

BUCKINGHAM MFG.

BUCKET RESCUE DEVICE (MODEL NO. 3813, 3813D1 & 3813Q2)

Warning: Do not use this product if you cannot understand and follow the instructions and warnings that come with it and complete all necessary functions.

Please consult with your physician prior to using this product. Do not use this product under the influence of drugs or alcohol.

Buckingham's P/N 3813, 3813D1 & 3823Q2 series has been designed to provide a means to rescue a worker from an elevated height. These systems and any of their **components must not be used for any other purpose.**

The Buckingham Bucket Rescue Device (PN 3813 & 381D1) includes a block and tackle system consisting of two double pulleys to provide a 4:1 reduction in load required to lift the worker. PN 3813Q2 includes a block and tackle system consisting of two triple pulleys to provide a 6:1 reduction in load.

Hardware, colors and options may vary from those shown in figures below.

PN 3813 is designed to have the boom strap and storage bag containing the block and tackle strapped and stored on the boom.

PN 3813D1 is designed to have the boom strap and storage bag containing the block and tackle strapped and stored to the boom, with the option of the storage bag with block and tackle being disconnected from the boom strap and stored in a compartment of the bucket truck.

PN 3813Q2 is supplied in a carry bag that can be stored in a compartment of the bucket truck and attached to the boom when needed.

In compliance with the ANSI Z359.4 standard these products have a user weight limit of 130 to 310 lbs. (59 to 140 kg) when fully equipped. Outside of the ANSI Z359.4 compliance these systems can be used as follows:

- Exceptional cases like an accompanied descent (i.e. hurt man rescue): 440 lbs. (200 kg) maximum, when fully equipped. This method of rescue can only be used by rescuers specially trained in this technique.
- Single person load of 420 lbs. (190.5 kg) maximum, when fully equipped and when used with an equivalently rated harness / accessories.

Note: as a minimum use of this system requires:

- no impact loading.
- the rescuer must have the physical ability and adequate strength to raise and hold the worker at any point during the rescue. (i.e. the minimum force on the haul line for a 420 lb. individual based upon the systems with 4:1 ratio blocks, is 105 lbs. with 6:1 ratio blocks, the force is reduced to 70 lbs.).
- it is recommended that an additional braking system be used. To add additional braking to the system, the user must route the tail end of the haul line around a suitable stationary object (such as a pole) to create friction. The amount of braking / friction can be controlled by varying the number of wraps around the stationary object.

Maintenance and inspection of this rescue equipment is the responsibility of the assigned crew and requires inspection including but not limited to the block and tackle, haul line, swivels, swivel lock rings, springs, straps, dee rings and buckles. After inspection, operate entire unit. This maintenance and inspection also applies when using a spare bucket truck.

NOTE: Ratchet components as well as the snap hook keeper, locking mechanism and springs should also be thoroughly inspected for corrosion.

Recommended inspection intervals: Visual inspection: Prior to raising the boom, perform a visual examination of the boom attachment strap, ratchet mechanism and storage bag for damage, deterioration or improper attachment.

Inspection should include but not be limited to ensuring that unit is free of burns, cuts, abrasions, kinks, knots, broken strands or excessive wear and dee rings, snaphooks, blocks and buckles (if any) function properly and are not cracked or distorted.

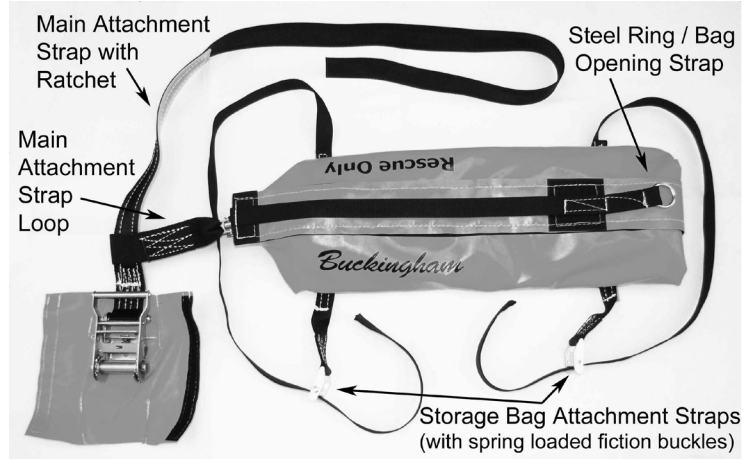
Only Buckingham Mfg. Co. or those people authorized in writing by Buckingham Mfg. Co. may make repairs / modifications to this equipment.

