

8442

**NETWORK
Scale / Printer
Technical Manual**

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INTRODUCTION

This publication is provided solely as a guide for individuals who have received Technical Training in servicing the METTLER TOLEDO product.

Information regarding METTLER TOLEDO Technical Training may be obtained by writing to:

METTLER TOLEDO
1900 Polaris Parkway
Columbus, Ohio 43240
(614) 438-4511

FCC Notice

This device complies with Part 15 of the FCC Rules and the Radio Interference Requirements of the Canadian Department of Communications. Operation is subject to the following conditions: (1) this device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

This equipment has been tested and found to comply with the limits for a Class A digital device, pursuant to Part 15 of FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications. Operation of this equipment in a residential area is likely to cause harmful interference in which case the user will be required to correct the interference at his own expense.

**METTLER TOLEDO RESERVES THE RIGHT TO MAKE REFINEMENTS OR
CHANGES WITHOUT NOTICE.**

PRECAUTIONS

READ this manual BEFORE operating or servicing this equipment.

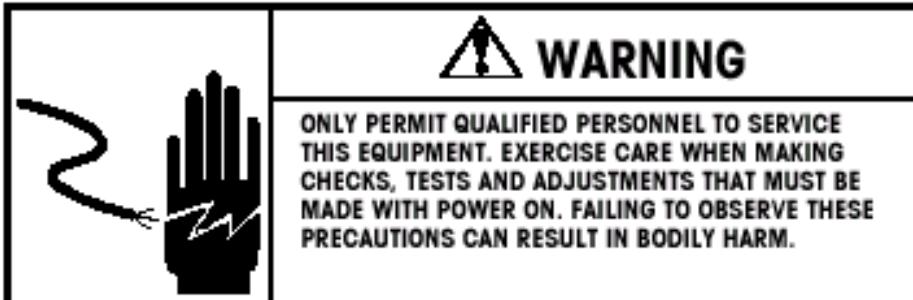
FOLLOW these instructions carefully.

SAVE this manual for future reference.

DO NOT allow untrained personnel to operate, clean, inspect, maintain, service, or tamper with this equipment.

ALWAYS DISCONNECT this equipment from the power source before cleaning or performing maintenance.

CALL METTLER TOLEDO for parts, information, and service.



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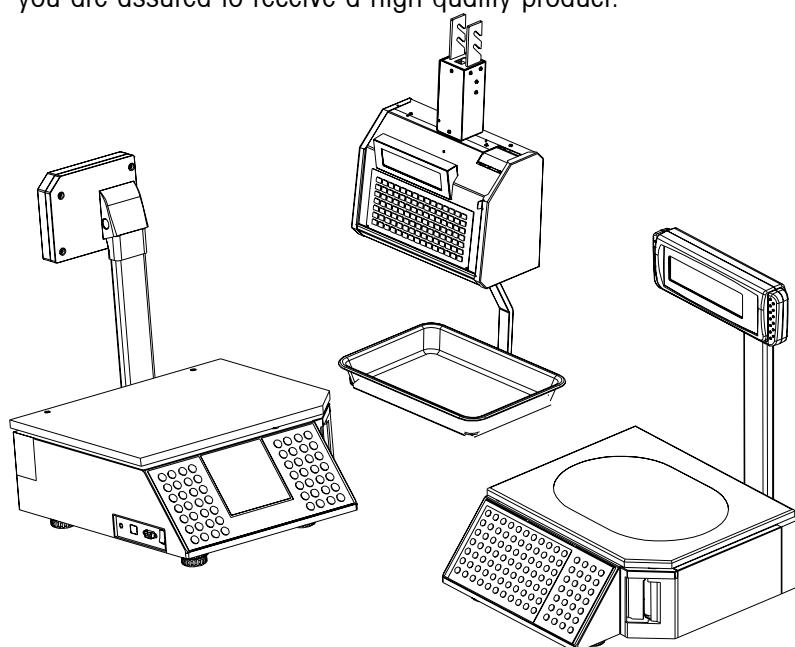
Specifications

General Description

The METTLER TOLEDO 8442 is a digital computing scale with an integrated thermal label printer. 8442 is a network scale, which has a database containing the PLU, Extra Text and etc. A PC program (-SPCT) is available to download the database from the PC. The 8442 has 512K and 128K RAM memory. The PLU memory can handle up to 3,000 items, type 8442-X6XX can up to 7000 items.

The standard 8442 weighing capacity is 6/15 kg dual range or 15/30 kg dual range. This scale integrates seven-segment displays on each display for weight, tare, unit price and total price. It also includes a 16 ([24](#) for type 8442-XX10 and 8442-XX10H) character display on each side to show item description.

The 8442, like all METTLER TOLEDO products is designed for maximum durability and reliability in even the most demanding application environments. The 8442 is manufactured in one of METTLER TOLEDO's ISO 9001 and ISO 14001 certified facilities so you are assured to receive a high quality product.



Features

- 6/15 x .002/.005 kg or 15/30x.005/.010kg.
- LCD display with LED backlight on both operator side and customers side.
- Four seven-segment numeric display for : 5 digits weight, 5 digits tare, 6 digits unit price and 6 digits total price (Special for 7 digits unit price and 7 total price). One 16-character or 24-character alphanumeric display for programming and item description.
- Indicators for zero, net and prepack mode.
- Compliance with H44 3000e, R76 OIML 3000e and Canadian W&M.
- Tactile feel membrane keyboard and an audible beeper.
- A 56 or 154 position preset keyboard for fast PLU retrieval.
- Real time clock and RAM are backed up by a lithium rechargeable battery with at least 1 month memory retention without external power.
- Push button zero (auto zero at power up) and automatic zero tracking.
- VOID key for clearing previous transaction from accumulator.
- Computer interface port (ethernet interface) for use with SPCT&AUTODOWN software and RS232 for use FLASH software.
- Integral thermal label printer with 8 dots/mm print head.
Adjustable 40 to 60mm width. Supports EAN and UPC symbology.
The printer can use die cut labels, continuous strip labels and continuous thermal paper.

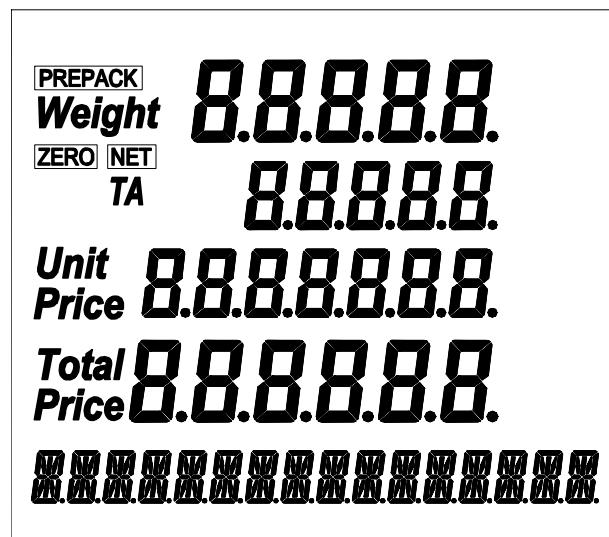
Customer/Vendor Display

There are two displays on the scale, one is on the vendor side and the other is on the customer side. For type 8442-XX00, the vendor display is mounted in the top cover and the customer display can be installed either on the base or on the tower.

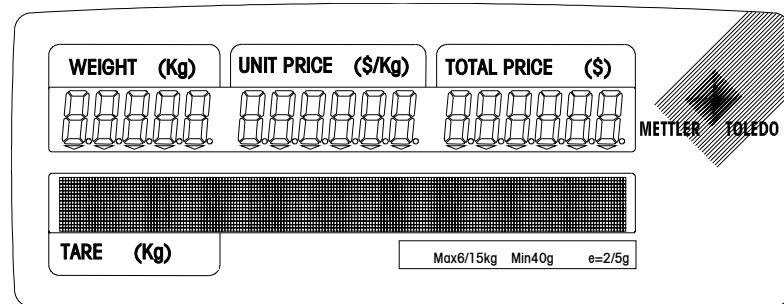
These two LCD displays incorporate LED backlight. The backlight is an orange color. Both the customer and vendor displays show 5 digits of weight, 5 digits of fare, 6 or 7 digits of unit price and 6 or 7 digits of total price values along with cursors for Zero, Net and Prepack mode. Both the customer and vendor displays can also show 16 or 24 alphanumeric characters for commodity description, marquee and prompt messages during programming.

The Weight and Total Price display characters are 12mm high by 7.4mm wide. The Tare and Unit Price display are 10mm high by 6mm wide. The alphanumeric characters are 7.6mm high and 5mm wide.

TYPE 8442-XX00:



TYPE 8442-XX10 and 8442-XX10H:



The Display Legends Definitions are shown in the following Table.

CURSOR	DEFINITION
NET	Indicates a tare has been entered and the weight is net.
ZERO	Indicates scale at zero, i.e. within 1/4 increment.
PREPACK	Indicates Prepack mode has been selected.

Weighing Capacity

The standard 8442 weighing capacity is 6/15 x .002/.005 kg or 15/30x.005/.010 kg version. The built-in scale is designed to withstand static overloads up to five times the rated capacity without sustaining permanent damage. A weight greater than five increments over capacity causes the weight display to "----" and printing is inhibited. If the scale is under zero by more than five increments, the weight field will display dashes "I____I". When zero can not be captured, the weight field will display EEEEE.

Keyboard

The keyboard consists of a membrane switch pad with an overlay that has raised domes over the switch positions to provide tactile feedback and an audible tone.

The 28 keys on the right keypad are used for entering basic scale functions.

Meaning of the function key

	Free entry of a price per piece
	Vendor, clerk
	Numeric keypad
	Clear
	Customer total
	Manual entry of a price per piece to add
	Manual entry of a price per piece to subtract
	Multiplication
	Fixed unit price / fixed tare
	Change back
	Void
	Continue
	Go back
	Tare
	Zero
	Code and switching
	Mode and switching
	Paper feed

Special functions keys

TYPE 8442-XX00	8442-XX10 or 8442-XX10H	
The left 28 keys	77 keys	preset key
	V2,V3,V4	vender key
	[Discount]	increase/decrease key

The following function keys can be used as word processing keys while entering PLU description, store address, Extra Text and etc.

-  Go to beginning of text
-  Go to end of text
-  move the cursor one position left in the text edit mode
-  move the cursor one position right in the text edit mode
-  Go to next sub-menu
-  Return to previous sub-menu
-  get upper case characters in text edit mode
or select a key's 2nd function
-  Alternate : special characters in text edit mode
-  Select font size
-  Backspace (delete the character left of the cursor)
-  Delete (delete the character on the cursor)
-  Insert (insert a character on the cursor)
-  Centerize the text in text edit mode
-  Carriage return (next line)
-  Selection of a menu

Remark :

* (or V2~V4) can be configurated as preset key or vendor key ,but one function is available at one time.

* (or [Discount]) can be configurated as preset key or increase/decrease key ,but only one function is available at one time.

The following numerical keys can be used to enter the special characters while SHIFT is active.

	=
	!
	"
	+
	\$
	%
	&
	/
	(
)

Tare

Tare is limited to a maximum of 2/3 full capacity.

Memory Specifications

The Main Logic PCB contains a rechargeable lithium battery that will retain backup PLU's and the time/date in the SRAM memory for up to one month. The Main Logic PCB contains 512K and 128K of SRAM memory which will hold 3000 PLU (some type can hold up to 7000 PLU) and 50 (or 250) Extra Text Records . Other data, including calibration data are retained in the EEPROM which requires no battery for memory retention.

Agency Approvals

The model 8442 is designed to meet the requirements of the following agencies:

UL	UL1950 Information Technology Equipment
cUL	CSA Std. C22.2 No. 950 Information Technology Equipment.
NIST	NTEP requirements for Class III weight device. NTEP/California Electronic Cash Registers General Code Requirements
FCC	Requirements for FCC Conducted Emissions and Radiated Emissions for a Class A device.

Label Printer

Labels can be printed with the built-in thermal label printer. The printer uses a 60mm (2.36") wide, high resolution, 8 dots/mm, thermal printhead. The printer driver PCB incorporates a heat detection circuit to ensure the best possible print quality while eliminating any possibility of overheating the head. Overheating is the major cause of premature printhead failure. The print speed and density can be adjusted via SERVICE MENU to compensate for varying types of labels.

The printer can use standard label sizes ranging from 48mm(1.9") to 94mm(3.7") long, and continuous strip stock or continuous thermal paper. Labels can be loaded in a stripped or unstripped mode. In stripped mode, the labels automatically peel from the backing liner. In the unstripped mode, the label and liner will be delivered. A tear/bar allows continuous stock to be torn to exact length needed. Print specifications for the thermal printer are as follows:

PRINthead TYPE: Thick Film Thermal Printhead

Dot Density: 8 Dots/mm

Print Speed: 75 mm/second (2.95 in/Second) maximum

Electrical

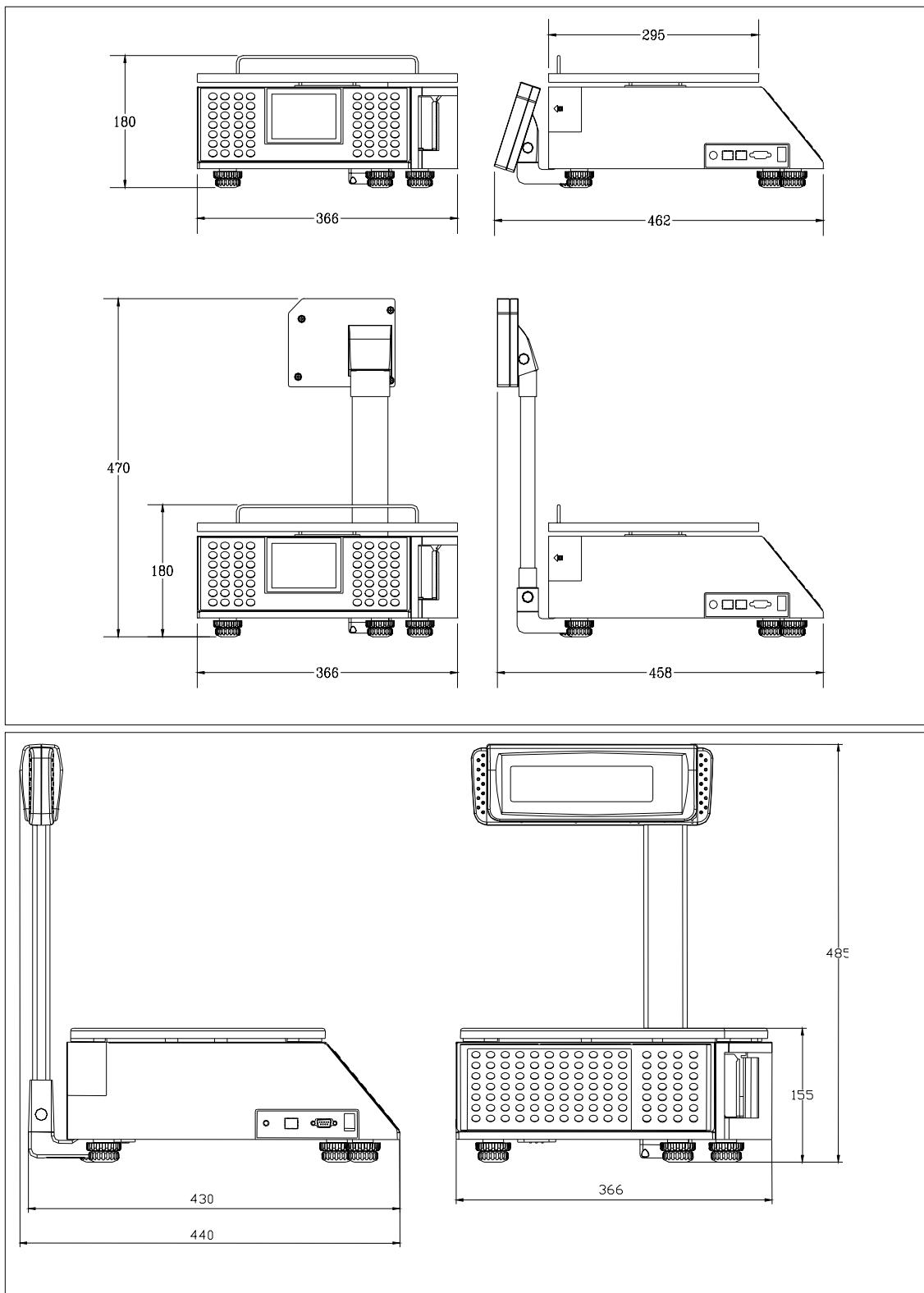
The 8442 requires a dedicated grounded 220 VAC, 50 HZ supply, and draws 0.3 amps (scale/printer versions.) The AC line (including ground) must not be shared with noise and surge generating equipment such as, electric motors, compressors, thermostats, fluorescent lights, etc. A line conditioning device is recommended to provide protection from surges and spikes. The Power supply uses an electronic overload protection circuit designed to protect the internal electrical components.

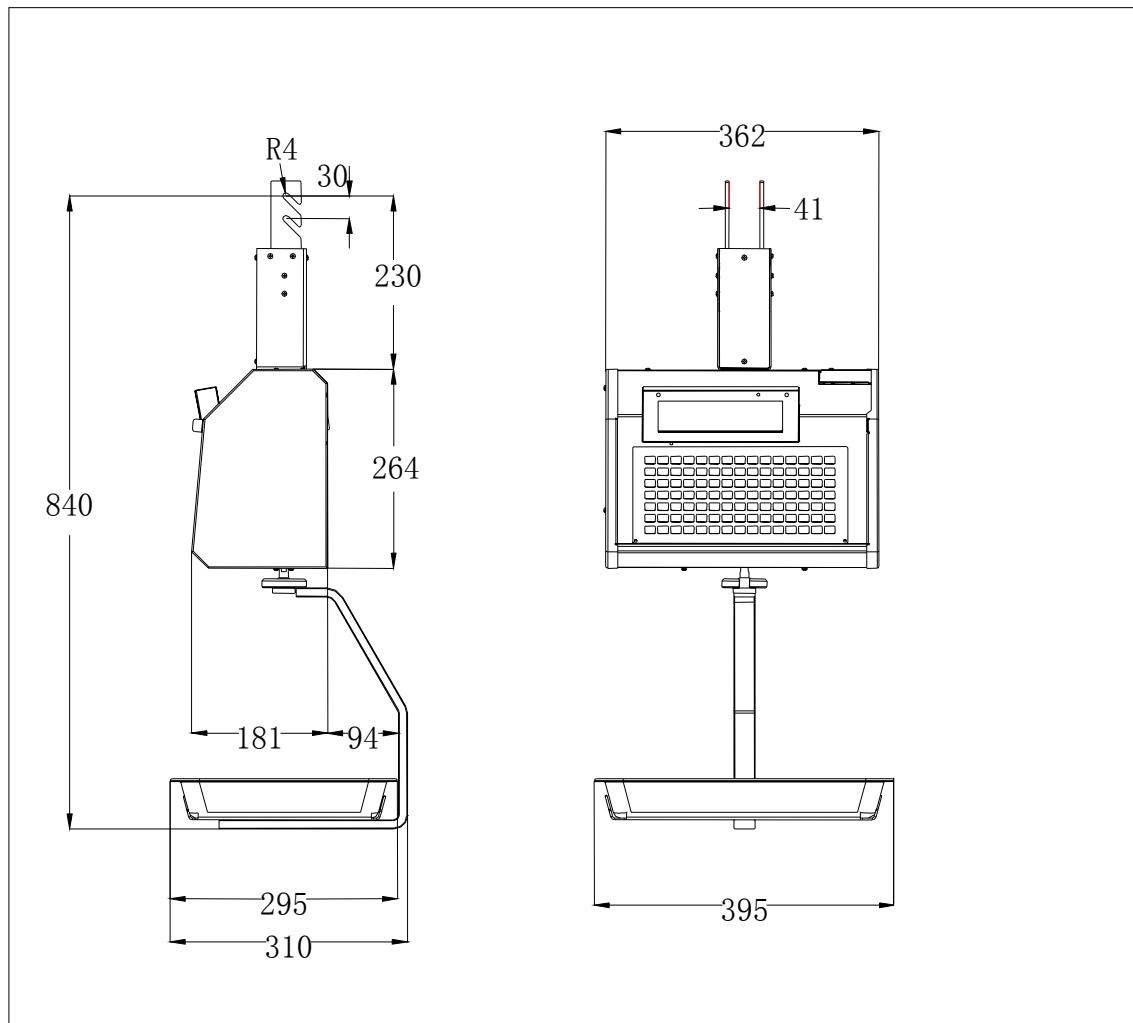
Operating & Storage Temperature

Operating Range: 0°C to 40°C (32°F to 104°F), humidity from 5% to 95% non-condensing.

Storage Range: 0°C to 70°C (32°F to 158°F), humidity from 5% to 95% non-condensing.

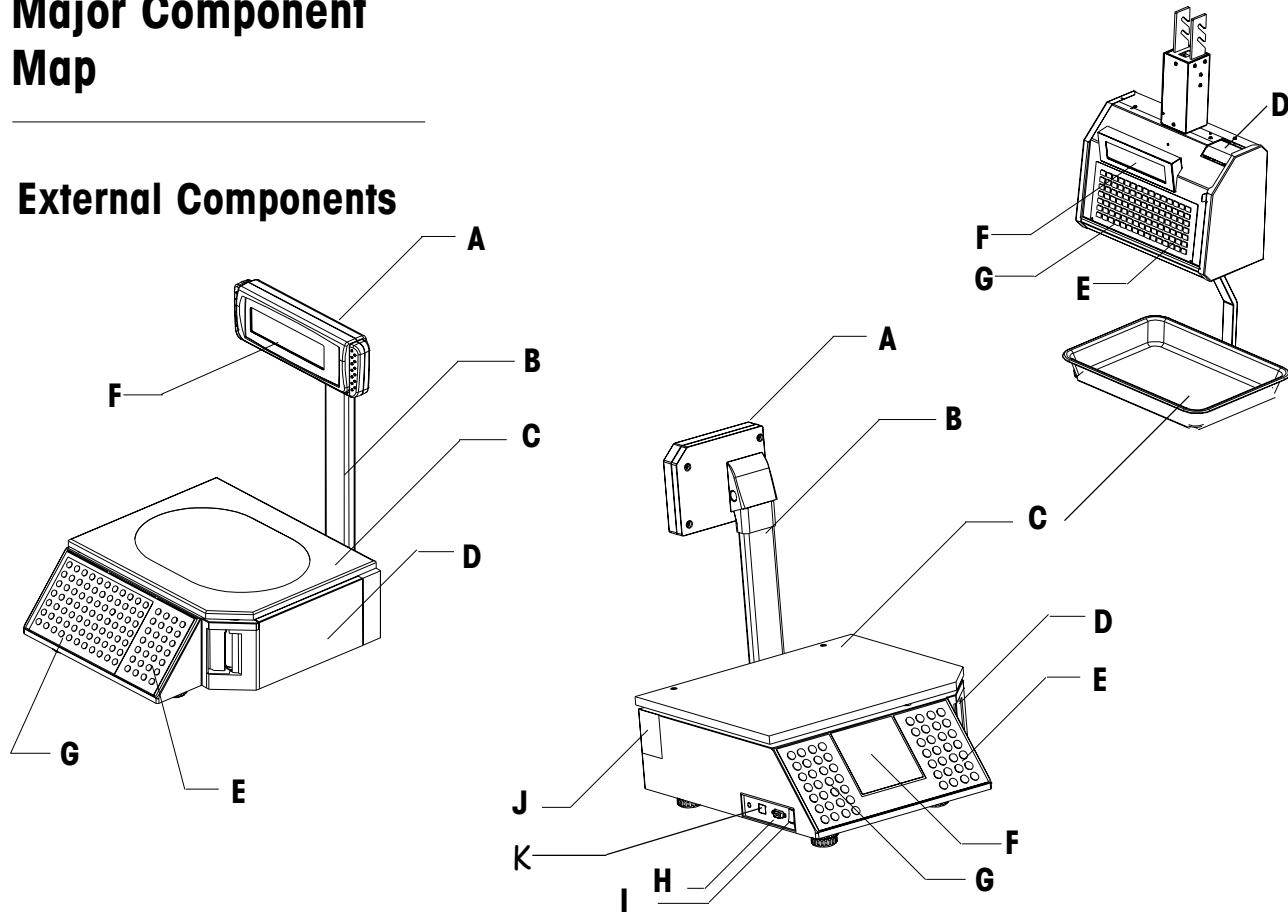
Dimensions Unit: mm





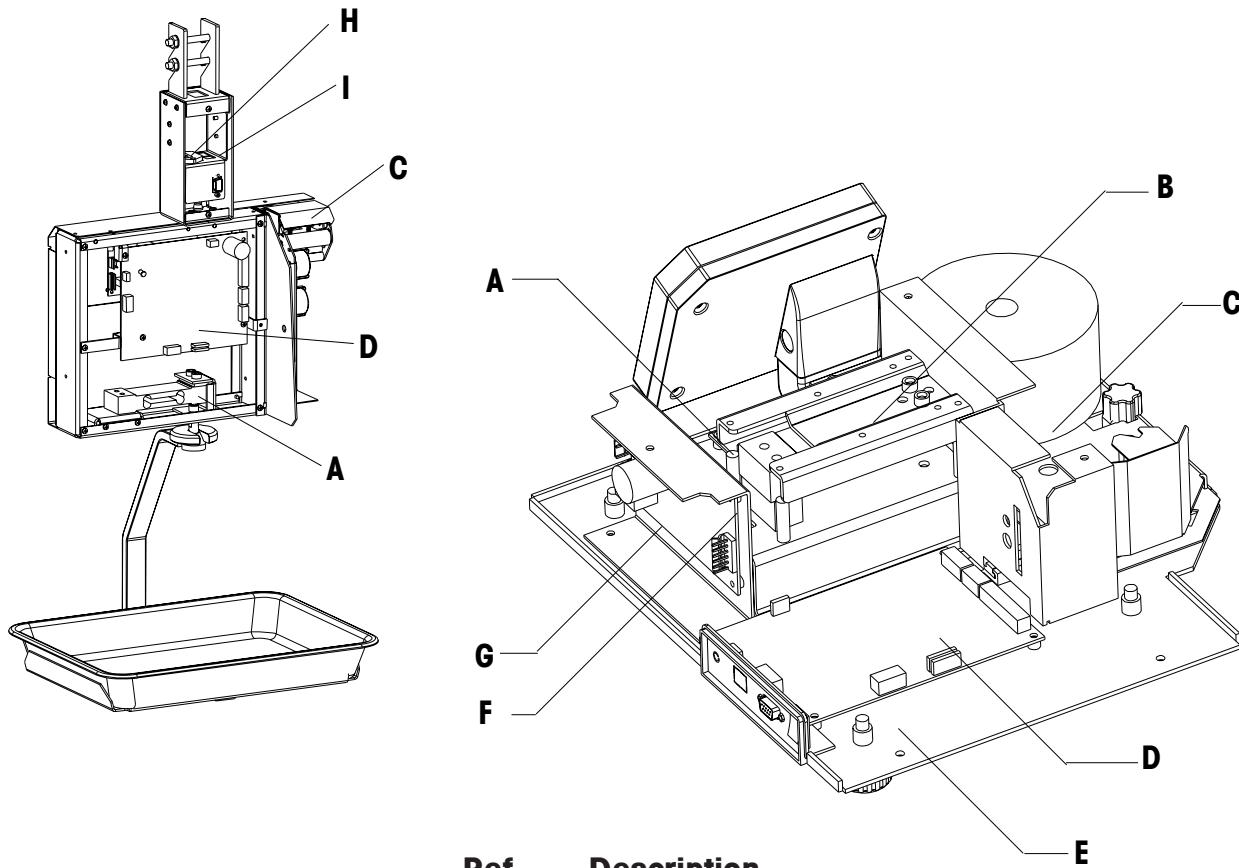
Major Component Map

External Components



Ref	Description
A	Customer Display
B	Tower
C	Platter
D	Printer
E	Numeric Keypad
F	Operator Display
G	Preset Keypad
H	Serial Port (some type in the bottom of the scale)
I	Power Switch
J	Tower box
K	Ethernet port (some type in the bottom of the scale)

Internal Components



Ref	Description
A	Load Cell
B	Spider, lower
C	Printer
D	Main Logic PCB
E	Base
F	Spacer, lower
G	Switching Power Supply
H	Power port
I	Ethernet port

Database Records

The PLU database file consists of:

PLU	The Price Look Up Number is a number between 1 and 999999 used for database indexing and to call up a record
ITEM NUMBER	The product number is a number that is encoded in the EAN Bar Code symbol. This number can be inputed up to 13 digit.
DESCRIPTION	Text used to describe the product. Normally 36 characters.
GROUP	A two digit number between 1 and 20 used for reports.
UNIT PRICE	Pricing range is 9999.99
TARE RANGE	A two digit number between 1 and 16 used to link a preprogrammed tare to the PLU record. The tare range is up to 2/3 full capacity.
LABEL FORMAT	A two digit number between 1 and 11 used for label format indexing.
ADVERTISE TEXT	A two digit number between 1 and 10 used to link a preprogrammed Advertise Text Record to the PLU record.
EXTRA TEXT	A three digit number between 1 and 50 used to link a preprogrammed Extra Text Record to the PLU record.
FIX WEIGHT	The Net Weight of By Count PLU.

Label Specifications

Label formatting is flexible with the 8442. Many different types of labels can be used. The following table shows standard label sizes available from METTLER TOLEDO .

Part #	Description	Label Length	Label Width
123785	Label roll, 46x40mm	46mm	40mm
123787	Label roll, 37x60mm	37mm	60mm
123788	Label roll, 40x60mm	40mm	60mm
123789	Label roll, 31x60mm	31mm	60mm
123794	Ticket, continuous paper	N/A	60mm

Index of Specifications

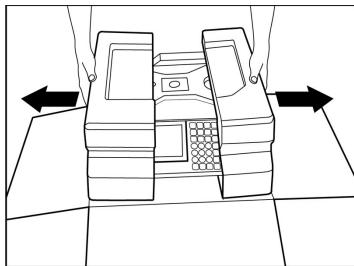
Part #	SCALE FACTORY#	Country	CAPACITY
139456	8442-3300-071	Singapore	6/15 x .002/.005kg
139457	8442-3300-045	Indonesia	6/15 x .002/.005kg
141476	8442-3300-053	Malaysia	6/15 x .002/.005kg
141477	8442-3300-064	Phillipines	6/15 x .002/.005kg
151615	8442-3600-071	Singapore	6/15 x .002/.005kg
151616	8442-3600-045	Indonesia	6/15 x .002/.005kg
151617	8442-3600-053	Malaysia	6/15 x .002/.005kg
151618	8442-3600-064	Phillipines	6/15 x .002/.005kg
147860	8442-3610-071	Singapore	6/15 x .002/.005kg
147861	8442-3610H-071	Singapore	6/15 x .002/.005kg

Index of Accessories

PART #	DESCRIPTION
135354	Insert, Preset, 8442
139855	Insert, Preset, 8442-Dot Matrix
123848	Cable, PC DB9 Serial Port to 8442, 10ft (3 m)
139532	Software, SPCT
139533	Software, Application code
133466	Interface test kit

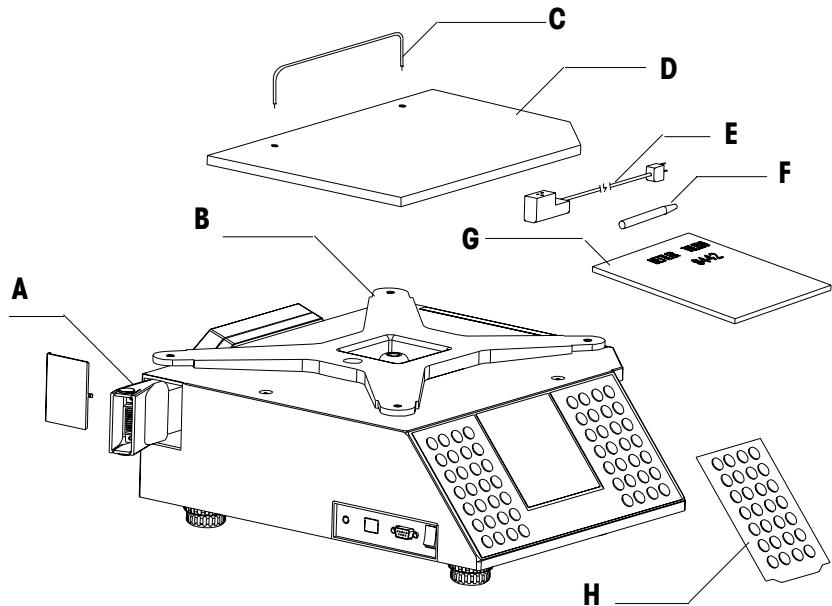
Bar Code Symbols

The 8442 is capable of printing EAN bar code symbols. The bar code must be setup correctly to work with the store's scanner. See page 2-18.

2**Setup****Unpack the shipping carton**

Note: If you choose to dispose of the package, please recycle the materials. The packaging is recyclable natural fiber with biodegradable adhesives.

Open up the package box. Take out the platter first, then take out the scale. Remove the foam inserts and plastic bag. Put the scale on the working counter and inspect for damage. Report any damage to the carrier promptly. DO NOT LIFT THE SCALE USING THE SPIDER OR BACK DISPLAY. Verify you received the accessories listed below.



Ref.	Description
A	Tower
B	8442
C	Protecting rod
D	Platter
E	Power cord
F	Cleaning pen
G	Operator manual
H	Preset keypad

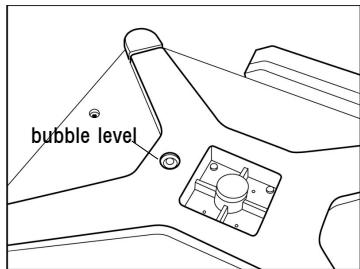
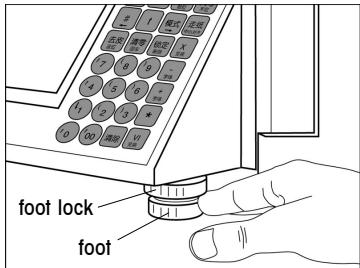
Not shown: Security Seal and Quality Feedback card.

Setup Checklist

Leveling	level the unit using the feet for adjustment and bubble indicator as a guide.
Install Tower	Install Display Tower.
Install platter	Install protecting rod on the platter.
Install label	Install labels in the printer.
Calibration	New scales must be calibrated on site.
Reset RAM	Initialize the scale and set all softswitches to factory default.
Password	To configure the passwords of the specific menus.
Keyboard	To configure the function keys and directly access keys of the keyboard.
Operator Configuration	To configure printed media, individual label or ticket or total label.
Label format	To configure default label format.
Barcode	To select bar code type.
Date/Time	To set up current date and time.
SPCT	SPCT is a PC program, which can be used to download or restore the PLU record, configuration, or other data.

Leveling

Adjust the four feet until the bubble is in the center of the bubble level. Then adjust the foot locks until the feet are secure.



Bubble Level



Right

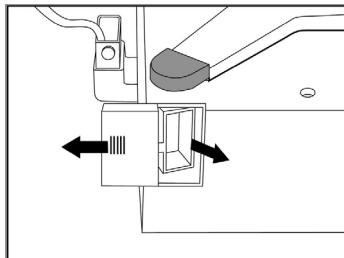


Wrong

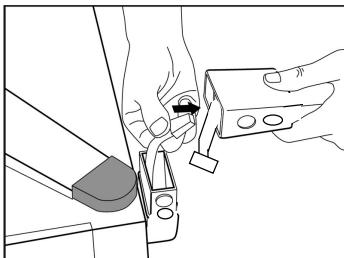
Install Tower

The following is example for 8442-XX00, If you install the 8442-XX10 you only have to take the tower and display component out and connect to scale as step 3 and 4.

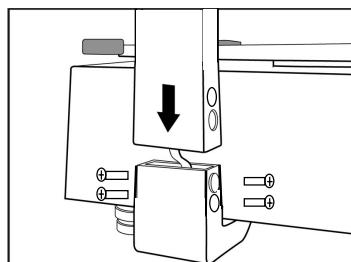
1. Take out the back display from package box



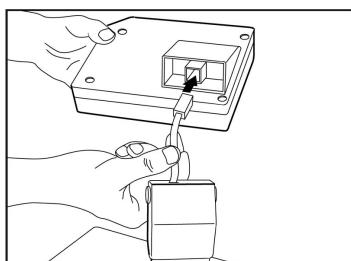
2. Open the small door at the left side of the scale and remove the tower from the scale. Then close the door. Remove the adhesive tape around one head of the tower.



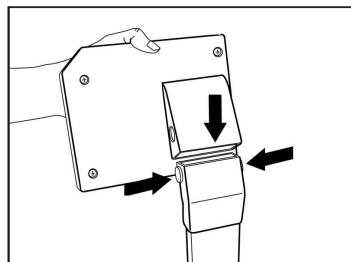
3. Connect two flat cables together between the tower and the display base.



4. Insert the tower and install four bolts on both side of the display base to lock the tower.

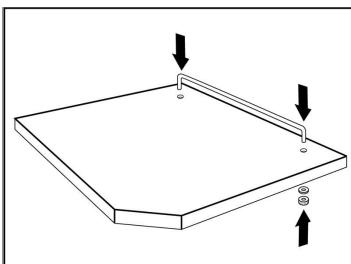


5. Plug the phone jack connector on the other end of the tower into the socket on the back display.



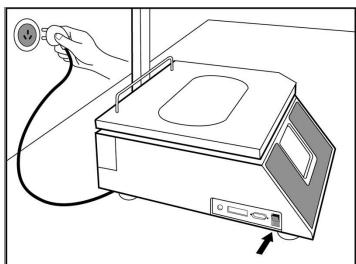
6. Press the buttons, which are on the sides of the tower. Then insert the back display.

Install Platter



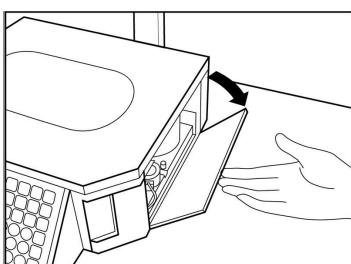
Take out the nuts, washers and the protecting rod from accessory bag. Insert the rod into the two holes on the platter , land secure it with the nuts and washers. Put the platter on the scale.

Power On

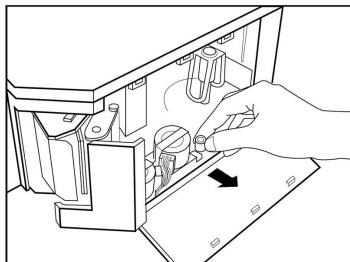


Take the power cord from the package box. Install the power cord in the receptacle on the bottom of the scale. (If unit has been stored or transported in below freezing temperatures, allow the unit to warm up to room temperature before turning on AC power.). Connect the power cord to AC power. Set the power switch to the ON position. Allow at least 30 minutes warm-up time before initial calibration.

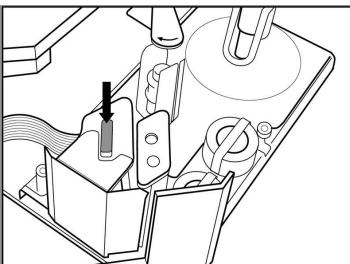
Install Labels In



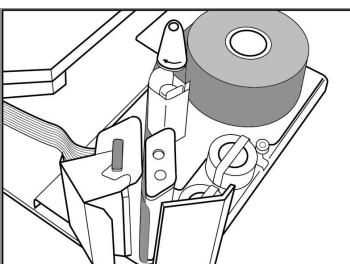
Remove the adhesive tape on the plastic door on the right side of the scale, and open the door.



Slide out the printer.



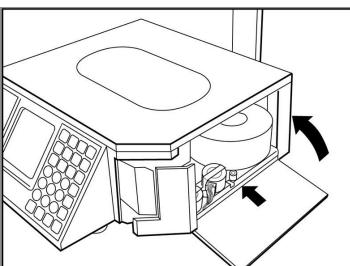
Press the trigger to open the printer head.



