

User Manual

Brick pump SUPPORT SURFACE SERIES



This instruction manual applies to all **BRICK PUMP™** series flotation mattresses.

Symbols & Statements

NOTE

Indicates some tips or some information users should be aware of.

CAUTION

Indicates correct operating or maintenance procedure in order to prevent damage to or destruction of the equipment or other property.

WARNING/DANGER

Calls attention to a potential danger that requires correct procedures or practices in order to prevent personal injury.



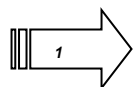
Always read the operating instructions before use.

Grounding Terminal

- * AP/APG NO indicates the device is NOT suitable for use in the presence of flammable anesthetic mixture with air or with oxygen or nitrous oxide.



** Type BF symbol indicates the degree of protection against electric shock.



IMPORTANT SAFEGUARDS

When using electrical products, especially when children are in present, basic safety precautions should always be followed, including the following:

READ ALL INSTRUCTIONS BEFORE USING

DANGER

To reduce the risk of electrocution:

- ▶ Always unplug this product immediately after use.
- ▶ Do not use while bathing.
- ▶ Do not place or store product where it can fall or be pulled into a tub or sink.
- ▶ Do not place in or drop into water or other liquids.
- ▶ Do not reach for a product that has fallen into water. Unplug immediately.

WARNING

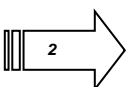
To reduce the risk of burns, electrocution, fire, or injury to persons:

- ▶ A product should never be left unattended when plugged in.
- ▶ Close supervision is necessary when this product is used by, on, or near children or invalids.
- ▶ Use this product only for its intended use as described in this manual.
Do not use attachments not recommended by the manufacturer.
- ▶ Never operate this product if it has a damaged cord or plug, if it is not working properly, and it has been dropped or damaged, or dropped into water. Return the product to a service center for examination and repair.
- ▶ Keep the cord away from heated surfaces.
- ▶ Never block the air openings of the product or place it on a soft surface, such as a bed or couch, where the air openings may be blocked. Keep the air openings free of lint, hair, and the like.
- ▶ Never drop or insert any object into any opening or hose.
- ▶ Do not use outdoors or operate where aerosol (spray) products are being used or where oxygen is being administered.
- ▶ Connect this product to a properly grounded outlet only. See Grounding Instructions.

SAVE THESE INSTRUCTIONS



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Introduction

This manual should be used for the initial set up of the system and for reference purposes.

General

The Brick pump is a high quality and affordable air support surface system suitable for pressure ulcer prevention. It has been specifically designed for prevention of bedsores and offers an affordable solution to 24-hour pressure area care.

Intended Use

The Brick pump is intended to reduce the incidence of pressure ulcers while optimizing patient comfort. It also provides the following:

- ▶ Individual home care setting and long-term care
- ▶ Pain management as prescribed by a physician.

Contraindication

Patient conditions for which the application of pressure relieving therapy on an alternation system is contraindicated are as follows:

- ▶ Cervical or skeletal traction
- ▶ Unstable spinal cord injuries

Product Description

Brick



Turn on

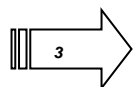
Turn off

Pump

- ▶ **Power Switch (1)** The switch is at the left side of the pump.
Turn ON the power, the pump will start operation.
- ▶ **Pressure-adjust Knob (3)** Turn the knob to set a weight.

Bubble Pad / Cell Mattress

Place flatly on a foam base. Please refer to the Specifications section for details.



Manual

Always read this manual before using this product.

