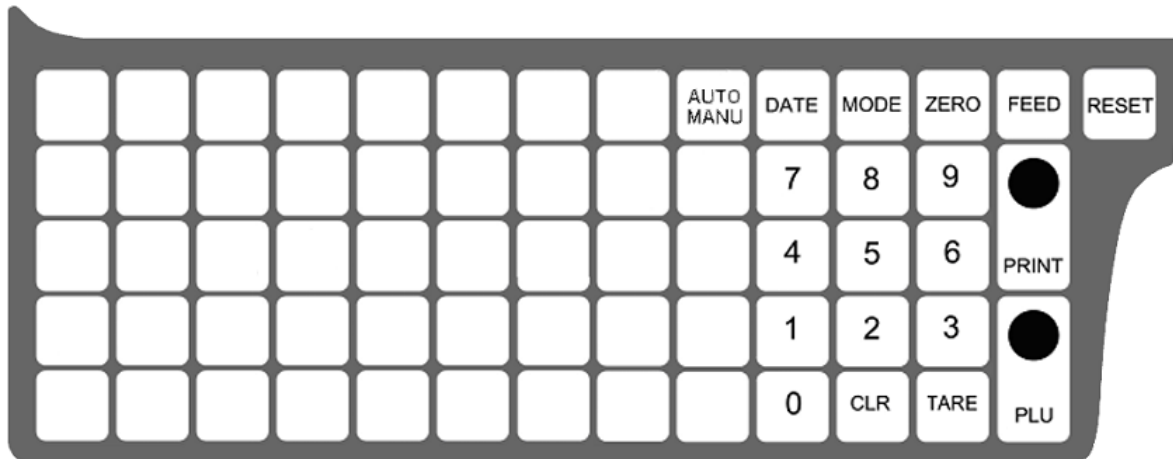
Program Key sheet



Operation Key sheet

**Bench type**

Program Key sheet



Operation Key sheet

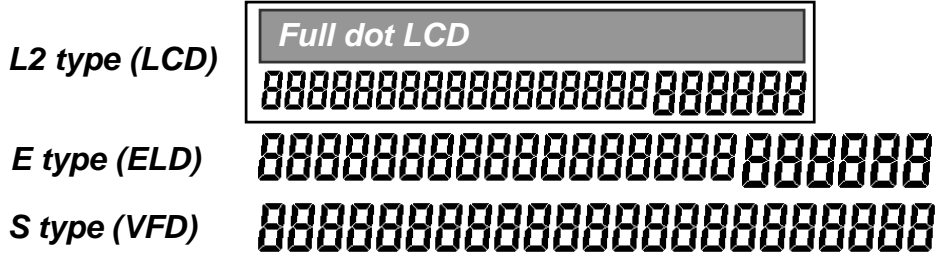
## 1.6 SPECIFICATIONS

Item	Content		
Product Name	BC-4000 L2*	BC-4000 E*	BC-4000 S*
Display	Full dot + 7-segment LCD type 192 ×16dots, 23-digit segment monochrome LCD, 2 backlight colors	7-segment LED type Tare/Weight/Unit Price: Small size: 17 digits Total Price: Large size: 6 digits	7-segment Vacuum Fluorescent Display type 23 digits
Display digit	Tare 4 digits Weight 5 digits, Unit Price 5 digits, Total Price 6 digits		
Weighing Capacity	15Kg: 0 - 6,000g / 2g, 6,000g - 15,000g / 5g, Multiple interval		
Weighing Accuracy	1/3000		
Scale Unit	0.002Kg / 0.005Kg		
Minimum Weighing Capacity	0.04Kg		
OS specification	µiTRON		
Standard I/O	100BASE LAN × 1		
Number of Keys	Pole type: 112 keys (108 single size keys + 2 double size keys) Bench type: 66 keys (61 single size keys + 2 double size keys)		
Printing Method	Direct, thermal method		
Thermal Head	2-inch (448 dots, 8 dots/mm) monochrome thermal head		
Printing Speed	80mm/sec.		
Label printing width	Max 56mm		
Label length	30 to 175mm		
Label Size	Label external: $\phi$ 100mm, Paper core: $\phi$ 40mm Label width: Min. 38mm – Max. 64mm		
Label backing paper width	Max 67mm		
Power Supply	AC220V/240V $\pm$ 10%,50/60Hz AC100V/120V $\pm$ 10%,60Hz(US & Canada)		
Power consumption	50W(stand-by)/100W(in operation)		
Operating Temperature	-5°C to +40°C		
Operating Humidity	15%RH to 85% RH(non condensing)		
External Dimensions	400(W) × 460(D) × 480(H)mm (including the pole height)		

\*: B: Bench type, H: Hanging type

## 2. SETUP MODE (B Mode)

### 7-SEGMENT CHARACTERS



7-SEGMENT be displayed in the following.

0	1	2	3	4	5	6	7	8	9					
0	1	2	3	4	5	6	7	8	9					
A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
A	b	C	d	E	F	G	H	,	J	K	L	ñ	n	o
P	Q	R	S	T	U	V	W	X	Y	Z				
P	q	r	s	t	U	v	w	x	y	z				
!	"	#	\$	%	&	'	(	)	*	+	,	-	.	/
~	'	!	_		'	-	C	3	_	_	_	-	_	_
:	:	<	=	>	?	[	]	^	_	@	{	}		
-	_	_	_	_	_	C	3	_	_	_	_	_	_	

### 2.1 ENTERING SETUP MODE

<b>KEY IN ITEM</b>	<b>No.</b>
<b>0.000</b>	<b>0.000</b>
<b>0.00</b>	<b>0.00</b>

Key in the numeric value "6000" and press the [MODE] key.  
Then, the machine enters Setup Mode.



## 2.2 B01 LABEL FORMAT

Press the [↓] key to enter B01 menu.



<b>1 LABEL FORMAT</b>	<b>[ENTER]</b>
<b>b01 LABEL FORMAT</b>	

### 2.2.1 B01-01 PRINT SETUP

Press the [ENTER] key to enter B01-01 menu.



<b>* PRINT SETUP</b>	<b>[ENTER]</b>
<b>b01-01 PRINT</b>	<b>1</b>

#### 2.2.1.1 B01-01-01 Label Format Number

Label print format number can be set.

##### **Operation**

1. Press the [ENTER] key to enter B01-01-01 menu.



<b>LABEL FORMAT No.</b>	
<b>b01-01-01 LABEL FMT</b>	<b>30</b>

2. Key in the desired label format number and press the [ENTER] key.

#01 - #04: Standard label format (01: default value).

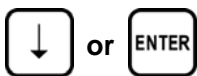
#31 - #99: Can be additionally registered.



#### 2.2.1.2 B01-01-02 Label Length + Gap

##### **Operation**

1. Press the [↓] or [ENTER] key to enter B01-01-02 menu.



<b>LENGTH+GAP(32.5to242.5)</b>	
<b>b01-01-02 LENGTH</b>	<b>39.5</b>

2. Measure the length of the label and the gap.

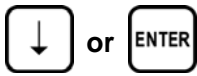
3. Key in the numeric value (0,1mm units), and press the [ENTER] key.



### 2.2.1.3 B01-01-03 Label Width

#### **Operation**

1. Press the [↓] or [ENTER] key to enter B01-01-03 menu.



<b>WIDTH (30.0 to 200.0mm)</b>	
<b>b01-01-03 WIDTH</b>	<b>0.0</b>

2. Measure the label width.

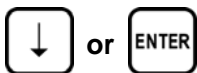
3. Key in the numeric value (0.1mm units), and press the [ENTER] key.



### 2.2.1.4 B01-01-04 Label Sensor Distance

#### **Operation**

1. Press the [↓] or [ENTER] key to enter B01-01-04 menu.



<b>SENSOR DISTANCE (0.1mm)</b>	
<b>b01-01-04 DISTANCE</b>	<b>73.0</b>

2. Key in the label sensor distance (between the label sensor and the thermal head), and press the [ENTER] key.

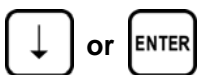
*Note: Normally, this value is fixed at 73.0mm.*



### 2.2.1.5 B01-01-05 Label Type Selection

#### **Operation**

1. Press the [↓] or [ENTER] key to enter B01-01-05 menu.



<b>DIE-CUT=0, CONTINUOU=1</b>	
<b>b01-01-05 CONTINUOUS</b>	<b>0</b>

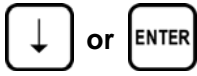
2. Key in the label type number (0: Die-cut labels (standard) or 1: Continuous labels) and press the [ENTER] key.



### 2.2.1.6 B01-01-06 Store Name/Address Print Selection

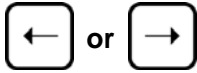
#### **Operation**

1. Press the [↓] or [ENTER] key to enter B01-01-06 menu.



<b>NAME, ADDRESS → 1:ENABLE</b>
<b>b01-01-06 STORE 1</b>

2. Use the [←] or [→] key to confirm the meaning of each item (code).



3. Key in the desired number (0 or 1) to determine whether or not to print the store name and address, and press the [ENTER] key.

0: Disable

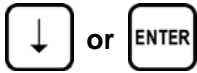
1: Enable



### 2.2.1.7 B01-01-07 Title (Unit Price or Weight) Print Selection

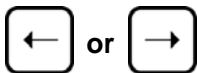
#### **Operation**

1. Press the [↓] or [ENTER] key to enter B01-01-07 menu.



<b>FIELD TITLE → 1:ENABLE</b>
<b>b01-01-07 TITLE 1</b>

2. Use the [←] or [→] key to confirm the meaning of each item (code).



3. Key in the desired number (0 or 1) to determine whether or not to print the title (unit price or weight) and press the [ENTER] key.

0: Disable

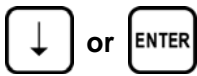
1: Enable



### 2.2.1.8 B01-01-08 Peel Sensor Selection

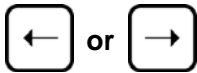
#### **Operation**

1. Press the [↓] or [ENTER] key to enter B01-01-08 menu.



<b>PEEL SENSOR → 1:ENABLE</b> <b>b01-01-08 PEEL</b>	<b>1</b>
--	----------

2. Use the [←] or [→] key to confirm the meaning of each item (code).



3. Key in the desired number (0 or 1) to determine whether or not to use the peel sensor and press the [ENTER] key.

0: Disable

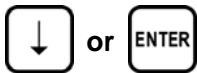
1: Enable



### 2.2.1.9 B01-01-09 PLU Number Setting for Test Printing

#### **Operation**

1. Press the [↓] or [ENTER] key to enter B01-01-09 menu.



<b>TEST ITEM No.</b> <b>b01-01-09 ITEM</b>	<b>00000001</b>
---	-----------------

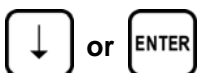
2. Key in the desired PLU number for test printing and press the [ENTER] key.



### 2.2.1.10 B01-01-10 Thermal Head Check Selection

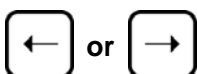
#### **Operation**

1. Press the [↓] or [ENTER] key to enter B01-01-10 menu.



<b>HEAD CHECK → 1:ENABLE</b> <b>b01-01-10 HEAD CHECK</b>	<b>1</b>
---	----------

2. Use the [←] or [→] key to confirm the meaning of each item (code).





3. Key in the desired number (0 or 1) to determine whether or not to check the thermal head and press the [ENTER] key.

0: Disable

1: Enable

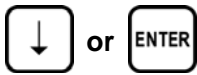


*Note: When using this function, the buzzer sounds if the thermal head fails in Normal Mode.*

### 2.2.1.11 B01-01-11 Subtotal Label Format Number

#### **Operation**

1. Press the [↓] or [ENTER] to enter B01-01-11 menu.



<b>SUB TOTAL FORMAT No.</b>	
<b>b01-01-11 SUB TOTAL</b>	<b>20</b>

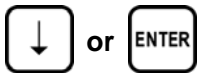
2. Key in the desired label format number for subtotal and press the [ENTER] key.



### 2.2.1.12 B01-01-12 Store Number Print Selection

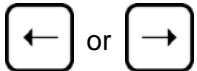
#### **Operation**

1. Press the [↓] or [ENTER] to enter B01-01-12 menu.



<b>STORE No. PRN → 1:ENABLE</b>	
<b>b01-01-12 STORE No.</b>	<b>1</b>

2. Use the [←] or [→] key to confirm the meaning of each item (code).



3. Key in the desired number (0 or 1) to determine whether or not to print the store number and press the [ENTER] key.

0: Disable

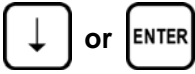
1: Enable



## 2.2.1.13 B01-01-13 Machine Number Print Selection

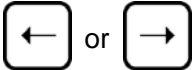
**Operation**

1. Press the [↓] or [ENTER] to enter B01-01-13 menu.



<b>MACH. No. PRN → 1:ENABLE</b>	
<b>b01-01-13 STORE No.</b>	<b>1</b>

2. Use the [←] or [→] key to confirm the meaning of each item (code).



3. Key in the desired number (0 or 1) to determine whether or not to print the machine number and press the [ENTER] key.

0: Disable

1: Enable



## 2.2.1.14 Returning to B01

**Operation**

Press the [END] key to return to B01 menu.



<b>1 LABEL FORMAT</b>	<b>[ENTER]</b>
<b>b01 LABEL FORMAT</b>	

## 2.2.2 B01-02 LABEL FORMAT

**Operation**

1. Press the [ENTER] key to enter B01-01 menu.



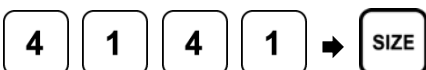
<b>* PRINT SETUP</b>	<b>[ENTER]</b>
<b>b01-01 PRINT</b>	<b>1</b>

2. Press the [↓] key to enter B01-02 menu.



<b>* LABEL EDIT</b>	<b>[ENTER]</b>
<b>b01-02 FORMAT</b>	

3. To proceed further steps, key in "4141" and press the [SIZE] key.



### 2.2.2.1 B01-02-01 Label Format Copy

**Operation**

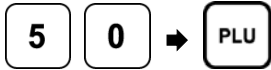
1. Press the [ENTER] key to enter B01-02-01 menu.



**\* FORMAT No. + [PLU] (30)**  
**b01-02-01 FORMAT No 30**

2. Key in the desired label format number (copy destination) and press the [PLU] key.

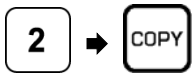
**Example:** Label format number "50"



**\* FORMAT No. + [PLU] (50)**  
**b01-02-01 FORMAT No 50**

3. Key in the desired label format number (copy origin) and press the [COPY] key.

**Example:** Label format number "2"



**\* FORMAT No. + [PLU] (02)**  
**b01-02-01 FORMAT No 02**

*Note: Format #1 through #4 are standard label formats and cannot be changed.*

*For format # 31 through #99, edit the format after copying a standard format.*

### 2.2.2.2 B01-02-02 Print Position Data

Printing position can be set for each unit.

**Operation**

1. Press the [↓] key to enter B01-02-02 menu.



**\* UNIT [ENTER]**  
**b01-02-02 UNIT**

2. Press the [ENTER] key to proceed to the next step.



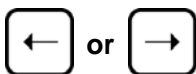
**0:X AXIS POSITION (0552)**  
**b01-02-02 0n00 0**

0: X axis  
 1: Y axis

Unit number (1-22)

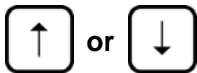
Print position  
 (in 0.1mm units)

3. Select "1" (Y axis) or "0" (X axis) using the [←] or [→] key.

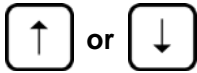


**0:Y AXIS POSITION (0490)**  
**b01-02-02 1n00 0**

4. Select the desired unit number using the [↑] or [↓] key.



<b>0:Y AXIS POSITION</b>	<b>(0055)</b>
<b>b01-02-02 1n31</b>	<b>0</b>



<b>0:X AXIS POSITION</b>	<b>(0019)</b>
<b>b01-02-02 0n01</b>	<b>0</b>

5. Key in the print position data (axis value) in 0.1mm units and press the [ENTER] key.

*Note: Print position data cannot be changed for standard format #1 through #4.*



6. Press the [END] key to return to the B01-02-01 menu.



<b>* FORMAT No. + [PLU]</b>	<b>(30)</b>
<b>b01-02-01 FORMAT No</b>	<b>30</b>

### 2.2.2.3 B01-02-03 Default PLU Number

#### **Operation**

1. Press the [↓] key twice to enter 01-02-03 menu.



<b>* DEFAULT PLU</b>	<b>[ENTER]</b>
<b>b01-02-03 PLU</b>	<b>00000001</b>

2. Key in the desired PLU number and press the [ENTER] key.

**Example:** PLU number "2"



<b>* DEFAULT PLU</b>	<b>[ENTER]</b>
<b>b01-02-03 PLU</b>	<b>00000002</b>

3. Press the [PRINT] key to issue a test label to confirm print position for each print unit.



### 2.2.2.4 Returning to B01-02-01

#### **Operation**

Press the [END] key to return to B01-02-01 menu.



<b>* FORMAT No. + [PLU]</b>	<b>(30)</b>
<b>b01-02-01 FORMAT No</b>	<b>30</b>

2.2.2.5 B01-02-04 Print Unit Data

**Operation**

1. Press the [↓] key repeatedly until 01-02-04 menu appears, or key in “4” and press the [↓] key to enter 01-02-04 menu directly.

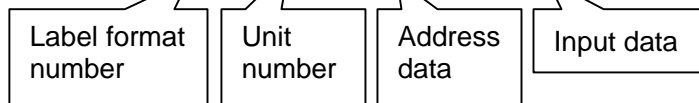


**\* UNIT DATA [ENTER]**  
**b01-02-04 UNIT DATA**

2. Press the [ENTER] key.



**FMT No / Unit No / Addr / Data**  
**b01-02-04 30 01 1d 1A30**



3. Select the desired psotion using the [←] [→] [↑] [↓] keys.



4. Key in the desired print unit data and press the [ENTER] key.



2.2.2.6 Returning to B01-02-01

**Operation**

Press the [END] key to return to B01-02-01 menu.



**\* FORMAT No. + [PLU] (30)**  
**b01-02-01 FORMAT No 30**

2.2.2.7 B01-02-05 Number of Units

**Operation**

1. Press the [↓] key repeatedly until 01-02-05 menu appears, or key in “5” and press the [↓] key to enter 01-02-05 menu directly.



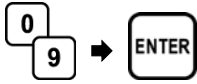
**NUMBER OF UNIT [ENTER]**  
**b01-02-05 No OF UNIT**

2. Press the [ENTER] key.



**NUMBER OF**  
**b01-02-05 No OF UNIT 22**

3. Key in the desired number of units and press the [ENTER] key.



### 2.2.2.8 Returning to B01-02-01

#### **Operation**

Press the [END] key to return to B01-02-01 menu.



<b>* FORMAT No. + [PLU]</b>	<b>(30)</b>
<b>b01-02-01 FORMAT No</b>	<b>30</b>

### 2.2.2.9 B01-02-06 Length + Gap

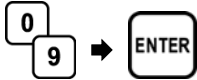
#### **Operation**

1. Press the [↓] key repeatedly until 01-02-06 menu appears, or key in “6” and press the [↓] key to enter 01-02-06 menu directly.



<b>LENGTH + GAP (32.5 to 242.5)</b>	
<b>b01-02-06 LENGTH</b>	<b>0.0</b>

2. Key in the desired data (Length + Gap) in 0.1mm units and press the [ENTER] key.



### 2.2.2.10 Returning to B01-01

Press the [END] key to return to B01-01.



<b>* PRINT SETUP</b>	<b>[ENTER]</b>
<b>b01-01 PRINT</b>	<b>1</b>

### 2.2.2.11 Returning to B01

#### **Operation**

Press the [END] key again to return to B01.



<b>1 LABEL FORMAT</b>	<b>[ENTER]</b>
<b>b01 LABEL FORMAT</b>	

## 2.3 B02 BARCODE SETTING

### Operation

Press the [↓] key to enter B02 menu.



**2 POS CODE** [ENTER]  
**b02 POS CODE**

### 2.3.1 B02-01 POS FLAG

POS flag can be set.

**Example:** Set “202” as a POS flag.

### Operation

1. Press the [ENTER] key to enter B02-01 menu.



**FLAG 8: 1 Digit, 13:2 Digits**  
**b02-01 POS FLAG**

202

POS flag 8

POS flag 13

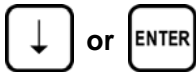
2. Key in the desired POS flag code (barcode prefix) and press the [ENTER] key.



### 2.3.2 B02-02 10 DIGIT FLAG

### Operation

1. Press the [↓] or [ENTER] key to enter B02-02 menu.



**10 DIGIT FLAG 8(13):2 Dig**  
**b02-02 10 DIG FLAG**

4949

PLU8

PLU13

FF\*\*\*\*\*C/D or FF\*\*\*\*\*C/D

10-digit fixed POS code

5-digit fixed POS code

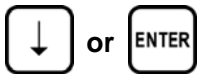
2. Key in the desired flag code for source marking and press the [ENTER] key.



### 2.3.3 B02-03 BARCODE TYPE

#### **Operation**

1. Press the [↓] or [ENTER] key to enter B02-03 menu.



<b>BAR TYPE</b>	<b>→ 1:NON PLU 13</b>
<b>b02-03 BAR TYPE</b>	<b>1</b>

2. Use the [←] or [→] key to confirm the meaning of each item (code).

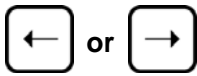
1: NON PLU 13 (EAN code)

2: NON PLU 8 (EAN code)

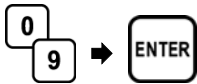
3: PLU 13 (EAN code)

4: PLU 8 (EAN code)

5: ITF 18



3. Key in the desired barcode type number and press the [ENTER] key.

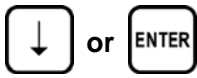




### 2.3.4 B02-04 POS TYPE

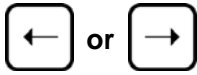
#### Operation

1. Press the [↓] or [ENTER] key to enter B02-04 menu.



<b>POS TYPE → 1:F2C5 (CP) P4</b> <b>b02-04 POS TYPE</b>	<b>1</b>
--	----------

2. Use the [←] or [→] key to confirm the meaning of each item (code).



3. Key in the desired POS type number and press the [ENTER] key.



#### <POS Type Numebr>

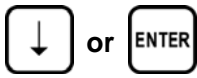
- 1: FFC CCCC (C/P) P P P P (C/D)
- 2: FFC CCCC C P P P P (C/D)
- 3: FCC CCCC (C/P) P P P P (C/D)
- 4: FFC CCCC P P P P P (C/D)
- 5: FCC CCCC P P P P P (C/D)
- 6: FFC CCC (C/P) P P P P P (C/D)
- 7: FFC CCCC C W W W W (C/D)
- 8: FCC CCCC W W W W W (C/D)
- 9: FCC CCCC I I I I I (C/D)
- 10: FFC CCCC P P P P P (C/D)
- 11: FFC CCCC C W W W W (C/D)
- 12: FFC CCC (C/P) W W W W W (C/D)
- 13: FF M M C C P P P P P (C/D)
- 14: FF M M C C C P P P P P (C/D)
- 15: FFC CCCC (0) P P P P P (C/D)
- 16: FFC CCCC W W W W W (C/D)
- 17: FFC CCCC P P P P P (C/D)
- 18: FFC CCCC (C/P) P P P P P (C/D)
- 19: FFC CCCC (C/P) W W W W W (C/D)
- 20: FCC CCCC P P P P P P (C/D)
- 21: FFC CCCC P P P P P P (C/D)
- 22: FCC C W W W W P P P P P (C/D)
- 23: FFC CCCC Q Q P P P P P (C/D)
- 24: F I I I I I I P P P P P (C/D)
- 25: F F I I I I I I P P P P P (C/D)
- 26: FCC C C C P P P P P P P (C/D)
- 27: F I I I I I I I P P P P P (C/D)
- 28: F F I I I I I I P P P P P (C/D)
- 29: FCC C C C C C P P P P P P (C/D)
- 30: FFC C C C C C C P P P P P (C/D)
- 31: FFC C C C C C Q Q Q Q Q (C/D)

(F: Flag, C: Commodity code, P: Price, W: Weight, I: Item code, Q: Quantity, M: Manufacturer code, C/P: Check price, C/D: Check didit)

### 2.3.5 B02-05 ITF 18 DIGIT BARCODE TYPE

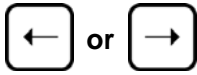
#### Operation

1. Press the [↓] or [ENTER] key to enter B02-05 menu.



ITF → 1:F2C5P5W5/Q5	
b02-05 ITF BAR	0

2. Use the [←] or [→] key to confirm the meaning of each item (code).



3. Key in the desired barcode type number and press the [ENTER] key.



<ITF 18 Digit Barcode Type Number> (U: Unit price)

1: FFCCCCPPPPWWWW(C/D)/

FFCCCCPPPPQQQQ(C/D)

2: FFCCCCUUUUWWWW(C/D)

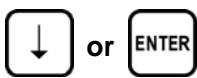
3: FFCCCCPPPPWWWW(C/D)

4: FFCCCCPPPPQQQQ(C/D)

### 2.3.6 B02-06 MANUFACTURER CODE

#### Operation

1. Press the [↓] or [ENTER] key to enter B02-06 menu.



MANUFACTURE CODE (4 Dig)	
b02-06 MANUFACTURE	0000

2. Key in the desired manufacturer code and press the [ENTER] key.



### 2.3.7 RETURNING TO B01

#### Operation

Press the [END] key to return to B01 menu.



1 LABEL FORMAT	[ENTER]
b01 LABEL FORMAT	

## 2.4 B03 BARCODE

Press the [↓] key repeatedly until B03 menu appears, or key in “3” and press the [↓] key to enter B03 menu directly.



<b>3 ITEM CODE SET [ENTER]</b> <b>b03 CODE POSITION</b>
--

### 2.4.1 B03-01 ITEM CODE POSITION

#### **Operation**

1. Press the [ENTER] key to enter B03-01 menu.



<b>ITEM CODE SET (BARCODE)</b> <b>b03-01 BARCODE 45</b>
--

2. Key in the item code position (starting position and the number of digits in the barcode), and press the [ENTER] key.

*Note: Three types are available, “45”, “36” and “27” (default value is “45”).*



**Example:** Item code “4567892” Set value “45”

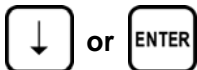
“45” means 5 digits from the 4th digit of the item code.

In this example, the item code is “67892”.

### 2.4.2 B03-02 DEPARTMENT CODE POSITION

#### **Operation**

1. Press the [↓] or [ENTER] key to enter B03-02 menu.



<b>ITEM CODE SET (DEPT)</b> <b>b03-02 DEPARTMENT 34</b>
--

2. Key in the item code position (starting position and the number of digits in the department code), and press the [ENTER] key.



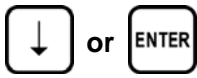
**Example:** Item code: “34567892”, Set value: “34”.

In this example, the department code is “5678” that are 4 digits from the 3rd digit.

### 2.4.3 B03-03 GROUP CODE POSITION

#### **Operation**

1. Press the [↓] or [ENTER] key to enter B03-03 menu.



<b>ITEM CODE SET (GROUP)</b> <b>b03-03 GROUP</b>	<b>32</b>
---	-----------

2. Key in the item code position (starting position and the number of digits in the group code) and press the [ENTER] key.



**Example:** Item code: "12345678", Set value: "32".

In this example, the group code is "34" that are 2 digits from the 3rd digit.

### 2.4.4 RETURNING TO B01

#### **Operation**

Press the [END] key to return to B01 menu.



<b>1 LABEL FORMAT</b> <b>b01 LABEL FORMAT</b>	<b>[ENTER]</b>
--	----------------

## 2.5 B04 DEFAULT SETTING

### **Operation**

Press the [↓] key repeatedly until B04 menu appears, or key in “4” and press the [↓] key to enter B04 menu directly.



4 DEFAULT	[ENTER]
b04 DEFAULT	

### 2.5.1 B04-01 DATE PRINT

#### **Operation**

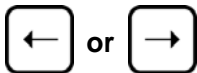
1. Press the [ENTER] key to enter B04-01 menu.



DATE PRINT → 4:BOTH	
b04-01 DATE FLAG	4

2. Use the [←] or [→] key to confirm the meaning of each item (code).

- 1: Prohibit (No print)
- 2: Pack date
- 3: Use-by date
- 4: Both (Print both)



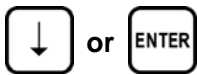
3. Key in the desired number to determine whether or not to print dates and press the [ENTER] key.



### 2.5.2 B04-02 USE BY DAYS

#### **Operation**

1. Press the [↓] or [ENTER] key to enter B04-02 menu.



USE BY (0 to 999)	
b04-02 USE BY	1

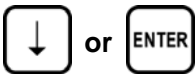
2. Key in the number of days for Use By period and press the [ENTER] key.



### 2.5.3 B04-03 PACK TIME PRINT

#### **Operation**

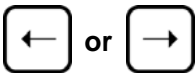
1. Press the [↓] or [ENTER] key to enter B04-03 menu.



<b>PACK TIME → 1:PROHIBIT</b> <b>b04-03 P TIME</b>	<b>1</b>
---	----------

2. Use the [←] or [→] key to confirm the meaning of each item (code).

- 1: Prohibit (No print)
- 2: Installed (System time print)
- 3: Designated time print



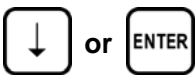
3. Key in the desired number to determine whether or not to print the pack time and press the [ENTER] key.



### 2.5.4 B04-04 EXPIRY TIME PRINT

#### **Operation**

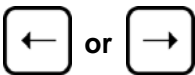
1. Press the [↓] or [ENTER] key to enter B04-04 menu.



<b>EXPIRY TIME → 1:PROHIBIT</b> <b>b04-04 E TIME</b>	<b>1</b>
---	----------

2. Use the [←] or [→] key to confirm the meaning of each item (code).

- 1: Prohibit (No print)
- 2: Relative time print
- 3: Designated time print



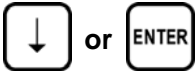
3. Key in the desired number to determine whether or not to print the expiry time and press the [ENTER] key.



### 2.5.5 B04-05 BEST BEFORE DATE PRINT

#### **Operation**

1. Press the [↓] or [ENTER] key to enter B04-05 menu.

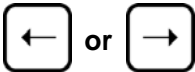


<b>BEST BEFORE → 1:NO PRINT</b>
<b>b04-05 BEFORE F</b> <span style="float: right;"><b>1</b></span>

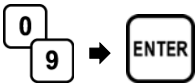
2. Use the [←] or [→] key to confirm the meaning of each item (code).

