FAIRBANKS SCALES

Operation / Maintenance

Dual Platform Counting Scale

WITH OMEGA SERIES COUNTING SCALE

MODEL 1129 SERIES

51300

Revision 4 05/16

Amendment Record

Dual Platform Counting Scale
With Omega Series Counting Scale
Model 1129 Series

Document 51300

Manufactured by Fairbanks Scales Inc.

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Created	07/12	
Revision 1	08/12	Released Product
Revision 2	03/13	Updated parts list and diagram. Updated assembly procedure.
Revision 3	12/15	Updated troubleshooting / low battery
Revision 4	05/16	Updated parts list

Disclaimer

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Section 1: General Information

1.1. INTRODUCTION

The **1129 Series Dual Platform Counting Scale** is available in five (5) standard models. The difference between these models is the capacity of the local scale.

- The **Omega Series Counting Scale** is available in five model sizes. This allows the user to weigh and count their products based on the smallest size of the parts being weighed.
  - ***6 lbs.*** – ***15 lbs.*** – ***30 lbs.*** – ***60 lbs.*** – ***100 lbs.***
- The **Remote Platform** has a capacity of **one thousand pounds** (1,000 lbs.).
  - It is used for weighing larger products, both in capacity and dimensionally.

The **Omega Counting Scale** is assembled in the same manner for all models.

- It is constructed with a mechanical cast iron lever system and base, metal pillar, **Acc 380 Omega Bracket Adapter**, and an **Omega Counting Scale**.

1.1.1. Standard Applications

- **Material handling**
- **Inventory management**
- **Warehousing**
- **Auditing**
- **Parts distribution**
- **Bag filling**

1.2. DESCRIPTION

1.2.1. Omega Series Scales

The self-contained, local weighing platform and instrument, **Omega Counting Scale** is designed in a rugged ABS plastic enclosure with a stainless steel weighing platform, perfect for almost any counting scale application.

– The **9.64" x 13.97"** weighing platform can easily accommodate most parts counting needs.

Standard units include the following features.

- **Lead-Acid Rechargeable Battery**
- **Programmable PLU (Parts Look Up)**
- **Dual RS232C Serial Ports**

✓ **Serial Port 1** *is dedicated to a* **Printer, Computer** *or a* **Remote Display.**

✓ **Serial Port 2** *is dedicated to* **Barcode Readers**.

1.2.2. Portable Platform Scale

The **Portable Platform Scale** is a remote platform used for bulk weighing and counting.

- This platform is selected using the front panel of the Omega series Counting Scale.
- The **17.75" x 23.5"** weighing platform provides a large space to weigh and count bulk items up to one thousand pounds (1000 lbs.)

1.3. TECHNICAL SPECIFICATIONS

1.3.1. Omega Series Basic Specification

DIGITAL DISPLAY	LCD, height 0.6 in (14.5 mm) 6/7/7(Weight / Piece Weight / Total Pieces)
PLATTER SIZE	9.64” x 13.97” (245 x 355 mm)
DIMENSIONS	(15.24” x 14.37” x 4.61” (387 x 365 x 117 mm)
NET WEIGHT (KG)	8.16 lbs. (3.7 kg)
OPERATING TEMPERATURE	32˚F to +104˚F (0℃ to +40℃)
RELATIVE HUMIDITY	Less than 85%
POWER	117VAC 50/60Hz +/- 10% – ***9V / 500mA, AC adapter;*** Built-in 6V Rechargeable Battery – ***15-20 hours continuous*** – ***7-10 hours continuous with an external platform*** – ***14-16 hours recharge time***
INTERFACE	RS-232C, Serial 1 and Serial 2

1.3.2. Omega Series Scale Specifications

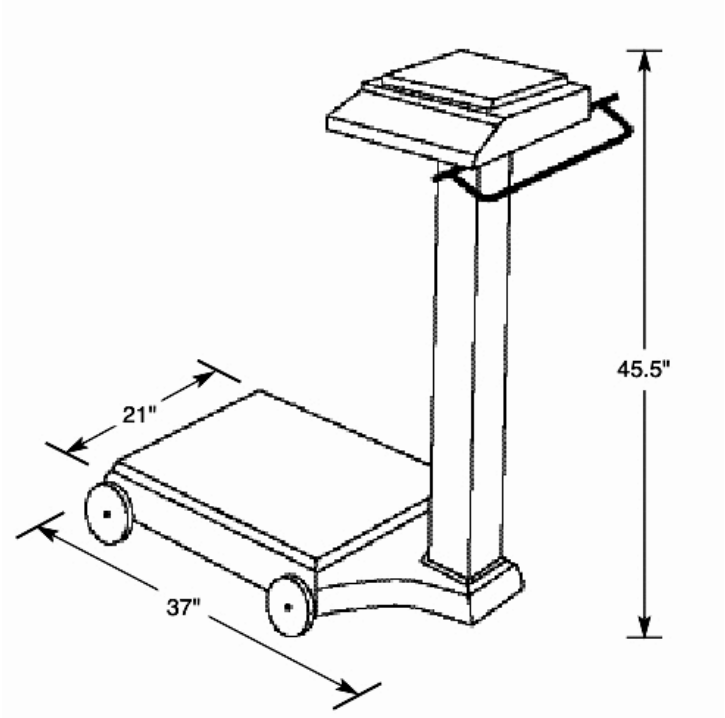
MODEL	Omega Counting Scales				
MAX. CAPACITY	6 lb / 3 kg	15 lb / 6 kg	30 lb / 15 kg	60 lb / 30 kg	100 lb / 50 kg
DISPLAYED DIVISIONS	0.0002 lb / 0.1 g	0.0005 lb / 0.2 g	0.001 lb / 0.5 g	0.002 lb / 1 g	0.002 lb / 1 g
ACCURACY	1/30000	1/30000	1/30000	1/30000	1/50000

1.3.3. Portable Platform Scale Specifications

MODEL	**Portable Platform Scale**
MAXIMUM CAPACITY	1000 lbs/ 454 kgs
DIVISION SIZE (D)	0.5 lbs/ 0.2 kgs
PLATFORM SIZE	17.75” x 23.5”
OVERALL LENGTH	37”
CONSTRUCTION	**Base/ Platform/ Wheels: Cast Iron** Column: Fabricated Steel
WEIGHT	168 lbs/ 76 kgs

1.4. ACCESSORIES

PRODUCT NO.	DESCRIPTION
31701	Bar code scanner (Symbol) with hands-free stand
31789	Dust cover (Qty. 5)
24482	GC402d series label printer
20483	GC420d printer cable (required when a GC420d printer is ordered).
34052	PLU Manager Database Software (CD)



Section 2: Customer Service Information

2.1. GENERAL SERVICE POLICY

It is **the customer/operator's responsibility** to ensure the equipment provided by Fairbanks is operated within the parameters of the equipment's specifications and protected from accidental or malicious damage.

W A R N I N G !

Absolutely NO physical, electrical or program modifications other than selection of standard options and accessories can be made by customers to this equipment

Repairs are performed by Fairbanks Scales Service Technicians and Authorized Distributor Personnel ONLY!

Failure to comply with this policy voids all implied and/or written warranties.

- ✓ The equipment consists of printed circuit assemblies which must be handled using ESD handling procedures, and must be replaced as units.
- ✓ Replacement of individual components is strictly not allowed.
- ✓ Using electric arc welding can severely damage scale components, such as digital weight indicators, junction boxes, power supplies, and load cells.

★ ★ IMPORTANT INSTALLATION NOTICE ★ ★

All load cells, load cell cables and interconnecting cables used to connect **all scale components shall be located a minimum of thirty-six (36”) inches distance away** from all single and multiple phase high energy circuits and electric current carrying conductors.

- ✓ This includes digital weight indicators, junction boxes, and power supplies.
- ✓ This includes any peripheral devices, such as printers, remote displays, and auxiliary data entry devices.
- ✓ Also included is the scale components themselves, such as 120 volt AC, 240 volt AC, 480 volt AC and electric supply of higher voltage wiring runs and stations, AC power transformers, overhead or buried cables, electric distribution panels, electric motors, florescent and high intensity lighting which utilize ballast assemblies, electric heating equipment, traffic light wiring and power, and relay boxes.

All scale components, including digital weight indicators and peripheral devices are not designed to operate on internal combustion engine driven electric generators and other similar equipment.

