Idaho
Boise Medical 83702
400 Main St
(208) 344-0299

Blackfoot 83221
1350 Parkway Dr. #26
(208) 782-0456

Burley 83318
198 N Overland
(208) 344-0299

Caldwell 83605
1906 Fairview Ave #120
(208) 402-0100

Chubbuck 83202
4639 Yellowstone Hwy
(208) 782-0456

Grangeville 83530
863 Main St
(208) 782-0456

Joseph 97846
4639 Yellowstone Hwy
(208) 782-0456

McCall 83638
80361 Hwy 395 N
(208) 782-0456

Moscow 83843
223 W 3rd St
(208) 882-3571

Reidburg 83440
146 North 2nd St
(208) 356-7913

Twins Falls Medical 83301
330 N. Haven Dr.
(208) 734-9330

† Idaho Falls Industrial 83301
203 S Park Ave West
(208) 733-8171

† Twin Falls Industrial 83301
329 W Main St
(208) 983-0390

† Idaho Falls Medical 83404
3450 N 25th East
(208) 523-2041

† Lewiston 83501
863 Main St
(208) 743-8384

† McCall 83638
Norco Medical Stockpoint
(208) 634-2523

† Meridian 83646
3050 N 2nd St
(208) 898-2020

† Moscow 83843
232 W 3rd St
(208) 882-3571

† Nampa 83687
150 Shannon Dr
(208) 467-3070

† Rexburg 83440
146 North 2nd St
(208) 356-7913

† Twin Falls Medical 83301
330 N. Haven Dr.
(208) 734-9330

† Idaho Falls Medical 83404
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† Nampa 83687
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(208) 467-3070

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(208) 734-9330
ResMed is committed to educating physicians and the public about the serious health risks of untreated sleep-disordered breathing and other respiratory conditions. With innovative products and solutions that deliver the best therapy on the market, we’re helping people live well and breathe better every day.

Breathe better, live better

ResMed.com
Discover the Freedom to Sleep Anywhere with Transcend miniCPAP™

Contact your local Norco branch to order Transcend miniCPAP.

Save $25 on your purchase with pro code: TRAHBK15

Do what you love and travel with Transcend miniCPAP. Small and lightweight, Transcend miniCPAP even has portable battery options so you can sleep anywhere.

Save $100 On Any Scooter Purchase

Please mention this code for $100 discount, NOR1HBK15. Not valid on rentals or for scooters covered by insurance. May not be combined with any other offer.

Travel with Transcend miniCPAP.
A Norco representative has provided me with this Patient Orientation Handbook and has given training on the equipment and/or service being provided at this time.

________________________________            _________________________
Patient Name     Account #

________________________________            _____/_____/__________
Patient/Caregiver  Date

________________________________            _____/_____/__________
Norco Employee     Date
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Back Cover Page

DETACH AND PLACE NEAR OXYGEN SYSTEM

Editors
Brent Christensen, BS, CRT
Robbie Roberts, MBA, RRT
Revised June 2015
WHO WE ARE…

Norco is a family-owned company supplying the Welding, Safety, Medical, and Specialty Gas industries with equipment, supplies, and gases. “Serving You Better” has been the mission of the organization since the Kissler family purchased Norco in 1968; the You in this statement being our valued customers. Growing from two southern Idaho stores in 1968, Norco currently serves the states of Idaho, Montana, Oregon, Washington, Utah, Nevada and Wyoming with 61 locations. “Finding a need and filling it” has been the basis for Norco’s continued growth within our service areas. Norco excels through company innovations, ethical management standards, and high employee dedication – our Team members. Norco is incorporated in the State of Idaho with company headquarters based in Boise.

Mission Statement

Since 1968, the Mission of Norco has always been the same…

Norco

“Serving You Better”

You refers to our customers, suppliers, team members and the communities where we work.

Welding Division – Norco began as a welding supplier in Boise and Twin Falls, Idaho. Today, Norco is recognized as an industry-leader with key Team members serving the welding supply industry in national and regional associations. Norco supplies clients throughout the Northwest with gases and supplies from 19 regional filling plants and our branch locations.

Safety Division – Norco entered the safety supply business as this industry emerged. Our Team members have extensive training that qualifies them to address all facets of an organization’s safety needs. From training and equipping, to outfitting a company’s staff with safety supply products to comply with all regulations, Norco can do it all.

Medical Division – Norco naturally transitioned into the medical equipment and supply business through its familiarity with oxygen for welding applications. Our branch locations are supported by clinically trained respiratory therapists and nurses, as well as other specially trained Team members, bringing oxygen, medical equipment, and supplies to clients in their homes. Norco has maintained accreditation with nationally recognized standards organizations since 1991; setting a high standard of excellence for the clients we serve.

NorLab – Norco entered the specialty gas business by manufacturing calibration standard gases. Our Team members produce calibration and specialty gases that are distributed internationally. NorLab, part of the Safety Division, has received ISO 9001:2008 certification, an international quality standard.

Norco wants to be our customers’ BEST supplier of equipment, supplies, and gases. It is Norco’s objective to become the most profitable, best managed, most prestigious Welding, Medical, and Safety Supply distributor in the United States.

Norco’s management philosophy is to achieve total customer satisfaction by continuing to improve our personnel through selection and training, making effective use of facilities and fostering innovation.

Norco’s commitment to this philosophy will be achieved with complete integrity towards the law, our Team members, and our customers, with the proper example always coming from the top of this organization.
Norco is a home medical equipment organization dedicated to providing comprehensive home care services to referred patients/clients with the utmost quality and professionalism.

Norco accepts only patients/clients whose home health care needs (as identified by the referring source) can be met by the treatment and/or services offered by Norco.

Our services include:

- Oxygen therapy products
- Physical therapy products
- Respiratory therapy products
- Sleep therapy products
- Equipment repair services
- Durable medical equipment

At Norco, we provide quality products for home care use, and our professional staff genuinely cares for the patients we serve.

24-hour Emergency Service: Special emergency assistance is available to our patients/clients through a 24-hour phone answering service.

Reimbursement Assistance: Medicare, Medicaid, and other third party payors are pre-qualified for direct payment. Payment by MasterCard, Visa, and Discover is also accepted.

Discharge Assistance: We work directly with physicians and hospital discharge planners to insure smooth transitions from hospital care to home care.

Patient Instruction and Training: A trained staff of home care professionals insures that each patient is fully trained in the operation and care of equipment. Instruction is carried out in the convenience and comfort of the patient's home.

Patient Assessment: A trained staff member meets with and assesses the needs of the patient with respect to the services provided. Patients are periodically monitored with their assessment updated to insure care that is timely and up-to-date.

Delivery Service: Set-up, instruction, and training are free-of-charge. Delivery fees may apply based on service requested and delivery location. Contact your local branch for further information.

Consultations: Staff professionals will meet, as necessary, with referral personnel, the patient, or their caregiver to solve any matter involving home care treatment or service.

Geographic Scope of Service: Geographical area and services offered vary - contact your local branch for further details.

Business Hours: Monday through Friday: 8:00AM - 5:00PM
Saturday: 8:00AM - 12:00PM (Some Norco locations only - check with your local representative to see if yours is open.)

Norco Medical consists of a staff of licensed and credentialed specialists who are dedicated professionals, taking exceptional pride in the care and service they provide.

These include:  
- Rehab/Delivery Technicians (ATP)
- Registered Nurses (RN)
- Respiratory Therapists (RRT, CRT)
- Licensed Practical Nurses (LPN)

Norco provides people with a personal concern for the patient's well being and an extensive inventory of home health care products. This combination results in the most professional care with the finest quality products available.

At Norco Medical, we are convinced that patients/clients are happier and progress faster when they can recover in the comfort and familiar surroundings of their own home. Our objective is to be an active and professional participant in making that plan a reality. Norco offers for our patients, the following home care equipment:
NORCO EQUIPMENT AND SERVICES

Oxygen Therapy
- High Pressure Oxygen Cylinders
- Liquid Oxygen Systems
- Oxygen Concentrators
- Oxygen Conservation Devices
- Stationary And Portable

Respiratory-Related Equipment
- Aerosol Therapy
- Aspirators
- BiPAP Systems
- Cough Assist™
- CPAP Systems
- Compressor-Driven Nebulizers
- IPPB Machines
- Percussors
- Air Purifiers
- Humidifiers
- Ultrasonic Nebulizers
- Vaporizers/Humidifiers
- Mechanical Ventilators
- Apnea Monitors
- Tracheostomy Mist (Cool / Heated)

Wheelchairs
- Adult, Youth, Pediatric
- Manual And Powered
- Scooters: 3 And 4-Wheeled
- Standard And Customized
- Travel Wheelchairs
- Wheelchair Accessories

Walking Aids
- Accessory Items
- Crutches
- Quad Canes
- Straight Canes
- Walkers: Rigid, Folding, Rollators

Bathroom Safety
- Commodes
- Grab Bars
- Raised Toilet Seats
- Safety Rails
- Tub Lifts
- Tub Seats
- Tub Transfer Benches

Patient Room Furnishings
- Bedside Commodes
- Hospital Beds: Electric, Manual
- Low Air Loss Beds/Mattresses
- Over-Bed Tables
- Patient Lifts
- Pressure Pad Units
- Seat Lift Chairs
- Trapeze Bars

Physical Therapy
- Ankle/Wrist Weights
- Cervical Traction, Back Traction Units
- Continuous Passive Motion (CPM) Units
- Tens Units / EMS
- Whirlpool Bath Units
- Whirlpools

Diagnostic Products
- Blood Pressure Monitoring Devices
- Blood Sugar Monitoring Glucometers
- Incentive Spirometers
- Stethoscopes
- Thermometers: Standard, Electric

Personal Items
- Braces
- Breast Pumps
- Convalescent Garments
- Incontinence Garments
- Mastectomy Products
- Orthopedic Supports
- Ostomy Supplies
- Wound And Skin Care

Miscellaneous
- Emergency Phone Alarms
- Enteral Pumps (Feeding Pump)
- Feeding Supplies, Syringes, Nutritionals
- I.V. Stands
- Negative Pressure Wound Therapy Pump
- Phototherapy Lights (Bililight)
- Sequential / Intermittent Pumps
- Temperature Pumps (T-Pump)
Your Information. Your Rights. Our Responsibilities.

You have the right to:
- Get a copy of your paper or electronic medical record
- Correct your paper or electronic medical record
- Request confidential communication
- Ask us to limit the information we share
- Get a list of those with whom we’ve shared your information
- Get a copy of this privacy notice
- Choose someone to act for you
- File a complaint if you believe your privacy rights have been violated

You have some choices in the way that we use and share information as we:
- Tell family and friends about your condition
- Provide disaster relief
- Include you in a hospital directory
- Provide mental health care
- Market our services and sell your information
- Raise funds

We may use and share your information as we:
- Treat you
- Run our organization
- Bill for your services
- Help with public health and safety issues
- Do research
- Comply with the law
- Respond to organ and tissue donation requests
- Work with a medical examiner or funeral director
- Address workers’ compensation, law enforcement, and other government requests
- Respond to lawsuits and legal actions

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 have available a detailed Notice of Privacy Practices which fully explains your rights and our obligations under the law. If you have not yet received a copy of our current Notice, please ask the front desk and we will provide you with a copy.
When it comes to your health information, you have certain rights.
This section explains your rights and some of our responsibilities to help you.

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| Get an electronic or paper copy of your medical record                       | • You can ask to see or get an electronic or paper copy of your medical record and other health information we have about you. Ask us how to do this.  
  • We will provide a copy or a summary of your health information, usually within 30 days of your request. We may charge a reasonable, cost-based fee. |
| Ask us to correct your medical record                                        | • You can ask us to correct health information about you that you think is incorrect or incomplete. Ask us how to do this.  
  • We may say “no” to your request, but we’ll tell you why in writing within 60 days. |
| Request confidential communications                                         | • You can ask us to contact you in a specific way (for example, home or office phone) or to send mail to a different address.  
  • We will say “yes” to all reasonable requests. |
| Ask us to limit what we use or share                                         | • You can ask us not to use or share certain health information for treatment, payment, or our operations. We are not required to agree to your request, and we may say “no” if it would affect your care.  
  • If you pay for a service or health care item out-of-pocket in full, you can ask us not to share that information for the purpose of payment or our operations with your health insurer. We will say “yes” unless a law requires us to share that information. |
| Get a list of those with whom we’ve shared information                       | • You can ask for a list (accounting) of the times we’ve shared your health information for six years prior to the date you ask, who we shared it with, and why.  
  • We will include all the disclosures except for those about treatment, payment, and health care operations, and certain other disclosures (such as any you asked us to make). We’ll provide one accounting a year for free but will charge a reasonable, cost-based fee if you ask for another one within 12 months. |
| Get a copy of this privacy notice                                            | • You can ask for a paper copy of this notice at any time, even if you have agreed to receive the notice electronically. We will provide you with a paper copy promptly. |
| Choose someone to act for you                                                | • If you have given someone medical power of attorney or if someone is your legal guardian, that person can exercise your rights and make choices about your health information.  
  • We will make sure the person has this authority and can act for you before we take any action. |
| File a complaint if you feel your rights are violated                       | • You can complain if you feel we have violated your rights by contacting us using the information on page 1.  
  • You can file a complaint with the U.S. Department of Health and Human Services Office for Civil Rights by sending a letter to 200 Independence Avenue, S.W., Washington, D.C. 20201, calling 1-877-696-6775, or visiting www.hhs.gov/ocr/privacy/hipaa/complaints/.  
  • We will not retaliate against you for filing a complaint. |
Your Choices

For certain health information, you can tell us your choices about what we share. If you have a clear preference for how we share your information in the situations described below, talk to us. Tell us what you want us to do, and we will follow your instructions.

In these cases, you have both the right and choice to tell us to:
- Share information with your family, close friends, or others involved in your care
- Share information in a disaster relief situation
- Include your information in a hospital directory

If you are not able to tell us your preference, for example if you are unconscious, we may go ahead and share your information if we believe it is in your best interest. We may also share your information when needed to lessen a serious and imminent threat to health or safety.

In these cases we never share your information unless you give us written permission:
- Marketing purposes
- Sale of your information
- Most sharing of psychotherapy notes

In the case of fundraising:
- We may contact you for fundraising efforts, but you can tell us not to contact you again.

Our Uses and Disclosures

How do we typically use or share your health information?
We typically use or share your health information in the following ways.

Treat you
- We can use your health information and share it with other professionals who are treating you.

Example: A doctor treating you for an injury asks another doctor about your overall health condition.

Run our organization
- We can use and share your health information to run our practice, improve your care, and contact you when necessary.

Example: We use health information about you to manage your treatment and services.

Bill for your services
- We can use and share your health information to bill and get payment from health plans or other entities.

Example: We give information about you to your health insurance plan so it will pay for your services.

continued on next page
How else can we use or share your health information? We are allowed or required to share your information in other ways – usually in ways that contribute to the public good, such as public health and research. We have to meet many conditions in the law before we can share your information for these purposes. For more information see: www.hhs.gov/ocr/privacy/hipaa/understanding/consumers/index.html.

| Help with public health and safety issues | We can share health information about you for certain situations such as:
• Preventing disease
• Helping with product recalls
• Reporting adverse reactions to medications
• Reporting suspected abuse, neglect, or domestic violence
• Preventing or reducing a serious threat to anyone’s health or safety |
| Do research | We can use or share your information for health research. |
| Comply with the law | We will share information about you if state or federal laws require it, including with the Department of Health and Human Services if it wants to see that we’re complying with federal privacy law. |
| Respond to organ and tissue donation requests | We can share health information about you with organ procurement organizations. |
| Work with a medical examiner or funeral director | We can share health information with a coroner, medical examiner, or funeral director when an individual dies. |
| Address workers’ compensation, law enforcement, and other government requests | We can use or share health information about you:
• For workers’ compensation claims
• For law enforcement purposes or with a law enforcement official
• With health oversight agencies for activities authorized by law
• For special government functions such as military, national security, and presidential protective services |
| Respond to lawsuits and legal actions | We can share health information about you in response to a court or administrative order, or in response to a subpoena. |
Our Responsibilities

- We are required by law to maintain the privacy and security of your protected health information.
- We will let you know promptly if a breach occurs that may have compromised the privacy or security of your information.
- We must follow the duties and privacy practices described in this notice and give you a copy of it.
- We will not use or share your information other than as described here unless you tell us we can in writing. If you tell us we can, you may change your mind at any time. Let us know in writing if you change your mind.

For more information see: www.hhs.gov/ocr/privacy/hipaa/understanding/consumers/noticepp.html.

Changes to the Terms of this Notice
We can change the terms of this notice, and the changes will apply to all information we have about you. The new notice will be available upon request, in our office, and on our web site.

Effective: 04/14/2003

This Notice of Privacy Practices applies to the following organizations.

Norco, Inc.

Corporate Compliance officer (208) 336-1643 x111108 or compliance@norco-inc.com
Medicare DMEPOS Supplier Standards

Note: This is an abbreviated version of the supplier standards every Medicare DMEPOS supplier must meet in order to obtain and retain their billing privileges. These standards, in their entirety, are listed in 42 C.F.R. 424.57(c).

1. A supplier must be in compliance with all applicable Federal and State licensure and regulatory requirements and cannot contract with an individual or entity to provide licensed services.
2. A supplier must provide complete and accurate information on the DMEPOS supplier application. Any changes to this information must be reported to the National Supplier Clearinghouse within 30 days.
3. An authorized individual (one whose signature is binding) must sign the application for billing privileges.
4. A supplier must fill orders from its own inventory, or must contract with other companies for the purchase of items necessary to fill the order. A supplier may not contract with any entity that is currently excluded from the Medicare program, any State health care programs, or from any other Federal procurement or non-procurement programs.
5. A supplier must advise beneficiaries that they may rent or purchase inexpensive or routinely purchased durable medical equipment, and of the purchase option for capped rental equipment.
6. A supplier must notify beneficiaries of warranty coverage and honor all warranties under applicable State law, and repair or replace free of charge Medicare covered items that are under warranty.
7. A supplier must maintain a physical facility on an appropriate site. This standard requires that the location is accessible to the public and staffed during posted hours of business. The location must be at least 200 square feet and contain space for storing records.
8. A supplier must permit CMS, or its agents to conduct on-site inspections to ascertain the supplier’s compliance with these standards. The supplier location must be accessible to beneficiaries during reasonable business hours, and must maintain a visible sign and posted hours of operation.
9. A supplier must maintain a primary business telephone listed under the name of the business in a local directory or a toll free number available through directory assistance. The exclusive use of a beeper, answering machine, answering service or cell phone during posted business hours is prohibited.
10. A supplier must have comprehensive liability insurance in the amount of at least $300,000 that covers both the supplier’s place of business and all customers and employees of the supplier. If the supplier manufactures its own items, this insurance must also cover product liability and completed operations.
11. A supplier must agree not to initiate telephone contact with beneficiaries, with a few exceptions allowed. This standard prohibits suppliers from contacting a Medicare beneficiary based on a physician’s oral order unless an exception applies.
12. A supplier is responsible for delivery and must instruct beneficiaries on use of Medicare covered items, and maintain proof of delivery.
13. A supplier must answer questions and respond to complaints of beneficiaries, and maintain documentation of such contacts.
14. A supplier must maintain and replace at no charge or repair directly, or through a service contract with another company, Medicare-covered items it has rented to beneficiaries.
15. A supplier must accept returns of substandard (less than full quality for the particular item) or unsuitable items (inappropriate for the beneficiary at the time it was fitted and rented or sold) from beneficiaries.
16. A supplier must disclose these supplier standards to each beneficiary to whom it supplies a Medicare-covered item.
17. A supplier must disclose to the government any person having ownership, financial, or control interest in the supplier.
18. A supplier must not convey or reassign a supplier number; i.e., the supplier may not sell or allow another entity to use its Medicare billing number.
19. A supplier must have a complaint resolution protocol established to address beneficiary complaints that relate to these standards. A record of these complaints must be maintained at the physical facility.
20. Complaint records must include: the name, address, telephone number and health insurance claim number of the beneficiary, a summary of the complaint, and any actions taken to resolve it.
21. A supplier must agree to furnish CMS any information required by the Medicare statute and implementing regulations.
22. All suppliers must be accredited by a CMS-approved accreditation organization in order to receive and retain a supplier billing number. The accreditation must indicate the specific products and services, for which the supplier is accredited in order for the supplier to receive payment of those specific products and services (except for certain exempt pharmaceuticals). Implementation Date – October 1, 2009
23. All suppliers must notify their accreditation organization when a new DMEPOS location is opened.
24. All supplier locations, whether owned or subcontracted, must meet the DMEPOS quality standards and be separately accredited in order to bill Medicare.
25. All suppliers must disclose upon enrollment all products and services, including the addition of new product lines for which they are seeking accreditation.
27. A supplier must obtain oxygen from a state-licensed oxygen supplier.
28. A supplier must maintain ordering and referring documentation consistent with provisions found in 42 C.F.R. 424.516(f).
29. DMEPOS suppliers are prohibited from sharing a practice location with certain other Medicare providers and suppliers.
30. DMEPOS suppliers must remain open to the public for a minimum of 30 hours per week with certain exceptions.
PATIENT BILL OF RIGHTS

It is Norco’s goal to serve you with the best in products, service, and personnel. When you have a concern or complaint, please contact the Norco Branch Manager in your local area, or complete and return the Patient Communication Form at the end of this booklet. The Branch Manager should see to it that your particular issue is corrected to your satisfaction as soon as possible. Should you continue to have difficulty, please contact our Corporate Compliance Officer. Please be assured that we at Norco value your input and want you to experience Norco “Serving You Better.”

