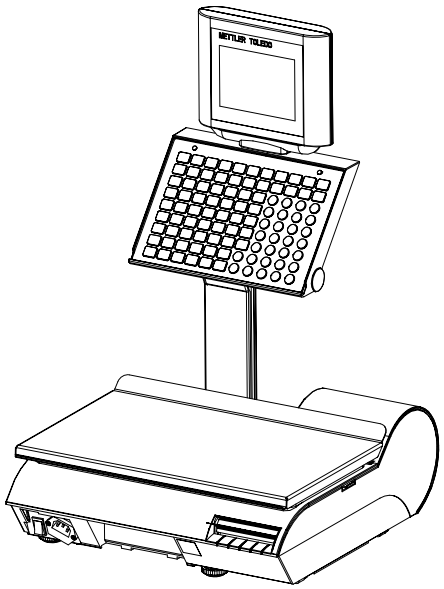
bC + bPro

Service Manual

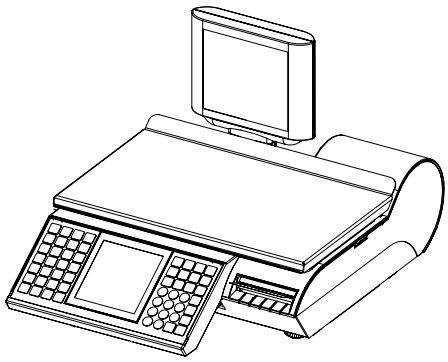
bC + bPro

Scale / Printer

bC – U2



bC – C2



ME-Nr. 2201 5698 Printed in Germany 0107/8.11 Edition: January 2007

Address Mettler - Toledo (Albstadt) GmbH
D-72458 Albstadt
Telephon +49(0) 74 31 / 14-0
Fax +49 (0) 74 31 / 14-640
Internet: http://www.mt.com

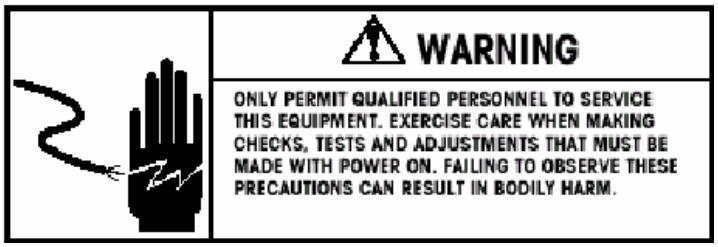
METTLER TOLEDO

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

1. 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.

Contents list **Page**

2. Specifications bC

2.1 General Description

The METTLER TOLEDO bC is a digital computing scale with an integrated thermal label printer. bPro is a network scale, which has a database containing the PLU, Exra Text and etc. A Special PC program is avaliable to download the database from the PC.

The standard bC weighing capacity is 6kg,15kg, or 30kg range. This scale integrates seven-segment displays on each display for weight, tare, unit price and total price. It also includes a 16 characters display on each side to show item description.Also we have a 240X240 whole dot-matrix display for the bC scale for displaying all kinds of characters.

The bC, like all METTLER TOLEDO products is designed for maximum durability and reliability in even the most demanding application environments. The bPro 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.

2.2 Features

• 6kg, 12kg, 15kg, 30kg.
(3000e or 3000e dual range or 6000e single range)

• LCD display with LED backlight on both operator side and customers side. Or 240X240 full dot-matrix display

• Four lines of seven-segment numeric display for : 5 digits weight, 5 digits tare, 7 digits unit price and 7 digits total price. Single line 16-character alphanumeric display for programming and item description.

• Indicators for zero, net and prepack mode.

• Compliance with H44 3000e, R76 OIML 3000e.

• Tactile feel membrane keyboard and an audible beeper.

• A 140 position preset keyboard for fast PLU retrieval.(different type may has different preset key quantity)

• Real time clock and RAM are backed up by a lithium rechargable battery with at least 1 month memory retention without external power.

• VOID key for clearing previous transaction from accumulator.

• Computer interface port (Ethernet interface) for use with communication software, uploading software with special tools and RS232 also can used for FLASH software.

• Integrated thermal label printer with 8 dots/mm print head. Supports printing paper width from 25 to 85mm. Supports EAN and UPC barcoding standards. Various paper types such as die cut labels, continuous strip labels and continuous thermal paper are supported.

2.3 Customer/Vendor Display

There are two displays on the scale, one is on the vendor side and the other is on the customer side.

These two LCD displays incorporate LED backlight. Both the customer and vendor displays show 5 digits of weight, 5 digits of tare, 7 digits of unit price and 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 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.

Another display option available is the full dot matrix display, which can enable promotional graphical displays as well as special offers to increase in-store sales.

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 Pre-pack mode has been selected.

2.4 Weighing Capacity

The bC is available in 3/6kg x 0.001/0.002kg, 6/15kgx0.002/0.005kg, 12kgX0,002kg and 15/30kgx0.005/0.010kg capacities. The 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 "|_____|". When zero can not be captured, the weight field will display EEEEE.

2.5 Tare

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

2.6 Memory Specifications

The Main Logic PCB contains a rechargable lithium battery that will retain backup PLU's and the time/date in the SRAM memory for up to one month. Other data, including calibration data are retained in the EEPROM which requires no battery for memory retention.

2.7 Label Printer

Labels can be printed with the built-in thermal label printer. The standard printer uses a 54mm 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 MODE to compensate for varying types of labels.

