

Uni-9 Series

Price Computing Scale with Printer and Color Touchscreen

Service Manual



9th Edition

IMPORTANT

- Read this manual thoroughly, and do not perform installation, operation, maintenance, or inspection unless you fully understand all of the contents.
- Keep this manual in a safe place where you can refer to it easily while installing, operating, and carrying out maintenance or inspections.

ISHIDA CO., LTD.

Issued in August 2016

Revised in September 2022

An ISO 9001 registered company
© Rice Lake Weighing Systems. All rights reserved.

Rice Lake Weighing Systems® is a registered trademark of
Rice Lake Weighing Systems.

All other brand or product names within this publication are trademarks or
registered trademarks of their respective companies.

All information contained within this publication is, to the best of our knowledge, complete and
accurate at the time of publication. Rice Lake Weighing Systems reserves the right to make
changes to the technology, features, specifications and design of the equipment without notice.

The most current version of this publication, software, firmware and all other product
updates can be found on our website:

www.ricelake.com

Revision History

Version	Date	Description
1	August, 2016	1 st edition
2	January, 2017	2 nd edition
3	March, 2019	3 rd edition Wiring Diagrams have been revised.
4	May, 2021	4 th edition Added Technical Reports SC216106 "Changing Power Supply Unit along with Changing CE Declaration".
5	August, 2021	5 th edition Added Technical Reports SC216120 "Replacement for P-1117 Board" at the beginning.
6	October, 2021	6 th edition - Added Technical Reports SC216131 "About the version change of P-1111 board" at the beginning. - Added notification about SC216131 at "3.1.8 Weighing unit" and "3.3.6 Load cell".
7	November, 2021	7 th edition Added "6.9.1 Procedure for adjusting scale(span)" in "Chapter 6 Adjust Mode".
8	April, 2022	8 th edition -Added the drawing of Hanging type to "1.1.8 Hanging type" in "Chapter 1 Overview". -Revised the block diagram with more precise one on "7.1 Bench type" in "Chapter 7 Block Diagram". -Added the block diagram of Hanging type to "7.8 Hanging type" in "Chapter 7 Block Diagram".
9	September, 2022	9 th edition Added "Precautions on Software Write after Board Replacement" to "6.11.1 MAIN" and "6.11.2 SUB APP." in "Chapter 6 Adjust Mode".

Introduction

● Purpose of this Manual

The purpose of this manual is as reference material for the delivery, installation, repair and maintenance of this machine.




● Target Readers



This manual has been written specifically for use by our service personnel.

The use of this manual by any person other than the above is strictly prohibited.

● Signal Words

The signal words shown in this manual are separated into two stages depending on the level of danger or the seriousness of potential injury. Fully understand the meanings of the signal words shown below and follow the directions as shown in this manual and on the stickers placed about the machine.

Signal Word	Meaning
 DANGER!	Indicates an imminently hazardous situation which, if not avoided, is likely to result in serious injury or may result in death.
 WARNING	Indicates a potentially hazardous situation which, if not avoided, will result in minor or moderate injury, or may result in serious injury or death.
 CAUTION	Indicates a potentially hazardous situation, which, if not avoided, may result in minor or moderate injury or in property damage.

Note:	Indicates information that needs to be noted or emphasized.
 INFORMATION	Indicates reference information when performing an operation.
 REFERENCE	Indicates the reference page related to performance of an operation.

It is strictly prohibited to copy or reproduce part or all of this manual without prior approval by the copyright holder.

Information

About the version change of P-1111 board

Document No:	SC216131	Category	UNI-9, IP/WM-AI, IZ-7000, MS-AcroII
Issue date:	6 October 2021	Approved:	T. Ando
Checked:	A. Hattori	By:	N. Izumi

Technical Reports are issued for our agencies/distributors. Please handle carefully not to pass them directly to customers.

[Contents]

Due to the shortage of parts supply, the CPU used in each weigher's scale board (P-1111) will be replaced with an alternative CPU.

[Details]

Refer to the table below for the compatibility with the current Item Code.

Although the Item Code will be changed, compatible boards can be replaced in the same way as before.

Notes: The board with a different branch number (A-5, 6, 7) cannot be used.

Be sure to use a compatible board.

We will inform you as soon as the change is complete for devices that have not yet been changed.

Before replacement			After replacement			Product
Item Code	Board Name	Branch No.	Item Code	Board Name	Branch No.	Model
000-130-7000-65	P-1111	A	100-047-9979-00	P-1111	A-5	IZ-7000(S,IT,IW) UNI-9(weigh unit 30kg), IP-AI (overseas: 30kg), IZ-7000(M), MS-Acro2
000-139-2566-18	P-1111	A-1	100-047-9980-00	P-1111	A-6	UNI-9 (weigh unit other than 30Kg)
100-003-3404-04	P-1111	A-2	100-047-9981-00	P-1111	A-7	WM-AI, IP-AI

The change has been made sequentially from the machines manufactured around the end of August. For maintenance parts, the changed board will be shipped as soon as current one run out of stock.

Information

Replacement for P-1117 Board

Document No:	SC216120	Category	UNI-9
Issue date:	17 August 2021	Approved:	T. Ando
Checked:	H. Shibata	By:	N. Izumi

Technical Reports are issued for our agencies/distributors. Please handle carefully not to pass them directly to customers.

[Summary]

Due to a shortage of parts, a sheet metal bracket cover will be attached instead of P-1117 board for UNI-9.

Maintenance parts will be continuously available as usual.

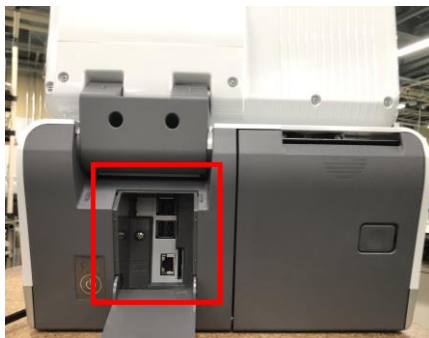
* This document is issued associated with a notification from Sales.

[Details]

Target machines: Serial number: 100548435 or later

P-1117 board (Connector board for drawer interlock) will NOT be attached to the target machines.

Location



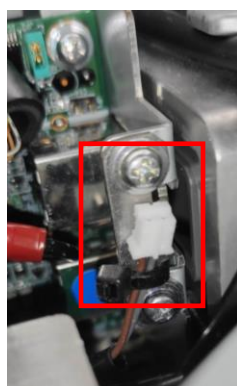
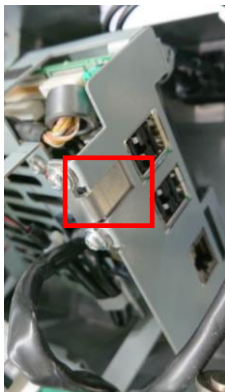
Before



After



The parts inside of the machine are fixed with harnesses as shown below.



A cable tie is passed through the gap in the sheet metal so that the connector would face upward on the screw head side.

Table of Contents

Revision History	2
Introduction.....	3
Chapter 1 Overview.....	1-1
1.1 External Dimensions.....	1-1
1.1.1 Bench type.....	1-1
1.1.2 Large platter type.....	1-2
1.1.3 Elevated type.....	1-3
1.1.4 Pole type.....	1-4
1.1.5 Short pole type	1-5
1.1.6 Self-service type	1-6
1.1.7 XL type	1-7
1.1.8 Hanging type	1-8
1.2 Specifications.....	1-9
1.2.1 Weighing Unit Specifications	1-9
1.2.2 Operation unit Specifications	1-9
1.2.3 Customer-side display Specifications	1-9
1.2.4 Printer unit Specifications	1-9
1.2.5 Cassette unit Specifications.....	1-9
1.2.6 Others.....	1-10
1.2.7 Options	1-10
Chapter 2 Mechanical hardware.....	2-1
2.1 Exploded view	2-1
2.1.1 Bench type.....	2-1
2.1.2 XL type	2-2
2.1.3 Hanging type	2-3
2.1.4 Pole unit.....	2-4
2.1.5 Short pole unit	2-5
2.1.6 Printer frame unit (Each type).....	2-6
2.1.7 Cassette unit (Each type)	2-7
Chapter 3 Machine Disassembly.....	3-1
3.1 Bench type	3-1
3.1.1 Plate unit.....	3-1
3.1.2 Main unit cover	3-2
3.1.3 Operation unit	3-4
3.1.4 USB port cover	3-5
3.1.5 Customer-side display	3-6
3.1.6 Main unit (Power board/ Main board).....	3-8
3.1.7 Operation unit	3-13
3.1.8 Weighing unit.....	3-16
3.2 Pole type	3-18
3.2.1 Customer-side display	3-18
3.2.2 Operation unit	3-21
3.3 Hanging type.....	3-24

3.3.1	Preparation	3-24
3.3.2	Front cover	3-25
3.3.3	Customer-side display	3-26
3.3.4	Rear cover	3-27
3.3.5	Top plate.....	3-29
3.3.6	Load cell	3-30
3.3.7	Main board.....	3-31
3.3.8	Power board	3-32
3.4	Thermal head	3-33
3.4.1	Thermal head	3-33
3.4.2	Thermal head cable	3-35
Chapter 4	Optional Unit	4-1
4.1	Big tray	4-1
4.2	Remote scale	4-3
4.3	Platter guide.....	4-5
4.4	Wi-Fi device	4-6
4.5	USB-I2NET Converter	4-9
4.6	USB Converter stand	4-10
4.7	Port guard	4-11
4.8	Serial port cable	4-12
4.9	Standard Cassette.....	4-12
Chapter 5	Setup Mode.....	5-1
5.1	Set up menu	5-1
5.1.1	Startup	5-1
5.2	MACHINE NO. SETTING.....	5-3
5.2.1	BASIC.....	5-3
5.2.2	IP ADDRESS.....	5-6
5.2.3	PC COM	5-7
5.2.4	WiFi	5-9
5.2.5	GLOBAL SV.	5-10
5.3	SALES MODE.....	5-11
5.4	PASSWORD	5-12
5.4.1	OPERATE	5-12
5.5	KEY LOCK.....	5-13
5.5.1	DISPLAY KEY	5-13
5.5.2	FUNCTION KEY	5-14
5.6	DATA STORAGE.....	5-15
5.6.1	TOTAL ADD.	5-15
5.6.2	TOTAL PROC.....	5-16
5.6.3	TRANSACTION.....	5-17
5.6.4	STORAGE.....	5-18
5.7	PRESET REPORT	5-19
5.7.1	DAILY	5-19
5.8	PLU OVERWRITE	5-20
5.9	PLU INITIAL DATA.....	5-21

5.9.1	SALE1	5-21
5.10	PLU UPDATE	5-22
5.11	RECEIPT SETTING	5-23
5.11.1	TITLE	5-23
5.11.2	BARCODE	5-24
5.11.3	RECEIPT No.	5-25
5.12	CASSETTE	5-26
5.13	LABEL SPEC.....	5-28
5.14	LABEL FORMAT	5-29
5.14.1	DETAIL (BASIC).....	5-29
5.14.2	DETAIL (UNIT)	5-31
5.14.3	DETAIL (PREVIEW)	5-32
5.15	BARCODE	5-33
5.15.1	POS FLAG.....	5-33
5.15.2	POS CODE.....	5-34
5.15.3	ITEM CODE.....	5-35
5.16	CUSTOM BARCODE.....	5-36
5.16.1	BASIC.....	5-36
5.16.2	PREVIEW	5-37
5.17	MENU TITLE.....	5-38
5.17.1	OPERATE	5-38
5.18	OPERATION SETTING	5-39
5.18.1	CALL1.....	5-39
5.18.2	PRODUCTION.....	5-40
5.18.3	TIMER	5-41
5.18.4	CR1	5-42
5.18.5	CR2	5-43
5.18.6	INPUT	5-44
5.18.7	SELF.....	5-45
5.18.8	LOG.....	5-46
5.18.9	TALON.....	5-47
5.18.10	AUTO PLU.....	5-48
5.18.11	SCANNER.....	5-49
5.19	ERROR PROCESS.....	5-50
5.19.1	ISSUE.....	5-50
5.19.2	CALL.....	5-51
5.19.3	COMMON.....	5-52
5.20	ERROR LOG.....	5-53
5.20.1	DISPLAY	5-53
5.21	TRACEABILITY	5-54
5.22	DUAL CURRENCY	5-55
5.23	PRICE ROUNDING.....	5-56
5.24	FREQUENT SHOPPER.....	5-57
5.25	DATA DISTRIBUTION.....	5-58
5.25.1	MACHINE	5-58
5.25.2	DATA.....	5-59
5.26	TAX	5-60
5.27	STANDBY MODE	5-61

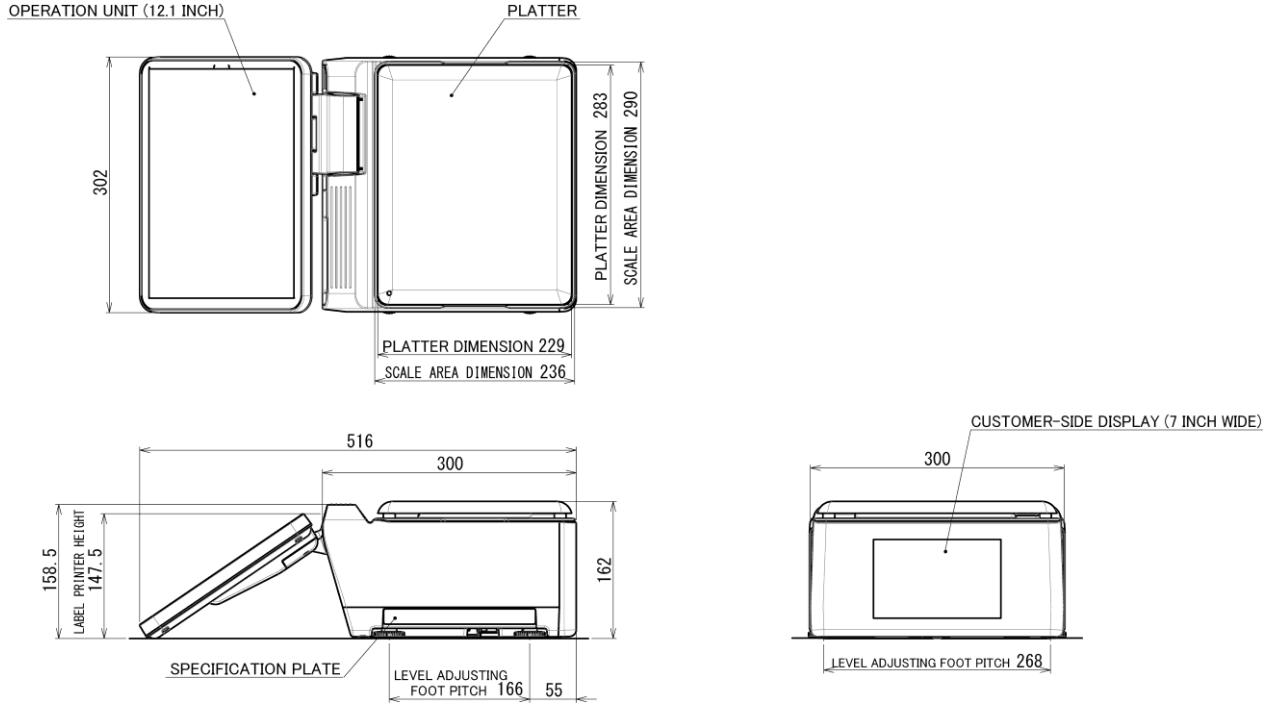
5.28	COUNTRY	5-62
5.29	FILE SAVE /LOAD	5-63
5.29.1	USB>SCALE	5-63
5.29.2	SCALE>USB	5-64
5.29.3	USB DATA DEL.....	5-65
5.29.4	SCALE INIT.....	5-66
Chapter 6	Adjust Mode	6-1
6.1	Adjust mode menu	6-1
6.1.1	Startup.....	6-1
6.2	DATE TIME	6-3
6.3	TOUCH SCREEN	6-4
6.4	DISPLAY CHECK	6-5
6.5	SOUND	6-6
6.6	FIRMWARE DETAILS	6-7
6.7	MEMORY CLEAR	6-8
6.8	PRINTER	6-10
6.8.1	HEAD.....	6-10
6.8.2	PEEL SENSOR	6-12
6.8.3	LABEL TYPE	6-13
6.8.4	LABEL FEED.....	6-14
6.9	CALIBRATION	6-16
6.9.1	Procedure for adjusting scale(span)	6-17
6.10	MACHINE TYPE	6-19
6.10.1	DETAIL.....	6-20
6.11	DOWNLOAD	6-21
6.11.1	MAIN.....	6-21
6.11.2	SUB APP.....	6-22
6.11.3	SUB BOOT.....	6-23
6.12	OPTION CHECK	6-24
6.12.1	SCANNER.....	6-24
6.12.2	USB.....	6-25
6.12.3	DEVICE	6-26
6.13	GRAVITY	6-27
Chapter 7	Block Diagram	7-1
7.1	BENCH TYPE	7-1
7.2	LARGE PLATTER TYPE	7-2
7.3	ELEVATED TYPE	7-3
7.4	POLE TYPE	7-4
7.5	SHORT POLE TYPE	7-5
7.6	SELF-SERVICE TYPE	7-6
7.7	XL TYPE	7-7
7.8	HANGING TYPE	7-8
Chapter 8	Appendix	8-1

8.1	Software Setup	8-1
8.1.1	Preparation	8-1
8.1.2	Backup the master data.....	8-1
8.1.3	Memorize settings.....	8-4
8.1.4	Replacement CF card.....	8-5
8.1.5	Setup from USB memory stick.....	8-6
8.1.6	Update software.....	8-12
8.1.7	Install the backup data.....	8-14
8.1.8	Check out settings	8-16

Chapter 1 Overview

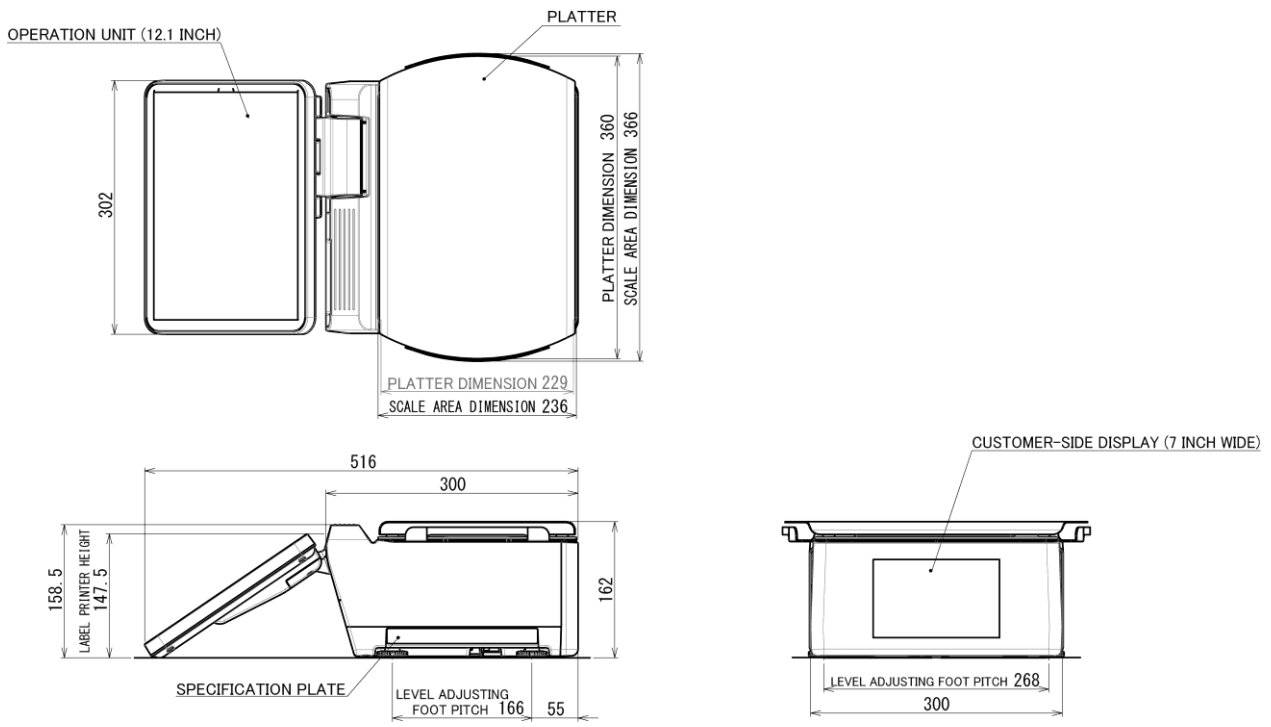
1.1 External Dimensions

1.1.1 Bench type



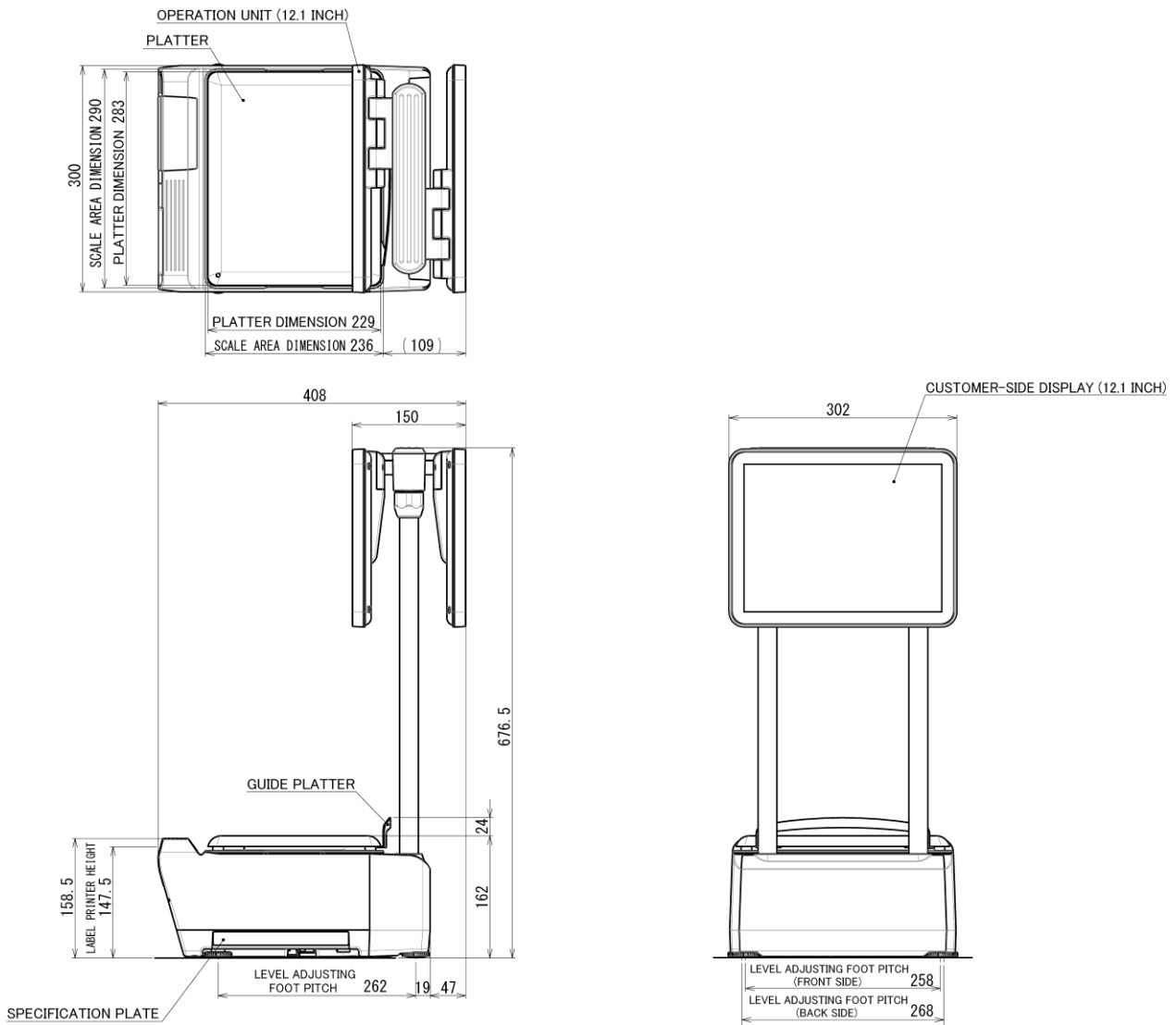
(unit: mm)

1.1.2 Large platter type



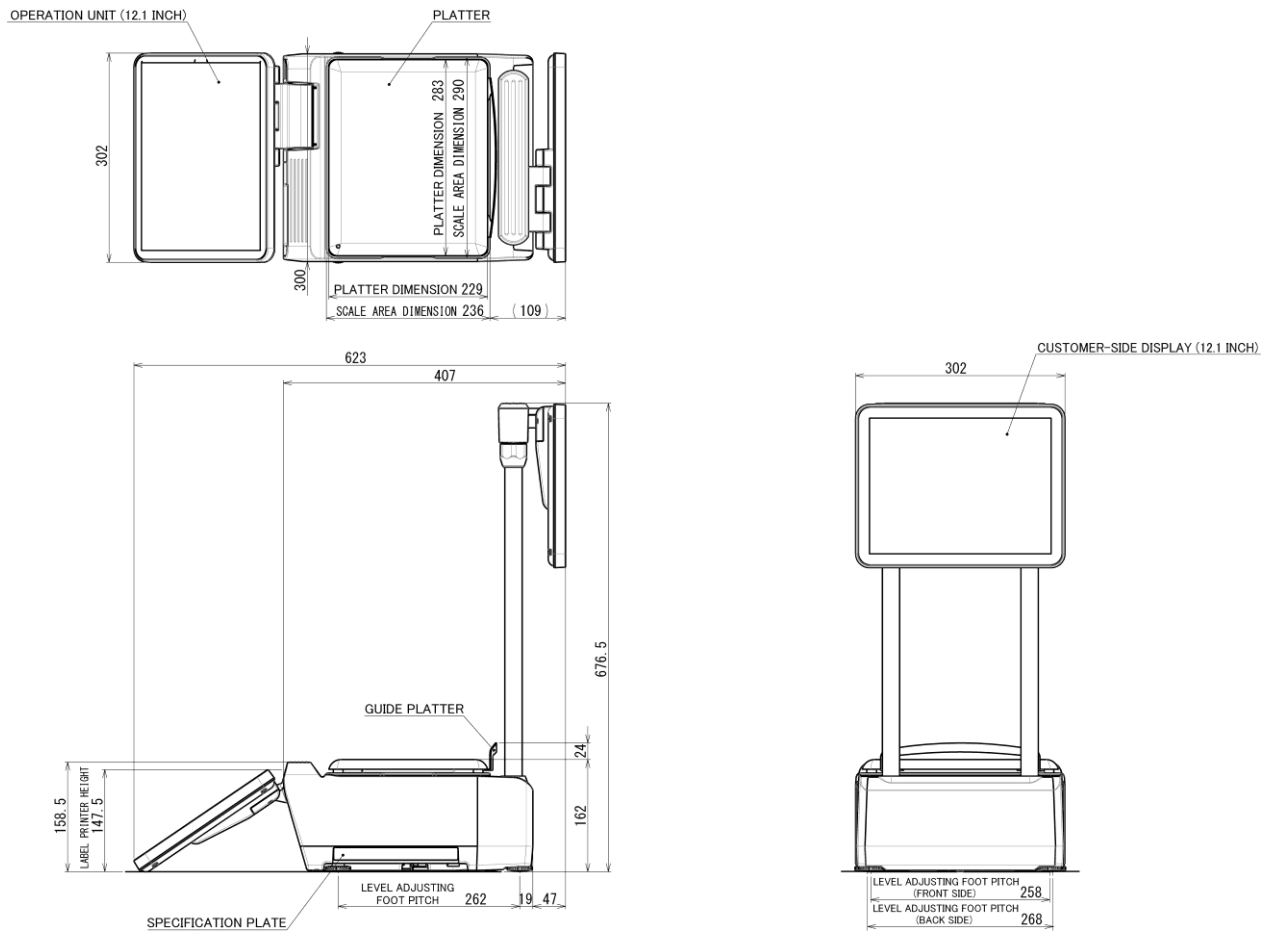
(unit: mm)

1.1.3 Elevated type



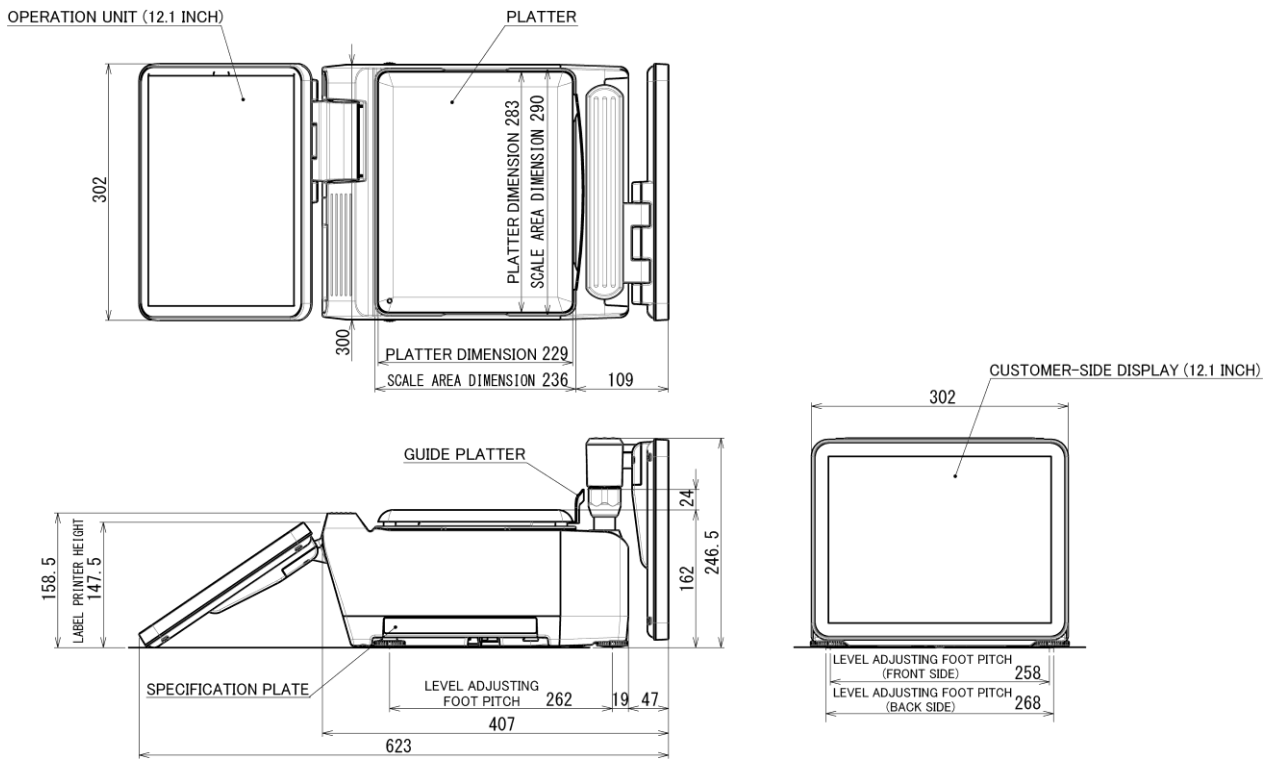
(unit: mm)

1.1.4 Pole type



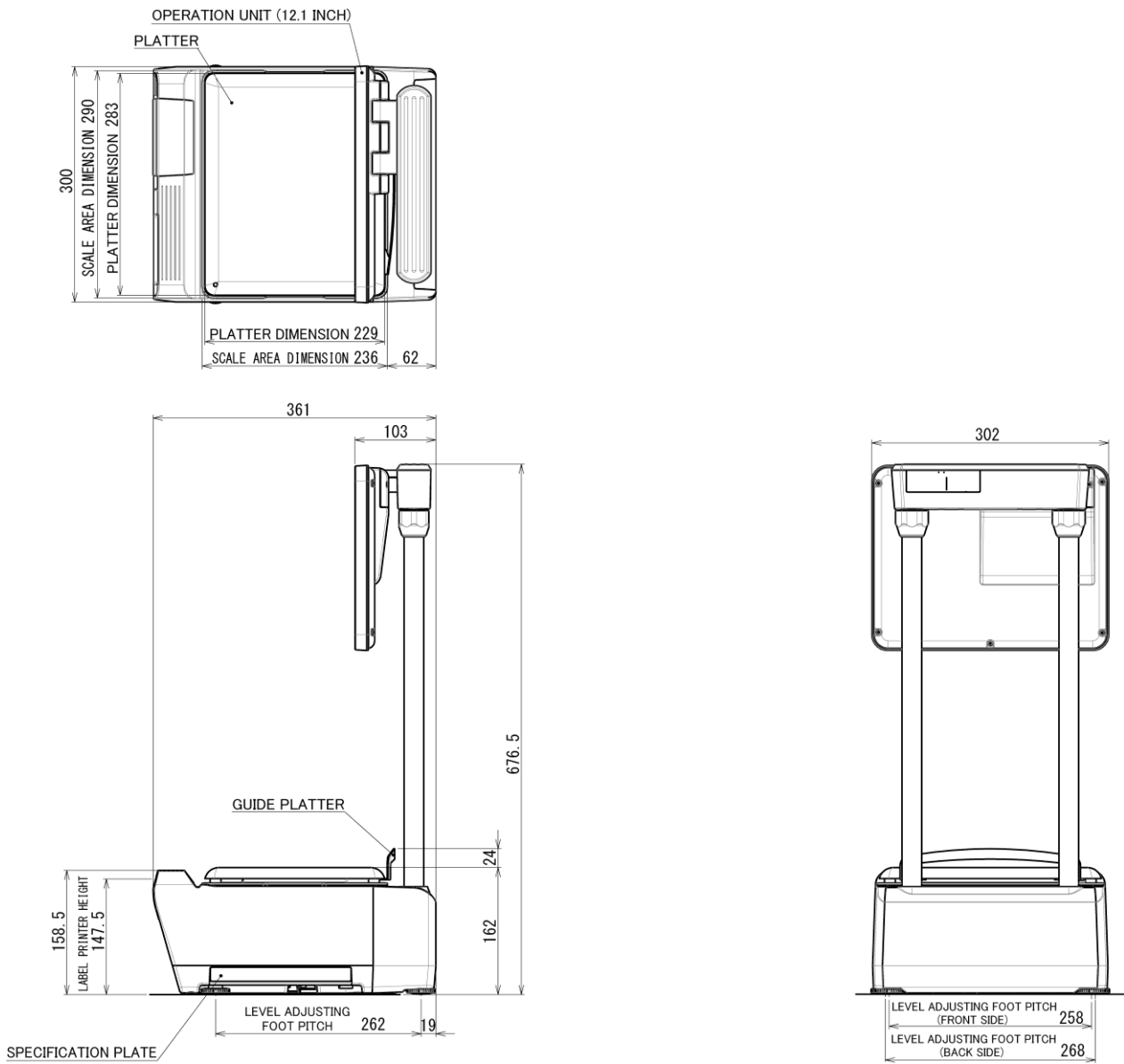
(unit: mm)

1.1.5 Short pole type



(unit: mm)

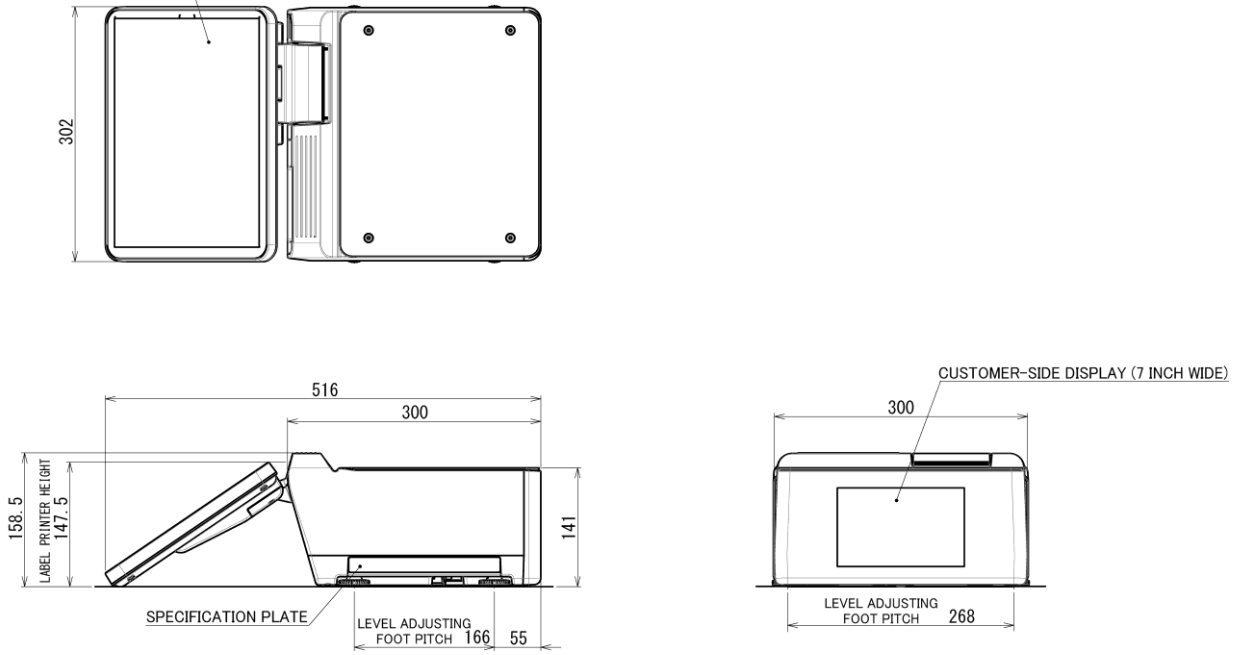
1.1.6 Self-service type



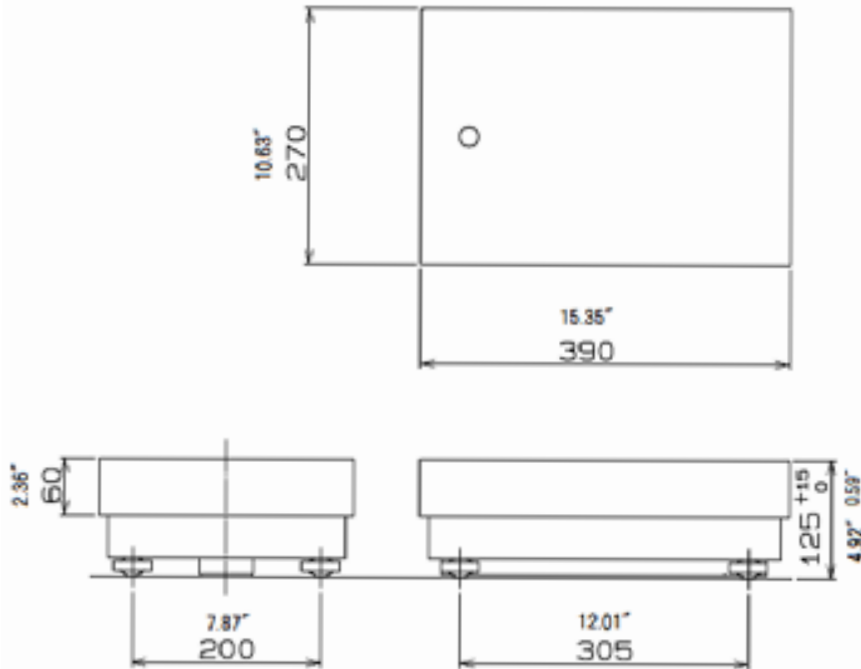
(unit: mm)

1.1.7 XL type

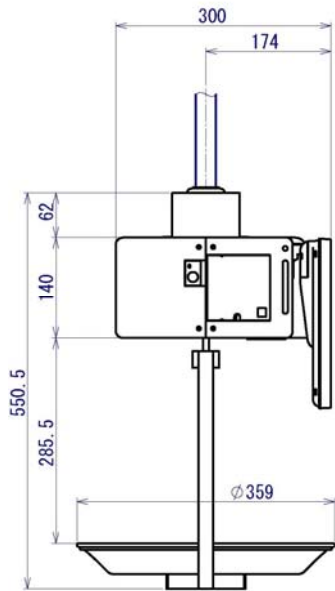
OPERATION UNIT (12.1 INCH)



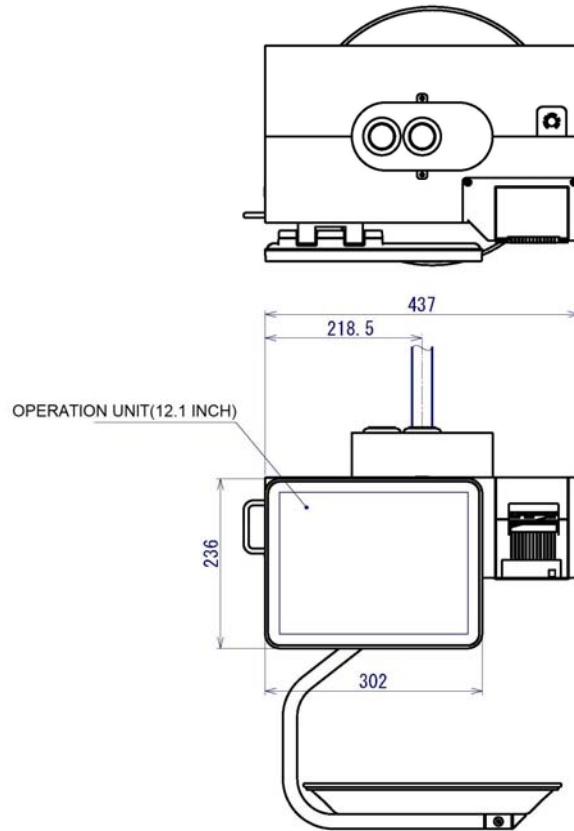
(unit: mm)



1.1.8 Hanging type



(unit: mm)



1.2 Specifications

1.2.1 Weighing Unit Specifications

Items	Descriptions
Weighting accuracy	1/3000
Weighting capacity	15kg: 0 to 6/0.002 kg, 6 to 15/0.005 kg
Scale interval	30lb: 0 to 15/0.005 lb., 15 to 30/0.01 lb.

