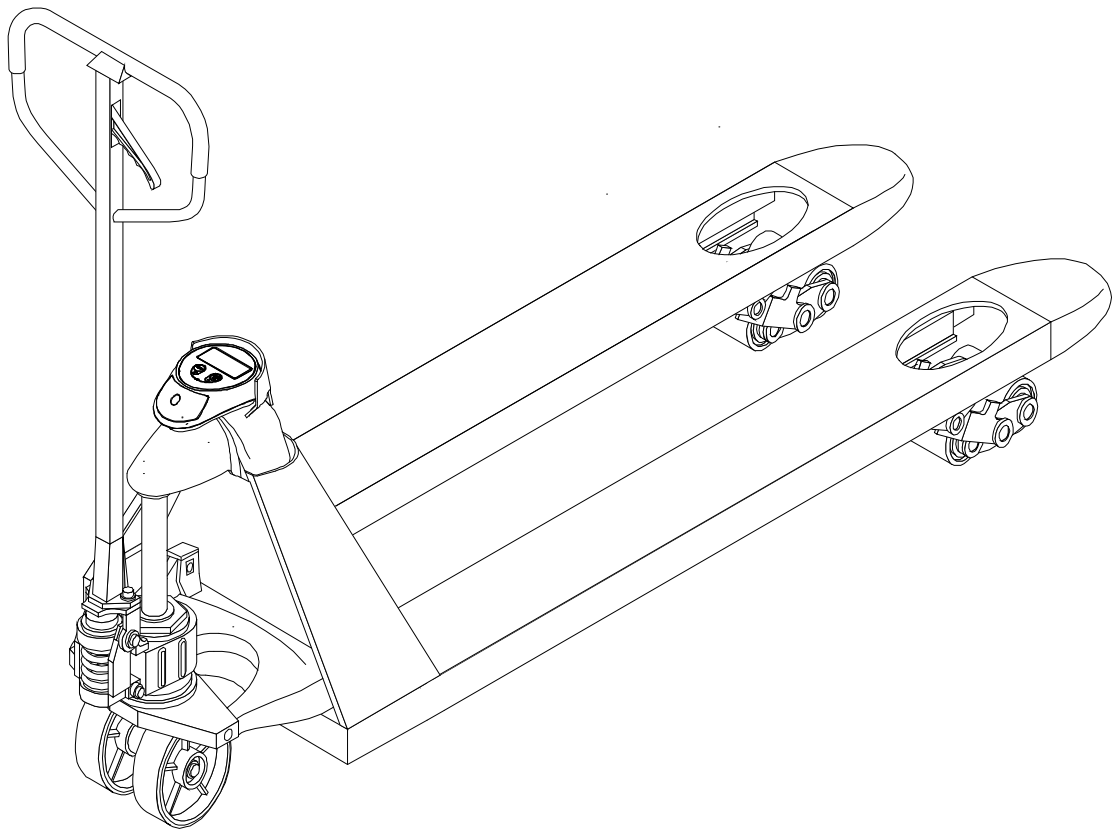# INSTALLATION MANUAL
# RAVAS-1



**Note: Operator MUST read and understand these operating instructions before using this Hand Pallet truck with weight indication.**

**Table of contents**

We would like to inform you about the fact that this  RAVAS product is  100 % recyclable on the basis that the parts are processed and disposed off in the right manner.
More information can be found on our website www.ravas.com.

# 1.      Introduction

Thank you for using this hand pallet truck with weight indication. Your hand pallet truck with weight indication was designed to give you a reliable and easy to use product. For your safety and correct operation, please carefully read this instruction before using it.

**NOTE: All of the information reported herein is based on data available
at the moment of printing. We reserve the right to modify our own
products at any moment without notice and incurring in any sanction.
So, it is suggested to always verify possible updates.**

## 2. Warnings & Safety measures

When using the hand pallet truck with weight indication please observe
carefully the instructions and guidelines contained in this manual.
Always perform each step in sequence.

**READ
CAREFULLY**

- All safety regulations that apply to the pallet truck remain valid and unchanged.
- Any modifications done to the system must be approved in writing from the supplier, prior to any work being completed.
- Do not operate this unit unless you have been fully trained of its capabilities.
- Check the accuracy of the scale on a regular basis to prevent faulty readings.
- Only trained and authorized personnel are allowed to service the scale.

## 3. Functionality keys

| KEY FUNCTIONS | ZERO | TOTAL / ON |
|---|---|---|
| **WEIGHING MODE**<br>1.  SHORT KEY PRESS | Zero correction | Switch ON<br>Totalize weight |
| 2.  LONG KEY PRESS (> 3 sec) | | Show totalization memory<br>• during cycle, reset memory by pressing zero |
| 3.  VERY LONG KEY PRESS (> 10 sec) | Zero calibration | |
| 4.  30 SEC KEY PRESS (> 30  sec) | | Go into *Service menu* (keep key pressed during switching on) |
| **ENTRY MODE**<br>1.  SHORT KEY PRESS | Go into entry menu<br>Shift cursor to left | Scroll upwards though menu to increase  the value of the shown digit |
| 2.  LONG KEY PRESS (> 3 sec) | Confirm (activate calibration) | |

## 4. Exploded view & Part list



01
02 03 04
05
06
07
08
11
09
10
04
13
12
14
15
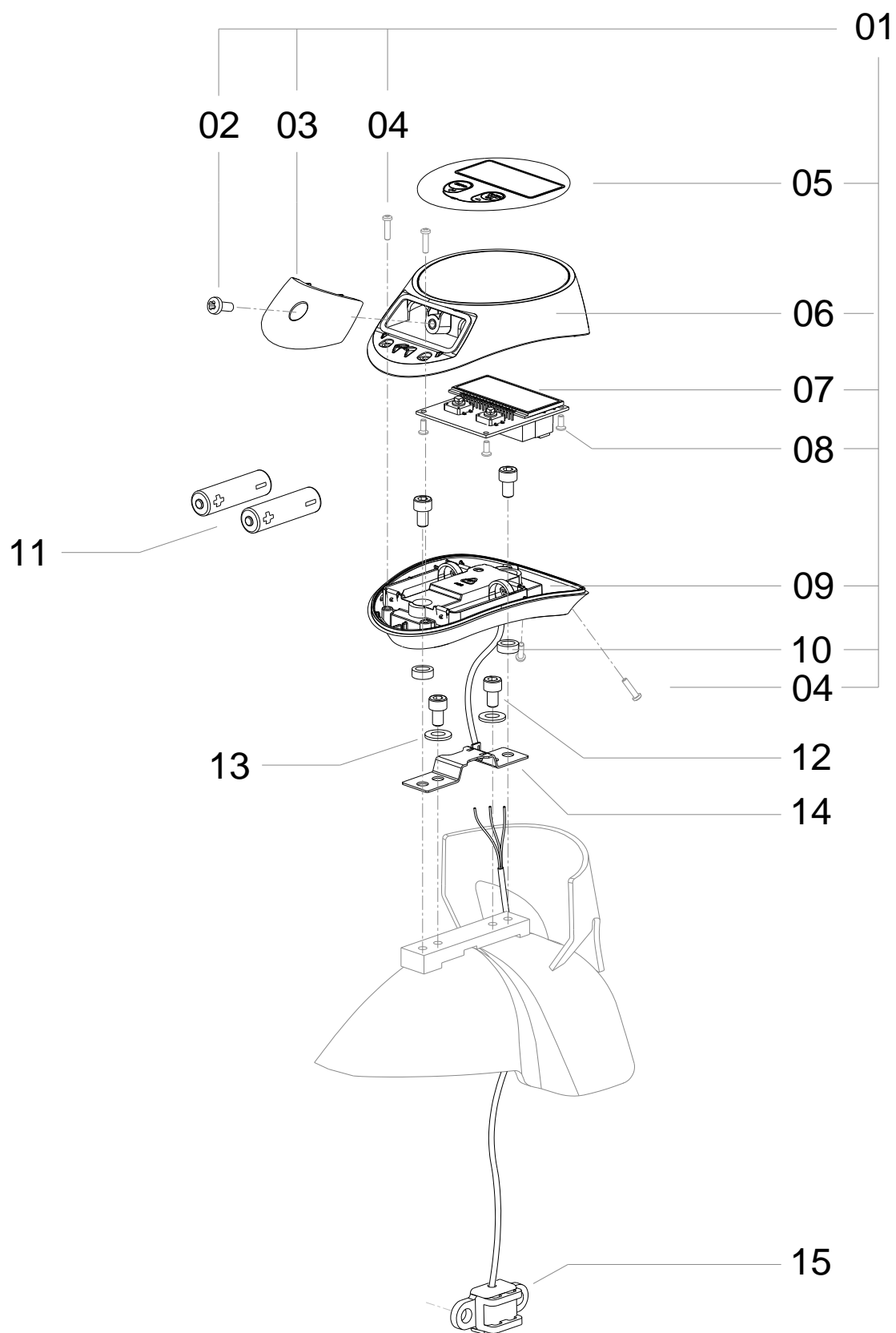
| Part nr. | Description | Amount |
|---|---|---|
| 1 | Indicator Assembled | 1 |
| 2 | Cross recessed raised cheesehead screw M4x10 | 1 |
| 3 | Indicator battery cover with sealing gasket | 1 |
| 4 | Self tapping plastic screw k3.0*12 | 4 |
| 5 | Touch panel | 1 |
| 6 | Indicator top housing | 1 |
| 7 | LCD display | 1 |
| 8 | Self tapping plastic screw k3.0*6 | 4 |
| 9 | Indicator bottom housing | 1 |
| 10 | Spacer ring M6 | 2 |
| 11 | AA battery 1.2-1.5VDC | 2 |
| 12 | Hexagon socket head screw M6x10 low | 4 |
| 13 | Washer M6 | 2 |
| 14 | Weight-sensor | 1 |
| 15 | Height-sensor | 1 |

