

# **Patient Welcome Packet**

### **Table of Contents**

	Page
General Information	1
Mission Statement	2
Notice of Privacy Practices	3
Emergency Preparedness/Disaster Preparedness	11
Infection Control	12
Patient Entrapment	13
Concentrator Instructions	14
Liquid Oxygen Instructions	20
Safe Practices for Oxygen Equipment	27
Oxygen Duration Guides	28
Nebulizer Instructions	32
Bipap Instructions	34
Hospital Bed Instructions	35
Suction Machine (Aspirator) Instructions	38
Trach Compressor Instructions	42
Enteral Feeding Pump Instructions	43
Alternating Pressure Pump (APP)	46
Low Air Loss Mattress	47
APM2	52



**CONTACT INFORMATION:** President: Frank F. Hays

Vice President: Chris L. Hottinger

### **HOURS OF SERVICE:**

Muncie Location: Monday thru Friday: 8:30 am - 5:00 pm

Customer Service Representatives on call 24 hours a day---seven days per week.

Respiratory Therapists and Delivery Technicians are on call to provide 24-hour emergency service.

**EQUIPMENT AND SERVICES:** We offer a wide range of durable medical equipment and supplies; we can also special order many hard to find items.

**DELIVERIES:** Deliveries are performed by our highly-trained Delivery Technicians which utilize a mobile warehouse process to quickly and accurately deliver medical equipment to hospice patients throughout Indiana.

**REFERRAL:** We accept referrals via web email, telephone, fax, or in person. Arrangements for service are made immediately by our Delivery Technicians by phone. An email reply to the referral provides estimated time of delivery, and following the delivery, another email reply to the referral confirms the delivery has successfully been made.

**STAFF:** Our staff consists of highly experienced personnel in the medical equipment industry, logistics, information technologies, factory-trained Delivery Technicians, and licensed Respiratory Therapists. A complete customer service and billing department is provided to serve our customers.

**PATIENT EDUCATION:** Our team of qualified professionals will perform all patient education presentations to the patients and their caregivers. **HOSPICE EXPRESS** will also provide them with written and/or verbal instruction on how to use the provided equipment and supplies, along with how to contact us after hours.

**BILLING INFORMATION:** HOSPICE EXPRESS contracts with small to large-sized hospice organizations, offering a variety of durable medical equipment and supplies. We have over 11,000 catalogue items, as well as our core contract items available as daily, monthly, or per diem rentals. We can customize any billing preferences and payment terms are typically net 30 days.

**STANDARD OF CARE:** HOSPICE EXPRESS works with the Physicians, Social Workers, Discharge Planners, Home Care Personnel, etc., to meet the needs of the patient and care-givers during the hospice continuity of care. There are written company policies and procedures for Safety Management, Infection Control, and Emergency Situations.

# **Mission Statement**

Hospice Express, Inc.'s mission is to provide durable medical equipment needs to the hospice and home health care industry by providing express delivery of quality equipment while maintaining professional and courteous customer / patient service.



Hospice Express, Inc. 225 W Ontario Dr Muncie, IN 47303

Ph: 765-282-1000

Fax: 765-286-3351

# NOTICE OF PRIVACY PRACTICES

This Notice is effective March 26, 2013

# THIS NOTICE DESCRIBES HOW MEDICAL INFORMATION ABOUT YOU MAY BE USED AND DISCLOSED AND

### HOW YOU CAN GET ACCESS TO THIS INFORMATION.

PLEASE REVIEW IT CAREFULLY

### WE ARE REQUIRED BY LAW TO PROTECT MEDICAL INFORMATION ABOUT YOU

We are required by law to protect the privacy of medical information about you and that identifies you. This medical information may be information about healthcare we provide to you or payment for healthcare provided to you. It may also be information about your past, present, or future medical condition.

We are also required by law to provide you with this Notice of Privacy Practices explaining our legal duties and privacy practices with respect to medical information. We are legally required to follow the terms of this Notice. In other words, we are only allowed to use and disclose medical information in the manner that we have described in this Notice.

We may change the terms of this Notice in the future. We reserve the right to make changes and to make the new Notice effective for *all* medical information that we maintain. If we make changes to the Notice, we will:

- Post the new Notice in our waiting area.
- Have copies of the new Notice available upon request. Please contact our Privacy Officer at **765-282-1000** to obtain a copy of our current Notice).

The rest of this Notice will:

- Discuss how we may use and disclose medical information about you.
- Explain your rights with respect to medical information about you.
- Describe how and where you may file a privacy-related complaint.

If, at any time, you have questions about information in this Notice or about our privacy policies, procedures or practices, you can contact our Privacy Officer at **765-282-1000**.

# WE MAY USE AND DISCLOSE MEDICAL INFORMATION ABOUT YOU IN SEVERAL CIRCUMSTANCES

We use and disclose medical information about patients every day. This section of our Notice explains in some detail how we may use and disclose medical information about you in order to provide healthcare, obtain payment for that healthcare, and operate our business efficiently. This section then briefly mentions several other circumstances in which we may use or disclose medical information about you.

For more information about any of these uses or disclosures, or about any of our privacy policies, procedures or practices, contact our Privacy Officer at **765-282-1000**.

#### 1. Treatment

We may use and disclose medical information about you to provide healthcare treatment to you. In other words, we may use and disclose medical information about you to provide, coordinate or manage your healthcare and related services. This may include communicating with other healthcare providers regarding your treatment and coordinating and managing your healthcare with others.

**Example:** Jane is a patient at the health department. The receptionist may use medical information about Jane when setting up an appointment. The nurse practitioner will likely use medical information about Jane when reviewing Jane's condition and ordering a blood test. The laboratory technician will likely use medical information about Jane when processing or reviewing her blood test results. If, after reviewing the results of the blood test, the nurse practitioner concludes that Jane should be referred to a specialist, the nurse may disclose medical information about Jane to the specialist to assist the specialist in providing appropriate care to Jane.

### 2. Payment

We may use and disclose medical information about you to obtain payment for healthcare services that you received. This means that, within the health department, we may use medical information about you to arrange for payment (such as preparing bills and managing accounts). We also may disclose medical information about you to others (such as insurers, collection agencies, and consumer reporting agencies). In some instances, we may disclose medical information about you to an insurance plan before you receive certain healthcare services because, for example, we may need to know whether the insurance plan will pay for a particular service.

**Example:** Jane is a patient at the health department and she has private insurance. During an appointment with a

nurse practitioner, the nurse practitioner ordered a blood test. The health department billing clerk will *use* medical information about Jane when he prepares a bill for the services provided at the appointment and the blood test. Medical information about Jane will be *disclosed* to her insurance company when the billing clerk sends in the bill.

**Example:** The nurse practitioner referred Jane to a specialist. The specialist recommended several complicated and expensive tests. The specialist's billing clerk may contact Jane's insurance company before the specialist runs the tests to determine whether the plan will pay for the test.

### 3. HealthcareOperations

We may use and disclose medical information about you in performing a variety of business activities that we call "healthcare operations." These "healthcare operations" activities allow us to, for example, improve the quality of care we provide and reduce healthcare costs. For example, we may use or disclose medical information about you in performing the following activities:

- Reviewing and evaluating the skills, qualifications, and performance of healthcare providers taking care
  of you.
- Providing training programs for students, trainees, healthcare providers or non-healthcare professionals to help them practice or improve their skills.
- Cooperating with outside organizations that evaluate, certify or license healthcare providers, staff or facilities in a particular field or specialty.
- Reviewing and improving the quality, efficiency and cost of care that we provide to you and our other patients.
- Improving healthcare and lowering costs for groups of people who have similar health problems and helping manage and coordinate the care for these groups of people.
- Cooperating with outside organizations that assess the quality of the care others and we provide, including government agencies and private organizations.
- Planning for our organization's future operations.
- Resolving grievances within our organization.
- Reviewing our activities and using or disclosing medical information in the event that control of organization significantly changes.
- Working with others (such as lawyers, accountants and other providers) who assist us to comply with this Notice and other applicable laws.

**Example:** Jane was diagnosed with diabetes. The health department used Jane's medical information – as well as medical information from all of the other health department patients diagnosed with diabetes – to develop an educational program to help patients recognize the early symptoms of diabetes. (Note: The educational program would not identify any specific patients without their permission).

**Example:** Jane complained that she did not receive appropriate healthcare. The health department reviewed Jane's record to evaluate the quality of the care provided to Jane. The health department also discussed Jane's care with an attorney.

### 4. Persons Involved in Your Care

We may disclose medical information about you to a relative, close personal friend or any other person you identify if that person is involved in your care and the information is relevant to your care. If the patient is a minor, we may disclose medical information about the minor to a parent, guardian or other person responsible for the minor except in limited circumstances. For more information on the privacy of minors' information, contact our Privacy Officer at **765-282-1000**.

We may also use or disclose medical information about you to a relative, another person involved in your care or possibly a disaster relief organization (such as the Red Cross) if we need to notify someone about your location or condition.