1: No print

2: Print



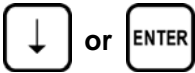
3. Key in the desired number to determine whether or not to print the Best Before date and press the [ENTER] key.



### 2.5.6 B04-06 BEST BEFORE DATE

#### **Operation**

1. Press the [↓] or [ENTER] key to enter B04-06 menu.



<b>BEST BEFORE DATE (0 – 999)</b>
<b>b04-06 BEFORE D</b> <span style="float: right;"><b>1</b></span>

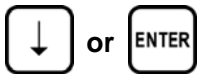
3. Key in the desired number of days for Best Before date and press the [ENTER] key.



## 2.5.7 B04-07 UNIT TYPE

### Operation

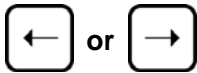
1. Press the [↓] or [ENTER] key to enter B04-07 menu.



<b>UNIT TYPE → 5:PC(S).</b> <b>b04-07 UNIT TYPE</b>	<b>5</b>
--	----------

2. Use the [←] or [→] key to confirm the meaning of each item (code).

- 1: oz
- 2: lb
- 3: kg
- 4: g
- 5: PC(S).
- 6: BOX(ES)
- 7: BUNDLE(S)
- 8: PACK(S)
- 9: CUT(S)
- 10: SLICE(S)
- 11: CUP(S)
- 12: PKT(S)
- 13: BAG(S)
- 14: BUCH(S)
- 15: BOTTLE(S)
- 16: LB



3. Key in the desired number to select the unit type and press the [ENTER] key.



## 2.5.8 RETURNING TO B01

### Operation

Press the [END] key to return to B01.



<b>1 LABEL FORMAT</b>	<b>[ENTER]</b>
<b>b01 LABEL FORMAT</b>	



## 2.6 TOTAL MODE SELECTION

### **Operation**

Press the [F] key repeatedly until B05 menu appears, or key in “5” and press the [F] key to enter B05 menu directly.

F ( ( F

<b>5 TOTAL SELECT</b>	<b>[ENTER]</b>
b05 TOTAL SELECT	

### 2.6.1 B05-01 DAILY TOTAL

#### **Operation**

1. Press the [ENTER] key to enter B05-01 menu.

ENTER

<b>DAILY TOTAL → 1:ENABLE</b>	
b05-01 DAILY	<b>1</b>

2. Use the [←] or [→] key to confirm the meaning of each item (code).

0: Disable

1: Enable

← or →

3. Key in the desired number to determine whether or not to use the daily total function and press the [ENTER] key.

0  
9 → ENTER

### 2.6.2 B05-02 WEEKLY TOTAL

#### **Operation**

1. Press the [ENTER] key to enter B05-02 menu.

ENTER

<b>WEEKLY TOTAL → 1:ENABLE</b>	
b05-02 WEEKLY	<b>1</b>

2. Use the [←] or [→] key to confirm the meaning of each item (code).

0: Disable

1: Enable

← or →

3. Key in the desired number to determine whether or not to use the weekly total function and press the [ENTER] key.

0  
9 → ENTER

### 2.6.3 B05-03 MONTHLY TOTAL

#### **Operation**

1. Press the [ENTER] key to enter B05-03 menu.

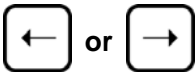


<b>MONTHLY TOTAL → 1:ENABLE</b> <b>b05-03 MONTHLY</b>	<b>1</b>
--	----------

2. Use the [←] or [→] key to confirm the meaning of each item (code).

0: Disable

1: Enable



3. Key in the desired number to determine whether or not to use the weekly total function and press the [ENTER] key.



### 2.6.4 RETURNING TO B01

#### **Operation**

Press the [END] key to return to B01 menu.



<b>1 LABEL FORMAT</b>	<b>[ENTER]</b>
<b>b01 LABEL FORMAT</b>	

## 2.7 B07 OPEN PRICE

### **Operation**

Press the [↓] key repeatedly until B07 menu appears, or key in “7” and press the [↓] key to enter B07 menu directly.



<b>7 OPEN PRICE</b>	<b>[ENTER]</b>
<b>b07 OPEN PRICE</b>	

### 2.7.1 B07-01 OPEN PRICE SELECTION

#### **Operation**

1. Press the [ENTER] key to enter B07-01 menu.

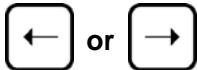


<b>OPEN PRICE → 0:ALLOW</b>	
<b>b07-01 OPEN PRICE</b>	<b>0</b>

2. Use the [←] or [→] key to confirm the meaning of each item (code).

0: Allow

1: Prohibit



3. Key in the number (0 or 1) to determine whether or not to allow open price function and press the [ENTER] key.



### 2.7.2 RETURNING TO B01

#### **Operation**

Press the [END] key to return to B01 menu.



<b>1 LABEL FORMAT</b>	<b>[ENTER]</b>
<b>b01 LABEL FORMAT</b>	

## 2.8 PLU SELECTION

### **Operation**

Press the [↓] key repeatedly until B08 menu appears, or key in “8” and press the [↓] key to enter B08 menu directly.

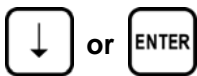


<b>8 PLU SELECT</b>	<b>[ENTER]</b>
<b>b08 PLU SELECT</b>	

### 2.8.1 B08-02 SALES MODE

#### **Operation**

1. Press the [↓] or [ENTER] key to enter B08-02 menu.

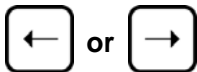


<b>SALES MODE</b>	
<b>b08-02 SALES MODE</b>	<b>1</b>

2. Use the [←] or [→] key to confirm the meaning of each item (code).

0: Disable

1: Enable



3. Key in the number (0 or 1) to determine whether or not to use the sales mode function and press the [ENTER] key.



### 2.8.2 B08-03 UNIT PRICE

#### **Operation**

1. Press the [() or [ENTER] key to enter B08-03 menu.

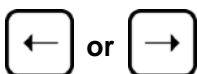
[ ( or )

<b>UNIT PRICE</b>	<b>( 1:ENABLE</b>
<b>b08-03 PRICE</b>	<b>1</b>

2. Use the [←] or [→] key to confirm the meaning of each item (code).

0: Disable

1: Enable



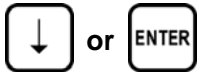
3. Key in the number (0 or 1) to determine whether or not to use the unit price function and press the [ENTER] key.



### 2.8.3 B08-04 MARKDOWN FLAG

#### **Operation**

1. Press the [↓] or [ENTER] key to enter B08-04 menu.

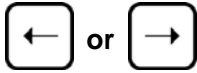


<b>MD FLAG</b>	<b>→ 1:ENABLE</b>
<b>b08-04 MD FLAG</b>	<b>1</b>

2. Use the [←] or [→] key to confirm the meaning of each item (code).

0: Disable

1: Enable



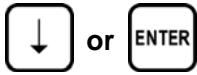
3. Key in the number (0 or 1) to determine whether or not to use the markdown function and press the [ENTER] key.



### 2.8.4 B08-05 MARKDOWN PRICE

#### **Operation**

1. Press the [↓] or [ENTER] key to enter B08-05 menu.

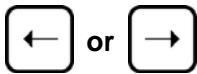


<b>MD PRICE</b>	<b>→ 1:ENABLE</b>
<b>b08-05 MD PRICE</b>	<b>1</b>

2. Use the [←] or [→] key to confirm the meaning of each item (code).

0: Disable

1: Enable



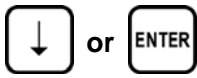
3. Key in the number (0 or 1) to determine whether or not to use the markdown price function and press the [ENTER] key.



### 2.8.5 B08-06 FIXED WEIGHT

#### **Operation**

1. Press the [↓] or [ENTER] key to enter B08-06 menu.

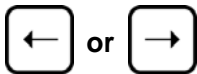


<b>FIXED WEIGHT</b>	<b>→ 1:ENABLE</b>
<b>b08-06 FIXED WEIGHT</b>	<b>1</b>

2. Use the [←] or [→] key to confirm the meaning of each item (code).

0: Disable

1: Enable



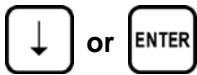
3. Key in the number (0 or 1) to determine whether or not to use the fixed weight function and press the [ENTER] key.



### 2.8.6 B08-07 QUANTITY

#### **Operation**

1. Press the [↓] or [ENTER] key to enter B08-07 menu.

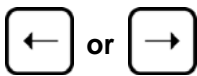


<b>PCS</b>	<b>→ 1:ENABLE</b>
<b>b08-07 PCS</b>	<b>1</b>

2. Use the [←] or [→] key to confirm the meaning of each item (code).

0: Disable

1: Enable



3. Key in the number (0 or 1) to determine whether or not to use the quantity function and press the [ENTER] key.

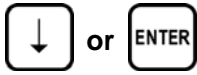


### 2.8.7 B08-08 TARE

Note that "Tare 2" is not available.

#### **Operation**

1. Press the [↓] or [ENTER] key to enter B08-08 menu.

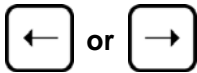


<b>TARE1</b>	<b>→ 1:ENABLE</b>
<b>b08-08 TARE1</b>	<b>1</b>

2. Use the [←] or [→] key to confirm the meaning of each item (code).

0: Disable

1: Enable



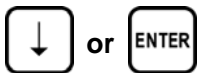
3. Key in the number (0 or 1) to determine whether or not to use the tare function and press the [ENTER] key.



### 2.8.8 B08-09 DATE PRINT

#### **Operation**

1. Press the [↓] or [ENTER] key to enter B08-09 menu.

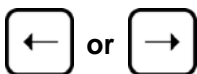


<b>DATE PRINT</b>	<b>→ 1:ENABLE</b>
<b>b08-09 DATE PRNT</b>	<b>1</b>

2. Use the [←] or [→] key to confirm the meaning of each item (code).

0: Disable

1: Enable



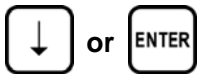
3. Key in the number (0 or 1) to determine whether or not to use the date print function and press the [ENTER] key.



### 2.8.9 B08-10 SHELF LIFE

#### Operation

1. Press the [↓] or [ENTER] key to enter B08-10 menu.

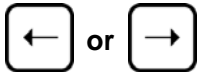


DATE PRINT	→ 1:ENABLE
b08-10 SHELF LIFE	1

2. Use the [←] or [→] key to confirm the meaning of each item (code).

0: Disable

1: Enable



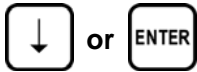
3. Key in the number (0 or 1) to determine whether or not to use the Shelf Life function and press the [ENTER] key.



### 2.8.10 B08-11 BEST BEFORE DATE FLAG

#### Operation

1. Press the [↓] or [ENTER] key to enter B08-11 menu.

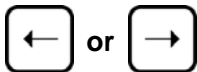


B BEFORE FLAG	→ 1:ENABLE
b08-11 B BEF FLG	1

2. Use the [←] or [→] key to confirm the meaning of each item (code).

0: Disable

1: Enable



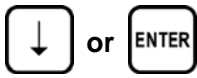
3. Key in the number (0 or 1) to determine whether or not to use the Best Before date function and press the [ENTER] key.





**2.8.11 B08-12 BEST BEFORE DATE DATA****Operation**

1. Press the [↓] or [ENTER] key to enter B08-12 menu.

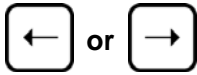


<b>B BEFORE DATE → 1:ENABLE</b>
<b>b08-12 B BEF DATE 1</b>

2. Use the [←] or [→] key to confirm the meaning of each item (code).

0: Disable

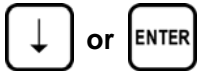
1: Enable



3. Key in the number (0 or 1) to determine whether or not to use the Best Before date data function and press the [ENTER] key.

**2.8.12 B08-13 PACK TIME FLAG****Operation**

1. Press the [↓] or [ENTER] key to enter B08-13 menu.

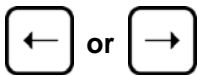


<b>P.TIME FLAG → 1:ENABLE</b>
<b>b08-13 P TIME FLG 1</b>

2. Use the [←] or [→] key to confirm the meaning of each item (code).

0: Disable

1: Enable



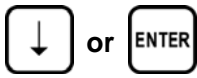
3. Key in the number (0 or 1) to determine whether or not to use the pack time function and press the [ENTER] key.



### 2.8.13 B08-14 PACK TIME DATA

#### Operation

1. Press the [↓] or [ENTER] key to enter B08-14 menu.

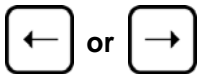


<b>P TIME DATA</b>	<b>→ 1:ENABLE</b>
<b>b08-14 P TIME DATA</b>	<b>1</b>

2. Use the [←] or [→] key to confirm the meaning of each item (code).

0: Disable

1: Enable



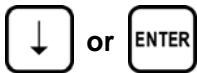
3. Key in the number (0 or 1) to determine whether or not to use the pack time data function and press the [ENTER] key.



### 2.8.14 B08-15 EXPIRY TIME FLAG

#### Operation

1. Press the [↓] or [ENTER] key to enter B08-15 menu.

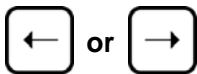


<b>E. TIME FLAG</b>	<b>→ 1:ENABLE</b>
<b>b08-15 E TIME FLG</b>	<b>1</b>

2. Use the [←] or [→] key to confirm the meaning of each item (code).

0: Disable

1: Enable

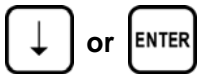


3. Key in the number (0 or 1) to determine whether or not to use the expiry time function and press the [ENTER] key.



**2.8.15 B08-16 EXPIRY TIME DATA****Operation**

1. Press the [↓] or [ENTER] key to enter B08-16 menu.

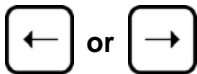


<b>E. TIME DATA</b>	<b>→ 1:ENABLE</b>
<b>b08-16 E TIME DATA</b>	<b>1</b>

2. Use the [←] or [→] key to confirm the meaning of each item (code).

0: Disable

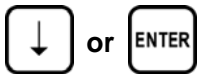
1: Enable



3. Key in the number (0 or 1) to determine whether or not to use the expiry time data function and press the [ENTER] key.

**2.8.16 B08-17 ITEM CODE****Operation**

1. Press the [↓] or [ENTER] key to enter B08-17 menu.

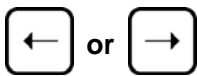


<b>ITEM CODE</b>	<b>→ 1:ENABLE</b>
<b>b08-17 ITEM CODE</b>	<b>1</b>

2. Use the [←] or [→] key to confirm the meaning of each item (code).

0: Disable

1: Enable



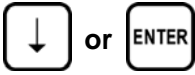
3. Key in the number (0 or 1) to determine whether or not to use the item code function and press the [ENTER] key.



### 2.8.17 B08-18 BARCODE TYPE

#### **Operation**

1. Press the [↓] or [ENTER] key to enter B08-18 menu.

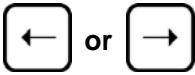


<b>BAR TYPE</b>	<b>→ 1:ENABLE</b>
<b>b08-18 BAR TYPE</b>	<b>1</b>

2. Use the [←] or [→] key to confirm the meaning of each item (code).

0: Disable

1: Enable



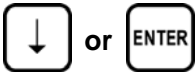
3. Key in the number (0 or 1) to determine whether or not to use the barcode type function and press the [ENTER] key.



### 2.8.18 B08-19 POS TYPE

#### **Operation**

1. Press the [↓] or [ENTER] key to enter B08-19 menu.

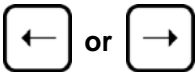


<b>POS TYPE</b>	<b>→ 1:ENABLE</b>
<b>b08-19 POS TYPE</b>	<b>1</b>

2. Use the [←] or [→] key to confirm the meaning of each item (code).

0: Disable

1: Enable

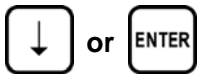


3. Key in the number (0 or 1) to determine whether or not to use the POS type function and press the [ENTER] key.



**2.8.19 B08-20 POS FLAG****Operation**

1. Press the [↓] or [ENTER] key to enter B08-20 menu.

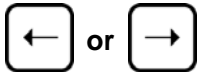


<b>POS FLAG</b>	<b>→ 1:ENABLE</b>
<b>b08-20 POS FLAG</b>	<b>1</b>

2. Use the [←] or [→] key to confirm the meaning of each item (code).

0: Disable

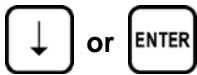
1: Enable



3. Key in the number (0 or 1) to determine whether or not to use the POS function and press the [ENTER] key.

**2.8.20 B08-21 POS CODE****Operation**

1. Press the [↓] or [ENTER] key to enter B08-21 menu.

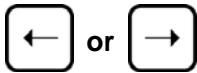


<b>POS CODE</b>	<b>→ 1:ENABLE</b>
<b>b08-21 POS CODE</b>	<b>1</b>

2. Use the [←] or [→] key to confirm the meaning of each item (code).

0: Disable

1: Enable

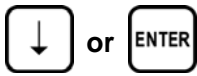


3. Key in the number (0 or 1) to determine whether or not to use the POS code function and press the [ENTER] key.



**2.8.21 B08-22 OPEN PRICE****Operation**

1. Press the [↓] or [ENTER] key to enter B08-22 menu.

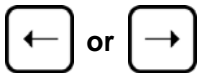


<b>OPEN PRICE</b>	<b>→ 1:ENABLE</b>
<b>b08-22 OPEN PRICE</b>	<b>1</b>

2. Use the [←] or [→] key to confirm the meaning of each item (code).

0: Disable

1: Enable



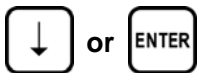
3. Key in the number (0 or 1) to determine whether or not to use the open price function and press the [ENTER] key.

**2.8.22 B08-23 COMMODITY MESSAGE**

Note that “Commodity message” can also be called “Extra message”.

**Operation**

1. Press the [↓] or [ENTER] key to enter B08-23 menu.

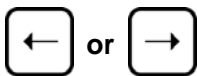


<b>COMMODITY MSG</b>	<b>→ 1:ENABLE</b>
<b>b08-23 COMMODITY MSG</b>	<b>1</b>

2. Use the [←] or [→] key to confirm the meaning of each item (code).

0: Disable

1: Enable

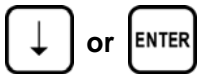


3. Key in the number (0 or 1) to determine whether or not to use the commodity message function and press the [ENTER] key.



**2.8.23 B08-24 INGREDIENTS MESSAGE****Operation**

1. Press the [↓] or [ENTER] key to enter B08-24 menu.

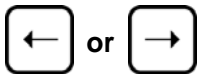


<b>INGRED MSG</b>	<b>→ 1:ENABLE</b>
<b>b08-24 INGREDIENTS MSG</b>	<b>1</b>

2. Use the [←] or [→] key to confirm the meaning of each item (code).

0: Disable

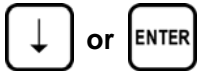
1: Enable



3. Key in the number (0 or 1) to determine whether or not to use the ingredients message function and press the [ENTER] key.

**2.8.24 B08-25 NUTRITION INFORMATION PANEL MESSAGE****Operation**

1. Press the [↓] or [ENTER] key to enter B08-25 menu.

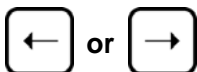


<b>NIP MESSAGE</b>	<b>→ 1:ENABLE</b>
<b>b08-25 NIP MESSAGE</b>	<b>1</b>

2. Use the [←] or [→] key to confirm the meaning of each item (code).

0: Disable

1: Enable



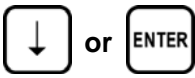
3. Key in the number (0 or 1) to determine whether or not to use the NIP message function and press the [ENTER] key.



### 2.8.25 B08-27 COUPON MESSAGE

#### **Operation**

1. Press the [↓] or [ENTER] key to enter B08-26 menu.

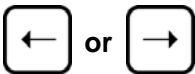


<b>COUPON MSG</b>	<b>→ 1:ENABLE</b>
<b>b08-26 COUPON</b>	<b>1</b>

2. Use the [←] or [→] key to confirm the meaning of each item (code).

0: Disable

1: Enable



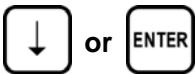
3. Key in the number (0 or 1) to determine whether or not to use the coupon message function and press the [ENTER] key.



### 2.8.26 B08-27 LOGO IMAGE 1

#### **Operation**

1. Press the [↓] or [ENTER] key to enter B08-27 menu.

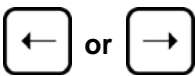


<b>LOGO IMAGE 1</b>	<b>→ 1:ENABLE</b>
<b>b08-27 LOGO 1</b>	<b>1</b>

2. Use the [←] or [→] key to confirm the meaning of each item (code).

0: Disable

1: Enable



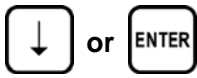
3. Key in the number (0 or 1) to determine whether or not to use the Logo Image1 function and press the [ENTER] key.





**2.8.27 B08-28 LOGO IMAGE 2****Operation**

1. Press the [↓] or [ENTER] key to enter B08-28 menu.

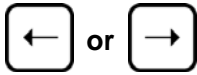


<b>LOGO IMAGE 2</b>	<b>→ 1:ENABLE</b>
<b>b08-28 LOGO 2</b>	<b>1</b>

2. Use the [←] or [→] key to confirm the meaning of each item (code).

0: Disable

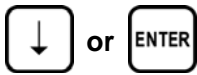
1: Enable



3. Key in the number (0 or 1) to determine whether or not to use the Logo Image 2 function and press the [ENTER] key.

**2.8.28 B08-29 LABEL FORMAT NUMBER****Operation**

1. Press the [↓] or [ENTER] key to enter B08-29 menu.

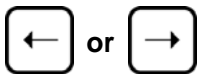


<b>LABEL FMT No.</b>	<b>→ 1:ENABLE</b>
<b>b08-29 FORMAT 1</b>	<b>1</b>

2. Use the [←] or [→] key to confirm the meaning of each item (code).

0: Disable

1: Enable



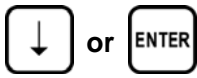
3. Key in the number (0 or 1) to determine whether or not to use the label format number function and press the [ENTER] key.



Note: Steps “b08-30” and “b08-31” are not available.

**2.8.29 B08-32 UPPER LIMIT****Operation**

1. Press the [↓] or [ENTER] key to enter B08-32 menu.

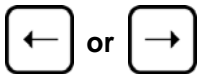


<b>UPPER LIMIT</b>	<b>→ 1:ENABLE</b>
<b>b08-32 UPPER</b>	<b>1</b>

2. Use the [←] or [→] key to confirm the meaning of each item (code).

0: Disable

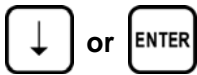
1: Enable



3. Key in the number (0 or 1) to determine whether or not to use the upper limit function and press the [ENTER] key.

**2.8.30 B08-33 LOWER LIMIT****Operation**

1. Press the [↓] or [ENTER] key to enter B08-33 menu.

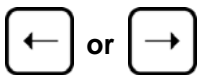


<b>LOWER LIMIT</b>	<b>→ 1:ENABLE</b>
<b>b08-33 LOWER</b>	<b>1</b>

2. Use the [←] or [→] key to confirm the meaning of each item (code).

0: Disable

1: Enable



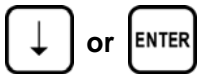
3. Key in the number (0 or 1) to determine whether or not to use the lower limit function and press the [ENTER] key.



### 2.8.31 B08-34 UNIT TYPE

**Operation**

1. Press the [↓] or [ENTER] key to enter B08-34 menu.

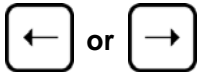


<b>UNIT TYPE</b>	<b>→ 1:ENABLE</b>
<b>b08-34 UNIT TYPE</b>	<b>1</b>

2. Use the [←] or [→] key to confirm the meaning of each item (code).

0: Disable

1: Enable



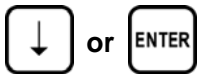
3. Key in the number (0 or 1) to determine whether or not to use the unit type function and press the [ENTER] key.



### 2.8.32 B08-35 DEPARTMENT CODE

**Operation**

1. Press the [↓] or [ENTER] key to enter B08-35 menu.

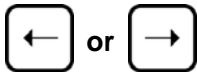


<b>DEPT CODE</b>	<b>→ 1:ENABLE</b>
<b>b08-35 DEPARTMENT</b>	<b>1</b>

2. Use the [←] or [→] key to confirm the meaning of each item (code).

0: Disable

1: Enable

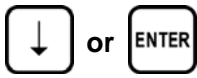


3. Key in the number (0 or 1) to determine whether or not to use the department code function and press the [ENTER] key.



**2.8.33 B08-36 GROUP CODE****Operation**

1. Press the [↓] or [ENTER] key to enter B08-36 menu.

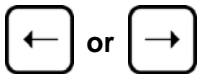


<b>GROUP CODE</b>	<b>→ 1:ENABLE</b>
<b>b08-36 GROUP</b>	<b>1</b>

2. Use the [←] or [→] key to confirm the meaning of each item (code).

0: Disable

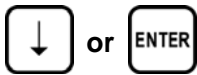
1: Enable



3. Key in the number (0 or 1) to determine whether or not to use the group code function and press the [ENTER] key.

**2.8.34 B08-37 REGISTER CODE****Operation**

1. Press the [↓] or [ENTER] key to enter B08-37 menu.

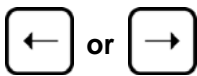


<b>REGIST CODE</b>	<b>→ 1:ENABLE</b>
<b>b08-37 REGISTER</b>	<b>1</b>

2. Use the [←] or [→] key to confirm the meaning of each item (code).

0: Disable

1: Enable

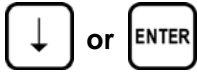


3. Key in the number (0 or 1) to determine whether or not to use the register code function and press the [ENTER] key.



**2.8.35 B08-38 COST PRICE****Operation**

1. Press the [↓] or [ENTER] key to enter B08-38 menu.

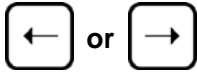


<b>COST PRICE</b>	<b>→ 1:ENABLE</b>
<b>b08-38 COST PRICE</b>	<b>1</b>

2. Use the [←] or [→] key to confirm the meaning of each item (code).

0: Disable

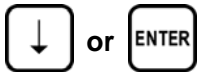
1: Enable



3. Key in the number (0 or 1) to determine whether or not to use the cost price function and press the [ENTER] key.

**2.8.36 B08-39 POP NUMBER****Operation**

1. Press the [↓] or [ENTER] key to enter B08-39 menu.

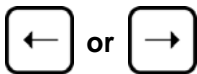


<b>POP NUMBER</b>	<b>→ 1:ENABLE</b>
<b>b08-39 POP</b>	<b>1</b>

2. Use the [←] or [→] key to confirm the meaning of each item (code).

0: Disable

1: Enable



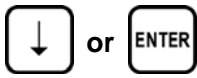
3. Key in the number (0 or 1) to determine whether or not to use the POP number function and press the [ENTER] key.



Note: Step "b08-40" is not available.

**2.8.37 B08-41 STORAGE MESSAGE****Operation**

1. Press the [↓] or [ENTER] key to enter B08-41 menu.

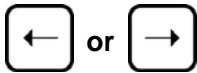


<b>STORAGE MSG → 1:ENABLE</b>
<b>b08-41 STORAGE MSG            1</b>

2. Use the [←] or [→] key to confirm the meaning of each item (code).

0: Disable

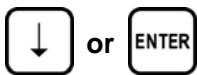
1: Enable



3. Key in the number (0 or 1) to determine whether or not to use the storage message function and press the [ENTER] key.

**2.8.38 B08-42 ADVISORY MESSAGE****Operation**

1. Press the [↓] or [ENTER] key to enter B08-42 menu.

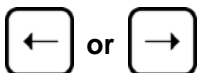


<b>ADVISORY MSG → 1:ENABLE</b>
<b>b08-42 ADVISORY MSG            1</b>

2. Use the [←] or [→] key to confirm the meaning of each item (code).

0: Disable

1: Enable



3. Key in the number (0 or 1) to determine whether or not to use the advisory message function and press the [ENTER] key.

**2.8.39 RETURNING TO B01****Operation**

Press the [END] key to return to B01 menu.

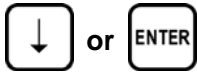


<b>1 LABEL FORMAT    [ENTER]</b>
<b>b01 LABEL FORMAT</b>

## 2.9 B09 SYSTEM

### Operation

Press the [↓] key repeatedly until B09 menu appears, or key in “9” and press the [↓] key to enter B09 menu directly.

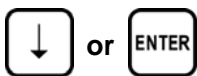


9 SYSTEM	[ENTER]
b09 SYSTEM	

### 2.9.1 B09-01 PLU REGISTRATION

#### Operation

1. Press the [↓] or [ENTER] key to enter B09-01 menu.

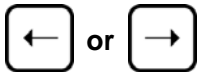


PLU	→ 1:ENABLE
b09-01 PLU	1

2. Use the [←] or [→] key to confirm the meaning of each item (code).

0: Disable

1: Enable



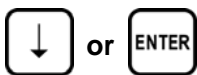
3. Key in the number (0 or 1) to determine whether or not to use the PLU registration function and press the [ENTER] key.



### 2.9.2 B09-02 COMMODITY NAME REGISTRATION

#### Operation

1. Press the [↓] or [ENTER] key to enter B09-02 menu.

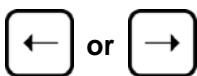


COMMODITY	→ 1:ENABLE
b09-02 COMMODITY	1

2. Use the [←] or [→] key to confirm the meaning of each item (code).

0: Disable

1: Enable



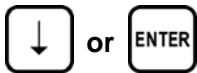
3. Key in the number (0 or 1) to determine whether or not to use the commodity name registration function and press the [ENTER] key.



### 2.9.3 B09-04 PRESET KEY

#### **Operation**

1. Press the [↓] or [ENTER] key to enter B09-04 menu.

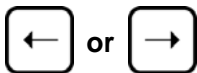


<b>PRESET KEY</b>	<b>→ 1:ENABLE</b>
<b>b09-04 PRESET</b>	<b>1</b>

2. Use the [←] or [→] key to confirm the meaning of each item (code).

0: Disable

1: Enable



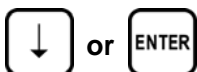
3. Key in the number (0 or 1) to determine whether or not to use the preset key function and press the [ENTER] key.



