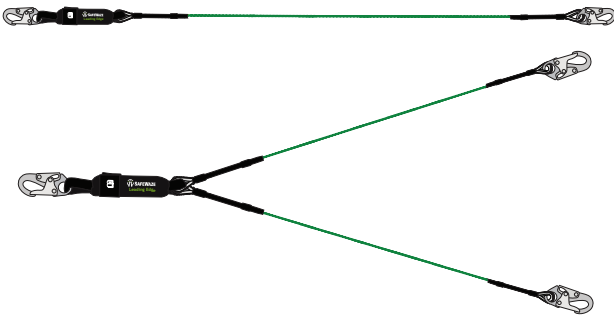




LE Lanyard Instruction Manual

019-2011, 019-2012, 019-2013, 019-2014,
019-2015, 019-2016, 021-2062



WARNING ⚠️
This product is part of a personal fall arrest system. The manufacturer's instructions must be provided to users of this equipment. The user must follow the manufacturer's instructions for each component of the system. The user must read and understand these instructions before using this equipment. Manufacturer's instructions must be followed for proper use and maintenance of this equipment. Alterations to this product, misuse of this product, or failure to follow instructions may result in serious injury or death.

IMPORTANT
Questions regarding the use, care, or suitability of this equipment for your application? Contact Safewaze.
IMPORTANT
Record identification information before using this product. Identification information may be found on the equipment label. This information should be recorded in the "Inspection Log" located at the back of this manual.

OSHA 1926 Subpart M, OSHA 1910.66, ANSI Z359.13
This manual is intended to meet the manufacturer's instructions as required by ANSI Z359 and should be used as part of an employee training program as required by OSHA.

User Information

Date of First Use: _____
Serial#: _____
Trainer: _____
User: _____

Do not throw away these instructions!

Read and understand these instructions before using equipment!

INTRODUCTION

Thank you for purchasing the Safewaze LE 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 manual and any other instructional material must be available to the user of the equipment. The user must understand how to safely and effectively use the LE Lanyard, and all fall protection equipment used in conjunction with the lanyard.

APPLICABLE SAFETY STANDARDS

When used according to instructions, the LE Lanyard meets all applicable ANSI Z359 standards and OSHA regulations for fall protection. Applicable standards and regulations depend on the type of work being done, and may include state-specific regulations. Refer to local, state, and federal (OSHA) requirements for additional information concerning the governing of occupational safety regarding Personal Fall Arrest Systems (PFAS).

WORKER CLASSIFICATIONS

Understand the definitions of those who work in proximity of or may be exposed to fall hazards.

Qualified Person: "Qualified" means one who, by possession of a recognized degree, certificate, or professional standing, or who by extensive knowledge, training, and experience, has successfully demonstrated his ability to solve or resolve problems relating to the subject matter, the work, or the project.

Competent Person: "Competent person" means one who is capable of identifying existing and predictable hazards in the surroundings or working conditions which are unsanitary, hazardous, or dangerous to employees, and who has authorization to take prompt corrective measures to eliminate them.

Authorized Person: "Authorized person" means a person approved or assigned by the employer to perform a specific type of duty or duties or to be at a specific location or locations at the job site.

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

PRODUCT SPECIFIC APPLICATIONS

Purpose: The Safewaze LE Lanyard is designed to be used as part of a Personal Fall Arrest System (PFAS).

- A competent person shall train users on this equipment in accordance with OSHA and ANSI.
- Never exceed a free fall distance of 6 ft. A free fall of more than 6 ft could cause excessive arrest forces that could result in serious injury or death.
- The Safewaze LE Lanyard has a maximum capacity of ANSI 310 lbs including any tools, clothing, accessories, etc., OSHA 420 lbs, unless otherwise rated by Safewaze.
- Structures for attachment of Safewaze LE Lanyard shall support a minimum 5,000 lbs or be designed with a safety factor of two by a Qualified Person.
- All Safewaze lanyards must IMMEDIATELY be removed from service if subjected to fall arrest forces.
- Safewaze lanyards shall be inspected by the end user prior to each usage and by a Competent Person other than the user at least annually. These inspections shall be documented.

