

[®]

GUARDIAN
FALL PROTECTION



Product Name: Vertical Lifeline Assembly (VLA)

Part #: 01310; 01320; 01323; 01324; 01325; 01326; 01327; 11318; 11320; 01330; 01340; 01346; 01350; 01360; 01365; 01345; 11329; 11330; 11331; 11332; 11333; 11334; 11335; 11321; 11322; 11323; 11324; 11325; 11326; 11327; 11328

Instruction Manual

Do not throw away these instructions!

Read and understand these instructions before using equipment!

| | |
|------------------------------------|-------|
| Introduction | 1 |
| Applicable Safety Standards | 1 |
| Worker Classifications | 1 |
| Product Specific Applications | 2 |
| Limitations | 2 - 3 |
| Components and Specifications | 3 - 4 |
| Installation and Use | 4 |
| Maintenance, Cleaning, and Storage | 5 |
| Inspection | 5 |
| Inspection Log | 5 |
| Safety Information | 6 |
| Labels | 7 |

Introduction

Thank you for purchasing a Guardian Fall Protection VLA. 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 VLA, and all fall safety equipment used in combination with the VLA.

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 regulations if applicable. 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: VLAs may be used in Personal Fall Arrest applications to support a **MAXIMUM 1 Personal Fall Arrest System (PFAS)**. Structure must withstand loads applied in the directions permitted by the system of at least 5,000 lbs. Maximum free fall is 6'. **MAXIMUM** combined length of fall arrester, lanyard extension, and D-ring is 36". Applicable D-ring: Dorsal.

- Use in Fall Arrest requires a shock absorbing element in PFAS. In the absence of a shock absorber integrated into rope, it must be present in the Fall Arrester used in combination with rope (positioning device or rope grab used with shock absorbing extension lanyard).



Restraint: VLAs 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/VLA. Structure must withstand loads applied in the directions permitted by the system of at least 1,000 lbs. No vertical 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.

Limitations

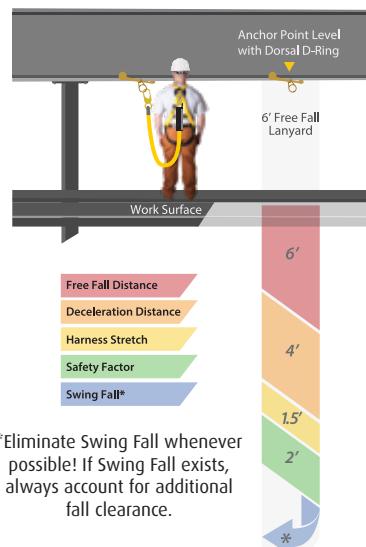
Fall Clearance: There must be sufficient clearance below the anchorage connector to arrest a fall before the user strikes the ground or an obstruction. When calculating fall clearance, account for a **MINIMUM 2'** safety factor, deceleration distance, user height, length of lanyard/SRL, harness stretch, 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 VLA, 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 VLA 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:

Fall clearance calculation shown based on standing worker falling directly in-line with anchor point. Always consider potential swing fall and other hazards when calculating fall clearance.



*Eliminate Swing Fall whenever possible! If Swing Fall exists, always account for additional fall clearance.

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.**



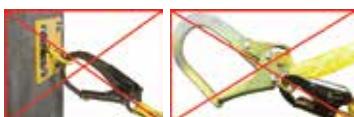
Connector directly to webbing.
NO.

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: steel, polyester or nylon, and steel polyolefin.

Lifeline diameter: 5/8".