The printer supports standard label sizes ranging from 25mm to 102mm 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:	Thermal Printhead
DOT DENSITY:	8 Dots/mm
PRINT SPEED:	Max 125 mm/sec

2.8 Electrical

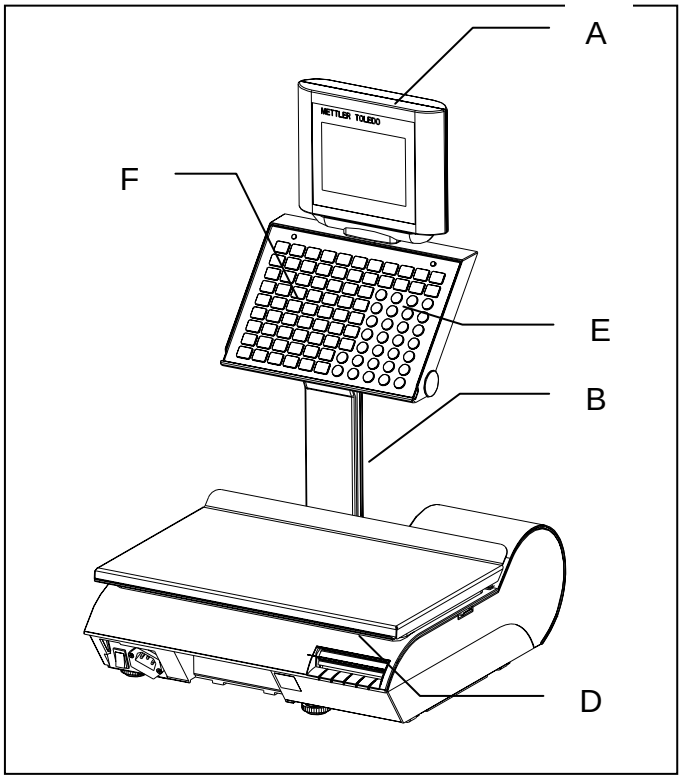
The bC requires a dedicated grounded 100-240 VAC, 50/60 HZ supply, and draws 0.3 amps (scale/printer versions.) The AC line (including ground) must not be shared with noise and surge generating equipment such as, electric motors, compressors, thermostats, fluorescent lights, etc. A line conditioning 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.

2.9 Operating & Storage Temperature

Operating Range: 0°C to 40°C, humidity from 5% to 95% non-condensing.

Storage Range: 0°C to 70°C, humidity from 5% to 95% non-condensing.

2.10 Major Component Map



Ref	Description
A	Display
B	Tower
C	Platter supporter
D	Printer
E	Numeric Keypad
F	Preset Keypad
G	Power switch

3. Troubleshooting

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 keyboard controller PCB.
2. Check Keyboard controller connection to Main Logic, ensure all connections are secure.
3. If all connections are secure and keyboard is inoperative:

a) Replace keyboard controller PCB.

b) Check keyboard once again.

c) If Keyboard is still inoperative, 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.
4. 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 serial port is used at PC.
4. If using bSoft, check the COM PORT SETUP and set to the following parameters:

   Bit per second: 9600

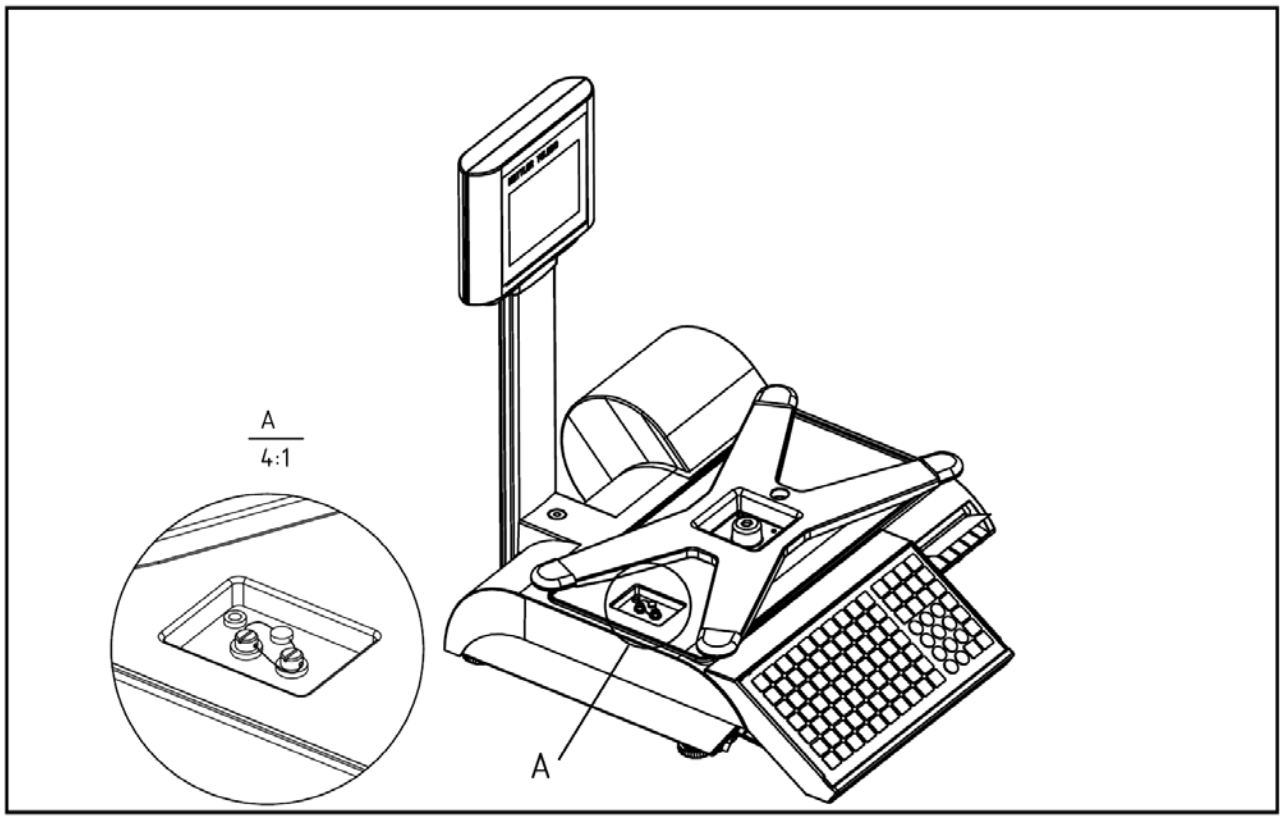
   Data bits: 8

   Parity: None

   Stop bits: 1

   Flow control: None

4. Calibration



- Open sealing wire
- Screw out sealing screw
- operation：

operation：	**display：**	**description：**
☛ CODE 2 4 6 8 1 3 5 7 ✳		enter the menu
☛ 0 5 ✳		enter calibration
	QUIET 0-2	ambience condition, 0=quiet; 1= normal; 2=disquiet
☛ 0 ✳		enter to calibrate
	PUSH CAL BUTTON	
☛ push calibration switch		press calibration switch
	SELECT GEO 12	
☛ (INPUT GEO)		input weight GEO (0-31)
☛ ↑		
	CAPACITY 15	
☛(INPUT CAPACITY)		INPUT CAPACITY
☛ ↑		
	INC.0.002/0.005	
☛Select increment（if necessory）		select increment
☛ ↑		
	READ THE ZERO	
☛ 1		capture zero
	ADD WEIGHT 0.000	
☛(input standard weight value and put on platter)		put standard weight on platter
☛ ✳	DONE	capture the weight
	SHUT DOWN	turn off scale and power on again

NOTE:

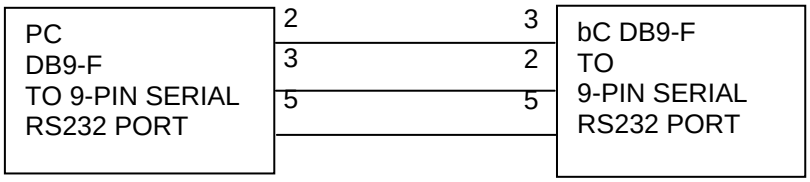
IN THE PROCESS IF GIVE THE MESSAGE “ INIT. CELL...”, WHICH INDICATE THE FAULT CALIBRATION.

5. PC software

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

Which requires an IBM or compatible PC with Windows 95/NT or higher version operating system. A 3,5 inch floppy drive and one serial port or Ethernet port is required. The wiring diagrams shown in the following figure can be used to make cables from a 25-pin or a 9-pin PC serial port to the 9-pin connector at the bC. Factory cables are available from METTLER TOLEDO using the part numbers shown in the figure.

123848OTC Cable, PC DB9 to bC 10ft/3m



6. Flashing Software

The bC 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 "**Hyperterminal**". Cables and components are the same as above RS232 cable.

Before downloading the software, turn the bC power OFF. Connect one end of the cable to the PC's serial port and the other end to the bC serial port.

Power ON the scale.

The scale will display "**WAIT FOR HOST……**" to wait for PC signal.

Then enter the Hyperterminal, to select right COMM port of the computer.
Then set the data as "**baud tare 115200, data bits 8, parity none, stop bits 1, flow control none**".
After come back main interface of the Hyper terminal, to select "**send file**" ,select the scale code and the protocol as "**1K Xmodem**". Send the file to scale.

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 Hyperterminal program at the PC.

7. POWER SUPPLY

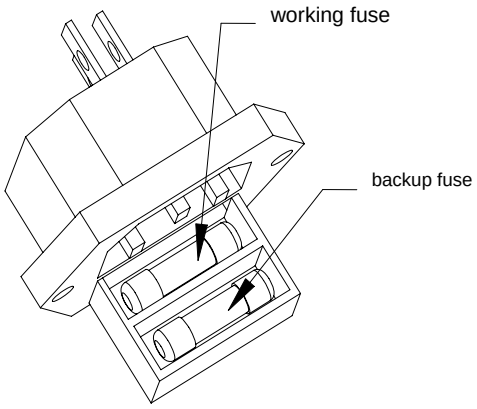
Following is a list of symptoms that could occur, and the recommended action to correct the problem.

Place the Power Switch to the OFF position. Remove the platter, spider, and top cove. To check the +24VDC output voltage from the Power Supply terminal between the terminals marked +V and GND, 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. 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.

