

# BUCKINGHAM MFG.

## P/N 105Q Series – Enclosed Space Rescue System Instructions / Warnings

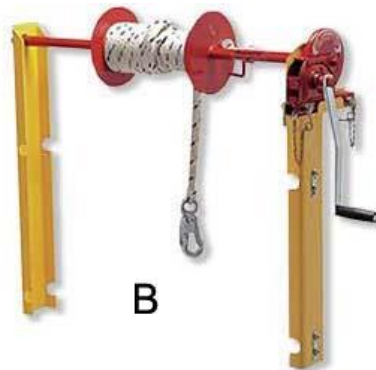
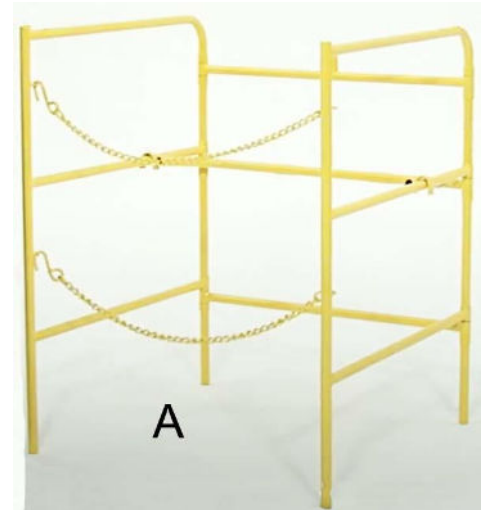
**Warning:** Do not use this product if you cannot understand and follow the instructions and warnings that come with it and complete all necessary functions.

This System is for use in ENCLOSED SPACES only (1910.269(e) & (t); 1910.268(o); 1926.953)

The Buckingham PN 105Q series systems are unique systems that allow for a rescue to be accomplished without having to send additional personnel into the hazardous area. These systems include the following components:

### 105Q1-30 Enclosed Space Rescue System-Tethered

- A- Manhole Guard, 42"-WAMG-42 (491131)
- B- Manhole Guard Winch, 42"-WAML-42DX (491132)
- C- Retrieval Breakaway Rope Kit-39SAM13Q3-30
- D- Storage Bag-4562R
- E- Rope Assembly w/ snap-39SAM13Q13-30
- F- Rope Grab-5004A1
- G-Shackle-491126
- H-Screw Link-491127
- I- Lynch Clip-491128



C - RETRIEVAL BREAKAWAY  
ROPE KIT - PN 39SAM13Q3-30



### Recommended Harnesses

- A - BUCKOHM ENCLOSED SPACE HARNESS-68M9EQ2
- B - BUCKOHM BUCKTRIEVER HARNESS-603A8Q12
- C - BUCKTRIEVER HARNESS-603S8Q211
- D - BUCK RETRIEVAL HARNESS, BASIC-63936Q



A



B



C



D

## Assembly of Manhole Guard [WAMG-42] and Winch [WAML-42]

### Manhole Guard [WAMG-42]

- Remove manhole guard assembly from box. This unit is pre-assembled, folded flat as shown in Fig. 1.
- Stand the unit up so it is resting on the legs and unwrap the chains from both sides (Fig. 2).
- Unfold the unit so the side rails (taller) are at 90° to the back rail (shorter) and form a U-shape. The lock bar on the back rail should be facing towards the inside of the guard.
- Lift the lock bar up (Fig. 3). (you may have to move the side rails out a bit in order for the lock bar to clear the side rails). Align the U-channels of the lock bar onto the middle bar of the side rail on both sides and lower the lock bar down so the side rails cannot move (Fig. 4).
- Reattach the chains by inserting the S hooks through the attached loops on the opposite side rail.



Fig. 1



Fig. 2



Fig. 3



Fig. 4



Fig. 5

### Winch [WAML-42]

- Remove all other components from the box. Winch assembly, winch handle, two winch mounting plates, and hardware package that includes 4-U bolts, 8-nuts, and 4-washer plates.
- The winch mounting plates are to be installed centered on the outside of the side rails.
- One winch mounting plate has a hole at the top and the other has an angle bracket and is slotted at the top. The slotted mounting plate is the side the winch handle must go on and it can be attached to either side rail for the most convenient to operation.
- Align one of the mounting plates to the two top rails with the mounting plate grooves facing towards the inside of the barricade (Fig. 6).

- Attach to the rails with the U bolts installed from the inside of the barricade to the outside so it captures the rail and the threaded ends are exposed through the flat part of the mounting plate (Fig. 7).
- Place a washer plate over the U Bolt threads so it sits flat against mounting plate (Fig. 7).
- Attach one nut to each of the U Bolt threads and evenly hand tighten (Fig. 8). Repeat this step for the remaining U bolts and mounting plates, only hand tightening nuts at this point.



Fig. 6

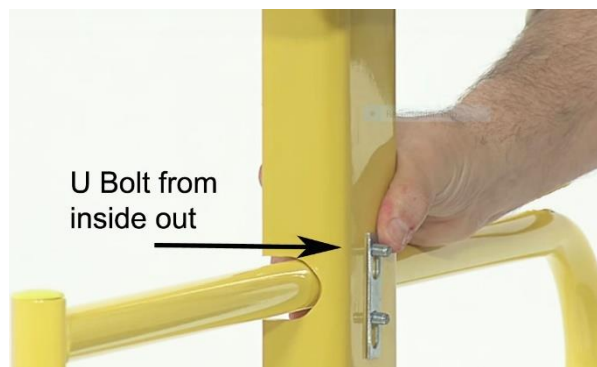


Fig. 7



Fig. 8

- Once the mounting plates are installed on the side rails and nuts are snug, align the plates so they are directly across from each other and in the middle of the side rail. Securely tighten the nuts to the U bolts with a wrench or socket. (Fig. 9).
- Install winch assembly by removing mounting pins and placing the axle end through the hole in the mounting bracket (Fig. 10).
- Set the winch end through the slot in the mounting bracket and nest the winch mount in the angle bracket (Fig. 10).
- Align the holes of the winch assembly to the holes in the angle bracket (Fig. 11).