## 5. Head mounting holes pattern
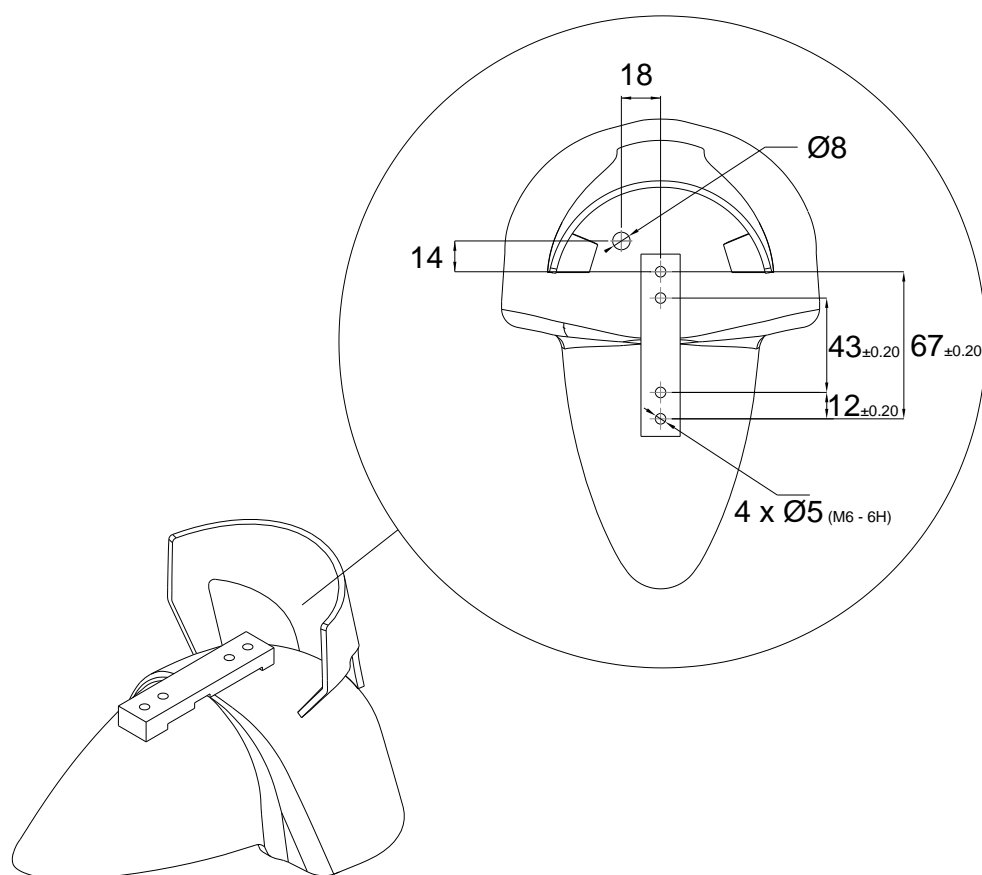
## 6.    Mounting indicator

**1**



**2**

**4x**

**2x**



**3**



**4**

2**x**



**5**
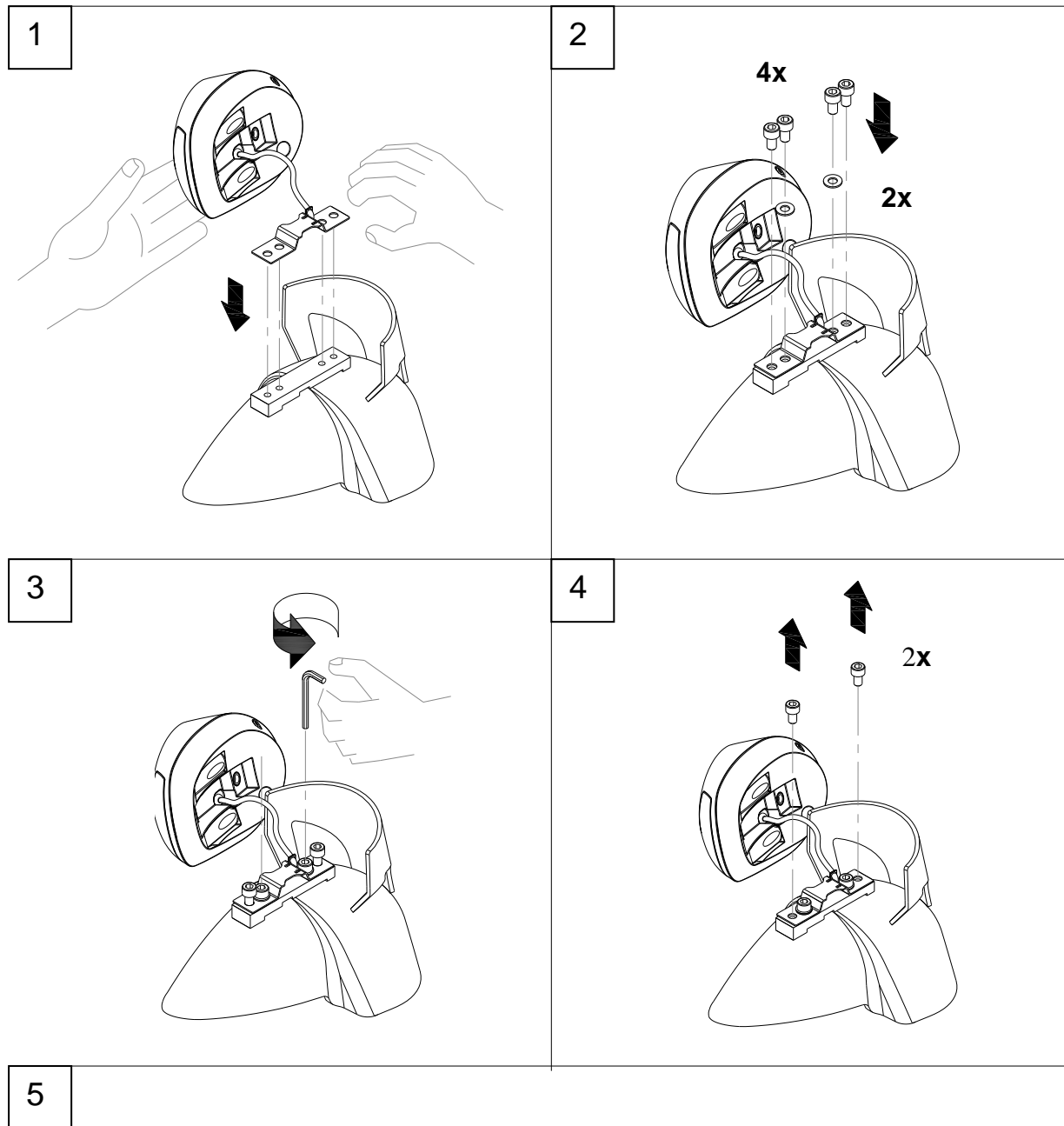
Degreasing
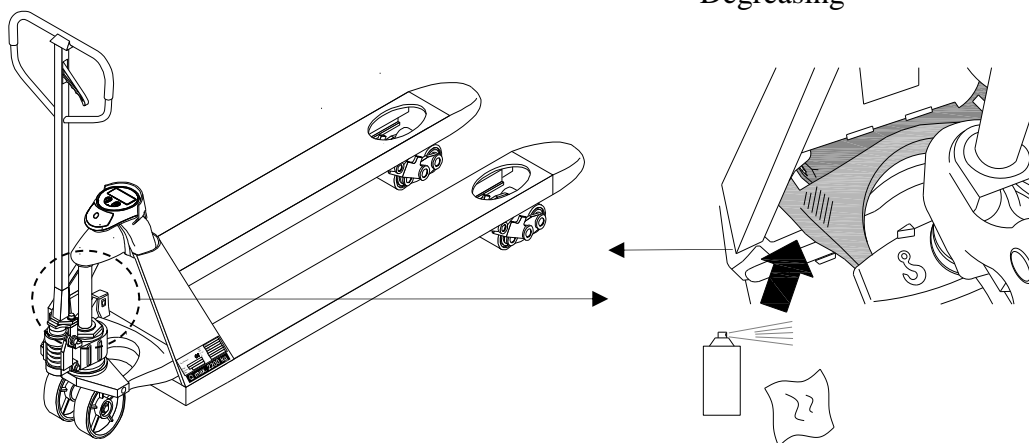
## 6

**Butyle gum**

## 7

**Putting butyle gum in the middle.**
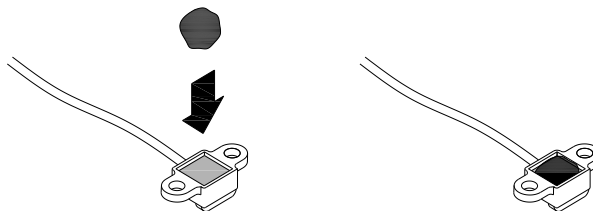
## 8

**Glue the sensor**

## 9

## 10

## 11

**12**



**13**



**14**



**15**



**16**



1
