User Manual

Alternating Pressure Pump and Mattress System

Item # AP8000N



IMPORTANT SAFEGUARDS

When using electrical products, especially when children are 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 physically challenged individuals.
- ▶ 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, if 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 in an oxygen enriched environment.
- ► Connect this product to a properly grounded outlet only. See Grounding Instructions.

Introduction

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

General

The AP8000N is a high quality and affordable air support surface system suitable for pressure ulcer prevention and treatment. It has been specifically designed for prevention and treatment of pressure ulcers and offers an effective solution to 24-hour pressure area care.

The AP8000N has been tested and certified to the following standards:

- ► ANSI/AAMI ES60601-1
- ► CAN/CSA-C22.2 NO.60601-1
- ► EN 60601-1
- ► EN 60601-1-2
- ▶ IEC 60601-1-11

Intended Use

The AP8000N is intended to reduce the incidence of pressure ulcers while optimizing patient comfort. It also is appropriate for the following:

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

Contraindication

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

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

Product Description

Pump

► Power Switch (1) The switch is on the front faceplate of the pump.

Turn ON the power, the pump will start operation.

► Pressure-adjust Knob (2) Turn the soft/firm knob to set a comfortable pressure level.

Mattress

Lay it flatly on a bed frame. Please refer to the Specifications section for details. Secure the mattress to the bed frame by properly tightens all straps. Do not tighten them on the base bed frame, but on the moveable frame.

Manual

Always read this manual before using this product.

Installation

- Step 1 ▶ Place the mattress flatly on a 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 ▶ Hang the pump over the frame or board at the foot end of the bed. Make sure the pump is secured to the board.
- Step 3 ▶ Connect the inflation tubes from the mattress to the pump's inflating nozzles. Make sure they are properly attached.
- CAUTION: Make sure the air hoses are not kinked or tucked under the mattress. Also check to ensure the CPR valve is properly attached.
- Step 4 ▶ Plug the power cord into an electrical outlet with grounded AC power.

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 as shown in the figure in the Grounding Instructions section.



NOTE: Before inserting the plug into the outlet, make sure the voltage is compatible.



CAUTION: Make sure this product is well grounded.

- Step 5 ▶ Turn on the power by pressing the power switch at the faceplate of the pump. Proceed to the Operation section.
- Step 6 ► Make sure to disconnect the pump by unplugging the power cord when it is not in use.

Grounding Instructions

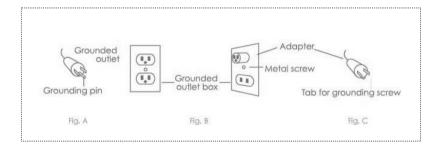
This product should be grounded when it is equipped with a cord that contains a grounding wire with a grounding plug. In the event of an electrical short circuit, grounding reduces the risk of electric shock by providing an escape wire for the electric current.

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, do not connect the grounding to either flat blade terminal. The wire with insulation having an outer surface that is green with or without vellow stripe 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.

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



Polarized Plug

- If the product is provided with a 2-wire polarized attachment plug

This appliance has a polarized plug (one blade is wider than the other). To reduce the risk of electric shock, this plug is intended to fit into a polarized outlet only one way. If the plug does not fit fully into the outlet, reverse the plug. If it still does not fit, contact qualified electrician. Do not attempt to modify the plug in any way.

Operation step by step



Always read the operating instructions before use.

APS000N

Step 1 ► Turn on the power. The green indicator of the power switch will come on. The pump starts to pump air into the mattress.

Step 2 ► For time-saving in the first inflation, turn the pressure knob to the full Firm position.





 ${\bf NOTE}$: It takes a while for the mattress to be fully inflated for the first time. You may

want to consider using a quick inflation device for the first inflation.

Step 3 Turn the pressure-adjust knob to set a comfortable pressure level from soft to firm according to patient's weight and comfort.

Pressure set up

It is recommended that the pressure-adjust knob being turned to Firm when the mattress is initially inflated. Users can then easily adjust the pressure level of the mattress 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	Check if the plug is inserted firmly into the outlet. Turn on the power switch again.
	 ▶ 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	For a quick check, adjust the pressure to Firm. Check to see if the inflation tubes connected to the pump are twisted or disconnected, or any leakage occurring.
(Low pressure)	
	► 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 mattress. 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 the 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.
- ▶ Wipe case with a clean cloth. Make sure all areas are clean (top and bottom, both sides).
- 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.
- ▶ Unplug the pump and store with proper identification tag.
- ▶ Avoid long exposure to sunlight.