### 2.9.4 B09-05 STORE NAME & ADDRESS

#### **Operation**

1. Press the [↓] or [ENTER] key to enter B09-05 menu.

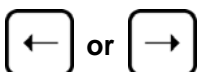


<b>STORE ADDR.</b>	<b>→ 1:ENABLE</b>
<b>b09-05 STORE</b>	<b>1</b>

2. Use the [←] or [→] key to confirm the meaning of each item (code).

0: Disable

1: Enable



3. Key in the number (0 or 1) to determine whether or not to use the store name and address function and press the [ENTER] key.

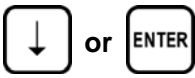




### 2.9.5 B09-06 DATE AND TIME

#### **Operation**

1. Press the [↓] or [ENTER] key to enter B09-06 menu.

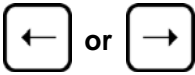


<b>DATE</b>	<b>→ 1:ENABLE</b>
<b>b09-06 DATE</b>	<b>1</b>

2. Use the [←] or [→] key to confirm the meaning of each item (code).

0: Disable

1: Enable



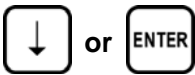
3. Key in the number (0 or 1) to determine whether or not to use the date and time function and press the [ENTER] key.



### 2.9.6 B09-07 COMMODITY MESSAGE

#### **Operation**

1. Press the [↓] or [ENTER] key to enter B09-07 menu.

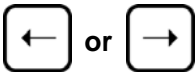


<b>COMMODITY</b>	<b>→ 1:ENABLE</b>
<b>b09-07 COMMODITY MSG</b>	<b>1</b>

2. Use the [←] or [→] key to confirm the meaning of each item (code).

0: Disable

1: Enable



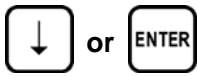
3. Key in the number (0 or 1) to determine whether or not to use the commodity message function and press the [ENTER] key.



### 2.9.7 B09-08 OPEN PLU

#### **Operation**

1. Press the [↓] or [ENTER] key to enter B09-08 menu.

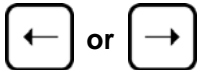


<b>OPEN PLU</b>	<b>→ 1:ENABLE</b>
<b>b09-08 OPEN PLU</b>	<b>1</b>

2. Use the [←] or [→] key to confirm the meaning of each item (code).

0: Disable

1: Enable



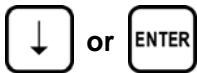
3. Key in the number (0 or 1) to determine whether or not to use the open PLU function and press the [ENTER] key.



### 2.9.8 B09-09 ITEM LIST

#### **Operation**

1. Press the [↓] or [ENTER] key to enter B09-09 menu.

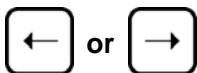


<b>ITEM LIST</b>	<b>→ 1:ENABLE</b>
<b>b09-09 LIST</b>	<b>1</b>

2. Use the [←] or [→] key to confirm the meaning of each item (code).

0: Disable

1: Enable



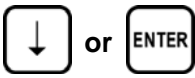
3. Key in the number (0 or 1) to determine whether or not to use the item list function and press the [ENTER] key.



### 2.9.9 B09-10 RS232C COMMUNICATIONS

#### **Operation**

1. Press the [↓] or [ENTER] key to enter B09-10 menu.

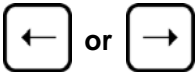


<b>RS232C COMM</b> → 1:ENABLE
<b>b09-10 RS232C</b> 1

2. Use the [←] or [→] key to confirm the meaning of each item (code).

0: Disable

1: Enable



3. Key in the number (0 or 1) to determine whether or not to use the RS232C communication function and press the [ENTER] key.

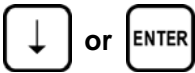


Note: Steps “b09-11” through “b09-19” are not available.

### 2.9.10 B09-20 COUPON MESSAGE

#### **Operation**

1. Press the [↓] or [ENTER] key to enter B09-20 menu.

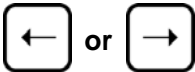


<b>COUPON MSG</b> → 1:ENABLE
<b>b09-20 COUPON</b> 1

2. Use the [←] or [→] key to confirm the meaning of each item (code).

0: Disable

1: Enable



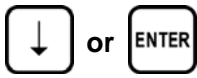
3. Key in the number (0 or 1) to determine whether or not to use the coupon message function and press the [ENTER] key.



### 2.9.11 B09-21 INGREDIENTS MESSAGE

#### **Operation**

1. Press the [↓] or [ENTER] key to enter B09-21 menu.

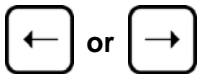


<b>INGRED MSG</b>	<b>→ 1:ENABLE</b>
<b>b09-21 INGRED MSG</b>	<b>1</b>

2. Use the [←] or [→] key to confirm the meaning of each item (code).

0: Disable

1: Enable



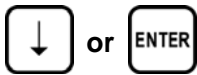
3. Key in the number (0 or 1) to determine whether or not to use the ingredients message function and press the [ENTER] key.



### 2.9.12 B09-22 NIP MESSAGE

#### **Operation**

1. Press the [↓] or [ENTER] key to enter B09-22 menu.

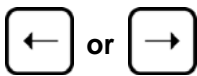


<b>NIP MESSAGE</b>	<b>→ 1:ENABLE</b>
<b>b09-22 NIP MESSAGE</b>	<b>1</b>

2. Use the [←] or [→] key to confirm the meaning of each item (code).

0: Disable

1: Enable

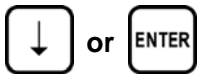


3. Key in the number (0 or 1) to determine whether or not to use the NIP message function and press the [ENTER] key.



**2.9.13 B09-23 TCP/IP COMMUNICATION****Operation**

1. Press the [↓] or [ENTER] key to enter B09-23 menu.

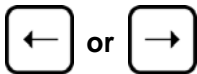


<b>TCP/IP COMM</b>	<b>→ 1:ENABLE</b>
<b>b09-23 TCP IP</b>	<b>1</b>

2. Use the [←] or [→] key to confirm the meaning of each item (code).

0: Disable

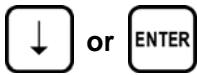
1: Enable



3. Key in the number (0 or 1) to determine whether or not to use the TCP/IP communication function and press the [ENTER] key.

**2.9.14 B09-24 OPERATOR SYSTEM****Operation**

1. Press the [↓] or [ENTER] key to enter B09-24 menu.

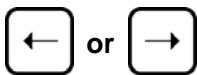


<b>OPERATOR</b>	<b>→ 1:ENABLE</b>
<b>b09-24 OPERATOR</b>	<b>1</b>

2. Use the [←] or [→] key to confirm the meaning of each item (code).

0: Disable

1: Enable



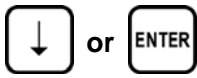
3. Key in the number (0 or 1) to determine whether or not to use the operator system function and press the [ENTER] key.



### 2.9.15 B09-25 TITLE MESSAGE

#### **Operation**

1. Press the [↓] or [ENTER] key to enter B09-25 menu.

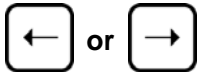


<b>TITLE MSG</b>	<b>→ 1:ENABLE</b>
<b>b09-25 TITLE</b>	<b>1</b>

2. Use the [←] or [→] key to confirm the meaning of each item (code).

0: Disable

1: Enable



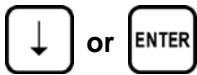
3. Key in the number (0 or 1) to determine whether or not to use the title message function and press the [ENTER] key.



### 2.9.16 B09-26 ADVERTISEMENT MESSAGE

#### **Operation**

1. Press the [↓] or [ENTER] key to enter B09-26 menu.

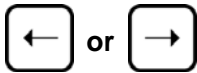


<b>SCROLL MSG</b>	<b>→ 1:ENABLE</b>
<b>b09-26 AD MSG</b>	<b>1</b>

2. Use the [←] or [→] key to confirm the meaning of each item (code).

0: Disable

1: Enable



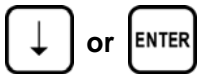
3. Key in the number (0 or 1) to determine whether or not to use the advertisement message function and press the [ENTER] key.



### 2.9.17 B09-27 DEPARTMENT

#### **Operation**

1. Press the [↓] or [ENTER] key to enter B09-27 menu.

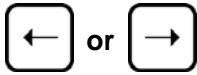


<b>DEPARTEMNT</b>	<b>→ 1:ENABLE</b>
<b>b09-27 DEPARTMENT</b>	<b>1</b>

2. Use the [←] or [→] key to confirm the meaning of each item (code).

0: Disable

1: Enable



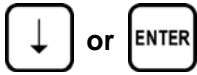
3. Key in the number (0 or 1) to determine whether or not to use the department function and press the [ENTER] key.



### 2.9.18 B09-28 GROUP

#### **Operation**

1. Press the [↓] or [ENTER] key to enter B09-28 menu.

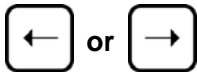


<b>GROUP</b>	<b>→ 1:ENABLE</b>
<b>b09-28 GROUP</b>	<b>1</b>

2. Use the [←] or [→] key to confirm the meaning of each item (code).

0: Disable

1: Enable



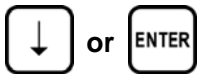
3. Key in the number (0 or 1) to determine whether or not to use the group function and press the [ENTER] key.



### 2.9.19 B09-29 CAMPAIGN

#### **Operation**

1. Press the [↓] or [ENTER] key to enter B09-28 menu.

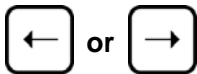


<b>CAMPAIGN</b>	<b>→ 1:ENABLE</b>
<b>b09-29 CAMPAIGN</b>	<b>1</b>

2. Use the [←] or [→] key to confirm the meaning of each item (code).

0: Disable

1: Enable



3. Key in the number (0 or 1) to determine whether or not to use the campaign function and press the [ENTER] key.



### 2.9.20 RETURNING TO B01

#### **Operation**

Press the [END] key to return to B01 menu.



<b>1 LABEL FORMAT</b>	<b>[ENTER]</b>
<b>b01 LABEL FORMAT</b>	



## 2.10 B10 ETHERNET SETTINGS

### **Operation**

Press the [↓] key repeatedly until B10 menu appears, or key in “10” and press the [↓] key to enter B10 menu directly.

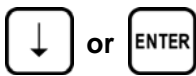


<b>10 ETHERNET</b> <b>b10 ETHERNET</b>	<b>[ENTER]</b>
---	----------------

### 2.10.1 B10-01 IP ADDRESS SETTING

#### **Operation**

1. Press the [↓] or [ENTER] key to enter B10-01 menu.



<b>* IP ADDRESS SET</b> <b>b10-01 IP ADDRESS</b>	<b>[ENTER]</b>
---	----------------

#### 2.10.1.1 B10-01-01 IP Address 1

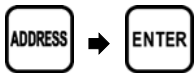
##### **Operation**

1. Press the [ENTER] key to enter B10-01-01 menu.



<b>IP ADDRESS 1</b> <b>b10-01-01 ADDR 1</b>	<b>194</b>
--	------------

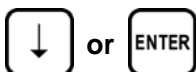
2. Key in the desired address and press the [ENTER] key.



#### 2.10.1.2 B10-01-02 IP Address 2

##### **Operation**

1. Press the [↓] or [ENTER] key to enter B10-01-02 menu.



<b>IP ADDRESS 2</b> <b>b10-01-02 ADDR 2</b>	<b>39</b>
--	-----------

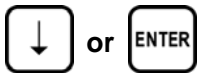
2. Key in the desired address and press the [ENTER] key.



### 2.10.1.3 B10-01-03 IP Address 3

#### **Operation**

1. Press the [↓] or [ENTER] key to enter B10-01-03 menu.



<b>IP ADDRESS 3</b>	
<b>b10-01-03 ADDR 3</b>	<b>78</b>

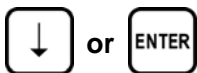
2. Key in the desired address and press the [ENTER] key.



### 2.10.1.4 B10-01-04 IP Address 4

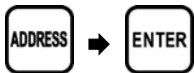
#### **Operation**

1. Press the [↓] or [ENTER] key to enter B10-01-04 menu.



<b>IP ADDRESS 4</b>	
<b>b10-01-04 ADDR 4</b>	<b>1</b>

2. Key in the desired address and press the [ENTER] key.



### 2.10.1.5 Returning to B10-01

#### **Operation**

Press the [END] key to return to B10-01 menu.



<b>* IP ADDRESS SET [ENTER]</b>
<b>b10-01 IP ADDRESS</b>

## 2.10.2 B10-02 GATEWAY ADDRESS SETTINGS

#### **Operation**

1. Press the [↓] key to enter B10-02.

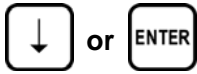


<b>*GATEWAY ADDRESS [ENTER]</b>
<b>b10-02 GATEWAY</b>

### 2.10.2.1 B10-02-01 Gateway Address 1

#### **Operation**

1. Press the [↓] or [ENTER] key to enter B10-02-01 menu.



<b>GATEWAY ADDRESS 1</b>
<b>b10-02-01 ADDR 1                      255</b>

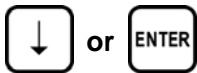
2. Key in the desired address and press the [ENTER] key.



### 2.10.2.2 B10-02-02 Gateway Address 2

#### **Operation**

1. Press the [↓] or [ENTER] key to enter B10-02-02 menu.



<b>GATEWAY ADDRESS 2</b>
<b>b10-02-02 ADDR 2                      255</b>

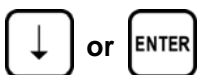
2. Key in the desired address and press the [ENTER] key.



### 2.10.2.3 B10-02-03 Gateway Address 3

#### **Operation**

1. Press the [↓] or [ENTER] key to enter B10-02-03.



<b>GATEWAY ADDRESS 3</b>
<b>b10-02-03 ADDR 3                      255</b>

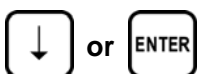
2. Key in the desired address and press the [ENTER] key.



### 2.10.2.4 B10-02-04 Gateway Address 4

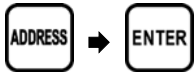
#### **Operation**

1. Press the [↓] or [ENTER] key to enter B10-02-04.



<b>GATEWAY ADDRESS 4</b>
<b>b10-02-04 ADDR 4                      255</b>

2. Key in the desired address and press the [ENTER] key.



### 2.10.2.5 Returning to B10-01

#### **Operation**

Press the [END] key to return to B10-01 menu.



```

* IP ADDRESS SET [ENTER]
b10-01 IP ADDRESS
  
```

### 2.10.3 B10-03 SUBNET MASK

Subnet Address is usually fixed as 255.255.255.0.

#### **Operation**

Press the [↓] key repeatedly until B10-03 menu appears, or key in "3" and press the [↓] key to enter B10-03 menu directly.



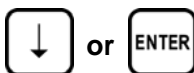
```

*SUBNET MASK SET [ENTER]
b10-03 SUBNET
  
```

#### 2.10.3.1 B10-03-01 Subnet Mask Address 1

#### **Operation**

1. Press the [↓] or [ENTER] key to enter B10-03-01.



```

SUBNET MASK 1
b10-03-01 ADDR 1          255
  
```

```

SUBNET MASK 1
b10-03-01 ADDR 1          255
  
```

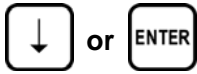
2. Key in the desired address and press the [ENTER] key.



## 2.10.3.2 B10-03-01 Subnet Mask Address 2

**Operation**

1. Press the [↓] or [ENTER] key to enter B10-03-02.



<b>SUBNET MASK 2</b>	
<b>b10-03-02 ADDR 2</b>	<b>255</b>

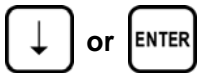
2. Key in the desired address and press the [ENTER] key.



## 2.10.3.3 B10-03-01 Subnet Mask Address 3

**Operation**

1. Press the [↓] or [ENTER] key to enter B10-03-03.



<b>SUBNET MASK 3</b>	
<b>b10-03-03 ADDR 3</b>	<b>255</b>

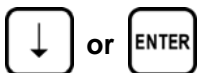
2. Key in the desired address and press the [ENTER] key.



## 2.10.3.4 B10-03-01 Subnet Mask Address 4

**Operation**

1. Press the [↓] or [ENTER] key to enter B10-03-04.



<b>SUBNET MASK 4</b>	
<b>b10-03-04 ADDR 4</b>	<b>0</b>

2. Key in the desired address and press the [ENTER] key.



## 2.10.3.5 Returning to B10-01

**Operation**

Press the [END] key to return to B10-01 menu.



<b>* IP ADDRESS SET [ENTER]</b>
<b>b10-01 IP ADDRESS</b>

## 2.10.4 B10-04 SERVER ADDRESS

### Operation

Press the [↓] key repeatedly until B10-04 menu appears, or key in “4” and press the [↓] key to enter B10-04 menu directly.

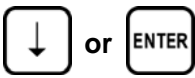


<p><b>*SERVER ADDRESS [ENTER]</b>  <b>b10-04 SERVER</b></p>
---

### 2.10.4.1 B10-04-01 Server Address 1

#### Operation

1. Press the [↓] or [ENTER] key to enter B10-04-01.



<p><b>SERVER ADDRESS 1</b>  <b>b10-04-01 ADDR 1</b> <b>255</b></p>
--

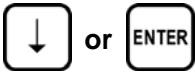
2. Key in the desired address and press the [ENTER] key.



### 2.10.4.2 B10-04-01 Server Address 2

#### Operation

1. Press the [↓] or [ENTER] key to enter B10-04-02.



<p><b>SERVER ADDRESS 2</b>  <b>b10-04-02 ADDR 2</b> <b>255</b></p>
--

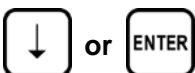
2. Key in the desired address and press the [ENTER] key.



### 2.10.4.3 B10-04-01 Server Address 3

#### Operation

1. Press the [↓] or [ENTER] key to enter B10-04-03.



<p><b>SERVER ADDRESS 3</b>  <b>b10-04-03 ADDR 3</b> <b>255</b></p>
--

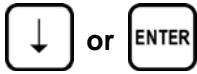
2. Key in the desired address and press the [ENTER] key.



## 2.10.4.4 B10-04-01 Server Address 4

**Operation**

1. Press the [↓] or [ENTER] key to enter B10-04-04.



<b>SERVER ADDRESS 4</b>
<b>b10-04-04 ADDR 4                      255</b>

2. Key in the desired address and press the [ENTER] key.



3. Press the [END] key to return to B10-01 menu.



<b>* IP ADDRESS SET [ENTER]</b>
<b>b10-01 IP ADDRESS</b>

## 2.10.5 B10-05 LOGIN NAME REGISTRATION

**Operation**

1. Press the [↓] key repeatedly until B10-05 menu appears, or key in "5" and press the [↓] key to enter B10-05 menu directly.



<b>* LOGIN NAME SET [ENTER]</b>
<b>b10-05 LOGIN</b>

2. Press the [ENTER] key to enter text editing screen.



<b>LOGIN NAME</b>
<b>TEST</b>

3. Key in alpha-numeric characters using the keyboard and press the [ENTER] key.



<b>LOGIN NAME</b>
<b>ISHIDA</b>

4. Press the [END] key to return to B10-01 menu.



<b>* IP ADDRESS SET [ENTER]</b>
<b>b10-01 IP ADDRESS</b>

## 2.10.6 B10-06 PASSWORD REGISTRATION FOR FTP COMMUNICATION

### Operation

1. Press the [↓] key repeatedly until B10-06 menu appears, or key in “6” and press the [↓] key to enter B10-06 menu directly.



**\* PASSWORD SETUP [ENTER]  
b10-06 PASSWORD**

2. Press the [ENTER] key to enter text editing screen.



**PASSWORD  
USNET**

3. Key in alpha-numeric characters using the keyboard and press the [ENTER] key.



**PASSWORD  
KYOTO**

4. Press the [END] key to return to B10-01 menu.



**\* IP ADDRESS SET [ENTER]  
b10-01 IP ADDRESS**

## 2.10.7 B10-07 MAC ADDRESS

### Operation

1. Press the [↓] key repeatedly until B10-07 menu appears, or key in “7” and press the [↓] key to enter B10-07 menu directly.

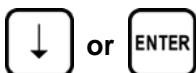


**\*MAC ADDRESS SET [ENTER]  
b10-07 MAC**

### 2.10.7.1 B10-07-01 MAC Address 1

#### Operation

1. Press the [↓] or [ENTER] key to enter B10-07-01.



**MAC ADDRESS 1 (0030)  
b10-07-01 ADDR 1**

*Note: Basically, MAC Address cannot be changed. When changing the address, key in the password “495344” and press the [SIZE] key to proceed further step.*

2. Key in the desired address and press the [ENTER] key.

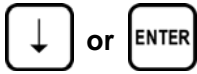




## 2.10.7.2 B10-07-02 MAC Address 2

**Operation**

1. Press the [↓] or [ENTER] key to enter B10-07-02.



<b>MAC ADDRESS 2</b>	<b>(1604)</b>
<b>b10-07-02 ADDR 2</b>	

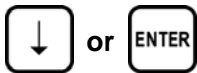
2. Key in the desired address and press the [ENTER] key.



## 2.10.7.3 B10-07-03 MAC Address 3

**Operation**

1. Press the [↓] or [ENTER] key to enter B10-07-03.



<b>MAC ADDRESS 3</b>	<b>(0017)</b>
<b>b10-07-03 ADDR 3</b>	

2. Key in the desired address and press the [ENTER] key.



3. Press the [END] key to return to B10-01 menu.

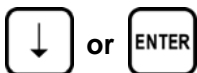


<b>* IP ADDRESS SET</b>	<b>[ENTER]</b>
<b>b10-01 IP ADDRESS</b>	

## 2.10.8 B10-08 DHCP COMMUNICATION SETUP

**Operation**

1. Press the [↓] key repeatedly until B10-08 menu appears, or key in “8” and press the [↓] key to enter B10-08 menu directly.



<b>* DHCP SETUP</b>	<b>[ENTER]</b>
<b>b10-08 DHCP</b>	

2. Press the [ENTER] key to enter B10-08-01 menu.

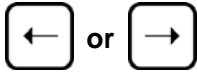


<b>DHCP</b>	<b>→ 1:ENABLE</b>
<b>b10-08-01 DHCP</b>	<b>1</b>

3. Use the [←] or [→] key to confirm the meaning of each item (code).

0: Disable

1: Enable



4. Key in the desired number (0 or 1) to determine whether or not to use the DHCP communication method and press the [ENTER] key.



5. Press the [END] key to return to B10-01 menu.



**\* IP ADDRESS SET [ENTER]**  
**b10-01 IP ADDRESS**

## 2.10.9 B10-09 NETWORK STATUS

Each setting related to network can be confirmed.

### **Operation**

1. Press the [↓] key repeatedly until B10-09 menu appears, or key in "9" and press the [↓] key to enter B10-09 menu directly.



**\* NETWORK STATUS [ENTER]**  
**b10-09 STATUS**

### 2.10.9.1 B10-09-01 DHCP Status Confirmation

#### **Operation**

Press the [ENTER] key to enter B10-09-01 menu to confirm DHCP status.

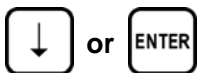


**DHCP STATUS**  
**b10-09-01 DHCP** **0**

### 2.10.9.2 B10-09-02 IP Address Confirmation

#### **Operation**

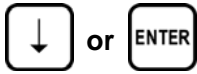
Press the [↓] or [ENTER] key to enter B10-09-02 menu to confirm IP address.



**IP ADDR.**  
**b10-09-02** **194.039.078.001**

**2.10.9.3 B10-09-03 MAC Address Confirmation****Operation**

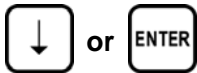
Press the [↓] or [ENTER] key to enter B10-09-03 menu to confirm MAC address.



<b>MAC ADDR.</b>
<b>b10-09-03            003016-040017</b>

**2.10.9.4 B10-09-04 Subnet Mask Confirmation****Operation**

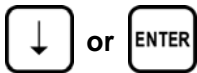
Press the [↓] or [ENTER] key to enter B10-09-04 menu to confirm Subnet Mask.



<b>SUBNET MASK</b>
<b>b10-09-04            S255.255.255.000</b>

**2.10.9.5 B10-09-05 Gateway Address Confirmation****Operation**

Press the [↓] or [ENTER] key to enter B10-09-05 menu to confirm Gateway address.



<b>GATEWAY ADDR.</b>
<b>b10-09-05            G255.255.255.255</b>

**2.10.9.6 Returning to B10-01****Operation**

Press the [END] key to return to B10-01 menu.



<b>* IP ADDRESS SET [ENTER]</b>
<b>b10-01 IP ADDRESS</b>

**2.10.9.7 Returning to B01****Operation**

Press the [END] key again to return to B01 menu.



<b>1 LABEL FORMAT [ENTER]</b>
<b>b01 LABEL FORMAT</b>

## 2.11 B11 SYSTEM TIMER

Time until returning to the initial screen since the last PLU was called can be set.

Setting range: 10 – 1,000 seconds (default value: 60 seconds)

### **Operation**

1. Press the [↓] key repeatedly until B11 menu appears, or key in “11” and press the [↓] key to enter B11 menu directly.



<b>11</b>	<b>SYSTEM TIMER</b>	<b>[ENTER]</b>
<b>b11</b>	<b>SYSTEM TIMER</b>	

2. Press the [ENTER] key to enter B11-01 menu.



<b>SYSTEM TIMER (10-1000sec)</b>
<b>b11-01 TIMER</b> <span style="float: right;"><b>60</b></span>

3. Key in the desired time (seconds) and press the [ENTER] key.



4. Press the [END] key to return to B01 menu.



<b>1</b>	<b>LABEL FORMAT</b>	<b>[ENTER]</b>
<b>b01</b>	<b>LABEL FORMAT</b>	

## 2.12 B12 PASSWORD REGISTRATION

### Operation

1. Press the [↓] key repeatedly until B12 menu appears, or key in “12” and press the [↓] key to enter B12 menu directly.



<b>12 PASSWORD</b>	<b>[ENTER]</b>
<b>b12 PASSWORD</b>	

2. Press the [ENTER] key to enter B12-00 menu.



<b>PASSWORD SETUP ( - - - - - )</b>
<b>b12-00</b>

### 2.12.1 B12-01 PASSWORD FOR REGISTRATION MODE

#### Operation

1. Key in “495344” and press the [ENTER] key to enter B12-01 menu.



<b>REGISTRATION ( - - - - )</b>
<b>b12-01 REGISTRATION</b>

2. Key in a password (4 digits) for entering Registration Mode and press the [ENTER] key.

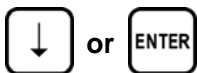
*Note: Default value is “9000”*



### 2.12.2 B12-02 PASSWORD FOR TOTAL MODE

#### Operation

1. Press the [↓] or [ENTER] key to enter B12-02 menu.



<b>TOTAL ( - - - - )</b>
<b>b12-02 TOTAL</b>

2. Key in a password (4 digits) for entering Total Mode and press the [ENTER] key.

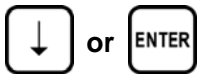
*Note: Default value is “8000”*



### 2.12.3 B12-03 PASSWORD FOR SUBTRACTION MODE

#### Operation

1. Press the [↓] or [ENTER] key to enter B12-03 menu.



**SUBTRACT ( - - - - )**  
**b12-03 SUBTRACTION**

2. Key in a password (4 digits) for entering Subtraction Mode and press the [ENTER] key.

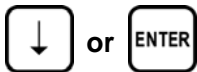
*Note: Default value is "7000"*



### 2.12.4 B12-04 PASSWORD FOR SETUP MODE

#### Operation

1. Press the [↓] or [ENTER] key to enter B12-04 menu.



**SETUP ( - - - - )**  
**b12-04 SETUP**

2. Key in a password (4 digits) for entering Setup Mode and press the [ENTER] key.

*Note: Default value is "6000"*

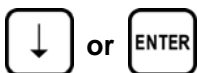


### 2.12.5 B12-06 PASSWORD CHANGE

This procedure is to change the password by which password change mode can be accessed.

#### Operation

1. Press the [↓] or [ENTER] key to enter B12-06 menu.



**PASSWORD CHANGE( - - - - - )**  
**b12-06**

2. Key in a password (6 digits) for proceeding further steps and press the [ENTER] key.

*Note: Default value is "495344"*



### 2.12.6 RETURNING TO B01

#### Operation

Press the [END] key to return to B01 menu.

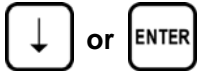


**1 LABEL FORMAT [ENTER]**  
**b01 LABEL FORMAT**

## 2.13 B13 MACHINE NUMBER

### Operation

1. Press the [↓] key repeatedly until B13 menu appears, or key in "13" and press the [↓] key to enter B13 menu directly.



<b>13 MACHINE NUM.</b>	<b>[ENTER]</b>
<b>b13 MACHINE NUMBER</b>	

2. Press the [ENTER] key to enter B13-01.



<b>MACHINE NUMBER(IP ADDR)</b>	
<b>b13-01 NUMBER</b>	<b>0</b>

3. Key in the desired machine number for communications and press the [ENTER] key.



*Note: Usually, the last digit of IP address is set as the machine number to avoid double registration.*

4. Press the [END] key to return to B01 menu.



<b>1 LABEL FORMAT</b>	<b>[ENTER]</b>
<b>b01 LABEL FORMAT</b>	

## 2.14 EXITING THE MODE

### Operation

Press the [MODE] key to exit the current mode.



<b>KEY IN</b>	<b>ITEM</b>	<b>No.</b>	
<b>0.000</b>	<b>0.000</b>	<b>0.00</b>	<b>0.00</b>

### 3. TEST MODE (C Mode)

#### 3.1 ENTERING TEST MODE

When the power is turned ON,

KEY	IN	ITEM	No.
0.000	0.000	0.00	0.00

Press the [RESET] key to reset the machine,



Keep pressing any key other than the [RESET] key for a while until C00 menu appears on the display.



Keep pressing any key  
other than RESET.

<b>*TEST MODE PRESS [↓] KEY C00</b>
---

When the power is turned OFF,



Turn ON the power, and immediately press and keep pressing any key other than the [RESET] key for a while until C00 menu appears on the display.



Keep pressing any key  
other than RESET.

<b>*TEST MODE PRESS [↓] KEY C00</b>
---

Note: It will take approximately 30 seconds to enter test mode.



## 3.2 C01 HARDWARE TEST

### **Operation**

Press the [↓] key to enter C01 menu.



<b>1 HARDWARE TEST [ENTER]</b> <b>C01</b>
--

### 3.2.1 C01-01 A/D Check

#### **Operation**

Press the [ENTER] key to enter C01-01 menu.



