

# Operation Manual

## Rhino P500



## Bariatric Patient Lifter

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## **Limited Warranty**

The warranty below has been drafted to comply with Federal Law applicable to products manufactured after July 4, 1975. This warranty is extended only to the original purchaser/consumer (or dealer non-consumer who does not buy for resale).

Tuffcare® warrants that its proprietary Rhino Series patient lifters will be free from defective workmanship and materials for a period of one (1) years following the date of original manufacture with the following exceptions: All welds are warranted for the life of the patient lifter. Electronics on the lifter are warranted for one (1) year. The warranty period commences on the original manufacture date. If within such warranty period any such product proven to Tuffcare® satisfaction to be defective, such product will be repaired or replaced at Tuffcare® option.

Tuffcare® sole obligation and your exclusive remedy under this warranty shall be limited to such repair and/or replacement. This warranty does not include any labor charges incurred in replacement parts installation. Freight charges to the factory are at the expense of the consumer or seller. Return freight charges will be prepaid by Tuffcare®. For warranty service, please contact the authorized dealer from whom you purchased your Tuffcare® products. In the event that you do not receive satisfactory warranty service, please write directly to Tuffcare®. **DO NOT RETURN PRODUCTS WITHOUT PRIOR AUTHORIZATION.**

**LIMITATIONS AND EXCLUSIONS:** The foregoing warranty shall not apply to products subjected to negligence, abuse, misuse, improper operation, improper maintenance, improper storage or damages beyond Tuffcare® control. The evaluation will be solely determined by Tuffcare®. The warranty shall not apply to problems arising from normal wear, or failure to follow instructions, or if parts are not manufactured by Tuffcare®, or not comply with original equipment specifications that are added to Tuffcare® product.

**THE FOREGOING WARRANTY IS EXCLUSIVE AND IN LIEU OF ALL OTHER WARRANTIES, INCLUDING BUT NOT LIMITED TO THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE AND SHALL NOT EXTEND BEYOND THE DURATION OF THE EXPRESS WARRANTY PROVIDED HEREIN. TUFFCARE® SHALL NOT BE LIABLE FOR ANY CONSEQUENTIAL OR INCIDENTAL DAMAGES WHATSOEVER.**

This warranty gives you specific rights and you may also have other legal rights which vary from state to state. Some states do not allow the exclusion or limitations of incidental or consequential damage, or limitation on how long an implied warranty lasts, therefore, the above exclusion and limitation may not apply to you.

## **MAINTENANCE**

1. Clean patient lifter regularly with non abrasive cleaners.
2. Check monthly that all screws are tight and have not loosened.
3. Inspect monthly for signs of leakage on hydraulic ram-jack and nicks or scratches on the lifting rod.
4. Check monthly for cut or exposed wires on the electrical components of the motorize patient lifter.
5. Lubricate the rod on the hydraulic ram-jack or the actuator every three month to ensure smoothness when lifting.
6. Make sure all rubber tips and ends are in good condition for use.

## **FORWARD**

Congratulations on your purchase of a TUFFCARE Rhino series patient lifter! Our Rhino lifter's are engineered and designed with durability and easy maintenance in mind.

Rhino lifters allow patients to be lifted and transferred with minimum effort. Before attempting to lift anyone please become familiar with using the lifter.

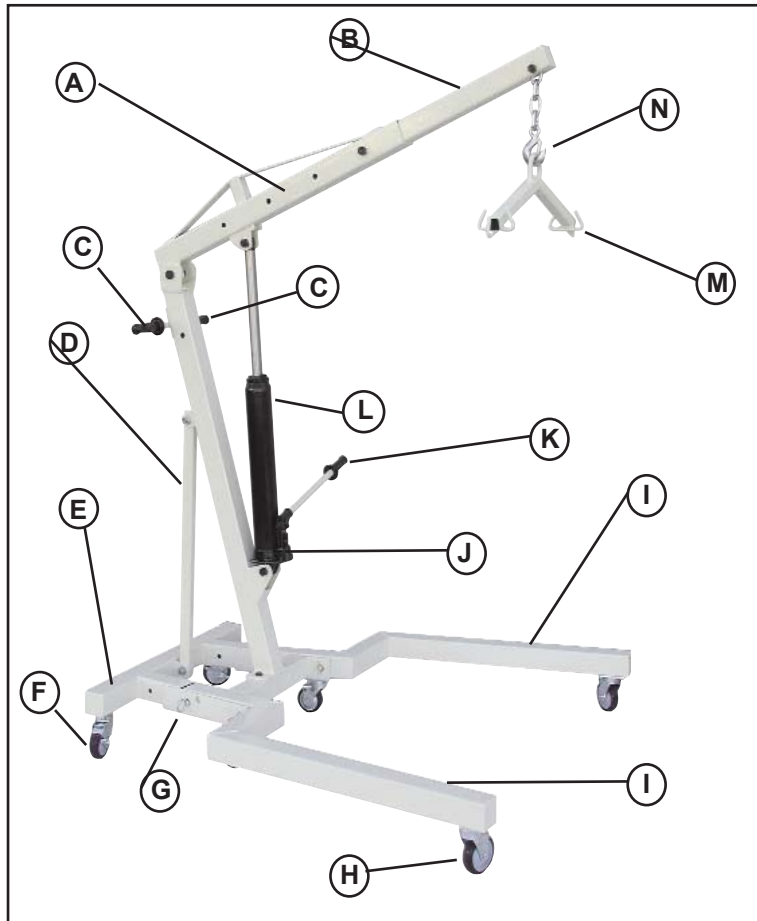
Read through this manual and get acquainted with your patient lifter. Follow the maintenance schedule to ensure proper function of your unit.