You may ask us at any time not to disclose medical information about you to persons involved in your care. We will agree to your request and not disclose the information except in certain limited circumstances (such as emergencies) or if the patient is a minor. If the patient is a minor, we may or may not be able to agree to your request.

**Example**: Jane's husband regularly comes to the health department with Jane for her appointments and he helps her with her medication. When the nurse practitioner is discussing a new medication with Jane, Jane invites her husband to come into the private room. The nurse practitioner discusses the new medication with Jane and Jane's husband.

### 5. Required by Law

We will use and disclose medical information about you whenever we are required by law to do so. There are many state and federal laws that require us to use and disclose medical information. For example, state law requires us to report gunshot wounds and other injuries to the police and to report known or suspected child abuse or neglect to the Department of Social Services. We will comply with those state laws and with all other applicable laws.

### 6. National Priority Uses and Disclosures

When permitted by law, we may use or disclose medical information about you without your permission for various activities that are recognized as "national priorities." In other words, the government has determined that under certain circumstances (described below), it is so important to disclose medical information that it is acceptable to disclose medical information without the individual's permission. We

will only disclose medical information about you in the following circumstances when we are permitted to do so by law. Below are brief descriptions of the "national priority" activities recognized by law. For more information on these types of disclosures, contact our Privacy Officer at **765-282-1000**.

- Threat to health or safety: We may use or disclose medical information about you if we believe it is necessary to prevent or lessen a serious threat to health or safety.
- Public health activities: We may use or disclose medical information about you for public health activities.
  Public health activities require the use of medical information for various activities, including, but not limited to, activities related to investigating diseases, reporting child abuse and neglect, monitoring drugs or devices regulated by the Food and Drug Administration, and monitoring work-related illnesses or injuries. For example, if you have been exposed to a communicable disease (such as a sexually transmitted disease), we may report it to the State and take other actions to prevent the spread of the disease.
- Abuse, neglect or domestic violence: We may disclose medical information about you to a government authority (such as the Department of Social Services) if you are an adult and we reasonably believe that you may be a victim of abuse, neglect or domestic violence.
- Health oversight activities: We may disclose medical information about you to a health oversight
  agency which is basically an agency responsible for overseeing the healthcare system or certain
  government programs. For example, a government agency may request information from us while they
  are investigating possible insurance fraud.
- **Court proceedings:** We may disclose medical information about you to a court or an officer of the court (such as an attorney). For example, we would disclose medical information about you to a court if a judge orders us to do so.
- Law enforcement: We may disclose medical information about you to a law enforcement official for specific law enforcement purposes. For example, we may disclose limited medical information about you to a police officer if the officer needs the information to help find or identify a missing person.
- **Coroners and others:** We may disclose medical information about you to a coroner, medical examiner, or funeral director or to organizations that help with organ, eye and tissue transplants.
- Workers' compensation: We may disclose medical information about you in order to comply with workers' compensation laws.

- **Research organizations:** We may use or disclose medical information about you to research organizations if the organization has satisfied certain conditions about protecting the privacy of medical information.
- Certain government functions: We may use or disclose medical information about you for certain government functions, including but not limited to military and veterans' activities and national security and intelligence activities. We may also use or disclose medical information about you to a correctional institution in some circumstances.

### 7. Authorizations

Other than the uses and disclosures described above (#1-6), we will not use or disclose medical information about you without the "authorization" – or signed permission – of you or your personal representative. In some instances, we may wish to use or disclose medical information about you and we may contact you to ask you to sign an authorization form. In other instances, you may contact us to ask us to disclose medical information and we will ask you to sign an authorization form.

If you sign a written authorization allowing us to disclose medical information about you, you may later revoke (or cancel) your authorization in writing (except in very limited circumstances related to obtaining insurance coverage). If you would like to revoke your authorization, you may write us a letter revoking your authorization or fill out an Authorization Revocation Form. Authorization Revocation Forms are available from our Privacy Officer. If you revoke your authorization, we will follow your instructions except to the extent that we have already relied upon your authorization and taken some action.

The following uses and disclosures of medical information about you will only be made with your authorization (signed permission):

Uses and disclosures for marketing purposes.
Uses and disclosures that constitute the sales of medical information about you.
Most uses and disclosures of psychotherapy notes, if we maintain psychotherapy notes.
Any other uses and disclosures not described in this Notice.

# YOU HAVE RIGHTS WITH RESPECT TO MEDICAL INFORMATION ABOUT YOU

You have several rights with respect to medical information about you. This section of the Notice will briefly mention each of these rights. If you would like to know more about your rights, please contact our Privacy Officer at **765-282-1000**.

### 1. Right to a Copy of This Notice

You have a right to have a paper copy of our Notice of Privacy Practices at any time. In addition, a copy of this Notice will always be posted in our waiting area. If you would like to have a copy of our Notice, ask the receptionist for a copy or contact our Privacy Officer at **765-282-1000**.

### 2. Right of Access to Inspect and Copy

You have the right to inspect (which means see or review) and receive a copy of medical information about you that we maintain in certain groups of records. If we maintain your medical records in an Electronic Health Record (EHR) system, you may obtain an electronic copy of your medical records. You may also instruct us in writing to send an electronic copy of your medical records to a third party. If you would like to inspect or receive a copy of medical information about you, you must provide us with a request in writing. You may write us a letter requesting access or fill out an **Access Request Form**.

Access Request Forms are available from our Privacy Officer.

We may deny your request in certain circumstances. If we deny your request, we will explain our reason for doing so in writing. We will also inform you in writing if you have the right to have our decision reviewed by another person.

If you would like a copy of the medical information about you, we will charge you a fee to cover the costs of the copy. Our fees for electronic copies of your medical records will be limited to the direct labor costs associated with fulfilling your request.

#### \$20 fee for medical records.

We may be able to provide you with a summary or explanation of the information. Contact our Privacy Officer for more information on these services and any possible additional fees.

### 3. Right to Have Medical Information Amended

You have the right to have us amend (which means correct or supplement) medical information about you that we maintain in certain groups of records. If you believe that we have information that is either inaccurate or incomplete, we may amend the information to indicate the problem and notify others who have copies of the inaccurate or incomplete information. If you would like us to amend information, you must provide us with a request in writing and explain why you would like us to amend the information.

You may either write us a letter requesting an amendment or fill out an **Amendment Request Form**. Amendment Request Forms are available from our Privacy Officer.

We may deny your request in certain circumstances. If we deny your request, we will explain our reason for doing so in writing. You will have the opportunity to send us a statement explaining why you disagree with our decision to deny your amendment request and we will share your statement whenever we disclose the information in the future.

#### 4. Right to an Accounting of Disclosures We Have Made

You have the right to receive an accounting (which means a detailed listing) of disclosures that we have made for the previous six (6) years. If you would like to receive an accounting, you may send us a letter requesting an accounting, fill out an **Accounting Request Form**, or contact our Privacy Officer. Accounting Request Forms are available from our Privacy Officer.

The accounting will not include several types of disclosures, including disclosures for treatment, payment or healthcare operations. If we maintain your medical records in an Electronic Health Record (EHR) system, you may request that include disclosures for treatment, payment or healthcare operations. The accounting will also not include disclosures made prior to April 14, 2003.

If you request an accounting more than once every twelve (12) months, we may charge you a fee to cover the costs of preparing the accounting.

### \$20 fee for Accounting Request

### 5. Right to Request Restrictions on Uses and Disclosures

You have the right to request that we limit the use and disclosure of medical information about you for treatment, payment and healthcare operations. Under federal law, we must agree to your request and comply with your requested restriction(s) if:

- 1. Except as otherwise required by law, the disclosure is to a health plan for purpose of carrying out payment of healthcare operations (and is not for purposes of carrying out treatment); and,
- 2. The medical information pertains solely to a healthcare item or service for which the healthcare provided involved has been paid out-of-pocket in full.

Once we agree to your request, we must follow your restrictions (except if the information is necessary for emergency treatment). You may cancel the restrictions at any time. In addition, we may cancel a restriction at any time as long as we notify you of the cancellation and continue to apply the restriction to information collected before the cancellation.

You also have the right to request that we restrict disclosures of your medical information and healthcare treatment(s) to a health plan (health insurer) or other party, when that information relates solely to a healthcare item or service for which you, or another person on your behalf (other than a health plan), has paid us for in full. Once you have requested such restriction(s), and your payment in full has been received, we must follow your restriction(s).

### 6. Right to Request an Alternative Method of Contact

You have the right to request to be contacted at a different location or by a different method. For example, you may prefer to have all written information mailed to your work address rather than to your home address.

We will agree to any reasonable request for alternative methods of contact. If you would like to request an alternative method of contact, you must provide us with a request in writing. You may write us a letter or fill out an **Alternative Contact Request Form**. Alternative Contact Request Forms are available from our Privacy Officer.

