



Operations Manual


Featuring Instant In-Service™

A recorded tutorial system providing immediate access to operational instructions



Comfort Setting Reference Chart

Comfort Setting		
Patient Weight (in lbs)	100	4
	125	4-5
	150	5
	175	5-6
	200	6
	250	6-7
	300	7
	350	7-8
	400	8



Thank you for selecting
the iQ Medical System™

**featuring Instant In-Service[®],
Healing Solution's patent-pending
tutorial system.**

Instant In-Service is a tutorial system that provides users immediate instruction on the proper usage of the iQ Medical System.

By pressing a button on the control unit, caregivers are guided through the proper use of the iQ Medical System, resulting in optimal patient care and ease of use for the caregiver.

Healing Solutions recommends that this tutorial system be used for the initial education of caregivers as well as a continuing educational tool throughout the life of the unit.

iQ MEDICAL™
with INSTANT IN-SERVICE[®]

System Overview

The iQ MEDICAL SYSTEM and associated mattress components are designed for the treatment and prevention of decubitus ulcers and the treatment of a variety of skin traumas including burns and open wounds.

The system is comprised of four components:

Low Air Loss Blower Controller Unit
Hose Assembly
Power Cord
Mattress

Applications

The iQ MEDICAL SYSTEM may be used for a variety of applications including, but not limited to the following:

AIDS	Multiple Sclerosis
ALS	Neurosurgery
Arthritis	Orthopedics
Burns	Pain Management
Cardiovascular	Plastic Surgery
Dermatology	Quadriplegia
Extended Care	Rehabilitation
Geriatrics	Ulcers

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Setup Instructions

1. Low air loss mattress

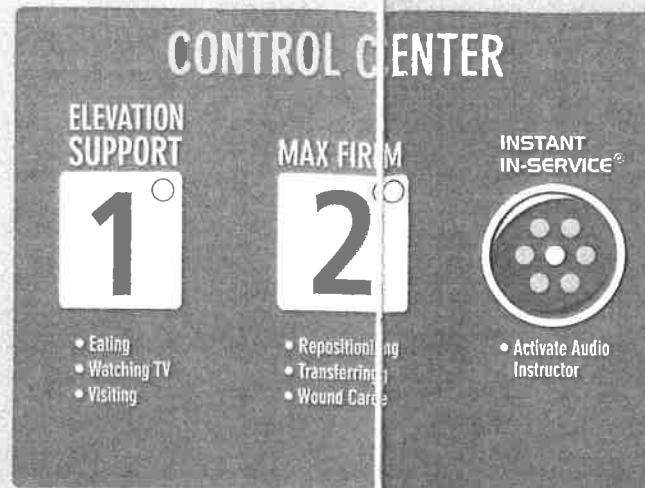
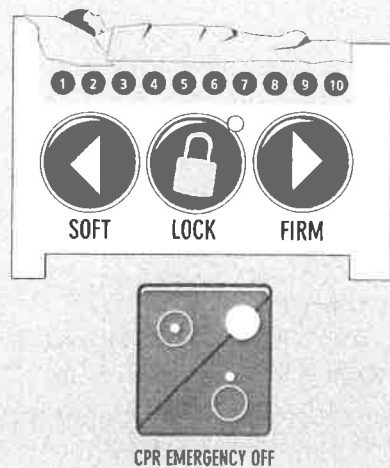
- Remove the existing mattress from the bed and replace with the low air loss mattress.
- Insert the mattress inside the mattress cover and zip closed.
- Make certain the mattress hose fitting is at the foot end of the bed frame.
- Strap the cover to the bed frame using the straps located on each side of the mattress cover.
- While the mattress is inflating, it may be helpful to partially unzip the cover and guide the mattress into the correct position.

Do not use tools or excessive force.

Note: any damaged components must be returned to manufacturer prior to operation.