For any further information, please contact our Customer Services Department:



SINGA TECHNOLOGY CORPORATION

No. 8, Heng 2nd St., Puzi Industrial Park, Puzi City, Chiayi County 613012,
Taiwan (R.O.C)

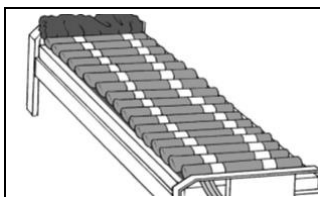
TEL: 886-3-3288328

FAX: 886-3-3271400

<http://www.singa.com.tw>

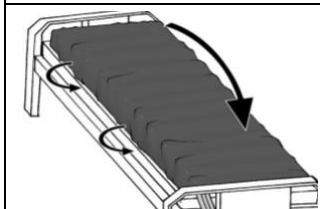
Email: service@singa.com.tw

Mattress Installation Steps

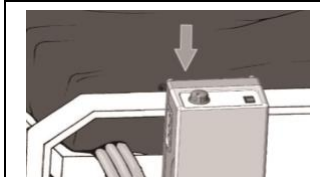


- STEP 1 : Place the bubble pad / cell mattress flatly on the bed frame.

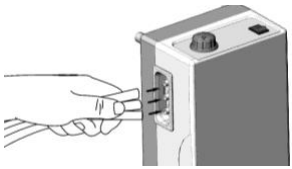
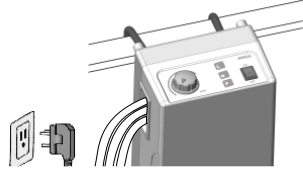
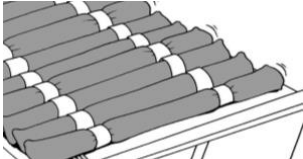
The inflation tubes should be towards the foot end so that they can be connected to the inflation nozzles on the pump.



- STEP 2 : Put the cells in order and insert the flap under mattress or fix the buckles in the corner of mattress.



- STEP 3 : Hang the pump over the frame or board at the foot end of the bed. Make sure the pump is secured.

	<ul style="list-style-type: none"> ■STEP 4 : Connect the inflation tubes from the bubble pad to the pump's inflating nozzles. Make sure they are properly attached and the tubes connecting to the pump, than plug the power cord into an electrical outlet with grounded AC power. Turn on the power by pressing the power switch at the left side of the pump. ■STEP 5 : Insert the plug, please. <p>☞ CAUTION: Before inserting the plug into the outlet, make sure the voltage is compatible.</p>
	<ul style="list-style-type: none"> ■STEP 6 : Make sure the tubes connecting to the pump, than plug the power cord into an electrical outlet with grounded AC power. Turn on the power by pressing the power Switch at the left side of the pump. Proceed to the Operation section. <p>☞ CAUTION: Make sure the inflation tubes are not kinked or tucked under the pad.</p>
	<ul style="list-style-type: none"> ■STEP 7 : While the air inject in to the cells, adjust each cell. Don' t compress it. ■STEP 8 : Spread the cover out, than fixed the buckles in the corner of mattress. ■STEP 9 : Finished installation.

☞ **CAUTION : Don't put any pad under the mattress; it may cut down the efficacy.**

☞ **CAUTION : If the power cord has a grounding wire with a grounding pin, then this three-wire plug must be plugged properly into an outlet and grounded well as shown in the figure in the Grounding Instructions section.**

Panel Instructions

BRICK



Indicator Light

- P : Green Light · it means power supply normally.
- N : Green Light · it means the pressure works normally.
- L : Yellow Light · it means the cells' pressure is too low or leakage.

Weight Comparison

Selection : 40KGS / 60KGS / 80KGS / 100KGS / 120KGS / 140KGS



Automatic Stop : When the air pressure inside the cells has reached the limit, the pump will stop working; when the pressure has decreased, the pump will start working.

Troubleshooting

☞ P= Power ; N= Normal ; L= Low Pressure ;

Problem	Solution
When power "P" led light doesn't work.	Check the power plug is correctly inserted. Turn the switch to " ON ". If the unit still cannot be restarted even switch on, Please contact your dealer immediately.
When (low pressure) power "L" led light doesn't work.	<ol style="list-style-type: none">1. Check the inflation tubes are connected with pump correctly. Make tubes keep straight, if tubes are twisted or leaked. Change tubes if leaked.2. Ensure CPR value is closed. Ensure every single cell is not broken. If any leakage occurs, please contact with local distribution. If the solution doesn't work out, Please contact your dealer immediately.
When power "N" led light doesn't work.	Check if the power failure or incomplete inflation follows the above solution. If the solution doesn't work out, please contact with the local distribution immediately.