### 7. Right to Notification if a Breach of Your Medical Information Occurs

You also have the right to be notified in the event of a breach of medical information about you. If a breach of your medical information occurs, and if that information is unsecured (not encrypted), we will notify you promptly with the following information:

A brief description of what happened;
A description of the health information that was involved;
Recommended steps you can take to protect yourself from harm
What steps we are taking in response to the breach; and,
Contact procedures so you can obtain further information.

### 8. Right to Opt-Out of Fundraising Communications

If we conduct fundraising and we use communications like the U.S. Postal Service or electronic email for fundraising, you have the right to opt-out of receiving such communications from us. Please contact our Privacy Officer to opt-out of fundraising communications if you chose to do so.

# YOU MAY FILE A COMPLAINT ABOUT OUR PRIVACY PRACTICES

If you believe that your privacy rights have been violated or if you are dissatisfied with our privacy policies or procedures, you may file a written complaint either with us or with the federal government.

We will not take any action against you or change our treatment of you in any way if you file a complaint.

To file a written complaint with us, you may bring your complaint directly to our Privacy Officer, or you may mail it to the following address:

### Josh Howard Office Manager & Privacy Officer 225 W Onatrio Dr Muncie, IN 47303

To file a written complaint with the federal government, please use the following contact information: Office for Civil

Rights U.S. Department of Health and Human Services 200 Independence Avenue, S.W. Room 509F, HHH Building Washington, D.C. 20201

Toll-Free Phone: 1-(877) 696-6775

Website: http://www.hhs.gov/ocr/privacy/hipaa/complaints/index.html

Email: OCRComplaint@hhs.gov

# **Emergency Preparedness/Disaster Preparedness**

Emergencies and disasters can occur anytime anywhere. Planning ahead and making provisions for you and your family's needs can make a big difference with you and your family being able to cope with emergencies. Here are some questions to ask yourself:

- 1. Where can you find recommendations and information for preparing for an emergency?
- 2. Where can you find a list of people, companies, and organizations that can assist you if there is an emergency?
- 3. What kind of supplies or things should I have set aside?

### Below you will find the answers to these questions and more:

Much of the above information can be found in the information packet supplied by your hospice provider.

- 1. You should develop a realistic preparedness plan in advance of any emergency or disaster. You should have at least a 72-hour emergency supply of food, water, medications and necessary medical supplies. If you have pets you should have supplies for them. A portable radio, flashlight and batteries.
- 2. Select a family member or friend who lives out of the immediate area to act as a contact person for you and your family. Typically it is easier to make a call out of a disaster area. Make sure you give this person's name and phone number to Hospice Express, Inc. We may need to call this person to locate you after an emergency to provide you with the necessary equipment and services.

Remember to try and remain calm after an emergency. Turn your radio or TV to the assigned EBS (Emergency Broadcast Station) in your area. This information can also be found in your phone book. EBS may advise you of an emergency evacuation, the local office of Emergency Services and Red Cross, uniformed agents of the law and fire service, will inform you what to do. You should quickly gather the following items to take with you.

### **Emergency Checklist**

Prescription	Flash Light	Food and Water
Eye Glasses	Clothing	Toilet Articles
Bedding	Money	Identification
Extra Batteries	First Aid Kit	Batter Powered Radio
Medical Supplies (	oxygen, tubing, etc.)	Pets and their supplies

You should keep the above list of items easily accessible.

### Infection Control

As part of your home therapy you may use items that present risks of infection and injury. These items may put family members, caregivers and those who visit your home at risk if they are not properly cleaned or discarded. The following guidelines will help you protect yourself and those around you.

<u>Wash your hands frequently</u> - especially after using the toilet, after being in contact with body fluids or blowing your nose.

Wash your hands as follows:

- Wet your hands with plenty of soap and water
- Rub the palm of one hand over the back of the other while working up lather over your hand and wrist. Repeat to the other hand and wrist for 15 seconds each.
- · Rinse your hands thoroughly under warm running water
- Dry your hands and wrists thoroughly
- Turn off the water with a paper towel

<u>Disposable Items</u>: Disposable items, which are not sharp items, should be discarded into plastic trash bags after use. Seal the bag securely and place in a trash receptacle.

Non-disposable Items: Wash soiled treatment-related items, such as bedding, clothing, etc., separately in hot soapy water. Use liquid bleach if there is a risk of viral contamination. If you are unable to immediately launder the soiled items, keep those items in a sealed plastic bag away from food items, heat sources and central air units.

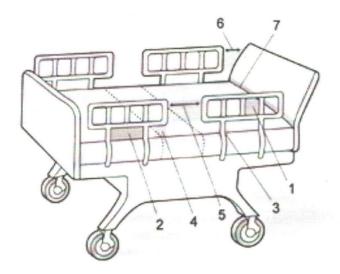
<u>Sharps</u>: Sharps are items such as lancets, needles, syringes, razor blades and disposable razors. These items should be disposed of immediately after use. Sharps should only be discarded into the sharps container that has been provided for your use.

<u>Spills</u>: In the event of a blood and body fluid spill, put on gloves and absorb the fluid using paper towels. Wipe the area using a mixture of 1 cup liquid bleach to 10 cups of hot water. Be sure to double bag paper towels used to clean the spill before discarding.

# **Patient Entrapment**

### **Potential Zones of Entrapment**

In 2006, the Food and Drug Administration (FDA) published guidelines addressing bed system entrapment zones. This guidance describes seven zones in the bed system where there is a potential for patient entrapment, which are identified in the drawing below.



Zone 1: Within the Rail

Zone 2: Under the Rail, Between the Rail Supports or Next to a Single Rail Support

Zone 3: Between the Rail and the Mattress

Zone 4: Under the Rail, at the Ends of the Rail

Zone 5: Between Split Bed Rails

Zone 6: Between the End of the Rail and the Side Edge of the Head or Foot Board

Zone 7: Between the Head or Foot Board and the Mattress End

To view the full report on hospital bed system dimensional and assessment guidance to reduce entrapment go to the following link:

http://www.fda.gov/MedicalDevices/DeviceRegulationandGuidance/GuidanceDocuments/ucm072662.htm

For more information you can also visit the FDA's website at:

 $\underline{http://www.fda.gov/MedicalDevices/Products and MedicalProcedures/GeneralHospitalDevices and Supplies/HospitalBeds/default.htm}$ 

Not all patients are at risk for an entrapment and not all beds pose a risk for entrapment. Your type of bed and/or configuration may differ from that pictured and therefore potential zones of entrapment, if any, may vary.

Be sure to notify your hospice provider immediately if you experience any issues with your bed system or have any questions relating to its operation or use. In addition, feel free to call Hospice Source directly at 1-800 299-9277 at any time.



225 W Ontario Dr Muncie, IN 47303

Phone 765-282-1000; Fax 765-286-3351 Store Hours: 8:30am – 5:00pm

# Oxygen Concentrator Instruction Booklet

No Smoking Signs Should Always Be Posted in a Visible Location

# **Oxygen Concentrator Set Up and Operation:**

- Plug concentrator DIRECTLY into a wall outlet... Always use a grounded electrical outlet
- Turn on concentrator
- Screw on nipple adaptor (Christmas tree) or bubble humidifier to the concentrator



-OR-



- If using bubble humidifier
  - -- Unscrew the bottom and fill with distilled water
  - -- Fill to the "MAXIMUM" line -- refill when level drops to "MINIMUM" line
  - -- Screw on bottom making sure it is properly threaded to avoid leaks

Attach tubing to nipple adaptor or outlet on bubble humidifier. Tubing can be connected together using small connectors and/or a water trap when using a humidifier bottle -- maximum tubing length: 50 feet







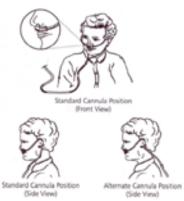
· Attach cannula or mask to other end of tubing



To put on the cannula, hold tubing on both sides of the prongs. Curved prongs should go towards the patient

Place prongs into nose and place tubing around ears so it hangs down under the chin -- or -- place tubing over the ears around the back of the head. Slide adjustment collar for a snug fit





Standard Cannula Position -front view Standard Cannula Position -- side view Alternate Cannula Position -side view

- Putting on a mask
  - -- Place the mask over the patient's face -- Strap should go behind the patient's head
  - -- Adjust strap



Adjust oxygen flow rate to bisect the ball with the line corresponding to the rate prescribed by the doctor.