2. Low air loss control unit

- Place the control unit hooks over the edge of the footboard or place on a solid surface.
- Insert the hose into the side of the control unit until a snap is heard. Ensure the hose is fastened securely.
- Insert the other end of the hose into the mattress.
- Insert power cord into the outlet.
- Turn main power switch " on ".
- Press the power button "on" and allow the mattress to fully inflate before making any adjustments or placing the patient on the mattress.
- Press MaxFirm button.
- Place the patient on the mattress in a normal, relaxed position.
- Press MaxFirm button again to turn OFF firm mode.
- Set the comfort setting based on the patient's weight and primary body position. See chart on inside front cover.
- Carefully place a hand between the patient and the bed frame to ensure there is 3-4 inches of clearance. The patient should not be touching the bed frame at any point and should be positioned in the center of the mattress.
- Once the patient's primary comfort setting is determined, press the lock button.



healingsolutions LLC

iQ MEDICAL™
with INSTANT IN-SERVICE®
(Patent Pending)

Initial Power On

1. Turn on the main power switch located on side of the control unit, next to the power cord connection.
2. Press the red and green 'ON/OFF button' on the control panel.

Control Panel

Soft Button / Firm Button

Decreases or increases mattress firmness in ½ increments (Illuminated firmness level indicator ranges from 1-10).

Lock Button

Press the button to lock the comfort level. Access to iQ control center is still available when locked. To adjust the comfort setting, the system must be unlocked.

To unlock the system, the user must:

1. Press and hold the lock button – the lock button LED remains lit.
2. While continuing to hold the lock button, press and release the soft button, then press and release the firm button, then release the lock button.
3. The lock button LED turns off indicating an unlocked state.

CPR/Emergency Off

Press the red and green 'ON/OFF button' on the control panel.

1 Elevation Support

Increases firmness by 2 increments above current setting, Provides seat area support for upright position, Press second time to return to previous setting.

2 Max Firm

Increases mattress to firmest setting. (returns to previous setting after 15 minutes)

Instant In-Service

This is an audio feature that provides users immediate instruction on the proper use of the iQ Medical system. By pressing the button on the control center, users are guided through a set of audio instructions that will help insure proper usage.

To activate, press the Instant In-Service button located in the Control center.

There are two language options from which to choose:

1. English (press button #1)
2. Alternate language (press button #2)

Press the Instant In-Service button again to stop the audio recording.

Control Panel Continued

Survey Support

When activated this feature provides the state surveyor with answers to most frequently asked product and medical code questions which could include:

- unit serial number
- product manual location
- use of under pads and draw sheets
- maintenance schedule
- turning schedule
- slide bolsters & side rails
- product Medicare code
- mattress cover information
- number of Instant In-Service requests

This information is stored within each unit and available to activate at any time.






To activate, press AND HOLD the Instant In-Service button.

There are two language options from which to choose:


1. English (press button #1)
2. Alternate language (press button #2)

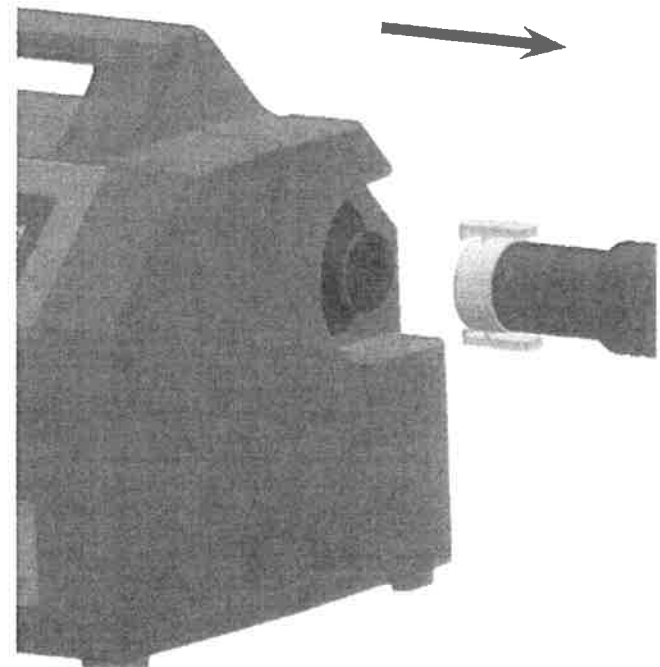
Press AND HOLD the Instant In-Service button again to stop the audio recording.

