Buckingham Mfg. Co.

P/N 109 Vertical Lifeline Kit
Instructions / Warnings

Read carefully, understand, and heed these and all included instructions, warnings, and cautions before using this equipment. Failure to do so could result in serious injury or death.

Buckingham’s P/N 109 is a Vertical Lifeline Kit that safely allows climbers vertical access to a structure while keeping them 100% fall protected. This kit and any of its components must not be used for any other purpose.

The P/N 109 Vertical Lifeline Kit contains the following components (Fig. 1)

Note: Hardware and components may differ from what is shown in Fig. 1.

1 – 39S2Q1-Length Lifeline
6 – 5005T Steel Carabiners
1 – 50051 Steel Carabiner
2 – 5004L Fall arresters with attached oval TRIACT Lock Carabiners
6 – 3905E-24 Redirect Slings
1 – 3902-6 Anchor Strap
1 – 4569PQ5-Length Rescue Bag

RECOMENDED USE OF THE PN 109 VERTICAL LIFELINE KIT

1. First person up ascends the structure using a means of fall protection and attaches the 3902-6 temporary anchor strap to the structure to create a suitable anchor (Fig. 2).
2. Ensure temporary anchorage connector is properly secured to anchorage before use.
3. Attach the lifeline carabiner (50051 provided) to the eye of the lifeline, then to the D-ring of the anchor strap (Fig. 3)
4. The first person up can now attach the 5004L fall arrester to the lifeline (Fig. 4 – 8) then connect to their harness frontal attachment element using the 5004L attached carabiner (Fig. 8). Note only use the oval TRIACT Lock Carabiner provided with the fall arrester.
5. Once the first person up reaches their desired work location they can attach themselves at that location using a suitable means of fall protection. Once properly attached they can disconnect the 5004L fall arrester from the lifeline.
6. Second person up can now attach an additional 5004L fall arrester to the lifeline then connect to their harness (step 4 above) and climb the structure while fall protected.

Note: In the event that the fall arrester experiences a rapid downward movement it will become locked and will need to be unlocked. To unlock remove weight from the fall arrester then press the locking wheel towards the rope and slide the fall arrester up the rope a few inches until you hear a click. The fall arrester is now unlocked (Fig. 9).

7. The second person up while ascending the structure, will attach the 3905-24 redirect sling to the structure, a 5005T carabiner to each redirect sling and then the lifeline to the 5005T carabiner (Fig. 9 – 11). This will keep the lifeline close to the structure.

Note: the second person up while installing the redirect sling must ensure their fall arrester is above each redirect sling being installed.
a. Depress silver arm on side of locking wheel
b. Insert rope into channel of Fall Arrester
c. Attach the oval TRIACT Lock carabiner to Fall Arrester
d.) Connect Fall Arrester Carabiner to the front-mounted attachment element of the Harness

**WARNINGS**

- Read understand and follow all instructions and warnings attached and/or packed with this product before use.
- This equipment is intended for use by properly trained professionals only.
- The Fall Arresters supplied with this kit are designed by the manufacturer to be used by workers with a maximum weight of 220 lbs. when fully equipped. Users weighing over 220 lbs. and up to 310 lbs. must use an energy absorbing lanyard when using these Fall Arresters.
- Fall protection equipment (i.e. fall arrest, work positioning belts, retrieval, suspension 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.
- Anchor points must support a minimum of 5000 lbf. per attached worker and be independent of worker support.
- Harnesses equipped with a front-mounted attachment element for fall arrest shall be used only as part of a personal fall arrest system that limits the maximum free fall distance to two feet and limits the maximum arrest force to 900 pounds. Ensure the front attachment element is properly positioned as stated under “Donning Harness” in Buckingham’s Harness Wearing Instructions.
- Avoid rubbing of unit components against abrasive surfaces and sharp edges.
- Use this product only in combination with compatible equipment.
- Equipment subjected to impact loading must be immediately removed from service, destroyed and discarded.
- Always visually check that the snap hook / carabiner freely engages the anchor point and the keeper / gate is completely closed. Never rely on the feel or sound of a snap hook / carabiner engaging.
- Be certain the snap hook / carabiner is positioned so that its keeper / gate is never load bearing.
• Ensure loads applied to carabiners are directed in the proper orientation. Proper and improper loading techniques are shown below in Fig. 14
• Never disable the locking mechanism on the snap hook / carabiner, punch holes in or alter a connecting device or any part of this system in any way.
• Do not let any part of this system come into contact with any chemicals, corrosive materials, acids or basic solvents.
• Wearing gloves while using this product is highly recommended.
• Product covered under these instructions / warnings should not be resold / redistributed or re-used after use by original user.
• Employer - instruct employees as to proper use, warnings and cautions before use of this equipment.

![Proper Loading Techniques](image1)
![Improper Loading Techniques](image2)

**Fig. 14**

**Maintenance**

- Proper maintenance and storage of your equipment will prolong its useful life and contribute toward its performance. Clean equipment with water and mild soap and allow to dry thoroughly without using excessive heat. Lubricate as necessary.
- Apart from visual examination of product before and after each use, it should be inspected at least twice a year by an authorized person.
- LUBRICATE LOCK MECHANISM AND KEEPER /GATE ON BOTH SIDES OF CONNECTOR AT LEAST WEEKLY OR AS OFTEN AS REQUIRED to maintain smooth operation (no binding) with light weight lubricant such as WD-40®

**INSPECTION**

Prior to and after each use, carefully inspect each component. It is also recommended all components be removed from the storage bag and as a minimum, inspected every six months. The inspection should include, but not be limited to the following:

**Fall Arrester**

- Inspect to ensure there are no cracks, distortion, nicks or burrs.
- Make sure the rope is woven through the arrester correctly as illustrated on the unit and shown in these instructions.
- Inspect for proper operation of device.

Note: Refer to these as well as the separately included manufacturers Instructions / Warnings for this device

**Temporary Anchors**

- Inspect to ensure that unit is free of burns, cuts, abrasions, kinks, knots, broken strands, chemical or physical exposures discoloration, swelling or excessive wear and D-rings and buckles (if any) are not distorted or cracked.
- Inspect stitching to ensure there is no excessive wear, abrasions, cut, broken, missing or unraveling thread or broken fibers.

**Lifeline**

- Inspect the entire length of rope to ensure there are no cuts, kinks, abrasions burns, broken fibers, chemical or physical exposures, excessive wear, discoloration, swelling, or herniated rope (core popping through cover).
- Inspect stitched eyes to ensure there is no excessive wear, abrasions, cut, broken, missing or unraveling thread or broken fibers and that shrink tube and thimbles are properly in place.

**Carabiners**

- Ensure locking device and or keeper / gate operate freely and smoothly.
- Inspect to ensure there are no cracks, distortion, corrosion or nicks.

If any evidence of wear or deterioration as outlined is observed, immediately cease use, destroy the product, and replace it with new equipment. Should any unusual conditions not outlined above be observed or you have reasonable doubt about a particular condition, remove the equipment from service and notify your Supervisor, Safety Director, or contact Buckingham Mfg. Co. for clarification.

BUCKINGHAM MFG. CO.
BINGHAMTON, NY
www.buckinghammfg.com
1-800-937-2825

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.