NOTE: *For more information, please contact a* **Fairbanks Service Representative.**

Section 3: Installation

3.1. TOOLS REQUIRED

- **#1 or Small Slotted Screwdriver**
- **#2 Phillips Screwdriver**
- **10" Adjustable Wrench**
- **Pliers**

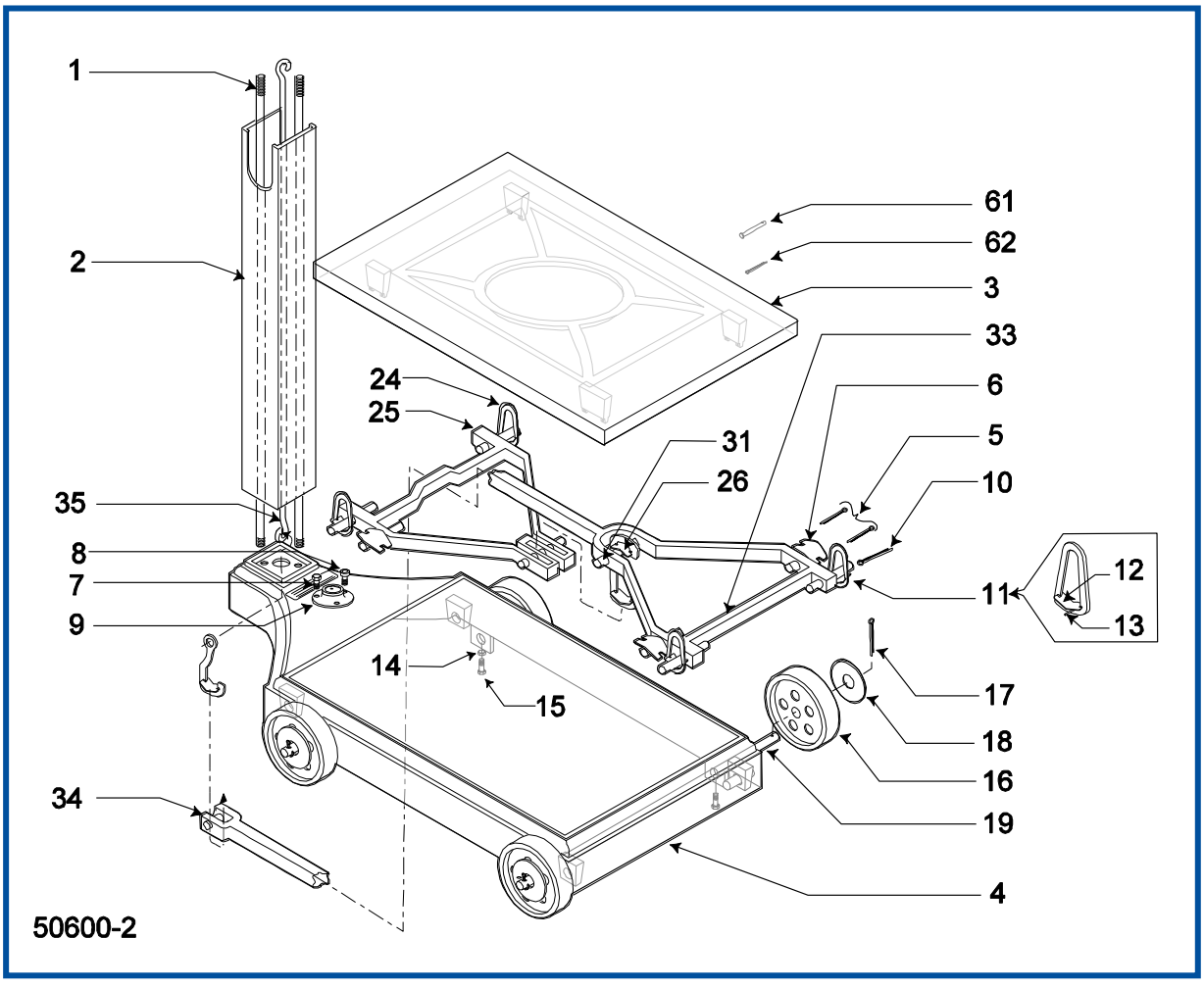
3.2. WHEEL AND PILLAR ASSEMBLY

1. Set the **Scale Base Assembly** (**#4**) sideways on the floor.
2. Insert a **Cotter Pin** (**#17**) through the small hole in one end of the **First Axle** (**#19**).
3. Place a **Flat Washer** (**#18**) and a **Wheel** (**#16**) onto the open end of the axle.
4. Insert the axle's other end through ***both*** holes in the base.
5. Place the **Second Wheel** (**#16**) onto the axle.
6. Place a **Flat Washer** (**#18**) over the axle, and then insert a **cotter pin** (**#17**) through the axle's small hole.
7. Repeat steps 2-6 for the second axle.
8. With the **Scale Base Assembly** (**#4**) in an upside-down position, center the axles in the base.
9. Insert the **Locking Screws** (**#15**) into the tapped holes in the bottom of the base, tightening the axle into place with the screws.
   – Directly under the axle holes.
10. Secure the **Lock Nuts** (**#14**).

NOTE: *See the diagram on the following page to identify parts in these assembly instructions.*

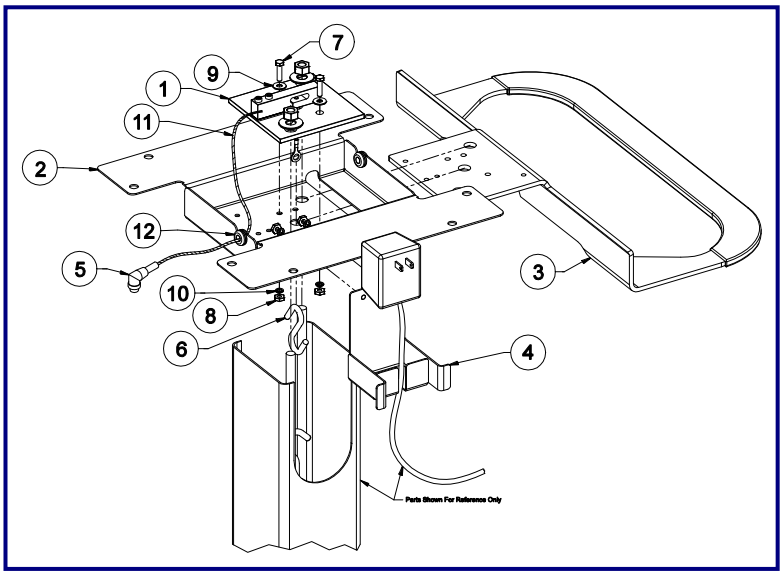
3.2. WHEEL & PILLAR ASSEMBLY, CONTINUED

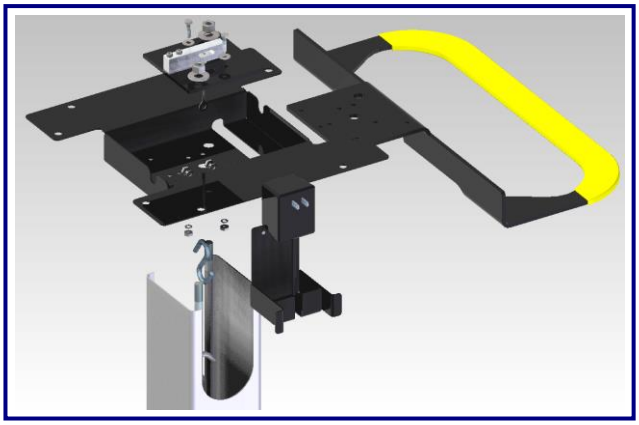
11. With the **Scale Base Assembly** (#4) in an upright position Screw the two (2) **Pillar Rods** (#1) into the two (2) tapped holes of the base.
12. Place the **Pillar** (#2) over the pillar rods.
    – The cutouts face to the left and right of the platform
13. Insert the **Steelyard Rod** (#35) down through the pillar.
    – The bent hook is on top, and the loose swivel hook is on the bottom.