1.2.2 Operation unit Specifications

Items	Descriptions
Display	12.1 inch TFT color SVGA LCD with LED back light
Keyboard	Full keyboard 18 has tact keys

1.2.3 Customer-side display Specifications

Items	Descriptions
Display	Standard type: 7.0-inch wide TFT color WVGA LCD with LED back light Short pole type: 12.1 inch TFT color SVGA LCD with LED back light

1.2.4 Printer unit Specifications

Items	Descriptions
Printing method	Direct thermal method
Thermal head	3 inches (960 dots) and 12 dots/mm
Printing speed	120 mm/second
Printing effective size	80 mm
Label size	Label width: 30 mm to 80 mm Label length: 20 mm to 100 mm
Character Decoration	Enhanced print character, Monochrome inversion, Underline and Enclosed character

1.2.5 Cassette unit Specifications

Items	Descriptions
Label replacement method	Replacement a cassette accessing in front of machine.
Cassette unit	Seven kinds of unit
Diameter of label roll	Internal diameter of paper tube: 40 mm \pm 1 mm Maximum external diameter: 100 mm

1.2.6 Others

Items	Descriptions
Power supply	Single phase 100 to 240 V AC, Frequency: 50/ 60 Hz
Power consumption	Standby: 60 W Printing: 180 W
Use conditions	Temperature: 0 to 40°C Humidity: 20 to 85%, Non condensing Override available temperature and humidity ranges of using label.
Machine weight	12kg (standard type), 14kg (short pole type)
Dimensions	Width: 300 mm (standard type), 302 mm (short pole type) Depth: 409 mm (standard type), 516 mm (short pole type) Height: 162 mm (standard type), 242 mm (short pole type)
Insect repelling	Contact type insect pest repellent
Input/ Output	LAN: 1 channel USB: 4 channels SD card: 1 channel Drawer: 1 channel

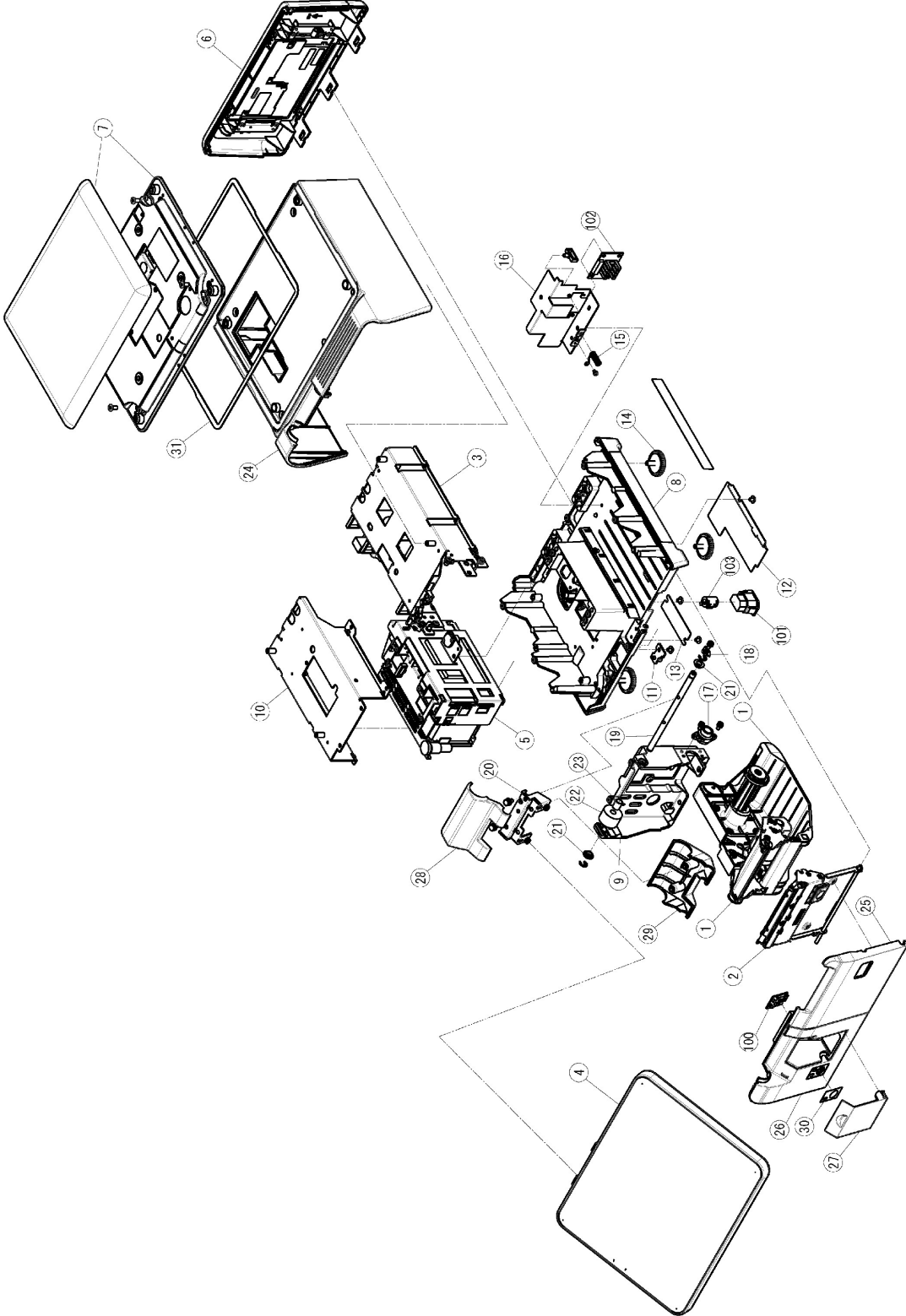
1.2.7 Options

- Scanner
- Cassette
- Printer
- Mobile printer
- Drawer
- Port guard
- Remote scale (30kg / 60lb)
- Remote scale
- Big tray
- Wi-Fi device
- Scale connection cable (2m)
- Serial port cable
- SD card

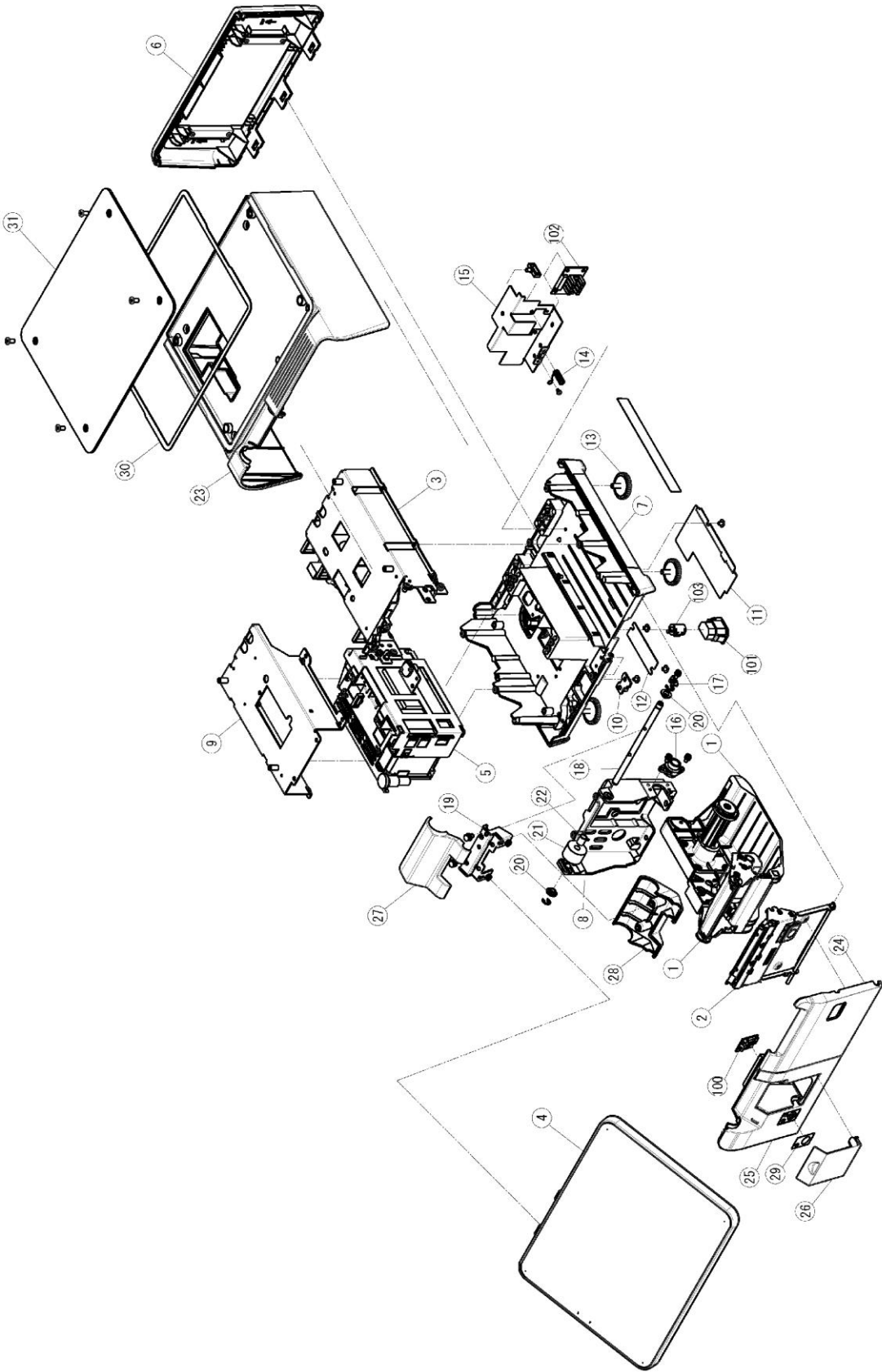
Chapter 2 Mechanical hardware

2.1 Exploded view

2.1.1 Bench type



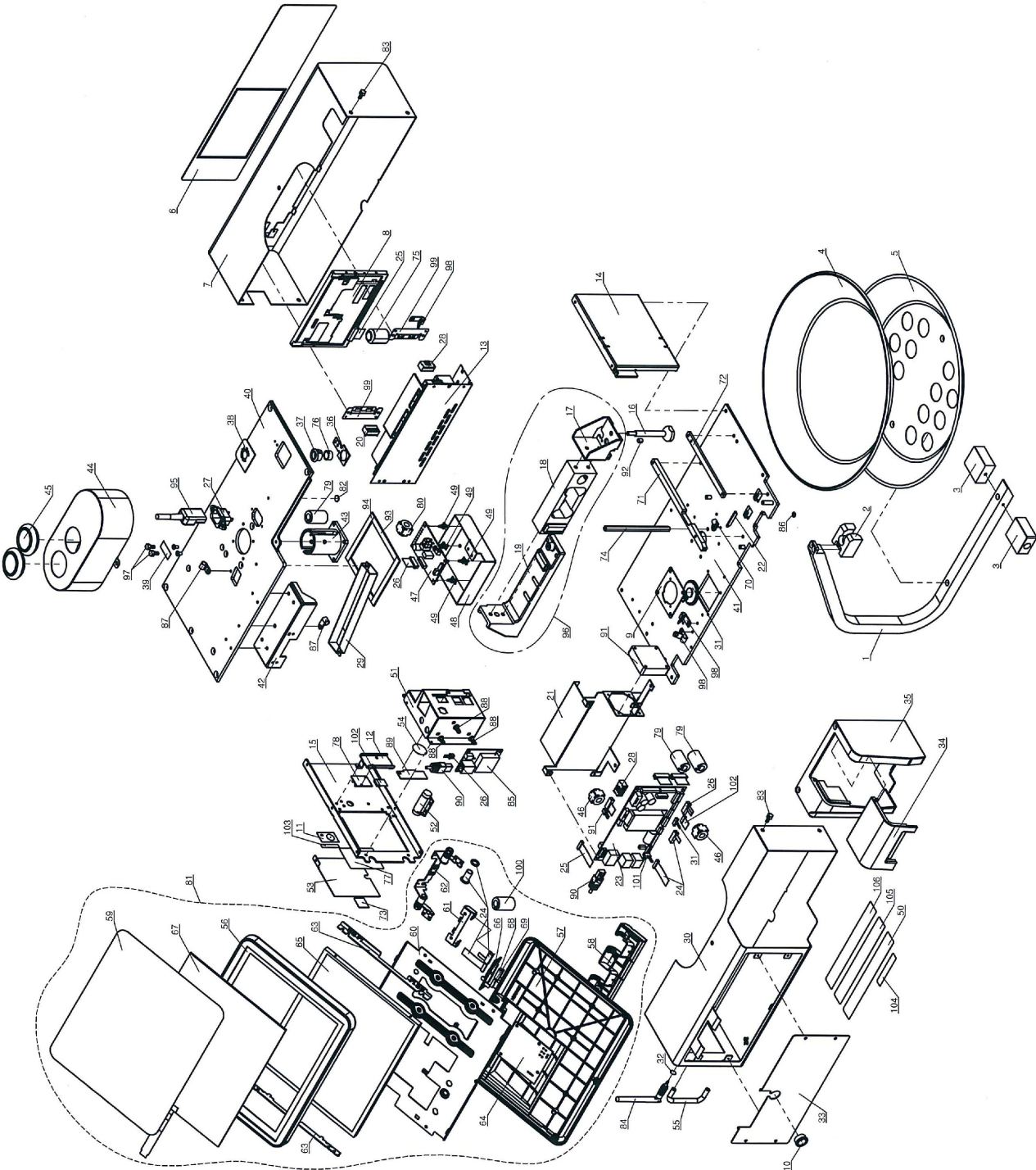
2.1.2 XL type



2.1.3 Hanging type

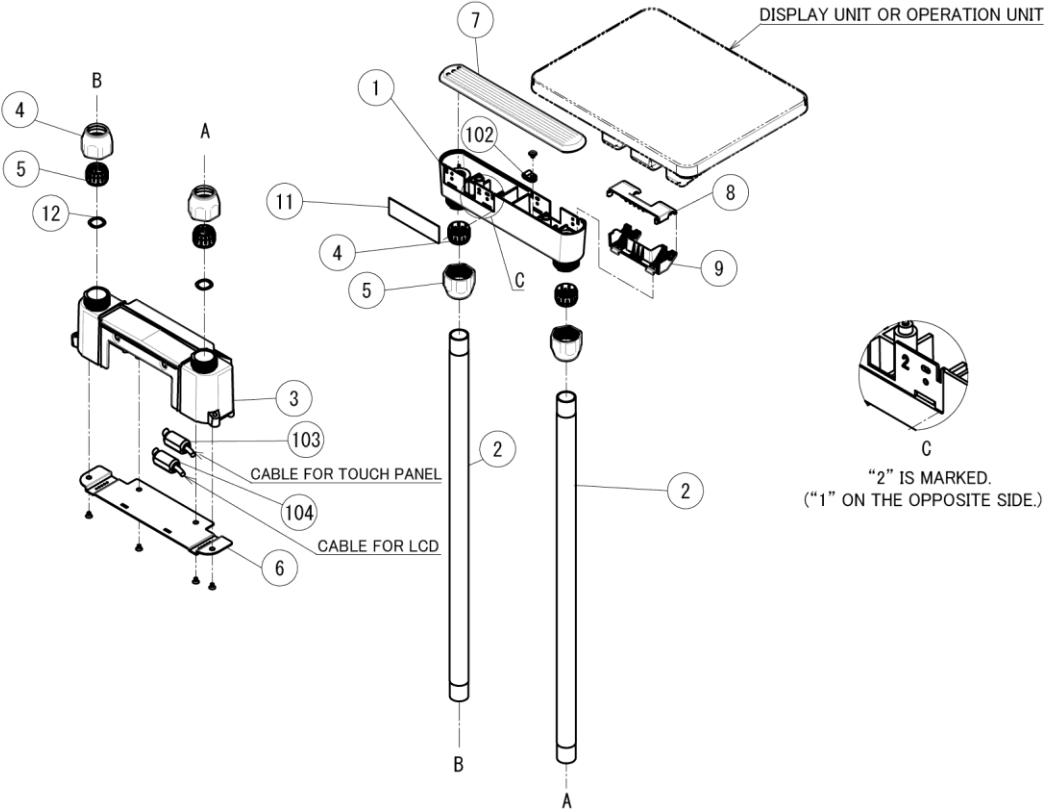


Refer to SC216106 at the beginning.

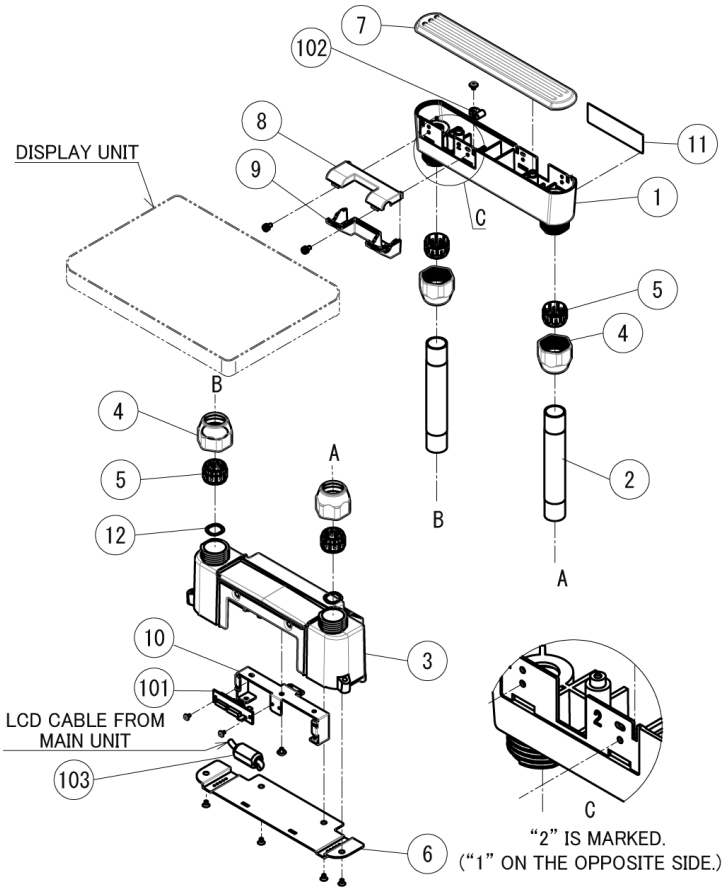


2.1.4 Pole unit

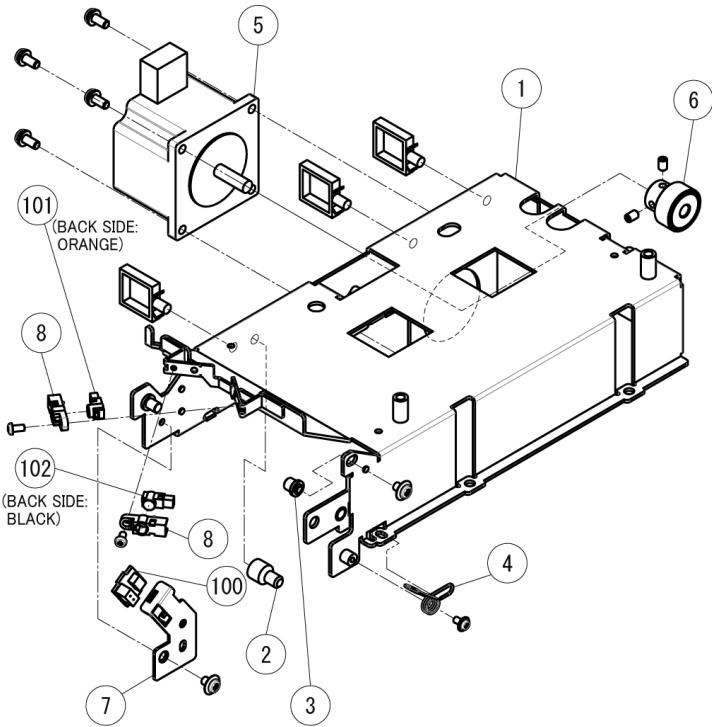
TYPE \ PART	⑧ AND ⑨	⑪	⑩②	⑩③	⑩④
POLE	ONE OF EACH (MARK "2" SIDE)	ONE PART (MARK "1" SIDE)	ONE PART	NONE	ONE PART
SELF-SERVICE	ONE OF EACH (MARK "1" SIDE)	ONE PART (MARK "2" SIDE)	ONE PART	ONE PART	ONE PART
ELEVATED KEYBOARD	TWO OF EACH (MARK "1" AND "2" SIDES)	NONE	TWO PARTS	ONE PART	TWO PARTS



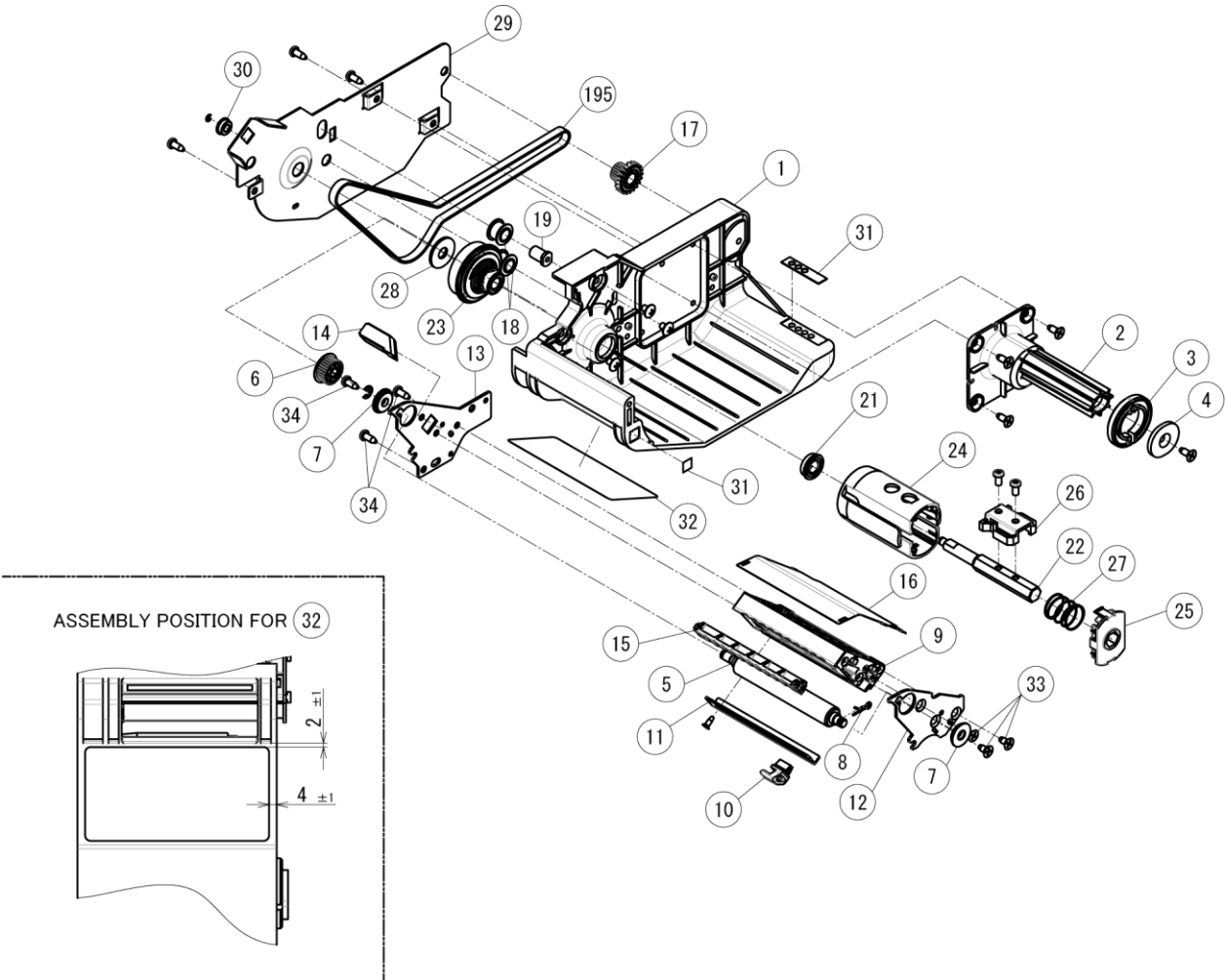
2.1.5 Short pole unit



2.1.6 Printer frame unit (Each type)



2.1.7 Cassette unit (Each type)



Chapter 3 Machine Disassembly

3.1 Bench type

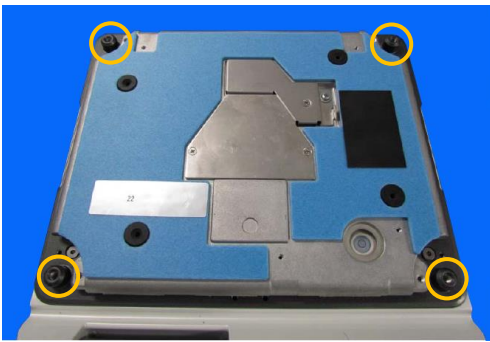


CAUTION Make sure to unplug the power cord from the wall outlet before starting the disassembly work.

3.1.1 Plate unit



1. Detach the platter.



2. Remove the four hex screws (3 mm).



3. Hold up the plate unit.



4. Unplug the connector and detach the plate unit.

Reverse this procedure for assembly.

3.1.2 Main unit cover



1. Raise the display to open the cassette cover.



2. Pull out the cassette unit.



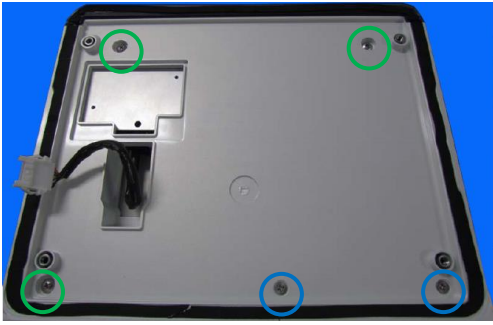
3. Remove two screws securing the hinge.



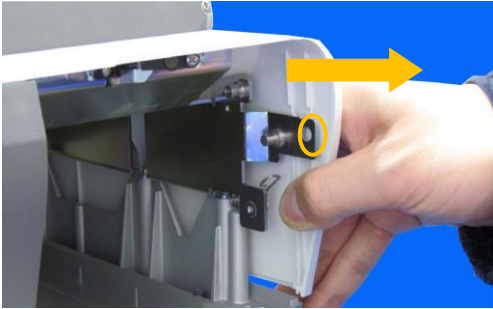
4. Detach the hinge cover (lower).



5. Lower the display to detach the upper hinge cover.



6. Remove three screws (green) and two TP screws (blue).



7. Push the main unit cover rightward to disengage the hook from the plate.



8. Open the left side of the main unit cover with the flat-blade screwdriver, etc.



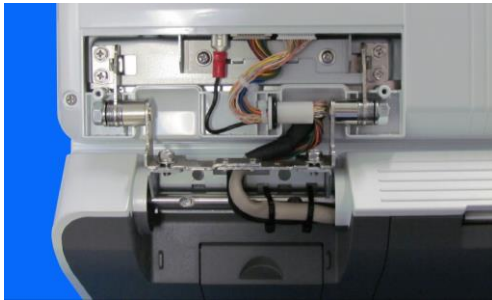
9. Detach the main unit cover.

Reverse this procedure for assembly.

3.1.3 Operation unit



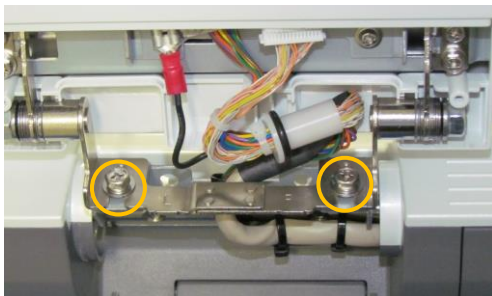
1. Remove two screws of display to detach the hinge cover.



2. Detach the hinge cover.



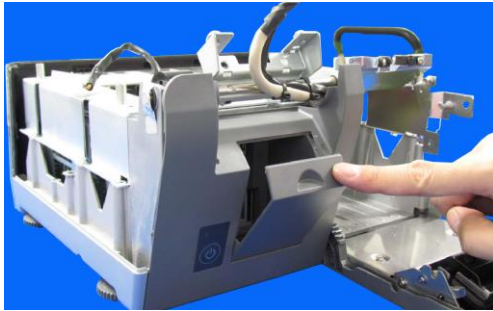
3. Unplug three display connectors.



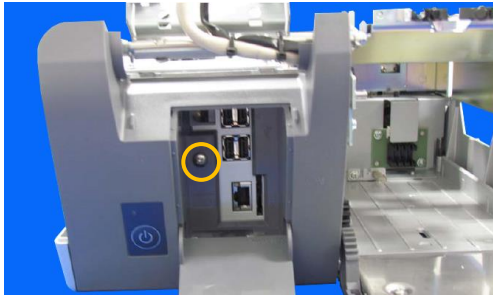
4. Loosen two screws securing the hinge to detach the display unit.

Reverse this procedure for assembly.

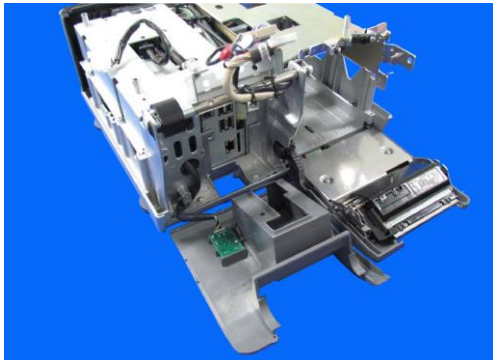
3.1.4 USB port cover



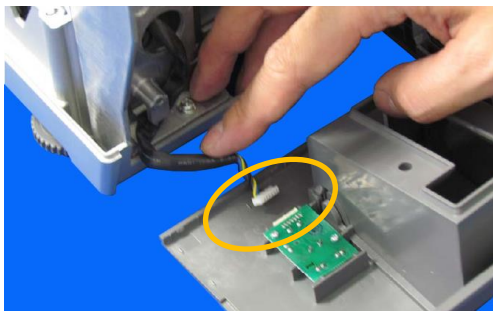
1. Open the USB port door.



2. Remove the screw securing the USB port cover.



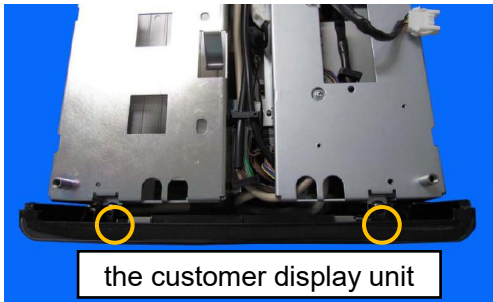
3. Detach the USB port cover.



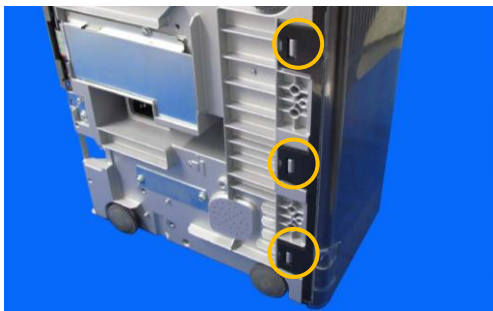
4. Unplug the connector connected to the power switch board.

Reverse this procedure for assembly.

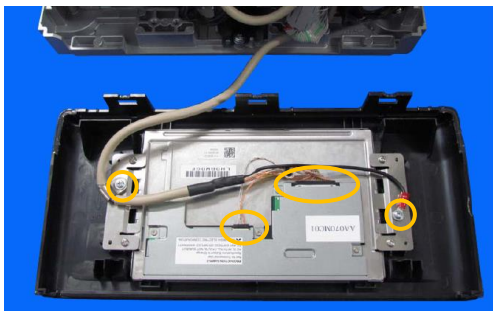
3.1.5 Customer-side display



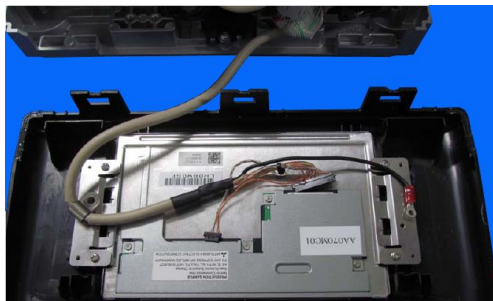
1. Remove two screws.



2. Disengage three hooks located on the bottom of the main unit.



3. Remove two screws and unplug two connectors.



4. Detach the customer-side display unit.



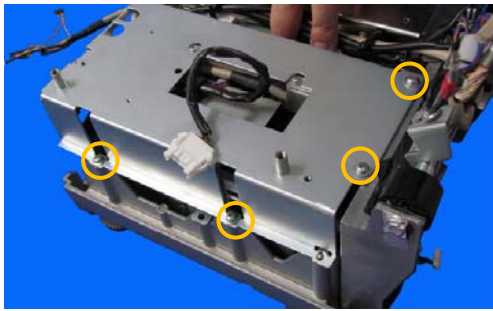
5. Remove four screws.

6. Detach the customer-side display panel.

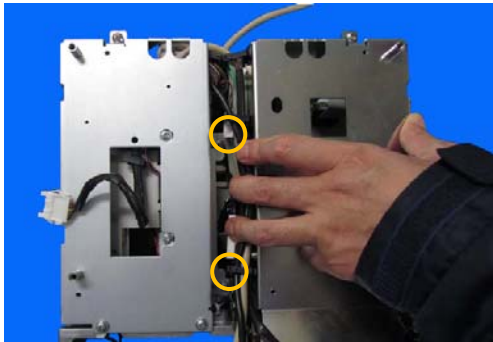


Reverse this procedure for assembly.

3.1.6 Main unit (Power board/ Main board)



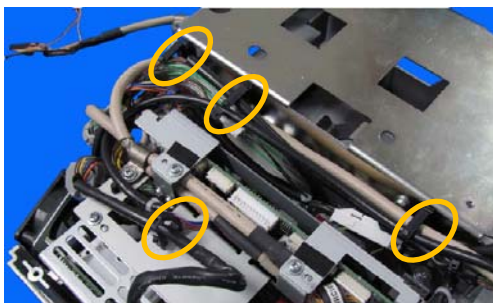
1. Remove six screws securing the main unit cover.



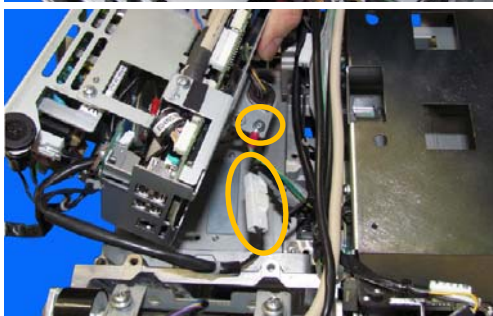
2. Detach the main unit cover.

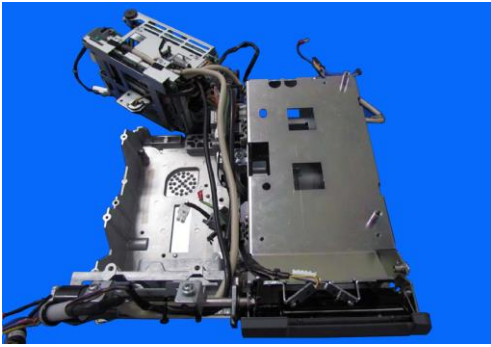


3. Disengage four clamps securing the cable.

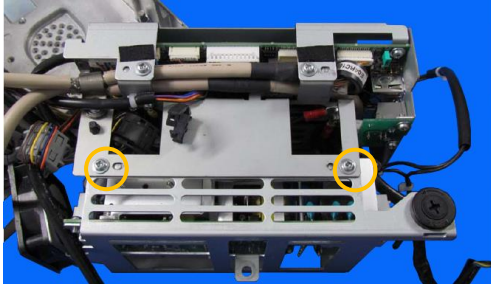


4. Unplug the connector and ground wire.

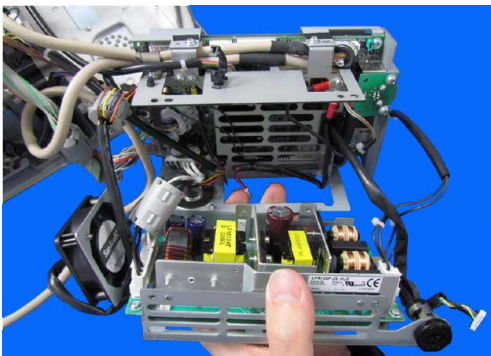




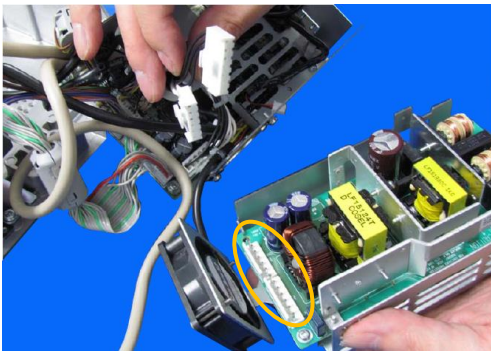
5. Pull out the main unit.



6. Remove two screws securing the power board.



7. Pull out the power board.



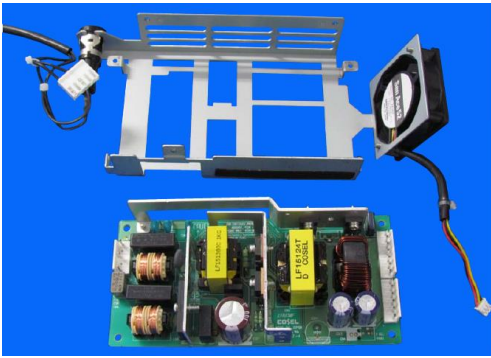
8. Unplug two connectors (CN2 and CN3) connected to the main board.



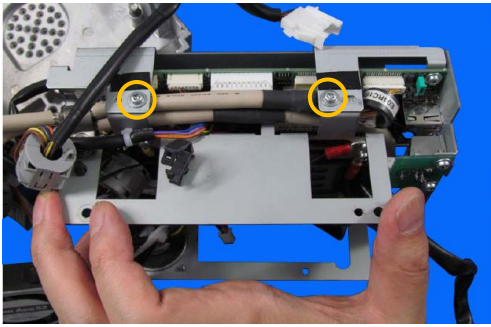
Here you need to disassemble the main board unit to unplug the FAN cable installed on the power board.



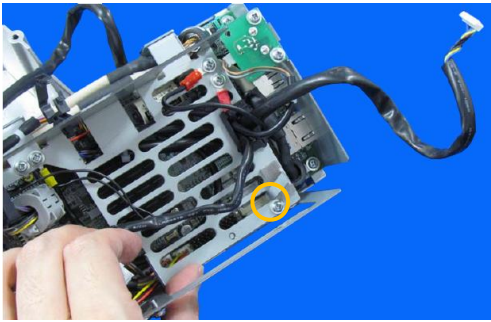
9. Unplug the connector (CN1) connected to the fuse holder and remove two screws.



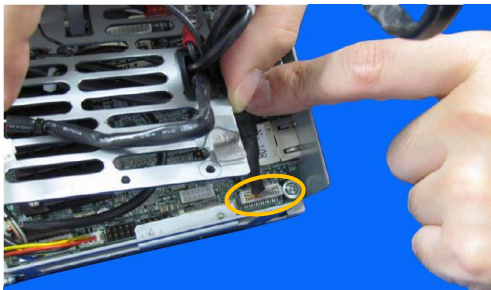
10. Detach the power board.



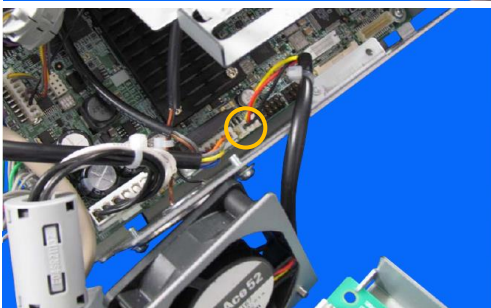
11. Remove two screws securing the frame.



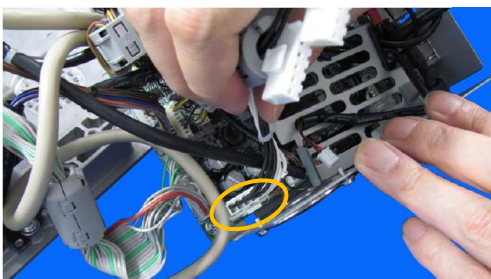
12. Remove the screw securing the frame.



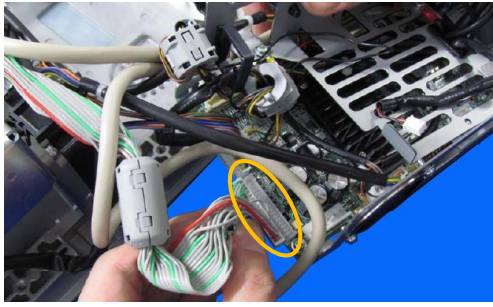
13. Unplug the connector (XJ8) connected to the customer-side display unit.



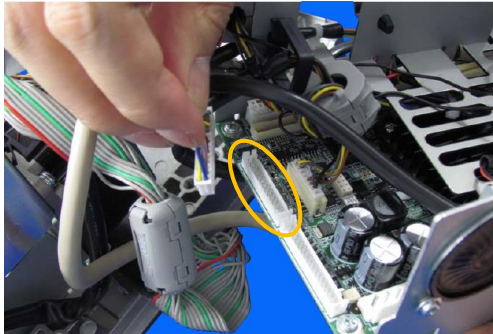
14. Unplug the connector (XJ20) connected to the FAN of the power board.



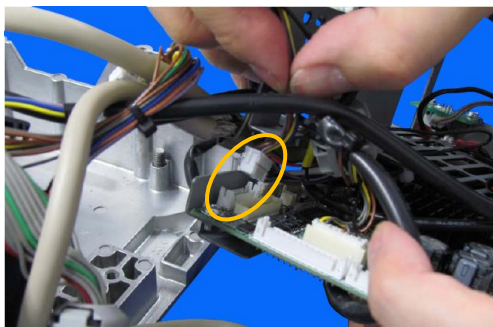
15. Unplug the connector (XJ13) connected to the power board.



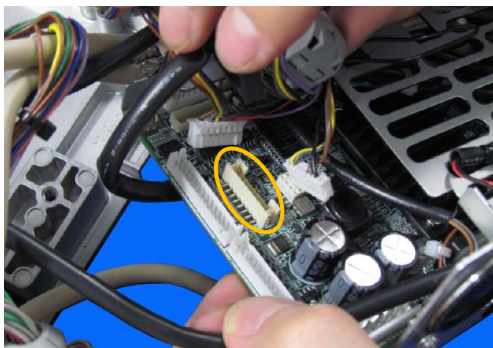
16. Unplug the connector (XJ17) connected to the thermal head.