Here is a list of agencies that promote patient satisfaction. Please contact Norco to assist you in getting your concerns addressed:

- Norco – Compliance Officer (800) 574-5885 x111108
- The Joint Commission (800) 994-6610
- Office of Inspector General (Fraud, Waste, Abuse & Conflict of Interest) (800) 488-8244
- Idaho Medical Assistance Program (800) 378-3385
- Oregon Medical Assistance Program (800) 232-3020
- Montana Medical Assistance Program (800) 362-8312
- Nevada Medical Assistance Program (800) 225-3414
- Washington Medical Assistance Program (800) 562-3022
- Medicare Beneficiary Customer Service (800) 633-4227
- Veteran’s Administration – Boise V.A. Medical Center (208) 422-1000
- Veteran’s Administration – Spokane V.A. Medical Center (509) 434-7000
- Veteran’s Administration – Portland V.A. Medical Center (503) 220-8262
- Veteran’s Administration – Seattle V.A. Medical Center (206) 762-1010
- Veteran’s Administration – Walla Walla V.A. Medical Center (509) 525-5200

A home care organization must protect and promote the rights of each client to be treated with respect and dignity. These rights, which may be exercised by the client or the client’s representative, include the intent of each of these statements of rights:

The right to be fully informed orally and in writing of the following before care is initiated:

- Services/products and equipment available
- Norco’s ownership and control
- Specific charges for services to be paid by the client and those charges covered by insurance, third-party payment or public benefit programs
- Billing policies, payment procedures, and any changes in the information provided on admission as they occur within 15 days from the date that Norco is made aware of change
- Names and qualifications of the personnel that will provide care and the proposed frequency of visits
- Their right to participate in the service plan and/or any change in the plan before it is made
- Norco’s policy on client advanced directives including a description of an individual’s rights under State law (whether statutory or as recognized by the courts of the State) and how such rights are implemented
- Grievance procedures which includes contact names, phone numbers, hours of operation and how to communicate problems

And the right to:

- Receive service without regard to race, creed, gender, age, handicap, sexual orientation, veteran status or lifestyle
- Receive service without regard to whether or not any advance directive has been executed
- Make informed decisions about service and treatment plans and to receiving information in a way that is understandable
- Be notified in advance of treatment options, transfers, when and why care will be discontinued
- Receive and access services consistently and in a timely manner
- Education, instructions, and requirements for continuing care when services are discontinued
- Receive disclosure information regarding any beneficial relationships Norco has that may result in profit for the referring organization
• Be referred to another provider organization if Norco is unable to meet the client's needs or if the client is not satisfied with the care they are receiving
• Voice grievances regarding treatment, care or respect for property that is or fails to be furnished by anyone providing services on behalf of Norco without reprisal for doing so
• Receive a response from Norco regarding investigation and resolution of the grievance
• Be advised of the availability, purpose and appropriate use of State, Medicare and Accreditor Hotline numbers
• Refuse treatment and be informed of potential results and/or risks
• Be free from any mental, physical abuse, neglect or exploitation of any kind by Norco staff
• Have the client's property treated with respect
• Confidentiality of the client's health information records and Norco's policy for accessing / disclosure of records
• Information regarding Norco's liability insurance upon request.

PATIENT RESPONSIBILITIES

• Remain under a doctor’s care while receiving Norco services and notify Norco of change in medical status such as doctor’s prescription, hospitalization, or insurance changes
• Provide Norco with all requested insurance and financial information
• Sign the required consents and releases for insurance billing
• Cooperate with your doctor, our staff, and other caregivers
• Accept the responsibility for refusal of treatment
• Treat Norco personnel with respect and consideration
• Advise Norco Management of any dissatisfaction or problems with your care
• Promptly notify Norco of any rental equipment malfunctions or defects, and allow Norco staff to enter the premises at all reasonable times to repair or service equipment
• Notify Norco of changes in mailing addresses, equipment locations, or insurance companies
• Return equipment in good condition at the end of the rental period

ADVANCED DIRECTIVES STATEMENT

Norco wishes to inform you of our company’s position with respect to resuscitative and life-sustaining action. According to The Good Samaritan Statute (Idaho Code, Section 5-330), designated clinical personnel are required to initiate resuscitative methods necessary to sustain life if such action proves necessary in their presence unless you or your physician or other legal representative has informed us of the existence of an advanced directive requesting the withholding of resuscitative services. Should such a directive be in effect, or should you choose to formulate such a directive, you must inform Norco through the local branch manager or Director of Patient Services so appropriate steps can be taken to carry out your request.

Mail to:
Your local Norco Branch
(see address inside of front cover) OR Director of Patient Services
Norco Medical
1125 W Amity Rd
Boise ID 83705

“At Norco, we value your input.”
GENERAL CLEANING INSTRUCTIONS

INFECTION CONTROL – General Disinfecting of equipment

♦ Always disconnect electrically powered equipment from power source before cleaning.
♦ Never submerge electrically powered or items with electronic components in any water or liquids and do not use excessively wet cloth/sponges when cleaning.
♦ A cleaning solution of mild soap and warm water is recommended for cleaning equipment on a daily basis.
♦ Five recommended ways to disinfect your equipment (3 times a week):
  ♦ Alcohol soak. Soak equipment in straight 70% isopropyl (rubbing) alcohol for 5 minutes. Use enough so the equipment is completely covered in alcohol. Air dry. Use fresh alcohol each time you soak.
  ♦ Bleach soak. Mix 1 teaspoon of household bleach in 8 ounces (1 cup) of tap water. Soak for 3 minutes. Rinse with water. Air dry. Make a fresh solution each time you soak.
  ♦ Boiling. Boil equipment parts in water for 5 minutes, then air dry. Do not boil disposable cups, or Flutter, or PEP devices.
  ♦ Hydrogen peroxide soak. Soak equipment in straight 3% hydrogen peroxide for 30 minutes. Use enough of the peroxide to completely cover (submerge) the equipment. Rinse with tap water. Air dry. Use fresh peroxide each time
  ♦ White vinegar soak. Use 1 part white vinegar to 3 parts water. Soak equipment for 20 minutes in the disinfecting solution. Rinse thoroughly under hot running water. Dry thoroughly prior to reuse. A commercial preparation is available through Norco. Please call for more information.
♦ When cleaning equipment it is recommended that gloves, safety glasses and an apron be worn for personal protection.
♦ Discard cleaning solution after each use. Do not reuse.
♦ If the patient or caregiver or the cleaning person has a negative reaction to the cleaning agent, check with the person’s physician prior to reuse.
♦ It is everyone's job to try to minimize the spreading of germs and disease.
HAZARDOUS OR INFECTIOUS MATERIALS

Norco provides information to our patients/clients and their family members and/or caregivers in an effort to help minimize the spreading of germs and disease as it relates to medical equipment. The following is considered hazardous or infectious material:

♦ Liquid or semi-liquid blood or other potential infectious materials (OPIM - i.e. body fluids).
♦ Items contaminated with blood or OPIM and which would release these substances in a liquid or semi-liquid state if compressed.
♦ Items caked with dry blood or OPIM and are capable of releasing these materials during handling.
♦ Contaminated sharps.

Standard precautions – All body fluids either wet or dried that might be, from time to time, on equipment due to patient use should be considered potentially infectious. Gloves should be worn when cleaning equipment.

Hand washing – Hands and any other exposed skin should be washed with soap and water after handling or cleaning contaminated equipment. Any other skin exposed to potentially infectious material is also washed with soap and water.

“Hand washing is the single most important thing you can do to prevent the spread of infection”

Cleaning contaminated equipment – The person doing the cleaning should wear gloves, apron and safety glasses or other form of eye protection.

Remove Any Disposable Material – Dispose of all disposable material, including rags in a separate garbage bag for garbage pickup. Clean all external surfaces with a disinfectant solution. Use a commercial-grade disinfectant or prepare a solution using 9 parts water to 1 part Clorox; mix and clean in a well-vented area.

Sharps – Such as lancets used with a Blood Glucose Monitor when used can be put in an empty coffee can and covered with a plastic lid. When the can is full, tape the plastic lid to the can, and place the full can in a garbage bag for garbage pickup. Check with your disposal company for any special handling requirements. (Commercial grade sharps containers are available through Norco. Please call for more information).

SAFETY PRECAUTIONS

BEDROOM SAFETY

Create a safe and cheerful bedroom environment for patients who are confined to their bedroom for a given part of the day. Here are some tips to keep in mind:

1. Open curtains or windows to allow sunlight to shine into the room. Inadequate bedroom light is a common cause for patient falls. The use of nightlights in the bedroom will also aid in preventing such accidents.
2. Keep personal belongings accessible. Place the telephone, a lamp or some type of light source, reading materials, snacks and beverages, etc. within easy reach. Obtain a bell or some type of calling device to notify caregiver when assistance is needed.
3. Remove items that could pose a hazard. Area rugs, loose carpeting, electrical extension cords, tables, and chairs not in use, and miscellaneous items on the floor could cause a patient to trip or fall.
4. NEVER SMOKE IN BED and NEVER allow anyone to smoke while there is an oxygen system in use.
BED RAIL ENTRAPMENT RISK NOTIFICATION

NOTICE TO PATIENT, PATIENT'S FAMILY AND/OR PRIMARY DAY-TO-DAY CAREGIVER

DO NOT use this product without first completely reading and understanding this Bed Rail Entrapment Risk Notification Guide and any additional instructional material such as owner’s manuals, instruction sheets and on-product warnings supplied with this product. If you are unable to fully understand this Bed Rail Entrapment Risk Notification Guide, the on-product warnings or any additional instructional material, contact the patient’s health care provider and/or your equipment provider before using this equipment. Failure to understand and comply with the information contained in this Bed Rail Entrapment Risk Notification Guide can result in serious injury or death.

BED RAIL ENTRAPMENT

The term “Bed Rail Entrapment” describes an event in which a patient using the bed is caught, trapped, or entangled in the space in or about the bed rail, mattress, or bed frame. Bed Rail Entrapment may result in serious injuries or death by the patient becoming entrapped as shown below:

- Entrapment within the bed rail
- Entrapment under the bed rail
- Entrapment between the rail and mattress
- Entrapment under the bed rail at the ends of the bed rail
- Entrapment between split bed rails
- Entrapment between the end of the rail and the side edge of the head board or foot board
- Entrapment between the head or foot board and the end of the mattress

RISK OF ENTRAPMENT

Bed Rail Entrapment is a known risk in the use of bed’s equipped with bed rails.

Every patient is unique. Only the patient’s medical care provider is familiar with the patient’s unique medical condition and needs. Only the patient’s medical care provider and/or the dealer from whom you obtained this equipment, upon proper assessment of the patient’s medical condition and needs, can evaluate whether this equipment is appropriate for use by any particular patient and assist the patient, the patient’s family and/or the patient’s primary day-to-day caregiver in assessing the Risk of Entrapment.

Proper patient assessment, equipment selection, frequent patient monitoring, and compliance with instructions, warnings and this Bed Rail Entrapment Risk Notification Guide is essential to reduce the risk of entrapment.

Accessories have been developed in the industry to reduce the openings in existing bed systems that could cause entrapment. Any modification through the use of accessories must be used in conjunction with proper patient assessment prior to intervention. For a full discussion on this topic, see the Hospital Bed Safety Workgroup’s “A Guide for Modifying Bed Systems and Using Accessories to Reduce Risk of Entrapment” found at http://www.fda.gov.

Conditions such as restlessness, mental deterioration and dementia or seizure disorders (uncontrolled body movement), sleeping problems, and incontinence can significantly impact a patient’s risk of entrapment. Pediatric patients or patients with small body size may also have an increased risk of entrapment.
I BED RAIL ENTRAPMENT RISK NOTIFICATION

- Bed rails are intended to prevent an individual from inadvertently rolling out of bed, provide assistance to a patient when repositioning and to provide a sense of security. NEVER use bed rails for restraint purposes where “restraint” means preventing or hindering the patient within the bed from exiting the bed as they wish. Use of rails as a means of restraint significantly increases a patient’s risk of entrapment.
- Bed rails are intended to be used as a pair in a bed system. When in use, both side rails must be in the up position, except when the patient is entering or exiting the bed. Use with one side rail up and one side rail down could create an increased risk of entrapment.
- Bed rails and/or their mountings should not be used if they are bent or otherwise deformed. Bent or deformed bed rails and/or bed rail mountings increase gaps and increase the risk of entrapment. DO NOT place pressure upon bed rails while moving the bed. Although bed rails are not rated to any specific patient weight limitation, the bed rails or their mountings may become deformed or broken if excessive side pressure is exerted on the bed rails.
- Mattress overlays or active therapeutic support surfaces (TSS), which support the patient on an air mattress or specialized foam layer, may present an increased risk of entrapment for some patients. The benefit of TSS product use must be weighed against the potential increased risk of entrapment. This risk judgment must be performed by a medical professional.
- Invacare homecare beds are specifically designed and manufactured for use in conjunction with Invacare accessories, including bed rails. Accessories designed by other manufacturers may include variations in bed rail dimensions, mattress thickness, mattress size or density or other factors that have not been tested by Invacare. Use of other manufacturer’s products in conjunction with an Invacare homecare bed, may significantly increase the risk of entrapment, as such Invacare does not recommend their use.

The U.S. Food and Drug Administration in partnership with the U.S. Department of Veterans Affairs, Health Canada’s Medical Devices Bureau and representatives from national health care organizations and provider groups, patient advocacy groups, and medical bed and equipment manufacturers including the Hospital Bed Safety Workgroup, a collection of experts from the United States FDA, health care professionals and manufacturers of hospital beds, published guidelines regarding body part dimensions as they relate to a bed system’s safety. These guidelines, “Hospital Bed System Dimensional and Assessment Guidance to Reduce Entrapment” contain additional information on the risk of entrapment.

Visit the FDA website at http://www.fda.gov and search for “bed rail entrapment” to learn about the risks of entrapment or to view the FDA guidelines document.

The above statements are not intended to be a complete or comprehensive list of all risks of entrapment. Invacare recommends that whenever bed products are used that the patient, the patient’s family and/or the patient’s primary day-to-day caregiver discuss entrapment risks with the patient’s medical care provider.

2 Appendix

SPECIAL NOTE

For your convenience, the April 2010 version of the FDA’s bed safety guidelines are provided in this section. The information from the FDA’s brochure, published by Hospital Bed Safety Workgroup, is reproduced verbatim, the latest revision of which is available at http://www.fda.gov.

2.1 A Guide to Bed Safety Bed Rails in Hospitals, Nursing Homes and Home Health Care: The Facts

Bed Rail Entrapment Statistics

Today there are about 2.5 million hospital and nursing home beds in use in the United States. Between 1985 and 2009, 803 incidents of patients caught, trapped, entangled, or strangled in beds with rails were reported to the U.S. Food and Drug Administration. Of these reports, 480 people died, 138 had a nonfatal injury, and 185 were not injured because staff intervened. Most patients were frail, elderly or confused.

* In this brochure, the term patient refers to a resident of a nursing home, any individual receiving services in a homecare setting, or patients in hospitals.

Patient Safety

Patients who have problems with memory, sleeping, incontinence, pain, uncontrolled body movement, or who get out of bed and walk unsafely without assistance, MUST be carefully assessed for the best ways to keep them from harm, such as falling. Assessment by the patient’s health care team will help to determine how best to keep the patient safe. Historically, physical restraints (such as vests, ankle or wrist restraints) were used to try to keep patients safe in health care facilities. In recent years, the health care community has recognized that physically restraining patients can be dangerous. Although not indicated for this use, bed rails are sometimes used as restraints. Regulatory agencies, health care organizations, product manufacturers and advocacy groups encourage hospitals, nursing homes and homecare providers to assess patients' needs and to provide safe care without restraints.

** Invacare bed rails MUST NEVER be used as a means of restraints.
FOR PATIENTS CONFINED TO A BED

Several pieces of equipment can assist patients’ confined to their bed:

1. *Adjustable hospital type bed* in the home allows most of the bedridden to change body position on regular intervals. These beds can also be adjusted into the sitting position to allow the patient to sit up straight. All hospital type beds should be set up with side rails for protection against falling out of bed.

2. Special *mattresses* available to help improve patient comfort and prevent sores from forming.

3. Wheeled *over-the-bed tables* for a variety of personal uses.

4. *Trapeze bars* to help the patient change positions or move out of the bed. These can be attached to the head of the hospital-type bed.

5. *Bedside commodes* assist those unable to ambulate to the bathroom.

6. *Patient lifters* assist patient transfers from their bed to a *wheelchair* or *commode.*

Contact Norco for more information.

“Never smoke in bed and never allow anyone to smoke while there is an oxygen system in use”

BATHROOM SAFETY

The bathroom is usually the most dangerous place in the household. Wet floors increase the danger of someone slipping or falling. Consider the following tips to improve the accessibility and safety to the bathroom:

1. Covering floors with carpeting and/or non-slip rugs to help prevent falling or slipping on wet surfaces.

2. Keep the floor clear of all towels or clothing.

3. *Grab bars* allow individuals support while getting in and out of the bathtub or shower. Non-slip strips or mats may be installed in the bottom of the tub or shower to prevent falling or slipping. The use of a *bath* or *shower bench* further assists individuals' stability by allowing them to sit in the tub or shower. A *hand-held shower hose* helps those individuals in need of more control of the shower spray.

4. *Elevated toilet seats* and *toilet safety rails* aid in the transfer to and from the toilet. The use of *drop-arm commodes* are also available for those individuals who are either non-ambulatory or require the use of a *wheelchair.*

5. Always read the labels of medicines before taking them and discard if out-of-date. All poisonous solutions should be kept out of medicine cabinets.

ELECTRICAL SAFETY

Hazard Precautions:

1. All electrical appliances should be at least three to four feet from any sink, tub, shower, or stove. Do not touch any electrical device with wet hands or when standing on a wet floor. Use of such devices can cause electrical hazards if dropped in water or used around a wet surface.

2. Do not use electrical devices with worn or frayed wires. Contact Norco for repairs or replacement on both rented and sold equipment.

3. Most electrical home medical equipment items use a three-prong, grounded connector. If the home has three-prong receptacles, the medical equipment may be used. Older homes may only have two-prong outlets. Norco advises that three-prong grounded receptacles be installed for safety. "Cheater" adapters should only be used as a temporary measure until upgraded electrical repairs can be made.
4. The use of extension cords on electrical devices should be prohibited unless the extension cords are UL approved and they have adequate wire size for the current load they carry. An extension cord connected to electrical home medical equipment and plugged into multiple receptacles may result in direct circuit overload. Overloaded circuits may cause excessive heat that could be the direct cause of blown fuses, open circuit breakers, or an electrical fire. Limit use of extension cords whenever possible.

5. If the home has a fuse box as opposed to a circuit breaker system, never use a fuse that exceeds the rating for that particular circuit. If a fuse or a circuit breaker continues to “blow”, simply remove some of the electrical appliances associated with that fuse or circuit breaker to reduce the load on that circuit. When in doubt, contact a qualified electrician for advice.

**FIRE SAFETY**

The local Fire Department is the best resource to help make a home fire safety plan. Here are some general guidelines:

1. Create an escape plan for the home; include at least one alternate escape route.
2. If an uncontrollable fire occurs, leave the home immediately; do not waste time gathering any belongings.
3. There should be some type of call system for the elderly to obtain assistance, like a bell or a whistle that can be used in the case of an emergency.

“Create an escape plan for the home; include at least one alternate escape route”

4. Make a plan to assist the elderly and children escape from the emergency.
5. If a fire is suspected in the home, and your bedroom door is closed, first feel the door or doorknob. If it is warm or hot do not open it. Escape from the room via the alternate escape route.
6. Do not panic, try to stay as calm as possible.

