

Service Manual for ED-H weighing scale

I . Phenomena of trouble

1) Trouble of part

The trouble phenomena are as following:

- a) Buzzer-----buzzer doesn't make sound, or sometimes makes sound and sometimes doesn't make sound.
- b) LCD-----The display is faultily.
- c) Backlight-----The backlight doesn't lighten, or sometimes it lightens and sometimes doesn't lighten:
- d) Key -----The keys don't work.

2) Trouble of load cell

The trouble phenomena are as following:

- a) The display data is inaccurate and drifting.
- b) The display data doesn't change when put on a weight.
- c) The internal resolution value is not in the natural range.
- d) The initial resolution is drifting.
- e) The display shows "E1" or "E3" when turn on the scale.

3) Trouble of power supply

The phenomenon is as following:

The scale doesn't work or the "low voltage" symbol comes out after turning on.

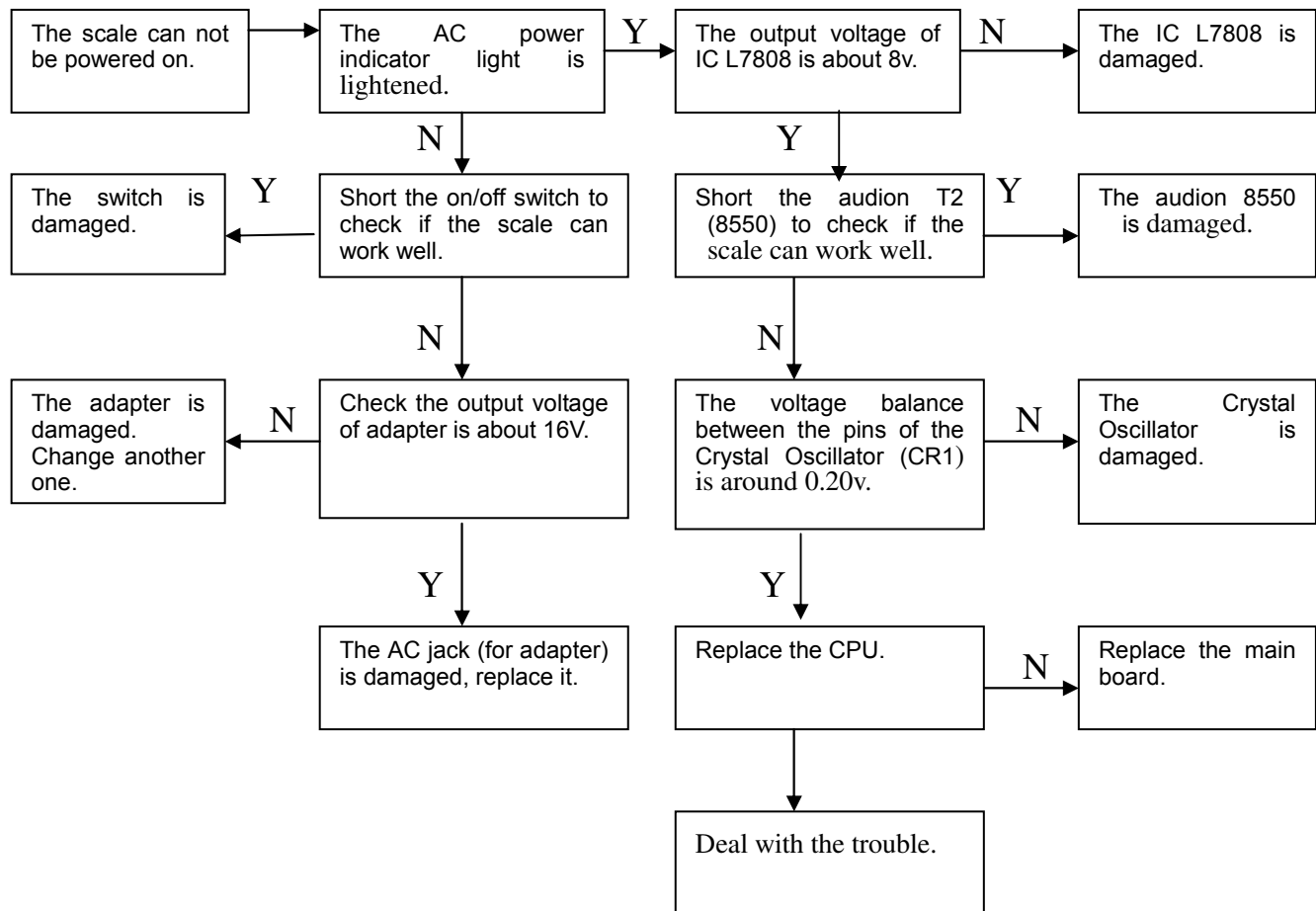
4) Trouble of the PCB

The phenomena are as following:

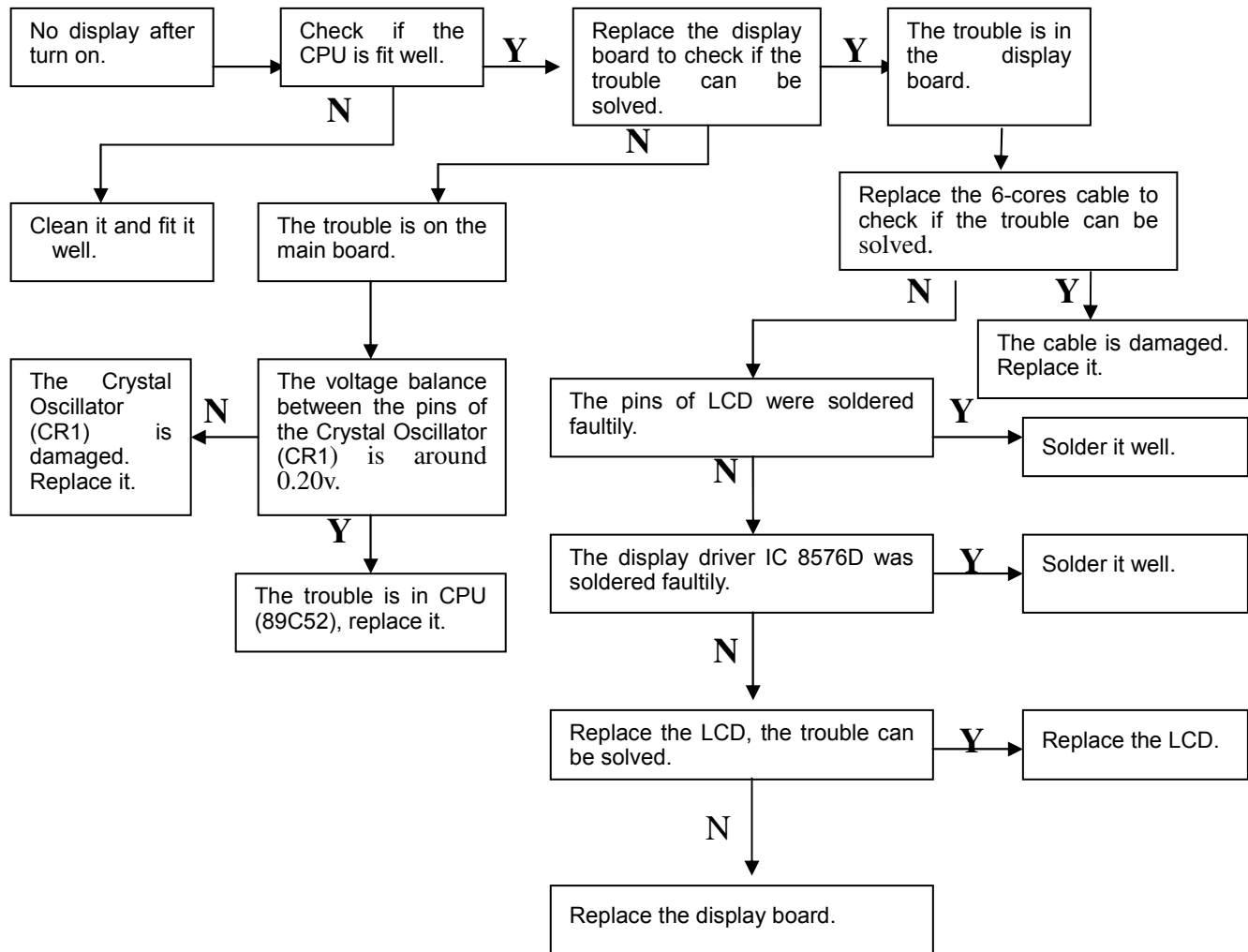
- a) Trouble of display board-----the display is abnormal, or shows nothing.
- b) Trouble of main board
 - There is nothing in the display window when turn on the scale.
 - The scale can not be powered on.
 - The weighing is unstable.
 - The internal resolution is out of the normal range.
- c) Trouble of RS-232 board-----The scale doesn't transmit any data.