Average arrest force: 900 lbs.
Maximum arrest force: 1,800 lbs.
Maximum deployment: 48".



| Part # | Length | Description |
|--------|--------|---|
| 01310 | 25' | Vertical Lifeline Assembly w/Shock Absorber, Positioning Device, & 18" Lanyard Extension |
| 01320 | 50' | Vertical Lifeline Assembly w/Shock Absorber, Positioning Device, & 18" Lanyard Extension |
| 01323 | 75' | Vertical Lifeline Assembly w/Shock Absorber, Positioning Device, & 18" Lanyard Extension |
| 01324 | 100' | Vertical Lifeline Assembly w/Shock Absorber, Positioning Device, & 18" Lanyard Extension |
| 01325 | 130' | Vertical Lifeline Assembly w/Shock Absorber, Positioning Device, & 18" Lanyard Extension |
| 01326 | 150' | Vertical Lifeline Assembly w/Shock Absorber, Positioning Device, & 18" Lanyard Extension |
| 01327 | 200' | Vertical Lifeline Assembly w/Shock Absorber, Positioning Device, & 18" Lanyard Extension |
| 11318 | 30' | No Tangle VLA w/Swivel Snap Hook, Shock Absorber, Positioning Device, & 18" Lanyard Extension |
| 11320 | 50' | No Tangle VLA w/Swivel Snap Hook, Shock Absorber, Positioning Device, & 18" Lanyard Extension |
| 11329 | 25' | Polydac Rope w/Snap Hook End |
| 11330 | 30' | Polydac Rope w/Snap Hook End |
| 11331 | 50' | Polydac Rope w/Snap Hook End |
| 11332 | 75' | Polydac Rope w/Snap Hook End |
| 11333 | 100' | Polydac Rope w/Snap Hook End |
| 11334 | 150' | Polydac Rope w/Snap Hook End |

| Part # | Length | Description |
|--------|--------|--|
| 11335 | 200' | Polydac Rope w/Snap Hook End |
| 11321 | 25' | VLA w/3 Strand Polydac Rope, Shock Pack, Positioning Device, & 18" Lanyard Extension |
| 11322 | 30' | VLA w/3 Strand Polydac Rope, Shock Pack, Positioning Device, & 18" Lanyard Extension |
| 11323 | 50' | VLA w/3 Strand Polydac Rope, Shock Pack, Positioning Device, & 18" Lanyard Extension |
| 11324 | 75' | VLA w/3 Strand Polydac Rope, Shock Pack, Positioning Device, & 18" Lanyard Extension |
| 11325 | 100' | VLA w/3 Strand Polydac Rope, Shock Pack, Positioning Device, & 18" Lanyard Extension |
| 11326 | 130' | VLA w/3 Strand Polydac Rope, Shock Pack, Positioning Device, & 18" Lanyard Extension |
| 11327 | 150' | VLA w/3 Strand Polydac Rope, Shock Pack, Positioning Device, & 18" Lanyard Extension |
| 11328 | 200' | VLA w/3 Strand Polydac Rope, Shock Pack, Positioning Device, & 18" Lanyard Extension |
| 01330 | 25' | Standard 5/8" Rope w/Snap Hook End |
| 01340 | 50' | Standard 5/8" Rope w/Snap Hook End |
| 01350 | 75' | Standard 5/8" Rope w/Snap Hook End |
| 01360 | 100' | Standard 5/8" Rope w/Snap Hook End |
| 01365 | 150' | Standard 5/8" Rope w/Snap Hook End |
| 01345 | 200' | Standard 5/8" Rope w/Snap Hook End |
| 01346 | 300' | Standard 5/8" Rope w/Snap Hook End |

Installation and Use



One connection per VLA.
NEVER attempt to remove components from VLA.

1. Ensure either that there is always adequate fall clearance for VLA to arrest fall (Fall Arrest), or that VLA will not allow the user to reach the leading edge of any fall hazard (Fall Restraint). Eliminate or minimize all risk of swing fall.

*** NEVER tie knots in lifeline, and always ensure end of lifeline is terminated to eliminate risk of detachment of Fall Arrester.**

Rope w/integral shock Rope w/out integral shock



2. Attach VLA snap hook to compatible anchorage connector. If VLA has integral shock pack, shock pack end must connect to anchor.