## **SAFETY PRECAUTIONS**

- \* Do not operate your lifter unit until you read and fully understand this manual.
- \* Do not operate your Rhino lifter until it is fully assembled and checked.
- \* Do not attempt to lift objects with the lifter. The lifter is designed solely for transferring patients.
- \* Adjust the sling properly, position patients so their knees are slightly above their waist and the weight centered in the middle.
- \* Do not transfer patients over shag or deep pile carpeting, thresholds, unpaved surfaces, outdoors or any other obstructions that can cause wheel stoppage and the lifter to tip over.
- \* Do not transfer patients on the lifter to go up or down a deep slop.
- \* Do not lock the rear brakes or block the wheels when lifting patient. All four wheels must be free to roll and allow the lifter to center itself beneath the patient.
- \* Do not exceed the maximum weight capacity of the lifter.

Do not modify or replace parts with other than those manufactured by TUFFCARE.

# RHINO P500 LAYOUT



**Hydraulic Fixed Base Lifter**

- |                   |                       |
|-------------------|-----------------------|
| A. BOOM           | H. FRONT CASTER       |
| B. BOOM EXTENSION | I. BASE EXTENSION LEG |
| C. PUSH HANDLE    | J. RELEASE KNOB       |
| D. SUPPORT        | K. JACK HANDLE        |
| E. BASE           | L. HYDRAULIC RAM      |
| F. LOCKING CASTER | M. CRADLE             |
| G. ROLLER SHAFT   | N. HOOK               |

## Transfer from Automobile

1. Park the automobile on a flat, smooth surface. Open the car door all the way.
2. Set a folded sling under the patient's back until the bottom of the sling touches the auto seat. Lift the patient's thighs and pass the end loops under the patient's legs. Cross the loops.
3. Lower the lifter's top bar so the cradle can clear the top of the door. Move lifter closer to auto so the loops on the sling can be attached to the hooks on the cradle.
4. Raise the lifter slowly and move the lifter back inch at a time. Repeat the process a few times until the patient's weight is rested on the sling.



5. Move lifter away from the car and rotate sling so that patient is facing the attendant.

## Transfer to Automobile

1. Push the lifter towards the car door. Approach car with patient's back to car seat.
2. Lean patient forward and adjust the sling to correct height so the head will clear car door. Continue to move the lifter forward until patient is inside the car.
3. Lift the patient's feet and legs inside the door and face the patient to the front of the car.
4. Slowly lower the lifter until the patient's weight is rested on the car seat. Remove the sling from patient or leave it behind patient for transferring out of car when reach destination. The lifter can be disassembled and placed in a car trunk.

### Raise the Patient from the floor

1. Roll the patient on the side and place the sling under the patient.
2. Move the lifter over the patient. Next place 1 or 2 pillows beneath the patient's head and shoulders, preventing any possible strain or injury when lifting the patient.
3. Lower the lifter so the loops on the sling can reach the hooks on the lifter bar, attach the loops.



4. Lift the patient off the floor. Turn the cradle so the patient is facing towards the upright bar. Rest the patient's legs on the base of the lifter.

### Lower the Patient to the floor

1. Before lowering patient, the patient should be centered in the sling.
2. Place a few pillows on the base of the lifter, to prevent the patient from hitting the base. Then slowly lower the sling to the floor. While lowering make sure the pillows are beneath the patient's head.