Mattress

- ▶ Brush off or wipe down all surfaces of the cover sheet with soap and water before wetting with any liquid disinfectant.
- ► 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.
- ▶ Unzip the top cover from the mattress.
- ▶ Brush or wipe down all surfaces with soap and water before applying any liquid.
- ▶ Covers are immersed and soaked in disinfectant for the required incubation time.
- ► After pre-soaking, the cover is rinsed through a regular cycle in a washer with no soap then laundered with mild detergent (wash temperature 93°F, rinse temperature 78°F or on the coldest setting).
- ► Covers are aerated until they are fully dry. (Drying temperature range 90-120°F or on the coldest setting.)
- ► The air cells are unsnapped from one side and are sprayed on all sides with a disinfectant. Let it sit for the required incubation time and wipe down with a clean cloth. (Make sure to disconnect all the air cells, one by one, and spray the disinfectant on all sides, including all the connecting tubes and hoses. Let it sit for least 10 minutes.)
- ▶ If there is a base after you remove all the air cells, the base has to be sprayed down with the disinfectant, inside and outside. Let it sit for the required incubation time and wipe down with a cloth.
- ▶ Repeat the process with the tubing set: spray, incubate, and then wipe clean.
- ► The optional carrying bag should be turned inside out and completely wiped down using the disinfectant solution. 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 mattress on a SUNLESS area after cleaning.

Handling and Storage

- ▶ Lay the mattress out flat and upside down.
- ▶ Roll from the foot end towards the head end; the foot-end strap can then be stretched around the rolled mattress to prevent unrolling.
- ▶ Do not fold, crease or stack the mattress.
- ▶ Follow the national requirement to dispose the pump

Maintenance

General

- ▶ Check the power cord and plug to see if there are abrasions or excessive wear.
- ► Check the mattress cover for signs of wear or damage. Ensure the mattress cover and tubes are connected together correctly.
- ▶ Plug in the pump and check the airflow from the hose connection port. The airflow should alternate between ports every half-cycle time.
- ▶ Check the air hoses to see if there are kinks or breaks. For replacement, please contact your local agent or dealer.
- ▶ Make sure the mattress tube is well connected.
- ► Check the pump and make sure both power and power indicator are off when the switch is turned off.

Low pressure

Examine if there is air leakage between the pump and the mattress connections or from the air mattress tubes :

- ► Check connectors between the air mattress and pump. If there is any disconnection, please reconnect it.
- ▶ Check the CPR Valves. Ensure their outlets are sealed.
- ▶ Check the air-connecting tubes. Ensure each single cell is not broken.
- ► Turn the pressure-adjust knob to Firm. Keep the tubes fully inflated and inspect for air leakage.
- ► Check if there is any air leakage from cells. Ensure no leakage occurs. If any leakage occurs, please contact your local agent or dealer.

Specifications

Pump

Pump	Specification
Power Supply	Class I; AP/APG NO*; Type BF**
Air output:	>5 liter/min.
Pressure range	30 mmHg – 80 mmHg
Cycle time	10 min./60Hz or 12 min./50Hz
Power consumption	AC 120V 60Hz or 230V 50Hz 12W, 1A
Fuse Rating	250V, T1A
Size	28.0 × 13.0 × 8.5 cm (11.0 × 5.1 × 3.3 in)
Weight (Pump: Q1-02)	1.1 kg (2.4 lbs)
Environment Requirements	► Temperature: Operation 41°F~104°F (5~40°C) Storage -13°F ~158°F (-25~70°C) ► Humidity: Operation 15%~93% non-condensing Storage ≤ 93% non-condensing
Safety Standards	UL, c-UL, CE

Mattress

Mattress	Specification
Size	78" x 35.4" x 7.8"
Material	Nylon/PVC (EN-71, low toxic)
Weight Capacity	160 kg or 350 lbs.

Warranty

Your Drive brand product is warranted to be free of defects in materials and workmanship for one year of the original consumer purchaser.

This device was built to exacting standards and carefully inspected prior to shipment. This 1 Year Limited Warranty is an expression of our confidence in the materials and workmanship of our products and our assurance to the consumer of years of dependable service.

This warranty does not cover device failure due to owner misuse or negligence, or normal wear and tear. The warranty does not extend to non-durable components, such as rubber accessories, casters, and grips, which are subject to normal wear and need periodic replacement.

If you have a question about your Drive device or this warranty, please contact an authorized Drive dealer.

<u>NOTE</u>

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