Do not change flow rate without consulting your physician

# **Accessories**

Bleed-In Adaptor -- Used to provide supplemental oxygen to other systems



**Water Trap --** Used when there is excess moisture in the tubing, formed by condensation from oxygen going through the bubble humidifier

- Attach between two pieces of extension tubing
- To remove water, twist and pull on either end



# **Troubleshooting and Alarms**

### If there is an audible alarm -- concentrator is not running:

- Is unit plugged into a working outlet?
- · Check circuit breaker on front of concentrator by the on/off switch
  - -- Push to reset

### If there is an audible alarm -- concentrator is running:

- Concentrator cannot be fixed by consumer
- ·Call 765-282-1000

### Flow meter will not rise above a certain point:

- Check bubble humidifier for cracks or a loose/crooked cap
- Check tubing for blockage

### No oxygen flow to patient:

- Check on/off switch
- Check flow meter settings
- If bubble humidifier is used
  - -- Check that bottom is properly screwed into the top
- -- Check bubble humidifier for cracks
- Check tubing for blockage or damage
- Check all tubing connections
- ·Call 765-282-1000

### If the problem or alarm can't be resolved:

- Place patient on back-up oxygen system
- Turn off concentrator
- ·Call 765-282-1000

# Oxygen Concentrator Safety

- Oxygen is non-flammable but supports combustion
- · Avoid fire hazards, ignition sources, smoking and combustible materials
- Do not operate equipment without proper instruction
- No Smoking Signs\_should be visible to anyone entering residence. Never smoke around or while using any type of oxygen system
- Review Safe Practices for Handling and Operating Oxygen Equipment
- Do not use oil or grease on oxygen equipment -- it's a potential fire hazard

- Never take the unit apart
- Never use extension cords
- Plug unit DIRECTLY into a wall outlet ... Always use a grounded electrical outlet
- Keep units 12 inches from walls for proper ventilation and cooling
- Keep units 5 feet from radiators, heaters and hot air registers
- Call 765-282-1000 to have the unit inspected or replaced if you suspect it is damaged in any way

## **Cleaning and Care**

- · Wipe concentrator units with a damp cloth weekly or as needed
- Filter maintenance
  - -- Wash with tap water weekly
  - -- Squeeze out excess moisture
- Filter locations
  - -- Located on either side of concentrator unit
- Bubble humidifiers and water traps
  - -- Wash with dishwashing detergent every 48 hours
  - -- Replace when worn out
- Tubing
  - -- Wipe with damp cloth as needed
  - -- If using a bubble humidifier, replace monthly
  - -- If not using a bubble humidifier, replace every three months
- Cannulas and masks
  - -- Wipe with damp cloth as needed
  - -- Replace every two weeks

### **Precautions**

- Use oxygen as prescribed; never alter oxygen flow without physician orders
- If your oxygen use is causing side effects, contact your physician

### Call 765-282-1000 if you are unable to answer these questions:

- What is the prescribed oxygen liter flow?
- How do you operate your oxygen unit?
- What are the oxygen safety rules?
- How do you maintain and clean your oxygen unit?
- How do you operate your portable or back-up unit?
- How long will your portable unit last at your prescribed flow rate?
- What do you do if your equipment malfunctions?
- •What do you do in a medical emergency?

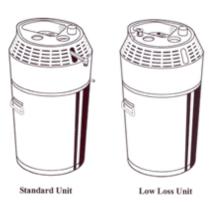


225 W Ontario Dr Muncie, IN 47303 Phone 765-282-1000; Fax 765-286-3351 Store Hours: 8:30am – 5:00pm

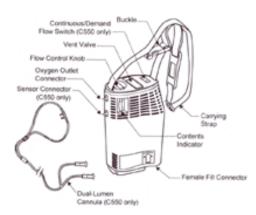
# **Liquid Oxygen Instruction Booklet**

No Smoking Signs Should Always Be Posted in a Visible Location

### **Liquid Oxygen Stationary Unit**



### **Liquid Portable Unit**



# **Set Up and Operation**

• Screw on nipple adaptor (Christmas tree) or bubble humidifier







- If using bubble humidifier
  - -- Unscrew the bottom and fill with distilled water
  - -- Fill to the "MAXIMUM" line -- refill when level drops to "MINIMUM" line
  - -- Screw on bottom making sure it is properly threaded to avoid leaks

Attach tubing to nipple adaptor or outlet on bubble humidifier. Tubing can be connected together using small connectors and/or a water trap when using a humidifier bottle -- maximum tubing length: 50 feet







· Attach cannula or mask to other end of tubing



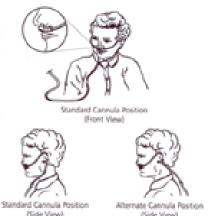
-OR-



To put on the cannula, hold tubing on both sides of the prongs. Curved prongs should go towards the patient

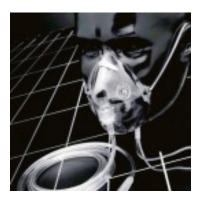
Place prongs into nose and place tubing around ears so it hangs down under the chin -- or -- place tubing over the ears around the back of the head. Slide adjustment collar for a snug fit





Standard Cannula Position front view Standard Cannula Position -- side view Alternate Cannula Position -- side view

- Putting on a mask
  - -- Place the mask over the patient's face -- Strap should go behind the patient's head
  - -- Adjust strap



Adjust oxygen flow rate to the rate prescribed by the doctor.

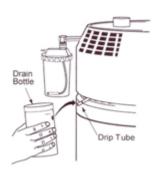
Do not change flow rate without consulting your physician.

### **Accessories**

**Bleed-In Adaptor --** Used to provide supplemental oxygen to other systems (i.e. CPAP)



Water Condensation Bottle -- Collects the moisture that condenses inside unit

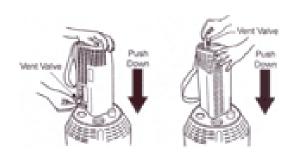


Check tank gauge daily to ensure there is enough liquid oxygen in the stationary unit to last until the next fill. If the gauge is below  $\frac{1}{4}$  full and refill is not scheduled for the next 24 hours, call 765- 282-1000.

# Filling Liquid Oxygen Portable Unit

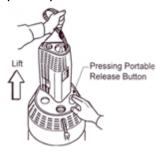
- Place portable unit on top of stationary unit; it is shaped so that it will only fit one way
- While holding the top of the portable unit, open the vent valve lever and push down on portable unit. You will hear a loud hissing noise, indicating the portable unit is filling
- It will take about 1 1/2 minutes to fill; when full, the fill noise will change and a white mist will come out of the stationary unit; close vent valve





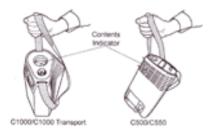
-THEN-

To remove the portable unit, lift by the strap and press down on the portable release button



### To Measure the Contents of Portable Unit

• Pick up unit by strap about 6 inches from the top.



Gauge should read 1/1 if just filled; gauge in red area is near empty

# **Set Up and Operation**

- Place the oxygen tube on the portable unit's outlet connector
- Adjust the cannula or mask to fit your face comfortably
- · Adjust oxygen flow rate as prescribed by physician
- Do not change flow rate without consulting your physician

### **Liquid Portable Unit**

- · When filling, vent valve lever is on top or side of the unit
- · When measuring content, gauge is on the top or side of the unit

# **Troubleshooting**

### If liquid oxygen is visibly leaking out of stationary or portable unit:

- · An occasional, slight hissing noise is normal venting
- Never touch liquid oxygen
- Leave the area where unit is leaking
- ·Call 765-282-1000

### If there is no oxygen flow to the patient:

- Check gauge to verify oxygen level in unit
- Check flow dial for proper setting
- If bubble humidifier is used
  - -- Check that bottom is properly screwed into the top
  - -- Check bubble humidifier for cracks
- Check tubing for blockage or damage
- Check all tubing connections
- ·Call 765-282-1000

### If the problem can't be resolved:

- Transfer patient to a working portable or stationary unit
- ·Call 765-282-1000

# Stationary and Portable Liquid Oxygen Unit Safety

- · Liquid oxygen is non-flammable, but supports combustion
- · Avoid fire hazards, ignition sources, smoking and combustible materials
- Do not operate equipment without proper instruction
- No Smoking flyers should be visible to anyone entering residence. Never smoke around or while using any type of oxygen system
- Review Safe Practices for Handling and Operating Oxygen Equipment
- Do not use oil or grease on oxygen equipment -- it's a potential fire hazard
- Never take the units apart
- · Never touch liquid oxygen leaking from a unit
  - -- It is 300 degrees below zero and can cause serious injury
  - -- It will appear as a bluish liquid that quickly forms a whitish mist
- Call 765-282-1000 to have the unit inspected or replaced if you suspect it is damaged in any way
- Always keep the portable liquid oxygen unit in an upright position; if laid on its side, it will make a highpitched noise -- this is gas venting

### Cleaning and Care

- · Wipe units with a damp cloth weekly or as needed
- Bubble humidifiers and water traps
  - -- Wash with dishwashing detergent every 48 hours
  - -- Replace when worn out
- Tubing
  - -- Wipe with damp cloth as needed
  - -- If using a bubble humidifier, replace monthly
  - -- If not using a bubble humidifier, replace every three months
- Cannulas and masks

- -- Wipe with damp cloth as needed
- -- Replace every two weeks
- Condensation bottle
  - -- Empty daily
  - -- Wash with dishwashing detergent weekly

### **Precautions**

- Use oxygen as prescribed; never alter oxygen flow without physician orders
- If your oxygen use is causing side effects, contact your physician

### Call 765-282-1000 if you are unable to answer these questions:

- •What is the prescribed oxygen liter flow?
- · How many hours a day should you use your oxygen?
- How do you operate your oxygen unit?
- ·What are the oxygen safety rules?
- · How do you maintain and clean your oxygen unit?
- · How do you operate your portable or back-up unit?
- How long will your portable unit last at your prescribed flow rate?
- What do you do if your equipment malfunctions?
- ·What do you do in a medical emergency?



