

# **VERTICAL LIFELINE ASSEMBLY (VLA)**

# Instruction Manual



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- Do not throw instructions away.
- A Read and understand instructions before using this equipment.



#### **Worker Classifications**

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

## **Applicable Safety Standards**

Meets or exceeds:

- OSHA 1910.140
- OSHA 1926.502

# **Permitted User Weight**

- User weight range (including all clothing, tools, and equipment) is:
  - 130-310 lbs.

## **Product Specific Applications**

Fall Arrest: This VLA may be used to support a MAXIMUM 1 Personal Fall Arrest System (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 permitted free fall is 6'. Maximum combined length of D-ring, Fall Arrester, and Lanyard Extension is 36".

## D-rings: Dorsal, Chest, Side (pairs only).

Restraint: This VLA may be used in Restraint applications. Restraint systems prevent workers from reaching the leading edge of a fall hazard. Always account for fully extended length of connecting equipment. 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).

D-rings: Dorsal, Chest, Side (pairs only).



# **Product Specifications**

Part #	Length	Description
01310	25'	Vertical Lifeline Assembly w/Shock Absorber, Positioning Device, and 18" Lanyard Extension
01320	50'	Vertical Lifeline Assembly w/Shock Absorber, Positioning Device, and 18" Lanyard Extension
01323	75'	Vertical Lifeline Assembly w/Shock Absorber, Positioning Device, and 18" Lanyard Extension
01324	100'	Vertical Lifeline Assembly w/Shock Absorber, Positioning Device, and 18" Lanyard Extension
01325	130'	Vertical Lifeline Assembly w/Shock Absorber, Positioning Device, and 18" Lanyard Extension
01326	150'	Vertical Lifeline Assembly w/Shock Absorber, Positioning Device, and 18" Lanyard Extension
01327	200'	Vertical Lifeline Assembly w/Shock Absorber, Positioning Device, and 18" Lanyard Extension
11318	30'	No Tangle VLA w/Swivel Snap Hook, Shock Absorber, Positioning Device, and 18" Lanyard Extension
11320	50'	No Tangle VLA w/Swivel Snap Hook, Shock Absorber, Positioning Device, and 18" Lanyard Extension
11329	25'	Co-polymer Rope w/Snap Hook End
11330	30'	Co-polymer Rope w/Snap Hook End
11331	50'	Co-polymer Rope w/Snap Hook End
11332	75'	Co-polymer Rope w/Snap Hook End
11333	100'	Co-polymer Rope w/Snap Hook End
11334	150'	Co-polymer Rope w/Snap Hook End
11335	200'	Co-polymer Rope w/Snap Hook End
11321	25'	VLA w/3-Strand Co-polymer Rope, Shock Pack, Positioning Device, and 18" Lanyard Extension
11322	30'	VLA w/3-Strand Co-polymer Rope, Shock Pack, Positioning Device, and 18" Lanyard Extension
11323	50'	VLA w/3-Strand Co-polymer Rope, Shock Pack, Positioning Device, and 18" Lanyard Extension
11324	75'	VLA w/3-Strand Co-polymer Rope, Shock Pack, Positioning Device, and 18" Lanyard Extension
11325	100'	VLA w/3-Strand Co-polymer Rope, Shock Pack, Positioning Device, and 18" Lanyard Extension
11326	130'	VLA w/3-Strand Co-polymer Rope, Shock Pack, Positioning Device, and 18" Lanyard Extension
11327	150'	VLA w/3-Strand Co-polymer Rope, Shock Pack, Positioning Device, and 18" Lanyard Extension
11328	200'	VLA w/3-Strand Co-polymer Rope, Shock Pack, Positioning Device, and 18" Lanyard Extension
01330	25'	5/8" Diameter Rope w/Snap Hook End
01340	50'	5/8" Diameter Rope w/Snap Hook End
01350	75'	5/8" Diameter Rope w/Snap Hook End
01360	100'	5/8" Diameter Rope w/Snap Hook End
01365	150'	5/8" Diameter Rope w/Snap Hook End
01345	200'	5/8" Diameter Rope w/Snap Hook End
01346	300'	5/8" Diameter Rope w/Snap Hook End

# Materials

5/8" diameter co-polymer, polyester and steel.







**Positioning Device** 

Extension



#### Limitations

Fall Clearance: There must be sufficient clearance below the work surface 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, free fall, and all other applicable factors.

#### See Diagram A on page 11.

Swing Falls: Prior to installation or use, make considerations for eliminating or minimising 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 to the VLA, eliminate all possibility of roll-out. Roll-out occurs when interference between a connector and the attachment point causes the connector gate to unintentionally open and release.