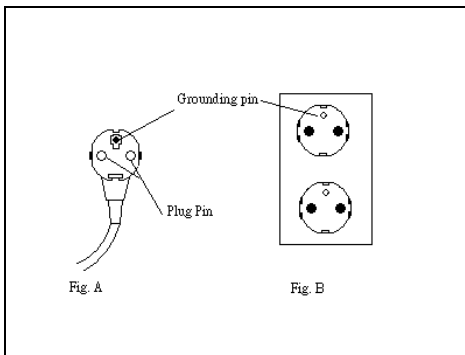
GROUNDING INSTRUCTIONS

This product should be grounded when it is equipped with a cord that contains a grounding wire with a grounding plug. In the event of an electrical short circuit, grounding reduces the risk of electric shock by providing an escape wire for the electric current.

DANGER – Improper use of the grounding plug can result in a risk of electric shock.

If repair or replacement of the cord or plug is necessary, check with a qualified electrician or serviceman if the grounding instructions are not completely understood, or if in doubt as to whether the product is properly grounded.

This product has a grounding plug that looks like the plug illustrated in figure A below. Fig. B is outlet with two poles and one grounding pin.



Operation *step by step*



Always read the operating instructions before use.

Step 1 ▶ Same as above.

Step 2 ▶ For timesaving in the first inflation, turn the pressure knob to the full Firm position.



NOTE: It requires approximately 10 minutes for a bubble pad to be fully inflated.

Step 3 ▶ Switch the pressure-adjust knob to set a comfortable pressure level from soft to firm or switch the pressure-adjust knob according to patient's weight.

Pressure set up

It is recommended that the pressure-adjust knob being turned to Firm when the bubble pad is firstly inflated. Users can then easily adjust the pressure level of the bubble pad to a desired firmness by themselves or according to the suggestion from a health care professional.

If the pressure is consistently low, check for any leakage occurring in inflation tubes. Contact your local dealer for replacement of any damaged tubes.

Troubleshooting

Problems	Solutions
The pump doesn't work	<ol style="list-style-type: none">1. Check if the plug is inserted firmly into the outlet.2. Turn on the power switch again. <ul style="list-style-type: none">▶ If the power indicator is ON and the pump still doesn't work, contact your local dealer immediately.▶ If the power indicator is OFF, there may be a faulty outlet. Try to connect the power cord to another outlet. If the power indicator is still OFF, contact a qualified electrician for main power check.
Incomplete inflation (Low pressure)	<ol style="list-style-type: none">1. For a quick check, adjust the pressure to Firm.2. Check to see if the inflation tubes connected to the pump are twisted or disconnected, or any leakage occurring. <ul style="list-style-type: none">▶ Always keep the tubes straight.▶ Change the tubes if there is any leakage.

Cleaning

In this section, we describe the procedures to clean and decontaminate the pump and bubble pad. It is important to follow these procedures before using the system on patients.

The cleaning task is required at least once a week to maintain personal hygiene.

Pump

- ▶ DO NOT immerse or soak the pump.
- ▶ Check for external damage and move the pump to a cleaning area.
- ▶ Place the pump on a work surface and spray or wipe the outside of the case with quaternary ammonium solution.
- ▶ DO NOT spray any cleaning solution directly on the surface of the pump.
- ▶ DO NOT use a Hypocarbonate or Phenolic based cleaning solution as this may cause damage to the case. Allow the solution to incubate for 10 minutes or accordingly as stated by the cleaning product used.
- ▶ Spray cloth with cleaning solution and clean faceplate. DO NOT allow excess cleaning solution on faceplate or control panel. (If solution gets inside, damage will occur.)
Allow surface to thoroughly dry after cleaning.
- ▶ After the pump is thoroughly cleaned and dried, proceed to plug in the pump and test to see if it runs normally.