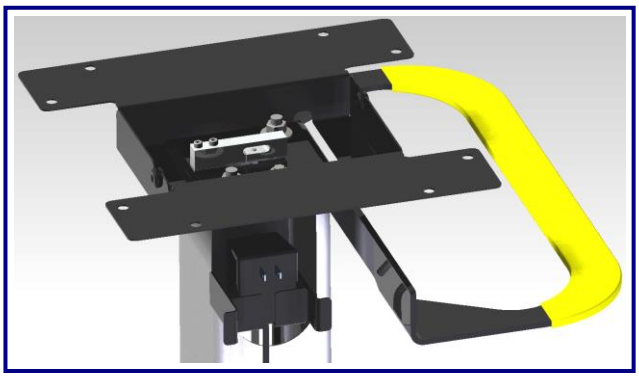


3.3. MOUNTING BRACKET KIT ASSEMBLY

1. With the portable platform right-side-up, place the **Handle (with stiffener plate)** (#3) on top of the pillar.
2. Place the **(Counting Scale) Bracket** (#2) on top of the **Handle Plate** (#3).
   - The two (2) pillar rods must pass through the two (2) holes in the **Bracket** (#2).
   - The scale display may face any direction on the platform.
3. Place the **Load Cell Assembly** (#1) on top of the pillar bolts, with the load cell cable exiting in the direction to easily connect the cable to the counting scale
4. Attach the split **Rubber Grommet** (#12) to the **Load Cell Cable (#1),** then place it down onto the slot in the side of the **Bracket** (#2).
5. Turn the **Jam Nut** onto the **Linkage Assembly** all the way to the bottom of the threads.
6. Turn the Linkage Assembly until the top of the threads can be seen in the Load Cell opening, but not touching the Load Cell body.
7. With a **quarter inch (¼") wrench**, *gently* tighten the Jam Nut against the Load Cell..



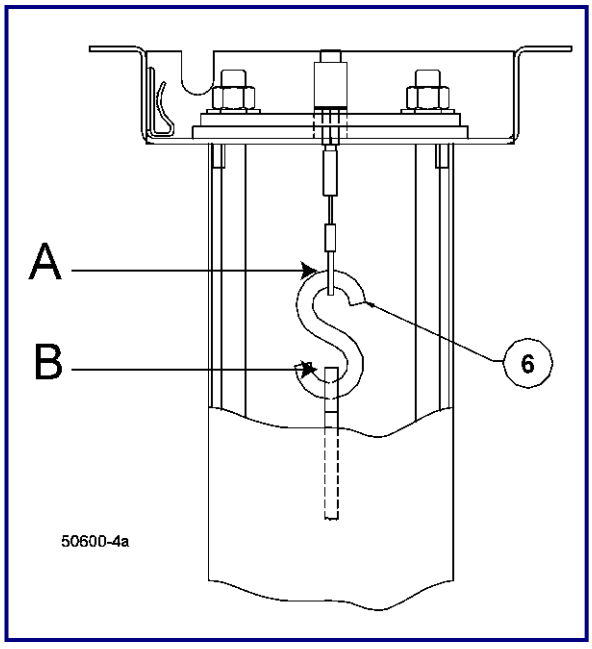




NOTE: *For complete parts diagram, see* **Section 6.3. Acc 380 Mounting Bracket Parts.**

3.3. MOUNTING BRACKET KIT ASSEMBLY, CONTINUED

8. Place the two (2) washers on the Pillar Bolts, install the nuts on the **Pillar Bolts**, then tighten the nuts to pull the whole assembly together.
9. On the bottom back-side of the scale's base, lift up the **Lever End** (**#34**) while placing the hook under the lever's pivot.
   – Do this while holding the top of the Beam Load Rod assembly.
10. Insert the **"S" Hook** (**#6**) into the eye on the end of the **Load Cell Linkage Cable Assembly** (**A**). Insert the hook end of the Beam Load Rod Assembly into the other end of the **"S" Hook** (**B**).
11. Route the load cell cable through the cable clamps and pull all excess load cell cable through the slot in the side of the bracket.



NOTE: *The lower-end of the* **Beam Load Rod Assembly** *must be properly hooked into the* **Transverse Lever Pivot**.

This can be verified by reaching under the pillar and verifying the hook and pivot connection.

3.4. INSTALLING THE INSTRUMENT

1. Remove the **four (4) feet** from the bottom of the Omega Counting Scale.
2. Place the scale on the bracket with the front of the scale oriented in the most useful direction.
3. **Re-install the feet** through the holes in the bracket, into the bottom of the counting scale.
4. Plug the **Load Cell Cable Connector** into the Remote Scale Port on the side panel of the counting scale.

Section 4: User Operations

4.1. INTRODUCTION

The **Omega Series Counting Scale** is a weighing device that displays the number of similar items in a group based upon the weight of a known sample.

- The counting feature of this scale calculates the *average piece weight* for the items by using the total weight of the sample and dividing that number by the number of items in the sample.
- All of these calculations are performed within the Omega Series Counting Scale **Internal Program Application**, which is performed automatically during the weighing process.
- This scale provide a quick and accurate count of large quantities of similar objects.

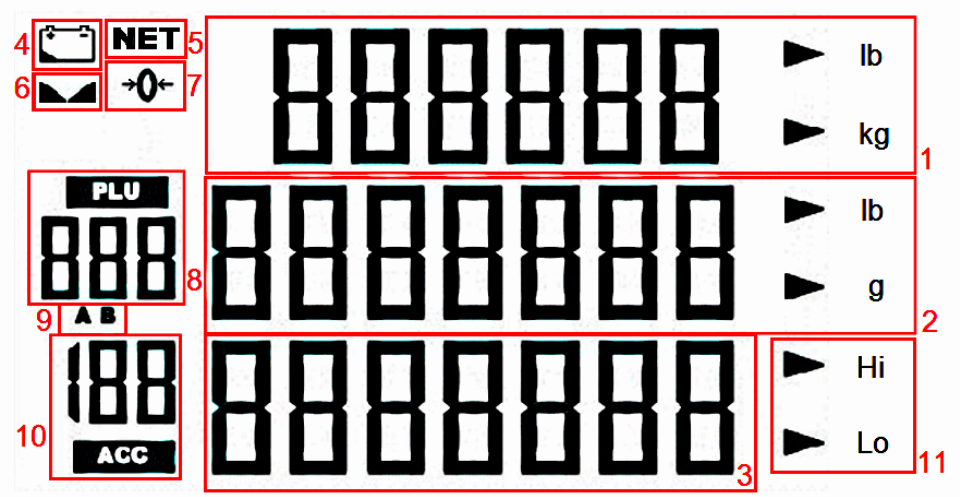
4.1.1. General Weighing

1. Press ON.
   - The scale powers up.
2. Press ZERO.
   - Allow the weight to stabilize (◣◢) on **zero**.
3. Place the item(s) on the scale platform and record the displayed weight.

OR…

4. Place a weighing container on the scale platform.
5. Press →T←
   - Allow the weight to stabilize (◣◢) on **zero**.
6. Add items into the container on the platform and record the Net weight.
7. Remove the item(s) from the scale.

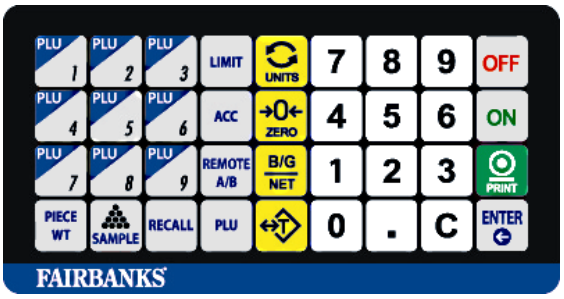
4.2. FRONT PANEL DISPLAY AND KEY FUNCTIONS



4.2.1. LCD Display Definitions

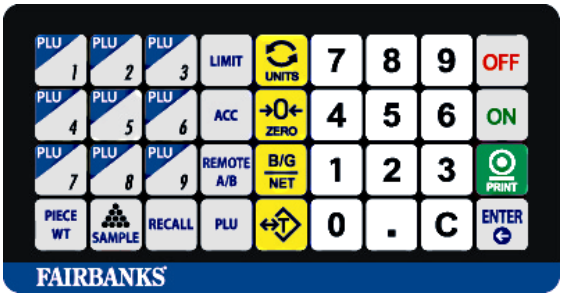
1	888888 ► Kg ► g	Actual weight display.
2	8888888 ► Kg ► g	Second row displays **Piece Weight**. Also used as keypad input display
3	8888888	The third row displays **Piece Counts**, and abbreviated as **PCS**.
4		Indicates the battery power is low. A battery recharge or battery replacement is required for further operation.
5	NET	Indicates the first row displays the Net weight after Tare Operation.
6		Indicates the weight is stable.
7	→0←	Indicates the weight is at zero.
8	PLU 888	Displays the PLU number.
9	A B	Indicates the selected scale.
10	188 ACC	Displays the accumulated counting results in memory.
11	► Hi ► Lo	Indicates that the upper Limit of piece counts or weight is set. Indicates that the lower Limit of piece counts or weight is set.