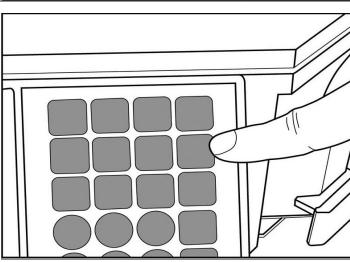
Install the label according to the instruction legend on the printer frame. Don't forget to roll the liner on the rewind Spool.



Close the printer head gently, until it clicks.

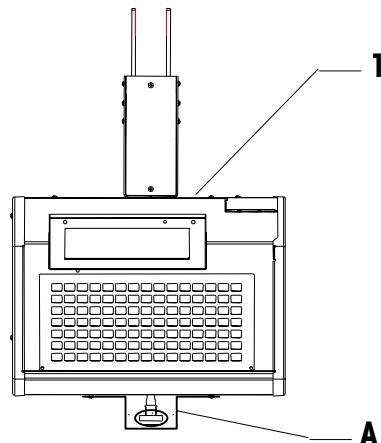


Slide the printer into the scale. Close the plastic door.



Press the key to bring the label into the start position.

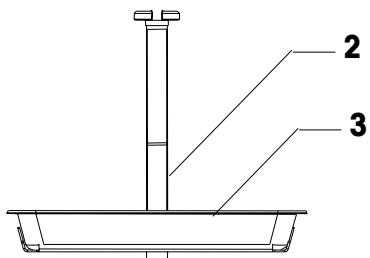
Install 8442-XX10H



Open up the package box. Remove the foam inserts. Take out the scale main (1) first, then take out the platter supporter (2) and platter (3). Put the scale on the working counter and inspect for damage. Report any damage to the carrier promptly.

Then installing this scale, first remove the transport protection set (A), and according the following diagram to install the 8442 scale, put the platter (3) and platter supporter (2) together to the scale. After confirming the 8442 scale is deep-set, don't forget to connect the power cord to the scale and the AC power.

Then to install the label or ticket in the printer as others 8442 scale.

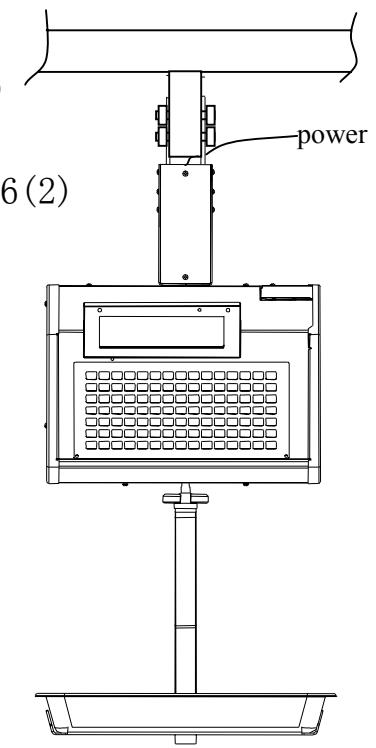


Screw M8 GB6170-86 (2)

40X40X3

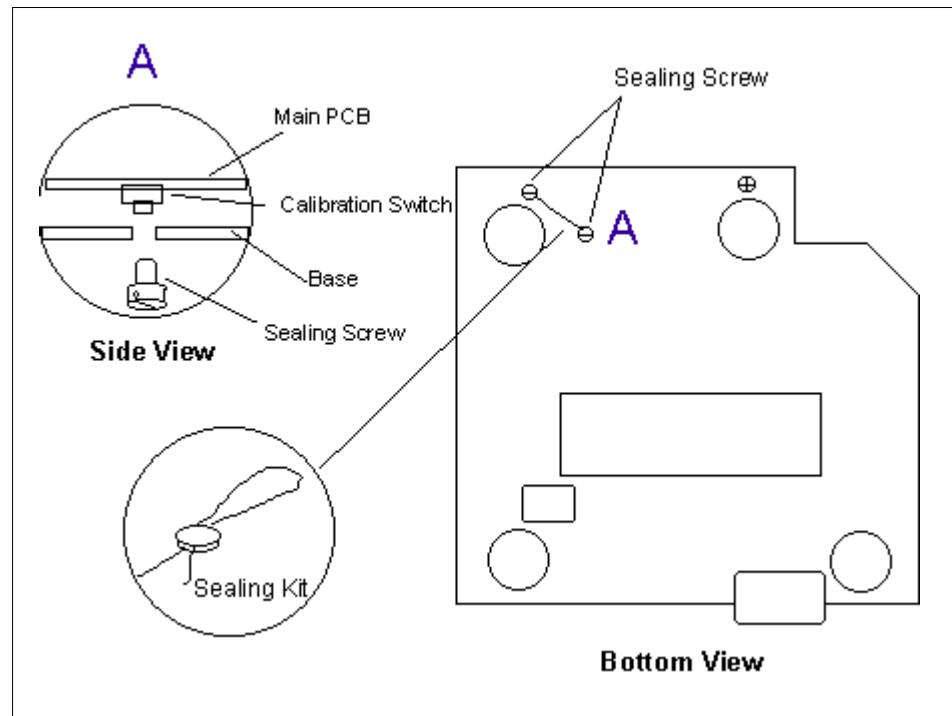
Gasket GB97.1-85 (4)

Bolt M8X65 GB/T5780-86(2)



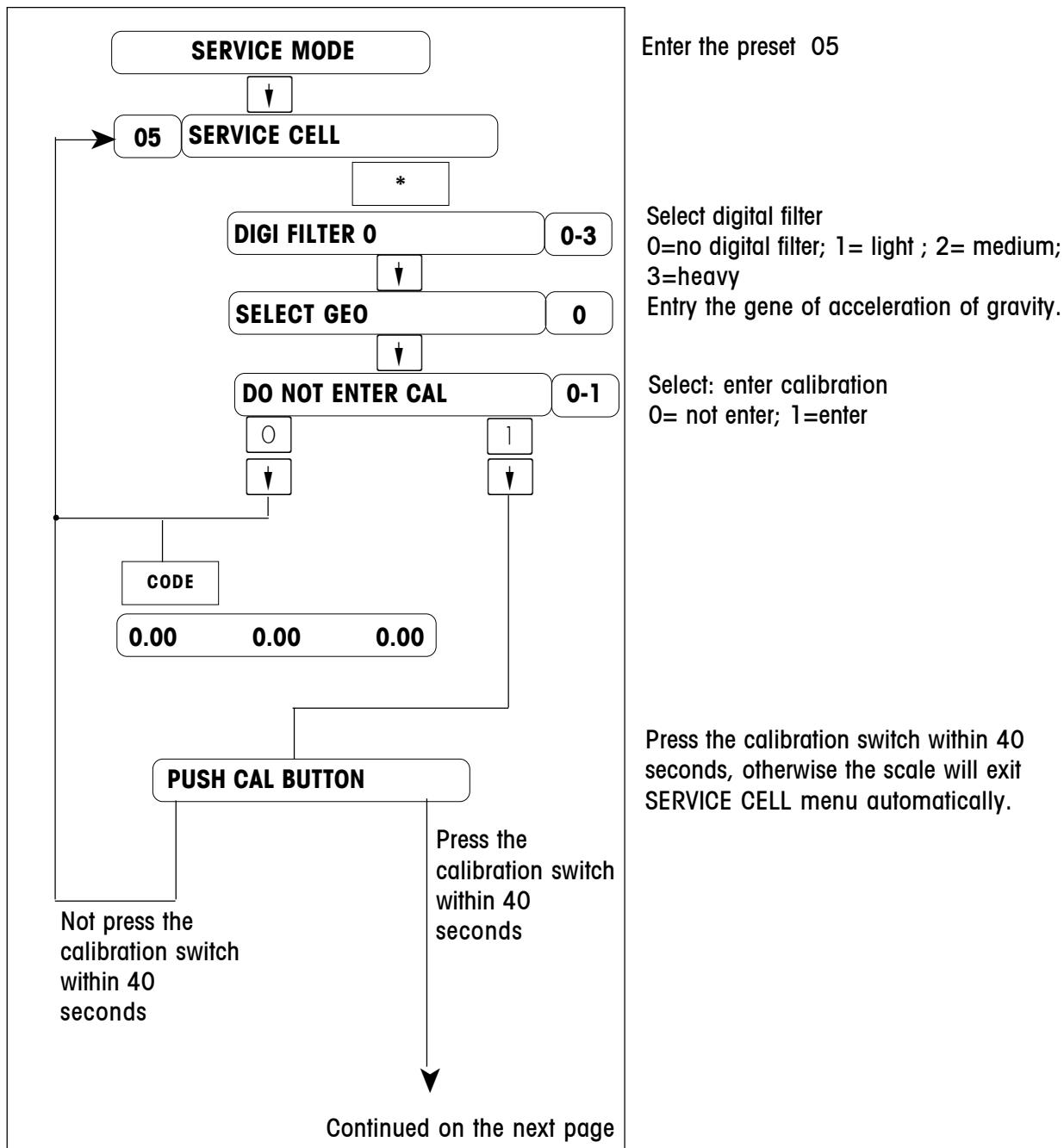
Calibration

To access calibration switch, remove the sealing wire and screw first. The following diagram show the sealing screw for type 8442-XXXX scale. In the 8442-XXXXH type the sealing method is the same as this, but the position isn't in the bottom of the scale , it's just in the upper of the scale.



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

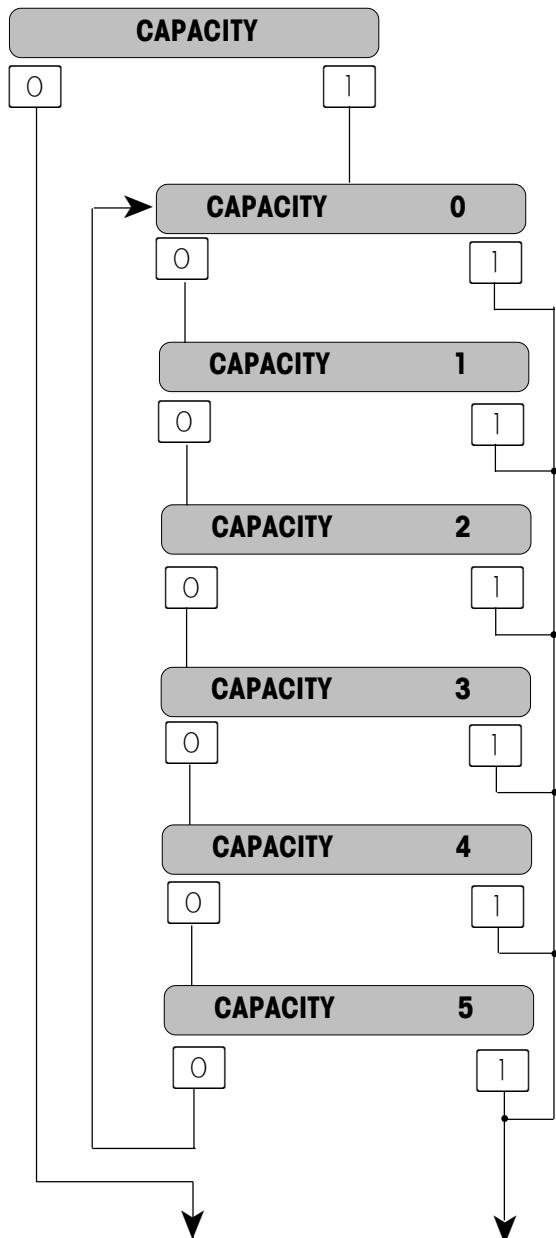
ENTER SERVICE MODE



Remarks:

You can press <CODE> key to exit anytime during the calibration. The scale will reset.

Continued from the last page



Press 1 to select capacity, or press 0 to skip this step.

Not used.

Not used.

Capacity 2 = 6/15kg dual range

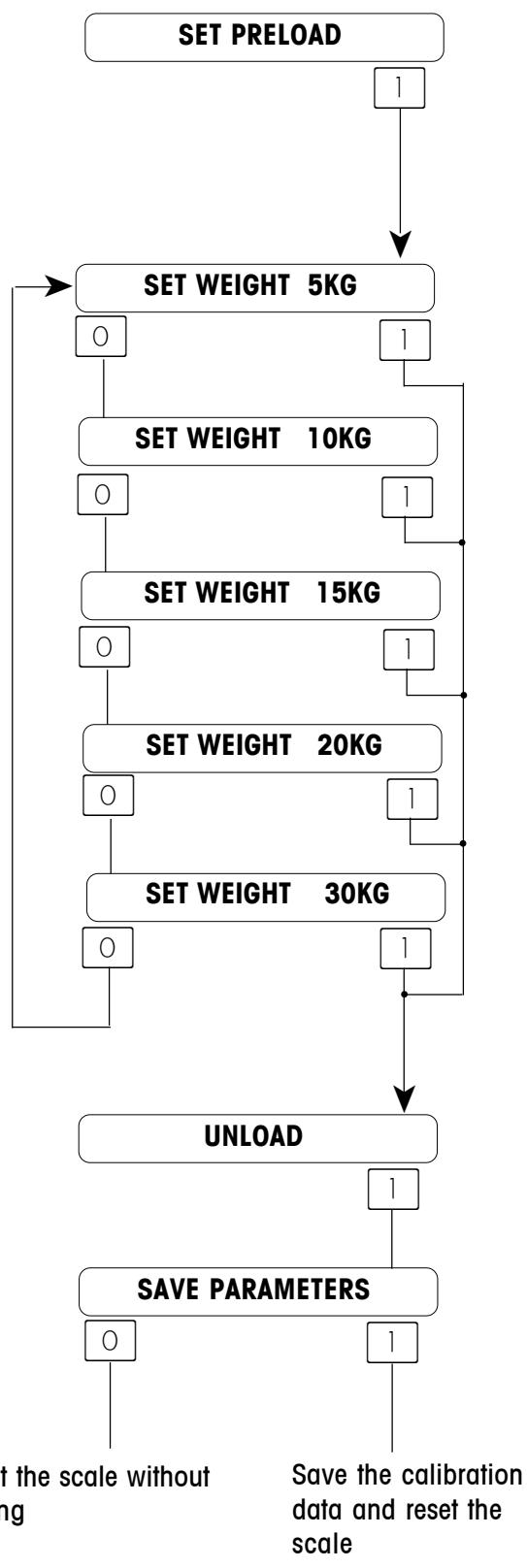
Capacity 3 = 15/30kg dual range

Not used.

Capacity 5 = 30 lb single range.(if lb unit is selected)

Continued on the next page

Continued from the last page

Empty the platter, Confirm with 1

The scale will read the zero data. Please keep the weight stable and wait for 5 seconds...

Calibration weight = 5kg

Calibration weight = 10kg

Calibration weight = 15kg

Calibration weight = 20kg

Calibration weight = 30kg

Add the selected weight on the platter, and confirm with 1

The scale will read the weight data. Please keep the weight stable and wait for 5 seconds...

Remove the weight on the platter and confirm with 1

Remarks:

To achieve the optimal weighing performance, please choose the calibration weight closest to full capacity load.

Remarks:

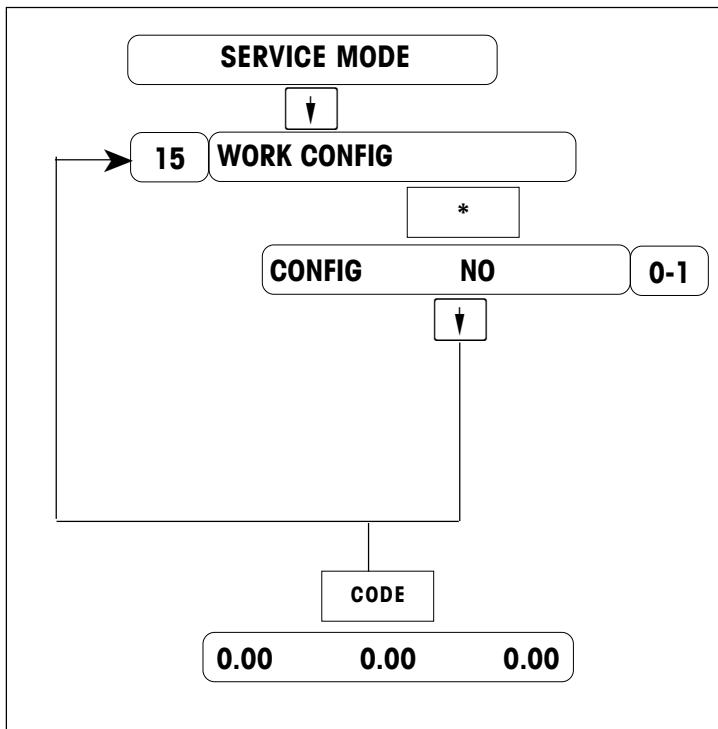
If the scale shows "INIT. CELL...", when it is saving the calibration data. It indicates you mis-operated the scale during the calibration, try to calibrate the scale again according the instructions in this manual.

Reset RAM

CAUTION! This operation will clear all PLU records and reset all formats to factory defaults! This should be used when setting up a new unit, or if the Main Logic PCB is replaced.

CODE 2 4 6 8 1 3 5 7 *

Call the "SERVICE MODE" menu



Enter the preset 15

0=Not reset RAM; 1= Reset RAM

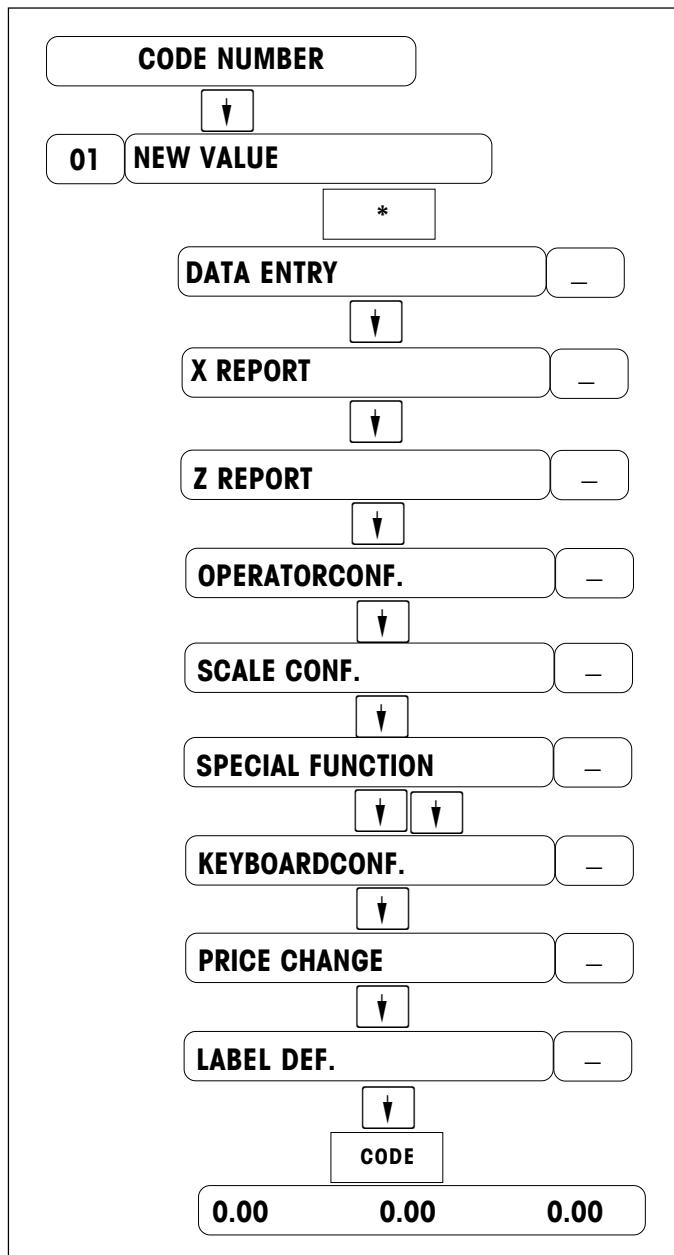
Press the **CODE** key to return to the weighing mode.

Password

This operation is used when the customer needs to change the default password of certain code menus.



Call the "CODE NUMBER" menu



Enter the preset code 01.

Enter the code of "DATA ENTRY"

Enter the code of "X REPORT"

Enter the code of "Z REPORT"

Enter the code of "OPERATOR CONFIGURE"

Enter the code of "SCALE CONFIGURE"

Enter the code of "SPECIAL FUNCTION"

Enter the code of "KEYBOARD CONFIGURE"

Enter the code of "PRICE CHANGE"

Enter the code of "LABEL DEFINITION"

Press the **CODE** key to return to the weighing mode.

3**FUNCTION CODE MODE****overview of mode functions**

Call the menu "MODE CHANGE"

MODE CHANGE	With select the desired sub-menu, or enter the preset code.
00 SERVICE	Select/return to service mode.
01 VOID OPER.	Select/return to void operation mode.
02 PREPACK	Select/return to prepack mode.
03 CODE-MODE	Select/return to code mode.
04 TRAINING-MODE	Select/return to training mode.
08 LARGE SALES	Select/return to large sales mode.
09 MENU END	Press to continue or to return to weighing mode.

With or the preset code, select the corresponding menu item, then activate it with the key.

Service mode

-For all weighing functions, registering, data entry and sales reporting

Code mode

-Enter the code functions

Training mode

-Learning and practical exercises on the device, without the realized turnover being memorized.

-The display reads "TRAINING"

Void oper. mode

-VOID OPERATION AFTER CHECK OUT means the ticket or label has been printout, and these transactions will be deleted from the statistics data.

Prepack mode

-For packing fieldwork of the supermarket. In this application, only print label, the small variety but large quantity print-work.

Large sales mode

-When the article is too big to weigh, operator can enter this mode by inputting the article weight and count price.

overview of function codes

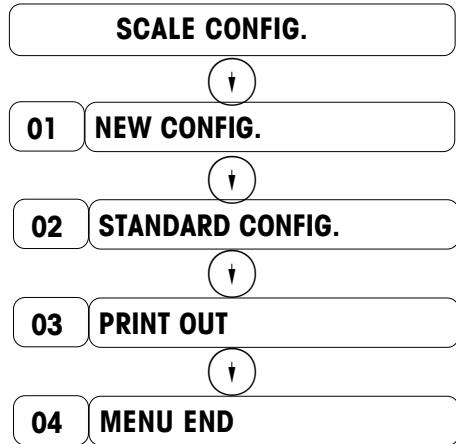
Function Code	Standard code	Application
Memory configuration	55555	configure the number of PLU/extratext.....
Operator configuration	4444	Operation mode/ticket layout/yes/no function
Data entry	1	Data new/change/clear/list
Price change	8	Data new/change the data,direct access and program keys
Increase/Decrease	88	Increase/Decrease
X-report	22	X-reporting
Z-report	333	Z-reporting
Special functions	666666	special functions
label format	998877	configure the label format
Keypad configuration	445566	Yes/no keys/affecting the operator keys/function keys/direct PLU keys
Service mode	24681357	Primary configuration/Maintenance function

- | | |
|-----------------------|----------------------|
| Access | (CODE) XXXXXX (*) |
| Quit | (CODE) |
| Next item in menu | (↓) |
| Previous item in menu | (↑) |
| Selection of a menu | (*) |
| Direct access numbers | (CODE) XXXXXX (*) XX |
| Delete an entry | (C) |

SCALE CONFIGURATION

CODE 5 5 5 5 5 *

Call the menu "Scale config", this menu for distributing the memory of scale.



new configuration:

SCALE CONFIG.	
↓	
01	NEW CONFIG.
*	
NO PP APPL. 0-1	
↓	
NUMBER OF PLU 3000	
↓	
SPECIAL OFFER 1	
↓	
EXTRA TEXT 0	
↓	
CONFIG. NO 0-1	
↓	
0,000	0,00
0,00	

enter preset code 01

0=no PLU label data
1=with PLU label data

enter the max.number of PLU

select whether use special offer in the scale
0=forbid;1=allow

enter the max. amount of extra tex.
(up to 50)

whether to save the change
0=no;1=yes

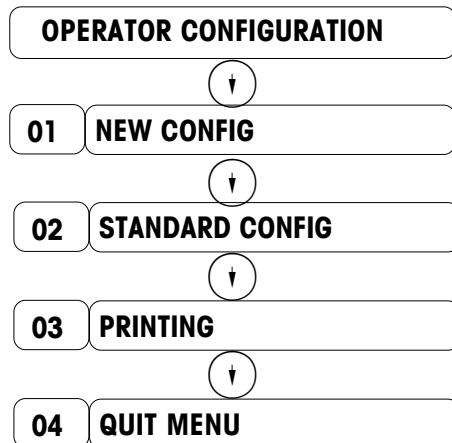
return to weighing mode

OPERATOR CONFIGURATION

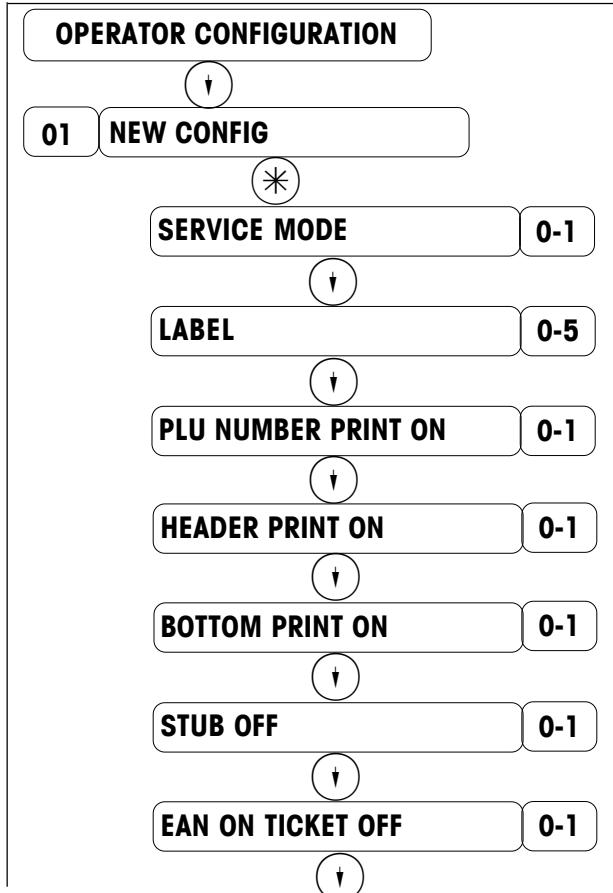


CODE 4 4 4 4 *

Call the menu "Operator Configuration"



new configuration:



enter the preset code 01

select the mode
0=service mode;1=prepak mode

select printing of customer tickets or label
0=ticket;1=label;2=label+total label;3=ticket on label;4=endless label;5=endless label+total label
PLU number printed on customer ticket.0=not print;1=printed

header printed on customer ticket.0=not printed;
1=printed

footer printed on customer ticket.0=not printed;
1=printed

counterfoil printer.0=not printed;1=printed

EAN code printed on customer ticket.0=not printed;
1=printed

EAN ON STUB OFF	0-1	EAN code printed on counterfoil.0=not printed; 1=printed
TOTAL WEIGHT OFF	0-1	total weight printed on ticket.0=not printed; 1=printed
RUNNING MESS. ON	0-1	running message on display.0=not printed; 1=printed
NO TARE PRINT	0-1	tare printed on ticket.0=not printed;1=printed
LABEL WITH TICKET NUMBER	0-1	print the ticket number on label:0=not print; 1=print
PRICE INPUT WITH #	0-1	enter price with # key.0=without;1=with
0,000 0,00 0,00		printing the new configuration then return to the weighting mode

standard configuration:

OPERATOR CONFIGURATION		
02 STANDARD CONFIG		
0,000 0,00 0,00		

enter the preset code 02

printing the standard configuration and then
return to weighing mode

printing operator configuration:

OPERATOR CONFIGURATION		
03 PRINTING		
0,000 0,00 0,00		

enter the preset code 03

printing the operator configuration,quit the menu
and return to weighing mode.

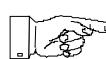
quit this menu:

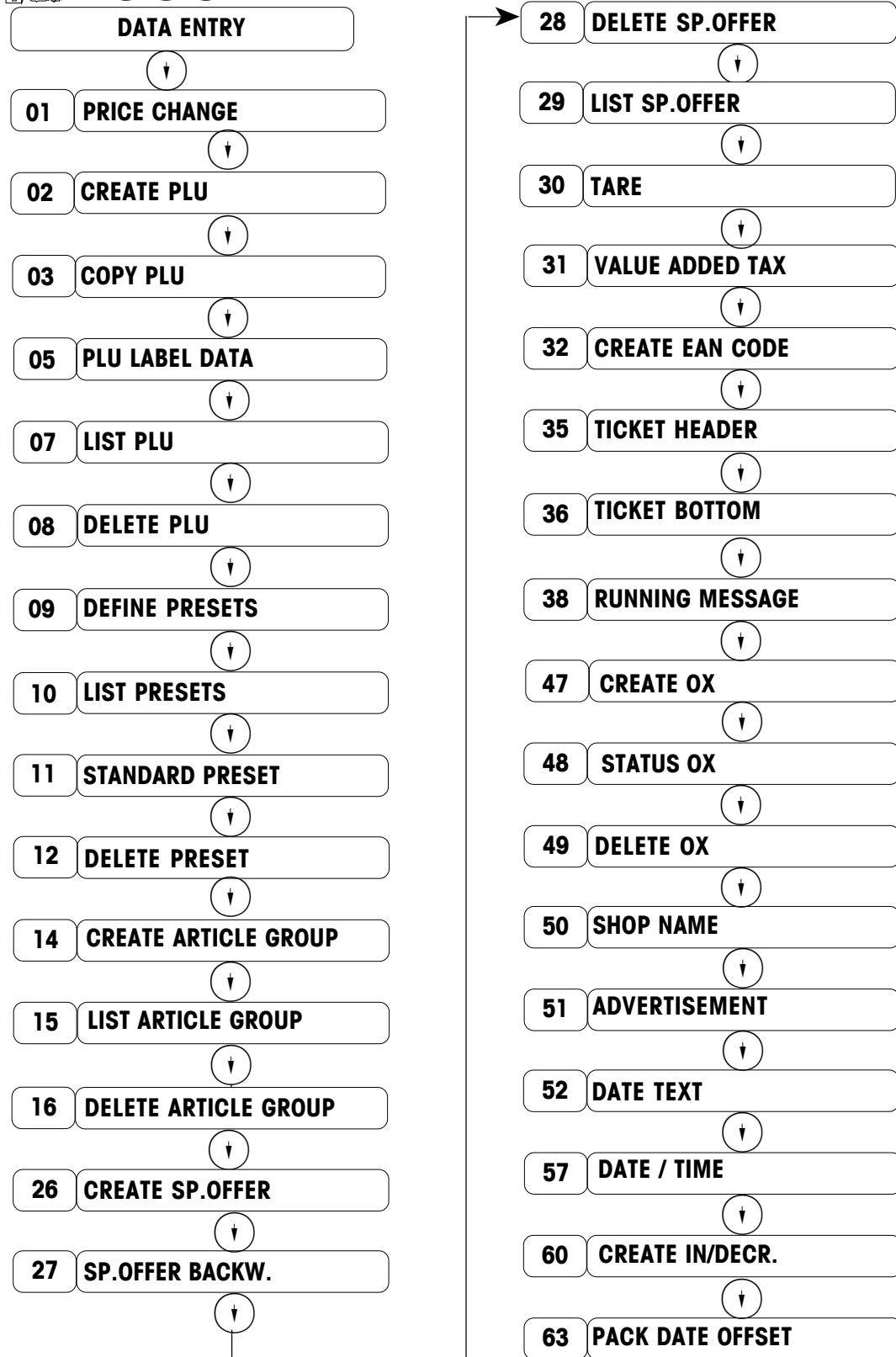
OPERATOR CONFIGURATION		
04 QUIT MENU		
0,000 0,00 0,00		

enter the preset code 04

return to weighing mode without printing

DATA ENTRY

 CODE 1 * Call the menu "Data Entry"



price change:

DATA ENTRY	
↓	
01	PRICE CHANGE
(*)	
BY PLU	
0-1	
↓	
PLU NUMBER	
0	
↓	
UNITPRICE	
0.00	

enter the preset code 01

0=by plu;1=by preset

enter PLU number (6 digits)

enter new price

create plu:(each item can be chosen in menu "code-6666666-18(plu format skip)"

DATA ENTRY	
↓	
02	CREATE PLU
(*)	
PLU NUMBER	
0	
↓	
ART. NR.	
0	
↓	
ENTER TEXT 1	
↓	
ENTER TEXT 2	
↓	
ARTICLEGROUP	
0	
↓	
UNITPRICE	
0,00	
↓	
VAT NUMBER	
0	
↓	
TARE NUMBER	
0	
↓	
BEST BEF.OFFSET	
0	
↓	
SELL BY OFFSET	
0	
↓	
PIECE NO	
0	
↓	
FIX WEIGHT	
0	
↓	
NO IN/DECREASE	
0-1	
↓	
OPEN PRICE YES	
0	

Press the key twice or enter the preset code 02.

Enter the PLU number.(1~999999)

Enter the article number (up to 13 figures).

Enter the first line and second line commodity text (up to 70 characters)

Enter the article group number.(1~20)

Enter the unitprice.(0~9999.99)

0=no vat

1~8=vat number

0=no tare

1~16=tare number

Enter the best before offset(0~499)

Enter the sell by offset(0~499)

0=by weight;1=by count

Enter the fix weight of the article

0=don't allow in./decrease

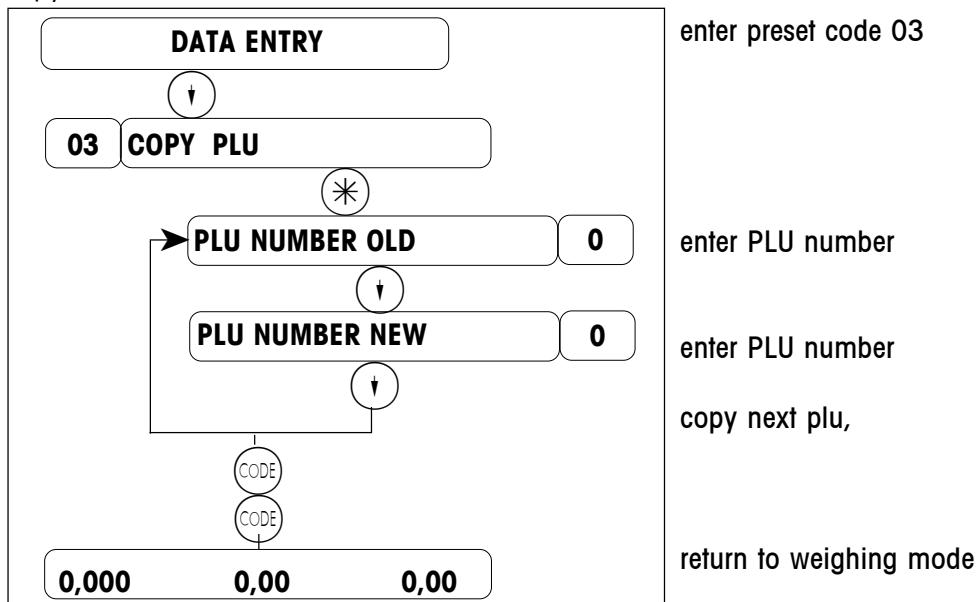
1=allow in./decrease

0=price can't be changed

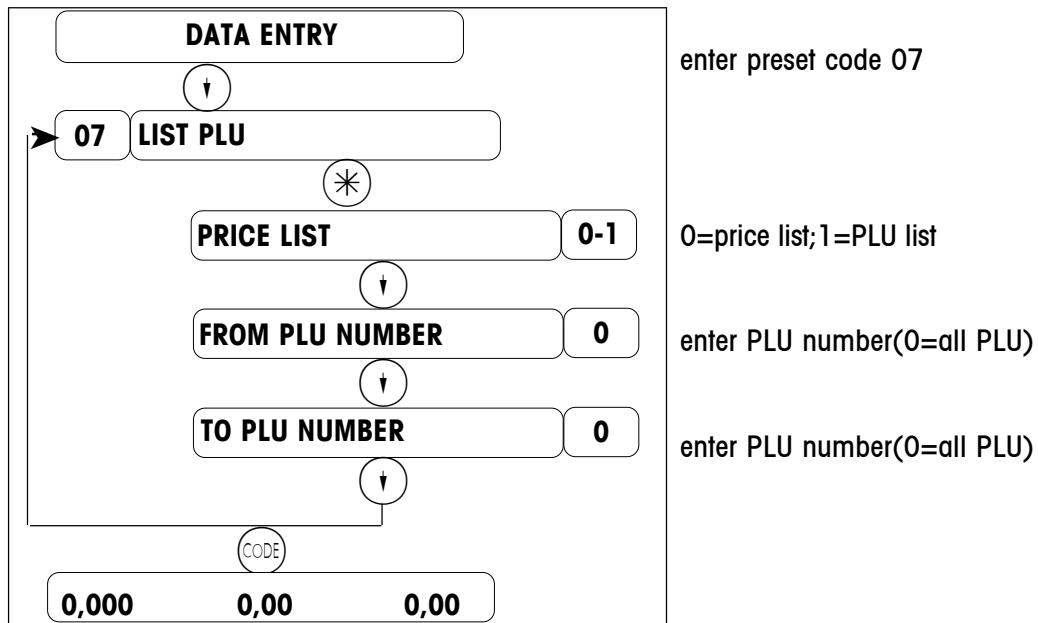
1=price can be changed by # key

METTLER TOLEDO 8442 Technical Manual

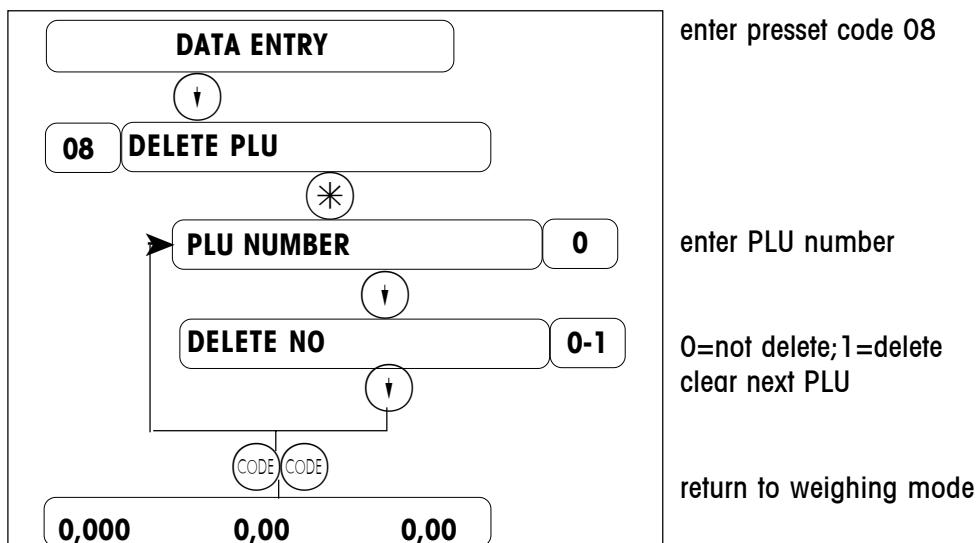
copy PLU:



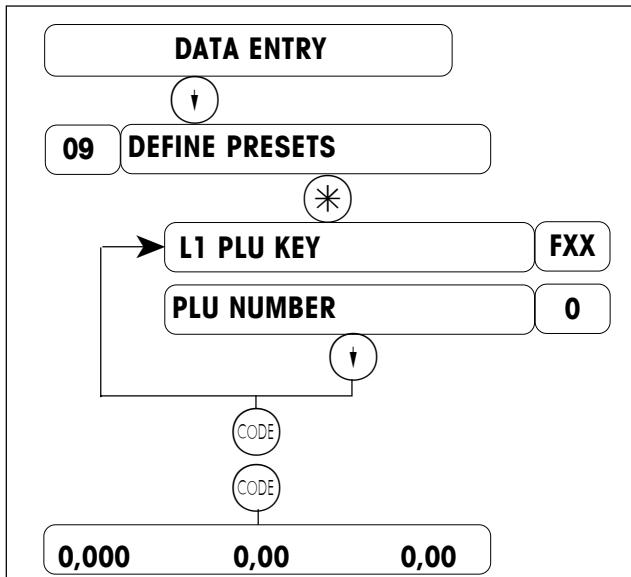
list PLU:



delete PLU:



define preset keys:

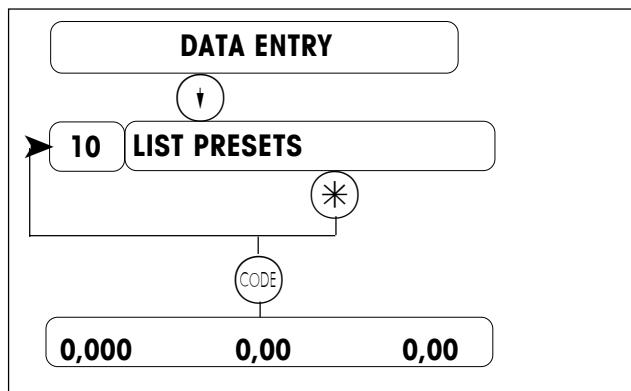


enter preset code 09

press a preset key(you can choose the layer L1 or L2 by press the key ⏴) L1=0~28 ;L2=29~56
enter the PLU number
define next preset key

return to weighing mode

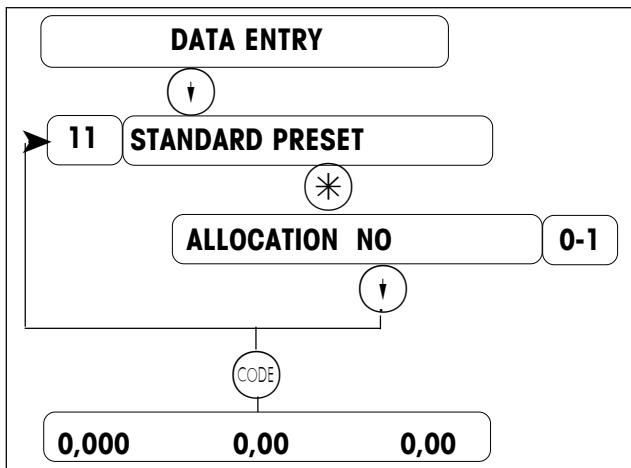
list preset keys:



enter preset code 10

print the list

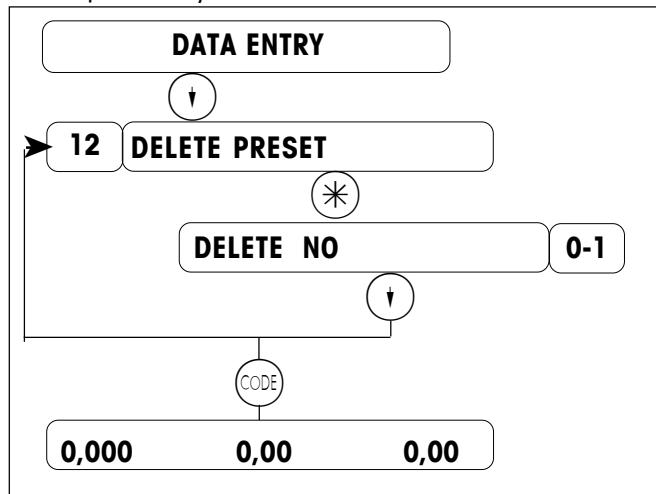
standard preset key:



enter the preset code 11

0=not allocate,1=automatic allocation by the system(plu 1-F001)

delete preset key:

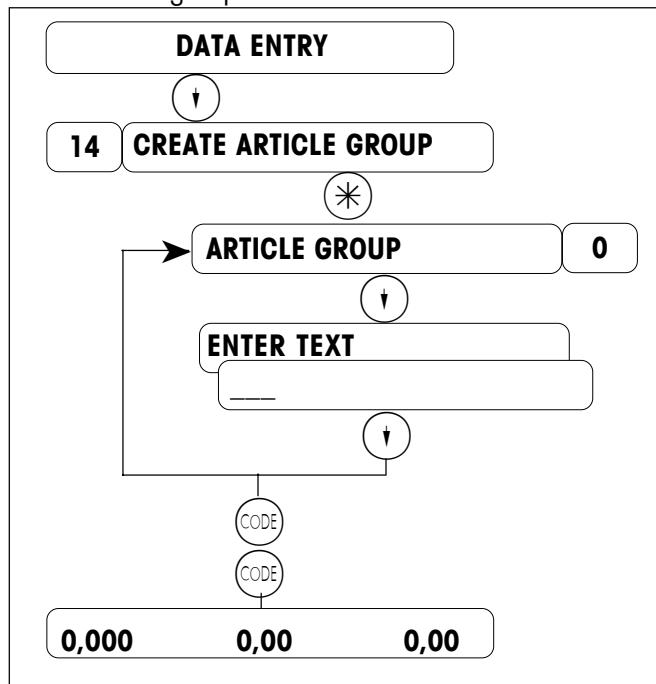


enter the preset code 12

0=not delete, 1=all preset keys are cleared

return to weighing mode

create article group:



enter preset code 14

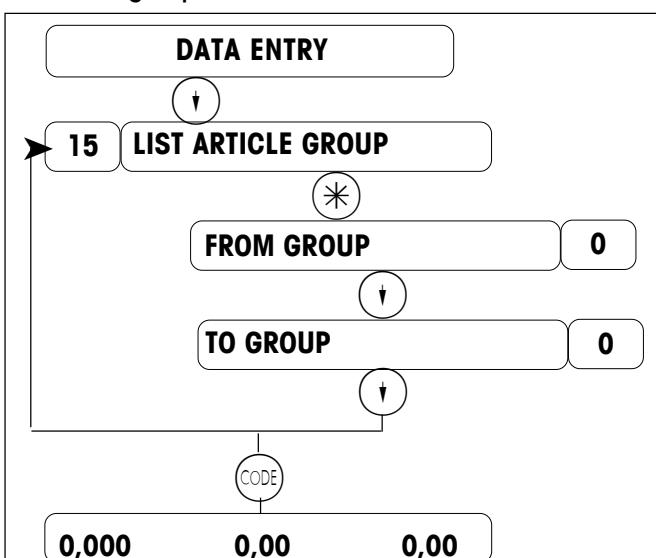
enter group number

enter group name(18 characters)

define next group

return to weighing mode

list article group:



enter preset code 15

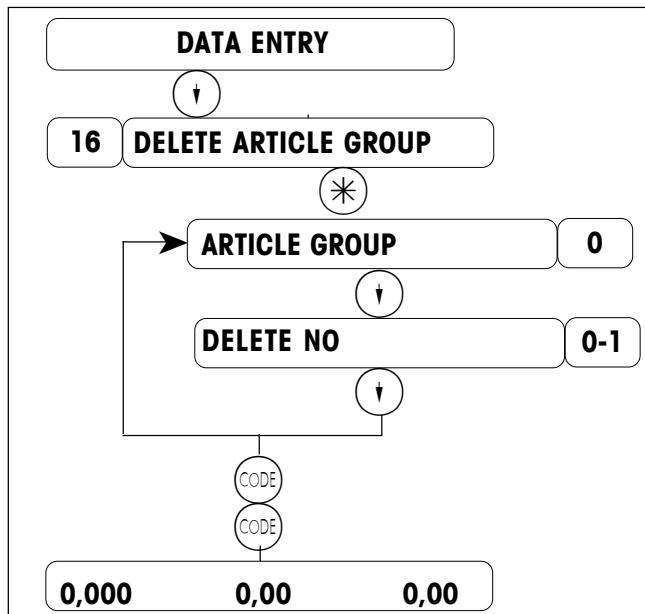
enter group number (0=all group)

enter group number (0=all group)

printing the list of group

return to weighing mode

delete article group:



enter preset code 16

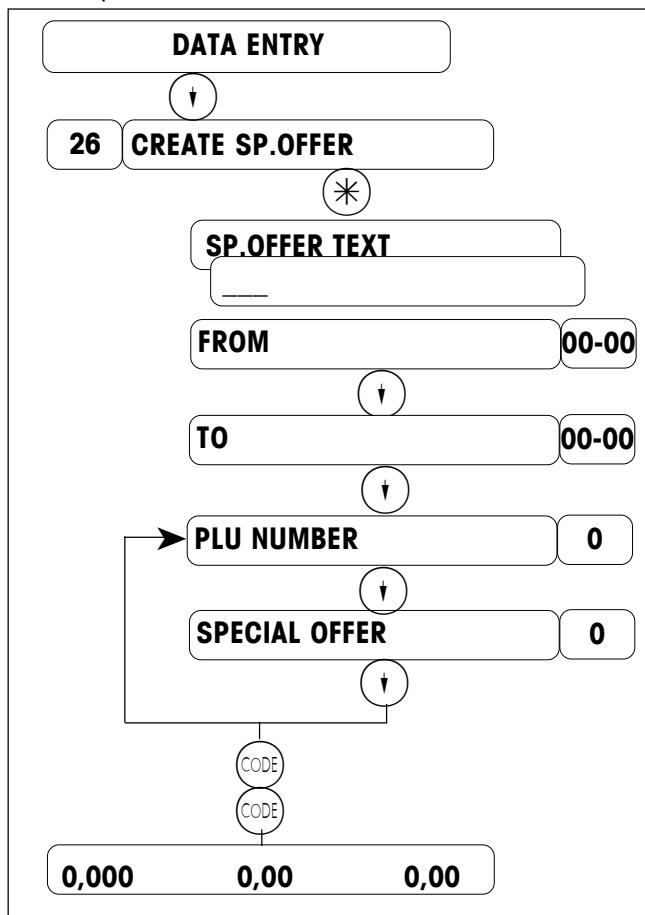
enter group number

0=not delete; 1=delete

delete the next group

return to weighing mode

create special offer:



enter preset code 26

enter the detail of special text

enter the start time

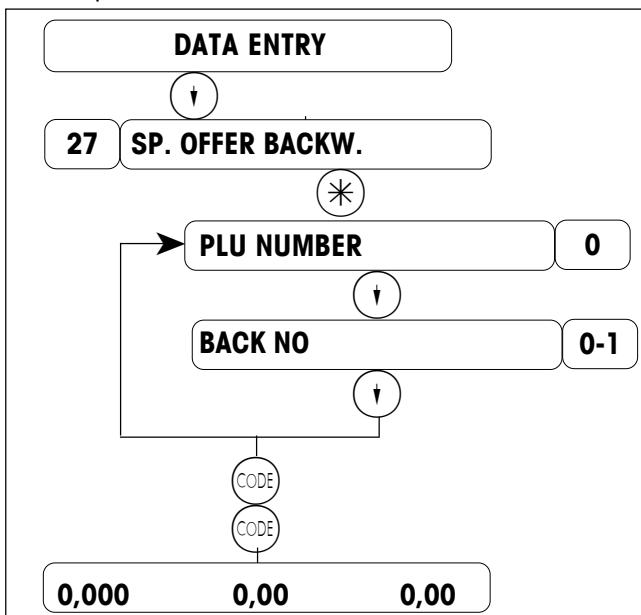
enter the end time

enter PLU number

enter the special offer

return to weighing mode

forbid special offer:



enter preset code 27

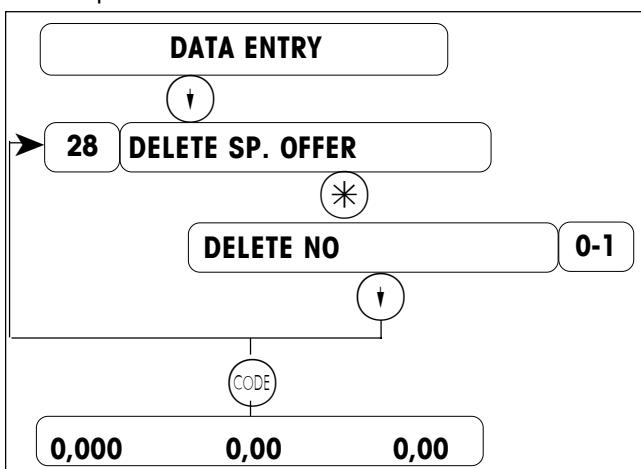
enter PLU number

0=not forbid special offer; 1=forbid

forbid the next special offer

return to weighing mode

delete special offer:

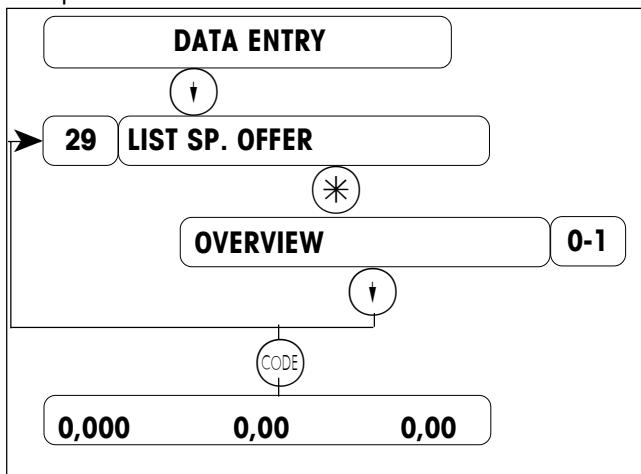


enter preset code 28

delete the special offer
0=not; 1=yes

return to weighing mode

list special offer:



enter preset code 29

0=overview
1=complete list

return to weighing mode

define tare:

DATA ENTRY

30 TARE

TARE NUMBER 0

TARE 0.00

CODE

CODE

0,000 0,00 0,00

enter preset code 30

enter tare number(1-16)

enter tare value

define vat:

DATA ENTRY

31 VALUE ADDED TAX

VAT NUMBER 0

PERCENT 0.00

CODE

CODE

0,000 0,00 0,00

enter preset code 31

enter VAT number(1-8)

enter a valid rate in percent(i.e."16.00"=16%)
define next VAT or return to weighing mode

return to weighing mode

create EAN code:

DATA ENTRY

32 CREATE EAN CODE

EAN CODE NUMBER 0

EAN CODE

CODE

CODE

0,000 0,00 0,00

enter preset code 32

enter EAN code number(1-8):1=for ticket and 2-8 for label

As you use EAN 13 code format,max.13 figures,13th figure=checkdigit,you must enter 12 figures.

(As you use EAN 25 code format,max.18 figures,18th figure=checkdigit,you must enter 17 figures.)

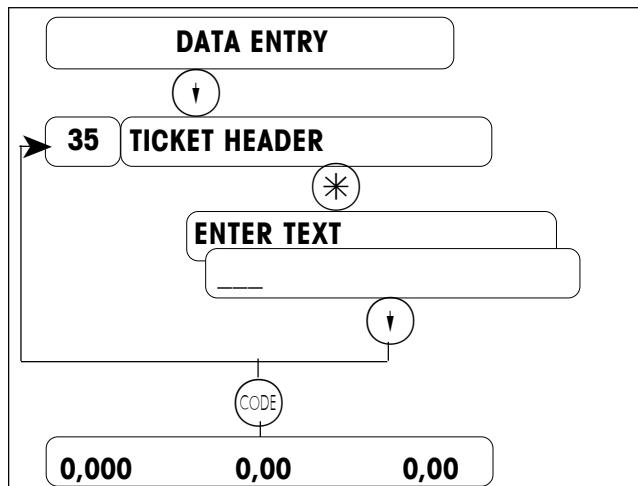
As you use EAN 14 code format,max.14 figures,no checkdigit,you must enter 14 figures.)

Then define next EAN code

return to weighing mode

LEGEND OF EAN IDENTIFICATION	
A=article number	up to 13 figures
C=checkdigit	1 figure
D=date	6 figures
P=PLU code	6 figures
W=group number	2 figures
B=amout	5/6 figures
Q=quantity	4/5 figures
O-9 Figures	12 figures
Example:	
Figures 1-6: 0-9,W,P	=Possible entry
Figures 7+8: C	=Possible entry
Figures 8-12: B,Q,O-9	=Possible entry
Figures 13: C	=Possible entry

define ticket header:

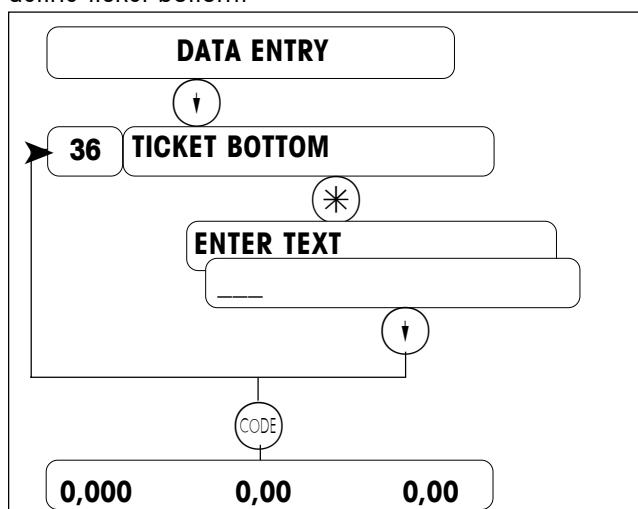


enter preset code 35

enter text(Max.4 lines;100 characters)

return to weighing mode

define ticket bottom:

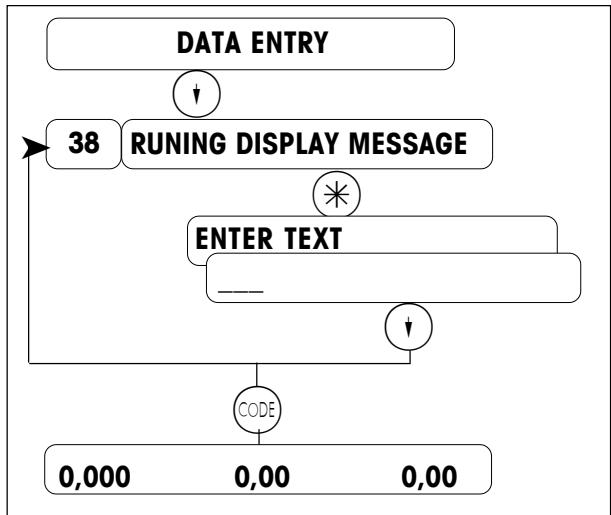


enter preset code 36

enter text(Max.4 lines;100 characters)

return to weighing mode

define runing display message:

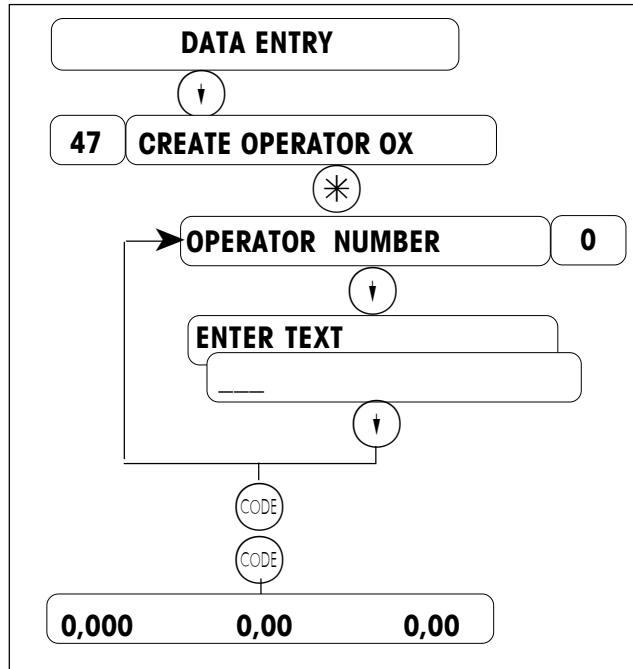


enter preset code 38

enter text(Max.100 characters)

return to weighing mode

create operator:



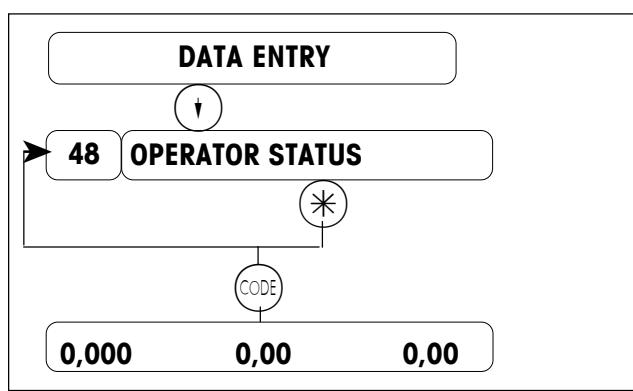
enter preset code 47

enter operator number(1-5)

enter operator name(18 characters)
define next vendor

return to weighing mode

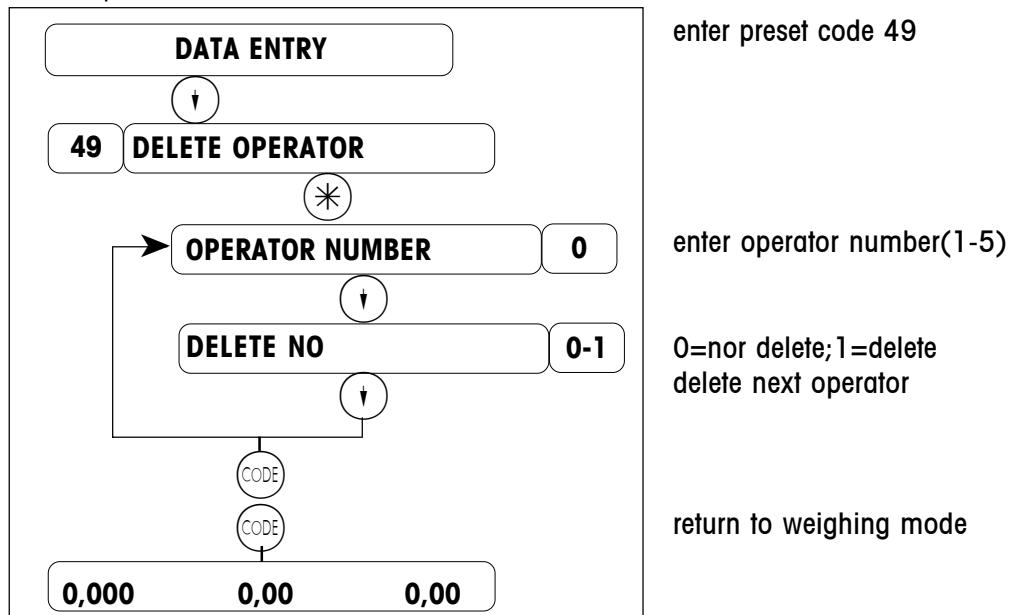
operator status:



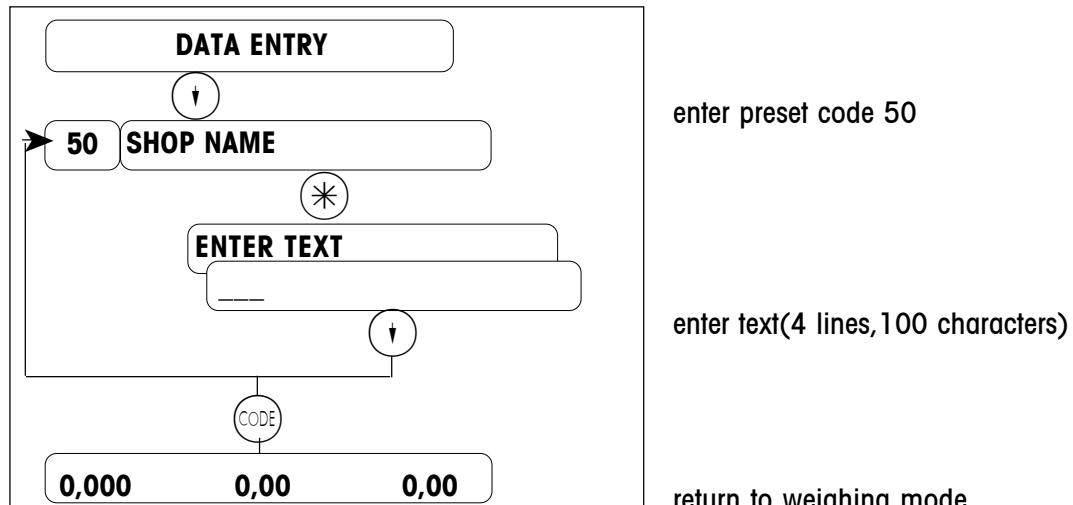
enter preset code 48

printing the list

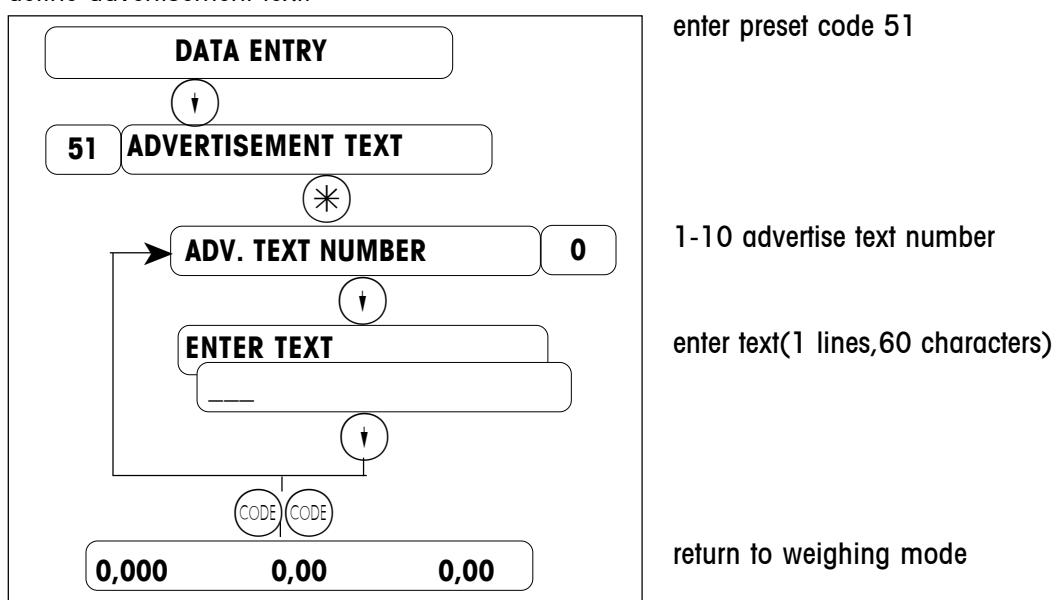
delete operator:



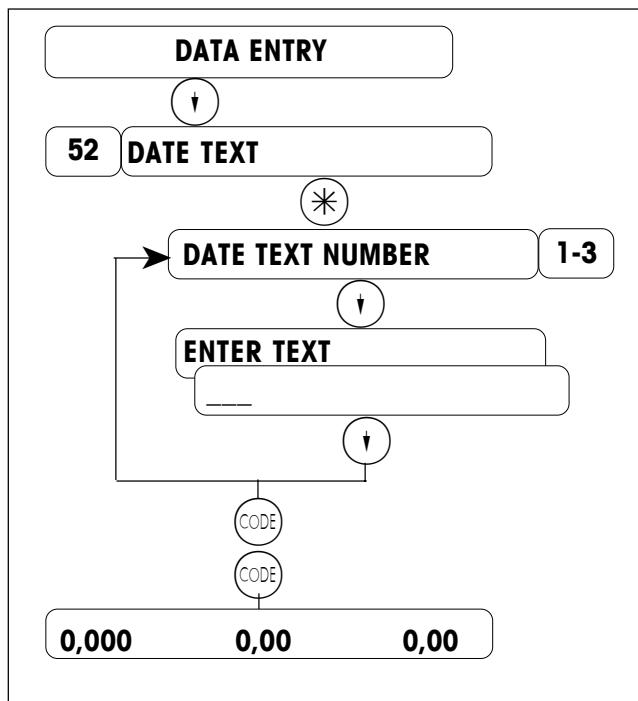
define shop name:



define advertisement text:



define date text :



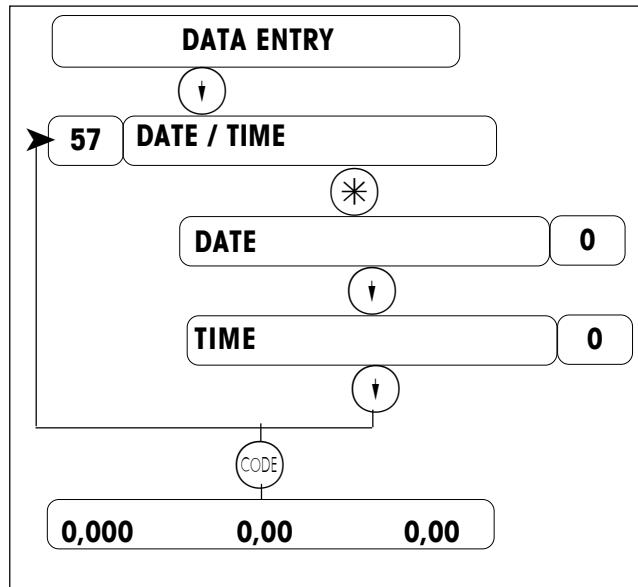
enter preset code 52

0=none ;1-3 date entry

enter text(18 characters)

return to weighing mode

define date/time:



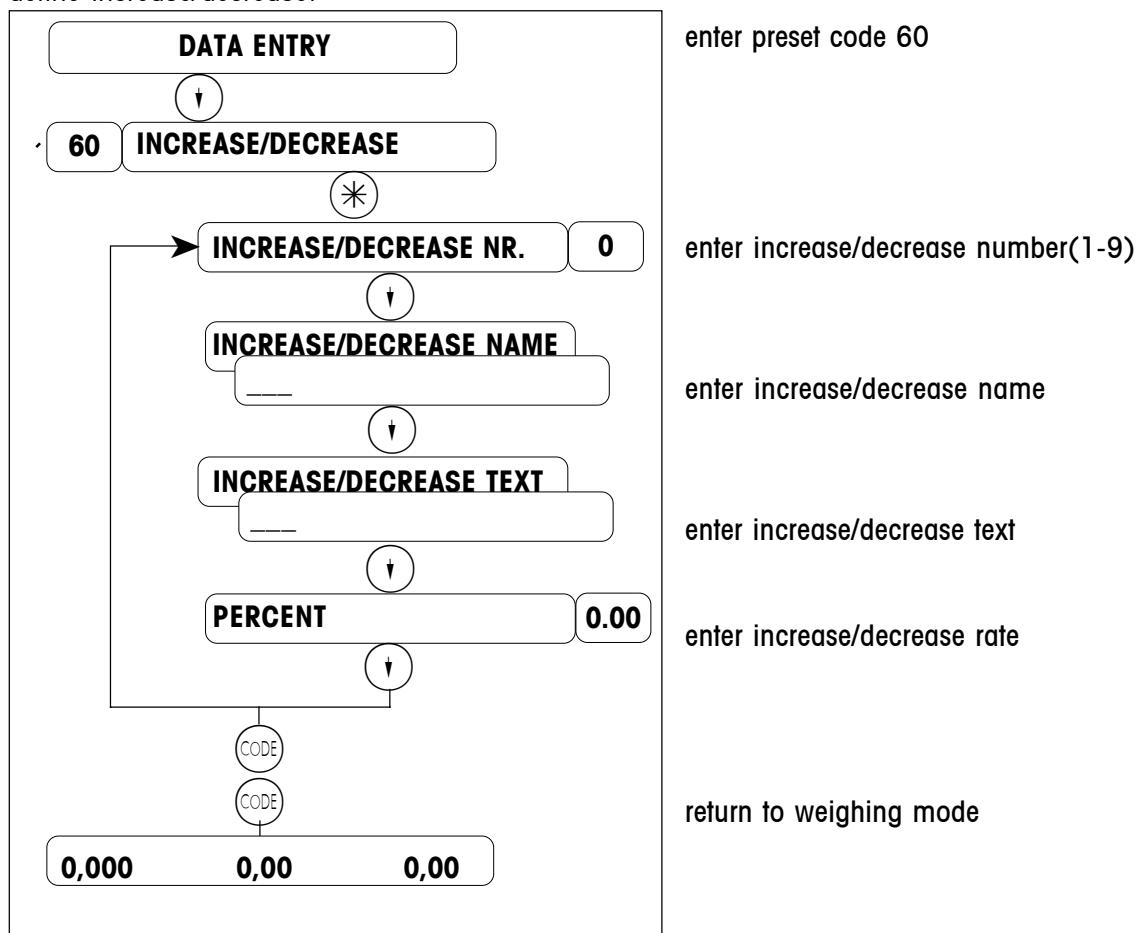
enter preset code 57

enter date in format:DD-MM-YY

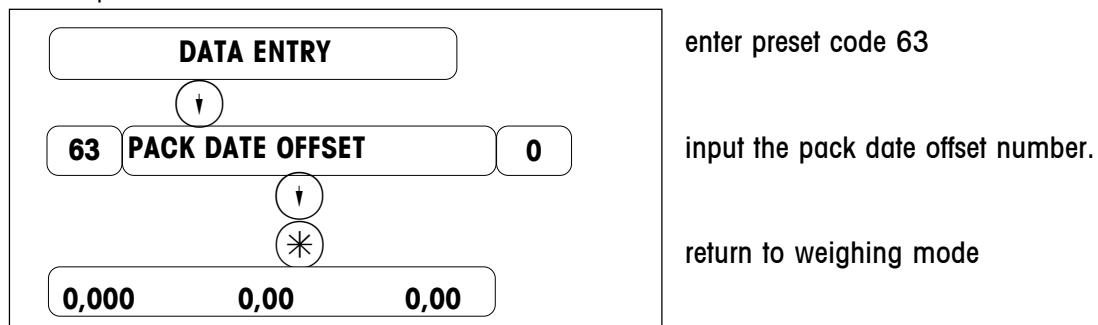
enter time in format:HH-MM-SS

return to weighing mode

define increase/decrease:

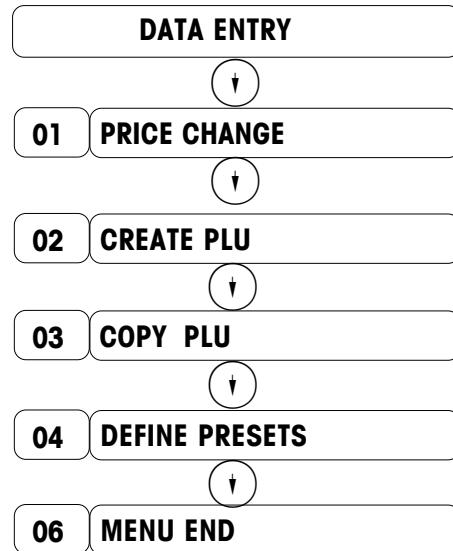


define pack date offset:



PRICE CHANGES

 CODE 8 * Call the menu "PRICE CHANGE"



change unitprice:

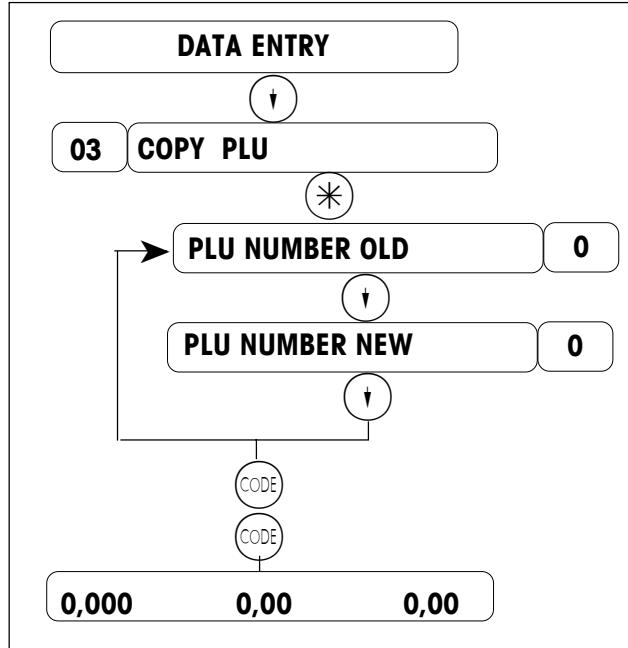
The diagram shows a detailed sequence for changing a unit price. It starts with a "DATA ENTRY" screen, followed by a "01 PRICE CHANGE" screen. On this screen, there is a field labeled "BY PLU" with a value of "0-1" and a multiplier symbol (*). The next screen is "PLU NUMBER" with a value of "0". Following this is a "UNITPRICE" screen with a value of "0.00". After entering the new price, two "CODE" buttons are pressed. The final screen shows three fields at the bottom: "0,000", "0,00", and "0,00". To the right of the screens, instructions are provided: "enter preset code 01", "0=by plu;1=by preset", "enter PLU number(4 digits)", "enter new price", and "return to weighing mode".

create PLU:

The diagram shows a simplified sequence for creating a PLU. It begins with a "DATA ENTRY" screen, followed by a "02 CREATE PLU" screen. The rest of the menu structure is indicated by three small dots at the bottom.

