



## **MEDLINE INDUSTRIES, INC**

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## **User's Manual**

**EU REPRESENTATIVE'S:**

**FOR TECHNICAL DOCUMENTS  
PLEASE CONTACT:**

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# SAVE THESE INSTRUCTIONS

## GROUNDING INSTRUCTIONS

This product should be grounded. In the event of an electrical short circuit grounding reduces the risk of electric shock by providing an escape wire for the electric current. This product is equipped with a cord having a grounding wire with a grounding plug. The plug must be plugged into an outlet that is properly installed and grounded.

**DANGER**-improper use of the grounding plug can result in a risk of electric shock

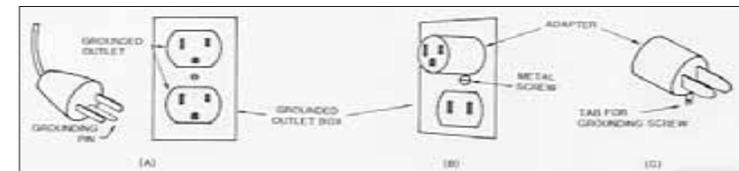
If repair or replacement of the cord or plug is necessary, do not connect the grounding wire to either flat blade terminal. The wire with insulation having an outer surface that is green with or without yellow stripes is the grounding wire.

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.

Note-The following instruction applies for 120V system only:

This product is for use on a nominal 120 V circuit and has a grounding plug that looks like the plug illustrated in figure B, in figure A as below. A temporary adapter, which look like the adapter illustrated in figure B and C, may be used to connect this Plug to a 2-pole receptacle as shown in figure B if a properly grounded outlet (figure A) can be installed by a qualified electrician. The temporary adapter should be used only until properly grounded outlet (figure A) can be installed by a qualified electrician. The green colored rigid ear, lug, and like extending from the adapter must be connected to a permanent ground such as properly grounded outlet box cover. Whenever the adapter is used. It must be held in place by the screw.

If is necessary to use an extension cord, use only a 3-wire extension cord that has a three-blade grounding plug, and a 3-slot receptacle that will accept the plug on the product. Replace or repair a damaged cord.



## 9. Technical Description

### Specifications:

Item		Specification	
Power Supply (Note: See rating label on the product)		A C 1 2 0 V / 60Hz, 0.2A ( for 120V system) A C 2 3 0 V / 50Hz, 0.17A ( for 230V system )	
Fuse Rating		T1A, 250V	
Cycle time		Analog type: 8 min for 60 Hz / 9.6min for 50 Hz Digital type: 10 min for 60 Hz / 50 Hz	
Dimension(LxWxH)		30 x 10.5 x 22.5 (cm) or 11.8" x 4.1" x 8.9"	
Weight		3.4 Kg or 7.5 lb	
Environment	• Temperature	Operation: 10°C to 40 °C (50°F to 104°F) Storage: -15°C to 50°C (5°F to 122°F) Shipping: -15°C to 70°C (5°F to 158°F)	
	• Humidity	Operation: 10% to 90% non-condensing Storage: 10% to 90% non-condensing Shipping: 10% to 90% non-condensing	
Classification		Class I, Type BF, IPX0 Applied Part: Air Mattress Not suitable for use in the presence of a flammable anesthetic mixture (No AP or APG protection)	
Mattress		Specification	
Model	Dimension(LxWxH)	Weight	Pressure Range
8" Cell-on-cell Replacement	200 x 90 x 20.3 (cm) or 78.7" x 35.4" x 8"	10 kg or 22 lb	30 - 60 mm Hg
6" Pediatric	140 x 72 x 15.2 (cm) or 55.1" x 28.3" x 6"	6.4 kg or 14.1 lb	10 - 30 mm Hg
5"+3" Replacement	200 x 90 x 12.7 (cm) or 78.7" x 35.4" x 5"	5.2 kg or 11.4 lb	30 - 60 mm Hg
5" Overlay	200 x 90 x 12.7 (cm) or 78.7" x 35.4" x 5"	5.2 kg or 11.4 lb	30 - 60 mm Hg
10" Turning	200 x 90 x 25.4 (cm) or 78.7" x 35.4" x 10"	7.5 kg or 16.5 lb	30 - 60 mm Hg

- NOTE: 1. Consult the distributor or EU representative for further technical documents  
2. The specification is also suitable for other areas operating with same power supply.  
3. Mattress dimension and weight is measured without foam; the manufacturer reserves the right to modify the specification without notice.