2
3

**17**

**18**



**19**



**20**

2x



**21**

Brown
Yellow
Blue

OK



**22**

Brown
Yellow
Blue



**23**

1

2
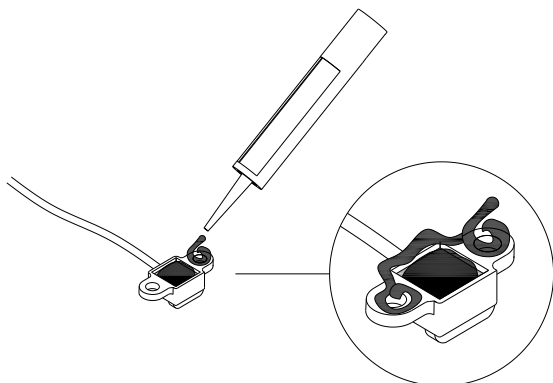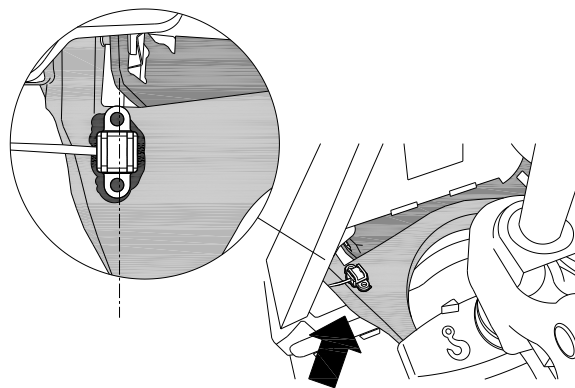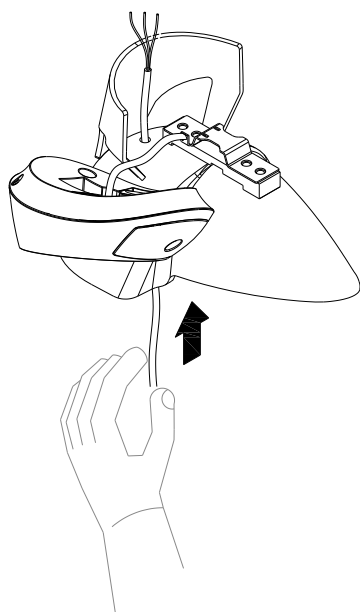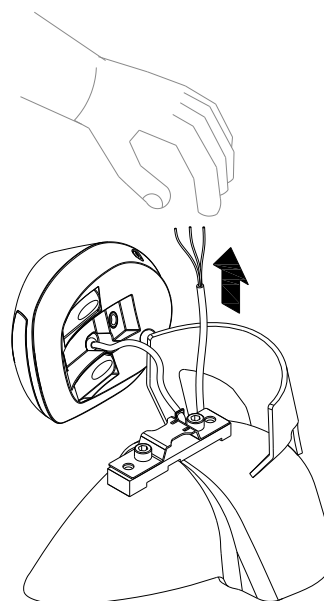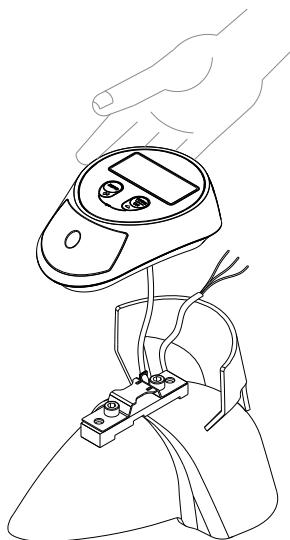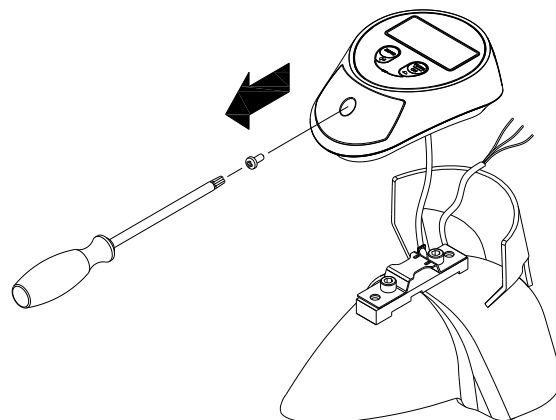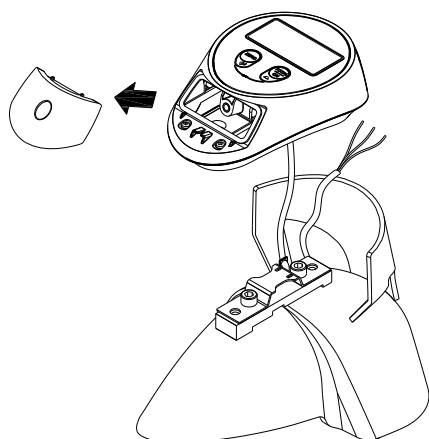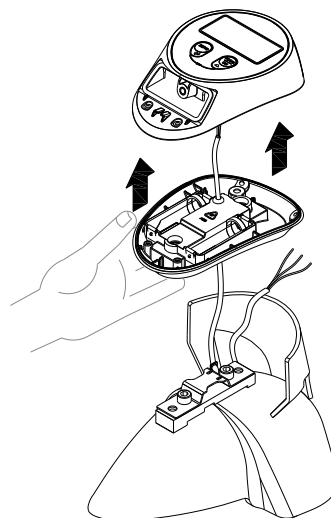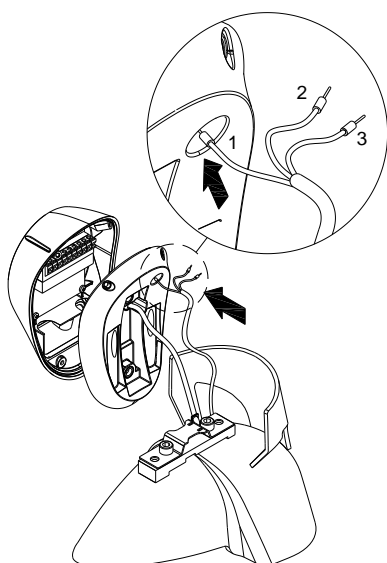