

# PINNACLE 6003

Models 800/800M 1000/1000M High Capacity Ceiling Lift System



# Operating Instructions

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#### Disclaimer

This manual contains general instruction of the use, operation and care of this product. The instructions are not all-inclusive. Safe and proper use of this product is solely at the discretion of the user. Safety information is included as a service to the user. All other safety measures taken by the user should be within and under consideration of applicable regulations. It is recommended that training on the proper use of this product be provided before using this product in an actual situation.

Retain this manual for future reference. Include it with the product in the event of transfer to new users. Additional free copies are available upon request from Customer Service.

# **Proprietary Notice**

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# **SECTION 1 - SAFETY INFORMATION**

#### 1.1 Danger

The following danger alert appears in this manual.

# **DANGER**

Electric shock can cause death or serious injury. Charge the lift batteries only as described in this manual.

# WARNING

Improper use of the lift can cause injury.

Use the lift only for the purpose described in this manual.

Untrained operators can cause injury or be injured. Permit only trained personnel to operate the lift.

Improper operation can cause injury.

Operate the lift only as described in this manual.

# WARNING

Helpers can cause injury or be injured.

Maintain control of the lift, operate the controls, and direct any helpers.

Improper maintenance can cause injury.

Maintain the lift only as described in this manual.

Improper parts and service can cause injury. Use only T.H.E. Medical parts and T.H.E. Medical-approved items on the lift.

## 1.3 Important

Boxes like the one below emphasize important information.

# **Important**

Fully discharging the lift batteries reduces battery life. Charge the batteries regularly.

# **SECTION 2 - LEARNING ABOUT THE LIFT**

# 2.1 Lift Description

The Pinnacle is a device for lifting and transporting a patient.

The lift is intended for professional use by one trained operator. Additional help may be necessary when using the lift.

# **WARNING**

Improper use of the lift can cause injury.

Use the lift only for the purpose described in this manual.

General specifications are rounded to the nearest whole number. For detailed specifications, contact T.H.E. Medical Customer Service (page 17). T.H.E. Medical reserves the right to change specifications without notice.

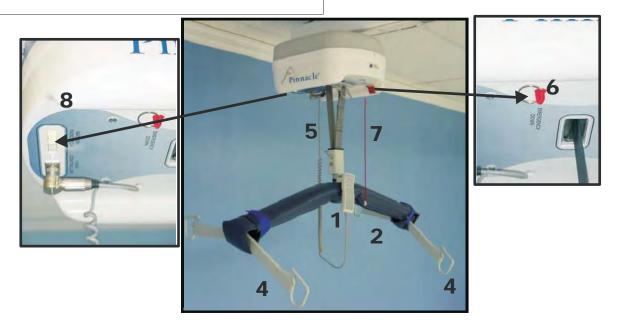


Figure 1 - Components

- 1) <u>Hand Controller</u>: Used to control raise and lower functions as well as traverse functions on power traverse models.
- 2) Spreader Bar Assembly: Used as the main support for lifting the patient.
- 3) <u>Scale (optional) not shown:</u> Accurate to within 1/10th of a pound. Features a LCD readout, auto-zeroing and the capability of displaying both pounds and kilograms.
- 4) Side Suspender Bars: Attached to spreader bar ends for use in four-point sling attachments.
- 5) <u>Lifting Strap</u>: Attaches the spreader bar to the lifting motor.
- 6) <u>Emergency Lowering Pullcord</u>: This feature is to be used for lowering the patient only when all other attempts fail.
- 7) <u>Emergency Stop:</u> Pull cord to completely shut off power to the Pinnacle lifting system. Pull cord a second time to turn the lift back on.
- 8) <u>Battery Level Indicator Gauge</u>: Allows the user to monitor battery levels at all times. The readings should always be in the "green zone". If levels fall below green (into yellow or red), lift should be charged immediately. The "smart charge" battery charging station makes overcharging impossible. An audible tone will sound if batteries are at a critically low level.

# SECTION 3 - OPERATOR SKILLS & TRAINING

## 3.1 Skills

Operators need a working knowledge of patient-handling procedures.