II. To solve the trouble

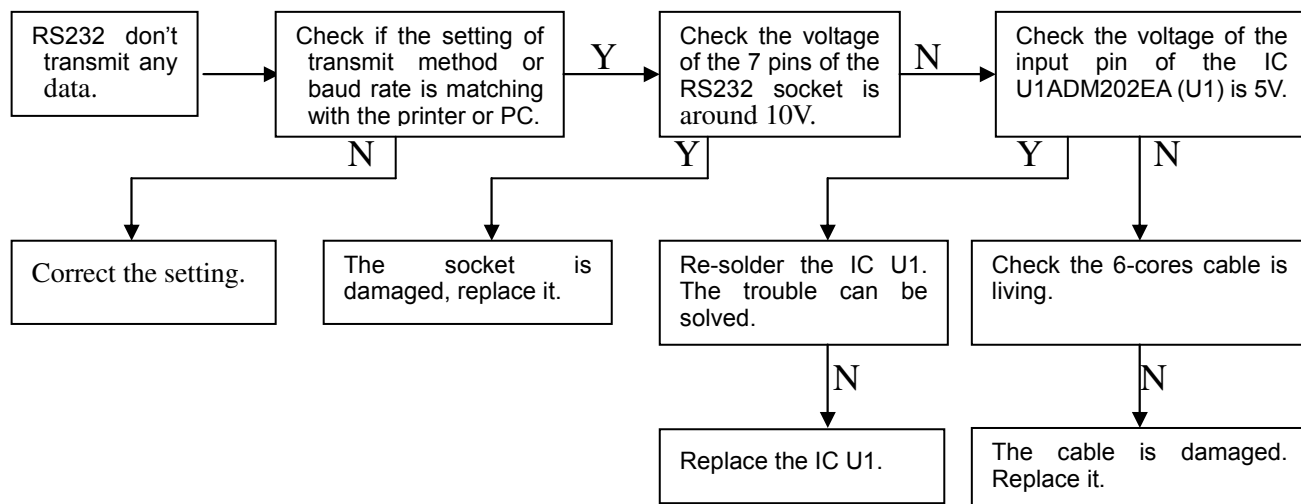
1. The scale can not be powered on



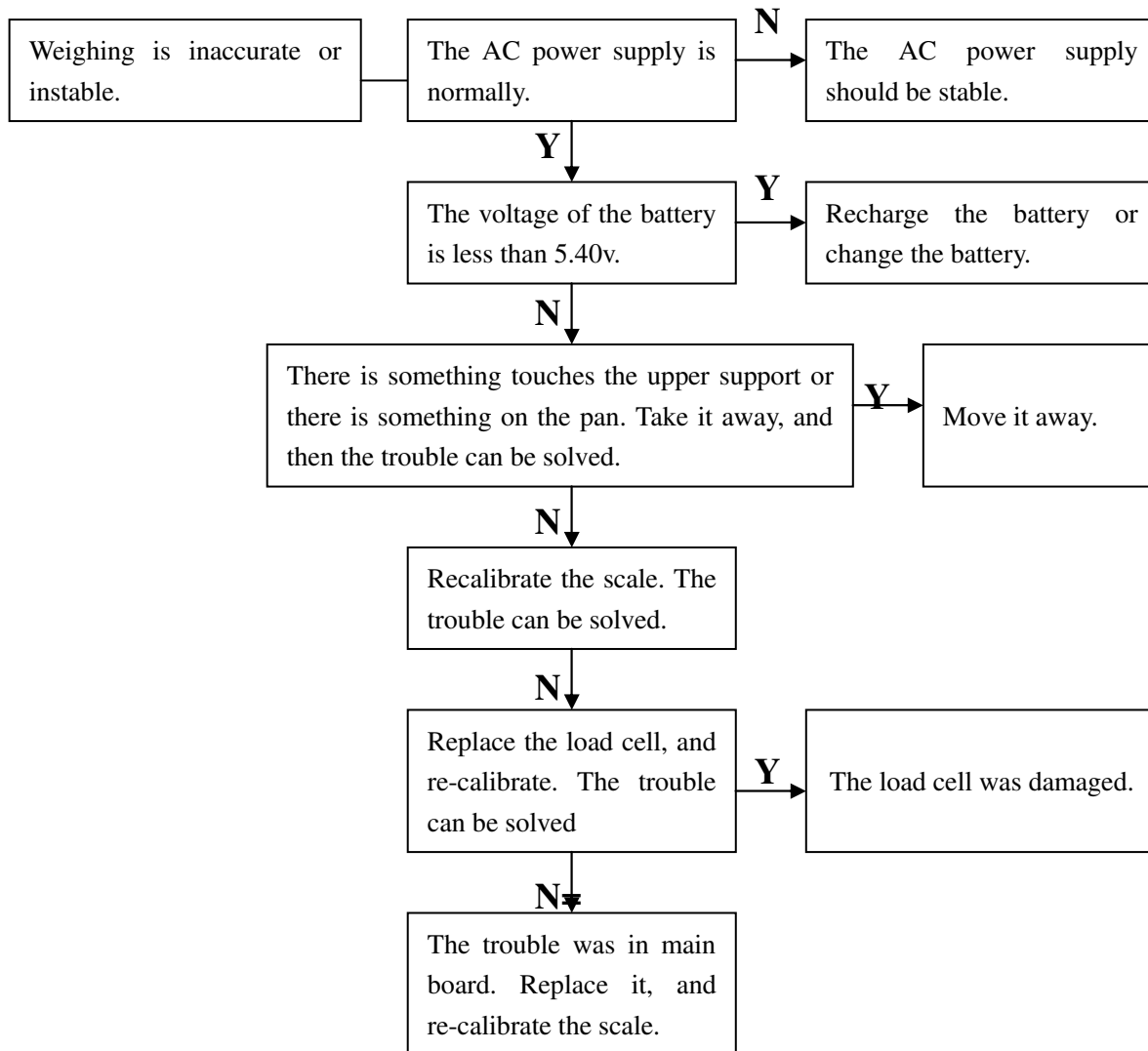
2. No display after turn on:



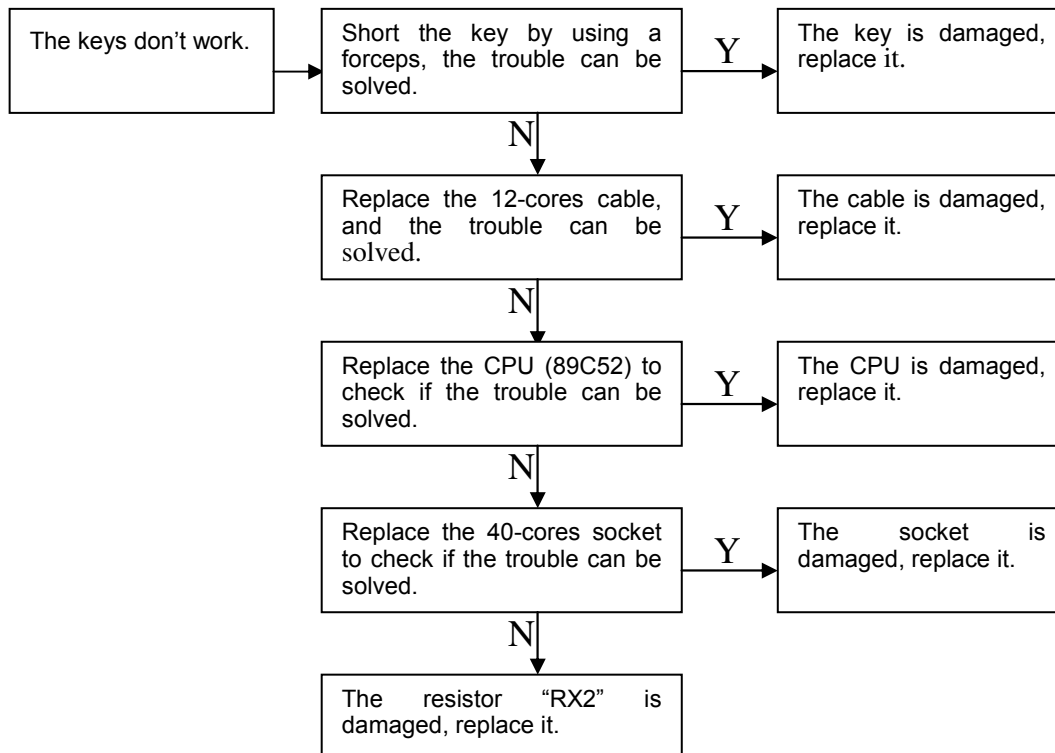
3. RS232 don't transmit any data



