

GUARDIAN

FALL PROTECTION



Product Name: 4-Person Rope HLL

Part #: 30800

Instruction Manual

Do not throw away these instructions!

Read and understand these instructions before using equipment!

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Introduction

Thank you for purchasing a Guardian Fall Protection 4-Person Rope HLL. This manual must be read and understood in its entirety, and used as part of an employee training program as required by OSHA or any applicable state agency.

This and any other included instructions must be made available to the user of the equipment. The user must understand how to safely and effectively use the 4-Person Rope HLL, and all fall safety equipment used in combination with the 4-Person Rope HLL.

| User Information | |
|--------------------|-------|
| Date of First Use: | _____ |
| Serial #: | _____ |
| Trainer: | _____ |
| User: | _____ |

Applicable Safety Standards

When used according to instruction specifications, this product meets or exceeds all applicable OSHA 1926 Subpart M, OSHA 1910, ANSI Z359.1-2007, and ANSI A10.32-2012 standards for fall protection. Applicable standards and regulations depend on the type of work being done, and also might include state-specific regulations. Consult regulatory agencies for more information on personal fall arrest systems and associated components.

Worker Classifications



Understand the following definitions of those who work near or who may be exposed to fall hazards.

Qualified Person: A person with an accredited degree or certification, and with extensive experience or sufficient professional standing, who is considered proficient in planning and reviewing the conformity of fall protection and rescue systems.

Competent Person: A highly trained and experienced person who is ASSIGNED BY THE EMPLOYER to be responsible for all elements of a fall safety program, including, but not limited to, its regulation, management, and application. A person who is proficient in identifying existing and predictable fall hazards, and who has the authority to stop work in order to eliminate hazards.

Authorized Person: A person who is assigned by their employer to work around or be subject to potential or existing fall hazards.

It is the responsibility of a Qualified or Competent person to supervise the job site and ensure all applicable safety regulations are complied with.

Product Specific Applications



WARNING Use of equipment in unintended applications may result in serious injury or death. Maximum 1 attachment per connection point.



Personal Fall Arrest: 4-Person Rope HLL may be used to support a MAXIMUM 4 PFAS for use in Fall Arrest applications. Structure must withstand loads applied in the directions permitted by the system of at least 5,000 lbs. Maximum free fall is 6', or up to 12' if used in combination with equipment explicitly certified for such use. Applicable D-ring: Dorsal.



Restraint: 4-Person Rope HLL may be used in Restraint applications. Restraint systems prevent workers from reaching the leading edge of a fall hazard. Always account for fully deployed length of lanyard/SRL. Structure must withstand loads applied in the directions permitted by the system of at least 1,000 lbs. No free fall is permitted. Restraint systems may only be used on surfaces with slopes up to 4/12 (vertical/horizontal). Applicable D-rings: Dorsal, Chest, Side, Shoulder.

For all applications: worker weight capacity range (including all clothing, tools, and equipment) is 130-310 lbs.

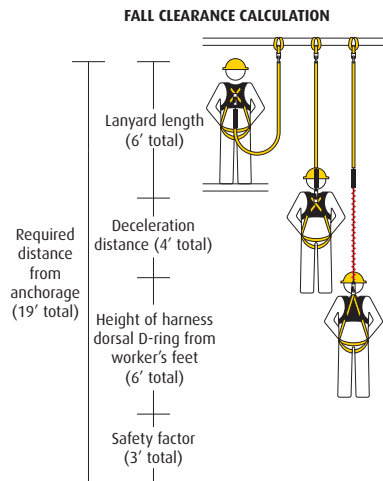
NEVER for simultaneous use in Fall Arrest and Restraint.

Limitations

Fall Clearance: There must be sufficient clearance below the anchorage connector to arrest a fall before the user strikes the ground or an obstruction. When calculating fall clearance, account for a MINIMUM 3' safety factor, deceleration distance, user height, length of lanyard/SRL, and all other applicable factors.

Diagram shown is an example fall clearance calculation ONLY.

Swing Falls: Prior to installation or use, make considerations for eliminating or minimizing all swing fall hazards. Swing falls occur when the anchor is not directly above the location where a fall occurs. Always work as close to in line with the anchor point as possible. Swing falls significantly increase the likelihood of serious injury or death in the event of a fall.