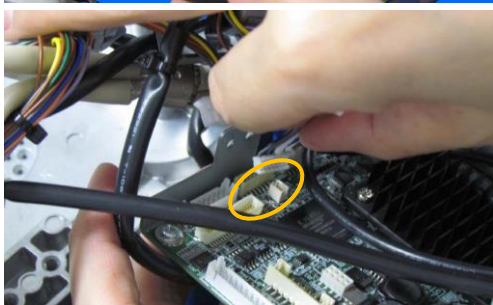
17. Unplug the connector (XJ21) connected to the peel-off sensor, label sensor and cassette sensor.



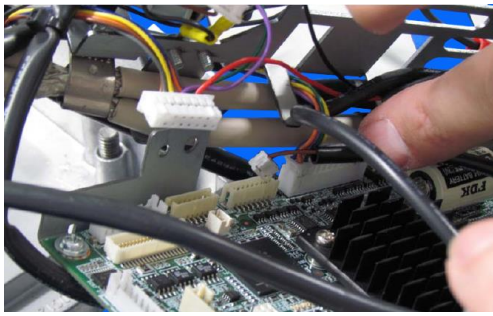
18. Unplug the connector (XJ25) connected to the scale unit.



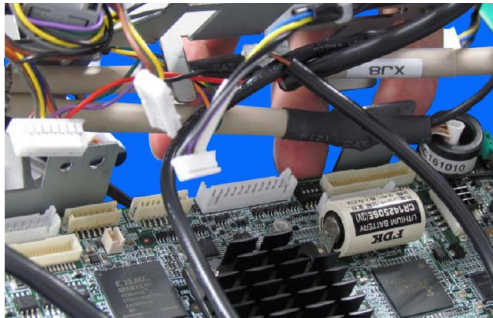
19. Unplug the connector (XJ16) connected to the terminal for connection with the separate-type scale unit. XJ25 and XJ16 are the pair of branch cables.



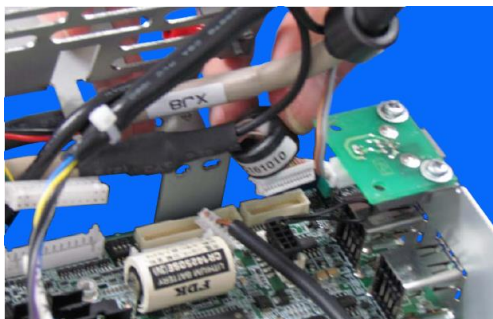
20. Unplug the connector (XJ23) connected to the power switch board.



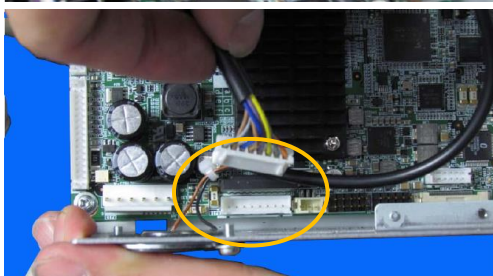
21. Unplug the connector (XJ12) connected to the speaker.



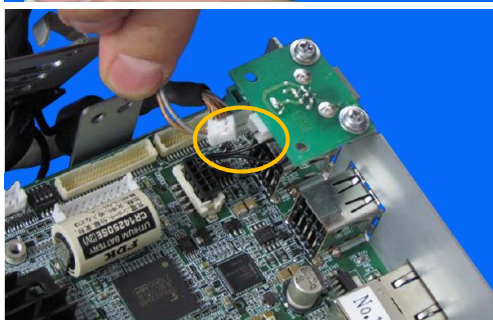
22. Unplug the connector (XJ22) connected to the operation display unit.



23. Unplug the connector (XJ9) connected to the operation display unit.



24. Unplug the connector (XJ18) connected to the cassette motor unit.



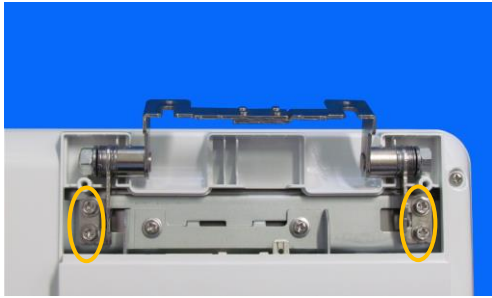
25. Unplug the connector connected to the modular jack board.



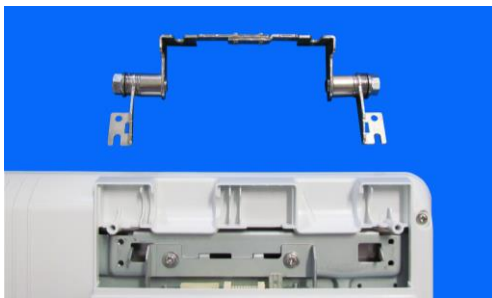
26. Detach the main board (remove the screws and detach the frame).

Reverse this procedure for assembly.

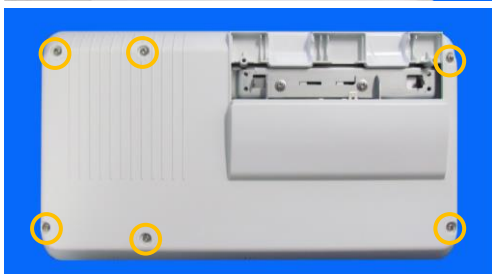
3.1.7 Operation unit , B-type



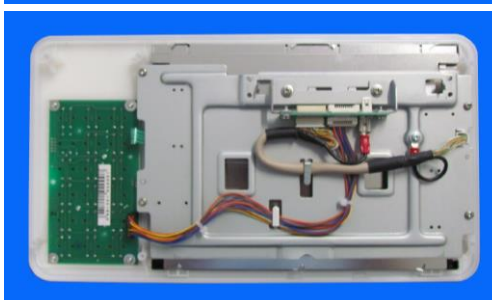
1. Remove four screws securing the hinge.



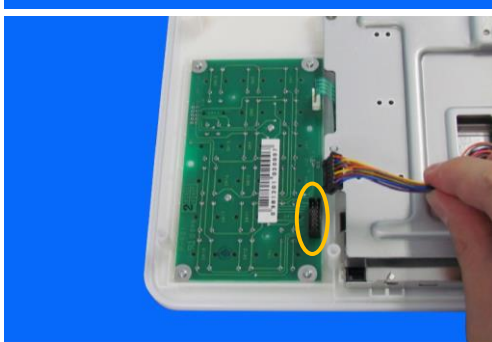
2. Detach the hinge.



3. Remove six screws securing the display cover.



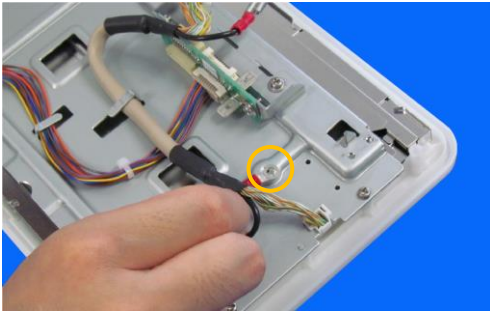
4. Detach the display cover.



5. Unplug a connector connected to the board P-981.



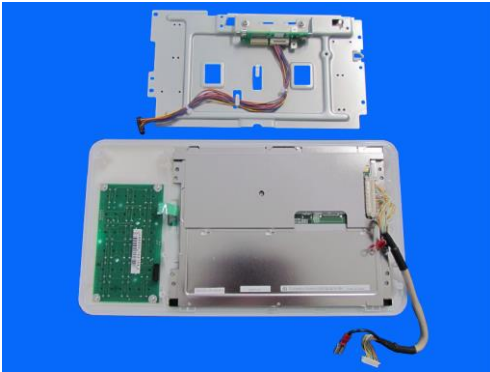
6. Unplug two connectors connected to the board P-985.



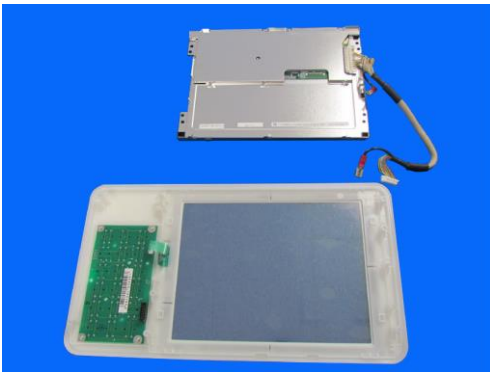
7. Remove a screw and ground wire.



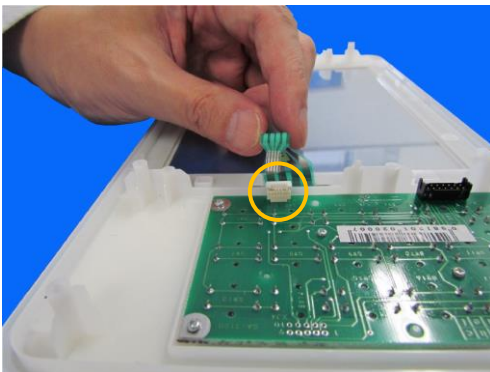
8. Remove a wire from the clamp.



9. Detach the plate on which the relay board is installed.

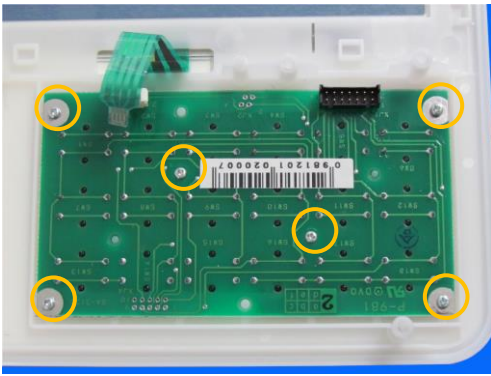


10. Detach the touch panel and LCD.



11. Unlock to remove the wire.

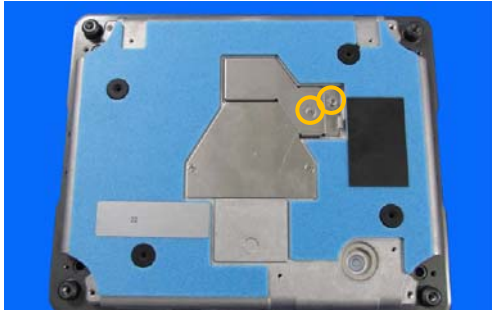
12. Remove six screws to detach the board P-981.



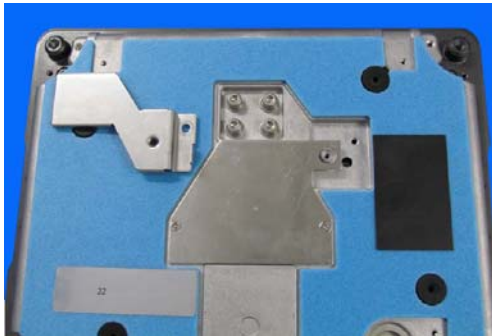
Reverse this procedure for assembly.

3.1.8 Weighing unit

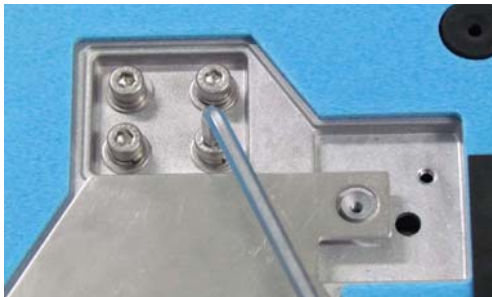
Note: Refer to Technical Reports No.SC216131 “About the version change of P-1111 board” at the beginning.



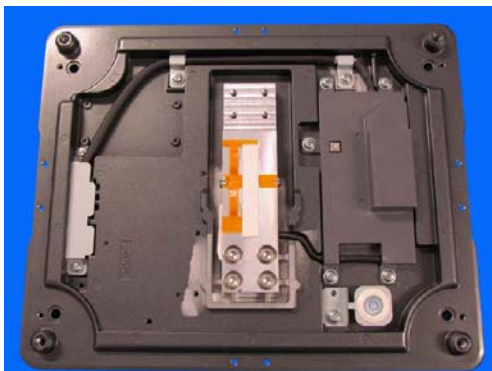
1. Remove the screw and TP screw.



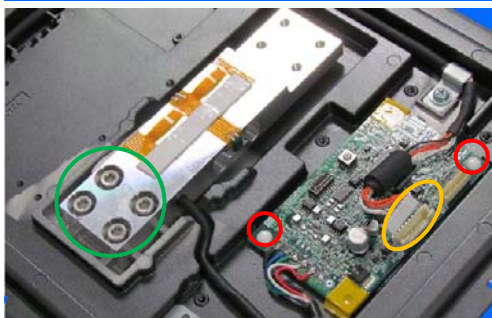
2. Detach the plate.



3. Remove four hex screws with the hex wrench (4mm) to detach the plate.



4. Remove five screws to detach the cover.



5. Unplug the connector, disengage two hooks and remove four hex screws.

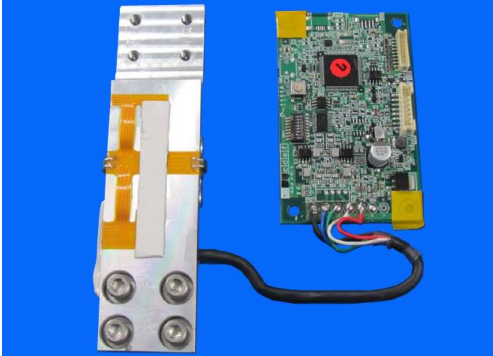
Disengage two hooks with the flat-blade screwdriver, etc.



6. Detach the load cell and scale board P-1111A. Unsolder five wires to detach the P-1111A.



When installing the load cell, make sure to install it in the center of the installation position on the plate.



Reverse this procedure for assembly.

3.2 Pole type

CAUTION Make sure to unplug the power cord from the wall outlet before starting the disassembly work.

3.2.1 Customer-side display



1. Remove two screws (the outer two screws) located on the bottom panel on the top of the pole.



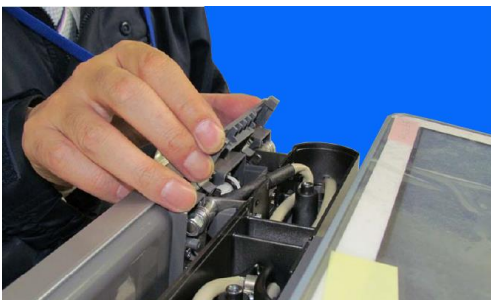
2. Detach the cover located on the top of the pole.



3. Remove two screws securing the hinge cover located on the back of the customer-side display.



4. Detach the hinge cover located on the back of the customer-side display.



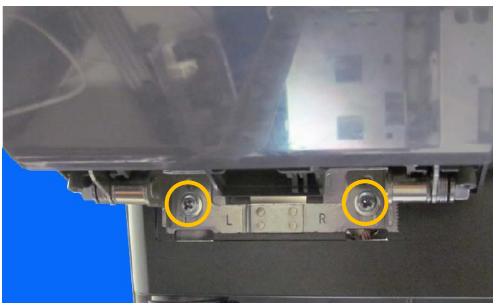
5. Detach the hinge cover (upper) located on the top of the pole.



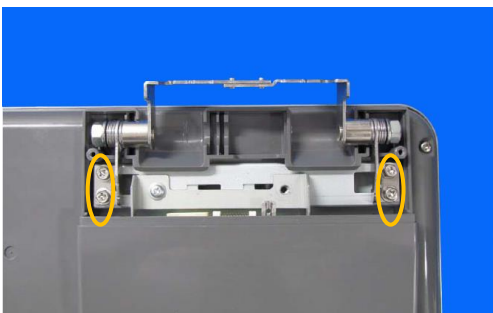
6. Detach the hinge cover (lower).



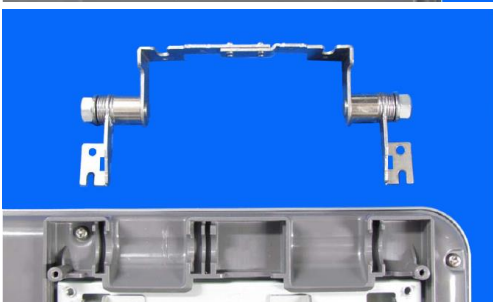
7. Unplug the connector and ground wire.



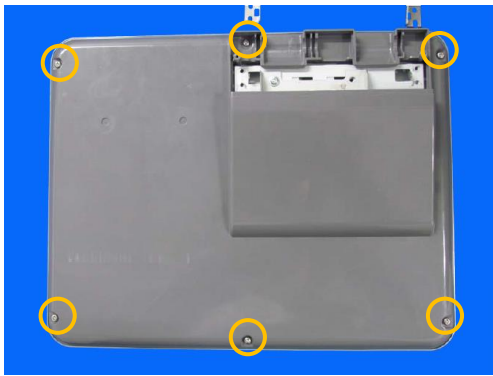
8. Loosen two screws securing the hinge to detach the customer-side display.



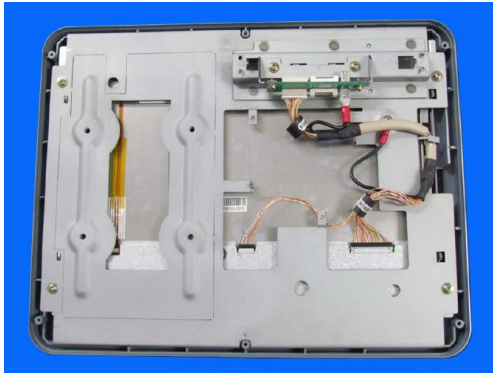
9. Remove four screws securing the hinge.



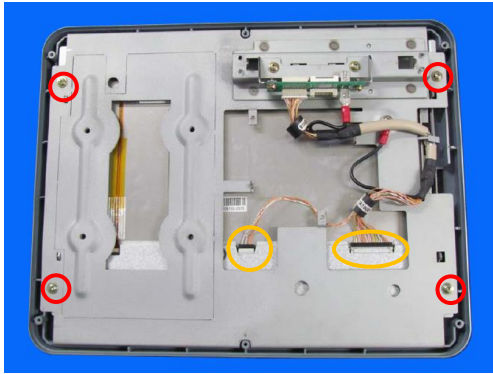
10. Detach the hinge.



11. Remove six screws securing the display cover.



12. Detach the display cover.



13. Unplug two connectors and remove four screws.



14. Detach the plate on which the relay board is installed.



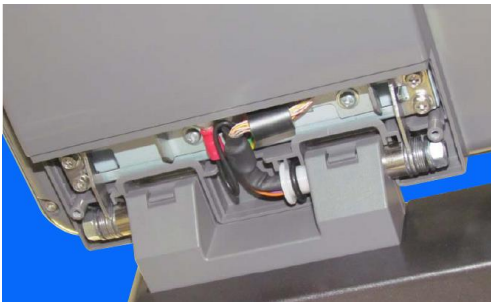
15. Detach the LCD from the cover.

Reverse this procedure for assembly.

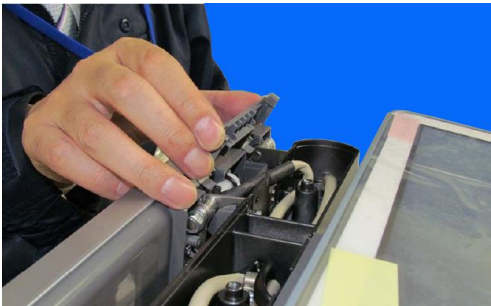
3.2.2 Operation unit



1. Remove two screws securing the hinge cover located on the back of the operation display.



2. Detach the hinge cover located on the back of the operation display.



3. Detach the hinge cover (upper) located on the top of the pole.



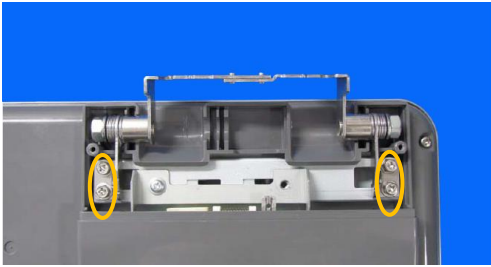
4. Detach the hinge cover (lower).



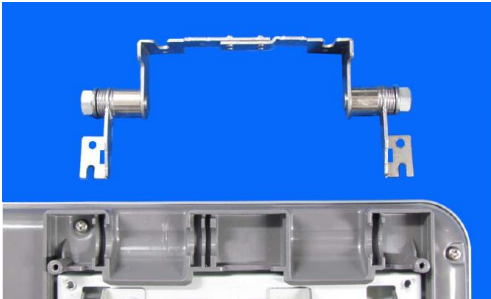
5. Unplug three display connectors.



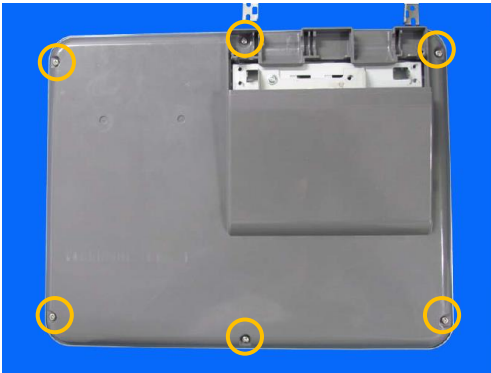
6. Loosen two screws securing the hinge to detach the operation display.



7. Remove four screws securing the hinge.



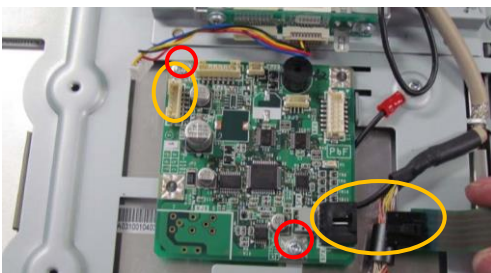
8. Detach the hinge.



9. Remove six screws securing the display cover.



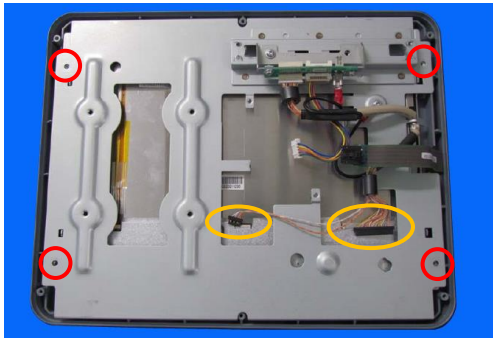
10. Detach the display cover.



11. Unplug two connectors and remove two screws.



12. Detach the board P-1102.



13. Unplug two connectors and remove four screws.



14. Detach the plate on which the relay board is installed.



15. Detach the touch panel and LCD.



During the reassembly work, make sure not to confuse the operation display with the customer-side display.

Reverse this procedure for assembly.

3.3 Hanging type

CAUTION Make sure to unplug the power cord from the wall outlet before starting the disassembly work.

3.3.1 Preparation



1. Detach the platter.



2. Remove the hanged UNI-9

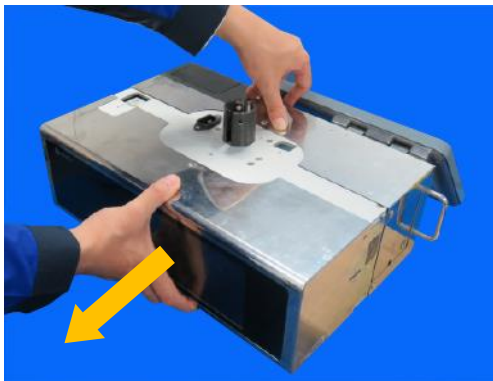
CAUTION An attachment of the platter connected to the load cell is located to the bottom of the main unit. If the main unit is placed on a flat surface to disassemble, the work is unstable and load will be applied to the attachment. That results in less accuracy.

When disassembling the main unit, place two boxes with a strength sufficiently enduring the weight of it under the both ends of it and put the main unit on the boxes so that the attachment on the bottom of it will not touch a flat surface such as floor or a table directly.

3.3.2 Customer-side cover



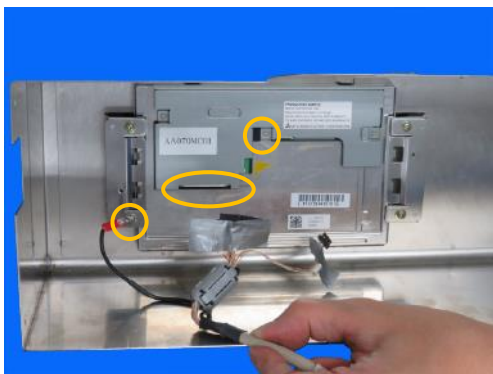
1. Remove five screws.



2. Detach the front cover slowly.



The front cover and the main unit are connected by a display connector cable. Be careful to detach the front cover.



3. Remove the screw and unplug two display connectors.

Reverse this procedure for assembly.

3.3.3 Customer-side display



1. Remove two screws.



2. Move the display to the left side and pull it out.



Reverse this procedure for assembly.

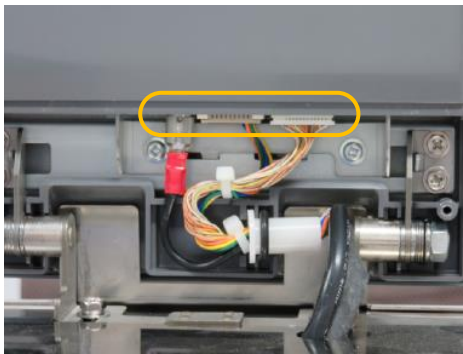
3.3.4 Operator-side cover



1. Remove two screws of the display to detach the hinge cover.



2. Detach the hinge cover.



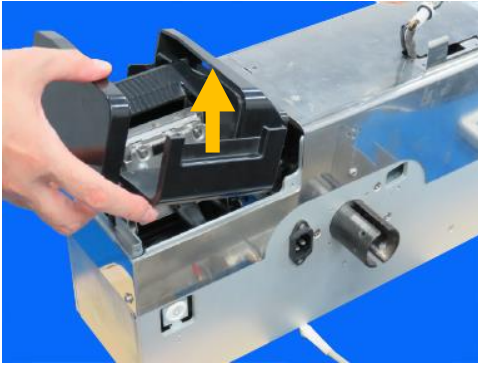
3. Unplug three display connectors.



4. Loosen two screws securing the hinge to detach the display unit.



5. Reposition the main unit to remove the two printer cover screws.



6. Detach the printer cover.



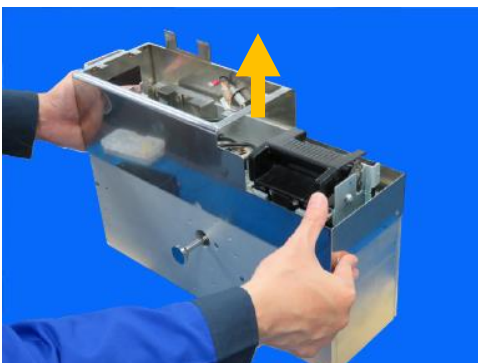
7. Remove four screws.



8. Detach the front cover.



9. Remove five screws.



10. Detach the rear cover.

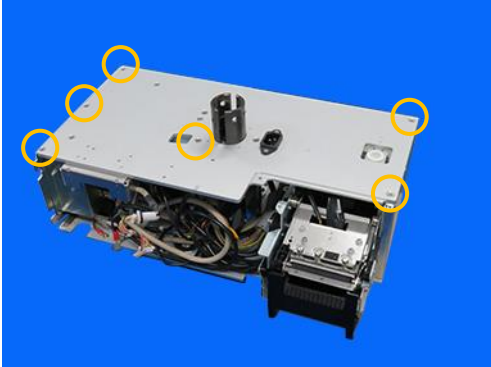
Note:

If a part of the printer is caught, press it with finger(s) to remove the cover.

Reverse this procedure for assembly.

3.3.5 Top plate

1. Detach the front and rear covers.



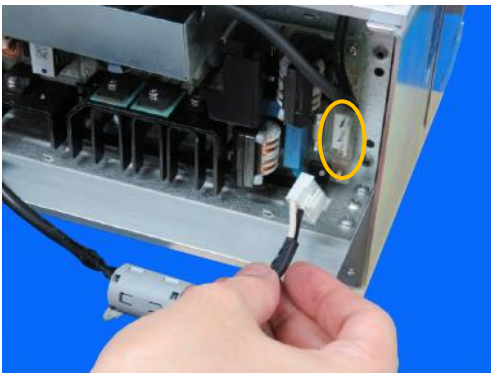
2. Remove six screws.



3. Remove three screws.

Note:

The board units attached to the top plate makes noise when it drops.



4. Unplug the power cable connector.



5. Detach the top plate.

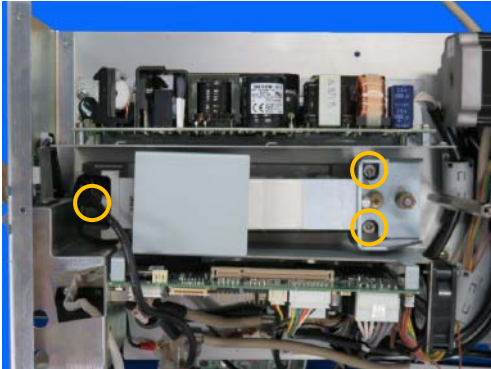
Reverse this procedure for assembly.

3.3.6 Load cell

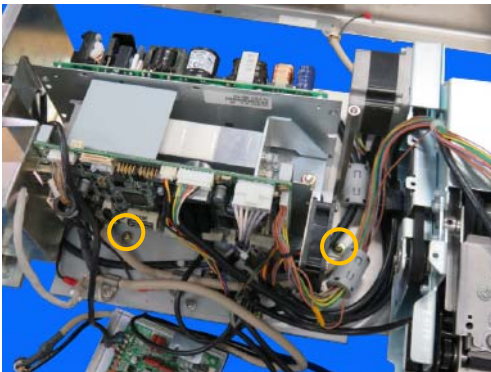
Note: Refer to Technical Reports No.SC216131 “About the version change of P-1111 board” at the beginning.

1. Detach the front and rear covers and the top plate.

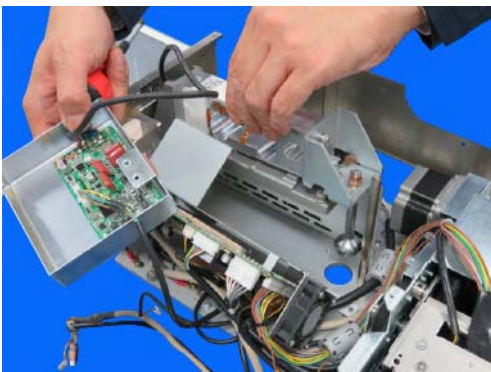
2. Remove three hex screws.



3. Remove two screws.



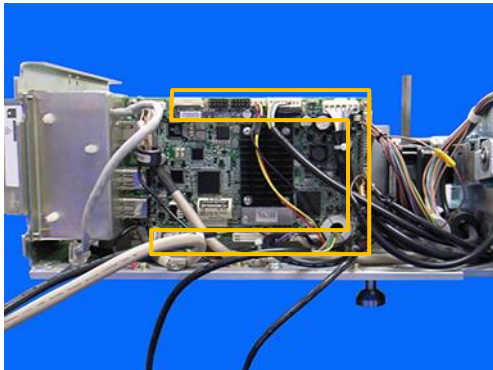
4. Detach the load cell.



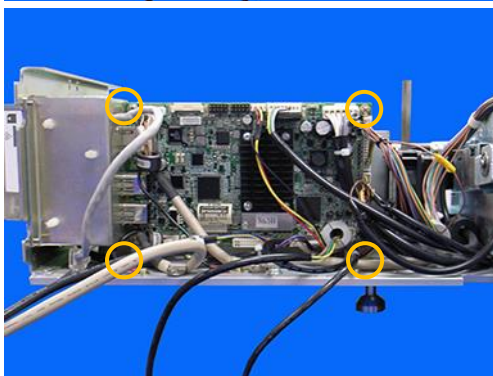
Reverse this procedure for assembly.

3.3.7 Main board

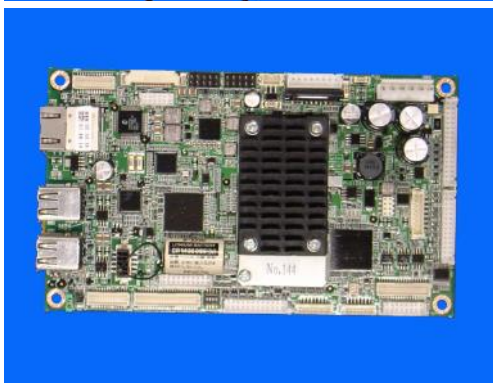
1. Detach the front and rear covers and the top plate.



2. Unplug the connectors on the main board.



3. Remove four screws.

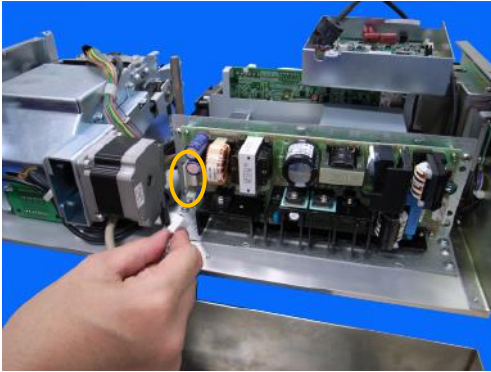


4. Detach the main board.

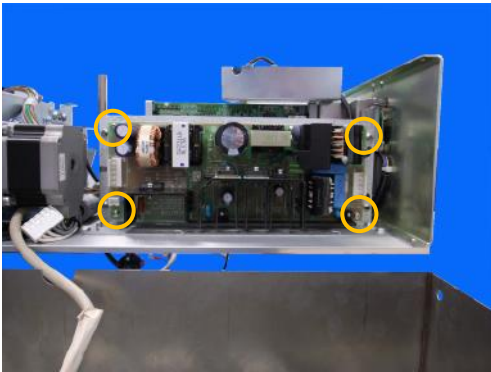
Reverse this procedure for assembly.

3.3.8 Power board

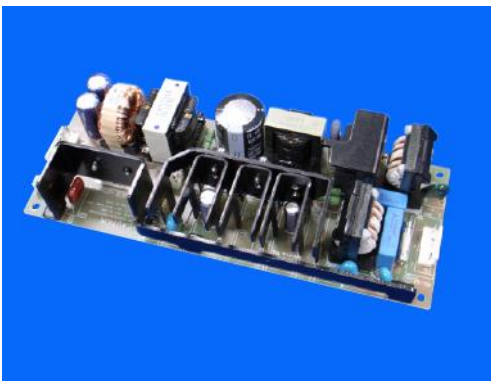
1. Detach the operator-side and customer-side covers and the top plate.
2. Unplug the power cable connector .



3. Remove four screws.



4. Detach the power board.



Reverse this procedure for assembly.

3.4 Thermal head

CAUTION Make sure to unplug the power cord from the wall outlet before starting the disassembly work.

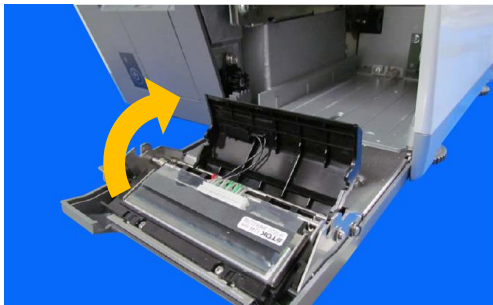
3.4.1 Thermal head



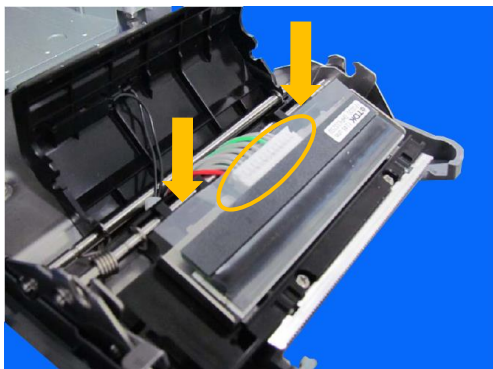
1. Push the button to open the cassette door.



2. Pull out the cassette unit.



3. Open the thermal head cover.



4. Disengage two hooks to detach the thermal head and then unplug the connector.

5. Detach the thermal head.

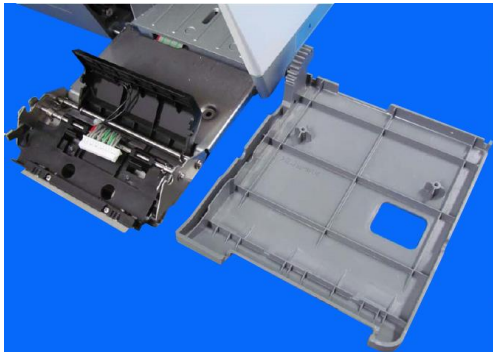


Reverse this procedure for assembly.

3.4.2 Thermal head cable



1. Remove two screws securing the cassette door after detaching the thermal head.



2. Detach the cassette cover.



3. Remove the screw located on the bottom of the main unit.



4. Detach the plate.



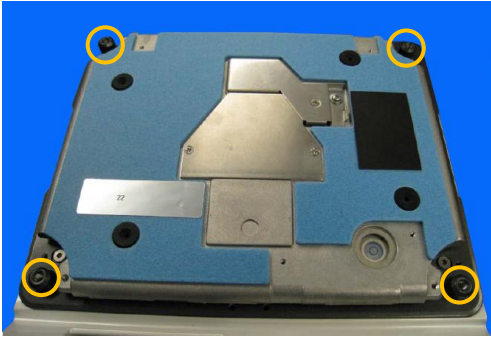
REFERENCE

The thermal head cable is connected to the connector (XJ17) on the main board.

Reverse this procedure for assembly.

Chapter 4 Optional Unit

4.1 Big tray



1. Detach the platter and remove four hex screws located on the plate unit.



2. Raise the plate unit.



3. Unplug the connector and detach the platter.



4. Attach two frames to the bottom of the platter.



Make sure of the platter guide direction.



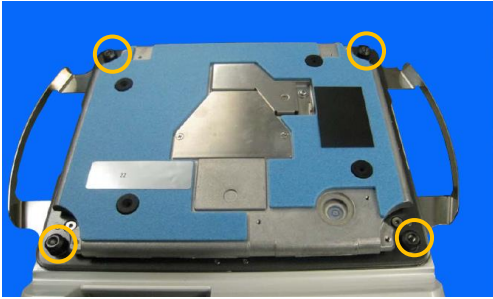
5. Tighten six screws to secure each frame.



6. Connect the cable.



7. When running the cable, make sure to get it through the storage hole of the main unit.



8. Tighten four hex screws.

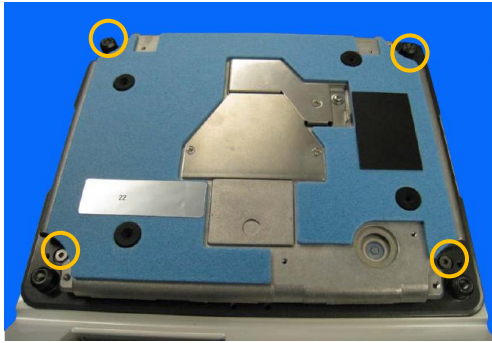


9. Put the big tray.



The image of the big tray shown in the photo differs from the actual product.

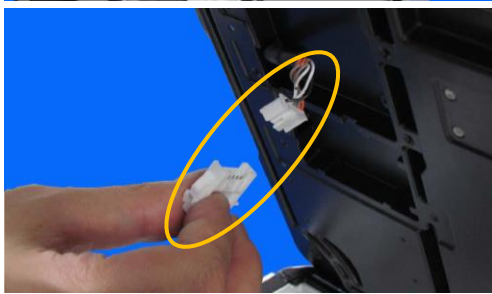
4.2 Remote scale



1. Detach the platter and remove four hex screws of the scale unit.



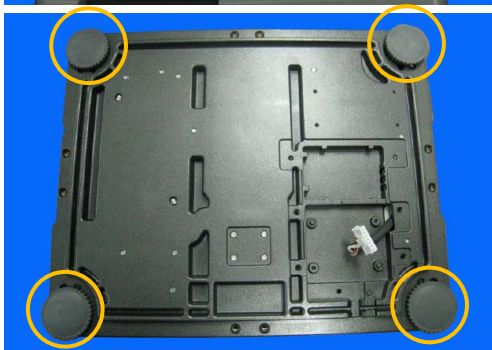
2. Raise the platter.



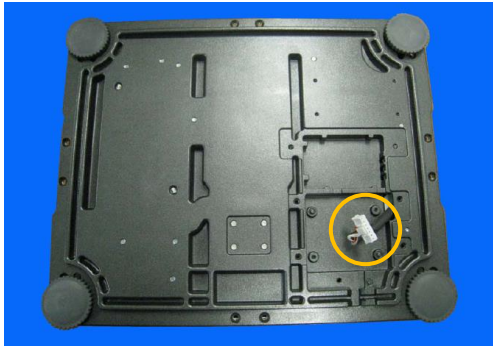
3. Unplug the connector and detach the platter.



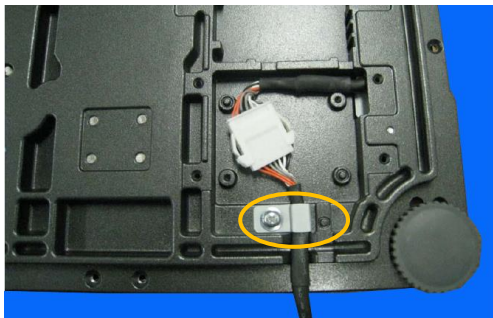
4. Tighten four screws to attach the main unit cover supplied with the scale.



5. Attach four level adjusting feet supplied with the scale on the bottom of the platter.



6. Connect the scale cable supplied with the scale to the connector of the platter.



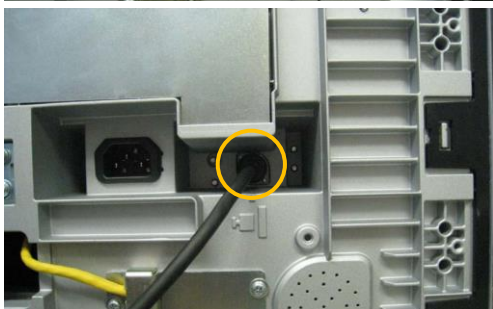
7. Clamp the scale cable to the plate and tighten the screw to secure the clamp.