<b>1. A/D CHECK [ENTER]</b> <b>C01-01</b>
--

#### 3.2.1.1 C01-01-00 Zero Point & Span Adjustment

##### **Operation**

1. Press the [ENTER] key to enter C01-01-00 menu. The original A/D data appears.



<b>ZERO=[ZERO]:SPAN=[TARE]</b> <b>C01-01-00            20008    20008</b>
--

2. Press the [ZERO] key to make the A/D initial value "20000".

*Note: "2000" is a data output from the A/D board, and "0" denotes that "2000" are regarded as zero point.*



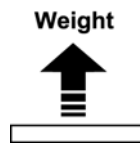
<b>ZERO=[ZERO]:SPAN=[TARE]</b> <b>C01-01-00            20000    0</b>
--

3. After a zero point adjustment, place the same weight as the maximum weighing capacity on the weigh platter and press the [TARE] key to execute the span adjustment automatically.

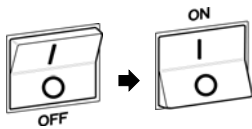


<b>ZERO=[ZERO]:SPAN=[TARE]</b> <b>C01-01-00            95000    75000</b>
--

4. Remove the weight from the weigh platter and press the Memory Switch to store the data in E2ROM.



5. Turn OFF and ON the power to restart the machine.



### 3.2.1.2 Returning to C01-01

#### **Operation**

Press the [END] key to return to C01-01 menu.



**1. A/D CHECK [ENTER]  
C01-01**

### 3.2.2 C01-02 Key Check

#### **Operation**

Press the [↓] key to enter C01-02 menu.



**2. KEY CHECK [ENTER]  
C01-02**

### 3.2.2.1 C01-02-00 Key Check

**Operation**

1. Press the [ENTER] key to enter C01-02-00 menu.



2. Press each key to check its function.  
The corresponding key number appears on the screen.

**<Key Number Table>**

1	2	3	4	5	6	7	8	9	10	11	12	13	14
15	16	17	18	19	20	21	22	23	24	25	26		28
29	30	31	32	33	34	35	36	37	38	39	40	41	42
43	44	45	46	47	48	49	50	51	52	53	54	55	56
57	58	59	60	61	62	63	64	65	66	67	68	69	70
71	72	73	74	75	76	77	78	79	80	81	82	83	84
85	86	87	88	89	90	91	92	93	94	95	96	97	98
99	100	101	102	103	104	105	106	107	108	109	110	111	112

### 3.2.2.2 Returning to C01-01

**Operation**

Press the [RESET] key to exit the key check menu and return to C01-01 menu.



### 3.2.3 C01-03 Display Check

**Operation**

1. Press the [↓] key repeatedly until C01-03 menu appears.



2. Press the [ENTER] key to execute the display check.



3. Press the [END] key to finish the display check.

The screen will return to C01-01 menu.



<b>1. A/D CHECK</b>	<b>[ENTER]</b>
<b>C01-01</b>	

### 3.2.4 C01-04 RS232C Check

A loop back test can be performed to carry out the RS232C input test. Engage the TXD and RXD short-circuited connector with D-SUB 9.

#### **Operation**

1. Press the [↓] key repeatedly until C01-04 menu appears.



<b>4. RS232C CHECK</b>	<b>[ENTER]</b>
<b>C01-04</b>	

2. Press the [ENTER] key to enter C01-04-00 menu.



<b>* RS232C CHECK</b>	<b>[PRINT]</b>
<b>C01-04-00</b>	

3. Press the [PRINT] key to output test data and judge by verifying received test data and sent data. When the data matches, "PASS" is displayed and "OK" buzzer sounds.



<b>* RS232C CHECK</b>	<b>[END]</b>
<b>C01-04-00</b>	<b>PASS</b>

4. To finish the check, press the [END] key. The screen will return to C01-01 menu.



<b>1. A/D CHECK</b>	<b>[ENTER]</b>
<b>C01-01</b>	

### 3.2.5 C01-05 Application Program Number

#### **Operation**

Press the [↓] key repeatedly until C01-05 menu appears.



<b>5. APLY PROG. No.</b>	<b>[ENTER]</b>
<b>C01-05</b>	

### 3.2.5.1 C01-05-00 Apply Number

**Operation**

Press the [ENTER] key to enter C01-05-00 menu.

The program number and version of the main program are displayed.

*Note: The program number for the prototype is the development code "APLY".*



<b>* APLY No.:</b>	<b>APLY</b>
<b>C01-05-00</b>	<b>0</b>

### 3.2.5.2 Returning to C01-01

**Operation**

Press the [END] key to return to C01-01 menu.



<b>1. A/D CHECK</b>	<b>[ENTER]</b>
<b>C01-01</b>	

### 3.2.6 C01-06 BIOS Program Number

**Operation**

Press the [↓] key repeatedly until C01-06 menu appears.



<b>6. BIOS PROG. No.</b>	<b>[ENTER]</b>
<b>C01-06</b>	

#### 3.2.6.1 C01-06-00 Program Number & Version Display

**Operation**

Press the [ENTER] key to enter C01-06-00 menu. Program number and version of the BIOS program are displayed.



<b>* BIOS No.:</b>	<b>B0500</b>
<b>C01-06-00</b>	<b>0</b>

#### 3.2.6.2 Returning to C01-01

**Operation**

Press the [END] key to return to C01-01 menu.



<b>1. A/D CHECK</b>	<b>[ENTER]</b>
<b>C01-01</b>	

### 3.2.7 C01-07 Reset Count

The number of automatic reset counts is recorded in case of Error "40" occurrence.

Before resetting the number in case particular problems occur, ensure to confirm the record.

#### Operation

Press the [↓] key repeatedly until C01-07 menu appears.



<b>7. RESET COUNT</b>	<b>[ENTER]</b>
<b>C01-07</b>	

#### 3.2.7.1 C01-07-00 Number of Reset Times

#### Operation

1. Press the [ENTER] key to enter C01-07-00 menu.

The number of reset times is displayed.



<b>CLEAR? YES = (ZERO+ZERO)</b>
<b>C01-07-00</b> <b>0000</b>

2. To clear the record, press the [ZERO] key twice.

Otherwise, press the [END] key. The screen will return to C01-01 menu.



#### 3.2.7.2 Returning to C01

#### Operation

Press the [END] key to return to C01-01 menu.



<b>1. A/D CHECK</b>	<b>[ENTER]</b>
<b>C01-01</b>	

### 3.3 C02 RAM CLEAR

#### **Operation**

Press the [↓] key repeatedly until C02 menu appears.



<b>2 RAM CLEAR</b>	<b>[ENTER]</b>
<b>C02</b>	

#### 3.3.1 C02-01 SRAM Clear

#### **Operation**

1. Press the [ENTER] key to enter C02-01 menu.



<b>* SRAM CLEAR</b>	<b>[ ]</b>
<b>C02-01</b>	

2. Press the [ZERO] key twice to clear SRAM data.

“PASS” is displayed and “OK” buzzer sounds when data clear is completed.



<b>* SRAM CLEAR</b>	<b>[OK]</b>
<b>C02-01</b>	<b>PASS</b>

#### 3.3.2 C02-02 Setup Data Clear

#### **Operation**

1. Press the [ENTER] key to enter C02-02 menu.



<b>* SETUP CLEAR</b>	<b>[ ]</b>
<b>C02-02</b>	

2. Press the [ZERO] key twice to clear the set data.

“PASS” is displayed and “OK” buzzer sounds when data clear is completed.



<b>* SETUP CLEAR</b>	<b>[OK]</b>
<b>C02-02</b>	<b>PASS</b>

#### 3.3.3 C02-03 Test Data Set

#### **Operation**

1. Press the [ENTER] key to enter C02-03 menu.



<b>* TEST DATA SET</b>	<b>[ ]</b>
<b>C02-03</b>	

2. Press the [ZERO] key twice to clear the test data.

“PASS” is displayed and “OK” buzzer sounds when data clear is completed.

ZERO

ZERO

**\* TEST DATA SET**  
**C02-03**

**[OK]**  
**PASS**

### 3.3.4 Returning to C01

#### **Operation**

Press the [END] key to return to C01 menu.

END

**1 HARDWARE TEST [ENTER]**  
**C01**



### 3.4 C03 THERMAL HEAD

#### **Operation**

Press the [↓] key repeatedly until C03 menu appears, or key in “3” and press the [↓] key to enter C03 menu directly.



<b>3</b>	<b>PRINT HEAD</b>	<b>[ENTER]</b>
<b>C03</b>		

#### 3.4.1 C03-01 Thermal Head Resistance

#### **Operation**

1. Press the [ENTER] key to enter C03-01 menu.

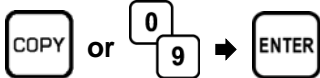
The thermal head resistance can be set.

*Note: The resistance must be set after the thermal head is replaced.*



<b>* RESISTANCE</b>	<b>(960)</b>
<b>C03-01</b>	

2. Press the [COPY] key to read the ID from the thermal head and set it automatically, or key in the resistance described on the head and press the [ENTER] key to save it in E2ROM.



#### 3.4.2 C03-02 Print Usage Distance

#### **Operation**

1. Press the [↓] key to enter C03-02 menu.

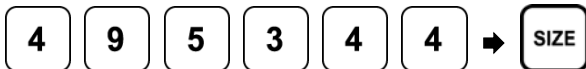
Total print distance of the thermal head can be confirmed.

It is displayed in 100m (0.1Km) units and stored.



<b>* PRINT USAGE</b>	<b>( 0.0 km)</b>
<b>C03-02</b>	

2. To reset the distance, key in the password “495344” and press the [SIZE] key.



3. Key in the desired usage distance and press the [ENTER] key.



### 3.4.3 C03-03 Resistance Value Adjustment

#### **Operation**

1. Press the [↓] key to enter C03-03 menu. The thermal head print density can be adjusted.



```

* RESIST. VALUE *ADJ (5)
C03-03

```

2. Key in the desired level (1 – 9) and press the [ENTER] key.  
Density range: 1 (thinnest) through 9 (thickest) Default value: 5



### 3.4.4 Returning to C01

#### **Operation**

Press the [END] key to return to C01 menu.



```

1 HARDWARE TEST [ENTER]
C01

```

### 3.5 C04 LABEL SENSOR CHECK

**Operation**

Press the [↓] key repeatedly until C04 menu appears, or key in “4” and press the [↓] key to enter C04 menu directly.



**4 LABEL SENS. CHK [ENTER]  
C04**

#### 3.5.1 C04-00 Label Sensor

**Operation**

1. Press the [ENTER] key to enter C04-00 menu.



**\* LABEL SENSOR  
C04-00**

32      XX

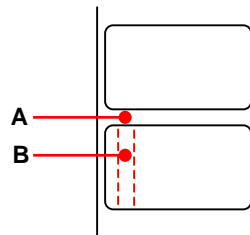
Fixed(No Function)      Output value

2. Adjustment is done VR1 of PS-990.

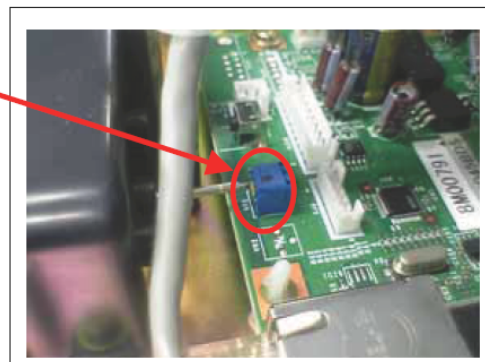
The difference between the label sensor output value when a label is detected and when a label is not detected must be 50 or greater. **A-B=<50**

Adjustment target value of the label sensor is as follows:

- A:** Only backing paper : 150±10
- B:** Label and backing paper : 50±10 or less  
Its value is highly transparent areas.



VR1 of PS-990



#### 3.5.2 Returning to C01

**Operation**

Press the [END] key to return to C01 menu.



**1 HARDWARE TEST [ENTER]  
C01**

### 3.6 C05 TOTAL MEMORY

#### **Operation**

Press the [↓] key repeatedly until C05 menu appears, or key in "5" and press the [↓] key to enter C05 menu directly.



**5 TOTAL MEMORY [ENTER]  
C05**

#### 3.6.1 C05-00 Total Memory & Remaining Memory

#### **Operation**

Press the [ENTER] key to enter C05-00. Total memory capacity and remaining memory capacity are shown on the screen.



**\* MEM 878[KB] REM 845[KB]  
C05-00**

#### 3.6.2 Returning to C01

#### **Operation**

Press the [END] key to return to C01 menu.



**1 HARDWARE TEST [ENTER]  
C01**

### 3.7 C06 ROM SWITCH

#### Operation

Press the [↓] key repeatedly until C06 menu appears, or key in “6” and press the [↓] key to enter C06 menu directly.



**6 ROM SWITCH** [ENTER]  
**C06**

#### 3.7.1 C06-00 ROM Switch Selection

#### Operation

1. Press the [ENTER] key to enter C06-00.

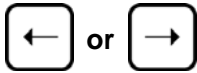


**\*ROM SWITCH No. SEL. [→←]**  
**C06-00**      **0**      **4**

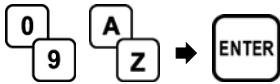
E2ROM  
address

E2ROM  
address data

2. Use the [←] or [→] key to select ROM switch (E2ROM address).



3. To change data, key in a hexadecimal value (0-9, A-F) and press the [ENTER] key.



#### Details of ROM Switch

Address	Content	Default
0	Number of weight display digits	04
1	Number of price display digits	03
2	Number of unit price display digits	03
3	DC motor	2B
4	Fixed price product count addition (0: Price, 1: Number)	00
5	Weighing unit	00
6	Price calculation rounding (0: 4/5, 1: 0/5)	00
7	Relish period calculation of days (0: That day, 1: Next day)	00
8	Time rounding	00
9	Sub-total label commodity name mode	00
10	RESET key (0: Use, 1: Prohibit)	00
11	Auto clear after total data sending (0: Off, 1: On)	00
12	Expiry date printing	00
13	Print cash drawer (0: Off, 1: On)	00
14	Weighing mode (0: 15Kg, 1: 30lb)	00
15	Price calculation	00

	0: Round down after decimal point 1: Round off at the 3rd digit after decimal point 2: Round down at the 2nd digit after decimal point 3: Round off at the 2nd digit after decimal point	
16	ITF barcode digit check calculation method 0: Odd number digits $\times$ 3 1: Even number digits $\times$ 3	00
25	LCD backlight color (0: Green, 1: Orange)	00
26	ITF bar code length ratio (0: 4:2, 1=5:2)	00

Note: Two-color printing is not available.

### 3.7.2 Returning to C01

#### **Operation**

Press the [END] key to return to C01 menu.



<b>1 HARDWARE TEST [ENTER]</b> <b>C01</b>
--

### 3.8 C07 PEEL SENSOR CHECK

**Operation**

Press the [↓] key repeatedly until C07 menu appears, or key in “7” and press the [↓] key to enter C07 menu directly.



**7 PEEL SENS. CHK. [ENTER]  
C07**

#### 3.8.1 C07-00 Peel Sensor

**Operation**

1. Press the [ENTER] key to enter C07-00.



**\* PEEL SENSOR 255 0  
C07-00**

Fixed(No Function)      Output value (with label)

2. With the value of obstructing the label is near zero.  
The state is not obstructing the value of the label is near 200.

**\* PEEL SENSOR 255 210  
C07-00**

Output value (without label)

#### 3.8.2 Returning to C01

**Operation**

Press the [END] key to return to C01 menu.

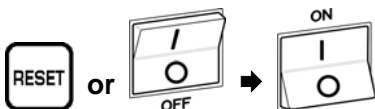


**1 HARDWARE TEST [ENTER]  
C01**

#### 3.8.3 Exiting the Mode

**Operation**

Press the [RESET] key or turn ON and OFF the power to exit Test Mode.

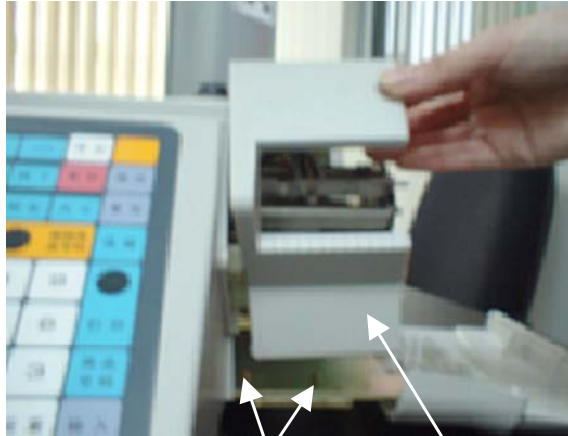


**KEY IN ITEM No.  
0.000 0.000 0.0 0.00**

## 4. COMPONENT REPLACEMENT

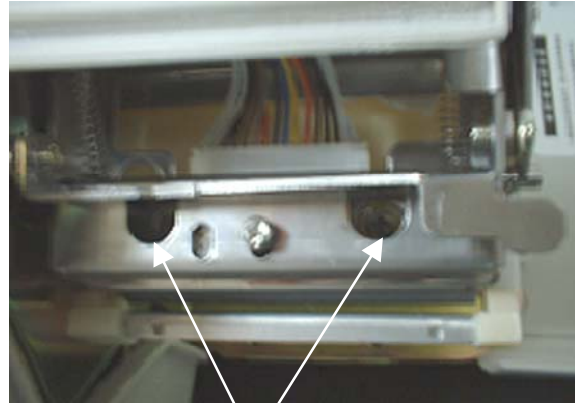
### 4.1 THERMAL HEAD REPLACEMENT

1. Dismount the front cover of the printer unit by removing the 2 fixing screws.



Screws Front cover

2. Remove the 2 screws fixing the thermal head.



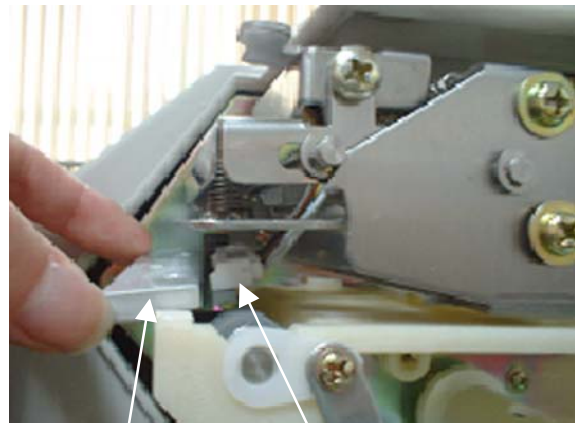
Screws

3. Raise the thermal head lever.



Lever

4. Dismount the thermal head and remove the communication harness connecting with the head.



Thermal head Communication harness

Note: If the print is so light, adjust the print darkness by moving the thermal head position back and forth and around as per step 2 above.

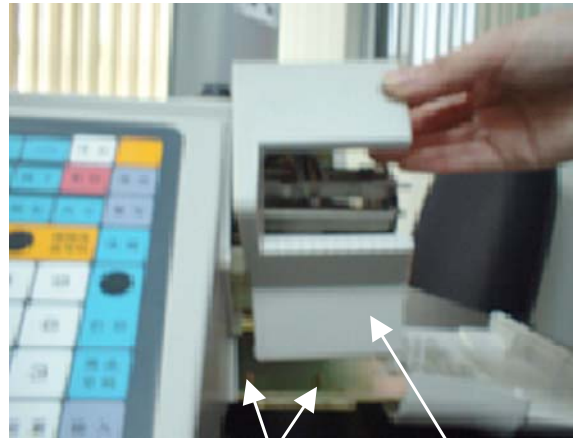


## 4.2 PRINT ROLLER REPLACEMENT

1. Remove the weigh platter.



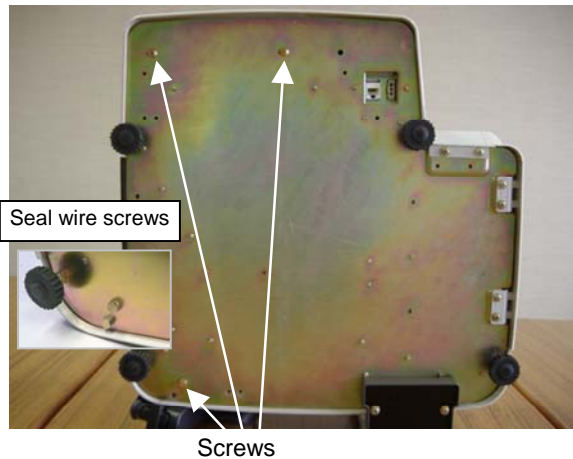
2. Dismount the front cover of the printer unit by removing the 2 fixing screws.



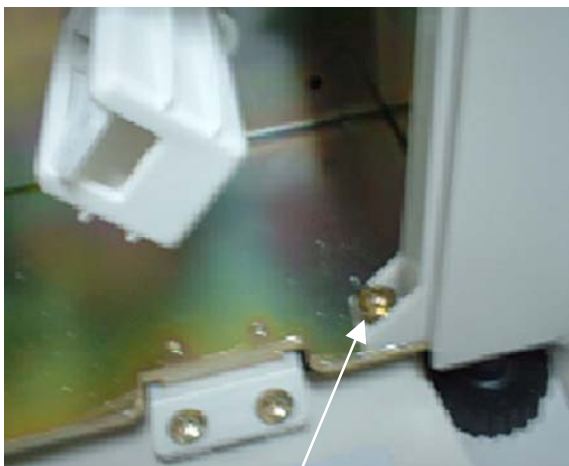
3. Raise the thermal head lever.



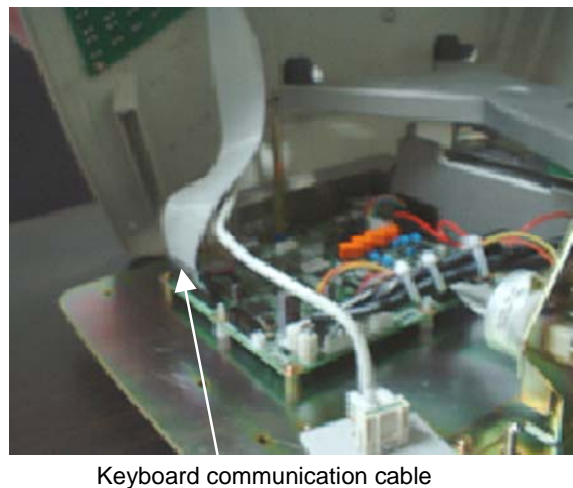
4. Remove the 3 screws located on the bottom of the machine that are fixing the top cover.



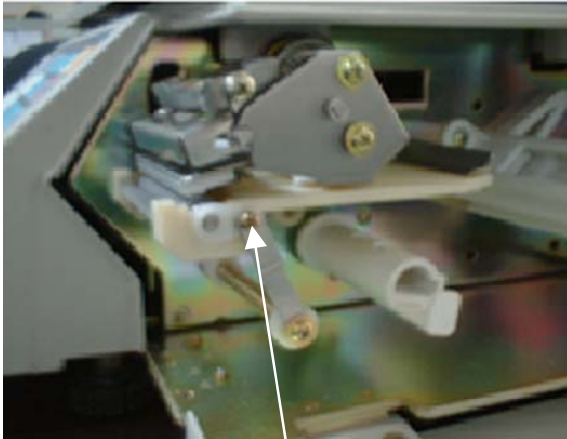
5. Remove the screw fixing the top cover of the printer unit.



6. Detach the top cover 6 and the above cover, and remove the communication cable connecting with the keyboard.

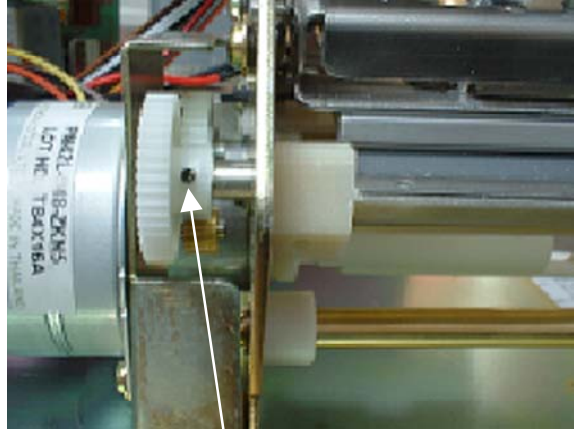


7. Remove the screw fixing the roller bracket.



Screw for roller bracket

8. Remove the gear after pulling out the gear stopper, and remove the print roller.



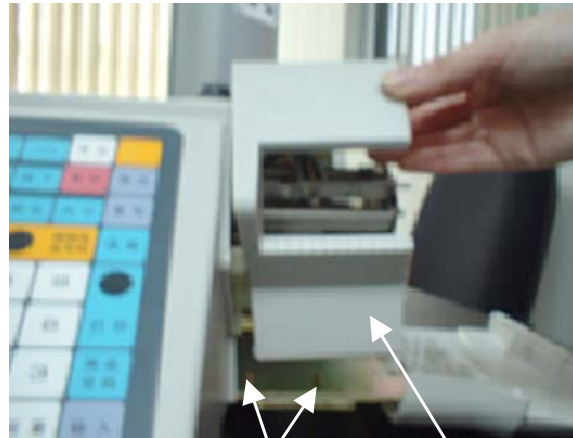
Gear stopper

### 4.3 LOAD CELL REPLACEMENT

1. Remove the weigh platter.

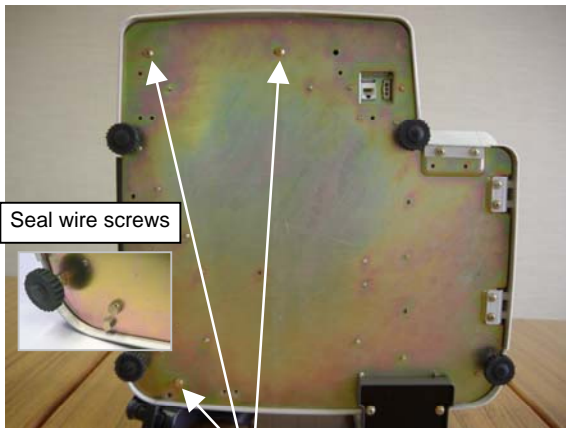


2. Dismount the front cover of the printer unit by removing the 2 fixing screws.



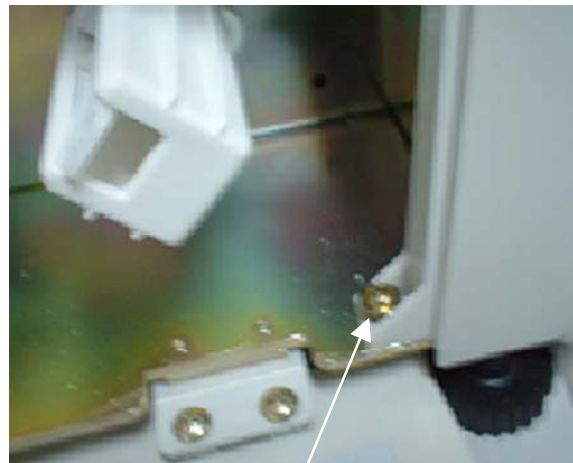
Screws Front cover

3. Remove the 3 screws located on the bottom of the machine that are fixing the top cover.



Screws

4. Remove the screw fixing the top cover of the printer unit.



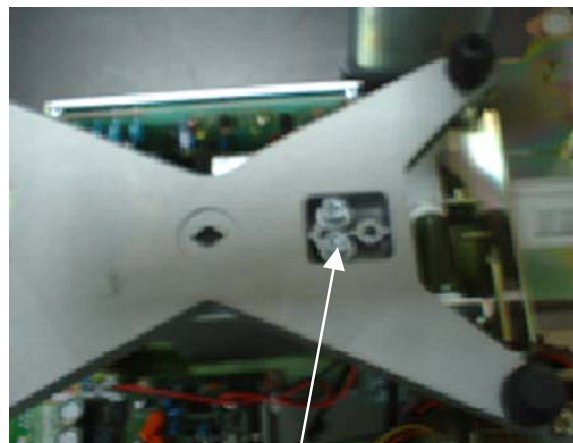
Screw

5. Detach the top cover, and remove the communication cable connecting with the keyboard.



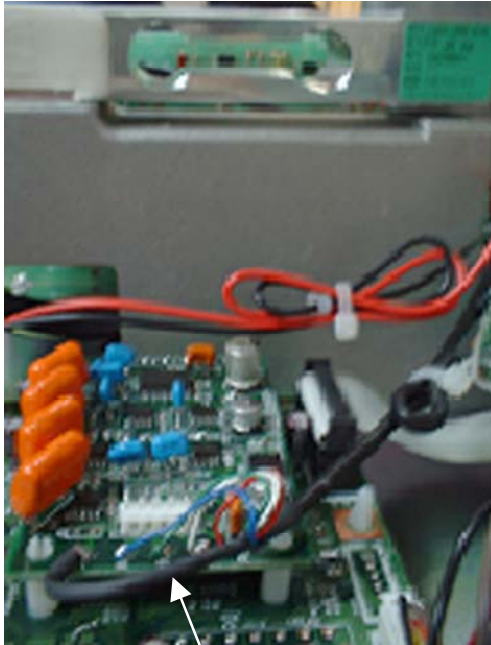
Keyboard communication cable

6. Remove the 2 screws fixing the weigh platter.



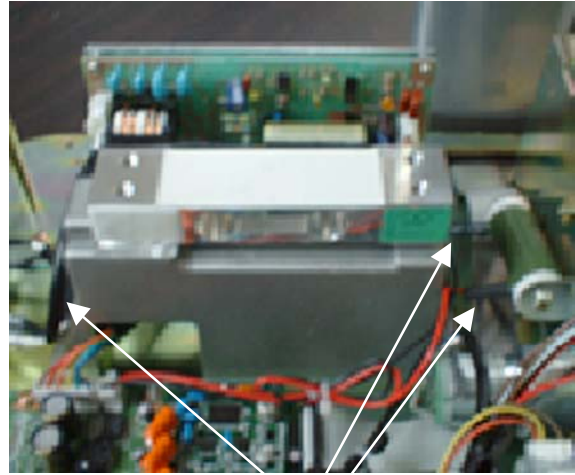
Screws

7. Remove the load cell communication harness on the A/D board using a soldering tool.



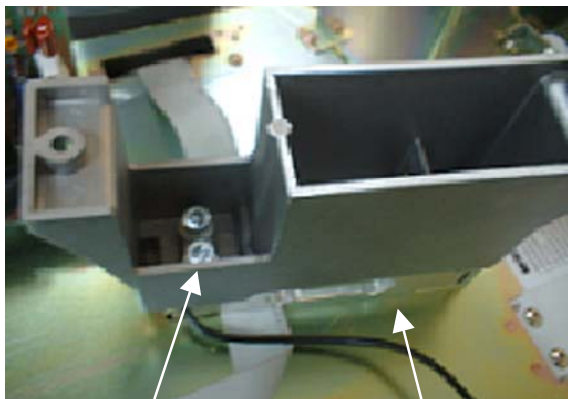
Load cell communication harness

8. Remove the 3 screws fixing load cell base.



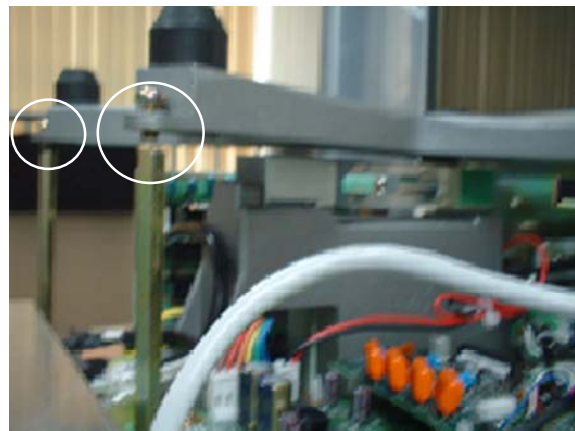
Screws

9. Detach the load cell by removing the 2 screws.



Screws

Load cell



Limit stopper

**Explanation**

When replacing with a new load cell, always adjust the 4 limit stopper screws on the weigh platter holder.