Operators need the ability to assist the patient.

# 3.2 Training

Follow a training program designed by your training officer.

Read this manual.

Practice with the lift before using it in regular service.

Test each trainee's understanding of the lift.

Keep training records. Use the convenient form on page 18.

# WARNING

Untrained operators can cause injury or be injured. Permit only trained personnel to operate the lift.

# **SECTION 4 - USING THE LIFT**

- 4.1 Before Placing the Lift in Service
- 1. Require all personnel who will work with the lift to read this manual.
- 2. Assign appropriate personnel to confirm that the lift operates properly. Have them follow instruction in Inspecting the Lift, page 15.
- 4.2 General Guidelines for Use
- Using the lift requires a minimum of one trained operator. Additional help may be necessary for some procedures or circumstances.
- 2. Follow standard patient-handling procedures when operating the lift.
- 3. Stay with the patient at all times.

# WARNING

Improper operation can cause injury.

Operate the lift only as described in this manual.

# WARNING

An unattended patient can be injured. Stay with patient at all times.

# 4.3 Using the Lift Controls

To use these controls, press the raise button to raise the patient. Press the lower button to lower the patient. Press either of the power traverse buttons to move forward or backward along the track.



Figure 2 - Hand Controller

## 4.4 Emergency Lowering

In the event of a malfunction locate the emergency lowering cord ring (see figure 3a & 3b) and pull until fully extended (see figure 3c.) Once extended, pull on emergency lowering cord to safely lower patient to bed or chair.





Figure 3a & 3b - Emergency Lowering

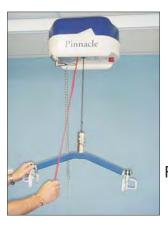


Figure 3c - Emergency Lowering.

## 4.4 Positioning the Sling

#### IF THE PATIENT IS LYING DOWN

- 1. Prepare the sling to slide under the patient.
- 2. Raise the bed rail on opposite side of bed. Log Roll the patient away from you. Lay the sling out, centered, the full length of the patient. Bunch enough sling material next to the patient's back so that sling will be centered when patient is laid back down (Figure 4).
- 3. Lay the patient flat again, then roll them toward you and proceed to pull the sling material that you had previously bunched up, through to the other side.
- 4. Lift the patient's legs, one at a time and pull the leg straps through and over the legs.

Figure 4 - Positioning the Sling for Patient in Bed

#### IF THE PATIENT IS SITTING

- 1. Lean the patient forward.
- 2. Slide the sling between the patient's back and the back of the seat (Figure 5).
- 3. Align the bottom of the sling with the seat surface of the chair.
- 4. Bring the leg loops around the patient then under each leg and then up between the legs.



Figure 5 - Positioning the Sling Behind a Seated Patient

## 4.5 Moving the Lift to the Patient

#### IF THE PATIENT IS IN A BED

1. With the sling in place, lower the spreader bar until the side suspender bars are just above the patient's abdomen or lower chest. Ensure that the spreader bar is parallel with the patient's shoulders (Figure 6).

## **Important**

Ensure that the lift is directly above patient prior to attaching sling. Do not attach sling if lift is misaligned to the front, back or either side.



Figure 6 - Lifting from a Bed

#### IF THE PATIENT IS IN A CHAIR

- 1. If the patient is in a chair, lock the chair's wheels if so equipped
- 2. With the sling in place, lower the spreader bar until the spreader bar is level with the patient's forehead and is 10 to 12 inches in front of the patient (Figure 7).

# **Important**

Ensure that the lift is directly above patient prior to attaching sling. Do not attach sling if lift is misaligned to the front, back or either side.



Figure 7 - Lifting Patient from a Chair

## 4.6 Attaching the Sling to the Lift

Decide in what position the patient should be when lifted.

To lift the patient in a seated position, use a shorter set of loops at the shoulders and a longer set of loops at the legs. This places the patient's head higher than his/her legs.

To lift in a reclined position use a longer set of loops at the shoulders and a shorter set of loops at the legs. This will allow the patient's head to be level with his/her legs.