4.2.2. Keypad Functions



Key	Function
OFF	Turns the scale **OFF**.
ON	Turns the scale **ON**.
PRINT	Initiates a **PRINT** cycle. • **Internal Programming** must be activated.
ENTER	Confirms the entry or selection.
1 ~ 9	Press the numeric and decimal keys to input data such as piece weight, PLU no., etc.
UNITS	Changes the **Unit of Measure**. • Pound (lb) or Kilogram (kg). • The current unit selected is displayed on the right hand side of the actual weight display.
ZERO	Sets the scale to **ZERO**.
B/G NET	Changes weight mode to **Gross Weight**, **Net Weight**, or **Tare Weight**.
T	Enters the actual weight as the **TARE**.
LIMIT	Sets the alarm for **high** and **low** **LIMITS** for piece counts and piece weights.

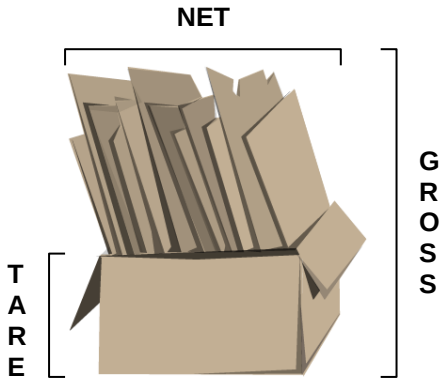
4.2.2 Keypad Functions, Continued



KEY	FUNCTION
ACC	Adds a **piece count** and **weight**.
REMOTE A/B	Switches operation between **Scale A** (main scale) and **Scale B** (remote scale).
PLU	Stores, loads, or modifies a preset piece weight.
PLU 1	**PLU** (**P**art **L**ook **U**p) keys. Loads preset piece weight data from the nine (9) PLU keys.
RECALL	**RECALLS** total piece count and total weight.
SAMPLE	Press to set up **SAMPLE** quantity. (Sample key: multiple sampling methods are available. (See ***Sampling***.)
PIECE WT	Sets up **PIECE WEIGHT**. (See ***Piece Weight Setup*)**.
C	**CLEARS** the selected data entry.

4.3. BASIC OPERATIONAL FUNCTIONS

4.3.1. Gross, Tare and Net Weight



There are three terms used when weighing a product.

The **GROSS WEIGHT** (**total amount**)

minus the **TARE WEIGHT** (***container only***)

equals the **NET WEIGHT** (***product only***).

Gross Weight – Tare Weight = NET WEIGHT

WORKING EXAMPLE

A full can of house paint is an object to be weighed. The empty can is the **TARE** weight. The paint is the **NET** weight. Together they equal the **GROSS** weight

There are two **Tare Operation** *types.*

- **AUTO TARE** – The Tare function may be enabled or disabled through **Service Programming**.
- **MANUAL TARE** – Manually entering a tare weight using the numeric keypad, then pressing the **TARE KEY**.

ALARM

The **Alarm** function provides a visual or audible signal of the count limit and weight limit when they are near the maximum values.

UNIT

The two (2) available weight units in the Omega Series scales is the **pound (lb)** and **kilogram / gram (kg / g)**.

- The operator uses the **UNITS KEY** 

to switch between units.

EXTERNAL SCALE

- The Omega Series scales may be interfaced to **one (1) external scale**.
- Using the **1129 Series Scale**, the **Omega Series Instrument** interfaces with the remote one thousand pound (1000 lb.) capacity portable platform.

4.3.2. Counting by Piece Weight

The **Omega Counting Scale** counts items by their **Piece Weight**.

– If the weight of each item is known, the items are counted based upon the weight upon the scale.

A WORKING EXAMPLE

There are ten (10) pounds of bolts on a scale. Each bolt weighs a tenth of a pound (**0.10 lbs.**) The scale performs an internal calculation and displays one hundred (**100**) on the third **PIECES** line on the display.

There are two ways to set the **Piece Weight**.

- **Keypad input.**
- **Sampling.**

The **ACC KEY** 

saves all current data.

– It records the weight and piece data into memory.

– After any record is saved, the scale weighing pan must be cleared to ensure the weight is at zero for the next record.

4.4. TARE OPERATIONS

4.4.1. Auto Tare Entry

1. While in the **Weigh Mode**, place the container on the scale pan.
2. Press the  key.
   – The tare weight has been stored.
3. **NET** is displayed.

IMPORTANT NOTE: *The* **Tare Weight** *cannot be set when the* **Displayed Weight** *is less than zero.*

4.4.2. Manual Tare Entry Using The Keypad

1. While in the **Weigh Mode**, input the **Tare Weight** using the numeric keys
   - If the unit indicated is **kg**, the tare entry is in kilograms.
   - If the unit indicated is **lb**, the tare entry is in pounds.
2. Press [T], and the tare weight has been stored.
   - The Tare data clears in **ten (10) seconds** if [T] is not pressed.
   - **NET** is displayed.

EXAMPLE

1. Press [.] [5] to manually enter the tare weight as **0.5 lb**.
2. Press the [T] key.

NET is displayed.

- The weight without the container will display **minus (–) 0.5 lb**.

IMPORTANT NOTE: *A* **Tare Weight** *cannot be manually entered that is greater than the scale capacity.*

4.5. SAMPLING OPERATION

4.5.1. Enter Piece Weight By Direct Keypad Input

1. While in the **Weigh Mode**, manually input the **Piece Weight** amount using the keypad.
2. Press the [PIECE WT] key.
   - The piece weight has been stored.
   - The Piece Weight data will be cleared in **ten (10) seconds** if the [PIECE WT] key is not pressed.
3. Press [C] to clear the **Piece Weight** amount.

4.5.2. Setup Piece Weight By Sampling (Quick Set)

1. While in the **Weigh Mode**, place items to be weighed onto the scale pan.
2. While in the **Weigh Mode**, manually input the **Piece Count** using the keypad.
3. Press SAMPLE to calculate
   – The **Piece Weight** data will be cleared in **ten (10) seconds** if the SAMPLE key is not pressed.
4. Press C to clear the **Piece Weight** amount.

EXAMPLE

1. Place a one pound (1 lb) test weight on the scale weighing pan.
2. Press 5 to set this as the number of pieces.
   – This displays on the second line.
3. Press SAMPLE and the scale displays the **Piece Weight** on the second line, and the number of **Pieces** on the third.
4. Press C to clear the **Piece Weight**.

4.5.3. Setup Piece Weight by Sampling (Place Item)

1. Set the **Piece Weight** on **ZERO**.
   – The scale will calculate the **Piece Weight Value** by what is added and **Piece Count Number**, as described below.
2. Press the SAMPLE key**.**
   – The second row of LCD displays SAMPLE.
   – The third row displays a default value of **100**.
3. Enter the new sampling quantity using the keypad.
4. Place the items to be weighed onto the scale pan.
   – Wait five (5) seconds for the weight to stabilize.
   – The **Piece Weight** calculates automatically, or press the ENTER key to calculate immediately.
5. Press C to clear the **Piece Weight**.

EXAMPLE

1. Press SAMPLE.
2. Press 5 to set this at the number of **Pieces**.
   – This displays on the third line.
3. Place a one pound (1 lb) test weight on the scale weighing pan.
   – Wait five (5) seconds for the weight to stabilize.
   – The **Piece Weight** displays as **0.2,** and the **Piece Count** displays as five (**5**).