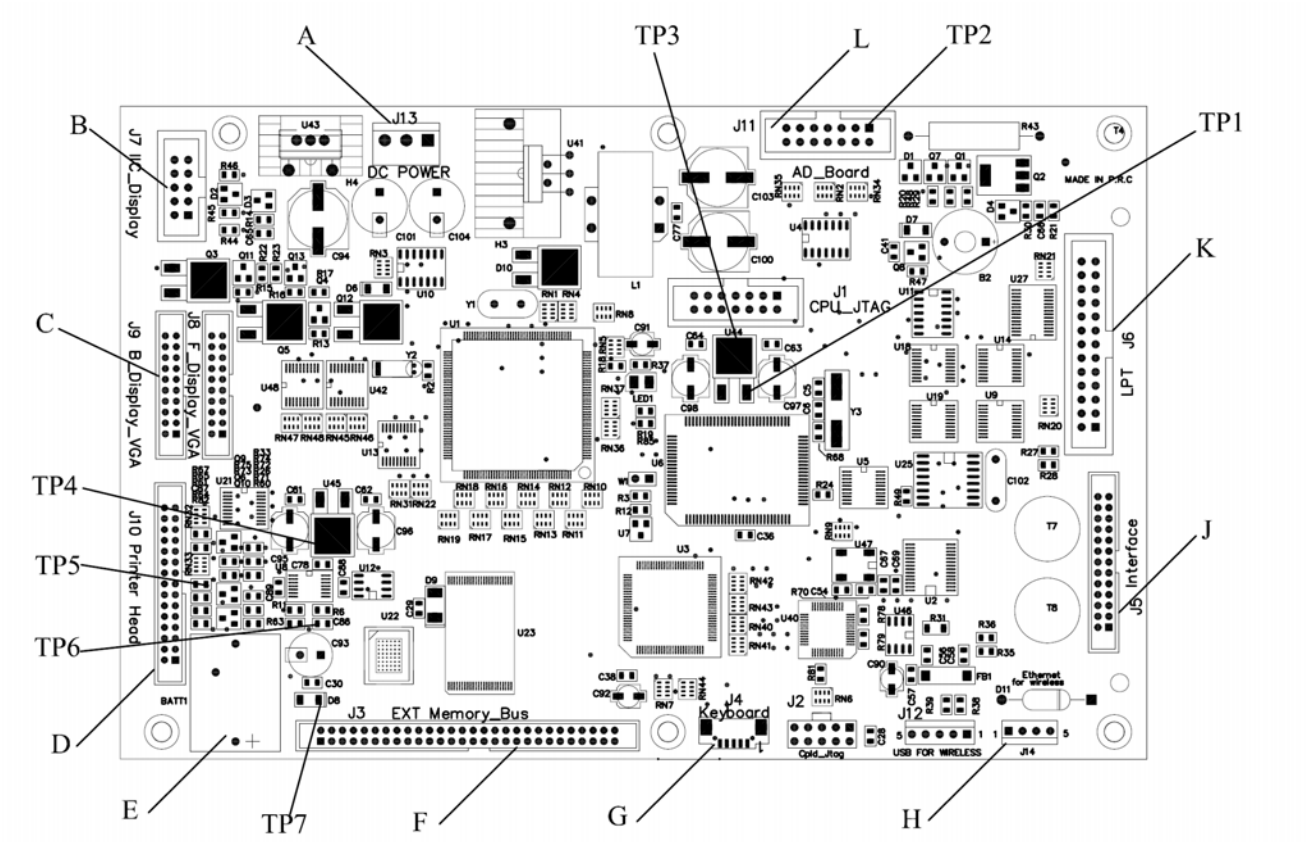


8. Main Logic PCB

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.

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.



Ref	Description	Ref	Description
A	J13，+24VDC Supply	TP1	U44, +5V test point
B	J7, IIC Display connector	TP2	J11, +12V test point
C	J8J9, VGA Display connector	TP3	U44, +3.3V test point
D	J10, Printerhead connector	TP4	U45, +2.5V test point
E	Battery	TP5	C87, Take up sensor test point
F	J3, Exttended Bus connector	TP6	C86, Gap sensor test point
G	J4, Keyboard connector	TP7	D8, SRAM Battery Supply test point
H	J14, Wireless Module +5V Supply		
J	J5, User Interface		
K	J6, ECP parallel Port		
L	J11, AD Module connector		

9. Load Cell

The Load Cell can be tested for proper analog voltage input and millivolt output by measuring the voltage 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.

10. Warning Messages

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.