The same as page 3-7.

copy PLU:



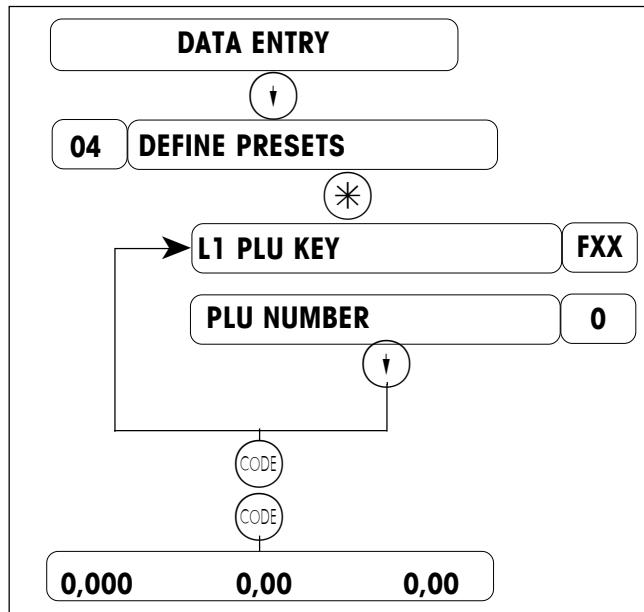
enter preset code 03

enter PLU number

enter PLU number
copy next PLU

return to weighing mode

define preset keys:



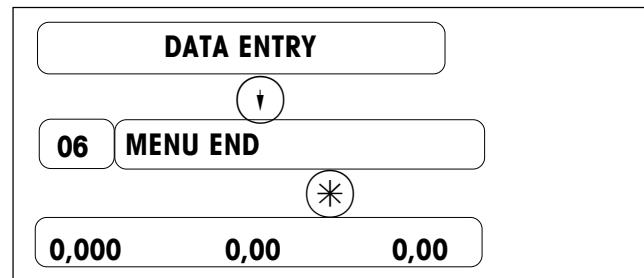
enter preset code 04

press the preset key

define next preset key

return to weighing mode

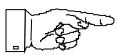
quit this menu:



enter preset code 06

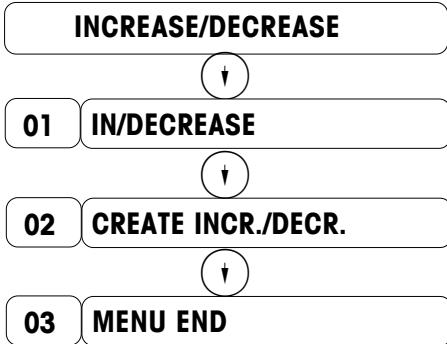
return to weighing mode

INCREASE/DECREASE



CODE 8 8 *

Call the menu "INCREASE/DECREASE"



define increase/decrease:

INCREASE/DECREASE

01 IN/DECREASE

NO IN/DECREASE 0-1

CODE

0,000 0,00 0,00

enter preset code 01

0=increase/decrease locked;1=increase/decrease activated

return to weighing mode

create incr./decrease:

INCREASE/DECREASE

02 CREATE INCR./DECR.

INC/DECR NR. 0

PERCENT 0.00

CODE CODE

0,000 0,00 0,00

enter preset code 02

enter increase/decrease number

enter percent

quit this menu:

INCREASE/DECREASE

03 MENU END

*

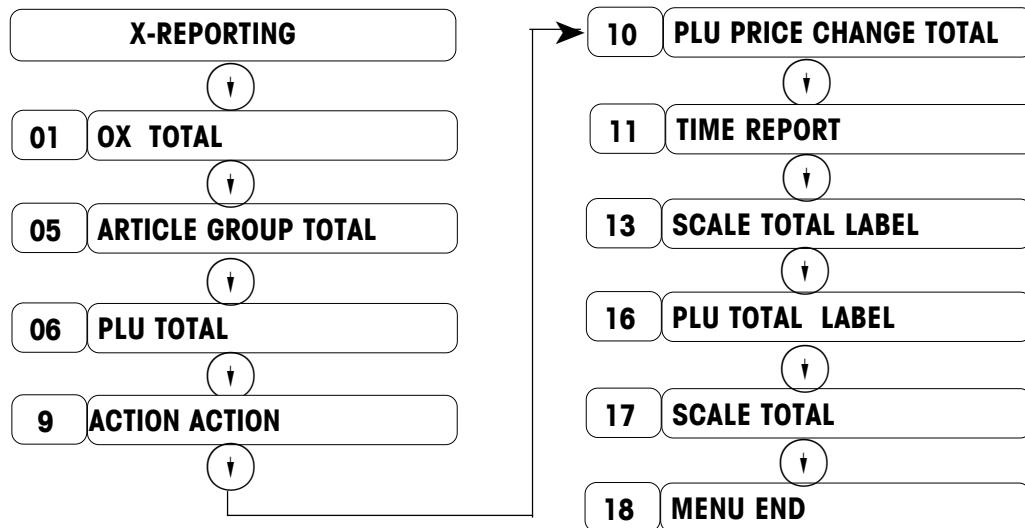
0,000 0,00 0,00

enter preset code 03

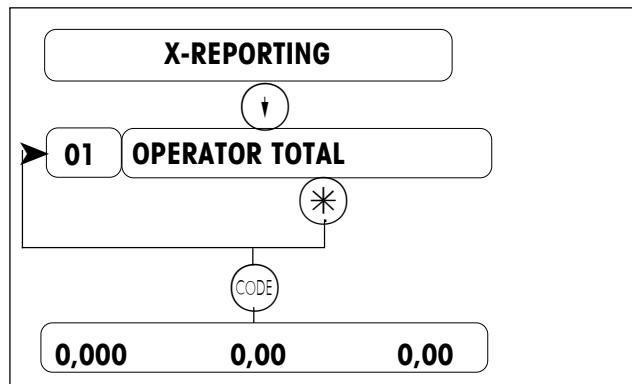
return to weighing mode

X-REPORTING

 CODE 2 2 * Call the menu "X-REPORTING"



operator total:

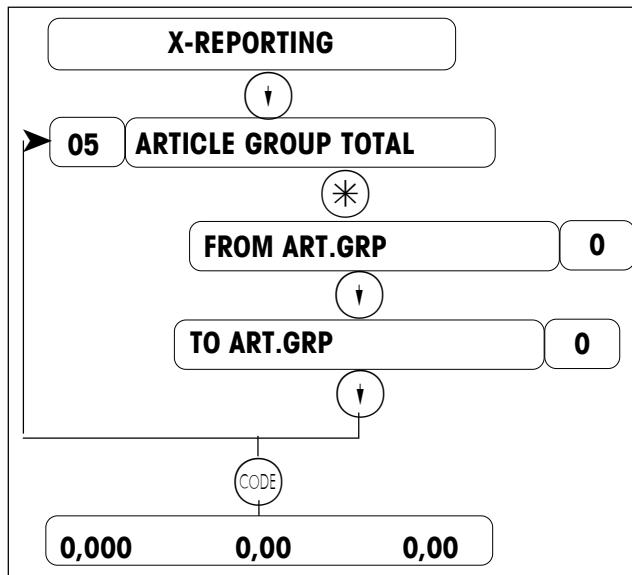


enter preset code 01

printing operator list

return to weighing mode

article group total:



enter preset code 05

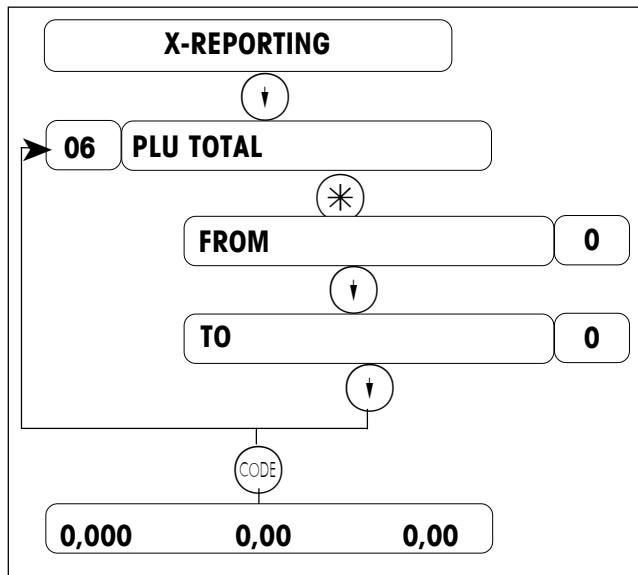
enter article group number

enter article group number

printing

return to weighing mode

PLU total:



enter preset code 06

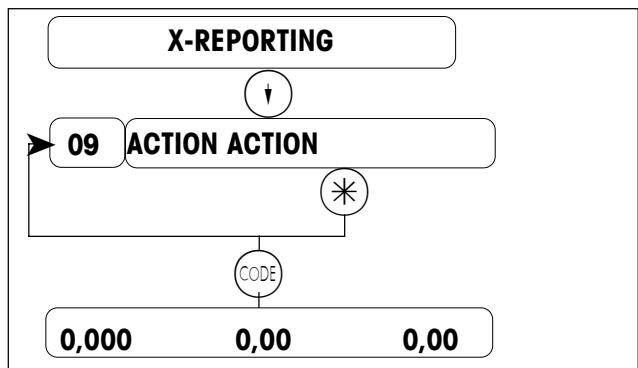
enter plu number

enter plu number

printing

return to weighing mode

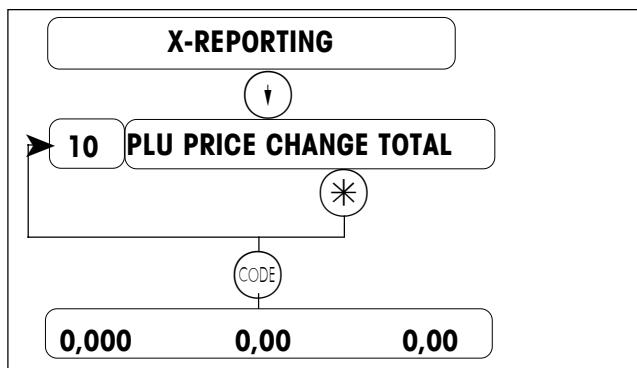
Special offer report:



enter preset code 09

printing the report of special offer

PLU price change:

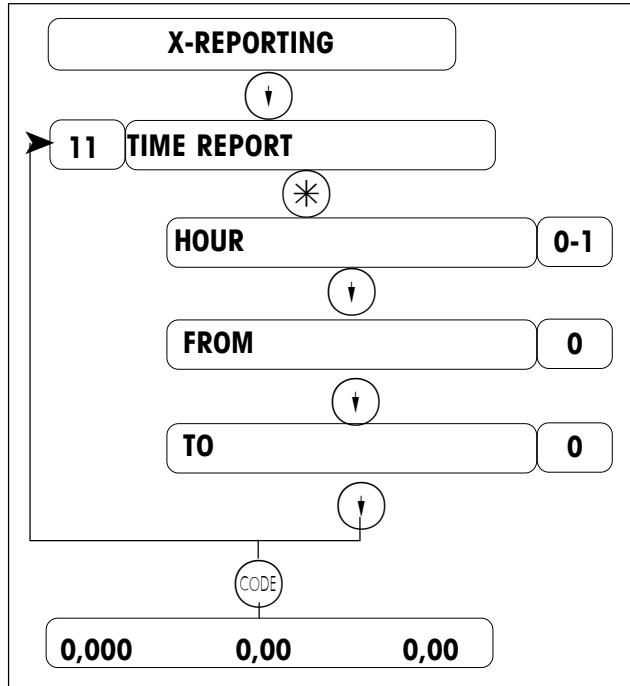


enter preset code 10

printing the report of PLU price change

return to weighing mode

time report:



enter preset code 11

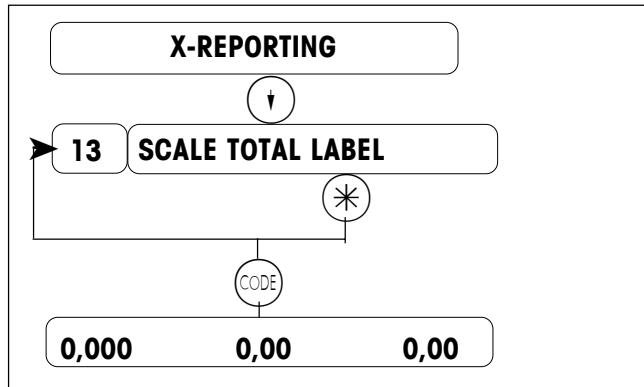
0=time,1=day of the week

enter time:0~24

or enter the day of the week:1=monday...7=sunday

printing

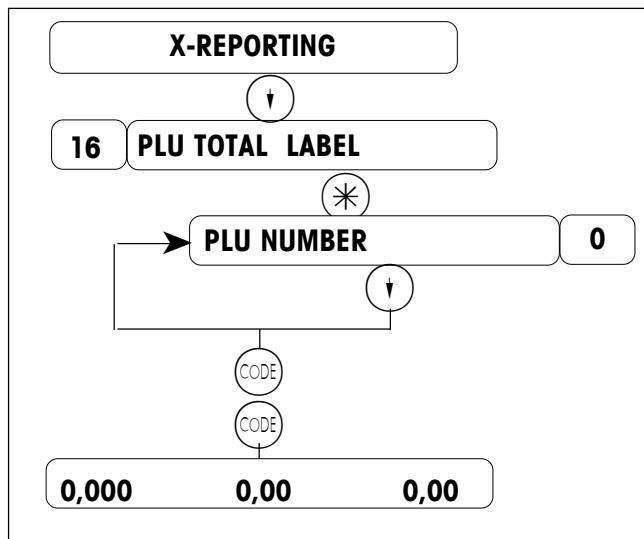
scale total label:



enter preset code 13

printing

total for a certain PLU:

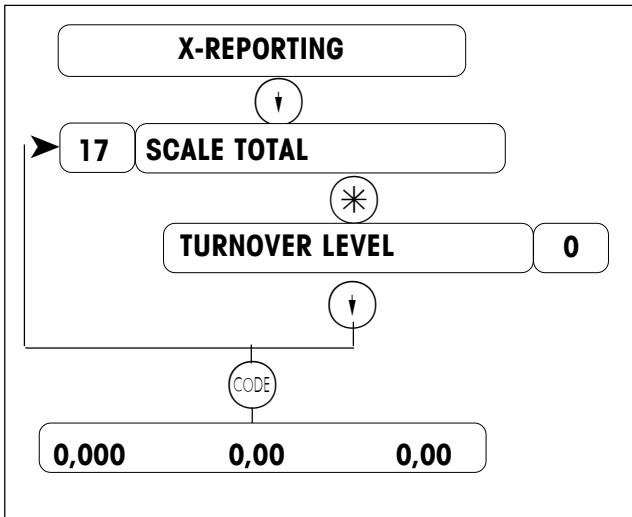


enter preset code 16

enter the choosen PLU number
printing

return to weighing mode

scale total report:



enter preset code 17

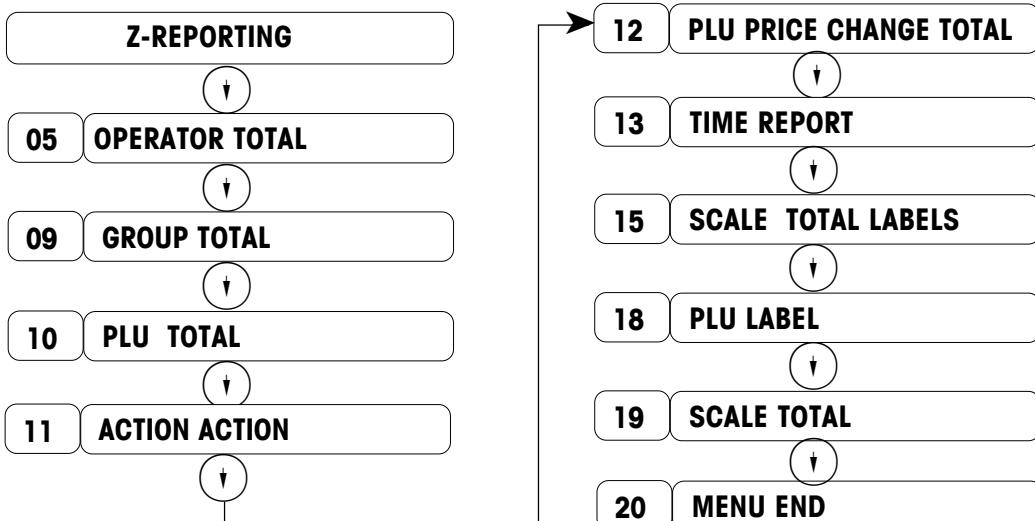
select the total
0=Daily total;1=weekly total;2=monthly total

printing

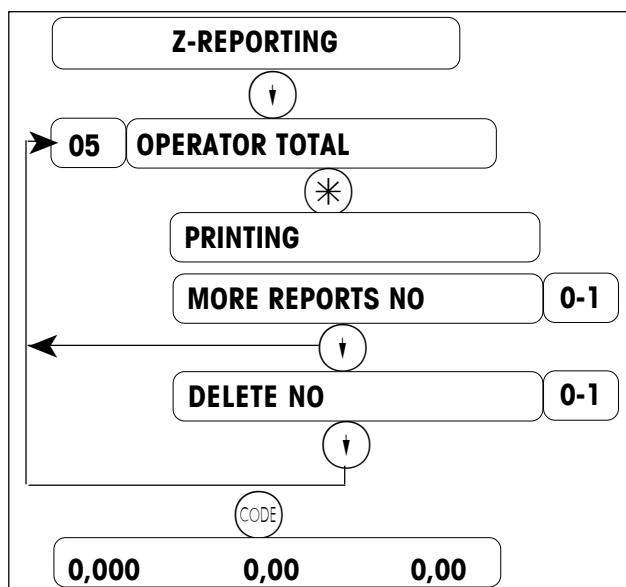
return to weighing mode

Z-REPORT

CODE 3 3 3 * Call the menu "Z-REPORTING"



operator total:



enter preset code 05

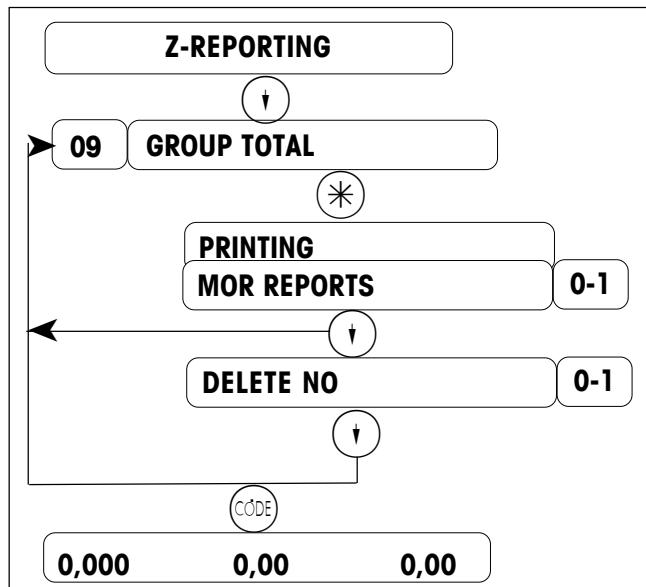
printing

0=no;1=yes

0=not delete;1=delete

return to weighing mode

group total:



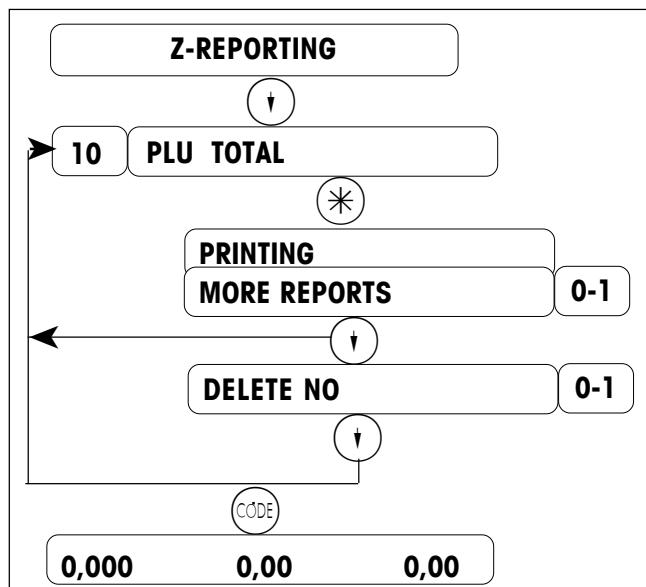
enter preset code 09

printing
0=no, 1=yes

0=not delete; 1=delete

return to weighing mode

PLU total:



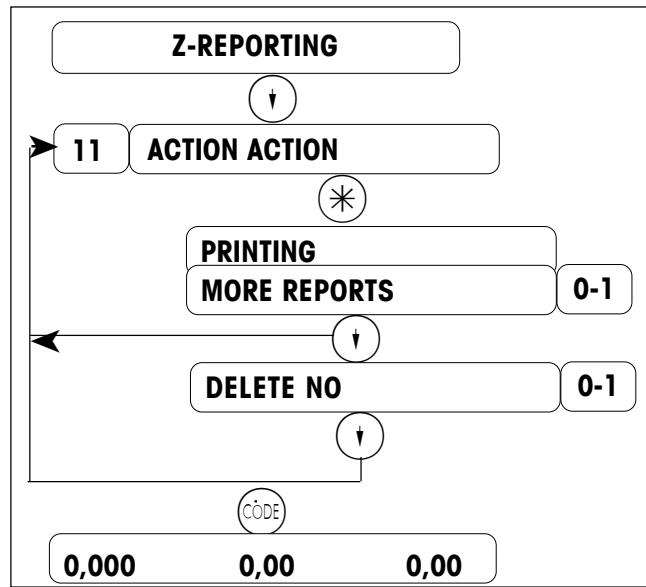
enter preset code 10

printing
more report 0=no, 1=yes

0=not delete; 1=delete

return to weighing mode

Special offer report:



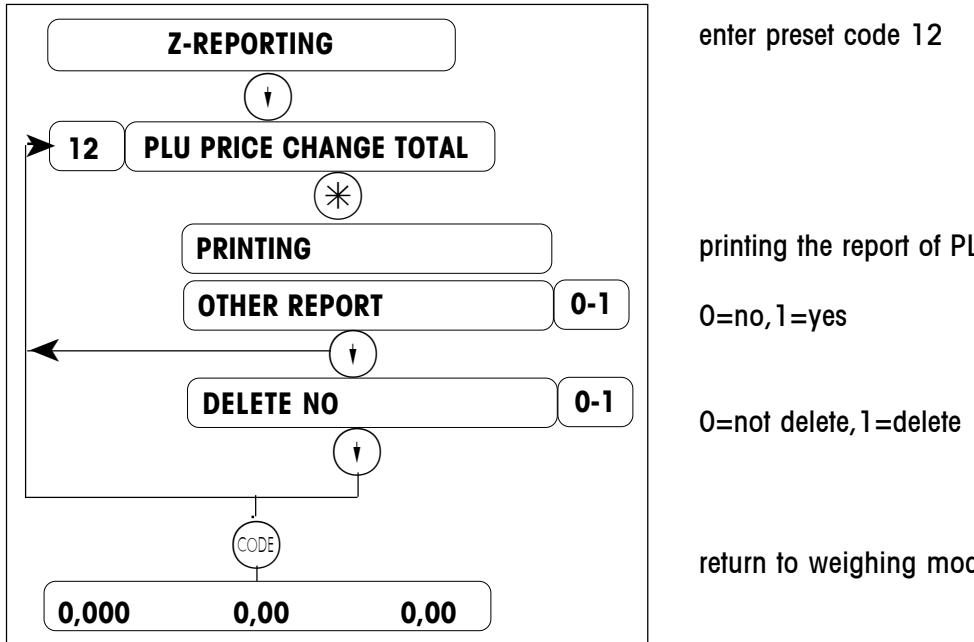
enter preset code 11

printing the report of special offer
more report 0=no, 1=yes

0=not delete; 1=delete

return to weighing mode

Price change report:



enter preset code 12

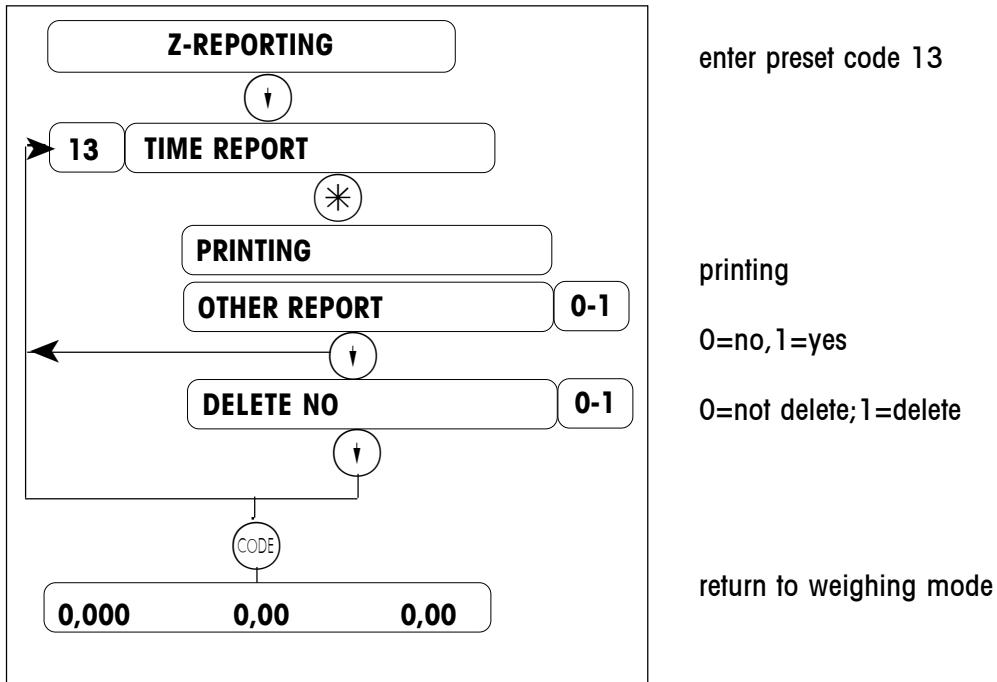
printing the report of PLU price change

0=no,1=yes

0=not delete,1=delete

return to weighing mode

Time report:



enter preset code 13

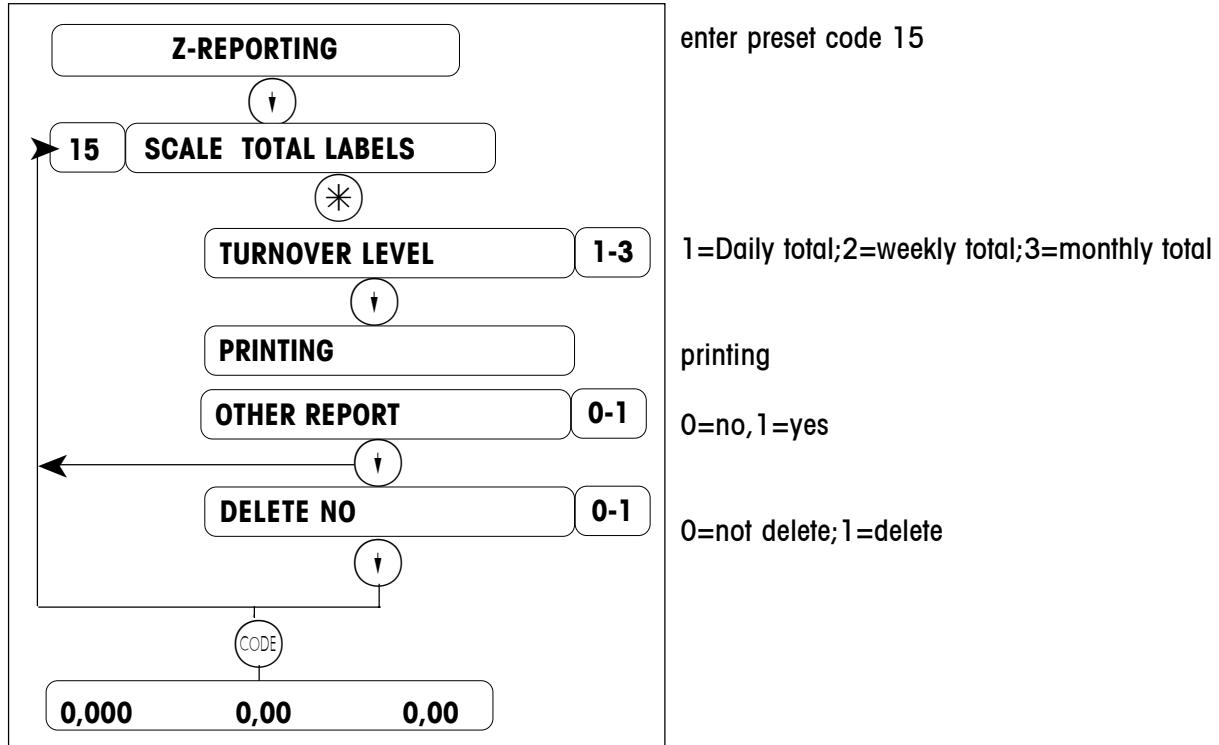
printing

0=no,1=yes

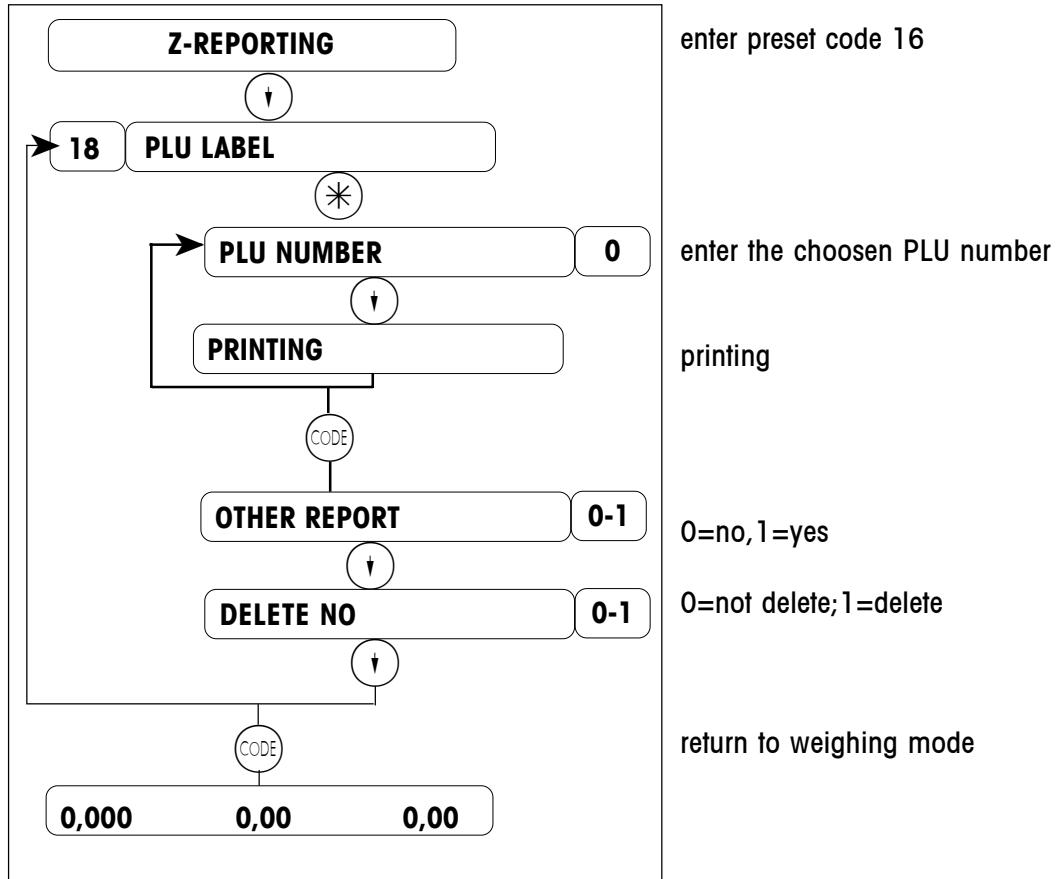
0=not delete;1=delete

return to weighing mode

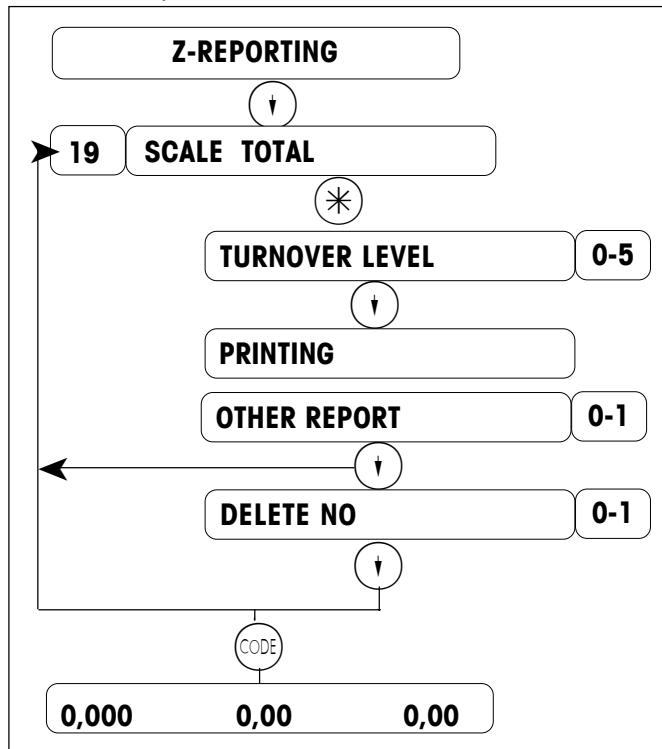
scale total:



total for certain PLU:



scale total report:



enter preset code 19

0=Daily total;1=weekly total;2=monthly total
 3=the day before yesterday;4=yesterday;5=three days ago.
 printing

more report: 0=no,1=yes

0=not delete;1=delete

SPECIAL FUNCTIONS



CODE

6

6

6

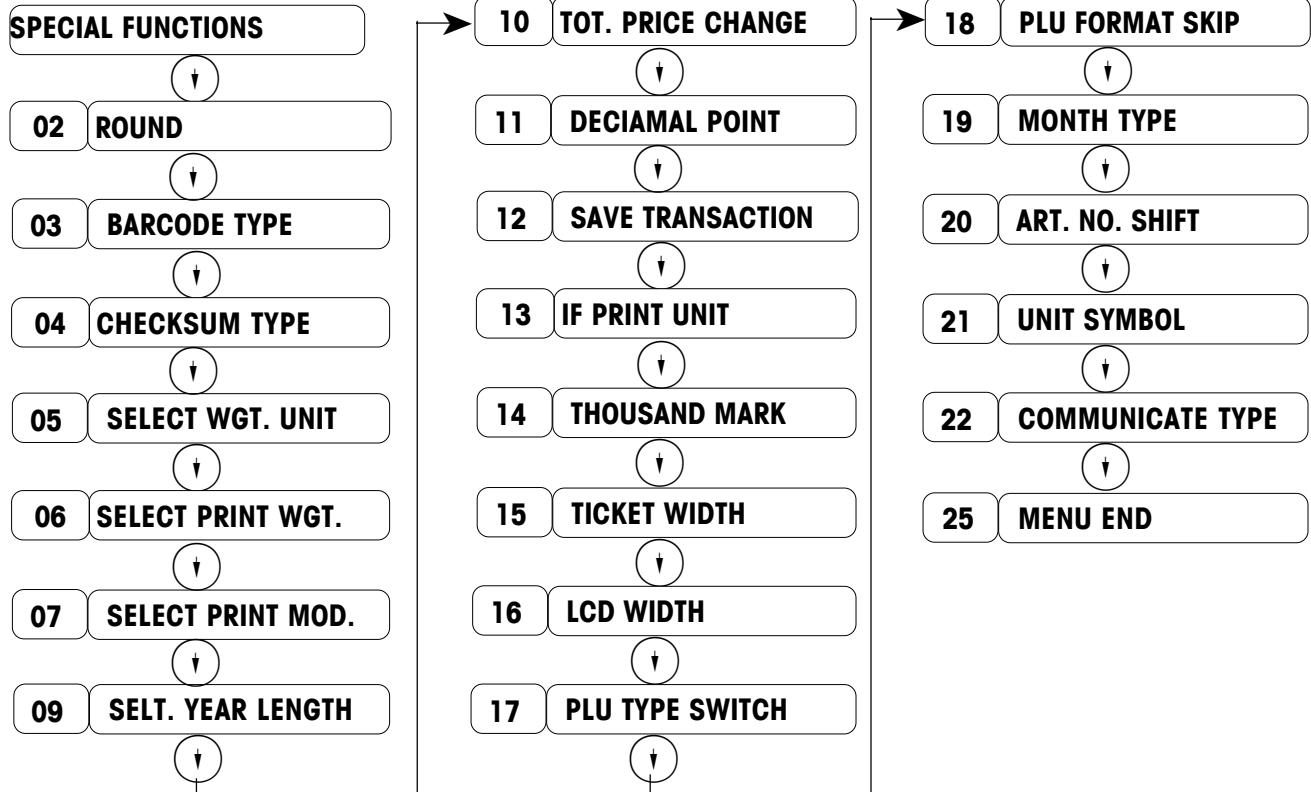
6

6

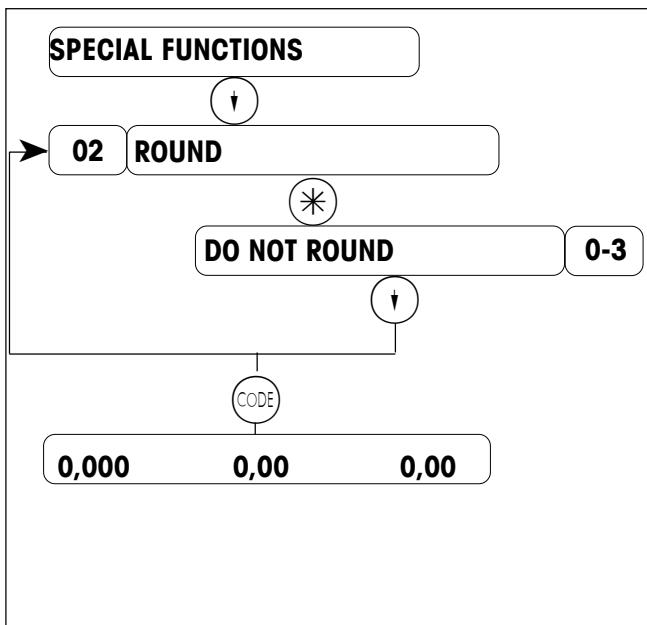
6

*

Call the menu "SPECIAL FUNCTIONS"



round:

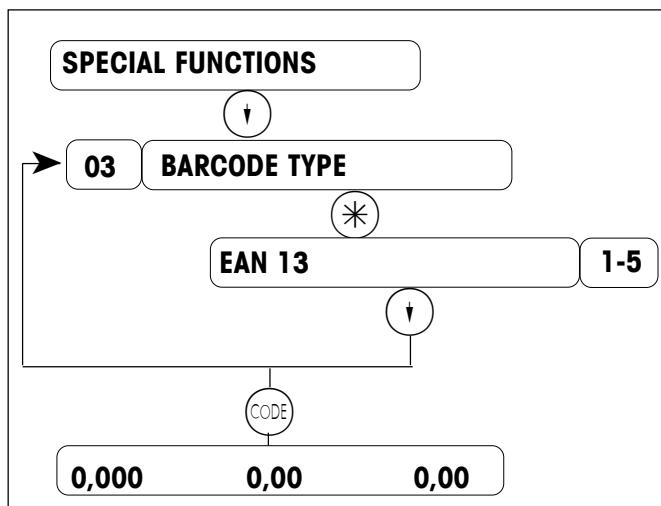


enter preset code 02

enter the method of round
 0=not round,
 1=round,
 2=0,1,2,3,4 round to 0
 5,6,7,8,9 round to 5
 3=0,1,2 round to 0
 3,4,5,6,7 round to 5
 8,9 round to 0

return to weighing mode

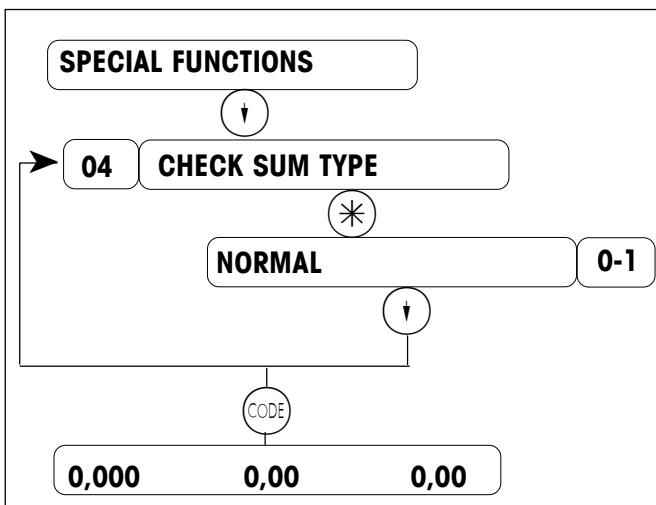
barcode type:



enter preset code 02

Select the barcode type
 1=Ean 13
 2=Code 25 narrow
 3=Barcode 14 wide
 4=UPC A
 5=Code 20
 return to weighing mode

check sum of barcode:

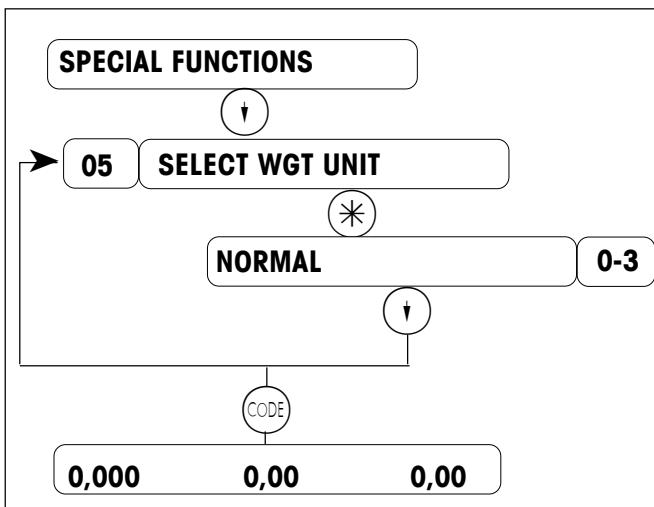


enter preset code 04

select the type of check sum for barcode
 0=normal;1=inverted check

return to weighing mode

Select the unit :



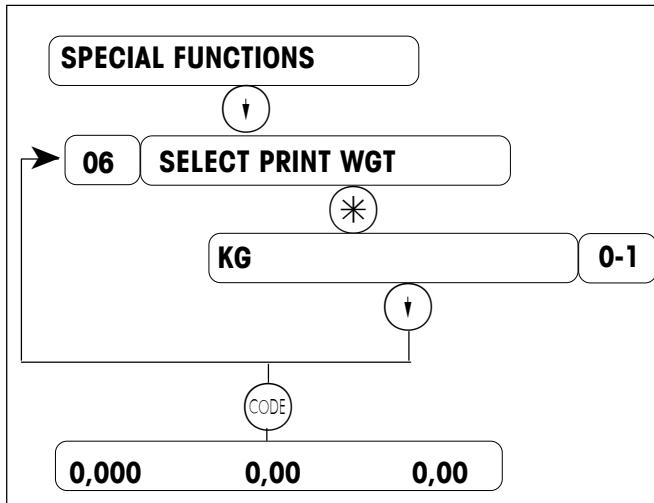
enter preset code 05

select the unit

0=price/1000g;1=price/500g;2=price/100g;
3=price/g

return to weighing mode

Select the unit of printed weight:



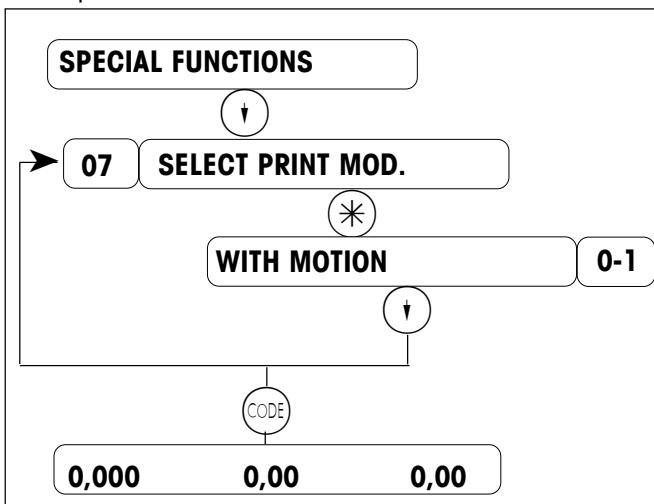
enter preset code 06

select the unit of printed weight

0=Kg;1=g

return to weighing mode

Select print mode:



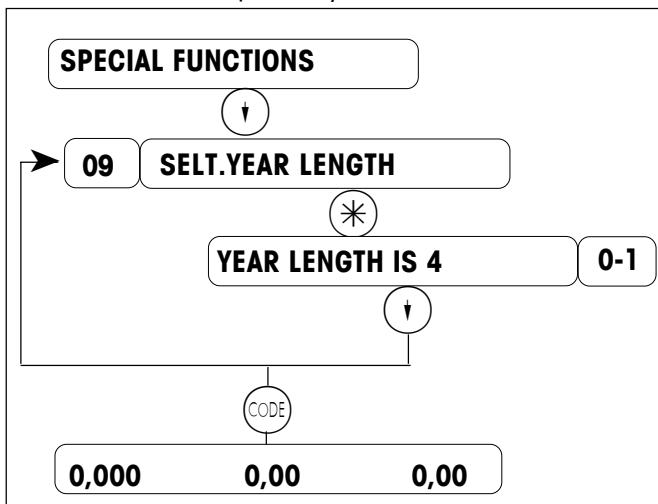
enter preset code 07

select the print mode

0=with motion of the weight
1=without motion

return to weighing mode

Select the format of printed year:

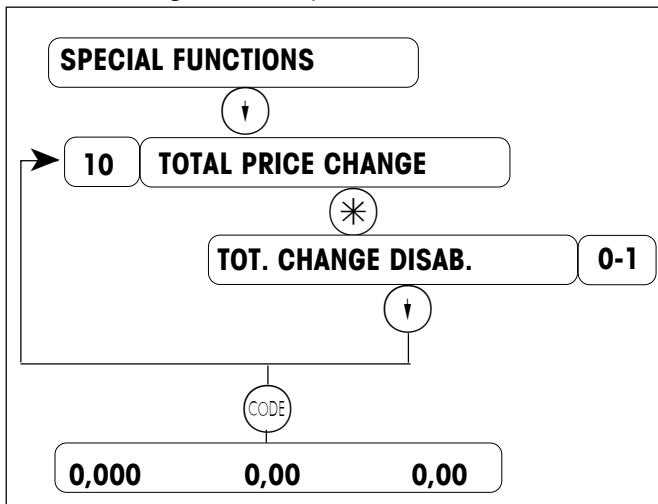


enter preset code 09

select the format for print year
0=xxxx (example:2001)
1=xx (example:01)

return to weighing mode

Select to change the total price:

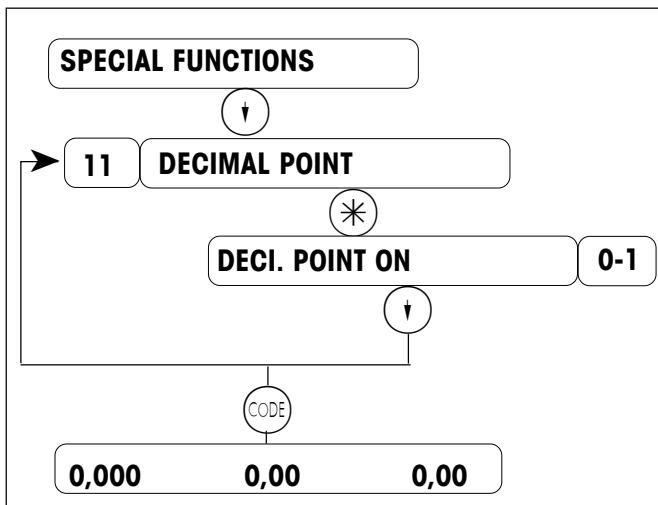


enter preset code 10

0=disable
1=enable
(Total price can be changed only for the articles whose unit price are changeable.)

return to weighing mode

Select to hide the decimal:

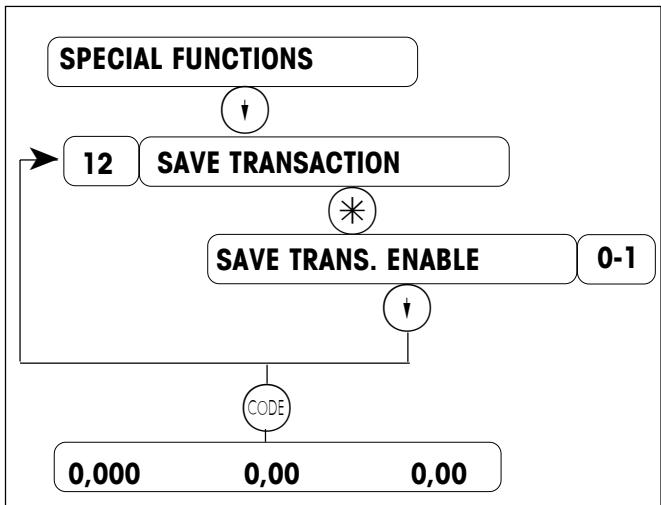


enter preset code 11

select whether use the decimal point
0=use
1=not use

return to weighing mode

Select to save the transaction:



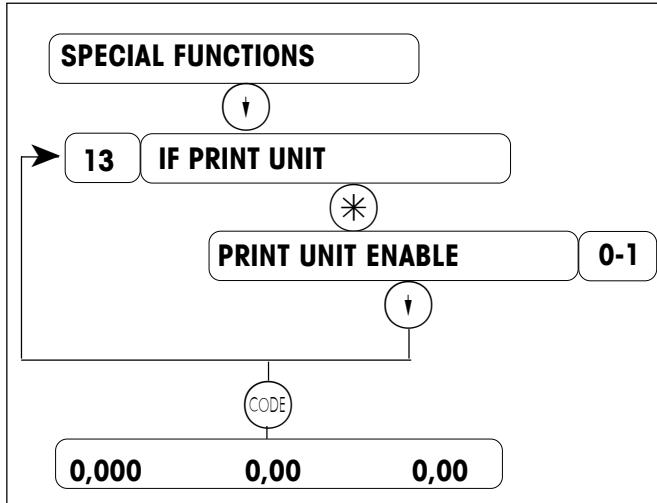
enter preset code 12

whether to save the transaction

0=save
1=not save

return to weighing mode

Select whether to print the unit of price:



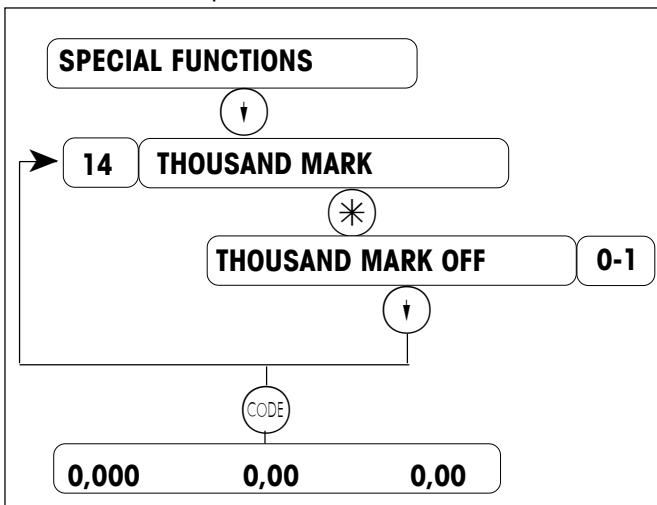
enter preset code 13

select whether to print the unit of price

0=print
1=not print

return to weighing mode

Select whether to print thousand mark:



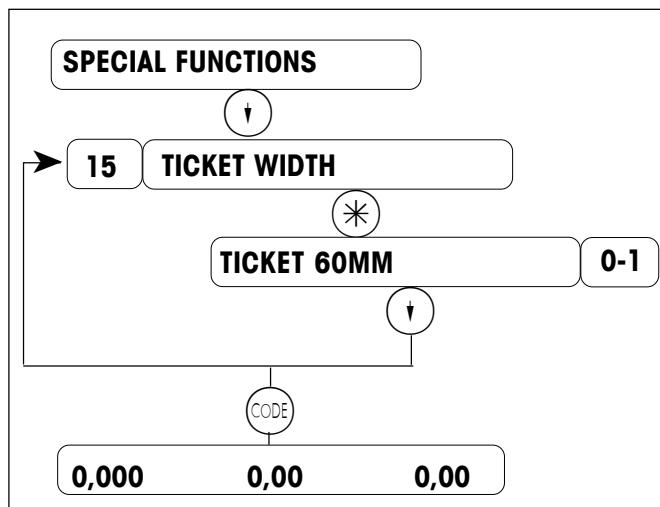
enter preset code 14

select whether to print price with thousand mark

0=not print
1=print

return to weighing mode

Select ticket width:



enter preset code 15

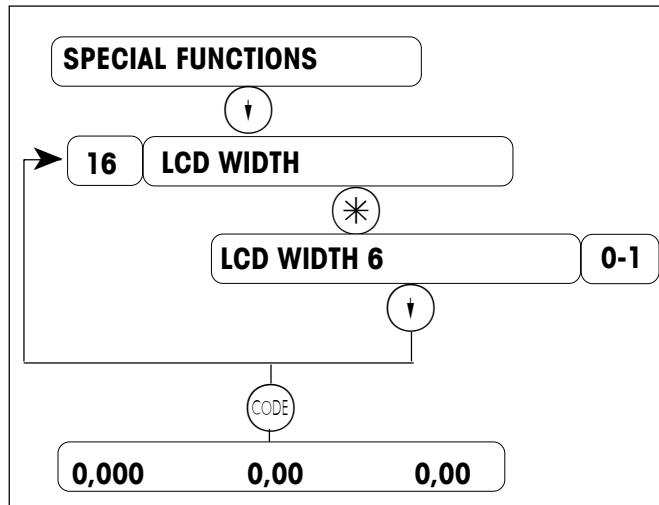
select ticket width

0=60mm

1=40mm

return to weighing mode

Select LCD width:



enter preset code 16

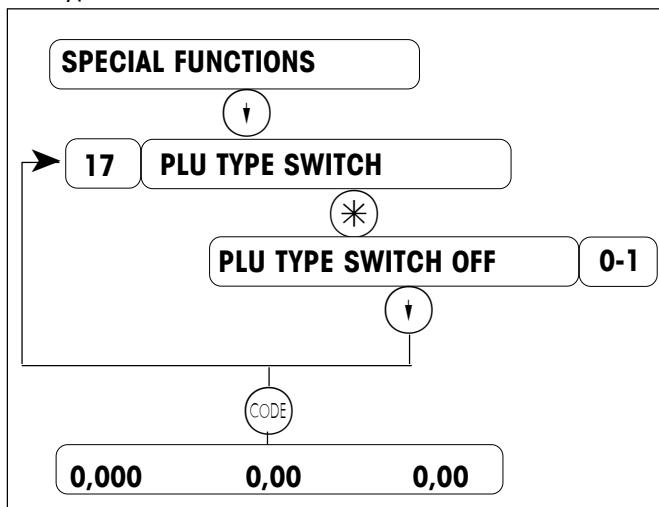
select LCD width

0=LCD width 6 digit

1=LCD width 7 digit

return to weighing mode

PLU type switch:



enter preset code 17

select whether to print price with thousand mark

0=switch off

1=switch on , plu can switch between by weight
and by count according the weight on platter.

return to weighing mode

PLU format skip:

SPECIAL FUNCTIONS

18 **PLU FORMAT SKIP**

(*) **ART.NR. ON** **0-1**

.....

CODE

0,000 0,00 0,00

enter preset code 18

whether to show these items in create PLU menu
0=off
1=on

.....

return to weighing mode

Select month print type:

SPECIAL FUNCTIONS

19 **MONTH TYPE**

(*) **MONTH TYPE NUMBER** **0-1**

CODE

0,000 0,00 0,00

enter preset code 19

select month print type
0=print number
1=print character

return to weighing mode

Set article number shift in barcode:

SPECIAL FUNCTIONS

20 **ART. NO. SHIFT**

(*) **ART. NO. SHIFT** **0**

CODE

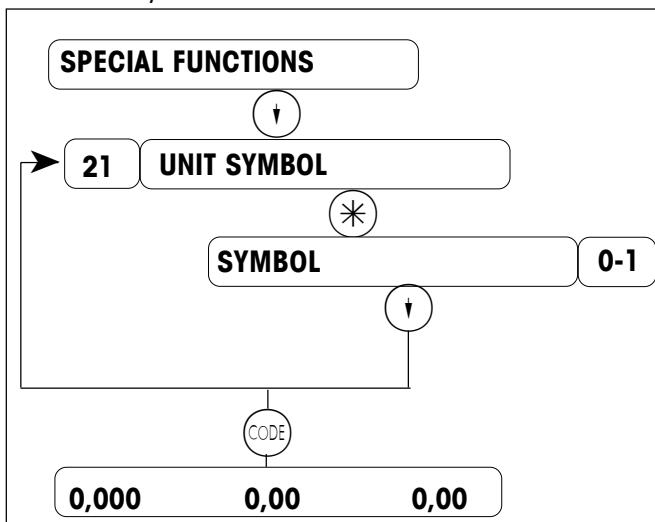
0,000 0,00 0,00

enter preset code 20

set the shift digit number of the article number in barcode

return to weighing mode

Select unit symbol:



enter preset code 21

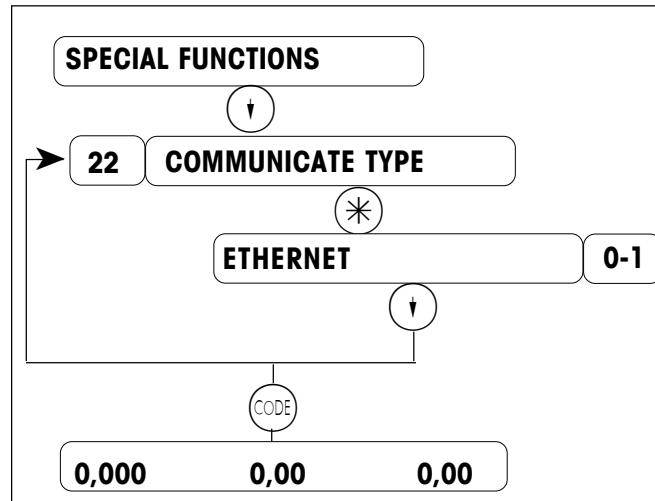
select unit symbol

0=off, default Kg

1=on, change to lb

return to weighing mode

Select communicate type:



enter preset code 22

select communicate type

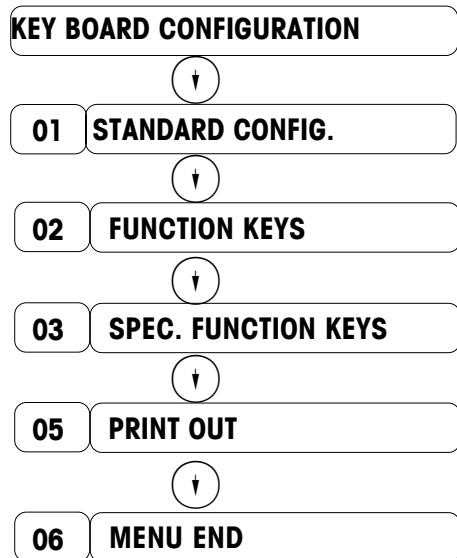
0=ethernet

1=commport

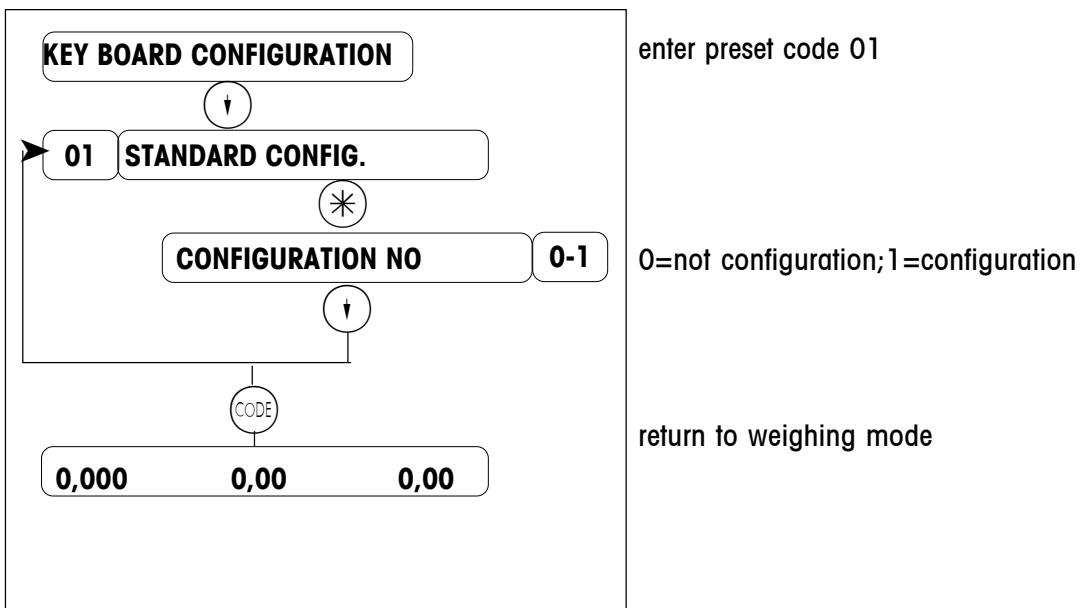
return to weighing mode

KEYBOARD CONFIGURATION

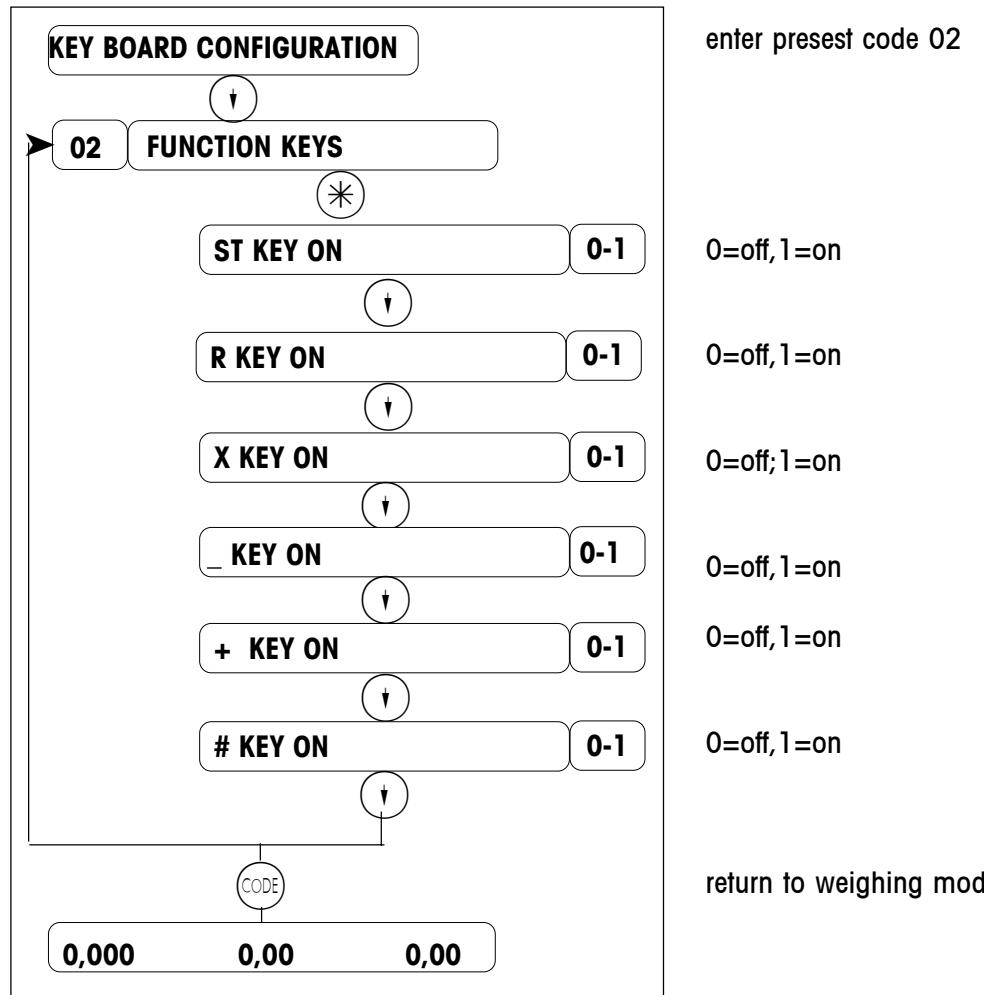
CODE 4 4 5 5 6 6 * Call the menu "KEYBOARD CONFIGURATION"



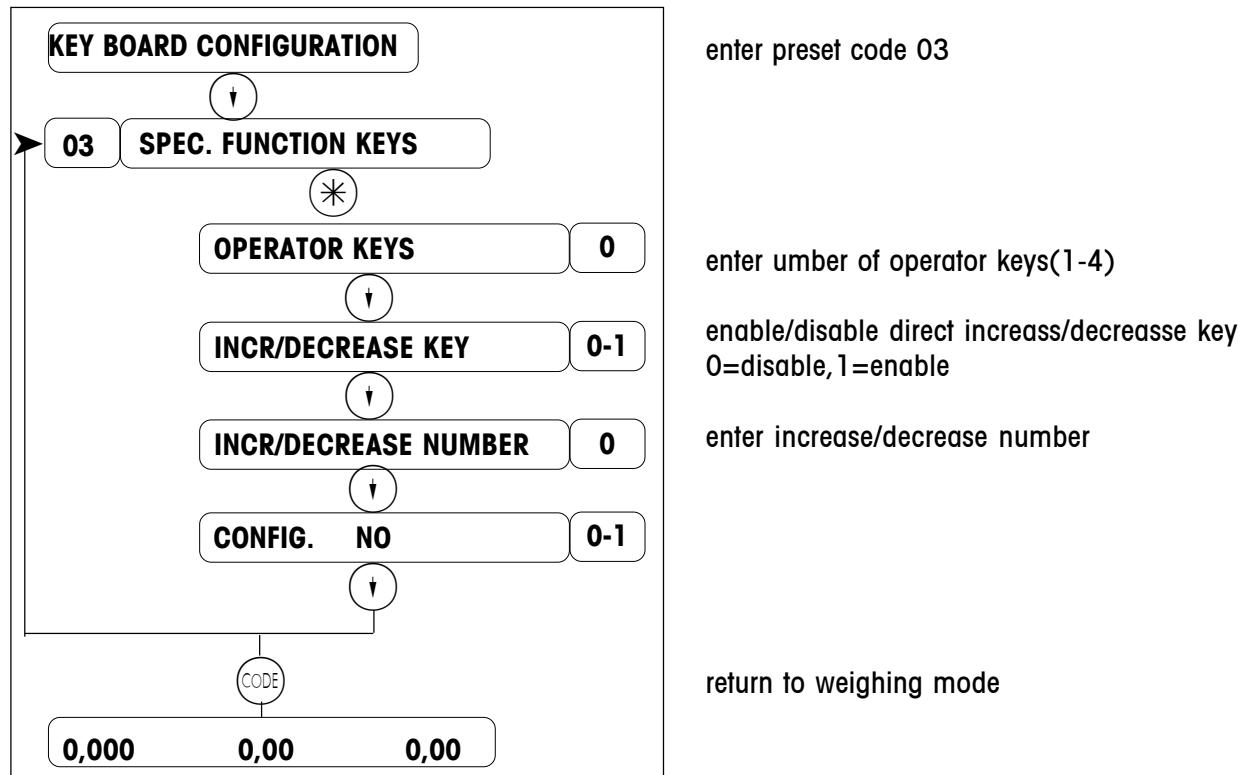
standard configuration:



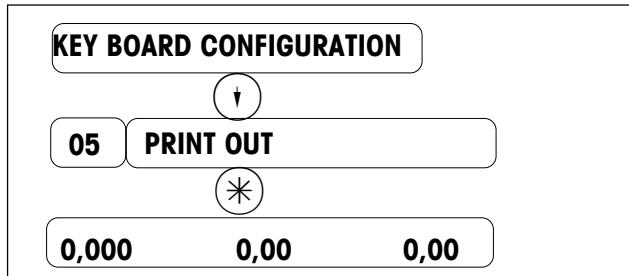
define function keys:



define special function keys:



Print out the keyboard configuration:

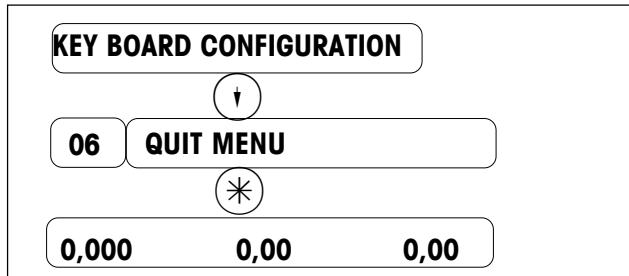


enter preset code 05

printing out the result of key board configuration

return to weighing mode

quit this menu:



enter preset code 06

return to weighing mode

label format

This operation is used, when the customer needs to change the default label formats.

CODE	9	9	8	8	7	7	*
------	---	---	---	---	---	---	---

Call the "LABEL DEFINITION" menu

LABEL DEFINITION	
XX	Select the selected label type
*	
XX	Select the label type
*	
LABEL NR. 0	
↓	
PLU TEXT LEFT 0-2	
↓	
SIZE PLU L1 0	
↓	
SIZE EXTRA TEXT 0	
↓	
NO SHOP NAME 0-1	
↓	
ADV. TEXT NR. 0	
↓	
PACK. DATE TEXT NR. 0	
↓	
BEST BEFORE TEXT NR. 0	
↓	

Enter the preset code of the desire label type.

02 = Service label

03 = Total label

04 = Prepack label

Select one kind label.

02 = Weight label

01 = Count label

Enter the number of the label format.

0 = PLU text left justified

1 = centered PLU text

2 = PLU text auto formatted

Font size of the 1st line of the PLU text

Font size of the extra text

Printing of the store address

0 = no printing / 1 = printing

Enter the number of the advertisement text

0 = no printing

Enter the number of the packing date text

0 = do not print the date

Enter the number of the best before date text.

0 = do not print the date

Continued on the next page

Continued from the last page

SELL BY DATE TEXT NR.	0
NO PACK DATE	0-2
NO BEST BEFORE	0-3
NO SELL BY DATE	0-3
CODE	
0.00	0.00
0.00	

Enter the number of the sell by date text.

0 = Do not print

0 = Do not print the date ; 1 = DD/MM/YY ; 2 = MM/DD/YY;3=YY/MM/DD

0 = Do not print the date ; 1 = DD/MM/YY ; 2 = MM/DD/YY;3=YY/MM/DD

0 = Do not print the date ; 1 = DD/MM/YY ; 2 = MM/DD/YY;3=YY/MM/DD

Press the **CODE** key to return to the weighing mode.

SPCT program

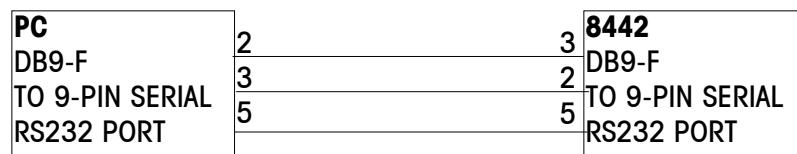
PLU records and setup data of the 8442 can be programmed through a PC (Personal Computer) using the METTLER TOLEDO program SPCT. New scales can be easily set up by using this program.

SPCT requires an IBM or compatible PC with Windows 95/NT or higher version operating system. A 3.5 inch floppy drive is required. And the connector at the 8442 is a standard ETHERNET connector for RJ45. You can connect to the ETHERNET directly.

Flashing Software

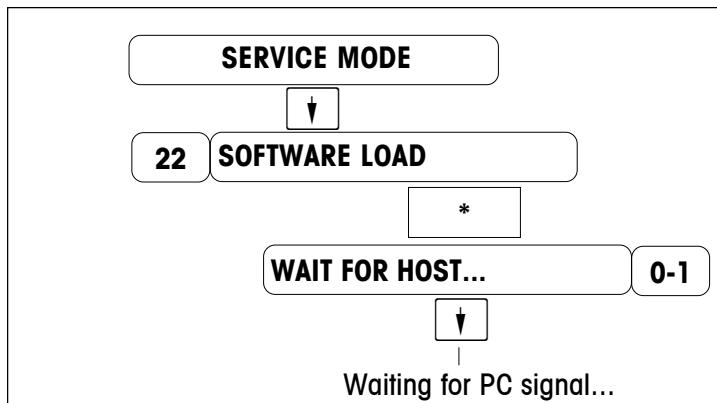
The 8442 Operating System Software is retained in Flash EEPROM's on the Main Logic PCB. The EPROM's can be reprogrammed using a PC and a downloader program called FLASH. Cables and components are shown as below:

123848 Cable, PC DB9 to 8442 10ft/3m



Before downloading the software, turn the 8442 power OFF. Connect one end of the cable to the PC's serial port and the other end to the 8442 serial port. Then turn the 8442 power ON and enter flashing status according to the following instructions.

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

Call the "SERVICE MODE" menu


Enter the preset code 22

Then enter FLASH command at DOS prompt. The FLASH command line is as follows:

FLASH filename.dat

(Replace *filename.dat* with the actual file name. Example: FLASH 123456R.dat). If you get a DOS Bad command or file name error, check to make sure you have not mis-typed the file name, and the FLASH.EXE is in your PC's path or current directory. FLASH uses the COM1 RS232 Serial Port as a default. If COM2 is required, you will need to add "2" at the end of the command line. (For example: FLASH 123456R.dat 2).

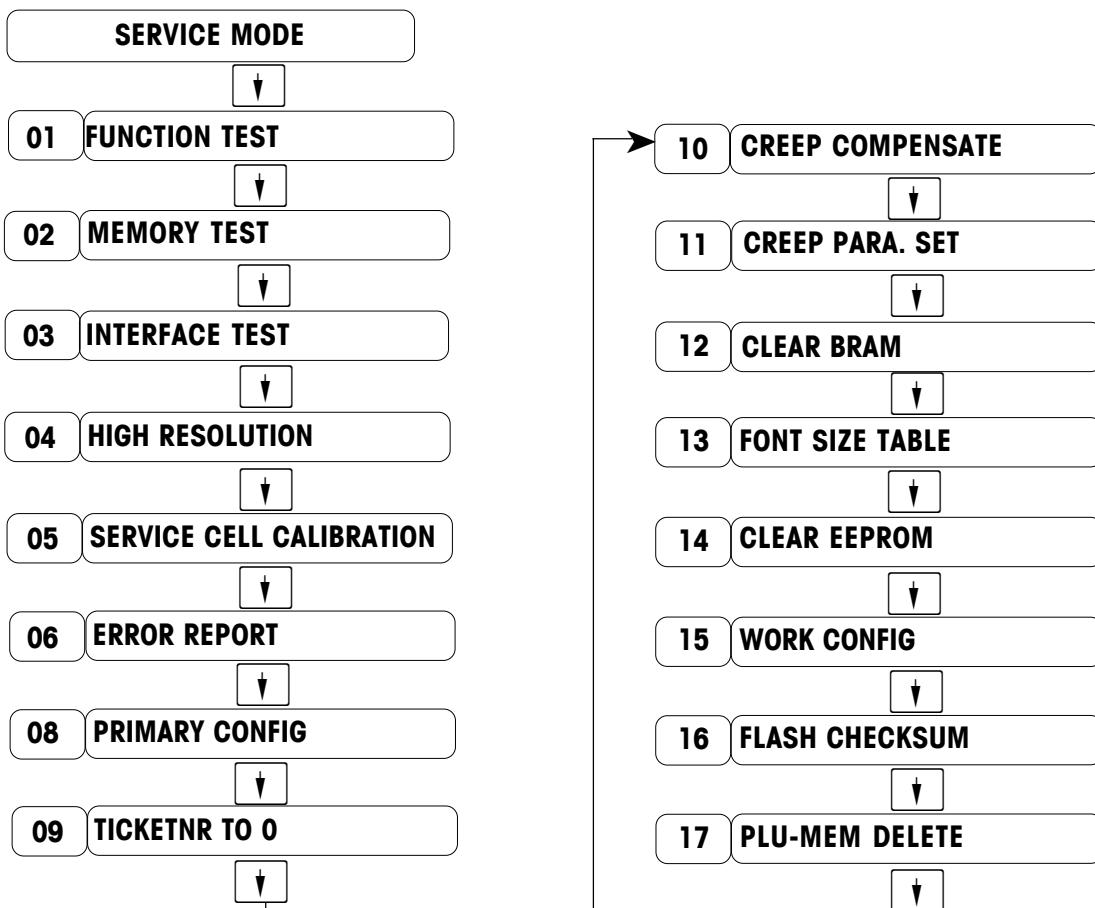
After you typed FLASH command, the PC screen will display a status menu to show the flashing progress. When the flashing is completed, the scale will reset automatically. Press any key to exit FLASH program at the PC.

4**Service mode**

**Presentation of the
"SERVICE MODE"
menu**

Service Mode is a special function menu which is provided to diagnose scale problems.

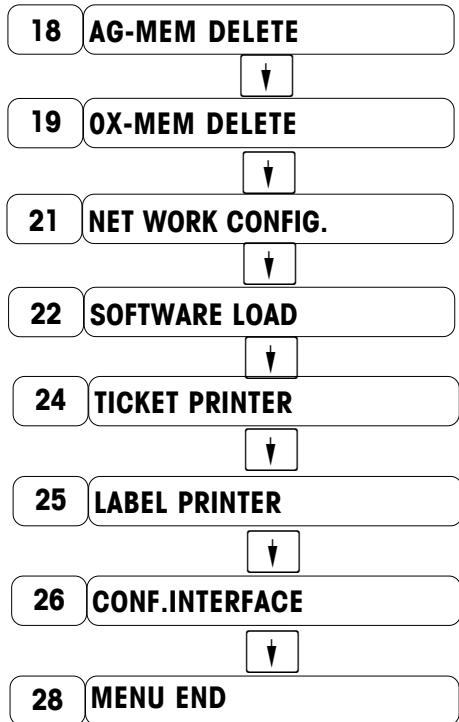
CODE	2	4	6	8	1	3	5	7	*
------	---	---	---	---	---	---	---	---	---



Select desired menu with or enter preset code and activate with key.

Continued :
Presentation of the "SERVICE MODE" menu
on the next page

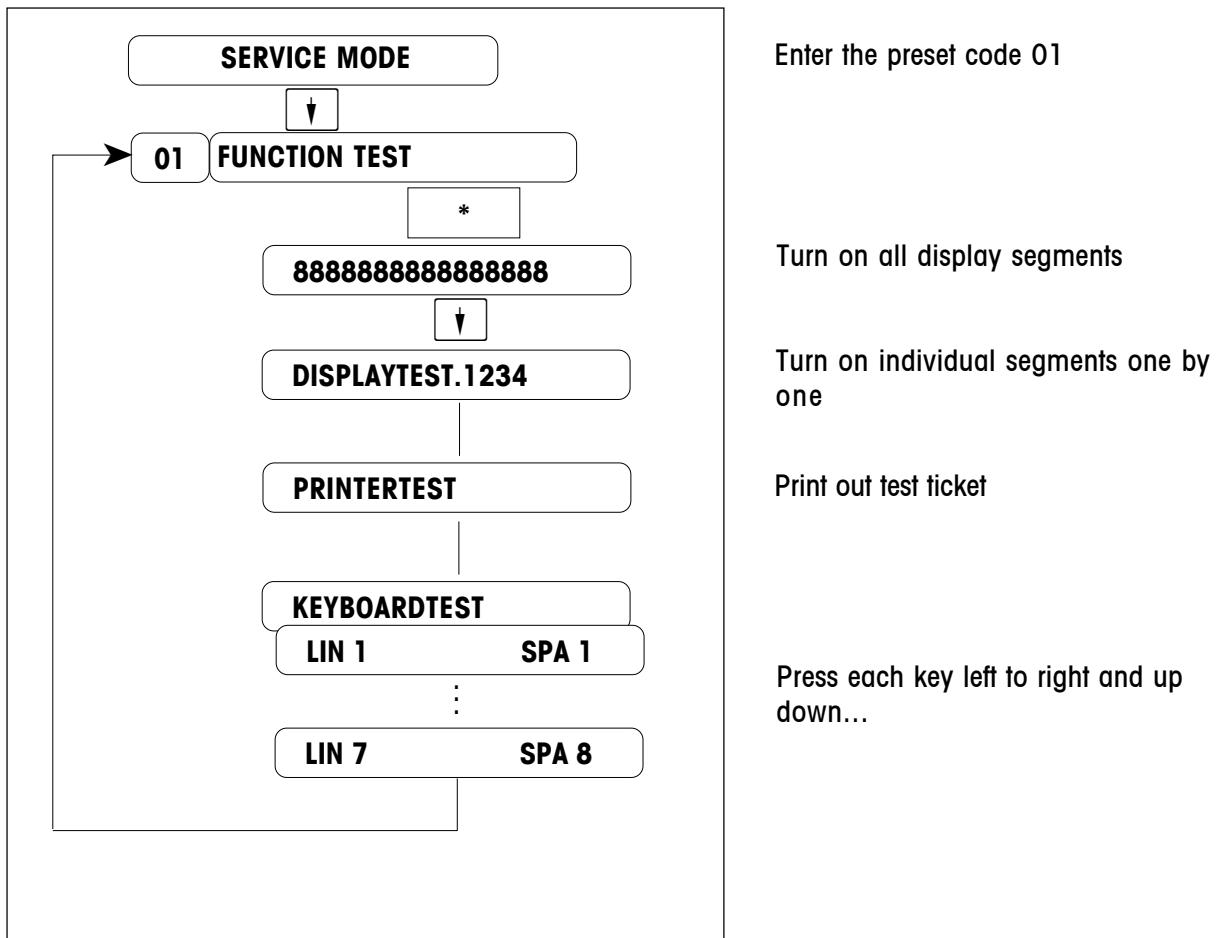
Continued from the last page



Select desired menu with or enter preset code
and activate with key.

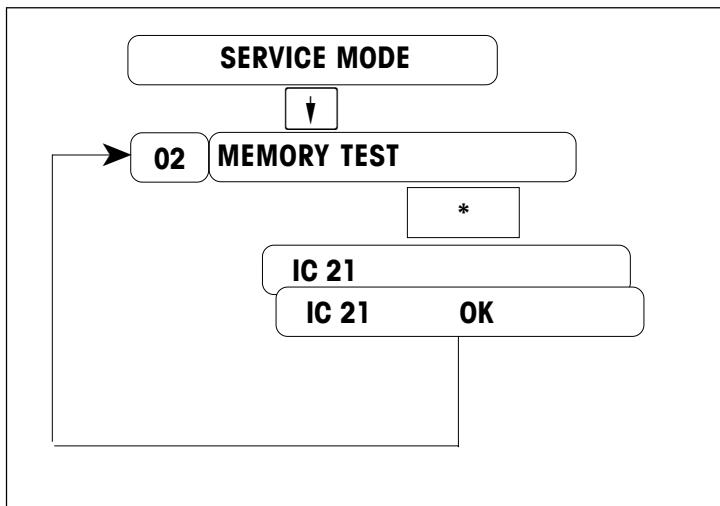
Function Test

This function is used to diagnose display, printer and keyboard.