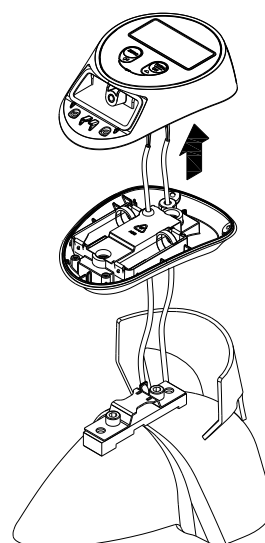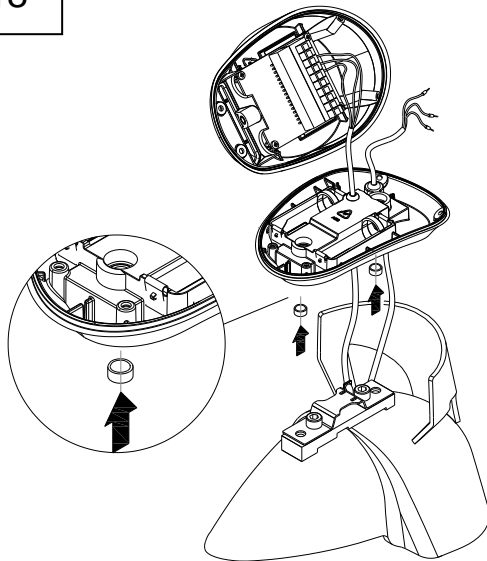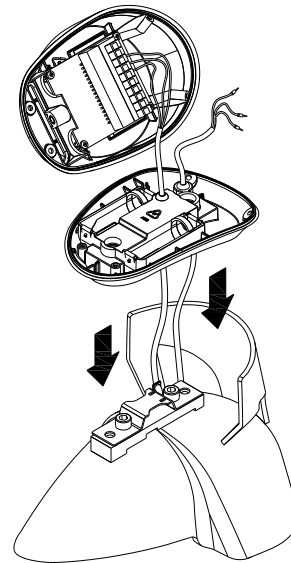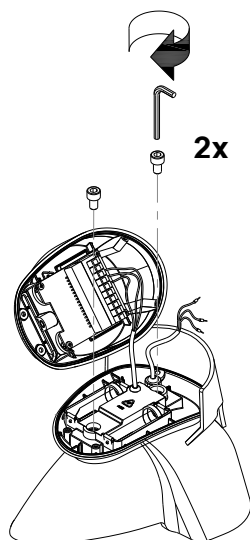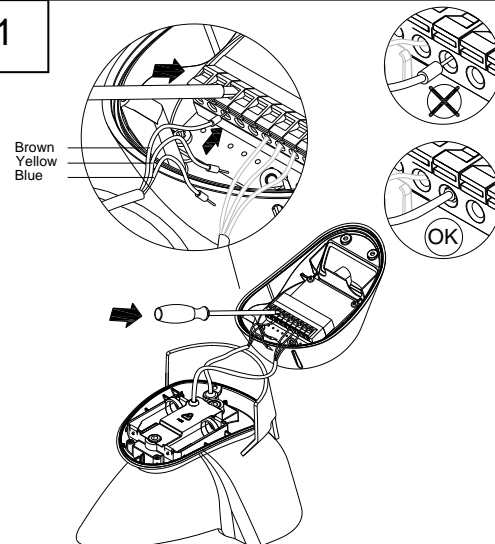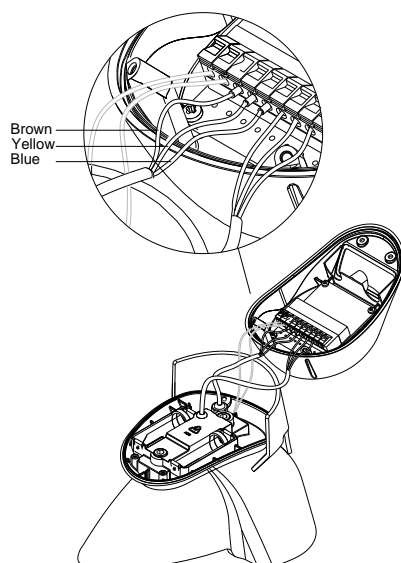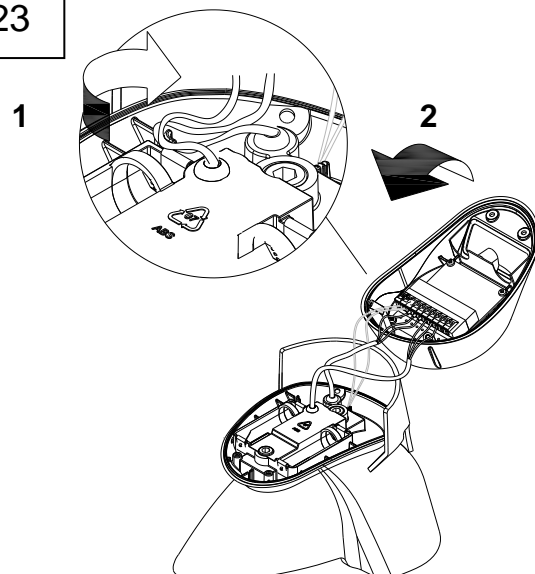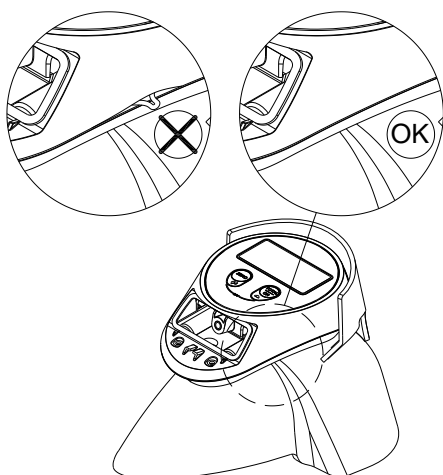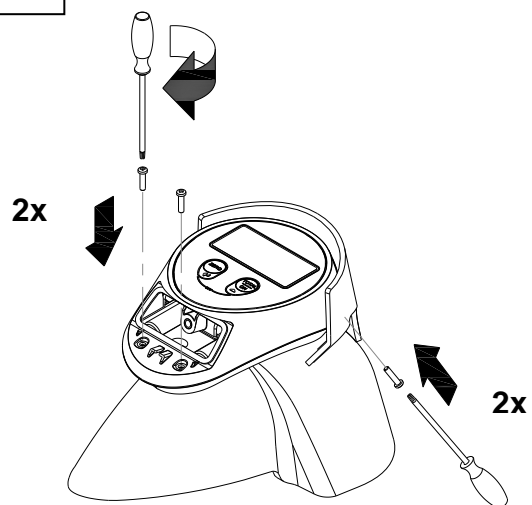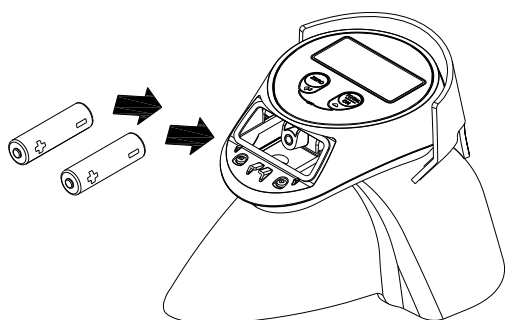
| | |
|---|---|
| **24** | **25** |
| | 2x |
| | 2x |