10.1 Error Messages

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

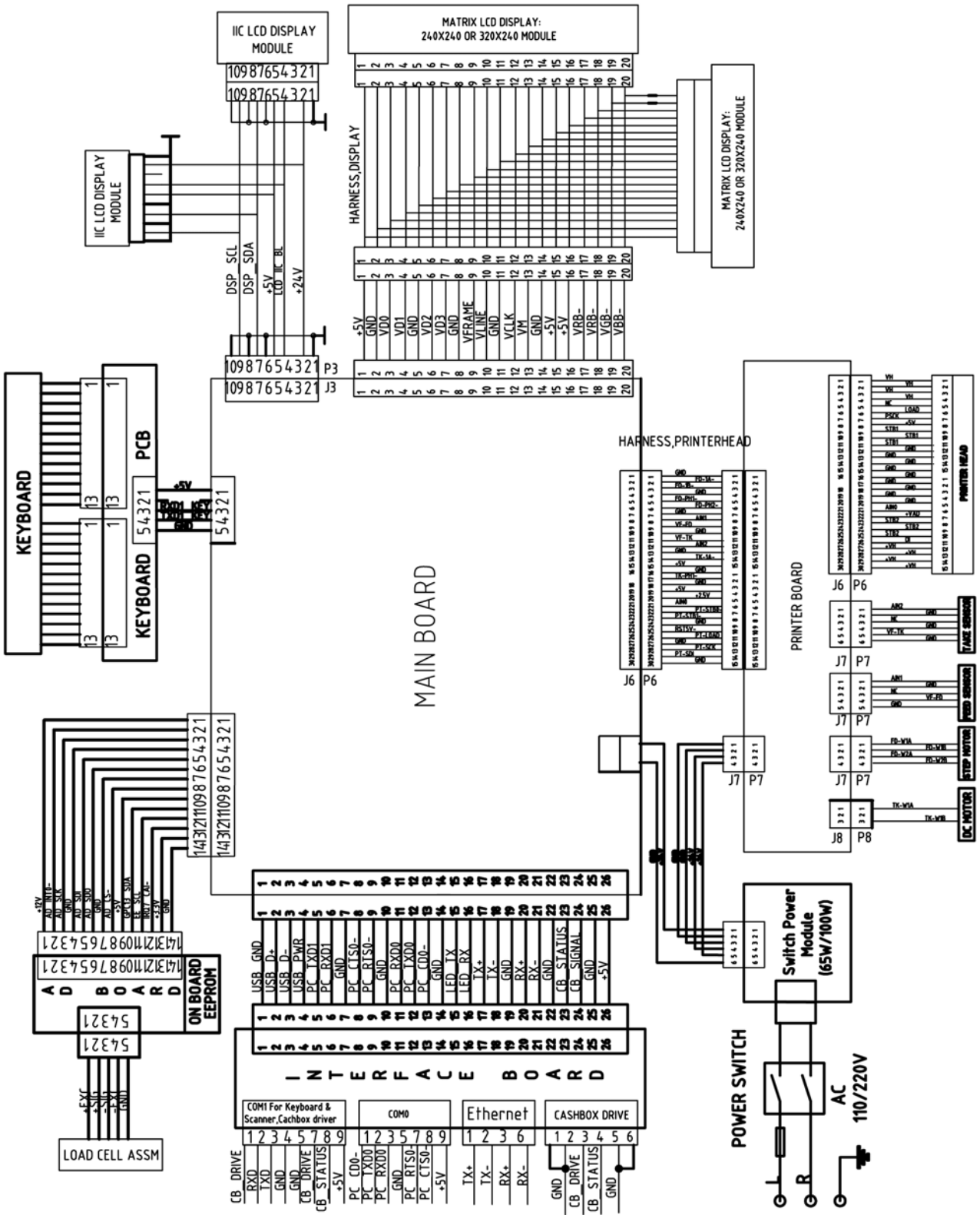
Meaning of XX

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

Meaning of YY

01 Operator Configure
03 Keyboard Configure
04 Password Configure

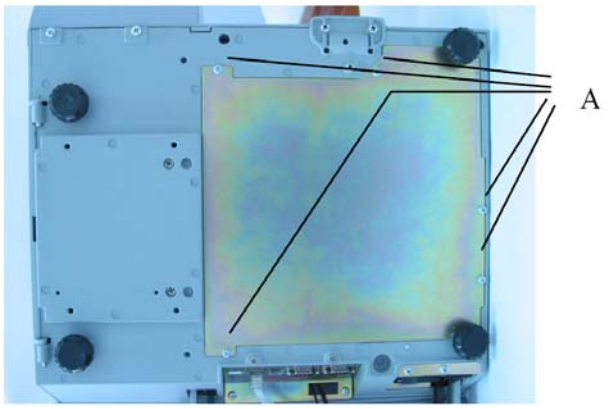
11. Interconnecting Diagram

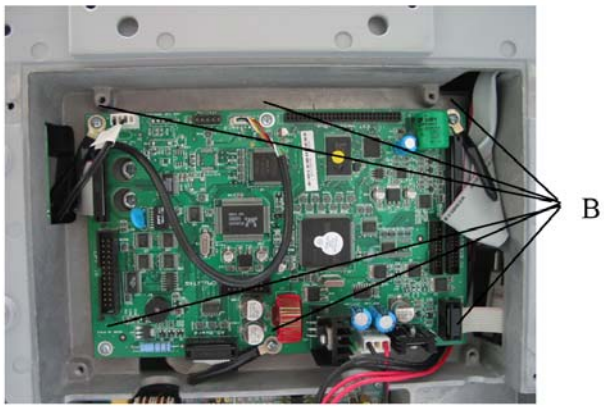


12. Parts Replacement

12.1 Replace main PCB

! all the data saved in main PCB, as you change the main PCB you will lose all of them.



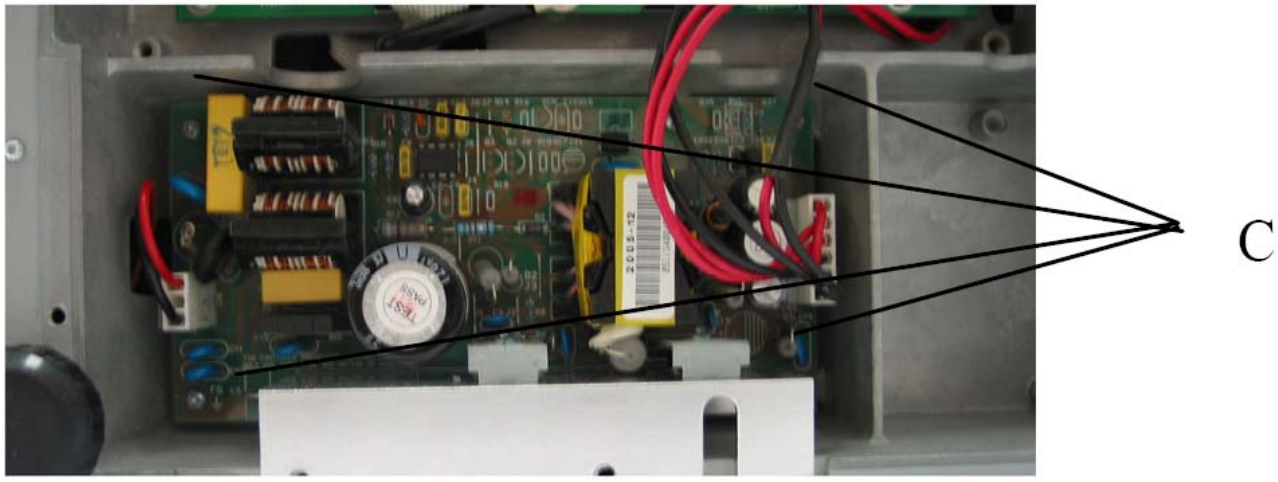


- Power off power and take out the power cable from electrical outlet.
- Take away platter.
- Screw out the 5 bolts (A) from base and take away.
- Show main PCB.
- Pull out all connection from main PCB.
- Screw out 6 bolts (B) from main PCB, take away it.

Install main PCB

- Put the main PCB to right position, screw in 6 bolts of main PCB.
- Put the cover of base then screw in 5 bolts.
- Put on platter.
- Power on scale.

13. Replace switch power



Take out switch power

- Power off power and take out the power cable from electrical outlet.
- Take away platter.
- Screw out the 5 bolts (A) from base and take away.
- Pull out the harness in switch power.
- Screw out 4 bolts in the power PCB.
- Take away the switch power.

Install switch power

- Put the switch power to the right position.
- Screw in 4 bolts of the power PCB.
- Plug in all the connection harness in the PCB.
- Put the cover of base then screw in 5 bolts.
- Put on platter.
- Power on scale.