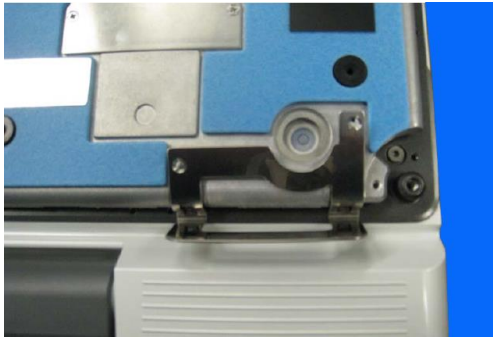
8. Cover the connected portion with the plate and tighten four screws to secure the plate.



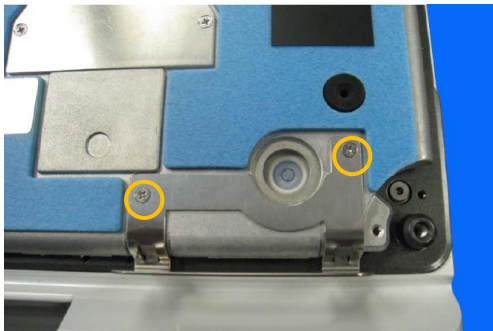
9. Connect the scale cable to the connector located on the bottom of the main unit.



4.3 Platter guide



1. Detach the platter and attach the platter guide on the right side of the operation display.

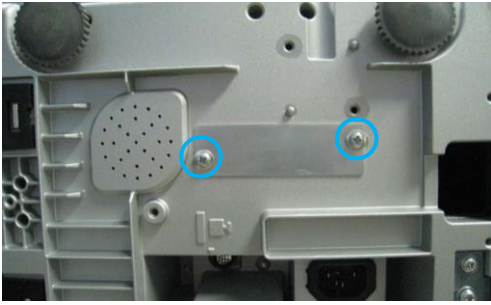


2. Tighten two screws supplied with the guide to secure the platter guide.



3. Attach the platter.

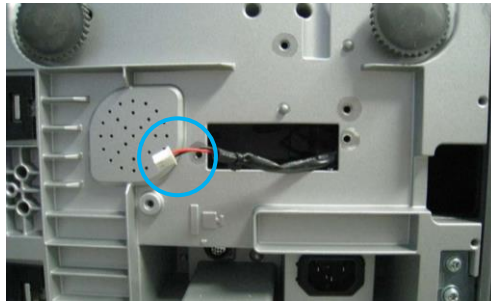
4.4 Wi-Fi device



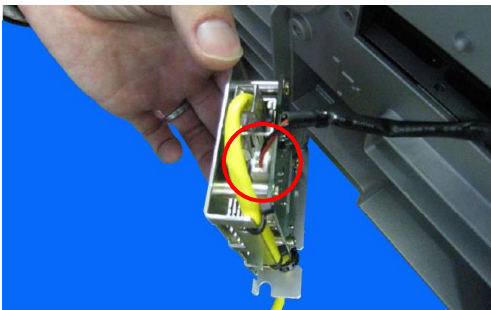
1. Remove two screws securing the plate located on the bottom of the main unit.



2. Detach the plate.



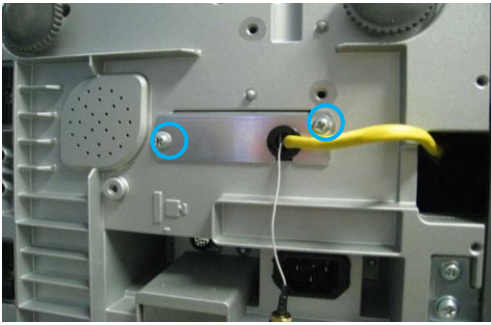
3. Pull out the cable from inside the main unit.



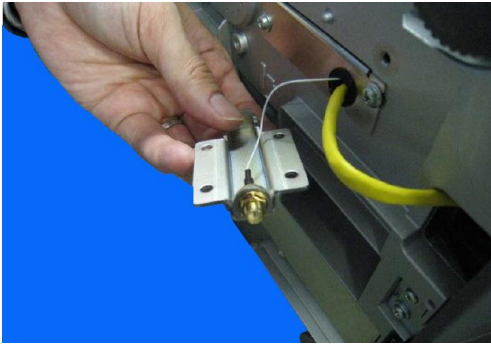
4. Connect the cable to the connector of the Wi-Fi unit.



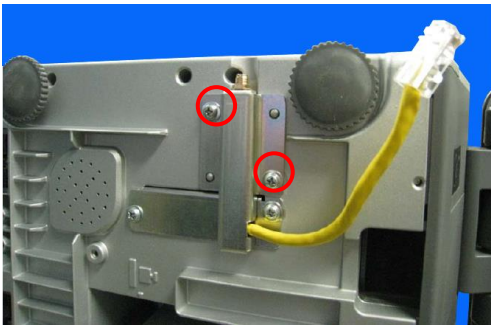
5. Insert the Wi-Fi unit into the main unit.



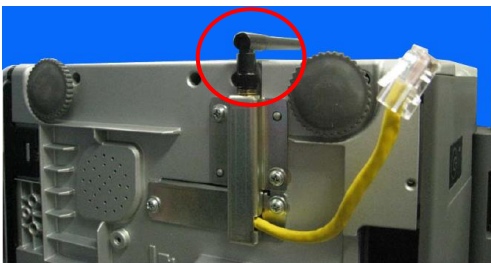
6. Tighten two screws to secure the Wi-Fi unit.



7. Install the antenna jack (the jack connected with the white cable) on the antenna cover plate.



8. Attach the antenna cover plate to the bottom of the main unit and tighten two screws supplied with the device to secure the plate.



9. Attach the antenna to the antenna jack.



10. Connect the LAN cable (yellow) to the LAN port located on the front of the main unit.



4.5 USB-I2NET Converter

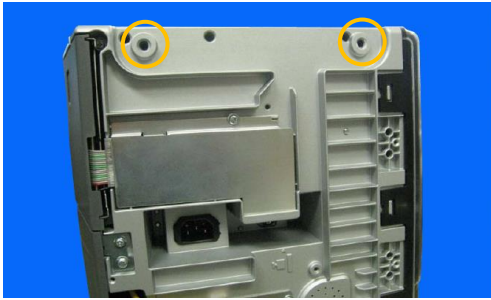


1. Connect the USB cable of the converter to the USB port located on the front of the main unit.

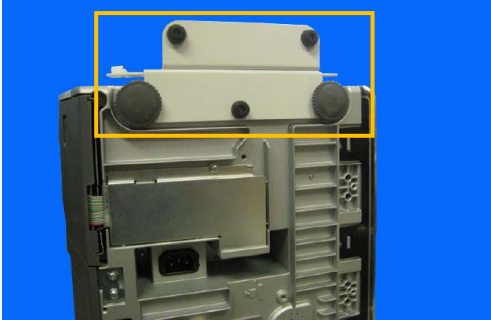


2. Run the cable along the guide on the bottom of the main unit to prevent the cable from being messed up.

4.6 USB Converter stand



1. Detach two level adjusting feet on one side located on the bottom of the main unit (regardless of right or left side).



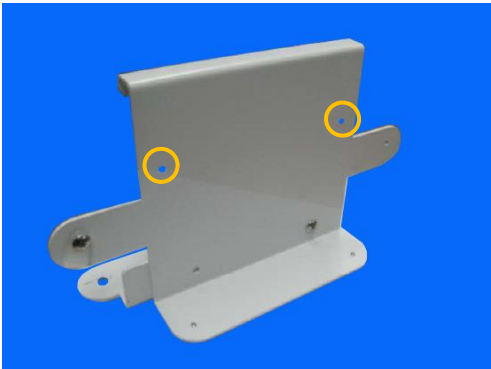
2. Hold the converter stand between the level adjusting feet and the bottom panel of the main unit to secure the stand.



REFERENCE

Attaching the stand never affect the main unit balance.

3. Remove the magnet of each USB converter and tighten two screws to secure the converter to the converter stand.
4. Two screw holes for the attachment of each converter.

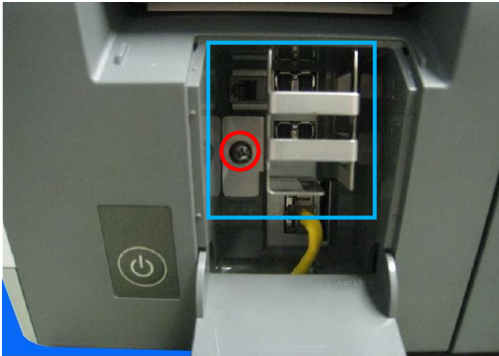


This photo shows the USB converter installed on the stand.

4.7 Port guard



1. Open the USB port door on the front of the main unit and remove the screw.



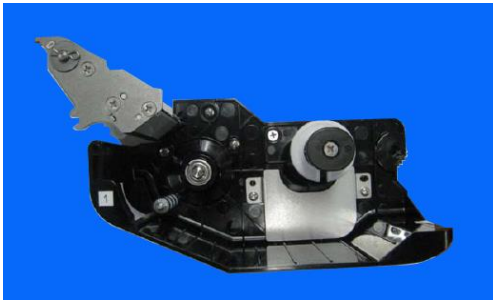
2. Attach the port guard and tighten the screw to secure the cover.

4.8 Serial port cable



1. Connect the USB socket of the cable located on the front of the main unit.

4.9 Standard Cassette



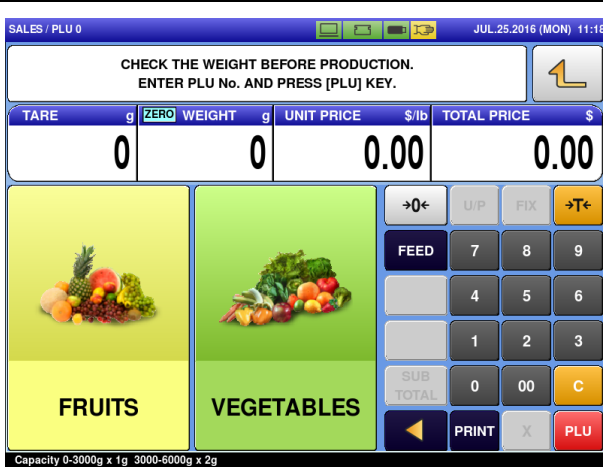
Chapter 5 Setup Mode


5.1 Set up menu

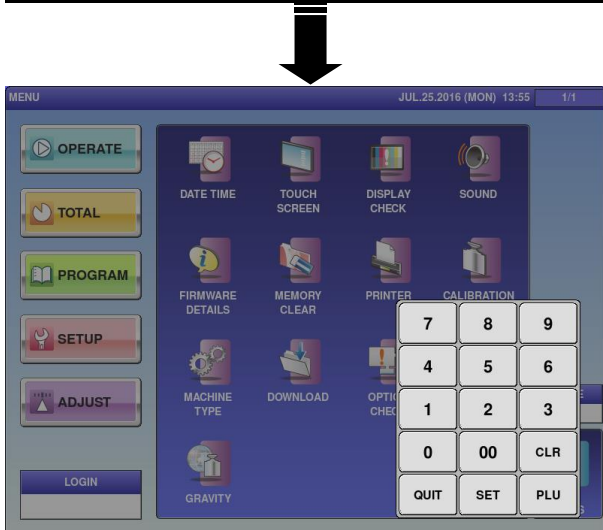
5.1.1 Startup



1. Turn on power.



2. Press  button at the upper right side of screen.



Press [SETUP] and [LOGIN] button, then input password "495344" using numerical keys, and press [SET] button.



3. Press only [LOGIN] button to log out.

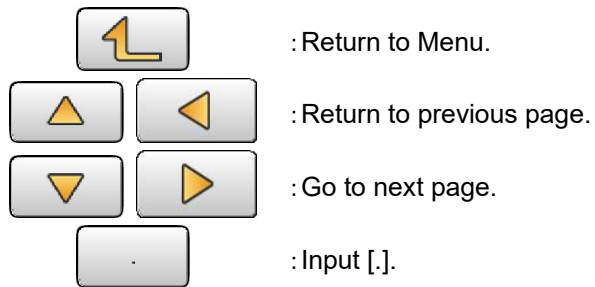
Before log in



Login screens



Common operating buttons



5.2 MACHINE NO. SETTING

5.2.1 BASIC

5.2.1.1 ALONE

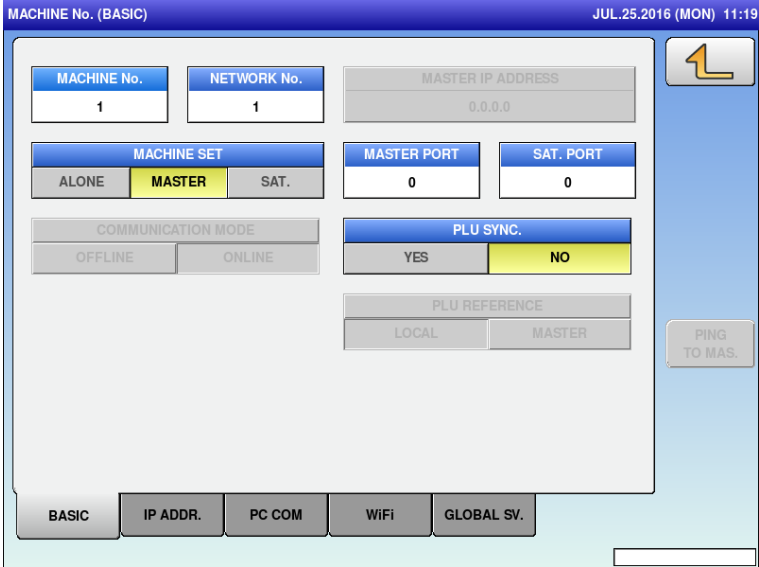
The screenshot displays the 'MACHINE No. (BASIC)' configuration window. At the top, it shows the date and time: 'JUL.25.2016 (MON) 11:18'. The main area contains several input fields and buttons:

- MACHINE No.:** Input field with value '1'.
- NETWORK No.:** Input field with value '1'.
- MASTER IP ADDRESS:** Input field with value '0.0.0.0'.
- MACHINE SET:** A group of three buttons: 'ALONE' (highlighted in yellow), 'MASTER', and 'SAT.'.
- MASTER PORT:** Input field with value '0'.
- SAT. PORT:** Input field with value '0'.
- COMMUNICATION MODE:** Two buttons: 'OFFLINE' and 'ONLINE'.
- PLU SYNC:** Two buttons: 'YES' and 'NO'.
- PLU REFERENCE:** Two buttons: 'LOCAL' and 'MASTER'.
- PING TO MAS.:** A button located on the right side of the window.

At the bottom of the window, there is a navigation bar with five buttons: 'BASIC', 'IP ADDR.', 'PC COM', 'WIFI', and 'GLOBAL SV.'.

Menu name	Specification
MACHINE No.	Enter the machine number. Input range: 1 to 99
NETWORK No.	Enter the network number. Input range: 1 to 9
MACHINE SET	Select one of the stand-alone, master or satellite machines. ALONE / MASTER / SAT. This function is enabled only when you log into the service network. The confirmation dialog appears when ALONE, MASTER and SAT. are selected respectively.

5.2.1.2 MASTER



Menu name	Specification
MASTER PORT	Enter the master port number. Input range: 0 to 65535
SAT. PORT	Enter the satellite port number. Input range: 0 to 65535
PLU SYNC.	Enter whether or not to sync with the PLU. YES / No
Enabled only when you access above menus after logging in with the service password.	

5.2.1.3 SAT.

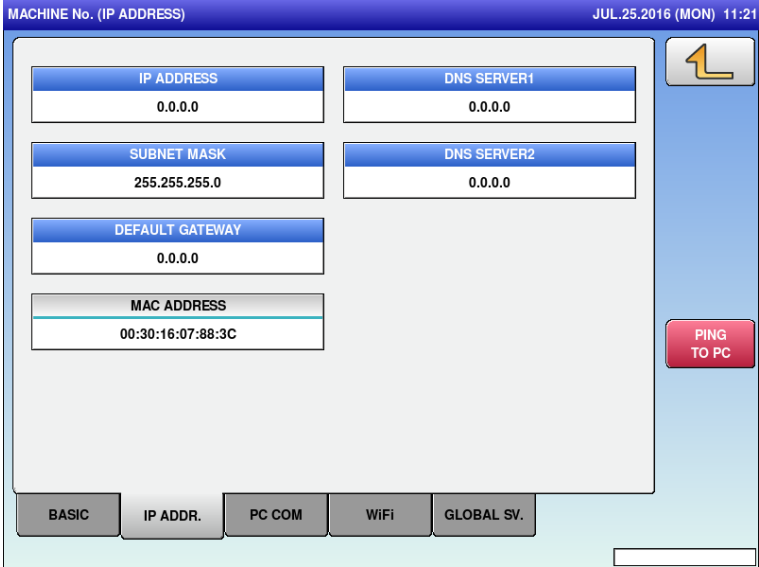
The screenshot shows a web-based configuration interface for a machine. The title bar reads 'MACHINE No. (BASIC)' and 'JUL.25.2016 (MON) 11:19'. The main area contains several sections:

- MACHINE No.:** 1
- NETWORK No.:** 1
- MASTER IP ADDRESS:** 0.0.0.0
- MACHINE SET:** ALONE, MASTER, SAT. (selected)
- MASTER PORT:** 0
- SAT. PORT:** 0
- COMMUNICATION MODE:** OFFLINE (selected), ONLINE
- PLU SYNC:** YES, NO
- PLU REFERENCE:** LOCAL (selected), MASTER

At the bottom, there are navigation tabs: BASIC, IP ADDR., PC COM, WIFI, and GLOBAL SV. A red button labeled 'PING TO MAS.' is located on the right side of the main panel.

Menu name	Specification
MASTER IP ADDRESS	Enter the IP address of master. Input range: "0.0.0.0" to "255.255.255.255"
COMMUNICATION MODE	Select mode of communication online or offline. OFFLINE / ONLINE
PLU REFERENCE	Select mode of PLU reference setting. LOCAL / MASTER
PING TO MAS.	Ping the master.
Enabled only when you access above menus after logging in with the service password and [SAT.] is selected.	

5.2.2 IP ADDRESS



Menu name	Specification
IP ADDRESS	Enter the IP address. Input range: "0.0.0.0" to "255.255.255.255"
SUBNET MASK	Enter the subnet mask. Input range: "0.0.0.0" to "255.255.255.255"
DEFAULT GATEWAY	Enter the default gateway. Input range: "0.0.0.0" to "255.255.255.255"
DNS SERVER1	Enter the IP address of Primary DNS server. Input range: "0.0.0.0" to "255.255.255.255"
DNS SERVER2	Enter the IP address of Secondary DNS server. Input range: "0.0.0.0" to "255.255.255.255"
PING TO PC	Ping the PC.

5.2.3 PC COM

Menu name	Specification
PC IP ADDRESS	Enter the PC's IP address. Input range: "0.0.0.0" to "255.255.255.255"
PC PORT No.	Enter the PC's port number. Input range: 0 to 65535 Note: default is 55201
COM CHECK PERIOD (SEC)	Enter the command check period. Input range: 0 or 30 to 9999 Note: set as 30 to 600 for wireless
COM CHECK TIME OUT (SEC)	Enter the command check time-out. Input range: 2 to 5
ERROR LOG SEND	Enter whether or not to send the error log. NO SEND / SEND
FIELD NAME ENABLE	Select and set whether or not to add filed name to the transmission data. DISABLE / ENABLE
PRESET FUNC. NAME REFER	Select the preset function name reference. COM.DATA / PLU
PC PORT NO. (UNI-7)	Enter the PC's port number. Input range: 0 to 65535
PROD. TRAN. SEND	Enter whether or not to perform transmission of Production Transaction. NO SEND / SEND
SALE TRAN. SEND	Enter whether or not to perform transmission of Sale Transaction.

Menu name	Specification
	NO SEND / SEND
PING TO PC	Ping the PC.

5.2.4 WiFi

MACHINE No. (WiFi) JUL.25.2016 (MON) 11:22

SECURITY / AUTHENTICATION / ENCRYPTION

NONE	WEP64	WEP 128	WEP64 Shared Key	WEP 128 ShKey	WPA PSK TKIP	WPA PSK CCMP	WPA2 PSK TKIP	WPA2 PSK CCMP
------	-------	---------	------------------	---------------	--------------	--------------	---------------	---------------

SSID (WIRELESS NETWORK NAME) []

KEY TYPE: [] [] []

WEP KEY INDEX: [] [] [] []

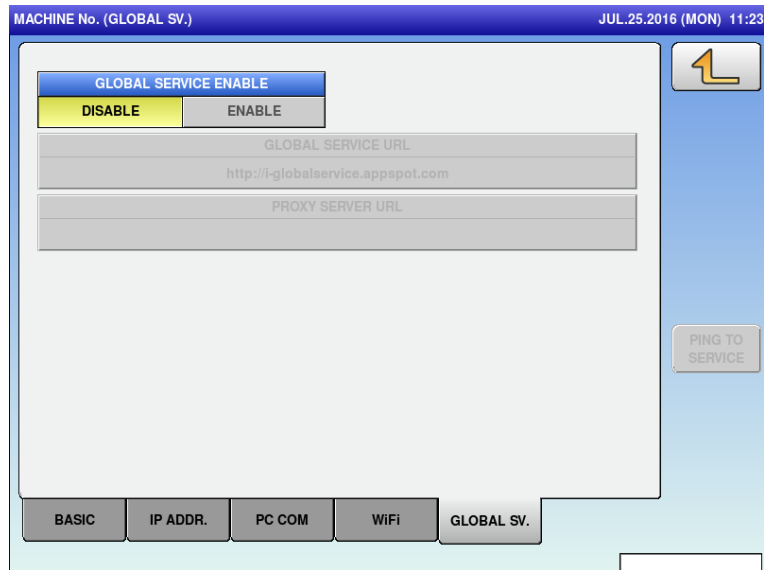
WEP64 KEY: [] [] [] [] []

PING TO PC

BASIC IP ADDR. PC COM WiFi GLOBAL SV.

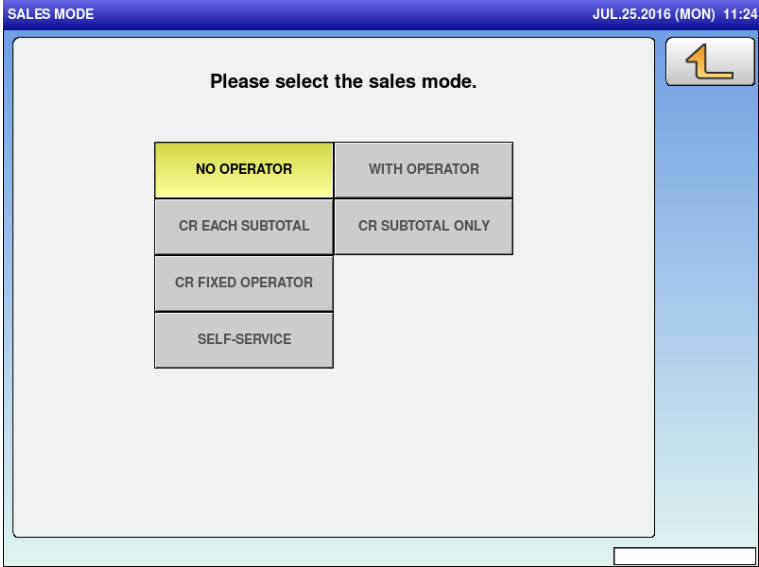
Menu name	Specification
SECURITY / AUTHENTICATION / ENCRYPTION	Select the method of security/authentication/encryption. NONE / WEP64 / WEP128 / WEP64 Shared Key / WEP128 ShKey / WPA PSK TKIP / WPA PSK CCMP / WPA2 PSK TKIP / WPA2 PSK CCMP
SSID (WIRELESS NETWORK NAME)	Enter the SSID. Press button to open editor screen. Up to 32 bytes
KEY TYPE	Select the WEP key index. HEX / ASCII / PASSPH
WEP KEY INDEX	Select the WEP key index. 1 / 2 / 3 / 4 This function is enabled only when one of WEP64 / WEP128 / WEP64 Shared Key / WEP128ShKey is selected for security / authentication / encryption.
WEP64 KEY	Enter the WEP64 Key. Up to 5 bytes This function is enabled only when one of WEP64 / WEP128 / WEP64 Shared Key / WEP128ShKey is selected for security / authentication / encryption.
PING TO PC	Ping the PC.

5.2.5 GLOBAL SV.



Menu name	Specification
GLOBAL SERVICE ENABLE	Select and set whether or not to use the cloud function (Global Service). DISABLE / ENABLE
The following parameters are valid only when GLOBAL SERVICE ENABLE setting is set to [ENABLE] (grayed out when set to [DISABLE])	
GLOBAL SERVICE URL	Enter the URL of Cloud server (only when the function is valid). Press button to open editor screen.
PROXY SERVER URL	Enter the URL of Proxy server (only when the function is valid). Press button to open editor screen.
PING TO SERVICE	Send PING to the set cloud server (When the cloud function is not in use, the option is grayed out).
REMOTE OPERATION	Allow remote access by VNC connection. Enter the service password to display this option. DISABLE / ENABLE

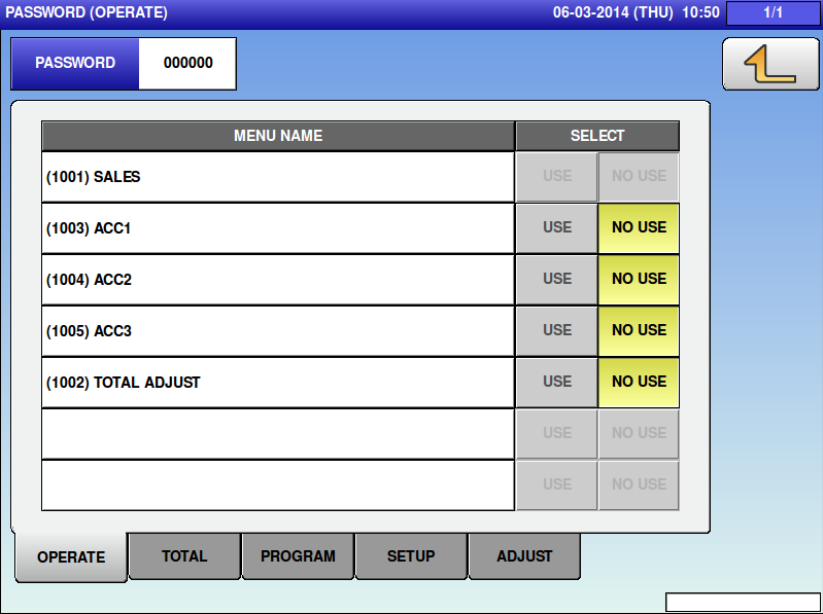
5.3 SALES MODE



Menu name	Specification
SALES MODE	Select the sales mode.

5.4 PASSWORD

5.4.1 OPERATE



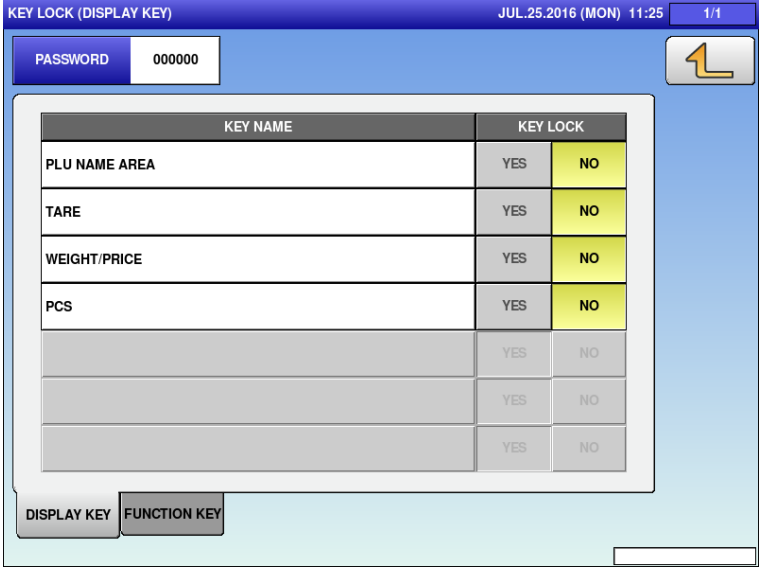
Menu name	Specification
PASSWORD	Enter password in six digits. Logging in by this password will release the menu operation prohibited status.
MENU NAME	Display the menu name. Both USE and NO USE for SALES are grayed out because SALES cannot be locked with the password.
SELECT	Select whether or not to lock with the password. USE: Locked NO USE: Not locked

(All tabs have the same operations so their explanations are omitted here.)

(All tabs share the same password.)

5.5 KEY LOCK

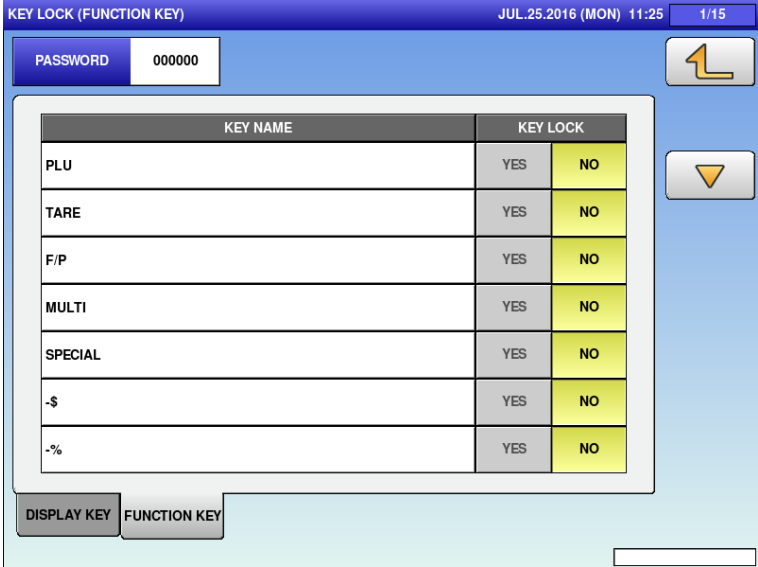
5.5.1 DISPLAY KEY



Menu name	Specification
PASSWORD	Enter the password in six digits. Normally in PRODUCTION screen, enter this password and press KEY LOCK FUNCTION to release the input prohibited status.
KEY NAME	Display measurement menu on normal mode screen. Not displayed WEIGHT/PRICE when [OCEANIA] is selected on COUNTRY menu. Enter 951753 and press PLU to enable this function.
KEY LOCK	Select whether or not to set a key lock. YES: key lock is set. NO: key lock is not set.

(All tabs share the same password.)

5.5.2 FUNCTION KEY

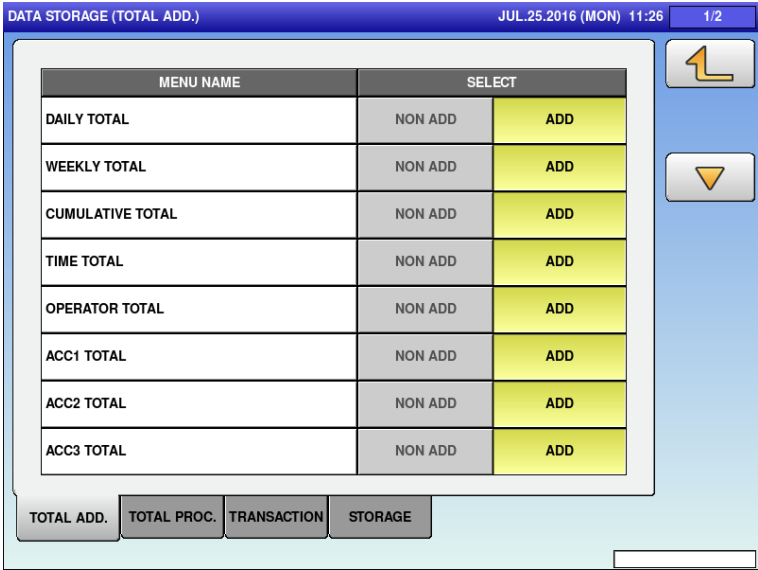


Menu name	Specification
PASSWORD	Enter the password in six digits. Normally in PRODUCTION screen, enter this password and press KEY LOCK FUNCTION to release the input prohibited status.
KEY NAME	Display the function key name. Not displayed WEIGHT/PRICE when [OCEANIA] is selected on COUNTRY menu. Enter 951753 and press PLU to enable this function.
KEY LOCK	Select whether or not to set a key lock. YES: key lock is set. NO: key lock is not set.

(All tabs share the same password.)

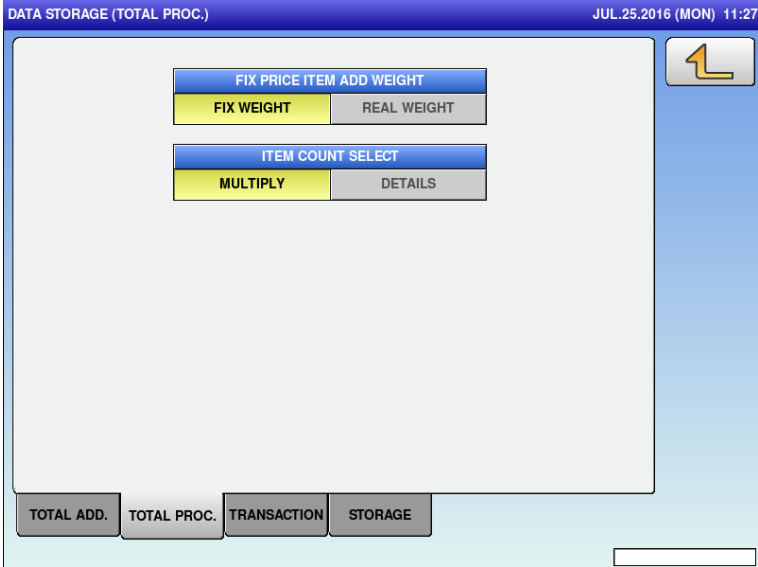
5.6 DATA STORAGE

5.6.1 TOTAL ADD.



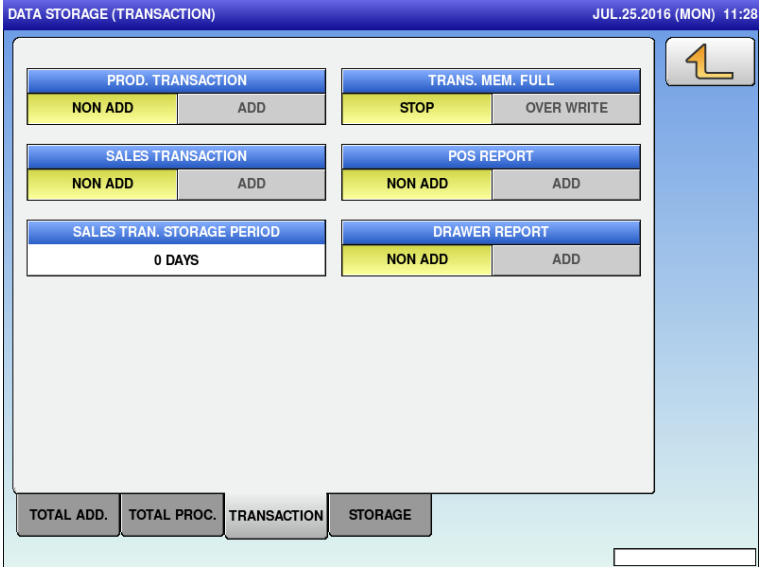
Menu name	Specification
MENU NAME	Display menu name.
SELECT	Select whether or not to add. NON ADD / ADD
TOTAL PROC. / TRANSACTION / STORAGE tabs are displayed only when you access above menus after logging in with service password.	

5.6.2 TOTAL PROC.



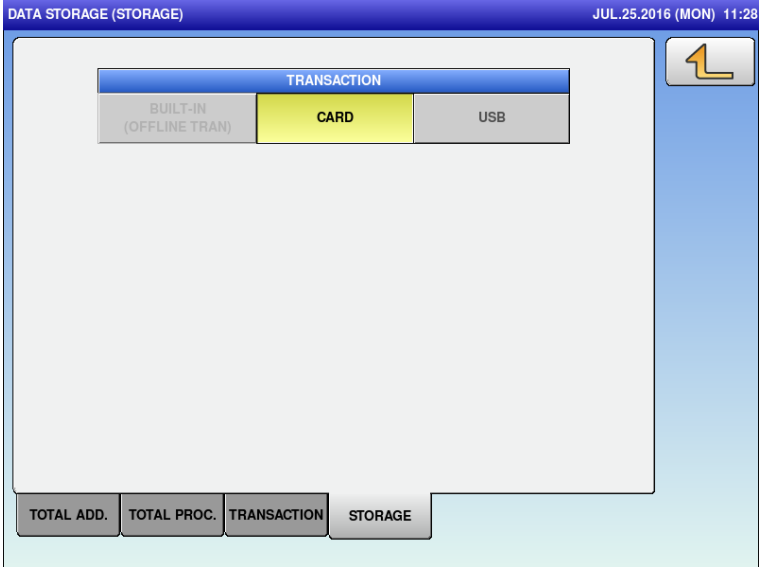
Menu name	Specification
FIX PRICE ITEM ADD WEIGHT	Select the addition weight of fixed-price items. FIX WEIGHT / REAL WEIGHT
ITEM COUNT SELECT	Select to count items. MULTIPLY / DETAILS

5.6.3 TRANSACTION



Menu name	Specification
PROD. TRANSACTION	Select whether or not to add the product transaction. NON ADD / ADD
TRANS. MEM. FULL	Select between stopping or overwriting the transaction addition at full memory condition. STOP / OVERWRITE
SALES TRANSACTION	Select whether or not to add the sales transaction. NON ADD / ADD
POS REPORT	Select whether or not to add the POS report. NON ADD / ADD
SALES TRAN. STORAGE PERIOD	Enter the sales transaction storage period. Input range: 0 to 99
DRAWER REPORT	Select whether or not to add the drawer report. NON ADD / ADD

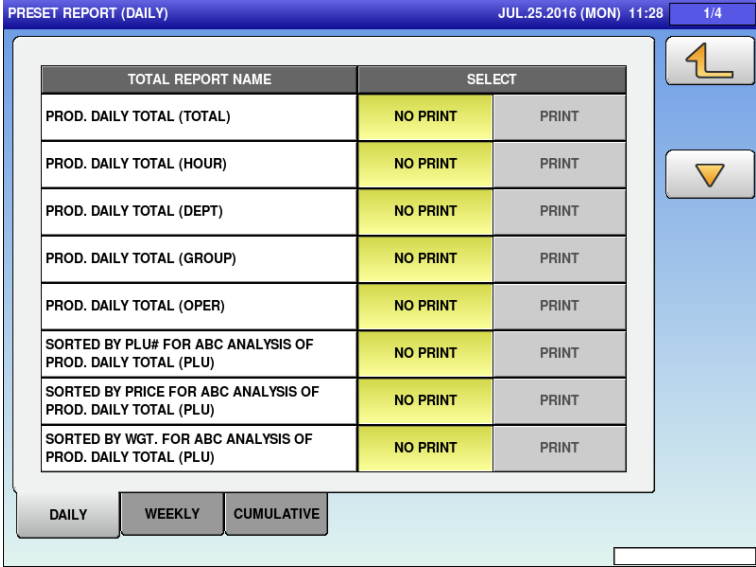
5.6.4 STORAGE



Menu name	Specification
TRANSACTION	Select where to save the transaction. BUILT-IN / CARD / USB

5.7 PRESET REPORT

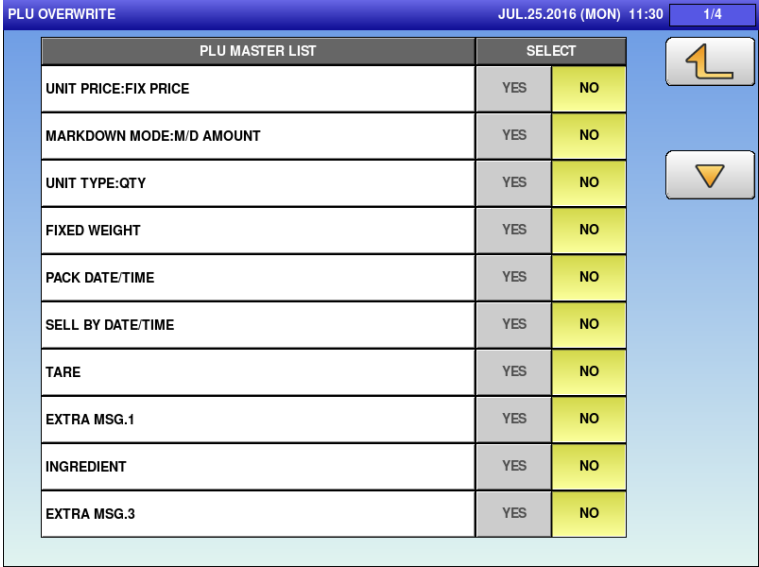
5.7.1 DAILY



Menu name	Specification
TOTAL REPORT NAME	Display the report menu name.
SELECT	Select whether or not to print the report. NO PRINT / PRINT

(All tabs have the same operations so their explanations are omitted here.)

5.8 PLU OVERWRITE



Menu name	Specification
PLU MASTER LIST	Display the PLU master list.
SELECT	Select whether or not to changes made by the operator will overwrite the PLU's programmed data values. YES / NO

5.9 PLU INITIAL DATA

5.9.1 SALE1

Menu name	Specification
(Each item)	Enter the initial value to newly create the PLU master.

(All tabs have the same operations so their explanations are omitted here.)