**FIRE PREVENTION AND PROTECTION**

1. No open flames or heated devices around any oxygen delivery system.
2. NEVER SMOKE IN BED.
3. Have a fire extinguisher located in the kitchen and in the garage or work area. Keep the stove clean of grease and other flammable materials.
4. Make sure all electrical outlets are safe and not overloaded. Insure all electrical and gas room heaters are off when not in use.
5. Store all matches in a box or container.
6. Locate lit candles in an area of minimal fire hazard, and remember to extinguish them before leaving the room.
7. Electronic cigarettes should not be used while a patient is undergoing oxygen therapy. Additionally, batteries of electronic cigarettes should not be charged in the vicinity of a patient undergoing oxygen therapy or the oxygen source itself.
8. Items containing wood should be stored at least 36 inches away from a stove or furnace. Make sure clothing, drapes, curtains, and other potentially flammable items are a safe distance away.
9. Install smoke detectors in at least two different areas in the home. They should be installed on the ceiling or a high wall in the home. To assure the detectors are working, the U.S. Product Safety Commission recommends that you depress the test button at least every month. Replace the battery annually or when there are intermittent beeps, which may indicate a weak battery. Refer to the owner’s manual of the particular detector for recommended maintenance.
“Notify the local fire department and power company of any special needs to help them prepare to restore power in the event of a power outage”

CAUSES AND CIRCUMSTANCES OF HOME FIRES

Source: NFPA fire Analysis and research

Home fires are not only a risk to you and your family but also your neighbors and their families. With the increase in multi-family residence i.e. condominiums, townhomes and apartments it is very important everyone understands the dangers fire can bring.

Did you know the cooking equipment was the leading cause of home structure fires and home fire injuries in the US?

Heating equipment was the second most common cause of home fire fatalities followed by intentional acts, electrical distribution and lighting equipment, smoking materials, clothes dryers or washers, candles and lastly playing with a heat source.

Regardless of the cause, 60% of home fire deaths occur in homes with no smoke alarm or an alarm that is not functioning.

“Remember to check your smoke alarms once a month!”

Home fires peak in the cooler months, when people are lighting candles, using their fire places and woodstoves more frequently. Make certain family members and guests are responsible when using or enjoying these items.

*If you are using liquid or compress oxygen your safest line of defense is to remove yourself from all heat and flame producing items.

To read about fire safety tips that can be tailored to your specific home environment please visit: http://www.nfpa.org/safety-information/safety-tip-sheets

EMERGENCY PREPAREDNESS

Because the weather is not always predictable, you should be prepared for whatever “Mother Nature” brings. Below are some precautions you should consider for preparing for any type of an emergency:

1. Contact the local National Weather Service, Emergency Services office and/or the Red Cross to find out the types of weather or disasters that could potentially occur in the area. The Red Cross can assist in preparing for major disasters and help put together a disaster plan. They also supply the community’s emergency warning signals and evacuation plans.

2. Notify the local fire department and power company of any special needs. This helps them prepare, should they need to come to the home or to prioritize restoration of power in the event of an outage.

3. In the event your power goes out, keep a portable radio available with charged batteries and listen for an “Emergency Information Station”.
4. Assemble an emergency supply kit that includes: a first aid kit, flashlight, batteries, non-perishable food items, blanket, etc.
5. When a severe storm is present, move to the center of the home, keeping away from all doors and windows.
6. Review emergency preparedness plans and test all equipment at least once a year.
7. Review the “In Case of Emergency” card cutout on the back cover of this handbook.

“In Case of Emergency
and test all equipment at least once a year”
Smoking and Oxygen Use

National Statistics

According to the National Fire Protection Agency (NFPA), 73% of Medical Oxygen-Related Burns at Hospital Emergency Rooms were caused by smoking materials. It is estimated that there are an average of 1,190 thermal burns and 182 home fires per year in which oxygen equipment was involved in ignition. An average of 46 people per year died in these fires and over 60 were injured. Smoking is by far the leading factor in these incidents.

Oxygen users should also stay away from candles, gas grills, stoves, and any open flames. This is an issue that is extremely dangerous in homes, but like most fires and burns, they can be prevented by people taking some very simple steps.

In looking at these facts, one might assume that oxygen is highly flammable. However this is not the case. Oxygen rather is an accelerator, meaning that if there is a fire and oxygen is present, the fire will burn hotter and faster. Therefore, in the presence of increased oxygen, the fire will be larger and spread faster.

The Devastating Effects Are Real...

MERIDIAN, ID
10/18/2010
Meridian fire officials say a woman, who was using medical oxygen, was trying to light a cigarette for the driver of the car when her oxygen-saturated clothes caught fire.

She is recovering at a local hospital, according to Meridian Fire Department reports.

LOS ANGELES, CA
10/14/2010
A man who was smoking while hooked up to an oxygen tank burned to death today when his actions caused a fire in his downtown Los Angeles apartment.

The man, about 50, was taken to County-

See reverse
Devastating Effects, continued

LOS ANGELES, CA
10/14/2010, continued

USC Medical center with critical burns and later died.

A fire department spokesman said the man was using oxygen therapy via a nasal cannula, the tube that delivers oxygen from a tank or generator.

Damage to the building was estimated at $45,000.

LAKE ARROWHEAD, CA
10/18/10

A County Fire investigator said a three-bedroom, two-bath A-frame home caught fire after the woman fell asleep while smoking. Her cigarette ignited a line carrying oxygen to her from her oxygen tank and touched off a series of oxygen-tank explosions. The fire gutted the two-story house, damaged a neighboring house and killed numerous pets trapped inside, Crest Forest Fire officials reported.

When firefighters arrived at the home at 12:24 a.m., they found it fully involved in flame, with a home next door, just catching fire, according to a press release. The woman managed to escape the burning home with two of her pets.

A total of 25 firefighters and 10 vehicles fought the blaze, bringing it under control in just over an hour. Firefighters estimated property losses at $350,000.

Lake Arrowhead, California Fire Destroys A-Frame Home

Oxygen Delivery Systems General Precaution:

NEVER SMOKE WHILE USING HOME OXYGEN DELIVERY SYSTEM OR ANY SOURCE OF HIGH-CONCENTRATION OXYGEN.

Liquid Oxygen Reservoir — After a Fire

Norco Medical

“Serving You Better”
EQUIPMENT CHECKLISTS

ALTERNATING PRESSURE PAD AND PUMP

Education
- Explain the goals of alternating pressure pad/pump therapy: To prevent pressure sores and decubitus ulcers.
- Explain that pad/pump should be used according to a physician’s prescription.

Demonstration
- Remove bed coverings from mattress. Place alternating pressure pad on top of the mattress and remake the bed so that only the sheet is between patient and the alternating pressure pad.
- Attach air supply tubing to the alternating pressure pad and pump. Place unit on the floor under edge of the bed and connect pump power cord to electrical wall receptacle. Turn on pump. Some pumps will come on automatically when plugged into wall outlet. Allow up to twenty minutes for alternating pressure pad to inflate fully.
- Demonstrate how to adjust air pressure level on the pump (low to high). Patient comfort determines the level needed.
- Allow pump to operate at all times when patient is in bed.

Cleaning/Maintenance/Troubleshooting
- Pump: always unplug pump from electrical outlet before cleaning. Wipe pump with a damp, not wet, cloth. Never submerse pump in water or liquids.
- If pump is operating, but pad is not inflated:
  - Check air supply tubing connections at pump and pad.
  - Check pad for cuts, rips, or holes. Patch with tape. If pad still does not inflate, call Norco.
- Alternating pressure pad: remove pad from bed; wipe with clean cloth dampened with clean warm water and mild soap. Allow to air dry before replacing pad on bed.
- If alternating pressure pump is not operating:
  - Check power cord at wall receptacle. Does a light switch operate wall receptacle?
  - Check “on-off” switch on pump. If pump is plugged into power source and unit is turned on, but will not operate, call Norco.
- Never attempt to repair the pump.

AMBULATORY AIDS

Cane, Quad Cane, Walker

Education
- Discuss the purpose: To help an individual remain mobile by providing assistance to walking.
- Follow your physician or therapist’s instructions carefully when using ambulatory aids.

Demonstration
- Walkers: When using the walker for the first time, have someone present who can assist you until you become familiar with its use.
  - Handgrips height: While in a standing position, have someone adjust the height of all four-walker legs to place the height of the handgrips slightly above the wrists. This provides a slight bend in the elbow while standing straight and holding the handgrips. Make sure all push buttons are popped out in the adjustment holes.
  - Follow slightly behind the walker, taking care not to place your feet all the way into the front of the walker frame. Doing so could result in the loss of balance or the tendency to fall forward.
Canes or quad canes: Always use in the hand on the opposite side from the affected or weaker leg regardless if you are right or left handed.

- Cane height: Adjust in place where the handgrip is just above the wrist when in a standing position.
- Move the cane forward first, followed by the affected limb. Then, bearing weight on the cane, bring the strong leg forward.
- The bases of most quad canes are flat on the side closest to the body to prevent tripping. It may be necessary to rotate the base by releasing the height adjustment and readjusting it to the other side.

Crutches: Adjust in place where the handgrip is just above the wrist when in a standing position.

- When placed under the patient’s arms, the shoulders should remain level. Make sure all push buttons are popped out in the adjustment holes.
- Always take short steps. Over striding tends to cause loss of balance.

Cleaning/Maintenance/Troubleshooting

- Clean rubber tips with alcohol to remove oil, grime, and dirt.
- Clean equipment with warm soapy water, rinse and thoroughly dry.
- Inspect tips/wheels for wear, tear, cracks, and rips.
- Folding walkers: Become familiar with the process of folding and unfolding it. Anytime the walker is unfolded check carefully to make sure the folding mechanism is locked securely in the open position before using.
- The height adjustment push button, rubber tips, and handgrips on your walker, cane or crutch, should be inspected regularly. Replace any worn or damaged tips and grips immediately.

**BATHROOM AIDS**

**Commodes, Toilet Risers, Grab Bars, and Transfer Benches**

**Education**

- Discuss the purpose of bathroom aids: 1) To decrease the risk of falling, 2) To ensure stability and leverage.
- Remind patient to use equipment as prescribed by physician or therapist.
- Discuss Medicare/Medicaid payment criteria for the equipment specific to set up. Explain the term “non-assignment” and "assignment."

**Demonstration**

**Commodes and Toilet Risers**

- Lock toilet riser in place to ensure stability.
- Always exert downward force when sitting or rising from the equipment. Using horizontal movement may cause the commode or toilet riser to slide or tip.
- Set the commode against a wall, close to a bed or chair where the patient usually resides.
- Make sure top of the commode or toiler riser is even with the bend in the patient’s knee.
- Make sure all legs are evenly adjusted so the commode seat is level and all the push buttons are popped out in the adjustment holes.
- Seat patient in the center of the commode and make sure bucket or pail is in place.
- Be sure to lock wheels (on wheeled models) when sitting or rising from the commode.

**Tub Transfer Bench**

- Place the bench in the tub facing the faucet end, with the two outer legs resting on the floor outside the tub. Adjust the two inner legs to a height approximately even with the side of the tub. Adjust the outside legs so the seat slopes slightly toward the inside. This will cause water falling on the seat surface to drain into the tub instead of out onto the floor.
- Sit on the bench with legs outside the tub. Then lift one leg at a time into the tub.
Grab Bars
- Secure grab bars to tub or wall as defined in manufacturer's installation sheet.
- Have a family member or caregiver apply pressure to the bar to ensure stability.
- Always exert downward force when sitting or rising from the tub or transfer bench. Using horizontal movement may cause the bar to slide, tip or break and the patient to slip in the tub.

Cleaning/Maintenance/Troubleshooting
- Clean rubber tips with alcohol to remove oil, grease, or talc periodically.
- Inspect tips/wheels for wear, tear, cracks, or rips.
- Keep the bathtub clean and free of soap film to prevent slipping.
- For infection control, clean all parts with 1 part bleach and 9 parts water. Rinse and allow to air dry or wipe with a clean, dry cloth.

BLOOD GLUCOSE TESTING

Education
- Diabetes is characterized by either the body's inability to produce insulin, or resistance to its own insulin. Insulin is a hormone which helps move glucose from the blood into the body's cells for energy, self-repair, growth and other various cellular functions. Home blood glucose monitoring allows diabetics to monitor how much glucose is in the blood stream at a given time and adjust the amount of food or medication needed to move the glucose.
- Blood Glucose testing involves pricking your finger with a lancet (a small, sharp needle), putting a drop of blood on a test strip and then placing the strip into a meter that displays your blood sugar level. Meters vary in features, readability (with larger displays or spoken instructions for the visually impaired), portability, speed, size, and cost. Current devices provide results in less than 15 seconds and can store this information for future use. These meters can also calculate an average blood sugar level over a period of time. Some meters also feature software kits that retrieve information from the meter and display graphs and charts of your past test results.
- The chart below gives you an idea of where your blood sugar level should be throughout the day. Your ideal blood sugar range may be different from another person's and will change throughout the day.

<table>
<thead>
<tr>
<th>Time of Test</th>
<th>Ideal for Adults With Diabetes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Before meals</td>
<td>70-130 mg/dL</td>
</tr>
<tr>
<td>After meals</td>
<td>Less than 180 mg/dL</td>
</tr>
</tbody>
</table>

*Source: American Diabetes Association, 2009

Preparation
- Several pieces of equipment are used for home blood glucose monitoring including a glucometer, test strips, a lancet, log book and a pen. Keep your supplies together. Testing your blood glucose can be done anywhere at anytime, but it is best to find a quiet spot where you will be comfortable and not distracted.
- Wash and thoroughly dry your hands. If you will be using an alternative site, wash and dry the area as well. Anything on your skin can affect the results. For this reason, it is not advisable to use rubbing alcohol. Most hand sanitizers contain alcohol. If you must use one, be sure the skin is completely dry and note in your log book that you used it.
- Check the code on your test strips to ensure it matches the code in your meter. There may be a chip inserted or the meter will give you this information when you turn it on.

Test Procedures
- Remove a test strip taking care not to touch the area where the blood sample goes.
Depending on your meter you will either turn it on or insert the test strip which turns it on. For some meters you insert the test strip after the blood sample is placed on it. Others absorb the blood sample from the tip of the test strip pointing out of the meter.

Massage the fingertip or other testing site to improve the blood flow, remember not to prick the very tip of your fingers but rather the sides of your fingers. Quickly prick the site with your lancet device and gently squeeze out a small blood sample. Each meter has a parameter for the amount of blood it needs. An inadequate sample will be rejected.

Touch the blood to the appropriate area on the test strip. Insert the test strip if this is how your meter works. Apply pressure with a cotton ball, tissue or paper towel to stop any bleeding.

Observe the meter's screen. It should show that it is processing the sample. Refer to your meter's guide for the exact symbol. Most meters will beep when they reach a result.

Test Results

A number will show in the display which ideally will be between 80 and 130 for fasting and less than 180 after eating. Record this number in your log book, and follow your doctor's instructions for the recorded results.

If you receive an error code, refer to your meter's guide for specific instructions. Errors usually result from an inadequate blood sample, mismatched coding chips and strips or low battery. Check your guide and repeat the test. Use a different site to obtain a new blood sample.

BREAST PUMP

Education

A physician’s order is not necessary to obtain a breast pump. However, follow your physician’s or lactation specialist’s guidelines closely, if appropriate.

Demonstration

Plug breast pump into a grounded outlet. Do not use an extension cord.

Explain the breast pump controls: 1) Power switch. 2) Suction rate (cycles/minute). 3) Vacuum adjustment. 4) Battery backup (if applicable). 5) Pump drive.

Assemble single or dual pump kit (see kit instructions) and attach the tubing to the pump.

Adjust the vacuum and suction rate appropriately.

Cleaning/Maintenance/Troubleshooting

Clean the exterior of the breast pump with a damp washcloth.

Sterilize single or dual pumping kit by boiling plastic parts in water for 10 minutes daily.

If unit does not power up: 1) Check outlet. 2) Check power cord.

If pump generates no or little vacuum: 1) Check for pump kit connection. 2) Check vacuum adjustment.

Contact Norco if the pump will not function and trouble-shooting efforts have failed.

Preventive Maintenance Schedule: Performed annually.

COUGH ASSIST™

Education

Explain the goals of the Cough Assist™: 1) To clear retained secretions. 2) To imitate the normal cough mechanism. 3) To prevent airway closure and lung infections.

Indications for use: 1) Any patient that is unable to cough or clear secretions effectively. 2) A Peak Cough Flow <200lpm. 3) Frequent infections due to an impaired cough.

Contraindications for use: 1) Patient history of bullous emphysema. 2) Known susceptibility to pneumothorax or pneumomediastinum. 3) Recent barotrauma (lung injury).
Use the Cough Assist according to physician’s guidelines.

Demonstration
- Plug the Cough Assist™ into a properly grounded outlet. Do not use an extension cord.
- Discuss the front panel controls: 1) Manual/Auto switch. 2) Inhale and exhale time intervals. 3) Pause function. 4) Manual control lever. 5) Pressure setting, gauge and Inhale pressure settings. 6) Inhale flow setting.
- Demonstrate proper circuit assembly with breathing filter, 3-6ft smooth bore tubing, inflatable mask, or mouthpiece/seal with nose plugs.
- Set the Cough Assist™ according to physicians prescribed settings. (*Note: Suggested manufacture settings are conservative at a set pressure of 10-15cmH20, inhale time of 2-3 seconds, exhale time of 1-2 seconds, inhale flow and inhale pressure set to max. Increase pressure until secretions are present.)
- Discuss that a treatment consists of 4-5 coughs (a cycle) and rest for 30-40 seconds. Repeat this process for 4-6 cycles. An average treatment will take 10-15 minutes. A normal treatment regimen is 4-6 treatments per day.

Cleaning/Maintenance/Troubleshooting
- Clean the Cough Assist™ periodically with a clean damp cloth.
- Change the breathing filter once per month.
- Clean the tubing and mask/mouthpiece or seal daily with warm soapy water. Let air dry.
- Disinfect tubing and mask/mouthpiece/seal 2-3 times a week using one of the methods listed in the General Cleaning Instructions given previously in this manual.
- If the machine does not power up: 1) Check the outlet. 2) Unplug the machine and check fuses.
- If the pressure gauge does not return to zero when the device is turned off, contact Norco.

CPAP or BiPAP

Education
- Explain OSA (discuss anatomy of airway and where obstruction may be present).
- Discuss the benefits of nasal CPAP/BiPAP therapy: 1) To improve energy levels. 2) To improve daytime somnolence. 3) To improve mental awareness/alertness. 4) To decrease occurrence of morning headaches.
- Discuss the purpose of CPAP/BiPAP: 1) To open oropharyngeal (throat) airway. 2) To increase nocturnal oxygenation. 3) To decrease the work of the heart. 4) To prevent hypertension, CHF, stroke, heart attack.
- Review the physician’s prescription and the purpose of the prescribed CPAP/BiPAP pressure.

Demonstration
- Discuss CPAP/BiPAP blower and functions (external functions, ramp and memory options).
- Attach 6 ft. tubing and humidifier (if ordered).
- Discuss nasal/full facemask options. Fit patient with proper mask size and discuss: 1) Preventing eye leakage (tolerate minor leaks toward the upper lip if headgear feels “too tight”). 2) Preventing pressure sores on face (use proper spacing on the bridge of the mask to prevent soreness and leakage). 3) Ensure that exhalation port is not obstructed or occluded.
- Discuss the proper level of heated humidity. If excessive condensation occurs: 1) Insulate 6 foot hose with an insulated sleeve. 2) Decrease humidifier setting. 3) Increase room temperature.
- Disconnect 18-24” humidifier hose from CPAP/BiPAP in the morning to prevent machine damage.
- Discuss chinstrap, if applicable.
- If oxygen is used, follow safety guidelines for oxygen in the handbook. (See Norco clinician for proper oxygen placement into circuit). Bleed in oxygen with adapter attached proximal to the equipment interface.

Note: Position the CPAP/BiPAP machine on a stand that is lower than the patient’s head to prevent accidental tipping as well as accumulation of condensation in the tubing.
Cleaning/Maintenance/Troubleshooting

- Wash the mask by hand daily in warm soapy water (liquid soap). Rinse well and let air-dry.
- Wash 6 ft. CPAP tubing by hand once per week in warm soapy water (liquid soap). Rinse well and let air-dry.
- Change disposable filter monthly. Wash reusable filters monthly by hand in warm soapy water (liquid soap). Rinse well and let air-dry prior to reuse.
- Wash the headgear by hand as needed. Rinse well and let air-dry.
- For humidifier tray/chambers: wash/soak once a week using one of the methods listed in the General Cleaning Instructions given previously in this manual.
- Discuss troubleshooting of upper airway irritation with humidifier/hydration techniques.
- Discuss mask/face fitting troubleshooting and solutions if not snug or remains uncomfortable.
- If error codes occur or CPAP/BiPAP unit fails prematurely, contact Norco.
- Explain that a replacement mask/headgear may be obtained using the schedule listed below.
- Preventive Maintenance Schedule: Performed annually.

CPAP OR BiPAP Troubleshooting Guide

If you are having problems with your equipment contact your local Norco branch for assistance.

The mask is the most important part of your CPAP/BiPAP system. It does not matter what the machine can do if the mask does not fit properly. Contact Norco to help you troubleshoot any mask interface problems.