| | |
|---|---|
| **26** | **27** |

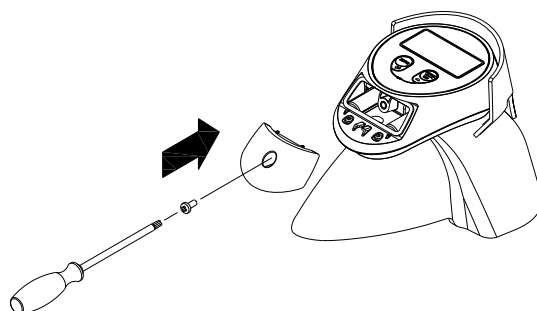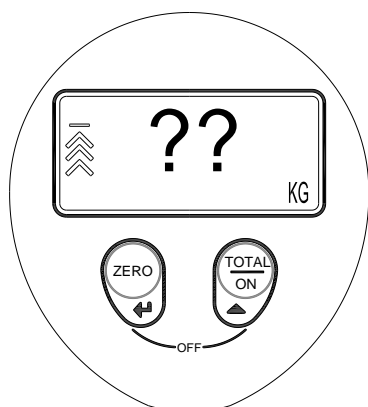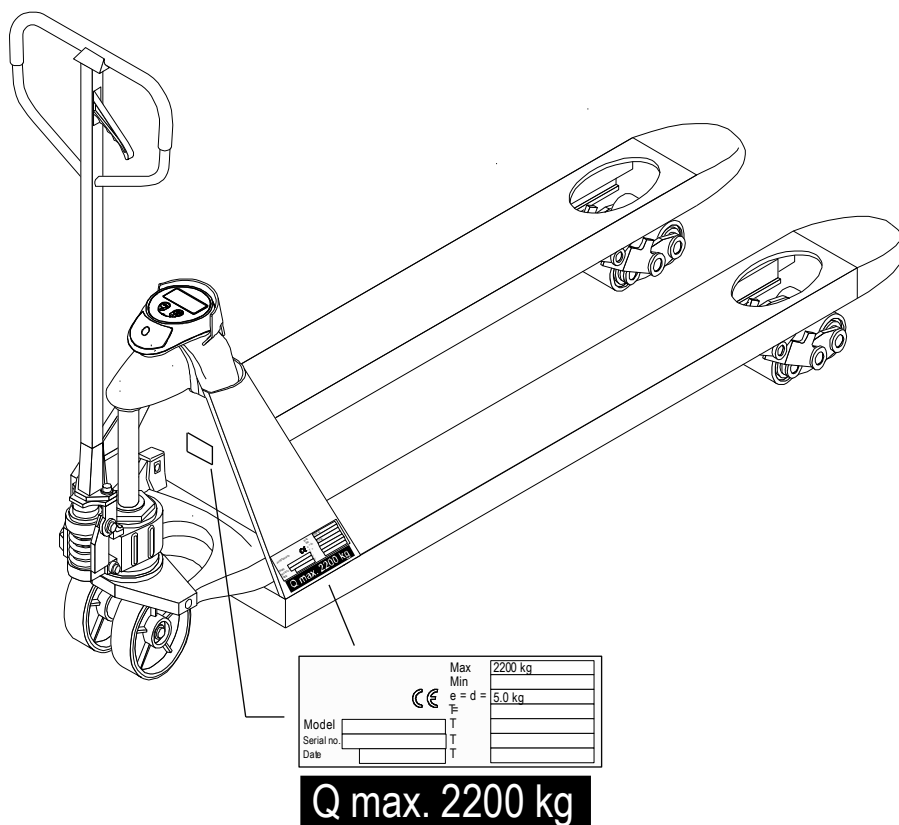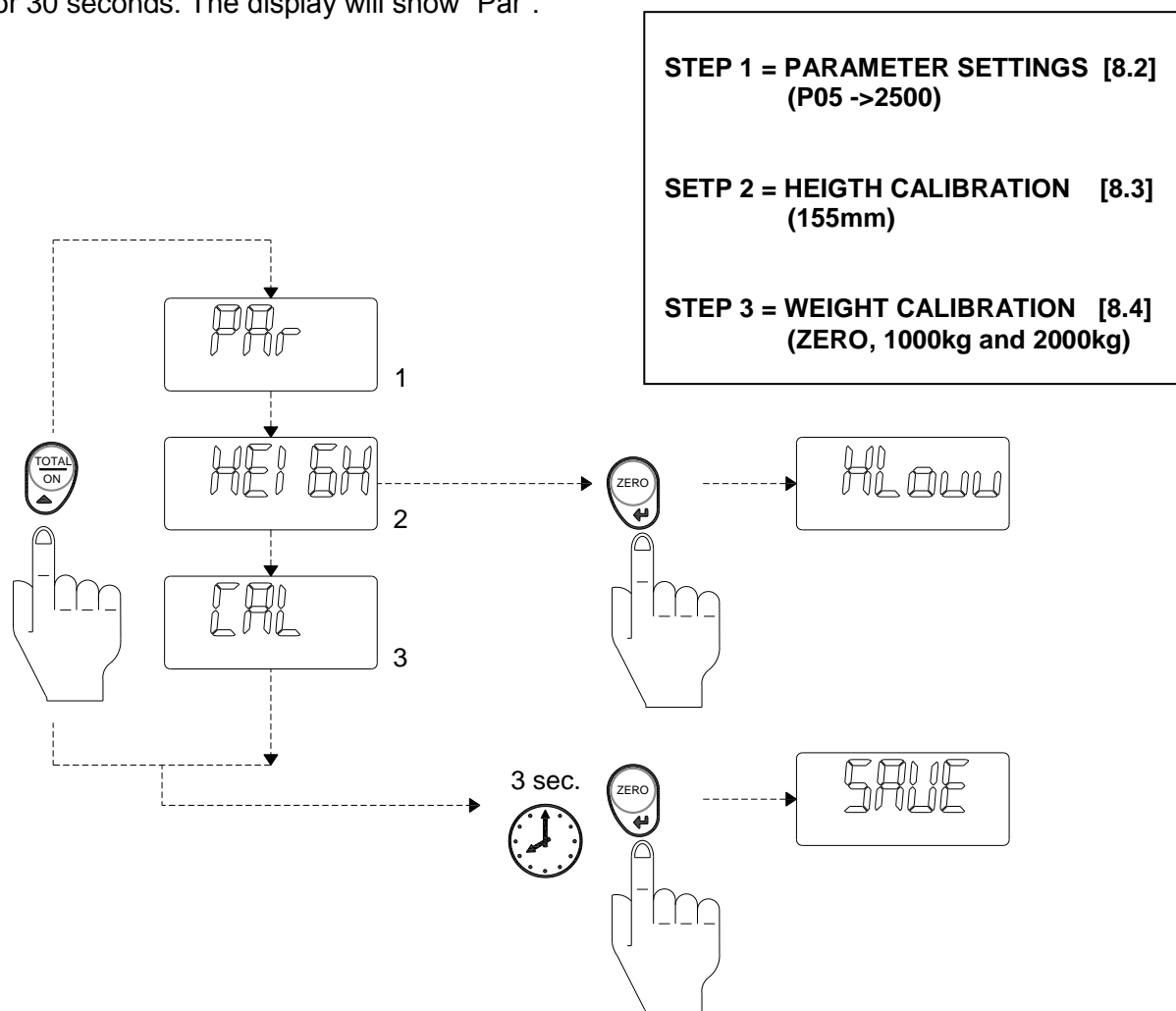| | |
|---|---|
| **28** | **29** |
| ?? KG | --oFF |
| ZERO   TOTAL/ON | ZERO   TOTAL/ON |
| | **Switch off the indicator by keeping both keys simultaneously pressed for 2 seconds.** |
| | 2 sec. |
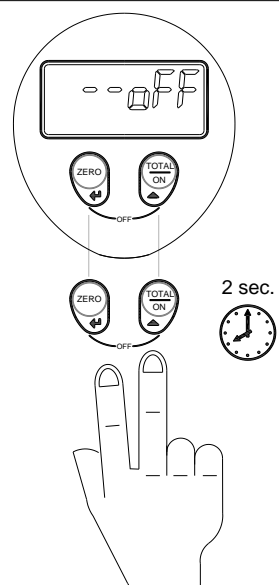
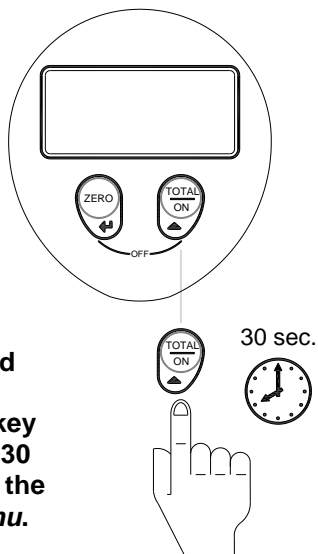## 7.     Placing the two machine labels

