

GUARDIAN

FALL PROTECTION



Product Name: External Shock Lanyards

Part #: 01205; 01206; 01214; 01215; 01217; 01218; 01220; 01221; 01223; 01230; 01231; 01237; 01240; 01241; 01242; 01243; 01245; 01246; 01275; 01285; 01290; 01291; 11520; 11730; 11740; 11750; 11760; 11830; 11840; 11855; 11865; 11900; 11901; 11902; 11903; 20091; 21210; 21214

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 External Shock Lanyard. 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 External Shock Lanyard, and all fall safety equipment used in combination with the External Shock Lanyard.

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 Z359.13-2013, 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: External Shock Lanyards 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 free fall is 6'. Applicable D-ring: Dorsal.



Restraint: External Shock Lanyards 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.



Work Positioning: External Shock Lanyards may be used in Work Positioning applications. Work Positioning systems allow a worker to be supported while in suspension and work freely with both hands. Structure must withstand loads applied in the directions permitted by the system of at least 3,000 lbs. Maximum allowable free fall is 2'. Applicable D-rings: Side.



Rescue/Confined Space: External Shock Lanyards may be used in Rescue/Confined Space applications. Rescue systems function to safely recover a worker from a confined location or after exposed to a fall. There are various configurations of Rescue systems depending on the type of rescue. Structure must withstand loads applied in the directions permitted by the system of at least 3,000 lbs. No free fall is permitted. Applicable D-rings: Dorsal, Chest, Shoulder.

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

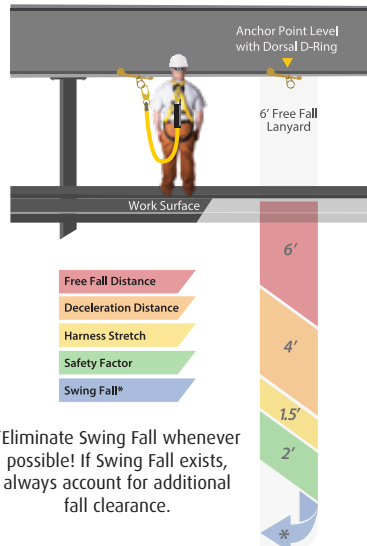
Limitations

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.

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.

Compatibility: When making connections with External Shock Lanyard, 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 External Shock Lanyard 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 connectors to same D-ring. **NO.**



Connector directly to webbing. **NO.**

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



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

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



Components and Specifications

The specific components of Guardian External Shock Lanyards vary depending on design and intended application. All webbing is made of polyester and nylon, and is 1" in width. All connectors (snap hooks, carabiners, and rebar hooks), are made from steel or aluminum. Contact Guardian Fall Protection with any questions regarding specific lanyard components or composition.

Part #	Size	Description
01205	18"	Extension Lanyard w/Snap Hook
01206	18"	Extension Lanyard w/Rebar Hook
01214	3'	Single Leg Lanyard w/Snap Hooks
01215	4'	Single Leg Lanyard w/Snap Hooks
01217	4'	Double Leg Lanyard w/Snap Hooks
01218	4'	Double Leg Lanyard w/Steel Rebar Hooks & Snap Hook
01220	6'	Single Leg Lanyard w/Snap Hooks
01221	6'	Single Leg Lanyard w/Rebar Hook
01223	6'	Single Leg Kevlar Lanyard w/snap Hooks & Shock Cover
01230	6'	Double Leg Lanyard w/ Snap Hooks
01231	6'	Double Leg Lanyard w/Steel Rebar Hooks & Snap Hook
01240	6'	Single Leg Cable Lanyard w/Snap Hooks
01241	6'	Double Leg Cable Lanyard w/Snap Hooks
01242	6'	Single Leg Cable Lanyard w/Rebar Hook & Snap Hook
01243	6'	Double Leg Cable Lanyard w/Rebar Hooks & Snap Hook