14. Replace display

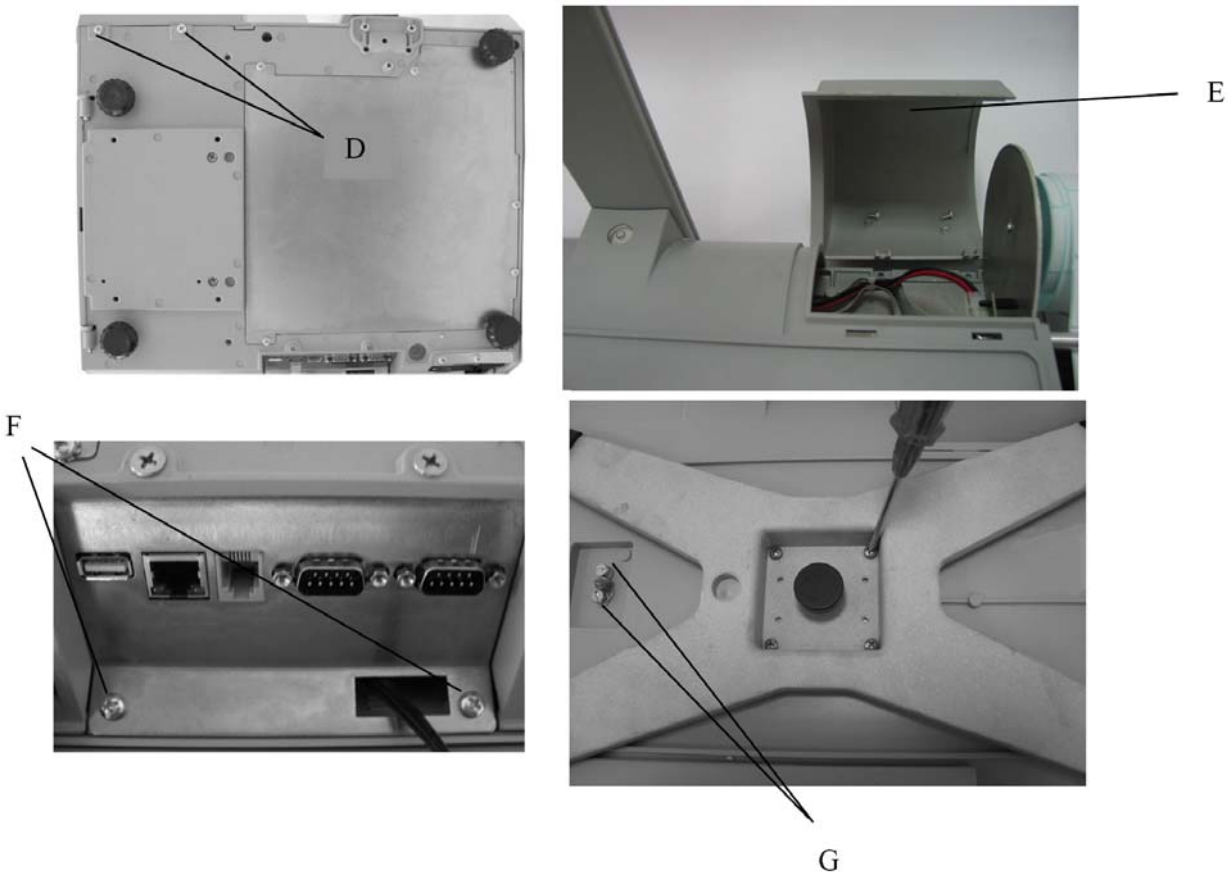
Take out display

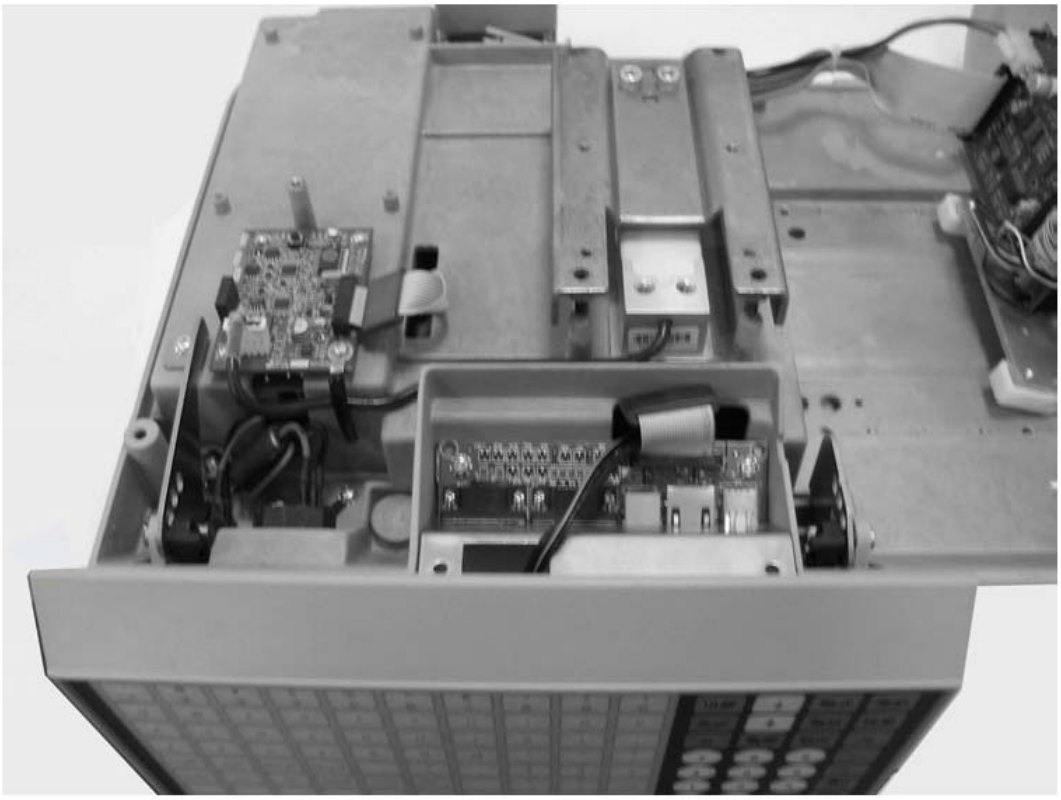
- Power off power and take out the power cable from electrical outlet.
- Take away platter.
- Take out the tower kits from scale as screw out 5 bolts.(see install tower)
- Take away the tower kits.
- Screw out 2 bolts in the display cover, and take out the front cover, show the display.
- Screw 5 bolts of the front display, pull out harness and take away the display.
- Screw 4 bolts of back display and pull out harness, take away back display.

Install display

- Put the back display to right position and screw in 4 bolts to fix it.
- Plug in harness of display.
- Also the harness to front display.
- Put on the front display.
- Screw in bolts for installation.
- Put the front display.
- Screw in 2 fix bolts of cover.
- Install the tower to base.
- Put on platter.
- Power on scale.