## 8. Service menu

### 8.1 Service menu set-up

After assembly, go into **_SERVICE MENU_** by pressing the TOTAL/ON key
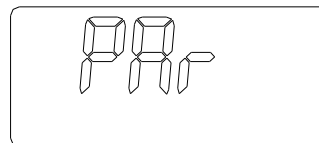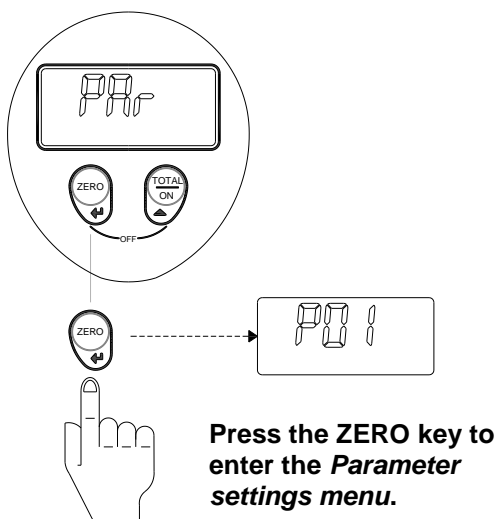for 30 seconds. The display will show "Par".
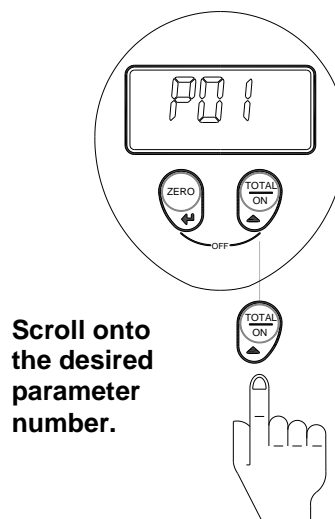
STEP 1 = PARAMETER SETTINGS  [8.2]
         (P05 ->2500)


SETP 2 = HEIGTH CALIBRATION   [8.3]
         (155mm)


STEP 3 = WEIGHT CALIBRATION   [8.4]
         (ZERO, 1000kg and 2000kg)

**8.2     Parameter settings menu (see step 1, page 12)**

| 1 | 2 |
|---|---|

**1**

Start up the
indicator and
keep the
TOTAL/ON key
pressed for 30
sec to enter the
*Service menu*.

30 sec.

**2**

*PAr*

**3**

*PAr*

*P01*

Press the ZERO key to
enter the *Parameter
settings menu*.

**4**

*P01*

Scroll onto
the desired
parameter
number.

**5**

*P05*

Enter the desired
parameter by
pressing the ZERO
key shortly.

*P05 = capacity*

**6**

*02300*

Change the
standard
setting into
the desired
setting by
pressing the
TOTAL/ON
key shortly.

**2x**

**7**

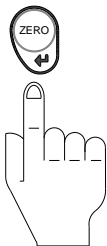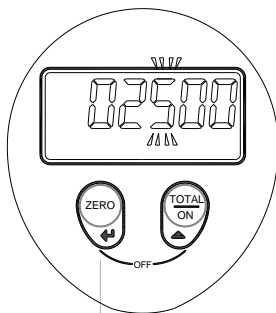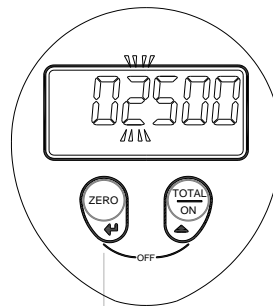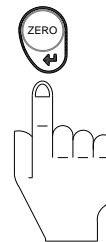**Confirm the entered setting by pressing the ZERO key shortly.**
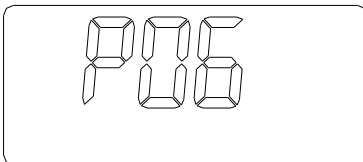
**8**

**2x**

**Confirm the entered setting completely by pressing the ZERO key twice.**
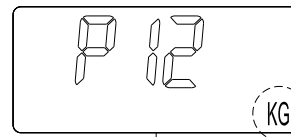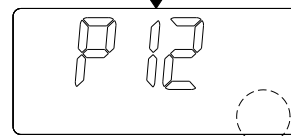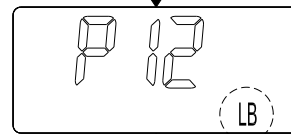
**9**

P06

**The indicator will go to the next upper parameter.**

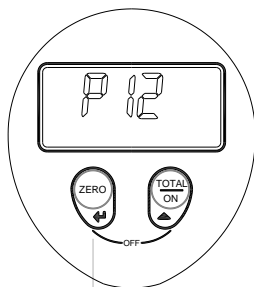**Scroll to P12 to set the desired weight unit**

**10**

P12 KG

P12 LB

P12

**Select *KG*, *LB* or *None* and confirm by pressing the ZERO key shortly.**
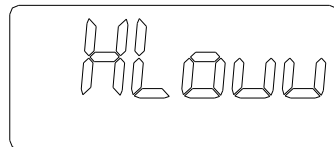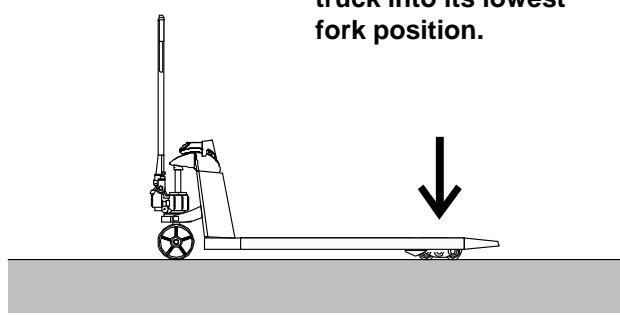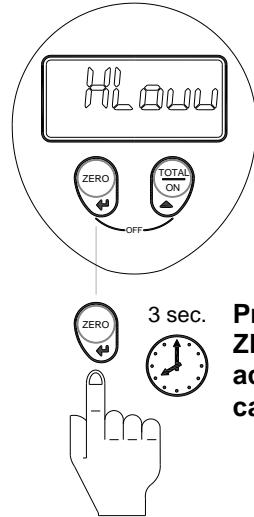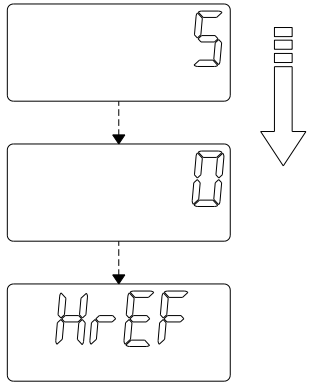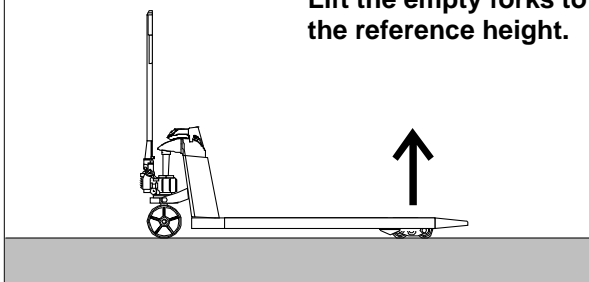
**11**

P12
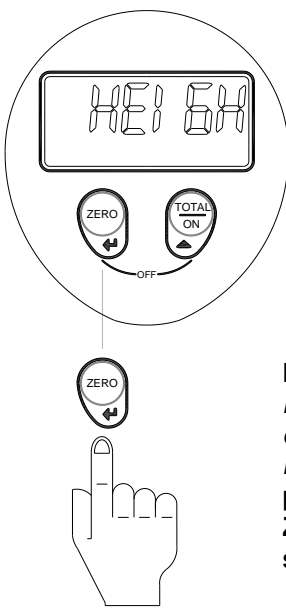
3 sec.