NOTE: *If weighing is performed on an* **external scale***, after pressing* SAMPLE **,** *the sampling job continues on main scale automatically when* **AUTO SWITCH** *is configured in the* **Scale Counting Parameter Setting***.*

4.5.4. Setup Piece Weight By Sampling (Remove Item)

1. Set the **Piece Weight** on **ZERO**.
2. Place a item on the weighing pan.
   – The scale will calculate the **Piece Weight Value** by the change in weight.
3. Press SAMPLE.
   – The second row of LCD displays SAMPLE.
   – The third row of LCD displays the default value as **100**.
4. Press the numeric keys to enter the new sampling quantity.
5. Remove the items to obtain the desired piece counts value from the weighing pan.
   – The piece weight will be calculated automatically.
6. Press C to clear the **Piece Weight** amount.

EXAMPLE

1. Place a five pound (5 lb) test weight on the scale weighing pan.
2. Press SAMPLE.
3. Press 5 to set this as the number of pieces to be removed.
   – It displays on the third line.
4. Remove the one pound (1 lb.) item from scale weighing pan.
   – Wait for five (5) seconds after the weight is stable.
   – The piece weight displays **0.2,** and piece count displays **20**.

NOTE: *If weighing is performed on an* **external scale**, *after pressing* SAMPLE**,** *the sampling job continues on main scale automatically when* **AUTO SWITCH** *is configured in the* **Scale Counting Parameter Setting**.**.**

4.5.5. Setup Piece Weight by Sampling (Re-sample)

If the **Piece Weight** and **Total Weight** have not been cleared, weight can be added or removed, then the SAMPLE key can be pressed to calculate the piece weight again.

EXAMPLE 1

1. Place a **one pound (1 lb) test weight** on the scale weighing pan.
2. Press 5 to set this as the number of **Pieces**.
   – It displays on the second line.
3. Press SAMPLE.
   – Displays the **Piece Weight** on the second line.
   – Displays the **Piece Count** on the third line.
4. Press SAMPLE again to use **Piece Count** number five (5) to sample again.

4.5.6. Auto Re-sample Operation

After a successful sampling operation, the scale will automatically sample again on the main scale for any new small weight.

– Placing new weight onto the scale will automatically sample again.

EXAMPLE 2

1. Press SAMPLE to into sample mode.
2. Press 5 0 to set item number as fifty (50).
   – This displays on the third line.
3. Place a five pound (5 lb.) test weight on the scale weighing pan.
   – Wait for five (5) seconds after the weight is stable.
   – The piece weight displays **0.1,** and piece count displays **50**.
4. Place a one pound (1 lb) test weight on the scale weighing pan.
   – After stabilizing, the scale will re-sample.

NOTE: *The new small weight should be less than half of the sampling weight.*
The item change must be greater than five (5).
If the weight change is larger than half of the sampling weight, **Auto Re-sample** *will stop.*

The **Auto Re-sample function** *can be disabled in* **SETUP SETTINGS menu.**

4.6. PLU (PART LOOK UP) OPERATION

PLU is a preset Piece Weight and Tare value. The scale can save up to 999 PLU items.

4.6.1. Setting PLU

A. Steps in setting PLU keys 1~9

1. Set up piece weight as in ***Sampling Operation*** section 7.5.
2. Press PLU, and PLU will begin flashing.
3. Select your desired PLU number from the direct PLU keys.
4. Press PLU to save your setting. PLU will stop flashing.
5. rEPLAC and YES is displayed. Press the ENTER key to accept the change

   or press C key to display rEPLAC and No. Press the ENTER key to disregard the changes.

Example：

1. Press . 5 PIECE WT to enter piece weight as 0.5 gram.
2. Press PLU key, now PLU is flashing on the display.
3. Press PLU 3 key, PLU indicator shows 3, and PLU 3 now flashing.
4. Press PLU key, after the beep, the piece weight for PLU 3 is now set as 0.5 gram.
5. rEPLAC and YES is displayed. Press the ENTER key to accept the change or press C key to display rEPLAC and No. Press the ENTER key to disregard the changes.

Note:

If there is no data input in 30 seconds, the scale will exit the PLU setting mode and returns to the normal weighing mode.

4.6.1. Setting PLU, continued

B. Steps in setting PLU no.0~999

1. Set up the piece weight as in ***Sampling Operation*** section 7.5.
2. Press PLU and PLU will begin flashing on the display.
3. Press the numeric keys to select PLU number.
4. Press PLU to save your setting, PLU will stop flashing on the display.
5. rEPLAC and YES is displayed. Press the ENTER key to accept the change or press C key to display rEPLAC and No. Press the ENTER key to disregard the changes.

Example：

1. Press . 5 PIECE WT to enter piece weight as 0.5 gram.
2. Press PLU key, now PLU is flashing on the display.
3. Press 5 5 5 key. PLU indicator shows 555, and PLU is flashing.
4. Press PLU key, after the beep, the piece weight for PLU 555 is stored as 0.5 gram.
5. rEPLAC and YES is displayed. Press the ENTER key to accept the change or press C key to display rEPLAC and No. Press the ENTER key to disregard the changes.

Note:

If there is no data input in 30 seconds, the scale exits the PLU setting mode and returns to normal weighing mode.

4.6.2. Loading PLU

A. Steps in loading PLU no.1-9

1. In weighing mode, press any key from the direct PLU keys to access the PLU memory of the key's lower-right set.

Example:

Press PLU 3 one time, the 3rd PLU is loaded. The LCD shows 3 below the PLU indicator.

B. Steps in loading PLU no.0-999

1. In weighing mode, press and hold PLU until it emits a double beep then release.

2. Use the numeric keys to input the desired PLU number and press PLU to load the reference PLU.

Example:

1. Press and hold PLU key until double beep.
2. PLU indicator shows 000. PLU indicator flashing now.
3. Press 5 5 5 key. PLU indicator shows 555. PLU indicator flashing now.
4. The Piece Weight and Tare Weight of PLU 555 will load to OCS.
5. Press PLU key to complete PLU loading process.

Note:

If there is no data input in 30 seconds, scale exits the PLU setting mode and returns to normal weighing mode.

4.6.3. Modify PLU

1. When PLU is shown on the display, press PLU and the piece weight starts flashing.
2. Set up piece weight according to the previous section and press PLU.
3. The Tare weight starts flashing.
4. Setup the Tare weight according to the previous section, if applicable, then press PLU.

4.6.3. Modify PLU, continued

5. **rEPLAC** is displayed on the Piece Weight line making sure you want to overwrite the previously stored value. Press [C] key to change from Yes to No. Press the [ENTER] key to overwrite.

Example:

1. Press [PLU 3] key to access the third PLU.
2. Press [PLU] key to access the PLU modify mode. Piece Weight is flashing now.
3. Press [.] [5] key. The Piece Weight 0.5.
4. Press [PLU] key to complete PLU modify process.
5. The Tare weight blinks. Enter the new Tare weight.
6. Press [PLU] key to save the Tare weight.
7. rEPLACE and YES are displayed, press the [ENTER] key to accept changes or press the [C] key to display no, then the [ENTER] key to disregard changes.

4.7. MORE OPERATIONS

4.7.1. Accumulation

1. When there is a load on the scale weighing pan and piece weight has been input.
2. Press [ACC] .
   – When the indicator beeps, **ACC** lights up on the LCD, indicating a data has been recorded.
3. Clear the load and put another load on the scale weighing pan. Set up the piece weight again.
4. Press [ACC].
5. The indicator beeps, **ACC** lights up, and the **Indicating Second Data** is recorded.

EXAMPLE

1. Empty the scale weighing pan.
   – The weight must be 0.
2. If the weight is not **ZERO** (**0**), use **ZERO** key to reset.
3. Press the [.] + [PIECE WT] keys to set Piece Weight as **0.5 pounds**.
4. Put 1 pound item on scale weighing pan and waiting for stable. [5]
5. Press [ACC].
   – When the indicator beeps, **ACC** lights up.
6. Remove item on scale weighing pan.
   – Make sure the weight is 0 again.
7. Press [.] + [PIECE WT] keys to set Piece Weight as **0.1 pounds**. [1]
8. Put two pounds (2 lbs.) test weight on scale weighing pan.
   – Allow the scale to be stable.
9. Press [ACC].
   – After one beep sound, **ACC** lights up.

NOTE: *After each recording, if the load on the weighing pan is not cleared, pressing [ACC] will result in a long beep. The scale will not be able to record the next weighing result.*

- *The stored memory can store up to **one hundred eighty** **(180)** accumulations.*

4.7.2. Recall

TOTAL MODE

1. In weighing mode, press RECALL and the Weight column will be cleared.
   – The **Piece Weight** column displays tOtAL.
2. The PCS column shows the total piece count in memory.
   – The Weight column shows the accumulated weight.
3. The number above “ACC” indicator is the record size.
4. Press ACC to exit without clearing the data.
5. Press C to clear the data and exit.