5.10 PLU UPDATE

PLU UPDATE JUL.25.2016 (MON) 11:37 1/12

CHANGE RANGE

START No. 00000001 END No. 99999999

UNIT PRICE No. CONDITION

1 2 3 4 5 NO YES

No.	LIST NAME	REPLACE CONDITION	CHANGE CONTENTS
1	ITEM CODE		
2	PACK DATE PRINT		
3	PACK TIME PRINT		
4	PACK TIME DATA		
5	SB DATE PRINT		
6	SB TIME PRINT		

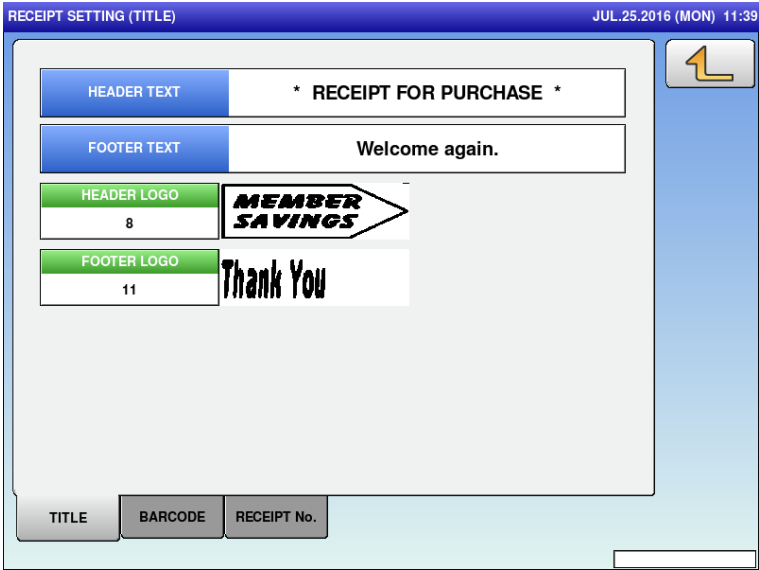
BATCH DELETE

EXEC

Menu name	Specification
START No.	Enter the start number of the batch change range. Input range: 1 to 99999999
END No.	Enter the end number of the batch change range. Input range: 1 to 99999999
UNIT PRICE No.	Enter the unit price number for the batch change. Press button to change selection.
CONDITION	Select whether or not to specify the replacement condition for the batch change. NO / YES
LIST NAME	Display the item for the batch change. Press button to change selection.
REPLACE CONDITION	Specify the replacement condition. This function is enabled when [YES] is selected in [CONDITION].
CHANGE CONTENTS	Specify the replacement contents.
BATCH DELETE	Cancel all selections.
EXEC	Execute the batch change. ALL REUPDATE CHECK dialog appears to ask whether to execute the batch change.

5.11 RECEIPT SETTING

5.11.1 TITLE



Menu name	Specification
HEADER TEXT	Enter text of header. Press button to open editor screen.
FOOTER TEXT	Enter text of footer. Press button to open editor screen.
HEADER LOGO	Enter logo of header. Press button to open image list screen.
FOOTER LOGO	Enter logo of footer. Press button to open image list screen.

5.11.2 BARCODE

Menu name	Specification
POS FLAG	Enter the POS flag. Input range: 00 to 99
POS CODE TYPE	Select the POS code type. 1: EAN / UPC13 / 2: EAN / UPC 8 / 3: 10 DIGITS 13 / 4: 5 DIGITS 8 / 5: GS1
RECEIPT CODE	Enter the receipt code. Input range: 0 to 99999999
GS1 EXP FORMAT	Select the GS1 EXP format. 1: (01)(3922)(3203) / 2: (01)(3922)(3203)(15)
POS MINUS FLAG	Enter the POS minus flag. Input range: 00 to 99
POS FORMAT	Select the POS format. Press button to open POS format list screen.

5.11.3 RECEIPT No.

RECEIPT SETTING (RECEIPT No.) JUL.25.2016 (MON) 11:40

RECEIPT START No.	1	DAILY TOTAL AUTO CLEAR	NO	YES
RECEIPT END No.	999999			

TITLE BARCODE RECEIPT No.

Menu name	Specification
RECEIPT START No.	Enter the receipt starting number. Input range: 1 to 999999
DAILY TOTAL AUTO CLEAR	Enter the daily total auto clear setting. NO / YES
RECEIPT END No.	Enter the receipt ending number. Input range: 1 to 999999

5.12 CASSETTE

PRINTER		PLU No.	LABEL W.	LABEL L.	CAST. No.
PRN 1		0	60.0 mm	44.0 mm	1

No.	FORMAT No.	LABEL SPEC	PEEL MODE	PRINT MODE
01	001	01	INDIV.LABEL	MANUAL
02	001	01	INDIV.LABEL	MANUAL
03	001	01	INDIV.LABEL	MANUAL
04	001	01	INDIV.LABEL	MANUAL
05	001	01	INDIV.LABEL	MANUAL
06	001	01	INDIV.LABEL	MANUAL
07	001	01	INDIV.LABEL	MANUAL

CAST. SWITCHING		CAST. SWITCH TIMER	GROUP/PAGE(FUNC)=0 MEANS	
CAST. INSERT			GRP.1 PG.1	NO DISP.

Menu name	Specification
PRINTER	Display only PRN 1.
PLU No.	Enter the PLU number to use for test printing. Input range: 0 to 99999999 For 0, print the checker label.
LABEL W.	Display the format width of label.
LABEL L.	Display the format length of label.
CAST. No	Display the cassette number.
FORMAT No.	Press button to open the format entering screen.
LABEL SPEC.	Press button to open the label number entering screen.
PEEL MODE	Enter the peel mode.
PRINT MODE	Select the print mode. AUTO / MANUAL
LABEL TYPE	Select the label type. DIE-CUT / CONTINUOUS
STORE PRINT	Select whether or not to print the store. ENABLE / DISABLE
TITLE PRINT	Select whether or not to print the title. ENABLE / DISABLE
OVERFLOW FLG.	Select and set the process when the printing is over the set. ERR+BLANK / TO MAX

Menu name	Specification
2nd FMT No.	Enter the format to be used in the second label printing. Input range: 0 to 999
SUBTTL FMTno.	Enter the subtotal format number. Input range: 0 to 999
SALES MODE	Select the sales mode. NO OPE / WITH OPE / CR EACH / CR SUBONLY / CR FIXED / SELF
FMT No.(A)	Enter the format number. Input range: 0 to 999
PLU NAME	Select the PLU name. FIXED / VARIABLE
EXTRA MESSAGE 1~3	Select the extra message 1 to 3. FIXED / VARIABLE
FREE MSG.	Select the free message. FIXED / VARIABLE

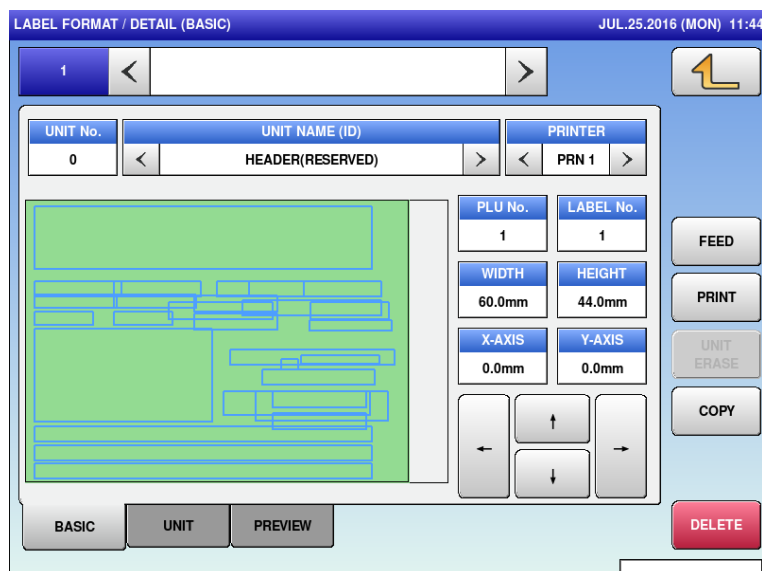
5.13 LABEL SPEC.

Menu name	Specification
LABEL TYPE	Select the label type. 0: RECEIPT / 1: 130LA-1 / 3: 150LA-1
PRINT DENSITY	Enter the print density control of black character. Input range: 0 to 9
RED DENSITY	Enter the print density control of red character. Input range: 0 to 9
SENSOR TYPE	Select the sensor type. 0: NO USE / 1: LABEL / 2: MARK
PRINT SPEED	Select the printing speed. 100mm/s / 120mm/s / 150mm/s

(See section **6.8.4 LABEL FEED** for details of the settings not listed here.)

5.14 LABEL FORMAT

5.14.1 DETAIL (BASIC)



Menu name	Specification
FORMAT NAME	Press button to open the format name edit screen. Press "<" and ">" located at both sides of the box to select the next (or previous) format master.
UNIT No.	Display the unit number. Press button to open the unit list for the current format. The UNIT tab also has the same function.
UNIT NAME(ID)	Display the selected unit name. If nothing is selected, [HEADER] is selected.
PRINTER	Select the printer number.
PLU No.	Enter the PLU number to be used for the test print and preview. Input range: 1 to 99999999 For 0, print the checker label.
LABEL No.	Specify the label number. Input range: 1 to 99
WIDTH	Enter the format width. Input range: 0 to 800
HEIGHT	Enter the format height. Input range: 0 to 2000
X-AXIS	Display the X axis of selected unit. The axis is moved by entering numerical number. Note: set as 9999 to disable a unit.

Menu name	Specification
Y-AXIS	Display the Y axis of selected unit. The axis is moved by entering numerical number.
FEED	Feed the label.
PRINT	Perform test printing by the format called and the item information set by PLU number.
UNIT ERASE	Delete the selected unit.
COPY	Enter numerical number and press COPY to copy the said numerical number's format.
DELETE	Delete the format master. The dialog appears to ask whether to delete the format master.
←↑→↓	Move the axis of selected unit. If HEADER is selected, the axis of whole format is moved.

5.14.2 DETAIL (UNIT)

Menu name	Specification
FORMAT NAME	Press button to open the format name edit screen. Press "<" and ">" located at both sides of the box to select the next (or previous) format master.
STRING EDIT	Open the format string edit screen. Up to 526 bytes
UNIT No.	Display the unit number. Press button to open the unit list set for the current format. UNIT tab also has the same function.
UNIT NAME	Display the selected unit name. If nothing is selected, "HEADER" is selected.
ABCDEF	Enter the alphabetical character. For hexadecimal entry.
PLU	Display the name of set item.
SET CONTENTS	Display the set contents.
VALUE	Enter the value for set contents.
FEED	Feed the label.
PRINT	Perform test printing by the format being called and the item information set by [PLU No.].
UNIT ERASE	Delete the selected unit.
UNIT COPY	Enter numerical number and press COPY to copy the said numerical number's format.
UNIT ADD	Add the unit. The header unit also increases by one at the same time.

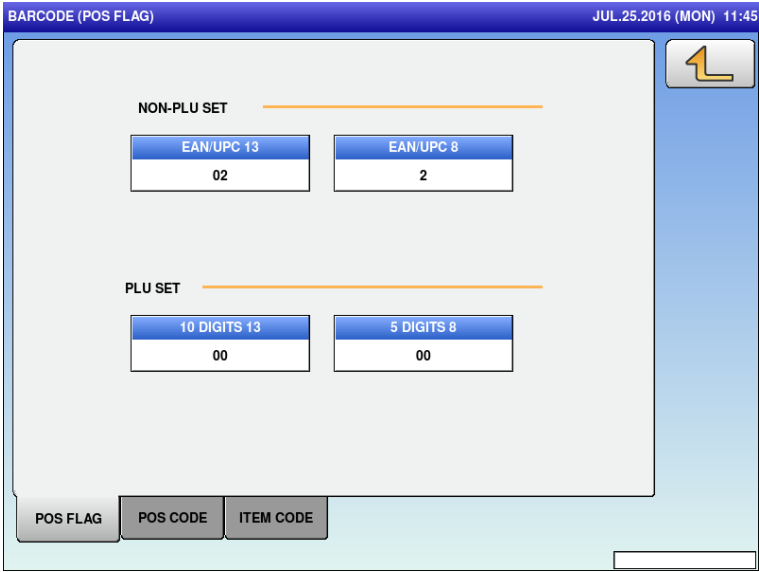
5.14.3 DETAIL (PREVIEW)



Menu name	Specification
DETAILED IMAGE /WHOLE IMAGE	Select the whole image or detailed image.
FEED	Feed the label.
PRINT	Perform test printing by the format called and the item information set by PLU number.
←↑→↓	Move the image. This function is enabled only for the detailed image.

5.15 BARCODE

5.15.1 POS FLAG



Menu name	Specification
EAN/UPC 13	Enter the NON-PLU 13 digits. Input range: 00 to 99
EAN/UPC 8	Enter the NON-PLU 13 digits. Input range: 0 to 9
10 DIGITS 13	Enter the PLU 13 digits. Input range: 00 to 99
5 DIGITS 8	Enter the PLU 8 digits. Input range: 00 to 99

5.15.2 POS CODE

Menu name	Specification
POS CODE TYPE	Select the POS code type. 1: EAN/UPC13 2: EAN/UPC 8/3:10 DIGITS 13/4:5DIGITS 8/5:GS1 6:GS1 ST/7:GS1 STO/8:GS1 LIMITED/9:GS1 EXPANDED/10: ITF
OCR	Select the POS code type. 1: EAN/UPC13 2: EAN/UPC 8/3:10 DIGITS 13/4:5DIGITS 8/5:GS1 6:GS1 ST/7:GS1 STO/8:GS1 LIMITED/9:GS1 EXPANDED/10: ITF
GS1 EXP FORMAT	Select the GS1 EXP format. 1:(01) (3922) (3203) / 2:(01) (3922) (3203) (15)
POS FORMAT(WGT)	Select the POS format (weight). Press button to open POS FORMAT list. Select the format from the list.
POS FORMAT (FIX PRICE)	Select the POS format (fix price). Press button to open POS FORMAT list. Select the format from the list.

5.15.3 ITEM CODE

BARCODE (ITEM CODE) JUL.25.2016 (MON) 11:45

DEPARTMENT No. DIGIT SET

1	2	3	4	5	6	7	8
---	---	---	---	---	---	---	---

GROUP No. DIGIT SET

1	2	3	4	5	6	7	8
---	---	---	---	---	---	---	---

EAN/UPC 13 DIGIT SET

1	2	3	4	5	6	7	8
---	---	---	---	---	---	---	---

EAN/UPC 8 DIGIT SET

1	2	3	4	5	6	7	8
---	---	---	---	---	---	---	---

POS FLAG POS CODE ITEM CODE

Menu name	Specification
DEPARTMENT No. DIGIT SET	<p>Execute the digit set of department number.</p> <p>Press numerical number to switch the selection.</p> <p>Press numerical number in series.</p> <p>(e.g. The combination of "1" and "3" cannot be selected. The combination of "1", "2" and "3" can be selected.)</p>
GROUP No. DIGIT SET	<p>Execute the digit set of group number.</p> <p>Press numerical number to switch the selection.</p> <p>Press numerical number in series.</p> <p>(e.g. The combination of "1" and "3" cannot be selected. The combination of "1", "2" and "3" can be selected.)</p>
EAN/UPC 13 DIGIT SET	<p>Execute the digit set of JAN code (13 digits).</p> <p>Press numerical number to switch the selection.</p> <p>Press numerical number in series.</p> <p>(e.g. The combination of "1" and "3" cannot be selected. The combination of "1", "2" and "3" can be selected.)</p>
EAN/UPC 8 DIGIT SET	<p>Execute the digit set of JAN code (8 digits).</p> <p>Press numerical number to switch the selection.</p> <p>Press numerical number in series.</p> <p>(e.g. The combination of "1" and "3" cannot be selected. The combination of "1", "2" and "3" can be selected.)</p>

5.16 CUSTOM BARCODE

5.16.1 BASIC

No.	ID	START	DIGIT	DATA	CTRL
1					

Menu name	Specification
PLU	Enter the item number to be used for the preview. Input range: 1 to 99999999 Other tabs also have the same function.
FORMAT	Input range: 1 to 999 Other tabs also have the same function.
FORMAT EDIT	Open the format edit screen. Other tabs also have the same function.
INSERT	Insert the blank line in front of selected line.
DELETE	Delete the selected line.
No.	Press button to switch the selection.
ID	Enter the ID to be combined. Press button to open the CUSTOM BARCODE ID LIST. Select the ID from the list.
START	Enter the start digit. Input range: 1 to 999
DIGIT	Enter the digit number. 0: ALL or 1 to 999
DATA	Display the set ID data. Press button to open the edit screen only when the ID is set to PRE PRINT.
CTRL	Select the control character. 0: NONE 1: ()

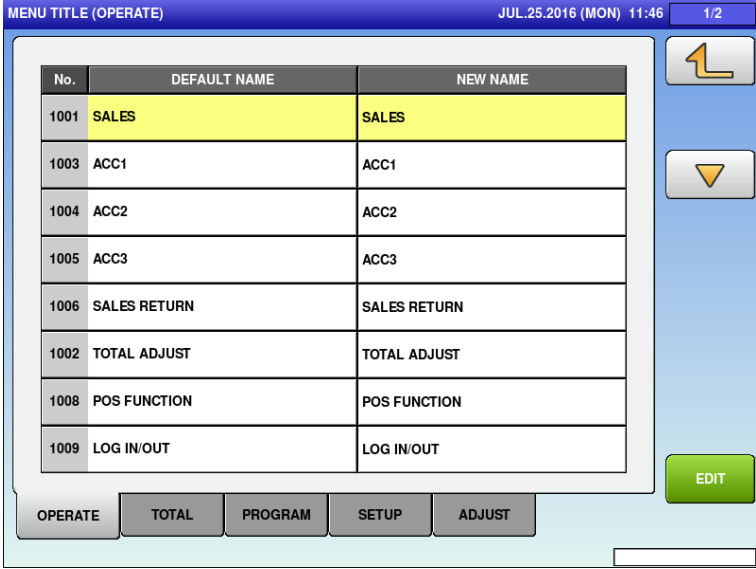
5.16.2 PREVIEW



Menu name	Specification
	The combined-barcode preview is displayed only.

5.17 MENU TITLE

5.17.1 OPERATE



Menu name	Specification
DEFAULT NAME	Display the menu name before editing. Press button to select the menu name.
NEW NAME	Display the menu name after editing. Press button to select the menu name.
EDIT	Transfer to the edit screen of the selected menu name.

(All tabs have the same operations so their explanations are omitted here.)

5.18 OPERATION SETTING

5.18.1 CALL1

Menu name	Specification
FIND PLU	Select how to search PLU. START CHAR. / LINE1 / LINE2 / ALL / START LINE2
OPEN PLU	Select whether or not to open the PLU. YES / NO
PROMO CONFIRMATION	Select whether or not to confirm a sales promotion. YES / NO
FREEMASTER FOR URL	Enter the free master number to use in the URL. Input range: 0 to 15

5.18.2 PRODUCTION

OPERATION SETTING (PRODUCTION) JUL.25.2016 (MON) 11:51

WEIGHED ITEMS' WEIGHT RANGES CHECK
 NO YES

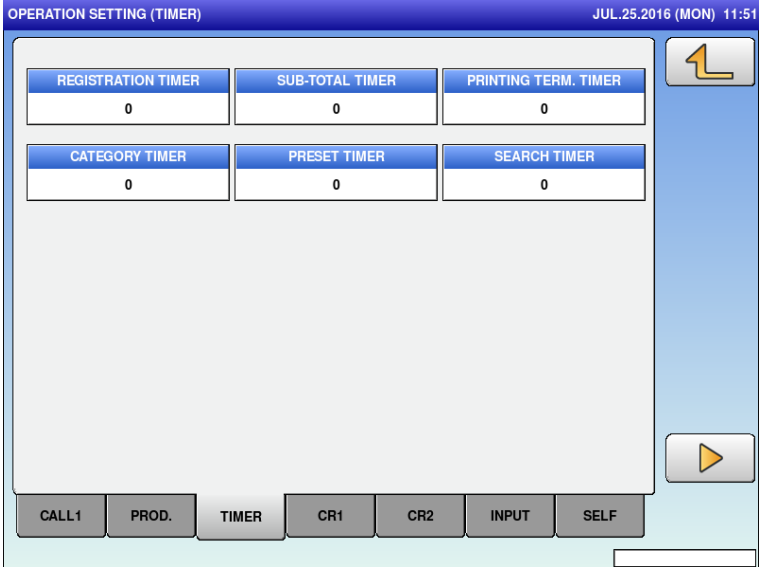
TARE SELECT **FIX PRICE AUTO PRN (WEIGHT)**
 1st TARE 2nd TARE NO YES

FIX PRICE ITEMS' WEIGHT RANGES CHECK
 NO YES

CALL1 PROD. TIMER CR1 CR2 INPUT SELF

Menu name	Specification
WEIGHED ITEMS'WEIGHT RANGES CHECK	Select whether or not to check the weight of weighed items. NO / YES
TARE SELECT	Select the tare. 1st TARE / 2nd TARE
FIX PRICE AUTO PRN (WEIGHT)	Select whether or not to check and print the weight of fixed-price product. NO / YES
FIX PRICE ITEMS' WEIGHT RANGES CHECK	Select whether or not to check the weight of fixed-price product. NO / YES

5.18.3 TIMER



Menu name	Specification
REGISTRATION TIMER	Enter the registration timer. Input range: 0 to 9999 (seconds)
SUB-TOTAL TIMER	Enter the time to return to the previous screen while no operation in the subtotal mode. Input range: 0 to 9999 (seconds)
PRINTING TERM.TIMER	Enter the time to return to the previous screen while no operation after printing in the subtotal mode. Input range: 0 to 9999 (seconds)
CATEGORY TIMER	Enter the category timer. Input range: 0 to 9999 (seconds)
PRESET TIMER	Enter the preset timer. Input range: 0 to 9999 (seconds)
SEARCH TIMER	Enter the search timer. Input range: 0 to 9999 (seconds)

5.18.4 CR1

OPERATION SETTING (CR1) JUL.25.2016 (MON) 11:51

VAT PRINT
NO YES

AUTO MODE OPERATION
CONTINUE EACH

DRAWER OPEN
PRN START PRN END

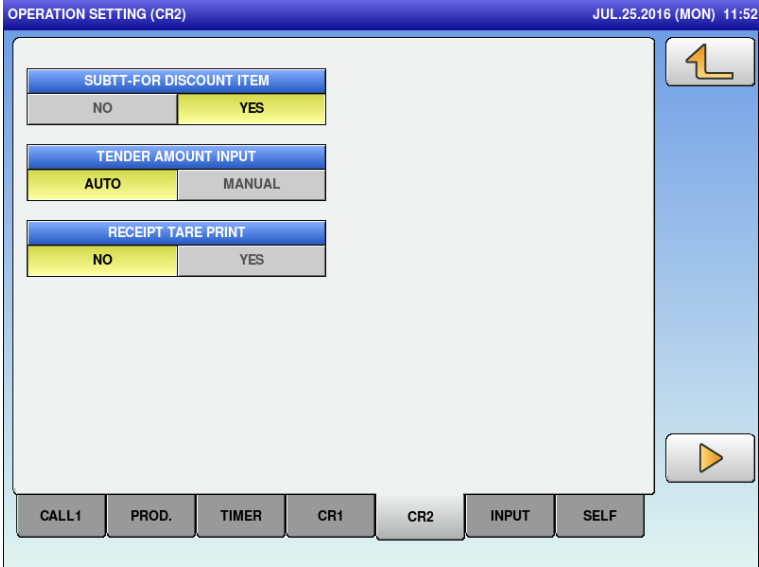
DRAWER 0 OPEN
NO YES

REISSUE
CALL UP TICKET OPEN TICKET

CALL1 PROD. TIMER CR1 CR2 INPUT SELF

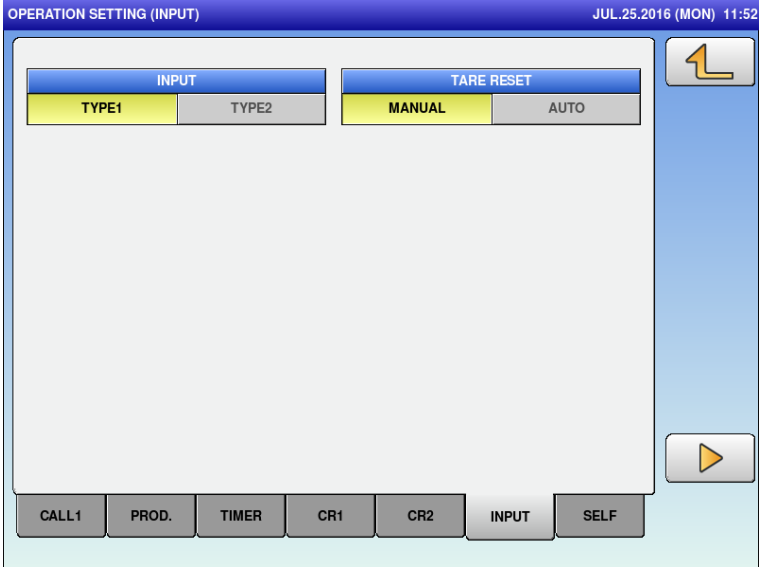
Menu name	Specification
VAT PRINT	Select whether or not to print the vat printing. NO / YES
AUTO MODE OPERATION	Select the automatic operation mode. CONTINUE / EACH
DRAWER OPEN	Select the drawer operation to open. PRN START / PRN END
DRAWER 0 OPEN	Select whether or not to operate the drawer 0 open operation. NO / YES
REISSUE	Select the reissue operation. CALL UP TICKET / OPEN TICKET

5.18.5 CR2



Menu name	Specification
SUBTT-FOR DISCOUNT ITEM	Select whether or not to set the items of subtotal for discount. NO / YES
TENDER AMOUNT INPUT	Select the operation mode of tender amount input. AUTO / MANUAL
RECEIPT TARE PRINT	Select whether or not to print with the receipt tare. NO / YES

5.18.6 INPUT



Menu name	Specification
INPUT	Select the type for input. TYPE1 / TYPE2
TARE RESET	Select mode of tare resetting. MANUAL / AUTO

5.18.7 SELF

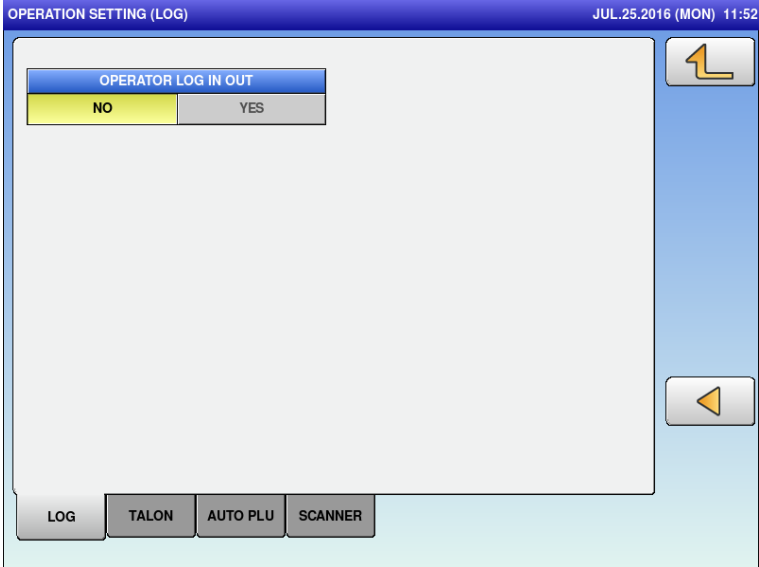
OPERATION SETTING (SELF) JUL.25.2016 (MON) 11:52

PRINT MODE <input checked="" type="radio"/> MANUAL <input type="radio"/> AUTO		SEARCH TYPE <input checked="" type="radio"/> PRESET <input type="radio"/> PLU	
AUTO PRINT TIMING(msec) 0		CALL PRINT <input type="radio"/> NO <input type="radio"/> YES	
PRESET SETTING			
GROUP NO. FOR WEIGHT ITEM 1		PAGE NO. FOR WEIGHT ITEM 1	
GROUP NO. FOR F/P ITEM 1		PAGE NO. FOR F/P ITEM 2	

CALL1 PROD. TIMER CR1 CR2 INPUT SELF

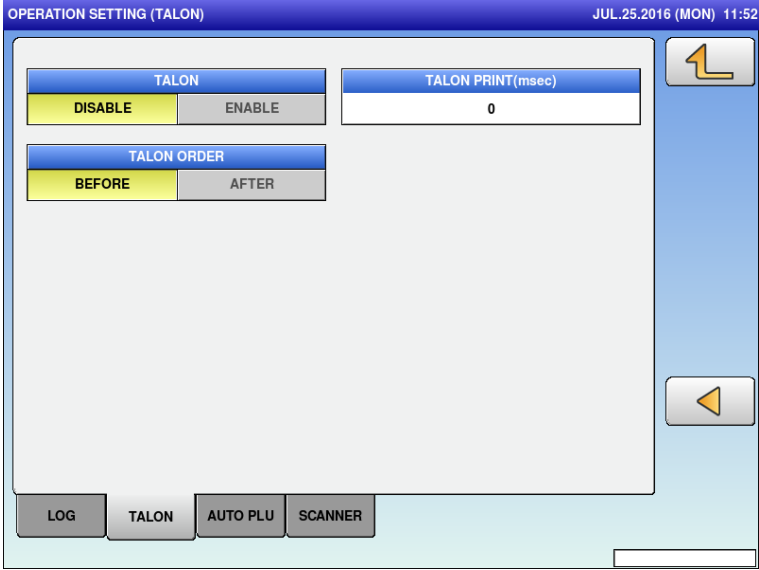
Menu name	Specification
PRINT MODE	Select mode for printing. MANUAL / AUTO
SEARCH TYPE	Select the searching type. PRESET / PLU
AUTO PRINT TIMING (msec)	Enter the time to set the auto print timing. Input range: 0 to 5000

5.18.8 LOG



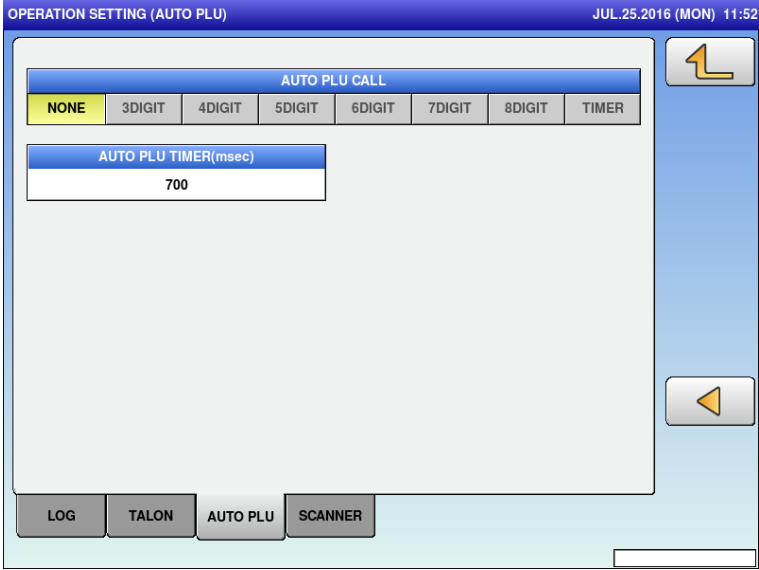
Menu name	Specification
OPERATOR LOG IN OUT	Select whether or not to be used to login for the operator. NO / YES

5.18.9 TALON



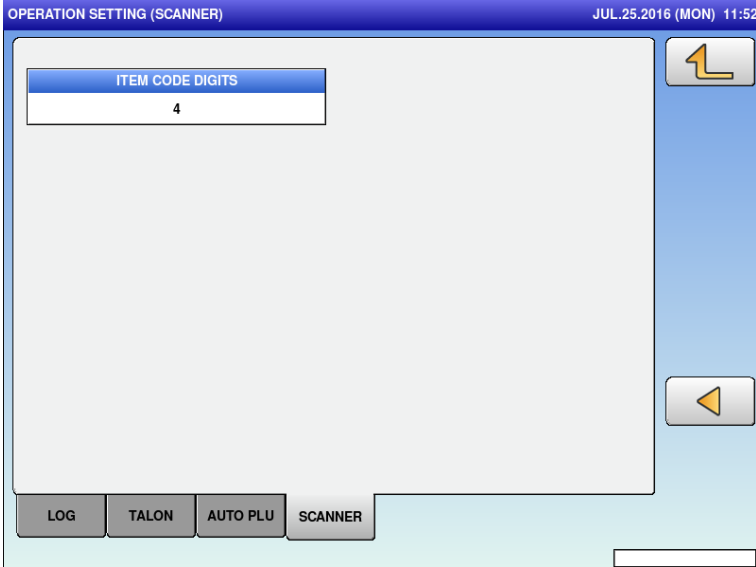
Menu name	Specification
TALON	Select the talon. DISABLE / ENABLE
TALON PRINT(msec)	Enter the time to set the talon printing. Input range: 0 to 3000
TALON ORDER	Select the talon. BEFORE / AFTER

5.18.10 AUTO PLU



Menu name	Specification
AUTO PLU CALL	Select the auto PLU call. NONE / 3DIGIT / 4DIGIT / 5DIGIT / 6DIGIT / 7DIGIT / 8DIGIT / TIMER
AUTO PLU TIMER (msec)	Enter the time allowed to enter a PLU. Input range: 0 to 3000

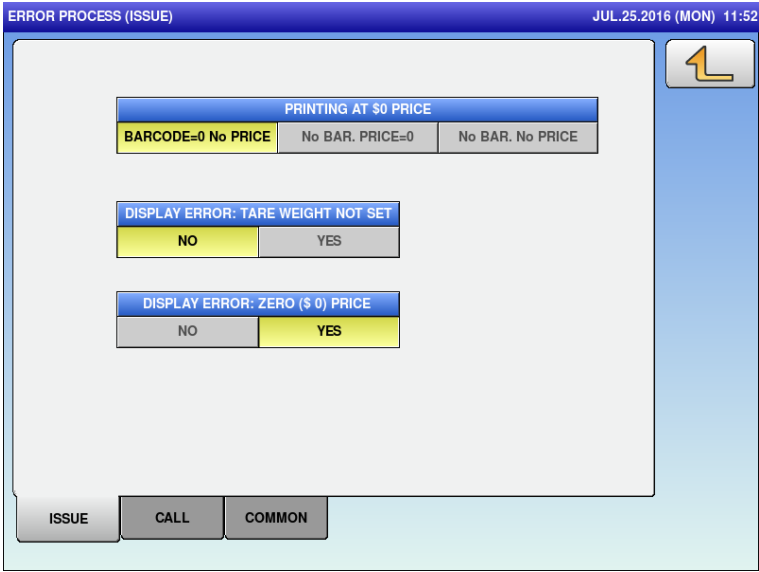
5.18.11 SCANNER



Menu name	Specification
ITEM CODE DIGITS	Enter digits of item code. Input range: 4 to 5

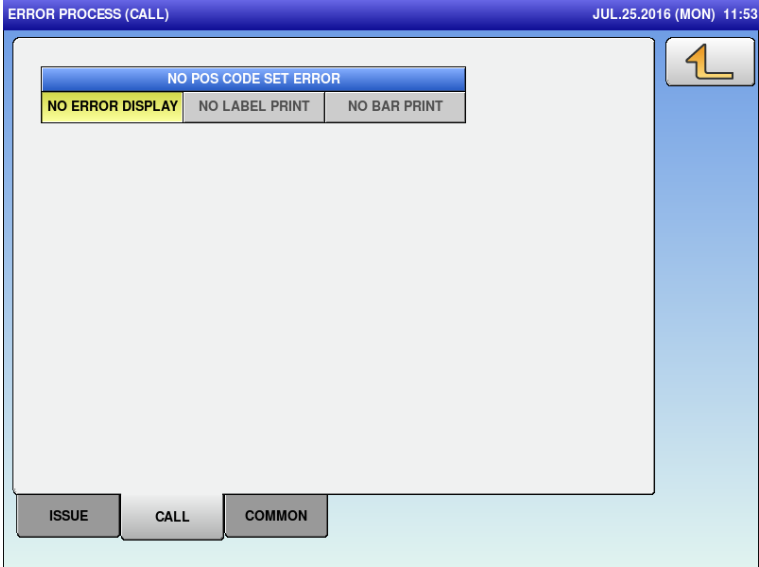
5.19 ERROR PROCESS

5.19.1 ISSUE



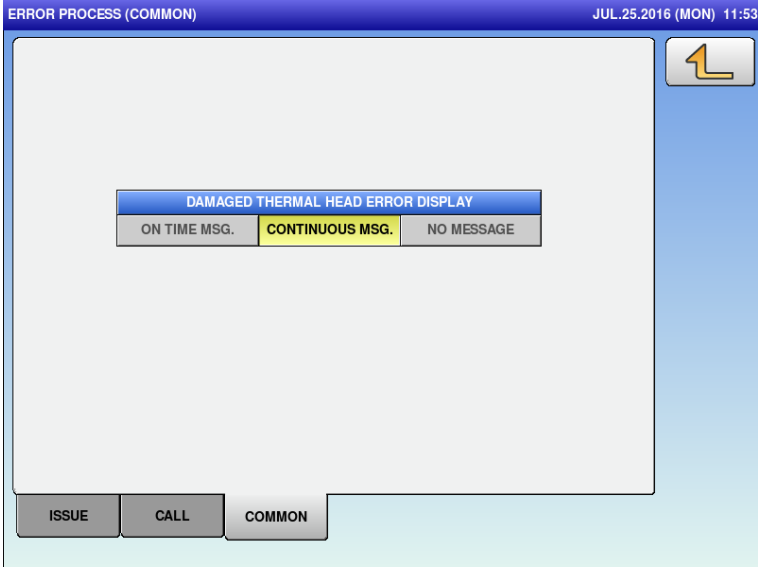
Menu name	Specification
PRINTING AT 0 PRICE	Select the action of printing at 0. BARCODE=0 No PRICE / No BAR.PRICE=0 / No BAR. No PRICE The currency unit depends on the country master.
DISPLAY ERROR: TARE WEIGHT NOT SET	Select whether or not to display the error message when the tare weight is not set. NO / YES
DISPLAY ERROR: ZERO PRICE	Select whether or not to display the error message of 0 price. NO / YES

5.19.2 CALL



Menu name	Specification
NO POS CODE SET ERROR	Select the action when the POS code is not set. NO ERROR DISPLAY / NO LABEL PRINT / NO BAR PRINT

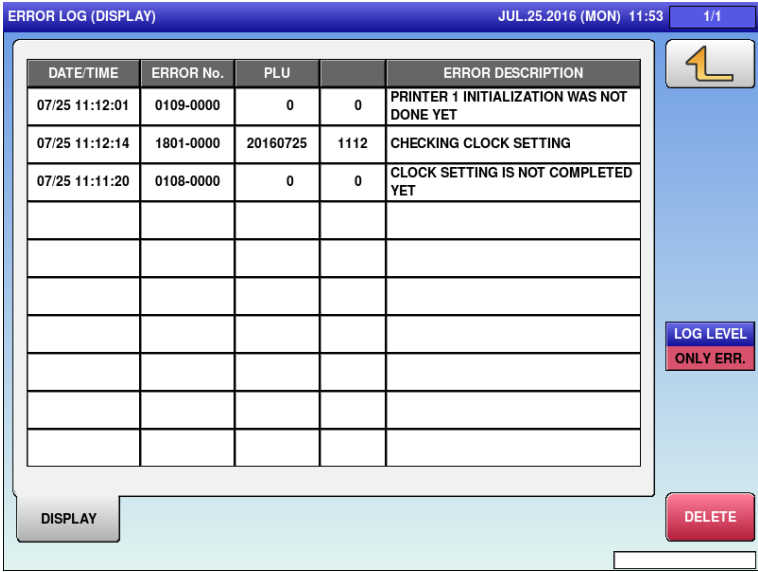
5.19.3 COMMON



Menu name	Specification
DAMAGED THERMAL HEAD ERROR DISPLAY	Select how to set the error message of damaged thermal head. ON TIME MSG / CONTINUOUS MSG / NO MESSAGE

5.20 ERROR LOG

5.20.1 DISPLAY



Menu name	Specification
LOG LEVEL	Select the error log level to be displayed on the list. ONLY ERR. / ERR. +OPE.
DELETE	Delete the error log. The DELETE CHECK dialog appears to ask whether to delete the error log.

5.21 TRACEABILITY

Menu name	Specification
TRACEABILITY TYPE	Select the traceability type. TYPE1 / TYPE2 (TYPE1 is simple traceability.)
TRACEABILITY TOTAL	Select whether or not to add the traceability total. NO / YES
TRACE. DATA DELETE	Select the manual or auto deletion of traceability data. MANUAL / AUTO
TRACEABILITY PASSWORD	Enter the traceability password. This function is enabled when [TYPE2] is selected in the TRACEABILITY TYPE. 0 or 4-digit number
TRACE RECEIPT PRINT	Select whether or not to print the trace receipt. NO PRINT / PRINT
LOOKUP TABLE EDIT	Select whether or not to enable the lookup table edit on the traceability screen in the normal mode. NO / YES

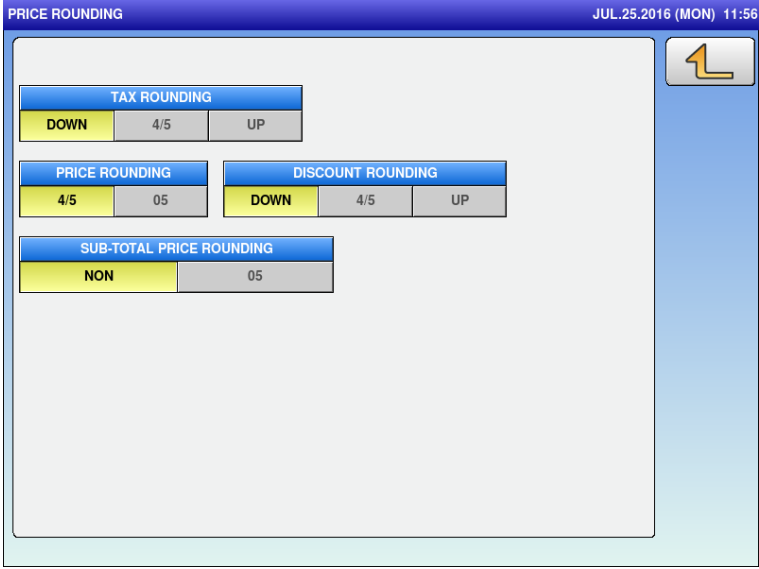
5.22 DUAL CURRENCY

DUAL CURRENCY 2012-02-22 (WED) 16:59

EXCH. RATE 4293	EXCH. RATE DEC. PNT. POS. 4
PERIOD SELECTION LOCAL+FOREIGN FOREIGN+LOCAL LOCAL FOREIGN	
EXCH. RATE PRINT FLAG NO PRINT PRINT	BARCODE PRICE SELECTION FOREIGN LOCAL
LOCAL CURRENCY SYMBOL Lm	LOCAL CURR. DEC. PNT. POS. 2

Menu name	Specification
EXCH. RATE	Enter the exchange rate of the second currency. Input range: 0 to 99999999
EXCH. RATE DEC. PNT. POS.	Enter the decimal point position of the exchange rate of the second currency. Input range: 0 to 7
PERIOD SELECTION	Select the currency combination. LOCAL+FOREIGN/FOREIGN+LOCAL/LOCAL/FOREIGN
EXCH.RATE PRINT FLAG	Select whether or not to print the teach rate flag. NO PRINT / PRINT
BARCODE PRICE SELECTION	Select the price selection of price. FOREIGN / LOCAL
LOCAL CURRENCY SYMBOL	Enter the local currency symbol. Up to 3 bytes
LOCAL CURR. DEC. PNT. POS.	Enter the decimal point position of the local currency. Input range: 0 to 7

5.23 PRICE ROUNDING



Menu name	Specification
TAX ROUNDING	Select the tax rounding type. 4/5 / 05 / UP
PRICE ROUNDING	Select the price rounding type. 4/5 / 05
DISCOUNT ROUNDING	Select the discount rounding type. DOWN / 4/5 / UP
SUB-TOTAL PRICE ROUNDING	Select the subtotal price rounding type. NON / 05

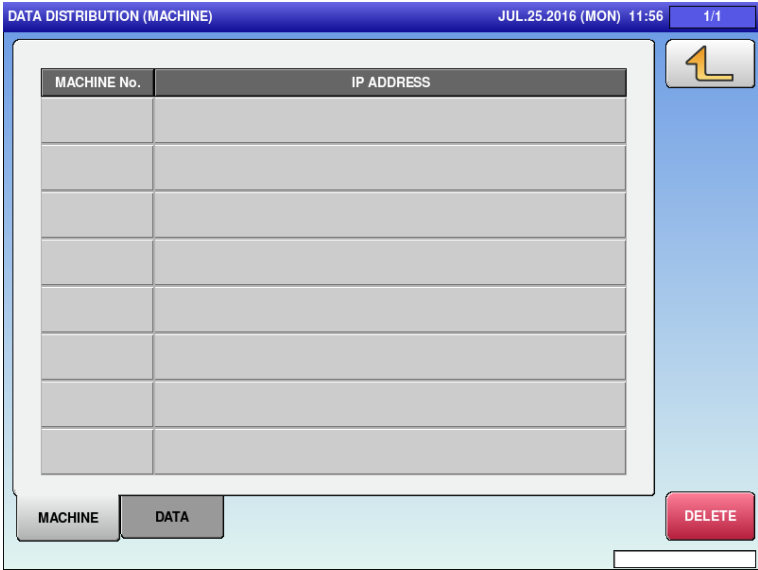
5.24 FREQUENT SHOPPER

The screenshot shows a software interface for 'FREQUENT SHOPPER'. At the top, the title bar indicates the date and time: 'JUL.25.2016 (MON) 11:56'. The main area contains two configuration sections. The first section, 'BARCODE PRICE TYPE', has two buttons: 'NORMAL' and 'MARKDOWN', with 'MARKDOWN' currently selected. The second section, 'LOGO IMAGE 1 No.', shows a text input field containing the number '000'. A blue sidebar on the right contains a yellow arrow icon pointing up and to the right.