**Leave the parameter menu by pressing the ZERO key for 3 sec.**

**12**
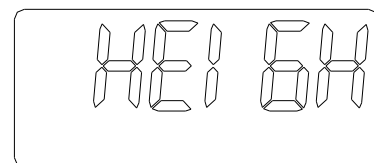
HEIGH

**Display has moved to the *Height calibration menu***

**8.3    Height sensor calibration (see step 2, page 12)**

1

HEI6H

Enter the *height calibration menu* by pressing the ZERO key shortly.

2

HLouu

The display shows "Hlow", to calibrate the lowest pallettruck position.

3

Be sure the forks of the hand pallet truck are empty.

Lower the pallet truck into its lowest fork position.

4

HLouu

3 sec.    Press the ZERO key to activate the calibration.

5

After 3 sec the indicator will start count down from 5 to 0 and calibrate the Height sensor.

5

0

HrEF

6

Lift the empty forks to the reference height.

**7**

HrEF

**The forks are at the reference height.**

±15 cm

**8**

HrEF

ZERO    TOTAL ON

OFF

ZERO    3 sec.
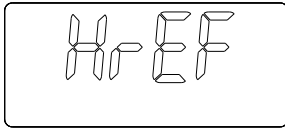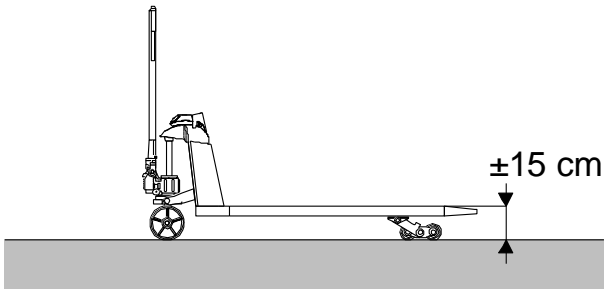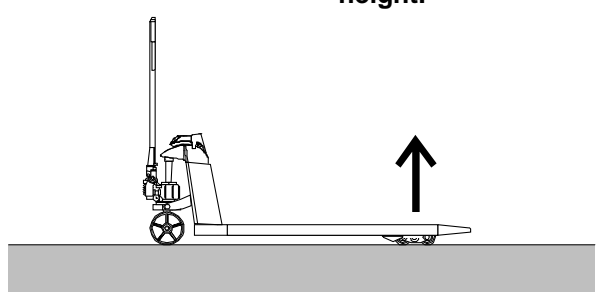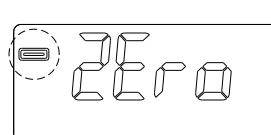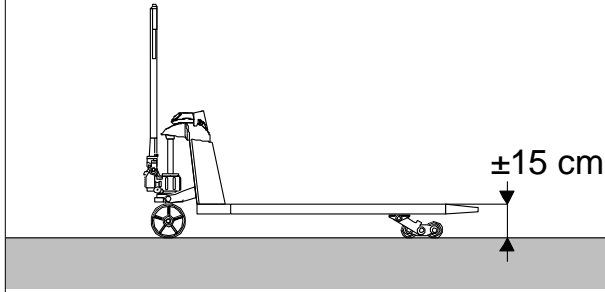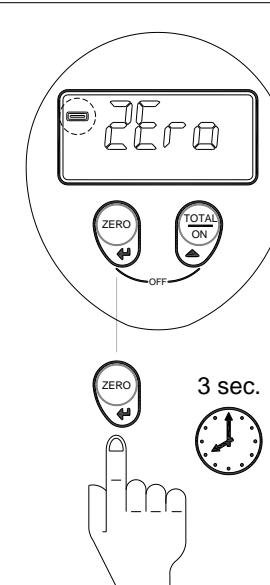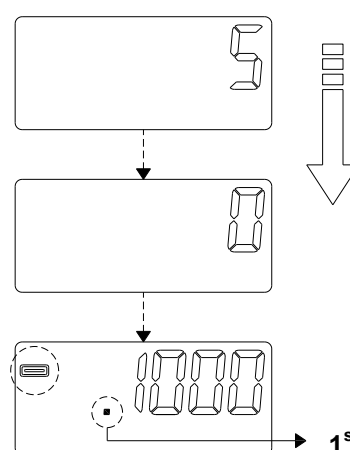
**Press the ZERO key to activate the calibration.**

**9**    **After 3 sec the indicator will start count down from 5 to 0 and calibrate the Height sensor.**

5

0

CAL

## 8.4 Weight calibration (see step 3, page 12)

**1**

**Enter the weight calibration menu by pressing the TOTAL/ON key shortly.**
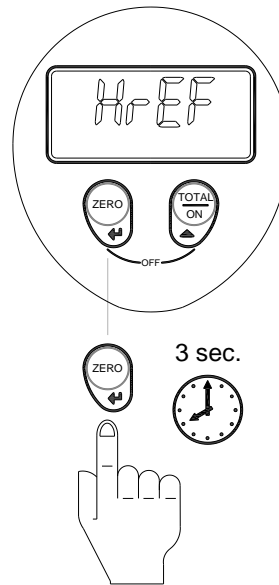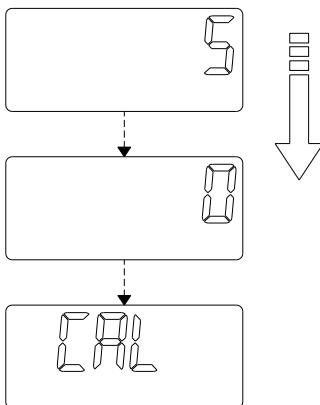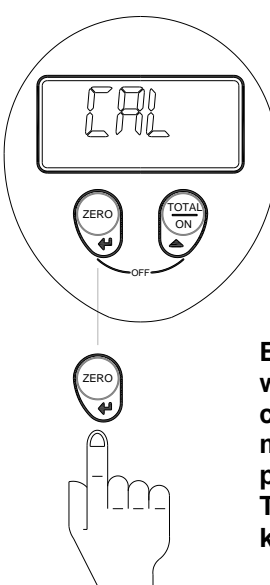
**2**

**3**

**Lift the empty forks to the reference height.**

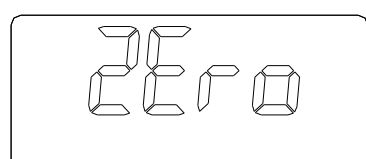**4**

**The forks are at the reference height, as shown at the left side of the display.**

±15 cm

**5**

ZERO

3 sec.

**6**

**After 3 sec the indicator will start count down and calibrate the Weight sensor.**

**1st calibration point**

**7**
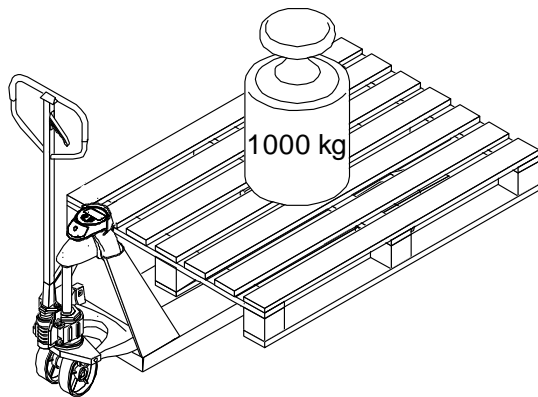
1000 kg

**8**

**Lift the forks to the reference height.**

1000kg

**9**

*(display showing 1000)*

ZERO    TOTAL/ON

OFF

**The forks are at the reference height, as shown at the left side of the display.**

ZERO    3 sec.

**Press the ZERO key for 3 sec. to activate the calibration.**

**10**

**After 2 sec the indicator will start count down and calibrate the Weight sensor.**

5

0

2000

**2ⁿᵈcalibration point**

**11**

2000 kg

**12**

**Lift the forks to the reference height.**

2000kg

**13**

The forks are at the reference height, as shown at the left side of the display.

Press the ZERO key for 3 sec. to activate the calibration.

3 sec.