EXAMPLE

1. Clear scale weighing pan. Make sure the weight is 0. If weight is not 0, use zero key to reset.
2. Press the . 5 + PIECE WT keys to set Piece Weight as **0.5 pounds**.
3. Put a one pound (1 lb.) item on scale weighing pan
   – Wait five (5) seconds for the scale to stabilize.
4. Press ACC .
   – After on beep sound, 1 ACC lights up.
5. Press RECALL to into total mode. The Weight shows 1 pound.
   – The Piece shows 2.
6. Press ACC to back to normal mode. The ACC data still in flash, and 1 ACC still lights up.
7. Press RECALL key to into total mode again.
8. Press C to clear all flash and back to normal mode.
   – **ACC Data** clears, and 1 ACC is gone.

4.7.2. Recall, Continued

RECORD VIEW MODE

1. Enter the **Total Mode**.
2. Press [RECALL] to enter record view mode.
3. Toggle through each of the stored accumulation records in memory by pressing the [RECALL].
   – If current record is the last record, it will return to total mode.
   – The number shown above the “ACC” indicates the number of current record. Weight, Piece Weight and Piece is the data of current record.
4. Press [ACC] to return to the **Weight Mode**.
5. Press [C] to clear current record.

EXAMPLE

1. Clear scale weighing pan. Make sure the weight is 0. If weight is not 0, use zero key to reset.
2. Press the [.] [5] + [PIECE WT] keys to set Piece Weight as **0.5 pounds**.
3. Put a one pound (1 lb.) item on scale weighing pan
   – Wait five (5) seconds for the scale to stabilize.
4. Press [ACC].
   – After on beep sound, 1 ACC lights up.
5. Remove the item from the scale weighing pan. Make sure the weight is 0 again.
6. Press [.] [1] + [PIECE WT] key to set Piece Weight as 0.1 pounds.
7. Put a two pound (2 lbs.) item on scale weighing pan
   – Wait five (5) seconds for the scale to stabilize..
8. Press [ACC].
   – After on beep sound, 1 ACC lights up.
9. Press [RECALL] to enter the **Total Mode** again.
10. Press [RECALL] again to access the record view mode.

4.7.2. Recall, Continued

EXAMPLE, Continued

11. Press RECALL to switch to the second record.
    - It is the last record.
12. Press RECALL to return to the **Total Mode**.
13. Press RECALL to access Record View Mode again.
14. Press ACC to return to normal weigh mode.
    - The ACC data is still in memory, and 

is illuminated.
15. Press RECALL twice to access the **Record View** again.
16. Press C key to clear the first record.
    - The display shows the next record.
    - The first is removed. The second replaces first one. The number above ACC remains at 1.
17. Press C key to clear again.
    - The record is not stored.
    - The scale returns to the normal weighing mode.

4.7.3. Alarm Function

A. Piece alarm

1. Press LIMIT key. The PCS column displays PCS. Hi.
2. The piece weight column shows the PCS Upper Limit setting. Configure the PCS Upper Limit with the numeric keys.
3. Press LIMIT key again. The PCS column displays PCS. Lo. Configure the PCS Lower Limit with the numeric keys.
4. Press LIMIT will save the piece lower limit value and enter the weight alarm mode.

Example:

1. Press LIMIT key to enter the Piece Upper Limit setting. The PCS column displays PCS. Hi.
2. Input 20 to set the Piece Upper Limit as 20.
3. Press LIMIT key to enter the Piece Lower Limit setting. The PCS column displays PCS. Lo.
4. Input 10 to set the Piece Lower Limit as 10.
5. Press LIMIT three times to complete Piece alarm setting.
6. Press - 5 PIECE WT key to set Piece Weight as 0.5 pounds.
7. Place 1 pound on scale weighing pan. The Piece Weight shows 2, and Lower Limit alarm is indicated. The Lower Limit indicator will be flashing. If the Low Beep sound is enabled, it will sound an audible alarm also.
8. Place 11 pounds on scale weighing pan. The Piece Weight shows 22, and Upper Limit alarm is indicated. The Upper Limit indicator will be flashing. If the High Beep sound is enabled, it will sound an audible alarm also.

B. Weight alarm

1. After the ***Piece alarm*** is configured, the scale will enter the Weight alarm setting.
2. The PCS column displays LoAd H i. Set up the Weight Lower Limit with the numeric keys. (If the unit is kg, this unit is in grams. If the unit is lb, this unit is in lb)
3. Press LIMIT key again, the PCS column displays LoAd Lo. Set up the Weight Lower Limit with the numeric keys. (If the unit is kg, this unit is in grams. If the unit is lb, this unit is in lb)
4. Press LIMIT key to save your settings and return to weighing mode.

Example:

1. Press LIMIT key three times to enter Weight Upper Limit setting. The PCS column displays LoAd H i
2. Input 10 to set Weight Upper Limit as 10.
3. Press LIMIT key to enter Weight Lower Limit setting. The PCS column displays LoAd Lo
4. Input 1 to set Weight Upper Limit as 2.
5. Press LIMIT to complete Weight alarm setting.
6. Put 1 pound on scale weighing pan. The Lower Limit alarm is indicated. (Lower Limit indicator begins flashing. If the Low Beep sound is enabled, it will sound an audile alarm.)
7. Put 11 pounds on scale weighing pan. Upper Limit alarm is indicated. (Upper Limit indicator begins flashing. If the High Beep sound is enabled, it will sound an audible alarm.)

Note:

1. If the piece count exceeds the upper limit of PCS Upper Limit, or lower than the PCS Lower Limit and it is not zero, the scale will continue to beep for a warning.

2. If the weight exceeds the upper limit of Weight Upper Limit, or lower than the Weight Lower Limit and is not zero, the scale will continue to beep for a warning.

3. The beep settings are configured in he SEtUP menu.

4.8. "B SCALE" SELECTION

1. Press REMOTE A/B to switch between the **Main Scale** and the **External Scale**.
   - The initial zero is configured in the **Calibration Procedure**.
   - Any loads on the weighing pan will display their exact weight after the scale starts.

Section 5: Service and Maintenance

5.1. BASIC CLEANING

The **Omega Series Counting Scales** *may be cleaned with a damp cloth and mild detergent. Do not use chemical cleaners or abrasive type scouring pads.*

5.2. TROUBLESHOOTING

5.2.1. Error Code List

ERROR	DESCRIPTION
OL1	Weight on the main scale is larger than the maximum scale capacity.
OL2	Weight on the external scale is larger than the maximum scale capacity range.
UL1	Weight on the main scale is out of range below the zero reference.
UL2	Weight on the external scale is out of range below the zero reference.
Error1	Key input error.
Error2	Zero range exceeds the permissible range.
Error3	The scale weight is unstable within the system time limit constraint.
Error203	Unrecognized barcode. Data not stored in Omega database.
LobAtt	Battery voltage ≤ 4.59Vdc. Recharge battery, See **WARNING!** (below)
rEPLAC	Prompt asking user to override existing information.

W A R N I N G !

If battery has been recharged, a minimum of 16 hours, and the display still reads "LobAtt", check to make sure the AC power source used to reacharge the battery is working. Also, check to make sure the battery connections are clean and well-fitted (both at the battery and on the PC board). If all this is in good, working order, then the rechargeable battery needs replacing.