Symbol Definitions

	On (Only for Part of the Equipment)		Type B Applied Part
	Off (Only for Part of the Equipment)		Protective Earth Terminal
	Attention: Consult Accompanying Documents		

Emergency deflate

In the event of an emergency, turn off the power for faster deflation. Press red and green "on/off" button  and disconnect the hose from the control unit or mattress for faster deflation.



Slide Bolster

The iQ Slide bolsters always function as a centering device. The bolsters can also help prevent gaps created by the use of bed frame side rails reducing the possibility of patient entrapment. The iQ Slide bolsters can be easily adjusted by sliding the foam cylinders out of the open-ended mattress cover to create an open area for patient transfers.

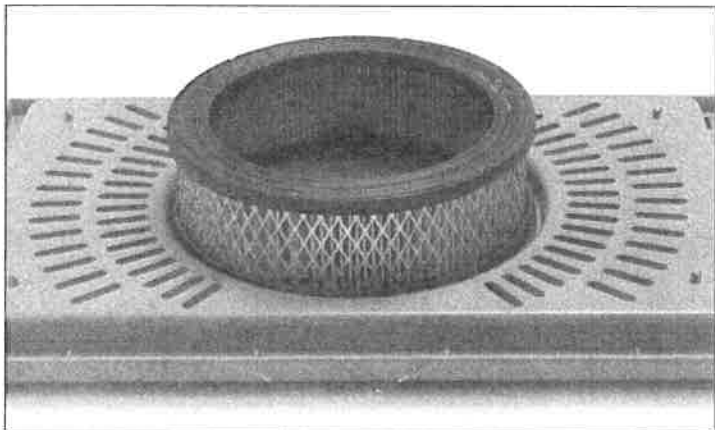


Maintenance

Any physical damage to mechanical or electrical components must be serviced by the manufacturer as outlined in the warranty supplied with the unit.

Filtration

The filter should be cleaned or replaced every 60-90 days. Accessing the filter is made easy by loosening the four captive screws on the bottom of the unit. Filter maintenance is critical to keep the blower motor in peak operating condition.



Maintenance Mode

This feature identifies basic maintenance information, which could include the following items:

- proper workings of LED lights
- accurate calibration of the pump
- internal temperature
- maximum temperature of the unit
- hours since last scheduled maintenance
- number of Instant In-Service activations

Cleaning Instructions

Clean the exterior of the unit with a mild detergent using a damp cloth. Do not soak the cloth with solution so that moisture drips onto, or lingers on, external surfaces.

Never use organic solvents such as paint thinner to clean the device.

Make sure the power unit is completely dry before attempting to reconnect and operate.

Mattress Cover Cleaning Instructions

ROUTINE CARE

Wipe clean with neutral soap suds and lukewarm water. Rinse and dry.

HARD TO CLEAN AREAS

Soft sponge with liquid cleaner as specified on manufacturer's product label. **DO NOT USE HARSH CLEANERS OR SOLVENTS.**

Mattress Cover Cleaning Instructions Continued

DISINFECTION

Most phenolic or quaternary type disinfectants can be used on RECOVERY5™ fabric. User must dilute disinfectants and germicides in accordance with manufacturer's instructions. It is recommended that all cleaning agents first be spot tested on an inconspicuous part of the fabric to ensure that they do not damage the fabric.

