

# ALTERNATING PRESSURE PAD

## **Purpose**

The purpose of an alternating pressure pad is to reduce the pressure applied to the surface of the skin and to promote better blood flow to pressure-sensitive areas by alternating the inflation and deflation of mattress segments. By reducing pressures to the skin areas around bony parts of the body, alternating pressure pads can promote comfort and reduce the factors that contribute to the breakdown of skin. Alternating pressure pads should only be used as part of a comprehensive wound/skin care program. Make sure you read and understand all manufacturers' use and care instructions.

## **Types**

Alternating pressure pads come in two basic models: those that are placed on top of a bed mattress and those that replace a bed mattress. Alternating pressure pads function in similar ways and usually only differ in their mattress thickness and whether they lay on top of a mattress or replace it.

All pressure reducing mattresses have a maximum weight limit that they can support. It is important to understand the limits and capacities for your alternating pressure pad:

Weight of user (stated by user) is \_\_\_\_\_ pounds.  
Maximum weight capacity of alternating pressure pad is \_\_\_\_\_ pounds.

## **Use**

The alternating pressure pad consists of a mattress and an electronic control unit. The electronic control unit needs to be hung on the foot end of the bed. If using a model that goes on top of a bed mattress, roll out the alternating pressure pad. If using a mattress replacement model, remove the bed mattress and roll out the alternating pressure pad. Be careful to place the pressure pad mattress in the correct position; there will be a head and foot section as well as a top and bottom. Attach the air hoses from the electronic control unit to the pressure pad.

Plug the electronic control unit into a grounded outlet and turn on the power. Turn the pressure setting to its maximum setting until the mattress is fully inflated. The time required to fully inflate the mattress will depend on the type and thickness of the mattress. Place the top surface of the mattress (therapy pad) over the inflated pressure pads (if applicable). Secure the fully assembled pressure pad to the mattress frame as specified by the manufacturer. Your medical equipment provider will instruct you on whether a sheet should be placed on top of the mattress.

Place the patient on the mattress and assess the level at which the patient sinks into the mattress. Adjust the mattress pressure until the patient sinks 1/3 into the mattress. After adjusting the mattress pressure, wait 10 minutes and reassess the level the patient sinks into the mattress. Slide the flat portion of your hand between the pad and the mattress of the bed to make sure there is a cushion of air between the pad and the mattress of the bed.

All alternating pressure mattresses have a feature for quick deflation. This quick deflation feature is provided to facilitate the need to perform cardiopulmonary resuscitation (CPR). Make sure you know how these deflation plugs are activated.

## **Safety**

The safe use of an alternating pressure pad requires it to be used as instructed, which includes the following safety precautions:

- Ensure that the CPR plugs are connected and that you know how to use them.
- Ensure that the electronic control unit power cord is routed underneath the bed frame.
- Ensure that the power cord, plug and air hoses are free of breaks, tears, or kinks.
- When using side rails, use a mattress thick enough and wide enough so that the gap between the top of the mattress and the bottom of the side rails and the gap between the side of the mattress and the side rails is small enough to prevent a patient from getting their head or neck between the mattress and the side rail.
- Failure to use bed side rails in the raised position could lead to accidental patient falls. Air mattresses have soft edges that may collapse when patients roll on to the edge.
- Never add, remove, or disable any feature, part, or function of your pressure pad.
- Never spray cleaners or liquids directly on the electronic control unit.
- Do not inflate the mattress when the bed is occupied.
- Do not use the mattress near an open flame or while smoking.
- Do not use the pressure pad if it is not securely fastened to the bed frame.
- Do not allow any unqualified person to use the pressure mattress.
- Do not hang anything on the electronic control unit.
- Do not place hot objects on top of the pressure mattress.
- Do not under any circumstances, cut or remove the round grounding plug from the power cord plug.
- Do not use any three (3) prong to two (2) prong electrical adapters.

In order to ensure care and provide operator safety, make sure you follow these safety guidelines:

- Use nightlights to increase vision around areas of use.
- Wipe up any water or slippery floor spills.
- Remove tripping hazards (loose floorboards, uneven floors, throw rugs, extension cords, clutter, etc.)
- Install grab bars, use bath mats with suction cups, and use an elevated toilet seat to prevent falls.

## **Maintenance**

Your alternating pressure pad must be kept clean by wiping it with a germicidal disinfectant solution; always unplug it before cleaning. If the alternating pressure pad has a therapy pad, it may be machine washable. If your system has a filter located on the exterior of the unit, it should be cleaned weekly with a vacuum cleaner or washed in warm soapy water, rinsed thoroughly, and dried before replacing. Only qualified repair technicians should diagnose, perform maintenance, or repair any part of your pressure reducing system. Call your medical equipment provider if your alternating pressure pad is not functioning properly.