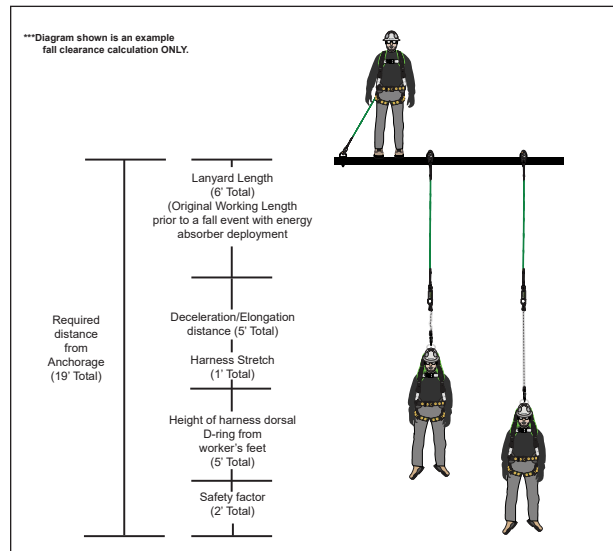
LIMITATIONS

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, and all other applicable factors. (See Figure 1)

FIGURE 1

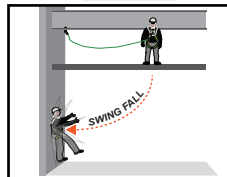
For all applications: worker weight capacity range (including all clothing, tools, and equipment) is ANSI 130-310 lbs, OSHA 420 lbs.

Fall Clearance Diagram - Foot Level Tie-Off



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. (See Figure 2)

FIGURE 2

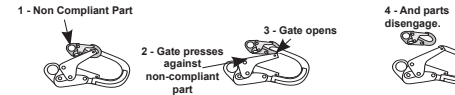


COMPATIBILITY OF CONNECTORS

Connectors are compatible with connecting elements when they have been designed to work together in such a way that their sizes and shapes do not cause their gate mechanisms to inadvertently open regardless of how they become oriented. Connectors (hooks, carabiners, and D-rings) must be capable of supporting at least 5,000 lbs. (22.2 kN). Connectors must be compatible with the anchorage or other system components (See Figure 4). **Do not use equipment that is not compatible.** Non-compatible connectors may unintentionally disengage (See Figure 3). Connectors must be compatible in size, shape, and strength. Self-locking snap hooks and carabiners are required by ANSI Z359 and OSHA guidelines. Contact Safewaze if you have any questions about compatibility.

⚠️ **NOTE:** SOME SPECIALITY CONNECTORS HAVE ADDITIONAL REQUIREMENTS. CONTACT Safewaze WITH QUESTIONS.

FIGURE 3 - UNINTENTIONAL DISENGAGEMENT



Using a connector that is undersized or irregular in shape (1) to connect a snap hook or carabiner could allow the connector to force open the gate of the snap hook or carabiner. When force is applied, the gate of the hook or carabiner presses against the non-compliant part (2) and forces open the gate (3). This allows the snap hook or carabiner to disengage (4) from the connection point.

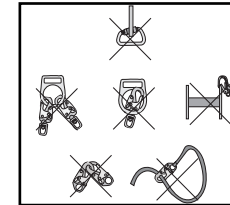
MAKING CONNECTIONS

Snap hooks and carabiners used with this equipment must be double locking and/or twist lock. Ensure all connections are compatible in size, shape and strength. Do not use equipment that is not compatible. Ensure all connectors are fully closed and locked.