## ASSEMBLY INSTRUCTIONS

- A. Please carefully unpack the container and remove the patient Lifter from the shipping carton.
- B. Inspect the packaging, make sure there's no shipping damage and all the components are in the shipping carton.
- C. Assistance is needed and highly recommended due to the heavy weight of parts in completing the final assembly.
  1. Pull out upper Pinlock.
  2. Remove upper Roller Shaft.

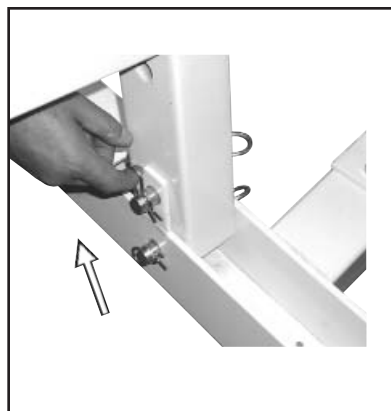


Figure 1

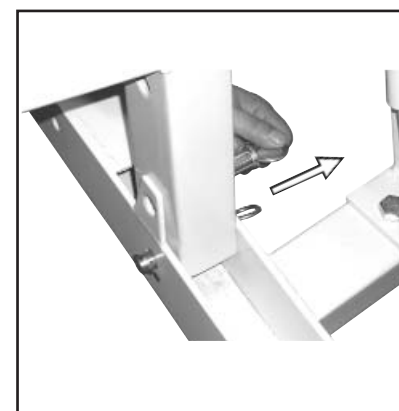
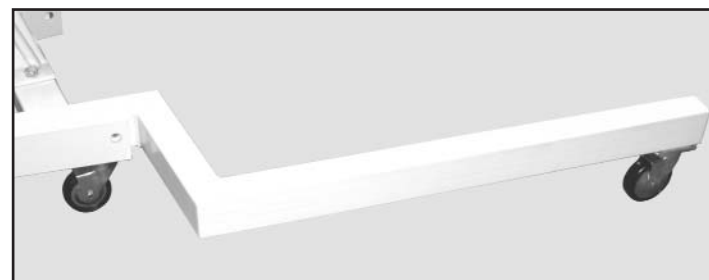


Figure 2

3. Carefully lay Base Extension Leg on the floor.



**CAUTION:** Keep fingers away from the moving components when lowering down Base Extension Legs.

# ASSEMBLY INSTRUCTIONS

4. Insert Roller Shaft to secure Extension Leg.
5. Insert Pinlock to secure Roller Shaft.

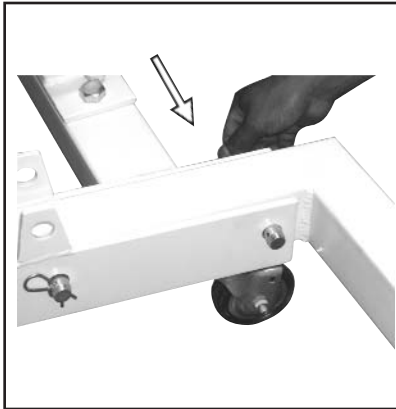


Figure 4

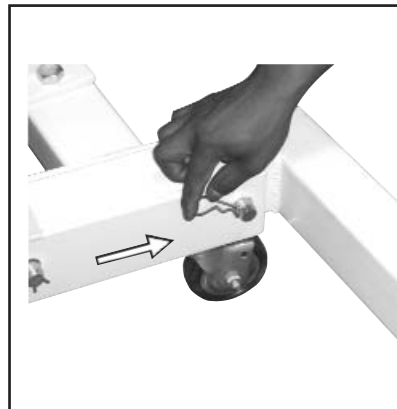
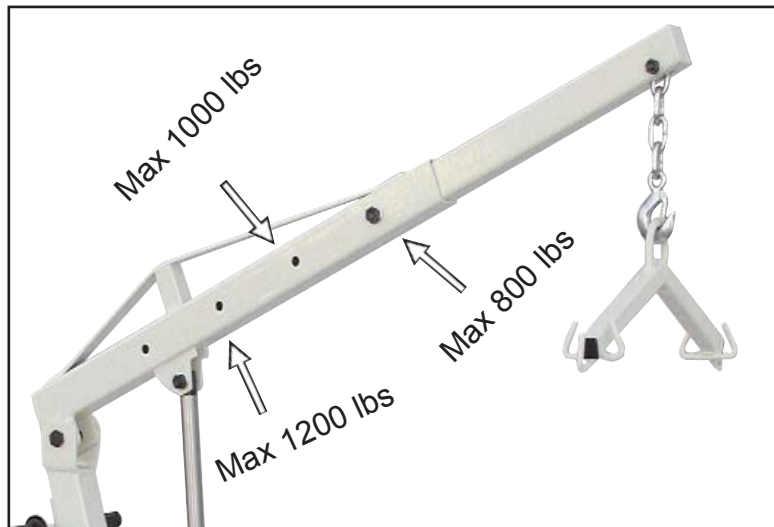