Menu name	Specification
BARCODE PRICE TYPE	Select the barcode price type. NORMAL / MARKDOWN
LOGO IMAGE 1 No.	Enter the logo image 1 number. Input range: 0 to 999

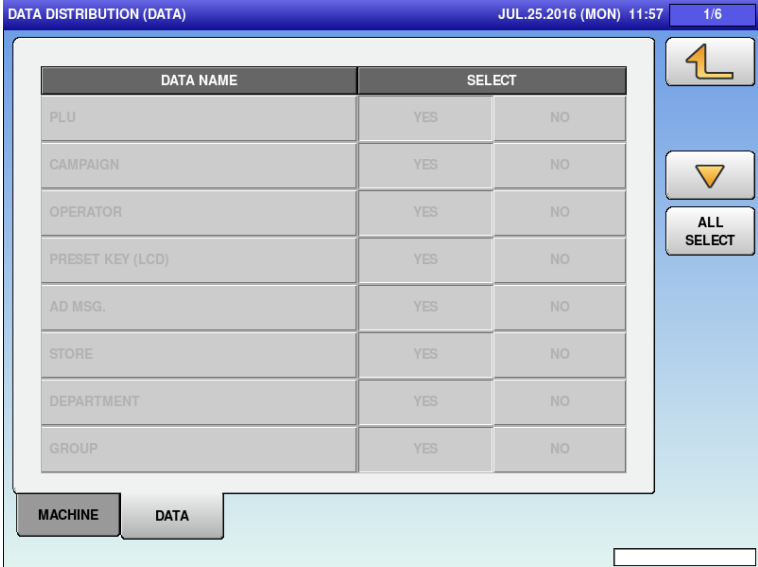
5.25 DATA DISTRIBUTION

5.25.1 MACHINE




Menu name	Specification
MACHINE No.	Enter the machine number. Input range: 0 to 99
IP ADDRESS	Enter the IP address. Input range: "0.0.0.0" to "255.255.255.255"
DELETE	Delete the selected line.

5.25.2 DATA



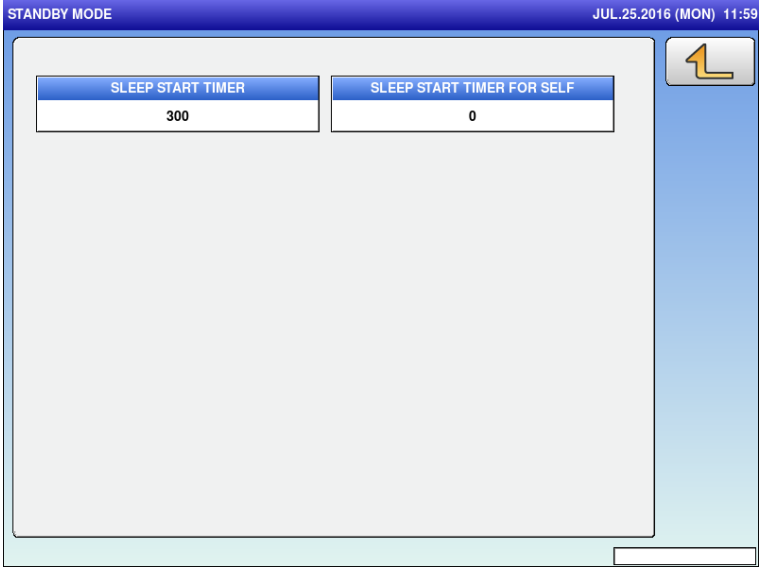
Menu name	Specification
DATA NAME	Display the data name.
SELECT	Select whether or not to distribute the master. YES / NO
ALL SELECT	Select all lines.

5.26 TAX

TAX					JUL.25.2016 (MON) 11:58	
TAX No.	TAX TYPE			TAX RATE		
0	EXCLUDED	INCLUDED	EXEMPT	5.00 %		
1	EXCLUDED	INCLUDED	EXEMPT	5.00 %		
2	EXCLUDED	INCLUDED	EXEMPT	5.00 %		
3	EXCLUDED	INCLUDED	EXEMPT	5.00 %		
4	EXCLUDED	INCLUDED	EXEMPT	5.00 %		
5	EXCLUDED	INCLUDED	EXEMPT	5.00 %		
6	EXCLUDED	INCLUDED	EXEMPT	5.00 %		
7	EXCLUDED	INCLUDED	EXEMPT	5.00 %		
8	EXCLUDED	INCLUDED	EXEMPT	5.00 %		
9	EXCLUDED	INCLUDED	EXEMPT	5.00 %		

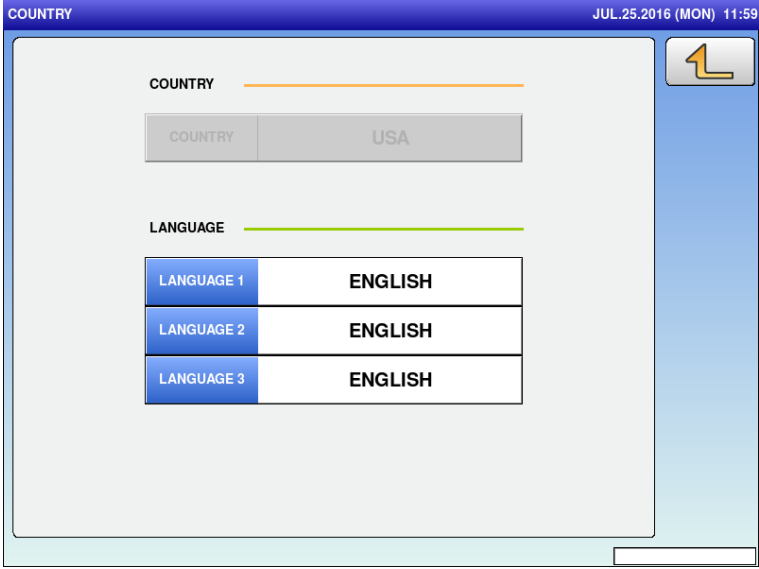
Menu name	Specification
TAX TYPE	Select tax type. EXCLUDED / INCLUDED / EXEMPT
TAX RATE	Enter the tax rate. Input range: 0.00 to 99.99 (%)

5.27 STANDBY MODE



Menu name	Specification
SLEEP START TIMER	Enter the time to standby mode. The unit is in seconds.
SLEEP START TIMER FOR SELF	Enter the time to standby mode for self. The unit is in seconds.

5.28 COUNTRY



Menu name	Specification
COUNTRY	Select the country. Enter 951753 and press PLU to enable this function. Press COUNTRY button to open the list and select the country.
LANGUAGE	Enter the first to third language. Press button to open the list and select the language.

5.29 FILE SAVE /LOAD

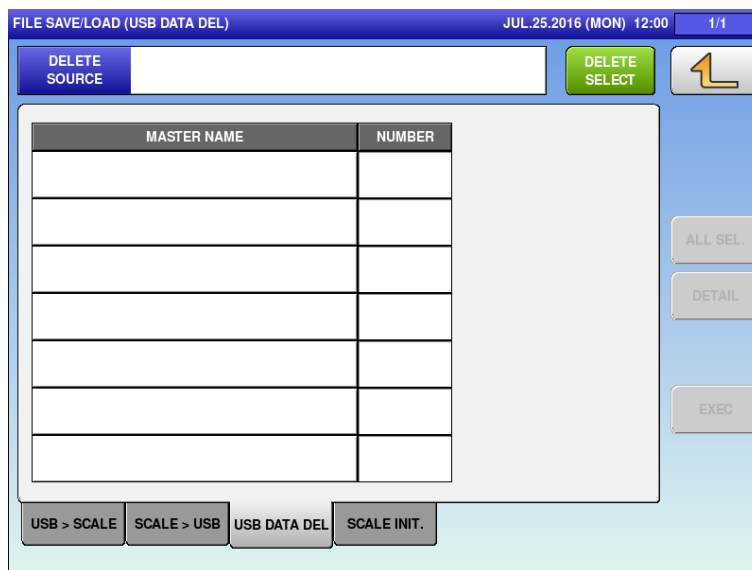
5.29.1 USB>SCALE

Menu name	Specification
INPUT SOURCE	Display the name of the input source.
INPUT SELECT	Open the FILE SAVE/LOAD IN SELECT screen. The input source is listed only when the files are saved on the USB flash drive.
MASTER NAME	Display the master name. Press button to change the selection. Other tabs also have the same function.
NUMBER	Display the number of master data. Other tabs also have the same function.
ALL SEL.	Change the selections of all masters. This function is enabled when the input source file is set. Other tabs also have the same function.
DETAIL	Open the FILE SAVE/LOAD OUT (DETAIL) screen. Other tabs also have the same function.
EXEC	Execute the file input of selected master. The INPUT CHECK dialog appears to ask whether to input the file.

5.29.2 SCALE>USB

Menu name	Specification
OUT SOURCE	Display the name of the output source.
OUTPUT SELECT	Open the FILE SAVE/LOAD OUT SELECT screen. SET: Enter the output source. EDIT: Edit the name of the output source.
ALL SEL.	Switch between "All items selected" / "All items unselected".
DETAIL	Move to the FILE SAVE/LOAD / DETAIL screen.
EXEC	Execute the file output of selected master. The OUTPUT CHECK dialog appears to ask whether to output the file.

5.29.3 USB DATA DEL.



Menu name	Specification
DELETE SELECT	Display the name of the deletion source.
MASTER NAME	Display the master name of the file in the folder of USB memory specified as "Deletion destination".
ALL SEL.	Switch between "All items selected" / "All items unselected".
EXEC	Execute the file output of selected master. The DELETE CHECK dialog appears to ask whether to output the file.

5.29.4 SCALE INIT.

FILE SAVE/LOAD (SCALE INIT.) JUL.25.2016 (MON) 12:00 1/8

DATA INTERNAL MASTER

MASTER NAME	NUMBER
PLU	52 (52)
STORE	2
FIX PRICE SYMBOL	20
FREE MSG.1	0
FREE MSG.2	0
FREE MSG.3	0
FREE MSG.4	0

MEMORY SPACE
200,012 KB

PLU MASTER CONV.
229610 EA

ALL SEL.

DETAIL

EXEC

USB > SCALE SCALE > USB USB DATA DEL SCALE INIT.

Menu name	Specification
DATA	Display the master name. Press button to change the selection.
MASTER NAME	Display the master name in the scale. Line selection/deselection is available.
NUMBER	Display the data Number of the master inside the scale.
MEMORY SPACE	Display the memory space inside the scale in kilobyte (kB).
PLU MASTER CONV.	Display the approximate value of how many more PLUs can be stored in the free space.
ALL SEL.	Switch between "All items selected" / "All items unselected".
EXEC	Initialize the selected master. The INITIALIZATION CHECK dialog appears to ask whether to initialize the master.

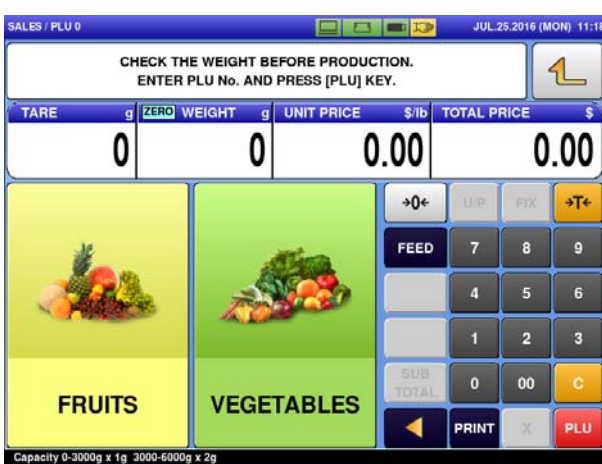
Chapter 6 Adjust Mode


6.1 Adjust mode menu

6.1.1 Startup



1. Turn on power.



2. Press  button at the upper right side of screen.



Press [ADJUST] and [LOGIN] button, then input password "495344" using numerical keys, and press [SET] button.



3. Press only [LOGIN] button to log out.

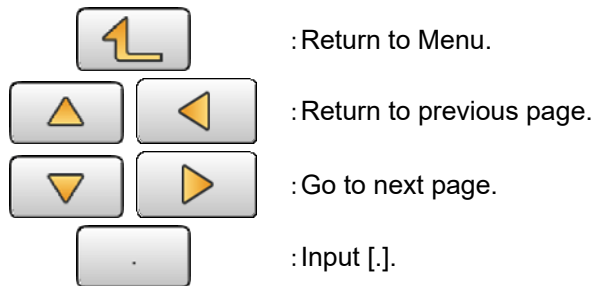
Before log in



Login screens



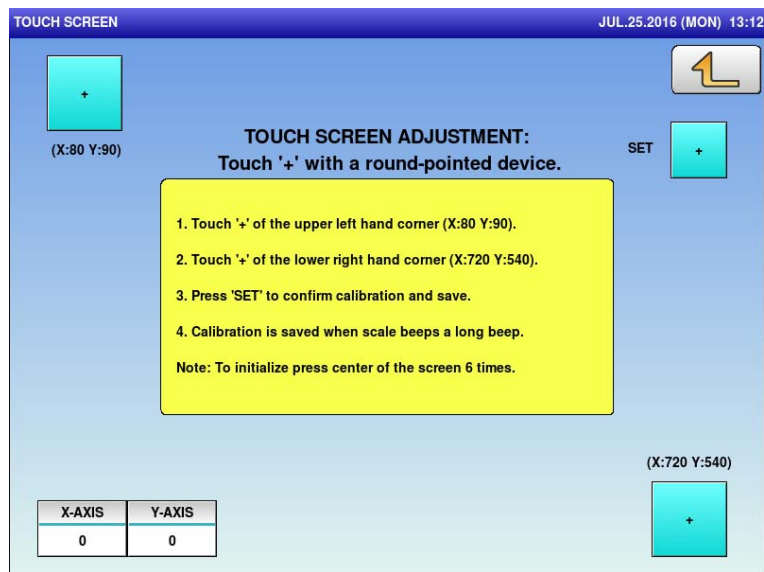
Common operating buttons



6.2 DATE TIME

Menu name	Specification
DATE	<p>Enter the date conforming to KEYIN LEN/DATE FORMAT.</p> <p>If "25072016" is entered, "JUL.25.2016" is displayed. If "25" is entered, " JUL.25.2016" is displayed. If "2507" is entered, " JUL.25.2016" is displayed.</p>
TIME	<p>Enter the time conforming to KEYIN LEN/TIME FORMAT.</p> <p>If "00" is entered, "13:11:00" is displayed. If "1100" is entered, "13:11:00" is displayed. If "131100" is entered, "13:11:00" is displayed.</p>
JULIAN DATE	<p>Display the number of days counted from January 1.</p>
SET	<p>Set the entered date and time.</p> <p>CHECKING CLOCK SETTING dialog appears to ask whether to change the date and time.</p> <p>When any change is made, save the setting (with confirmation message).</p>

6.3 TOUCH SCREEN

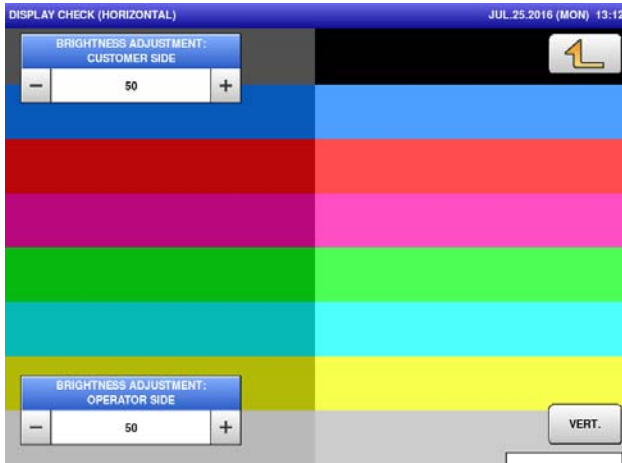


Menu name	Specification
	For initialization of touch panel, press center of the screen 6 times.

(Follow the instructions on the screen to calibrate the touch panel.)

6.4 DISPLAY CHECK

● HORIZONTAL screen

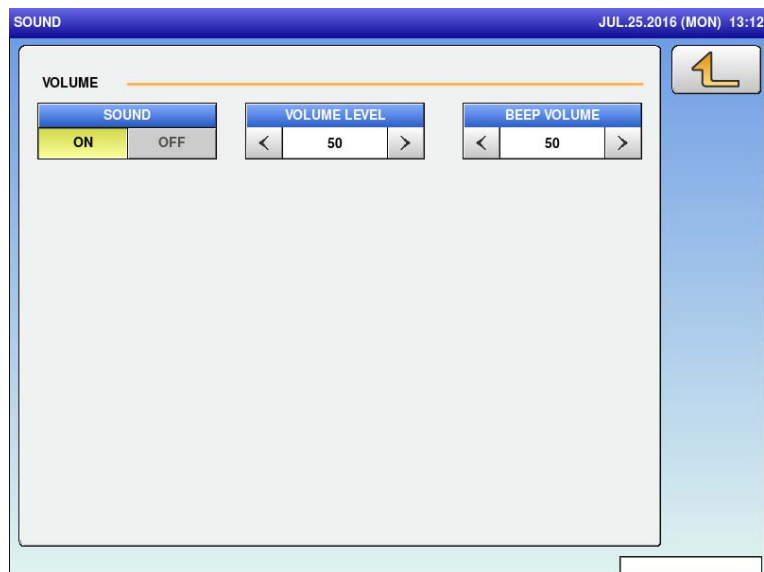


● VERTICAL screen




Menu name	Specification
BRIGHTNESS ADJUSTMENT: CUSTOMER SIDE	Enter the brightness of customer-side display. Input range: 0 to 100
BRIGHTNESS ADJUSTMENT: OPERATOR SIDE	Enter the brightness of operator-side display. Input range: 0 to 100
VERT. / HORI.	Switch between the vertical and horizontal screen display.

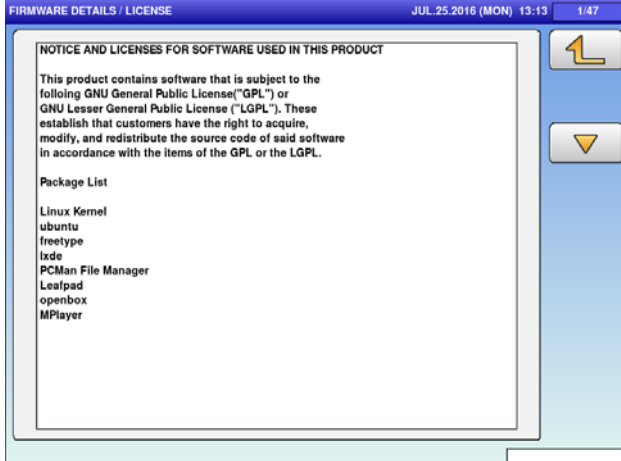
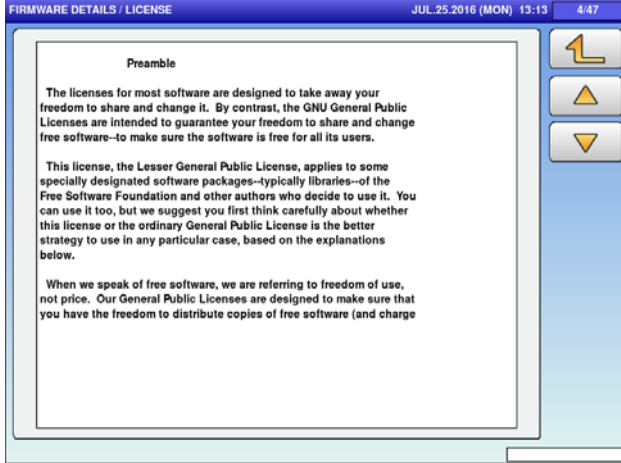
6.5 SOUND



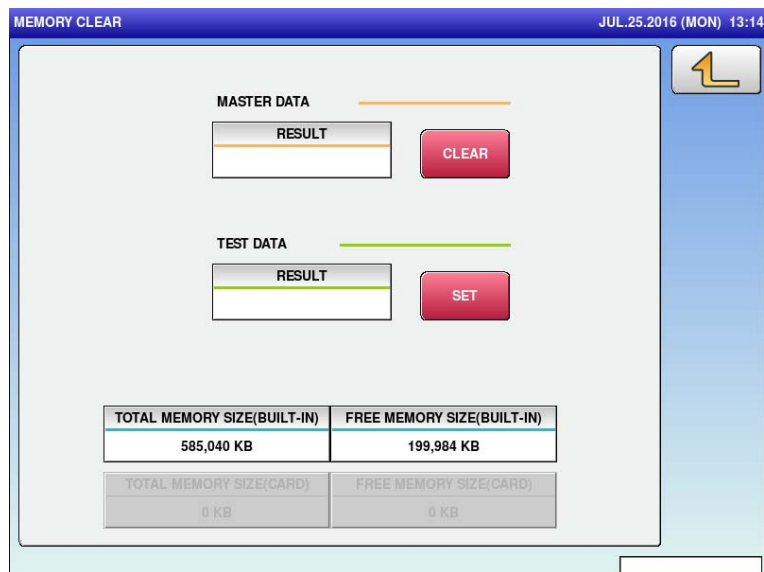
Menu name	Specification
SOUND	Select sound ON or OFF.
VOLUME LEVEL	Enter volume level. Input range: 0 to 100
BEEP VOLUME	Enter beep volume level. Input range: 0 to 100

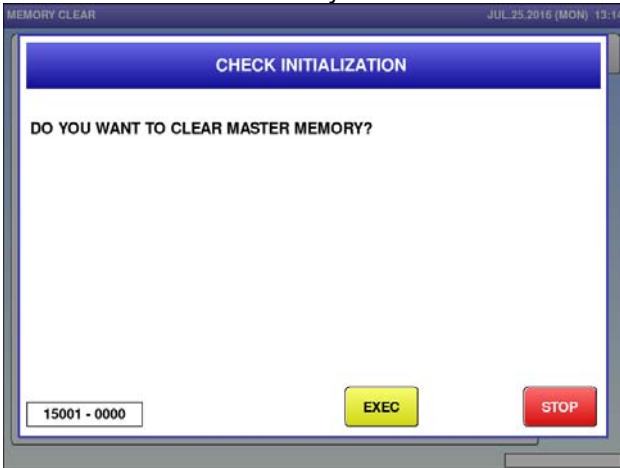
6.6 FIRMWARE DETAILS

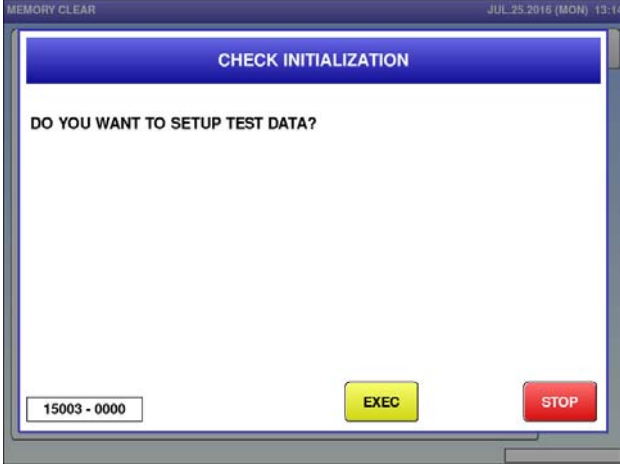
FIRMWARE DETAILS				JUL.25.2016 (MON) 13:13	
TITLE SOFTWARE		B0669M		LICENSE 	
SOFTWARE	VERSION	SOFTWARE	VERSION		
MAIN	B0670K				
SCALE DRIVER (UPDATER)	B0671(J0835)				
OS	J0829C	PRINTER APP.(BOOT)	J0826L(J0827)		
BIOS	J0825				
FPGA APP.(BOOT)	J0820C(J0824)				
SCALE	J0776E				

Menu name	Specification
LICENSE	<p>Move to the FIRMWARE DETAILS / LICENSE screen.</p>  <p style="text-align: center;">↓</p> 

6.7 MEMORY CLEAR



Menu name	Specification
MASTER DATA CLEAR	<p>Clear all DB and initialize the system master.</p> <p>The CHECK INITIALIZATION dialog (memory clear) appears to ask whether to clear the memory.</p> 
TEST DATA SET	<p>Set the initial data and initialize the system master.</p> <p>CHECK INITIALIZATION dialog (test data setting) appears to ask whether to set the test data.</p> <p>For Oceanian model, the password "951753" should be entered to set the test data.</p>


Menu name	Specification
	
TOTAL MEMORY SIZE (BUILT-IN)	Display the built-in memory size in kilobyte (kB).
FREE MEMORY SIZE (BUILT-IN)	Display the free memory size in kilobyte (kB).
TOTAL MEMORY SIZE (CARD)	Display the memory size in kilobyte (kB) when the SD card is inserted. If the SD card is not inserted, the option is grayed out.
FREE MEMORY SIZE (CARD)	Display the free memory size in kilobyte (kB) when the SD card is inserted. If the SD card is not inserted, the option is grayed out.

6.8 PRINTER

6.8.1 HEAD



Menu name	Specification
PRINTER	Display only 1.
FORMAT	Enter the format number for the test print. Input range: 0 to 999 If there is no format, nothing is printed.
TEST PRINT	Select CHECKER (checkered pattern) or NORMAL (normal pattern).
TEST FORMAT(H)	Enter the height of format directly. Input range: 0 to 999
HEAD TYPE	Select the head type. BHE4256 / DHP6332
BACK FEED ADJUSTMENT	Enter the back feed for each label length. Input range: 0 to 99
HEAD USAGE	Enter the head travel distance. Input range: 0 to 999
HEAD TEMP RISE PROTECT	Select whether or not to protect the head in case its temperature rises. NO / YES
HEAD RESISTANCE	Enter the head resistance. Input range: 0 to 9999
RESIST.INIT.	Initialize the head resistance.

PRINTER INIT.	<p>Initialize the printer.</p> <p>CHECK INITIALIZATION dialog (printer initialization) appears to ask whether to initialize the printer.</p> <p>Other tabs also have the same function.</p>
PRINT	<p>Execute the print.</p> <p>Other tabs also have the same function.</p>
FEED	<p>Execute the feed.</p> <p>Other tabs also have the same function.</p>
HEAD INIT.	<p>Initialize the thermal head.</p> <p>CHECK INITIALIZATION dialog (head initialization) appears to ask whether to initialize the thermal head.</p> <p>Follow the procedure below.</p> <ol style="list-style-type: none"> ① Press [HEAD INIT.]. ② On the confirmation screen, press [EXEC]. ③ Check HEAD TYPE on the printer to enter the head type to be mounted. ④ Press [RESIST.INIT.] in HEAD RESISTANCE. ⑤ Press [CHECK] in HEAD STATUS CHECK to check the head availability. 

6.8.2 PEEL SENSOR

PRINTER (PEEL SENSOR) JUL.25.2016 (MON) 13:15

PRINTER < 1 >

CASSETTE 1 LABEL 1 FORMAT 1 CASST. SENS. ○○○● HEAD UP ON

TEST PRINT < CHECKER > TEST FORMAT(H) 44.0mm

PEEL SENSOR LEVEL 141 PEEL DETECT. - 190 + PEEL SENSITIVITY - 140 +

PRINTER INIT. FEED PRINT DETAIL HEAD INIT.

HEAD PEEL SENSOR LABEL TYPE LABEL FEED

Menu name	Specification
PEEL DETECT.	Enter the threshold value of peel sensor. Input range: 0 to 255
PEEL SENSITIVITY	Enter the sensitivity of peel sensor. Input range: 0 to 255
PEEL SENSOR LEVEL	Display the output value of peel sensor.
<p>Enter the threshold depending on PEEL SENSOR LEVEL at the time the backing paper remains on the sensor or not.</p> <p>(e.g. If the value at the time the backing paper remains is 180 and if the value at the time the backing paper does not remain is 80, the threshold is enter to about 150.)</p>	

6.8.3 LABEL TYPE

PRINTER (LABEL TYPE) JUL.25.2016 (MON) 13:15

PRINTER < 1 >

CASSETTE LABEL FORMAT CASST. SENS. HEAD UP
1 1 1 ○○○● ON

TEST PRINT TEST FORMAT(H)
< CHECKER > 44.0mm

LABEL TYPE PRINT DENSITY
< 1:130LA-1 > - 5 +

PRINT DIRECTION LABEL GAP
STAND. INVERSE 2.5mm

LABEL SHAPE ROUND LABEL
STANDARD ROUNDING 0.0mm


HEAD PEEL SENSOR LABEL TYPE LABEL FEED

PRINTER INIT. FEED PRINT DETAIL HEAD INIT.

Menu name	Specification
LABEL TYPE	Select the label type. 0: RECEIPT / 1:130LA-1 / 3:150LA-1
PRINT DENSITY	Enter the print density. Input range: 0 to 9
PRINT DIRECTION	Select the print direction. STAND. / INVERSE
LABEL GAP	Enter "Interval between labels" of the label roll set to the printer. Input range: 0 to 99.9
LABEL SHAPE	Select the label shape. STANDARD / ROUNDING
ROUND LABEL	Enter the correction value of irregular-shaped label. Input range: 0 to 999

6.8.4 LABEL FEED

Menu name	Specification
SENSOR TYPE	Select the sensor type. 0: NONE / 1: LABEL / 2: MARK
PRINT SPEED	Select the print speed. 100 mm/s / 120 mm/s / 150 mm/s
BACK FEED	Select whether or not to set the back feed. NO / YES
LABEL SENS. DIS.	Enter the label sensor distance. Input range: 0 to 99.9
PRE-PRINT LENGTH	Enter the pre-print length. Input range: 0 to 99.9
LABEL GAP DETECT.	Enter the label sensor threshold. Input range: 0 to 255
SENSITIVITY	Enter the label sensor sensitivity. Input range: 0 to 255
LABEL SENSOR LEVEL	Display the output value of label sensor.
DETAIL	Display the label sensor details screen.

Menu name	Specification
	
	<p>Enter the label sensor sensitivity so as not to exceed the peak value of label sensor. (e.g. If the label sensor peak is about 120, the threshold is enter to about 100.)</p>

6.9 CALIBRATION

CALIBRATION JUL.25.2016 (MON) 13:16

SETTING

CAPACITY: 6000g RANGE: SINGLE MULTI SPAN A/D: 60000 GRAVITATIONAL ACC.: 9.7970

SCALE DATA

A/D: 20239 CELL VOLTAGE: STATUS: 0100 0001

WGT. CONVERTED

WEIGHT A/D: 0 WEIGHT: 0 g DATA DISPLAY: WEIGHT VOLTAGE

OTHERS

10715 2004 01003 005000 012001

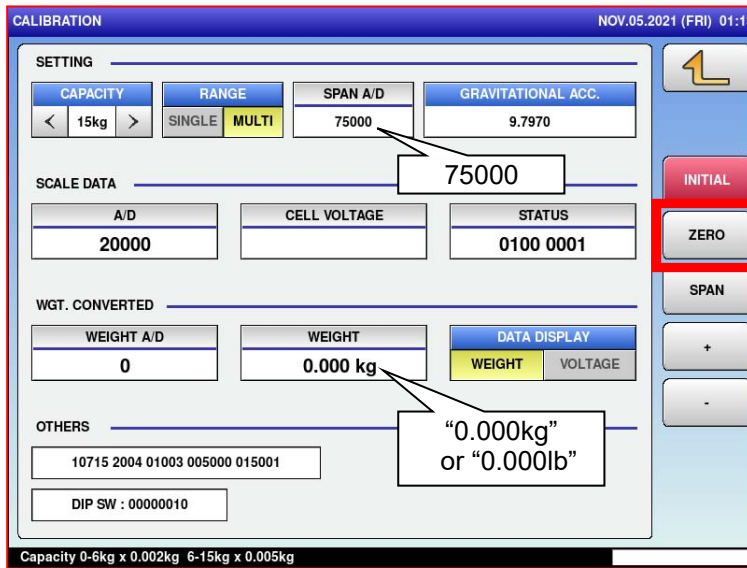
DIP SW : 00000010

Capacity 0-3000g x 1g 3000-6000g x 2g

Menu name	Specification
CAPACITY	Select the capacity of the scale. 6000g / 6kg / 15kg / 30kg / 30lb / 60lb
RANGE	Select the range. SINGLE / MULTI The range to be selected is limited depending on the capacity.
GRAVITATIONAL ACC.	Enter the gravitational acceleration. Input range: 97799 to 98300
DATA DISPLAY	Select the A/D or cell voltage display. WEIGHT / VOLTAGE
INITIAL	Initialize the scale.
ZERO	Enter the current scale status to zero.
SPAN	Enter the current scale status to CAPACITY according to CAPACITY setting.
+	Add span value.
-	Deduct span value.

6.9.1 Procedure for adjusting scale(span)

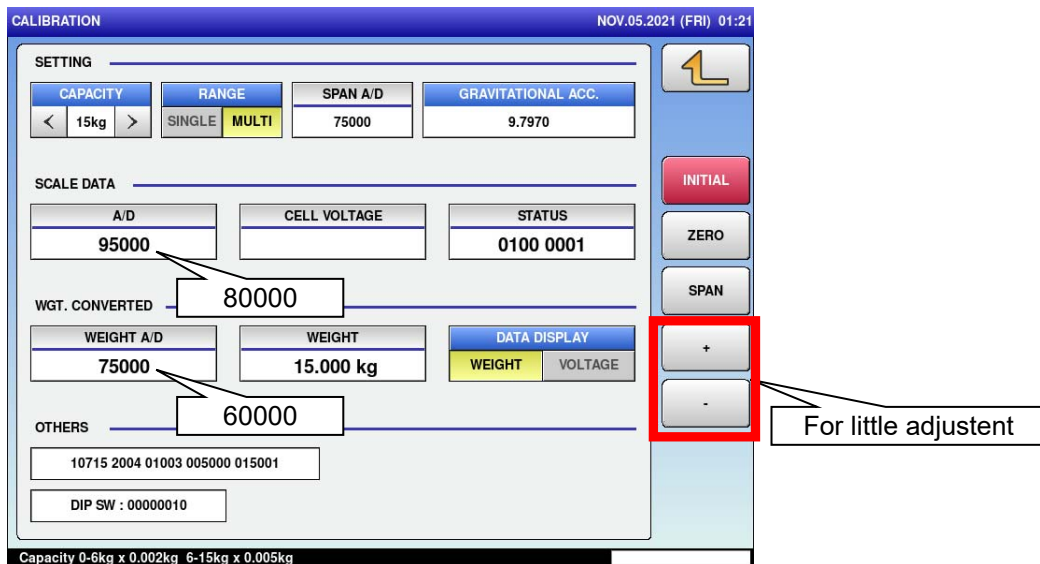
1. Press the “ZERO” key to adjust the zero point.
Then the “WEIGHT” displays field shows “0.000kg” or “0.000lb”.
Check that the “A/D” display field shows “20000” and the “SPAN A/D” field shows “60000”.



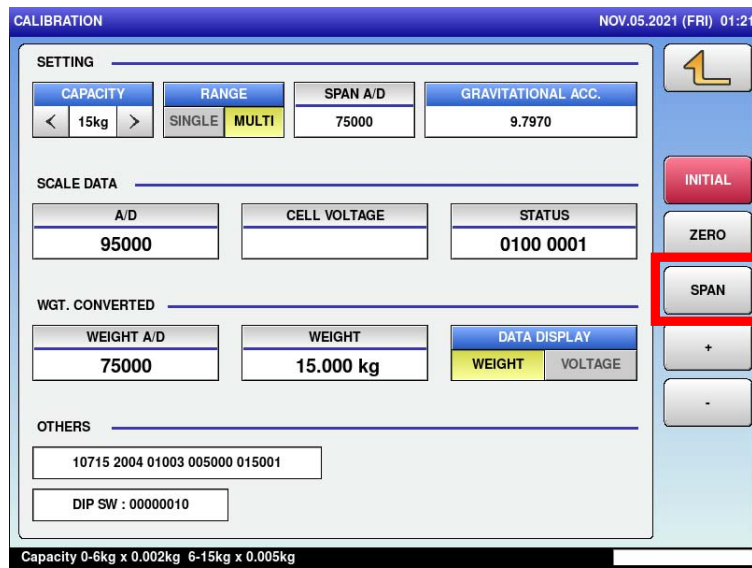
2. Place the weights of the same weight as the upper limit of the weighing capacity on the scale.



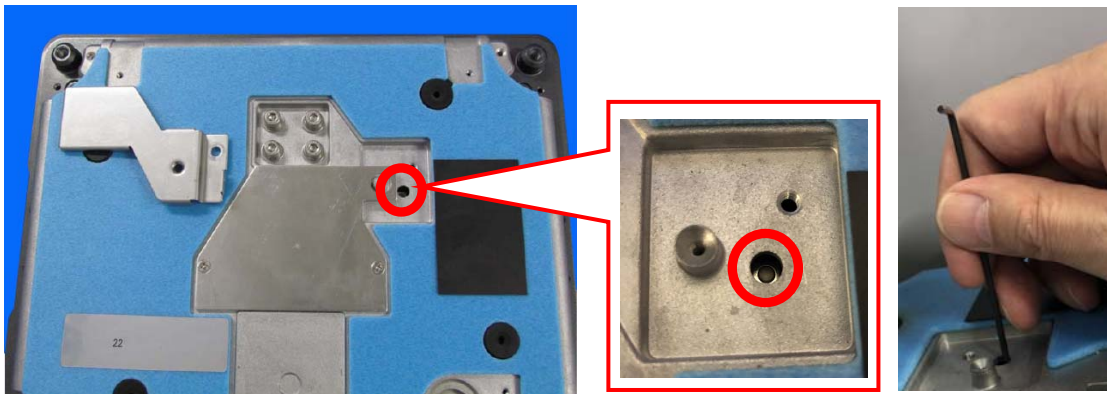
3. Check that the “A/D” display field shows “80000” and the “WEIGHT A/D” field shows “60000”.
“+” and “-” key for little adjustment, if necessary.



4. Press the “SPAN” key.
Then remove the weights from the scale.

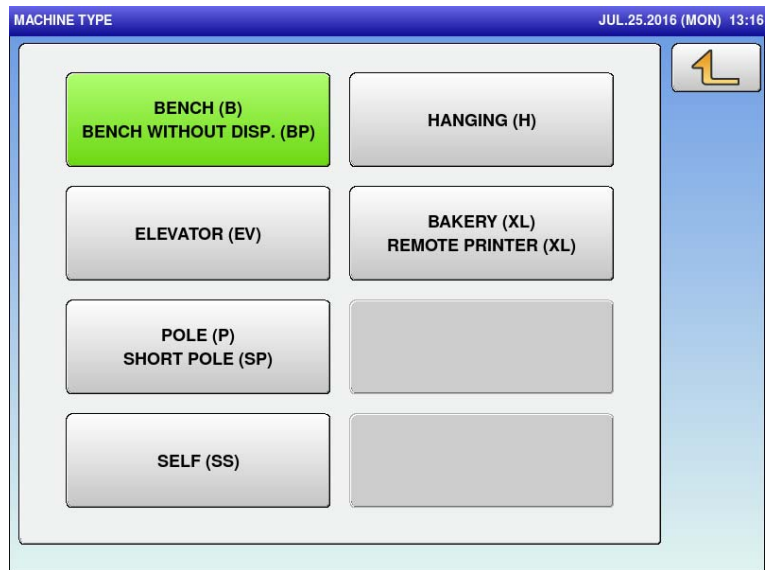


5. Push the Memory switch on “PWB:P-1111*_*” to memorize the A/D data.
The scale will make a long beep when the switch is pushed.