Adjustment target: There is no gap between the stopper screw and the pole when the 1.5 times weight of the weighing capacity is placed on the platter.

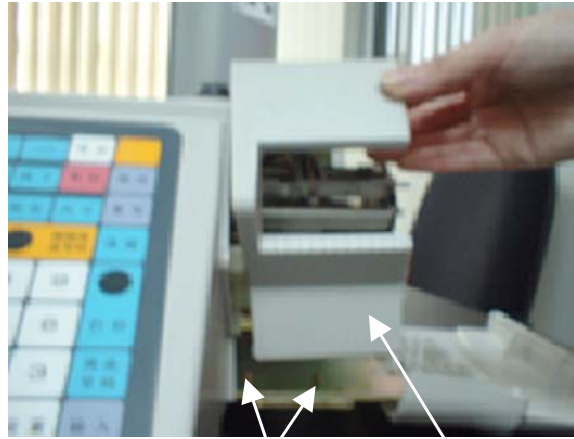
After the load cell has been replaced, perform the span adjustment.

### 4.4 MAIN BOARD REPLACEMENT

1. Remove the weigh platter.

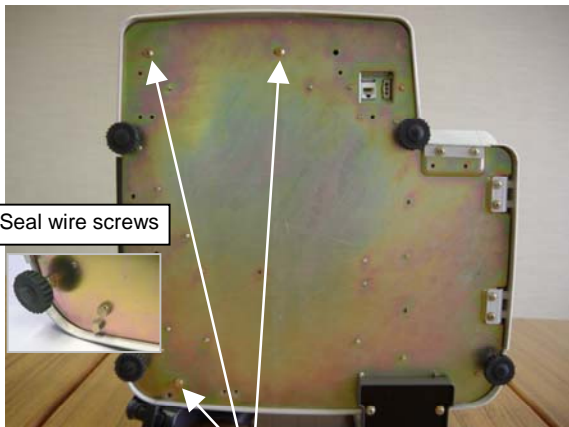


2. Dismount the front cover of the printer unit by removing the 2 fixing screws.



Screws Front cover

3. Remove the 3 screws located on the bottom of the machine that are fixing the top cover.



Seal wire screws

Screws

4. Remove the screw fixing the top cover of the printer unit.



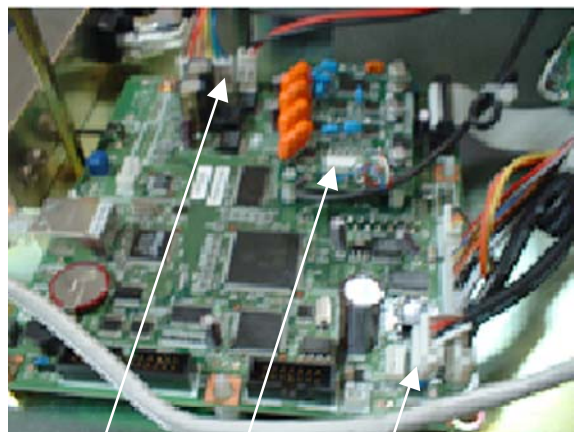
Screw

5. Detach the top cover, and disconnect the keyboard communication cable.



Keyboard communication cable

6. Disconnect all harnesses connecting with the main board, and dismount the A/D board.



Connectors A/D board Connector

7. Dismount the main board by removing the 3 screws fixing the board.



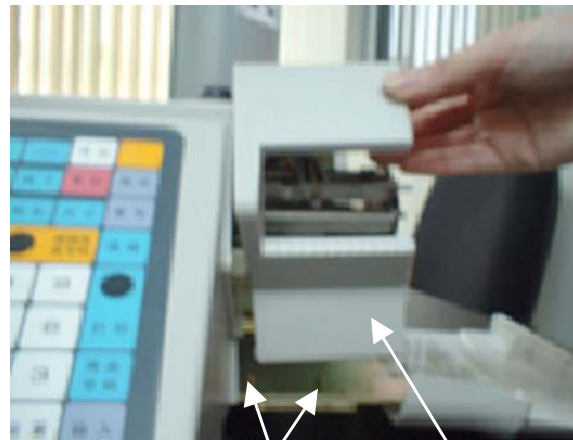
Screws

## 4.5 KEY SHEET REPLACEMENT

1. Remove the weigh platter.

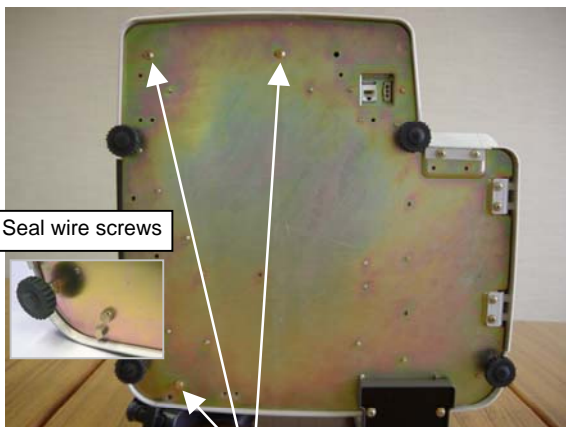


2. Dismount the front cover of the printer unit by removing the 2 fixing screws.



Screws Front cover

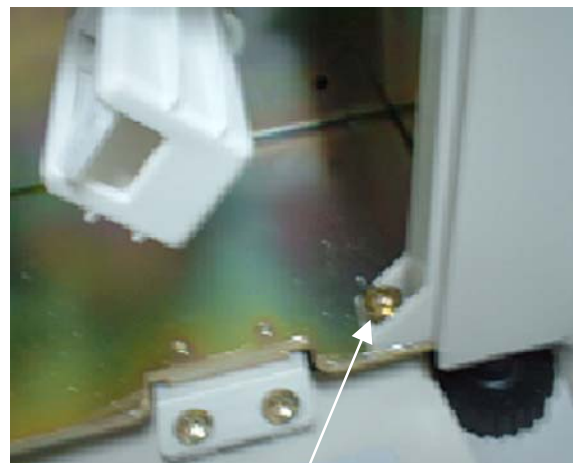
3. Remove the 3 screws located on the bottom of the machine that are fixing the top cover.



Seal wire screws

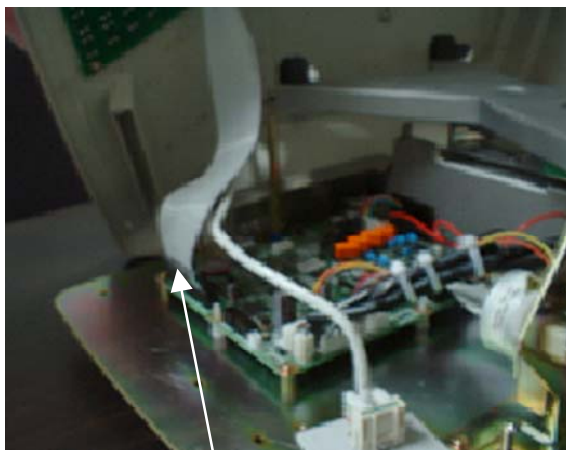
Screws

4. Remove the screw fixing the top cover of the printer unit.



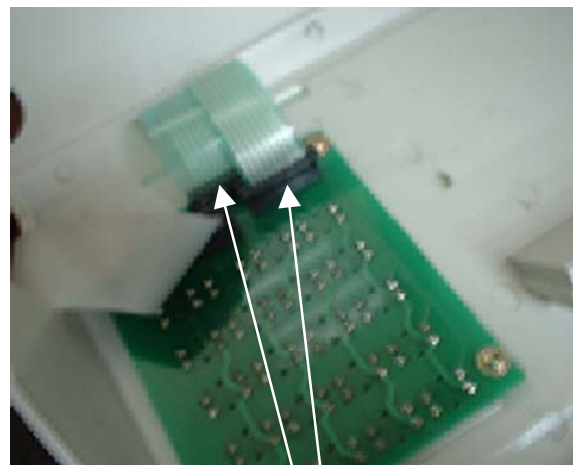
Screw

5. Detach the top cover, and remove the communication cable with the keyboard.



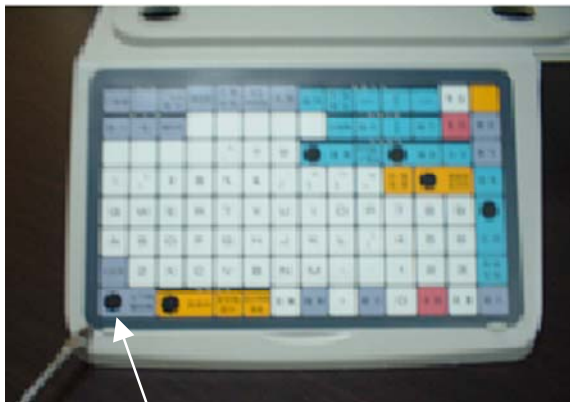
Keyboard communication cable

6. Pull out the key sheet flat communication cable connectors.



Key sheet cable connectors

7. Pull out the key sheet from the lower left side of the key sheet.



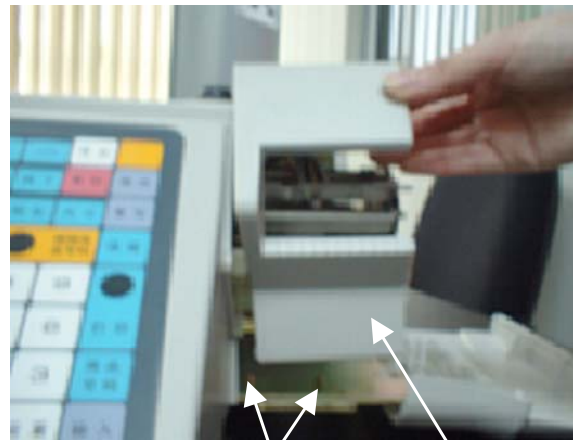


## 4.6 A/D BOARD REPLACEMENT

1. Remove the weigh platter.

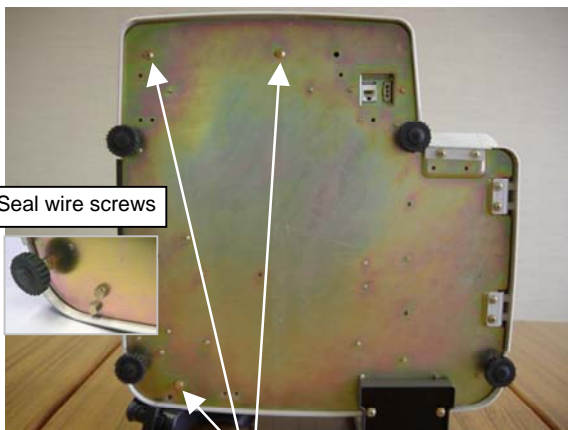


2. Dismount the front cover of the printer unit by removing the 2 fixing screws.



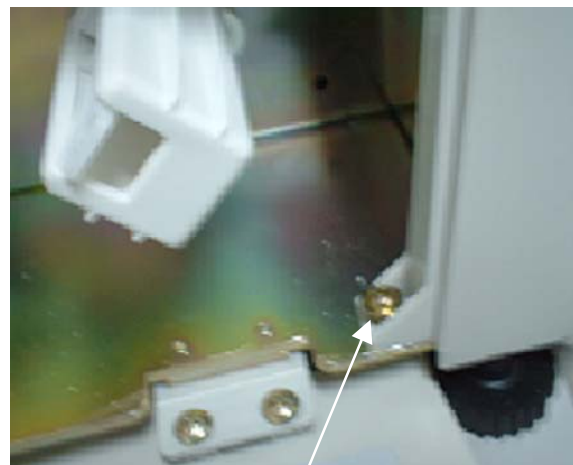
Screws Front cover

3. Remove the 3 screws located on the bottom of the machine that are fixing the top cover.



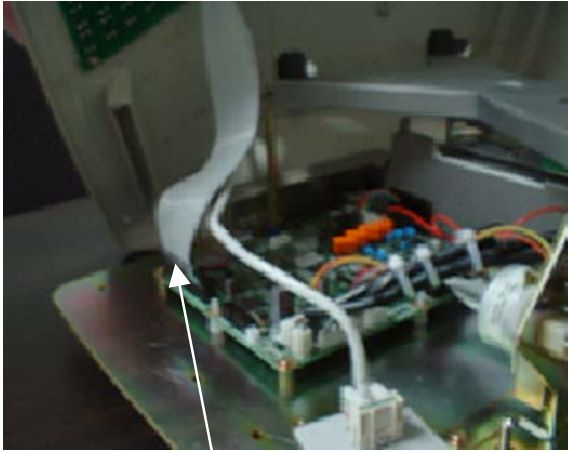
Screws

4. Remove the screw fixing the top cover of the printer unit.



Screw

5. Detach the top cover, and disconnect the communication cable with the keyboard.



Keyboard communication cable

6. Disconnect the load cell communication harness on the A/D board using a soldering tool, and remove the A/D board from the main board.



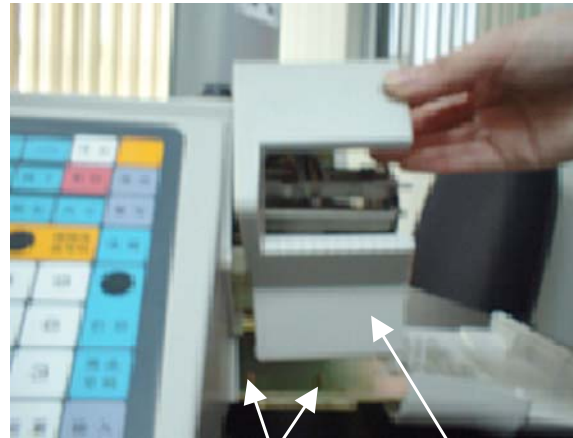
Load cell communication harness

## 4.7 POWER SUPPLY BOARD REPLACEMENT

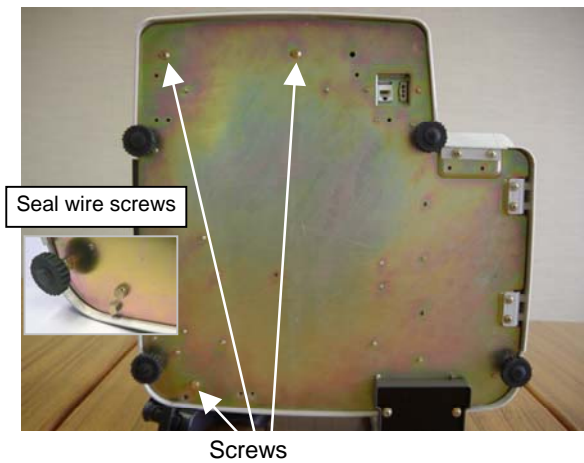
1. Remove the weigh platter.



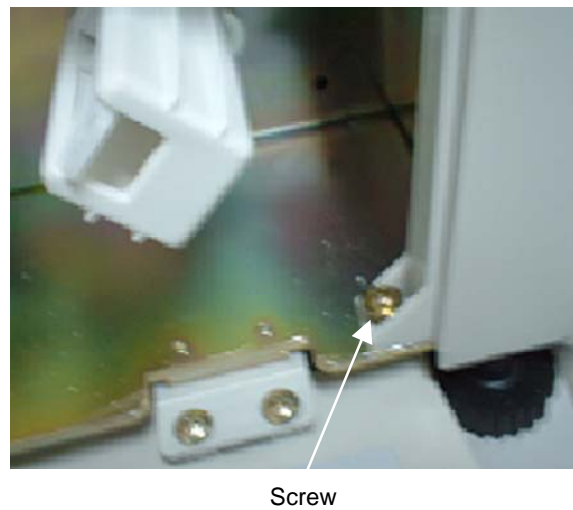
2. Dismount the front cover of the printer unit by removing the 2 fixing screws.



3. Remove the 3 screws located on the bottom of the machine that are fixing the top cover.



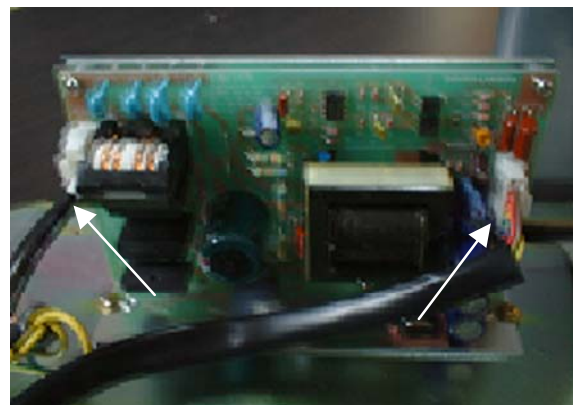
4. Remove the screw fixing the top cover of the printer unit.



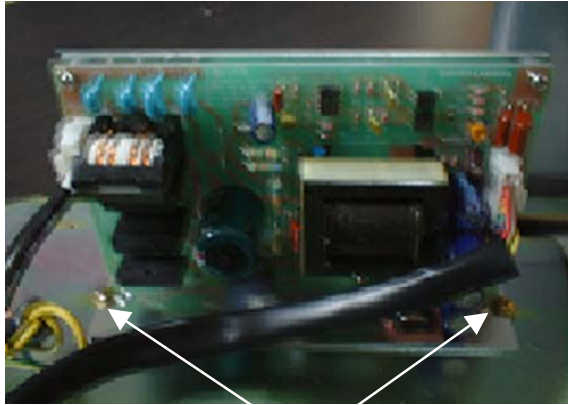
5. Detach the top cover, and remove the communication cable with the keyboard.



6. Pull out the 2 plugs on the power supply board.



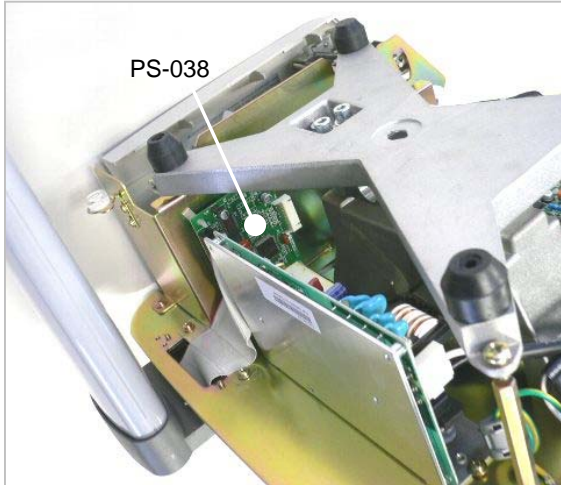
7. Remove the 2 screws fixing the power supply board on the scale base, and detach the power supply board.



Screws

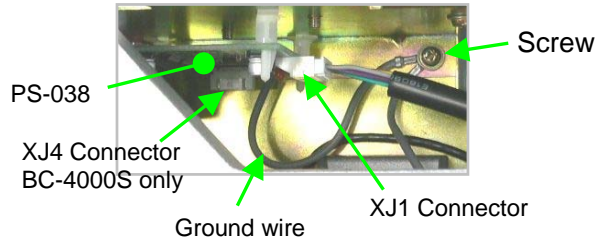
### 4.8 DISPLAY DRIVER PS-038 REPLACEMENT(BC-4000E/S)

1. Shows the placement of the P-038.

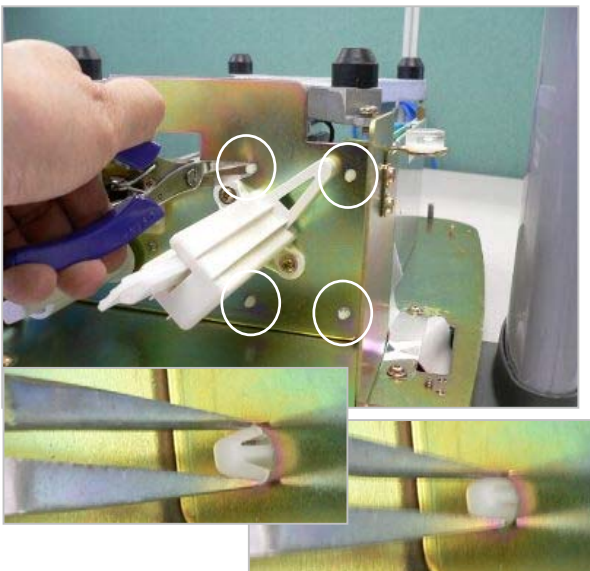


screws

2. Remove the harness from XJ1 connector.  
 Remove the harness from XJ4 connector.  
 (BC-4000S only)  
 Remove the screw secure the ground wire.

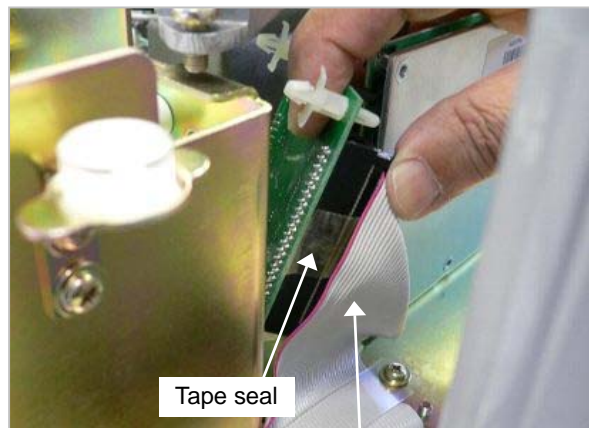


3. Print circuit board remove from the frame.  
 ACCESSORY SUPPORT is easier to remove from the frame.

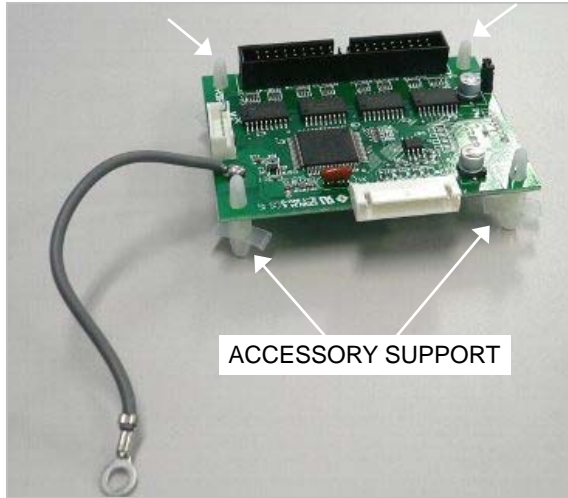


PRESS and PUSH

4. Peeling the tape seal. And Remove the Display harness from XJ3 connector.



5. Remove the ACCESSORY SUPPORT from Print circuit board.



## 4.9 DISPLAY UNIT REPLACEMENT

### 4.9.1 DISPLAY COVER

1. Remove the 2 screws fixing the display unit with the pole.



Screws

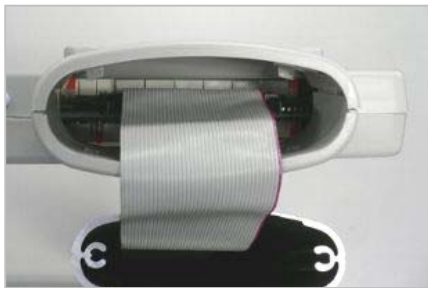
2. Pull out the display unit, and remove the flat cable connector of the display unit.(L2 type)



Connector

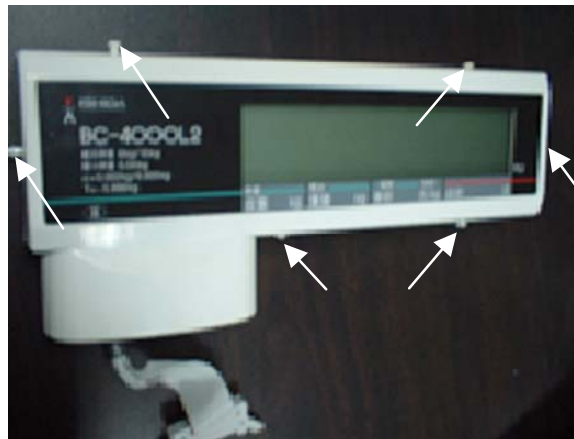
L2 type

3. Pull out the display unit, and remove the flat cable connector of the display unit.(E and S type)



E and S type

4. Pull out the 6 Push Rivet fixing the display cover.



Push Rivet

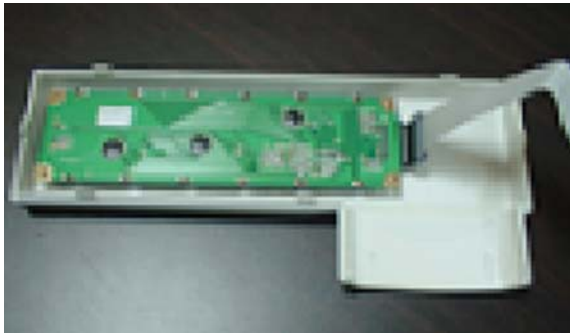


## 4.9.2 L2 TYPE

1. Open the display cover.

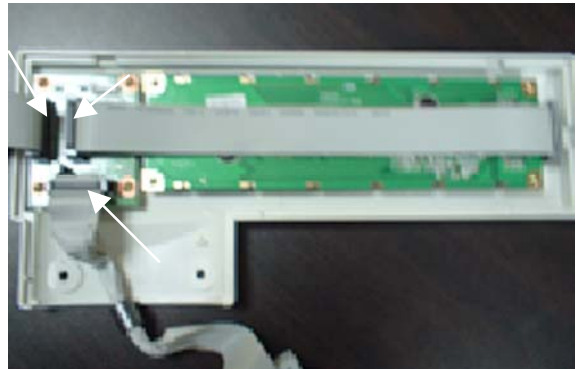


Operator display



Customer display

2. Remove the 3 connectors on the PS-986 display driver board.



Connectors

3. Remove the 4 screws fixing the PS-986 display driver board.



Screws

4. Remove the 4 screws fixing the operator display board.



Screws

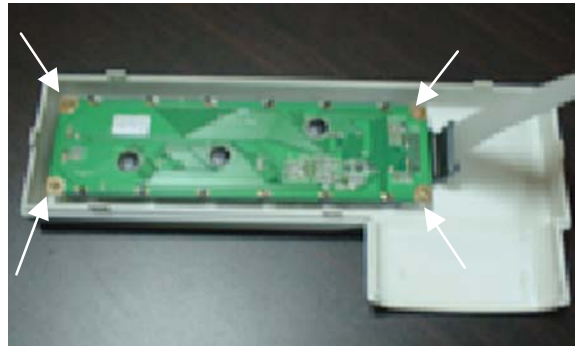


5. Remove the connector on the display board, and detach the operator display board.



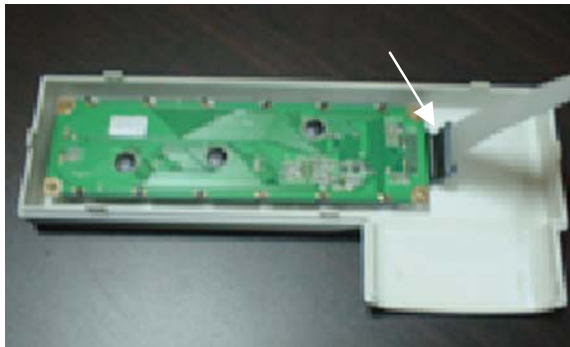
Connector

6. Remove the 4 screws fixing the customer display board.



Screws

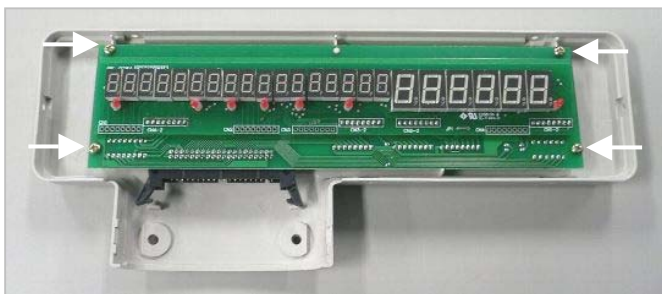
7. Remove the connector on the display board, and detach the customer display board.



Connector

### 4.9.3 E AND S TYPE

1. Remove the 4 screws fixing the display board.



Photography is the E type.