## IMPORTANT SAFEGUARDS

### READ ALL INSTRUCTIONS BEFORE USING

**DANGER** - To reduce the risk of electrocution:

1. Always unplug this product immediately after using.
2. Do not use while bathing.
3. Do not place or store product where it can fall or be pulled into a tub or sink.
4. Do not place in or drop into water or other liquid.
5. 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:

1. This product should never be left unattended when plugged in.
2. Close supervision is necessary when this product is used by, on, or near children or invalids.
3. Use this product only for its intended use as described in this manual. Do not use attachments not recommended by the manufacturer.
4. Never operate this product if it has a damaged cord or plug, if it is not working properly, if it has been dropped or damaged, or dropped into water. Return the product to a service center for examination and repair.
5. Keep the cord away from heated surfaces.
6. Never block the air openings of this product or place it on a soft surface, such as a bed or couch, where their openings may be blocked. Keep the air opening free of lint, hair, and other similar particles.
7. Never drop or insert any object into any opening or hose.
8. Connect this product to a properly grounded outlet only. See Grounding Instructions.

**NOTE, CAUTION AND WARNING STATEMENTS:**

**NOTE-** Indicate some tips.

**CAUTION -** Indicate correct operating or maintenance procedures in order to prevent damage to or destruction of the equipment or other property.

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

### SYMBOLS



"BF" symbol, indicate this product is according to the degree of protecting against electric shock for type BF equipment.



Grounding terminal



Attention, should read the instructions

# 1. Introduction

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

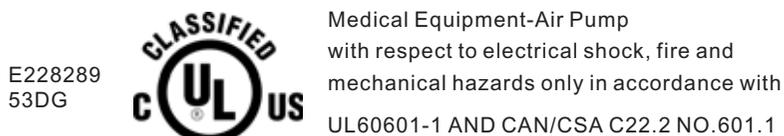
## 1.1 General Information

The system is a high quality and affordable mattress system suitable for stage II, III bed sore treatment and prevention of pressure ulcers.

The system has been successfully approved with the following standards:



FOR US AND CANADA ONLY



Le produit a été testé avec des équipements médicaux et respecte les normes UL 60601-1 and CAN / CSA C22.2 No.601.1, prévenant les choc électrique, le feu et les risques de blessures physiques.

## 1.2 Intended Use

This product is intended to help and reduce the incidence of pressure ulcers while optimizing patient comfort. It also provide following purposes:

- Individual home care setting and long term care of whom suffering from pressure ulcer.
- Pain management as prescribed by physician.

**NOTE** : Equipment not suitable for use in the presence of a flammable anesthetic Mixture with air or with oxygen or nitrous oxide.

**NOTE** : L'équipement ne peut être utilisé s'il y a risque de mélange d'un anesthésique inflammable avec l'air ou l'oxygène ou oxyde nitreux.

# 8. Troubleshooting

Problem	Solution
Power is not ON	<ul style="list-style-type: none"> <li>■ Check if the plug is connected to mains.</li> <li>■ Check if there is any blown fuse.</li> </ul>
Alarm is on (audible & visual)	<ul style="list-style-type: none"> <li>■ Check if the connection between air tube connector to pump unit is tightly secured.</li> <li>■ Check if all tubing connections along mattress are secured.</li> <li>■ Check if the CPR is sealed.</li> <li>■ Check if there are any leakage on air cells.</li> </ul>
Patient is bottoming out	<ul style="list-style-type: none"> <li>■ Pressure setting might be inadequate for the patient, adjust pressure to higher level and wait for a few minutes.</li> </ul>
Air Mattress is not secured	<ul style="list-style-type: none"> <li>■ Check if all the snap buttons or straps of mattress are all securely fastened.</li> <li>■ Check if the mattress is fixed to the bed frame by elastic straps.</li> </ul>
No air produced from some air outlets of the air tube connector	<ul style="list-style-type: none"> <li>■ This is normal during alternating mode. Air outlets take turn to produce air during preset cycle time.</li> </ul>
For turning mattress, mattress seems not turning	<ul style="list-style-type: none"> <li>■ Wait for a complete turning cycle.</li> <li>■ Check tubing connections inside mattress.</li> </ul>

If your questions can't be answered with above information, it might require a technician to take care the problem. Please contact your local agent directly.