Safewaze connectors (snap hooks and carabiners) are designed to be used only as specified in each product's user's instructions. See figure 4 for examples of inappropriate connections. Do not connect snap hooks and carabiners:

- To a D-ring to which another connector is attached.
- In a manner that would result in a load on the gate (with the exception of tie back hooks).
- **NOTE:** Large snap hooks must not be connected to objects which will result in a load on the gate if the hook twists or rotates. Snap hooks marked with ANSI Z359.12 and are equipped with a 3,600 lb (16 kN) gate. Check the marking on your snap hook to verify its compatibility.
- In a false engagement, where features that protrude from the snap hook or carabiner catch on the anchor, and without visual confirmation seems to be fully engaged to the anchor point.
- To each other.
- By wrapping the web lifeline around an anchor and securing to lifeline except as allowed for Tie Back models.
- To any object which is shaped or sized in a way that the snap hook or carabiner will not close and lock, or that roll-out could occur.
- In a manner that does not allow the connector to align properly while under load.

FIGURE 4 - INAPPROPRIATE CONNECTIONS



APPLICATIONS

Personal Fall Arrest: The LE Lanyard is designed as an anchor point to support a maximum of 1 Personal Fall Arrest System (PFAS) when utilized for fall protection applications. The structure to which the anchor is attached must withstand loads applied in the directions permitted by the system of at least 5,000 lbs. Maximum allowable free fall is 6'.

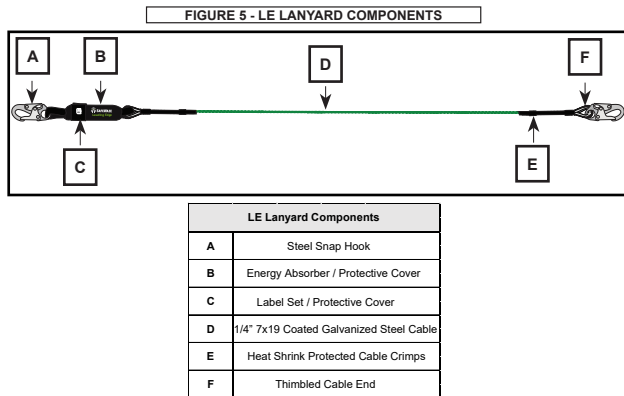
Restraint: The LE Lanyard is authorized for use in Restraint applications. The structure to which the anchor is attached must withstand loads applied in the directions permitted by the system of at least 1,000 lbs. NO free fall is permitted. Restraint systems may only be used on surfaces with slopes up to 4 / 12 (vertical / horizontal). For Restraint applications, the allowable attachment points to harness are Dorsal D-ring, Chest D-ring, Side D-rings, and Shoulder D-rings.

Rescue/Confined Space: The LE Lanyard is authorized for use in Rescue/Confined Space applications. Rescue systems are utilized to safely recover a worker from a confined location or after exposure to a fall. Composition of rescue systems can vary based upon the type of rescue involved. The structure to which a Beam Anchor is attached must withstand loads applied in the directions permitted by the system of at least 3,000 lbs. NO free fall is permitted. For rescue applications, the allowable attachment points to harness are Dorsal D-ring, Chest D-ring and Shoulder D-rings.

All above referenced applications have a worker weight capacity range of ANSI 130-310 lbs (including all clothing, tools, and equipment), OSHA 420 lbs.