Memory Test

This function is used to test RAM chip U21.

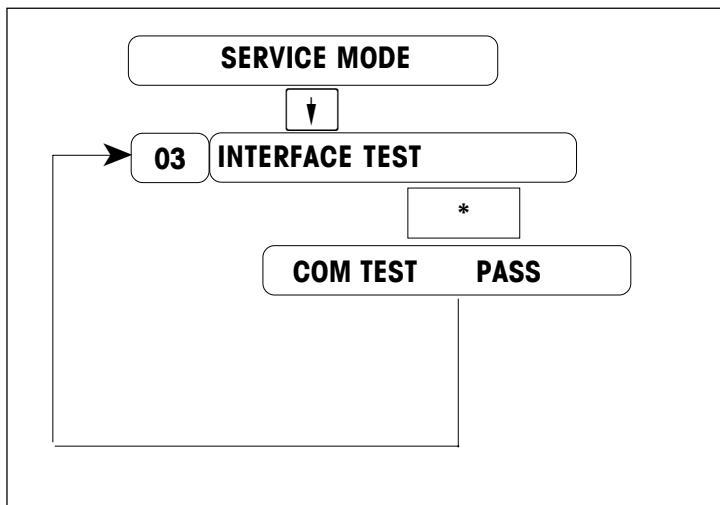


Enter the preset code 02

The test result will be displayed and printed.

Interface Test

This function is used to test the RS232 Serial Port

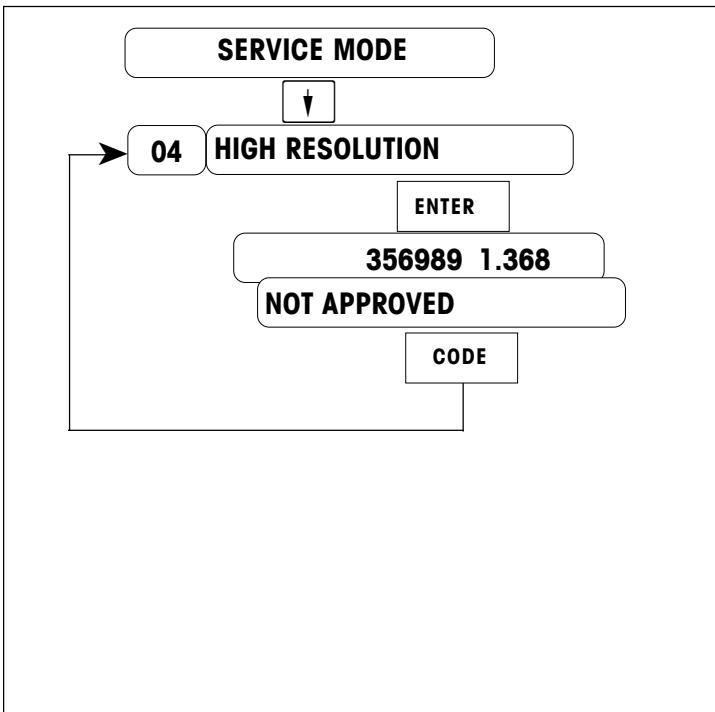


Enter the preset code 03

Install the interface test kit .

The test result will be displayed .

Expand display

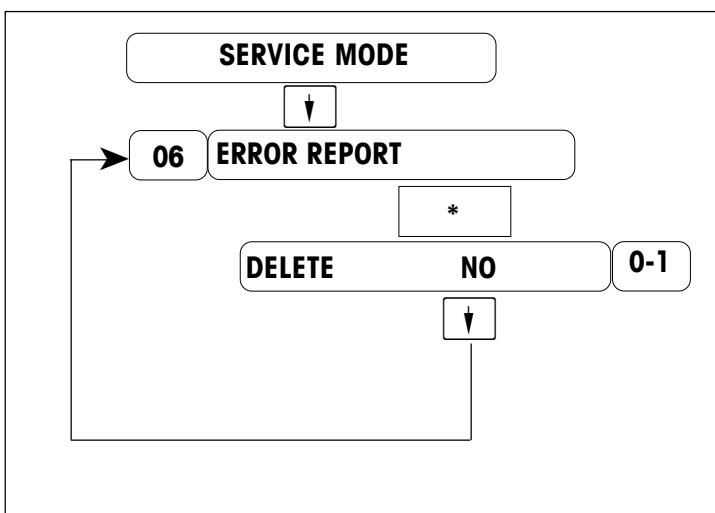


Enter the preset code 04

The accuracy of the weight is expanded 10 times on the TOTAL PRICE display area, this read is only used for service purpose only. The internal A/D counts is displayed on the UNIT PRICE display area. Press CODE key to exit Expand Display mode

Error Report

This function is used to record hardware errors

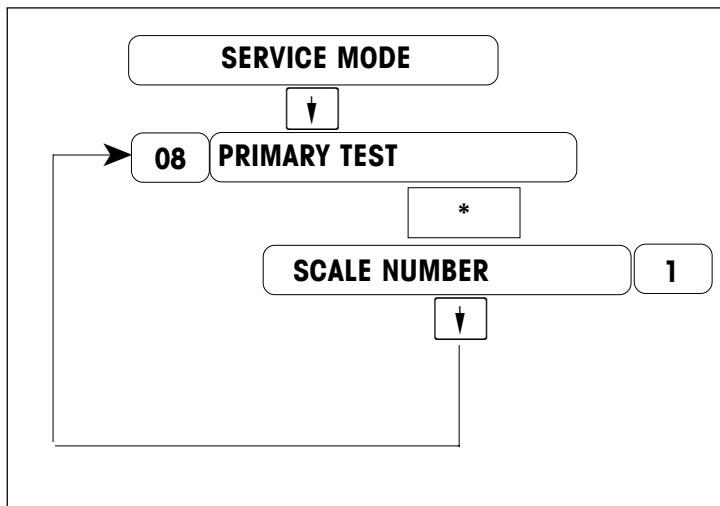


Enter the preset code 06

The Error report is printed out.
Delete error report
0= Do not delete; 1=delete

Primary Configure

This function is used to set up scale number.

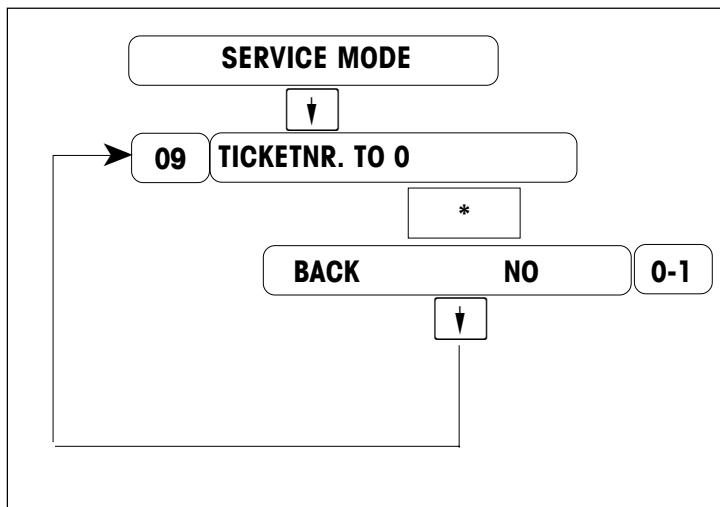


Enter the preset code 08

Enter the scale number (1-64)

Reset Ticket Number

This function is used to reset ticket number.

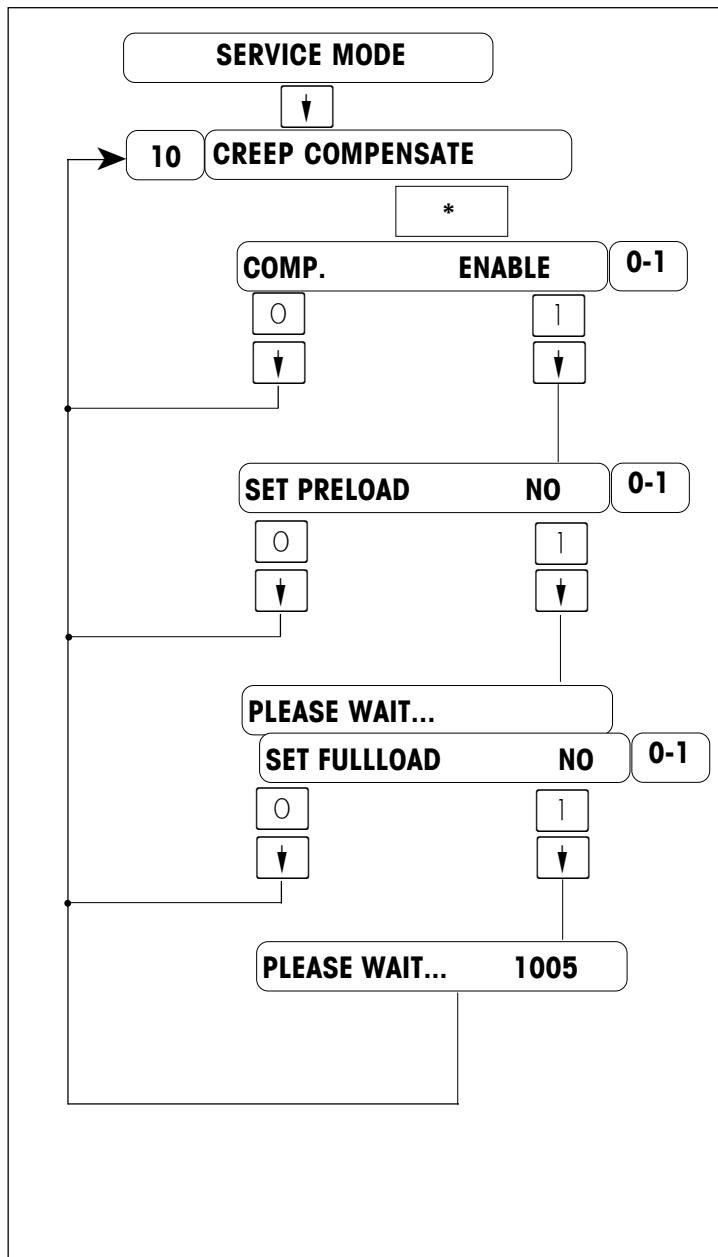


Enter the preset code 09

Reset ticket number
0=Do not reset; 1= Reset

Creep Compensate

This function is used to compensate the creep performance of the scale.



Enter the preset code 10

0=Disable; 1=Enable

0=Not read zero data;
1= Read zero data

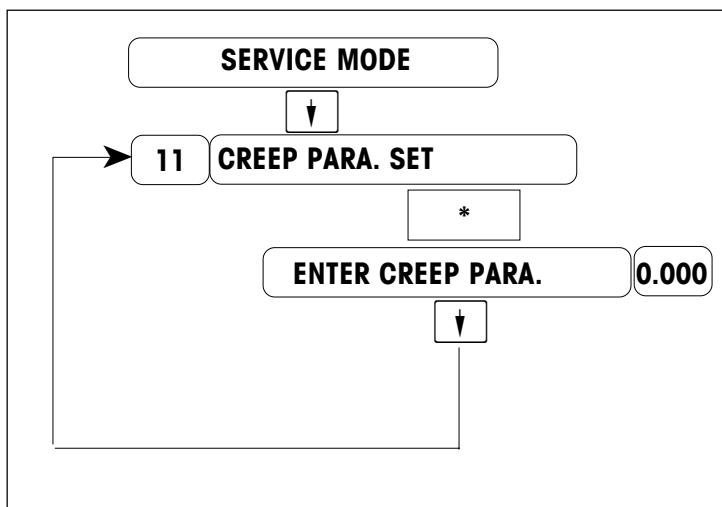
the scale will read the zero data. Please
keep the weight stable and wait for 5
seconds...

0=Not read full capacity data;
1=Read full capacity data

the scale will read the full capacity data.
Please keep the weight stable and wait for
30 minutes...

Set Creep Parameter

This function is used to set up creep parameter manually.

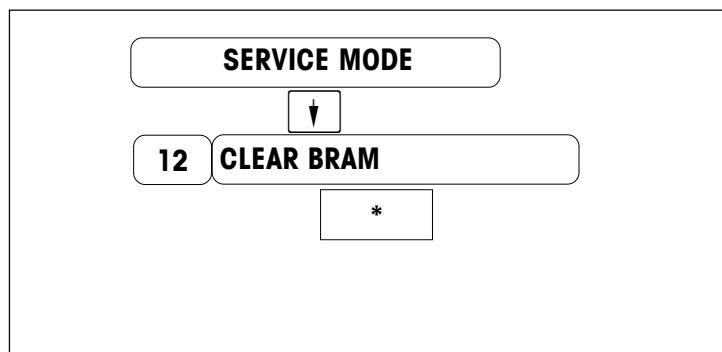
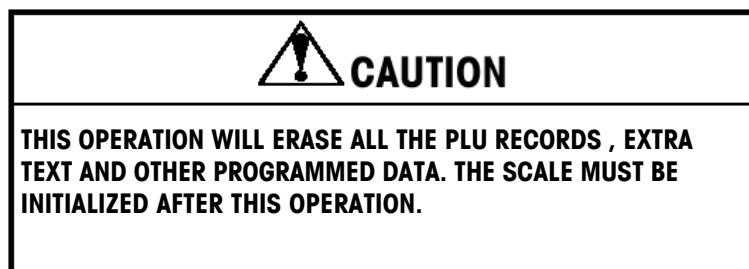


Enter the preset code 11

Enter the creep parameter on the L/C label.

Clear Battery Backup RAM

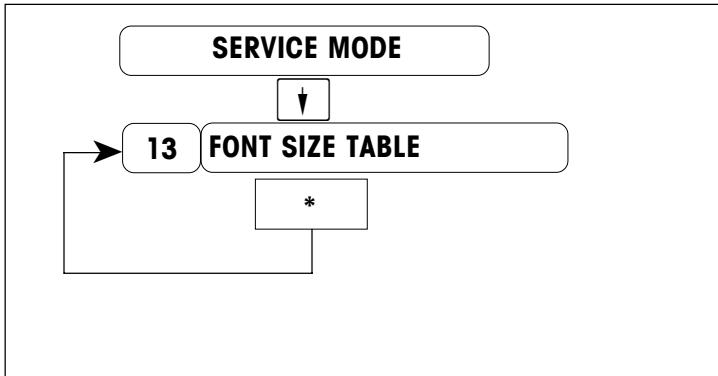
This function is used to clear battery backup RAM.



Enter the preset code 12

The scale will be reset after this operation. A error message "ERROR 200 DATABA" will be shown after reset. You have to initialize the scale at this time(See Reset RAM of chapter 2).

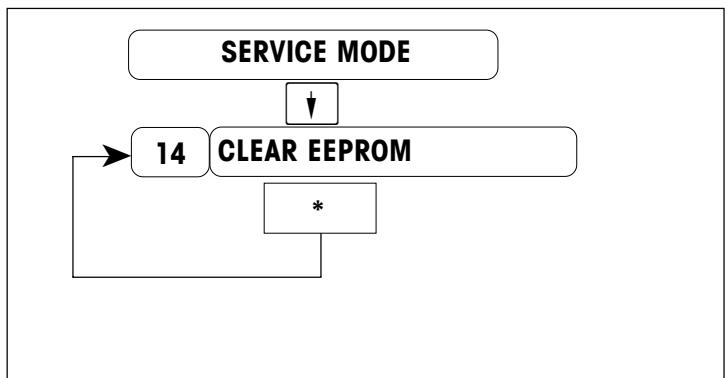
Print Font Size Table



Enter the preset code 13

A sample of different size fonts is printed out.

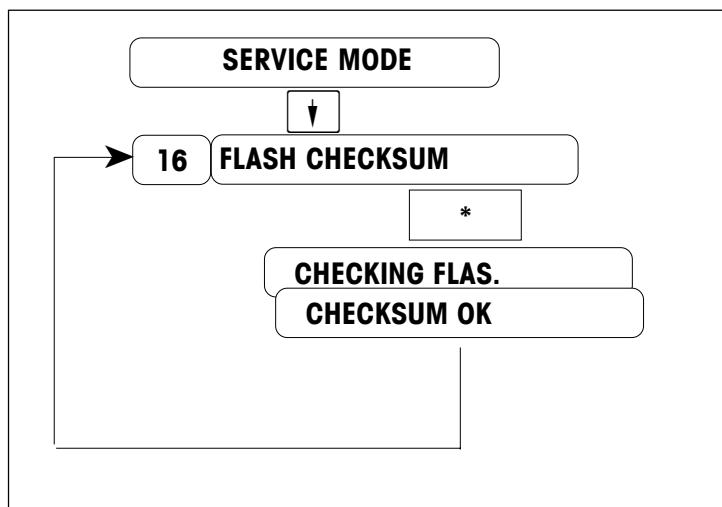
Clear EEPROM



Enter the preset code 14

Flash Checksum

This function is used to verify if the scale code is correct.

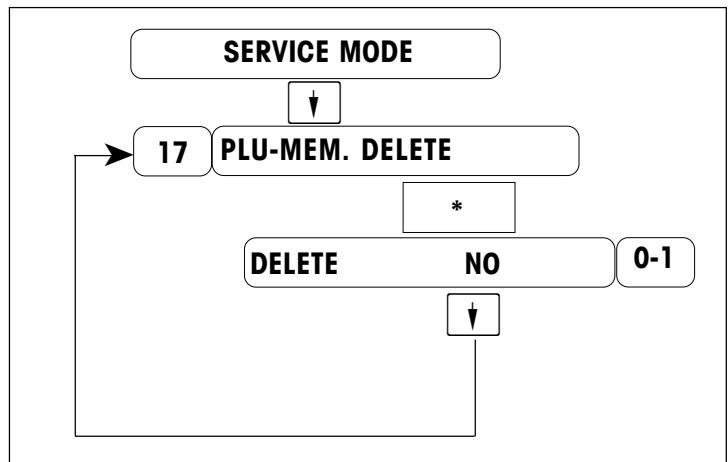


Enter the preset code 16

The test result will be shown.

Delete PLU Memory

This function is used to clear PLU memory.



Enter the preset code 17

Delete PLU memory
0= Do not delete; 1=delete

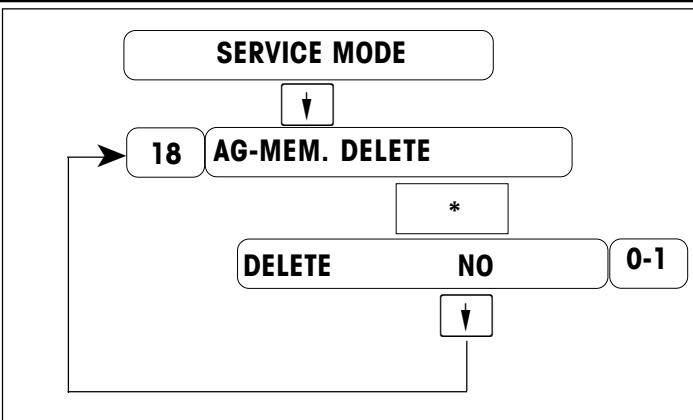
Delete Group Memory

This function is used to clear Group memory.



CAUTION

THIS OPERATION WILL ERASE ALL THE GROUP RECORDS AND GROUP TOTAL.



Enter the preset code 18

Delete Group memory
0= Do not delete; 1=delete

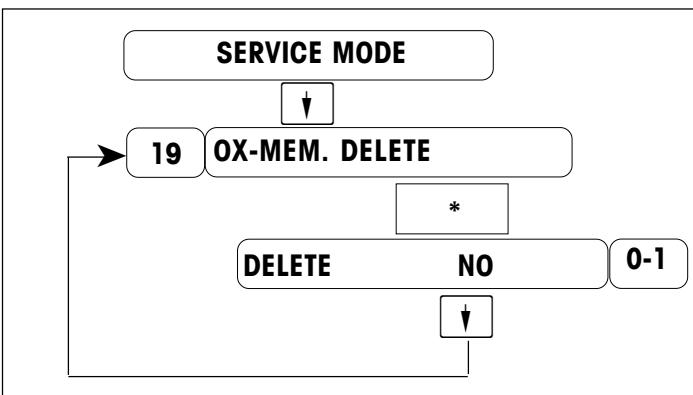
Delete Operator Memory

This function is used to clear Operator memory.



CAUTION

THIS OPERATION WILL ERASE ALL THE OPERATOR RECORDS AND OPERATOR TOTAL.

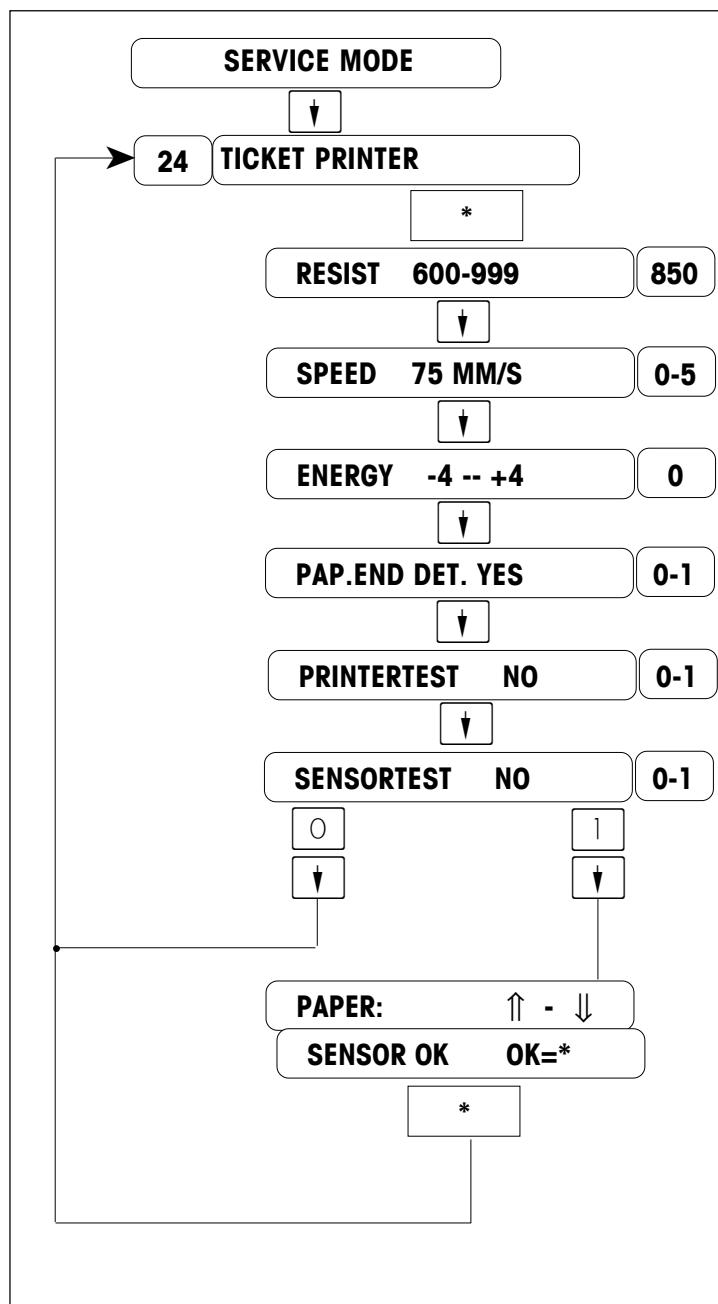


Enter the preset code 19

Delete Operator memory
0= Do not delete; 1=delete

Ticket Printer Test

This function is used to test ticket printer hardware and adjust printer parameters.



Enter the preset code 24

Select the Ohms Rating marked on the Print Head.

Select the printer speed:

0=75mm/s; 1=70mm/s; 2=65mm/s;
3=60mm/s; 4=55mm/s; 5=50mm/s

Enter print density (use CNT/WT CHANGE key to input negative value)

Enable paper end detecting (i.e. enable the take label sensor)

0= disable; 1=enable

Conduct printer test (To print out test ticket)

0= No; 1=Yes

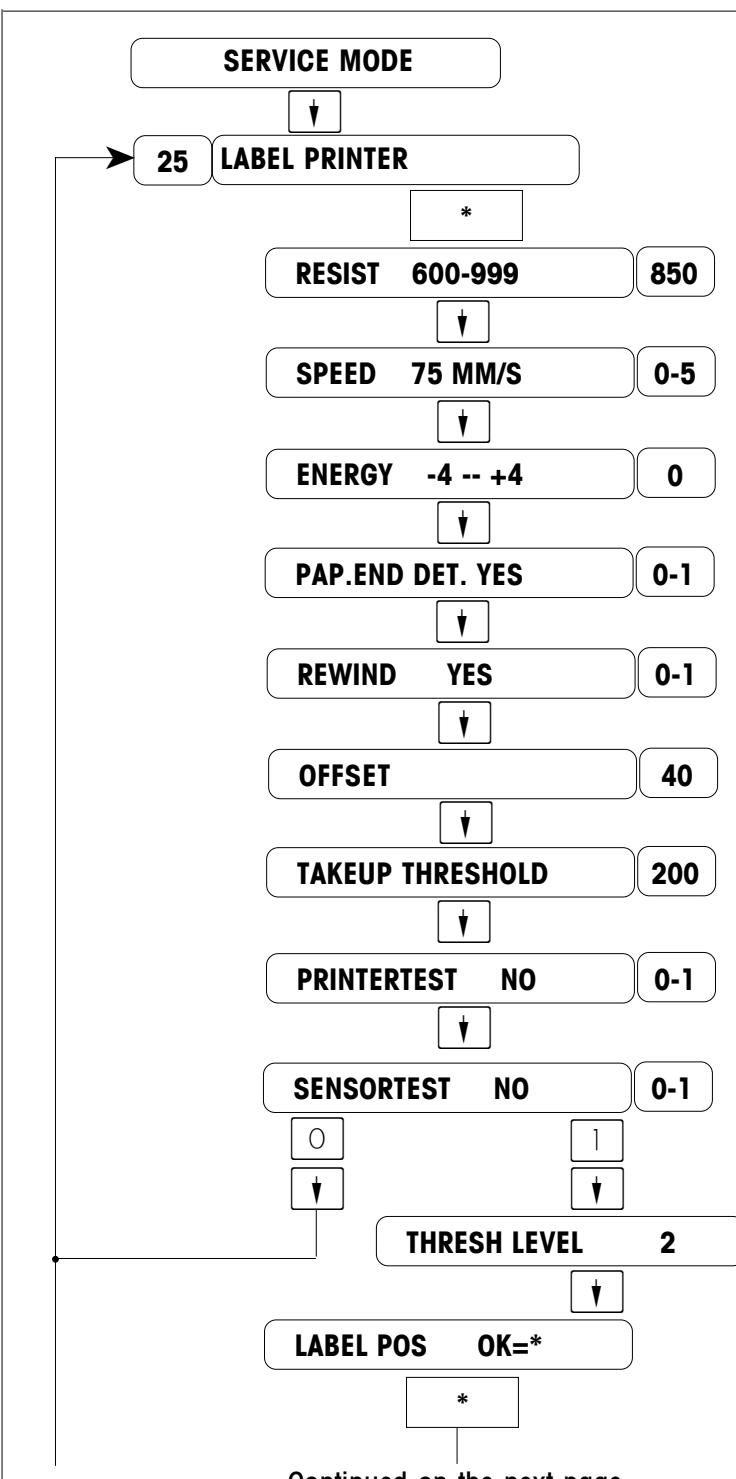
Conduct gap sensor test

0= No; 1=Yes

Slowly remove the ticket and insert the ticket again in 10 seconds. The test result will be shown.

Label Printer Test

This function is used to test label printer hardware and adjust printer parameters.



Enter the preset code 25

Select the Ohms Rating marked on the Print Head.

Select the printer speed:
0=75mm/s; 1=70mm/s; 2=65mm/s;
3=60mm/s; 4=55mm/s; 5=50mm/s

Enter print density (use CNT/WT CHANGE key to input negative value)

Enable paper end detecting (i.e. enable the take label sensor)

0= disable; 1=enable

Enable rewind feature

0= disable; 1=enable

Enter offset length in mm (Eject distance)

Enter takeup threshold value, used on adjusting the advantage of take label sensor.

Conduct printer test (To print out test ticket)

0= No; 1=Yes

Conduct gap sensor and take label sensor test

0= No; 1=Yes

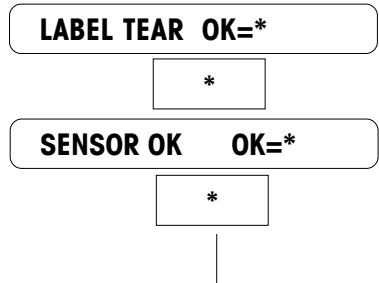
Select the threshold of the label
0~5 means 2/8,3/8,4/8,5/8,6/8,7/8

Lead the label to the start position manually. The scale will test gap sensor.

Continued on the next page

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Continued from the last page



The scale will test take label sensor

The scale will issue two or three labels
and show the test results.

5

Troubleshooting

Troubleshooting Guide

Following is a list of symptoms that could occur, and the recommended action to correct the problem.

SCALE INOPERATIVE/BLANK DISPLAYS

1. Check AC power at outlet.
2. Check Voltage on Main Logic PCB. If voltages are zero, check Power Supply.
3. If test point voltage is good replace Main Logic PCB.
4. Check Display Cable on Main Logic PCB and Operator Display PCB. Check Display PCB.

KEYBOARD INOPERATIVE

1. Check keyboard connection on Main Logic.
2. Replace Keyboard.

SCALE WON'T ZERO (DISPLAY "PUT PLATTER ON" or "ZERO NOT CAPTURE")

1. Check platter and spider for obstructions. Turn power off, then back on.
2. Recalibrate.
3. Check Load Cell supply voltage.
5. Replace Load Cell.

LOSING PROGRAMMED DATA

1. Check Error Report of Service Mode.
2. Check Main Logic voltage at test points.
3. Replace Main Logic PCB.

PRINTER WON'T DELIVER LABEL

1. Check printer for obstructions.
2. Check if there is a label which has not been removed.
3. Check Take Label sensor obstructions.
4. Clean Take Label sensor.
5. Test Take label sensor with SENSOR TEST in Service Mode.
6. Check harness from Printer to Main PCB.
7. Check label stepper motor.
8. Replace Main Logic PCB.

INCORRECTLY INDEXES LABELS

1. Check label installation.
2. Check label format and label size.
3. Clean Gap Sensor Lens.
4. Check and clean platen roller, stripper bar, and delivery path using MT cleaning pen.
5. Adjust label Gap Sensor through SENSOR TEST in Service Mode.
6. Replace Gap Sensor Assembly.
7. Replace Main Logic PCB.

LABELS DARK

1. If labels are printed correctly, but are excessively dark, check the ENERGY setting in Service Mode.
2. Check printhead harnesses for loose wires.

LABELS MISSING DOTS

1. If the labels are streaked by lines from top to bottom, replace the Printhead.
2. If characters are cut off, check label format programming. If OK, replace printhead.

LABELS ARE EXCESSIVELY LIGHT/DARK

1. Check Print SPEED and ENERGY setting in Service Mode.
2. Check with other known good label stock.
3. If light print, check and clean printhead resistor line and platen roller.
4. Check printhead harness for loose wires.
5. Check Main Logic PCB voltages. If OK, replace Printhead.

LABEL PRINT IS MOTTLED WITH LIGHT SPOTS

1. Check with other known good label stock.
2. Check and clean printhead resistor line and platen.
3. Replace printhead.

LABELS NOT STRIPPING CORRECTLY

1. Check with other known good label stock, e.g. Nashua.
2. Check label format programming.
3. Check rewind spool for wear.
4. Check Gap Sensor and Take Label Sensor with SENSOR TEST in Service Mode.

LABELS PRINTED EVEN IF ONE IS NOT YET TAKEN

1. Check PAP. END DET. option in Service Mode (Paper End Detection)
2. Check Take Label Sensor.
3. Check Main Logic PCB.

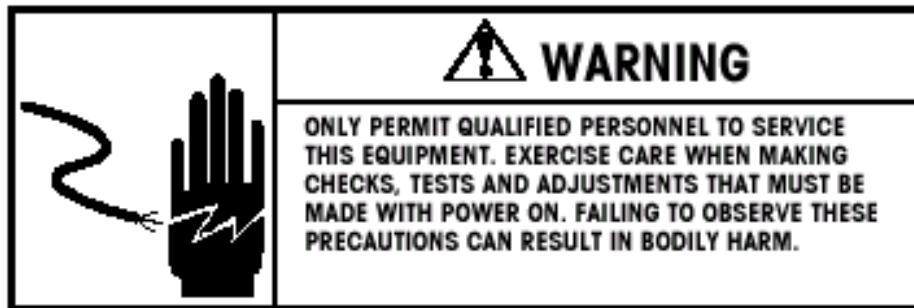
OUT OF LABELS ERROR

1. Make sure labels are threaded through the Gap Sensor.
2. Clean/Check Gap Sensor.
3. Check Gap Sensor through SENSOR TEST in Service mode.
4. Replace Gap Sensor.
5. Replace Main Logic PCB.

CAN'T COMMUNICATE WITH PC

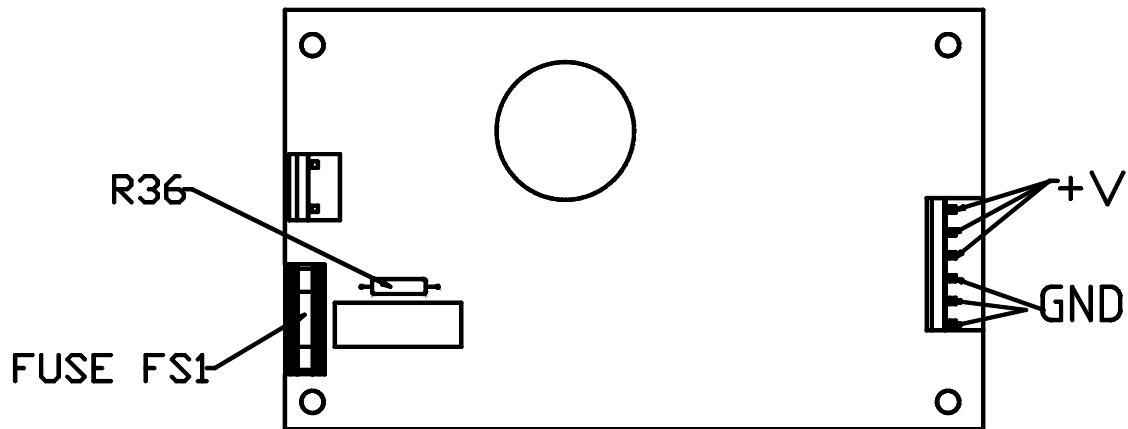
1. Test scale serial port through INTERFACE TEST in Service Mode.
2. Check the connection cable.
3. Check which port is used at PC.
4. If using SPCT, check the ethernet port.

POWER SUPPLY



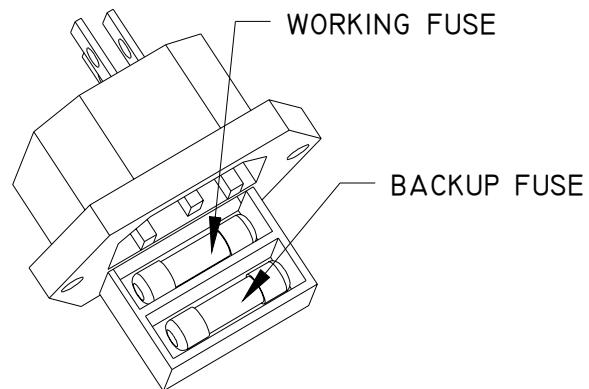
Place the Power Switch to the OFF position. Remove the platter, spider, and top cover (Refer to Chapter 6). Disconnect the operator display harness and keyboard harnesses. Remove the DC power harness. Place the power switch to ON, then check the +24VDC output voltage from the Power Supply terminal between the terminals marked +V and GND, as shown in following Figure. The acceptable output range is +24VDC +/- 0.50 VDC.

If the voltage is normal, the Power Supply should be good, and the problem should be suspected as being in the Main Logic PCB or a component that connects to the Main Logic PCB.



If the output voltage is zero, check the 120 VAC input voltage. Place your positive meter lead on the lower pin of fuse FS1 and your negative meter lead on the right pin of R36. If the correct AC input voltage is present, but there is no +24 VDC output, replace the Power Supply.

If no voltage is present, check the fuse (240VAC 4A) on the power supply. If the fuse is OK, check AC input at the Line Cord Jack between the Red wire and Black wire. If the 120VAC is present, suspect a defective power switch. If 120 VAC is not present at the jack, check the fuse (240VAC 3A) installed in the Line Cord Jack, as shown in the following Figure. If the fuse is OK, verify voltage is present at the AC wall outlet.



Main Logic PCB for type 8442-X300



The Main Logic PCB receives +24VDC from the Power Supply and uses this to supply +10VDC and +5VDC to other components. The Main Logic PCB controls all functions in the unit including the thermal printer. Inputs and Outputs to the Main Logic include the Label Taken Sensor, Gap Sensor, Printhead, Stepper Motor, Rewind Motor, Load Cell and etc. The following Figure shows the locations of the various components and connectors on the Main Logic PCB.

Check the voltage between the left pin of F1 and the left pin of F4, the correct range is +10VDC +/- 0.25VDC

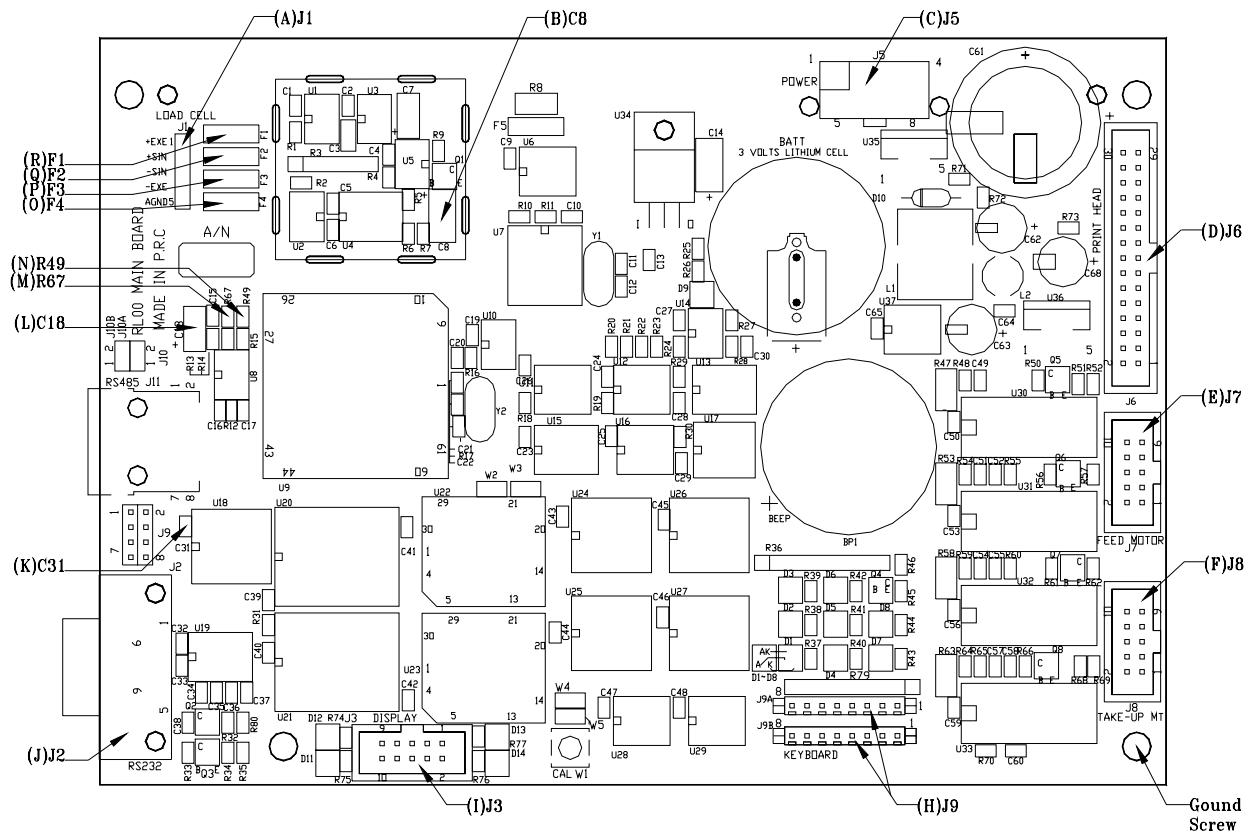
Check the voltage between two terminal of C18, the correct range is +2.8VDC-3.1VDC

Check the voltage between two terminal of C31, the correct range is +5VDC +/- 0.25VDC

If the volages are not within the range specified, and the Power Supply voltage is correct, replace the Main Logic PCB.