- Masks usually last 3 to 6 months. A mask may look acceptable but need to be replaced. If you had a good seal but now are having problems getting that good seal your mask may need to be replaced.
- If you are having problems with a runny nose or allergy like symptoms, check your filters. A clean filter may help eliminate these symptoms and help to protect the machine.
- MEDICARE CUSTOMERS: You must use pap ≥ 4 hours per night on 70% of nights during a consecutive 30 day period anytime during the first 3 months of initial usage and they must have a face-to-face clinical re-evaluation by the treating physician with documentation that symptoms of obstructive sleep apnea are improved.

<table>
<thead>
<tr>
<th>PROBLEM</th>
<th>POSSIBLE REASON(S)</th>
<th>SOLUTION(S)</th>
<th>WHO TO CONTACT</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pressure seems too high</td>
<td>Not used to exhaling against pressure</td>
<td>✓ Practice breathing on CPAP/BiPAP prior to sleep with slow deep breaths. ✓ Add ramp feature ✓ Add exhalation comfort mode</td>
<td>Norco</td>
</tr>
<tr>
<td>Nasal congestion and or dry mouth</td>
<td>1. Inadequate humidity 2. Open mouth 3. Air leak</td>
<td>✓ Increase humidity or add heated humidifier ✓ Use chin strap ✓ Full face mask</td>
<td>Norco</td>
</tr>
<tr>
<td>Water in tubing</td>
<td>1. Increased condensation due to cold room temp &amp; warm air in tubing 2. Heated humidifier set too high</td>
<td>✓ Increase room temp ✓ Decrease humidifier setting ✓ Insulate CPAP/BiPAP tubing</td>
<td>Norco</td>
</tr>
<tr>
<td>Nasal/sinus pressure, ear pain or runny nose</td>
<td>1. Reaction to air flow 2. Sinus infection 3. Nasal congestion</td>
<td>✓ Use heated humidity ✓ Inhaled nasal steroid ✓ Change/wash CPAP filters</td>
<td>Norco Your Physician</td>
</tr>
<tr>
<td>Sore on face or nose from mask</td>
<td>1. Mask is too tight 2. Incorrect mask size 3. Mask is worn; needs replacing. 4. Allergic reaction to mask</td>
<td>✓ Contact Norco Customer Service Representative or Respiratory Therapist</td>
<td>Norco</td>
</tr>
<tr>
<td>Eyes red and or swollen</td>
<td>1. Mask too tight causing air leak into eyes. 2. Mask too loose causing air leak into eyes</td>
<td>If mask has forehead or bridge adjustment: ✓ Move mask towards bridge of nose to seal area ✓ Adjust mask as loose as possible to stop the leak. ✓ Don’t over tighten straps</td>
<td>Norco</td>
</tr>
</tbody>
</table>
CPAP OR BiPAP Troubleshooting Guide

<table>
<thead>
<tr>
<th>PROBLEM</th>
<th>POSSIBLE REASON(S)</th>
<th>SOLUTION(S)</th>
<th>WHO TO CONTACT</th>
</tr>
</thead>
<tbody>
<tr>
<td>Symptoms of OSA have returned</td>
<td>1. Machine not calibrated properly</td>
<td>✓ Verify machine is at prescribed pressure</td>
<td>Norco</td>
</tr>
<tr>
<td></td>
<td>2. Recent weight gain</td>
<td>✓ Monitor weight gain</td>
<td>Your Physician</td>
</tr>
<tr>
<td></td>
<td>3. Using CPAP less than 4 hrs/night</td>
<td>✓ Increase hourly/daily CPAP use</td>
<td></td>
</tr>
<tr>
<td></td>
<td>4. Mask worn or leaking</td>
<td>✓ Adjust or replace mask</td>
<td></td>
</tr>
<tr>
<td>Feeling ‘bloated’ or uncomfortable</td>
<td>Air escaping into your stomach</td>
<td>✓ Sleep on your side</td>
<td>Norco</td>
</tr>
<tr>
<td></td>
<td></td>
<td>✓ Decrease CPAP pressure (on Dr’s order only)</td>
<td>Your Physician</td>
</tr>
<tr>
<td></td>
<td></td>
<td>✓ Try Bi-Level device (on Dr’s order only)</td>
<td></td>
</tr>
</tbody>
</table>

CPAP / BiPAP Replacement Supplies

The following table lists replacement frequencies for CPAP/BiPAP accessories allowed by Medicare, Medicaid, and most insurance companies:

<table>
<thead>
<tr>
<th>Description</th>
<th>Replacement Allowance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mask</td>
<td>1 every 3 months</td>
</tr>
<tr>
<td>Nasal Pillow or Mask seal</td>
<td>2 per month</td>
</tr>
<tr>
<td>Full-face Mask seal</td>
<td>1 per month</td>
</tr>
<tr>
<td>Headgear</td>
<td>1 every 6 months</td>
</tr>
<tr>
<td>Chinstrap</td>
<td>1 every 6 months</td>
</tr>
<tr>
<td>Tubing</td>
<td>1 every 3 months</td>
</tr>
<tr>
<td>Filter, Disposable (usually white)</td>
<td>2 each month</td>
</tr>
<tr>
<td>Filter, Non-disposable (usually gray)</td>
<td>1 every 6 months</td>
</tr>
<tr>
<td>Humidifier Chamber</td>
<td>1 every 6 months</td>
</tr>
</tbody>
</table>

- It is recommended that CPAP masks or Nasal Pillows, tubing and filters be replaced according to the schedule shown above for successful use of the equipment.
- A Norco mailer is sent out to patients at the interval they are eligible for supplies. Patients or their designees may go directly to the local Norco branch to get replacement supplies, or they may return the response letter for direct-shipment of supplies.
- To return the mailer:
  - Please remove the letter and mark the appropriate boxes requesting supplies or clinical follow-up and return to Norco.
  - The lower portion is removed from the letter, folded over and sealed. Postage is prepaid for the return to Norco.
  - Supplies will be sent using FedEx. A signature for delivery is not necessary. A Norco representative may contact you to verify your supply needs
- Contact your local Norco branch if you have questions regarding this service.
CPM

Education

- Discuss the purpose of CPM (continuous passive motion): 1) For post-surgical rehabilitation, 2) To prevent scar tissue or development of adhesions, 3) To prevent rigidity of joints, 4) To increase the range of joint motion.
- Emphasize that CPM must be used according to prescription.
- Refer patient back to physician or physical therapist for adjustments to the range of motion.

Demonstration

- Explain CPM component parts: 1) Thigh plate, 2) Knee joint, 3) Foot plate.
- Demonstrate thigh, knee, and foot adjustments.
- Demonstrate CPM pad assembly (boot, calf support, thigh pad, and optional strap).

  **Do not set the flexion or extension.** The physical therapist or physician must perform this function.

- Explain the flexion and extension controls.
- Explain the start, stop, and CPM speed functions.

Cleaning/Maintenance/Troubleshooting

- Machine wash reusable pads and reattach.
- Keep CPM exterior free of debris.
- Clean exterior with washcloth and soap as needed.
- If unit fails to operate, contact Norco.
- If flexion is set higher than extension, unit will alarm.
- Preventive Maintenance Schedule: Performed every six months (depending on manufacturer).

Emergency Phone Alarm

Education

- Discuss the purpose of an emergency phone alarm and alarm monitoring:
  1) To promote EMS / patient communication, 2) To decrease response time for patient illness or injury, 3) To provide an interactive personal emergency reporting system (PERS) for patients.
- Discuss the need to check the pendant and base unit function on a regular basis.
- Review settings of the system and limitations of use.
- Explain the purpose of the emergency phone alarm and the means of obtaining technical assistance.
- Rx not needed.

Demonstration

- Identify the indicators and buttons on the front panel of the phone alarm unit.
  - **Indicators**
    - Trouble – Lights if transmitter missing, blinks slowly for transmitter low battery
    - Power – Lights if AC present, Blinks slowly if charging, Blinks quickly on battery
    - Home – Lights if Activity Timer on, Blinks slowly if < 15 minutes remain on timer, Blinks quickly if timer has expired
    - Sending – Flashes when console is placing a call
  - **Buttons**
    - Emergency – Press and hold to trigger alarm
- Clear – Stops alarm, clears indicators, cancels alarm reports in progress
- Home – Turns on, resets, and turns off Activity Timer

- Discuss placement possibilities of unit within home.
- Requirements include grounded AC electrical outlet and phone jack.
- Place alarm in a central location or area where patient spends majority of time.
- Plug AC adapter into outlet (not controlled by wall switch).
- Connect the phone alarm telephone cord into a telephone outlet. If a telephone is already connected to the outlet, disconnect the telephone from the outlet and plug it into the jack on the bottom of the phone alarm labeled “phone.”
- Slide phone alarm power switch to the “on” position. The phone alarm will sound two beeps and announce “timer off.” The green “power” indicator light should light steady.
- If a telephone is connected to the phone alarm, lift the handset on the telephone and check for a dial tone to verify that the telephone line is active and working properly.

- Use the remote control sensor to test use/function of the phone alarm. Press the sensor button until an audible “beep” can be heard and the remote control sensor light is lit. The phone alarm should sound “Emergency” for 30 seconds before declaring “Emergency Reported.” Wait for 10-15 seconds and a representative from the response company will come on the line and question the patient.
- The maximum communication range of the control sensor to the phone alarm is 1000 feet.
- Discuss backup battery. (Phone alarm battery will last a minimum of 32 hours with a charge time of 7 hours)

Cleaning/Maintenance/Troubleshooting

- Dust with dry cloth as needed.
- Make certain phone alarm is connected to a power outlet that is NOT controlled by a wall switch.
- Check pendant function on a regular basis by activating unit
- Wear remote control sensor at all times unless separated from the phone alarm for more than 24 hours. When separated from the phone alarm for more than 24 hours, leave the remote sensor with the phone alarm.
- Remote control sensor is waterproof for bathing and/or showering. Avoid submersion for long periods of time at depths greater than 3 feet.
- Phone alarm power indicator light will blink during or after a power outage. This shows that the unit is operating on backup battery and recharging respectively. Indicator light will also blink when the phone alarm has been unplugged. Indicator light remains steady during normal operation.

**FEEDING PUMP**

Education

- Discuss the purpose of enteral feeding: 1) To overcome the anatomical barriers to swallowing, 2) To provide adequate caloric requirements.
- Discuss the prescribed flow (ml/hr) and hours of use. Explain that the pump is to be used according to physician’s guidelines.

Demonstration

- Discuss the functions of the pump: Rate, dose, hold, run function, total volume, clear volume, and battery charge (see manual for battery charging times and battery life).
- Demonstrate setting the pump flow and dose functions.
- Demonstrate proper assembly of feeding bag to pump and IV pole.
Identify all pump alarms: Alarms are listed on the side of all pumps with a troubleshooting guide. (Simulate an alarm and then troubleshoot.)
Discuss acquisition of supplies, preventive maintenance of equipment and follow up.
If patient experiences constipation or nausea/vomiting, contact physician.

Cleaning/Maintenance/Troubleshooting
Change feeding bag set daily. Do not wash or reuse bag.
Discard feeding syringes after 24 hours of use.
If dirty, clean exterior of feeding pump with a damp soapy cloth.
Store feeding supplement at room temperature. Refrigerate any opened unused liquid nutrition that is not in use.
If alarm-troubleshooting guide reads, “contact service representative”, contact Norco immediately.
Functional check schedule: Performed every six (6) months.
Preventive Maintenance Schedule: Performed annually.

HIGH FLOW HEATED HUMIDIFIED OXYGEN DELIVERY

Education
Discuss the purpose of High Flow Heated Oxygen delivery: 1) To warm and humidify high flow oxygen delivery systems >8lpm. 2) To treat hypoxemia (decreased Pa02/Sa02). 3) To prevent severe nasal congestion/dryness associated with high flow oxygen delivery. 4) To treat hypothermia.
Discuss contraindications of High Flow Heated Oxygen delivery: 1) Patients with occluded nostrils or severe septal defects should consult a physician before use. 2) Any situation in which high humidity is contraindicated (see AARC Clinical Practice Guidelines).

Demonstration
Discuss the functions of the heated wire circuit humidifier: 1) Power button. 2) Alarm silence button. 3) Temperature setting. 4) Temperature window. 5) Alarm symbols
Attach heated wire circuit humidifier to an IV stand.
Demonstrate circuit assembly: 1) Attach heated wire circuit humidifier to humidifier chamber with appropriate temperature and heated wire cables. 2) Attach humidifier chamber spike set to the 1000ml sterile water port. 3) Insert oxygen tubing into the gas inlet port on the heated humidifier chamber at flows >8lpm. 4) Depress the power button and adjust the temperature to 32-37 degrees Fahrenheit to begin the therapy.
Discuss temperature adjustment: Temperature is adjusted by turning dial on the face of the humidifier. The set temperature will be displayed in the monitoring window. *If using the Fisher Paykel MR850, the temperature will automatically increase to a preset level.
Explain that the actual circuit temperature will be displayed in the monitoring window.
Discuss acquisition of supplies and follow up.

Cleaning/Maintenance/Troubleshooting
Change the heated wire circuit, humidifier chamber and high flow cannula once a week.
The patient must be disconnected to a standard oxygen system at the prescribed flow during the circuit change.
Clean the heated wire circuit humidifier with a soapy wash cloth to clear dust or debris.
Discuss alarm troubleshooting. See manual on heated wire humidifier for specific alarm conditions.
Functional check schedule: Performed annually.
Preventive Maintenance Schedule: None
**HOSPITAL BEDS**

**Education**
- Discuss the appropriate use of full electric, semi-electric and manual beds (e.g., when should a full, semi-electric or manual bed be used and why).
- Discuss Medicare qualification guidelines for the bed: 1) Body positioning not feasible in ordinary bed, 2) Change or frequent changes in body position, 3) Head elevated due to airway compromise, 4) Traction equipment attached to hospital bed, 5) Medical condition will last at least one month.

**Demonstration**
- Discuss weight restrictions for standard bed (400 lbs), and heavy-duty Bariatric beds (600 lbs).
- Demonstrate proper assembly and transportation of bed, bed rails, head pins and mattress placement (including mattress protective cover). Rails must be placed between second and third spring. Failure to do so will result in damage to rails.
- Discuss wheel locks and demonstrate function.
- Discuss/demonstrate the manual or electric controls to raise/lower head, foot or height of bed.
- Discuss proper placement (see troubleshooting) and function of full or half-sized side bed rails. Make sure all moving parts are free of obstructions (sheets, blankets, oxygen tubing, etc.)
- Emphasize not to use bed rails as a restraint or a brace for stability. Patient should not use bed rails as a “push handle” when moving. Side rails are to prevent a patient from rolling out of the bed.

**Cleaning/ Maintenance/ Troubleshooting**
- Discuss cleaning of hospital bed (soiled mattress cover, bed frame, etc.). Patient may use warm soapy water to clean. Mattress cover to remain on bed throughout use.
- Discuss troubleshooting of semi and full electric controls. (If height, head or foot will not reach maximum potential.)
- Refer patient and caregiver to their physician or physical therapist for instruction on patient transfers.

**INFANT MONITOR**

**Education**
- Discuss “true apnea”: 1) True apnea (no breathing) will always be associated with bradycardia (slow heart rate; normal heart rate is 120-160), cyanosis (blue skin coloration), or both. 2) Periodic breathing is a common CNS breathing pattern in infants (normal rate is 30-40 BPM). Periodic breathing will not show bradycardia or cyanosis.
- Discuss the purpose of apnea monitoring: To detect apnea, bradycardia and tachycardia.
- Discuss the three (3) patient alarms and the three (3) equipment alarms. 1) Patient alarms – apnea, bradycardia and tachycardia. 2) Equipment alarms – lead problems, battery problems and memory full.
- Explain the alarm pattern to detect differences in patient and equipment alarms. (See manual).
- Discuss how to respond to alarms:
  - Respond within 10 beeps or 10 seconds.
  - If cyanosis present, stimulate infant immediately.
  - Rub the infant’s back.
  - Flick the balls of the feet.
  - While supporting the head and body, move infant in an up and down motion.
  - If bradycardia is present without cyanosis, verify infant’s pulse (brachial artery).
  - If infant does not respond call 911 and begin CPR. (Parents should receive CPR training before infant’s discharge from the hospital.)
- Document activities and incidents as required by physician on *Daily Record*. (Located near the back of this Handbook)
Demonstration

- Discuss the various alarms, controls, lights and LEDs on the monitor.
- Discuss the alarm-reset function. (Note: On the Healthdyne monitor, the alarm silence function is only functional with the low battery and memory full alarms. The alarm silence feature will not work with apnea, bradycardia, tachycardia and loose connection alarms. This is an FDA guideline.)
- Review the monitor settings. Emphasize that settings may not be altered without physician’s consent.
- Discuss battery charging and recharging (12-24 hours) and battery life (24 hours on a full charge).
- Explain the patient lead cable: 1) Black lead – place lead vertically on left side of the infant’s chest parallel to the nipple, 2) White lead – place lead on the right side of the chest, 3) Green lead is neutral and is not used. However, one can use the green lead in either the white or the black ports as a back-up lead.
- The patient belt is designed for babies > 7lbs.
- Avoid radio/electromagnetic interference (cell phones, cordless phones, microwave, etc.). Keep unit at least three (3) feet away from the source of interference.
- Discuss acquisition of supplies, preventive maintenance of equipment and follow up.

Cleaning/Maintenance/Troubleshooting

- Explain lead rotation and care: 1) Place electrode in a clean dry area of infant’s skin. 2) Rotate electrodes every two to three days. (Electrodes are Hydrogel adhesive. If electrodes lose their adhesive properties, wipe with a damp cloth. Blow on electrodes until sticky). 3) Clean infant’s skin and place the electrodes on the appropriate areas.
- If infant’s skin is red, rashy, or dry/flaky, contact Norco for other lead options (patient belt).
- Wash patient belt (if applicable).
- Functional check schedule: Performed quarterly.
- Preventive Maintenance Schedule: Performed annually.

Only Norco offers a Five year warranty On your CPAP

Ask our staff of Respiratory Therapists about our 5 year CPAP warranty and worry-free program on re-ordering your mask and other supplies.
# Infant Monitor Alarm Log

**Baby’s Name:** ____________________________

**Settings:**
- Slow Heart Rate: __________
- Fast Heart Rate: __________
- Apnea Delay: __________

**Event:**

<table>
<thead>
<tr>
<th>Date:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Time – A.M. or P.M.</td>
</tr>
<tr>
<td>Number of Beeps Counted</td>
</tr>
</tbody>
</table>

**Baby:**

<table>
<thead>
<tr>
<th>Awake</th>
</tr>
</thead>
<tbody>
<tr>
<td>Asleep</td>
</tr>
<tr>
<td>Breathing</td>
</tr>
<tr>
<td>NOT BREATHING</td>
</tr>
<tr>
<td>Couldn’t Tell</td>
</tr>
</tbody>
</table>

**Color Change:**

<table>
<thead>
<tr>
<th>Normal Color</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pale</td>
</tr>
<tr>
<td>Blue</td>
</tr>
</tbody>
</table>

**Monitor:**

<table>
<thead>
<tr>
<th>Apnea Alarm</th>
</tr>
</thead>
<tbody>
<tr>
<td>Slow Heart Rate Alarm (Bradycardia)</td>
</tr>
<tr>
<td>Fast Heart Rate Alarm (Tachycardia)</td>
</tr>
</tbody>
</table>

**Action:**

<table>
<thead>
<tr>
<th>Nothing-baby is fine</th>
</tr>
</thead>
<tbody>
<tr>
<td>Real Alarm- reset</td>
</tr>
<tr>
<td>Gentle Stimulation</td>
</tr>
<tr>
<td>Vigorous Stimulation</td>
</tr>
<tr>
<td>CPR</td>
</tr>
</tbody>
</table>
**IPPB (Intermittent Positive Pressure Breathing)**

**Education**
- Discuss the goals of IPPB therapy: 1) to treat/prevent airway closure (atelectasis), 2) to mobilize secretions, 3) to promote a cough, 4) to deliver aerosolized medication.
- Review the physician Rx and the need to use the equipment as prescribed.
- Discuss the length and frequency of treatments via physician prescription. (15-20 min./ Q4 (every 4 hours), QID (four times a day), Q3 (every 3 hours), TID (3 times a day), Q2 (every 2 hours), BID (twice a day), or PRN (as needed).)
- Discuss contraindications/potential side effects which include: 1) Hyperventilation [fast breathing], 2) Barotrauma (lung damage due to extreme pressure) or airway collapse, 3) Fatigue, 4) Tremors or shakes, 5) Tachycardia (from nebulizer medication) [fast heartbeat; normal heart rate for adults: 60 – 100, children: 100-140, infants: 120-160 bpm], 6) allergies.
- Discuss safe medication storage (refer patient to specific medication instruction).