**14**

After 3 sec the indicator will start count down and calibrate the Weight sensor.
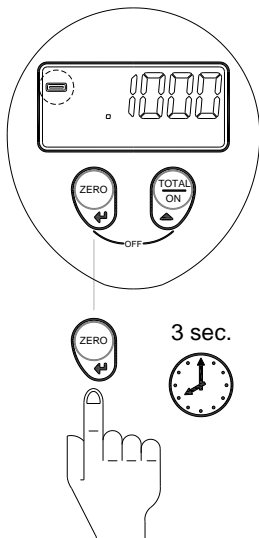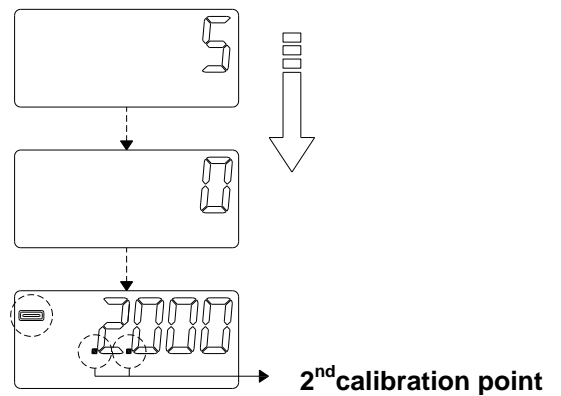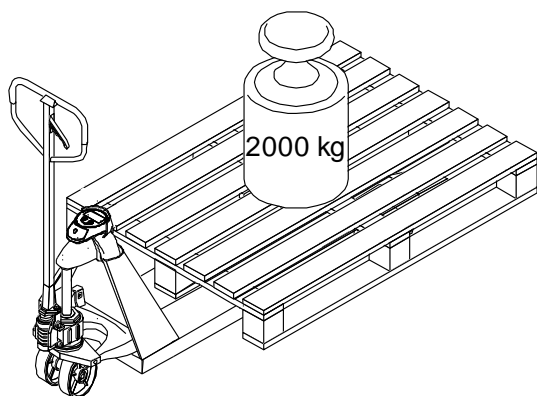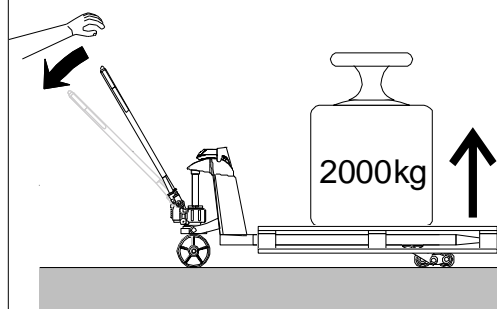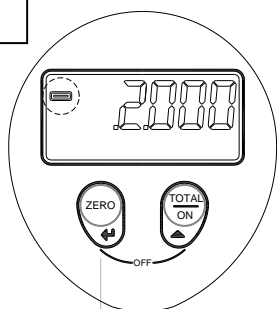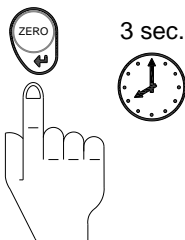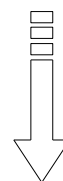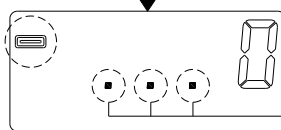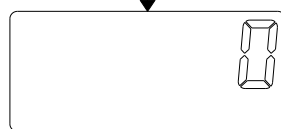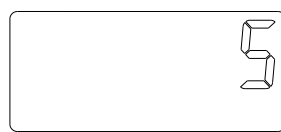
*A value of "0" means not active*

3<sup>rd</sup> calibration point
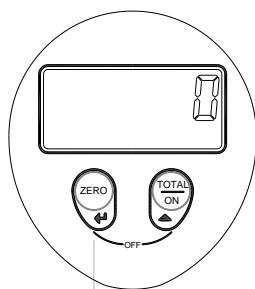
If desired, the 3<sup>rd</sup> calibration point can be activated.

Press the ZERO key shortly to go into the entry menu.
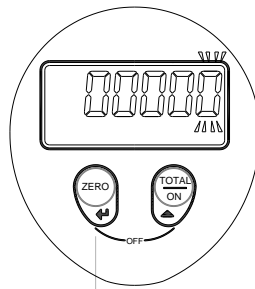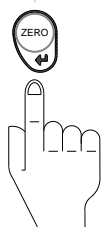
Change the digits by using the TOTAL/ON and ZERO key.

When the desired value has been entered, execute the 3<sup>rd</sup> calibration point by pressing the ZERO key 3 sec.
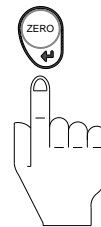
**15**

The indicator will save the new weight calibration, show for example the text "uV0.04" and show the text "Par" afterwards.

**16**

Now, the menu can be left and saved by pressing the ZERO key 3 sec. And go back to the weighing mode.

3 sec.

## 9. Parameterlist software IN-RAV-1-3V (LIST)

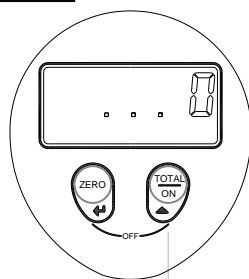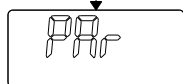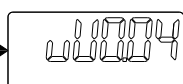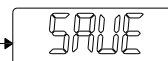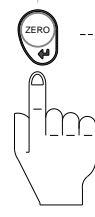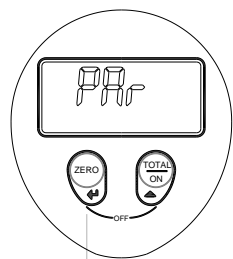| Par Nr. | Function | Settings | Factory defaults | RAVAS-1 | Option Quicklift |
|---------|----------|----------|------------------|---------|------------------|
| P 01 | Delay time peakhold in seconds | 0 /9 | **5** | | |
| P 02 | Smallest graduation step | 0.1/0.2/0.5/1/2/5/10/20/50/100 | **5** | | |
| P 03 | Biggest graduation step *1 | 0.1/0.2/0.5/1/2/5/10/20/50/100 | **5** | | |
| P 04 | multi interval per 100-graduation steps | 0000-9900 | **200** | | |
| P 05 | overload (full scale) per 100-graduation steps | 00000-99900 | **2300** | **2500** | |
| P 06 | motion detection in div/sec. | 0/1/2/3/4/5/20/50/100/200/500 | **4** | | |
| P 08 | auto shut-off time in minutes | 0 t/m 99 (0 = off) | **2** | | |
| P 10 | Zerotrack on/off | 0 = off en 1 = on (0.5div/sec) | **0** | **0** | |
| P 12 | Start-up unit | None, kg, lb | **kg** | | |
| P 17 | Application | 0 = standard    1 = peakhold | **0** | **0** | |
| P 18 | g-sensor connected for height indication? | Yes or No | **Yes** | | |
| P 19 | Flashing mode display active? | *Yes:* the digits that show the weight will be flashing in the display, when forks are not on reference height. *No:* the digits that show the weight will always be shown continuously | **Yes** | | |
| P 20 | Buffer size for filtering g-sensor input | 0/2/4/6/8/10/12 | **8** | **4** | |
| P 30 | Top height-range1 in % | 1-99% | **60** | | **50** |
| P 31 | Top height-range2 in % | 1-99% | **82** | | **75** |
| P 32 | Bandwidth range4 in % from H-ref | 0.5/1.0/1.5/2.0/2.5/3.0/3.5/4.0/4.5/5.0/5.5/6.0/6.5/7.0/7.5/8.0/8.5/9.0/9.5/10.0% | **4** | | **4.5** |
| P 90 | Reset all parameters to factory default settings | | | | |
| P 91 | Low bat level in Volts | 0.8/1.0/1.2/1.4/1.6/1.8/2.0/2.2/2.4/2.6/2.8/3.0 | **2.0** | | |
| P 92 | Low Batt Low bat sign will be blinking during low battery | 0 = indicator not automatically off because of low-bat 1 = indication off after 1 min | **1** | | |
| P 93 | Main function Key nr. 2 | 0 = Totalization functions disabled 1 = Totalization functions enabled | **1** | | |
| P 99 | Software number | | **001** | | |

**10. Wiring diagram**