*** NEVER install VLA in a tie-back method (do not wrap VLA around anchor point and connect snap hook back to rope).**

3. Attach Fall Arrester/Extension Lanyard to applicable harness D-ring.

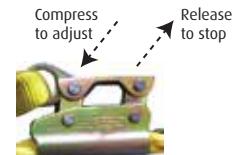
*** If working in Fall Arrest, and if VLA rope does not include integral shock absorber, Fall Arrester/Extension Lanyard must include shock absorber.**

Fall Arrester w/ integral shock Fall Arrester w/out integral shock



4. To move along lifeline, compress and hold Fall Arrester handle. ALWAYS adjust Fall Arrester to reduce slack in the system as much as possible. When attached to Fall Arrester and moving along work surface, ALWAYS do so by moving Fall Arrester along rope, and NEVER by moving only the rope itself. For example, if moving from a roof edge to the roof peak, engage handle of Fall Arrester and move it up the VLA while walking to peak. DO NOT move up to roof peak by moving VLA and keeping Fall Arrester stationary; doing so can create free fall in excess of levels permitted by system.

5. To restrict Fall Arrester movement along lifeline, release Fall Arrester handle. NEVER grab the Fall Arrester in the event of a fall; doing so may cause the unit to accidentally disengage and slip along the rope.



Maintenance, Cleaning, and Storage

If VLA 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 VLAs. Remove all dirt, corrosives, and contaminants from VLAs before and after each use. If a VLA cannot be cleaned with plain water, use mild soap and water, then rinse and wipe dry. NEVER clean VLAs 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 VLA for deficiencies, including, but not limited to, corrosion, deformation, pits, burrs, rough surfaces, sharp edges, cracking, rust, paint buildup, excessive heating, alteration, broken stitching, fraying, bird-caging, and missing or illegible labels. IMMEDIATELY remove VLA 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 12 months, a Competent Person other than the user must inspect VLAs. **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 VLAs 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 VLA. Separate inspection logs must be used for each VLA. 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 |
|----|---|---|---|---|---|---|---|---|---|---|---|---|
| YR | | | | | | | | | | | | |
| YR | | | | | | | | | | | | |
| YR | | | | | | | | | | | | |
| YR | | | | | | | | | | | | |

If equipment fails inspection IMMEDIATELY REMOVE FROM SERVICE.

Safety Information

WARNING

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.

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

Shock Pack Labels
(Depending on model, may be beneath cover.)

Warning: User Capacity Range 130-310 lbs.
6ft. 900 lbs.
Maximum Free Fall Average Arresting Force
Maximum Deployment Distance 48"
Forces may increase when cold and/or wet
Read Instructions Before Use



50' Vertical Lifeline
Maximum Elongation Distance: 48"
DO NOT REMOVE SHRINK TUBE!

| | | |
|--|-------------------|---|
| | Serial #: | GUARDIAN® ALWAYS READ AND UNDERSTAND ALL MANUFACTURER'S INSTRUCTIONS INCLUDED WITH EQUIPMENT AT TIME OF SHIPMENT. Compliant with all OSHA 1910, OSHA 1926 Subpart M, ANSI Z359.1-07, and ANSI A10.32-12 regulations. Worker weight capacity range: 130-310 lbs. Materials: 5/8" diameter polysteel, polyester, or nylon. Make only compatible connections. Refer to instructions for proper connection methods. Avoid contact with sharp and abrasive edges and surfaces. DO NOT remove labels. |
| | | 90820 (Rev. B) |

| | User must inspect prior to each use. Competent Person to inspect and initial at least every 12 months. Date of First Use: _____. Product lifetime is indefinite, as long as product passes all inspection requirements. | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|--|---|----|---|---|---|---|---|---|---|---|---|---|---|---|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|
| <table border="1"><thead><tr><th>YR</th><th>J</th><th>F</th><th>M</th><th>A</th><th>M</th><th>J</th><th>J</th><th>A</th><th>S</th><th>O</th><th>N</th><th>D</th></tr></thead><tbody><tr><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></tr><tr><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></tr><tr><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></tr><tr><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></tr><tr><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></tr><tr><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></tr><tr><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></tr><tr><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></tr><tr><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></tr></tbody></table> | | YR | J | F | M | A | M | J | J | A | S | O | N | D | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| YR | J | F | M | A | M | J | J | A | S | O | N | D | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |

| | |
|----------------------------|--|
| Part # | |
| Date of manufacture | |
| Length | |