All connections must be selected and deemed compatible with the VLA by a Competent Person.

All connector gates must be self-closing, self-locking, and withstand a minimum load of 3.600 lbs.

See Diagram B on page 11 for examples of compatible and incompatible connections.

# Maintenance, Cleaning, and Storage

Cleaning after use is important for maintaining the safety and longevity of the VLA. Remove all dirt, corrosives, and contaminants from the VLA 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 harness with corrosive substances.

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



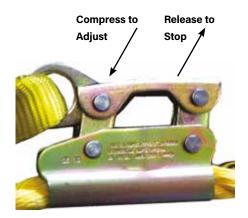
#### Installation and Use

- Never for Leading Edge (LE) use. VLA must never impact edge of fall hazard.
- ♠ One connection per VLA. Never attempt to remvoe components from VLA.
- 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.
- 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).
- 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.

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.





Rope w/Integral Shock



Rope w/out Integral Shock



Fall Arrester w/Integral Shock



Fall Arrester w/out Integral Shock





### 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 build-up, excessive heating, alteration, broken stitching, fraying, 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 work area will support the application-specific minimum loads set forth in this manual. Work area MUST be stable.

At least every 12 months, a Competent Person (CP) other than the user must inspect VLA.

Inspections MUST be recorded in inspection log in instruction manual and on equipment inspection grid label. The CP must sign their initials in the box corresponding to the month and year the inspection took place.

During inspection, consider all applications and hazards the VLA has been subjected to.

Product lifetime is indefinite as long as it passes pre-use and CP inspections.

This inspection log must be specific to one VLA. Separate inspection logs must be used for each harness. All inspection records must be made visible and available to all users at all times. If equipment fails inspection it must be discarded immediately.

## **Inspection Log**

Serial No:	Date:
Model #:	User:

Date:	Condition:	Inspected by:



## **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.

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.

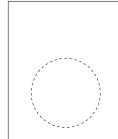
Equipment subjected to forces of fall arrest must immediately be removed from use.

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





ALWAYS READ AND UNDERSTAND ALL MANUFACTURER'S INSTRUCTIONS INCLUDED WITH EQUIPMENT AT TIME OF SHIPMENT.

#### A NOT SUITABLE FOR LEADING EDGE USE A

Compliant with all OSHA 1910.140 & 1926.502 regulations.

Worker weight capacity range: 130-310 lbs.

Materials: 5/8" diameter co-polymer, polyester, and steel.

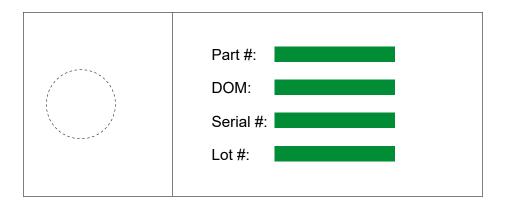
Make compatible connections only.

Refer to instructions for proper connection methods.

DO NOT remove labels.

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.

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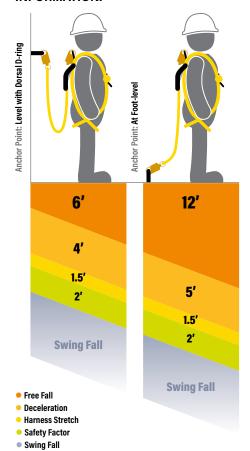




## **Diagram A - Fall Clearance**

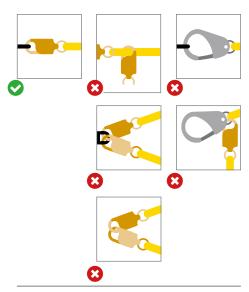
Fall clearance calculation shown below is based on a standing worker falling directly in-line with anchor point.

SAMPLE CALCULATION ONLY. ALWAYS REFER TO CONNECTOR INSTRUCTIONS FOR PRODUCT-SPECIFIC CLEARANCE INFORMATION.

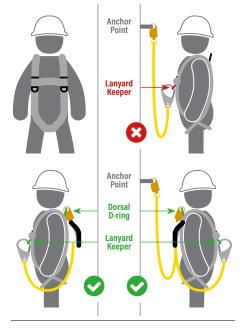


▲ WARNING! Eliminate Swing Fall whenever possible! If swing fall exists, always account for additional fall clearance. Example above shows deployment distance for ANSI rated shock absorbing lanyard.

# **Diagram B - Connections**



# **Diagram C - Lanyard Keepers**





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