## 6. Storage

1. To store, lay the mattress out flat and upside down.
2. Roll from the head end towards the foot end.
3. Foot-end strap can then be stretched around the rolled mattress to prevent unrolling.

⚠ Note: Do not fold, crease or stack the mattresses.

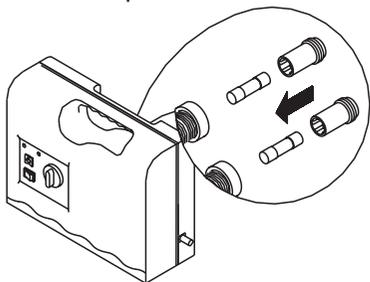
⚠ Note: Follow the national requirements to dispose unit.

## 7. Maintenance

### 7.1 General

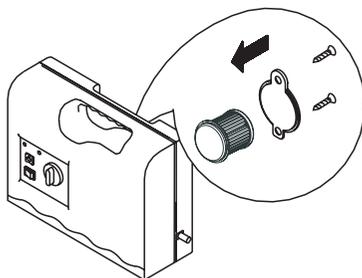
1. Check main power cord and plug if there are abrasions or excessive wears.
2. Check mattress cover for signs of wear or damage. Ensure mattress cover and tubes are stubbed together correctly.
3. Check airflow from the air hose connector. The airflow should alternate between each connector every half-cycle time if it's in alternating mode.
4. Check the air hoses for any kink or break. For replacement, please contact our local dealers.

### 7.2 Fuse Replacement



1. Disconnect the plug from mains power when a blown fuse is suspected.
2. Remove the cover of the fuse holder by means of a small screwdriver.
3. Insert a new fuse of the correct rating in, and replace the cover of the fuse holder back. The fuse should be rated as 1A/250V type.