# Safe Practices for Handling and Operating Oxygen Equipment

Oxygen should be handled carefully at all times. Although oxygen does not burn, it supports combustion. Materials that can burn are ignited more readily and burn more rapidly in the presence of oxygen. Metal cylinders are used to store oxygen under high pressure. Never smoke around or while using any type of oxygen system.

### To prevent injury of damage:

- Wash your hands before handling cylinders or regulators
- Store cylinders in a secure upright position or lying flat on their side in a clean, dry location away from direct sunlight, extreme heat or high-traffic areas
- Do not allow post valves, regulators or fittings to come in contact with oils, grease, hand lotions, petroleum-based products or any other combustible substance
- Keep cylinders away from flames, electricity and sources of sparks
- · Do not store cylinders under a bed, in a car trunk or in a closet
- Keep at least 12 hours of backup oxygen in case of an emergency

### **Oxygen Cylinder Regulator Instructions**



- 1. Be sure that the washer is in place on the side of the regulator.
- 2. Place the regulator over the cylinder valve.
- 3. Place the indexing pins into the corresponding holes on the cylinder valve.
- 4. Tighten the "T" handle clockwise until the regulator is secure.

- 5. Attach the cannula to the oxygen fitting.
- 6. Place the supplied wrench on the top of the cylinder valve. Turn the wrench counter clockwise until the needle on the cylinder pressure gauge shows how full the cylinder is.
- 7. Turn the liter flow knob clockwise until the prescribed liters per minute of oxygen shows.
- 8. Place the nasal cannula in your nose.
- 9. To turn the oxygen off, once you are done using it, turn the wrench clockwise until it stops.

# **GASEOUS CYLINDER USAGE GUIDE**

(Using an Regular Adult Regulator)

Approximate Use Times  Your Individual Results May Vary							
	M-4	M-6	M-9	D	E	M-60	M-M
Cu. Ft. / Liter	113	164	248	415	682	1724	3452
0.5 LPM	3:46	5:29	8:16	13:49	22:44	57:27	115:04
1.0 LPM	1:53	2:44	4:08	6:54	11:22	28:43	57:32
1.5 LPM	1:15	1:49	2:45	4:36	7:34	19:09	38:21
2.0 LPM	0:56	1:22	2:04	3:27	5:41	14:21	28:46
2.5 LPM	0:45	1:05	1:39	2:45	4:32	11:29	23:00
3.0 LPM	0:37	0:54	1:22	2:18	3:47	9:34	19:10
4.0 LPM	0:28	0:41	1:02	1:43	2:50	7:10	14:23
6.0 LPM	0:18	0:27	0:41	1:09	1:53	4:47	9:35
NOTE: T	NOTE: TIMES ARE IN HOURS AND MINUTES (FORMAT 00:00)  Please also note that a H cylinder has 7,970 liters						

# **GASEOUS CYLINDER USAGE GUIDE**

(Using a Conserving Regulator)

		Setting							
Cylinder Type	Cylinder Volume	Estimated Cylinder Duration in Hours 2 4				CF 4 Ipm			
M2	36 Liters	2.3	1.4	0.9	0.8	0.7	0.6	0.3	0.2
M4 (A)	113 Liters	7.2	4.3	2.9	2.4	2.0	1.8	0.9	0.5
M6 (B)	164 Liters	10.5	6.2	4.3	3.5	3.0	2.6	1.4	0.7
ML6	171 Liters	11.0	6.5	4.5	3.7	3.1	2.7	1.4	0.7
M7	198 Liters	12.7	7.5	5.2	4.2	3.6	3.2	1.7	0.8
M9 (C)	246 Liters	15.8	9.3	6.4	5.3	4.5	3.9	2.1	1.0
D	425 Liters	27.2	16.1	11.1	9.1	7.7	6.8	3.5	1.8
E	680 Liters	43.6	25.8	17.7	14.5	12.3	10.9	5.7	2.8

# **HELIOS PORTABLE USAGE GUIDE**

Approximate Use Times for a Full Portable Unit Note: Your Use Times May Vary				
Flow Control Knob Setting				
0	Not Applicable			
.12	15 Hours			
.25	15 Hours			
.5	10 Hours			
.75	6.5 Hours			
1	13 Hours			
1.5	12 Hours			
2	10 Hours			
2.5	8.5 Hours			
3	6.5 Hours			
3.5	6 Hours			
4	5 Hours			

# **COMPANION PORTABLE GUIDE**

Approximate Use Times for a Full Portable Unit  Note: Your Use Times May Vary				
Flow Setting	Run Time			
.12	57.1			
.25	57.1			
.5	21.8			
.75	16.7			
1	13.5			
1.5	9.7			
2	7.6			
2.5	6.3			
3	5.3			
3.5	4.6			
4	4.1			
5	3.3			
6	2.8			
8	2.1			
10	1.7			
15	1.1			

# **COMPANION STATIONARY GUIDE**

#### COMPANION STATIONARY RUN TIME SPECIFICATIONS (HOURS) Flow Settings Companion 21 Companion 41 Companion 31 (Liters/min.) 0.12 0.25 0.5 0.75 1.5 2.5 3.5

Specifications subject to change without notice. Data listed is analytical & based on continuous flow w/o any portable fills.



225 W Ontario Dr Muncie, IN 47303

Phone 765-282-1000; Fax 765-286-3351 Store Hours: 8:30am – 5:00pm

# Small Volume Nebulizer Aerosol Therapy Instruction Sheet

Prior to each treatment, wash your hands thoroughly with soap and water.

## **Equipment Preparation**

- Place nebulizer on a level surface, close to where you will be using it
- Plug power cord into a grounded outlet
- · Add medication into machine cup
- Attach lid
- Attach tee and mouth piece or mask to lid
- Attach one end of tubing to medicine cup and the other end to nebulizer outlet port

## **Taking the Treatment**

- Sitting during treatment usually works best
- Turn on nebulizer
- Place the mouthpiece in your mouth, making a good seal with your lips -- or put on mask
- Take slow, deep breaths through the mouthpiece
  - -- Pause at the end of each inhaled breath for 1-2 seconds
  - -- Exhale slowly and completely
- Pause several seconds -- repeat sequence until all medication is nebulized
- Feel free to stop at any time during the treatment to cough; if you produce sputum, note the thickness and color

### **After Each Treatment**

- Disassemble nebulizer cup lid, tee and mouthpiece or mask
- Rinse parts thoroughly under hot tap water -- place on paper towels to dry

# **After Last Daily Treatment**

- · Take nebulizer apart using control III
- To remove excess moisture from tubing, attach tubing to nebulizer outlet port and run until condensation is gone

### Weekly

- · Wipe off tubing with damp cloth as needed
- · Wipe off all surfaces of nebulizer with clean, damp cloth

### **Precautions**

- Use medications as prescribed
- If medication side effects occur, contact a physician

# **Troubleshooting Nebulizer**

### **Nebulizer Will Not Turn On**

- · Check to see if power cord is plugged in
- Check to see if there is power to the outlet

### **Nebulizer Produces Little or No Mist**

- Check to see if nebulizer is on and plugged into a working outlet
- Check tubing for blockage or damage
- Replace nebulizer kit

# **BI-PAP Troubleshooting**







PROBLEM:	SOLUTION:
* **	1. Make sure that the PAP machine is plugged
	into a grounded outlet.
If the machine fails to turn on:	2. Make sure that the ON/OFF switch is in the
	ON position.
	3. Make sure that the wall outlet has power.
	1. Make sure that the inlet filter is clean and
	unblocked.
If there is no pressure coming from your	2. Make sure that the cooling fan is unblocked
machine:	and that air is flowing freely.
	3. Make sure that all tubing is securely
	Connected.

### **Getting started:**

Wash your face and apply the mask and headgear as instructed. The mask should fit snugly to prevent air leaks, but not so tight as to cause skin irritation or discomfort.
 Turn the PAP power switch to the ON position. You should feel air blowing through the mask. Breathe normally and adjust the mask if you feel an air leak.
 If there are no leaks, activate the "ramp" feature on your PAP machine. The ramp allows a lower pressure to be delivered for a designated time period (usually 5 to 45 minutes) to allow you to relax and fall asleep easier. The pressure will then gradually increase to the prescribed pressure that controls your apnea.

Remember to turn OFF your PAP unit when it is not in use.