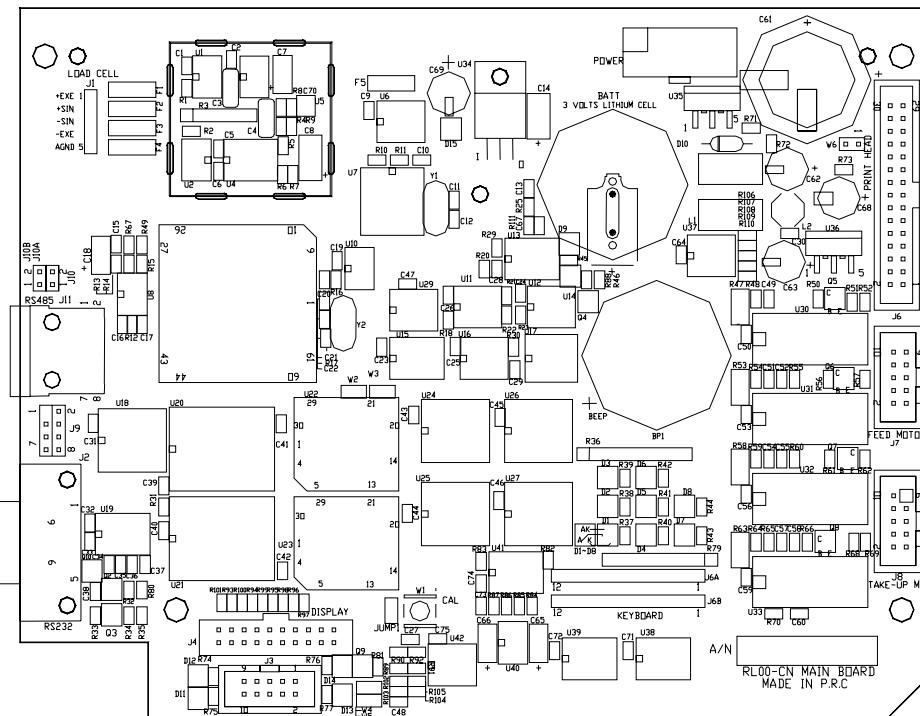
NOTE: WHEN REPLACING THE MAIN LOGIC PCB, THE UNIT MUST BE REFLASHED.

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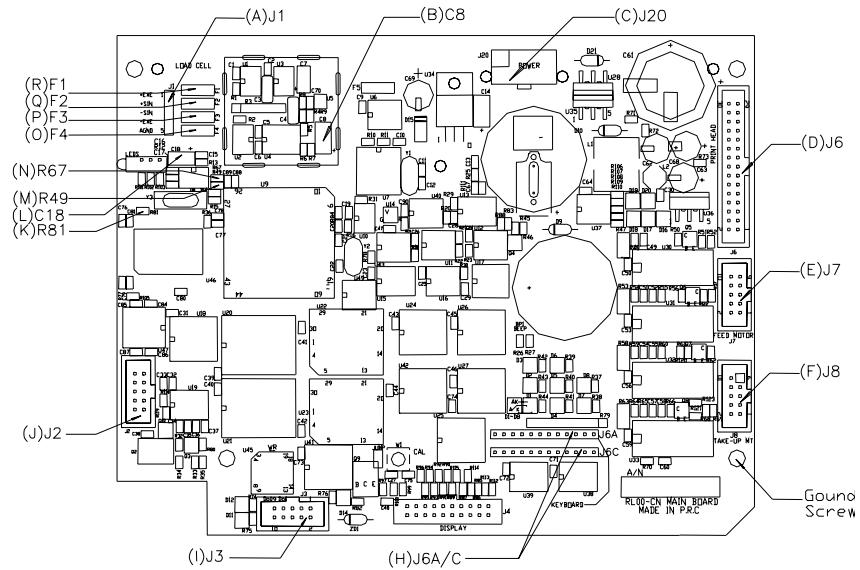


Ref	Description	Ref	Description
A	Load Cell connector J1	J	Serial Port Connector J2
B	C8, not used.	K	C31, +5VDC test point
C	J5, +24VDC supply from Power Supply	L	C18, +3VDC test point
D	Printhead connector J6	M	R49, Gap Sensor test point
E	Stepper motor connector J7	N	R67, Take Label Sensor test point
F	Rewind motor connector J8	O	F4, -EXC test point
G	Ground	P	F3, -SIG test point
H	Keyboard connector J9A/B	Q	F2, +SIG test point
I	Display connector J3	R	F1, +EXC test point

Main Logic PCB for type 8442-X310&H

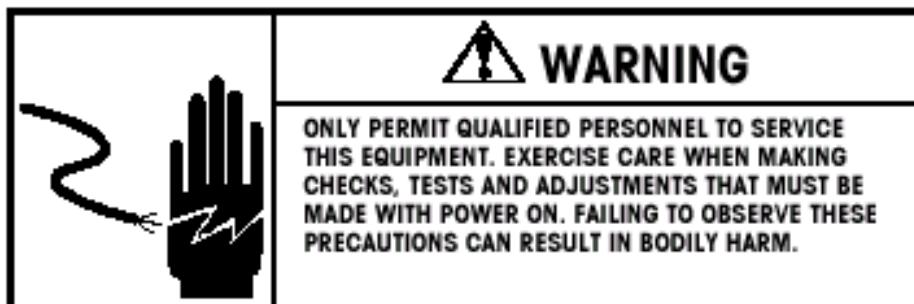


Main Logic PCB for type 8442-X6XX&H



Ref	Description	Ref	Description
A	Load Cell connector J1	J	Serial & Ethernet port J2
B	C8,Ref Voltege test point	K	R81,+5VDC test point
C	J20,+24VDC supply	L	C18,+3VDC test point
D	Printhead connetor J6	M	R49,Gap Sensor test point
E	Stepper motor connetor J7	N	R67,Take Table Sensor test point
F	Rewind motor connector J8	O	F4,-EXC test point
G	Ground	P	F3,-SIG test point
H	Keyboard connector J6A/C	Q	F2,+SIG test point
I	Display connector J3	R	F1,+EXC test point

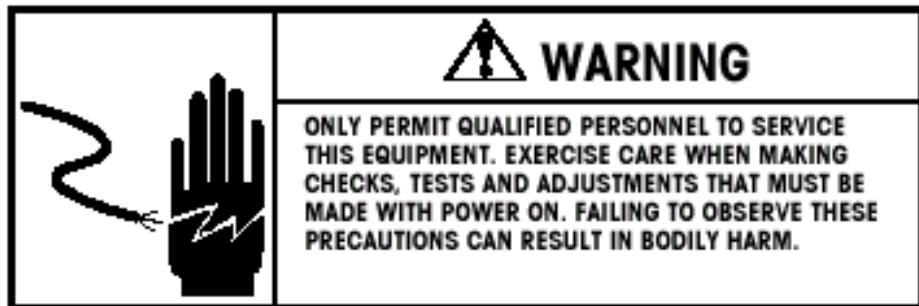
Motor



The Stepper Motor can be tested by disconnecting it from the Main Logic PCB at connector J7. Connect your ohm meter between pin 1 and 2 of Stepper Motor connector. You should read between 9 ohms and 11 ohms. Next, connect your ohm meter between pin 3 and 4 of Stepper Motor connector. You should read between 9 ohms and 11 ohms. If the motor checks good and does not appear to have a mechanical bind, replace the Main Logic PCB.

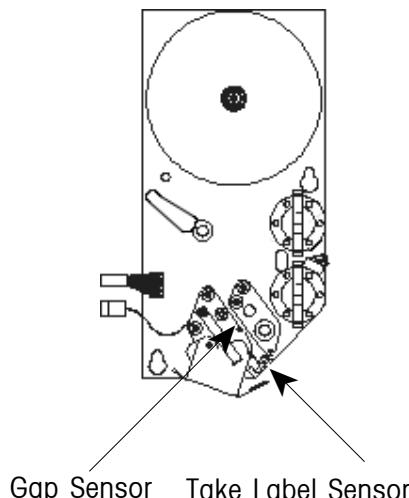
The Rewind Motor can be tested by disconnecting it from the Main Logic PCB at connector J8. Connect your ohm meter between pin 1 and 2 of Stepper Motor connector. You should read between 9 ohms and 11 ohms. Next, connect your ohm meter between pin 3 and 4 of Stepper Motor connector. You should read between 9 ohms and 11 ohms. If the motor checks good and does not appear to have a mechanical bind, replace the Main Logic PCB.

Sensor



The Take Label Sensor detects the presence of an issued label in the printer to prevent multiple labels issuing in Prepack mode or sale mode when the labels are being stripped. The sensor locations are shown in the following Figure. Before troubleshooting Take Label problems, always make sure the sensor lens are clean. The Take Label Sensor can be tested as follows. Place your positive meter lead on the upper pin of R67 and your negative meter lead on Ground. The reading should be above +2.1VDC when the take label sensor is not blocked and below +0.8VDC when it is blocked. If the Take Label Sensor fail this test, replace it.

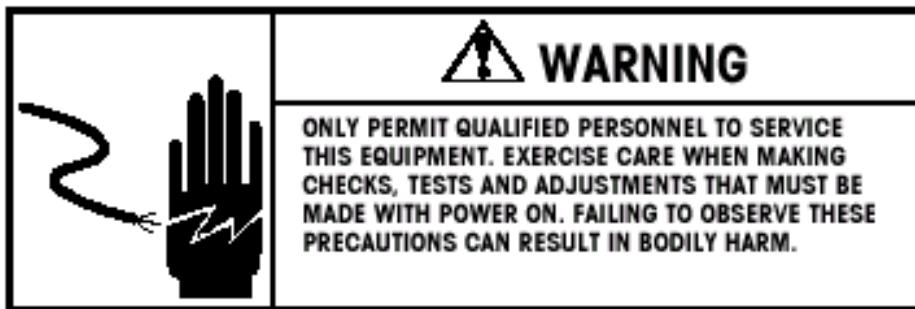
Tip: The Take Label Sensor can be disabled via by disabling paper end detecting in Service Mode.



The Gap Sensor is used to detect the gaps between die cut labels and is used as a reference point for indexing the labels. Low stock conditions are also detected using the Gap Sensor. The Gap Sensor can be adjusted automatically while running the Sensor Test in Service Mode.

If the automatic adjustment fails to correct an indexing problem, insert a piece of the customer's label liner in the Gap Sensor. Place your meter on volts and turn the Power on. Put the positive meter lead on the upper pin of R49 and the negative on Ground. Note the meter reading. Then install a piece of label liner and label stock in the label gap sensor. This reading should be at least 1 volt higher value. (Example: 1 VDC liner only, and 2 VDC with liner and label blocking sensor). If the Gap Sensor fails this test, replace the sensor.

Load Cell



The Load Cell can be tested for proper analog voltage input and millivolt output by measuring the voltage at connector J1 on the Main Logic PCB. To check the input voltage across +EXC & -EXC, place your meter on volts and put the positive lead on the left pin of F1 and the negative lead on the left pin of F4. You should be reading a steady +10VDC +/- 0.25VDC.

If the Excitation voltage is good, the signal output can be checked across +SIG & -SIG. Set the meter to read in millivolts (mV). Put the positive lead on the left pin of F2 and negative lead on the left pin of F3. With no weight on the platter, you should read zero data. As you add weight to the platter, the voltage should rise and be linear if equal weight is added each time. If the output is linear and correct, but no weight is displayed, replace the Main Logic PCB. If there is no output from the load cell, but correct input voltage, replace the load cell.

Display PCB

(TYPE 8442-XX00)



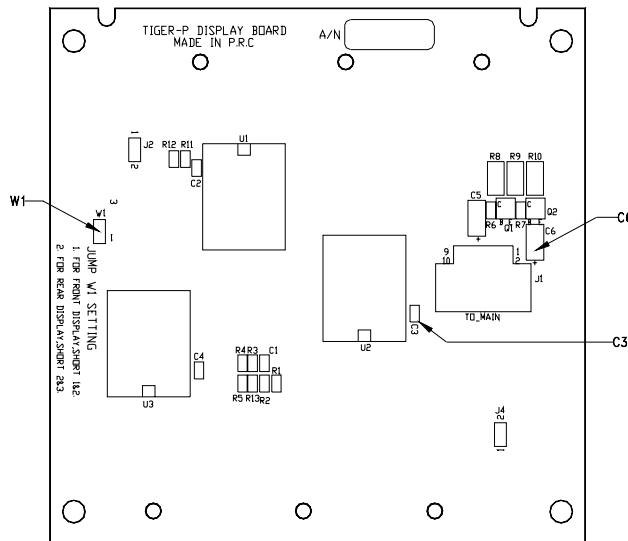
The following Figure shows the locations of the various components on the Display PCB.

Check the voltage between two terminal of C3, the correct range is +5VDC +/- 0.25VDC

Check the voltage between two terminal of C6, the correct range is +24VDC +/- 0.5VDC

If the correct voltage is present, but the display is blank, replace the Display PCB.

NOTES: SHORT W1 FOR OPERATOR DISPLAY PCB, OPEN W1 FOR CUSTOMER DISPLAY PCB



Warning Message

INPUT TOO BIG

The input is too big.

INPUT TOO SMALL

The input is too small.

TOO MUCH INPUT

The input is out of limit.

WRONG CODENR.

The code number is invalid.

KEY NO FUNCTION

The key has no function.

KEY BLOCKED

The key is disabled. Check the KEYBOARD CONFIGURE.

PLU NOT FOUND

The entered PLU number does not exist.

AG NOT FOUND

The entered Group number does not exist.

OPER.NOT FOUND

The entered Operator number does not exist.

LABEL NOT FOUND

The entered Label Format does not exist.

PLUNR IS OCCUP

You are trying to duplicate a PLU into an exist PLU number.

LABELNR. OCCUP

You are trying to duplicate a label format into an exist label format number.

AG NOT DELETABLE

This Group contains total data and can not be deleted.

OP NOT DELETABLE

This Operator contains total data and can not be deleted.

MEMORY FULL

Memory is full.

WEIGH AGAIN

You are trying to record one item twice. Remove the item from the platter and put a new item on the platter.

WRONG LABEL

The installed label roll does not match the configured label format.

LABEL MOVED

The stepper motor or the rewind motor is not working properly.

CHANGE PAPERROLL

The label roll is not installed or the label roll is empty.

TAKE LABEL OFF

Take off the current label before printing the next one.

NO FREE OX KEY

All the configured operator keys have been occupied.

PRINT TICKET

Print out the customer ticket before logging out.

OPEN CUST. TICK

You are trying to delete an operator who has total data.

OX NOT LOGGED-IN

The operator has not be assigned to an operator.

PAYMENT TOO LOW

The payment is less than the total amount.

NO FURTHER REG.

No further transaction has been recorded.

DISCOUNT IMPOSS

This PLU does not allow to be discounted. Check the PLU Discount configuration, or this PLU is in special offer.

TARE TOO BIG

The entered tare is too big.

PLU TARE ACTIVE

You are forbidden to override the PLU tare.

NO STABLE WEIGHT

The weight is not stable.

PUT PLATTER ON

The weight is too small and out of power up zero range.

ZERO NOT CAPTURE

The weight is too big and out of power up zero range.

WEIGHT TOO SMALL

The weight is too small to be printed.

ERROR TAKE-SENS

The take label sensor is not working properly.

ERROR POS_SENS

The gap sensor is not working properly.

ERROR INTERFACE

The serial port is not working properly.

Error Message

Listed below are the possible error codes are listed. When an error code appears, the scale should be switched off and on. In many cases the error will disappear.

There are 3 different kinds of error messages:

Error Status 1:

Warning! After the warning the scale can still be used.

Error Status 2:

Press "CODE" key. Change to one of the CODE menu. Back to normal operation mode.

Error Status 3:

Press "CODE" key and enter SERVICE MODE, after returning to normal operation mode the scale will perform RESET.

Error Message	Reason	Status	Action
ERROR 300 PRINTER	Printer driver defect	2	Replace Main Logic PCB
ERROR 301 PRINTER	Printer driver defect	2	1 Reflash the software 2 Replace Main Logic PCB
ERROR 307 PRINTER	Printhead defect	2	1 Replace printhead 2 Replace printhead harness 3 Replace Main Logic PCB
ERROR 308 PRINTER	Printer driver defect	1	Replace Main Logic PCB
ERROR 310 PRINTER	Printer driver defect	2	Replace Main Logic PCB
ERROR 101 AP	Real Time Clock defect	1	Replace Main Logic PCB
ERROR 400 CELL	Load Cell defect	-	1 Replace Main Logic PCB 2 Replace Load Cell
ERROR 401 CELL	Load Cell defect	-	1 Recalibrate 2 Replace Main Logic PCB 3 Replace Load Cell
ERROR 200 DATABASE	Data bank error	3	Reset RAM
ERROR 201 XX DATABASE	XX Data error	2	1 Reset RAM 2 Delete Data XX
ERROR 202 XX DATABASE	XX Data error	2	1 Reset RAM 2 Delete Data XX
ERROR 203 YY DATABASE	YY Data error	2	1 Reset RAM 2 Configure YY
ERROR 205 DATABASE	Data bank error	3	Reset RAM

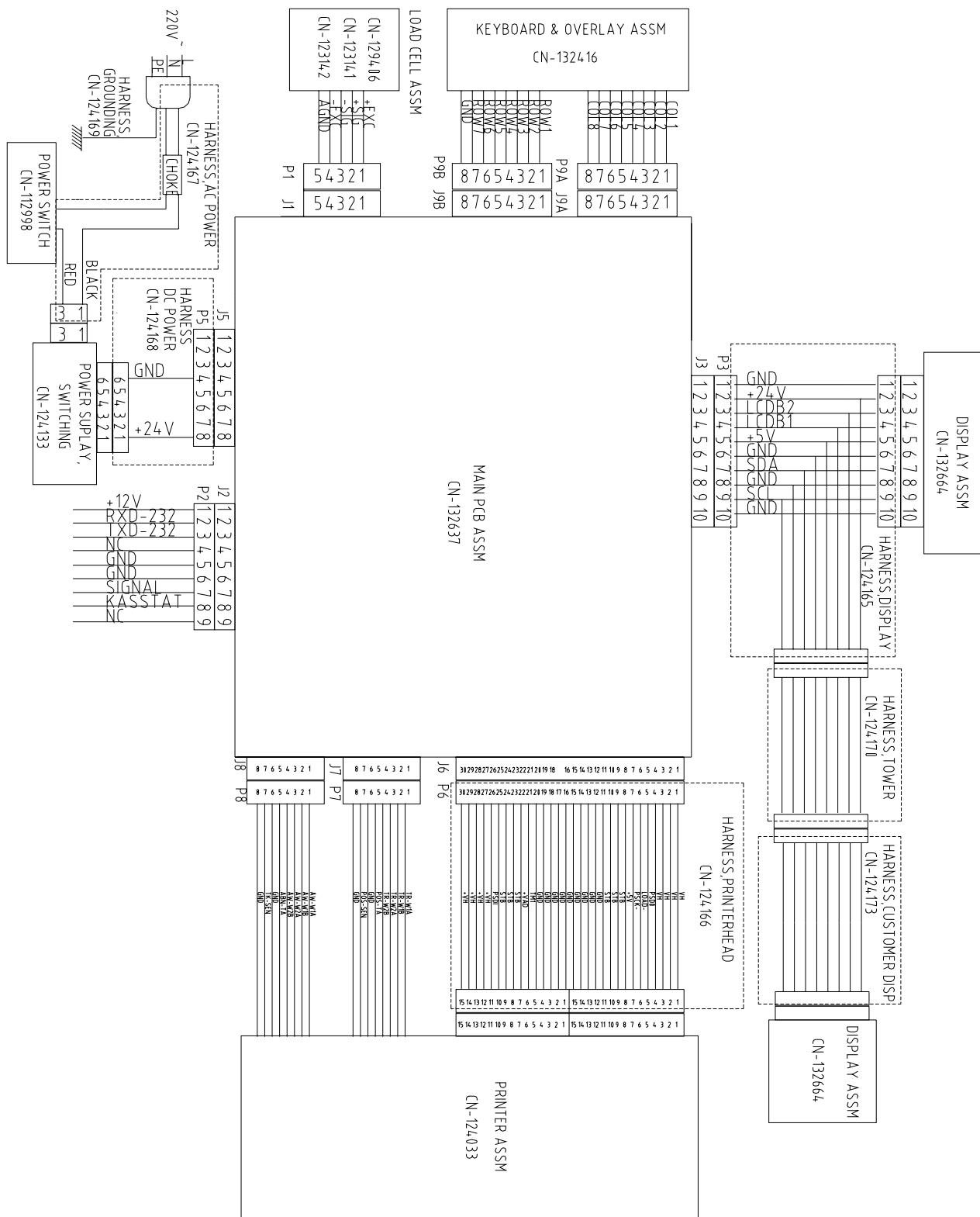
Meaning of XX

- | | |
|--------------------|-------------------|
| 01 Operator | 07 Group data |
| 02 Ticket data | 13 Label data |
| 03 Time total data | 15 Date text data |
| 04 Text data | 21 PLU label data |
| 05 Barcode data | 23 Store address |
| 06 Tare data | 24 PLU data |

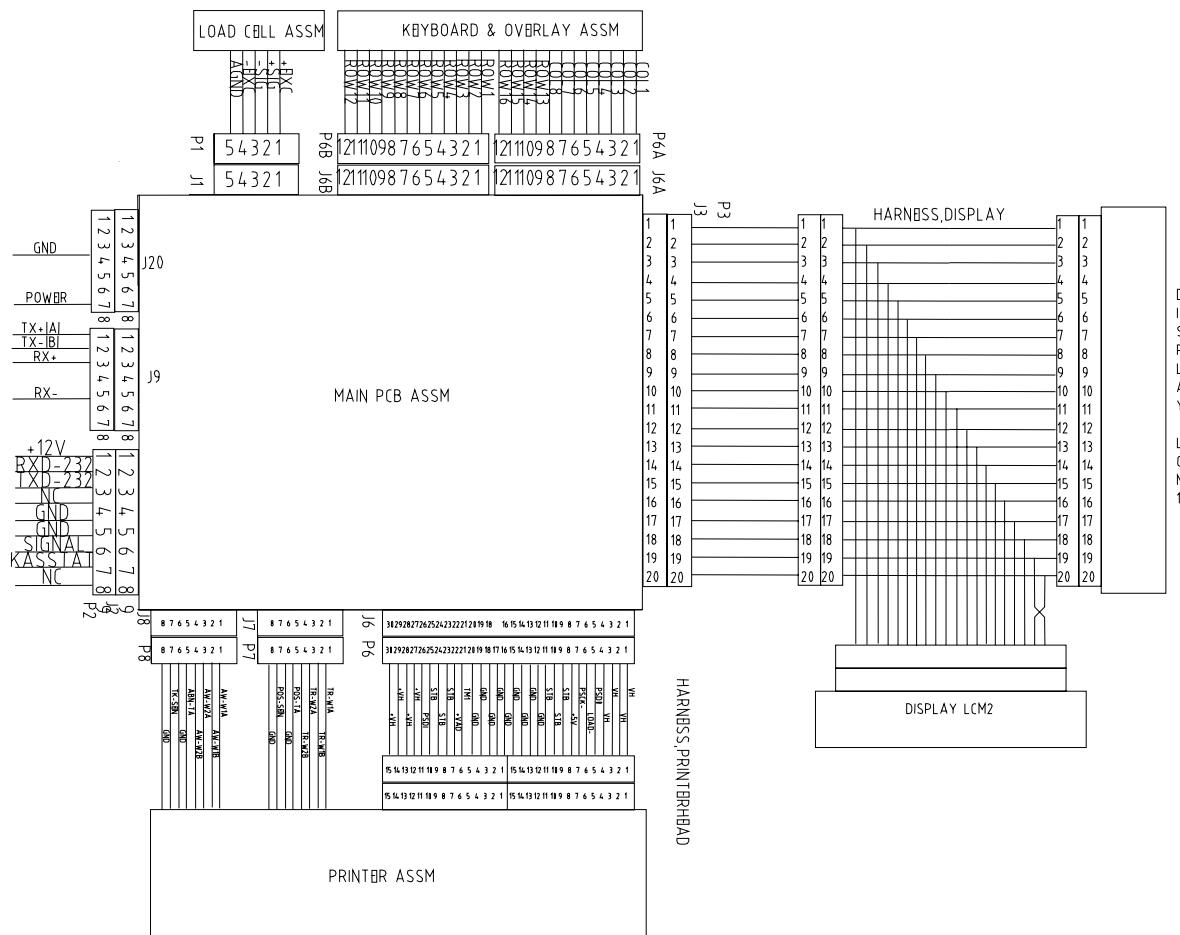
Meaning of YY

- | | |
|-----------------------|-----------------------|
| 01 Operator Configure | 04 Password Configure |
| 03 Keyboard Configure | |

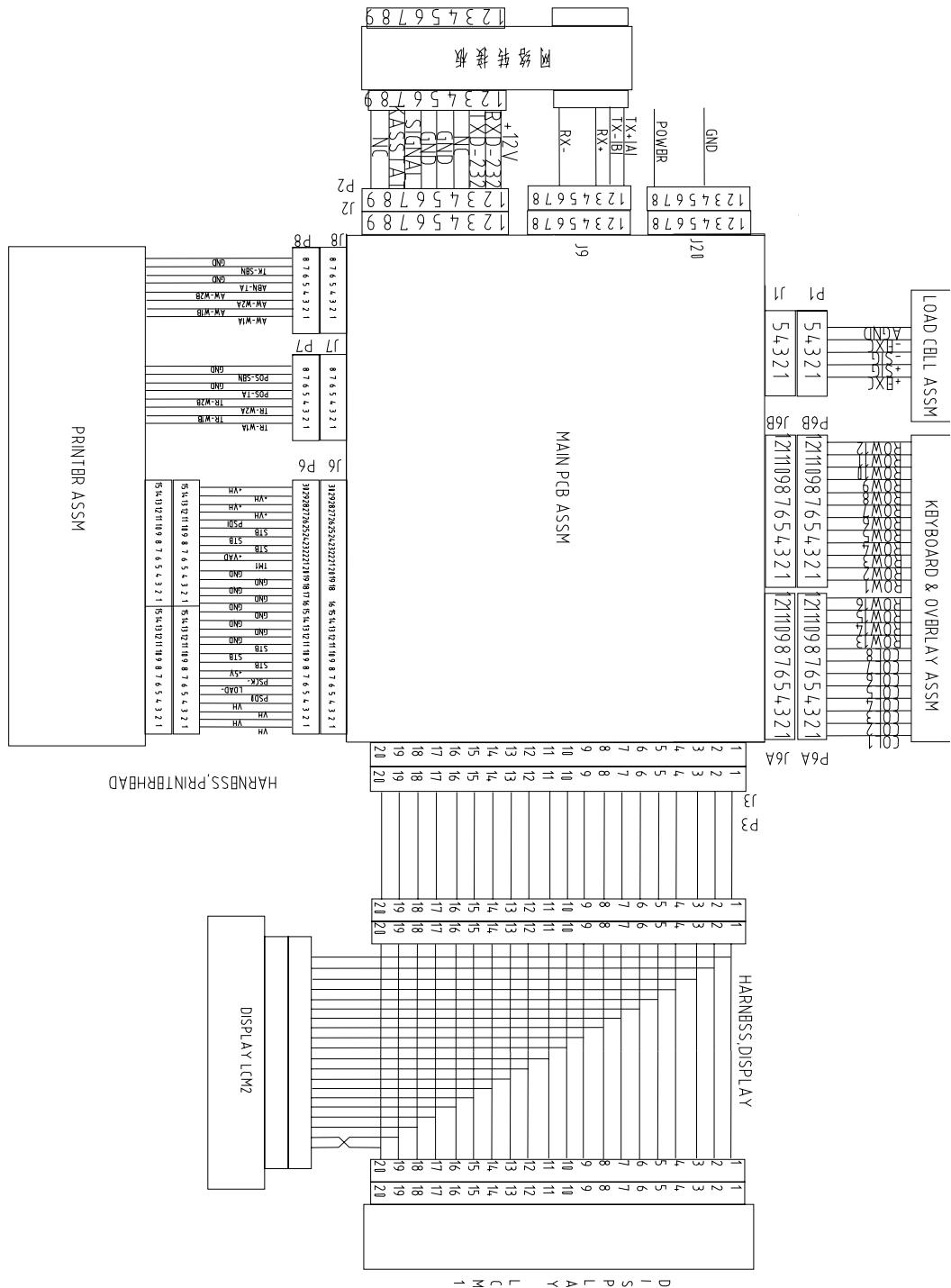
Interconnecting Diagram for type 8442-X300



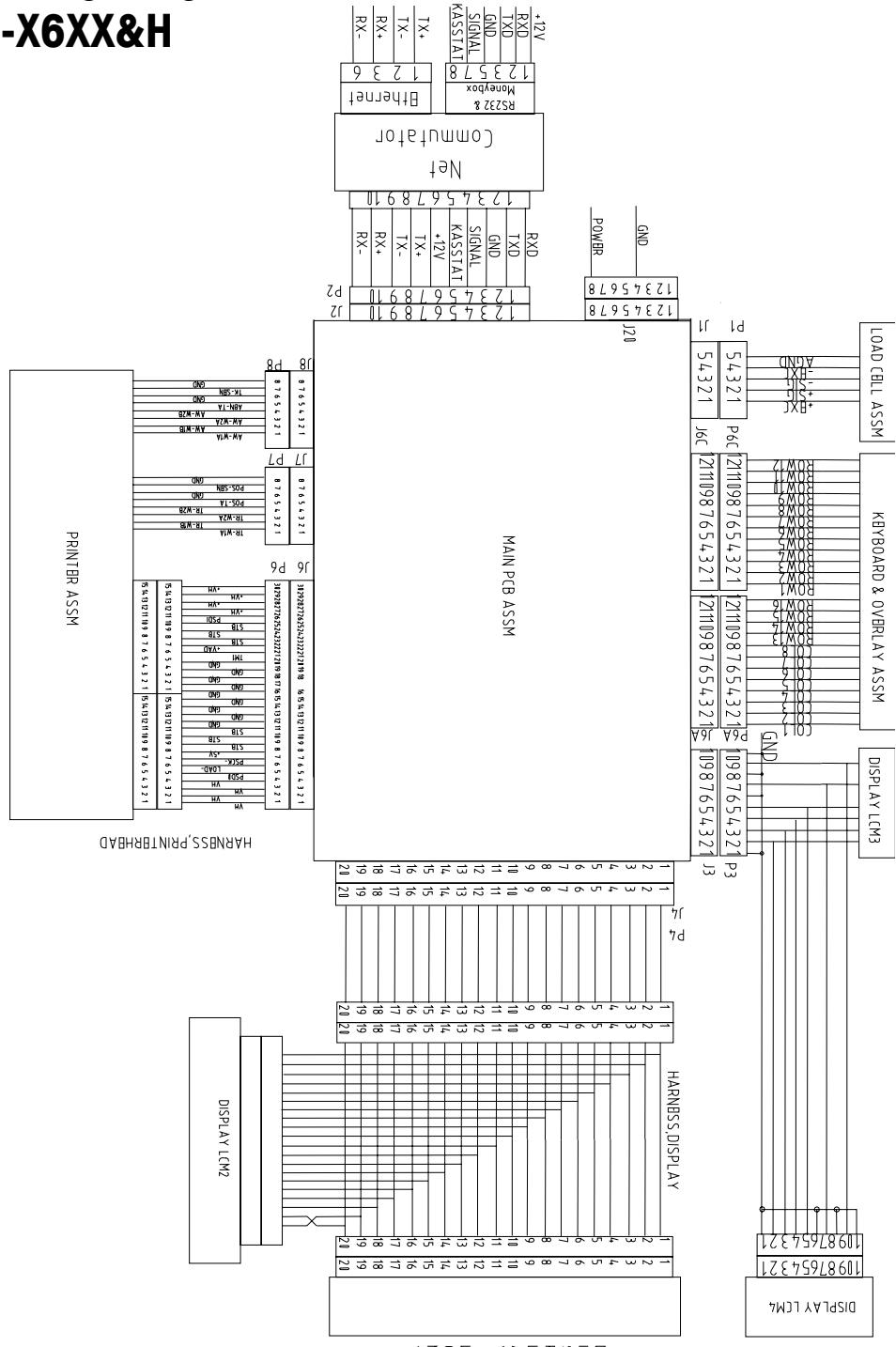
Interconnecting Diagram for type 8442-X310



Interconnecting Diagram for type 8442-X310H



Interconnecting Diagram for type 8442-X6XX&H



NOTE:

TYPE 8442-X600 Right of the keyboard pin must according the sign "1" on keyboard pin in the main PCB. And the display harness must connect the J3P3 in the main PCB.

TYPE 8442-X610&H According the diagram to connect the keyboard, and the display harness must connect the J4P4 in the main PCB.

METTLER TOLEDO 8442 Technical Manual

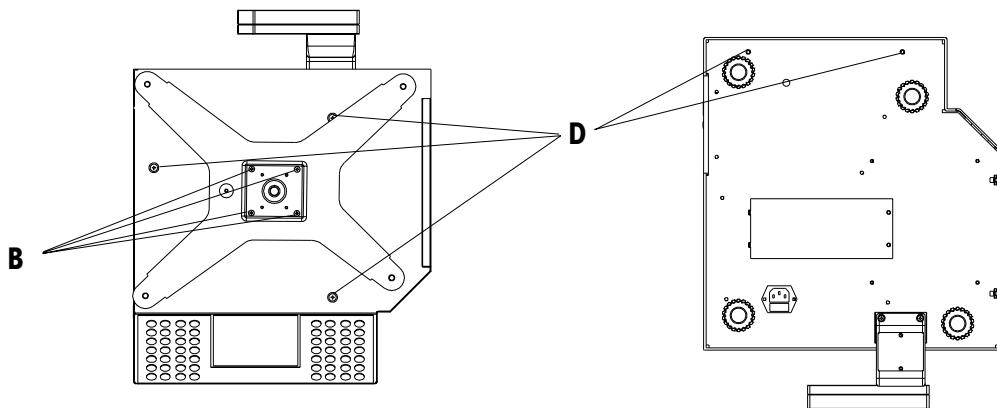
6

Parts Replacement

Cover Removal



- A Turn the scale power off by placing the power switch to the OFF position (Press the "0" on the power switch). Disconnect power cord from outlet. Then remove the platter.
- B Remove the 4 Phillips Head screws, then remove the upper spider.
- C Open the printer door.
- D Remove the 3 top Philips Head screws, then remove the 2 screws underneath the scale base.
- E When removing the top cover, slightly lift the cover and disconnect the keyboard harnesses on the Main Logic PCB and disconnect the display harness on the front display PCB before lifting the cover off the base.

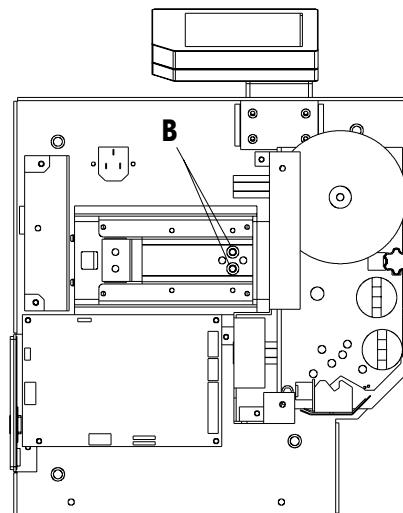


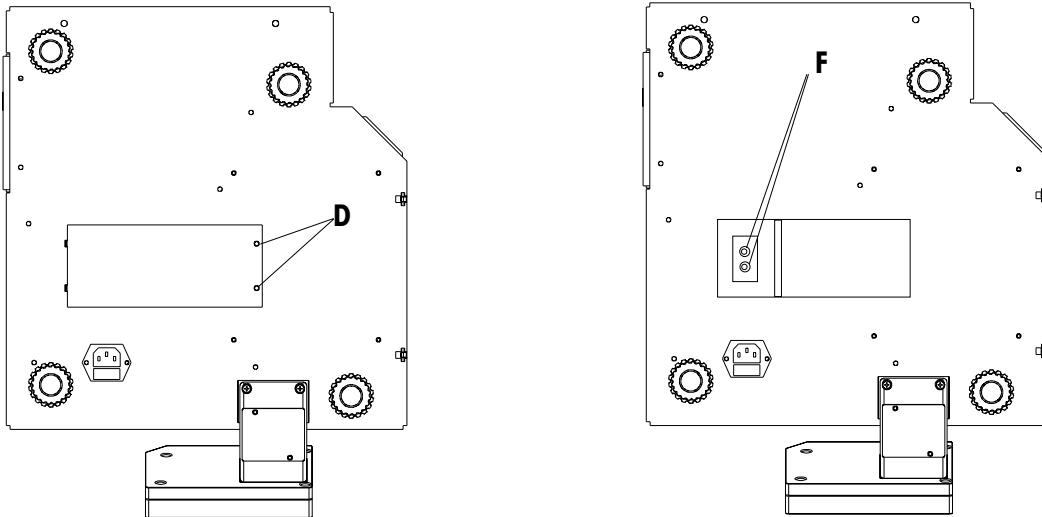
Load Cell Replacement



- A** Turn the scale power off and disconnect power cord from outlet and remove the platter, upper spider and top cover.
- B** Disconnecting the Load Cell harness, then remove the two socket head Allen screws on the lower spider with a 6mm Hex Wrench.
- C** Remove the lower spider and the upper load cell spacer .
- D** Remove the two Phillips head screws underneath the scale base, then remove the battery cover.
- E** Remove the two socket head Allen screws inside the battery box.
- F** If the load cell is removed or replaced, the load cell and the lower spider must be installed square to the base. The capscrews should be tightened to 8Nm (metric Newton-Meters or 70 in-lb or 6 ft-lb) with a torque wrench.

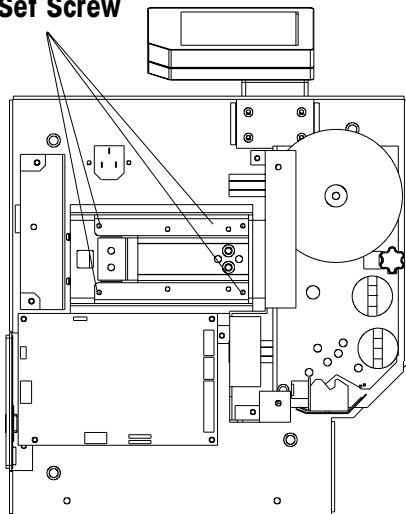
**NOTE: IF THE LOAD CELL IS REPLACED, THE OVERLOAD
STOPS MUST BE CHECKED AND ADJUSTED TO FACTORY
SPECIFICATIONS AS DESCRIBED IN THE NEXT SECTION.**





Overload Stops

Overload Stop Set Screw

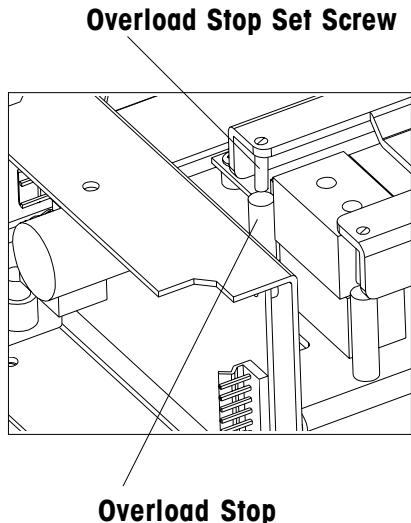


If the Load Cell, or lower Spider is replaced, the overload stop gaps must be checked and adjusted per factory specifications. The overload protection is by set screws in the lower spider which are designed to contact stops on the scale base in the event of an overload condition.