Compatibility: When making connections with 4-Person Rope HLL, eliminate all possibility of roll-out. Roll-out occurs when interference between a hook and the attachment point causes the hook gate to unintentionally open and release. All connections must be selected and deemed compatible with 4-Person Rope HLL by a Competent Person. All connector gates must be self-closing and self-locking, and withstand minimum loads of 3,600 lbs. See the following for examples of compatible/incompatible connections:

Connector closed and locked to D-ring. **OK.**



Connector to integral lanyard. **NO.**

Two or more snap hooks or carabiners connected to each other. **NO.**



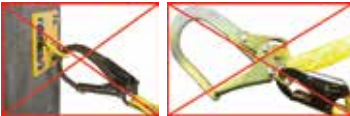
Connector directly to webbing. **NO.**

Two connectors to same D-ring. **NO.**



Application that places load on gate. **NO.**

Incompatible or irregular application, which may increase risk of roll-out. **NO.**



Connector directly to horizontal lifeline. **NO.**

Components and Specifications

Materials: Polyester and powder-coated aluminum.




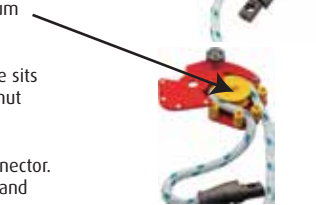

Installation and Use

Prior to use, plan your system:

1. Ensure all PFAS equipment is selected and deemed compatible by a Competent Person.
2. Eliminate or minimize all risk of swing fall.
3. Determine desired location for HLL; ensure location is free of debris, rot, decay, cracking, and hazardous materials.
4. Installation, set-up, and use of HLL system must be done under the supervision of a Qualified Person.

Recommended Users: 2 Maximum Users: 4

Installation:

1. Loosen end plate nut and slide open housing plates. 
2. Pull back the cam and lever, and wrap rope around drum of the tensioner. Feed rope as shown. 
3. Reposition the housing plates, and ensure the top plate sits squarely on the pins. Once aligned, re-tighten end plate nut securely to hold the plates in position.
4. With a carabiner, attach lever eye to an anchorage connector. Connect a second carabiner on the cam of the tensioner, and secure to a second anchorage connector.
5. If the tensioner is installed as shown, the tail of the rope will hang down and may be used as a lifeline in combination with an automatic rope grab for access protection.
6. Pull initial slack through the tensioner by hand, and ensure the rope is sitting in the groove of the drum. If rope is trapped between the cam and the side of the drum, release the cam and pull on the rope until it slips back into the center of the drum. It is not necessary to pull the rope until it is fully taut; this is achieved by tightening the tensioner with a lever.
7. Using a 1" wrench, tighten rope tensioner to 440 lbs. of force. Ensure rope is tightened correctly by pulling firmly on rope 5' from the tensioner; sag must not exceed 4". NEVER attempt to reverse-wind the tensioner; the cam will lock and resist rotation in this direction. 

8. To uninstall HLL, loosen wing nut, then pull back cam lever. Use tommy bar to pry the lever back against the cam. Cam will release from drum, allowing rope to be pulled back through the tensioner, and the lifeline to be taken down from its anchorage. After releasing lifeline, inspect where it contacted tensioner and ensure there is no evidence of damage, including wear, corrosion, of separation of rope fibers.

Maintenance, Cleaning, and Storage

If 4-Person Rope HLL fails inspection in any way, immediately remove it from service, and contact Guardian to inquire about its return or repair.

Cleaning after use is important for maintaining the safety and longevity of 4-Person Rope HLL. Remove all dirt, corrosives, and contaminants from 4-Person Rope HLL before and after each use. If 4-Person Rope HLL cannot be cleaned with plain water, use mild soap and water, then rinse and wipe dry. NEVER clean 4-Person Rope HLL with corrosive substances.

When not in use, store equipment where it will not be affected by heat, light, excessive moisture, chemicals, or other degrading elements.

Inspection

Prior to EACH use, inspect 4-Person Rope HLL for deficiencies, including, but not limited to, corrosion, deformation, pits, burrs, rough surfaces, sharp edges, cracking, rust, paint buildup, excessive heating, alteration, and missing or illegible labels. IMMEDIATELY remove 4-Person Rope HLL from service if defects or damage are found, or if exposed to forces of fall arrest.

Ensure that applicable work area is free of all damage, including, but not limited to, debris, rot, rust, decay, cracking, and hazardous materials. Ensure that selected work area will support the application-specific minimum loads set forth in this instruction manual. Work area MUST be stable.

At least every 6 months, a Competent Person other than the user must inspect 4-Person Rope HLL. **Competent Person inspections MUST be recorded in inspection log in instruction manual and on equipment inspection grid label. The Competent Person must sign their initials in the box corresponding to the month and year the inspection took place.**

During inspection, consider all applications and hazards 4-Person Rope HLL have been subjected to.

Inspection Log

Date of First Use: _____.