Part #	Size	Description
11730	6'	Single Leg Double Lock Wrap Lanyard
11740	6'	Double Leg Double Lock Wrap Lanyard
11750	6'	Single Leg Triple Lock Wrap Lanyard
11760	6'	Double Leg Triple Lock Wrap Lanyard
11830	4' - 6'	Single Leg Double Lock Wrap Lanyard
11840	4' - 6'	Double Leg Double Lock Wrap Lanyard
11855	4' - 6'	Single Leg Triple Lock Wrap Lanyard
11865	4' - 6'	Double Leg Triple Lock Wrap Lanyard
11900	4½' - 6'	Single Leg Tiger Tail Stretch Lanyard w/Snap Hooks
11901	4½' - 6'	Double Leg Tiger Tail Stretch Lanyard w/Snap Hooks
11902	4½' - 6'	Single Leg Tiger Tail Stretch Lanyard w/Rebar Hooks
11903	4½' - 6'	Double Leg Tiger Tail Stretch Lanyard w/Rebar Hooks
20091	4' - 6'	Double Leg Adjustable Lanyard w/Rebar Hooks
21214	6'	Double Leg Lanyard w/Aluminum Rebar Hooks & Snap Hook
01237	4'	Double Leg Cable Lanyard w/Snap Hook & Pompier Hooks
01245	6'	Single Leg Coated Cable Lanyard w/Removable Flame Resistant Cover
01246	6'	Double Leg Coated Cable Lanyard w/Removable Flame Resistant Cover
01275	6'	Single Leg Heavy Duty Tie-Back Lanyard w/Snap Hooks
01285	4' - 6'	Single Leg Adjustable Lanyard w/Snap Hooks
01290	6'	Single Leg Tie-Back Lanyard w/Snap Hooks and Adjustable D-Ring
01291	6'	Double Leg Tie-Back Lanyard w/Snap Hooks and Adjustable D-Rings

Installation and Use

1. Prior to use, inspect Guardian External Shock Lanyards and all PFAS equipment to be used in combination with External Shock Lanyards.
2. Make considerations for eliminating or minimizing swing fall hazards.
3. Ensure that all connectors and all other components of the PFAS are compatible with Guardian External Shock Lanyards, and are selected by a Competent Person. The selected safety harness MUST be of proper size, and MUST be fitted snugly, but still allow for a full range of movement.
4. Ensure structure to which the anchorage connector is attached is capable of withstanding a MINIMUM load relative to the application in which the External Shock Lanyard is to be used (see pg. 2).
5. Attach lanyard snap hook or carabiner to compatible harness D-ring. ALWAYS locate the shock absorber end at the applicable harness D-ring. The shock absorber MUST NEVER be located at the anchorage connector. For lanyards with two, integrally connected legs, only attach the central snap hook or carabiner to the applicable harness D-ring.
6. Attach remaining snap hook or carabiner end of lanyard to compatible anchorage connector. Rebar Hooks MUST ONLY be connected to structural rebar or other compatibly sized structural anchor. Ensure that all connectors are self-closing and self-locking, and that there is no risk of roll-out.
7. NEVER work with employed harness D-ring positioned above the anchorage connector, unless permitted by specific application or combination of equipment. A Competent Person must make a determination regarding the acceptability of working above an anchorage connector.

Only use Guardian Lanyards in the fall protection application(s) for which they are designed. Refer to product labeling, or contact Guardian Fall Protection if unsure of proper application(s).

Maintenance, Cleaning, and Storage

If an External Shock Lanyard 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 External Shock Lanyards. Remove all dirt, corrosives, and contaminants from External Shock Lanyards before and after each use. If External Shock Lanyard cannot be cleaned with plain water, use mild soap and water, then rinse and wipe dry. NEVER clean External Shock Lanyards 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 External Shock Lanyard 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 External Shock Lanyard 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 External Shock Lanyards. **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 External Shock Lanyards have been subjected to.

Inspection Log

Date of First Use: _____.

Product lifetime is indefinite, as long as product passes all inspection requirements. 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 External Shock Lanyard. Separate inspection logs must be used for each External Shock Lanyard. 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												
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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.

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.