BLOOD CONTAMINATION

Contamination with blood on RECOVERY5™ can be disinfected with a 1:10 dilution of household bleach (5.25% sodium hypochlorite) as recommended by the CDC (US Department of Health and Human Services, February 1989).

ODOR CONTROL

To prevent odors on long term incontinent applications, clean RECOVERY5™ daily. The use of a scented cleaner/disinfectant is recommended.

WARNING

Iodophor type disinfectants (Betadine, for example) will stain RECOVERY5™ fabric.

WARNING

Prolonged contact with bleach solutions, improper dilution ratios for any cleaning agent, or poor rinsing of fabric surface after disinfecting and cleaning may cause damage to both the appearance and performance of this fabric.

Safety Precautions

Note: It is very important to read and review all safety precautions before operating the iQ MEDICAL SYSTEM.

For 240 V units (P/N 900-0100) a power supply cord suitable for the voltage and current involved shall be used with the equipment. The power supply cord shall comply with local code requirements.

Disconnect the power supply cord from the appliance inlet prior to performing maintenance on the equipment.

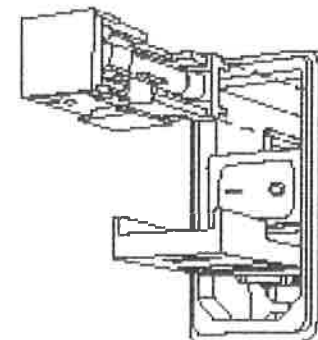
Explosion danger

There is a risk of explosion if the system is operated in the presence of flammable anesthetics.

Do not smoke in the presence of the system.

Fire risk

Use only the correct value and type of fuse for replacement. Fuse must be UL listed 3ag 5a 250vac.



The fuse holder is located on the side of unit opposite of hose attachment.

The fuse holder accepts both 5x20mm and 1-1/4" fuse sizes.

When reinstalling, orient the voltage indicator to show the proper voltage through the panel cover window.

Caution

- Electrical shock hazard - do not remove cover.
- Do not operate when using oxygen administering equipment, of any configuration other than a nasal mask, or ½ bed length type tent. The oxygen tent should not extend below the mattress support level of the iQ Medical control panel unit.
- Do not operate in the presence of smoking or open flame. Air flow through the mattress may support combustion.
- There are a variety of bed frames used in each care setting, i.e. nursing homes, home care, and hospitals. Therefore, it is the responsibility of the caregiver to take the necessary precautions to ensure the safety of the patient. This includes, but is not limited to, the appropriate use of side rails.
- This unit will only be properly grounded with a receptacle clearly marked "hospital grade" or "hospital only".

Additional safety considerations

- Read and review all safety instructions before operating the system.
- Do not place liquids on the control panel unit.
- Handle unit with care. Dropping the unit can cause irreparable damage to the internal electronics. If the unit is not operating correctly, it should be checked by a qualified technician before further operation.
- The system should not be exposed to dirt and dust, which may cause premature failure. The filter should be replaced annually under normal operating conditions. Inspect the filter every month for signs of excessive dirt or dust build-up.
- Unplug the unit when cleaning it and its associated components. Harsh chemical cleaners should not be used. A mild solution of soap and water may be used on a damp cloth or paper towel to clean the control panel and components.


Classifications in accordance with IEC 60601-1

- Type of Protection Against Electrical Shock: Class I Equipment.
- Degree of Protection Against Electrical Shock: Type B Applied Part.
- Equipment is not suitable for use in the presence of a flammable anesthetic mixture with air or with oxygen or nitrous oxide.

Troubleshooting

Problem/corrective action

1. Low air loss control unit does not turn on and power light does not illuminate:

- Make sure the control unit is plugged into a live 120 volt outlet
- Ensure the cord is properly and firmly connected.
- Make sure the power entry switch is on.
- Press the red and green "on/off"  button.