#### Care and maintenance

It is very important to keep your PAP equipment and supplies clean. The life of the supplies depends on the care they receive. Under normal circumstances, expect the mask and headgear to last 9 to 12 months. Refer to the owner's manual for more information.

Headgear should be washed as needed. Daily inspection and weekly washing are recommended. Do not disassemble the straps. Machine wash in warm water, making sure to attach velcro hooks and tabs before washing. Line dry or machine dry on a low setting.

Continued on next page

### **Bi-Pap Continued**

Masks should be washed every other day. Daily inspection is recommended. Leave the mask and tubing attached. Gently wash the mask with a soft cloth using warm water and mild detergent, concentrating on the mask cushion flaps. DO NOT use alcohol or bleach. Rinse thoroughly and air dry.

Tubing should be washed every other day. Daily inspection is recommended. Wash in warm water and mild detergent and rinse thoroughly. Hook the tubing to the machine and blow until dry.

Humidifiers should be washed daily and filled with DISTILLED water before use. Wash with warm water and mild detergent. Disinfect weekly by soaking with a solution of 1 part white vinegar and 3 parts water for 30 minutes. Rinse thoroughly and air dry.

Disposable filters should be replaced about once a month. Wash reusable foam filters with warm water and mild detergent at least once a month. Rinse thoroughly and dry with paper towels.

Avoid cleaners that contain fragrance or conditioners as these may leave a residue.

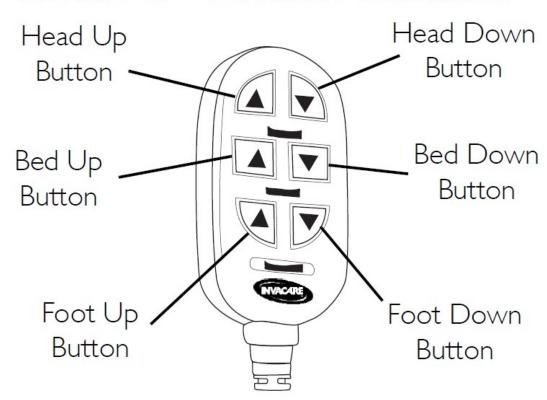
# **FULL ELECTRIC BED OPERATION**

## Raising and Lowering the Head and Foot Sections

NOTE: For this procedure, refer to Detail "A" of FIGURE 2.1.

- 1. To raise the head of the bed, press the "Head Up" button.
- 2. To lower the head of the bed, press the "Head Down" button.
- 3. To raise the foot of the bed, press the "Foot Up" button.
- 4. To lower the foot of the bed, press the "Foot Down" button.

### **DETAIL "A" - PENDANT CONTROLS**



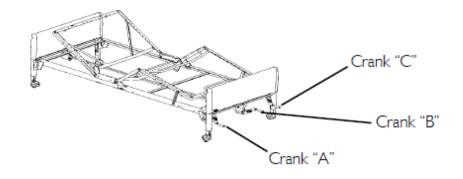
# **Using the Emergency Crank**

NOTE: If the full electric bed needs to be adjusted manually due to a power outage or an electronic malfunction, use the emergency crank to make the adjustments. You should find the Emergency crank stored in the link fabric of the spring deck. If you do not find the crank, contact Hospice Express.

- 1. Remove the emergency crank from the spring deck of the bed under the mattress.
- 2. Locate the exposed shaft end according to the function you want to perform. Refer to the diagram below.
- 3. Attach the emergency crank to A, B, or C.

NOTE: Push in the emergency crank while turning it the desired direction.

NOTE: To move the entire bed on full electric models, open drive shaft cover on the foot end of the gear box.



# **Suction Machine Operating Instructions**

## Set-Up

NOTE: For this procedure, refer to FIGURE 1 below.

- 1. Place unit on a table top or flat work surface.
- 2. Check that the power switch is Off (O). Refer to Detail "A".
- 3. If the unit is cold, let the unit reach room temperature before plugging it in.
- 4. Connect one end of the connection tubing to the elbow connector on top of the collection bottle, and connect the other end of the connection tubing to the hydrophobic filter.
- 5. Connect the second length of connection tubing between the hydrophobic filter and the vacuum port barb.
- 6. Connect the suction tubing to the labeled patient connector (outlet) on the collection bottle.

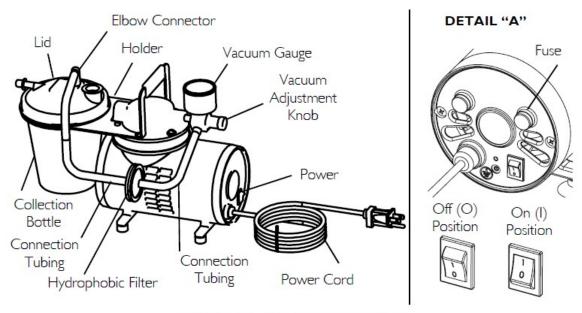


FIGURE I Medical Suction Unit

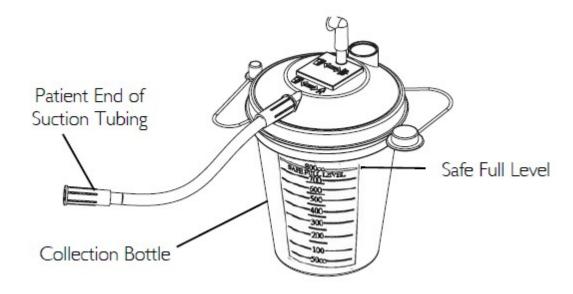
## **Using the Suction Unit**

- 1. Ensure the suction tubing is connected to the labeled patient connector (outlet) on the collection bottle.
- 2. Ensure that all connections are secure and without leaks.
- 3. Connect the unit to power.
- 4. Turn the power switch On (I).
- 5. Adjust the vacuum level from 0 to 560 mmHg by turning the vacuum adjust knob:
- Clockwise to increase vacuum.
- Counter-clockwise to decrease vacuum.

NOTE: Refer to the vacuum gauge while setting the desired level of vacuum. To accurately read the gauge, block the patient end of the hose or cap off the collection bottle and allow the gauge

to reach a stable vacuum reading.

- 6. Position the suction tubing appropriately with the patient and start therapy.
- 7. Turn the power switch Off (O) when the automatic float shut-off is activated.
- 8. Remove and clean the collection bottle when the motor has completely stopped and the vacuum has dropped. Refer to Cleaning the Collection Bottle and Lid.
- 9. Unplug the suction unit when not in use.



## **Cleaning the Collection Bottle and Lid**

NOTE: Clean the collection bottle and lid after each use.

1. Ensure the power switch is Off (O), the motor has completely stopped, and the vacuum has dropped.

- 2. Disconnect the suction unit from the AC power source.
- 3. Remove the elbow connector and tubing from the collection bottle lid.
- 4. Remove the collection bottle lid from the collection bottle.
- 5. Empty the contents.
- 6. Clean the collection bottle and lid after each use by one of the following methods:
- Wash the collection jar and lid in the upper rack of a dishwasher with a water temperature maximum of 150oF (65oC).
- Perform the following: (1) Wash with a hot water/dishwashing detergent solution; (2) Rinse with clean, hot tap water; (3) Soak in one part vinegar to three parts hot water solution for 20 minutes; and (4) Rinse with hot tap water and air dry.
- Wash with rubbing alcohol and air dry.
- Wash with a commercial (bacterial-germicidal) disinfectant. Follow disinfectant manufacturer's recommended instructions and dilution rates carefully.

### **Cleaning the Tubing**

- 1. Disconnect the tubing from the connection jar.
- 2. Clean the tubing after each use by one of the following methods:
- Wash with rubbing alcohol and air dry.
- Perform the following (make sure all solutions run through the tubing):

(1) Wash in a hot water/dishwashing detergent solution; (2) Rinse with clean, hot tap water; (3) Soak in one part vinegar to three parts hot water solution for 20 minutes; (4) Rinse with hot tap water; and, (5) Air dry.

#### **Troubleshooting**

NOTE: The suction unit contains no user-serviceable parts except the fuse.

PROBLEM	SOLUTION	
Suction unit does not turn On.	Check that the plug is firmly fitted to the wall socket.     Ensure the wall outlet is live. Try plugging in another device such as a lamp.     Check the power cord for damage.     Contact your Invacare representative.	
Motor runs but no vacuum	Verify tubing connection security.     Check for leaks or tubing kinks.     Ensure that float shut-off is not activated.     Check for bottle leaks and cracks.     If these solutions do not work, contact your medical provider.	
Low vacuum	Use vacuum adjust knob to increase vacuum level.     Check system for leaks.     Adjust vacuum adjust knob and release.	
Overload protector shuts off the motor frequently	Check number of motor operated appliances on same circuit and adjust for aspirator unit.	
Motor overheats and overload protector shuts off motor	Turn power switch Off (O) and allow the motor to cool approximately 5 minutes. Restart compressor.     Inspect fuses and replace if necessary.     Call your medical provider if unit still does not start.	
Blown fuse	Replace the fuse with the same type of fuse (Miniature Glass Fuse 5x20 mm, fast blow (quick acting), F2A/250V).	