5.2.2. Solutions

SYMPTOM	CAUSE	SOLUTION
"UL1" *or* **"UL2"**	• Below **ZERO** • Bind	✓ *Check for platform bind.* ✓ *Check that the "S" hook is attached.* ✓ *Check that the hook is under the lever's end at the bottom of the scale.* ✓ *Check for proper platform assembly.* ✓ *Possible damaged load cell.* ✓ ***Call for service.***
"OL1" *or* **"OL2"**	• Over Capacity • Bind • Possible damaged load cell. • Possible A/D failure.	✓ *Check platform to be empty, then press* **ZERO**. ✓ *Check for platform bind.* ✓ ***Call for service.***
Does not return to "0.0"	• Bind	✓ *Check for platform bind.* ✓ *Check that the "S" hook is attached.* ✓ *Check that the hook is under the lever's end at the bottom of the scale.* ✓ *Check for proper platform assembly.*
"Error3"	• Bind • Possible damaged load cell. • Possible A/D failure.	✓ *Check for platform bind.* ✓ *Check that the "S" hook is attached.* ✓ *Check that the hook is under the lever's end at the bottom of the scale.* ✓ *Check for proper platform assembly.* ✓ ***Call for service.***
Blank display	• Battery pack discharged. • No power at outlet • Batteries dead • Faulty instrument	✓ *Replace or Recharge the battery pack.* ✓ *Check AC outlet; check circuit box.* ✓ ***Call for service.***
"LoBAtt"	• Batteries low	✓ *Recharge the battery pack,* See **WARNING**! (above)

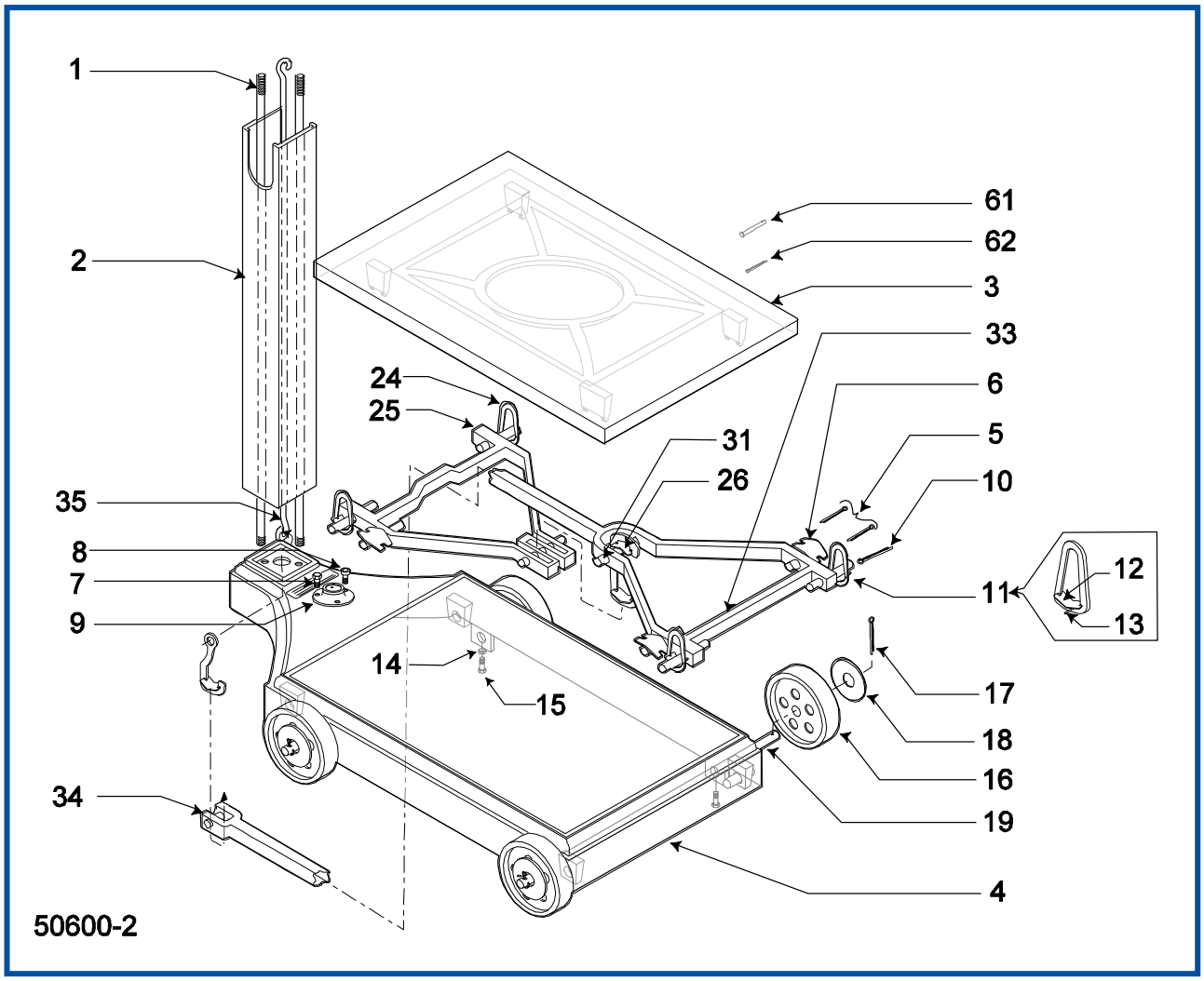
★ *For all errors not listed or for help, please call your local* ***Fairbanks Service Representative.***

Section 6: Parts

6.1. PLATFORM AND PILLAR ASSEMBLY PARTS LIST

ITEM	PART NO.	DESCRIPTION
1	71622	PILLAR ROD, LONG
2	58933	PILLAR
3	95847	PLATFORM COVER
4	95848	FRAME
5	95855	COTTER PIN
6	58937	BEARING, PLATFORM
7	95856	SCREW, PH HD
8	95857	SCREW, ALLEN
9	95858	LEVEL, BUBBLE
10	95859	PIN, CORNER LOOP
11	71623	LOOP, CORNER
12	71624	BEARING, CORNER LOOP
13	71625	COTTER PIN
10, 11	58938	LOOP, CORNER ASSEMBLY
12,13	58938	LOOP, CORNER ASSEMBLY
14	95867	HEX NUT
15	95868	HEX HEAD BOLT
16	95869	WHEEL, 5" DIAMETER
17	71627	COTTER PIN
18	71629	WASHER, FLAT
19	71630	AXLE
24	95861	PIVOT, LOAD & FULCRUM
25	72948	SHORT LEVER ASSY
26	58939	CENTER CONNECTION ASSY
31	95863	CENTER PIVOT, LONG LEVER
33	72947	LONG LEVER ASSY
34	95864	LONG LEVER TIP PIVOT
35	58934	STEELYARD ROD ASSY
44	71592	ACORN NUTS (2)
61	95865	PLATFORM LOCKING PIN
62	95866	COTTER PIN, PLATFORM LOCKING PIN