As a minimum annually Inspect complete system and repack. As required by ANSI Z359.4: "Equipment shall be inspected by the rescuer before each use and additionally by a competent person other than the rescuer at intervals of no more than one year".

Ensure the system is in good working order. If there is any question about the condition of any component of the system, discard the unit and replace with a new unit.

SYSTEM COMPONENTS:

PN 3813 shown



WARNING: Storage Bag Attachment Straps used on PN 3813 and 3813D1 are designed to hold the Storage Bag to the Boom, Not for Human Support.

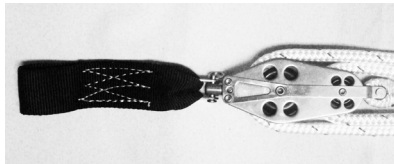
Block and Tackle & Haul Line
(4:1 Ratio)
(Model 3813 & 3813D1)



Block and Tackle & Haul Line
(6:1 Ratio)
(Model 3813Q2)



Top Block with Swivel
connected to Main
Attachment Strap Loop
(Model 3813)



Top Block with Swivel
connected to Snap Hook
(Model 3813D1)
Top & Bottom Blocks with
Swivels connected to
Snap Hooks
Red Snap Hook is used
to connect to anchor
(Model 3813Q2)



Main Attachment Strap with Ratchet and Cover (Model 3813 & 3813D1)



Main Attachment Strap with Ratchet (Model 3813Q2)



Snaphook (Style may vary from that shown)



Storage bag with Velcro Closure Model 3813 & 3813D1



Storage bag with Velcro Closure Model 3813Q2



PRIOR TO ATTACHING THE BUCKET RESCUE DEVICE TO THE BOOM:

1. Remove all components including product instructions from the storage bag. See System Components section above for details of the entire system.
2. **Read and fully understand all instructions and warnings before installation and use.**
3. Thoroughly inspect all components and operate swivels, pins, pin lock rings, shives, snap hooks, ratchets, etc. to ensure they function properly.
4. Inspect and operate the blocks for proper rigging. Also, run the blocks several times to assure that they function properly. NOTE: If blocks DO NOT function properly, correct or replace the unit.
5. Ensure a stopper knot is tied approximately one foot from the end of the haul line. If there is no Knot near the end of the line, tie an overhand knot approximately one foot from the end of the haul line. See Fig. 1.

Fig. 1

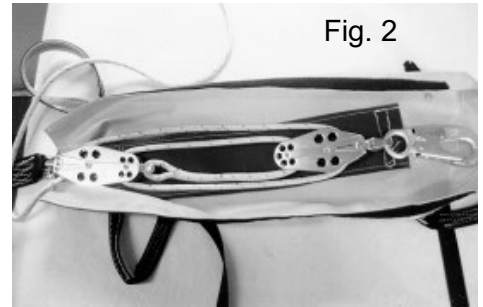


REPACK:

1. Upon completion of inspection, re-pack the unit into the storage bag as described below.
2. PN 3813: Lay out blocks to the interior length of the bag with the snaphook toward the closed end and the 1 3/4" black nylon web main attachment strap loop extending out from the open end of the bag. See Fig. 2.

PN 3813D1: Would follow the same instruction with the only exception being that the top block with attached snaphook should extend from the open end of the bag. See Fig. 2 (PN 3813 shown.)

Model 3813Q2: Lay out blocks to the interior length of the bag with the snaphooks facing opposite directions.



3. Model 3813 & 3813D1: Hand coil the remaining haul line to the size of the storage bag and place it neatly into the bag on top of the blocks (Fig. 3). This will allow the coil to fall out without being entangled into itself.

Model 3813Q2: Hand coil the remaining haul line to the size of the storage bag and secure the loops with 5 or 6 wraps of the tail. Leave enough tail to pass through the loop as a bight and pull tight to secure. See Fig. 4.