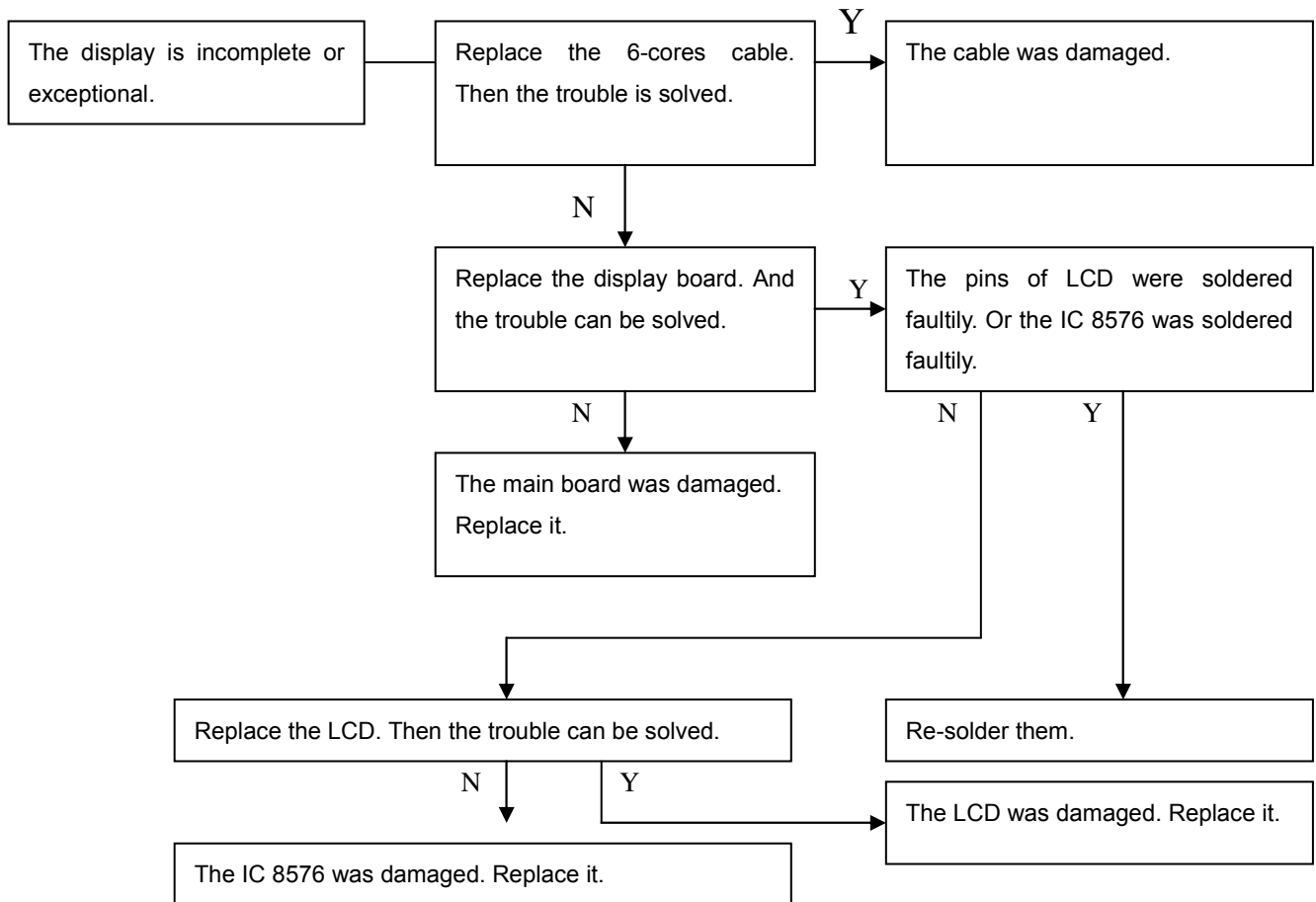
4. Weighing is inaccurate or unstable:



5. The keys don't work



6. The display is incomplete or exceptional.



Note: Since this series of balance is with high precision, it is very easy to be affected by climate and temperature. Sometimes the scale has the following phenomena:

1) Weighing is inaccurate.

The problem can be solved by re-calibration.

2) After self-check, the display shows error messages.

E1: When the main board is replaced or EPROM data lost, the display window will show "E1". Re-calibrate the scale to solve it.

E2: When the zero of the load cell changes or the signal cannot be input, "E2" appears. Re-calibrate the scale or replace the load cell to deal with the trouble.

E3: When the internal resolution value is not in the natural range and the initial zero is drifting badly, the display will show "E3". The solution is to re-calibrate the scale.

E4: The sample weight is too small. Put on more weight.

E5: In alarm check setting, the high limit value is set lower than the low value. Reset the limit values by using numeric keys.

E6: When the subtraction value is larger than the total accumulated value, "E6" will appear. Correct the operation to solve this problem.

3) If either main board or load cell is changed, the scale must be recalibrated.

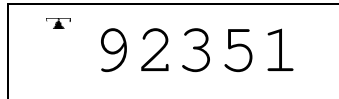
III. Calibration procedure

- 1) Switch on; Press **CAL BUTTON**
- 2) Calibration mode during self-checking. .

The window shows as follow:



Press **"COUNT/▲"** key to show the internal resolution of the scale.



- 3) Change and choose the weight units, accuracy and capacity by using the **"COUNT/▲"**key and the **"TARE/Enter"** key. The steps are as below:

Choose weight units: (Scale of Korea model hasn't this setting. The default setting: g)

- a) After the scale enter into the Calibration mode, give a long press of the **"ZERO "** key to enter into selecting weight units setting, and the display shows:

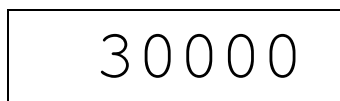


- b) Press the **"COUNT/▲"** key to change the value (1-lb, 0-g).
- c) Press the **"TARE/Enter"** key to confirm and enter into next step (Choose accuracy value).

Note: If only the unit should be changed, then press the **"TARE/Enter"** key to confirm, and press **"M+/Exit"** key to exit calibration model.

Choose accuracy value:

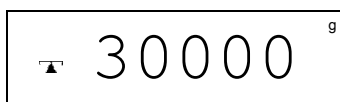
- a) The display shows:



- b) Press the **"COUNT/▲"** key to change the value. There are five system-preset values (30000, 60000, 75000, 12000, 15000) can be chosen.
- c) Press the **"TARE/Enter"** key to confirm and enter into next step (Choose capacity).

Choose capacity:

- a) The display shows:



- b) Press the **"COUNT/▲"** key to select the capacity value.PL refer to the below list:

Capacity	The value should be chosen
1.5kg×0.05g	1500.00
3kg×0.1g	3000.0
6kg×0.2g	6000.0
15kg×0.5g	15000.0
30kg×1g	30000
3kg×0.05g	3000.00
6kg×0.1g	6000.0
15kg×0.2g	15000.0
30kg×0.5g	30000.0

C) Press the **“TARE/Enter”** key to confirm, at the same time enter into Calibration Mode, the display shows as below:



Calibration Mode:

- Touch the pan by hand lightly, several seconds later, the display window shows the weight value (1/3 Max of full capacity) which should be put on for the first time. Put on the weight refer to the display.
- Several seconds later, the display window shows the weight value (2/3 Max. of full capacity) which should be put on for the second time. Put on the weight refer to the display.
- Several seconds later, the display window shows the weight value (3/3 Max. of full capacity) which should be put on for the third time. Put on the weight refer to the display.
- Several seconds later, the scale returns to counting mode. Then the calibration procedure is finished.
- Switch off, and take off all the weight, then switch on, the scale can be used.