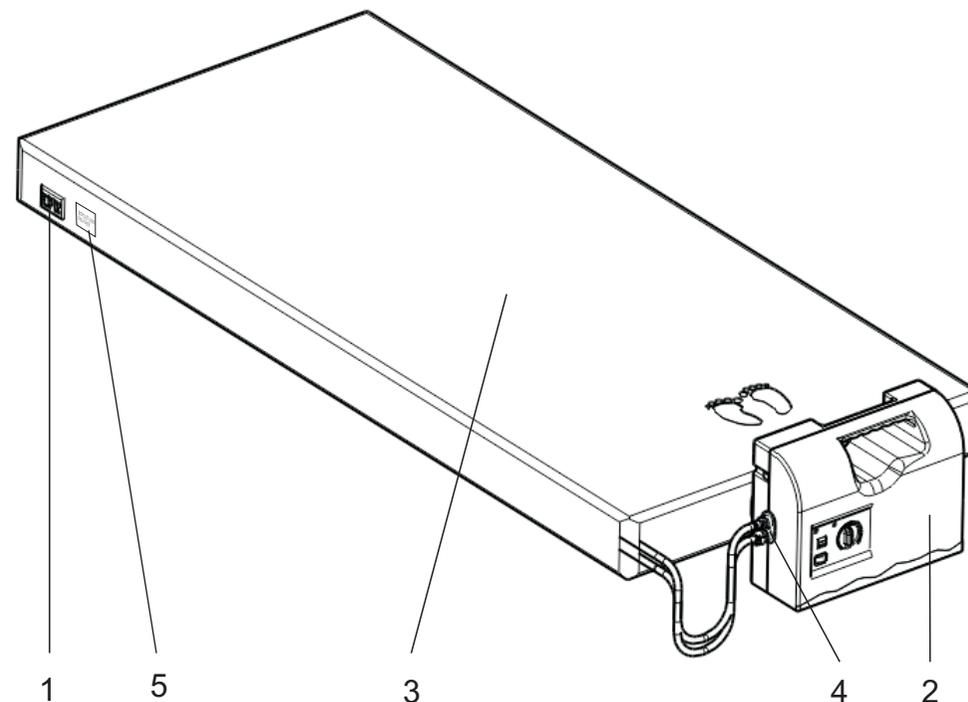
### 7.3 Air Filter Replacement



1. Loosen the screws from the air filter plate located at the back of pump.
2. The filter is reusable and can be washed gently with a mild detergent and water. Dry the filter before use.
3. Suggest to check and replace air filter regularly if environment is dirty.

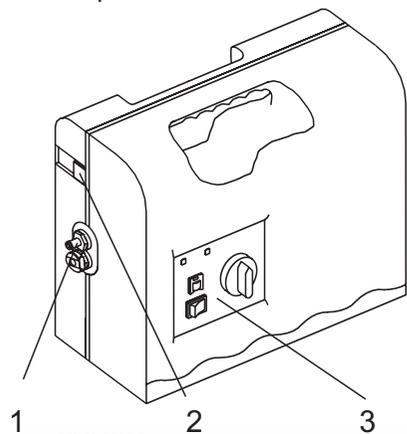
## 2. Product Description

### 2.1 Pump and Mattress System



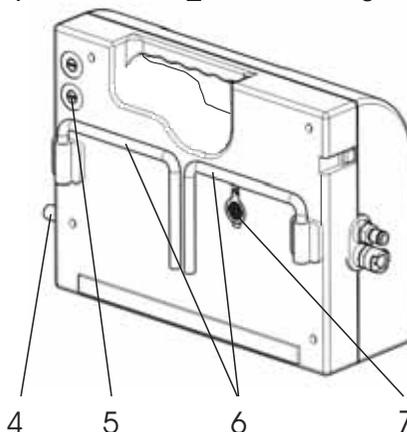
1. CPR
2. Pump unit
3. Mattress System
4. Quick Connectors
5. Rotation ON/OFF (only available with DynaTURN model)

## 2.2 Pump Unit



Front

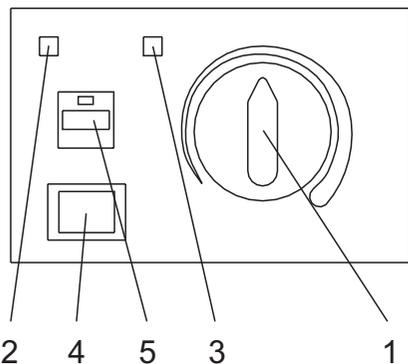
- 1.Quick Connectors
- 2.Alarm Reset
- 3.Front Panel



Rear

- 4.Power Cord
- 5.Fuses
- 6.Mounting Brackets
- 7.Air Filter

## 2.3 Front panel



1. Pressure Adjust Knob

Pressure adjust knob controls the air pressure output. When turning clockwise, the output pressure will increase. Vice versa for decreasing air pressure. Please consult your physician for a suitable setting.

If the pump unit is equipped with alarm buzzer, the alarm will buzz and the Low Pressure indicator light up when air pressure is below normal. To mute the alarm, simply press the Alarm Reset button on the side. However, the low pressure indicator remains until the low-pressure fault condition is solved.

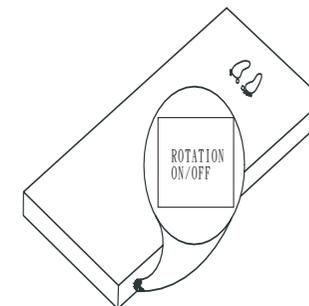
**⚠️ Note:** For analog-control type model, to re-activate the audible alarm function, please press Alarm Reset button again on the side to turn on the function. For digital-control type model, the alarm reset function will be re-activated automatically in 3 min.

## 4.5 Static Mode

Press the orange STATIC button to suspend the alternating mode of mattress. By pressing this button again, the mattress will be back to alternating therapy mode.