15. Replace loadcell





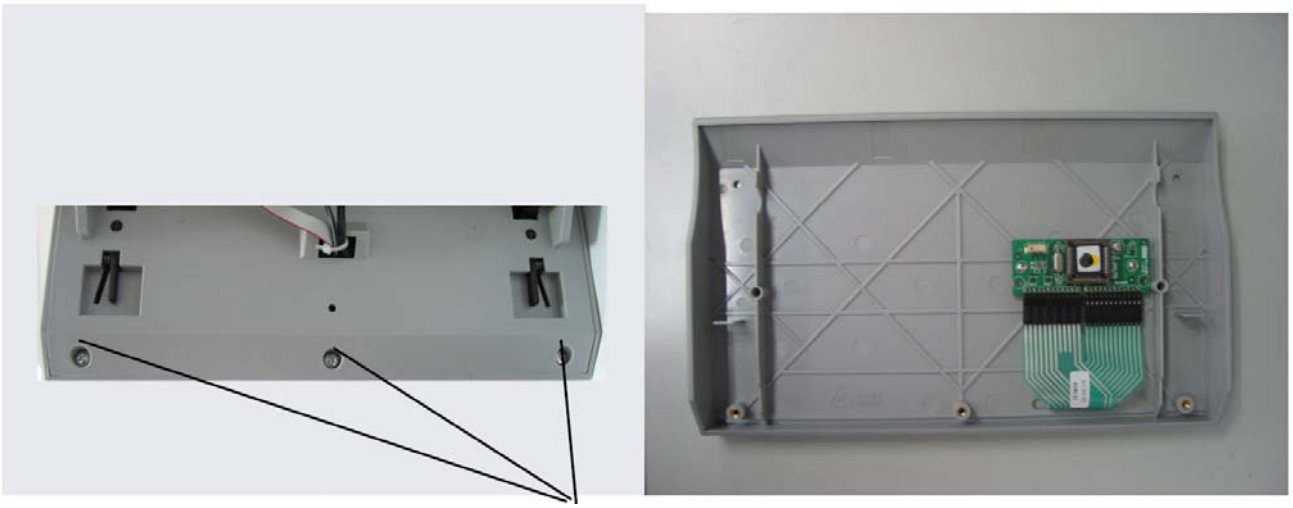
Take out loadcell

- Power off power and take out the power cable from electrical outlet.
- Take away platter.
- Screw out 2 bolts for fix the cover of print paper (D).
- Take out the cover (E).
- Screw out 2 bolts in interface PCB (F).
- Screw out 4 bolts in up spider, and take out it.
- Open the sealing screw (G).
- Take away up cover.
- Pull out loadcell harness from main PCB.（see above to find the main PCB）
- Screw 2 screws in loadcell and take out spacer.
- Also take out loadcell spacer.
- Also screw 2 screws for installing loadcell under the scale.
- Take away loadcell.

Install loadcell

- Put the loadcell to right position.
- Install 2 screws from scale bottom.
- Screw down with moment spanner.15kg CAPACITY with 8 NM,
  30kg CAPACITY with 10 NM.
- Put the spacer and then screw down 2 screws in it.
- Screw down with moment spanner.15kg CAPACITY with 8 NM,
  30kg CAPACITY with 10 NM.
- With X mm ruler to adjust the limit size of back 2 screws. With Y mm ruler to adjust the limit size of front 2 screws inspacer.(capacity:6/15kg
  X=1.2mmY=0.9mm；capacity:15/30kg X=1.9mmY=1.3mm)
- Insert the loadcell harness to main PCB.
- Install the up cover, print paper cover,up spacer,screws in interface PCB, cover of main PCB at bottom etc.
- Adjust 4 screws in up spacer and let the spacer levelly.
- Put on platter.
- Power on scale.