Figure 5

6. Repeat step 1 to 5 for the other leg.
7. Depend on the desired weight to be lifted, please select the proper lift limit.



## Transferring Patient from Wheelchair

1. Secure the wheelchair from rolling back by engaging both wheel locks on the wheelchair. Have the sling folded as in Page 11
2. Lean patient forward and set the folded sling behind the patient's back. Set the sling as far down as possible until it touches the back of the wheelchair seat.



3. Open the sling, pull the button loop section of the sling under patient's thighs then cross the loops
4. Move the lifter over the wheelchair and attach the loops to the cradle hooks. Then slowly raise the patient above the seat.

## Transferring Patient to Wheelchair

1. First lock both brakes on the wheelchair. Position the lifter over the wheelchair to center the wheelchair seat.
2. Lower the lifter slowly and while descending, guide the patient into the chair by pushing on the knees until the patient has achieved in a comfortable sitting position.
3. Detach the sling seat and roll the patient lifter away. Then remove the sling seat under the patient.





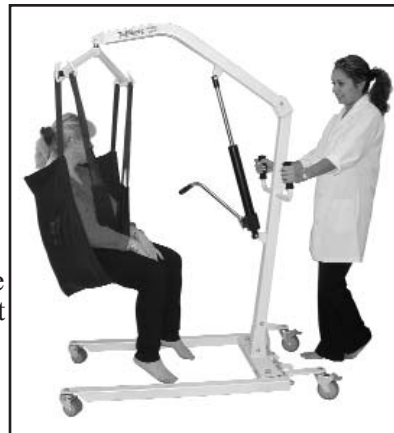
## Returning Patient to Bed

1. Raise the lifter until the patient's buttocks is above the mattress. If the patient can not be lifted above the bed try to lower the bed height, do not push or pull patient onto bed. This may tip over the lifter or injure the patient.
2. Move the lifter over the bed until the patient is approximately in the center. Lift the patient's feet and legs onto the bed. Gently rotate the patient to face end of the bed and slowly lower the patient onto the bed.



## Transfer Patient in lifter

1. When wheeling patients in the lifter try to keep the patient as low as possible. Keeping the center of gravity low to the ground to avoid tipping over. Have the patient's feet rest on the base of the lifter. The patient must face the attendant at all times.
2. Push the lifter by grabbing on the the push handles. Do not attempt to go over deep carpet, small objects or unpaved surfaces. Do not try to go up or down a slop over 5% or one that's over the attendant's ability to handle.



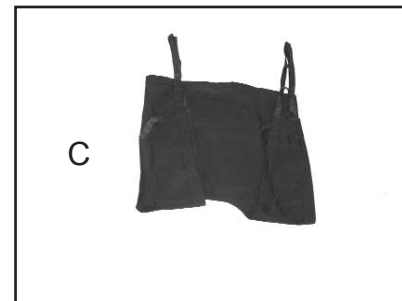
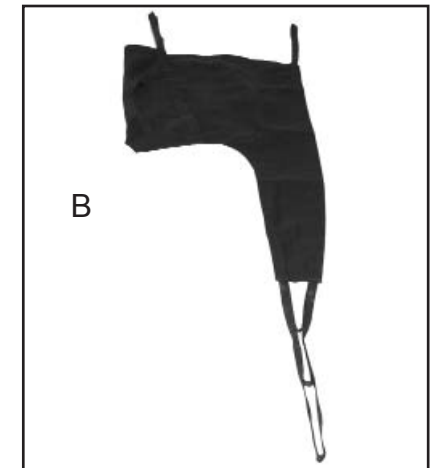
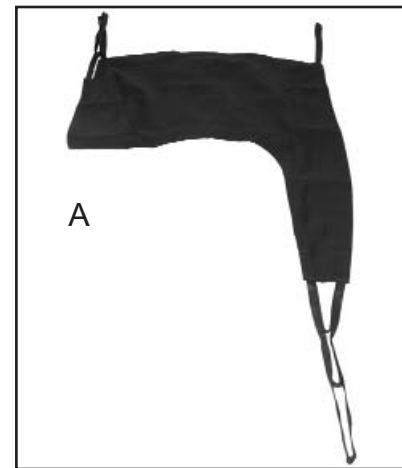
## OPERATING INSTRUCTIONS

For safety and security of the patient, please READ carefully all of the instructions before operating.