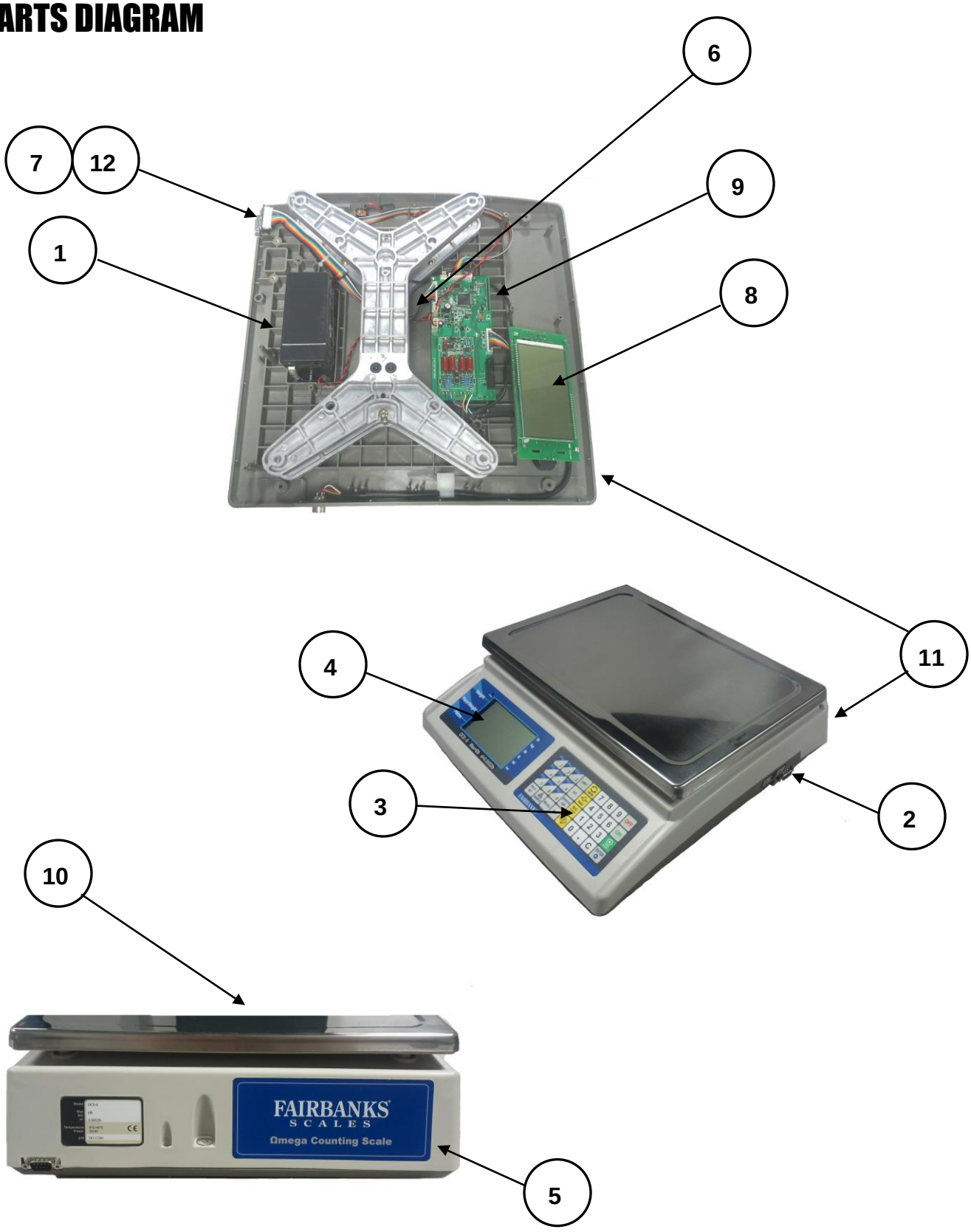
Platform & Pillar Assembly Diagram



6.2. OMEGA SERIES PARTS LIST

ITEM	PART NO.	DESCRIPTION
--	**24157**	AC Adapter (TAD41-0900500DU)
1	**27391**	Lead-acid battery NP4-6
--	**31790**	Remote Scale connector kit (includes a male and female connector)
2	**31791**	Adjustable Scale Feet (set of 4)
3	**31792**	Keypad
4	**31793**	Display Window Overlay
5	**31794**	Rear Panel Overlay
6	**31795**	Single point load cell 6kg (C2G1) 6 lb Omega Scale
6	**31796**	Single point load cell 10kg (C2G1) 15 lb Omega Scale
6	**31797**	Single point load cell 20kg (C2G1) 30 lb Omega Scale
6	**31798**	Single point load cell 35kg (C2G1) 60 lb Omega Scale
6	**32723**	Single point load cell 40kg (PW6KC3) 100 lb Omega Scale
--	**31799**	Screw kit (includes all screws for the Omega series scale)
--	**31800**	Cable kit (includes all pcb cables for the Omega series scale)
7	**31801**	RS232C cable
8	**31802**	Display pcb assembly
9	**31803**	A/D pcb assembly
10	**31804**	Weighing platform (Stainless and plastic)
11	**31805**	ABS enclosure (top and bottom assemblies)
12	**31806**	RS232C pcb

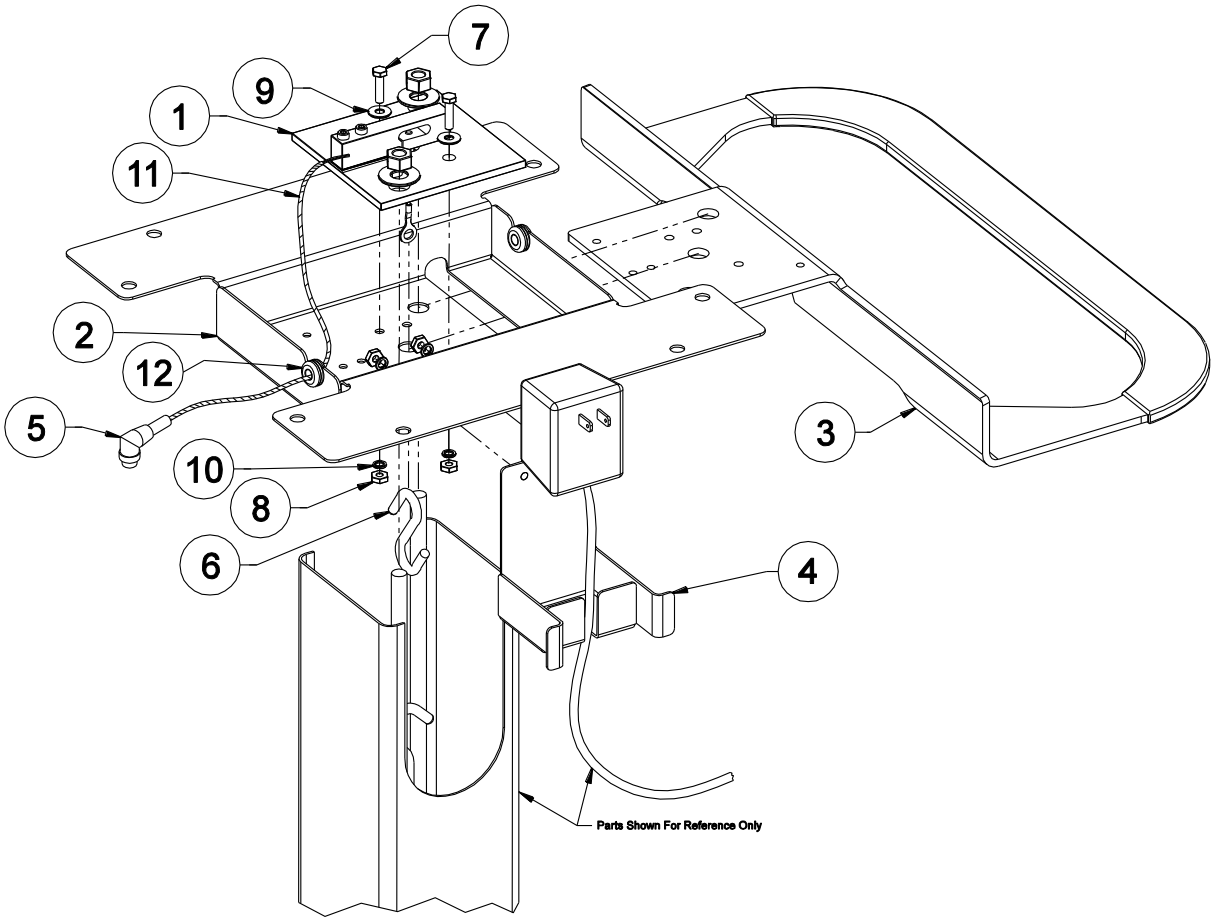
PARTS DIAGRAM



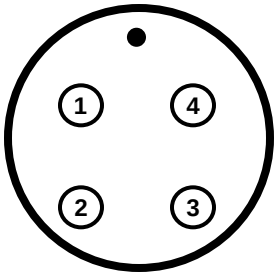
6.3. ACC 380 MOUNTING BRACKET PARTS

ITEM	PART NO.	DESCRIPTION
1	14230	LOAD CELL ASSEMBLY (90 LB CAP LOAD CELL 13199)
2	32383	COUNTING SCALE BRACKET
3	26299	HANDLE
4	32434	POWER SUPPLY HOLDER
5	32462	90 DEGREE CONNECTOR
6	122643	“S” HOOK
7	*	10-32 X .75” HEX SCREW
8	*	10-32 HEX NUT
9	*	#10 FLAT WASHER
10	*	#10 LOCK WASHER
11	*	BLACK SPIRAL WRAP
12	*	RUBBER GROMMET

* *Parts supplied locally.*



Appendix I: Remote Platform Wiring



INSTRUMENT CONNECTOR

PIN	DESCRIPTION
1	+ EXC
2	– EXC
3	+ SIG
4	– SIG

W A R N I N G !

Never perform any wiring with the instrument turned on! Damage to system components can occur.

APPENDIX II: RS232C Connection:DB9 (Male)

PIN	DESCRIPTION
1	DCD
2	RX
3	TX
4	DTR
5	GND
6	DSR
7	RTS
8	CTS
9	RI

OMEGA SERIES COUNTING SCALE

Dual Platform Counting Scale

Document 51300

Manufactured by **Fairbanks Scales**
821 Locust Street
Kansas City, MO 64106
www.fairbanks.com