Attach the back loops to the hanger by slipping the right back loop over the right back hook and the left back loop over the left back hook.

Note: The left and right refer to the patient's left and right.

CONFIGURING THE SLING FOR NORMAL USE

1. Run the right leg strap under the patient's right leg, up between the patient's legs, and attach to the left front hook (Figure 8).



Figure 8 - Configuring the Sling - Step 1

2. Run the left leg strap under the patient's left leg, up between the patient's legs, and attach to the right front hook (Figure 9).



Figure 9 - Configuring the Sling - Step 2

CONFIGURING THE SLING FOR IMPAIRMENTS
SUCH AS GROIN INJURY

- 1. Run the right leg strap under both of the patient's legs and attach to the left front hook.
- 2. Run the left leg strap under both of the patient's legs and attach to the right front hook (Figure 10).



Figure 10 - Configuring the Sling for a Groin Injury

# 4.7 Lifting the Patient

IF THE PATIENT IS IN A BED OR ON THE FLOOR

- Once sling is attached to spreader bar raise the patient just enough to check the patient's safety and comfort. Ensure that leg loops are not bunched up or twisted. Ensure that leg loops are not riding up uncomfortably into patients groin. Once sling has been checked and adjusted if required, continue to raise the patient to desired height.
- 2. As you raise the spreader bar, have attendants use the sling handles to guide the patient.



Figure 11 - Lifting from a Bed

#### IF THE PATIENT IS IN A CHAIR

- 1. Raise the patient just enough to check the patient's safety and comfort. Ensure that leg loops are not bunched up or twisted. Ensure that leg loops are not rising up uncomfortably into patients groin (Figure 12).
- 2. Once sling has been checked and adjusted if required, continue to raise the patient to desired height.



Figure 12 - Lifting from a Chair

## 4.8 Transporting the Patient

- 1. Lift patient as previously described in this manual.
- 2. Ensure there are no obstructions in the path of travel.
- 3. Depress the appropriate power traverse button on the hand controller if so equipped. For the manual traverse models, push or pull on the sling handles.
- 4. Walk with the patient, stabilizing them at the same time to ensure safety.

## 4.9 Lowering the Patient

LOWERING THE PATIENT TO A BED

- 1. Lower the patient slowly to the bed. Once the patient is fully supported by the bed, disconnect the sling from the lift.
- 2. Roll the patient on to his/her side, and slide the sling from beneath the patient (Figure 13).



Figure 13 - Removing the sling from under a patient in bed

#### LOWERING THE PATIENT TO A CHAIR

- 1. If lowering the patient into a wheelchair, lock the wheelchair's wheels.
- 2. Position the patient over the chair.
- 3. Lower the patient slowly into the chair. Have the attendant guide the patient into the chair.
- 4. As the patient settles in the chair, have the attendant grasp the handle on the back of the sling and pull upward gently, allowing the patient to sit in an upright position (Figure 14).



Figure 14 - Lowering a Patient into a Chair

4. Once the patient is fully supported by the chair disconnect the sling form the lift.

Note: If lowering the patient to a toilet use a toileting sling. This type of sling can be kept attached the patient while they use the toilet.

5. When finished transporting the patient, remove the sling from behind the patient.

## 4.10 Charging the Batteries

- Charge the lift when it is not in use or if the orange or red LED's are illuminated on the battery indicator
- 2. Raise the spreader bar to a safe height.
- 3. Depress the traverse button on the hand controller (or manually move the lift.)
- 4. Move the lift until it reaches the charging station.
- 5. If batteries are discharged to a level where the lift will not move, manually pull it to the charging station.
- 6. Charge the lift for at least two hours before returning it to service.
- 7. The LED's will flash sequentially when proper charging is initiated

Note: T.H.E. Medical recommends that the lift remain connected to the battery charger any time it is not in use.

## 4.11 Using Additional Help

Operating the lift requires a minimum of one trained operator. He/She may need additional help.

Operators should maintain control of the lift and direct helpers.

# WARNING

Helpers can cause injury or be injured.

Maintain control of the lift and direct any helpers.



Electric shock can cause death or serious injury. Charge the lift batteries only as described in this manual.