2. Low air loss control unit runs, but mattress does not inflate:

- Make sure the hose is properly connected to the mattress and control unit.
- Check to see if the hose is crushed or pinched by the bed frame.
- Check for air leaks because of loose connections or damaged hose.
- Check the comfort level adjustment. Make sure the setting displayed on the panel is the proper setting for the patient.

3. Low air loss control unit is operating correctly, but appears to be abnormally hot:

- Check for a proper system pressure setting. If the system pressure is set extremely high, the load on the control unit will increase causing the system to run warmer than usual.
- Make sure the filter is not clogged and is properly installed.
- Make sure the area around the filter air input is not restricted.
- Make sure the control unit is not being used in an environment with temperatures above 104°F.
- Make sure the correct cover is on the mattress and the mattress baffles have low air loss holes on the top (with the cover off, you should be able to feel the air flow from the holes from 5-6 inches away).

4. The low air loss control unit is "locked up":

- Turn the power entry switch off.
- Wait 30 seconds and turn it back on. This will reset the control unit's computer and allow for normal operation.
- If the problem persists, remove the control unit from service and contact your distributor.

Specifications

The LOW AIR LOSS control unit is UL 60601-1 classified medical equipment.

Medical equipment



With Respect To Electric Shock, Fire And Mechanical Hazards Only
In Accordance With UI60601-1, Iec60601-1, can/csa C22.2 No. 601.1

The control unit is designed to reduce radiation of radio-frequency energy. There is no guarantee that communications or other radio-frequency interference will not occur in a particular installation. If this control unit does cause harmful interference to radio or television reception, which can be determined by turning the control unit off and on, the user is encouraged to try and correct the interference by one or more of the following steps:

- Make sure the electrical cord is properly grounded.
- Reorient or relocate the receiving antenna of the device affected.
- Increase the separation between the control unit and the device affected.
- Plug the equipment into a different outlet.
- Consult the dealer and/or an experienced radio/TV technician.

Electrical ratings

P/N 900-0000: Rated 120 V, 50/60 Hz, 5 A

P/N 900-0100: Rated 240 V, 50/60 Hz, 5 A

Environmental conditions of use

Temperature: 10 to 35 °C (50 to 95 °F)

Humidity: 30% to 75 %

Pressure: 700 hPa to 1060 hPa (20.67 inHg to 31.30 inHg)

Environmental conditions of transport/storage

Temperature: -40 to 70 °C (-40 to 158 °F)

Humidity: 10% to 100%

Pressure: 14.76 inHg to 31.30 inHg (500 hPa to 1060 hPa)

Warranty

Healing Solutions, LLC, warrants the low air loss control unit for a period of twelve months from date of purchase. The mattress, cover and all other mattress system components will be warranted for a period of twelve months.

Healing Solutions, LLC, will repair or replace (at its option) any components that, upon examination by a Healing Solutions representative or agent, are found to be defective within the limits of the warranty.

To obtain service under the terms of this warranty, the user must:

Notify Healing Solutions, LLC, its representatives or agent of the defect noted within the time limit of this warranty.

Healing Solutions, LLC, will arrange for the inspection and/or return of the system or component. No system or component will be accepted for return without prior authorization.

Any repair made to the equipment or components by anyone other than a Healing Solutions, LLC, technician voids this warranty in its entirety. Systems or components to be returned must be cleaned (disinfected) prior to return, and must be securely shipped in manufactures original packaging.

This warranty does not apply to any products that have been subjected to damage in accident, misuse or abuse.

The user assumes all risk and liability in connection with determining the suitability of the system and its components for a particular user. Healing Solutions, LLC, and its representatives and agents shall not be liable for injury, loss or damage arising out of the improper use or operation of the system. There are no warranties, implied or expressed, beyond those stated for any consequential damage or loss resulting from failure of this product to perform in the manner anticipated.

For a schedule of repairs and cost, please call your Healing Solutions, LLC, representative.