**Demonstration**
- Plug power cord into properly grounded AC electrical outlet. Do not use an extension cord.
- Fill nebulizer cup on the Vortran™ IPPB circuit with the medication vial and the balance with saline solution (15-20ml total). The Vortran™ will nebulize at a rate of 1ml/minute.
- Attach one end of the plastic tubing to the air outlet on the compressor and the other end to Vortran™ IPPB nebulizer reservoir.
- Adjust pressure on the high flow compressor to 40-50 psi.
- Adjust the IPPB pressure and sensitivity on the modulator piece to tolerance. 15-20cmH20 is a conservative starting pressure. Increase pressure according to physician’s guidelines. (See Vortran™ IPPB kit instructions.)
- Use mouthpiece or inflatable mask to deliver therapy. Sit upright with back straight. Take 10-15 slow deep breaths. Rest for 1-2 minutes and repeat. The treatment should last 15-20 minutes. If using a mouthpiece, nose plugs are recommended to prevent air escaping from the nose.
- It is extremely important to cough and spit out mucous from the central airways. Cough as frequently as prescribed.
- Ways to detect and correct low aerosol levels: 1) listen for a crackling sound or change in pitch from the nebulizer cup, 2) tap the nebulizer lightly until aerosol mist appears.
- Disconnect tubing from the IPPB kit. Clean and store the IPPB with tubing in a clean plastic bag.
- A clinician will follow up with you every day for the first 3 days of therapy.

**Cleaning/Maintenance/Troubleshooting**
- Discuss equipment malfunction procedures: 1) power failure, 2) compressor wear/ failure.
- Clean compressor filters weekly in warm soapy water. Rinse and allow to air dry.
- Daily, disassemble IPPB unit and wash in hot soapy water (7 ft. tubing excluded). Rinse to remove soapy residue.
- Three times per week, soak IPPB circuit (excluding the modulator adapter) using one of the methods listed in the General Cleaning Instructions given previously in this manual. Do not towel dry or clean in dishwasher.
- If using a medical disinfectant, follow the manufacturer’s guidelines and safety precautions carefully. The high flow compressor can be sprayed with cleaner and wiped with a clean paper towel.
- If the compressor does not power up: 1) Check the outlet 2) Unplug the machine and check the fuses.
- If the Vortran™ IPPB kit doesn’t pressurize/create a mist: 1) Check hose connections. 2) Check all connections on kit. 3) Check nebulizer cup to ensure that clear adapter is not cracked or damaged.
- replace the Vortran™ IPPB kits every 6 months.
LOW AIR LOSS MATTRESS
ROHO™, Turn Q™, 3500 S™

Education
- Explain the goals of low air loss therapy: To prevent pressure soreness and decubitus ulcers.
- Explain that mattress should be used according to physician’s prescription.
- Discuss contraindications for low air loss therapy: 1) COPD (The continuous circulation of dry air can thicken pulmonary secretions. Body position on the bed will also affect the normal cough mechanism). 2) Patients undergoing moist wound healing therapies (The circulation air can dry out wound area increasing the risk of infection).

Demonstration
- Remove hospital bed mattress. Install air loss mattress on the bed frame and power unit on the footboard.
- Connect air hoses to all connectors by their standard connection or color-coding. Make certain the CPR plug is securely fastened into the proper fitting. The plug can be found at the machine or the mattress.
- Inflate mattress. Set the patient weight or comfort level: Use arrow keys (Turn-Q+™), Set Range Switch (3500ST™) [Low 0-180 lbs., High 150-350 lbs.]. Set comfort level on ROHO™ to maximum.
- Demonstrate how to adjust air pressure level on the power unit. *Note- The maximum weight capacity for any low air loss mattress is 400 lbs.
- For 3500ST™ and ROHO™: Start at maximum pressure. Gradually lower the control knob/comfort level setting every 3 minutes until about 30% of the patient’s body is immersed into the mattress top surface.
- For Turn-Q+™: Set Turn Mode and Turn Interval Time settings. Note: A caregiver should observe 2 complete turning cycles when using the automatic turning mode.
- Discuss the Alternating Pressure and Upright mode on the ROHO™ system (Alternating pressure mode is designed to reduce the mattress pressure by 20% to take pressure away from weight bearing areas. The Upright mode is used when the head of the bed is in the upright position
- Allow pump to operate at all times when patient is in bed.
- The Firm mode button will increase the mattress pressure to maximum. This feature is used when repositioning or moving a patient on the mattress.
- Should patient require immediate deflation of the mattress turn power unit off and pull CPR Plug. *Note- The CPR plug is found on the Turn Q+™ control unit. The CPR plug is on the mattress for the 3500ST™. For the ROHO™, turn power button off for CPR.

Cleaning/Maintenance/Troubleshooting
- Power Unit: Always unplug pump from electrical outlet before cleaning. Wipe pump with a damp, not wet, cloth. Never submerse pump in water or liquids.
- Therapy Pad: Remove pad from bed; wipe with clean cloth dampened with clean warm water and mild soap. Allow to air dry before replacing pad on bed.
- Launder mattress pad covers once per week.
- For the ROHO™ mattress, clean reusable filter once a month in warm soapy water.
- If pump is operating, but mattress is not inflated:
  - Check air supply tubing connections at power unit and mattress.
  - Check mattress for cuts, rips, or holes, call Norco.
- If Power Unit is not operating:
  - Check power cord at wall receptacle. Does a light switch operate wall receptacle?
  - Check “on-off” switch on pump. If pump is plugged into power source and unit is turned on, but will not operate, call Norco.
- Never attempt to repair the Power Unit.
- Preventive Maintenance Schedule: Performed annually.
NEBULIZER (LARGE VOLUME) / TRACH MIST

Education

- Explain the goals of cool and heated mist therapy: 1) To decrease inflammation (cool mist only), 2) To promote a cough, 3) To improve efficiency of cough, 4) To thin/hydrate secretions, 5) To provide humidification through an artificial airway.
- Review physician’s prescription (i.e., hours of use, length of need, oxygen use, etc.).

Demonstration

- Plug power cord into properly grounded outlet. Do not use an extension cord.
- Attach nebulizer head and water bottle to the compressor. Set compressor between 20-30 PSI by turning the knob clockwise to increase, or counter clockwise to decrease.
- Attach six (6) foot Corr-a-flex tubing to nebulizer heads.
- Cut Corr-a-flex tubing in the most gravity dependent (lowest) portion of the tubing. Place drain bag into circuit. Empty bag as needed. Attach trach mask, aerosol mask, or face tent on the end of the six (6) foot tubing.
- If oxygen is used, follow safety guidelines for oxygen in the handbook. (See Norco clinician for proper oxygen placement into circuit). Bleed in oxygen with adapter attached proximal to the equipment interface.
- If using a heater, place thermometer “T” adapter as close to the mask interface as possible.
- Adjust flow by turning the flow control on the nebulizer (open window = higher flow).
- Discuss preventive maintenance (yearly) and equipment follow-up (monthly).

Cleaning/Maintenance/Troubleshooting

- Clean compressor filters weekly, by hand, in warm soapy water (liquid soap). Rinse well and let air-dry.
- Clean the exterior of the machine with a damp, soapy cloth and wipe with a clean dry cloth.
- Replace nebulizer head, six (6) foot Corr-a-flex tubing, drain bag, thermometer “T” and mask interface Bi-monthly, or more frequently if required.
- Change water source as necessary (when empty).
- If nebulizer is not producing a mist: 1) Check nebulizer head for cracks, 2) Make sure that nebulizer head is secured to the water bottle, 3) Check water level in bottle. If empty, replace.
- Contact Norco if compressor will not maintain PSI levels above 20 PSI.
- Plan for emergency back up power if applicable (generator, etc.)
- Functional check schedule: Performed monthly.

NEBULIZER (SMALL VOLUME)

Education

- Discuss the purpose of aerosolized medication therapy via Nebulizer: 1) To open airways [bronchiolar dilation], 2) To thin secretion, 3) To promote cough.
- Review the physician Rx and the need to use treatment as prescribed.
- Discuss length and frequency of treatments per physician prescription [10-15 min. /Q4 (every 4 hours), QID (4 times a day), Q3 (every 3 hours), TID (3 times a day), Q2 (every 2 hours), BID (Twice a day) PRN (as needed).
- Discuss contraindications/potential side effects, which include: 1) Hyperventilation [fast breathing], 2) Fatigue, 3) Tremors or shakes, 4) Tachycardia [fast heartbeat; normal heart rate for adults: 60 – 100, children: 100-140, infants: 120-160 BPM], 5) Allergies.
- Discuss safe medication storage (refer patient to specific medication instruction).

Demonstration

- Plug power cord into properly grounded AC electrical outlet or appropriate DC power supply (car cigarette lighter) if unit is an AC/DC model. Do not use an extension cord.
Attach one end of the plastic tubing to the air outlet on the compressor and the other end to the nebulizer cup.

Fill nebulizer cup with prescribed medication.

Take pulse for 60 seconds (see above for normal ranges).

Turn nebulizer switch to on to begin treatment as prescribed. During treatment take slow, deep breaths and occasionally hold breath for several seconds before exhaling. Sit upright with back straight.

It is extremely important to cough and spit out mucous from the central airways. Cough as frequently as prescribed.

Ways to detect and correct low aerosol levels: 1) Listen for a crackling sound or change in pitch from the nebulizer cup, 2) Tap the nebulizer lightly until aerosol mist appears, 3) Treatments should take 10 - 15 minutes (if using 3cc of medication).

Ten minutes after treatment is completed, take pulse again. If pulse increases more than 20 beats from the baseline pulse, contact physician.

Disconnect nebulizer and tubing. Clean & store the nebulizer and tubing in a clean plastic bag.

**Cleaning/Maintenance/Troubleshooting**

- Discuss equipment malfunction procedures. 1) Power failure, 2) Compressor wear/ failure.
- Check external filter once per month. Clean and replace if necessary.
- Daily, disassemble nebulizer and wash in hot soapy water (7 ft. tubing excluded). Rinse to remove soapy residue.
- Three times per week, disinfect nebulizer cup and “T” piece using one of the methods listed in the General Cleaning Instructions given previously in this manual. Remove items from solution, rinse and allow to air dry. Discard cleaning solution after each use. Do not attempt to save and reuse. Do not towel dry or clean in dishwasher.
- If using a medical disinfectant, follow the manufacturer’s guidelines and safety precautions carefully. Nebulizer compressor can be sprayed with cleaner and wiped with a clean paper towel.
- We recommend replacing disposable hand held nebulizers every month, many insurance companies allow two (2) per month. Reusable handheld nebulizer kits should be replaced every 6 months.

**NECK TRACTION**

**Education**

- Explain the purpose of neck traction: 1) To treat neck, upper back and arm pain
- Review the physician or therapist’s prescription; use the equipment as prescribed.
- Review any materials on neck traction before use.

**Demonstration**

- Follow the assembly and usage guide provided with the neck traction unit.
- Lay on your back with your neck between the wedges. (See manual)
- Secure the head strap over your forehead using the hook and loop attachment.
- Use the hand pump and watch the gauge. Be sure to follow your physician’s guidelines. As the pressure increases, the neck will begin to stretch. If you feel pain, release the pressure. Once you are comfortable, move the pump to hold position. Maintain level of traction for the time prescribed by physician.

**Cleaning/Maintenance/Troubleshooting**

- If dirty clean exterior of the neck traction with a damp cloth.
- If the pump or hoses are leaking on the neck traction unit, check the connections. If any connections, locking knobs or leg snap buttons seem loose or faulty on the back traction, contact Norco.
NEGATIVE PRESSURE WOUND THERAPY

Education

- Discuss the purpose of negative pressure wound therapy (NPWT): 1) To promote healing in large or chronic wounds, 2) To fight infection, 3) To enhance healing of burns
- What medical conditions are contraindicated for NPWT: 1) The presence in the wound of necrotic tissue with eschar, if debridement is not attempted, 2) Untreated osteomyelitis within the vicinity of the wound, 3) Cancer present in the wound, 4) The presence of a fistula to an organ or body cavity within the vicinity of the wound
- Discuss briefly how NPWT works through use of the pump and wound dressing to promote healing
- Identify the various alarms, controls, connections, and status meters and explain the function of each.
- Describe the difference between hospital and homecare wound pumps
- Discuss the application of the wound dressing
- Discuss treatment and application of wound dressing for multiple and tunneling wounds
- Identify the accessories for securing, transporting, and odor control that can be used with the pump
- Discuss acquisition of supply items and frequency

Demonstration

- Identify the indicators and buttons on the top panel of the therapy unit.

- Red – Indicates there is a large air leak in the dressing system that needs immediate attention.
- Yellow - Indicates there is a small or slow air leak in the dressing system but adequate suction is still being applied to wound bed.
- Green - This light indicates therapeutic level of suction is being applied to wound bed and pump is functioning properly.
- Blue - Indicates there is an obstruction in the suction as would happen with a full collection canister, a kink in tubing or drainage obstruction at wound bed.
Cleaning/Maintenance/Troubleshooting

- Clean exterior by wiping down top panel with lightly damp cloth
- If the pump light indicator is showing Red or Blue for more than 2 hours the dressing must be removed and the system applied prior to use of the Negative Pressure Wound Therapy System needs to be used / reapplied
- If the Yellow light indicator is showing, a therapeutic level of suction continues to be applied to the wound but there is a small or slow leak in the dressing system. What can be done:
  - Apply gentle pressure at the borders of the dressing cover (drape) to determine if the Green indicator light will again display. When it does, reinforce this area to obstruct the leak.
  - If the Green indicator light will not display but the Yellow continues to display, there is no need to do further intervention until the next scheduled dressing change. Contact the practitioner for additional instructions.
- Disconnect the dressing tubing from the Pump before showering. After reconnecting tubing to pump after showering, it may display a Blue indicator for about 5 minutes before returning to Green.
- If your pump indicator light is Blue (not related to showering):
  - Ensure that none of the tubing lines are kinked or clamped.
  - Change the collection canister.
  - If the above action does not resolve the Blue Indicator light, there may be a drainage obstruction in the wound bed. Remove the Negative Pressure dressing and apply a dressing system used prior to the Engenex System or as directed by your practitioner.
- In case of emergency, dial 911.

OXIMETER

Education

- Discuss the purpose of spot check and continuous oximetry: To monitor blood oxygen levels non-invasively.
- Explain that SpO2 monitoring is used as a guide for trending data. The SpO2 value is not as accurate as the SaO2 or PaO2 obtained from a blood gas.
- Review the physician’s prescription.
- Explain that oximetry is to be used only under the supervision of and prescription by a licensed physician.
- Document activities and incidents as required by physician on Daily Record, located near the back of the book.

Demonstration

- Plug power cord into properly grounded outlet. Do not use an extension cord.
- Describe internal battery life and charging times specific to the oximeter.
- Set high/low heart and high/low SpO2 alarms according to physician’s guidelines.
- Demonstrate adjustment of pulse tone, alarm volumes and alarm silence function. Note: Never disable the alarm silence function when continuously monitoring a patient.
- Demonstrate proper: 1) Placement of oximetry probe, 2) Observe the pulse bar for a strong signal (a weak signal may result in inaccurate readings), 3) Sensors should fit comfortably without restricting blood flow, 4) See Cleaning/Troubleshooting for proper probe care.

Cleaning/Maintenance/Troubleshooting

- Clean the surface of the probe sensors prior to patient use. Rotate probe sites. Occluded or dirty sensors will result in SpO2 inaccuracy.
- Keep sensors out of bright light. Warn patient to avoid wearing colored nail polish when using oximeter, as this will affect accuracy of oximeter.
- Avoid electromagnetic/radio interference (i.e., microwave, other medical monitoring equipment). Keep the oximeter at least thirty-six (36) inches from any potential interference.
- Use sensors specific to the manufacture of the oximeter.
- If the unit fails to operate, contact Norco.
**OXYGEN ANALYZER**

**Education**
- Explain the purpose of the oxygen analyzer: To measure the oxygen level within a gas or gaseous mixture.
- Demonstrate analyzer calibration. Perform every eight hours with a calibrated gas (oxygen) standard each business day.

**Demonstration**
- Follow the specific guidelines to document analyzer calibration (Form FDA14):
  1. Enter date and time.
  2. Enter the “concentration of standard” (from calibrated gas [oxygen]).
  3. Set flow at 2lpm and wait until value stabilizes for 10-15 seconds.
  4. Enter the FIO2 before adjustment.
  5. If FIO2 is other than 100, calibrate analyzer to 100 using the turn wheel.
  6. Disconnect the oxygen and wait 90 seconds. Analyzer should return to 21% ± 2%.
  7. Enter reading on room air.
  8. Indicate whether unit passes/fails calibration and sign name in operator column.
- If unit fails, discontinue use and check battery and sensor. Replace defective items and redo analyzer calibration process.

**Cleaning/Maintenance/Troubleshooting**
- If analyzer fails the calibration procedure, discontinue use and obtain a new sensor.
- Check 9-volt battery periodically.
- Avoid drastic temperature, humidity, and pressure fluctuations.

**OXYGEN DELIVERY SYSTEMS**

General precautions:
1. NEVER SMOKE WHILE USING HOME OXYGEN DELIVERY SYSTEM OR ANY SOURCE OF HIGH-CONCENTRATION OXYGEN.
2. Oxygen tubing poses a potential fall risk. Be aware of the placement of tubing to avoid falls.
3. Never use hand lotions, hair sprays, and/or other flammable aerosol agents within six feet of the oxygen source. Do not use petroleum-based products (e.g. Vaseline) in or around the nose when using oxygen.
4. Do not operate electrical appliances (such as electric razors, hair dryers, electric blankets, etc.) near oxygen equipment.
5. Never lubricate home oxygen equipment or supplies. Internal maintenance is the responsibility of Norco.
6. Always use caution not to kink oxygen tubing. Never lay heavy objects on connective tubing. Drain all moisture that may develop in connective tubing (this is completely normal) daily. Do not allow tubing to come in contact with any source of direct heat that may cause damage to that tubing.
7. Large oxygen cylinders should be stored in a place in the home where they will be safe from tipping over. All large cylinders should have a base stand to prevent them from tipping over. Cylinders not in a stand or cart should be laid on their side in a well-ventilated area. Cylinders are not to be stored in a confined space, such as a car trunk or closet.
8. Liquid oxygen is 297 degrees below zero F. Contact can cause frostbite. Adhere to manufacturer’s recommendations on storage and filling of liquid oxygen systems. Do not touch frosted fittings or piping. Exposure to liquid oxygen should be reported immediately to a physician and Norco for proper course of action. Do not carry the portable unit under a coat or any form of clothing. Do not store liquid oxygen equipment (reservoirs, portables) in confined spaces such as closets or car trunks.
9. ALWAYS ADHERE TO YOUR ATTENDING PHYSICIAN’S PRESCRIPTION.
10. Ensure that smoke detectors are functioning and a fire extinguisher is present. Batteries should be changed in smoke detectors every year.
11. Notify the local fire department and power company that oxygen is being utilized in the home. In some areas, priority service restoration can be provided in the event of a major power outage.

12. When you have questions about your oxygen delivery equipment, call Norco.

**Education**

- Discuss the purpose of oxygen therapy: 1) To decrease the work of the heart, 2) To decrease the work of breathing, 3) To improve exercise tolerance, 4) To improve lifestyle, etc.
- Review the physician’s prescription and the need to use treatment as prescribed (liter flow, hours of use, length of need).
- Discuss potential side effects/contraindications of oxygen therapy: 1) Fire/smoking precautions (tubing at least six feet away from source of heat or open flame and never smoke while using oxygen), 2) Post “No Smoking/O2 In Use” sign, 3) Nasal dryness/irritation (explain hydration methods), 4) Contact dermatitis (abrasions of nose, cheeks or ears -- use barriers).
- Discuss use and care of oxygen tubing: 1) Do not kink, 2) Do not place heavy objects on tubing, 3) Avoid contact with any source of heat, 4) Remove moisture in tubing (water trap).
- Discuss mode of delivery: 1) Nasal cannula [< 5 lpm], 2) Oxygen mask(s) [≥ 6 lpm].

**Demonstration for Cylinder High Pressure System**

- Discuss cylinder, base/cart and regulator. Make sure that cylinder base/cart is secure.
- Never lubricate the oxygen regulator.
- Demonstrate proper regulator placement (yoke "pin" system on E cylinder, CGA on K regulator). See “Patient Instructions for E Cylinder” later in this Handbook.
- Open cylinder valve slowly. A quarter of a turn is sufficient to pressurize cylinder to 2200 PSI.
- Set regulator to desired flow rate (as physician prescribed only).
- Discuss tank duration times (see Oxygen Flow/Time Chart).
- Discuss cylinder storage in home (lay cylinder on side in well-ventilated area; avoid closets).
- Discuss safe cylinder transport in automobile (never transport or store cylinders in trunk. Ensure that cylinders are secured with a restraint).
- Demonstrate a cylinder change. Make sure that regulator PSI gauge is “zero” before attempting a change.
- Demonstrate the proper attachment of the nasal cannula to the portable unit and the patient.