Bubble Pad / Cell Mattress

- ▶ Any obvious blood spots should be wet thoroughly with 1:9 Hypochlorite solution (1 part bleach to 9 parts water) and allow drying for at least 10 minutes. Then blot with a clean, damp cloth.
- ☞ The temperature of washing water should be below 25 degree.
- ▶ Brush or wipe down all surfaces with soap and water before applying any liquid.
- ▶ Allow it to thoroughly air dry. Once the inside is dry, turn it back: wipe down the outside of the bag with disinfectant.
- ▶ Dry the bubble pad or cell mattress on a SUNLESS area after cleaning.
- ☞ DO NOT DRY IT WITH DRYER.

Handling and Storage


- ▶ Place the bubble pad or cell mattress flatly. Fold or roll it carefully.
- ▶ Unplug the pump and store with proper identification tag.
- ▶ Follow the national requirement to dispose the pump.

Maintenance

- ▶ Check the power cord and plug to see if there are abrasions or excessive wear.
- ▶ Plug in the pump and check the airflow from the hose connection port. The airflow should alternate between ports every half-cycle time.

Specifications

System

System	Specification
Classification	Class I; AP/APG NO*; Type BF** 
Applied Part	Bubble pad or Cell mattress
Input Rating	AC 110V / 220V ; 50 / 60Hz
Fuse Rating	AC250V / 0.5A
Environment Requirements	▶ Temperature: Operation 50°F~95°F (10~40°C) Storage 5°F ~122°F (-15~50°C) Shipping 5°F ~158°F (-15~70°C) ▶ Humidity: Operation 20%~80% non-condensing Storage 10%~90% non-condensing
Safety Standards	CE

Pump

Pump	Specification
Dimensions (Pump)	76.0 × 140.0 × 260.0 mm
Weight (Pump)	2.4 kg (5.29 lbs)
Air Output	≥ 4.5 liter/min
Pressure Range	40~70 mmHg
Cycle Time	10 min/60Hz, 12 min/50Hz
Indicator Light	Power/Normal/Low Pressure

Bubble Pad

Part No.	Arrangement	Dimension	Material	Weight Support
BM01	Bubble pad with One-way Valve	L195xW88x6cm/2kg	PVC	100 kg
BM02	Bubble pad without extension Flap	L195xW88x6cm/2kg	PVC	100 kg
BM03	Bubble pad with extension Flap	L254xW102x6cm/2.1kg	PVC	100 kg
BM04	Bubble pad with extension Flap	L250xW106x6.3cm/2.2kg	PVC	100 kg
BM05	Bubble pad with extension Flap and replacement	L196xW92x10cm foam pad	PVC	100 kg

Cell Mattress

Part No.	High (inch)	Dimension	Cell Material	Weight Support
NPV418BF	4	200 x 90 cm	PVC+Nylon	120KG
NUV418ZF	4	200 x 90 cm	TPU+Nylon	120KG
NFV418ZS	4	200 x 90 cm	Full TPU	120KG
PUV520ZF	5	200 x 90 cm	TPU+Nylon	150KG
PFT520ZS	5	200 x 90 cm	Full TPU	150KG
PUT820ZS	8	200 x 90 cm	TPU+Nylon	180KG
PFT820ZS	8	200 x 90 cm	Full TPU	180KG
PUT1020ZS	10	200 x 90 cm	TPU+Nylon	200KG
PFT1020ZS	10	200 x 90 cm	Full TPU	200KG

- © Due to the continual development of the above products, specifications are subject to change without prior notice.
- © Instructions or reference information for repair of equipment parts are provided by the manufacturer, please contact local dealer for further information.