## 5. ERROR LIST & TROUBLESHOOTING

### 5.1 ERROR LIST

Error Message	Meaning	Operation
ERROR 2	Commodity name overflow	Press the [CLEAR] key to return to Normal Mode.
ERROR 3	POP message overflow	Press the [CLEAR] key to return to Normal Mode.
ERROR 4	Extra message overflow	Press the [CLEAR] key to return to Normal Mode.
ERROR 7	Store name/address overflow	Press the [CLEAR] key to return to Normal Mode.
ERROR 8	Run out of label paper	Press the [CLEAR] key to return to Normal Mode.
ERROR 9	Label size error	Press the [CLEAR] key to return to Normal Mode.
ERROR 10	Discount price calculation mistake	Press the [CLEAR] key to return to Normal Mode.
ERROR 11	Extra message 2 overflow	Press the [CLEAR] key to return to Normal Mode.
ERROR 12	Extra message 3 overflow	Press the [CLEAR] key to return to Normal Mode.
ERROR 13	Coupon message overflow	Press the [CLEAR] key to return to Normal Mode.
ERROR 16	Memory overflow	Press the [CLEAR] key to return to Normal Mode.
ERROR 21	Thermal head failure	Press the [CLEAR] key to return to Normal Mode.
ERROR 40	Memory error	Press the [CLEAR] key to return to Normal Mode.
WEIGHT OVER ERROR	Blank	
WEIGHT UNDER ERROR	-----	

## 5.2 TROUBLE SHOOTING

Phenomenon	Cause	Measures
Power is not supplied.	<ol style="list-style-type: none"> <li>1. Power supply plug has loosened.</li> <li>2. The fuse has blown out.</li> <li>3. Main board is defective.</li> <li>4. Power supply unit is defective.</li> <li>5. Power switch is defective.</li> </ol>	<ol style="list-style-type: none"> <li>1. Insert the plug again.</li> <li>2. Replace the fuse.</li> <li>3. Check the main board, and replace it.</li> <li>4. Check the power supply unit, and replace it.</li> <li>5. Check the power switch, and replace it.</li> </ol>
Test Mode is entered directly after the power has been turned OFF.	<ol style="list-style-type: none"> <li>1. Main board is defective.</li> <li>2. Key sheet is defective.</li> </ol>	<ol style="list-style-type: none"> <li>1. Check the main board, and replace it.</li> <li>2. Check the key sheet, and replace it.</li> </ol>
Machine does not stop operation after "TEST" is displayed.	<ol style="list-style-type: none"> <li>1. Load cell is defective.</li> <li>2. External vibration</li> <li>3. A/D board is defective.</li> <li>4. Main board is defective.</li> <li>5. Power supply unit is defective.</li> </ol>	<ol style="list-style-type: none"> <li>1. Adjust the load cell, and replace it</li> <li>2. Change the installation to a vibration-free place.</li> <li>3. Check the A/D board, and replace it.</li> <li>4. Check the main board, and replace it.</li> <li>5. Check the power supply unit, and replace it.</li> </ol>
Weight error occurred.	<ol style="list-style-type: none"> <li>1. Limit stopper screw hits something.</li> <li>2. There is a foreign object under the load cell.</li> <li>3. A/D board is defective.</li> <li>4. Load cell is defective.</li> <li>5. Main board is defective.</li> </ol>	<ol style="list-style-type: none"> <li>1. Adjust the limit stopper screws.</li> <li>2. Remove the foreign body.</li> <li>3. Replace the A/D board.</li> <li>4. Adjust the load cell, and replace it.</li> <li>5. Check the main board, and replace it.</li> </ol>
A specific program cannot be displayed.	<ol style="list-style-type: none"> <li>1. Machine connection error</li> <li>2. Main board is defective.</li> <li>3. Display board is defective.</li> </ol>	<ol style="list-style-type: none"> <li>1. Check the machine connection.</li> <li>2. Check the main board, and replace it.</li> <li>3. Check the display board, and replace it.</li> </ol>
A key doesn't work.	<ol style="list-style-type: none"> <li>1. Key sheet is defective.</li> <li>2. Machine connection error</li> </ol>	<ol style="list-style-type: none"> <li>1. Check the key sheet, and replace it.</li> <li>2. Check the machine connection.</li> </ol>
Registration data has changed.	<ol style="list-style-type: none"> <li>1. Battery is defective.</li> <li>2. Main board is defective.</li> <li>3. Influence of external noise</li> </ol>	<ol style="list-style-type: none"> <li>1. Replace with a new battery.</li> <li>2. Check the main board, and replace it.</li> <li>3. Change the installation to a noise-free place.</li> </ol>
Display disappears all while operating.	<ol style="list-style-type: none"> <li>1. Power-supply voltage fluctuation</li> <li>2. Power supply unit is defective.</li> <li>3. Display board is defective.</li> <li>4. Main board is defective.</li> </ol>	<ol style="list-style-type: none"> <li>1. Confirm the power-supply voltage.</li> <li>2. Confirm the power supply unit, and replace it.</li> </ol>

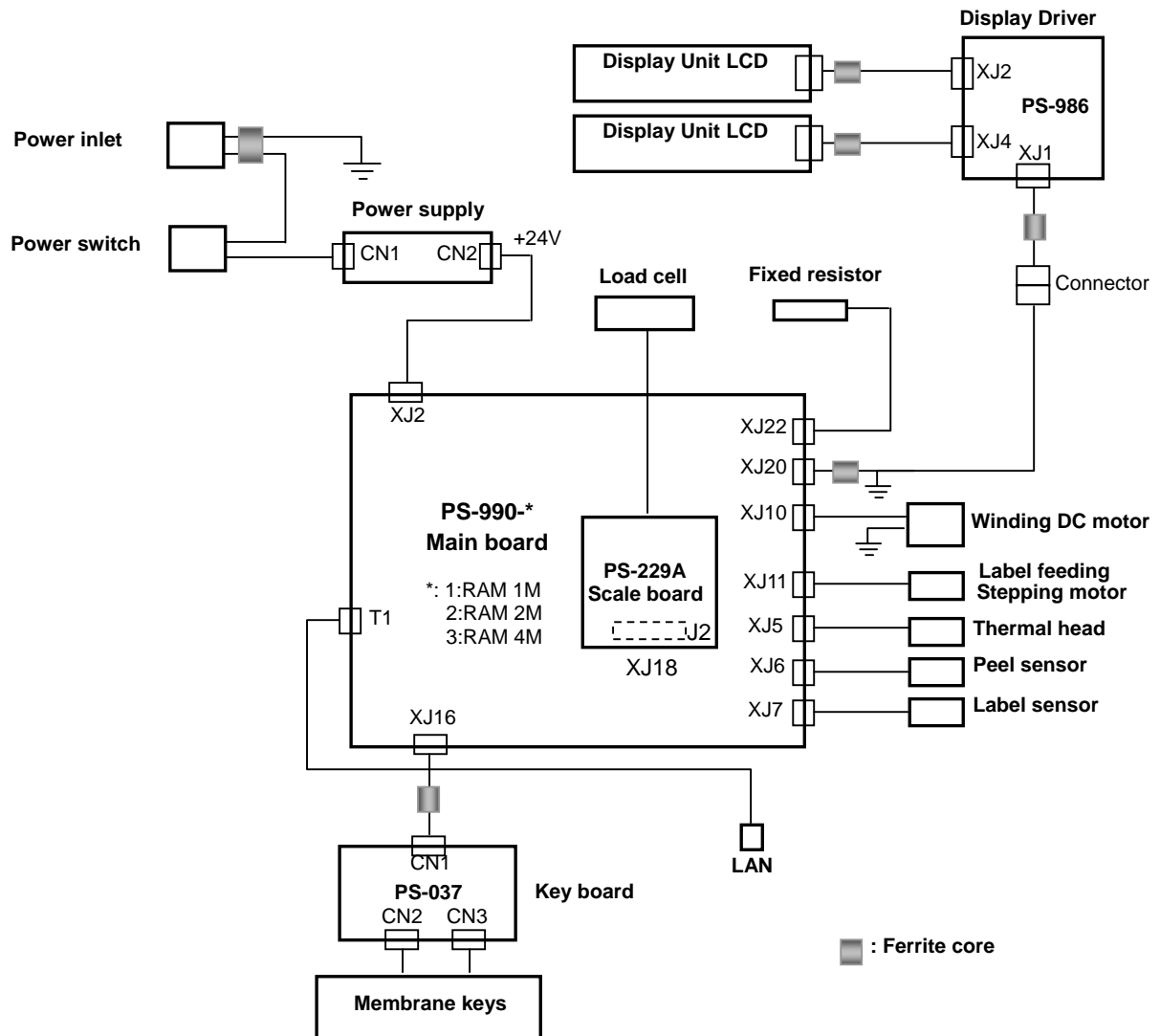
		<ol style="list-style-type: none"><li>3. Check the display board, and replace it.</li><li>4. Check the main board, and replace it.</li></ol>
Printing cannot be performed.	<ol style="list-style-type: none"><li>1. Head cable is defective,</li><li>2. Power supply unit is defective.</li><li>3. Thermal head is defective.</li><li>4. Main board is defective.</li></ol>	<ol style="list-style-type: none"><li>1. Confirm the power-supply voltage.</li><li>2. Confirm the permissible head voltage and replace the power supply unit.</li><li>3. Adjust the head, and replace it.</li><li>4. Check the main board, and replace it.</li></ol>

**memo**

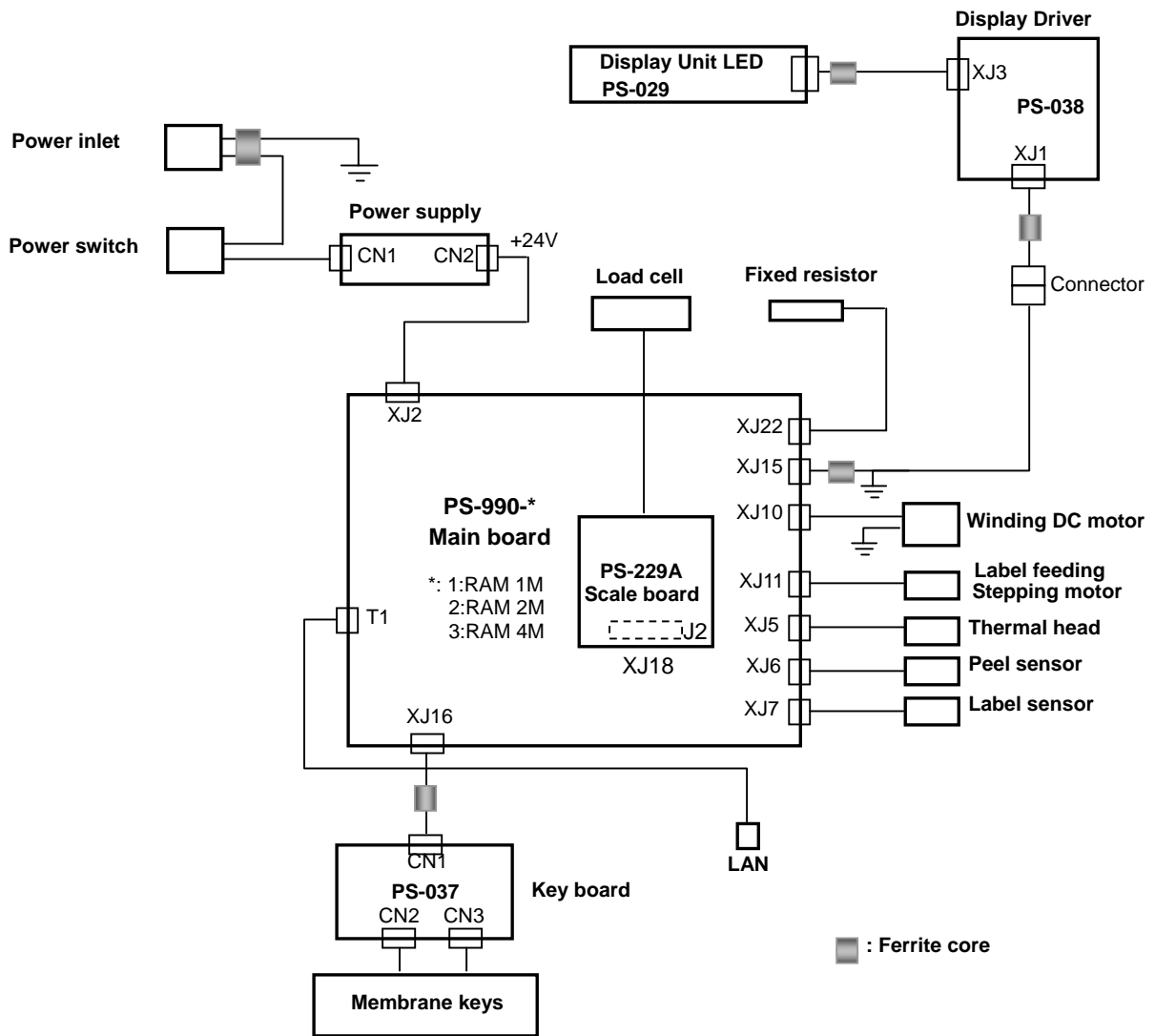
## 6. Electric Assembly

### 6.1 BLOCK DIAGRAM

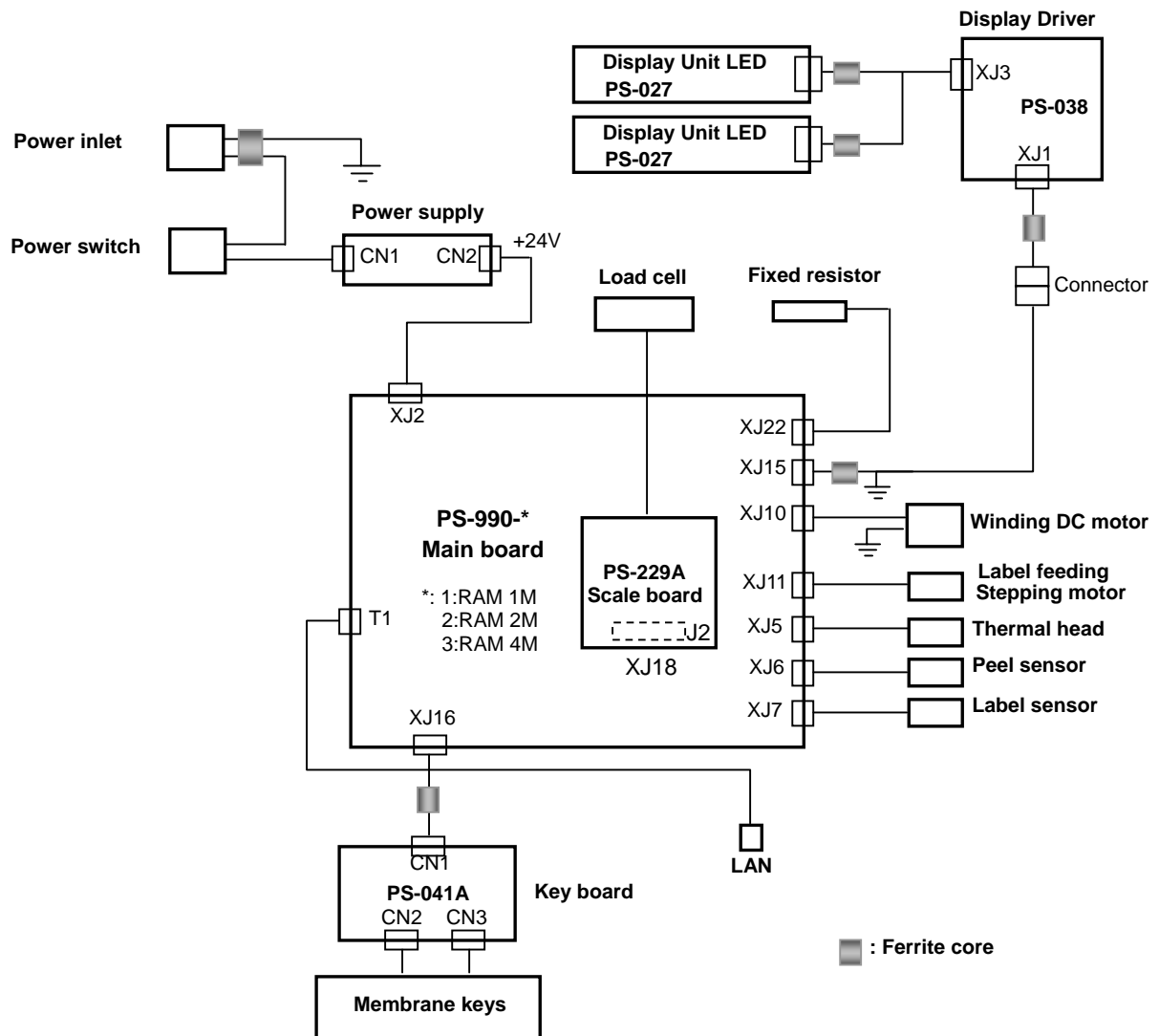
#### 6.1.1 BC-4000L2/L2B/L2H



### 6.1.2 BC-4000E

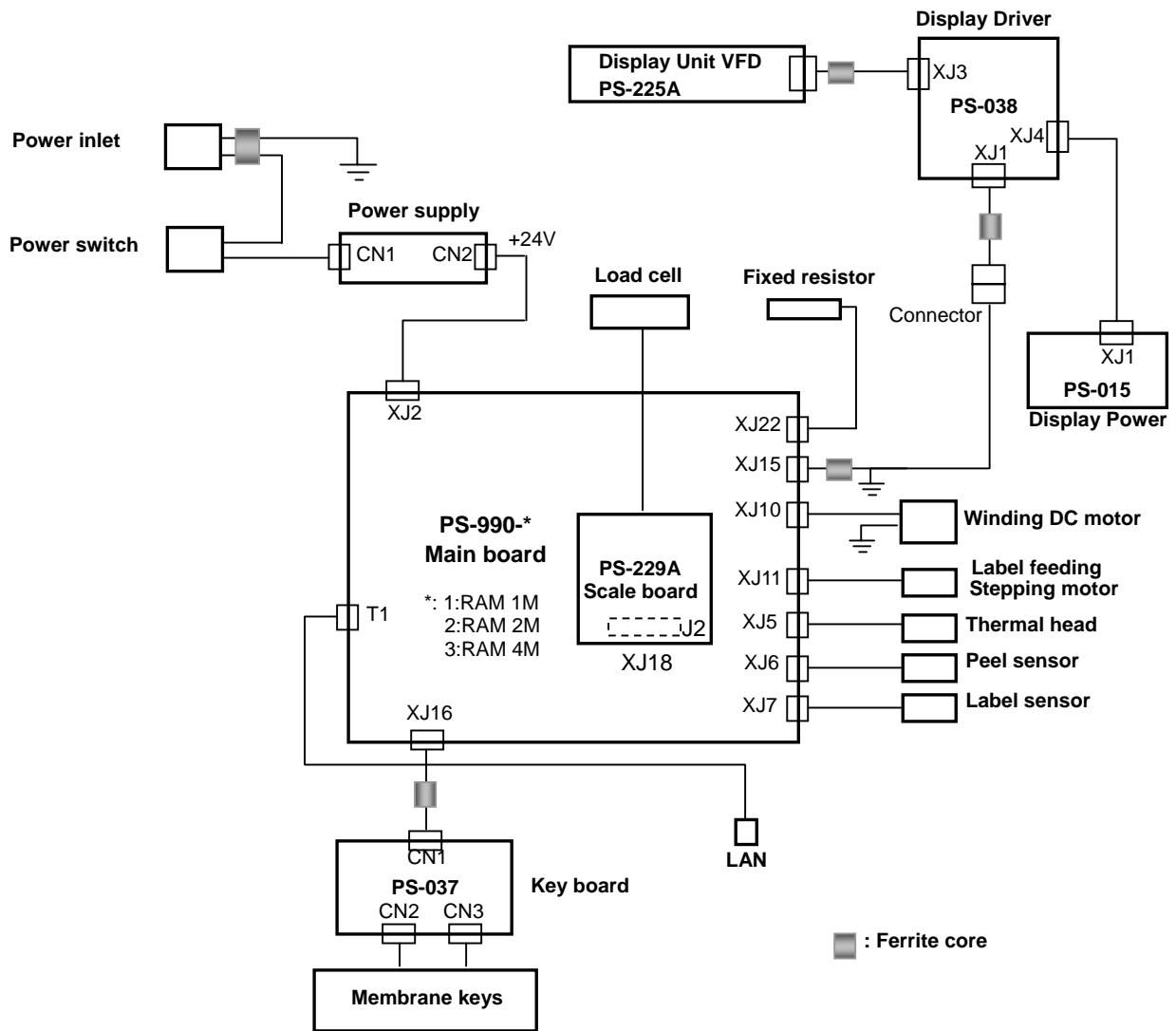


### 6.1.3 BC-4000EB

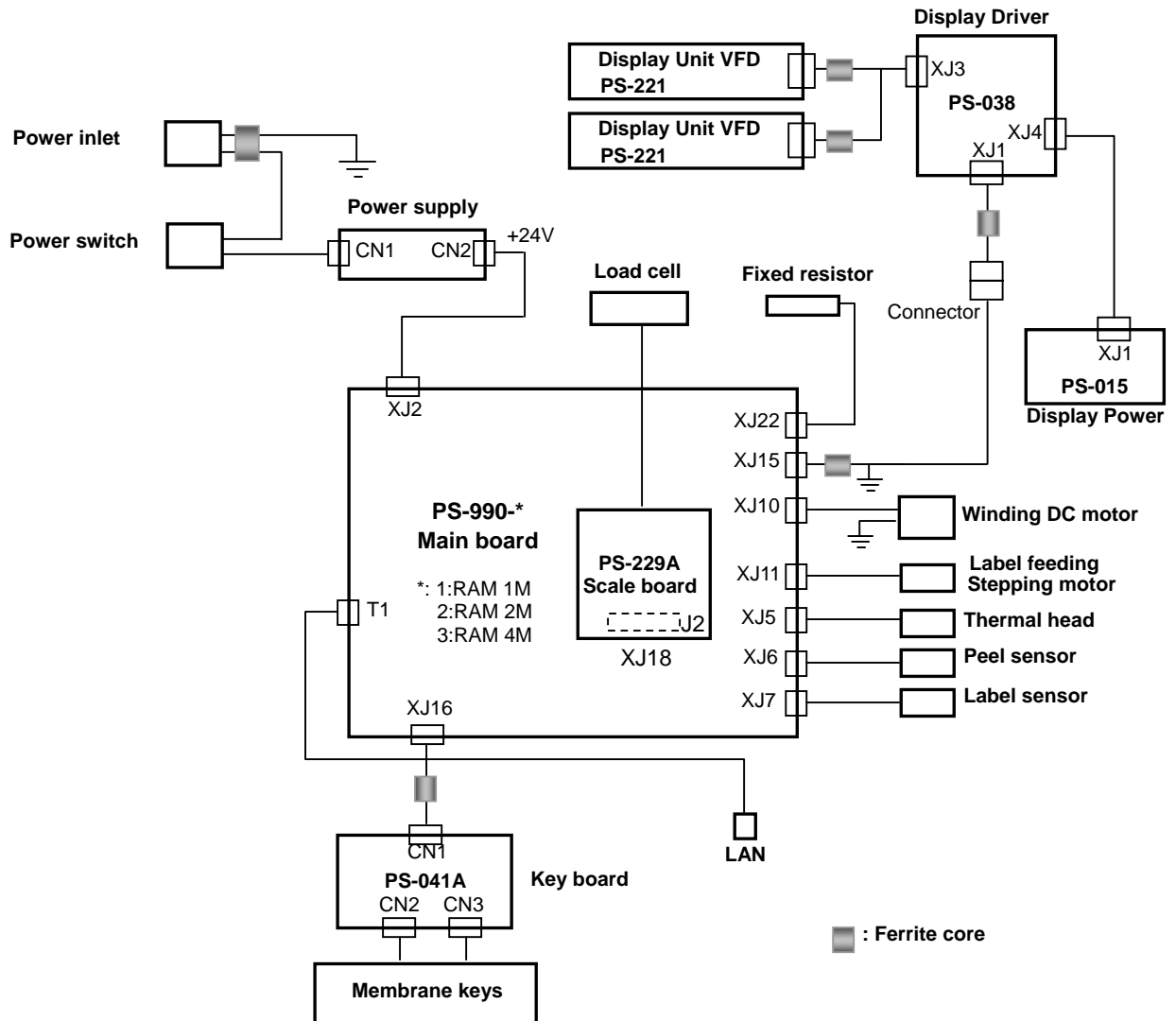




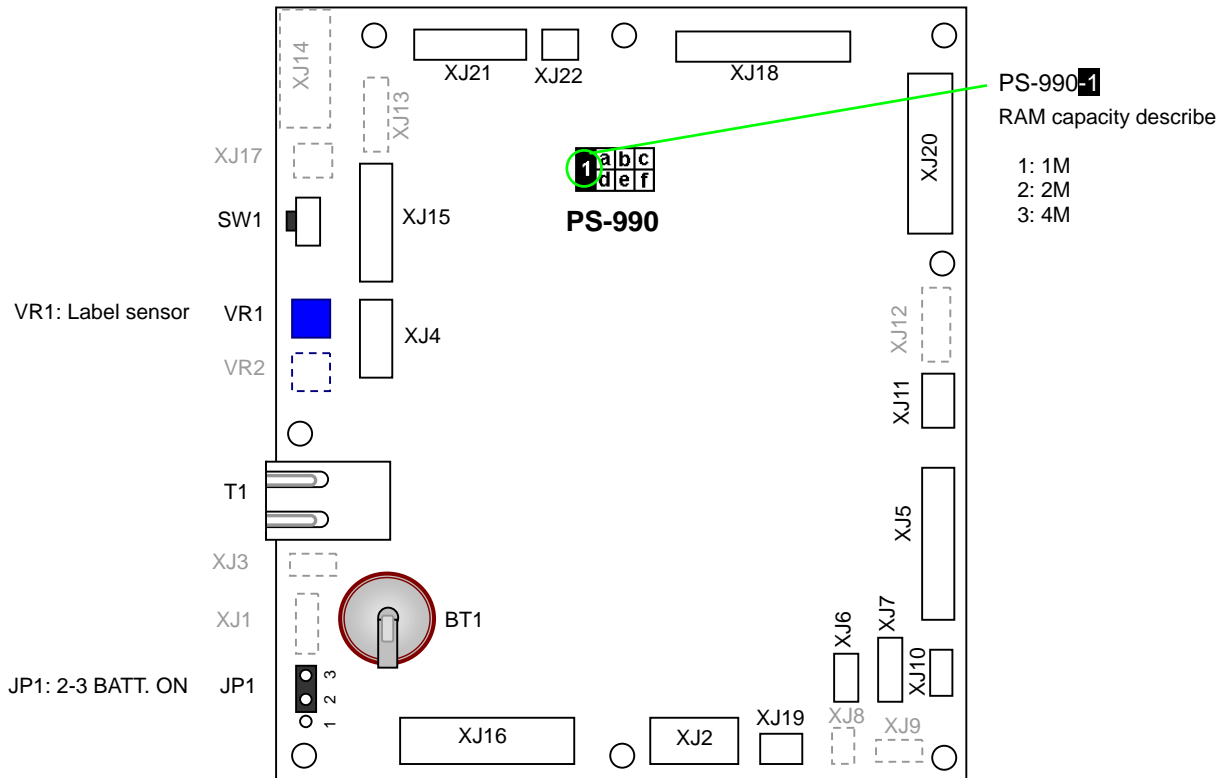
### 6.1.4 BC-4000S



### 6.1.5 BC-4000SB



## 6.2 PS-990 MAIN BOARD



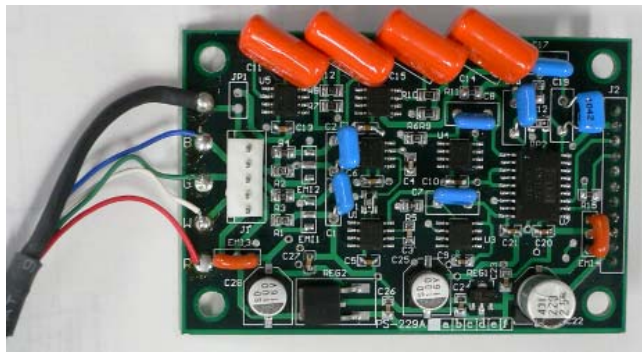
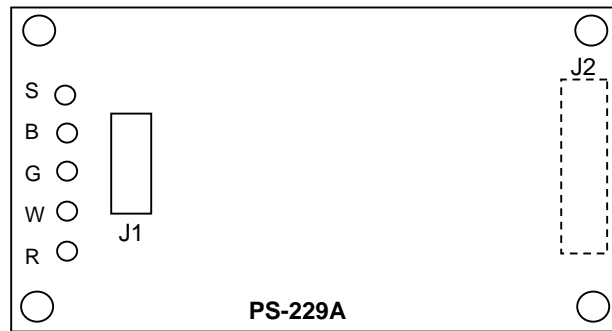
**Note:** BC-4000 , There are two type key board (Pole/Hanging or r Bench), and three language type, boot (BIOS) software is different depend on configuration. Following list describe parts number and software. Please prepare properly parts number when purchase PS-990.

### 6.2.1 I/O SIGNALS

Connector No.	Contacts	Signal name	Other end	Circuit Drawing Page
XJ1	5	AUX. Port	–	1
XJ 2	14	Computex H-UDI IF	–	1
XJ 3	2	External Memory Back UP Battery (non charge Type)	–	2
XJ 4	6	AUX. Port	–	3
XJ 5	28	Thermal head	Thermal head	5
XJ 6	4	Peel sensor	Peel sensor	6
XJ 7	4	Label sensor	Label Sensor	6
XJ 8	2	Head UP sensor	–	6
XJ 9	3	Cassette sensor	–	6
XJ 10	3	DC Motor	Winding DC motor	7
XJ 11	4	Bipolar STEP MOTOR	Label feeding stepping motor	7
XJ 12	6	UNI Polar STEP MOTOR	–	7
XJ 13	6	RS232C (Machine Inside)	–	8
XJ 14	9	RS232C	–	8
XJ 15	9	LED IF(BC-4000E)/VFD IF (BC-4000S)	PS-038 XJ1	8
XJ 16	26	KEY IF	PS-037 Key board	9
XJ 17	2	External Memory Switch	–	10
XJ 18	11	Scale IF	PS-229A Scale board	10
XJ 19	2	DRAWER	–	10
XJ 20	20	LCD IF(BC-4000L2)	P-986 XJ1	11
XJ 21	6	DC24V INPUT	Power supply CN2	12
XJ 22	2	LCD Backlight Current Breeder Resistance	Fixed resistor	12
T1	8	Ethernet RJ45	LAN Connector	4

“ – “: Not used

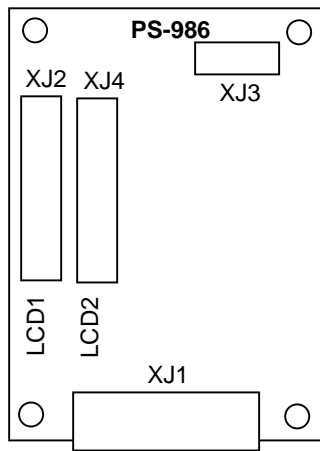
### 6.3 PS-229A SCALE BOARD



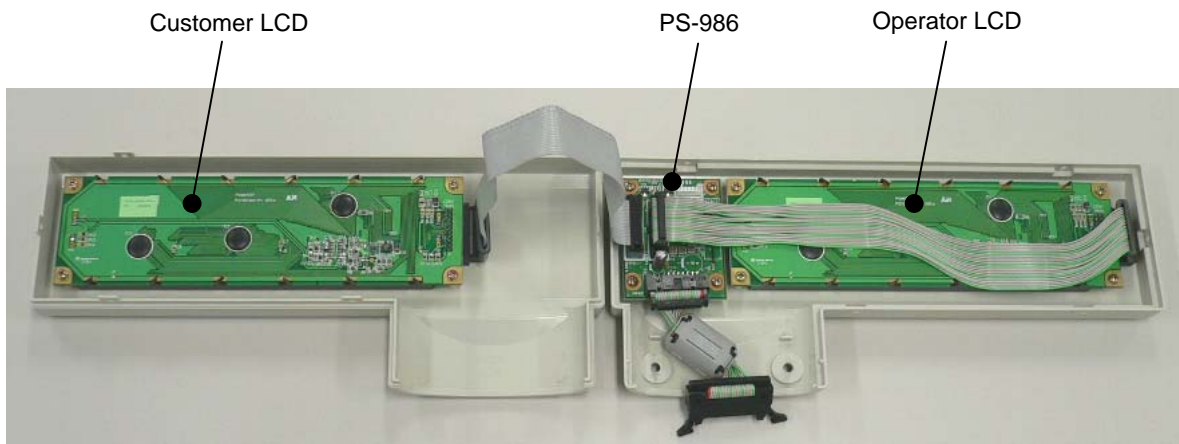
Connector No.	Contacts	Signal name	Other end
J1	5	Lord cell Analog level check	Not used
J2	14	Scale IF output	PS-990 XJ18
S B G W R	5	Lord cell connection terminal S: Shield Wire B: blue Wire G: Green Wire W: White Wire R: Red Wire	Lord cell

## 6.4 PS-986 DISPLAY DRIVER

For LCD Display.