**Demonstration for High Flow Oxygen**

- Discuss the purpose of high flow oxygen.
- Describe briefly how GP55 liquid oxygen systems and/or 10 LPM concentrators work and discuss estimated GP tank times.
- Discuss setting the proper liter flow on the GP55 and/or 10 LPM concentrator. Review the physician's Rx and the need to use oxygen as prescribed.
- Explain possible throat discomfort and humidification. Demonstrate filling and attaching a humidifier.
- Explain possible nose and ear irritation. Discuss use of non-petroleum based gels, ear protection and changing to a different cannula.
- Explain the procedure for removing condensation that accumulates in connecting tubing.
- Identify the various controls, gauges and connections on the GP55 and/or 10 LPM concentrator, explaining the function of each.
- Discuss proper location of the GP55 outside the home and 10 LPM concentrator inside the home
- Discuss emergency backup in the event of a GP or concentrator failure, including adequate backup (6 hours of "E" or "K" cylinders) available.
- Discuss applicable alarms on the 10 LPM concentrator, as applicable.
- Discuss proper procedures to be taken by the patient or caregiver in the event of equipment failure.
- Discuss liquid oxygen safety guidelines, as applicable.
- Discuss functional check schedule and proper documentation.
Demonstration for Oxygen Conserving Devices (Liquid & High Pressure)

- See “Demonstration for Cylinder High Pressure System” for general instructions.
- Discuss theory of operation: 1) Unit will only provide oxygen upon inspiration, 2) Cylinder should last two to three times longer than a standard system, 3) Respiratory rate plays a major role in tank times. 4) Flow can be set to conserving or continuous on some models.
- Demonstrate regulator placement or LOX filling procedure (see High Pressure Oxygen System or Liquid Oxygen Demonstration Procedure).
- Set liter flow to prescribed level and discuss alarms (if applicable).
- Demonstrate proper placement of single or dual lumen nasal cannula.
- Discuss tank times (see Oxygen Flow/Time Chart).

Demonstration for Concentrator

- Turn oxygen concentrator on and discuss theory of operation: 1) Separates oxygen from air, 2) Purges nitrogen from the oxygen, 3) Stores oxygen in a holding tank available for use at the prescribed lpm.
- Ensure that concentrator is plugged directly into a properly grounded outlet.
- Demonstrate proper placement, assembly and filling of the bubble humidifier. Ensure that the humidifier “bubbles” once the unit is turned on.
- Demonstrate proper placement of nasal cannula/mask.
- Demonstrate proper oxygen setting (line should split the ball).
- Discuss alarms and troubleshooting: 1) Standard 3 alarm tones when concentrator is turned on. 2) Power failure alarm (short alarm with a pause between alarms). 3) Concentrator failure alarm (continuous tone).
- Do not place concentrator close to any object. Keep at least 18 inches clearance on all sides. Place concentrator in an open well ventilated area to prevent overheating. Keep concentrator away from flammable objects and at least five feet from open flame.
- Discuss follow up with patient, including concentrator check by Norco staff.
- Functional check schedule: Concentrator check every 6 month (some contracts require quarterly checks).
- Preventive Maintenance schedule: Performed annually.

Demonstration for HomeFill™ Concentrator

- Discuss proper assembly of the HomeFill™ unit to the concentrator: 1) Place the HomeFill™ unit on top of the concentrator using the bracket attachment. Do not place concentrator/HomeFill™ unit less than 18 inches from any object. 2) Insert the interconnect hose to the inlet fitting on the HomeFill™ unit. Attach the other end of the hose to the outlet fitting on the concentrator (see diagram). 3) Turn on the HomeFill™ compressor and the concentrator.
- Demonstrate the proper flow setting according to the physician’s prescription. (**Note- The HomeFill™ unit will not function above 3lpm while a cylinder is filling. It will deliver oxygen to the patient while it is filling a cylinder.)
- Inspect the cylinder and cylinder valve for any signs of damage. If damage is present, do not use cylinder and contact Norco.
- Attach cylinder to the HomeFill™ station. 1) The “wait” yellow indicator light will come on for 0-3 min. 2) The “Filling” green indicator light will come on while the cylinder is filling. 3) The “02 Below Normal” yellow indicator may come on periodically for the first 5 minutes. If this indicator stays lit for more than 10 minutes, contact Norco. 4) When the cylinder is full, the “Full” green indicator will light. Detach cylinder by depressing the silver ring and lift up on cylinder. 5) Set conserving device to prescribed flow. (See flow/time chart for tank times)
- Explain that the filling process will take 2.5 hours for an M9 cylinder and 1.5 hours for an M6 cylinder.
OXYGEN SOLUTIONS

Freedom to move... around the house,

HELiOS™ Plus-LOX
- Lasts up to 10 hours at 2 LPM
- Portable, efficient and weighs only 3.6 lbs. filled
- "No Spill" design with no batteries or electricity required
- Up to 4 LPM demand flow and up to 6 LPM continuous flow

the town,

HELiOS™ Marathon-LOX
- Lasts up to 20 hours at 2 LPM
- Portable, efficient and weighs only 5.6 lbs. filled
- "No Spill" design with no batteries or electricity required
- Up to 4 LPM demand flow and up to 6 LPM continuous flow

the world!

Eclipse 3™ POC
- AC/DC and battery operated
- Continuous Flow and Pulse Dose Modes
- Both stationary & ambulatory—a 24/7 oxygen solution
- No more storing or waiting for oxygen tanks
- Lower electric bills vs. standard concentrators

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CAIRE
A Chart Industries Company
Discuss alarms and troubleshooting for the HomeFill™ compressor: 1) If the “Attention” alarm sounds make sure that the cylinder is fully attached. Placing a cylinder >1500psi on the HomeFill™ unit will eventually cause this alarm. Replace with an empty cylinder. If alarm persists, contact Norco.

- Functional check schedule: quarterly
- Preventive Maintenance schedule: Performed annually.

Demonstration for Liquid Oxygen

- Explain theory of liquid oxygen: 1) LOX is -297F. Contact can cause severe burns 2) Discuss the advantage of LOX over other oxygen systems (a) Functions from pressure, not electricity; (b) Portability, increased portable tank times on continuous flow.
- Set liquid oxygen reservoir to prescribed liter flow. Discuss liquid reservoir system: 1) Fill gauge (read the top of the green line to determine vessel content), 2) Liter flow dial, 3) Portable release button, 4) Blue fill nozzle, 5) Placement in home at least 18”on both sides clear of walls furniture or other objects.
- Demonstrate proper placement, assembly and filling of the bubble humidifier. Ensure that the humidifier “bubbles” once the unit is turned on.
- Demonstrate proper placement of nasal cannula or mask.
- Discuss portable liquid oxygen system: 1) Pressure release flap, 2) Liter flow dial, 3) Blue fill nozzle, 4) Content gauge (scale mechanism).
- Demonstrate proper procedure for filling the portable unit: 1) Place portable on top of LOX system aligning blue nozzles, 2) Depress portable and release pressure flap on side of unit, 3) Fill time is 1 to 2 minutes, 4) When oxygen begins “fogging and sputtering” from the stationary, close pressure flap and release oxygen portable by depressing release button on top of the unit.
- Discuss portable tank times (see Oxygen Flow/Time Chart).
- Discuss safety with liquid oxygen: 1) Do not overfill portable, 2) Keep LOX in an open, well-ventilated area, 3) Do not place portable under a coat or in enclosed area (closet), 4) Do not touch frosted buildup on piping. Before filling portable unit, dry blue nozzle(s) with cloth. 5) If skin comes in contact with LOX, rinse area with warm water. If burn is severe, contact physician.

Cleaning / Maintenance/ Troubleshooting of Oxygen Systems

- Change cannula/mask once a month
- Change 25/50 ft. oxygen tubing every 3 months.
- Change humidifier bottle monthly. Fill with distilled H₂O.
- To clean the humidifier, soak chamber/lid in one of the solutions listed in the General Cleaning Instructions given previously in this manual. Rinse well in hot running water. Allow to air dry prior to reuse. Clean once per week in warm soapy water.
- For Concentrators: clean filters weekly in warm soapy water. Rinse well in hot running water. Allow to air dry prior to reuse. Use a warm, wet washcloth to keep concentrator exterior free of dust or debris. Note: Norco is responsible for internal maintenance.
- For LOX: empty water collection bottles as needed. Wipe exterior of reservoir with a warm, wet washcloth to keep free of dust or debris. Note: Norco is responsible for internal maintenance.
- If oxygen concentrator/liquid oxygen/high pressure system fails, contact Norco. Use portable oxygen system until Norco staff replaces equipment.
- Discuss humidifier troubleshooting (Secure lid, overfilling, crack or flaw in lid, clogged diffuser etc).
- Discuss the “In Case of Emergency”, and “No Smoking, Oxygen in Use” card cutout on the back cover of this handbook.
Patient Instructions for “E” Cylinder

Note: each new cylinder comes with a plastic washer (under the plastic cover). If the regulator already has a plastic washer in the coupling mechanism, you do not need a new washer. Use only one washer. Using more than one washer may make the regulator leak.

1. Place cylinder in stand. Tighten thumbscrew on front of cart to secure tank to stand. Note: The “E” cylinder neck has a white plastic cover. Pull on the tab to remove the plastic cover.

2. Put regulator over neck of cylinder. Look for two pins inside regular coupling [Figure 2]. Slide into matching holes in the cylinder neck. Tighten wing nut (turn to right) until regulator is snug.

3. Put cylinder wrench on valve stem at top of cylinder neck [Figure 3]. Turn wrench counter clockwise (left) to open the cylinder. If you hear a loud rush of air, turn the cylinder wrench clockwise (right) and close cylinder. Then, tighten regulator wing nut. Open valve again. If you still hear a loud rush of air, turn off valve and check plastic washer. If washer is missing or damaged, replace with new washer that comes with cylinder.

4. Regulator has a pressure gauge and a flow control knob. The pressure gauge shows how much oxygen is in the cylinder. Change cylinder when gauge reads 1/4 (500 psi) or less. The flow control knob shows liter flow. To adjust to proper liter flow, turn knob to the right to increase flow, or to the left to decrease flow [Figure 4 & 5].

5. Connect oxygen tubing to nipple port on the regulator.

6. When cylinder is not in use, the pressure gauge must read zero. Leave flow control knob on number that matches your prescribed liter flow. Then, turn the cylinder valve as instructed above.
Patient Instructions for Liquid Oxygen

**Stationary Reservoir**

1. Fill humidifier with distilled water
2. Attach humidifier to breathing oxygen supply
3. Turn Flow Control to your prescribed setting
4. Check for a steady stream of bubbles

**Filling the Portable Reservoir**

1. Set portable on top of Liquid Reservoir system aligning the blue nozzles
2. Depress portable and release pressure flap on side of unit
3. Fill time is 1 to 2 minutes
4. When oxygen begins “fogging and sputtering” from the stationary, close pressure flap and release portable by depressing release button on top of the unit.
5. Lift portable by the strap to check contents.
# OXYGEN FLOW/TIME CHART

## Standard Oxygen System

<table>
<thead>
<tr>
<th>Continuous Flow</th>
<th>E Cylinder</th>
<th>K Cylinder</th>
<th>LOX PB1000™</th>
<th>LOX PB550™</th>
<th>PB Marathon™</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>9 - 10 hrs.</td>
<td>4 - 4.5 days</td>
<td>14 - 16 hrs.</td>
<td>8 –9 hrs.</td>
<td>10.5 hrs.</td>
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<tr>
<td>2</td>
<td>4 - 5 hrs.</td>
<td>2 - 2.5 days</td>
<td>7 - 8 hrs.</td>
<td>3.5 – 4.5 hrs.</td>
<td>5.5 hrs.</td>
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<tr>
<td>3</td>
<td>3 - 4 hrs.</td>
<td>1 - 1.5 days</td>
<td>5 - 6 hrs.</td>
<td>2 – 3 hrs.</td>
<td>3.5 hrs.</td>
</tr>
<tr>
<td>4</td>
<td>1.5 - 2.5 hrs.</td>
<td>1 day &amp; 3 hrs.</td>
<td>3 - 4 hrs.</td>
<td>1 – 2 hrs.</td>
<td>2.5 hrs.</td>
</tr>
<tr>
<td>5</td>
<td>2 hrs.</td>
<td>23 hrs.</td>
<td>2 hrs.</td>
<td>.5 – 1.5 hrs.</td>
<td>2.0 hrs.</td>
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<tr>
<td>8</td>
<td>45 min. - 1.5 hrs.</td>
<td>14 - 15 hrs.</td>
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<td></td>
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</tr>
<tr>
<td>10</td>
<td>30 min. - 1 hr.</td>
<td>11 - 12 hrs.</td>
<td></td>
<td></td>
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<tr>
<td>15</td>
<td>20 - 40 min.</td>
<td>7 - 8 hrs.</td>
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## Oxygen Conserving Devices

Tank times based upon a respiratory rate of 20 BPM

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<tr>
<th>M 6 Cylinder</th>
<th>M 9 Cylinder</th>
<th>C Cylinder</th>
<th>LOX Portables</th>
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<tr>
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<td>Hours</td>
<td>Hours</td>
<td>Hours</td>
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<td>.5</td>
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<td>16 – 17</td>
<td>20</td>
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<tr>
<td>1</td>
<td>5</td>
<td>8</td>
<td>10</td>
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## Pediatric Oxygen Delivery

Based upon a full tank at 2200 psi

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<th>D Cylinder</th>
<th>E Cylinder</th>
<th>K Cylinder</th>
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<tbody>
<tr>
<td>1 / 32</td>
<td>91 hrs.</td>
<td>189 hrs. – 7.5 days</td>
<td>13.5 days</td>
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<tr>
<td>1 / 16</td>
<td>45 hrs.</td>
<td>93 hrs.</td>
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<tr>
<td>1 / 8</td>
<td>22 hrs.</td>
<td>46 – 47 hrs.</td>
<td>82 hrs.</td>
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<td>1 / 4 (.25)</td>
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<td>23 hrs.</td>
<td>41 hrs.</td>
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<td>1 / 2 (.50)</td>
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<td>11.5 hrs.</td>
<td>20 hrs.</td>
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</tr>
<tr>
<td>1</td>
<td>2.5 hrs.</td>
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<td>10 hrs.</td>
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<tr>
<td>1.5</td>
<td>1 hr. 45 min.</td>
<td>3.5 – 4 hrs.</td>
<td>6.5 hrs.</td>
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<td>1 hr. 20 min.</td>
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<td>4 - 5 hrs.</td>
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### Liquid Oxygen Use Time Chart: Duration

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**Reservoirs**

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**Notes:**
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- Duration times for Demand Mode are based on 20 bpm and are shown in *italic*
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## OXYGEN SOLUTIONS

### OXYGEN CONCENTRATOR

<table>
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<tr>
<th>PROBLEM</th>
<th>POSSIBLE REASON(S)</th>
<th>SOLUTION(S)</th>
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</table>
| Concentrator won’t turn on                     | Electrical Problem                  | ✓ Make sure con is plugged in  
|                                                 |                                     | ✓ Make sure there is power to the outlet  
|                                                 |                                     | ✓ Check reset button to be sure it is pushed in  
|                                                 |                                     | ✓ Check power outlet not controlled by light switch  |
| Concentrator is hot                            | 1. Filters are dirty  
|                                                 | 2. Not enough clearance around the con  
|                                                 | 3. Red/yellow indicator is lit       | ✓ Clean filters  
|                                                 |                                     | ✓ Make sure there is a 12-18 inch space around and under the concentrator  |
| Concentrator running but unable to adjust the proper liter flow | 1. Humidifier is cross-threaded  
|                                                 | 2. Humidifier lid is not tight  
|                                                 | 3. Humidifier is too full  
|                                                 | 4. Humidifier is clogged  
|                                                 | 5. Tubing is kinked/obstructed      | ✓ Re-thread humidifier bottle lid  
|                                                 |                                     | ✓ Re-tighten humidifier bottle lid  
|                                                 |                                     | ✓ Make sure water level is below “maximum level.”  
|                                                 |                                     | ✓ Replace humidifier  
|                                                 |                                     | ✓ Replace tubing  |
| Concentrator is alarming                       | 1. “Normal” start up alarms  
|                                                 | 2. Power failure/circuit breaker    | ✓ 3-4 beeps when the concentrator is turned on. This is a normal function  
|                                                 | 3. Concentrator mechanical failure | ✓ Short beep with a 2-3 second pause Depress reset button. If con does not power up, go to back up and wait for power to come back on  
|                                                 |                                     | ✓ Long continuous or “fast beeping” alarm. Contact Norco  |

### LIQUID OXYGEN

| HELIOS – No oxygen flow                          | 1. Frozen  
|                                                 | 2. Dirty or kinked cannula or tubing  
|                                                 | 3. Not breathing through the nose    | ✓ Allow 30 minutes to thaw out  
|                                                 |                                     | ✓ Change cannula-or-pull off cannula and reverse port connection  
|                                                 |                                     | ✓ Breathe through the nose  |
| HELIOS - fill gauge not working                  | 1. Not holding onto black strap only | ✓ Gauge shows by weight  
|                                                 |                                     | ✓ Hold black strap - push pulse unit until vertical  |
| SPIRIT – No oxygen flow                          | 1. Need to change batteries  
|                                                 | 2. Frozen                           | ✓ Replace 2 C batteries  
|                                                 | 3. Not breathing through nose       | ✓ Green light turns red when batteries need to be changed  |
| BURN from liquid oxygen                          | 1. Bare skin exposed to liquid oxygen | ✓ Run affected area under warm water for 2-3 minutes  |

### MISCELLANEOUS TROUBLESHOOTING

| NOT GETTING ENOUGH OXYGEN                          | 1. Occluded/kinked tubing  
|                                                 | 2. Occluded humidifier bottle  
|                                                 | 3. Leak/cracked in the humidifier lid  
|                                                 | 4. Cross-thread humidifier lid    | ✓ Replace tubing  
|                                                 |                                     | ✓ Change humidifier  
|                                                 |                                     | ✓ Check humidifier connection on the top of the bottle  |
| HUMIDIFIER IS DIRTY                                | 1. Hard water build-up             | ✓ Clean weekly with half-vinegar, half water – let sit for 30 minutes  
|                                                 |                                     | ✓ Replace humidifier monthly  
|                                                 |                                     | ✓ Use distilled water  |
| CANNULA OR TUBING IS HARD AND YELLOW               | 1. Cannula or tubing is old        | ✓ Change cannulas once/month  
|                                                 |                                     | ✓ Change oxygen tubing every 3 months  
|                                                 |                                     | ✓ Clean daily with soapy warm water  |
| WATER IN TUBING                                    | 1. Condensation                    | ✓ Replace tubing  
|                                                 | 2. Over filling humidifier bottle  | ✓ If excessive, call Norco for water trap  
|                                                 |                                     | ✓ Always fill below max water fill line  |
| NASAL/SINUS PRESSURE OR NASAL BLEEDING             | 1. Airway dryness due to oxygen flow | ✓ Use humidity with oxygen™  
|                                                 |                                     | ✓ Use nasal moisturizer-Ayre™, Roezit™, Ocean™  
|                                                 |                                     | ✓ Change cannula if hard  |
| TOPS OF THE EARS ARE SORE                          | 1. Weight of tubing over ears      | ✓ Ask Norco for cannula ear pads  
|                                                 |                                     | Don’t pull cannula too tight  |
Traveling with Oxygen

There are some very important things to consider while traveling with oxygen. We at Norco want to make sure that your trip will be a success and will do our best to assist you wherever possible. Please feel free to contact our customer service department as soon as you know that you will be traveling. Here are some things to consider when traveling with oxygen:

- Plan as early as possible. This will help prevent any unexpected last minute delays. Contact Norco 1-2 weeks ahead of time to arrange for travel concentrator, additional portables, liquid system, and supplies. If traveling outside of Norco service area, please notify Norco of the service you will be needing, address and phone number where you will be staying and any other travel arrangements you have so we can provide you with a list of suppliers or arrange a supplier for you while you are away from home.

- How will you get there?
  - **Car** Can you carry enough oxygen? (Liquid Oxygen or Cylinders) Store cylinders in well-ventilated areas. Do not store cylinders in your car and always open your car windows when traveling with a cylinder.
  - **Train** Will they let you carry on your oxygen? Do they have someone to assist you in loading your oxygen?
  - **Plane** Most airlines will not let you carry on your own oxygen. You must use their onboard oxygen. Our experience is that airline oxygen services are expensive. You will need to let your ticket agent know that you are on oxygen. Will there be a layover during your flight? You will need to arrange to have oxygen during your layover.
  - **Ship** Some shipping lines will let you bring your own oxygen onboard ship. Do not forget about the travel time to and from the ship. Are you staying over night off the ship? If so, you will need oxygen for the off ship stay. Will you be traveling off the ship during the day? If so, you will need portable oxygen for the day trips off the ship.

- How long will it take to get there?
  - You may have to alter your route to replenish your oxygen supply.
  - Do you have enough oxygen to cover any delays like road construction?