6. Seal off the Memory switch again.

6.10 MACHINE TYPE



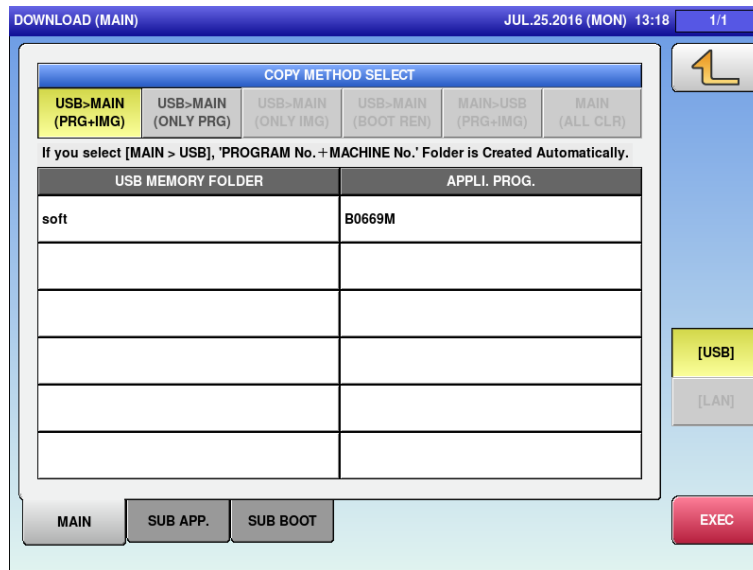
Menu name	Specification
Select type.	

6.10.1 DETAIL

Menu name	Specification
PRODUCT ID	Enter the product ID in seven digits. Input range: 0 to 9999999
KEY CONNECT	Select whether to connect the numeric keys. 0: NONE / 1: 3x6 / 2: 6x4
SCALE CONNECT	Select whether to connect the scale. 0: NONE / 1: WIRED / 2: WIRELESS
TRAY DETECTION	Select whether to use the tray detection function. NO / YES
CUSTOMER DISP	Select whether to connect the customer display. 0: NO IMG / 1: IMG
SCREEN SAVER DISP	Select display to indicate the screen saver. 0: SHOP / 1: CUSTOMER
CUSTOMER DISP COLOR	Select customer side color scheme. 0: WHITE / 1: BLACK
PRINT DOT RATIO	Select printing dot ratio. 1:1 / 1:1.1
SET	Save the setting (with confirmation message).
STRUCURE	Display the configuration selected by the previous screen [MACHINE TYPE].
STATUS	Display the communication status with the wrapper.
PRINTER 1 CONNECTION	Display the communication status with Printer No.1.

6.11 DOWNLOAD

6.11.1 MAIN



Menu name	Specification
COPY METHOD SELECT	When “USB>MAIN (PRG+IMG)” is selected, the program and the image data of the selected USB memory folder are downloaded. When “USB>MAIN (ONLY PRG)” is selected, only the program of the selected USB memory folder is downloaded. The image data is not downloaded.
USB MEMORY FOLDER	Press button to switch the selection.
APPLI. PROG.	Press button to switch the selection.
EXEC	Download the selected program. The CHECK EXECUTION OF MAIN PROGRAM DOWNLOAD dialog appears to ask whether to download the program.

Note:

● Precautions on software write after board replacement

Until all software completes write operations, the following phenomenon may occur. This occurs because of the incompatibility between software in the flash memory of the board and the main application software in CF (compact flash).

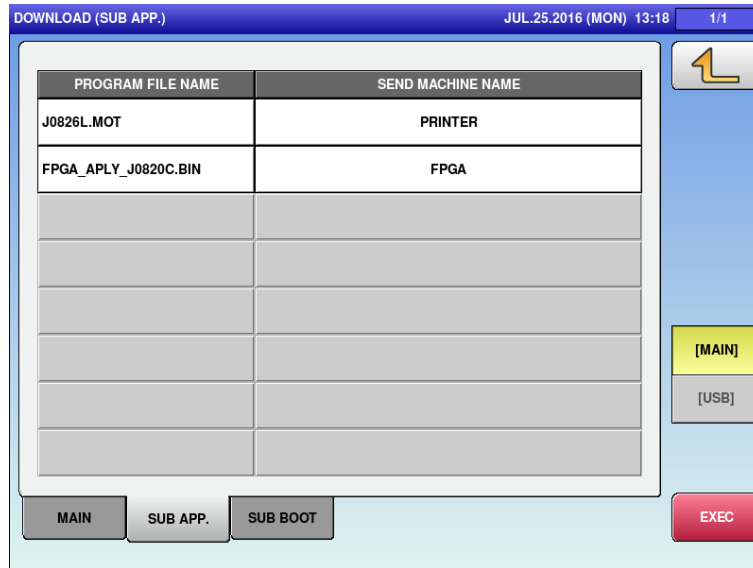
<LED remains ON after shutdown>

The power switch of the applicable models is turned OFF after software write. LED on the P-1100 board, however, may remain ON even upon OS shut down and the screen becomes black. In this case, turn OFF the breaker or pull out the power supply plug, and make sure that LED is turned OFF. After 20 to 30 seconds, turn ON the breaker or insert the power supply plug, and turn ON the power switch.

<Error display>

Errors such as a battery error or communication error may be displayed on the screen before software starts the write operation after starting the main application software. In this case, continue the software write operation. If the error display persists even after all software completes write operations, memory initialization, and basic settings such as model setting, take measures to each error.

6.11.2 SUB APP.



Menu name	Specification
PROGRAM FILE NAME	Press button to switch the selections.
SEND MACHINE NAME	Press button to switch the selections.
MAIN/USB	Select where the program is downloaded from. MAIN / USB
EXEC	Download the selected program. The CHECK FOR EXECUTION OF DEVICE MACHINE PROGRAM dialog appears to ask whether to download the program.

Note:

● Precautions on software write after board replacement

Until all software completes write operations, the following phenomenon may occur. This occurs because of the incompatibility between software in the flash memory of the board and the main application software in CF (compact flash).

<LED remains ON after shutdown>

The power switch of the applicable models is turned OFF after software write. LED on the P-1100 board, however, may remain ON even upon OS shut down and the screen becomes black. In this case, turn OFF the breaker or pull out the power supply plug, and make sure that LED is turned OFF. After 20 to 30 seconds, turn ON the breaker or insert the power supply plug, and turn ON the power switch.

<Error display>

Errors such as a battery error or communication error may be displayed on the screen before software starts the write operation after starting the main application software. In this case, continue the software write operation. If the error display persists even after all software completes write operations, memory initialization, and basic settings such as model setting, take measures to each error.

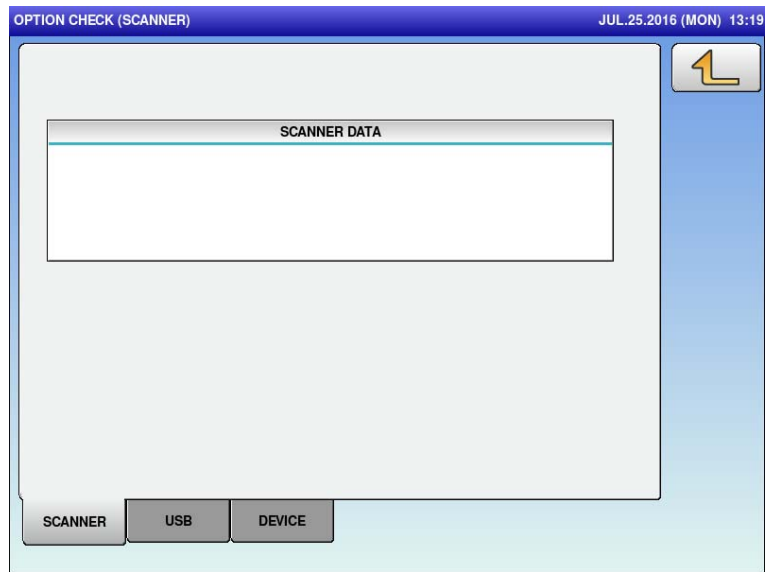
6.11.3 SUB BOOT

The screenshot shows a software interface for downloading programs. It features a table for listing programs and machine names, and several control buttons for navigation and execution.

Menu name	Specification
PROGRAM FILE NAME	Press button to switch the selections.
SEND MACHINE NAME	Press button to switch the selections.
MAIN/USB	Select where the program is downloaded from. MAIN / USB
EXEC	Download the selected program. The CHECK FOR EXECUTION OF DEVICE MACHINE PROGRAM dialog appears to ask whether to download the program.

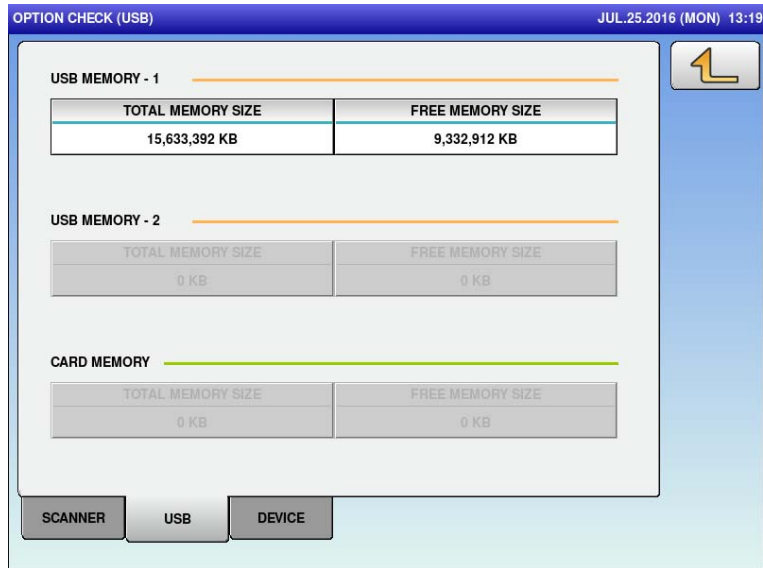
6.12 OPTION CHECK

6.12.1 SCANNER



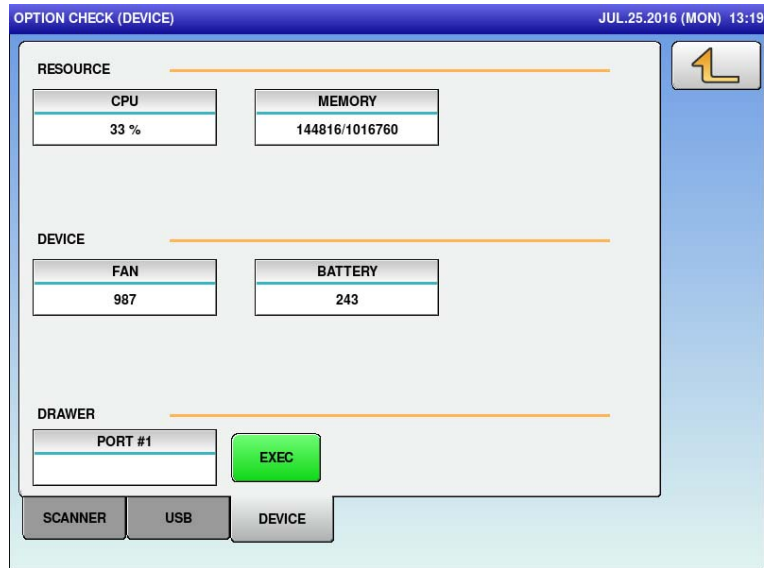
Menu name	Specification
SCANNER DATA	Display the scanned data.

6.12.2 USB



Menu name	Specification
USB MEMORY -1	Display the information of connected USB memory.
USB MEMORY -2	Display the information of connected USB memory.
CARD MEMORY	Display the information of connected SD card memory.

6.12.3 DEVICE



Menu name	Specification
CPU	Display the CPU use rate.
MEMORY	Display the use size and the total size of the internal memory.
FAN	Display the rotation count of the CPU fan. Unit: internal count
BATTERY	Display the battery voltage. Unit: internal AD value
DRAWER	Open the drawer

6.13 GRAVITY

GRAVITY JUL.25.2016 (MON) 13:19

SETTING

CAPACITY	RANGE	SPAN A/D	GRAVITATIONAL ACC.
6000g	MULTI	60000	9.7970

SCALE DATA

A/D	STATUS
20240	0100 0001

WGT. CONVERTED

WEIGHT A/D	WEIGHT
0	0 g

OTHERS

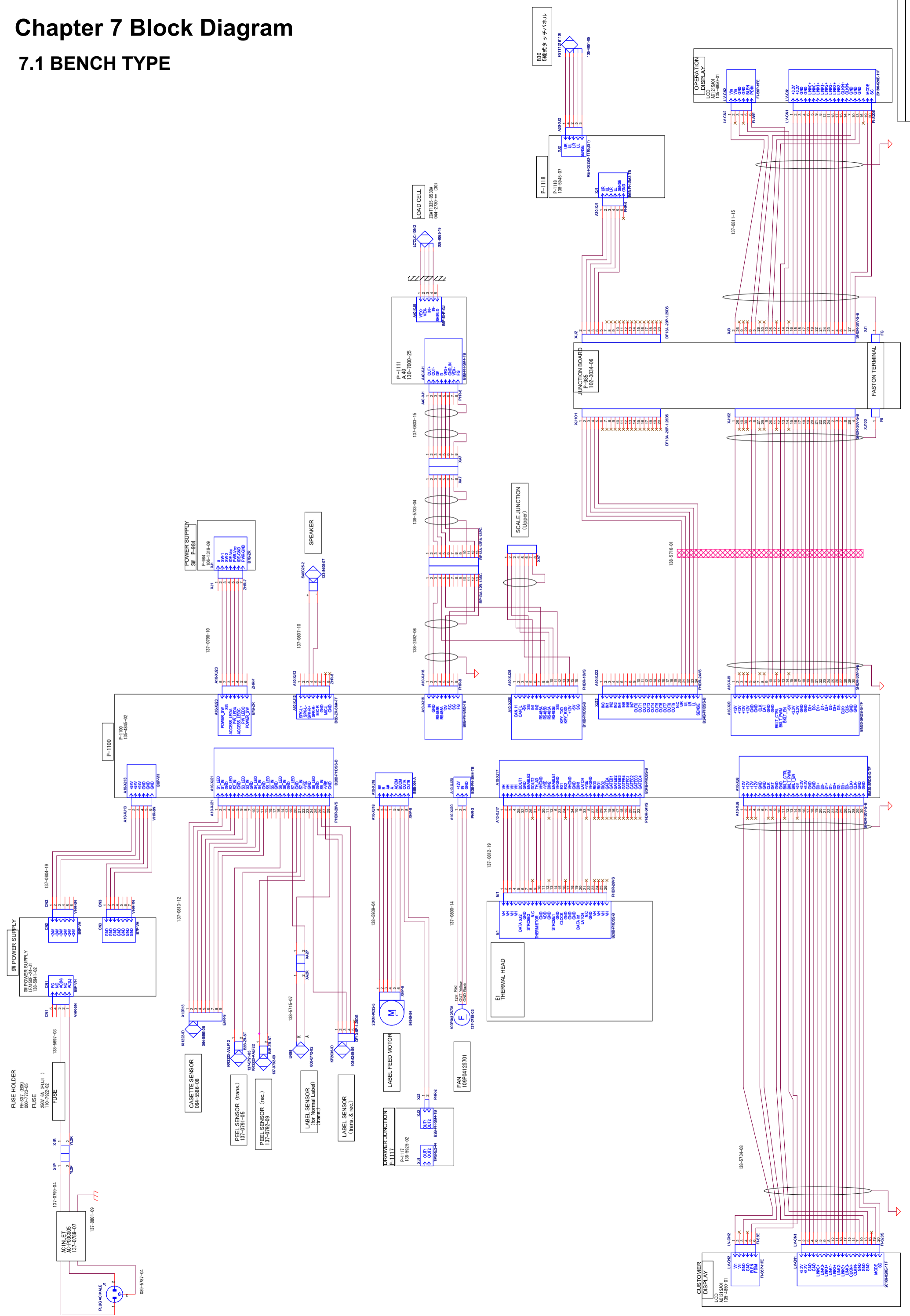
DIP SW : 00000010

Capacity 0-3000g x 1g 3000-6000g x 2g

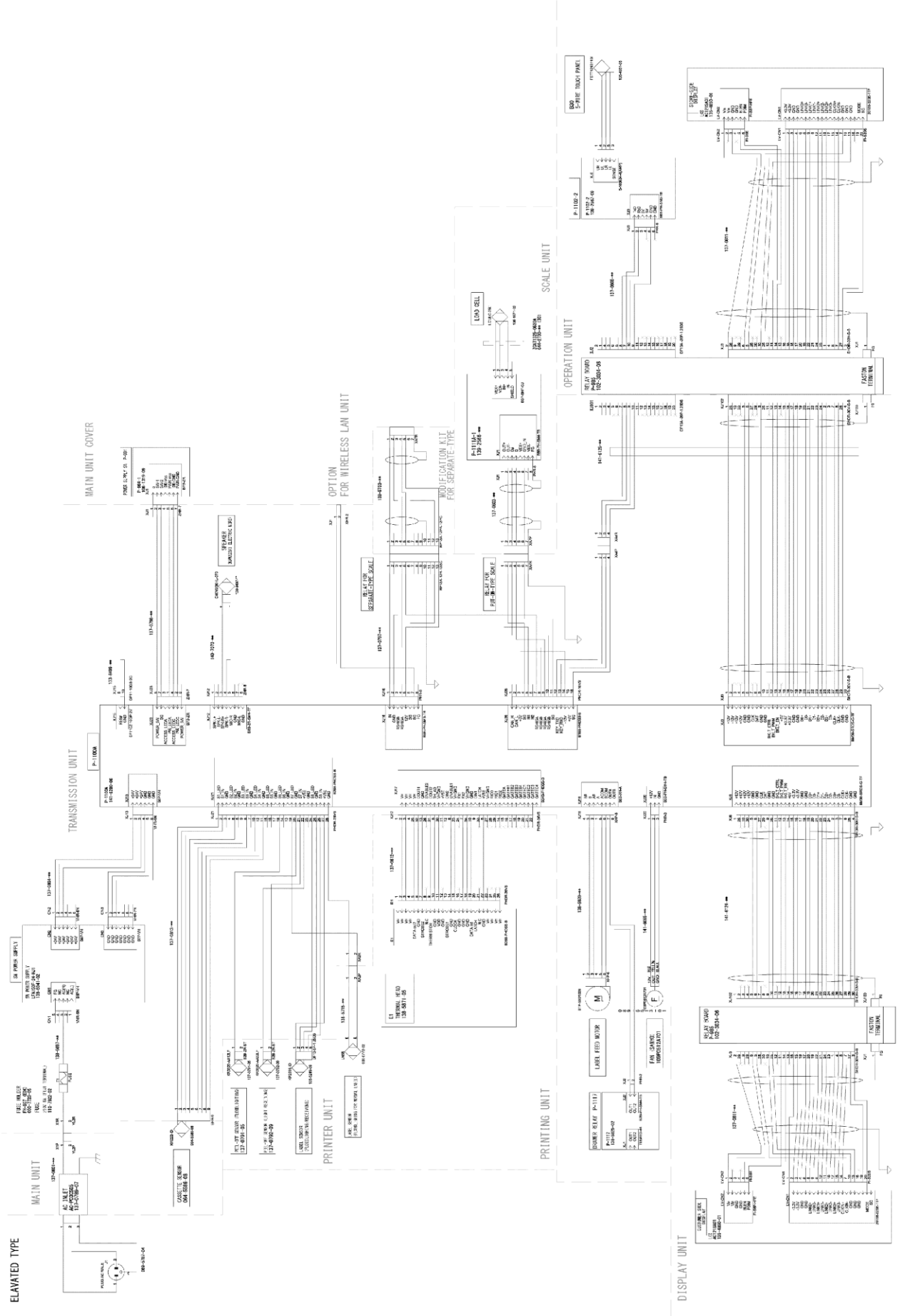
Menu name	Specification
CAPACITY	Display the capacity.
RANGE	Display the range type.
SPAN A/D	Display the span count.
GRAVITATIONAL ACC.	Enter the gravitational acceleration. Input range: 97799 to 98300
A/D	Display the A/D count.
STATUS	Display the scale status.
WEIGHT A/D	Display the A/D count for weight conversion.
WEIGHT	Display the weight.
DIP SW	Display the DIP SW status of the scale.
ZERO	Press to zero the weight reading.

Chapter 7 Block Diagram

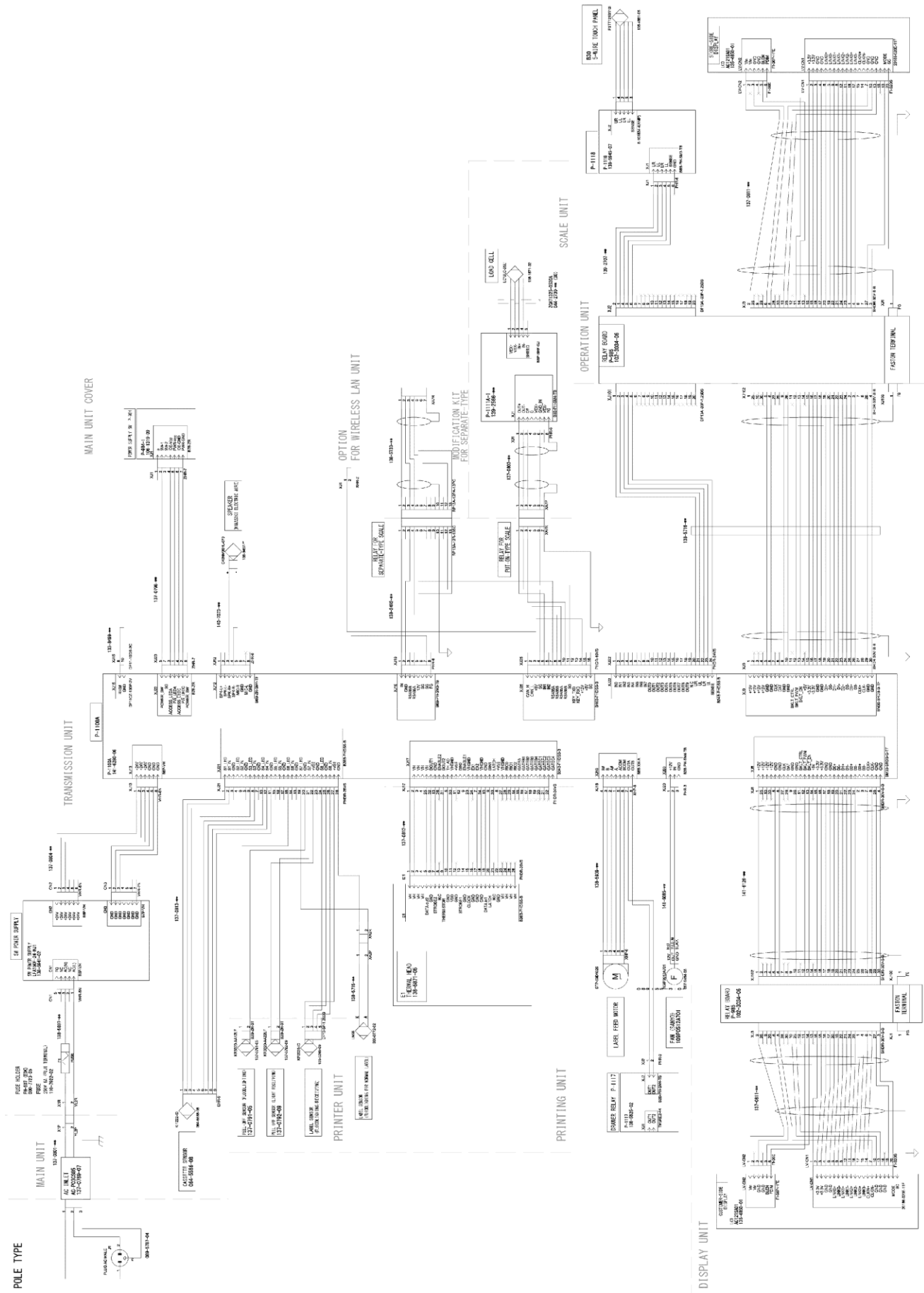
7.1 BENCH TYPE



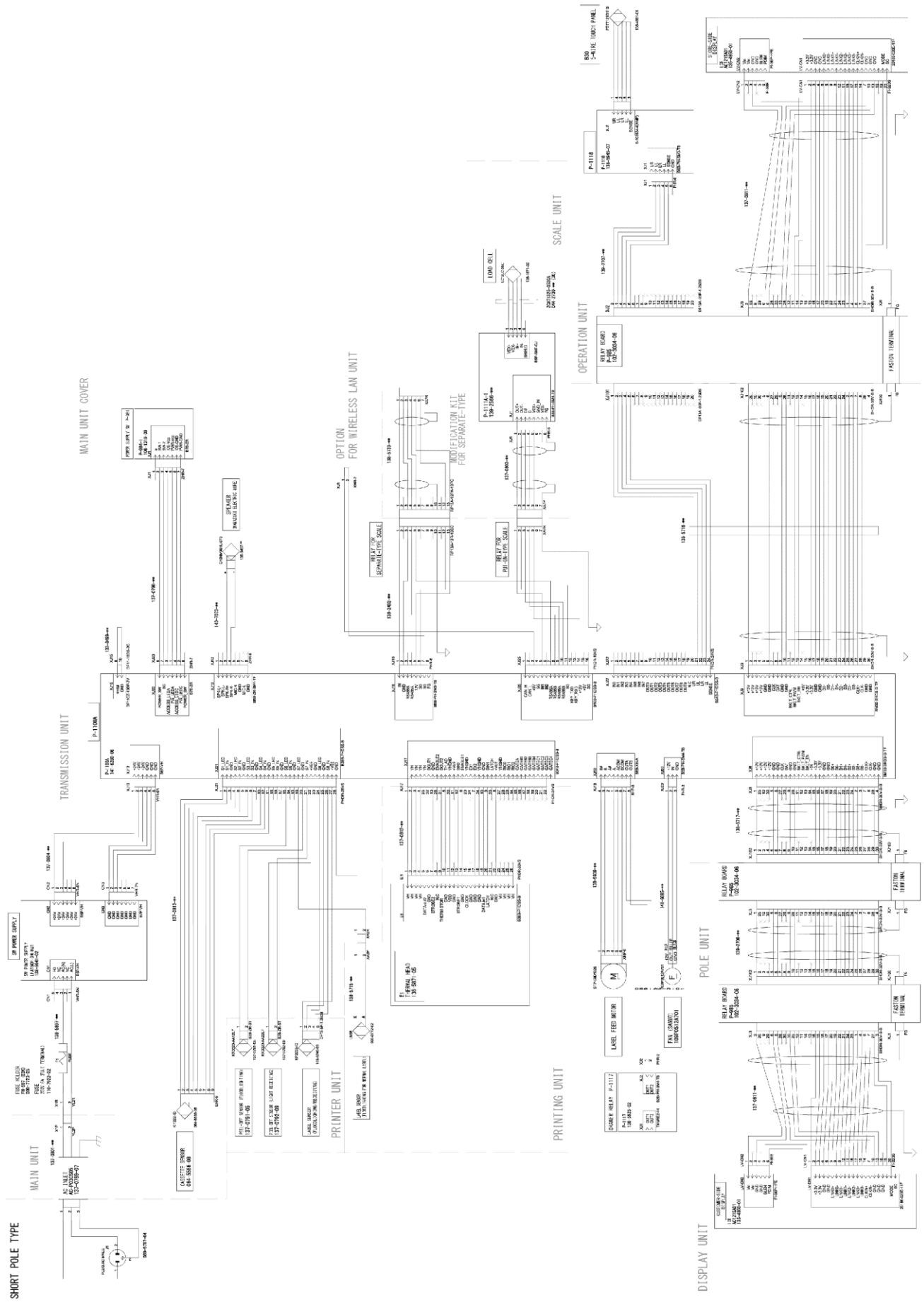
7.3 ELEVATED TYPE



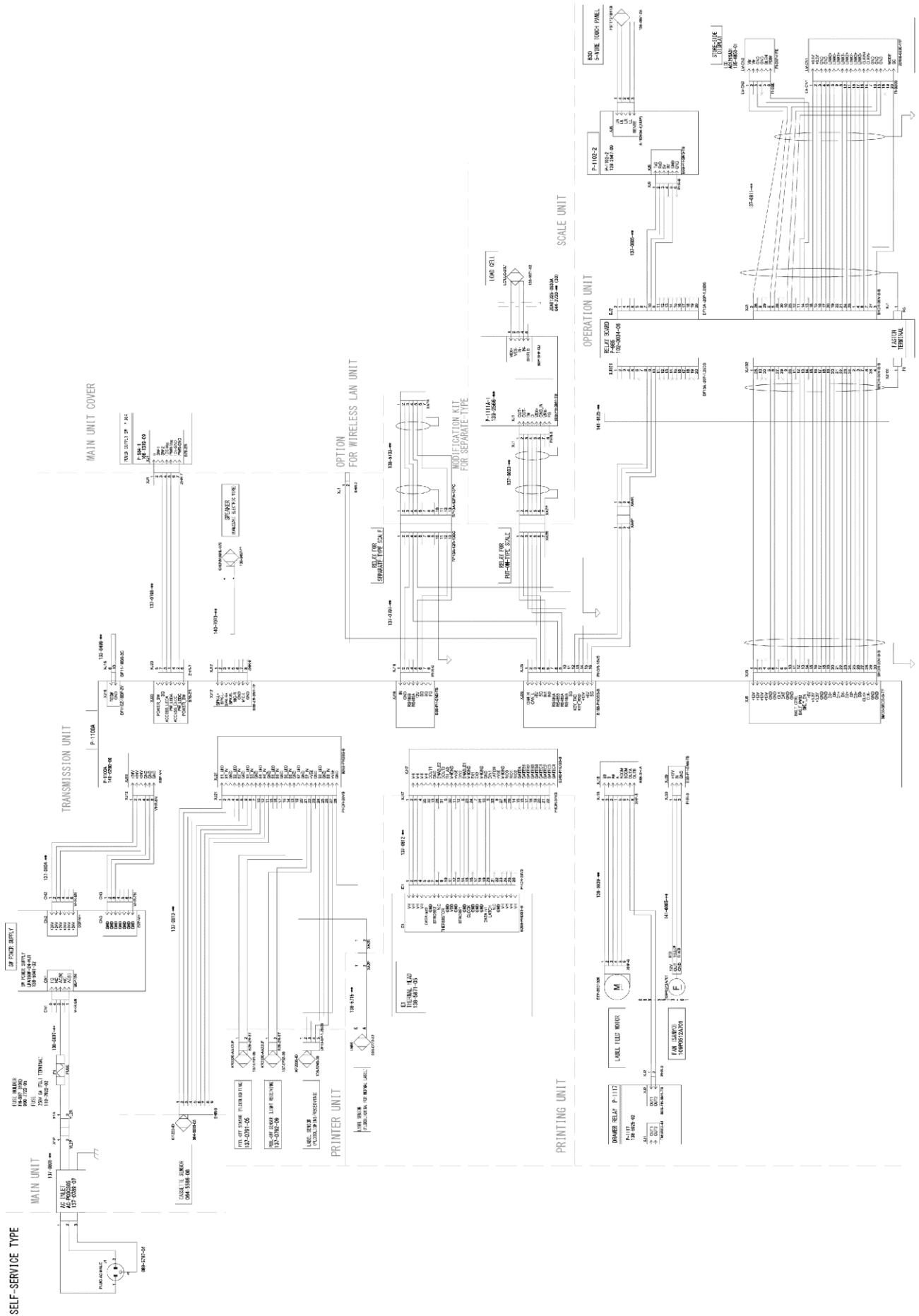
7.4 POLE TYPE



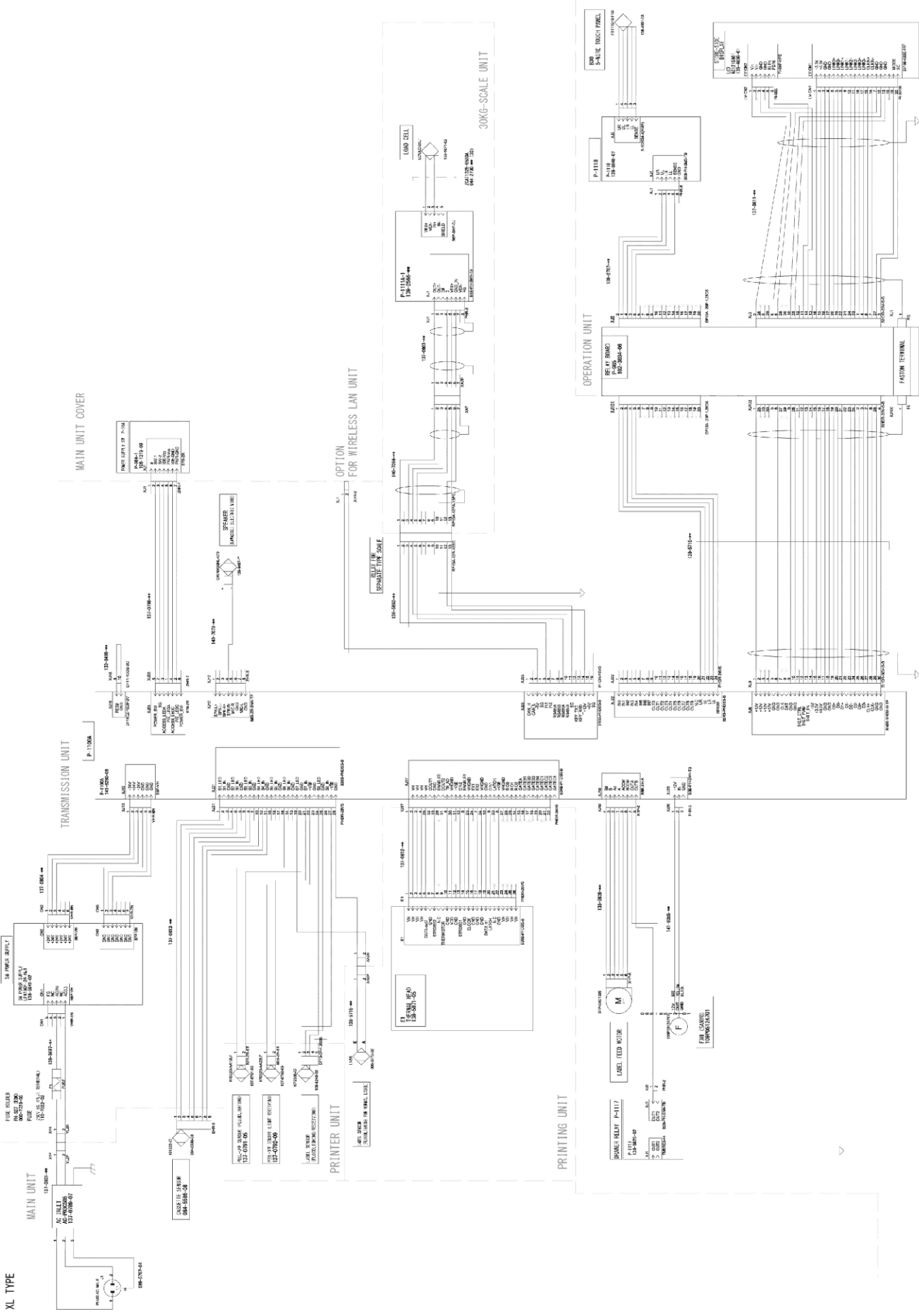
7.5 SHORT POLE TYPE



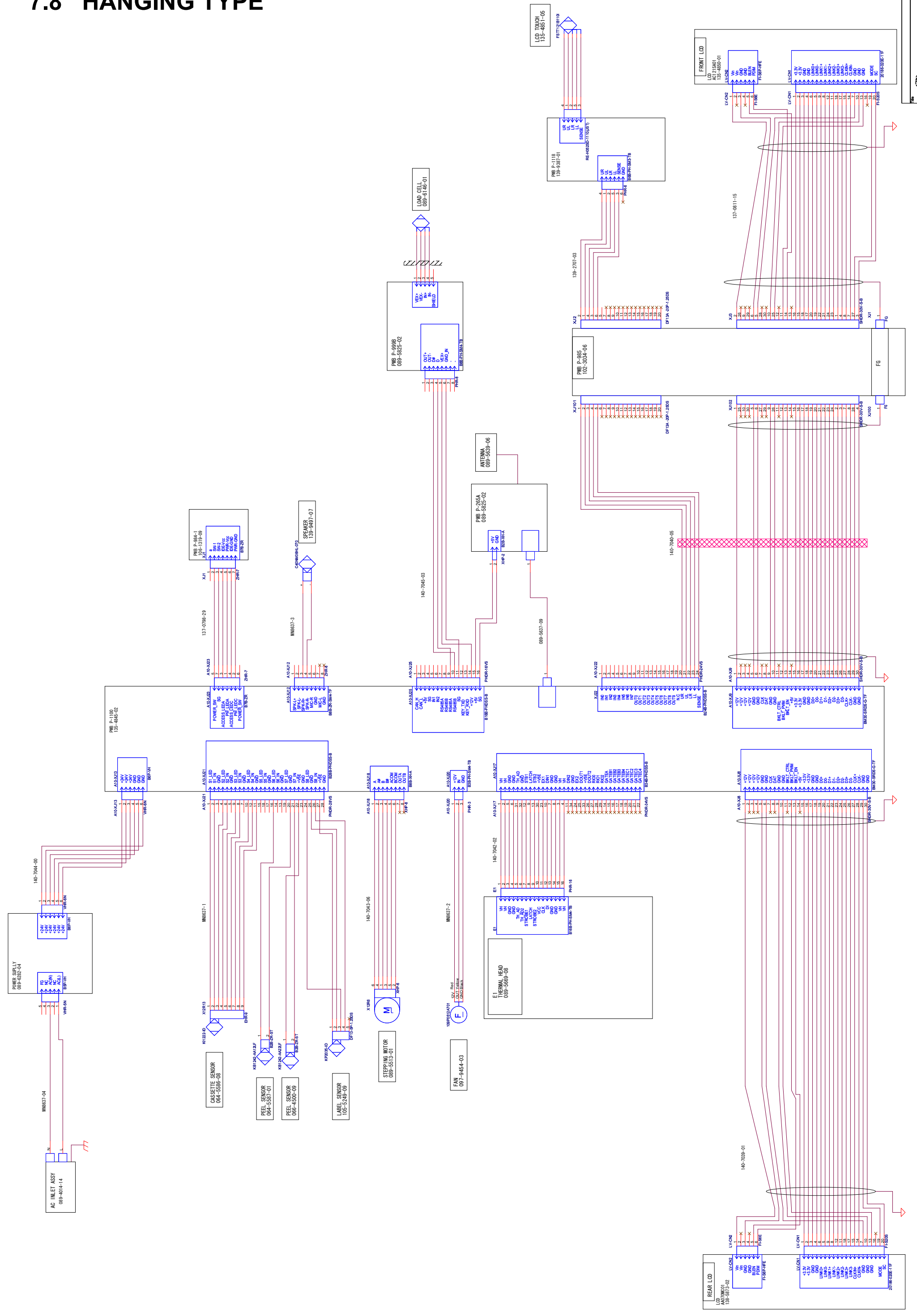
7.6 SELF-SERVICE TYPE



7.7 XL TYPE



7.8 HANGING TYPE



Chapter 8 Appendix

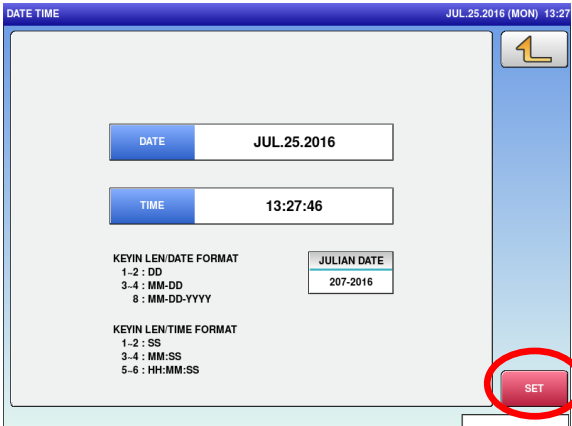
8.1 Software Setup

8.1.1 Preparation

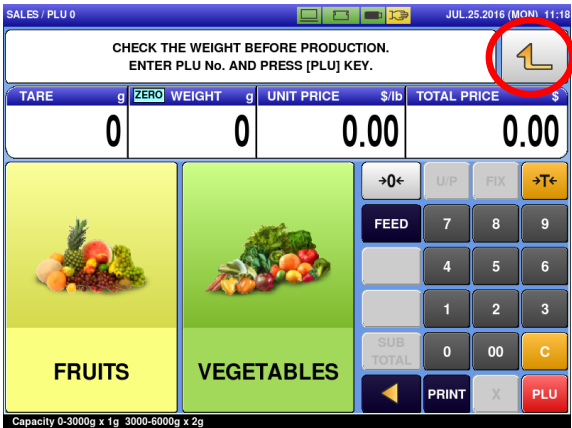
- CF card installed the LINUX program.
- USB memory stick storage soft folder arranged directly under directory of the USB.