## **Trach Compressor Troubleshooting**





PROBLEM:	PROBABLE CAUSE:	SOLUTION:
	1. On/Off Switch in off	1. Push on/off Switch to on position
	Position	2. check Power cord connections
	2. Power cord not connected properly	3. Shut product off Wait 15 minutes ensure vents are clear
	3. Product overheated	4. Replace Fuse
Product does not operate		5. Turn off product. When Power restored, repeat Start Up Procedure.
	4. Blown Fuse	
	5. Power interruption	
Unable to adjust pressure/flow	1. Locked Regulator Knob	1.Pull Regulator Knob out
Overheating	1. Poor ventilation	move product to a cooler, better ventilated area
	2. Dirty Air Filters	2. Clean Air Filters
	1. Loose connection at outlet	1. Tighten connection
Low pressure/flow	fitting	The state of the s
residuals from the engine consideration and entered the first plant of the	2. Improper regulator adjustment	2. Re-adjust regulator

DANGER Electric shock hazard: Do not remove cabinet.

CAUTION - Do not submerge in water, as compressor damage will result.

#### CLEANING/MAINTENANCE

Excessive dust buildup on external filters will reduce performance of product. If this occurs, clean or replace with new filters

- 1. Check both Air Filters on top rear of cabinet for dust buildup.
- 2. If dust buildup occurs, unplug product, remove Air Filters from their recessed areas and wash in warm, soapy water and rinse
- 3. Absorb excess water from filters with a dry towel.
- 4. Return filters to their original locations.

Weekly: Clean exterior surfaces with a cloth or sponge dampened with soap and water. Wipe dry with a clean cloth or paper towel.

# Enteral Feeding Pumps Troubleshooting







(Your model may differ than shown above)

PROBLEM:	PROBABLE CAUSE:	SOLUTION:
1. LOW BAT alarm	1.1 Battery charge is below	1.1 Plug cord into AC outlet.
activated.	performance level.	y.
	2.1 Feeding container is	2.1 Replace or refill feeding
	empty	Container.
	2.2 Occlusion is restricting	2.2 Find point of occlusion:
	flow.	kinked tubing or closed roller clamp
	2.3 Drip chamber walls	in pump set; feeding tube;
2. OCCL/Empty alarm	coated with formula.	container, and correct.
activated.	2.4 Drip chamber not	2.3 Replace pump set.
	properly placed in pump.	2.4 Review operating instructions
	2.5 Too much fluid in drip	and position properly.
	chamber.	2.5 Replace pump set.
	2.6 Drop sensors need	2.6 Clean with cotton swab
	cleaning.	dampened with isopropyl alcohol.
	2.7 Pump is on hold for	2.7 Press RUN/HOLD button to
	more than 2-1/2 minutes.	return to hold mode.
3. Rate change alarm	3.1 INC, DEC, and TOTAL	<b>3.1</b> Press RUN/HOLD button once to
activated.	RESET may only be pressed	stop pump. Change rate. Press
	when pump is on hold.	RUN/HOLD to restart pump.
4. Dose complete alarm	4.1 Pump has delivered	4.1 Press total reset. Press
activated.	preset volume.	RUN/HOLD. If additional
		volume is needed, pump will
		operate until dose is completed
		again.
5. Free flow alarm	5.1 Pump set has become	5.1 Press RUN/HOLD button once to
activated.	dislodged.	stop pump. Correct placement on
	5.2 Drip chamber walls	rotor.
	coated with formula.	<b>5.2</b> Replace pump set.

Continued on next page

#### Enteral Feeding Pumps Continued

#### **Setup Instructions**

To set or change the rate or dose limit, see the side of the pump. If an alarm sounds, instructions are on side of the pump. Before initial use on battery power and after an extended storage period, the pump must be plugged into an AC power source for a minimum of 8 hours (pump may be operated during this time). The pump should be operated on battery power for a minimum of 6 continuous hours at least once every 6 months for best performance and battery life. Use AC Power whenever possible. Plug the pump in during storage to assure a fully charged battery for emergencies.

- 1. Wash your hands thoroughly.
- 2. Check the formula's expiration date.
- 3. Attach or place on an appropriate feeding stand. If an IV pole is used, be sure that the pump is properly seated in the charger and then clamp the charger to the IV pole.4. Plug in the cord if AC Power is available a. NOTE: When LOW BATTERY message appears, pump will run approximately 30 minutes before shutting down completely. However, if battery is not getting the proper charge or no charge, or if pump is running 30 minutes after LOW BATTERY alarm, the pump will shut down while running on AC or DC power. When fully charged, the pump can operate on battery power for 8 hours.
- 5. Remove the feeding bag from the package.
- 6. CLOSE THE ROLLER CLAMP ON THE TUBING.
- 7. Hang the bag on the IV pole and pour food into the bag.
- 8. Insert the drip chamber into the guide on the pump.
- 9. Open the roller clamp and allow the formula to flow until the tubing is FREE OF AIR BUBBLES (This does not apply to the Kendall feeding pump, as this pump is self-priming).
- 10. Finish connecting the tubing around the triangular rotor.
- 11. Set the rate and dose limits on the pump (as per the prescription from the client's doctor).
- 12. Connect the tubing to the feeding tube.
- 13. OPEN THE ROLLER CLAMP.
- 14. Turn the pump on by pushing the run/hold button.
- 15. Follow your physician's instructions for changing and flushing the system.
- 16. If the alarm sounds, turn the pump dial to HOLD. Correct the alarm condition indicated by the visual display, then turn the pump dial to RUN to resume feeding.

PRECAUTIONS: Replace each pump set and container as needed (or at least every 24 hours) to avoid product contamination problems.

Alarm should be set and maintained at maximum volume. When facing the volume knob on the back of the pump, turn the knob all the way to the left for maximum volume.

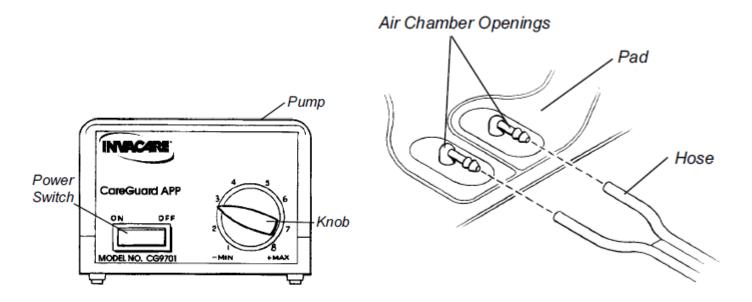
#### **CLEANING AND DISINFECTING THE PUMP**

• ALWAYS DISCONNECT THE PUMP FROM THE AC OUTLET BEFORE CLEANING TO AVOID ELECTRICAL SHOCK.

Using a cloth or sponge, clean the pump housing and rollers with warm soapy water. Clean the drop sensor parts with soft cotton swabs and isopropyl alcohol. When a pump has come in contact with an infectious disease, clean the same way as above, but instead of using soapy water, use isopropyl alcohol or a disinfectant safe for plastics. Do not use any disinfectants that contain any kind of phenol; the plastic absorbs the phenol.

# **Alternating Pressure Pad (APP)**

### **Using and Adjusting the Pump:**



- 1. Plug power cord into outlet.
- 2. Turn power switch to the ON position.
- 3. Turn knob on pump to the maximum setting (clockwise).

NOTE: It will take approximately 15 minutes for the pad to fully inflate.

4. Adjust the pressure to the setting that is most acceptable to the patient.

NOTE: You should be able to slide the flat portion of your hand between the bed mattress and the pad.

#### (Alternating Pressure Pad)

### **APP Troubleshooting**





PROBLEM:	PROBABLE CAUSE:	SOLUTION:
	<b>1.1</b> The system is not plugged in.	<b>1.1</b> Plug power supply into the wall receptacle.
	<b>1.2</b> There is no power at the	1.2 Restore the power
	outlet.	
1. System not on.	<b>1.3</b> The power cord is damaged.	1.3 Contact Med-Depot
	<b>1.4</b> The fuse is blown.	
		1.4 Contact Med-Depot
	2.1 Punctured reservoir	<b>2.1</b> Call Med-Depot for a replacement.
		<b>2.2</b> Call Med-Depot for a replacement.
	2.2 Internal problem resulting in	2.3 Turn pump on.
	malfunctioning	<b>2.4</b> Ensure there is a secure connection of airline at
	<b>2.3</b> The pump is not turned on.	the pump and mattress.
	<b>2.4</b> The airlines are not properly	<b>2.5</b> Correct to restore air flow.
	connected.	2.6 Contact Med-Depot
<b>2.</b> Mattress not inflated, or		<b>2.7</b> Lower head of the bed, allow the air to
patient reports sinking.	2.5 The Air lines are kinked	equalize. Return head of bed to elevated position
	and/or twisted.	that is comfortable for the patient.
	<b>2.6</b> Air lines or connectors are	2.8 Call Med-Depot for a replacement.
	damaged.	
	<b>2.7</b> Head of the bed is elevated.	
*		
	201-1::	
	<b>2.8</b> Leaking inflation system.	