- Costs of oxygen while traveling are ultimately yours. Norco will do what we can to help.
  - With proper *advanced* notice, we may be able to obtain a discount for your service.
  - Medicare, Medicaid, and most insurance companies do not pay for traveling oxygen. Norco may help with a portion of the cost of traveling oxygen. It is very important that you notify Norco *in advance* of your trip so it can be determined if Norco will assist with any of the charges. Norco’s assistance will be limited to the daily rate for each day traveling. Contact your local Norco branch for a more detailed explanation.
  - If Norco does assist in the cost of your travel oxygen, it will show as a credit on your Norco account.
  - Not notifying Norco *in advance* of your trip may affect our ability to help with your trip and could result in higher costs to you.

Hey ... Life just got started

Norco Medical

Specializing in Home Oxygen, Respiratory Care and all your home medical needs

Oxygen • Sleep • Mobility


**PATIENT LIFT**

**Education**
- Explain the theory of operation: To facilitate the transfer of a patient.
- Note: Only a physician can prescribe use for a patient lift. Before attempting any transfer, study the manufacturer's instructions and, or have a lift demonstration.

**Demonstration**
- The physician, nurse, or medical attendant should determine the proper and safe sling to use.
- Keep patient centered between the legs of the base and facing toward the attendant who is operating the lift.
- Check / adjust position of the sling to be sure seat is close to knees.
- Adjust links of chain or slides on web straps to insure the most comfortable position.
- Make sure wheels are not locked when putting the patient into and out of the patient lift (if outfitted with wheel locks).

**Cleaning/Maintenance/Troubleshooting**
- For infection control, wipe the complete lift (minus the sling) with a clean cloth using the Bleach Soak process found in the General Cleaning Instructions. The entire lift can then be sprayed with a disinfectant and allowed to air dry.
- Soak the sling using the Bleach Soak process found in the General Cleaning Instructions, then hand wash with laundry soap and air dry.
- Check hydraulic cylinder for leaks once a week.
- Make sure wheels will lock.
- Check to make certain patient lift arm remains in position when lift mechanism is locked.
- Check control knob. If the patient lift arm lowers while lift mechanism is locked, cylinder is leaking either internally or externally.
- Call Norco if lift malfunctions.

**PERCUSSOR**

**Education**
- Explain the goals of therapy for CPT and postural drainage: 1) To mobilize secretions, 2) To facilitate secretion clearance through proper positioning and percussion, 3) To treat and prevent atelectasis.
Use percussor according to physician’s guidelines.

**Demonstration**

- Plug percussor into a properly grounded outlet. Do not use an extension cord.
- Explain the percussor, vibration control (minimum to maximum), and percussion adaptors (three different percussor heads).
- Demonstrate effective positioning in relation to the affected lung area (i.e., right lower lobe pneumonia: patient should lay flat on left side with shoulder back).
- Adjust percussor to comfort level and apply percussor to the affected area. Treatments should take 10-15 minutes.
- Patient should cough and expectorate secretions as needed.

**Cleaning/Maintenance/Troubleshooting**

- Clean percussor with a damp cloth when dirty.
- If percussor does not power up: 1) Check electrical outlet, 2) Make sure vibration control is ON position.
- If percussor fails to operate, contact Norco.

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**PHOTOTHERAPY**

**Education**

- Discuss the purpose of phototherapy: To decrease serum bilirubin levels.
- Discuss the theory of operation: Exposure to “blue” light promotes the breakdown of bilirubin and excretion through the liver.
- Explain the dangers of hyperbilirubinemia: Unconjugated or Kernicterus bilirubin cross the blood brain barrier and deposits in the basal ganglia of the brain stem causing brain damage. In term infants, levels <20 mg/dl place the infant at low risk for Kernicterus.
- Review setting and length of need (1-7 days) as prescribed by physician: Minimum and maximum.
- Discuss follow up bilirubin check with physician.
- Document activities and incidents as required by physician on *Daily Record*, located near the back of this book.

**Demonstration**

- Plug bililight (blanket or bed) into properly grounded outlet. Do not use an extension cord.
- Discuss biliblanket cord and pad.
- Discuss pad covers for biliblanket. Parent should watch for possible skin irritation. Place infant on pad (skin to pad cover contact).
- Discuss the bilibed temperature function (75°F maximum) and High temperature alarm (98°F).
- Discuss the importance of eye protection for the bilibed. *Note- The bilibed should not be used at night. The baby should be observed at all times while under the bilibed light.*
- Discuss signs and symptoms of dehydration: 1) Check infant’s temperature regularly, 2) Monitor intake (feedings) and output (stools, urine), 3) If infant is lethargic, disinterested in feeding, etc. contact the physician, 4) Adjust light intensity from minimum to maximum according to physician’s guidelines.

**Cleaning/Maintenance/Troubleshooting**

- Change biliblanket pad if soiled or wet.
- Change bilibed underpad if soiled or wet.
- Clean the biliblanket fiberoptic pad and the bilibed foam insert with a soapy washcloth if soiled.
- Keep bililight free from debris or flammable materials.
- Do not use Biliblanket near water.
- Contact Norco if light bulb fails.
- Contact Norco if cooling fan fails.
- Preventive Maintenance Schedule: Performed annually.
**SEQUENTIAL / INTERMITTENT COMPRESSION PUMP**

**Education**
- Discuss the purpose of compression therapy: 1) To improve lymphatic and blood flow. 2) To decrease fluid edema. 3) To prevent blood coagulation (clotting).
- Define sequential and intermittent compression therapy: 1) Sequential – 5 air chambers fill one at a time (at the prescribed pressure) and then deflate sequentially starting from the end closest to the machine. 2) Intermittent – One air chamber fills (at the prescribed pressure) and then deflates. 3) Both pumps have a pressure setting and a timing mechanism.
- Discuss the contraindications of compression therapy: 1) Pulmonary edema, 2) Edema due to CHF, 3) Known or suspected deep venous thrombosis, 4) Extreme deformity of limb, 5) Severe arteriosclerosis or other ischemic vascular disease, 6) Any local condition in which the garment would interfere (i.e., dermatitis, untreated or infected wounds).

**Demonstration**
- Plug power cord into properly grounded outlet. Do not use an extension cord.
- Explain pump controls: 1) Two pressure settings: (a) 30-60mm Hg (default), and (b) 30 - 120mm Hg (high range). The pressure setting dial will increase or decrease the pressure between these limits. **Note: Only use at High Range operating pressures if directed by physician.**
- Describe and explain the arm or leg garment.
- Demonstrate proper connection of garment hoses to the pump.
- Turn on the pump and make sure of proper operation.
- See **Troubleshooting** if problems arise.

**Cleaning / Maintenance / Troubleshooting**
- Wipe hoses and machine with a damp soapy washcloth.
- To clean garment, remove hoses and turn garment inside out. Clean garment with a mild detergent and let drip-dry.
- Troubleshooting: 1) If pump will not operate, check power source, 2) If pump runs, but garment will not inflate: check hose connection, inflation time or defective garment, 3) If garment is too tight: check pressure setting or reposition garment.

**SUCTION - ORAL/NASAL/TRACHEAL/GI**

**Education**
- Discuss the purpose of nasal, oral, tracheal and GI suctioning: 1) To clear secretions, 2) To decrease airway resistance, 3) To decrease infectious risk, 4) To prevent airway closure (atelectasis).
- Discuss the contraindications/potential side effects of suctioning: 1) Hypotension (low blood pressure). 2) Atelectasis (airway closure) and Irregular Heartbeat (arrhythmias).
- Review the physician’s prescription; use the treatment as prescribed.

**Demonstration**
- Plug power cord into properly grounded AC electrical outlet or appropriate DC power supply (car cigarette lighter) if unit is an AC/DC model. Do not use an extension cord.
- Make sure canister lid is attached and sealed.
- Attach 18” tubing (if applicable) to suction canister lid labeled vacuum and the other end to the machine. Attach 6’ tubing to the canister lid labeled patient.
- Turn suction unit on and crimp 6’ tube. Adjust suction to the proper level. For tracheal suctioning: infants 40-80 mmHg, pediatrics 60-100mmHg, and adults 80-140mmHg. For GI suctioning (90 or 120mmHg) intermittent. If oral suctioning, set pump to appropriate negative pressure level to clear secretions.
- Explain use and care of appropriate suction appliance (e.g., Yankauer, suction catheter, lubricating jelly, etc.).
- Demonstrate proper suctioning procedure. Emphasize that tracheal suctioning longer than 10 seconds may be hazardous (clinical staff - simulate only).
- Demonstrate how to clean foreign matter from the tubing using hot water or saline solution.

*Note: Ventilator patients should be pre-oxygenated before an in-line suction catheter is used. See negative pressure values above for the appropriate suction pressure.

**Cleaning/Maintenance/Troubleshooting**

- Discuss battery life for portable suction pumps. Discuss battery-charging procedure (battery life of 45 minutes after 14 hours of charging).
- Empty suction canister when approximately 1/2 full.
- Soak suction bottle and lid with one of the solutions listed in the General Cleaning Instructions given previously in this manual. Rinse canister and lid under hot running water. Dry thoroughly prior to reuse. Discard cleaning solution after each use. Do not attempt to save and reuse.
- If hydrophobic filter under canister lid becomes wet, the pump will not suction.
- If using lid with float design, pump will not suction if fluid level reaches the float.
- Change 6’ suction tubing every two weeks. Change Yankauer oral suction devices every two weeks.

**TENS (TRANSCUTANEOUS ELECTRICAL NERVE STIMULATOR)**

**Education**

- Explain the goal of TENS therapy: To eliminate pain to an area with electrical stimulation through the skin.
- Explain that only a physical therapist or physician can set TENS units.
- Caution: Use TENS units according to physician’s guidelines.
  - Note: Please read, understand, refer to and adhere to all instructions in the manufacturer’s manual provided specific to your equipment.

**Demonstration**

- Always make sure unit is turned off before connecting or disconnecting leads to patient.
- Patient should pay particular attention to the skin condition at the stimulation site (where electrodes have been used).
- Apply electrode/patch to clean, unbroken skin. (Clean the application site thoroughly with mild soap and water and rinse to assure good adhesion.) Press electrode firmly in place at stimulation site. Do not stretch electrode or skin when applying.
- Connect lead wires to electrodes only. Check to make sure TENS unit is turned off before connecting lead wires to the unit.
- Turn unit on and adjust unit to desired stimulation level.
- After treatment, a wet finger worked between the electrode and skin may aid removal. Clean the skin at the stimulation site with adhesive remover and mild soap and water. Use adhesive remover to clean adhesive from electrode, if an adhesive was required.
- Discuss battery and recharging procedure (if applicable).

**Cleaning/Maintenance/Troubleshooting**

- Do not submerge unit in water or liquid
- Clean unit with a damp, not wet, cloth.
- No power to electrodes with lead wires connected and unit turned on:
  - Check lead wires for good connection.
  - Check tight adhesion of electrodes to skin.
  - Check for broken or frayed lead wires. Replace if necessary.
  - Remove electrodes, clean skin, reapply adhesive, and reattach electrodes. Turn unit on, adjust stimulation.
- Unit still does not work.
  ✓ Replace batteries.
- Stimulation occurs only on skin surface.
  ✓ Electrode is not adhering tightly to skin. Remove and clean both electrodes and skin area, then reattach.
- Treatment has been ongoing continuously for an extended period and stimulation seems diminishing.
  ✓ Batteries are getting weaker.
  ✓ Muscles in the body area of stimulation are becoming numb. In this case, turn the unit off. Contact physician.

**T-PUMP (HEAT THERAPY SYSTEM)**

**Education**
- Discuss the purpose of heat therapy: 1) To increase blood flow by vascular dilation, 2) To treat chronic pain in muscles and joints.
- Review physician’s prescription. Note: The physician determines the set temperature of the pump.

**Demonstration**
- Demonstrate how to: 1) Attach T-pad to appropriate hoses, 2) Fill T-Pump with distilled water to the fill line, 3) Set temperature to the proper prescribed level, 4) Plug the T-Pump into a properly grounded outlet, 5) Turn on T-Pump and let water circulate for twenty minutes before applying to patient.
- When treatment is completed: 1) Turn off pump; 2) Close the hose clamps. *Note: Placing the pad above the pump will drain the pad automatically; 3) Holding the pad above the pump, remove the fill cap of the pump and drain water into the sink.
- Discuss automatic shut off if T-Pump is tipped over when it is filled.

**Cleaning/Maintenance/Troubleshooting**
- Clean outer surface of the T-Pump with a damp cloth.
- Drain pad and pump daily. Refill only with distilled water.
- If “over temperature” light is on: 1) Pad or hose is kinked, or hose clamps are closed; 2) Water level is too low.
- If T-Pump will not heat: 1) T-Pump is tipped, 2) “Over temperature” light is on.
- If T-Pump will not pump: 1) Water level is too low, 2) “Over temperature” light is on.
- If T-Pump will not turn on: 1) The ON switch may not be fully engaged, 2) The unit is not plugged into an electrical outlet. 3) The circuit breaker has tripped.
- Contact Norco if any leakage from the pump or pad occurs.
- Preventive Maintenance Schedule: Performed every six months (Gaymar).

**TRAPEZE**

**Education**
- Discuss the purpose of floor, head and full-length trapeze (patient leverage, positioning and safety).
- Discuss the qualification guidelines for trapeze. If patient is on Medicare: 1) Patient needs body positioning and transferring within the bed, 2) Patient must have a hospital bed for an attached fixed trapeze, 3) Patient must not have a hospital bed for a floor-based trapeze.

**Demonstration**
- Discuss the differences between the use of floor, head and full-length trapeze. (See weight capacities for trapeze type to be used.)
- Identify components of trapeze (triangular grip, mounting hardware, chain, etc.)
- Demonstrate proper assembly. Double-check all clamps and test by bearing weight on triangle. Trapeze should not move.
Demonstrate how to adjust triangular grip (patient should have leverage enough to reposition or lift the body with trapeze).

Discuss weight capacities: Floor trapeze (250 lbs.); fixed trapeze (250 lbs.); full-length trapeze (300 lbs.).

Cleaning/ Maintenance/Troubleshooting

Discuss cleaning (warm soapy water and cloth).

Contact Norco immediately if trapeze ever appears unstable.

Note: Refer patient / caregiver to their physician or physical therapist for instruction on patient transfers.

VENTILATOR or BiPAP S/T

Education

Discuss the purpose of invasive (ventilator) and non-invasive ventilatory support (BiPAP S/T):
1) To promote ventilatory rest, 2) To decrease work of breathing, 3) To treat Hypercapnia, 4) To treat hypoxia/hypoxemia, 5) To maintain ventilatory support.

Discuss potential side effects: Hyper/hypoventilation, cardiac arrhythmias, bradycardia, impaired cardiac output, barotrauma, etc.

Review settings as prescribed by physician.

Note: Only a qualified Norco clinician or health care professional should alter ventilator parameters.

Explain the purpose of the backup ventilator. Have the back up vent charged and ready for use at all times.

Demonstration

Plug ventilator/BiPAP S/T into properly grounded outlet. Do not use an extension cord.

Define ventilator/BiPAP S/T controls and settings (i.e., IPAP, EPAP, tidal volume, respiratory rate, PEEP, sensitivity, flow, I:E ratio, ventilator mode).

Review alarms and alerts (i.e., high/low pressure, apnea backup low minute ventilation, etc.)

Note: Never disable alarms and alerts. Refer to the Pulmonetic LTV™ in-service sheet for specific alarm troubleshooting.

If oxygen is used, follow safety guidelines for oxygen in the handbook. (See Norco clinician for proper oxygen placement into circuit). Bleed in oxygen with adapter attached proximal to the equipment interface.

Ensure that backup oxygen is in place to maintain patient for at least six hours.

Discuss external monitors: Oximetry (recommended) for ventilator patients.

Explain ventilator internal and external battery times: Patient should have at least six hours of battery backup.

Explain ventilator/BiPAP S/T circuit assembly: Trach adaptors, exhalation valve line, PAP line, PEEP, volume, breathing filter, etc.

Review humidifier controls and accessories.

Educate patient on the signs and symptoms of infection. Tell patient to contact their physician if they experience symptoms of infection or respiratory distress.

Discuss the purpose of emergency bag/mask ventilation. Have enough oxygen available for six hours of backup. Ensure that an ambu-bag is in place and functional to run on 10-15lpm of 02.

Explain monthly clinician follow up.

Caregiver should receive training on CPR.

Cleaning/Maintenance/Troubleshooting

For BiPAP S/T circuits, follow the cleaning procedure listed under CPAP/BiPAP S in this handbook.

For ventilator patients, change circuit, in-line suction catheter, humidification chamber and air outlet filter Bi-monthly, or more frequently if required. Discuss common causes of ventilator-associated pneumonia (VAP- see education sheet).

If needed, wipe down the exterior of the ventilator/BiPAP S/T with damp, soapy cloth and wipe with a clean dry cloth.
Change BiPAP disposable filters monthly. Wash the gray ventilator intake filters monthly by hand in warm soapy water (antibacterial liquid soap). Rinse well and let air-dry.

If using humidification on ventilator/BiPAP S/T clean the chamber weekly. (Use one of the methods listed in the General Cleaning Instructions given previously in this manual.) If using a disposal humidification chamber, change weekly.

If ventilator fails, go to backup.
If tracheostomy tube accidentally comes out (decannulation), go to backup tracheostomy tube.
In case of emergency, dial 911.
Explain common causes for high/low pressure alarms: 1) Disconnect, 2) Occluded trach, 3) Occluded circuit, 4) Changes in resistance/compliance.
Functional check schedule: Performed monthly.
Preventive Maintenance Schedule: Performed every two years or 10,000 hours.

WHEELCHAIR

Education

Discuss the benefit of wheelchair therapy: To help an individual with mobility related activities of daily living.
Use wheelchair as prescribed by physician.

Demonstration

When lifting or loading the wheelchair, grasp it only on the frame after removing the front rigging (if so equipped).
When transporting the chair lying on its side, always engage the wheel locks.
Always engage both wheel locks before transferring patient into or out of the wheelchair. Never transport a patient in a wheelchair when locks do not work.
Position wheelchair close to the patient at the most advantageous angle. This will make it easier for the patient to get into or out of the wheelchair. Push, swing, and remove the footplates. Position the outside of the chair before patient transfer to minimize the possibility of the patient tripping. (Replace footplates to original position after transfer.)
On wheelchairs equipped with removable arms: Remove the arm closest to the patient before transferring with a slide board.
Adjust the footrests so that the patient’s knees are level and the thighs are bearing weight.

Cleaning/Maintenance/Troubleshooting

Clean the frame, wheels, tires, seat and back with warm, soapy water and a clean cloth or sponge. Dry with clean dry cloth or towel. Do not get water or cleaning solutions in wheel or caster bearings.
See General Cleaning Instructions for Infection Control Cleaning.

If caster wheels will not roll freely:
 ✓ Check/keep correct tire pressure in pneumatic tires, if so equipped.
 ✓ Clean hair or other foreign material from the caster bearing where the wheel attaches to the fork. Caster wheel bearings should be snug, but wheel should rotate freely without resistance. When adjusting, adjust both casters accordingly for straight chair operation.

If main wheels/tires will not roll freely or propel the chair in a straight line:
 ✓ Check/keep correct tire pressure in pneumatic tires, if so equipped.
 ✓ Clean hair or other foreign material from the caster bearing where the wheel attaches to the fork. Caster wheel bearings should be snug, but wheel should rotate freely without resistance. When adjusting, adjust both casters accordingly for straight chair operation.

If engaged wheel lock does not prevent wheel from turning:
 ✓ Call Norco for adjustment or repair.
 Call Norco if for any reason you feel the chair is unsafe, needs servicing, or needs repair.
Nothing beats a Quickie®! Enthusiasm for new ideas has always been part of the company's success. More than 20 years ago, Quickie created the original lightweight manual wheelchair. Today Quickie offers the most innovative products in the marketplace with power, manual, pediatric and sport wheelchairs. Jay seating and positioning products address the patient's posture, skin and functional needs. Quickie wheelchairs combined with the Jay® support surfaces create a winning combination...Get out there!
WHEELCHAIR/SCOOTER SAFETY

- Transferring onto and off your powered mobility device requires a good sense of balance. Be sure to have an attendant or health care professional present while learning to properly transfer yourself. To eliminate the possibility of injury, verify the following before attempting a transfer:
  - Be sure the power is turned off.
  - Be sure that your power wheelchair or scooter is not in free wheel mode.
  - Make sure your armrests are flipped up or removed.
  - If you have footrests, flip them up or move the leg rest aside. This keeps your feet from getting caught on the footrest or leg rest during transfer.