8.1.2 Backup the master data

1. Plug a USB memory stick to the port and turn on power.
2. Press [SET] button.

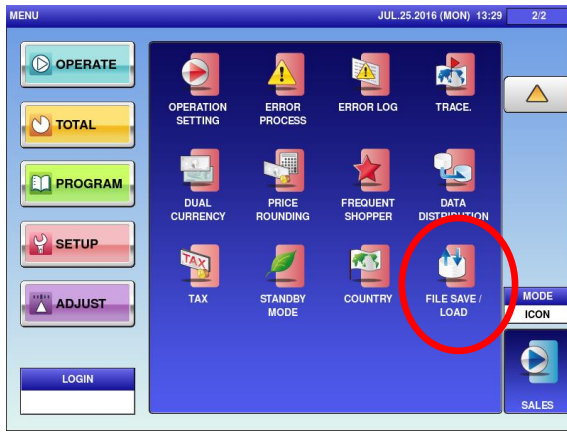


3. Press  button.

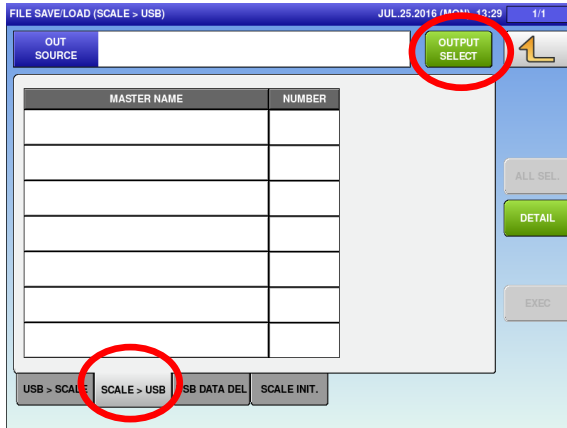


4. Press [SETUP] and [LOGIN] button, then input password "495344" using numerical keys, and press [SET] button.

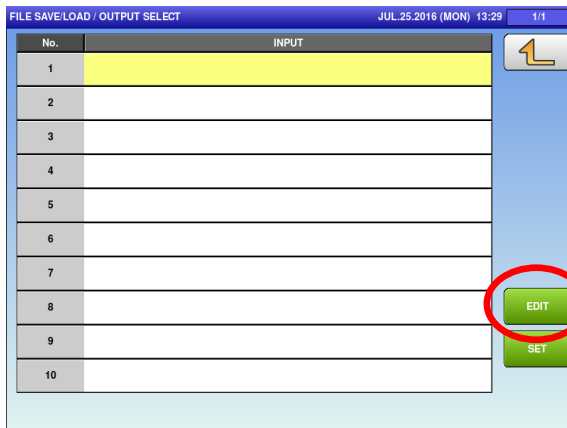




5. Press  and [FILE SAVE /LOAD] button.




6. Select [SCALE > USB] tab and press [OUTPUT SELECT] button.

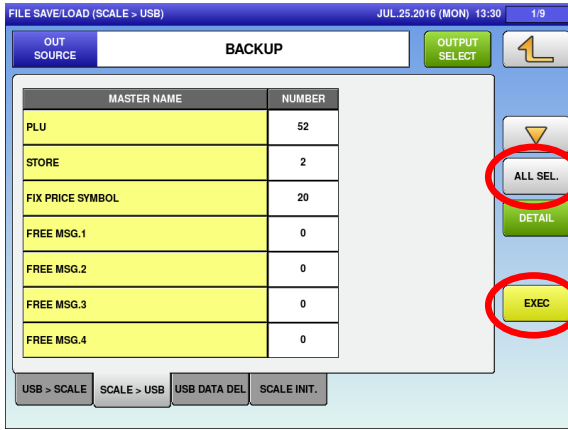


7. Select number for output and press [EDIT] button.

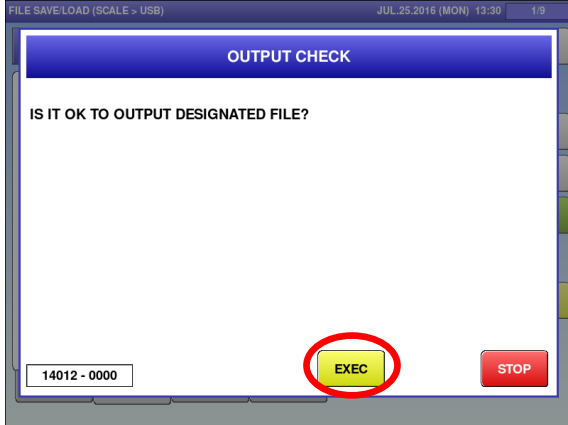


8. Enter folder name and press  button to return to previous page.

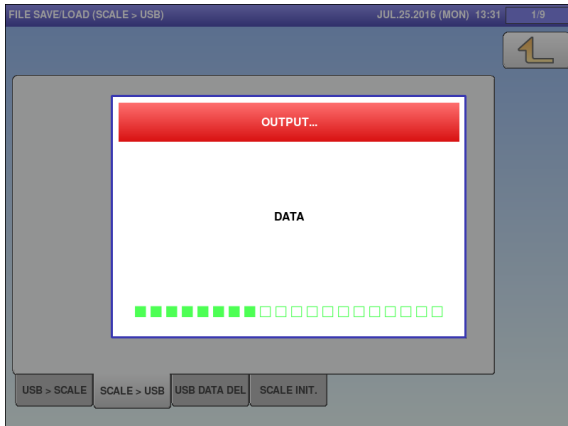
9. Press [ALL SEL.] and [EXEC] button.



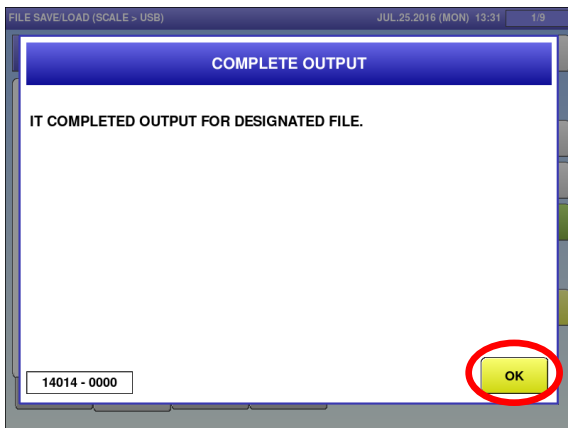
10. Press [EXEC] button.



11. Starting to output files.

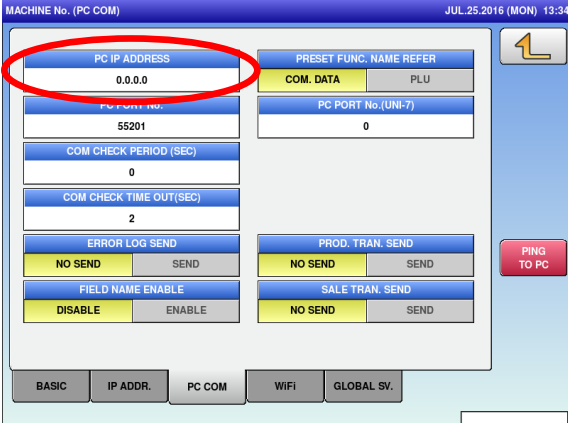
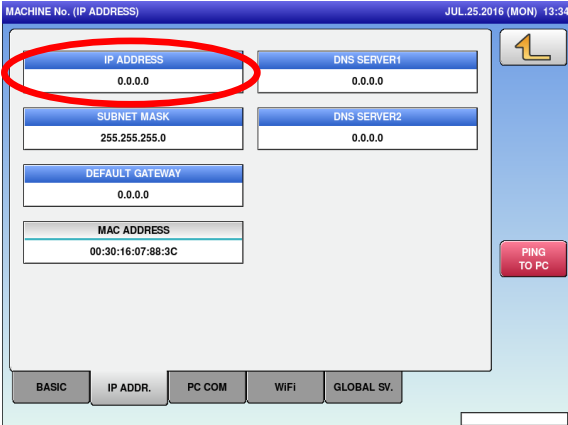
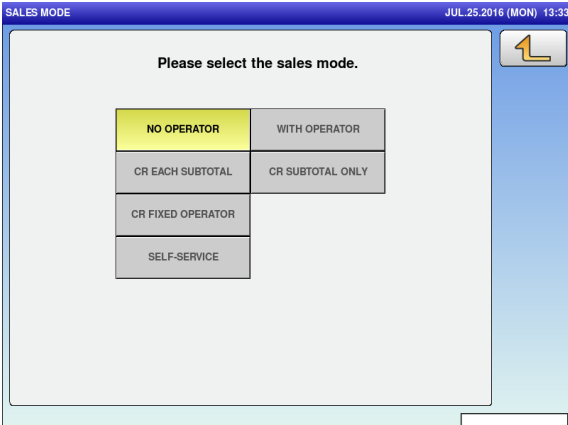


12. Press [OK] button and unplug USB memory stick.



8.1.3 Document settings

- 1. Print and save sample labels for checking after setup.
- 2. Document the Logo on receipt.
- 3. Document layout of customer side display.
- 4. Document SALES MODE.
- 5. Document IP ADDRESS and PC IP ADDRESS on MACHINE No. screen.

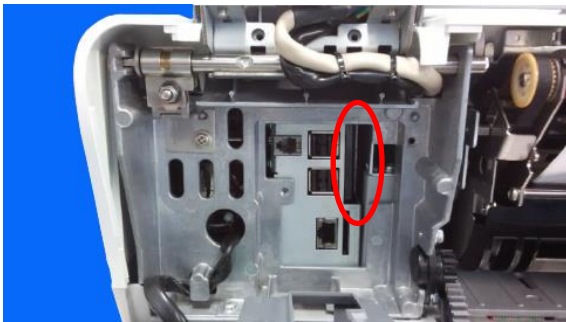


8.1.4 Replacement CF card

CAUTION Make sure to unplug the power cord from the wall outlet before starting.



1. Remove two tapping screws marked yellow circle on figure to detach a cover of shaft side.
Also, remove a screw marked red circle on figure to detach a cover of switch side.



2. Replace a CF card.

CAUTION

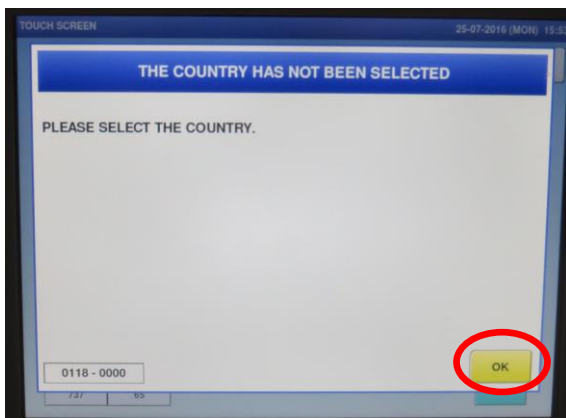
Attach a sticker to eject the card.

3. Reverse this procedure for assembly.

8.1.5 Setup from USB memory stick

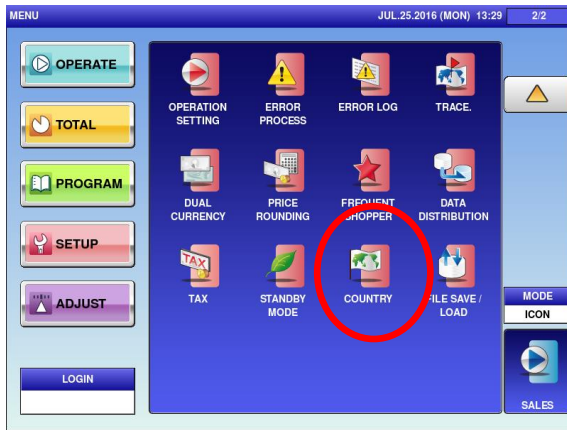
1. Storage INF file, ZIP file, and TXT file to the soft folder arranged directly under directory of USB memory stick.
2. Plug the USB and turn on power.
3. Starting to install files.

When the installation has succeeded, the system restarts.

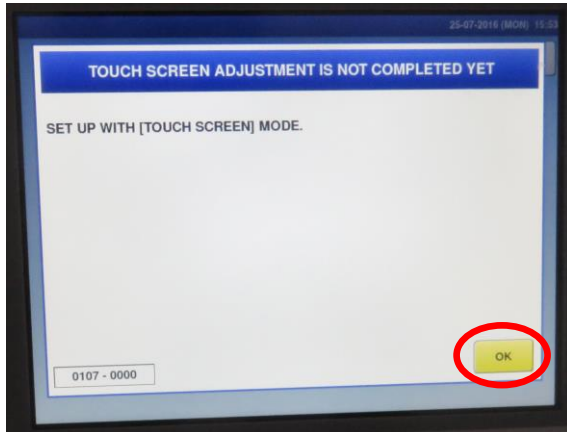


4. Press [OK] button.

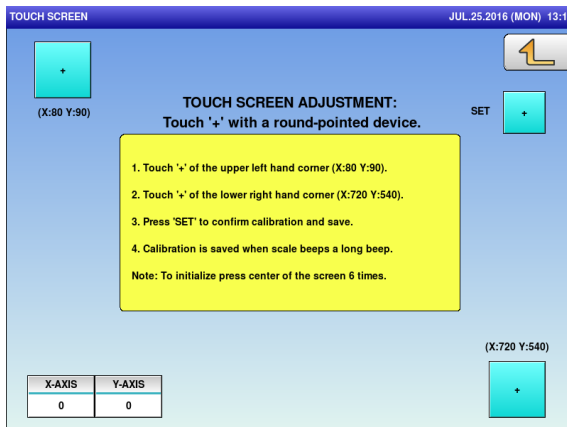
5. Press [COUNTRY] button on SETUP menu and select country.




6. Press [OK] button.

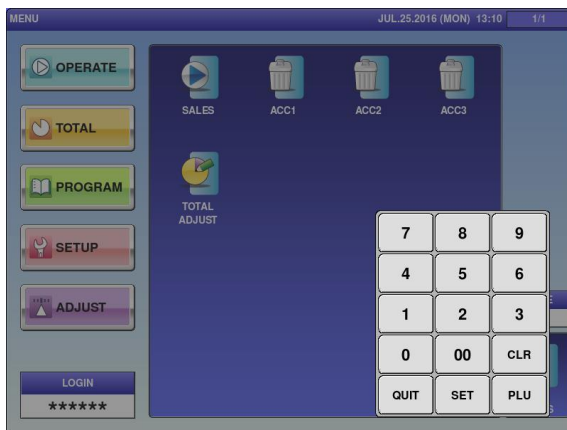


7. Adjust the touch screen.

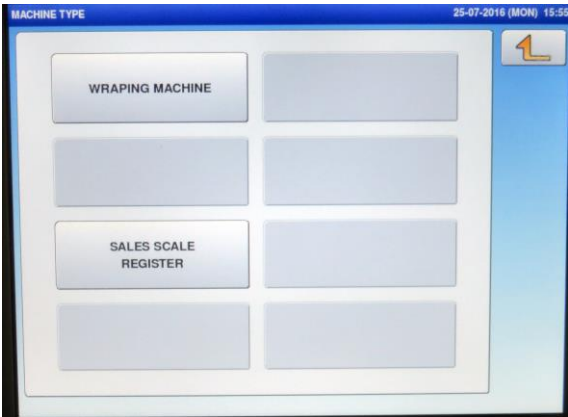


8. Press  button to return menu screen.

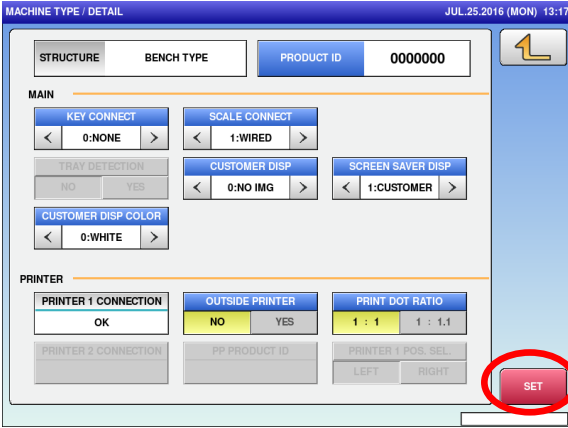
9. Press [ADJUST] and [LOGIN] button, then input password "495344" using numerical keys, and press [SET] button.



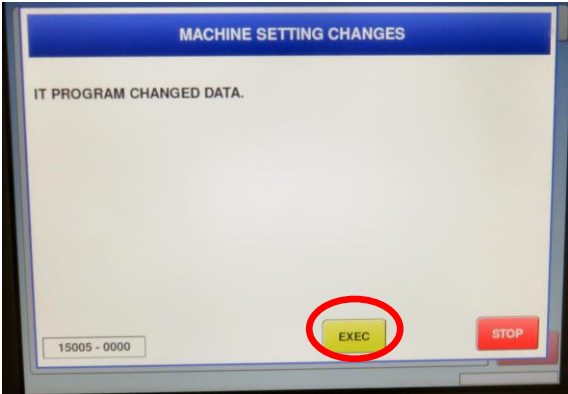
10. Select machine type on MACHINE TYPE screen.



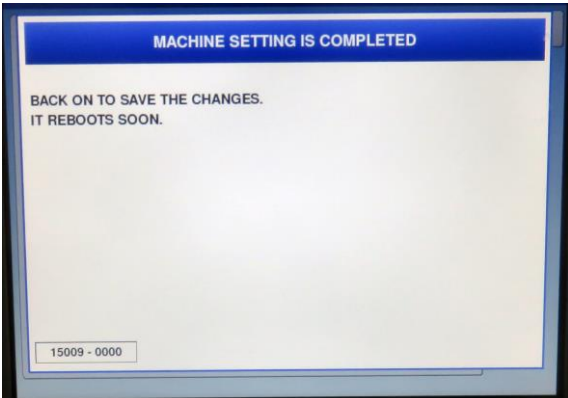
11. Press [SET] button.

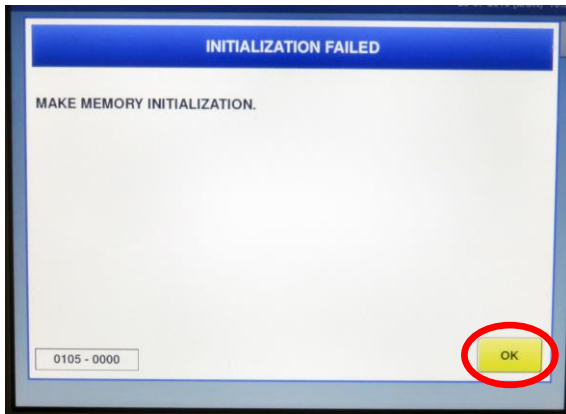


12. Press [EXEC] button

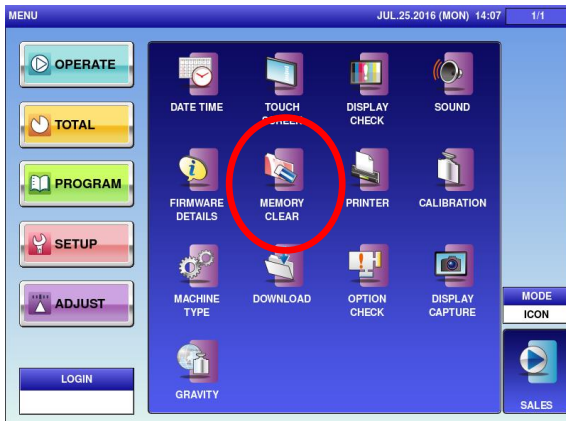


13. Restart system.

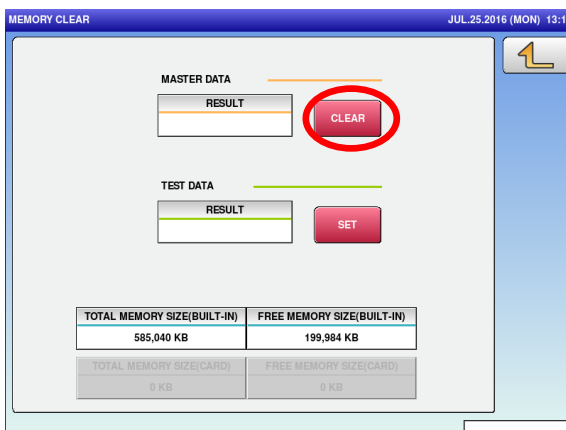




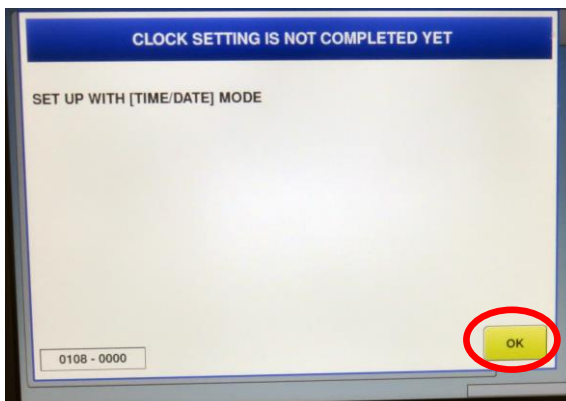
14. Press [OK] button.



15. Login again and press [MEMORY CLEAR] button on ADJUST menu.

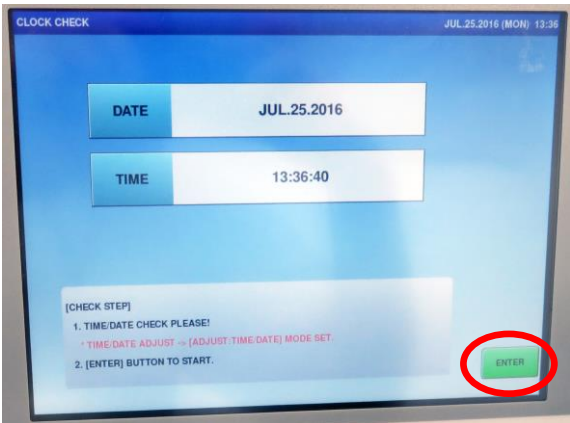


16. Press [CLEAR] button.

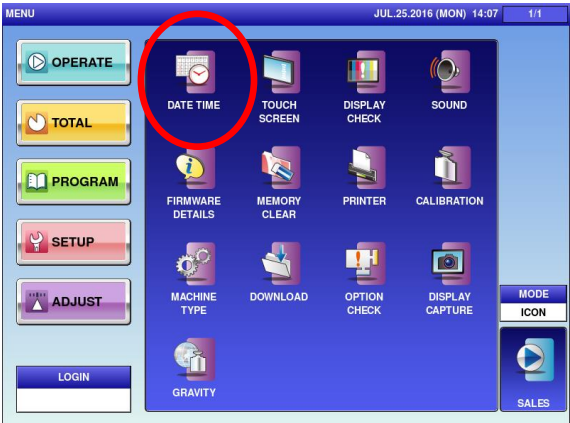


17. Press [OK] button.

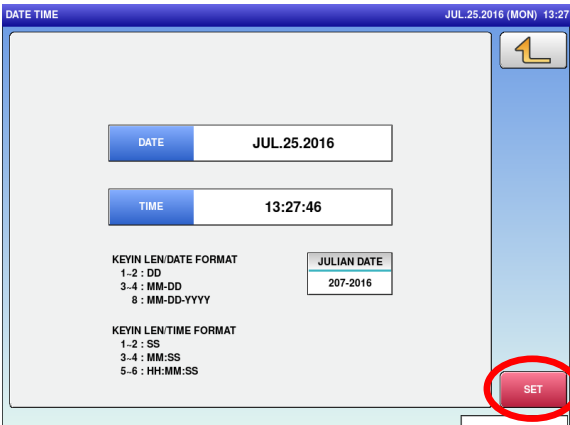
18. Press [ENTER] button.



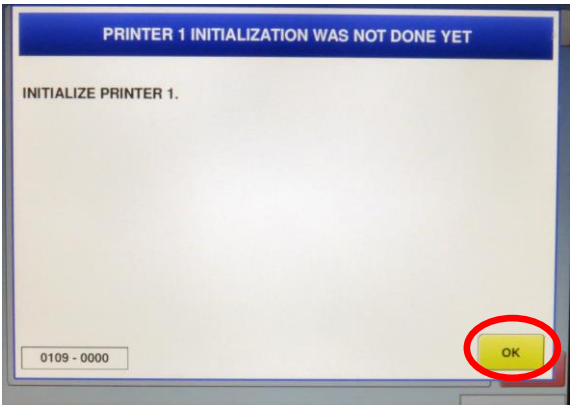
19. Press [DATE TIME] button on ADJUST menu.



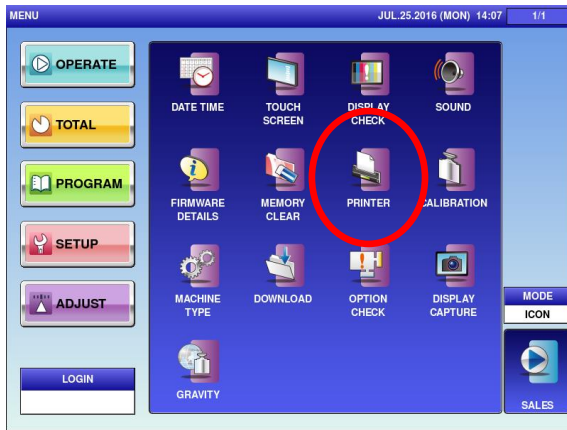
20. Set the current time and date and press [SET] button.



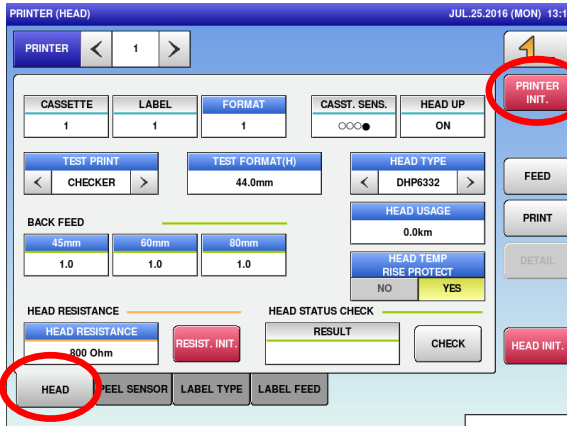
21. Press [OK] button.



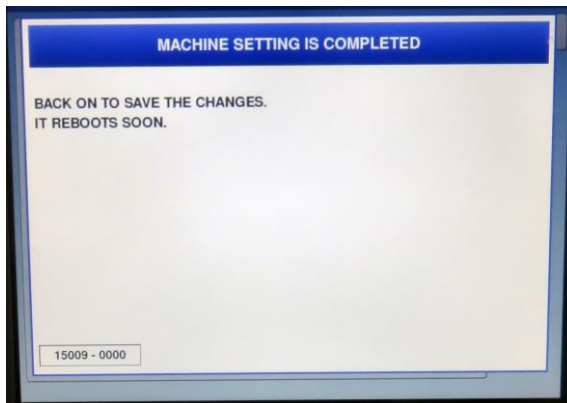
22. Press [PRINTER] button on ADJUST menu.



23. Select [HEAD] tab and press [PRINTER INIT.] button.



24. Restart and complete.

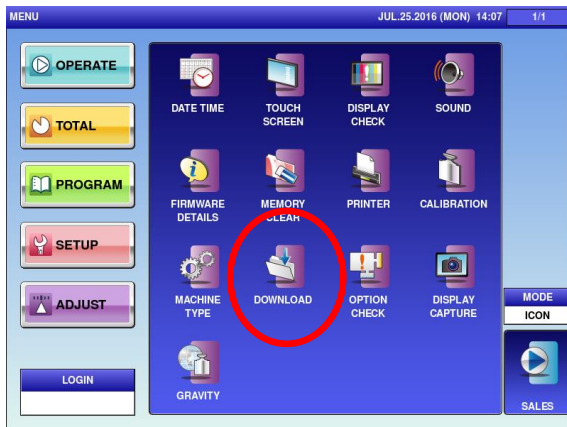


8.1.6 Update firmware

1. Plug the USB memory stick and turn on power.
2. Press [ADJUST] and [LOGIN] button, then input password "495344" using numerical keys, and press [SET] button.



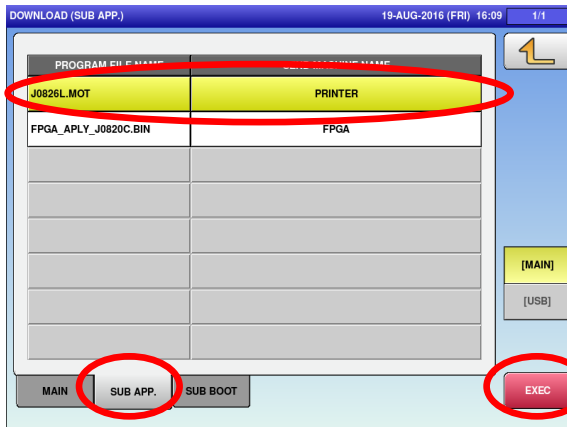
3. Press [DOWNLOAD] button.



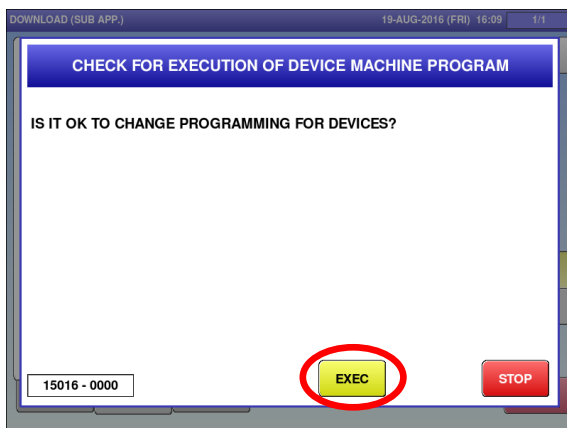
4. Select [SUB APP.] tab and PRINTER line and press [EXEC] button.



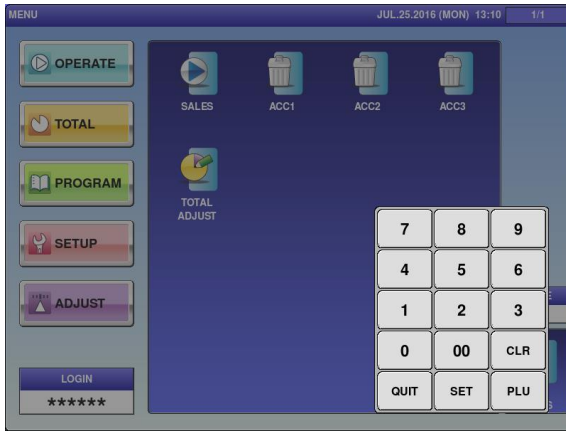
**Select only the FPGA sub app.
Each sub app must be selected and
downloaded separately.**



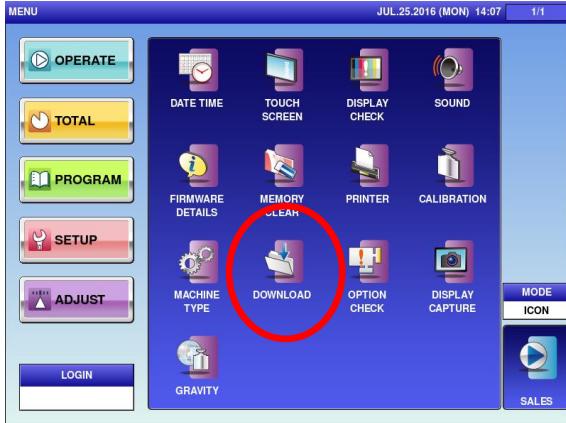
5. Press [EXEC] button then restart and complete.



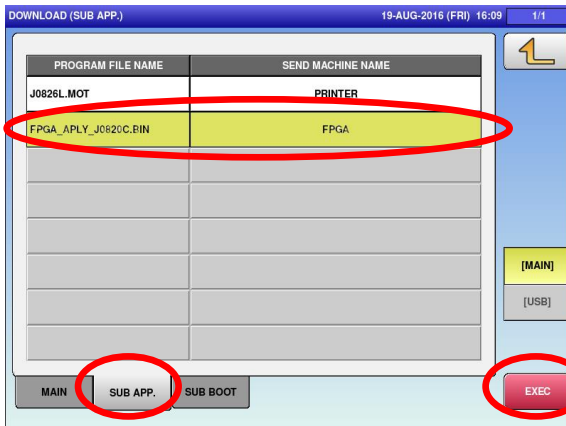
- Press [ADJUST] and [LOGIN] button, then input password "495344" using numerical keys, and press [SET] button again.



- Press [DOWNLOAD] button.

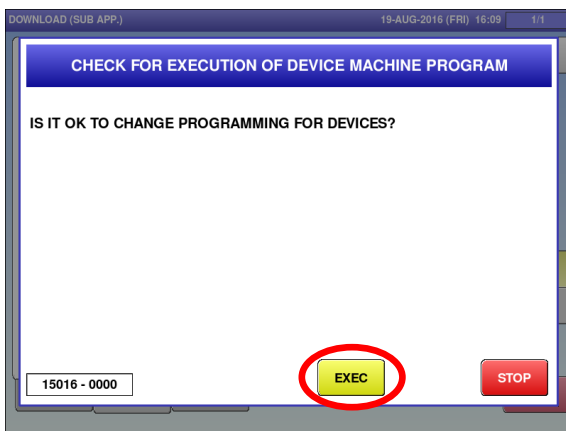


- Select [SUB APP.] tab and FPGA line and press [EXEC] button.



Select only the PRINTER sub app. Each sub app must be selected and downloaded separately.

- Press [EXEC] button then restart and complete.



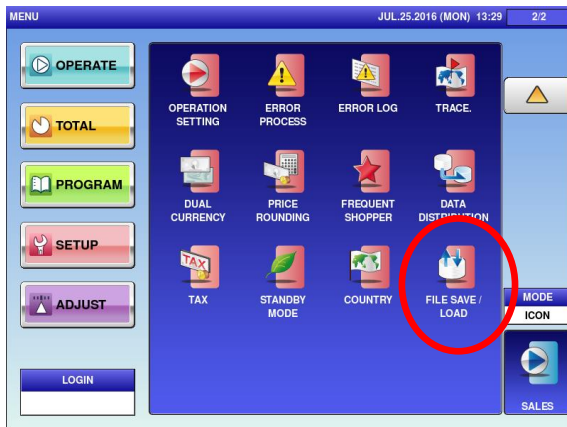
- Unplug USB memory stick.

8.1.7 Install the backup data

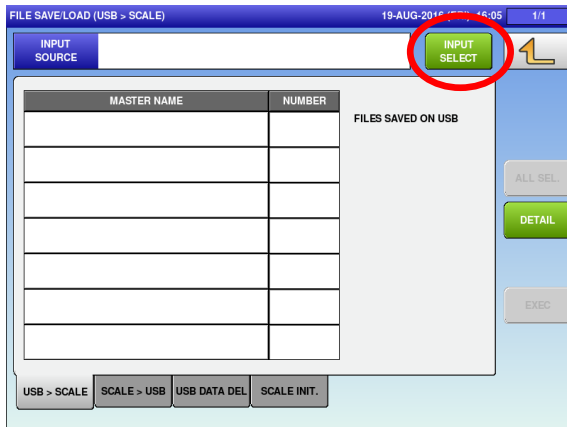
1. Plug the USB memory stick and turn on power.
2. Press [SETUP] and [LOGIN] button, then input password "495344" using numerical keys, and press [SET] button.



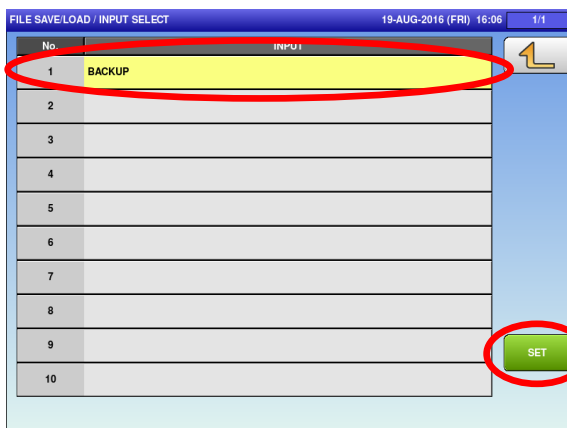
3. Press  and [FILE SAVE /LOAD] button.

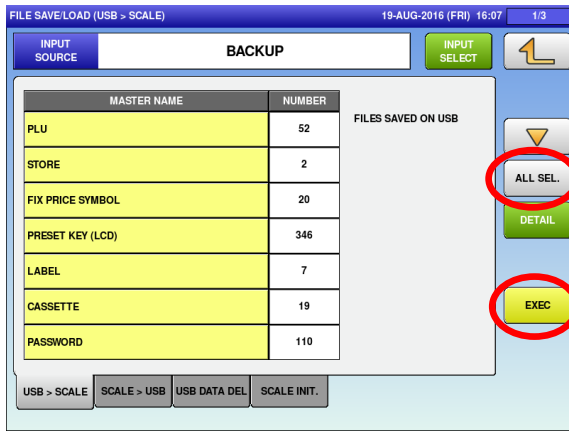


4. Press [INPUT SELECT] button.

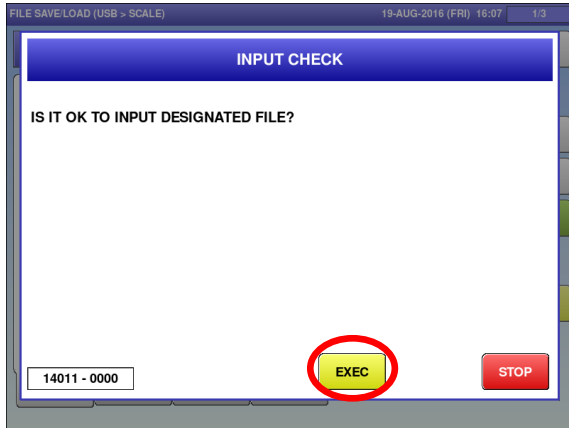


5. Select BACKUP line and press [SET] button.

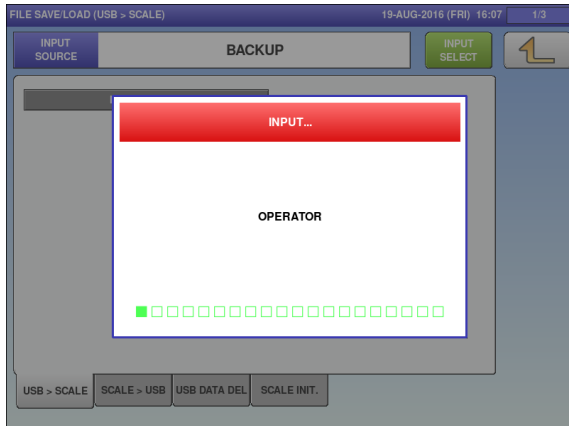




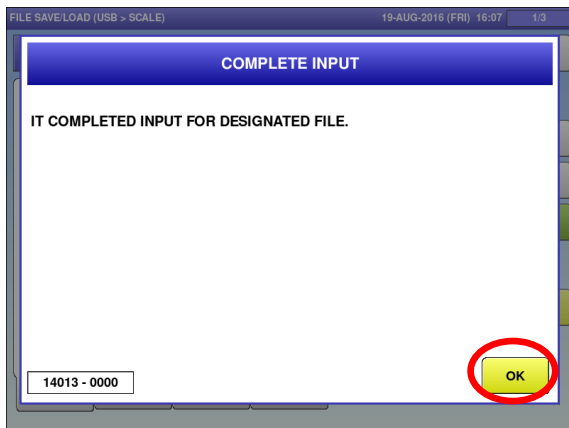
6. Press [ALL SEL.] and [EXEC] button.



7. Press [EXEC] button.



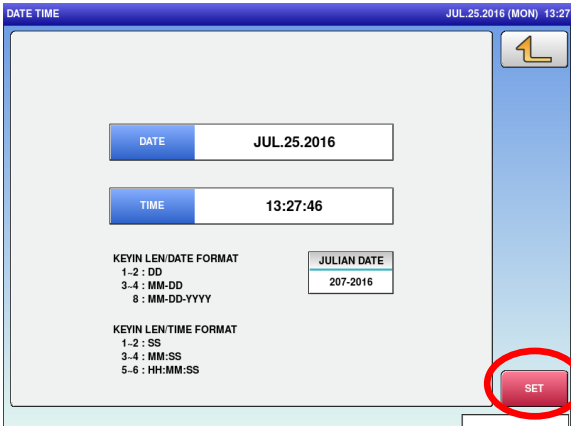
8. Starting to input files.



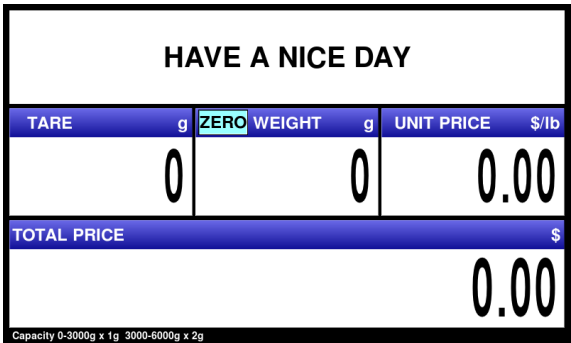
9. Press [OK] button and unplug USB memory stick.

8.1.8 Verify the settings

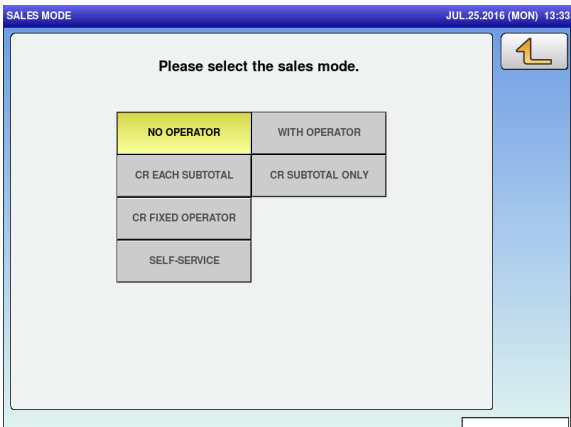
- 1. Turn on power.
- 2. Enter the correct time and date and press the [SET] button.



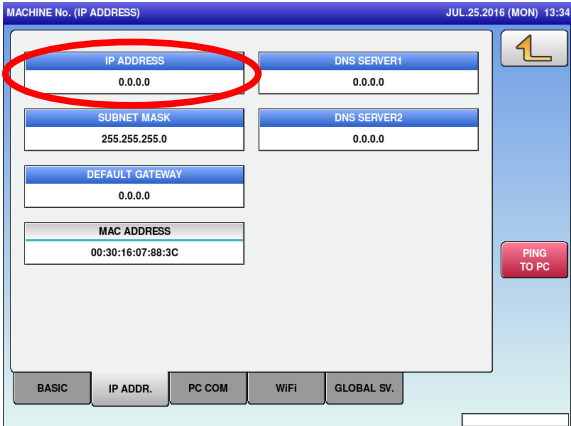
- 3. Verify the layout of customer side display.

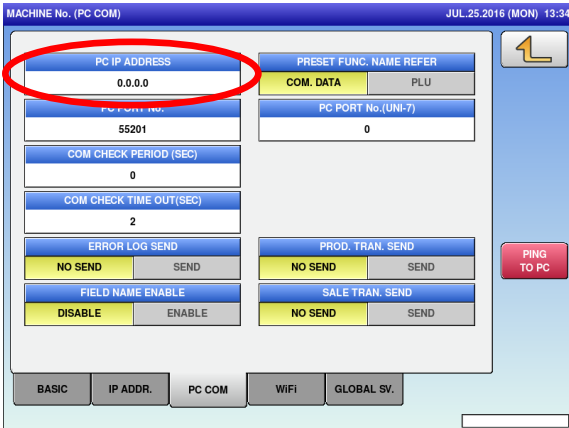


- 4. Verify the SALES MODE.



- 5. Verify the IP ADDRESS and PC IP ADDRESS on MACHINE No. screen.





- 6. Print the label for checking after setup.
- 7. Verify the logo, date, shop name, and format on label.
- 8. Test satellite and master connection.
- 9. Power the scale off and on to verify the settings and operation are maintained. If not, check the battery switch on the CPU board is set to the ON position.



© Rice Lake Weighing Systems Specifications subject to change without notice.
Rice Lake Weighing Systems is an ISO 9001 registered company.

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