Product lifetime is indefinite as long as it passes pre-use and Competent Person inspections. User must inspect prior to EACH use. Competent Person other than user must complete formal inspection at least every 6 months. Competent Person to inspect and initial.

This inspection log must be specific to one 4-Person Rope HLL. Separate inspection logs must be used for each 4-Person Rope HLL. All inspection records must be made visible and available to all users at all times.

| | J | F | M | A | M | J | J | A | S | O | N | D |
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| YR | | | | | | | | | | | | |
| YR | | | | | | | | | | | | |
| YR | | | | | | | | | | | | |
| YR | | | | | | | | | | | | |

If equipment fails inspection IMMEDIATELY REMOVE FROM SERVICE.

Safety Information



Failure to understand and comply with safety regulations may result in serious injury or death. Regulations included herein are not all-inclusive, are for reference only, and are not intended to replace a Competent Person's judgment or knowledge of federal or state standards.

Do not alter equipment. Do not misuse equipment.

Workplace conditions, including, but not limited to, flame, corrosive chemicals, electrical shock, sharp objects, machinery, abrasive substances, weather conditions, and uneven surfaces, must be assessed by a Competent Person before fall protection equipment is selected.

The analysis of the workplace must anticipate where workers will be performing their duties, the routes they will take to reach their work, and the potential and existing fall hazards they may be exposed to. Fall protection equipment must be chosen by a Competent Person. Selections must account for all potential hazardous workplace conditions. All fall protection equipment should be purchased new and in an unused condition.

Fall protection systems must be selected and installed under the supervision of a Competent Person, and used in a compliant manner. Fall protection systems must be designed in a manner compliant with all federal, state, and safety regulations. Forces applied to anchors must be calculated by a Competent Person.

Unless explicitly stated otherwise, the maximum allowable free fall distance for lanyards must not exceed 6'. No free fall allowed for non-LE SRLs. Class A SRLs must arrest falls within 24"; Class B SRLs must arrest falls within 54".

Harnesses and connectors selected must be compliant with manufacturer's instructions, and must be of compatible size and configuration. Snap hooks, carabiners, and other connectors must be selected and applied in a compatible fashion. All risk of disengagement must be eliminated. All snap hooks and carabiners must be self-locking and self-closing, and must never be connected to each other.

A pre-planned rescue procedure in the case of a fall is required. The rescue plan must be project-specific. The rescue plan must allow for employees to rescue themselves, or provide an alternative means for their prompt rescue. Store rescue equipment in an easily accessible and clearly marked area.

Training of Authorized Persons to correctly erect, disassemble, inspect, maintain, store, and use equipment must be provided by a Competent Person. Training must include the ability to recognize fall hazards, minimize the likelihood of fall hazards, and the correct use of personal fall arrest systems.

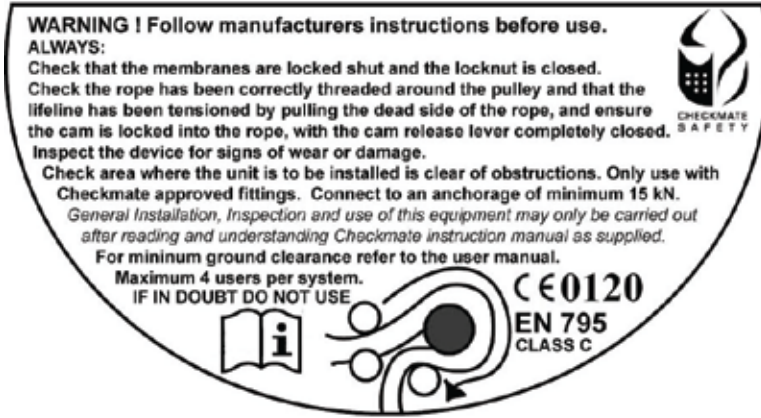
NEVER use fall protection equipment of any kind to hang, lift, support, or hoist tools or equipment, unless explicitly certified for such use.

Equipment subjected to forces of fall arrest must immediately be removed from use.

Age, fitness, and health conditions can seriously affect the worker should a fall occur. Consult a doctor if there is any reason to doubt a user's ability to withstand and safely absorb fall arrest forces or perform set-up of equipment. Pregnant women and minors must not use this equipment.

Physical harm may still occur even if fall safety equipment functions correctly. Sustained post-fall suspension may result in serious injury or death. Use trauma relief straps to reduce the effects of suspension trauma.

Labels



DEVICE TYPE/LENGTH (m)
 DATE OF MANUFACTURE
 SERIAL No.
 INSPECTION DATES
 Manufactured in the UK by Checkmate Lifting & Safety Ltd.
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