COMPONENTS



INSTALLATION AND USE

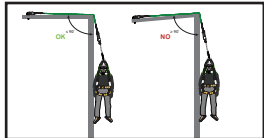
- Under guidance of a Competent Person, a suitable anchor point must be chosen that meets the strength requirement, minimizes free fall, and reduces swing fall hazards. Do not work above the anchorage point.
- The LE Lanyard can be attached to any anchorage that meets the strength requirements as defined in the APPLICATIONS section of this manual for Personal Fall Arrest, Restraint, and Rescue.
- The LE Lanyard must be inspected prior to installation for any defect including, but not limited to, deformities, cracks, severe corrosion, excessive paint, welding spatter or slag, broken wires, bird caging, or any excessive debris or condition that would potentially impede the installation or use of the LE Lanyard. (See Figure 7 A-D for examples of cable damage)
- The LE Lanyard is designed for use in Leading Edge Environments. The preferred connection of the lanyard to a fall arrest anchorage is at D-ring height or above. However, the LE Lanyard is suitable for foot level tie off if required, for a maximum 12 ft. Free Fall. Tying off below the level of the Dorsal D-ring on your Full Body Harness or at foot level should always be a last resort, as additional fall clearance is required, and there is a greater risk of swing fall injuries.
- Ensure that the energy absorber end of the lanyard is connected to the Dorsal D-ring of the Full Body Harness.

- Avoid working in a position which would allow the lanyard to continuously or repeatedly rub or abrade against sharp or abrasive edges. Eliminate this type of contact if possible, or protect such edges with heavy padding or an edge protector.

Precautions pertaining to Leading Edge Lanyards

- The angle of redirection allowed regarding the lifeline portion of the LE Lanyard shall be at least 90 degrees.
- The anchor point for the LE Lanyard shall be at the same height or higher than the leading edge over which a fall may occur (See figure 6). An anchor point situated below the level of a leading edge, could cause the lifeline portion of the Lanyard to exceed a 90 degree angle over the edge in the event of a fall.

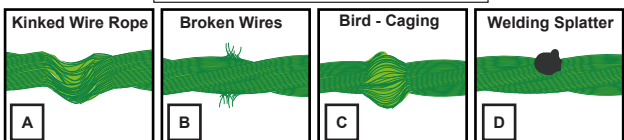
FIGURE 6 - LE LANYARD ANCHOR POINT ILLUSTRATION



- The user must be aware of all situations which may limit the work area in relation to the anchor point. Factors such as swing fall and abrasion of the lanyard at the Leading Edge should be considered during development of the fall protection plan.
- User must not work on the far side of an opening opposite his/her anchor point for the LE Lanyard.

CABLE DAMAGE EXAMPLES

FIGURE 7 - CABLE DAMAGE



PERFORMANCE

STANDARD	TEST WEIGHT	TEST	FREE FALL	RESULTS		
ANSI	282 lbs.	Amb	6' FF	MAF 1,800 lbs.	Amb AAF 900 lbs. Cond AAF 1125 lbs.	Max AD 48"
ANSI	282 lbs.	Cond	6' FF			
ANSI	282 lbs.	Amb	12' FF	MAF 1,800 lbs.	Amb AAF 1350 lbs. Cond AAF 1575 lbs.	Max AD 60"
ANSI	282 lbs.	Cond	12' FF			
OSHA	378 lbs.	Amb	6' FF	MAF 1,800 lbs.	Amb AAF 900 lbs. Cond AAF 1125 lbs.	Max AD 48"
OSHA	378 lbs.	Cond	6' FF			
OSHA	378 lbs.	Amb	12' FF	MAF 1,800 lbs.	Amb AAF 1350 lbs. Cond AAF 1575 lbs.	Max AD 68"
OSHA	378 lbs.	Cond	12' FF			

Leading Edge Application: with 2' Minimum Anchor Setback Distance

ANSI LE	282 lbs.	Perp	12' FF	MAF 1,900 lbs.	AAF 1125 lbs.	Max AD 30"
ANSI LE	282 lbs.	Off	12' FF			
OSHA LE	378 lbs.	Perp	12' FF	MAF 1,900 lbs.	AAF 1125 lbs.	Max AD 46"
OSHA LE	378 lbs.	Off	12' FF			

**Abbreviation Glossary: Amb: (Ambient), Cond: (Conditioned), Perp: (Perpendicular)
Off: (Offset 45°), MAF: (Maximum Arrest Force)
AAF: (Average Arrest Force), Max AD: (Maximum Arrest Distance)**