- Norco does not recommend power chair or scooter users to be transported in vehicles while seated in their power mobility device. Personal injury may result.
- Your powered mobility device may be equipped with a positioning belt, this belt was not designed with the intent of providing proper restraint during motor vehicle transport.
- It may be difficult for motorist to see you when you are seated on your chair or scooter. To ensure your safety, always assume you cannot be seen. Wait until your path is clear of traffic and then proceed with extreme caution.
- Powered wheelchairs and scooters are not designed to travel up or down stairs or escalators. Always use an elevator.
- When climbing an incline, try to keep your chair moving. If you must stop, start up again slowly, and then accelerate cautiously. When driving down an incline, do so slowly and in the forward direction only. If your chair or scooter starts to move faster than you anticipated or desired, allow the chair to come to a complete stop by releasing the joystick.
- Never wash your power wheelchair or scooter with a stream of water. Keep a plastic bag on the chair to protect the joystick if you should encounter a rain or snowstorm while using your powered chair outdoors.
- Do not drive your chair or scooter through puddles or any type of deep water/snow. This could cause damage to the controllers and/or motors.
- Electric motors do not require any type of lubrication, (grease, oil, WD40, etc…). If there seems to be a problem with the motor(s) contact your local Norco Branch.
- Keep clothing or outwear (sweater, jackets, coats, etc…) away from moving parts such as the tires. They can get caught and cause damage and/or injury.
- Be sure to read the information in your owner’s manual about Electromagnetic Interference (EMI) and Radio Frequency Interference (RFI). Laboratory test performed by the Food and Drug Administration (FDA) have shown that radio waves can cause unintended motion of powered wheelchairs or scooters.

If you should have any questions about your powered mobility device please consult the owners manual that was included when the equipment was delivered. Your local Norco Branch will also be available to answer questions and troubleshoot your device. Finally, you can also contact the manufacturer of your powered mobility device, the phone number can be found in the owner’s manual.

WHEELCHAIR/SCOOTER BATTERY INFORMATION

lead-acid batteries contain a sulfuric acid electrolyte, which is a highly corrosive poison and will produce gasses when recharged that will explode if ignited. When working with batteries, you need to have plenty of ventilation, remove your jewelry, wear protective eyewear (face shields offer the best protection) and clothing, and exercise caution. Do not allow battery electrolyte to mix with salt water. Even in small quantities of this combination will produce chlorine gas that is very dangerous! Whenever possible, please follow the manufacturer’s instructions for testing, installing, charging and equalizing batteries.
Power wheelchairs and scooters use deep cycle batteries. If an automotive battery is used in place of a deep cycle battery, the unit may run but it will not recharge properly and will not sustain a significant life.

There are several different types of deep cycle batteries. Norco recommends that the deep cycle battery be a sealed battery. Some batteries give you direct access to the electrolyte (battery acid) in the battery. If this type of battery is placed on its side, the electrolyte will leak out of the battery. Sealed deep cycle batteries do not give you access to the electrolyte making them safer than non-sealed batteries.

**TYPES AND TRANSPORTATION OF SEALED BATTERIES**

- **Sealed liquid.** This type of battery is the least expensive but is limited to hazardous transportation. Many transportation authorities, such as the FAA, treat sealed liquid lead acid batteries as they would wet-acid batteries. This makes transportation inconvenient and expensive.

- **Gel Cell and AGM (Absorbed Glass Mat).** Both types are sealed but are more expensive than sealed liquid batteries. The gel cell has its electrolyte in a gelled state. The electrolyte in the AGM is held in a fiberglass sponge. Most are approved for general public transportation such as air travel. Batteries that pass the International Air and Transportation Association (IATA) code are approved for travel on commercial airlines. All batteries that are approved for air transportation should have labeling on the battery that states they are within tolerance.

There are many sizes and capacities of batteries used for powered mobility. The group (size) classification only determines the physical size of the battery. U-1, NF22, Group 24 & 27 are some common group classifications. Batteries also are classified by the capacity, this is known as Amp Hours (AH). The bigger the battery the greater the capacity (amp hours). Some batteries with the same group (size) may differ slightly in capacity.

The owner’s manual that was included with your power wheelchair or scooter will identify the size(s) of batteries that are recommended. Some models come standard with lower capacity batteries but may be able to accept larger size and/or capacity. If you cannot identify the required battery contact your local Norco Branch and they will assist you in finding the correct battery.

**BATTERY CHARGING AND STORAGE**

*In the past there was the issue of batteries having a “memory”. The resolution was to fully discharge the battery. Today’s battery technology has eliminated this issue. Deep Cycle batteries **DO NOT** have a memory and fully discharging will lead to early battery failure. Also batteries will not discharge when stored on concrete.*

Charging the batteries is by far the most important procedure to maintaining the battery life. The frequency in which you charge the batteries is going to depend on use. Although it is important to use the batteries to a certain extent before charging them, it is very detrimental to the batteries if they get too low. All power wheelchair and scooters have some form of battery meter. A good rule of thumb is to charge the batteries before the indicator moves into the red.

The charger can either be separate from (off-board) or installed (on-board) on your power wheelchair or scooter, see your owner’s manual.

Charges can either be manual or fully automatic. Manual chargers require supervision so that the batteries do not become permanently damaged due to being overcharged. Automatic chargers monitor the charge in the batteries and automatically shut off when fully charged.
♦ Chargers should not be left plugged into the battery for more than 24 hours. It can permanently damage the battery or cause incidents like battery acid leaks or fire.

♦ Gel Cell and AGM batteries also charge at a lower voltage than sealed liquid or wet lead-acid batteries making it critical to use only appropriate chargers. When attempting to recharge a Gel Cell battery, be sure that the charger is capable of recharging Gel Cell batteries, some older model chargers may not be Gel Cell compatible. The chargers supplied with your power wheelchair or scooter will be compatible to the batteries that were originally installed.

♦ If the batteries are going to be stored for a long period of time (more than a month), the batteries must be fully charged before storage, batteries will naturally discharge over time. Battery connections or power cables should be disconnected. If the batteries are in storage for more than a month it is a good practice to check the batteries every month. You can have the batteries tested at your local Norco Branch or battery dealers. If the batteries are not tested and recharged (as necessary) during storage, they may become damaged due to extensive discharge.

♦ Gel Cell and AGM batteries can be left in temperatures below 32 degrees F. Gel Cell batteries contain chemicals that do not freeze and AGM batteries do not contain any liquid. However, batteries should not be stored below 32 degrees F.

♦ Storing batteries in a cool dry place will slow the rate of self-discharge.

♦ AGM batteries will store for longer periods of time vs. Gel Cell and other deep cycle batteries.

♦ Keeping the batteries clean helps sustain the life of the batteries. If a battery has a layer of debris (dirt, dust, grime, etc…) on top of the battery, it may become conductive (depending on the debris). Conductive debris can cause the battery to self-discharge at a much higher rate that normal. If the debris is not conductive it will not allow proper airflow to cool the battery. Most batteries are manufactured to operate at 80 degrees F. When the temperature is higher than 80 degrees F it will reduce the life of the battery.

♦ Whenever possible, turn off the charger and chair when plugging or unplugging the charger from the chair.

FREQUENTLY ASKED QUESTIONS

1. **When my batteries are wired in series do I need to replace both batteries if one goes bad?**
   ♦ It may not be necessary but it is recommended. If the two batteries do not match in capacity (amp hours) the smaller battery may become overcharged or the larger battery may become undercharged. If the batteries differ in age their capacity will differ.

2. **Do I need to deeply discharge my deep cycle batteries the first few time they are used?**
   ♦ No, none of the deep cycle batteries need to be deeply discharged the first few times of use. It is actually better for Gel Cell batteries to be discharged at a shallow rate (80% to 90% state of charge) then recharged the first 10-15 times. Deep cycle batteries do not need to be deeply discharged (less than 20% state of charge) at any stage in their life to enhance performance or service life.

3. **When I purchase a new battery do I need to charge it before use?**
   ♦ Yes, batteries may have been sitting on the self for some time. During that time the batteries will self-discharge.

4. **What are the symptom(s) of bad batteries?**
   ♦ If your power chair/scooter is showing lack of power (even after being fully charged) or the batteries will not hold a charge this may be a sign your batteries are bad. Before replacing the batteries, make sure the connections to the batteries are clean and not loose. This can also make the batteries not function properly.
5. **How long will batteries last?**
   - Many factors can affect the life of the batteries. Batteries that go bad before the first year are a direct result of poor maintenance. Other issues such as poor charging habits, too high or low of storage temperature, and the age of the batteries affect the life.

6. **Will my insurance pay for replacement batteries?**
   - This depends on your insurance policy. Contact your insurance company to find out what your policy states. Norco will help to bill your insurance company but you still could be responsible for the cost.

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**Beautiful and Safe Bathing Solutions**

You make important choices every day for you and your family. When it comes to safe bathing is your bathroom up to the task? Make sure it can adapt as your needs change - make sure it helps you maintain your independence!

Transform your bathroom into a worry-free, safe environment with a Best Bath accessible shower or walk-in tub. Manufactured right here in the Treasure Valley each model is built to last and designed for easy installation and maintenance.

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For more information contact:

NORCO at (208) 344-2099
www.norco-inc.com
Best Bath Systems Authorized Dealer
WHIRLPOOL

Education

- Discuss the purpose of whirlpool therapy to the foot or leg: 1) To reduce swelling to the affected area, 2) To improve circulation, 3) To aid injury recovery.
- Review the physician’s prescription. The patient is to use treatment as the physician or therapist prescribes.

Demonstration

- Plug power cord into properly grounded outlet. Do not use an extension cord.
- Attach the 11” circular air panel to the bottom of the 10-gallon circular tub. Press the 11” panel down firmly to secure the suction cups to the bottom.
- Insert the supply hose into the power supply. Plug in the power supply and start the unit for a brief warm up period.
- With the power supply off, insert the other end of the supply hose into the circular 11” panel.
- Fill 10-gallon tub with water to the desired level.
- Set the whirlpool speed to low, medium or high (the higher the speed the higher the turbulence). The unit will start when timer is set.

Cleaning / Maintenance / Troubleshooting

- Clean the unit daily by circulating a 1:20 bleach/water solution through the whirlpool.
- Clean the interior and exterior of the 10-gallon tub with a soapy washcloth as needed.
- If supply unit doesn’t power up, check the power supply. Make sure the timer is set.
- Because this unit is an electrical appliance used near water, please read Electrical Safety in this handbook.

Norco

“Contact your local Norco branch with any questions regarding the equipment or services you have in your home”
## Daily Record

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BILLING INFORMATION

Our billing process begins when you receive a new piece of equipment. Norco personnel will go over the various forms your insurance company requires to process the claim before you sign them. Medicare and your insurance may need further documentation, which we will secure. Insurance bases reimbursement on your medical needs, documented by your doctor, and coverage criteria. A doctor’s prescription does not guarantee coverage. At that time Norco will decide whether to accept assignment.

Assignment: Norco will bill Medicare and payment goes directly to Norco. Medicare will pay Norco 80% of their allowed amount for that particular item. You or your co-insurance company will be responsible for the remaining 20% of Medicare’s allowed amount of the bill.

Non-assigned: Norco will bill Medicare and the notice of payment will go directly to you. Norco will receive notification of payment or denial. You or your co-insurance company will be responsible for 100% of the total bill. Again, we emphasize that notice of payment or denial will be sent directly to you.

Regardless of whether Medicare criteria are met, Norco may not accept assignment for some items:

♦ CPM Machines  ♦ Blood Glucometers
♦ TENS/EMS Units  ♦ Miscellaneous Ostomy Supplies
♦ Group II Oxygen Patients  ♦ Miscellaneous Surgical Supplies
♦ Seat Lift Mechanisms  ♦ Full Electric Beds
♦ Power Operated Scooters  ♦ Lymphedema Pumps
♦ All Bathroom Items  ♦ All items where
♦ Mobile Commodes Medicare criteria is not met

Capped Rental and Inexpensive or Routinely Purchased Items Notification

Medicare defines equipment as being either a capped rental or an inexpensive or routinely purchased item.

☐ FOR CAPPED RENTAL ITEMS:

Medicare will pay a monthly rental fee for a period not to exceed 13 months, after which ownership of the equipment is transferred to the Medicare beneficiary. After ownership of the equipment is transferred to the Medicare beneficiary, it is the beneficiary’s responsibility to arrange for any required equipment service or repair. Examples of this type of equipment include: Hospital beds, wheelchairs, alternating pressure pads, air-fluidized beds, nebulizers, suction pumps, continuous airway pressure (CPAP) devices, patient lifts, and trapeze bars.

☐ FOR INEXPENSIVE OR ROUTINELY PURCHASED ITEMS:

Equipment in this category can be purchased or rented; however, the total amount paid for monthly rentals cannot exceed the fee schedule purchase amount. Examples of this type of equipment include: Canes, walkers, crutches, commode chairs, low pressure and positioning equalization pads, home blood glucose monitors, seat lift mechanisms, pneumatic compressors (lymphedema pumps), bedside rails, and traction equipment.

Billing Statement

The next page shows an example of our billing statement. The statement reflects the status of charges that are in part or entirely your responsibility. Our billing cycle starts on the 1st of one month and ends on the last day of the month. Medicare beneficiaries who do not have a secondary plan should receive a statement by the end of the first week of the month. If you have Medicare and a secondary insurance company, or if you have other primary insurance coverage, you may not receive a statement unless you receive a non-assigned item or your insurance company does not pay your statement in full.
The date you received an item or the date we received & applied payment on your account.

This is our invoice number or check number of a payment.

<table>
<thead>
<tr>
<th>SERVICE DATE</th>
<th>INVOICE NO.</th>
<th>BILLED AMOUNT</th>
<th>INSURANCE PORTION</th>
<th>CUSTOMER PORTION</th>
</tr>
</thead>
<tbody>
<tr>
<td>03/10/01</td>
<td>560008</td>
<td>30.00</td>
<td>24.00</td>
<td>6.00</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>03/27/04</td>
<td>567540</td>
<td>30.00</td>
<td>24.00</td>
<td>6.00</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>03/27/01</td>
<td>657980</td>
<td>85.97</td>
<td>71.65</td>
<td>14.32</td>
</tr>
<tr>
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<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>03/30/01</td>
<td>663863</td>
<td>62.78</td>
<td>.00</td>
<td>62.78</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>04/25/01</td>
<td>994457</td>
<td>6.00CR</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>05/15/01</td>
<td>992678</td>
<td>24.00CR</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Definitions: PC : E0570 RR. This is a code all insurance company’s need. It further describes the equipment and whether it’s a rental (RR) or purchase (NU).

CR is credit or payment to your account.

What your insurance allows for that item and what we expect them to pay.

What you owe after your primary insurance pays.

If there’s no price listed, one of these 4 scenarios applies:
1. We will not bill your insurance as it’s a non-covered item.
2. We did not accept assignment for this item. (See Billing Information page)
3. We have not yet billed your insurance for this item.
4. You have paid your portion.

<table>
<thead>
<tr>
<th>LAST PAYMENT DATE</th>
<th>LAST PAYMENT AMOUNT</th>
<th>TOTAL DUE</th>
<th>31 – 60 DAYS</th>
<th>61 – 90 DAYS</th>
<th>OVER 90 DAYS</th>
</tr>
</thead>
<tbody>
<tr>
<td>00/00/00</td>
<td>.00</td>
<td>95.65</td>
<td>.00</td>
<td>.00</td>
<td>.00</td>
</tr>
<tr>
<td></td>
<td></td>
<td>83.10</td>
<td>.00</td>
<td>.00</td>
<td>.00</td>
</tr>
</tbody>
</table>

TOTAL DUE: 83.10
GENERAL INFORMATION

The information presented in this educational and service guide is general in nature and is not intended to be all-encompassing or to supersede any specific manufacturer’s instructions/recommendations, physician orders/instructions, other qualified medical professional’s instructions or agency criteria or governmental regulations.

**Warning:** It is important to understand that anytime products with a lanyard are worn, there is a possibility of entanglement of the lanyard that could create a choking hazard.

**Warranty and Maintenance of Purchased Equipment**

Every product sold or rented by our company carries a 1-year manufacturer’s warranty. Norco will notify all Medicare beneficiaries of the warranty coverage, and we will honor all warranties under applicable law. Norco will repair or replace, free of charge, Medicare-covered equipment that is under warranty. In addition, Norco maintains an owner’s manual with warranty information for all durable medical equipment where this manual is available.

Norco can supply manufacturer instructions on the type and frequency of maintenance required for equipment purchased from our company.

Norco honors the manufacturer’s warranty for new equipment and parts. Equipment without a specified manufacturer’s warranty will be warranted by Norco for 30 days against manufacturer defect. For rental equipment, all warranties are effective from the first day of rental. Warranties do not cover equipment that was modified by the client, or when damaged due to negligence or abuse while not operating or caring for the equipment in a manner consistent with the use or care for which it was designed. (Power mobility equipment exposed to rain or dampness will cause the equipment to malfunction electronically and mechanically, and will be considered abuse of the equipment.) Labor and travel time are not covered under the warranty.

**Resolving Complaints**

All patients have the right to freely voice grievances and recommend changes in care or services without fear of reprisal or unreasonable interruption of services. Service, equipment, and billing complaints will be communicated to management and upper management. These complaints will be handled in a professional manner. All logged complaints will be investigated, acted upon, and responded to in writing or by telephone within a reasonable amount of time after the receipt of the complaint. If there is no satisfactory resolution of the complaint, the next level of management will be notified progressively and up to the president or owner of the company.

**Norco Assistance Available**

Norco is always as near as your telephone to assist you. This assistance includes:

- Additional equipment and corresponding service
- Client education
- Services coordinator
- Insurance billing
- Equipment emergencies
- Guidance, direction, and answers for any and all questions you might have at initial setup or in the future.

Remember that one of the friendliest and very best resources you have during your time of convalescing at home is the personnel at Norco. We are always available for you even in the event of equipment emergencies after hours, on weekends, and holidays. Thank you for choosing Norco. We want to be your BEST supplier of medical equipment and supplies.
At Norco we genuinely strive to provide the highest quality in healthcare services for our clients. We appreciate hearing when our Team Members exceed your expectations. We also appreciate knowing your concerns to ensure that our service meets your total satisfaction. Please describe the praise or concern you may have and send it to your local Norco branch. This completed form will be routed directly to the branch manager, who will promptly review the information and contact you to thank you for your comments and/or let you know what is being done to correct the problem. We appreciate your candid comments as well as your assistance in helping us to continually improve our service to our many and valued customers. This form is also available on our website: www.norco-inc.com/content/patient-communication-form.

Mail to:
Your local Norco Branch
(see address inside of front cover) OR Director of Patient Services
Norco Medical
1125 W Amity Rd
Boise ID 83705

Your Name: _______________________________ Date: ____________________________

Name of affected individual: _____________________________________________________

Date of occurrence: __________________________________________________________________

Describe compliment/concern: (Use another sheet if necessary):
_________________________________________________________________________________
_________________________________________________________________________________
_________________________________________________________________________________
_________________________________________________________________________________
_________________________________________________________________________________
_________________________________________________________________________________

Signature: ____________________________ Date: ____________________________

Norco Use Only:
Received by: ____________________________ Date: ____________________________

Routed to: ____________________________ Date: ____________________________

Norco Action Report Initiated: ☐ Yes ☐ N/A Date: ____________________________

NAR #: ____________________________

Follow-up with customer by: ____________________________ Date: ____________________________

Signature: ____________________________ Date: ____________________________
CAIRE: Designing solutions for your oxygen needs.

The AirSep® FreeStyle™ 5 has the highest oxygen output of any wearable POC on the market and offers 5 pulse settings. The 4.4 lb. AirSep® FreeStyle™ has a 3-pulse setting. Both available with extended battery duration options.

The SeQual® Eclipse 5™ POC with autoSAT® technology delivers up to 3 LPM continuous flow.

The CAIRE® Companion™ Series is an incredibly durable reservoir with easy-to-use, top-mounted controls and capacities of 21 and 41 L. The CAIRE® Companion™ 1000 and 1000T are portable continuous flow units that provide up to 7.7 hours of use at 2LPM.

CAIRE manufactures the widest array of POCs available, ranging from the AirSep® FreeStyle™, the lightest POC on the market at only 1.75 lbs., to the SeQual® eQuinox™ featuring Multi-Language Voice Interface and weighing only 14 lbs. CAIRE offers robust, reliable LOX portables and reservoir units ranging from the 3.6 lbs HELiOS™ portable to the 60 L Liberator reservoir.

For more information, please contact our CAIRE Customer Support Team:

800.482.2473

www.chartindustries.com/Respiratory-Healthcare
When it comes to sleep therapy masks, it was time for new ideas. That's why Philips Respironics set out to change some things — and we have succeeded. From innovative cushion designs for excellent seal and comfort and an unparalleled field of vision, our masks are helping more CPAP users get the sleep they deserve.

Ask for our masks by name. www.sleepapnea.com
OXYGEN ACCESSORIES
CLEANING TIPS

1. Clean filters weekly
2. Clean humidifier weekly
3. Clean cannulas weekly
4. Replace cannulas monthly
5. Replace extension tubing every 3 months
6. Replace humidifier monthly

Please refer to the Patient Orientation Handbook for cleaning instructions.

Call Norco:

IN CASE OF EMERGENCY

1. Begin using back-up oxygen.

2. Contact Norco at above number.

3. If phone communications are inoperable, please report to store for additional oxygen supply.

4. If all other options are unavailable, go to local emergency room for assistance.