Important
Totally discharging the lift
batteries reduces battery life.



Model 800 Maximum Load Limit



If load limit has been exceeded, inspect the lift (See Inspecting the Lift, page 15).

Users' Manual **Pinnacle** 

# **SECTION 5 - MAINTAINING THE LIFT**

#### 5.1 Maintenance Schedule

5.2 Cleaning the Lift

follow a maintenance schedule. Use the convenient a mild detergent. Form on page 16.

The following chart represents minimum for obvious damage as you disinfect it. m

naintenance.	As Needed	Each Month
Cleaning(this page)	•	
Inspecting (this page)	•	•

# WARNING

Improper maintenance can cause injury. Maintain the lift only as described in this manual.

If the inspection shows damage or excessive wear, remove the lift form service until repair is made (see Repair Parts and Service, below).

#### Lubrication:

The internal ring gear requires lubrication annually. For optimal performance, NYE Rheolube 380 or equivalent industrial grade grease should be used. This must be performed by a qualified technician only.

The lift requires regular maintenance. Set up and Clean all surfaces of the lift with a damp, soft cloth and Use a stiff-bristled brush if necessary. Wipe the lift using a damp cloth. Dry the Lift with a towel. T.H.E. recommends inspecting the lift

#### Inspecting the Lift 5.4

Have your service technician check the following: Are all components present?

Does the spreader bar move up and down smoothly?

Are the lift components free of excessive wear?

Do all controls function properly?

Do all safety cutouts function properly?

Are the slings in good condition with no cuts or frayed edges?

Are all screws, nuts, bolts, and pins present and securely in place?

Does the lift traverse smoothly?

Is the main lifting strap in good condition with no cuts or fray?

# SECTION 5b - MAINTAINING THE TRACK

# WARNING

Failure in performing annual track maintenance and load testing can result in a catastrophic system failure which could cause serious injury or death.

The ceiling lift track system is an important part of your overall lifting system. All tracks and related components require regular maintenance, inspection and load testing. Any loose fittings must be repaired prior to using the ilft. Any lateral or end-to-end movement or deflection in the track is a sign of abnormal wear. Do not use the lift if any of these conditions arise. Have your track system professionally serviced prior to putting the lift back into service. Annual track inspections and load testing are imperative and required. Never use any track system that has not been load tested in the last 12 months.

# SECTION 6 - REPAIR PARTS AND SERVICE

# **WARNING**

injury. Use only T.H.E. Medical parts and T.H.E. Medical approved service on the

To order parts or for professional lift repair, contact T.H.E. Medical.

T.H.E. Medical (or an approved dealer) are the only agents authorized to manage, service or repair this product.

### Description

Hand controller
6003 Control Board
Battery meter
Case
Spreader bar TU3040
Batteries
Lifting strap
Clevis pin
Battery charger



Parts & Service 1-800-565-7075

Users' Manual

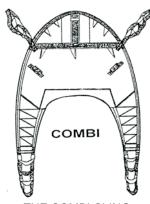
# Pinnacle

Figure 15 Maintenance Schedule

Lifting Motor	As Needed	Each Use	Monthly	Annually	Every 2 Years
Clean Lift as described in section 5.2	•				
Inspect lifting strap for cuts and/or fraying and/or unravelled stitching Replace strap immediately if damaged. Do not us lift if strap is damaged		•			
Inspect all spreader bar and side bar hardware for loose and/or missing components. Repair any deficiencies before using lift Inspect/test hand controller functions		•			
Inspect/test charging functions			•		
			•		
Inspect/test all limit switch functions				•	
Inspect/adjust all trolley wheels. Clean as required				•	
Inspect/test emergency lowering and emergency stop functions				•	
Inspect lift frame for loose/missing fasteners				•	
Inspect/test CNTC free wheel mechanism / lubricate main gear				•	
Replace main lifting strap					•
Replace Batteries					•
CEILING LIFT TRACKS					
Inspect and tighten all track brackets				•	
Inspect and tighten all track end stops				•	
Load test all tracks				•	
SLINGS					
Inspect for custs, tears, fraying ad unravelled stitching IMMEDIATELY REMOVE from service if damaged Inspect for signs of bleaching – as per sling instructions		•			