4. Model 3813 & 3813D1: To close the bag, fold the end of the bag inward, then, while holding the two halves of the bag together in the middle, close the bag with the Velcro- lined vinyl strip. See Fig. 5



INSTALLATION:

INSTALLATION INSTRUCTIONS FOR ATTACHING THE STORAGE BAG TO THE BOOM (Model 3813 & 3813D1)

1. Install the block and tackle storage bag on the boom approximately 10 -11 feet measured to the anchor point of the rescue system from the centerline of the bucket. Taller users may have to mount the bag higher. (Note: Ensure attachment is at adequate height to remove hurt person from bucket.) The storage bag should be mounted on the bucket side of the boom (Fig. 6), except on double bucket trucks, on which the bag should be mounted on the bottom of the boom to facilitate the two buckets. The bag should be installed with the drain hole facing down so as to not allow water to collect in the bag with the boom stored for transit.
2. Attach by looping the storage bag attachment straps around the boom and feeding them through the spring loaded friction buckles. Then pull the straps tight so that the storage bag is securely in place.

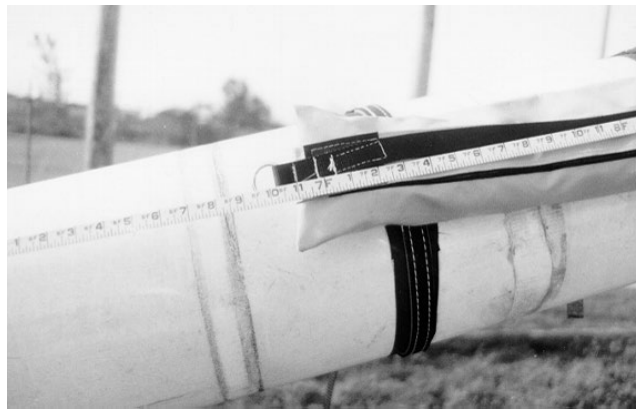


Fig. 6

INSTALLATION INSTRUCTIONS FOR ATTACHING THE BLOCK AND TACKLE TO THE BOOM (Model 3813, 3813D1 & 3813Q2)

1. When securing the main attachment strap / ratchet to the boom, ensure the placement is such that it can be easily accessible for attachment, (or removal of the bag Model 3813 & 3813D1) by any person who may be required to use the unit. Ensure attachment is at adequate height to remove hurt person from bucket.
2. The main attachment strap should be mounted so that the Main Attachment Strap Loop (Model 3813) or dee ring (Model 3813D1 & 3813Q2) are on the bucket side of the boom, except on Double bucket trucks, on which the dee ring should be on the bottom of the boom to facilitate the two buckets.

Model 3813: To mount the block and tackle to the boom, weave the main attachment strap around the boom and through the main attachment strap loop. See Fig 7 & 8.

Fig. 7

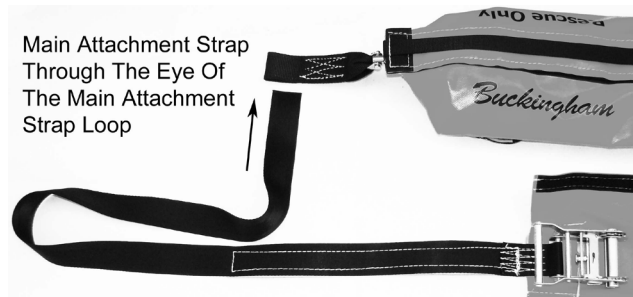
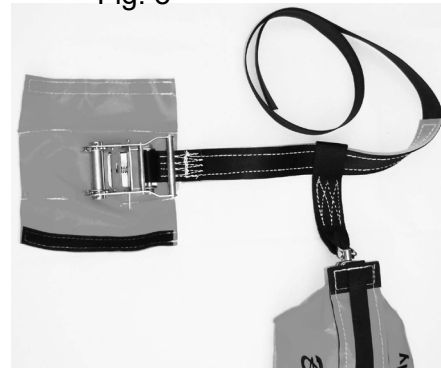


Fig. 8



Main Attachment Strap threaded through the Main Attachment Strap Loop (PN 3813)

Model 3813D1: To mount the block and tackle to the boom weave the main attachment strap around the boom and then connect the snaphook to the dee ring. Always visually check that the connecting device freely engages the dee ring and the keeper/gate is completely closed. See Fig 9.

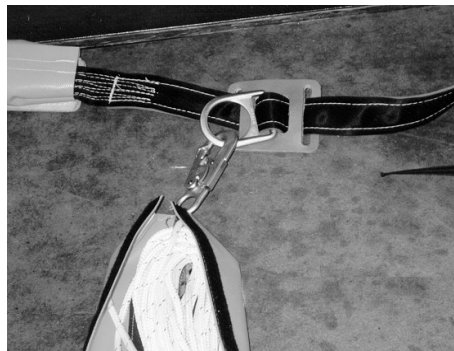


Fig. 9

Snaphook connected to the dee ring (Model 3813D1 shown)

3. Threading main attachment strap through ratchet (Model 3813, 3813D1 & 3813Q2):

- a. Thread the free end of the nylon strap through the slot in the winder bar (Fig. 10).