16. Replace keyboard



H

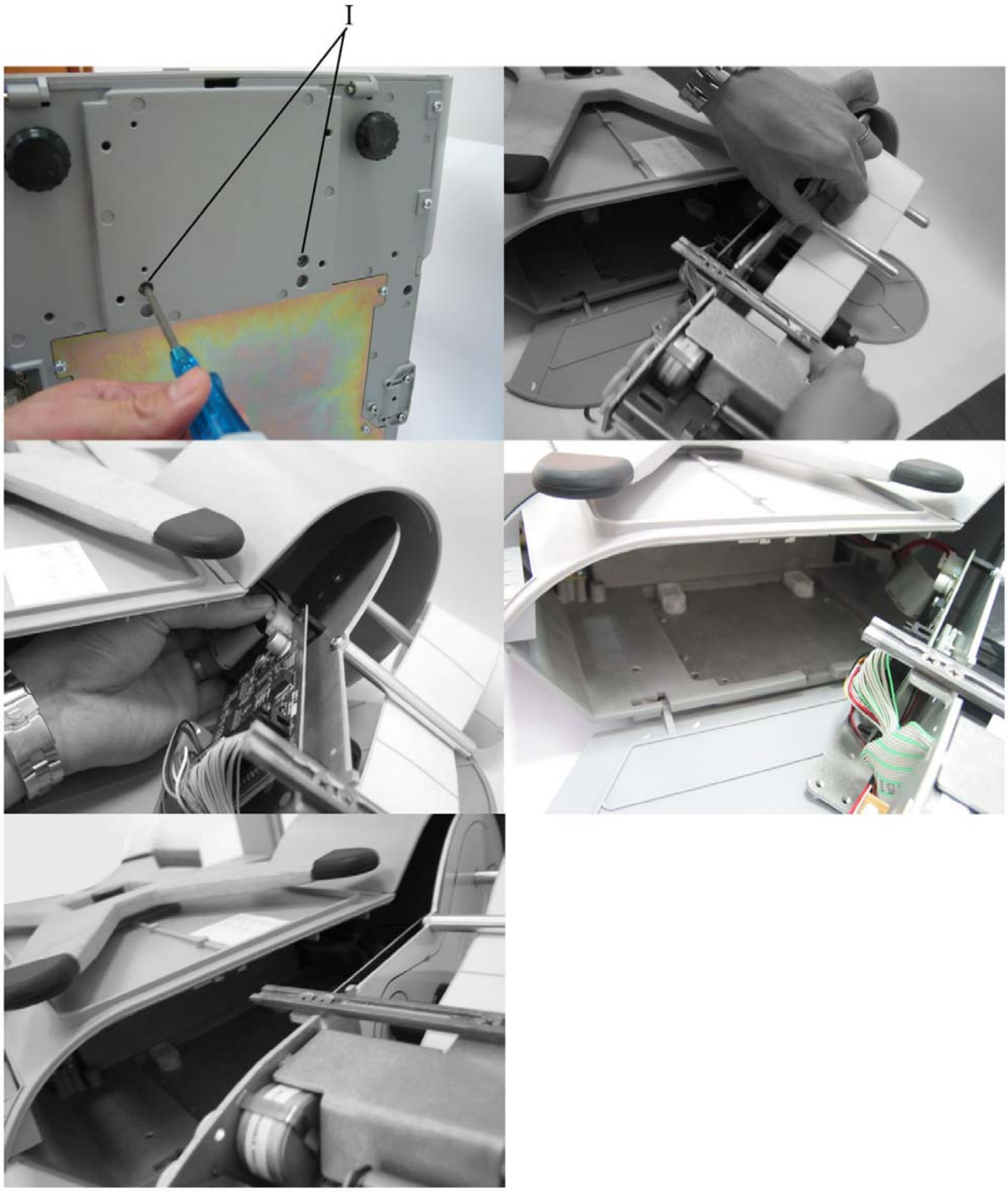
Take out keyboard

- Power off power and take out the power cable from electrical outlet.
- Take away platter.
- Screw out 3 bolts (H) in keyboard at bottom.
- Take out keyboard and cover kits.
- Pull out the harness of keyboard from the keyboard convert PCB.
- Rip off the keyboard overlay, take out it.

Install keyboard

- Clean the keyboard cover with alcohol, and wait it till dry.
- Let harness through the hole in it and rip off the protect paper in keyboard, then stick it to the keyboard cover.
- Plug in the harness to keyboard convert PCB.
- Put the keyboard to right position and install 3 bolts in it.
- Put on platter.
- Power on scale.

17. Replace printer



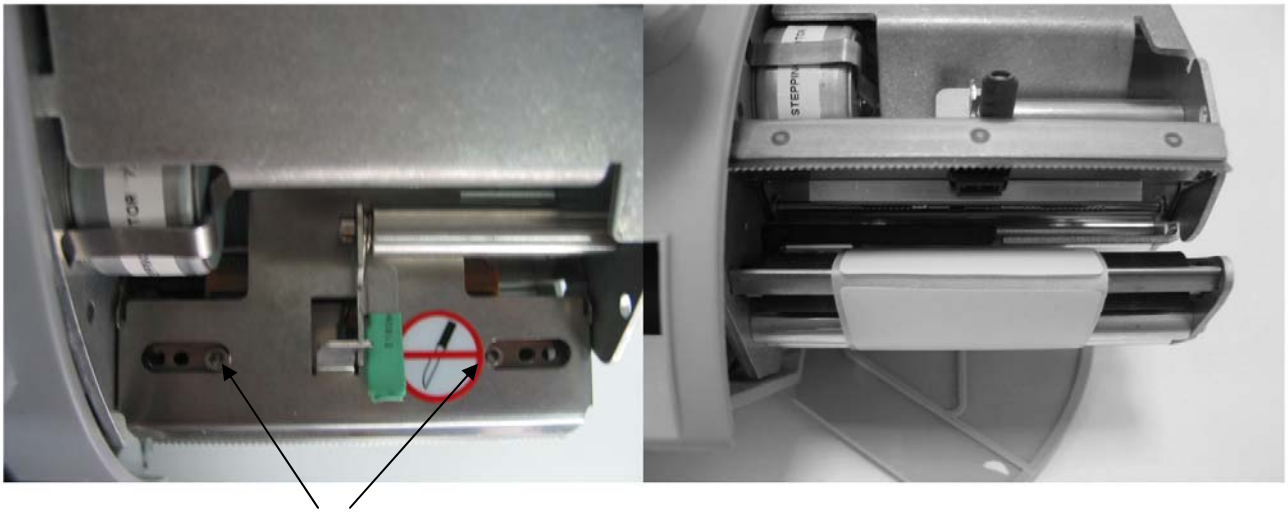
Take out printer

- Power off power and take out the power cable from electrical outlet.
- Take away platter.
- Screw out 2 bolts(I) at the bottom of the scale.
- Open the printer door.
- Pull out printer, also disconnect the harness in printer PCB.
- Take out printer, also with 2 spacer under it.

Install printer

- Put 2 white spacer to right position.
- Insert the harness of the printer PCB.
- Put the printer to right position and insert to scale carefully.
- Screw down 2 bolts for fixing the printer at bottom of scale.
- Close printer door.
- Put on platter.
- Power on scale.

18. Replace printer head



⚠ DON'T GRIDE THE PRINTER HEAD.

Take out printer head.

- Power off power and take out the power cable from electrical outlet.
- Take away platter.
- Open printer door, pull out printer.
- Screw out 2 screws (J) for fixing printer head.
- Pull out the harness from printer head.
- Take away printer head.

Install printer head

- Insert the printer head harness.
- Put the printer head and spacer to right position. Screw down 2 bolts.
- Close the printer head.
- Push the printer back to scale.
- Put on platter.
- Power on scale.

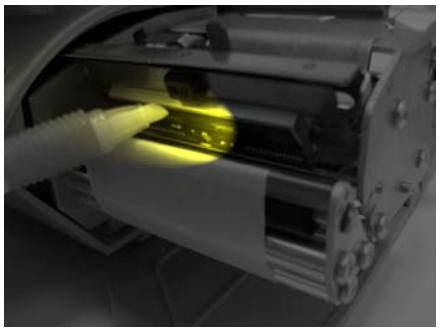
19. Maintenance

19.1 External Cleaning

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.
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.

19.2 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 print head.

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

Push back the print head until it clicks.

Slide the printer in.

Close the plastic door.

19.3 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, or turn the scale off and back on again with the main power switch.

20. Changes

Service Manual bC + bPro 2201 5698; Edition 01/07

Chapter	new	changed	canceled	discription
AABB	✗	✗	✗	