The attendant responsible for using the patient lifter should be thoroughly familiar with its operation. Since no patients are alike, care and discretion should be used to produce the most effective, safe and labor saving method of handling patient.

For adjustable base lifters, the legs of the base should always be widened to insure proper stability and balance. The narrow position is only used for moving the unit through narrow passages, such as doorways. Remember that the patient lifter is used for transferring patients only, not transporting.

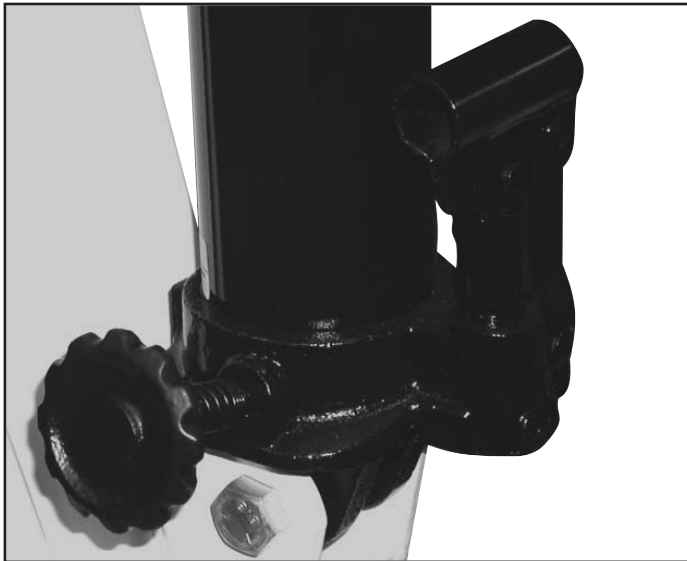
To set the U-style sling under patient first fold it as shown.



## Raising and Lowering the Lifter

Before attempting to raise the patient, be sure that the patient is seated comfortably and properly, the loops on the sling are hooked correctly. Make sure that all the attachments are secure. Keep the base legs widened.

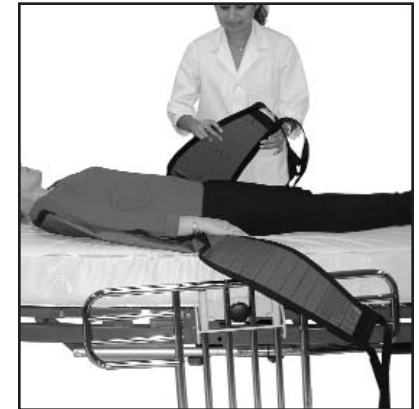
Turn the knob on the release valve clockwise all the way. Firmly tighten the knob. Use jack handle to pump the hydraulic ram-jack with full strokes, the cradle will raise slowly with every stroke. If the release valve is not securely tight the unit will not lift. To lower the patient, gently release the valve by turning it counter clockwise. The rate of a patient's descent is determined by how quickly the knob is turned and the amount of pressure released



**IMPORTANT** - Do not turn the knob too quickly or too far, otherwise the patient will rapidly descend.

## Transferring Patient from Bed

1. Carefully and gently roll the patient on their side. The sling seat should be folded lengthwise and placed under the patient so that the lower edge of the seat is slightly below the back.
2. Now roll the patient back onto their other side and pull the sling seat so that it unfolds under the patient. Then pull the leg loops forward and under the patients thighs. The loops should come through the patients legs. Then cross the loops.



3. Roll the base of the patient lifter over the bed as far as possible so that the cradle is directly over the patient. Lower the top bar and attach the loops on the sling to the hooks of the cradle.
4. Elevate the patient into a upright position by rising the head of the bed or by using pillows.
5. Make sure the parking brake is not set. It will allow the lift to center itself beneath the patient.
6. Raise the patient, make sure the patient is in a safe sitting position as the lifter rises.
7. As the patient is being raised, the cradle will level the patient into a seated position. Raise the patient until buttocks are just above the mattress. Rotate the patient to face lifter so the legs dangle off side of the bed.
8. Transfer the patient to wheelchair or other transport device by holding onto the push handles.