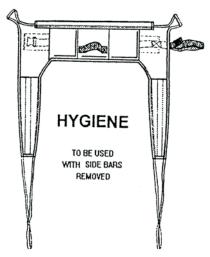
SECTION 7 - ACCESSORIES AND RELATED PRODUCTS

T.H.E. Medical offers a full line of accessories approved for use with the lift. Always follow the instructions packed with accessories. Keep the instructions with this manual. Be aware of any special considerations (maximum load limits, etc.) when using accessories.



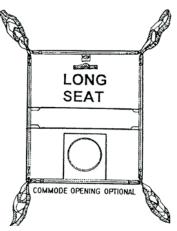
THE COMBI SLING

The most commonly used sling, the Combi Sling is designed to perform bed, chair, and floor lifts. It provides head support and features padded leg loops.



THE HYGIENE SLING

Used primarily for toileting and peri-care, the Hygiene Sling is designed to allow easy access to the perineal area. The sling supports the patient with an integrated chest harness. Patient's clothing may be adjusted for toileting while the patient is in the sling. Note: The side suspender bars are not used with this sling.



THE LONG SEAT SLING

Used primarily for amputee patients or patients with circumstances that make using the Combi Sling inappropriate, the Long Seat Sling provides body support for both above and below-the-knee amputees.

Contact T.H.E. Medical Customer Service (page 17) or your T.H.E. Medical dealer for product information.

Description	Cat #
Combi Sling	T015CMT015CXT015CMXT015CXXT015CXXT015CXXXT015TT015LT015LC

# WARNING

Attaching improper items to the lift can cause injury. Use only T.H.E. Medical-approved items on the lift.

# **SECTION 8 - LIMITED WARRANTY**

Thank you for purchasing the Pinnacle Ceiling Lift. With proper care and maintenance, you will enjoy many years of service from our carefully crafted product.

T.H.E. Medical ("Manufacturer") warrants only to the original purchaser ("Purchaser") for a period of one year commencing from the date of purchase as established by the sales receipt ("Date of Purchase") that the Pinnacle is free from all defects in material and workmanship, such as defect to be determined at the sole discretion of Manufacturer acting reasonable. Upon receiving any claim under this warranty, the Manufacturer shall provide replacement parts or replace the entire Pinnacle unit as Manufacturer, at its sole discretion, deems best, free of charge to the Purchaser. Shipping costs are specifically not covered.

Manufacturer shall determine whether and how warranty applies: Manufacturer shall advise whether it shall: (1) request the Original Purchaser ship the Pinnacle prepaid freight to the Manufacturer for inspection and determination of warranty coverage, (2) ship replacement parts to authorized service personnel for replacement, (3) replace the Pinnacle, or (4) deny warranty coverage.

Manufacturer specifically disclaims any and all other representations, condition and warranties, whether express or implied, whether arising by statute or operation of law, including but not limited to warranties or conditions of merchantability, or fitness save and except as set out above and shall not be responsible for any damages or any kind, including without limitation, direct, indirect, special, consequential, incidental, punitive or other damages, whatsoever, howsoever caused that may arise out of or result from use of the Pinnacle. In no instance shall the Manufacturer be liable for damages or any kind in excess of the original purchase price.

If any clause or part of a clause contained in this Warranty shall be held invalid or unenforceable, the Warranty shall be interpreted as if such clause or part of a clause had not been included..

# **SECTION 9 - CUSTOMER SERVICE**

Customer service product support are important aspects of each T.H.E. Medical product.

For assistance with the lift, contact T.H.E. Medical Customer Service.

Please have the serial number of your T.H.E. Medical product available when calling Customer Service, and include it in all written communications.

T.H.E. Medical One Easter Court, Suite J Owings Mills, MD 21117

Telephone: 888-363-7224 Fax: 410-363-7708



SERIAL NUMBER\_\_\_\_\_

# TRAINING RECORD

Date	Name	Description

# MAINTENANCE RECORD

Date	Description	Ву