



Product Name: Web HLL

Part #: 04662

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 Web 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 Web HLL, and all fall safety equipment used in combination with the Web 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 and OSHA 1910 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



CAUTION

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



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



Personal Fall Arrest: Web HLL may be used to support a MAXIMUM 2 personal fall arrest systems (PFAS) for use in Fall Arrest applications. Structure must withstand loads applied in the directions permitted by the system of at least 3,600 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: Web 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:

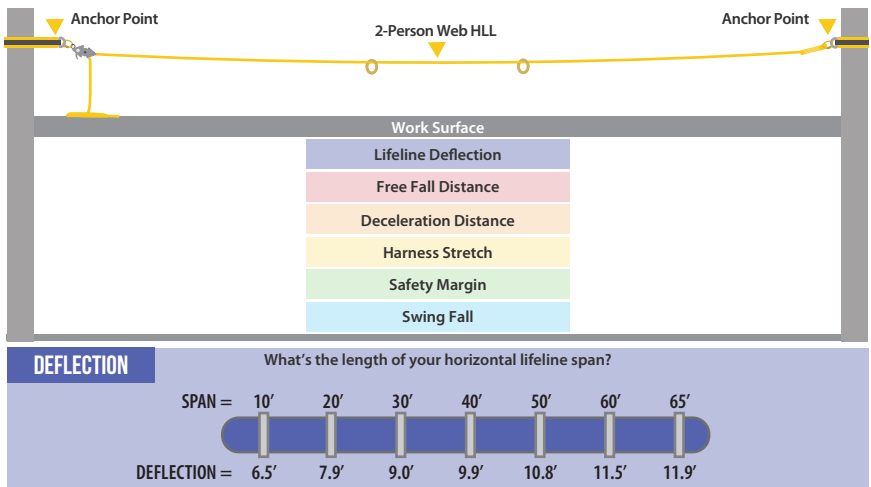
- For one user: 130-420 lbs.
- For two users: 130-310 lbs. (each).
- MAXIMUM two users per Web HLL.**

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 2' safety factor, deceleration distance, user height, length of lanyard/SRL, harness stretch, lifeline deflection, and all other applicable factors.

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.

Diagram shown is an example fall clearance calculation ONLY.



Compatibility: When making connections with Web 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 Web 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.**

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



Connector directly to webbing. **NO.**

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



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

Components and Specifications

Materials: polyester, galvanized steel, and zinc-plated steel.

Web width: 1½”.

Part #	Length	Description
04662	65'	Web HLL w/(1) Tensioner, (2) 3” O-rings, (2) 6’ Cross Arm Straps, (1) Web Assembly, & (1) Carrying Bag



Web Assembly



O-rings (x2)



Carrying Bag



Ratchet Assembly



Cross Arm Straps (x2)

IMPORTANT:

Web HLL is also provided with Bungee Tether, part #: BNGEXT1C10XT-R. Dropped object prevention is an essential component of any jobsite safety plan. Always adhere to all provided Bungee Tether instructions. Bungee Tether is intended to be used in combination with removable ratchet handle to eliminate accidental drops or misplacement.



Installation and Use

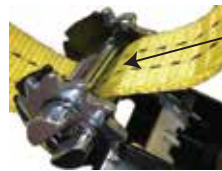
Prior to use, plan your system:

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

Installation:

1. Determine intended system length (maximum 65') and anchor point installation locations. Anchor points must be directly across from each other, so that Web HLL will be completely level and not slope in any way when installed.
2. Install Cross Arm Straps around compatible structural anchor points, as determined by a Competent Person. Note: it is also permitted to connect Web HLL to anchorage connectors other than Cross Arm Straps, provided applicable anchorage connectors are deemed compatible with Web HLL by Competent Person.

3. Attach Ratchet Assembly at one anchor point end, and Web Assembly at other anchor point end.

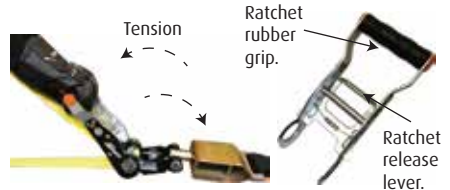


Thread Web Assembly here.

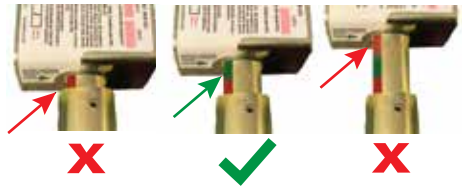
4. Thread free end of Web Assembly through slotted drum as shown. Pre-tension system by pulling webbing through drum until taut and slack is eliminated.

Failure to take up excess slack may result in webbing damage and prevent ratchet from locking properly.

5. Tension Web HLL to final position with ratchet. Pull towards web to tighten, push back toward shock absorber, and repeat. Hold rubber grip of ratchet only. Do not grip ratchet release lever, which is only used during removal.



6. Web HLL is properly tensioned when green tension indicator is visible next to green arrow on label. **DO NOT USE if either red indicator aligns with green alignment arrow on label. ALWAYS inspect tension indicator prior to, and periodically during, each use to ensure proper tension is maintained.**

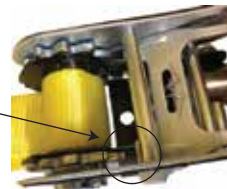


7. Remove ratchet handle by fully pulling up on release lever and lifting away from Ratchet Assembly. Do not pull back on handle, as this may accidentally release tension on Web HLL.

8. Attach complete and compatible PFAS to HLL O-rings. Maximum 1 connection per O-ring.

9. To uninstall, first reattach ratchet handle. Then, pull up partially on ratchet release lever until bottom of release no longer rests in ratchet channel. Then, pull down fully on handle until tension is released.

Ratchet release pulled up and away from ratchet.



Maintenance, Cleaning, and Storage

If Web 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 Web HLL. Remove all dirt, corrosives, and contaminants from Web HLL before and after each use. If Web HLL cannot be cleaned with plain water, use mild soap and water, then rinse and wipe dry. NEVER clean Web 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 Web 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. Careful inspection should be made at location where ratchet contacts web lifeline; excessive turns of ratchet drum may accelerate webbing wear. Bar tack stitching is present at both ends of web assembly shock absorber, as shown below. If inspection shows bar tack stitching is broken or deployed in any way the product has been exposed to excessive force and must not be used. **IMMEDIATELY remove Web HLL from service if defects or damage are found, if exposed to forces of fall arrest.**

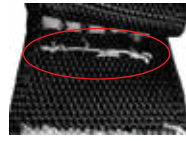
Bar Tack Stitch Location
(under end of shrink tube)



Bar Tack Stitch - GOOD



Bar Tack Stitch - REMOVE FROM SERVICE



Any visual evidence of deployment is a primary indicator of excessive load - **IMMEDIATELY remove Web HLL from service.**



Deployed Shock Absorber

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 12 months, a Competent Person other than the user must inspect Web 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 Web 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 12 months. Competent Person to inspect and initial.

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

INSPECTED BY:

Date: _____ Initials: _____

Date:	Initials:

**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.