Connector No.	Contacts	Signal name	Other end
XJ1	20	LCD IF	PS-990 XJ20
X J2	20	LCD output	Customer LCD
XJ3	6	Not used	Not used
XJ4	20	LCD output	Operator LCD



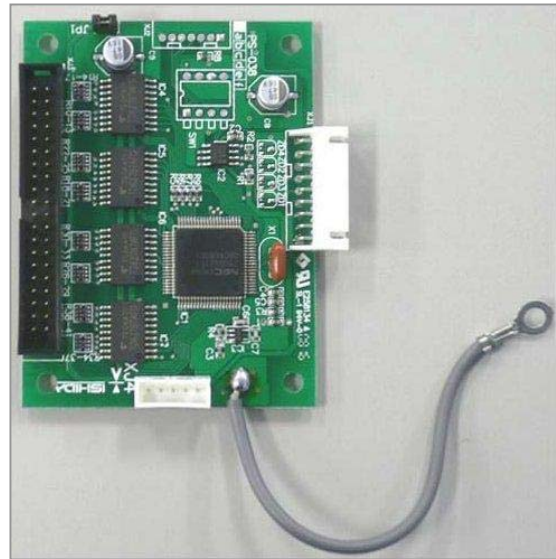
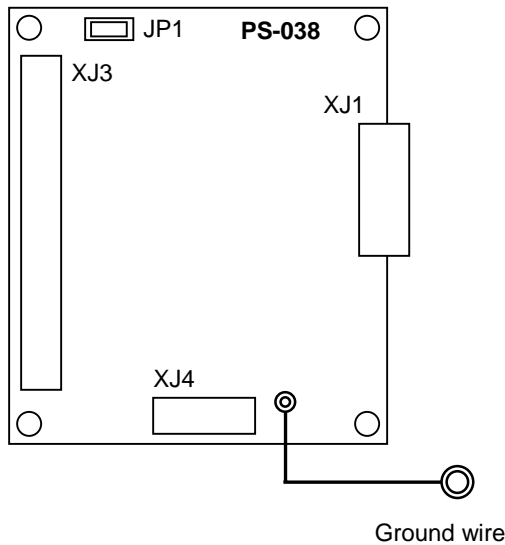
Dot matrix display 192 x 16 dots (Upper)

Fluorescent display (Lower)



## 6.5 PS-038 DISPLAY DRIVER

For LED and VFD Display.



Connector No.	Contacts	Signal name	Other end
XJ1	9	LCD IF	PS-990 XJ15
X J2		Not used	Not used
XJ3	40	LED/VFD IF	LED Display PS-027 BC-4000E VFD Display PS-221 BC-4000SB VFD Display PS-225A BC-4000S
XJ4	5	VFD Power	PS-015 (S type only)

### **JP1 (Jumper 1) YES: For LED display (BC-4000E)**

**Notice:** In case JP1 Yes, and connect different type display (VFD, BC4000S), Display not showing, Fuse of PS-015 become over

### **JP1 (jumper 1) No: For VFD display (BC4000S)**

**Notice:** In case JP1 NO, and connect different type display (LED, BC-4000E), display are dim Regular Maintenance parts PS-038 (900-3240-11), there is no Jumper pin and no Ground wire.

( Ground wire parts code is 900-0990-01 HARNESS:C2:GND. )

In case replace new PS-038, please follow as existing board setting.

Ex, BC-4000E, please remove jumper pin and Ground wire from existing board.

BC-4000S, Please use ground wire from existing board.

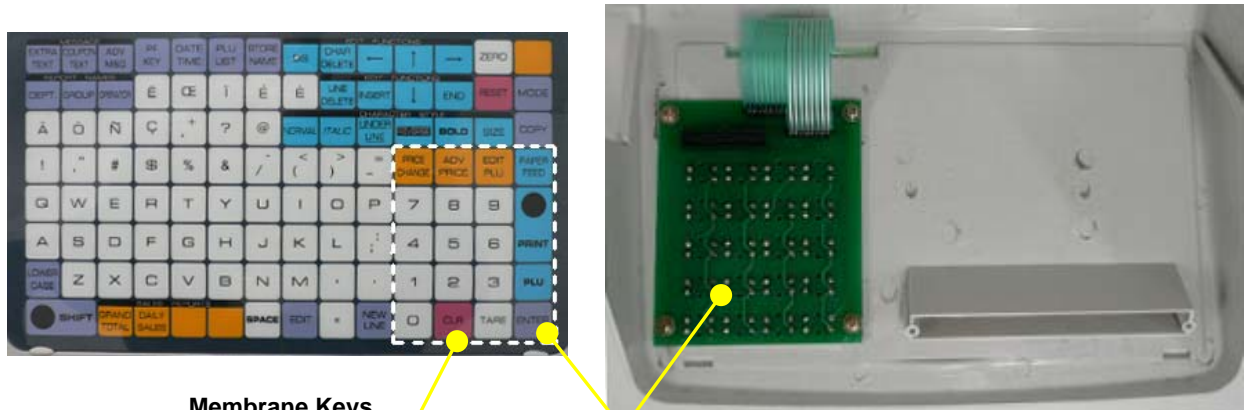
FYI.

We prepare parts number 900-8245-08 DISPLAY DRIVER AS:PS-038:

That is including PS-038 (900-3240-11) with Ground wire (900-0990-01)

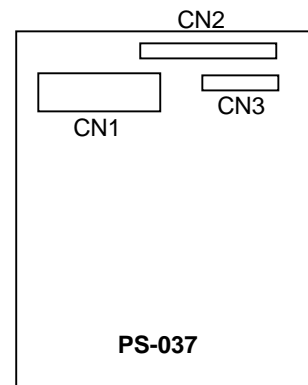
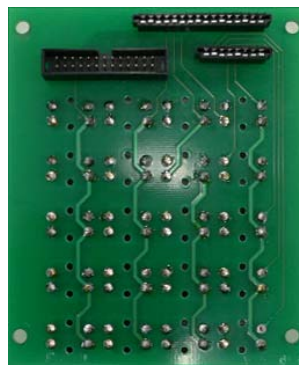
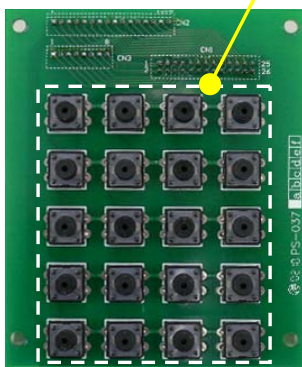
## 6.6 PS- 037 KEY BOARD & MEMBRANE KEYS

For pole type



Membrane Keys

PS-037 Key board

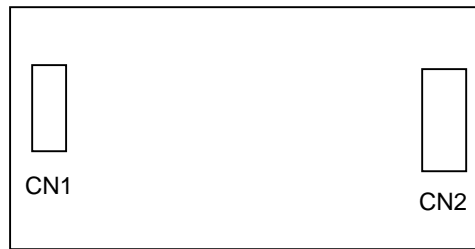


Connector No.	Contacts	Signal name	Other end
CN1	26	Key Data	PS-990 XJ16
CN2	16	Key Data	Membrane Keys
CN3	8	Key Data	Membrane Keys

The bench type used, PS-041 keyboard and for Membrane key seat for bench type.

## 6.7 POWER SUPPLY

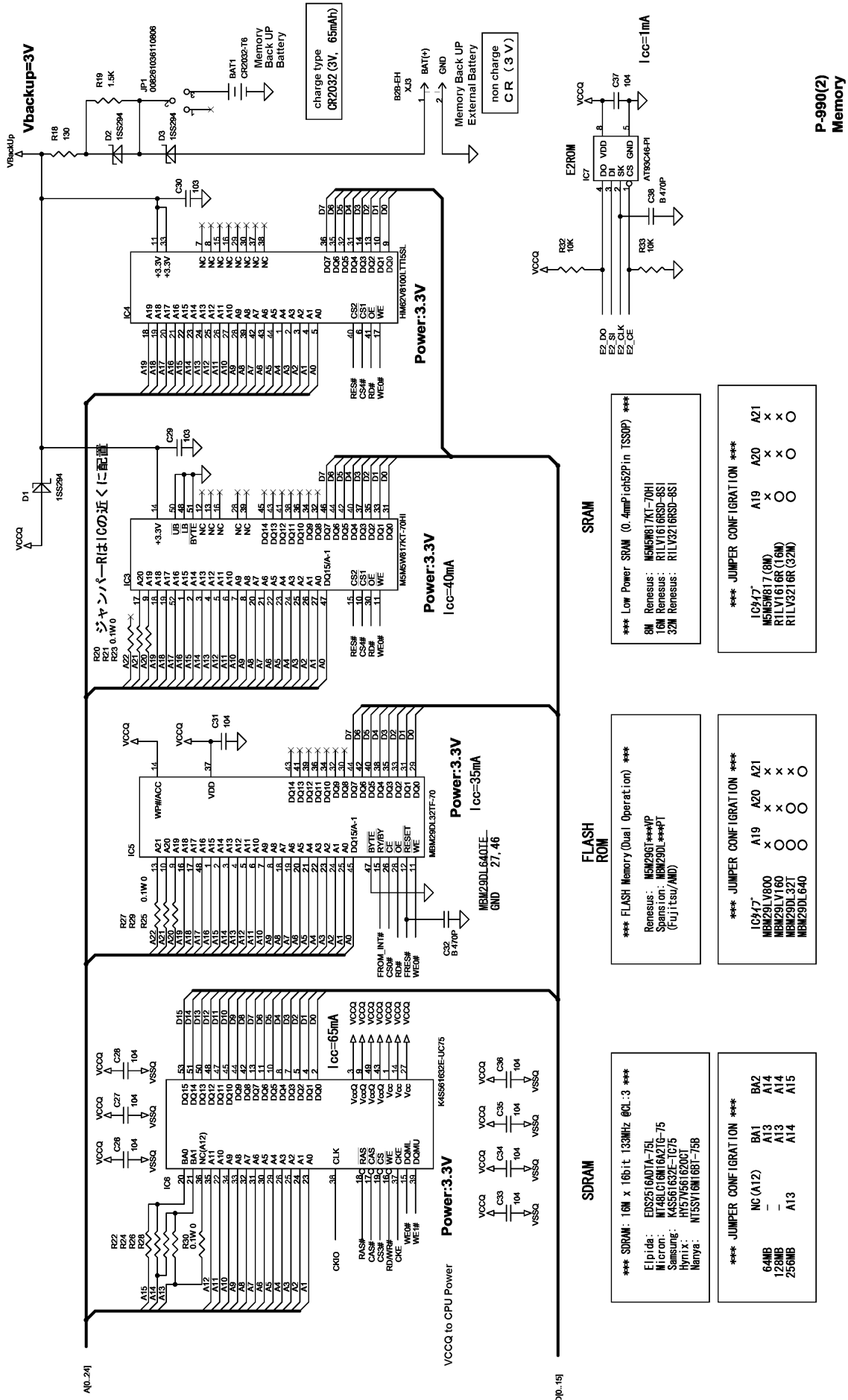
Model: CWS100-24

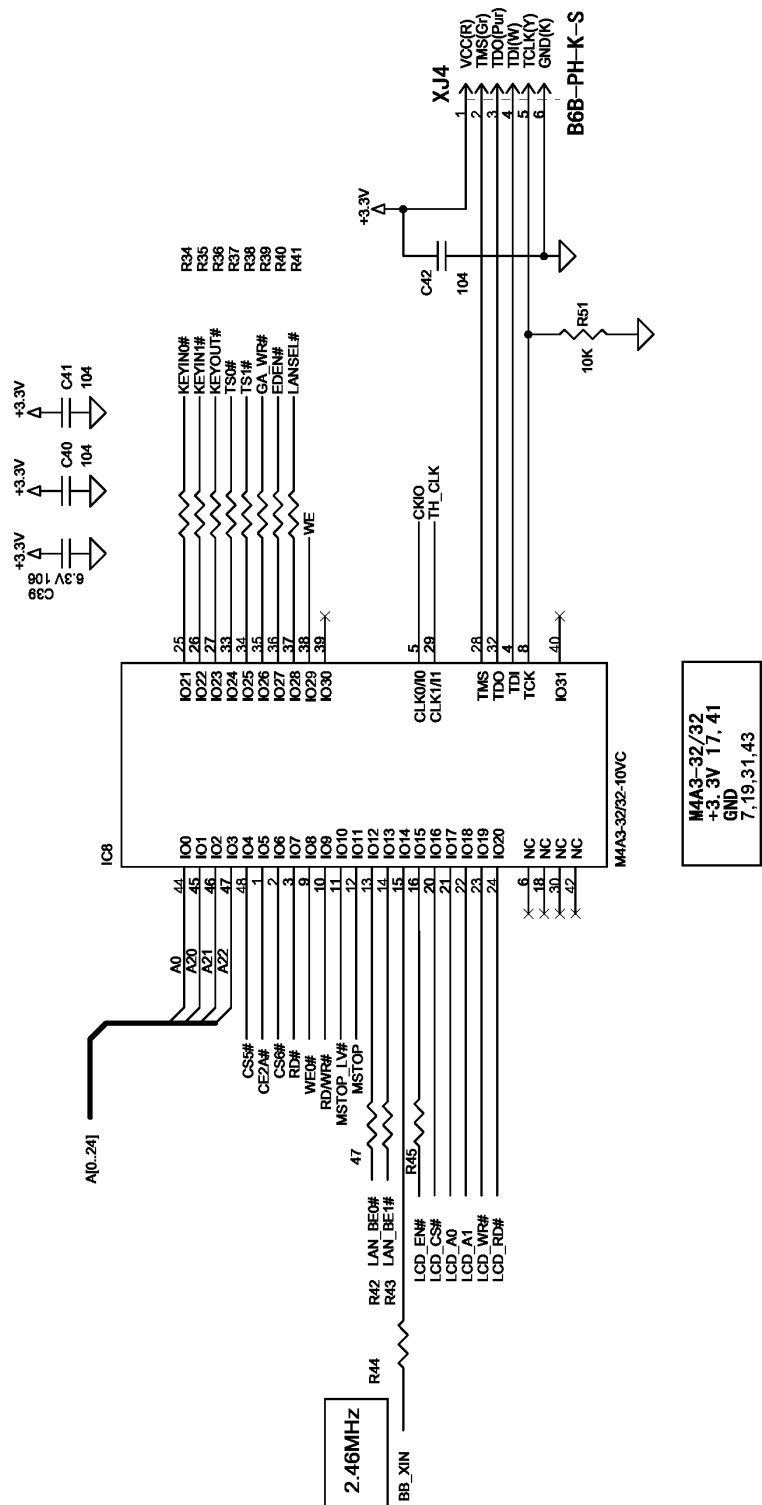


Connector No.	Contacts	Signal name	Other end
CN1	3	AC INPUT	Power switch
CN2	6	DC24V OUTPUT 1-3: +24V 4-6: GND	PS-990 XJ21