## 4.6 Stop rotation (with DynaTURN model only)

- I. The default configuration of DynaTURN is the combination of alternating and rotation therapies
- II. To stop rotation, please first press the STATIC button and wait for about 15 min. The mattress will stop rotation and become a flat surface.
- III. Then open the cap of "Rotation ON/OFF" at the left side of the mattress and disconnect the two connectors inside.
- IV. Press the STATIC button again, and the mattress will start alternating without rotation.



## 5. Cleaning

It is important to follow the cleaning procedures before using the machine on human bodies; otherwise, patients and/or doctors may have the possibility of getting infection.

By wiping the pump unit with a damp cloth pre-soaked with a mild detergent, and keep it away from dust. If other detergent is used, choose one that will have no chemical effects on the surface of the plastic case of the pump unit.

**⚠️ CAUTION:** Do not immerse or soak pump unit.

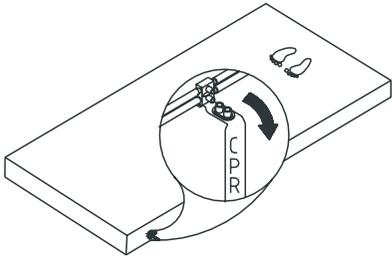
By wiping the mattress with a damp cloth pre-soaked with warm water containing a mild detergent. The cover may also be cleaned using sodium hypochlorite diluted in water. All parts should be air dried thoroughly before use.

**⚠️ CAUTION:** Do not use phenolic based product for cleaning.

**⚠️ CAUTION:** After cleaning, dry the mattress without direct exposure of sunlight.

The carrying bag should be turned inside out and completely wiped down using the disinfectant solutions. Allow it to air-dry thoroughly. Once the inside is dry, turn it back and wipe down the outside of the bag with disinfectant solutions.

## 4.2 CPR



When there is an emergency to perform CPR on the patient, quickly pull the CPR valves to release air from mattress. The CPR valves are located at the head-end, right-hand-side of the mattress. The quick connector on the pump unit can be disconnected for even faster deflation. (Number of CPR Valve depends on different model)

## 4.3 Pressure Set Up

Users can adjust pressure of air mattress to a desired softness by adjusting the pressure knob. Please consult your physician for a suitable setting.

Patient can lie on the mattress after Normal Pressure indicator lights up, this indicates the pressure is reached to the desired softness.

**⚠ NOTE:** Check to see if the suitable pressure is selected by sliding one hand between the deflated air cells and the patient to feel's patient's buttock. Users should be able to feel the minimum contact.

## 4.4 Low Pressure and Alarm Function

When an abnormal low pressure occurred, the Low Pressure indicator (yellow LED) will light up. Check to ensure all connections are connected properly and that they are correctly installed as per installation instructions.

**⚠ NOTE:** If the pressure level is consistently low, check for any leakage (tubes or connecting hoses). If necessary, replace any damaged tubes or hoses. Or contact local qualified dealer for repair.

If the pump unit is equipped without alarm buzzer, the Low Pressure indicator will light up until the low-pressure fault condition is resolved.

### 2. Normal Pressure Indicator

When green LED lights up, the pressure inside of air mattress reaches the preset pressure setting.

### 3. Low Pressure Indicator

When low pressure LED lights up, the pressure inside of air mattress is below normal. (please refer to troubleshooting)

### 4. Main Power Switch

To turn on/off the pump unit.

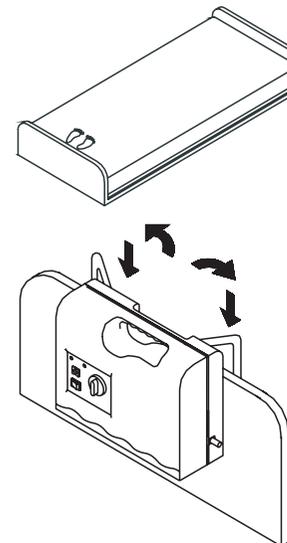
### 5. Static Function

Press orange STATIC button to suspend alternating function, if needed. The pressure inside of air tubes will be adjusted to the same softness. Press the STATIC button again, it will switch back to alternating mode. (if this feature is available)

## 3. Installation

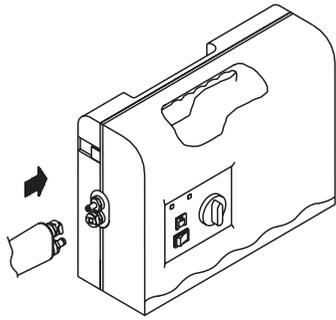
Unpacking the box to inspect for any damage which may have occurred during shipment. If there are any damages, please contact your dealer immediately.