Fig. 10

- b. Pull the strap through the winder bar until the strap is taut (Fig 11).



Fig. 11

- c. Tighten the strap with the ratchet until the strap is sufficiently snug to prevent the unit from moving when in use. A minimum of 2 full wraps of webbing should be around the winder bar after tightening. Care should be taken not to place an excessive number of wraps around the winder bar as this may cause jamming (Fig. 12). NOTE: For installation on a square boom, ensure ratchet lies against the flat surface.



Fig.12

d. **Model 3813 & 3813D1:** Lock the ratchet by inserting the cotter pin through the holes in the ratchet housing and handle and spreading the ends of the cotter pin (Fig 13).

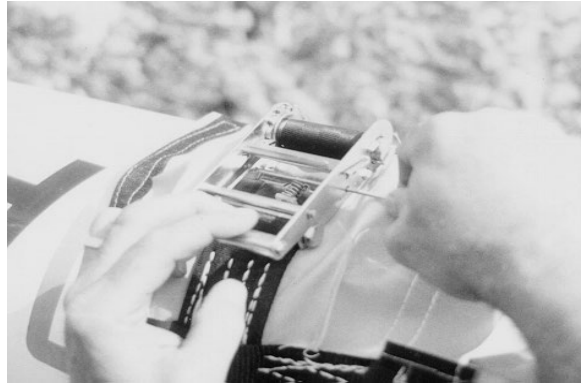


Fig. 13

e. Cut off excess strap, leaving approximately 6" protruding from the ratchet. Burn the cut end of the strap to prevent fraying.

f. **Model 3813 & 3813D1:** Cover the ratchet by folding the vinyl flaps of the cover over the ratchet and mating the Velcro strips (Fig. 14).

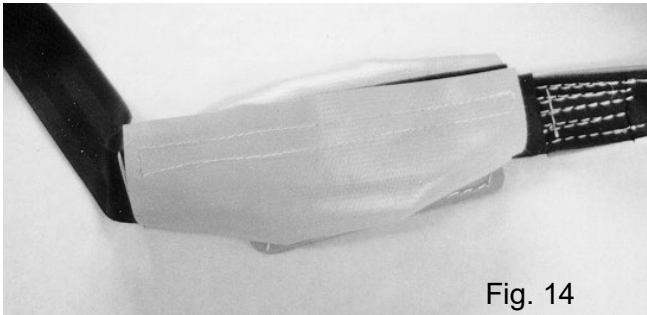


Fig. 14

Model 3813D1: Once the main attachment strap is around the boom and ratcheted tight with handle closed, attach the red snap hook of the block and tackle to the dee ring. Always visually check that the connecting device freely engages the dee ring and the keeper/gate is completely closed.



Fig. 15

OPERATION:

1. Model 3813 & 3813D1: Rescuer positions the bucket then pulls downward on steel ring to open the bag. The haul line, block and snaphook release from the bag. Do not allow the haul line to fall into the bed of the truck where it could become tangled (Fig. 15).

Model 3813Q2: Pull the tail of the haul line through the bight of the loop to release the coil. Do not allow the haul line to fall into the bed of the truck where it could become tangled.

2. Rescuer secures the haul line snaphook to the fall arrest attachment of the lineman's harness and removes his fall arrest lanyard (Fig 16 & 17).



Fig. 16



Fig. 17

3. The victim is then hoisted out of the bucket (Fig. 18).

Note: Prior to initiating this step, rescuer must ensure he / she has the physical ability and adequate strength to hold the worker at any point during the rescue.
(i.e. using Model 3813 or 3813D1 the minimum force on the haul line for a 420 lb. individual based upon the systems 4:1 ratio blocks, is 105 lbs. Using Model 3813Q2 with 6:1 ratio blocks, the force is reduced to 70 lbs.).