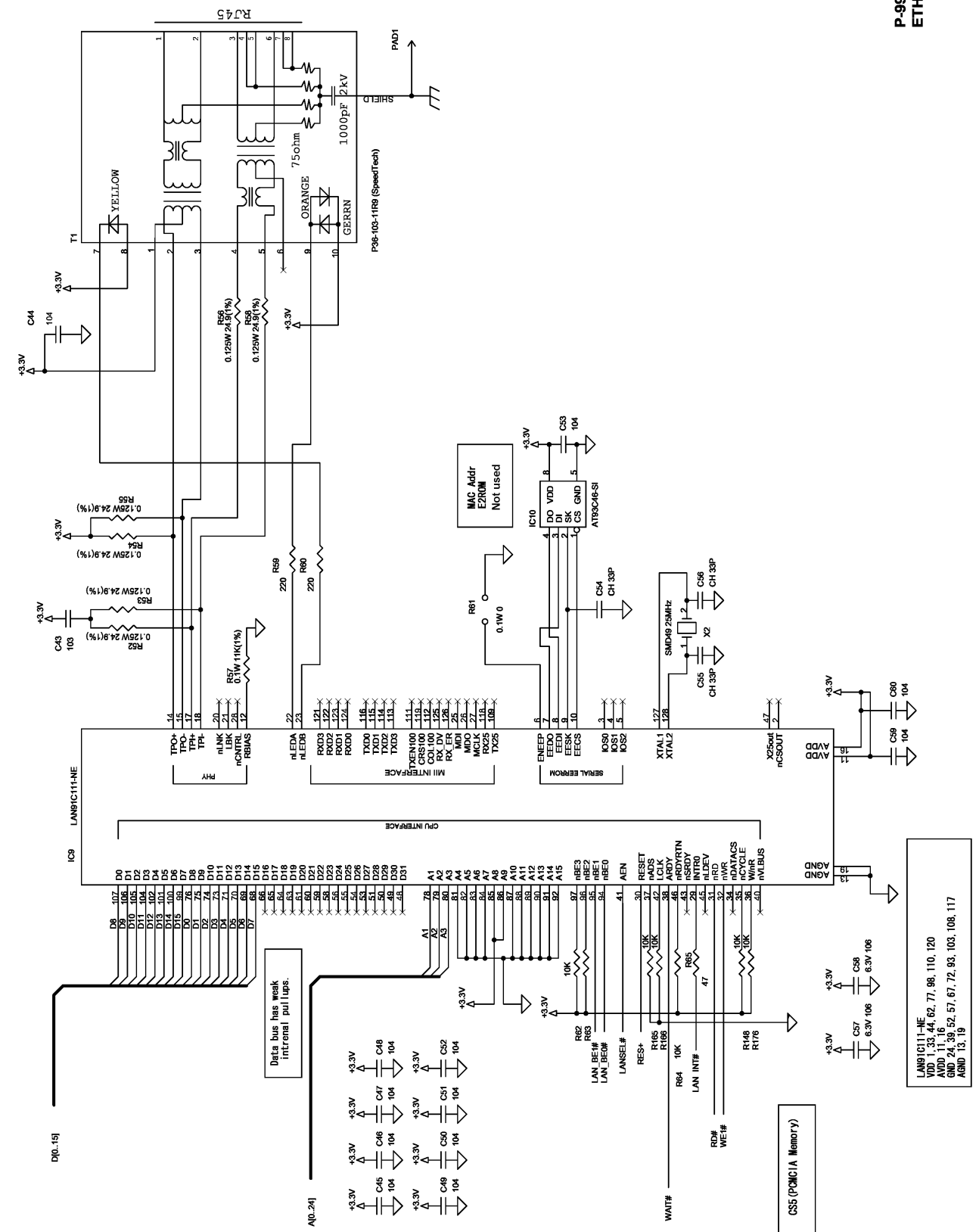


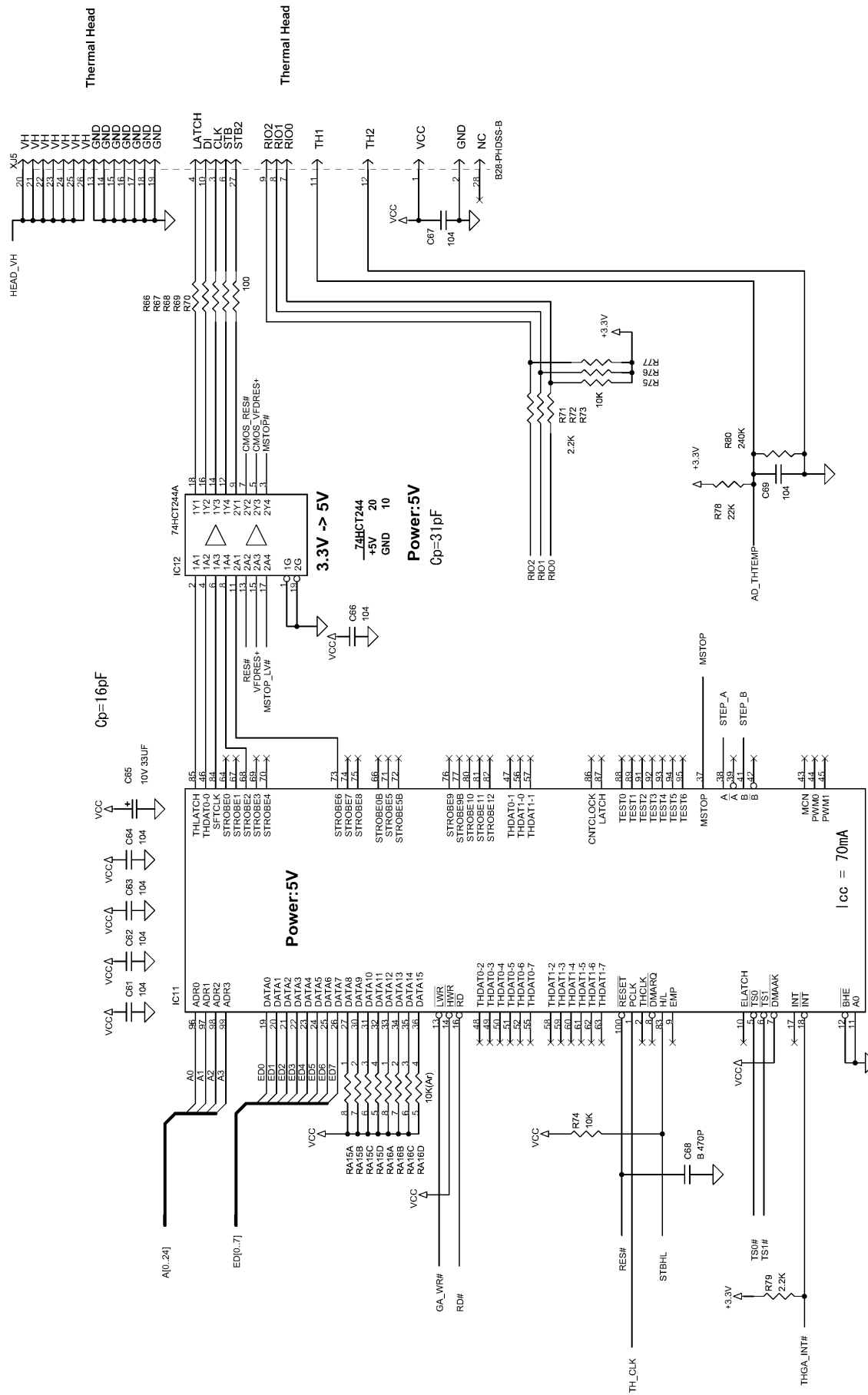




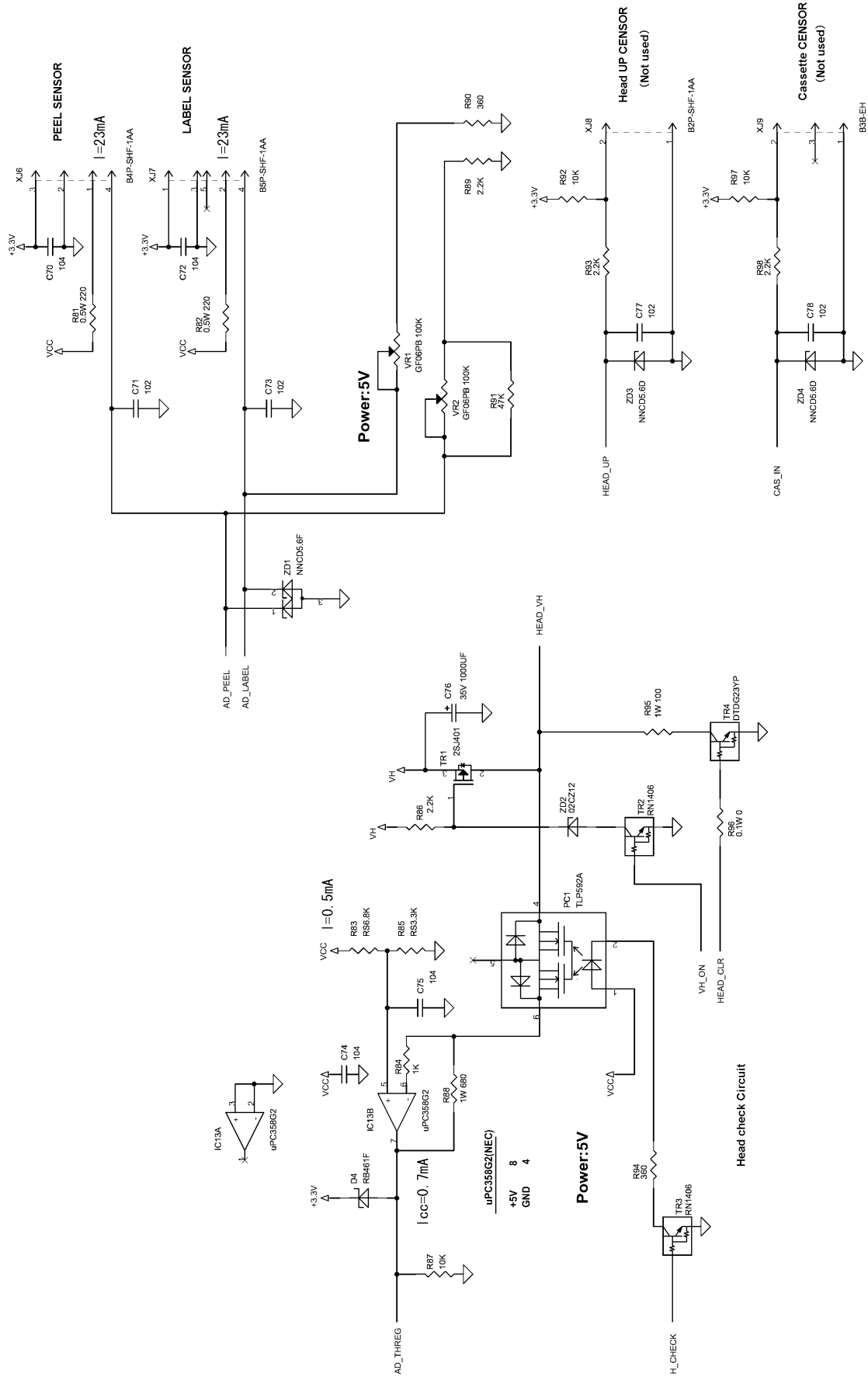


M4A3-32/32  
 +3.3V 17, 41  
 GND 7, 19, 31, 43

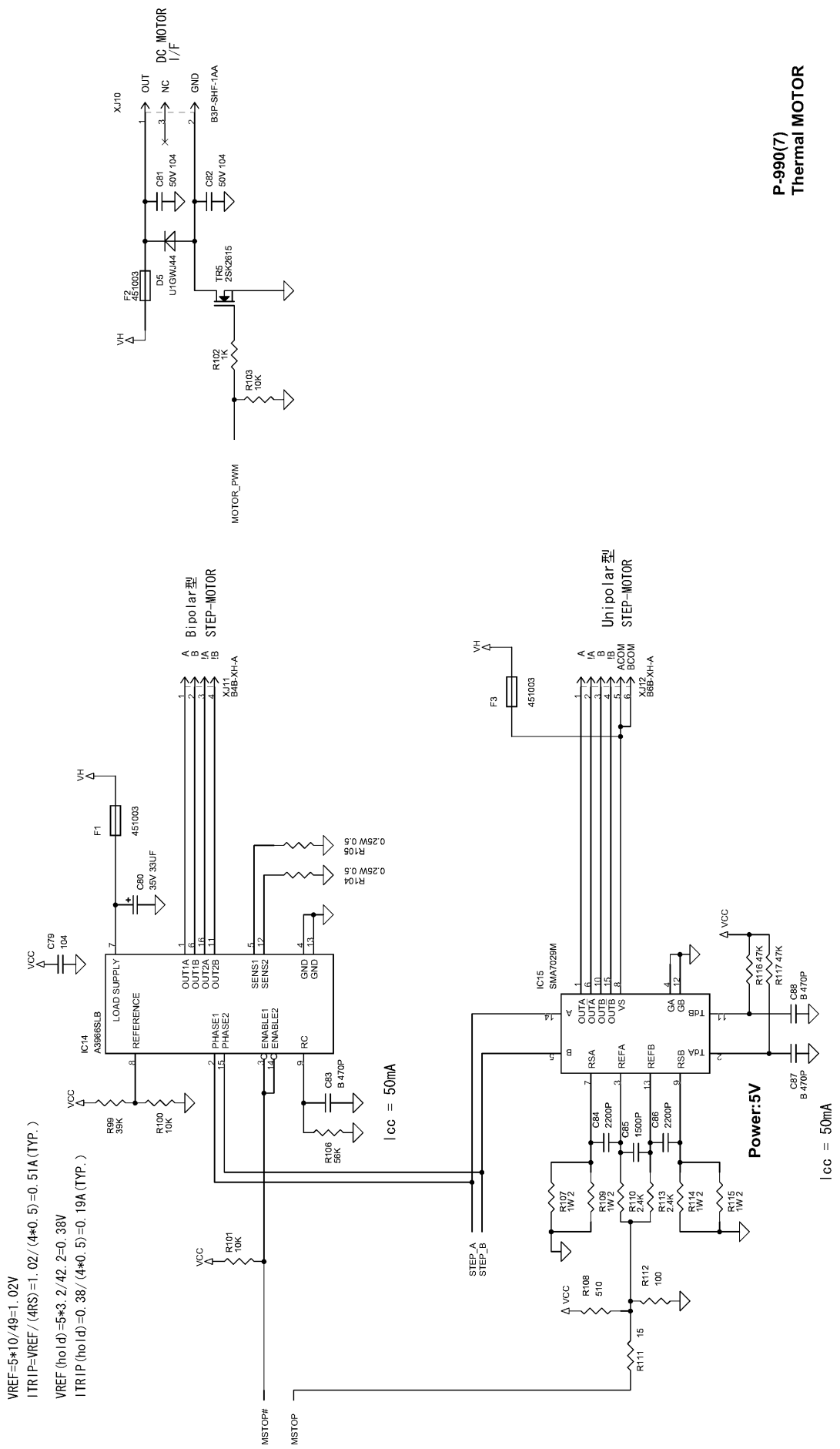


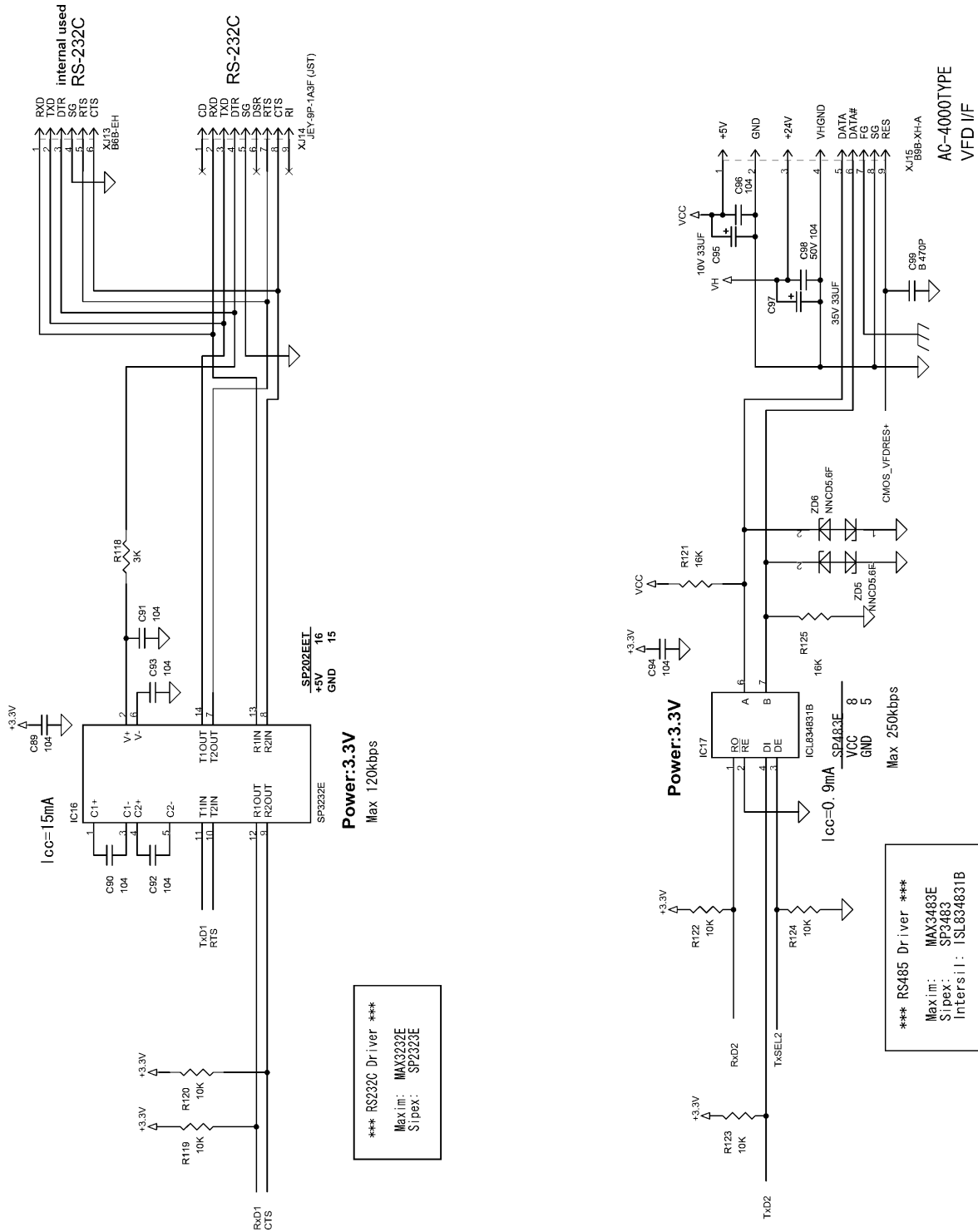


P-990(5)  
Thermal GA

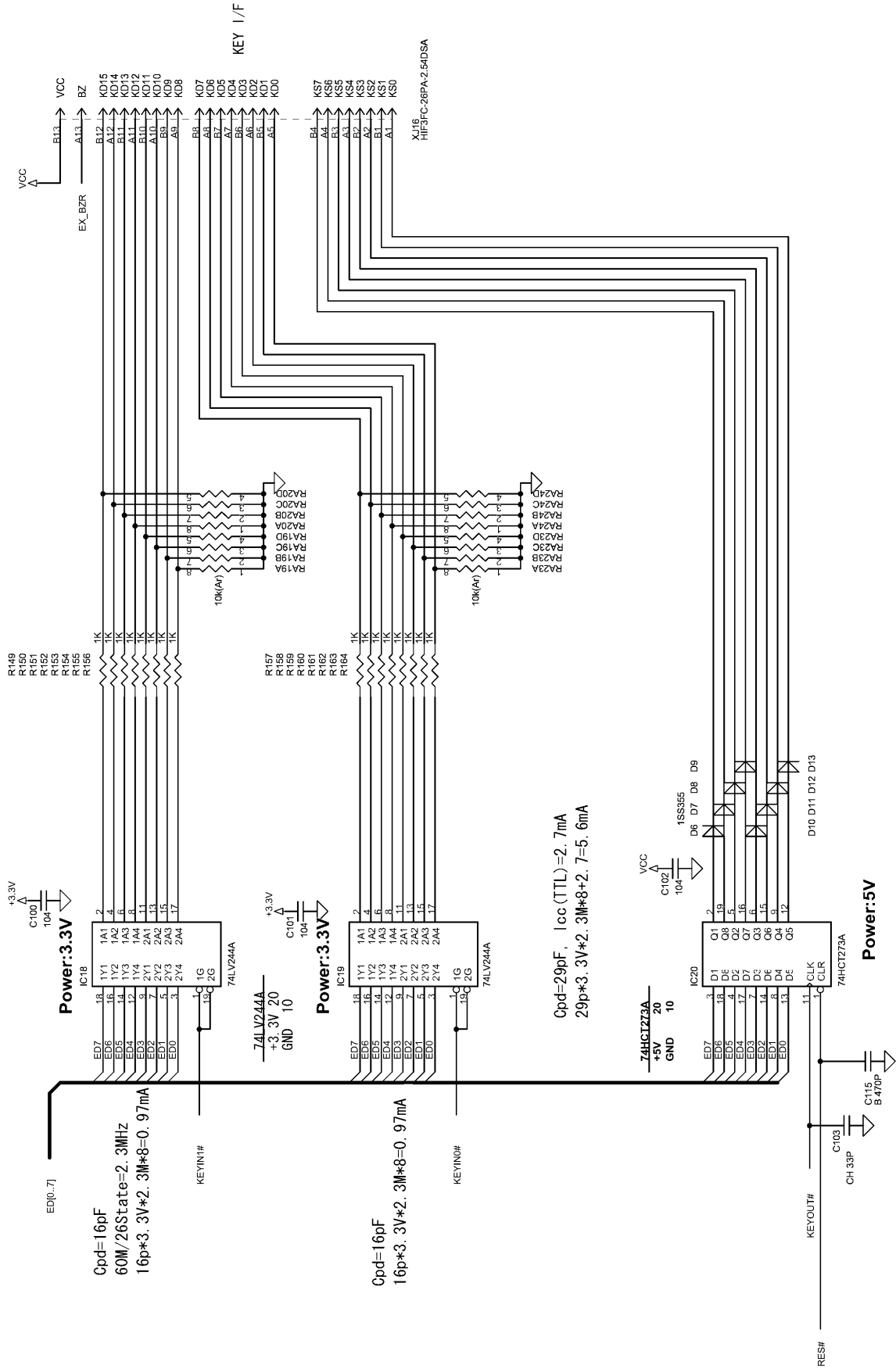


P-990(6)  
Thermal  
SENS

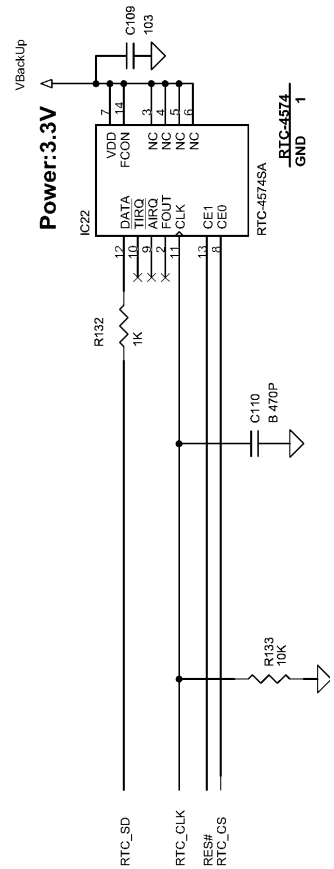
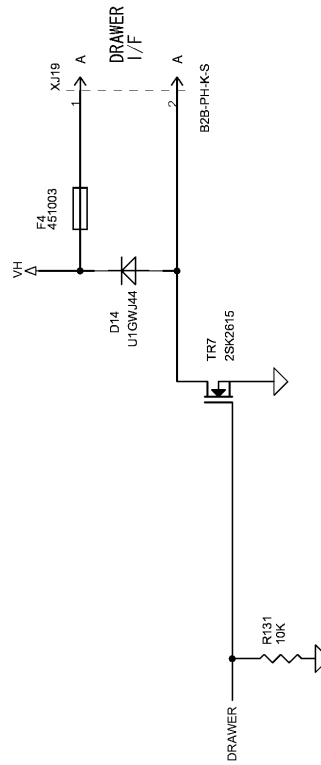
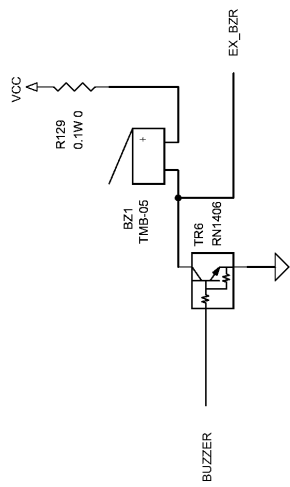
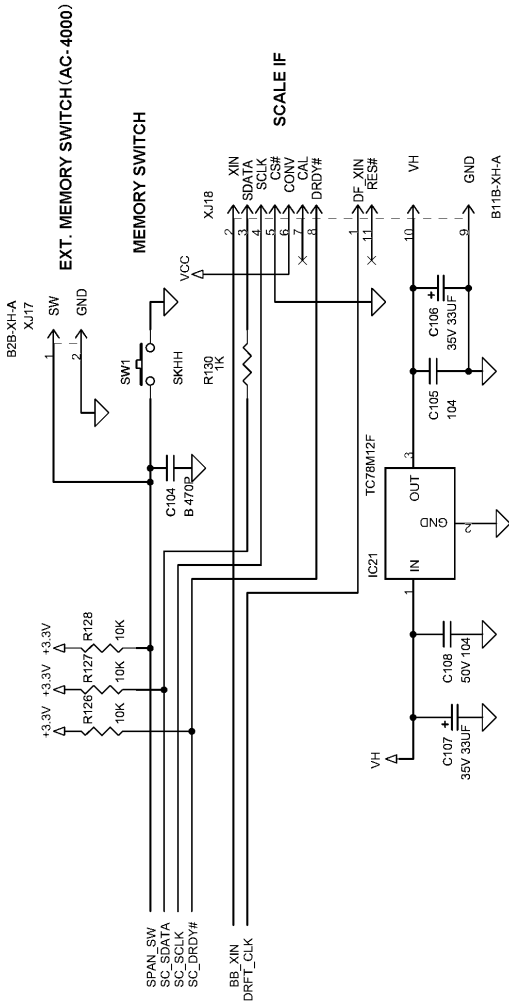




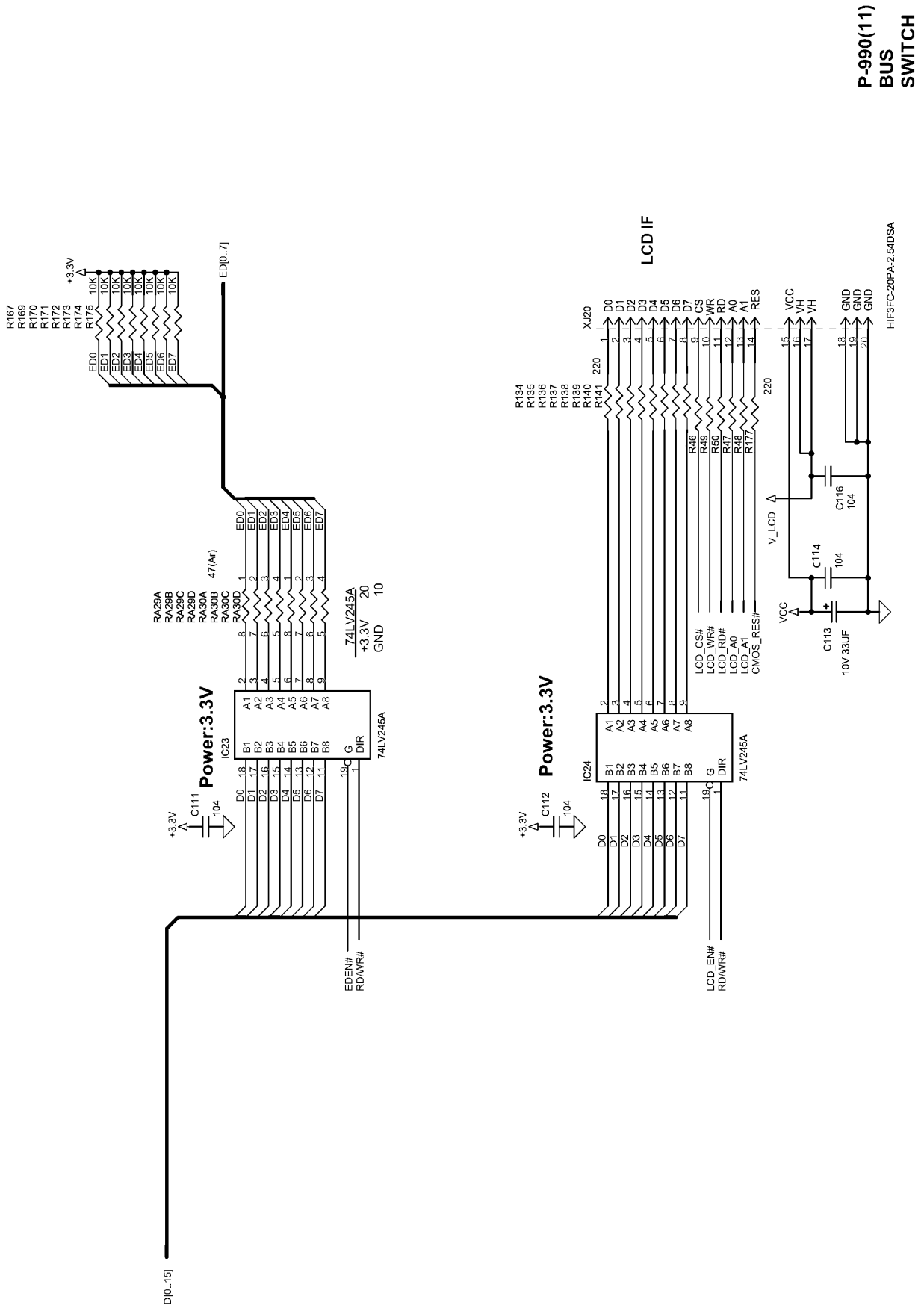


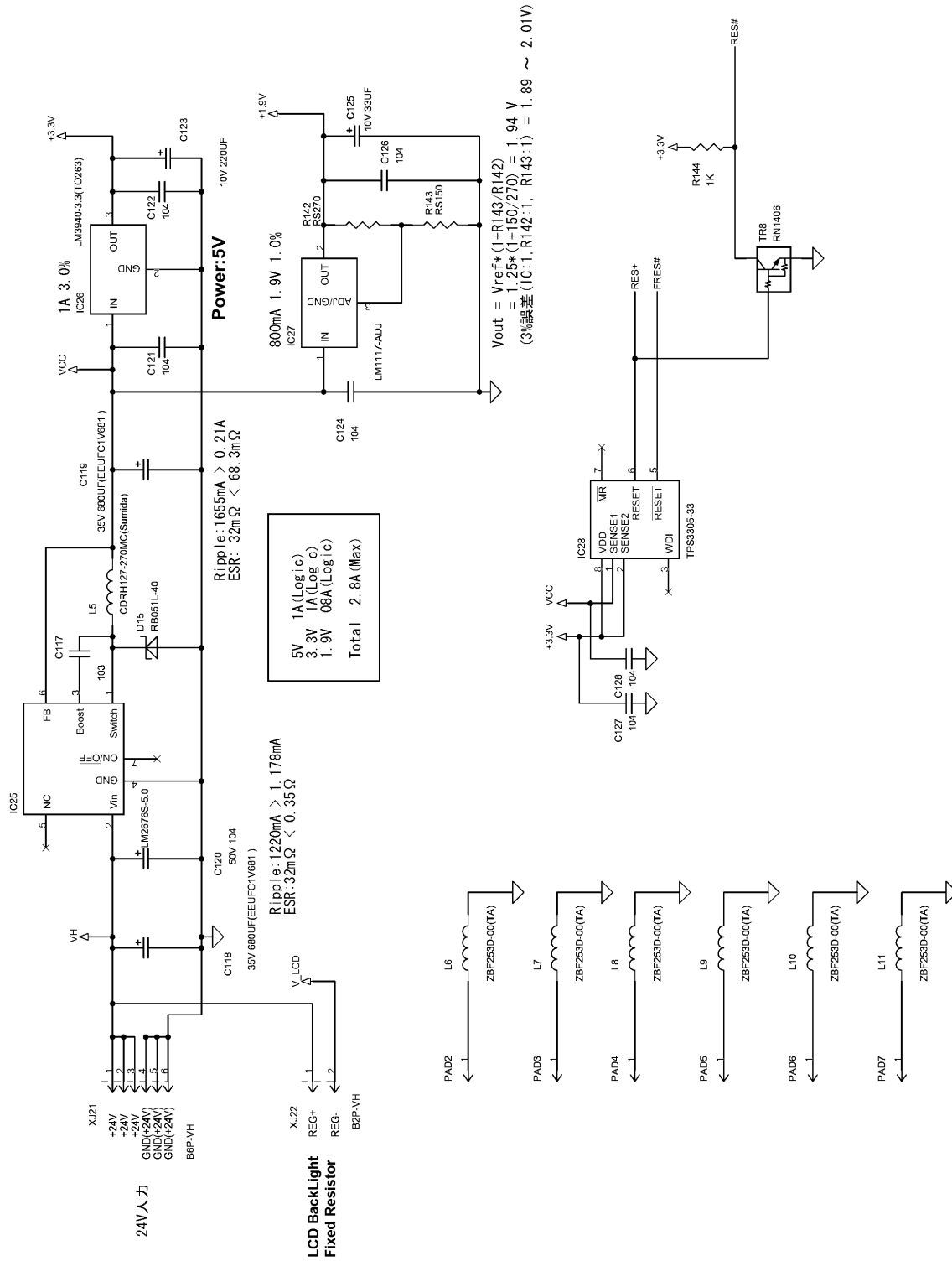


P-990(9)  
 Key IF



P-990(10)  
DRAWER, BZR, RTC





**memo**

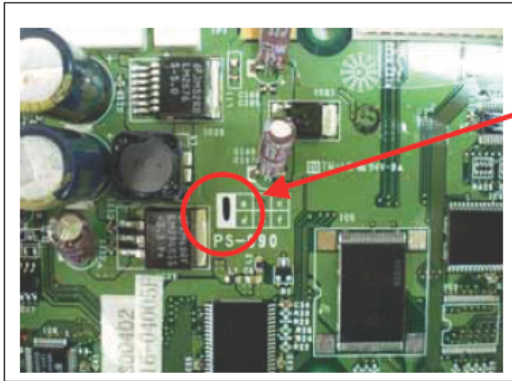
## 7. PS-990 MAIN BOARD REPLACEMENT

PS-990, it is need to install properly boot (Bios) software to work correctly. BC-4000 , There are two type key board (Pole/Hanging or Bench), and three language type, boot (BIOS) software is different depend on configuration. Following list describe parts number and software. Please prepare properly parts number when purchase PS-990.

### 7.1 PWB PS-990 LIST

	Part Number	RAM capacity	Boot software number	Language (Country)	Pole/ Hanging/ Bench
1	900-8369-06	2M	E4018	Standard (USA, S Africa , S America)	Pole/Hanging
2	9008369-01	2M	E4024	Standard (USA, S Africa , S America)	Bench
3	900-8371-04	2M	E4033	EU (Russia, Greece, Hungary)	Pole/Hanging
4	900-8372-08	2M	E4034	EU (Russia, Greece, Hungary)	Bench
5	900-8373-01	2M	E4026	2 Bytes (Hong Kong, Taiwan)	Pole/Hanging
6	900-8374-05	2M	E4037	2 Bytes (Hong Kong, Taiwan)	Bench
7	900-8375-09	4M	E4018	Standard (USA, S Africa , S America)	Pole/Hanging
8	900-8376-02	4M	E4024	Standard (USA, S Africa , S America)	Bench
9	900-8377-06	4M	E4033	EU (Russia, Greece, Hungary)	Pole/Hanging
10	900-8378-00	4M	E4034	EU (Russia, Greece, Hungary)	Bench
11	900-8379-03	4M	E4026	2 Bytes (Hong Kong, Taiwan)	Pole/Hanging
12	900-8380-08	4M	E4037	2 Bytes (Hong Kong, Taiwan)	Bench

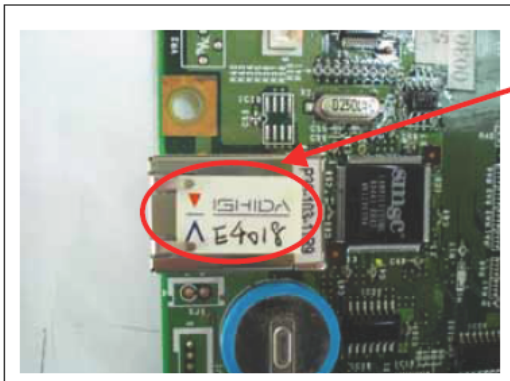
## 7.2 RAM CAPACITY AND BOOT SOFTWARE NUMBER



RAM capacity describe

- 1: 1M
- 2: 2M
- 3: 4M

This photo is "1", 1M



Boot software describe sticker

This photo is E4018, so it is use for standard and Pole version Please make sure software and specification is correct. If you update software, please revise software number also.

## 7.3 UPDATE OF THE PS-990 MAIN BOARD

NOTICE: this operation is applied for PS-990, PS-950 (a part)

### I: preparing:

1. Softer ware and program file:  
Scale Firmware Update, bios file (BOOT.BIN) and apply file (APLY.BIN)
2. Set up the computer's IP to 192.168.10.X, such as 192.168.10.11(warning: X do not be 1)

### II: Install the “Scale Firmware Update”

1. Open the file of the “Scale Firmware Update”, click the “SETUP.EXE”. The same as another software, the installation of the “Scale Firmware Update” is very easily.
2. After installing “Scale Firm-ware Update” successfully, we can fond a file named “FwUpdate.wiz”



### III: Use the “Scale Firmware Update”

Carry out the FwUpdate.wiz, install guiding will be appearing.





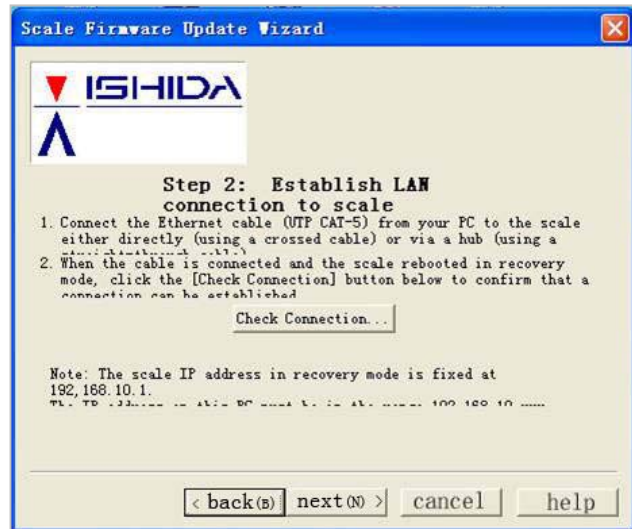
### 1. Step1

Hold down the "MEMORY SWITCH FOR A/D DATA" button and turn on the scale power, then the scale will get into "C02-04" after three sound.



### 2. Step2

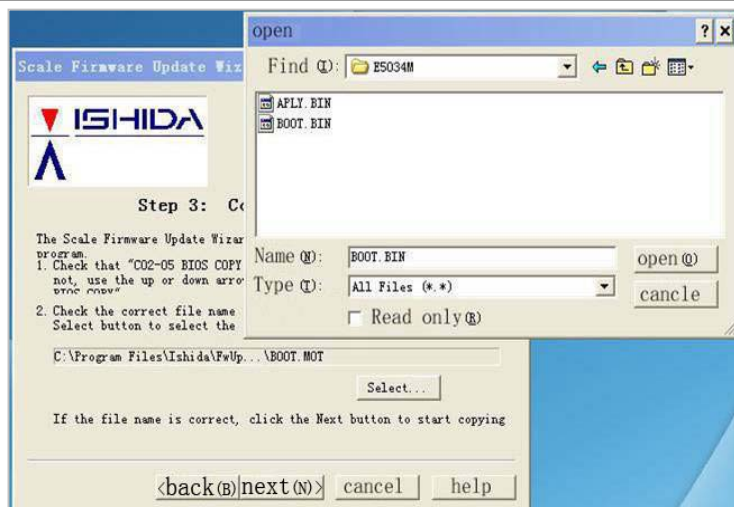
Build an effective connection between computer and scale, click the [Check Connection] button to confirm that the connection whether be established or not.



### 3. Step3

Copy scale BIOS program

Click the Select button to select the correct bios program file (BOOT.BIN)



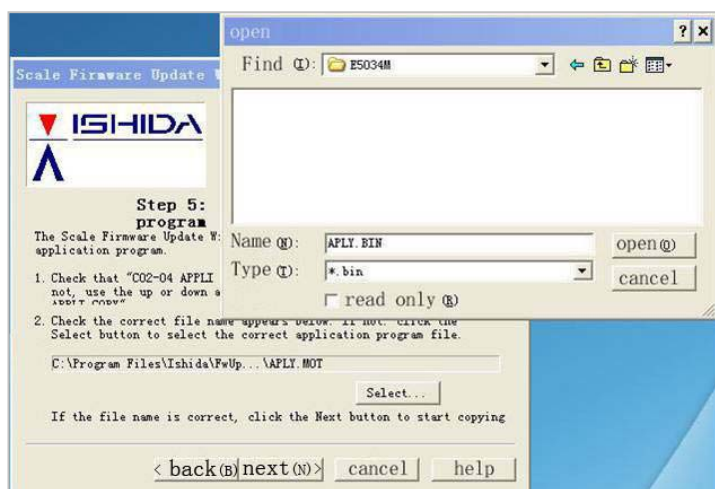
**4. Step4**

Copy bios program and confirm the scale  
 While copying completed OK, Press the ZERO button twice to update the received program.  
 When the scale display "PASS", the program was updated successfully.

**5. Step5**

Copy scale application program  
 Check the scale display "C02-04 APPLI COPY", Click the Select button to select the correct application program file (APLY.BIN)

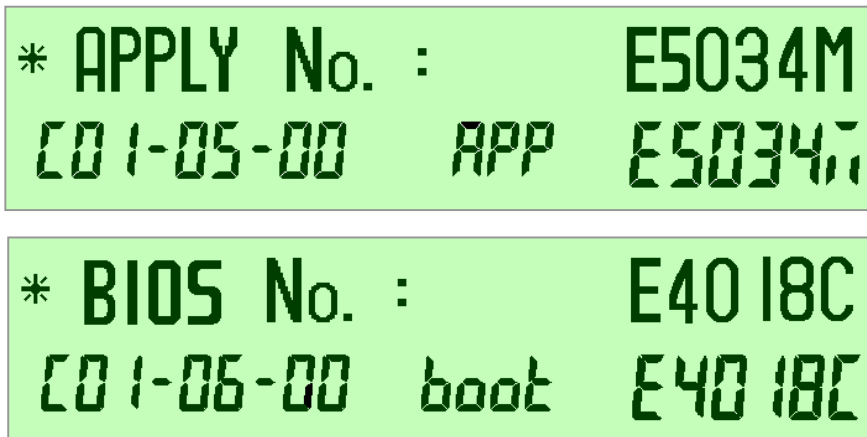
*NOTICE: file type must select ". bin"; We can insert ". bin" at the black of the "APPLY" use the computer key.*

**6. Step6**

Copy application program and confirm the scale  
 While copying completed OK, Press the ZERO button twice to update the received program.  
 When the scale display "PASS", the program was updated successfully.



7. Please check the new version of the program at the "C01-05" and the "C01-06"



L2 display type

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8. Clear the memory to the "C02-01", "C02-02" and "C02-03" for the application of new program.

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230 W. Coleman St. • Rice Lake, WI 54868 • USA  
U.S. 800-472-6703 • Canada/Mexico 800-321-6703 • International 715-234-9171 • Europe +31 (0)26 472 1319