### 3.1 Pump & Mattress Installation



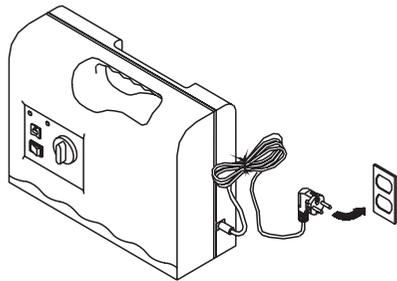
1. Place the mattress on top of the bed frame.  
Please note for the foot end.

2. Hang the pump onto bed rail (foot-end), and adjust hangers to best upright position of the pump.



3. Connect air hose connectors from air mattress to the pump unit. When a "click" sound is felt or heard, the connection is completed and secured.

**NOTE:** Check and ensure the air hoses are not kinked or tucked under mattress.



4. Plug the power cord into electrical outlet.

**NOTE:** 1. Make sure the pump unit is suitable for the local power voltage.

2. The plug is also served to disconnect the device.

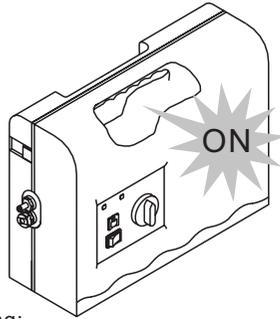
**NOTE:** 1. S'assure que la pompe est compatible au voltage local ou disponible.

2. L'appareil est également muni d'une fiche de connexion à l'électricité.

**CAUTION:** The pump can only be applied to the mattress recommended by the manufacturer. Do not use it for any other purpose.  
(applied part: air mattress)

**AVERTISSEMENT:** La pompe ne peut être utilisée qu'avec le matelas designé ou recommandé par le manufactureier. Ne peut servir d'usage autre que celui auquel elle a été conçu.

5. Then turn the main power switch to ON position.



**Grounding:**

Before any connection to the output connectors is made, the unit shall be connected to a protective earth conductor via the three-core main cable; the mains plug shall be inserted only into a socket outlet provided with a protective earth contact. The protective action shall not be negated by the user of an extension cord without protective conductor.

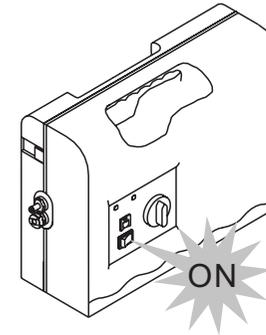
Several installation tips are listed below:

After installation, the extra length of the power cord, if any, should be neatly arranged to avoid any tripping accidents. The EQUIPMENT should be firmly placed at position where users/doctors can access easily.

**4. Operation**

**NOTE:** Always read the operating instruction before use.

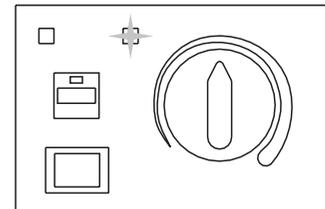
**4.1 General operation**



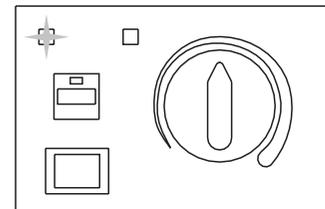
1. Switch on the main power switch.

**Pumping**

2. The pump unit is to delivering air into mattress.



3. The low pressure indicator (yellow LED) will light up when the mattress is not yet fully inflated.



4. When the appropriate pressure is reached, the low pressure indicator (yellow LED) will go off and normal pressure indicator (green LED) will light up automatically.

**NOTE:** Every time when mattress is first setup for use, it is recommended that the pressure knob to be set to "Firm" for the quickest inflation. User can then adjust air mattress to the desired softness afterward.