NOTES: FAILURE TO PROPERLY CHECK AND SET THE OVERLOAD GAPS MAY RESULT IN SEVERE DAMAGE TO THE LOAD CELL IN THE EVENT OF AN OVERLOAD CONDITION.

To check the spider overload stop gaps, insert the proper size feeler gauge in between the overload stop set screw and the overload stop on the scale base, as shown in the following Figure. Gauges can be made using the appropriate size of music wire. The music wire should be bent into a hook shape to check the gaps. If the gap is set properly a slight snap and drag will be felt when pulling the hooked end through the gap. If a slight snap is not felt, the gap is too wide, or if the drag is excessive, the gap is too narrow. To adjust the gap, turn the overload set screw in or out with a 5mm Hex Wrench until a the slight snap (drag) is felt when pulling the gauge through. Refer to the following Figure for overload stop positions and gap specifications.

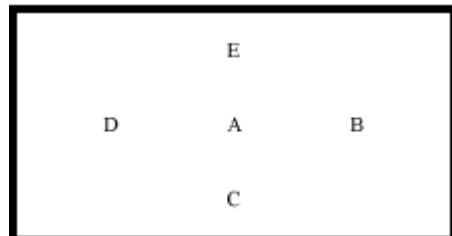
If any of the overload stops are adjusted, remove the screws, clean off residue from threads, then apply Loctite to the threads to prevent vibration from turning the set screws. Re-adjustment is not required if the top cover or upper spider is removed and reinstalled.



Gap Position	Capacity = 6kg	Capacity = 15kg or 30lb
A (mm/inch)	0.9/0.035	1.2/0.047
B (mm/inch)	0.75/0.030	0.9/0.035

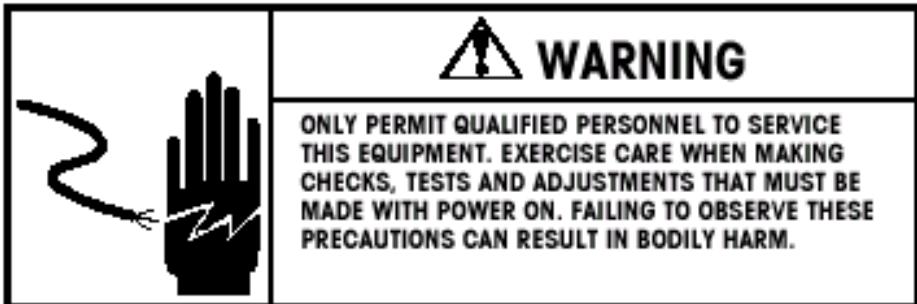
Shift Test

The shift test should be performed after calibration. Place 25 lb of test weight on the scale platter at point A, as shown in the following Figure. Proceed with the test at points B through E. Points B through E are midway between the center of the platter and the edge of the platter. The NIST H-44 acceptance tolerance is ± 0.015 lb of any of the points B through E compared to A.

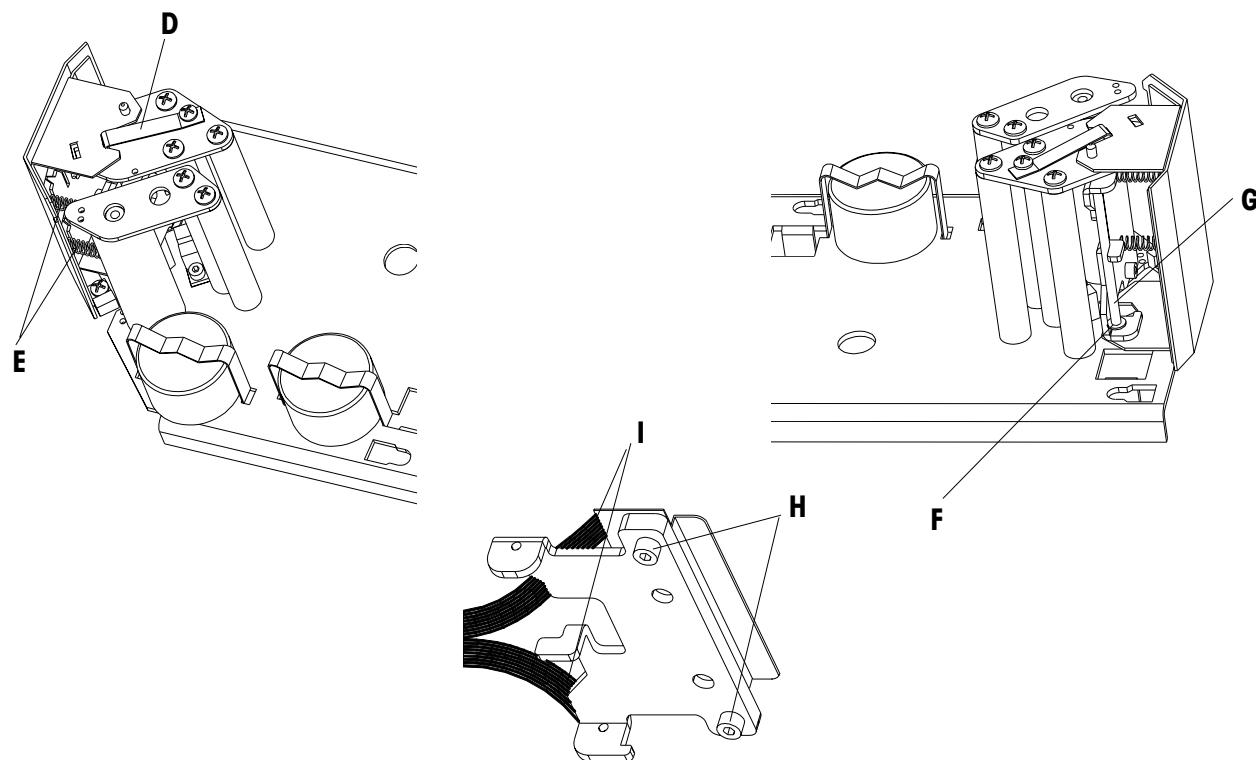


If the scale fails to meet the specified tolerance at one or more test points, check the load cell overload stop screws for proper adjustment, check top scale cover for proper seating and possible interference with sub-platter. The Spider and load cell spacer must be properly centered to avoid interference with top cover. If none of the above conditions exist, replace the load cell, recalibrate the scale, and recheck the shift.

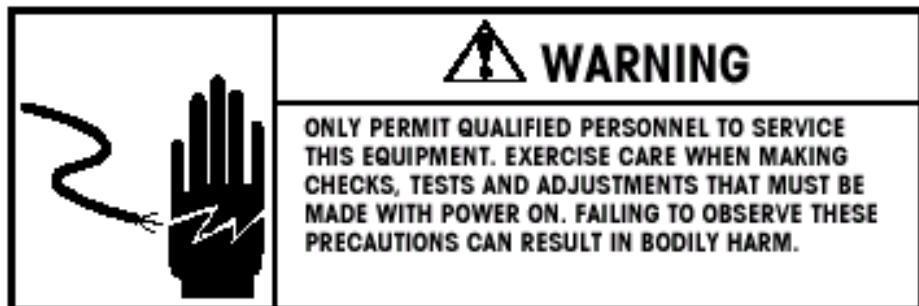
Printhead Replacement



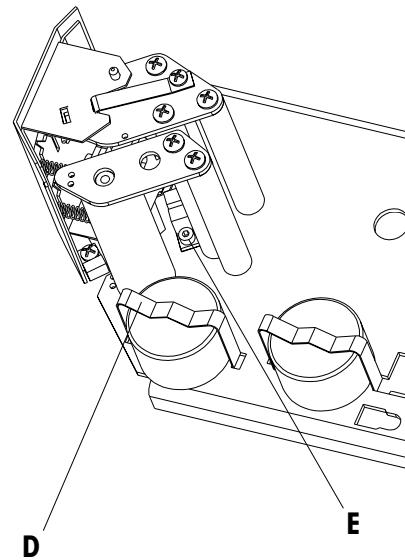
- A** Turn the scale power off. Disconnect power cord from outlet. Then remove the platter, upper spider and top cover.
- B** Disconnector the Printhead harness, Stepper motor harness and Rewind motor harness on Main Logic PCB.
- C** Remove the socket head Allen screw and the printer holder. Take out of the printer from scale base.
- D** Open printhead by pressing green button on the printhead.
- E** Then remove the two springs with needle nose pliers
- F** Remove the wash with a pliers.
- G** Then remove the shaft downside.
- H** Remove the two socket head Allen screws with a 2.5mm Hex Wrench.
- I** Disconnect Printhead harness from printhead, then replace the printhead.



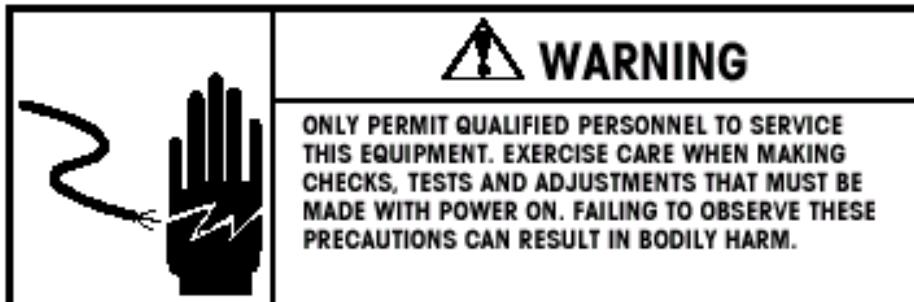
Gap Sensor or Stepper Motor Replacement



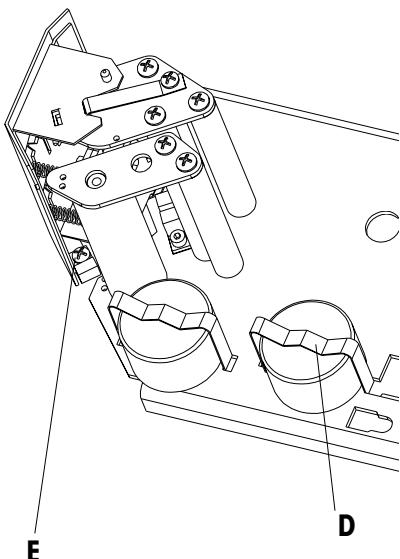
- A** Turn the scale power off. Disconnect power cord from outlet. Then remove the platter, upper spider and top cover.
- B** Disconnector the Printhead harness, Stepper motor harness and Rewind motor harness on Main Logic PCB.
- C** Remove the socket head Allen screw and the printer holder. Then take out of the printer from scale base.
- D** Remove the Stepper motor clip with pliers. Then take off the Stepper motor.
- E** Remove the socket head Allen screw with a 2.5mm Hex Wrench. Then take off the Gap sensor.
- F** Open the harness clip underneath the printer, and replace the Stepper motor and Gap sensor harness.



Take Label Sensor or Rewind Motor Replacement



- A Turn the scale power off. Disconnect power cord from outlet, then remove the platter, upper spider and top cover.
- B Disconnect the Printhead harness, Stepper motor harness and rewind motor harness on Main Logic PCB.
- C Remove the socket head Allen screw and the printer holder. Then take out of the printer from scale base.
- D Remove the Rewind motor clip with pliers. Then take off the Rewind motor.
- E Remove the Philip Head screw and take off the Take Label sensor.
- F Open the harness clip underneath the printer, and replace the Rewind motor and Take Label sensor harness.



Replace components for type 8442-XX10H

(Reference the 8442-XX10H
base diagram)

A. TAKE DOWN MAIN PCB

Turn off the power, take out the power harness from the electrical outlet.

Take away the platter(18) and platter assembly(20).

Unscrew 2 bolts in the left door, take down left door(5).

Open right door(26).

Unscrew 4 bolts installed the front cover assembly.

Move the front cover(7), pull out the display harness from the main PCB J4.

Pull out the keyboard pin from the main PCB J6.

Take away front cover assembly.

Unscrew 2 bolts installed the netcard(46), and take down the netcard.

Pull out the load cell harness(J1) from the main PCB.

Pull out the communication harness (J11,J2) from the main PCB.

Pull out the power pin (J20) from the main PCB.

Pull out the feed paper motor harness(J7) and take paer motor harness (J8) from main PCB.

Pull out printer header harness (J6) from main PCB.

Pull put the harness (JUMP) for calibration from main PCB.

Unscrew 4 bolts installed the main PCB (6), take down it.

B. TAKE DOWN THE POWER SUPPLY PCB.

Turn off the power, take out the power harness from the electrical outlet.

Accoring above to take down the main PCB.

Pull out the AC power harness from the power supply (34).

Unscrew 4 bolts installed the power supply PCB.

Take down the power supply PCB.

C.TAKE DOWN THE FRONT DISPLAY ASSEMBLY.

Turn off the power, take out the power harness from the electrical outlet.

Take away the platter(18) and platter assembly(20).

Unscrew 2 bolts in the left door, take down left door(5).

Open right door(26).

Unscrew 4 bolts installed the front cover assembly.

Move the front cover(7), pull out the display harness from the main PCB J4.

Pull out the keyboard pin from the main PCB J6.

Take down the front cover assembly (7).

Unscrew the 6 bolts in the front cover assembly.

Take down the front display assembly.

Unscrew 4 screw in the front display liner(8), pull out display harness.

Unscrew 4 screw in the LCM (9),take out the LCM display.

D.TAKE DOWN USER DISPLAY PCB

Turn off the power,take out the power harness from the electrical outlet.

According above steps to take down the main PCB.

Pull out the display harness in the user display (9), unscrew 4 screws.

Take down user display LCM.

E.TAKE DOWN LOAD CELL.

Turn off the power,take out the power harness from the electrical outlet.

According above steps to take down front cover assembly (7) and main PCB assembly (6).

Snip the sealing (B11) on the upper of back cover, unscrew 2 sealing bolts (B10).

Disconnect 2 harness in the back of switch.(Remember the position of each wire)

Unscrew 3 screw in the back cover assembly.

Take down the back cover assembly (36).

Pull out load cell harness from the main PCB (6).

Unlace from load cell.

Unscrew hexagonal bolts (B3) in the bottom of scale,take down conglomeration (23).

Unscrew 2 hexagonal bolts (B6) through 2 holes in the bottom of the scale.

Take down the load cell (16) , load cell spacer (17) and structural matter (24).

F.TAKE DOWN KEYBOARD.

Turn off the power,take out the power harness from the electrical outlet.

Take away the platter (18) and platter assembly (20).

Unscrew 2 bolts in the left door, take down left door (5).

Open right door (26).

Unscrew 4 bolts in the upper of the front cover and bottom of it.

Move the front cover (7),pull out display harness from the main PCB.

Pull out the keyboard harness (J6) from the main PCB.

Take down the front cover assembly (7).

Tear the keyboard overlay (12), pay attention to clear the gluewater.

G.TAKE DOWN THE NET COMMUTATOR PCB.

Turn off the power,take out the power harness from the electrical outlet.

Unscrew 2 bolts in the port cover (4), takedown it.

Pull out power harness (45) from the outlet (39), pull out all the ethernet harness and RS232 harness.

Unscrew 4 bolts (B2) in the outlet holder (3),take down it.

Pull out the RS232 converter harness (43) and ethernet converter harness (41) from the commutator PCB (40).

Unsrew 1 bolt in the converter PCB,unscrew 2 hexagonal bolts in the D type 9 pin and holder, take down the commutator PCB (40).

7

Maintenance

External Cleaning

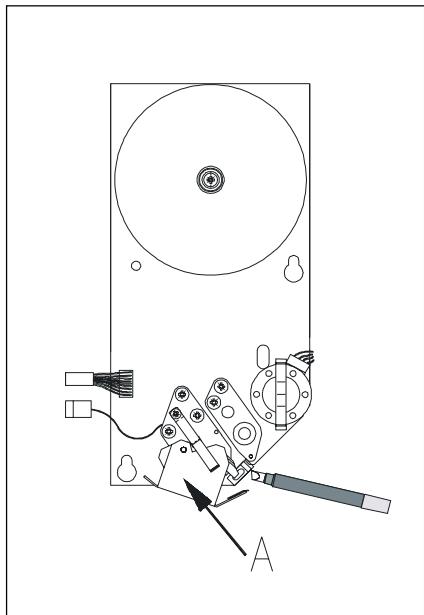


Turn the scale power off by placing the power switch to the OFF position (Press the "O" on the power switch). Disconnect power cord from outlet.

Use a soft clean cloth dampened with a mild detergent and water (or a mild cleaner) to wipe the exterior surfaces. Do not spray liquid directly on the unit. A mild spray cleaner can be used by spraying the cleaning cloth.

Cleaning Printhead





Turn the scale off by placing the power switch to the OFF position.
Disconnect power cord from outlet.

Open the plastic door on the right side of the scale.

Slide out the printer .

Press the trigger to open the printhead.

Clean the printhead with a soft clean cloth soaked in isopropyl alcohol, METTLER TOLEDO liquid cleaner or equivalent, or the METTLER TOLEDO Cleaning Pen.

Push back the printhead until it clicks.

Slide the printer in.

Close the plastic door.

Rezeroing

This scale is equipped with an automatic zeroing device, which compensates for small weight change. This device is not activated when a package tare is compensated. After cleaning the dirt from the platter with the scale on, the display can read :

- a negative value
- or "_____ " segments can be lit.

Solution :

Press the ZERO key

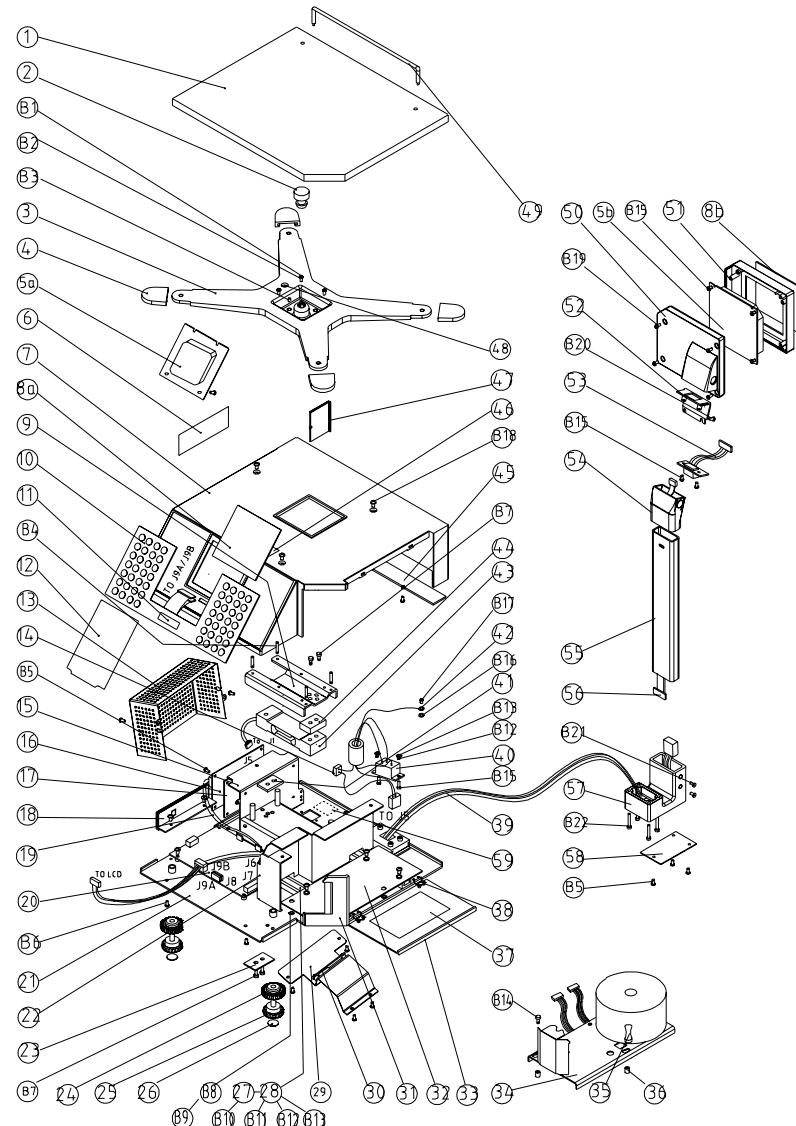
If the message appears again :

Turn the scale off and back on again with the main power switch.

8

Replacement Parts

8442-XX00 Base

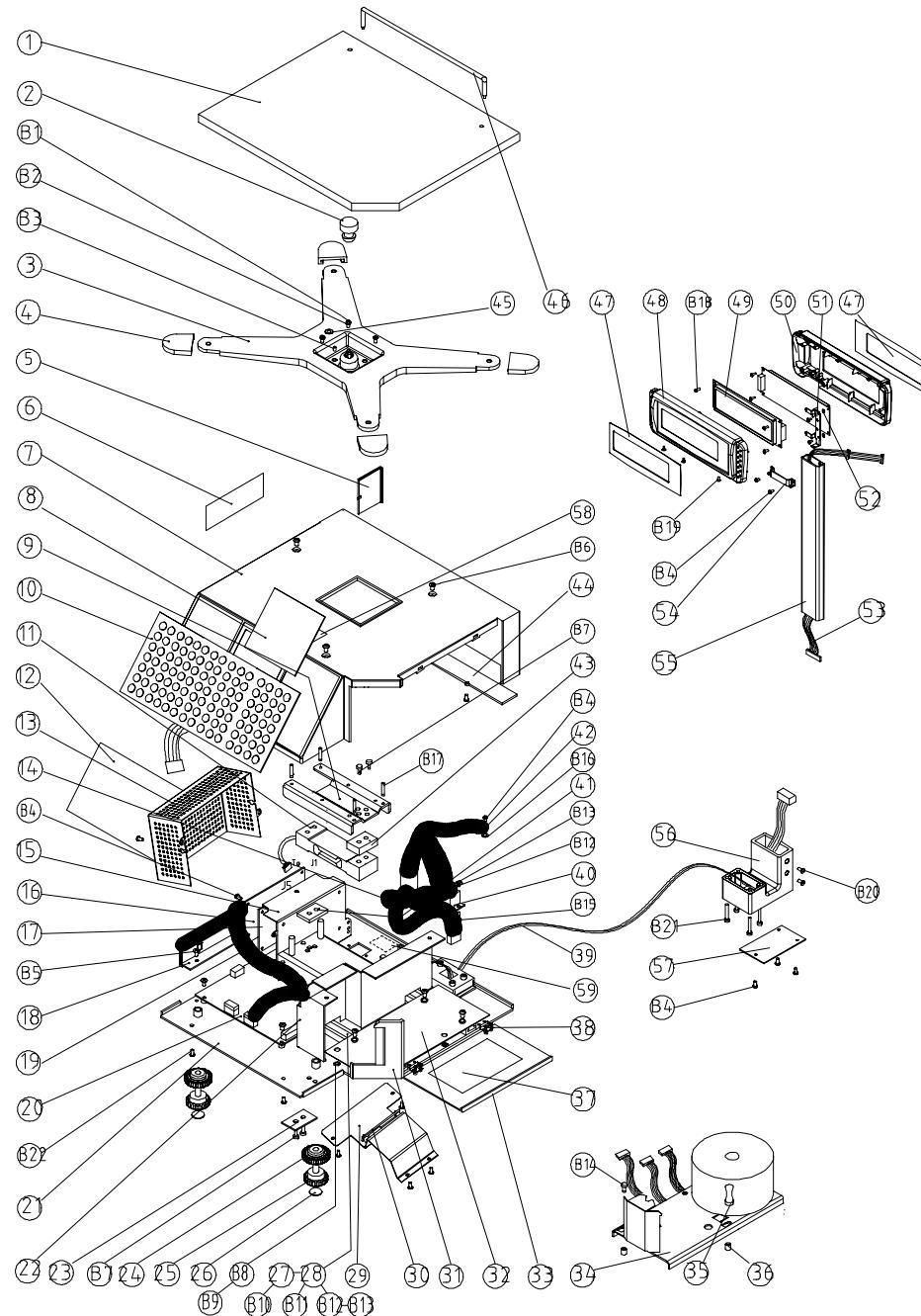


8442-XX00 Base Parts List

No	P/N	DESCRIPTION	QTY	REMARK
1	124009	Platter	1	
2	124041	Spacer, center rubber	1	
3	124020	Spider,upper	1	
4	124022	Spacer, corner rubber	4	
5	132664	Display assembly,8442-US/SEA	2	
6	122768	Label,data plate124X28	1	
7	149514	Cover, top, deep grey	1	
	124001	Cover, top, tint grey	1	
8	124018	Lens, display, 8442	2	
9	124019	Spider, lower	1	
10	124046	Keyboard & overlay Assm,8442-sea	1	
11	124049	Capacity sticker	1	
12	135354	Insert, Preset key	1	
13	143907	Protect cover,power	2	
14	112998	Power switch	1	
15	124031	Frame, power supply	1	
16	144913	Power supply, switching	1	
17	124082	Insulating paper	1	
18	149516	Cover, interface,deep grey	1	
	124037	Cover, interface,tint grey	1	
19	124168	Harness, DC power	1	
20	144558	Main PCB Assm, integrated ethernet	1	
	141809	Main PCB Assm, uninfregrated ethernet	1	
	145970	Main PCB Assm,standard alone,USA		
21	124002	Base	1	
22	124032	Bracket, printer	1	
23	124069	Spacer, load cell	1	
24	124011	Foot, lock	4	
25	124010	Foot	4	
26	124043	Spacer, foot, rubber	4	
27	132665	Slider,holder		
28	132666	Slider, printer	2	
29	143905	Cover, battery	1	
30	144238	Nef convert PCB	1	
31	149517	Cover, side front,printer,deep grey	1	
	143182	Cover, side front,printer,tint grey		
32	151827	Holder Assem., printer	1	

33	149515	Door, printer,deep grey	1	
	124024	Door, printer, tint grey	1	
34	134426	Printer Assm.	1	
35	149920	Printer hold	1	
36	132667	Pole	2	
37	124068	Label, change label	1	
38	145151	Gemel	1	
39	124165	Harness, display	1	
40	124167	Harness, AC power	1	
41	124016	Spacer, lower,6/15Kg	1	
	124017	Spacer, lower,15/30Kg	1	
42	124169	Harness,grounding	1	
43	129406	Load cell Assm.AMI-30	1	
	141529	Load cell Assm.AMI-40	1	
44	124016	Spacer, upper,6/15Kg	1	
45	124030	Cover, inside, cover	1	
46	133024	Label,EDP warning	1	
47	149520	Door,tower,deep grey	1	
	124023	Door,tower,tint grey	1	
48	102326	bubble,ÿ dia.16.5	1	
49	131591	Block assem.	1	
50	149519	Cover, back, customer display,deep grey	1	
	124008	Cover, back, customer display,tint grey	1	
51	149518	Cover, front, customer display,deep grey	1	
	124007	Cover, front, customer display,tint grey	1	
52	124042	Cover, insert, customer display	1	
53	124173	Harness, customer display	1	
54	149521	Commutator,upper, tower,deep grey	1	
	124006	Commutator,upper, tower,tint grey	1	
55	149486	Metal tower	1	
56	124170	Harness,tower display	1	
57	149484	Base,metal tower	1	
58	149485	Metal cover	1	
59	119275	Power label	1	

8442-XX10 Base

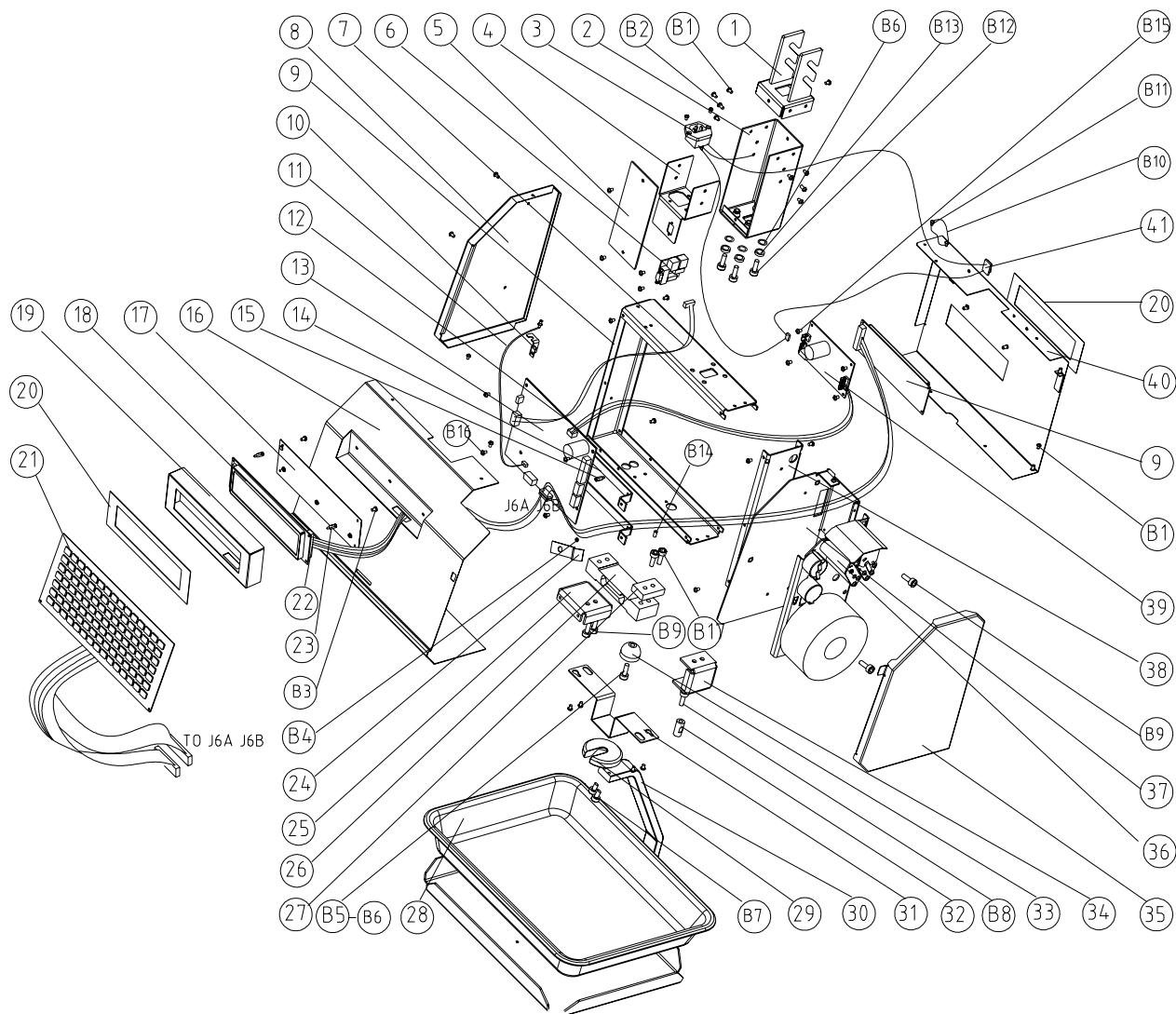


Parts List

No	P/N	DESCRIPTION	QTY	REMARK
1	124009	Platter	1	
2	124041	Spacer, center rubber	1	
3	124020	Spider, upper	1	
4	124022	Spacer, corner rubber	4	
5	143178	Door, tower box, tint white	1	
6	122768	Label,data plate	1	
7	143177	Cover, top	1	
8	140207	Cover Liner	1	
9	124019	Spider, lower	1	
10	147756	Keyboard & overlay Assm,8442-SEA	1	
11	129406	Load cell assem.,AMI-30	1	
	141529	Load cell assem.,AMI-40	1	
12	139855	Insert, Preset key	1	
13	143907	Protect cover,power	1	
14	112998	Power switch	1	
15	124031	Frame, power supply	1	
16	144913	Power supply, switching	1	
17	124082	Insulating paper	1	
18	143181	Cover, interface	1	
19	124168	Harness, DC power	1	
20	144558	Main PCB Assm.,integrated ethernet	1	
	144829	Main PCB Assm.,unintegrated ethernet	1	
21	124002	Base	1	
22	124032	Bracket, printer	1	
23	124069	Spacer, load cell	1	
24	124011	Foot, lock	4	
25	124010	Foot	4	
26	124043	Spacer, foot, rubber	4	
27	132665	Slider, holder	2	
28	132666	Slider, printer	2	
29	143905	Cover, battery	1	
30	144238	Net commutator PCB		
31	143182	Cover, front	1	
32	151827	Holder, printer	1	

33	143180	Door, printer	1	
34	134426	Printer Assm.	1	
35	149920	Printer hold	1	
36	132667	Pole	2	
37	124068	Label, change label	1	
38	145151	Gemel	1	
39	143068	Harness, display	1	
40	124167	Harness, AC power	1	
41	124017	Spacer, 15/30Kg	1	
42	124169	Harness,grounding	1	
43	124016	Spacer, 6/15Kg	1	
44	124030	Cover, inside, cover	1	
45	102326	Bubble,Dia.16.5	1	
46	131591	Block assem.,plate	1	
47	147759	Display assem.,8442-sea	1	
48	139848	Front cover, chinese display	1	
49	141669	Display LCM	1	
50	139849	Back cover, chinese display	1	
51	139850	PCB support	1	
52	112825	insulating tray	2	
53	148812	Harness,display	1	
54	139851	Press board,tower	1	
55	151659	Silvery tower	1	
56	149484	Base,tower	1	
57	149485	Metal cover	1	
58	133024	label,prevent static label	1	
59	119275	Power label	1	

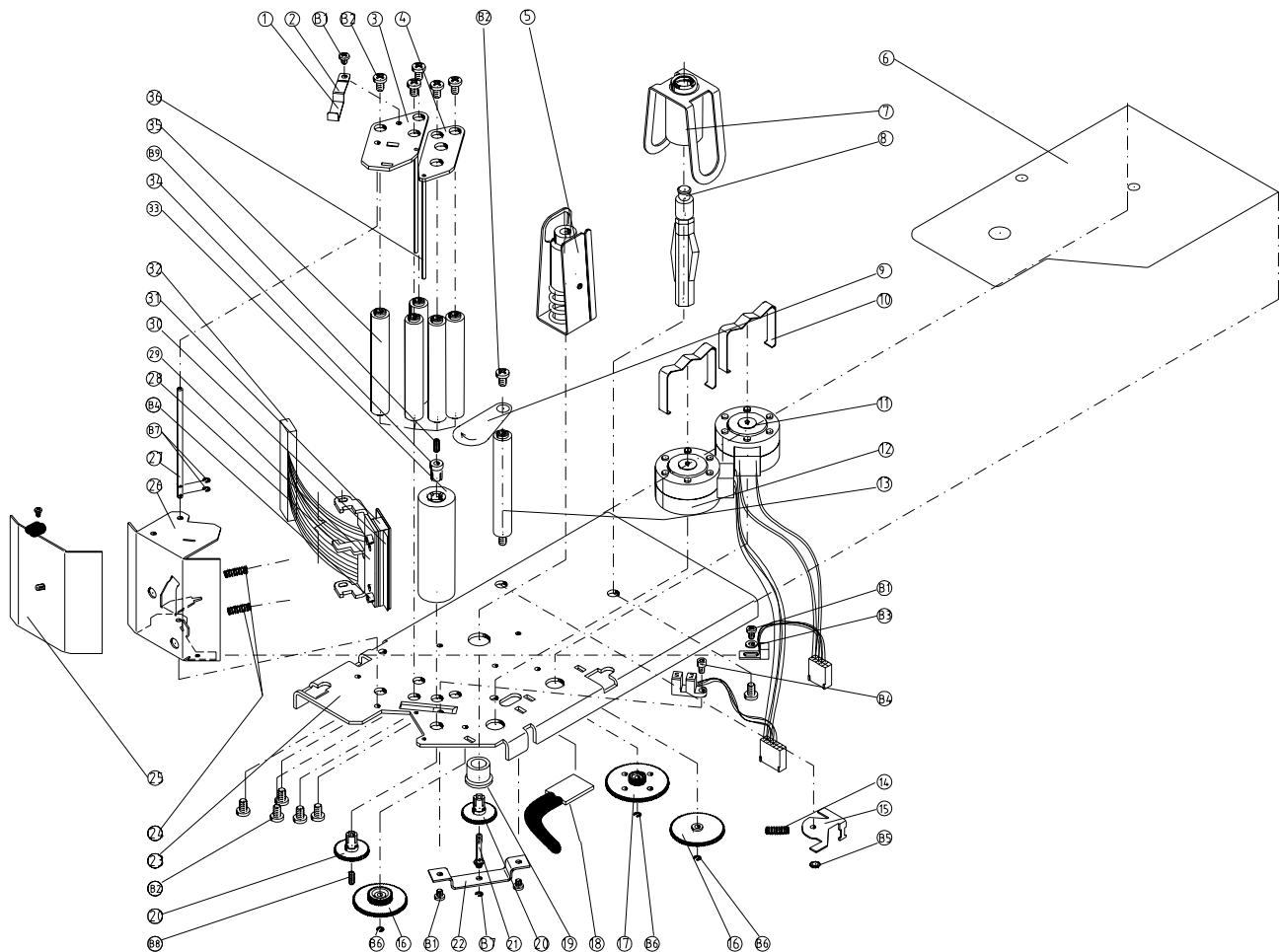
8442-XX10H Base



Parts List

No	P/N	DESCRIPTION	QTY	REMARK
1	141074	Holder	1	
2	141249	Suspender assembly	1	
3	141915	Power harness	1	
4	141044	Holder, jack	1	
5	141046	Cover, port	1	
6	145643	Convert PCB	1	
7	145644	Harness, net convert		
8	141040	Door, left	4	
9	141027	Main girder	1	
10	141043	Holder, converter PCB	1	
11	141912	Harness,calibration	1	
12	146738	Harness,DC power	1	
13	144558	Main PCB,integrated ethernet	1	
	144892	Main PCB,unintegrated ethernet	1	
14	141042	PCB holder	2	
15	141881	Hexagonal screw A	4	
16	141245	Cover assembly, back	1	
17	141051	Display Liner	1	
18	141669	LCM	2	
19	141050	Display liner A	1	
20	147758	Display overlay,8442-sea	1	
21	147757	Keyboard &Overlay	2	
22	141916	Harness, display	1	
23	141881	Hexagonal screw B	4	
24	141251	Spring piece	1	
25	141030	Spider, load cell	1	
26	129406	Load cell,AMI-30	1	
	141529	Load cell,AMI-40	1	
27	141882	Spacer, load cell	1	
28	141037	Platter	1	
29	141034	Hook, stainless steel	1	
30	141250	Platter assembly	1	
31	141243	Protection set	1	
32	141032	Stainless pole	1	
33	141033	Conglobation	1	

Printer Engine



Printer Engine Parts List

No	P/N	DESCRIPTION	QTY	REMARK
1	134443	Trigger	1	
2	134449	Plastic pipe	1	
3	134439	Top cover assm.	1	
4	134450	Top cover with pin	1	
5	136874	Wing rewind assm.	1	
6	136872	Show figure	1	
7	134459	Wing, label roll assm.	1	
8	136876	Shaft roll assm.	1	
9	134467	Hinder plate	1	
10	134442	Clip,motor	2	
11	138593	Stepper motor assm.	1	
12	138594	Rewind motor assm.	1	
13	134469	Shaft 10	2	
14	131718	Spring, pull	1	
15	134468	Orientation plate	1	
16	133438	Gear,middle	2	
17	133437	Gear,big	1	
18	133411	Clip	2	
19	134465	Cuprum ring	1	
20	133439	Gear,small	2	
21	134460	Shaft, hexad nut	1	
22	134457	Fixed plate	1	
23	134438	Base assm.	1	
24	131717	Spring	4	
25	134446	Cover, front	1	
26	124034	Bracket	1	
27	134431	Shaft, 3	1	
28	134472	Installation base ,printerhead	1	
29	153758	Holder, spring base	1	
30	134471	Piece,printerhead	1	
31	129534	Printerhead	1	
32	124166	Harness,printerhead	1	
33	133444	Wheel aeesm.	1	
34	133440	Tuck, wheel	1	
35	134444	Pole	5	
36	134451	lead paper track	1	

METTLER TOLEDO

Scales & Systems

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