#### **Overlay and Power Unit Installation:**

- 1. Using the integrated hanging hook, securely hang the power control unit on the bed end at the foot end or place on a smooth flat surface.
- 2. Note: Allow pad to reach room temperature prior to unpacking. Place pad on top of bed mattress with hose fittings toward foot of bed.
- 3. Connect hose to pump and pad. Check and ensure the air hoses are not kinked or tucked under the mattress.
- 4. Plug the power cord into outlet, Turn on the pump.

#### **Routine Cleaning While in Use by Patient:**

**Pad:** Routine cleaning of the pad can be done by wiping with an EPA registered hospital grade disinfectant. **Power Unit:** *WARNING! Always unplug power unit before cleaning.* Power control unit can be cleaned by wiping down with damp cloth using soap and water or mild neutral detergent. Never spray cleaners or liquids directly on power control unit.

# Aire•Twin Mattress Replacement System Operator's Manual



### Instructions for Use

- 1. Place control unit on a flat surface or suspend on end of bed using attached hooks.
- 2. Aire•Twin set up:

### **ATM500**

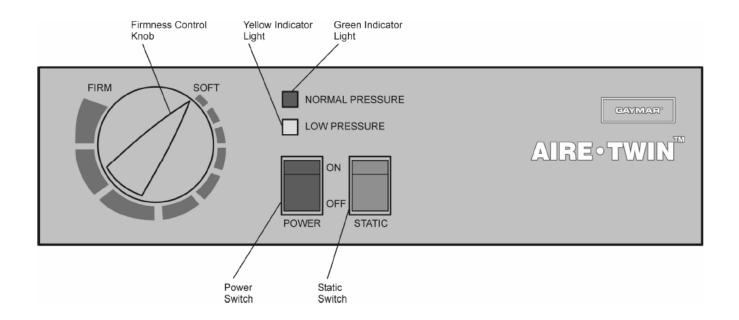
The ATM500 can be used as a mattress and placed directly on a bed frame, but it is recommended that the

ATM500 be placed on a top•gard® 5" foam mattress replacement or other similar foam pad. Secure the end flaps of ATM500 in place on the foam mattress.

### **ATM800**

Place the mattress on the bed frame with air hoses at the foot end of the bed; attach mattress to bed frame with straps.

- 3. Connect the quick-connect couplings of the mattress air hoses to the mating connectors located on the side of the Control Unit. Check that the hoses are secure by gently pulling. Ensure the hoses are not kinked or tucked under the mattress.
- 4. Ensure that the power switch is in the OFF position. Plug the power cord into properly grounded outlet.
- 5. Turn the control unit ON. Set pressure knob to FIRM for each initial inflation. Mattress inflation will begin. The yellow light indicates that the mattress is not yet fully inflated. The green light will automatically light up when the appropriate pressure is reached. The ATM500 will take approximately 30 minutes for complete inflation. The ATM800 will take approximately 35 minutes for complete inflation.



- 6. Apply hospital linens and/or incontinence pad over the top of the mattress. Linens should be loose to prevent "hammocking".
- 7. If alternating pressure is not desired, press the STATIC switch.
- 8. When green light indicates appropriate pressure is reached, place the patient on the mattress. Adjust the Pressure Control knob to the lowest possible setting while maintaining hand check clearance outlined in Step 9.
- 9. Perform a hand check. A hand check must be performed every 8 hours to ensure that the mattress is properly inflated.

To perform the hand check:

ATM500: Unsnap top sheet.

**ATM800:** Unzip cover at the side of the bed as necessary to access the air cells.

Using a vertical hand, slide hand between the air cells directly underneath the patient's sacral area. Slide hand under the patient. If four fingers of clearance exist, no

adjustment is needed. If you can feel the patient's body resting on your hand, adjust the pressure control to a higher setting. Wait 10 minutes and repeat the hand check. If the hand check fails, check that the hoses are not kinked or pinched. If repeated hand check fails and hoses are not kinked, contact Hospice Express for further instruction.

Check patient at least every 8 hours to assure proper system inflation.

## **Low Air Loss Troubleshooting**



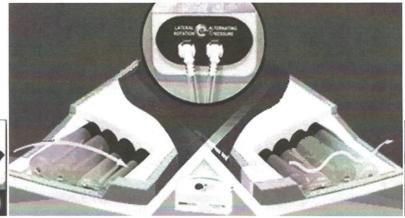
PROBLEM:	PROBABLE CAUSE:	SOLUTION:
	<b>1.1</b> Be sure air is flowing	1.1 Hose or manifolds may need to be
	smoothly through hoses and	moved to avoid kinking or obstruction. If
	mattress manifolds. Inspect	cuts or tears are observed, hose(s) or
1. Power unit is working, but	for cuts or cracks.	manifold may need to be replaced.
is mattress not inflating.	<b>1.2</b> Attach connectors	<b>1.2</b> Be sure hoses are properly connected to
	securely into place until you	power unit.
	hear them "click".	1.3 Insert CPR valve securely into CPR valve
	<b>1.3</b> Check to see if CPR valve is	block. It may be necessary to unzip the
	secure in CPR valve block.	cover to do so.
	When CPR pull is released a	
	white label can be seen that	
	says "CPR OPEN" in black	*
	print.	*
	<b>2.1</b> Look at patient weight	<b>2.1</b> Increase or decrease weight setting by
	setting on power unit.	turning dial until adequate pressure setting
2. Patient is "bottoming		is achieved.
out".	<b>2.2</b> Try same procedures as	<b>2.2</b> Try same possible solutions as Problem
	Problem 1 above.	1.
	<b>3.1</b> Verify power cord is	3.1 Secure plug into socket
	securely plugged into wall	3.2 Plug another appliance into wall outlet
	outlet with power.	to verify wall outlet has power.
		3.3 A power surge may temporarily
3. Power unit is inoperable.	3.2 Verify wall outlet has	overload the circuitry. Turn unit off for
	power.	several seconds. Check the fuse for damage.
		Re-try turning unit on with normal
	3.3 Verify Fuse is not blown.	operating procedures.
	<b>3.4</b> Power unit not responding	3.4 Contact Med-Depot
2	to solutions listed in 3.1 thru	
	3.3	

**BLOWER ON/OFF SWITCH:** This switch is used to turn the unit on and off.

**COMFORT LEVEL CONTROL:** This control is used to adjust the amount of air in the system. The control knob permits fine-tuning of the mattress's firmness for patient comfort. To increase mattress firmness, turn the control knob clockwise. To decrease mattress firmness, turn the control knob counterclockwise.

(Lateral Rotation)

## **APM <sup>2</sup> Mattress Troubleshooting**





PROBLEM:	PROBABLE CAUSE:	SOLUTION:
	1.1 The system is not plugged in.	<b>1.1</b> Plug power supply into the wall receptacle.
1. System not on.	<b>1.2</b> There is no power at the outlet.	1.2 Restore the power
	1.3 The power cord is damaged.	1.3 Contact Med-Depot
	<b>1.4</b> The fuse is blown.	1.4 Contact Med-Depot
	2.1 Not pumping air.	2.1 Unplug airlines at mattress. Verify air is
2. Controller not	2.2 Internal problem resulting in	pumping through the air lines. In alternating
operating properly.	malfunctioning indicator lights, inability	pressure mode, air will pump through one side a
	to select desired operated mode,	a time as cycle alternates
	failure to properly inflate mattress,	2.2 Contact Med-Depot
	failure to alternate.	2.3 Contact Med-Depot
	2.3 Damaged in use.	
	<b>3.1</b> The pump is not turned on.	3.1 Turn pump on.
	3.2 The airlines are not properly	3.2 Ensure there is a secure connection of airline
3. Mattress not	connected.	at the pump and mattress.
inflating, or patient	3.3 The Air lines are kinked and/or	3.3 Correct to restore air flow.
reports a sinking	twisted.	3.4 Contact Med-Depot
feeling.	3.4 Air lines or connectors are	3.5 Lower head of the bed, allow the air to
	damaged.	equalize. Return head of bed to elevated
	<b>3.5</b> Head of the bed is elevated.	position that is comfortable for the patient.
	Leaking inflation system.	3.6 Call Med-Depot for a replacement.
	3.6 Leaking inflation system.	

WARNING: Unplug unit before cleaning. DO NOT submerge in water to clean.

**COVER CLEANING:** Wipe clean with neutral suds. Approved cleaning agents include germicidal phenols and quaternary ammonia. Avoid the use of bleach.

**PUMP CLEANING:** Do not use any disinfectants that contain any kind of phenol; the plastic absorbs the phenol.