INSPECTION

- Safewaze LE Lanyards shall be inspected by the user prior to each use and at least annually by a Competent Person. Annual Inspections must be documented. Severity of conditions during use may necessitate increased frequency of documented inspections.
- LE Lanyards that fail inspection MUST be removed from service.
- Prior to each use, inspect the LE Lanyard for deficiencies or damage, including, but not limited to, sharp edges, rough edges, deformations, corrosion, pits, burrs, chemical exposure, extreme heat exposure, or missing or illegible labels. If any deficiencies or defects are found, the LE Lanyard must IMMEDIATELY be removed from service.
- The LE Lanyard must be inspected at least annually by a Competent Person other than the user. Competent person inspections must be recorded in the inspection log included in this manual and on the inspection grid label on the lanyard.

WARRANTY

Safewaze warrants its products are free from defects in materials and construction under normal use and service. Liability is not accepted for abuse, modification, improper use, destructive activity and contaminated exposure.

MAINTENANCE & STORAGE

The LE Lanyard can be cleaned with water and mild soap if necessary. User should remove all dirt, possible corrosives, and contaminants from the lanyard prior to, and after each use. Never use any type of corrosive substance to clean the LE Lanyard.

Excess water should be blown out with compressed air. Hardware can be wiped off with a clean, dry cloth.

When not in use, store the LE Lanyard in a cool dry area where it will not be exposed to extreme light, extreme heat, excessive moisture, or possibly corrosive chemicals or materials.



WARNING

Users should consult with their doctor to verify ability to safely absorb the forces of a fall arrest event. Fitness level, age, and other health conditions can greatly affect an individual's ability to withstand fall arrest forces. Women who are pregnant, individuals considered minors must not use any Safewaze equipment.

Lanyards that are exposed to fall arrest forces MUST be IMMEDIATELY removed from service and destroyed.

Never alter any part of a lanyard or add/remove components. Safewaze shall not be held responsible for injury or death due to tampering.

Failure to follow these instructions and warnings could result in serious injury or death in the event of a fall.

A preplanned rescue procedure in the event of a fall is required. The rescue plan must be specific to the project. The rescue plan must allow for employees to rescue themselves, or to be promptly rescued by alternative means.

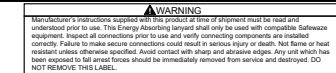
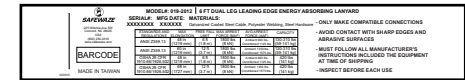
Harnesses or connectors selected for use with any Safewaze lanyard must be compatible in size and configuration. User must ensure compatibility of snap hooks, carabiners and other connectors. Any connection which could allow disengagement must be eliminated. Snap hooks and carabiners must be self locking and self closing and must never be hooked to each other.

A Competent Person must conduct an analysis of the workplace and anticipate where workers will be conducting their duties, the route they will take to reach their work, and the existing and potential fall hazards they may be exposed to. The Competent Person must choose the fall protection equipment to be utilized.

Do not misuse equipment.

Equipment designated for fall protection must never be used to lift, hang, support or hoist tools or equipment unless specifically certified for such use.

LABEL EXAMPLES



Warning: User Capacity Range 130-310 lbs.

6ft. 900lbs.
Maximum Free Fall Average Arresting Force

Maximum Deployment Distance 48"
Forces may increase when cold and/or wet

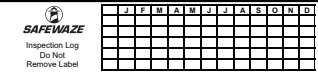
Read Instructions Before Use

Warning: User Capacity Range 130-310 lbs.

12ft. 1350lbs.
Maximum Free Fall Average Arresting Force

Maximum Deployment Distance 60"
Forces may increase when cold and/or wet

Read Instructions Before Use



NEVER attach the unused leg of the lanyard back to the harness at any location other than a lanyard storage keeper.

INSPECTION LOG

Date	Inspection Items Noted	Corrective Action	Initials