Fig. 9



Fig. 10



Fig. 11

- Insert the locking pins through the winch assembly and angle bracket and attach the locking pin keeper (Fig. 12).
- Remove nut on end of winch handle axle and install the handle onto the axle. Replace nut and securely tighten with a wrench or socket (Fig. 12).
- Test winch to be sure it lowers and raises by turning the winch handle.
- Position the guard around the manhole as needed.
- The fully assembled unit should appear as shown (Fig. 13).





Fig. 12



Fig. 13

#### PN 105Q1-30 Tethered Enclosed Space Rescue

- Disconnect the safety chains from the barricade.
- The entrant dons a full body retrieval harness (See page 2).
- **Attach the lifeline snaphook to the entrant's harness dorsal attachment (Fig, 14) and the other end of the lifeline to the loop at the bottom of the barricade using the breakaway assembly (Fig, 15).** Note: the breakaway assembly is designed to release the lifeline from the barricade in case of an accident such as a car striking the barricade.



Fig. 14



Fig. 15

- The entrant then enters the space with the lifeline attached.

Should the Entrant need to be rescued the attendant will:

- Release the breakaway lifeline assembly from the barricade (Fig. 16).
- Attach the rope grab on the lifeline to the snaphook on the winch line (Fig. 17).
- Crank the winch handle to raise the victim (Fig. 18).
- Continue to crank until the victim is raised above the surface of the space (Fig. 19).
- Carefully tip the barricade backwards so that the victim assumes a prone position on the ground (Fig. 20).



Fig. 16



Fig. 17



Fig. 18



Fig. 19



Fig. 20



## Warnings

- This equipment is intended for use by properly trained professionals only. Do not use without proper training.
- This product is designed to be used by a person with a maximum weight of 350 lbs. when fully equipped.
- Fall protection equipment, (i.e. fall arrest, work positioning belts, retrieval, suspension, rescue etc.) should not be resold or provided to others for re-use after use by original user as assurance cannot be granted that a used product meets criteria of applicable standards and is safe for use to a subsequent user.
- Do not alter this product or any safety product in any way.
- Only Buckingham Mfg. Co. or those people authorized in writing by Buckingham Mfg. Co. may make repairs to this equipment.
- Equipment subjected to impact loading must be immediately removed from service, destroyed, and discarded.
- Attach only to compatibly sized locking carabiners / snap hooks.
- Retrieval anchor points must support your weight plus any additional job-related load.
- Always visually check that: 1) each carabiner / snap hook freely engages D-ring or anchor point, 2) keeper / gate is completely closed with each use. Never rely solely on the feel or sound of a carabiner / snap hook /engaging.
- Make sure each carabiner / snap hook is positioned so that its keeper / gate is never load bearing.
- Ensure there is no pressure on the locking mechanism sufficient to depress it as this will, due to its length, render it incompatible with currently designed rings and make it very susceptible to rollout.
- Never disable locking keeper / gate on carabiner / snap hook, punch holes in or alter a connecting device in any way.
- Never use these units where contact of the webbing with sharp edges, corners or abrasive surfaces are likely. Sharp and abrasive surfaces may include but not be limited to (sheet metal, steel, concrete, block, stone, laminated materials etc.)
- Avoid contact of this equipment with chemicals, abrasive surfaces, high temperature surfaces, welding, or other heat sources, electrical hazards, or moving machinery that may damage the material. If in doubt, contact Buckingham Mfg. Co.
- In exceptional circumstances, wear or damage could occur on the first use which reduces the lifetime of the product to that one single use.
- This product, which is only one part of a retrieval system, is intended for retrieval purposes only, not fall arrest.
- Retrieval lines must be attached only to the single mounted back, sternal or both shoulder mounted D-rings / loops of your full body harness.
- The use of fall arrest back up equipment is **highly recommended** in addition to this product.
- Thorough employee training in the selection and proper use of retrieval equipment is imperative.
- This equipment is for personal use only, not towing or hoisting.
- Never work without independent fall arrest protection if there is danger of a fall.
- Employer - instruct employee as to proper use and warnings before use of equipment.
- Completely read, understand, and follow all instructions, warnings, and guidelines pertaining to this and all associated equipment before use. Failure to do so could result in your serious injury or death.
- Product covered under these instructions / warnings should not be resold / redistributed or re-used after use by original user.
- Activities involving the use of this equipment are inherently dangerous. You are responsible for your own actions and decisions. Before using this equipment, you must:
  - ❖ Get specific training in its proper use.
  - ❖ Become acquainted with its capabilities and limitations.
  - ❖ Understand and accept the risks involved.
- Verify that this product is compatible with the other components of your system. See the instructions to those products.

## 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 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](http://www.buckinghammfg.com/register).

**BUCKINGHAM MFG.**  
BINGHAMTON, NY  
1-800-937-2825  
[www.buckinghammfg.com](http://www.buckinghammfg.com)

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.