Fig. 18



4. The rescuer lowers the victim to the ground for medical Attention (Fig. 19).

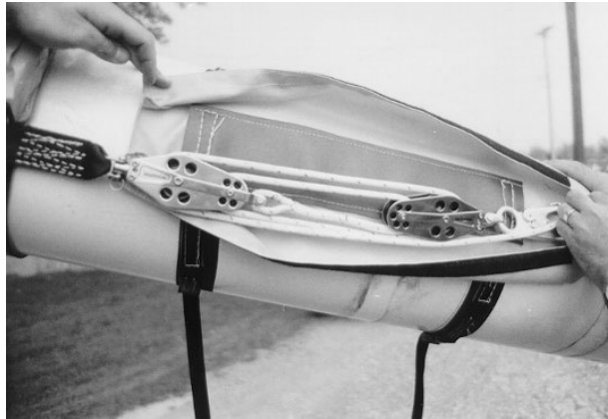
Fig. 19



INSTRUCTIONS FOR RE-PACKING WHILE THE BAG IS ATTACHED TO THE BOOM:

1. **Model 3813 & 3813D1:** Two people are required to place the unit in the storage bag. Using the full capacity of the storage bag, adjust the length of the block and tackle to the dimensions of the interior of the bag and insert the block and tackle with the snap hook positioned toward the bucket (Fig. 20).

Fig. 20



2. The remaining haul line is hand coiled to the size of the storage bag and placed neatly into the bag (Fig. 21). This will allow the coil to fall out without being entangled into itself.

Fig. 21



3. The storage bag can now be closed by mating the Velcro strips (Fig. 22). Remember, the drain hole of the storage bag will face down when properly installed.

Fig. 22



NOTE: Ensure proper fit / size of product before use. This product can-not be returned unless it is in new / unused condition.

STATEMENT of OBSOLESCENCE:

Precise “useful life expectancy” or “shelf life” for this product is not specified, as the degree of use, conditions of use, and the degree of care and storage determines useful life. All users maintain responsibility to select proper equipment for the job, be properly trained in its use, and ensure all personnel support equipment passes inspection before each use. Upon evidence of defects, damage or deterioration, all equipment shall be removed from service immediately and tagged or marked as unusable or destroyed. Additionally, all equipment shall be inspected on a regular basis not to exceed one year by a Competent Person, as defined by OSHA/ANSI, to verify that the equipment is safe for use. In the event of any question or concern regarding the condition of such equipment, users shall remove the equipment from service for further inspection. All users must comply with OSHA/ANSI/ASTM standards prior to and in using such equipment. For more information regarding safe and appropriate use of equipment, please contact Buckingham Manufacturing at 1-800-937-2825.

INTERNATIONAL USERS:

Notwithstanding the above, please know that certain international jurisdictions require manufacturers of equipment to provide customers with a maximum useful lifespan (sometimes referred to as a “Statement of Obsolescence”). To the extent required, Buckingham personal protective equipment manufactured from synthetic fiber materials including but not limited to items such as webbing and/or rope are subject to a maximum useful lifespan of ten (10) years from the date of manufacture. As stated above proper usage, storage, maintenance, and care impacts the useful lifespan of equipment. Extreme circumstances may require that product must be retired after only one use. This statement is made in conformance and compliance with BS EN 365:2004. International users must ensure that product inspections are completed by Competent Persons as defined by international standards including but not limited to British Standard (“BS”). If equipment fails any inspections, it must be immediately withdrawn from service and destroyed. For more information regarding safe and appropriate use of equipment, please contact Buckingham Manufacturing at 1-800-937-2825.

OUR GUARANTEE:

We guarantee the equipment we manufacture to be free from defects in material and workmanship. We will repair any equipment deemed to be defective which is returned to us by the original purchaser. However, this guarantee is void if any product is changed or altered in any way, or if the product is used in a manner other than for which it is intended. This express guarantee supersedes all other expressed or implied guarantees, obligations or liabilities. There are no implied warranties of merchantability or fitness for a particular purpose and as such, all implied warranties are specifically disclaimed.

LIMITATION ON LIABILITY:

In no event will Buckingham or buyer be liable to the other for lost revenues, lost profits or any other indirect, consequential, special or punitive losses or damages, however caused, whether in action for breach of contract, strict liability, tort, or otherwise, even if advised of the possibility of such losses or damages. In no event will Buckingham’s liability exceed the total amount paid by the buyer to Buckingham for the product or equipment giving rise to such claim(s).

Please see other terms and conditions relating to this product at <https://buckinghammfg.com/terms-conditions/>

REGISTRATION:

Before use of the product, ensure to register and confirm the product at www.buckinghammfg.com/register.

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Information contained in these written instructions supersedes all other information (written, audio, video etc.) produced by Buckingham Mfg. prior to the revision date of this document.